

Virtual City Council Meetings Details

Cisco WebEx hosts the virtual Council Chamber. Join the meetings using the information shown below.

Visit the [City Council Meeting page](#) to view the agenda for upcoming meetings. For those unable to attend, recordings of any virtual City Council Meetings will be posted to our [YouTube Channel](#).

July 01, 2025, Virtual Meetings Details:

A Regular City Council meeting is scheduled for **6:30 PM – 8:30 PM** on **Tuesday, July 01, 2025**.

Regular City Council Meeting

At no sooner than 6:20 pm, visit the Cisco WebEx meeting site by clicking the link below.

<https://bit.ly/MattoonCC070125>

Meeting number (access code): 2554 031 3521

Meeting password: 20819

Additional Instructions

Join meetings by telephone by **dialing 415-655-0001** and use the **meeting number** and **password** shown above.

Participants may be muted when initially connected to the meeting.

If using a phone to call in, you can press ***6** to unmute and mute yourself when public comment is invited.

If you wish to be heard during the public comment portion of the meeting or wish to comment during the discussion period on an open motion, you need to send your comments in advance to the City Clerk's office. Your comments will be read into the record, or you will be called upon to speak at the appropriate time. Contact the City Clerk's office before 4:00 p.m. on the day of the meeting by calling 217-235-5655 or by sending an email message to cityclerk@mattoonillinois.org. NOTE: All those speaking during the meeting must first identify themselves by providing their full name for the record.

CITY OF MATTOON, ILLINOIS

CITY COUNCIL AGENDA

July 1, 2025

6:30 P.M.

6:30 P.M. BUSINESS MEETING

Pledge of Allegiance

Roll Call

Electronic Attendance

CONSENT AGENDA:

Items listed on the Consent Agenda are considered to be routine in nature and will be enacted by one motion. No separate discussion of these items will occur unless a Council Member requests the item to be removed from the Consent Agenda. If an item is removed from the Consent Agenda, it will be considered elsewhere on the agenda for this meeting. Prior to asking for a motion to approve the Consent Agenda, the Mayor will ask if anyone desires to remove an item from the Consent Agenda for public discussion.

1. Minutes of the Regular Meeting of June 17, 2025.
2. Bills and Payroll for the last half of June 2025.

PRESENTATIONS, PETITIONS AND COMMUNICATIONS

This portion of the City Council meeting is reserved for persons who desire to address the Council. The Illinois Open Meetings Act mandates that the City Council may NOT take action on comments received on matters that have not been identified on this agenda, but the Council may direct staff to address the topic or refer the matter for action on the agenda for another meeting. Persons addressing the Council are requested to limit their presentations to three minutes and to avoid repetitious comments. We would also ask you to state your name and address for the record as well as stand when speaking.

NEW BUSINESS

1. Motion – Adopt Special Ordinance No. 2025-1966: Granting a Special Use for a Tier II Short-Term Rental located at 201 Moultrie Avenue. Petitioners: Todd & Kimberly Fuller (06-0-02808-000)
2. Motion – Adopt Special Ordinance No. 2025-1967: Granting a Special Use for a Digital Display Sign located at 4112 Lake Land Boulevard (07-1-01425-000). Petitioner: Richard Rhodes of Dusty's Outdoor Media
3. Motion – Adopt Special Ordinance No. 2025-1968: Granting a Special Use for a Mobile Home Park located at 805 N. 8th Street and 808 Piatt Avenue with the condition that parcel numbers 07-1-02132-000 and 07-1-02135-000 shall require a separate application Special Use for a Mobile Home Park prior to the placement of mobile homes on those lots. Petitioner: Frederick Family Homes (07-1-02132-000, 07-1-02135-000 & 07-1-02130-000)
4. Motion – Adopt Special Ordinance No. 2025-1969: Authorizing the mayor to sign an outright grant agreement by and between the City of Mattoon and Washington Savings Bank Trust 5136 reimbursing up to \$42,165 from Mid-town TIF Revenues over a one-year period for roof replacement and repairs to the building located at 1400 Broadway Avenue; and authorizing the mayor to sign the agreement. (07-1-03844-000)

5. Motion – Adopt Special Ordinance No. 2025-1970: Authorizing the mayor to sign an outright grant agreement by and between the City of Mattoon and Washington Savings Bank Trust 5136 reimbursing up to \$17,200 from Mid-town TIF Revenues over a one-year period for roof replacement and repairs to the building located at 1406 Broadway Avenue; and authorizing the mayor to sign the agreement. (07-1-03843-000)

6. Motion – Adopt Special Ordinance No. 2025-1971: Authorizing the mayor to sign an outright grant agreement by and between the City of Mattoon and Washington Savings Bank Trust 5136 reimbursing up to \$20,081 from Mid-town TIF Revenues over a one-year period for roof replacement and repairs to the building located at 1408 Broadway Avenue; and authorizing the mayor to sign the agreement. (07-1-03841-000)

7. Motion – Approve Council Decision Request 2025-2608: Approving the contract with Collins Engineering, Inc. in the amount of \$41,295 to perform an in-depth inspection and evaluation of Lake Paradise Dam; and authorizing the city manager to sign the contract.

8. Motion – Approve Council Decision Request 2025-2609: Approving the plans and specifications for the 2025 Pavement Striping Contract; authorizing the solicitation of bids; and authorizing the mayor to sign the IDOT Material Proposal or Deliver and Install Proposal document. (25-00000-05-GM) (BLR 12240)

9. Motion – Approve Council Decision Request 2025-2610: Awarding the bids for the 2025 Oil & Chip Program to:

Earl Walker Co. Inc. for Furnish & Spread Oil (Bituminous) Material @ \$4.00/gallon; and Earl Walker Co. Inc. for Spread Aggregate (CA-16) @ \$20.00/ton for a total of \$313,160 for seal coating on streets at various locations; and authorizing the mayor to sign the Acceptances of Proposals to Furnish Materials and Approvals of Award (BLR 12330). (25-00000-01-GM)

10. Motion – Approve Council Decision Request 2025-2611 Awarding the bid for the 2025 Oil & Chip Program to Charleston Stone Company for Furnish Aggregate (CA-16 Crushed Stone) @ \$26.65/ton for a total of \$61,081.80 to furnish the aggregate seal coating on streets at various locations; and authorizing the mayor to sign the Acceptance of Proposal to Furnish Materials and Approval of Award (BLR 12330). (25-00000-01-GM)

11. Motion – Approve Council Decision Request 2025-2612: Awarding the bid in the amount of \$97.00 per cubic yard for a total of \$97,000 from Ne-Co Asphalt Company Inc. for the MFT General Street Maintenance ready-mix concrete (HMA Surface CSE) (25-00000-02-GM); and authorizing the mayor to sign the Acceptance of Proposal to Furnish Materials and Approval of Award (BLR 12330).

12. Motion – Approve Council Decision Request 2025-2613: Awarding the bid in the amount of \$199,100 from Mid-Illinois Concrete, Inc. for Portland Cement Concrete (PCC) mixes at various locations as needed; and authorizing the mayor to sign the Acceptances of Proposals to Furnish Materials and Approvals of Award (BLR 12330). (25-00000-03-GM)

13. Motion – Approve Council Decision Request 2025-2614: Approving the plans and specifications for the Fire Station #3 Addition and Remodeling Project; and authorizing the solicitation for bids.

14. Motion – Approve Council Decision Request 2025-2615: Authorizing the purchase of one 2025 Ford Explorer Expedition Police Interceptor vehicle in the amount of \$50,405 including a trade-in from Pilson Auto Center.

COMMENTS BY THE COUNCIL

Adjourn.

CONSENT AGENDA ITEMS:

UNAPPROVED MINUTES: Regular Meeting – June 17, 2025

The City Council of the City of Mattoon held a Regular City Council meeting in the Council Chambers of City Hall on June 17, 2025. Mayor Hall presided and called the meeting to order at 6:30 p.m.

The following members of the Council answered roll call physically present in person: YEA Commissioner Erica Butler, YEA Commissioner Jim Closson, YEA Commissioner Dave Cox, YEA Commissioner David Phipps and YEA Mayor Rick Hall.

Also physically present in person were City personnel: City Manager Kyle Gill, City Attorney Daniel C. Jones, Finance Director/Treasurer Beth Wright, Arts & Tourism Director Angelia Burgett, Public Works Director David Clark, Fire Chief Jeff Hilligoss (audio), Police Chief Sam Gaines, and City Clerk Susan O'Brien.

CONSENT AGENDA

Mayor Hall seconded by Commissioner Cox moved to approve the consent agenda consisting of Regular Meeting minutes of June 6, 2025, bills and payroll for the first half of June 2025.

Bills and payroll for the first half of June, 2025

General Fund

Payroll		\$	330,532.08
Bills		\$	145,498.01
	Total	\$	476,030.09

Hotel Tax Administration

Payroll		\$	5,617.32
Bills		\$	25,753.87
	Total	\$	31,371.19

Festival Mgmt Fund

Bills		\$	6,830.00
	Total	\$	6,830.00

Capital Project Fund

Bills		\$	24,355.87
	Total	\$	24,355.87

Broadway East Bus Dist

Bills		\$	3,368.67
	Total	\$	3,368.67

Remington Rd & I-57 Bus Dist

Bills		\$	103,488.67
	Total	\$	103,488.67

Water Fund

Payroll		\$	49,279.60
Bills		\$	59,163.89
	Total	\$	108,443.49

Sewer Fund

Payroll		\$	40,255.70
Bills		\$	26,624.42
	Total	\$	66,880.12

Health Insurance Fund

Bills		\$	4,681.43
	Total	\$	4,681.43

Motor Fuel Tax Fund

Bills		\$	326,009.34
	Total	\$	326,009.34

Mayor Hall declared the motion carried by the following omnibus vote: YEA Commissioner Butler, YEA Commissioner Closson, YEA Commissioner Cox, YEA Commissioner Phipps, YEA Mayor Hall.

PRESENTATIONS, PETITIONS AND COMMUNICATIONS

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Proclamation: Lake Land Lakers

Mayor Hall read the following proclamation:

PROCLAMATION

Lake Land College 2025 Baseball & Softball Season

WHEREAS, Lake Land College, Lakers Baseball started in 1971 and has made two appearances at the World Series in 1988 and 2025 under the coaching of Julio Godinez with a record of 45-21 in 2025; and,

WHEREAS, the Lakers Baseball made their first appearance in the NJCAA Division 1 World Series since 1988 and finished fourth in the tournament in 2025; and,

WHEREAS, the Lakers Softball started in 1977 and has made the World Series in 2006, 2011, 2012, 2013, 2014, 2016, 2017, 2018, 2019, 2022, 2024 and in 2025 under the coaching of John Hendrix with an overall record of 45-20; and,

WHEREAS, the Lakers Softball received recognition as All-Regional XXIV and All Great Rivers Athletic Conference (GRAC) Team Awards: Emma Thomas, Noemye Letendre, Kaylie Brake, Paige Collie, Kierra Johnson and Karah Moore; and,

WHEREAS, the City of Mattoon wishes to extend congratulations to both teams and their coaches for a remarkable season.

NOW THEREFORE, BE IT PROCLAIMED, that I, Rick Hall, Mayor of Mattoon, do hereby, recognize June 17th as Lake Land Laker Day in the City of Mattoon, and I call this observance to the attention of all of our citizens.

IN RECOGNITION THEREOF, I, Mayor Rick Hall, have hereunto set my hand and caused the seal of the City of Mattoon, Coles County, Illinois to be affixed this 17th day of June, 2025.

/s/ Rick Hall
Rick Hall, Mayor,
City of Mattoon, Illinois

Coaches Godinez and Hendrix complemented their teams and had pictures taken.

Presentation: Acknowledging the retirement of Captain Melvin Pierce from the Mattoon Fire Department after 27 years of service.

Chief Hilligoss thanked Captain Pierce's wife, Stacy, for her sacrifices while Capt. Pierce served the City; and thanked, provided a background of Capt. Pierce's service with the City, and wished him well during retirement. Capt. Pierce stated he still believed he had the best job in Coles County. Commissioner Cox presented Capt. Pierce with a retirement plaque and thanked him for his service.

Presentation: Acknowledging the retirement of Officer Michael Shane West from the Mattoon Police Department after 27 years of service.

Chief Gaines provided a background of Officer West's 27 years of service with the City including his position as School Resource Officer at the Middle School and presented him with a retirement plaque; and stated Officer West would be missed. Officer West stated he had a good run and enjoyed his service with the City.

Chief Hilligoss notified the Council that with the retirement of Capt. Pierce, Driver Donald Seibert was next to be promoted to Captain, effective Friday, June 20, 2025; provided a background of Driver Seibert's preparations for the position; and congratulated Driver Seibert on his promotion.

Mayor Hall requested any Public comments on the golf carts to be held until the Council considered the motion. Mayor Hall opened the floor for Public comments for those in attendance. Mrs. Ashley Herbert, 1101 Bell, requested the Council to reconsider the idea of backyard chickens. Miss Saylor Morgan, 1100 N 2nd Street, Gays, described her morning routine caring for her chickens and requested the Council to allow her friends to have chickens. Mr. Beau Scott, Executive Director of Fit 2 Serve, stated he did not want to make more work for the police department and provided information on the residential chickens. Manager Gill discussed the issue with Council. Mayor Hall stated someone would be contacted after review. Commissioner Closson inquired whether the High School or FFA continued their programs. Mr. Karl Rabe, adviser of FFA (Future Farmers of America) noted the chicken program at the High School has continued for about 10 years as well as quail, rabbits and tilapia.

Mr. Ed Neil, 500 Wabash, requested the Council address the safety concern involving speeding between 5th Street and Logan Avenue and Charleston Avenue and Lafayette Avenue, and no school speed limit on Charleston Avenue in the Lutheran School area. Chief Gaines stated flashing speed signs were in the process of being displayed. Director Clark noted the State route, which would need prior approval.

Mr. Jacob Kimery, 1717 Edgewater, requested a different way to implement the supplemental liquor license for video gaming, grandfathering existing establishments, willing to help find a different route. Manager Gill stated he had heard from other bar owners and was to meet with some of the owners as well as the mayor.

Mr. Jonathan Kaye, 27th/Broadway Management, requested continuance of a butterfly garden-habitat. Chief Gaines stated the property was on the Mow List. Mayor Hall stated there were complaints from the neighbors and other properties more suited. Mr. Kaye stated he would have the area mowed.

Mr. Dan Picha, 901 3600 East Road, Neoga, requested the Council to address a safety concern at Lake Mattoon due to wake and surf boarding resulting. Manager Gill noted Lake employee John Wurtsbaugh also had a concern of bank erosion and causing turn over in the water stirring the silt. Mr. Jeff Oakley, 24 Branson Drive, Neoga, requested the Council to address the wakeboard boats due to erosion of his property, safety reasons, and sound pollution. Mayor Hall and Manager Gill would look into the issue.

NEW BUSINESS

Commissioner Butler seconded by Commissioner Cox moved to Adopt Ordinance No. 2025-5497, amending Title VII: Traffic Code of the municipal code to establish Chapter 76 Golf Carts regulating the operation of golf carts on streets and alleys under the jurisdiction of the City of Mattoon, Illinois, County of Coles.

CITY OF MATTOON, ILLINOIS

ORDINANCE NO. 2025-5497

AN ORDINANCE AMENDING TITLE VII: TRAFFIC CODE ESTABLISHING THE REGULATION OF OPERATION OF GOLF CARTS ON STREETS AND ALLEYS UNDER THE JURISDICTION OF THE CITY OF MATTOON, COLES COUNTY, ILLINOIS

WHEREAS, the City of Mattoon, Illinois, is authorized pursuant to 625 ILCS 5/11- 1426.1 to designate one or more specific streets under the jurisdiction of the City of Mattoon, Illinois, as egress and ingress routes for the use of non-highway vehicles; and,

WHEREAS, the City Council for the City of Mattoon, Illinois, has considered the volume, speed and character of traffic on the streets and alleys of the City of Mattoon, Illinois; and,

WHEREAS, the City Council for the City of Mattoon, Illinois, has determined that certain types of golf carts, as defined below, may safely operate on the streets and alleys within the corporate limits of the City of Mattoon, Illinois, if properly regulated as provided herein; and,

WHEREAS, such use of all golf carts shall be subject to all requirements of 625 ILCS 5/11- 1426.1, et seq., and subject to the limitations set forth in this Chapter, and shall only be allowed for the purpose of transporting persons.

NOW, THEREFORE, BE IT HEREBY ORDAINED BY THE CITY COUNCIL FOR THE CITY OF MATTOON, ILLINOIS, as follows:

Section 1. Recitals. The facts and statements contained in the preamble to this Ordinance are found to be true and correct and are hereby adopted as part of this Ordinance.

Section 2. Adoption of Code. Title VII: TRAFFIC CODE, CHAPTER 76 GOLF CARTS shall be enacted as follows:

TITLE VII: TRAFFIC CODE

CHAPTER 76. GOLF CARTS

§76.01 OPERATON OF GOLF CARTS – STREETS AND ALLEYS.

(A) Definition: For purposes of this Ordinance, the term "Golf Cart" shall have the same meaning as that term is defined in Section 1-123.9 of the Illinois Vehicle Code.

(B) Policy statement: the City of Mattoon, in passing this section is not advocating or endorsing the use of golf carts on city streets. Other means of transportation may be safer than a golf cart. All persons who operate golf carts within the city do so at their own risk and peril. In passing this section, the city does not accept any level of liability for accidents, collisions, injuries or death, or destruction of property. In passing this section, the city is merely regulating the use of golf carts on city streets, as invited by the law of the State of Illinois, in an attempt to increase safety on city streets.

(C) Subject to the requirements and regulations of this Ordinance, Golf Carts may be operated on all city roads, streets, and alleys not marked as RED as depicted on the map attached hereto as Exhibit A, which are under the jurisdiction and control of the City of Mattoon, Illinois, and where the posted speed limit is 30 miles per hour or less. No person shall operate a Golf Cart on streets and alleys where the posted speed limit is higher than 30 miles per hour, on bike trails or sidewalks, or on streets and alleys marked as not allowed on the map attached hereto as Exhibit A. Operators are permitted to make a direct crossing in a perpendicular manner on those intersections depicted as BLUE circled crossing locations on the map attached hereto as Exhibit A, and listed as follows:

Approved Crossing Locations

- Intersection of Marshall Avenue & 26th Street
- Lake Land Boulevard (Also Known As: South Route 45 / US Route 121) & Rudy Avenue
- South 9th Street & Oklahoma Avenue
- South 9th Street & Marshall Avenue
- IL-16 (Also Known As: Charleston Avenue) & 15th Street
- 19th Street (Also Known As: US Route 121 / US 45) & Richmond Avenue
- Richmond Avenue & Logan Street

- Dewitt Avenue & 10th Street

(D) Golf Carts shall be operated in the same direction as traffic.

(E) It shall be unlawful to operate or park a Golf Cart on any sidewalks, bike paths, multi-use paths, or other locations within the corporate limits of the City of Mattoon, Illinois, except as permitted by this Ordinance or on private property.

(F) It shall be unlawful to operate a Golf Cart on unimproved alleys when wet or muddy when damage to the alleyway could occur.

§76.02 REQUIRED EQUIPMENT ON GOLF CARTS.

(A) No Golf Cart shall be operated on any street or roadway under the jurisdiction and control of the City of Mattoon, Illinois, unless the Golf Cart is equipped with the following equipment that must be kept in good working condition at all times:

- Brakes;
- Steering apparatus;
- Tires;
- A rear view mirror;
- A red reflectorized warning device (e.g., red reflective tape or emblem) on the front and rear of the Golf Cart;
- A triangular slow-moving emblem as required by 625 ILCS 5/12 709 attached to the rear of the Golf Cart;
- A headlight that emits white light visible from at least 500 feet to the front of the Golf Cart;
- A tail lamp that emits red light visible from at least 100 feet from the rear of the Golf Cart;
- Brake lights on the rear of the Golf Cart;
- Turn signals on the front and rear of the Golf Cart; and,
- Seat Belts for all occupants

(B) Lights. No Golf Cart shall be operated on the streets and alleys under the jurisdiction and control of the City of Mattoon, Illinois, unless such Golf Cart has its head lights and taillights illuminated at all times.

(C) Required seating / passengers. A Golf Cart may transport only the number of passengers for which the specific Golf Cart was designed, every passenger shall sit in a seat that was installed by the manufacturer of the Golf Cart. It shall be unlawful for the operator/driver of the Golf Cart to transport passengers unless each passenger is in a seat. It shall also be unlawful for a passenger who would require a car seat or other

similar additive safety restraint in a traditional motor vehicle to be a passenger of a Golf Cart. The operator/driver of the Golf Cart shall not transport anyone who is sitting on the lap of a passenger or in any other location except in a seat. No part of the body of the operator or an occupant shall extend outside the perimeter of the Golf Cart while in operation. Furthermore, all occupants in a Golf Cart shall remain seated at all times that the Golf Cart is in operation.

- (D) Trailers. It shall be unlawful, while operating a Golf Cart on the streets and alleys under the jurisdiction and control of the City of Mattoon, Illinois, to pull a trailer, equipment, or device.
- (E) Age of Operator/License. No person shall operate a Golf Cart on the streets and alleys under the jurisdiction and control of the City of Mattoon, Illinois, unless such operator is at least eighteen (18) years of age and holds a valid motor vehicle driver's license bearing a photograph verifying the identity and age of the operator.
- (F) Speed Limit. No person shall operate a Golf Cart on the streets and alleys under the jurisdiction and control of the City of Mattoon, Illinois, in excess of 30 miles per hour.
- (G) Ordinance and Vehicle Code Obedyance. During the operation of a Golf Cart on any street or alley under the jurisdiction and control of the City of Mattoon, Illinois, the operator of such Golf Cart shall obey all applicable rules, regulations, and ordinances of the City of Mattoon, Illinois, and the provisions of the Illinois Vehicle Code, 625 ILCS 5/11-100, et. seq., as amended from time to time. A person operating or who is in actual physical control of a Golf Cart or as described herein on any City Street or other roadway while under the influence is subject to Section 11-500 through 11-502 of the Illinois Compiled Statutes (625 ILCS 5/11-500-11-502).

§76.03 CITY PERMIT; ANNUAL FEE.

- (A) No Golf Cart shall be operated on the streets and alleys under the jurisdiction and control of the City of Mattoon, unless said Golf Cart is first permitted by the City of Mattoon, Illinois.
- (B) A person desiring to operate a Golf Cart on the streets and alleys under the jurisdiction and control of the City of Mattoon, Illinois, shall make application for a Golf Cart permit with the Police Chief of the City of Mattoon, Illinois, or his/her designee, on forms provided by the City, and shall contain the following information:
 - i. Name and address of applicant;
 - ii. Name of liability insurance carrier;
 - iii. The serial number, make, model, and description of the Golf Cart;
 - iv. Signed Unconditional and Full General Release of Liability, Waiver, Discharge, and Covenant Not to Sue by applicant and any other person who will operate the Golf Cart. This shall include releasing the city and agreeing to defend, indemnify and hold the city harmless from any and all future claims resulting from the operation of their golf carts on city streets relating to the golf cart owned or operated by the applicant;
 - v. Photocopy of applicable liability insurance coverage card specifically for

the vehicle to be operated pursuant to the permit; and,

vi. Such other information as the City may require.

(C) No permit shall be granted unless the applicant's place of domicile is located within the corporate limits of the City of Mattoon, Illinois.

(D) Prior to the issuance and/or renewal of a Golf Cart permit pursuant to this Ordinance, any person applying for a Golf Cart permit pursuant to this Ordinance shall pay an annual fee of \$150.00 to the City of Mattoon, Illinois based on a calendar year from January 1st to December 31st.

If the Golf Cart permit is obtained or renewed after July 1st, the fee shall be \$75.00 through December 31st. Furthermore, prior to the issuance and/or renewal of a Golf Cart Permit, an applicant shall also present the Golf Cart to the Police Department of the City of Mattoon, Illinois, or his/her designee, for an inspection to determine whether the Golf Cart complies with the provisions of this Ordinance and may be operated on the streets and alleys under the jurisdiction and control of the City of Mattoon, Illinois. If an officer with the Police Department of the City of Mattoon, Illinois, or his/her designee determines that the applicant and the Golf Cart comply with the provisions of this Ordinance, then the Police Chief, or his/her designee shall issue a permit to the applicant.

(E) The permit shall be in that form as attached hereto as Exhibit B. The permit, if issued, shall be valid until the 31st day of December following issuance.

(F) A copy of the permit, as well as proof of required insurance, shall always be maintained in the Golf Cart during operation. The permit sticker shall be displayed on the triangular slow-moving emblem attached to the golf cart.

§76.04 MANDATORY INSURANCE.

- (A) No person shall operate a Golf Cart on the streets and alleys under the jurisdiction and control of the City of Mattoon, Illinois, unless:
- (B) The Golf Cart is covered by a liability insurance policy as required under 625 ILCS 5/7-601.
- (C) Every operator of a Golf Cart shall carry with the Golf Cart evidence of insurance as required by 625 ILCS 5/7-602.

§76.05 RELEASE OF LIABILITY.

- (A) No person shall operate a Golf Cart on the streets and alleys under the jurisdiction and control of the City of Mattoon, Illinois, unless that person has executed an Unconditional and Full General Release of Liability, Waiver, Discharge, and Covenant Not to Sue and filed the same with the Police Department of the City of Mattoon, Illinois. The Unconditional and Full General Release of Liability, Waiver, Discharge, and Covenant Not to Sue shall be in that form as attached hereto as Exhibit C,

§76.06 PERMIT REVOCATION.

- (A) The Permit issued pursuant to 76.03 of this Ordinance may be revoked by the Police Chief of the City of Mattoon, Illinois, or his/her designee, if:

1. There is any material misrepresentation made by the applicant on the application;
2. The liability insurance required by 76.04 of this Ordinance is no longer in full force and effect; or,
3. There is evidence, as determined in the sole discretion of the Chief of Police of the City of Mattoon, Illinois, or his/her designee, that the permit holder can no longer safely operate the Golf Cart.

(B) The Chief of Police of the City of Mattoon, Illinois, or his/her designee, shall issue a notice of revocation of a Permit in writing and either hand deliver the notice to the permit holder, or send the notice by certified mail, return receipt required, to the Permit holder at the address on the application. The revocation of the Permit shall be effective immediately after personal service, or on the third day after the postmark of the certified mail. In the event of revocation of a Permit, the Permit holder shall not be entitled to the return of any portion of the annual fee.

§76.06 VIOLATIONS; PUNISHMENT.

- (A) Any person who violates any provision of this Ordinance or who aids or abets the violation of any provision of this Ordinance shall be guilty of a petty offense punishable by a fine of not less than \$50.00 nor more than \$750.00. In addition to any fine, the City may seek injunctive and declaratory relief directing-the violator(s) to cure the violation, and the City may revoke any Permit authorized and issued pursuant to this Ordinance.
- (B) A separate offense shall be deemed to be committed on each day during or on which a violation of any provision of this Ordinance occurs or continues,
- (C) Any second or subsequent offense of any provision of this Ordinance shall result in the revocation of the Golf Cart Permit for a period of not less than three (3) years nor more than five (5) years.

Section 3. Invalidity. In the event a court of competent jurisdiction declares any particular provision of this Ordinance to be invalid or unenforceable, the remaining provisions of this Ordinance shall be construed to be valid and enforceable, The invalidity of any part of this Ordinance shall not affect any other parts thereof.

Section 4. Effective Date. This Ordinance shall be in full effect on August 1, 2025 and approval as provided by law.

Section 5. Repeal of Conflicting Provisions. All prior ordinances or resolutions of the City of Mattoon, Illinois, contrary to the terms and conditions of this Ordinance shall be deemed to be repealed as of the effective date of this Ordinance.

Section 6. Publication. The Clerk is directed by the corporate authorities to publish this Ordinance in pamphlet form. This Ordinance shall be in full force and effect after its passage and publication in accordance with 65 ILCS 5/1-2-4.

Upon motion by Commissioner Butler, seconded by Commissioner Cox, adopted this 17th day of June 2025, by a roll call vote, as follows:

AYES (Names): Commissioner Butler, Commissioner Closson,
Commissioner Cox, Commissioner Phipps,

NAYS (Names): Mayor Hall
ABSENT (Names): None

Approved this 17th day of June 2025.

/s/Rick Hall
Rick Hall, Mayor
City of Mattoon, Illinois

ATTEST:

APPROVED AS TO FORM:

/s/Susan J. O'Brien
Susan J. O'Brien, City Clerk

/s/Daniel C. Jones
Daniel C. Jones, City Attorney

Recorded in the Municipality's Records on 06-17, 2025.

Mayor Hall opened the floor for Public discussion. Mrs. Bobbie Woolbright, 821 DeWitt Avenue, inquired whether her Polaris Ranger would be allowed under the Golf Cart ordinance. Commissioner Butler reviewed the rules for golf carts. Chief Gaines discussed the efforts that went into developing the ordinance. Manager Gill stated the City would start out with golf carts and address any changes in the future. Council with input from Manager Gill and Chief Gaines discussed developing the ordinance to address concerns, IDOT to review this week, age of 18, golf carts at High School, which would be determined by the High School, speed limits signs to deter speeding, other municipalities having golf carts as Effingham, Centralia, Bloomington, add to the sense of community, crossing signs, potential markets, parking with questions from Jacob and Vee Kimery, ability to reach each restaurant, and enforcement by Police Department.

Mayor Hall declared the motion carried by the following vote: YEA Commissioner Butler, YEA Commissioner Closson, YEA Commissioner Cox, YEA Commissioner Phipps, YEA Mayor Hall.

Commissioner Closson seconded by Commissioner Phipps moved to adopt Resolution No. 2025-3308, appropriating \$550,000 of Motor Fuel Tax funds for the 2024 Street Maintenance uses; and authorizing the city clerk to sign the document. [24-00000-00-GM] BLR 14220



CITY OF MATTOON, ILLINOIS
RESOLUTION NO. 2025-3308

Resolution for Maintenance
Under the Illinois Highway Code

District	County	Resolution Number	Resolution Type	Section Number
7	Coles	2025-3308	Supplemental	24-00000-00-GM

BE IT RESOLVED, by the _____ Council _____ of the _____ City _____ of _____
Governing Body Type Local Public Agency Type
_____ Mattoon _____ Illinois that there is hereby appropriated the sum of _____
Name of Local Public Agency
Five hundred and fifty thousand dollars and zero cents. _____ Dollars (\$550,000.00)
of Motor Fuel Tax funds for the purpose of maintaining streets and highways under the applicable provisions of Illinois Highway Code from
_____ 01/01/24 _____ to _____ 04/30/25 _____
Beginning Date Ending Date

BE IT FURTHER RESOLVED, that only those operations as listed and described on the approved Estimate of Maintenance Costs, including supplemental or revised estimates approved in connection with this resolution, are eligible for maintenance with Motor Fuel Tax funds during the period as specified above.

BE IT FURTHER RESOLVED, that _____ City _____ of _____ Mattoon _____
Local Public Agency Type Name of Local Public Agency
shall submit within three months after the end of the maintenance period as stated above, to the Department of Transportation, on forms available from the Department, a certified statement showing expenditures and the balances remaining in the funds authorized for expenditure by the Department under this appropriation, and

BE IT FURTHER RESOLVED, that the Clerk is hereby directed to transmit four (4) certified originals of this resolution to the district office of the Department of Transportation.

I _____ Susan J. O'Brien _____ City _____ Clerk in and for said _____ City _____
Name of Clerk Local Public Agency Type Local Public Agency Type
Of _____ City of Mattoon _____ in the State of Illinois, and keeper of the records and files thereof, as
Name of Local Public Agency
provided by statute, do hereby certify the foregoing to be a true, perfect and complete copy of a resolution adopted by the
_____ Council _____ of _____ Mattoon _____ at a meeting held on _____ 06/17/25 _____
Governing Body Type Name of Local Public Agency Date
IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this _____ 18th _____ day of _____ June, 2025 _____
Day Month, Year

(SEAL, if required by the LPA)

Clerk Signature

--

APPROVED

Regional Engineer
Department of Transportation

Date

--	--

Completed 06/05/25

BLR 14220 (Rev. 12/13/22)

Mayor Hall opened the floor for comments. Director Clark noted the initial obligation of funds which cover the expenses of the year and included four additional months due to switching to a fiscal versus calendar year.

Mayor Hall declared the motion carried by the following vote: YEA Commissioner Butler, YEA Commissioner Closson, YEA Commissioner Cox, YEA Commissioner Phipps, YEA Mayor Hall.

Commissioner Cox seconded by Commissioner Phipps moved to approve Council Decision Request 2025-2605, approving the plans and specifications to perform concrete paving and patching on Remington Road and Swords Drive. 25-00000-04-GM

Mayor Hall opened the floor for comments. Director Clark explained how the concrete panels were cracked in the area, so the crews will have them fixed.

Mayor Hall declared the motion carried by the following vote: YEA Commissioner Butler, YEA Commissioner Closson, YEA Commissioner Cox, YEA Commissioner Phipps, YEA Mayor Hall.

Commissioner Phipps seconded by Commissioner Cox moved to approve Council Decision Request 2025-2606, approving the engineering proposal in the amount of \$70,000 from the Upchurch Group to complete Phase II Engineering for final plans and specifications for the Right In/Right Out on Illinois Route 16 west of Walmart to connect to the Wooddell Way Extension at Dettro Drive; and authorizing the mayor to sign the proposal.

Mayor Hall opened the floor for comments. Director Clark explained how having the engineering proposal prepared allows the City to apply for more grants and have a better chance to obtain grant funds.

Mayor Hall declared the motion carried by the following vote: YEA Commissioner Butler, YEA Commissioner Closson, YEA Commissioner Cox, YEA Commissioner Phipps, YEA Mayor Hall.

Commissioner Butler seconded by Commissioner Closson moved to adopt Resolution No. 2025-3309, approving the payment design costs for completing final plans, specifications, and bid documents for construction a Right In/Right Out entrance on Illinois Route 16 west of Walmart and connecting it to the extension of Woodell Way on the west side of Dettro Drive for the lump sum amount of \$70,000.00 using Rebuild Illinois Funds (RBI); and authorizing the city clerk to sign the resolution. 13-00259-00-PV



CITY OF MATTOON, ILLINOIS
RESOLUTION NO. 2025-3209

Resolution for Improvement
Under the Illinois Highway Code

Is this project a bondable capital improvement?

☒ Yes ☐ No

Resolution Type	Resolution Number	Section Number
Original	2025-3309	13-00259-00-PV

BE IT RESOLVED, by the Council of the City
Governing Body Type Local Public Agency Type
of Mattoon Illinois that the following described street(s)/road(s)/structure be improved under
Name of Local Public Agency
the Illinois Highway Code. Work shall be done by Contract
Contract or Day Labor

For Roadway/Street Improvements:

Name of Street(s)/Road(s)	Length (miles)	Route	From	To
Dettro to IL Loop Road.	0.7		Dettro Drive	IL 16

For Structures:

Name of Street(s)/Road(s)	Existing Structure No.	Route	Location	Feature Crossed

BE IT FURTHER RESOLVED,

1. That the proposed improvement shall consist of

Phase II Engineering to construct a Right In / Right Out intersection at IL 16 and then connect with Wooddell Way at Dettro Drive.

2. That there is hereby appropriated the sum of Sixty-nine thousand four hundred nine and 33/100

Dollars (\$69,409.33) for the improvement of
said section from the Local Public Agency's allotment of Motor Fuel Tax funds.

BE IT FURTHER RESOLVED, that the Clerk is hereby directed to transmit four (4) certified originals of this resolution to the district office of the Department of Transportation.

I, Susan O'Brien City Mattoon Clerk in and for said City
Name of Clerk Local Public Agency Type Local Public Agency Type
of Mattoon in the State aforesaid, and keeper of the records and files thereof, as provided by
Name of Local Public Agency
statute, do hereby certify the foregoing to be a true, perfect and complete original of a resolution adopted by
Council of Mattoon at a meeting held on June 17, 2025
Governing Body Type Name of Local Public Agency Date

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 18th day of June, 2025
Day Month, Year

(SEAL, if required by the LPA)

Clerk Signature & Date

06/18/2025

Approved

Regional Engineer Signature & Date
Department of Transportation

Mayor Hall opened the floor for comments. Director Clark stated this request for Rebuild Illinois funds which had to be obligated by the end of June including the next two resolutions which were for the same reasons.

Mayor Hall declared the motion carried by the following vote: YEA Commissioner Butler, YEA Commissioner Closson, YEA Commissioner Cox, YEA Commissioner Phipps, YEA Mayor Hall.

Commissioner Closson seconded by Commissioner Butler moved to adopt Resolution No. 2025-3310, approving the payment of the City of Mattoon's portion of construction costs for the extension of Wooddell Way west of Dettro Drive in the amount of \$175,000.00 using Rebuild Illinois Funds (RBI); and authorizing the city clerk to sign the resolution. 23-00353-00-PV.

CITY OF MATTOON, ILLINOIS
RESOLUTION NO. 2025-3310



Resolution for Improvement
Under the Illinois Highway Code

Is this project a bondable capital improvement?

☒ Yes ☐ No

Resolution Type

Resolution Number

Section Number

Original

2025-3310

23-00353-00-PV

BE IT RESOLVED, by the Council

of the City

Governing Body Type

Local Public Agency Type

of Mattoon

Illinois that the following described street(s)/road(s)/structure be improved under

Name of Local Public Agency

the Illinois Highway Code. Work shall be done by Contract

Contract or Day Labor

For Roadway/Street Improvements:

Name of Street(s)/Road(s)	Length (miles)	Route	From	To
Wooddell Way	0.075		Dettro Drive	400 Feet West

For Structures:

Name of Street(s)/Road(s)	Existing Structure No.	Route	Location	Feature Crossed

BE IT FURTHER RESOLVED,

1. That the proposed improvement shall consist of

Construction a new section of Wooddell Way west of Dettro Drive. This will be new concrete pavement, curb and gutter, and storm sewer

2. That there is hereby appropriated the sum of One hundred seventy-five thousand and 00/100.

Dollars (\$175,000.00) for the improvement of

said section from the Local Public Agency's allotment of Motor Fuel Tax funds.

BE IT FURTHER RESOLVED, that the Clerk is hereby directed to transmit four (4) certified originals of this resolution to the district office of the Department of Transportation.

I, Susan O'Brien

City

Clerk in and for said City

Name of Clerk

Local Public Agency Type

Local Public Agency Type

of Mattoon

Name of Local Public Agency

in the State aforesaid, and keeper of the records and files thereof, as provided by

statute, do hereby certify the foregoing to be a true, perfect and complete original of a resolution adopted by

Council

of Mattoon

at a meeting held on June 17, 2025

Governing Body Type

Name of Local Public Agency

Date

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 18th day of June, 2025

Day

Month, Year

(SEAL, if required by the LPA)

Clerk Signature & Date

/s/ Susan J. O'Brien

06/18/2025

Approved

Regional Engineer Signature & Date
Department of Transportation

Mayor Hall opened the floor for comments. Director Clark stated this request was the same principle.

Mayor Hall declared the motion carried by the following vote: YEA Commissioner Butler, YEA Commissioner Closson, YEA Commissioner Cox, YEA Commissioner Phipps, YEA Mayor Hall.

Commissioner Cox seconded by Commissioner Phipps moved to adopt Resolution No. 2025-3311, approving the payment of the City of Mattoon's portion of engineering costs to complete the Phase I Study of the intersection at Swords Drive and Illinois Route 16 in the amount of \$114,000.00 using Rebuild Illinois Funds (RBI); and authorizing the city clerk to sign the resolution. 25-00374-00-TS



**CITY OF MATTOON, ILLINOIS
RESOLUTION NO. 2025-3311**

**Resolution for Improvement
Under the Illinois Highway Code**

Is this project a bondable capital improvement?

☒ Yes ☐ No

Resolution Type Resolution Number Section Number

Original 2025-3311 25-00374-00-TS

BE IT RESOLVED, by the Council of the City

Governing Body Type

Local Public Agency Type

of Mattoon

Name of Local Public Agency

Illinois that the following described street(s)/road(s)/structure be improved under the Illinois Highway Code. Work shall be done by Contract

Contract or Day Labor

For Roadway/Street Improvements:

Name of Street(s)/Road(s)	Length (miles)	Route	From	To
Swords Drive & IL 16 Intersection	0.3	IL 16 (FAP 325)	Broadway Ave	Remington Road

For Structures:

Name of Street(s)/Road(s)	Existing Structure No.	Route	Location	Feature Crossed

BE IT FURTHER RESOLVED,

1. That the proposed improvement shall consist of

Perform Phase I Engineering for an Intersection Design Study, Traffic Study at the intersection of IL 16 and Swords Drive from Broadway Ave. to Remington Road to determine improvements required in the intersection and on Swords to the south.

2. That there is hereby appropriated the sum of One hundred fourteen thousand and 00/100.

Dollars (\$114,000.00) for the improvement of

said section from the Local Public Agency's allotment of Motor Fuel Tax funds.

BE IT FURTHER RESOLVED, that the Clerk is hereby directed to transmit four (4) certified originals of this resolution to the district office of the Department of Transportation.

I, Susan O'Brien

City

Clerk in and for said City

Name of Clerk

Local Public Agency Type

Local Public Agency Type

of Mattoon

Name of Local Public Agency

in the State aforesaid, and keeper of the records and files thereof, as provided by

statute, do hereby certify the foregoing to be a true, perfect and complete original of a resolution adopted by

Council

Governing Body Type

of Mattoon

Name of Local Public Agency

at a meeting held on June 17, 2025

Date

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 18th day of June, 2025

Day

Month, Year

(SEAL, if required by the LPA)

Clerk Signature & Date

/s/ Susan J. O'Brien

06/18/2025

Approved

Regional Engineer Signature & Date
Department of Transportation

Mayor Hall opened the floor for comments. Director Clark stated this was the same thing and the total cost would be 50/50 with IDOT to complete the study.

Mayor Hall declared the motion carried by the following vote: YEA Commissioner Butler, YEA Commissioner Closson, YEA Commissioner Cox, YEA Commissioner Phipps, YEA Mayor Hall.

Commissioner Phipps seconded by Commissioner Butler moved to adopt Special Ordinance No. 2025-1965, approving the interest rate and terms for a \$45,000 loan from the Revolving Loan Fund to Melissa M. Walker-Harden of Studio 21 to finance the RLF loan at the Studio 21 Facility located at 1408 Broadway Avenue, Mattoon, Illinois.

CITY OF MATTOON, ILLINOIS

SPECIAL ORDINANCE NO. 2025-1965

AN ORDINANCE APPROVING AN INTEREST RATE AND TERMS FOR \$45,000 LOAN FROM THE REVOLVING LOAN FUND TO STUDIO 21 MELISSA M WALKER-HARDEN FOR EQUIPMENT AND RENOVATIONS FOR STUDIO 21 AT 1408 BROADWAY AVENUE, MATTOON

WHEREAS, the City of Mattoon has a Revolving Loan Fund (RLF) Program; and,

WHEREAS, STUDIO 21, Melissa M. Walker-Harden has submitted a Revolving Loan Application for RLF funds in the amount of forty-five thousand (\$45,000) for equipment and working capital at 1408 Broadway Avenue; and,

WHEREAS, the equipment and working capital costs are to establish the business operations; and,

WHEREAS, the Mattoon Revolving Loan Fund (RLF) Committee has reviewed said RLF Application and recommends City Council approval in accordance with the applicable guidelines.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Mattoon as follows:

Section 1. The City Council hereby approves the Studio 21, Melissa M. Walker-Harden RLF loan request in the amount of forty-five thousand (\$45,000) for a fixed annual interest rate of 3% for a term of eight (8) years for renovations at 1408 Broadway Avenue.

Section 2. The Municipal Clerk is hereby directed to file a certified copy of this ordinance in the City Revolving Loan File.

Section 3. This ordinance shall be deemed published as of the day of its adoption and approval by the City Council.

Upon motion by Commissioner Phipps, seconded by Commissioner Butler, adopted this this 17th day of June, 2025, by a roll call vote, as follows:

AYES (Names): Commissioner Butler, Commissioner Closson,
Commissioner Cox, Commissioner Phipps,
Mayor Hall

NAYS (Names): None

ABSENT (Names): None

Approved this 17th day of June, 2025.

/s/Rick Hall
Rick Hall, Mayor
City of Mattoon, Illinois

ATTEST:

APPROVED AS TO FORM:

/s/Susan J. O'Brien
Susan J. O'Brien, City Clerk

/s/Dan C. Jones
Dan C. Jones, City Attorney

Recorded in the Municipality's Records on 06-17, 2025.

Mayor Hall opened the floor for comments. Manager Gill noted this grant was similar to the past grants (Harold's Cleaners as an example) with Studio 21 as a new business, new equipment including three beauty salon chairs to rent out.

Mayor Hall declared the motion carried by the following vote: YEA Commissioner Butler, YEA Commissioner Closson, YEA Commissioner Cox, YEA Commissioner Phipps, YEA Mayor Hall.

Commissioner Butler seconded by Commissioner Closson moved to approve Council Decision Request 2025-2607, authorizing the purchase of a new TV450B Case Track Loader (skid steerer) in the amount of \$65,700 with trade-in attachments from Birkey's Construction Equipment for use in the Public Works Department; and authorizing the city manager to sign the invoice.

Mayor Hall opened the floor for comments. Manager Gill noted the trading-in of the older skid steer for a replacement of equipment; explained Sourcewell cooperative purchasing advantages were more than the three quotes the City received; and reviewed the Case bid as lower with ease of maintenance.

Mayor Hall declared the motion carried by the following vote: YEA Commissioner Butler, YEA Commissioner Closson, YEA Commissioner Cox, YEA Commissioner Phipps, YEA Mayor Hall.

COMMENTS BY THE COUNCIL

Council thanked those in attendance for good dialogue and input, efforts in bringing the golf cart ordinance to Council, and appreciation of attendees with good citizens' feedback. Mayor Hall added the time expended for the Phase II bond sales which occur at the end of the month with Phase II moving ahead so construction to be completed in the next 12 months to coincide with the June '26 baseball schedule, and appreciated the time and efforts by Manager Gill.

Commissioner Cox seconded by Commissioner Phipps moved to adjourn at 7:55 p.m.

Mayor Hall declared the motion carried by the following vote: NAY Commissioner Butler, YEA Commissioner Closson, YEA Commissioner Cox, YEA Commissioner Phipps, YEA Mayor Hall.

/s/Susan J. O'Brien
City Clerk

BILLS & PAYROLL:

BILLS & PAYROLL BEGIN ON THE NEXT PAGE.

CITY OF MATTOON
PAYROLL 6/20/2025
5/31/2025-6/13/2025

	G/L ACCOUNT	ACCOUNT NAME	AMOUNT
CITY COUNCIL	110 5110-111	SALARIES OF REG EMPLOYEES	\$ 590.73
CITY CLERK	110 5120-111	SALARIES OF REG EMPLOYEES	\$ 4,534.60
	110 5120-114	COMPENSATED ABSENCES	\$ 288.94
CITY ADMINISTRATOR	110 5130-111	SALARIES OF REG EMPLOYEES	\$ 2,230.76
FINANCIAL ADMINISTRATION	110 5150-111	SALARIES OF REG EMPLOYEES	\$ 2,419.68
	110 5150-114	COMPENSATED ABSENCES	\$ 113.35
COMPUTER INFO SYSTEMS	110 5170-111	SALARIES OF REG EMPLOYEES	\$ 5,390.68
	110 5170-112	SALARIES OF TEMP EMPLOYEES	\$ 480.00
	110 5170-114	COMPENSATED ABSENCES	\$ 249.60
POLICE ADMINISTRATION	110 5211-111	SALARIES OF REG EMPLOYEES	\$ 17,655.68
CRIMINAL INVESTIGATION	110 5212-111	SALARIES OF REG EMPLOYEES	\$ 13,480.00
	110 5212-113	OVERTIME	\$ 2,324.61
PATROL	110 5213-111	SALARIES OF REG EMPLOYEES	\$ 93,465.54
	110 5213-113	OVERTIME	\$ 1,061.41
K-9 SERVICE	110 5214-111	SALARIES OF REG EMPLOYEES	\$ 6,607.14
	110 5214-113	OVERTIME	\$ 340.69
SCHOOL RESOURCE PROGRAM	110 5227-111	SALARIES OF REG EMPLOYEES	\$ 6,477.77
FIRE PROTECTION ADMIN	110 5241-111	SALARIES OF REG EMPLOYEES	\$ 49,407.70
	110 5241-112	SALARIES OF PART-TIME EMPLOYEE	\$ 120.00
	110 5241-113	OVERTIME	\$ 6,314.69
	110 5241-114	COMPENSATED ABSENCES	\$ 18,465.57
AMBULANCE SERVICE	110 5242-111	SALARIES OF REG EMPLOYEES	\$ 21,048.80
	110 5242-113	OVERTIME	\$ 2,682.22
	110 5242-114	COMPENSATED ABSENCES	\$ 6,915.17
CODE ENFORCEMENT ADMIN	110 5261-111	SALARIES OF REG EMPLOYEES	\$ 4,068.28
	110 5261-112	SALARIES OF TEMP EMPLOYEES	\$ 1,248.00
PUBLIC WORKS ADMIN	110 5310-111	SALARIES OF REG EMPLOYEES	\$ 6,974.03
	110 5310-112	SALARIES OF TEMP EMPLOYEES	\$ 1,520.00
	110 5310-113	OVERTIME	\$ 142.28
	110 5310-114	COMPENSATED ABSENCES	\$ 299.17
STREETS	110 5320-111	SALARIES OF REG EMPLOYEES	\$ 12,356.43
	110 5320-112	SALARIES OF TEMP EMPLOYEES	\$ 486.40
	110 5320-113	OVERTIME	\$ 336.34
	110 5320-114	COMPENSATED ABSENCES	\$ 2,828.03
CUSTODIAL SERVICES	110 5381-111	SALARIES OF REG EMPLOYEES	\$ 891.48
	110 5381-114	COMPENSATED ABSENCES	\$ 891.50
PARK ADMINISTRATION	110 5511-111	SALARIES OF REG EMPLOYEES	\$ 6,164.72
	110 5511-112	SALARIES OF TEMP EMPLOYEES	\$ 5,799.75
	110 5511-113	OVERTIME	\$ 2,377.94
	110 5511-114	COMPENSATED ABSENCES	\$ 196.94

CITY OF MATTOON
PAYROLL 6/20/2025
5/31/2025-6/13/2025

LAKE MATTOON	110 5512-111	SALARIES OF REG EMPLOYEES	\$ 2,238.96
	110 5512-112	SALARIES OF TEMP EMPLOYEES	\$ 1,287.75
	110 5512-114	COMPENSATED ABSENCES	\$ 474.74
CEMETERY	110 5570-111	SALARIES OF REG EMPLOYEES	\$ 2,787.65
	110 5570-112	SALARIES OF TEMP EMPLOYEES	\$ 4,242.00
	110 5570-113	OVERTIME	\$ 137.68
		*** FUND 110 TOTALS ***	\$ 320,415.40
HOTEL TAX ADMINISTRATION	122 5653-111	SALARIES OF REG EMPLOYEES	\$ 5,025.78
	122 5653-113	OVERTIME	\$ 24.00
	122 5653-114	COMPENSATED ABSENCES	\$ 551.54
		*** FUND 122 TOTALS ***	\$ 5,601.32
WATER TREATMENT PLANT	211 5353-111	SALARIES OF REG EMPLOYEES	\$ 14,851.11
	211 5353-112	SALARIES OF TEMP EMPLOYEES	\$ 2,457.14
	211 5353-113	OVERTIME	\$ 425.07
	211 5353-114	COMPENSATED ABSENCES	\$ 1,331.29
WATER DISTRIBUTION	211 5354-111	SALARIES OF REG EMPLOYEES	\$ 9,267.32
	211 5354-112	SALARIES OF TEMP EMPLOYEES	\$ 364.80
	211 5354-113	OVERTIME	\$ 149.48
	211 5354-114	COMPENSATED ABSENCES	\$ 2,120.91
ACCOUNTING & COLLECTION	211 5355-111	SALARIES OF REG EMPLOYEES	\$ 5,731.42
	211 5355-112	SALARIES OF TEMP EMPLOYEES	\$ 224.00
	211 5355-113	OVERTIME	\$ 51.73
	211 5355-114	COMPENSATED ABSENCES	\$ 674.75
ADMINISTRATIVE & GENERAL	211 5356-111	SALARIES OF REG EMPLOYEES	\$ 10,127.94
	211 5356-113	OVERTIME	\$ 106.70
	211 5356-114	COMPENSATED ABSENCES	\$ 278.09
		*** FUND 211 TOTALS ***	\$ 48,161.75
SANITARY SEWER MTCE & CLEAN	212 5342-111	SALARIES OF REG EMPLOYEES	\$ 9,267.32
	212 5342-112	SALARIES OF TEMP EMPLOYEES	\$ 364.80
	212 5342-113	OVERTIME	\$ 149.48
	212 5342-114	COMPENSATED ABSENCES	\$ 2,120.91
WASTEWATER TREATMENT PLANT	212 5344-111	SALARIES OF REG EMPLOYEES	\$ 6,400.54
	212 5344-113	OVERTIME	\$ 784.42
	212 5344-114	COMPENSATED ABSENCES	\$ 4,747.41

CITY OF MATTOON
PAYROLL 6/20/2025
5/31/2025-6/13/2025

ACCOUNTING & COLLECTION	212 5345-111	SALARIES OF REG EMPLOYEES	\$	5,731.44
	212 5345-112	SALARIES OF TEMP EMPLOYEES	\$	224.00
	212 5345-113	OVERTIME	\$	51.74
	212 5345-114	COMPENSATED ABSENCES	\$	674.81
ADMINISTRATIVE & GENERAL	212 5346-111	SALARIES OF REG EMPLOYEES	\$	10,127.94
	212 5346-113	OVERTIME	\$	106.70
	212 5346-114	COMPENSATED ABSENCES	\$	278.09
		*** FUND 212 TOTALS ***	\$	41,029.60

CITY OF MATTOON

PAYROLL 6/20/2025

5/31/2025 - 6/13/2025

GRAND TOTALS ***

\$ 415,208.07

*** PAY CODE TOTALS ***

PAY CODE	NO OF TIMES	HOURS	AMOUNT
SALARY PAY	136	10,373.08	\$ 334,370.35
SICK PAY-AFSCME	17	224.75	\$ 7,223.03
VACATION PAY	27	379.5	\$ 12,561.95
HOLIDAY PAY-REGULAR	31	172.66	\$ 4,854.70
VACATION PAY	8	408	\$ 13,205.46
SICK-FD UNION	6	158	\$ 5,373.90
REGULAR PAY	25	1,111.25	\$ 19,119.99
OVERTIME PAY	34	383.75	\$ 16,467.00
SHIFT PAY	4	96	\$ 65.28
STRAIGHT OT POLICE	1	15	\$ 707.97
SICK-NON UNION	4	9	\$ 281.77
CAPTAIN PAY	6	360	\$ 360.00
SHIFT PAY	3	240	\$ 187.20
COMP EARNED	3	86.63	\$ -
BACK PAY	1		60.00CR
HOLIDAY PAY-OT	1	8	\$ 392.21
COMP PAID	1	4	\$ 97.26

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 110 CITY COUNCIL

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5110-829	VGT ALLOCATIO:	USPS	162713	39.28
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5110-562	TRAVEL & TRAI:	NIU	162713	250.00
VENDOR 01-000720 TOTALS							289.28
01-001886	RICK HALL	I-202506260749	110 5110-562	TRAVEL & TRAI:	MILEAGE 6/10/2025	001887	70.70
VENDOR 01-001886 TOTALS							70.70
01-004619	COLUMN SOFTWARE PBC	I-30D2103C-0059	110 5110-827	VGT ALLOCATIO:	DEMO NOTICE 1000 MAR	162754	84.80
01-004619	COLUMN SOFTWARE PBC	I-30D2103C-0060	110 5110-827	VGT ALLOCATIO:	DEMO 320 N 16TH	162754	84.80
VENDOR 01-004619 TOTALS							169.60
01-004706	DEANGELO CONTRACTING S	I-INV-040214	110 5110-827	VGT ALLOCATIO:	SPRING SPRAYING	162755	1,385.89
VENDOR 01-004706 TOTALS							1,385.89
01-004730	DENZIN SOLTANZADEH LLC	I-20141	110 5110-827	VGT ALLOCATIO:	LEGAL SERVICES	162756	939.00
01-004730	DENZIN SOLTANZADEH LLC	I-20142	110 5110-827	VGT ALLOCATIO:	LEGAL SERVICES	162756	290.50
01-004730	DENZIN SOLTANZADEH LLC	I-20146	110 5110-827	VGT ALLOCATIO:	LEGAL SERVICES	162756	143.00
01-004730	DENZIN SOLTANZADEH LLC	I-20147	110 5110-827	VGT ALLOCATIO:	LEGAL SERVICES	162756	25.00
01-004730	DENZIN SOLTANZADEH LLC	I-20148	110 5110-827	VGT ALLOCATIO:	LEGAL SERVICES	162756	143.50
01-004730	DENZIN SOLTANZADEH LLC	I-20149	110 5110-827	VGT ALLOCATIO:	LEGAL SERVICES	162756	303.00
01-004730	DENZIN SOLTANZADEH LLC	I-20150	110 5110-827	VGT ALLOCATIO:	LEGAL SERVICES	162756	255.00
01-004730	DENZIN SOLTANZADEH LLC	I-20155	110 5110-827	VGT ALLOCATIO:	LEGAL SERVICES	162756	630.00
VENDOR 01-004730 TOTALS							2,729.00
01-008200	COLES CO REGIONAL PLAN	I-8124	110 5110-825	GRANTS	: LEAD SERVICE LINE IN	162753	788.45
VENDOR 01-008200 TOTALS							788.45
DEPARTMENT 110 CITY COUNCIL TOTAL:							5,432.92
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5120-311	OFFICE SUPPLI:	STAPLES	162713	89.76
VENDOR 01-000720 TOTALS							89.76

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 120 CITY CLERK

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-003555	WASHINGTON SAVINGS BAN	I-202506260753	110 5120-519	OTHER PROFESS:	SAFE DEPOSIT BOX	162735	40.00
					VENDOR 01-003555 TOTALS		40.00
01-004758	MARLIN LEASING CORPORA	I-40605460	110 5120-814	PRINT/COPY MA:	COPIER	162769	566.78
					VENDOR 01-004758 TOTALS		566.78
				DEPARTMENT 120	CITY CLERK	TOTAL:	696.54
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5150-571	DUES & MEMBER:	AICPA	162713	355.00
					VENDOR 01-000720 TOTALS		355.00
01-003334	LAUTERBACH & AMEN, LLP	I-105546	110 5150-513	AUDITING & AC:	WEST COST CALCULATIO	162767	567.00
					VENDOR 01-003334 TOTALS		567.00
				DEPARTMENT 150	FINANCIAL ADMINISTRATION	TOTAL:	922.00
01-004299	SMITH, PAPPAS & JONES	I-JULY2025-LEGALSERV	110 5160-519	OTHER PROFESS:	LEGAL SERVICES	162781	3,750.00
					VENDOR 01-004299 TOTALS		3,750.00
				DEPARTMENT 160	LEGAL SERVICES	TOTAL:	3,750.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5170-325	SOFTWARE	: TODOIST	162713	16.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5170-516	TECHNOLOGY SU:	SMTP2GO	162713	70.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5170-571	DUES & MEMBER:	GMIS INTERNATIONAL	162713	350.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5170-852	NETWORK SECUR:	DUO SECURITY LLC	162713	30.00
					VENDOR 01-000720 TOTALS		466.00
01-001620	VERIZON WIRELESS	I-6116113932	110 5170-533	CELLULAR PHON:	MOBILES	162787	20.79
01-001620	VERIZON WIRELESS	I-6116113932	110 5170-533	CELLULAR PHON:	MOBILES	162787	42.35
					VENDOR 01-001620 TOTALS		63.14

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 170 COMPUTER INFO SYSTEMS

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
=====							
01-004672	CIVICPLUS LLC	I-334470	110 5170-841	WIDE AREA NET:	SOCIAL MEDIA ARCHIVE	001875	4,617.27
						VENDOR 01-004672 TOTALS	4,617.27
=====							
				DEPARTMENT 170	COMPUTER INFO SYSTEMS	TOTAL:	5,146.41

01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5211-311	OFFICE SUPPLI:	STAPLES	162713	202.72
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5211-313	MEDICAL & SAF:	STAPLES	162713	27.98
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5211-562	TRAVEL & TRAI:	CASEYS	162713	42.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5211-562	TRAVEL & TRAI:	RACE TRAC	162713	22.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5211-562	TRAVEL & TRAI:	SHELL	162713	45.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5211-562	TRAVEL & TRAI:	BUC-EE'S	162713	33.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5211-562	TRAVEL & TRAI:	CARIBE ROYALE	162713	7.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5211-562	TRAVEL & TRAI:	MARATHON	162713	20.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5211-562	TRAVEL & TRAI:	SHELL	162713	48.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5211-311	OFFICE SUPPLI:	STAPLES	162713	673.14
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5211-313	MEDICAL & SAF:	STAPLES	162713	23.99
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5211-562	TRAVEL & TRAI:	ST PETERSBURG MARRIO	162713	304.00
						VENDOR 01-000720 TOTALS	1,448.83
=====							
01-000732	LAKE LAND COLLEGE	I-1613184	110 5211-550	PRINTING & BI:	CITATIONS	162765	673.20
						VENDOR 01-000732 TOTALS	673.20
=====							
01-001620	VERIZON WIRELESS	I-6116113932	110 5211-533	CELLULAR PHON:	MOBILES	162787	764.96
01-001620	VERIZON WIRELESS	I-6116113932	110 5211-533	CELLULAR PHON:	MOBILES	162787	15.09-
01-001620	VERIZON WIRELESS	I-6116113932	110 5211-533	CELLULAR PHON:	MOBILES	162787	78.36
01-001620	VERIZON WIRELESS	I-6116113932	110 5211-533	CELLULAR PHON:	MOBILES	162787	402.18
						VENDOR 01-001620 TOTALS	1,230.41
=====							
01-003705	EDWARDS CARPENTRY, INC	I-2587	110 5211-579	MISC OTHER PU:	MOWING 6/6 & 6/13	162758	300.00
01-003705	EDWARDS CARPENTRY, INC	I-2588	110 5211-579	MISC OTHER PU:	NUISANCE MOWING 6/1	162758	60.00
						VENDOR 01-003705 TOTALS	360.00
=====							
01-004497	COBAN TECHNOLOGIES, IN	I-59537	110 5211-316	TOOLS & EQUIP:	CAMERA EXTENSION CAB	162751	240.00
						VENDOR 01-004497 TOTALS	240.00
=====							

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 211 POLICE ADMINISTRATION

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-004758	MARLIN LEASING CORPORA	I-40605380	110 5211-814	PRINT/COPY MA: COPIER		162769	209.56
01-004758	MARLIN LEASING CORPORA	I-40605463	110 5211-814	PRINT/COPY MA: COPIER		162769	137.72
VENDOR 01-004758 TOTALS							347.28
01-037800	RAY O'HERRON CO	I-2419015	110 5211-315	UNIFORMS & CL: BADGES		162776	339.87
VENDOR 01-037800 TOTALS							339.87
01-038700	MATTOON POLICE PENSION	I-202506260751	110 5211-232	POLICE PENSIO: PROPERTY TAX DISTRIB	001868		288,152.34
VENDOR 01-038700 TOTALS							288,152.34
DEPARTMENT 211 POLICE ADMINISTRATION TOTAL:							292,791.93
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5213-319	MISCELLANEOUS: STAPLES		162713	59.67
VENDOR 01-000720 TOTALS							59.67
01-002062	LEXIPOL, LLC	I-INVLEX11254295	110 5213-579	MISC OTHER PU: LAW ENFORCEMENT POLI	162768		5,659.87
VENDOR 01-002062 TOTALS							5,659.87
DEPARTMENT 213 PATROL TOTAL:							5,719.54
01-003663	ALBIN ANIMAL HOSPITAL	I-202506240736	110 5214-579	MISC OTHER PU: BANE P/E 6/6/25		162746	504.54
VENDOR 01-003663 TOTALS							504.54
DEPARTMENT 214 K-9 SERVICE TOTAL:							504.54
01-002934	SOUTH CENTRAL FS, INC.	I-202506200722	110 5223-326	FUEL : MAY FUEL		001848	6,721.32
VENDOR 01-002934 TOTALS							6,721.32
01-003951	ZURCHER TIRE, INC.	C-5702206346	110 5223-318	VEHICLE PARTS: TIRES		162790	1,927.56-

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 223 AUTOMOTIVE SERVICES

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-003951	ZURCHER TIRE, INC.	I-5702205954	110 5223-318	VEHICLE PARTS: TIRES		162790	3,420.00
						VENDOR 01-003951 TOTALS	1,492.44
01-004510	KC SUMMERS NISSAN MAZD I-6152838		110 5223-434	REPAIR OF VEH: OIL CHANGE		162764	56.61
01-004510	KC SUMMERS NISSAN MAZD I-6152839		110 5223-434	REPAIR OF VEH: OIL CHANGE, TIRE INS		162764	166.61
01-004510	KC SUMMERS NISSAN MAZD I-6152848		110 5223-434	REPAIR OF VEH: OIL CHANGE		162764	60.99
01-004510	KC SUMMERS NISSAN MAZD I-6152850		110 5223-434	REPAIR OF VEH: UNIT 11 REPAIRS		162764	1,223.68
01-004510	KC SUMMERS NISSAN MAZD I-6152851		110 5223-434	REPAIR OF VEH: UNIT 12 REPAIRS		162764	436.55
01-004510	KC SUMMERS NISSAN MAZD I-6152856		110 5223-434	REPAIR OF VEH: OIL CHANGE		162764	60.99
01-004510	KC SUMMERS NISSAN MAZD I-6152857		110 5223-434	REPAIR OF VEH: OIL CHANGE		162764	60.99
01-004510	KC SUMMERS NISSAN MAZD I-6152862		110 5223-434	REPAIR OF VEH: OIL CHANGE		162764	56.61
01-004510	KC SUMMERS NISSAN MAZD I-6152866		110 5223-434	REPAIR OF VEH: UNIT 16 REPAIRS		162764	166.61
						VENDOR 01-004510 TOTALS	2,289.64
01-041000	SECRETARY OF STATE	I-202506240735	110 5223-319	MISCELLANEOUS: RENEW REGISTRATION		010676	151.00
						VENDOR 01-041000 TOTALS	151.00
						DEPARTMENT 223 AUTOMOTIVE SERVICES TOTAL:	10,654.40
01-000720	ELAN FINANCIAL SERVICE I-202506200721		110 5224-316	TOOLS & EQUIP: HOME DEPOT		162713	249.00
						VENDOR 01-000720 TOTALS	249.00
01-001070	AMEREN ILLINOIS	I-202506180686	110 5224-321	UTILITIES : 620 S 12TH		010610	62.32
						VENDOR 01-001070 TOTALS	62.32
01-003044	GETZ FIRE EQUIPMENT	I-I2-586374	110 5224-432	REPAIR OF BUI: HEAT/SMOKE DETECTOR		162759	5,100.20
						VENDOR 01-003044 TOTALS	5,100.20
01-004253	SYCAMORE ENGINEERING	I-400012967	110 5224-432	REPAIR OF BUI: REPAIR 1ST FLOOR HVA		162784	448.00
						VENDOR 01-004253 TOTALS	448.00

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 224 POLICE BUILDINGS

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-004602	AEP ENERGY	I-202506240739	110 5224-321	UTILITIES	: 620 S 12TH 2929	162744	18.41
01-004602	AEP ENERGY	I-202506240739	110 5224-321	UTILITIES	: 1700 WABASH 3324	162744	2,690.83
VENDOR 01-004602 TOTALS							2,709.24
01-033800	MATTOON WATER DEPT	I-202506180695	110 5224-321	UTILITIES	: 221 S 17TH	010619	34.54
01-033800	MATTOON WATER DEPT	I-202506180696	110 5224-321	UTILITIES	: 1710 WABASH	010620	140.32
VENDOR 01-033800 TOTALS							174.86
01-044480	THOMPSON ELECTRONICS C	I-122031	110 5224-439	OTHER REPAIR	: REPLACE SMOKE DETECT	162786	1,472.35
VENDOR 01-044480 TOTALS							1,472.35
DEPARTMENT 224 POLICE BUILDINGS						TOTAL:	10,215.97
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5241-432	REPAIR OF BUI:	WALMART	162713	99.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5241-742	VEHICLES	: TALBERT TINTING	162713	2,018.62
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5241-562	TRAVEL & TRAI:	PAR.A.DICE	162713	272.60
VENDOR 01-000720 TOTALS							2,390.22
01-001070	AMEREN ILLINOIS	I-202506180683	110 5241-321	UTILITIES	: 2700 MARSHALL	010607	149.02
VENDOR 01-001070 TOTALS							149.02
01-001487	AUTOZONE, INC.	I-00637932696	110 5241-316	TOOLS & EQUIP:	BIT SET	162748	16.19
VENDOR 01-001487 TOTALS							16.19
01-001620	VERIZON WIRELESS	I-6116113932	110 5241-532	TELEPHONE	: MOBILES	162787	108.03
VENDOR 01-001620 TOTALS							108.03
01-001984	BOUND TREE MEDICAL, LL	I-85792416	110 5241-313	MEDICAL & SAF:	MEDICAL SUPPLIES	162749	135.90
VENDOR 01-001984 TOTALS							135.90

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 241 FIRE PROTECTION ADMIN.

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-002934	SOUTH CENTRAL FS, INC.	I-202506200722	110 5241-326	FUEL	: MAY FUEL	001848	1,308.13
VENDOR 01-002934 TOTALS							1,308.13
01-003097	CINTAS	I-4227316979	110 5241-312	CLEANING SUPP: CLEANERS		162750	61.87
01-003097	CINTAS	I-4233186410	110 5241-312	CLEANING SUPP: CLEANERS		162750	61.87
01-003097	CINTAS	I-4233186671	110 5241-312	CLEANING SUPP: CLEANERS		162750	143.03
VENDOR 01-003097 TOTALS							266.77
01-004602	AEP ENERGY	I-202506240739	110 5241-321	UTILITIES	: 1801 PRAIRIE 3043	162744	74.35
01-004602	AEP ENERGY	I-202506240739	110 5241-321	UTILITIES	: 2700 MARSHALL 3199	162744	3.27
01-004602	AEP ENERGY	I-202506240739	110 5241-321	UTILITIES	: 2700 MARSHALL 3245	162744	174.25
01-004602	AEP ENERGY	I-202506240739	110 5241-321	UTILITIES	: 1801 PRAIRIE 3470	162744	1.36
VENDOR 01-004602 TOTALS							253.23
01-004758	MARLIN LEASING CORPORA	I-40605464	110 5241-814	PRINT/COPY MA: COPIER		010675	68.59
01-004758	MARLIN LEASING CORPORA	I-40624599	110 5241-814	PRINT/COPY MA: COPIER		162769	34.23
VENDOR 01-004758 TOTALS							102.82
01-007890	DUST & SON OF COLES CO	I-S4-1040025	110 5241-433	REPAIR OF MAC: AIR FILTER, CARBURET		162757	42.38
VENDOR 01-007890 TOTALS							42.38
01-017200	MATTOON FIRE PENSION	I-202506260750	110 5241-233	FIREFIGHTERS	: PROPERTY TAX DISTRIB	001867	378,389.32
VENDOR 01-017200 TOTALS							378,389.32
01-025600	ILMO PRODUCTS COMPANY	I-0001561370	110 5241-313	MEDICAL & SAF: CYLINDER RENTAL		001881	50.40
VENDOR 01-025600 TOTALS							50.40
01-031000	LORENZ SUPPLY CO.	I-656277	110 5241-312	CLEANING SUPP: CLEANERS		001882	90.06
VENDOR 01-031000 TOTALS							90.06

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 241 FIRE PROTECTION ADMIN.

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-044325	TERMINIX	I-650325	110 5241-579	MISC OTHER PU:	PEST CONTROL	162785	80.00
01-044325	TERMINIX	I-650326	110 5241-579	MISC OTHER PU:	PEST CONTROL	162785	65.00
VENDOR 01-044325 TOTALS							145.00

DEPARTMENT 241 FIRE PROTECTION ADMIN. TOTAL: 383,447.47

01-001620	VERIZON WIRELESS	I-6116113932	110 5242-532	TELEPHONE	: MOBILES	162787	72.02
01-001620	VERIZON WIRELESS	I-6116113932	110 5242-532	TELEPHONE	: MOBILES	162787	36.01
01-001620	VERIZON WIRELESS	I-6116113932	110 5242-532	TELEPHONE	: MOBILES	162787	36.01
01-001620	VERIZON WIRELESS	I-6116113932	110 5242-532	TELEPHONE	: MOBILES	162787	36.01
01-001620	VERIZON WIRELESS	I-6116113932	110 5242-533	CELLULAR PHON:	MOBILES	162787	72.02
VENDOR 01-001620 TOTALS							252.07

01-001984	BOUND TREE MEDICAL, LL	I-85792416	110 5242-313	MEDICAL & SAF:	MEDICAL SUPPLIES	162749	200.04
VENDOR 01-001984 TOTALS							200.04

01-002908	STERICYCLE, INC.	I-8011144256	110 5242-579	MISC OTHER PU:	JULY SUBSCRIPTION	162782	41.68
VENDOR 01-002908 TOTALS							41.68

01-002934	SOUTH CENTRAL FS, INC.	I-202506200722	110 5242-326	FUEL	: MAY FUEL	001848	834.23
VENDOR 01-002934 TOTALS							834.23

01-011875	DENNING AUTOMOTIVE	I-202506260747	110 5242-434	REPAIR OF VEH:	AMBULANCE REPAIRS	001877	1,280.59
01-011875	DENNING AUTOMOTIVE	I-202506260757	110 5242-434	REPAIR OF VEH:	UNIT 29 SERVICE	001877	229.37
VENDOR 01-011875 TOTALS							1,509.96

01-025600	ILMO PRODUCTS COMPANY	I-0001561370	110 5242-313	MEDICAL & SAF:	CYLINDER RENTAL	001881	92.70
01-025600	ILMO PRODUCTS COMPANY	I-0001564472	110 5242-313	MEDICAL & SAF:	OXYGEN	001881	26.17
01-025600	ILMO PRODUCTS COMPANY	I-0001565429	110 5242-313	MEDICAL & SAF:	OXYGEN	001881	50.57
VENDOR 01-025600 TOTALS							169.44

DEPARTMENT 242 AMBULANCE SERVICE TOTAL: 3,007.42

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 261 COMMUNITY DEVELOPMENT

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5261-571	DUES & MEMBER:	ELEVATE	162713	50.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5261-541	SOFTWARE	: OPEN AI	162713	20.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5261-571	DUES & MEMBER:	ADOBE	162713	63.74
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5261-562	TRAVEL & TRAI:	LALUNA	162713	19.98
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5261-562	TRAVEL & TRAI:	ICED BAKERY & CAFE	162713	16.50
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5261-562	TRAVEL & TRAI:	LALUNA	162713	21.46
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5261-540	ADVERTISING	: FACEBOOK	162713	3.22
VENDOR 01-000720 TOTALS							194.90
01-002934	SOUTH CENTRAL FS, INC.	I-202506200722	110 5261-326	FUEL	: MAY FUEL	001848	75.51
VENDOR 01-002934 TOTALS							75.51
01-004758	MARLIN LEASING CORPORA	I-40605462	110 5261-814	PRINTER/COPY	: COPIER	162769	35.51
VENDOR 01-004758 TOTALS							35.51
01-008200	COLES CO REGIONAL PLAN	I-8123	110 5261-511	PLANNING & DE:	MAY SAFETY ACTION PL	162753	5,299.50
VENDOR 01-008200 TOTALS							5,299.50
DEPARTMENT 261 COMMUNITY DEVELOPMENT TOTAL:							5,605.42
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5310-540	ADVERTISING	: CENTRAL IL NEWSPAPER	162713	30.99
VENDOR 01-000720 TOTALS							30.99
01-001620	VERIZON WIRELESS	I-6116113932	110 5310-533	CELLULAR PHON:	MOBILES	162787	100.00-
01-001620	VERIZON WIRELESS	I-6116113932	110 5310-533	CELLULAR PHON:	MOBILES	162787	33.35
01-001620	VERIZON WIRELESS	I-6116113932	110 5310-533	CELLULAR PHON:	MOBILES	162787	12.00
VENDOR 01-001620 TOTALS							54.65-
01-003488	S.S.C. SERVICES, INC.	I-9098	110 5310-460	OTHER PROFESS:	JANITORIAL SERVICES	001873	66.00
VENDOR 01-003488 TOTALS							66.00

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 310 PUBLIC WORKS

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-004298	WM CORPORATE SERVICES, I-0192630-2754-2		110 5310-421	DISPOSAL SERV: TRASH SERVICES		010644	1,590.63
01-004298	WM CORPORATE SERVICES, I-0364277-4072-9		110 5310-421	DISPOSAL SERV: TRASH SERVICES		010643	116.24
01-004298	WM CORPORATE SERVICES, I-0371177-4072-2		110 5310-421	DISPOSAL SERV: TRASH SERVICES		010667	58.77
01-004298	WM CORPORATE SERVICES, I-0371877-4072-7		110 5310-421	DISPOSAL SERV: TRASH SERVICES		010667	202.51
						VENDOR 01-004298 TOTALS	1,968.15
01-004658	RUMPKE WASTE SERV OF I I-0032965		110 5310-421	DISPOSAL SERV: TRASH SERVICES		010634	190.50
						VENDOR 01-004658 TOTALS	190.50
01-004758	MARLIN LEASING CORPORA I-40605465		110 5310-814	PRINT/COPY MA: COPIER		010675	248.73
						VENDOR 01-004758 TOTALS	248.73
01-041000	SECRETARY OF STATE I-202506240737		110 5310-319	MISCELLANEOUS: TITLE & PLATES BUCKE	162780		173.00
						VENDOR 01-041000 TOTALS	173.00
DEPARTMENT 310 PUBLIC WORKS						TOTAL:	2,622.72
01-000461	KEN COFFEY I-202506260748		110 5320-313	MEDICAL & SAF: CDL RENEWAL		001886	10.00
						VENDOR 01-000461 TOTALS	10.00
01-001070	AMEREN ILLINOIS I-202506180665		110 5320-321	UTILITIES : 420 N LOGAN		010598	41.78
						VENDOR 01-001070 TOTALS	41.78
01-002934	SOUTH CENTRAL FS, INC. I-202506200722		110 5320-326	FUEL : MAY FUEL		001848	2,584.55
						VENDOR 01-002934 TOTALS	2,584.55
01-004602	AEP ENERGY I-202506240739		110 5320-321	UTILITIES : 401 DEWITT 2851		162744	112.22
01-004602	AEP ENERGY I-202506240739		110 5320-321	UTILITIES : 420 N LOGAN 5847		162744	4.30
						VENDOR 01-004602 TOTALS	116.52

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 320 STREETS

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-004653	SUE A MEYERS, INC.	I-202506240727	110 5320-562	TRAVEL & TRAI:	MCDANIEL CDL TRAININ	162783	1,000.00
01-004653	SUE A MEYERS, INC.	I-202506240728	110 5320-562	TRAVEL & TRAI:	SHAW CDL TRAINING	162783	1,000.00
					VENDOR 01-004653	TOTALS	2,000.00
01-025600	ILMO PRODUCTS COMPANY	I-0001561365	110 5320-440	RENTALS	: CYLINDER RENTAL	001881	9.00
					VENDOR 01-025600	TOTALS	9.00
01-033800	MATTOON WATER DEPT	I-202506180691	110 5320-321	UTILITIES	: 401 DEWITT	010615	37.96
					VENDOR 01-033800	TOTALS	37.96
01-044325	TERMINIX	I-650001	110 5320-460	OTHER PROP MA:	PEST CONTROL	162785	31.67
					VENDOR 01-044325	TOTALS	31.67
				DEPARTMENT 320	STREETS	TOTAL:	4,831.48
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5381-316	TOOLS & EQUIP:	HOME DEPOT	162713	299.98
					VENDOR 01-000720	TOTALS	299.98
01-001070	AMEREN ILLINOIS	I-202506180658	110 5381-321	UTILITIES	: 1718 B'DWAY UNIT B	010594	119.55
01-001070	AMEREN ILLINOIS	I-202506180659	110 5381-321	UTILITIES	: 1701 B'DWAY HERITAGE	010595	75.19
01-001070	AMEREN ILLINOIS	I-202506180678	110 5381-321	UTILITIES	: 1701 WABASH BURGESS	010604	89.72
					VENDOR 01-001070	TOTALS	284.46
01-003488	S.S.C. SERVICES, INC.	I-9098	110 5381-460	OTHER PROP MA:	JANITORIAL SERVICES	001873	268.00
					VENDOR 01-003488	TOTALS	268.00
01-004602	AEP ENERGY	I-202506240739	110 5381-321	UTILITIES	: 208 N 19TH 3302	162744	1,156.89
01-004602	AEP ENERGY	I-202506240739	110 5381-321	UTILITIES	: 1701 WABASH 3313	162744	89.91
01-004602	AEP ENERGY	I-202506240739	110 5381-321	UTILITIES	: CITY HALL LIGHTS 345	162744	14.88
01-004602	AEP ENERGY	I-202506240739	110 5381-321	UTILITIES	: 1701 B'DWAY HERITAGE	162744	44.82
01-004602	AEP ENERGY	I-202506240739	110 5381-321	UTILITIES	: 1718 B'DWAY UNIT B 7	162744	122.40
					VENDOR 01-004602	TOTALS	1,428.90

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 381 CUSTODIAL SERVICES

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-012025	DETECTION SECURITY CO	I-200214	110 5381-460	OTHER PROP MA:	ALARM SECURITY	001878	309.00
VENDOR 01-012025 TOTALS							309.00
01-033800	MATTOON WATER DEPT	I-202506180692	110 5381-321	UTILITIES	: 420 N LOGAN	010616	36.97
01-033800	MATTOON WATER DEPT	I-202506180693	110 5381-321	UTILITIES	: 1701 B'DWAY	010617	8.57
01-033800	MATTOON WATER DEPT	I-202506180694	110 5381-321	UTILITIES	: 1701 WABASH	010618	25.50
VENDOR 01-033800 TOTALS							71.04
01-036810	C.R. NEFF PLUMBING, HE	I-75993	110 5381-432	REPAIR OF BUI:	INSTALL WASHER BOX	001884	661.60
VENDOR 01-036810 TOTALS							661.60
DEPARTMENT 381 CUSTODIAL SERVICES						TOTAL:	3,322.98
01-001070	AMEREN ILLINOIS	I-202506180663	110 5511-321	UTILITIES	: 500 B'DWAY	010596	108.49
01-001070	AMEREN ILLINOIS	I-202506180664	110 5511-321	UTILITIES	: 212 N 12TH	010597	57.63
01-001070	AMEREN ILLINOIS	I-202506180666	110 5511-321	UTILITIES	: 632 S 14TH	010599	90.35
01-001070	AMEREN ILLINOIS	I-202506180668	110 5511-321	UTILITIES	: 500 B'DWAY	010601	142.55
01-001070	AMEREN ILLINOIS	I-202506180672	110 5511-321	UTILITIES	: 500 B'DWAY	010603	38.16
01-001070	AMEREN ILLINOIS	I-202506180685	110 5511-321	UTILITIES	: 1 S 22ND	010609	41.36
01-001070	AMEREN ILLINOIS	I-202506200718	110 5511-321	UTILITIES	: 500 B'DWAY	010665	75.41
VENDOR 01-001070 TOTALS							553.95
01-001620	VERIZON WIRELESS	I-6116113932	110 5511-533	CELLULAR PHON:	MOBILES	162787	22.08
VENDOR 01-001620 TOTALS							22.08
01-002934	SOUTH CENTRAL FS, INC.	I-202506200723	110 5511-326	FUEL	: FUEL	001848	1,810.77
VENDOR 01-002934 TOTALS							1,810.77
01-003200	FRED BIGGS ELECTRIC SU	I-406311	110 5511-319	MISCELLANEOUS:	LIGHTING KIT	001871	23.52
VENDOR 01-003200 TOTALS							23.52

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 511 PARKS

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-004602	AEP ENERGY	I-202506240739	110 5511-321	UTILITIES	: 500 B'DWAY 3010	162744	72.41
01-004602	AEP ENERGY	I-202506240739	110 5511-321	UTILITIES	: CUNNINGHAM PARK 3087	162744	12.29
01-004602	AEP ENERGY	I-202506240739	110 5511-321	UTILITIES	: 500 B'DWAY PETERSON	162744	5.24
01-004602	AEP ENERGY	I-202506240739	110 5511-321	UTILITIES	: 632 S 14TH 3335	162744	171.01
01-004602	AEP ENERGY	I-202506240739	110 5511-321	UTILITIES	: 212 N 12TH 3380	162744	26.23
01-004602	AEP ENERGY	I-202506240739	110 5511-321	UTILITIES	: 500 B'DWAY 3447	162744	167.47

VENDOR 01-004602	TOTALS	454.65
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01-020803	HARRELSON PLUMBING & H	I-M3714	110 5511-440	RENTALS	: POTTY RENTAL @ KINZE	001880	97.00
01-020803	HARRELSON PLUMBING & H	I-M3715	110 5511-440	RENTALS	: POTTY RENTAL @ LAWSO	001880	97.00
01-020803	HARRELSON PLUMBING & H	I-M3716	110 5511-440	RENTALS	: POTTY RENTAL @ PETER	001880	97.00

VENDOR 01-020803	TOTALS	291.00
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01-032600	MATTOON FLOWER SHOP	I-6726	110 5511-319	MISCELLANEOUS:	MEMORIAL DAY FLOWERS	162770	910.00
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VENDOR 01-032600	TOTALS	910.00
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01-033800	MATTOON WATER DEPT	I-202506180701	110 5511-321	UTILITIES	: 212 N 12TH BLDG 2	010625	10.82
01-033800	MATTOON WATER DEPT	I-202506180702	110 5511-321	UTILITIES	: 418 RICHMOND DEMARS	010626	42.00
01-033800	MATTOON WATER DEPT	I-202506180704	110 5511-321	UTILITIES	: 305 RICHMOND GRIMES	010628	37.26
01-033800	MATTOON WATER DEPT	I-202506180705	110 5511-321	UTILITIES	: 307 RICHMOND GRIMES	010629	18.27
01-033800	MATTOON WATER DEPT	I-202506180706	110 5511-321	UTILITIES	: 500 B'DWAY PETERSON	010630	48.73
01-033800	MATTOON WATER DEPT	I-202506180707	110 5511-321	UTILITIES	: 500 B'DWAY PAV SHED	010631	19.50
01-033800	MATTOON WATER DEPT	I-202506180708	110 5511-321	UTILITIES	: 500 B'DWAY	010632	150.98
01-033800	MATTOON WATER DEPT	I-202506180709	110 5511-321	UTILITIES	: LAWSON BASEBALL DIAM	010633	37.46

VENDOR 01-033800	TOTALS	365.02
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DEPARTMENT 511	PARKS	TOTAL:	4,430.99
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01-000481	PANA WHOLESALE BAIT CO	I-2716587	110 5512-317	CONCESSION &	: CONCESSIONS	162774	700.75
01-000481	PANA WHOLESALE BAIT CO	I-2716795	110 5512-317	CONCESSION &	: CONCESSIONS	162774	600.50

VENDOR 01-000481	TOTALS	1,301.25
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01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5512-317	CONCESSION &	: WALMART	162713	123.13
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5512-317	CONCESSION &	: WALMART	162713	136.70
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5512-317	CONCESSION &	: WALMART	162713	178.79

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 512 LAKE MATTOON

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5512-319	MISCELLANEOUS: WALMART		162713	46.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5512-317	CONCESSION & : WALMART		162713	11.96
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5512-317	CONCESSION & : SAM'S CLUB		162713	293.27
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5512-317	CONCESSION & : WALMART		162713	67.53
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	110 5512-317	CONCESSION & : WALMART		162713	135.13
VENDOR 01-000720 TOTALS							992.51
01-000732	LAKE LAND COLLEGE	I-1613938	110 5512-319	MISCELLANEOUS: NO PARKING SIGNS		162765	86.40
VENDOR 01-000732 TOTALS							86.40
01-001620	VERIZON WIRELESS	I-6116113932	110 5512-533	CELLULAR PHON: MOBILES		162787	54.85
VENDOR 01-001620 TOTALS							54.85
01-002934	SOUTH CENTRAL FS, INC.	I-202506200725	110 5512-327	FUEL - RESALE: FUEL		001848	3,790.47
VENDOR 01-002934 TOTALS							3,790.47
01-003095	ADVANCE AUTO PARTS	I-202506240726	110 5512-319	MISCELLANEOUS: RV CLEANERS		162743	62.36
VENDOR 01-003095 TOTALS							62.36
01-003394	KOERNER DISTRIBUTOR, I	I-4534092	110 5512-317	CONCESSION & : CONCESSIONS		010674	193.74
01-003394	KOERNER DISTRIBUTOR, I	I-4534093	110 5512-317	CONCESSION & : CONCESSIONS		010674	128.00
VENDOR 01-003394 TOTALS							321.74
01-004650	DONNEWALD DISTRIBUTING	I-697479	110 5512-317	CONCESSION & : CONCESSIONS		010672	257.85
01-004650	DONNEWALD DISTRIBUTING	I-697480	110 5512-317	CONCESSION & : CONCESSIONS		010672	52.00
01-004650	DONNEWALD DISTRIBUTING	I-697481	110 5512-317	CONCESSION & : CONCESSIONS		010672	108.00
VENDOR 01-004650 TOTALS							417.85
01-004675	AMERIGAS PROPANE LP	I-806257847	110 5512-317	CONCESSION & : PROPANE EXCHANGE		162747	112.00
01-004675	AMERIGAS PROPANE LP	I-806262299	110 5512-317	CONCESSION & : PROPANE EXCHANGE		162747	288.00
VENDOR 01-004675 TOTALS							400.00

6/26/2025 3:58 PM REGULAR DEPARTMENT PAYMENT REPORT PAGE: 15
VENDOR SET: 01 CITY OF MATTOON BANK: APBNK
FUND : 110 GENERAL FUND
DEPARTMENT: 512 LAKE MATTOON
INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999
PAY DATE RANGE: 6/18/2025 THRU 7/01/2025
BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
=====							
01-006256	HEARTLAND COCA COLA BO	I-47420160010	110 5512-317	CONCESSION &	CONCESSIONS	162760	335.48
					VENDOR 01-006256 TOTALS		335.48
01-012025	DETECTION SECURITY CO	I-200201	110 5512-576	SECURITY SERV:	ALARM SECURITY	001878	47.00
					VENDOR 01-012025 TOTALS		47.00
01-020803	HARRELSON PLUMBING & H	I-M3709	110 5512-440	RENTALS	: POTTY RENTAL @ MARIN	001880	122.00
01-020803	HARRELSON PLUMBING & H	I-M3719	110 5512-440	RENTALS	: POTTY RENTAL @ BEACH	001880	207.00
01-020803	HARRELSON PLUMBING & H	I-M3720	110 5512-440	RENTALS	: POTTY RENTAL @ CAMPG	001880	97.00
					VENDOR 01-020803 TOTALS		426.00
01-024060	IL DEPT OF NATURAL RES	I-202506180690	110 5512-802	HUNTING/FISHI:	FISHING LICENSES	010613	295.50
01-024060	IL DEPT OF NATURAL RES	I-202506250742	110 5512-802	HUNTING/FISHI:	FISHING LICENSES	010673	330.50
					VENDOR 01-024060 TOTALS		626.00
01-041755	SHELBY ELECTRIC COOPER	I-202506180710	110 5512-321	UTILITIES	: NEW TRF	010635	980.40
01-041755	SHELBY ELECTRIC COOPER	I-202506180711	110 5512-321	UTILITIES	: BEACH AREA	010636	135.04
01-041755	SHELBY ELECTRIC COOPER	I-202506180712	110 5512-321	UTILITIES	: RESTROOMS	010637	265.17
01-041755	SHELBY ELECTRIC COOPER	I-202506180713	110 5512-321	UTILITIES	: CAUSEWAY	010638	29.90
01-041755	SHELBY ELECTRIC COOPER	I-202506180714	110 5512-321	UTILITIES	: HUFFMANS	010639	953.30
01-041755	SHELBY ELECTRIC COOPER	I-202506180715	110 5512-321	UTILITIES	: MARINA	010640	607.46
01-041755	SHELBY ELECTRIC COOPER	I-202506180716	110 5512-321	UTILITIES	: CAMPGROUND	010641	1,639.85
01-041755	SHELBY ELECTRIC COOPER	I-202506180717	110 5512-321	UTILITIES	: CAUSEWAY BRIDGE	010642	68.00
					VENDOR 01-041755 TOTALS		4,679.12
DEPARTMENT 512 LAKE MATTOON							TOTAL: 13,541.03

01-004602	AEP ENERGY	I-202506240739	110 5551-321	UTILITIES	: KINZEL FIELD 2918	162744	28.01
01-004602	AEP ENERGY	I-202506240739	110 5551-321	UTILITIES	: TBALL COMPLEX 2952	162744	124.50
01-004602	AEP ENERGY	I-202506240739	110 5551-321	UTILITIES	: JFL COMPLEX 3009	162744	126.32
01-004602	AEP ENERGY	I-202506240739	110 5551-321	UTILITIES	: 311 N 6TH 3188	162744	4.68
01-004602	AEP ENERGY	I-202506240739	110 5551-321	UTILITIES	: GIRLS COMPLEX 3256	162744	262.39
01-004602	AEP ENERGY	I-202506240739	110 5551-321	UTILITIES	: BOYS COMPLEX 3278	162744	255.46
01-004602	AEP ENERGY	I-202506240739	110 5551-321	UTILITIES	: BOYS COMPLEX SHED 35	162744	0.52
					VENDOR 01-004602 TOTALS		801.88

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

DEPARTMENT: 551 SPORTS FACILITIES

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
=====							
01-020803	HARRELSON PLUMBING & H	I-M3710	110 5551-440	RENTALS	: POTTY RENTAL @ BOYS	001880	182.00
01-020803	HARRELSON PLUMBING & H	I-M3711	110 5551-440	RENTALS	: POTTY RENTAL @ GIRLS	001880	182.00
01-020803	HARRELSON PLUMBING & H	I-M3712	110 5551-440	RENTALS	: POTTY RENTAL @ BIKE	001880	97.00
01-020803	HARRELSON PLUMBING & H	I-M3713	110 5551-440	RENTALS	: POTTY RENTAL @ DOG P	001880	182.00
01-020803	HARRELSON PLUMBING & H	I-M3717	110 5551-440	RENTALS	: POTTY RENTAL @ SKATE	001880	97.00
01-020803	HARRELSON PLUMBING & H	I-M3718	110 5551-440	RENTALS	: POTTY RENTAL @ TBALL	001880	97.00
						VENDOR 01-020803 TOTALS	837.00
=====							
01-033800	MATTOON WATER DEPT	I-202506180697	110 5551-321	UTILITIES	: 421 SHELBY MJFL	010621	45.03
01-033800	MATTOON WATER DEPT	I-202506180698	110 5551-321	UTILITIES	: 421 SHELBY MJFL	010622	19.26
01-033800	MATTOON WATER DEPT	I-202506180699	110 5551-321	UTILITIES	: 713 SHELBY GIRLS	010623	154.55
01-033800	MATTOON WATER DEPT	I-202506180700	110 5551-321	UTILITIES	: 801 SHELBY MJBL	010624	515.60
01-033800	MATTOON WATER DEPT	I-202506180703	110 5551-321	UTILITIES	: 301 RICHMOND	010627	24.88
						VENDOR 01-033800 TOTALS	759.32
=====							
				DEPARTMENT 551	SPORTS FACILITIES	TOTAL:	2,398.20

01-001070	AMEREN ILLINOIS	I-202506180655	110 5570-321	UTILITIES	: 917 N 22ND	010592	22.15
						VENDOR 01-001070 TOTALS	22.15
=====							
01-002934	SOUTH CENTRAL FS, INC.	I-202506200724	110 5570-326	FUEL	: FUEL	001848	922.37
						VENDOR 01-002934 TOTALS	922.37
=====							
01-003206	BIRKEYS	I-P63130	110 5570-433	REPAIR OF MAC:	CHAINSAWS	001872	799.98
						VENDOR 01-003206 TOTALS	799.98
=====							
01-004602	AEP ENERGY	I-202506240739	110 5570-321	UTILITIES	: 917 N 22ND 2895	162744	2.22
01-004602	AEP ENERGY	I-202506240739	110 5570-321	UTILITIES	: 917 N 22ND 2996	162744	17.18
						VENDOR 01-004602 TOTALS	19.40
=====							
01-012025	DETECTION SECURITY CO	I-200201	110 5570-319	MISCELLANEOUS:	ALARM SECURITY	001878	264.00
						VENDOR 01-012025 TOTALS	264.00
=====							
				DEPARTMENT 570	DODGE GROVE CEMETERY	TOTAL:	2,027.90

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 110 GENERAL FUND

BANK: APBNK

DEPARTMENT: 912 INTRFND TRNSFRS - LIBRARY

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-030100	MATTOON PUBLIC LIBRARY	I-202506260756	110 5912-822	TRANSFER TO L:	PROPERTY TAX DISTRIB	162733	74,170.05
					VENDOR 01-030100 TOTALS		74,170.05
				DEPARTMENT 912	INTRFND TRNSFRS - LIBRARY	TOTAL:	74,170.05
				VENDOR SET 110	GENERAL FUND	TOTAL:	835,239.91

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 122 HOTEL TAX FUND

DEPARTMENT: 653 HOTEL TAX ADMINISTRATION

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	122 5653-561	BUSINESS MEET: JIMMY JOHNS		162713	129.21
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	122 5653-572	COMMUNITY PRO: DOLLAR GENERAL		162713	37.29
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	122 5653-572	COMMUNITY PRO: DOLLAR GENERAL		162713	5.05
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	122 5653-311	OFFICE SUPPLI: ADOBE		162713	63.74
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	122 5653-540	ADVERTISING : CREATIVE COURTNEY		162713	80.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	122 5653-540	ADVERTISING : DJI		162713	1,114.13
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	122 5653-572	COMMUNITY PRO: WEBSTAUANT STORE		162713	88.46
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	122 5653-572	COMMUNITY PRO: MATT POSS BAND		162713	1,500.00
						VENDOR 01-000720 TOTALS	3,017.88
01-001070	AMEREN ILLINOIS	I-202506180643	122 5653-321	NATURAL GAS &: 4219 DEWITT WELCOME	010580		38.51
01-001070	AMEREN ILLINOIS	I-202506180651	122 5653-321	NATURAL GAS &: 3901 MARSHALL AVE SI	010588		38.13
01-001070	AMEREN ILLINOIS	I-202506180657	122 5653-321	NATURAL GAS &: 1718 B'DWAY UNIT C	010593		90.41
						VENDOR 01-001070 TOTALS	167.05
01-003646	SCHEFF'S OFFICE SUPPLI	I-4074	122 5653-311	OFFICE SUPPLI: PAPER		162778	24.00
						VENDOR 01-003646 TOTALS	24.00
01-004602	AEP ENERGY	I-202506240739	122 5653-321	NATURAL GAS &: 3901 MARSHALL WELCOM	162744		0.01
01-004602	AEP ENERGY	I-202506240739	122 5653-321	NATURAL GAS &: 4219 DEWITT 3177	162744		0.90
01-004602	AEP ENERGY	I-202506240739	122 5653-321	NATURAL GAS &: 1718 B'DWAY 3515	162744		85.86
						VENDOR 01-004602 TOTALS	86.77
01-033200	MATTOON PRINTING CENTE	I-202506250743	122 5653-572	COMMUNITY PRO: CONCERT FLYERS,MAPS	162771		155.50
01-033200	MATTOON PRINTING CENTE	I-202506250744	122 5653-317	CONCESSION & : PENS,JUMBO CLIPS	162771		959.40
						VENDOR 01-033200 TOTALS	1,114.90
						DEPARTMENT 653 HOTEL TAX ADMINISTRATION TOTAL:	4,410.60
						VENDOR SET 122 HOTEL TAX FUND TOTAL:	4,410.60

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 123 FESTIVAL MGMT FUND

DEPARTMENT: 582 JULY 4TH FIREWORKS

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	123 5582-330	FOOD	: AIRPORT STEAKHOUSE	162713	226.88
						VENDOR 01-000720 TOTALS	226.88
01-007882	COLES CO AIRPORT AUTHO	I-170393	123 5582-574	SPECIAL EVENT:	JULY 4TH FACILITY US	162752	100.00
						VENDOR 01-007882 TOTALS	100.00
						DEPARTMENT 582 JULY 4TH FIREWORKS TOTAL:	326.88
01-033200	MATTOON PRINTING CENTE	I-202506250743	123 5584-550	PRINTING & BI:	CONCERT FLYERS,MAPS	162771	240.00
01-033200	MATTOON PRINTING CENTE	I-202506250745	123 5584-550	PRINTING & BI:	FLYERS,VIP BADGES,PO	162771	1,874.50
						VENDOR 01-033200 TOTALS	2,114.50
01-046715	WAVE GRAPHICS	I-82091	123 5584-317	CONCESSION & :	BAGEL BITES SHIRTS	162789	191.00
						VENDOR 01-046715 TOTALS	191.00
						DEPARTMENT 584 BAGELFEST TOTAL:	2,305.50
						VENDOR SET 123 FESTIVAL MGMT FUND TOTAL:	2,632.38

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 124 MOBILE EQUIPMENT FUND

DEPARTMENT: 320 STREETS VEHICLES & MACH

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-004813	SCHMID AUCTION	I-6562-13366-1	124 5320-741	STREETS MACHI:	SKID STEER ATTACHMEN	162779	1,700.00
VENDOR 01-004813 TOTALS							1,700.00
DEPARTMENT 320 STREETS VEHICLES & MACH TOTAL:							1,700.00
01-004813	SCHMID AUCTION	I-6562-13366-1	124 5342-741	SEWER COLL MA:	SKID STEER ATTACHMEN	162779	1,700.00
VENDOR 01-004813 TOTALS							1,700.00
DEPARTMENT 342 SEWER COLL VEH & MACH TOTAL:							1,700.00
01-004813	SCHMID AUCTION	I-6562-13366-1	124 5354-741	WATER DIST MA:	SKID STEER ATTACHMEN	162779	1,700.00
VENDOR 01-004813 TOTALS							1,700.00
DEPARTMENT 354 WATER VEHICLES & MACHINE TOTAL:							1,700.00
VENDOR SET 124 MOBILE EQUIPMENT FUND TOTAL:							5,100.00

BANK: APBNK

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-040463	SARAH BUSH LINCOLN HEA I-6900988		125 5150-519	OTHER PROFESS:	DRUG SCREENS	162777	347.00
						VENDOR 01-040463 TOTALS	347.00
				DEPARTMENT 150	FINANCIAL ADMINISTRATION TOTAL:		347.00
				VENDOR SET 125	INSURANCE & TORT JDGMNT	TOTAL:	347.00

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 130 CAPITAL PROJECT FUND

DEPARTMENT: 321 STREETS

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-035154	MID-ILLINOIS CONCRETE	I-289407	130 5321-730	IMPROVEMENTS :	CURB & GUTTER	162772	471.00
01-035154	MID-ILLINOIS CONCRETE	I-290100	130 5321-730	IMPROVEMENTS :	MID-ILLINOIS CONCRET	162772	450.00
01-035154	MID-ILLINOIS CONCRETE	I-290307	130 5321-730	IMPROVEMENTS :	CURB & GUTTER	162772	471.00
01-035154	MID-ILLINOIS CONCRETE	I-290672	130 5321-730	IMPROVEMENTS :	25-008-CCSP	162772	2,019.00
01-035154	MID-ILLINOIS CONCRETE	I-290673	130 5321-730	IMPROVEMENTS :	25-011-CCSP	162772	500.00
01-035154	MID-ILLINOIS CONCRETE	I-291263	130 5321-730	IMPROVEMENTS :	25-013-CCSP	162772	186.00

VENDOR 01-035154	TOTALS	4,097.00
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DEPARTMENT 321	STREETS	TOTAL:	4,097.00
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VENDOR SET 130	CAPITAL PROJECT FUND	TOTAL:	4,097.00
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VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 150 I-57 EAST TIF DISTRICT

BANK: APBNK

DEPARTMENT: 604 ADMINISTRATIVE EXPENSES

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-000170	PRO-MOW, INC.	I-663975	150 5604-460	LANDSCAPING	: COLES CENTER LANDSCA	001869	317.50
					VENDOR 01-000170	TOTALS	317.50
				DEPARTMENT 604	ADMINISTRATIVE EXPENSES	TOTAL:	317.50
				VENDOR SET 150	I-57 EAST TIF DISTRICT	TOTAL:	317.50

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 211 WATER FUND

DEPARTMENT: 351 RESERVOIRS & WTR SOURCES

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-004654	HYDRO BIOSCIENCE, LLC	I-1725	211 5351-740	MACHINERY & E: ALGAE UNIT		162761	13,909.50
VENDOR 01-004654 TOTALS							13,909.50
DEPARTMENT 351 RESERVOIRS & WTR SOURCES TOTAL:							13,909.50
01-000044	AIRGAS USA LLC	C-9703267916	211 5353-314	CHEMICALS : AIRGAS USA LLC		162745	120.00-
01-000044	AIRGAS USA LLC	C-9703267922	211 5353-314	CHEMICALS : AIRGAS USA LLC		162745	120.00-
01-000044	AIRGAS USA LLC	C-9703267927	211 5353-314	CHEMICALS : AIRGAS USA LLC		162745	120.00-
01-000044	AIRGAS USA LLC	C-9703267929	211 5353-314	CHEMICALS : AIRGAS USA LLC		162745	120.00-
01-000044	AIRGAS USA LLC	C-9703267930	211 5353-314	CHEMICALS : AIRGAS USA LLC		162745	120.00-
01-000044	AIRGAS USA LLC	C-9703267932	211 5353-314	CHEMICALS : AIRGAS USA LLC		162745	120.00-
01-000044	AIRGAS USA LLC	C-9703267934	211 5353-314	CHEMICALS : AIRGAS USA LLC		162745	120.00-
01-000044	AIRGAS USA LLC	I-9161818623	211 5353-314	CHEMICALS : CARBON DIOXIDE		162745	3,051.81
VENDOR 01-000044 TOTALS							2,211.81
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	211 5353-377	PLANT EQUIPME: GRAINGER		162713	210.90
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	211 5353-439	OTHER REPAIR : MT. VERNON TV & APPL		162713	1,490.99
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	211 5353-434	REPAIR OF VEH: NBS AUTO SALVAGE		162713	35.00
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	211 5353-377	PLANT EQUIPME: ULINE		162713	132.29
VENDOR 01-000720 TOTALS							1,869.18
01-001070	AMEREN ILLINOIS	I-202506180650	211 5353-321	NATURAL GAS &: RR2, SHED		010587	40.04
01-001070	AMEREN ILLINOIS	I-202506180653	211 5353-321	NATURAL GAS &: 2800 E LAKE PARADISE		010590	986.56
VENDOR 01-001070 TOTALS							1,026.60
01-001620	VERIZON WIRELESS	I-6116113932	211 5353-533	CELLULAR PHON: MOBILES		162787	33.35
01-001620	VERIZON WIRELESS	I-6116113932	211 5353-533	CELLULAR PHON: MOBILES		162787	40.02
01-001620	VERIZON WIRELESS	I-6116113932	211 5353-533	CELLULAR PHON: MOBILES		162787	12.00
01-001620	VERIZON WIRELESS	I-6116113932	211 5353-533	CELLULAR PHON: MOBILES		162787	36.01
01-001620	VERIZON WIRELESS	I-6116113932	211 5353-533	CELLULAR PHON: MOBILES		162787	80.04
VENDOR 01-001620 TOTALS							201.42
01-001756	LAKE SARA MARINA	I-77122	211 5353-433	REPAIR OF MAC: FUEL LINE REPAIRS		162766	365.60
VENDOR 01-001756 TOTALS							365.60

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 211 WATER FUND

DEPARTMENT: 353 WATER TREATMENT PLANT

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-003953	AMAZON CAPITAL SERVICE	I-1MGT-N9N7-MF9Y	211 5353-432	REPAIR OF STR: FUSES		001874	31.05
VENDOR 01-003953 TOTALS							31.05
01-004602	AEP ENERGY	I-202506240739	211 5353-321	NATURAL GAS &: LAKE PARADISE SHED 2	162744		2.36
01-004602	AEP ENERGY	I-202506240739	211 5353-321	NATURAL GAS &: 2800 E LAKE RD 3021	162744		1,556.29
01-004602	AEP ENERGY	I-202506240739	211 5353-321	NATURAL GAS &: 12TH ST LIGHTING 334	162744		7.26
01-004602	AEP ENERGY	I-202506240739	211 5353-321	NATURAL GAS &: LAKE MATTOON PUMP 34	162744		53.82
VENDOR 01-004602 TOTALS							1,619.73
01-035365	MISSISSIPPI LIME COMPA	I-CD105590	211 5353-314	CHEMICALS : LIME		162773	11,485.60
VENDOR 01-035365 TOTALS							11,485.60
01-045171	USA BLUEBOOK	I-INV00738051	211 5353-319	MISCELLANEOUS: USA BLUEBOOK		001885	813.58
VENDOR 01-045171 TOTALS							813.58
01-046603	WATER SOLUTIONS UNLIMI	I-7103709	211 5353-314	CHEMICALS : CHEMICALS		162788	2,600.00
01-046603	WATER SOLUTIONS UNLIMI	I-7103710	211 5353-314	CHEMICALS : CHEMICALS		162788	305.00
VENDOR 01-046603 TOTALS							2,905.00
DEPARTMENT 353 WATER TREATMENT PLANT TOTAL:							22,529.57
01-000461	KEN COFFEY	I-202506260748	211 5354-313	MEDICAL & SAF: CDL RENEWAL		001886	10.00
VENDOR 01-000461 TOTALS							10.00
01-001070	AMEREN ILLINOIS	I-202506170638	211 5354-321	NATURAL GAS &: SWORDS DRIVE STANDPI	010578		81.66
01-001070	AMEREN ILLINOIS	I-202506180646	211 5354-321	NATURAL GAS &: 3919 DEWITT WATER TO	010583		57.48
01-001070	AMEREN ILLINOIS	I-202506180654	211 5354-321	NATURAL GAS &: S 12TH ST	010591		27.58
01-001070	AMEREN ILLINOIS	I-202506180667	211 5354-321	NATURAL GAS &: 401 N DIVISION	010600		42.48
01-001070	AMEREN ILLINOIS	I-202506180679	211 5354-321	NATURAL GAS &: 1201 MARSHALL	010605		217.17
01-001070	AMEREN ILLINOIS	I-202506180680	211 5354-321	NATURAL GAS &: 1201 MARSHALL	010606		178.13
01-001070	AMEREN ILLINOIS	I-202506180688	211 5354-321	NATURAL GAS &: 621 S 12TH	010611		55.12
VENDOR 01-001070 TOTALS							659.62

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 211 WATER FUND

DEPARTMENT: 354 WATER DISTRIBUTION

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE:	DR-DEPARTMENT REQUESTED
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VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-001620	VERIZON WIRELESS	I-6116113932	211 5354-533	CELL PHONES	: MOBILES	162787	54.02
					VENDOR 01-001620	TOTALS	54.02
01-002934	SOUTH CENTRAL FS, INC.	I-202506200722	211 5354-326	FUEL	: MAY FUEL	001848	2,584.54
					VENDOR 01-002934	TOTALS	2,584.54
01-004602	AEP ENERGY	I-202506240739	211 5354-321	NATURAL GAS &	: 401 DEWITT 2851	162744	112.22
01-004602	AEP ENERGY	I-202506240739	211 5354-321	NATURAL GAS &	: 1201 MARSHALL 2907	162744	5.43
01-004602	AEP ENERGY	I-202506240739	211 5354-321	NATURAL GAS &	: RR2, WATER DEPT 3111	162744	0.01
01-004602	AEP ENERGY	I-202506240739	211 5354-321	NATURAL GAS &	: 1201 MARSHALL 3144	162744	155.59
01-004602	AEP ENERGY	I-202506240739	211 5354-321	NATURAL GAS &	: SWORDS STANDPIPE 320	162744	56.56
01-004602	AEP ENERGY	I-202506240739	211 5354-321	NATURAL GAS &	: W 121 WATER TOWER 32	162744	15.69
01-004602	AEP ENERGY	I-202506240739	211 5354-321	NATURAL GAS &	: 621 S 12TH 3379	162744	9.43
01-004602	AEP ENERGY	I-202506240739	211 5354-321	NATURAL GAS &	: 12TH ST PUMP 3414	162744	199.66
01-004602	AEP ENERGY	I-202506240739	211 5354-321	NATURAL GAS &	: S 12TH ST 3537	162744	9.69
01-004602	AEP ENERGY	I-202506240739	211 5354-321	NATURAL GAS &	: E TOWER DIVISION 355	162744	4.83
					VENDOR 01-004602	TOTALS	569.11
01-025600	ILMO PRODUCTS COMPANY	I-0001561365	211 5354-440	RENTALS	: CYLINDER RENTAL	001881	9.00
					VENDOR 01-025600	TOTALS	9.00
01-025682	IMCO UTILITY SUPPLY	I-1139067-01	211 5354-374	SERVICE LINE	: METER BOXES	162762	177.00
01-025682	IMCO UTILITY SUPPLY	I-1140426-00	211 5354-374	SERVICE LINE	: METER PITS	162762	1,222.00
01-025682	IMCO UTILITY SUPPLY	I-1140884-00	211 5354-374	SERVICE LINE	: VALVES,GASKETS,COUPL	162762	6,182.56
01-025682	IMCO UTILITY SUPPLY	I-1140884-01	211 5354-374	SERVICE LINE	: IMCO UTILITY SUPPLY	162762	424.00
01-025682	IMCO UTILITY SUPPLY	I-1140884-01	211 5354-375	LEAK REPAIR M:	IMCO UTILITY SUPPLY	162762	424.00
01-025682	IMCO UTILITY SUPPLY	I-1141041-00	211 5354-375	LEAK REPAIR M:	CLAMPS	162762	450.00
					VENDOR 01-025682	TOTALS	8,879.56
01-033800	MATTOON WATER DEPT	I-202506180691	211 5354-321	NATURAL GAS &	: 401 DEWITT	010615	37.96
					VENDOR 01-033800	TOTALS	37.96
01-044325	TERMINIX	I-650001	211 5354-460	OTHER PROPERT:	PEST CONTROL	162785	31.67
					VENDOR 01-044325	TOTALS	31.67
				DEPARTMENT 354	WATER DISTRIBUTION	TOTAL:	12,835.48

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 211 WATER FUND

DEPARTMENT: 355 ACCOUNTING & COLLECTION

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	211 5355-311	OFFICE SUPPLI:	STAPLES	162713	23.09
					VENDOR 01-000720 TOTALS		23.09
01-001620	VERIZON WIRELESS	I-6116113932	211 5355-532	TELEPHONE	: MOBILES	162787	36.01
					VENDOR 01-001620 TOTALS		36.01
01-002553	EXPRESS SERVICES, INC.	I-32454016	211 5355-519	OTHER PROFESS:	OFFICE CLERK 6/2-6/6	001870	450.62
					VENDOR 01-002553 TOTALS		450.62
01-002934	SOUTH CENTRAL FS, INC.	I-202506200722	211 5355-326	FUEL	: MAY FUEL	001848	275.24
					VENDOR 01-002934 TOTALS		275.24
01-004758	MARLIN LEASING CORPORA	I-40605461	211 5355-814	PRINTING/COPY:	COPIER	010675	89.80
					VENDOR 01-004758 TOTALS		89.80
01-033000	UNITED STATES POSTAL S	I-202506260754	211 5355-531	POSTAGE	: PO BOX 99	162734	176.00
					VENDOR 01-033000 TOTALS		176.00
01-035266	MIDWEST METER INC	I-0178811-IN	211 5355-373	WATER METERS :	METERS, TRANSPONDERS,	001883	12,812.00
01-035266	MIDWEST METER INC	I-0179146-IN	211 5355-373	WATER METERS :	METERS	001883	978.00
					VENDOR 01-035266 TOTALS		13,790.00
01-038300	PERRY'S LOCKSMITH	I-86692	211 5355-319	MISCELLANEOUS:	PADLOCKS	162775	123.00
					VENDOR 01-038300 TOTALS		123.00
				DEPARTMENT 355	ACCOUNTING & COLLECTION TOTAL:		14,963.76
01-003488	S.S.C. SERVICES, INC.	I-9098	211 5356-460	OTHER PROPERT:	JANITORIAL SERVICES	001873	66.00
					VENDOR 01-003488 TOTALS		66.00
				DEPARTMENT 356	ADMINISTRATIVE & GENERAL TOTAL:		66.00
				VENDOR SET 211	WATER FUND TOTAL:		64,304.31

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 212 SEWER FUND

DEPARTMENT: 342 SEWER COLLECTION SYSTEM

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-000461	KEN COFFEY	I-202506260748	212 5342-313	MEDICAL & SAF:	CDL RENEWAL	001886	10.00
					VENDOR 01-000461 TOTALS		10.00
01-001620	VERIZON WIRELESS	I-6116113932	212 5342-533	CELL PHONES :	MOBILES	162787	54.01
					VENDOR 01-001620 TOTALS		54.01
01-002934	SOUTH CENTRAL FS, INC.	I-202506200722	212 5342-326	FUEL :	MAY FUEL	001848	2,584.54
					VENDOR 01-002934 TOTALS		2,584.54
01-004602	AEP ENERGY	I-202506240739	212 5342-321	UTILITIES :	401 DEWITT 2851	162744	112.23
					VENDOR 01-004602 TOTALS		112.23
01-025600	ILMO PRODUCTS COMPANY	I-0001561365	212 5342-440	RENTALS :	CYLINDER RENTAL	001881	9.00
					VENDOR 01-025600 TOTALS		9.00
01-025682	IMCO UTILITY SUPPLY	I-1141085-00	212 5342-361	SEWER PIPE :	IMCO UTILITY SUPPLY	162762	3,005.10
					VENDOR 01-025682 TOTALS		3,005.10
01-033800	MATTOON WATER DEPT	I-202506180691	212 5342-321	UTILITIES :	401 DEWITT	010615	37.97
					VENDOR 01-033800 TOTALS		37.97
01-035154	MID-ILLINOIS CONCRETE	I-289409	212 5342-363	BACKFILL & SU:	FLOWABLE FILL	162772	875.00
01-035154	MID-ILLINOIS CONCRETE	I-289980	212 5342-363	BACKFILL & SU:	MID-ILLINOIS CONCRET	162772	450.00
					VENDOR 01-035154 TOTALS		1,325.00
01-044325	TERMINIX	I-650001	212 5342-460	OTHER PROPERT:	PEST CONTROL	162785	31.66
					VENDOR 01-044325 TOTALS		31.66

DEPARTMENT 342 SEWER COLLECTION SYSTEM TOTAL: 7,169.51

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 212 SEWER FUND

DEPARTMENT: 343 SEWER LIFT STATIONS

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-001620	VERIZON WIRELESS	I-6116113932	212 5343-533	CELLULAR PHON: MOBILES		162787	36.01
						VENDOR 01-001620 TOTALS	36.01
01-004602	AEP ENERGY	I-202506240739	212 5343-321	NATURAL GAS &: 4220 DEWITT 3425		162744	11.76
						VENDOR 01-004602 TOTALS	11.76
						DEPARTMENT 343 SEWER LIFT STATIONS TOTAL:	47.77
01-000720	ELAN FINANCIAL SERVICE	I-202506200721	212 5344-516	TECHNOLOGY SU: WIN 911		162713	1,584.00
						VENDOR 01-000720 TOTALS	1,584.00
01-001070	AMEREN ILLINOIS	I-202506170635	212 5344-321	NATURAL GAS &: N 45 LIFT STA		010576	199.09
01-001070	AMEREN ILLINOIS	I-202506170637	212 5344-321	NATURAL GAS &: 1221 REMINGTON RD		010577	59.47
01-001070	AMEREN ILLINOIS	I-202506180641	212 5344-321	NATURAL GAS &: 206 MCFALL RD		010579	43.30
01-001070	AMEREN ILLINOIS	I-202506180644	212 5344-321	NATURAL GAS &: 4220 DEWITT LIFT STA		010581	49.99
01-001070	AMEREN ILLINOIS	I-202506180645	212 5344-321	NATURAL GAS &: 2521 N 6TH RILEY CRE		010582	2,862.80
01-001070	AMEREN ILLINOIS	I-202506180647	212 5344-321	NATURAL GAS &: 600 N LOGAN		010584	54.73
01-001070	AMEREN ILLINOIS	I-202506180648	212 5344-321	NATURAL GAS &: OAK AVE, WILLOWSHIRE		010585	94.16
01-001070	AMEREN ILLINOIS	I-202506180649	212 5344-321	NATURAL GAS &: 820 S 5TH PLACE		010586	10,451.36
01-001070	AMEREN ILLINOIS	I-202506180652	212 5344-321	NATURAL GAS &: S 12TH ST SHED		010589	38.13
01-001070	AMEREN ILLINOIS	I-202506180670	212 5344-321	NATURAL GAS &: S 9TH ST		010602	38.16
01-001070	AMEREN ILLINOIS	I-202506180684	212 5344-321	NATURAL GAS &: 820 S 5TH PLACE SLUD		010608	116.30
						VENDOR 01-001070 TOTALS	14,007.49
01-001620	VERIZON WIRELESS	I-6116113932	212 5344-533	CELLULAR PHON: MOBILES		162787	33.34
01-001620	VERIZON WIRELESS	I-6116113932	212 5344-533	CELLULAR PHON: MOBILES		162787	12.01
01-001620	VERIZON WIRELESS	I-6116113932	212 5344-533	CELLULAR PHON: MOBILES		162787	22.08
01-001620	VERIZON WIRELESS	I-6116113932	212 5344-533	CELLULAR PHON: MOBILES		162787	21.21
01-001620	VERIZON WIRELESS	I-6116113932	212 5344-533	CELLULAR PHON: MOBILES		162787	36.01
						VENDOR 01-001620 TOTALS	82.23
01-004243	CHRISTOPHER PHILLIPS	I-202506260746	212 5344-562	TRAVEL & TRAI: TRAVEL 5/18 TO 5/23		001888	1,492.92
						VENDOR 01-004243 TOTALS	1,492.92

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 212 SEWER FUND

DEPARTMENT: 344 WASTEWATER TREATMNT PLANT

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-004298	WM CORPORATE SERVICES, I-0192631-2754-0		212 5344-460	OTHER PROPERT:	TRASH SERVICES	010644	246.47
						VENDOR 01-004298 TOTALS	246.47
01-004602	AEP ENERGY	I-202506240739	212 5344-321	NATURAL GAS &:	11669 US HWY 45 2963 162744		206.06
01-004602	AEP ENERGY	I-202506240739	212 5344-321	NATURAL GAS &:	GARFIELD/28TH LIFT S 162744		29.29
01-004602	AEP ENERGY	I-202506240739	212 5344-321	NATURAL GAS &:	3601 OAK 3100 162744		36.30
01-004602	AEP ENERGY	I-202506240739	212 5344-321	NATURAL GAS &:	820 S 5TH PLACE 3155 162744		14,466.42
01-004602	AEP ENERGY	I-202506240739	212 5344-321	NATURAL GAS &:	1503 N 19TH LIFT STA 162744		10.41
01-004602	AEP ENERGY	I-202506240739	212 5344-321	NATURAL GAS &:	600 N LOGAN 3290 162744		11.95
01-004602	AEP ENERGY	I-202506240739	212 5344-321	NATURAL GAS &:	2521 N 6TH 3357 162744		1,359.87
01-004602	AEP ENERGY	I-202506240739	212 5344-321	NATURAL GAS &:	206 MCFALL ROAD 3368 162744		6.78
01-004602	AEP ENERGY	I-202506240739	212 5344-321	NATURAL GAS &:	S 9TH ST 5870 162744		0.01
01-004602	AEP ENERGY	I-202506240739	212 5344-321	NATURAL GAS &:	S 12TH ST SHED 6755 162744		0.01
						VENDOR 01-004602 TOTALS	16,127.10
01-006780	CLARK DIETZ INC	I-444551	212 5344-730	IMPROVEMENTS :	PRIMARY PUMP REPLACE 001876		505.00
						VENDOR 01-006780 TOTALS	505.00
01-015220	ENVIRONMENTAL RESOURCE I-115890		212 5344-319	MISCELLANEOUS:	ENVIRONMENTAL RESOUR 001879		1,656.56
						VENDOR 01-015220 TOTALS	1,656.56
01-016000	JOHN DEERE FINANCIAL	I-202506250741	212 5344-366	PLANT MTCE & :	HYDRAULIC FLUID 162763		119.96
01-016000	JOHN DEERE FINANCIAL	I-202506250741	212 5344-311	OFFICE SUPPLI:	WATER 162763		13.96
01-016000	JOHN DEERE FINANCIAL	I-202506250741	212 5344-318	VEHICLE PARTS:	FILLER CAP 162763		18.93
						VENDOR 01-016000 TOTALS	152.85
						DEPARTMENT 344 WASTEWATER TREATMNT PLANTTOTAL:	35,854.62
01-000720	ELAN FINANCIAL SERVICE I-202506200721		212 5345-311	OFFICE SUPPLI:	STAPLES 162713		23.08
						VENDOR 01-000720 TOTALS	23.08
01-001620	VERIZON WIRELESS	I-6116113932	212 5345-532	TELEPHONE :	MOBILES 162787		36.01
						VENDOR 01-001620 TOTALS	36.01

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 212 SEWER FUND

DEPARTMENT: 345 ACCOUNTING & COLLECTION

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-002553	EXPRESS SERVICES, INC.	I-32454016	212 5345-519	OTHER PROFESS:	OFFICE CLERK 6/2-6/6	001870	450.62
					VENDOR 01-002553	TOTALS	450.62
01-002934	SOUTH CENTRAL FS, INC.	I-202506200722	212 5345-326	FUEL	: MAY FUEL	001848	275.24
					VENDOR 01-002934	TOTALS	275.24
01-004758	MARLIN LEASING CORPORA	I-40605461	212 5345-814	PRINTING/COPY:	COPIER	010675	89.80
					VENDOR 01-004758	TOTALS	89.80
01-033000	UNITED STATES POSTAL S	I-202506260754	212 5345-531	POSTAGE	: PO BOX 99	162734	176.00
					VENDOR 01-033000	TOTALS	176.00
01-035266	MIDWEST METER INC	I-0178811-IN	212 5345-373	WATER METERS :	METERS, TRANSPONDERS,	001883	12,812.00
01-035266	MIDWEST METER INC	I-0179146-IN	212 5345-373	WATER METERS :	METERS	001883	978.00
					VENDOR 01-035266	TOTALS	13,790.00
01-038300	PERRY'S LOCKSMITH	I-86692	212 5345-319	MISCELLANEOUS:	PADLOCKS	162775	123.00
					VENDOR 01-038300	TOTALS	123.00
				DEPARTMENT 345	ACCOUNTING & COLLECTION	TOTAL:	14,963.75
01-003488	S.S.C. SERVICES, INC.	I-9098	212 5346-460	OTHER PROPERT:	JANITORIAL SERVICES	001873	66.00
					VENDOR 01-003488	TOTALS	66.00
				DEPARTMENT 346	ADMINISTRATIVE & GENERAL	TOTAL:	66.00
01-024150	IL EPA	I-202506200720	212 5735-817	2017 CSO PIPi:	IL EPA	010666	98,209.28
					VENDOR 01-024150	TOTALS	98,209.28
				DEPARTMENT 735	DEBT SERVICE	TOTAL:	98,209.28

VENDOR SET: 01 CITY OF MATTOON

BANK: APBNK

FUND : 212 SEWER FUND

DEPARTMENT: 795 DEBT SERVICE

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-024150	IL EPA	I-202506200720	212 5795-817	INTEREST EXPE: IL EPA		010666	18,934.95
VENDOR 01-024150 TOTALS							18,934.95

DEPARTMENT 795 DEBT SERVICE TOTAL: 18,934.95

VENDOR SET 212 SEWER FUND TOTAL: 175,245.88

REPORT GRAND TOTAL: 1,091,694.58

** G/L ACCOUNT TOTALS **

YEAR	ACCOUNT	NAME	AMOUNT	=====LINE ITEM=====			=====GROUP BUDGET=====	
				ANNUAL	BUDGET OVER		ANNUAL	BUDGET OVER
				BUDGET	AVAILABLE BUDG		BUDGET	AVAILABLE BUDG
2024-2025	211-5353-314	CHEMICALS	120.00-	500,000	115,873.81			
		TOTAL:	120.00-					
2025-2026	110-5110-562	TRAVEL & TRAINING	320.70	6,000	5,386.30			
	110-5110-825	GRANTS	788.45	30,000	35,231.75-	Y		
	110-5110-827	VGT ALLOCATION-DEMOLITIONS	4,284.49	128,000	122,032.18			
	110-5110-829	VGT ALLOCATION-EQUIPMENT	39.28	128,000	122,983.49			
	110-5120-311	OFFICE SUPPLIES	89.76	2,740	2,321.42			
	110-5120-519	OTHER PROFESSIONAL SERVICE	40.00	18,720	18,280.00			
	110-5120-814	PRINT/COPY MACH LEASE & MA	566.78	8,400	7,211.69			
	110-5150-513	AUDITING & ACCOUNTING SERV	567.00	30,750	30,183.00			
	110-5150-571	DUES & MEMBERSHIPS	355.00	1,500	770.00			
	110-5160-519	OTHER PROFESSIONAL SERVICE	3,750.00	80,000	60,463.00			
	110-5170-325	SOFTWARE	16.00	6,450	6,418.00			
	110-5170-516	TECHNOLOGY SUPPORT SERVIC	70.00	111,000	81,291.29			
	110-5170-533	CELLULAR PHONE	63.14	1,450	1,266.15			
	110-5170-571	DUES & MEMBERSHIPS	350.00	400	50.00			
	110-5170-841	WIDE AREA NETWORK SOFTWARE	4,617.27	88,000	34,436.37			
	110-5170-852	NETWORK SECURITY SYSTEMS	30.00	9,720	6,061.15			
	110-5211-232	POLICE PENSION CONTRIBUTIO	288,152.34	2,659,178	2,292,159.71			
	110-5211-311	OFFICE SUPPLIES	875.86	4,500	3,495.60			
	110-5211-313	MEDICAL & SAFETY SUPPLIES	51.97	750	676.44			
	110-5211-315	UNIFORMS & CLOTHING	339.87	6,500	5,483.90			
	110-5211-316	TOOLS & EQUIPMENT	240.00	15,000	13,104.62			
	110-5211-533	CELLULAR PHONE	1,230.41	10,500	8,245.18			
	110-5211-550	PRINTING & BINDING	673.20	2,500	1,515.80			
	110-5211-562	TRAVEL & TRAINING	521.00	24,000	20,142.44			
	110-5211-579	MISC OTHER PURCHASED SERVI	360.00	240,000	39,776.53			
	110-5211-814	PRINT/COPY MACH LEASE & MA	347.28	5,500	4,786.41			
	110-5213-319	MISCELLANEOUS SUPPLIES	59.67	3,000	2,922.14			
	110-5213-579	MISC OTHER PURCHASED SERVI	5,659.87	20,000	10,120.97			
	110-5214-579	MISC OTHER PURCHASED SERVI	504.54	2,000	1,301.86			
	110-5223-318	VEHICLE PARTS	1,492.44	7,000	5,286.97			
	110-5223-319	MISCELLANEOUS SUPPLIES	151.00	1,000	606.00			
	110-5223-326	FUEL	6,721.32	90,000	77,430.24			
	110-5223-434	REPAIR OF VEHICLES	2,289.64	30,000	25,138.46			
	110-5224-316	TOOLS & EQUIPMENT	249.00	1,000	731.61			
	110-5224-321	UTILITIES	2,946.42	80,800	69,235.85			
	110-5224-432	REPAIR OF BUILDINGS	5,548.20	30,000	20,168.99			
	110-5224-439	OTHER REPAIR & MAINT SRVCS	1,472.35	7,500	5,527.65			
	110-5241-233	FIREFIGHTERS PENSION CONTR	378,389.32	3,176,836	2,719,580.72			
	110-5241-312	CLEANING SUPPLIES	356.83	7,000	5,467.61			
	110-5241-313	MEDICAL & SAFETY SUPPLIES	186.30	3,500	2,223.09			
	110-5241-316	TOOLS & EQUIPMENT	16.19	9,000	7,399.69			
	110-5241-321	UTILITIES	402.25	8,500	6,659.99			
	110-5241-326	FUEL	1,308.13	24,000	21,115.25			
	110-5241-432	REPAIR OF BUILDINGS	99.00	7,000	5,034.64			

** G/L ACCOUNT TOTALS **

YEAR	ACCOUNT	NAME	AMOUNT	=====LINE ITEM=====		=====GROUP BUDGET=====	
				ANNUAL BUDGET	BUDGET OVER AVAILABLE BUDG	ANNUAL BUDGET	BUDGET OVER AVAILABLE BUDG
	110-5241-433	REPAIR OF MACHINERY	42.38	12,000	11,784.37		
	110-5241-532	TELEPHONE	108.03	7,500	6,622.97		
	110-5241-562	TRAVEL & TRAINING	272.60	45,000	41,237.50		
	110-5241-579	MISC OTHER PURCHASED SERVI	145.00	37,000	9,652.40		
	110-5241-742	VEHICLES	2,018.62	37,000	32,962.76		
	110-5241-814	PRINT/COPY MACH LEASE & MA	102.82	1,000	803.70		
	110-5242-313	MEDICAL & SAFETY SUPPLIES	369.48	14,000	12,532.32		
	110-5242-326	FUEL	834.23	22,000	19,882.40		
	110-5242-434	REPAIR OF VEHICLES	1,509.96	20,000	17,081.21		
	110-5242-532	TELEPHONE	180.05	3,000	2,565.62		
	110-5242-533	CELLULAR PHONE	72.02	2,000	1,855.96		
	110-5242-579	MISC OTHER PURCHASED SERVI	41.68	15,000	14,916.64		
	110-5261-326	FUEL	75.51	1,500	1,336.91		
	110-5261-511	PLANNING & DESIGN SERVICES	5,299.50	60,000	42,381.50		
	110-5261-540	ADVERTISING	3.22	60,000	59,996.78		
	110-5261-541	SOFTWARE	20.00	5,000	4,960.00		
	110-5261-562	TRAVEL & TRAINING	57.94	6,000	5,870.91		
	110-5261-571	DUES & MEMBERSHIPS	113.74	4,000	3,352.52		
	110-5261-814	PRINTER/COPY MACH LEASE	35.51	0	71.24-	Y	
	110-5310-319	MISCELLANEOUS SUPPLIES	173.00	500	205.21		
	110-5310-421	DISPOSAL SERVICES	2,158.65	65,000	57,461.43		
	110-5310-460	OTHER PROFESSIONAL SERVICE	66.00	4,000	3,406.00		
	110-5310-533	CELLULAR PHONE	54.65-	1,200	975.96		
	110-5310-540	ADVERTISING	30.99	3,000	2,938.02		
	110-5310-814	PRINT/COPY MACH LEASE & MA	248.73	2,200	1,667.06		
	110-5320-313	MEDICAL & SAFETY SUPPLIES	10.00	8,000	7,739.77		
	110-5320-321	UTILITIES	196.26	6,000	4,662.56		
	110-5320-326	FUEL	2,584.55	40,000	34,203.03		
	110-5320-440	RENTALS	9.00	10,000	9,880.12		
	110-5320-460	OTHER PROP MAINT SERVICES	31.67	6,000	4,917.18		
	110-5320-562	TRAVEL & TRAINING	2,000.00	2,000	0.00		
	110-5381-316	TOOLS & EQUIPMENT	299.98	1,000	700.02		
	110-5381-321	UTILITIES	1,784.40	50,000	42,512.23		
	110-5381-432	REPAIR OF BUILDINGS	661.60	25,000	21,721.40		
	110-5381-460	OTHER PROP MAINT SERVICES	577.00	25,000	21,899.25		
	110-5511-319	MISCELLANEOUS SUPPLIES	933.52	25,000	21,961.01		
	110-5511-321	UTILITIES	1,373.62	35,000	30,208.11		
	110-5511-326	FUEL	1,810.77	15,000	12,024.06		
	110-5511-440	RENTALS	291.00	4,500	3,393.75		
	110-5511-533	CELLULAR PHONE	22.08	1,200	805.90		
	110-5512-317	CONCESSION & SOUVENIR SUPP	3,722.83	47,000	30,692.44		
	110-5512-319	MISCELLANEOUS SUPPLIES	194.76	25,000	18,483.23		
	110-5512-321	UTILITIES	4,679.12	51,000	43,138.37		
	110-5512-327	FUEL - RESALE	3,790.47	35,000	28,807.67		
	110-5512-440	RENTALS	426.00	5,000	3,691.50		
	110-5512-533	CELLULAR PHONE	54.85	900	690.30		
	110-5512-576	SECURITY SERVICES	47.00	1,000	906.00		
	110-5512-802	HUNTING/FISHING REMITTANCE	626.00	12,000	8,333.25		

** G/L ACCOUNT TOTALS **

YEAR	ACCOUNT	NAME	AMOUNT	=====LINE ITEM=====			=====GROUP BUDGET=====		
				ANNUAL BUDGET	BUDGET AVAILABLE	OVER BUDG	ANNUAL BUDGET	BUDGET AVAILABLE	OVER BUDG
	110-5551-321	UTILITIES	1,561.20	35,000	31,051.00				
	110-5551-440	RENTALS	837.00	7,000	3,816.25				
	110-5570-319	MISCELLANEOUS SUPPLIES	264.00	4,000	3,349.44				
	110-5570-321	UTILITIES	41.55	4,000	3,512.58				
	110-5570-326	FUEL	922.37	8,000	6,528.86				
	110-5570-433	REPAIR OF MACHINERY	799.98	10,000	9,009.22				
	110-5912-822	TRANSFER TO LIBRARY FUND	74,170.05	549,413	475,242.95				
	122-5653-311	OFFICE SUPPLIES	87.74	4,500	3,734.53				
	122-5653-317	CONCESSION & SOUVENIR SUPP	959.40	2,000	1,040.60				
	122-5653-321	NATURAL GAS & ELECTRIC (CI	253.82	2,500	1,962.52				
	122-5653-540	ADVERTISING	1,194.13	25,000	11,345.87				
	122-5653-561	BUSINESS MEETING EXPENSE	129.21	1,200	941.58				
	122-5653-572	COMMUNITY PROMOTION & RELA	1,786.30	35,000	29,088.70				
	123-5582-330	FOOD	226.88	300	73.12				
	123-5582-574	SPECIAL EVENT SERVICES	100.00	100	0.00				
	123-5584-317	CONCESSION & SOUVENIR SUPP	191.00	2,500	2,309.00				
	123-5584-550	PRINTING & BINDING	2,114.50	3,000	885.50				
	124-5320-741	STREETS MACHINERY & EQUIPM	1,700.00	195,000	186,633.33				
	124-5342-741	SEWER COLL MACH & EQUIP	1,700.00	34,000	25,633.34				
	124-5354-741	WATER DIST MACH & EQUIP	1,700.00	34,000	25,633.33				
	125-5150-519	OTHER PROFESSIONAL SERVICE	347.00	7,000	2,998.00				
	130-5321-730	IMPROVEMENTS OTHER THAN BL	4,097.00	1,360,000	1,312,854.82				
	150-5604-460	LANDSCAPING	317.50	4,000	3,682.50				
	211-5351-740	MACHINERY & EQUIPMENT	13,909.50	12,000	1,909.50-	Y			
	211-5353-314	CHEMICALS	16,722.41	500,000	447,367.87				
	211-5353-319	MISCELLANEOUS SUPPLIES	813.58	25,000	19,218.07				
	211-5353-321	NATURAL GAS & ELECTRIC	2,646.33	196,500	172,745.54				
	211-5353-377	PLANT EQUIPMENT	343.19	30,000	27,483.05				
	211-5353-432	REPAIR OF STRUCTURES	31.05	35,000	30,850.08				
	211-5353-433	REPAIR OF MACHINERY	365.60	35,000	33,951.68				
	211-5353-434	REPAIR OF VEHICLES	35.00	2,000	1,890.31				
	211-5353-439	OTHER REPAIR & MAINT. SERV	1,490.99	8,500	2,315.39				
	211-5353-533	CELLULAR PHONE	201.42	3,000	2,349.18				
	211-5354-313	MEDICAL & SAFETY SUPPLIES	10.00	3,000	2,739.77				
	211-5354-321	NATURAL GAS & ELECTRIC	1,266.69	30,000	22,832.65				
	211-5354-326	FUEL	2,584.54	50,000	44,203.04				
	211-5354-374	SERVICE LINE MATERIALS	8,005.56	75,000	66,282.44				
	211-5354-375	LEAK REPAIR MATERIALS	874.00	25,000	22,487.00				
	211-5354-440	RENTALS	9.00	10,000	9,880.12				
	211-5354-460	OTHER PROPERTY MAINT. SERV	31.67	6,000	4,917.18				
	211-5354-533	CELL PHONES	54.02	1,500	1,331.97				
	211-5355-311	OFFICE SUPPLIES	23.09	2,500	2,396.92				
	211-5355-319	MISCELLANEOUS SUPPLIES	123.00	1,500	1,284.77				
	211-5355-326	FUEL	275.24	5,000	4,398.57				
	211-5355-373	WATER METERS	13,790.00	40,000	25,550.05				
	211-5355-519	OTHER PROFESSIONAL SERVICE	450.62	5,000	7,339.13-	Y			
	211-5355-531	POSTAGE	176.00	24,000	21,017.87				
	211-5355-532	TELEPHONE	36.01	3,000	2,753.80				

** G/L ACCOUNT TOTALS **

YEAR	ACCOUNT	NAME	AMOUNT	=====LINE ITEM=====		=====GROUP BUDGET=====	
				ANNUAL BUDGET	BUDGET OVER AVAILABLE BUDG	ANNUAL BUDGET	BUDGET OVER AVAILABLE BUDG
	211-5355-814	PRINTING/COPY MACH LEASE/M	89.80	1,500	1,309.58		
	211-5356-460	OTHER PROPERTY MAINT SVCS	66.00	1,500	906.00		
	212-5342-313	MEDICAL & SAFETY SUPPLIES	10.00	5,000	4,739.76		
	212-5342-321	UTILITIES	150.20	5,000	3,568.71		
	212-5342-326	FUEL	2,584.54	48,000	42,203.04		
	212-5342-361	SEWER PIPE	3,005.10	30,000	26,994.90		
	212-5342-363	BACKFILL & SURFACE MATERIA	1,325.00	45,000	40,006.83		
	212-5342-440	RENTALS	9.00	20,000	19,880.12		
	212-5342-460	OTHER PROPERTY MTCE SERVIC	31.66	7,500	6,417.20		
	212-5342-533	CELL PHONES	54.01	1,500	1,331.97		
	212-5343-321	NATURAL GAS & ELECTRIC	11.76	55,000	54,974.90		
	212-5343-533	CELLULAR PHONE	36.01	2,750	2,518.76		
	212-5344-311	OFFICE SUPPLIES	13.96	750	712.06		
	212-5344-318	VEHICLE PARTS	18.93	3,000	2,285.39		
	212-5344-319	MISCELLANEOUS SUPPLIES	1,656.56	9,000	6,728.48		
	212-5344-321	NATURAL GAS & ELECTRIC	30,134.59	275,000	205,510.85		
	212-5344-366	PLANT MTCE & REPAIR MATERI	119.96	50,000	39,610.21		
	212-5344-460	OTHER PROPERTY MTCE SERVIC	246.47	45,000	44,447.06		
	212-5344-516	TECHNOLOGY SUPPORT SERVICE	1,584.00	4,000	2,116.00		
	212-5344-533	CELLULAR PHONE	82.23	2,000	1,712.04		
	212-5344-562	TRAVEL & TRAINING	1,492.92	3,000	935.08		
	212-5344-730	IMPROVEMENTS OTHER THAN BL	505.00	1,580,000	1,579,495.00		
	212-5345-311	OFFICE SUPPLIES	23.08	2,500	2,396.93		
	212-5345-319	MISCELLANEOUS SUPPLIES	123.00	1,500	1,284.77		
	212-5345-326	FUEL	275.24	5,000	4,398.57		
	212-5345-373	WATER METERS	13,790.00	40,000	25,550.05		
	212-5345-519	OTHER PROFESSIONAL SERVICE	450.62	5,000	7,339.14-	Y	
	212-5345-531	POSTAGE	176.00	22,500	19,517.87		
	212-5345-532	TELEPHONE	36.01	3,000	2,757.81		
	212-5345-814	PRINTING/COPY MACH LEASE/M	89.80	1,500	1,309.58		
	212-5346-460	OTHER PROPERTY MAINT SVCS	66.00	3,500	2,906.00		
	212-5735-817	2017 CSO PIPING LOAN	98,209.28	196,915	98,705.72		
	212-5795-817	INTEREST EXPENSE	18,934.95	107,440	88,505.05		
	TOTAL:		1,091,814.58				

** DEPARTMENT TOTALS **

ACCT	NAME	AMOUNT
110-110	CITY COUNCIL	5,432.92
110-120	CITY CLERK	696.54
110-150	FINANCIAL ADMINISTRATION	922.00
110-160	LEGAL SERVICES	3,750.00
110-170	COMPUTER INFO SYSTEMS	5,146.41

** DEPARTMENT TOTALS **

ACCT	NAME	AMOUNT
110-211	POLICE ADMINISTRATION	292,791.93
110-213	PATROL	5,719.54
110-214	K-9 SERVICE	504.54
110-223	AUTOMOTIVE SERVICES	10,654.40
110-224	POLICE BUILDINGS	10,215.97
110-241	FIRE PROTECTION ADMIN.	383,447.47
110-242	AMBULANCE SERVICE	3,007.42
110-261	COMMUNITY DEVELOPMENT	5,605.42
110-310	PUBLIC WORKS	2,622.72
110-320	STREETS	4,831.48
110-381	CUSTODIAL SERVICES	3,322.98
110-511	PARKS	4,430.99
110-512	LAKE MATTOON	13,541.03
110-551	SPORTS FACILITIES	2,398.20
110-570	DODGE GROVE CEMETERY	2,027.90
110-912	INTRFND TRNSFRS - LIBRARY	74,170.05

110 TOTAL	GENERAL FUND	835,239.91
122-653	HOTEL TAX ADMINISTRATION	4,410.60

122 TOTAL	HOTEL TAX FUND	4,410.60
123-582	JULY 4TH FIREWORKS	326.88
123-584	BAGELFEST	2,305.50

123 TOTAL	FESTIVAL MGMT FUND	2,632.38
124-320	STREETS VEHICLES & MACH	1,700.00
124-342	SEWER COLL VEH & MACH	1,700.00
124-354	WATER VEHICLES & MACHINE	1,700.00

124 TOTAL	MOBILE EQUIPMENT FUND	5,100.00
125-150	FINANCIAL ADMINISTRATION	347.00

125 TOTAL	INSURANCE & TORT JDGMNT	347.00
130-321	STREETS	4,097.00

130 TOTAL	CAPITAL PROJECT FUND	4,097.00
150-604	ADMINISTRATIVE EXPENSES	317.50

150 TOTAL	I-57 EAST TIF DISTRICT	317.50
211-351	RESERVOIRS & WTR SOURCES	13,909.50
211-353	WATER TREATMENT PLANT	22,529.57
211-354	WATER DISTRIBUTION	12,835.48
211-355	ACCOUNTING & COLLECTION	14,963.76

** DEPARTMENT TOTALS **

ACCT	NAME	AMOUNT
211-356	ADMINISTRATIVE & GENERAL	66.00

211 TOTAL	WATER FUND	64,304.31

212-342	SEWER COLLECTION SYSTEM	7,169.51
212-343	SEWER LIFT STATIONS	47.77
212-344	WASTEWATER TREATMNT PLANT	35,854.62
212-345	ACCOUNTING & COLLECTION	14,963.75
212-346	ADMINISTRATIVE & GENERAL	66.00
212-735	DEBT SERVICE	98,209.28
212-795	DEBT SERVICE	18,934.95

212 TOTAL	SEWER FUND	175,245.88

** TOTAL **		1,091,694.58

NO ERRORS

VENDOR SET: 01 CITY OF MATTOON

BANK: EHBK

FUND : 221 HEALTH INSURANCE FUND

DEPARTMENT: 412 HEALTH PLAN ADMIN

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-004322	AETNA	I-202506260752	221 5412-213	MEDICARE ADVA:	MAPD JULY MEDICAL	162736	23,705.52
01-004322	AETNA	I-202506260752	221 5412-213	MEDICARE ADVA:	MAPD JULY RX	162736	32,738.64
VENDOR 01-004322 TOTALS							56,444.16
DEPARTMENT 412 HEALTH PLAN ADMIN						TOTAL:	56,444.16
01-002811	BLUE CROSS & BLUE SHIE	I-202506260755	221 5413-212	HEALTH PREMIU:	JULY MEDICAL INS	162737	364,058.99
VENDOR 01-002811 TOTALS							364,058.99
DEPARTMENT 413 MEDICAL CLAIMS						TOTAL:	364,058.99
01-002811	BLUE CROSS & BLUE SHIE	I-202506260755	221 5415-212	DENTAL PREMIU:	JULY DENTAL INS	162737	13,033.47
VENDOR 01-002811 TOTALS							13,033.47
DEPARTMENT 415 DENTAL CLAIMS						TOTAL:	13,033.47
01-002052	DOROTHY ROLING	I-202506240732	221 5416-211	REFUNDS REIMB:	REIMB LIPS 7/2025	162795	36.80
VENDOR 01-002052 TOTALS							36.80
01-004165	MAUREEN NICHOLS	I-202506240734	221 5416-211	REFUNDS REIMB:	REIMB LIPS 7/2025	162793	36.80
VENDOR 01-004165 TOTALS							36.80
01-004412	CHARLES SHUMARD	I-202506240733	221 5416-211	REFUNDS REIMB:	REIMB LIPS 7/2025	162796	36.80
VENDOR 01-004412 TOTALS							36.80
01-004637	BARBARA KING	I-202506240731	221 5416-211	REFUNDS REIMB:	REIMB LIPS 7/2025	162792	36.80
VENDOR 01-004637 TOTALS							36.80
01-004647	BEVERLY BOLSEN	I-202506240730	221 5416-211	REFUNDS REIMB:	REIMB LIPS 7/2025	162791	36.80
VENDOR 01-004647 TOTALS							36.80

VENDOR SET: 01 CITY OF MATTOON

BANK: EHBK

FUND : 221 HEALTH INSURANCE FUND

DEPARTMENT: 416 REFUNDS REIMB & MISC EXPS

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-004794	MARCIA ROETKER	I-202506240729	221 5416-211	REFUNDS REIMB:	REIMB LIPS 7/2025	162794	36.80
VENDOR 01-004794 TOTALS							36.80

DEPARTMENT 416 REFUNDS REIMB & MISC EXPSTOTAL: 220.80

VENDOR SET 221 HEALTH INSURANCE FUND TOTAL: 433,757.42

REPORT GRAND TOTAL: 433,757.42

** G/L ACCOUNT TOTALS **

				=====LINE ITEM=====			=====GROUP BUDGET=====	
YEAR	ACCOUNT	NAME	AMOUNT	ANNUAL	BUDGET	OVER	ANNUAL	BUDGET OVER
				BUDGET	AVAILABLE	BUDG	BUDGET	AVAILABLE BUDG
2025-2026	221-5412-213	MEDICARE ADVANTAGE PREMIUM	56,444.16	691,943	579,913.24			
	221-5413-212	HEALTH PREMIUMS	364,058.99	4,926,022	4,196,528.24			
	221-5415-212	DENTAL PREMIUMS	13,033.47	161,015	134,867.97			
	221-5416-211	REFUNDS REIMBURSEMENTS & M	220.80	5,000	3,267.93			
TOTAL:			433,757.42					

** DEPARTMENT TOTALS **

ACCT	NAME	AMOUNT
221-412	HEALTH PLAN ADMIN	56,444.16
221-413	MEDICAL CLAIMS	364,058.99
221-415	DENTAL CLAIMS	13,033.47
221-416	REFUNDS REIMB & MISC EXPS	220.80

221 TOTAL	HEALTH INSURANCE FUND	433,757.42

** TOTAL **		433,757.42

NO ERRORS

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
01-001070	AMEREN ILLINOIS	I-202506170634	121 5326-321	NATURAL GAS &:	SWORDS DRIVE LIGHTIN	010645	110.27
01-001070	AMEREN ILLINOIS	I-202506170636	121 5326-321	NATURAL GAS &:	REMINGTON RD LIGHTIN	010646	173.39
01-001070	AMEREN ILLINOIS	I-202506180639	121 5326-321	NATURAL GAS &:	101 CHARLESTON	010647	45.28
01-001070	AMEREN ILLINOIS	I-202506180640	121 5326-321	NATURAL GAS &:	1121 B'DWAY	010648	47.89
01-001070	AMEREN ILLINOIS	I-202506180642	121 5326-321	NATURAL GAS &:	700 B'DWAY	010649	47.76
01-001070	AMEREN ILLINOIS	I-202506180656	121 5326-321	NATURAL GAS &:	B'DWAY LIGHTS	010650	145.60
01-001070	AMEREN ILLINOIS	I-202506180660	121 5326-321	NATURAL GAS &:	1613 B'DWAY	010651	79.28
01-001070	AMEREN ILLINOIS	I-202506180661	121 5326-321	NATURAL GAS &:	121 N 16TH	010652	111.78
01-001070	AMEREN ILLINOIS	I-202506180662	121 5326-321	NATURAL GAS &:	17TH & CHARLESTON	010653	45.87
01-001070	AMEREN ILLINOIS	I-202506180669	121 5326-321	NATURAL GAS &:	19TH & WESTERN	010654	107.60
01-001070	AMEREN ILLINOIS	I-202506180671	121 5326-321	NATURAL GAS &:	1600 B'DWAY	010655	59.77
01-001070	AMEREN ILLINOIS	I-202506180673	121 5326-321	NATURAL GAS &:	9TH & CHARLESTON	010656	48.12
01-001070	AMEREN ILLINOIS	I-202506180674	121 5326-321	NATURAL GAS &:	21ST & MARSHALL	010657	52.51
01-001070	AMEREN ILLINOIS	I-202506180675	121 5326-321	NATURAL GAS &:	14TH & CHARLESTON	010658	46.44
01-001070	AMEREN ILLINOIS	I-202506180676	121 5326-321	NATURAL GAS &:	1420 CHARLESTON	010659	46.83
01-001070	AMEREN ILLINOIS	I-202506180677	121 5326-321	NATURAL GAS &:	6TH & CHARLESTON	010660	47.67
01-001070	AMEREN ILLINOIS	I-202506180681	121 5326-321	NATURAL GAS &:	WABASH AVE ENTRANCE	010661	40.16
01-001070	AMEREN ILLINOIS	I-202506180682	121 5326-321	NATURAL GAS &:	NANTUCKET DR ENTRANC	010662	40.28
01-001070	AMEREN ILLINOIS	I-202506180687	121 5326-321	NATURAL GAS &:	18TH & MARSHALL	010663	49.96
01-001070	AMEREN ILLINOIS	I-202506180689	121 5326-321	NATURAL GAS &:	19TH & CHARLESTON	010664	45.20
VENDOR 01-001070 TOTALS							1,391.66
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	STREET LIGHTING	28 162797	1,826.71
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	CHARLESTON & CRESTVI	162797	12.41
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	1121 B'DWAY E	3032 162797	11.55
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	19TH & WESTERN	306 162797	81.22
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	17TH & CHARLESTON	162797	10.00
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	19TH & CHARLESTON	162797	9.27
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	15TH & CHARLESTON	162797	9.94
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	6TH & CHARLESTON	3 162797	10.89
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	18TH & MARSHALL	32 162797	15.57
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	LOGAN & CHARLESTON	162797	9.14
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	19TH & RICHMOND	32 162797	12.10
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	1600 B'DWAY	3391 162797	29.40
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	14TH & CHARLESTON	162797	9.53
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	9TH & CHARLESTON	3 162797	11.43
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	208 N 19TH	3526 162797	1,041.92
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	121 N 16TH	5858 162797	46.03
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	1613 B'DWAY	5869 162797	98.61
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	18TH & CHARLESTON	162797	9.54
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	21ST & MARSHALL	6766 162797	14.27
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	WABASH AVE ENTRANCE	162797	2.42
01-004602	AEP ENERGY	I-202506240738	121 5326-321	NATURAL GAS &:	NANTUCKET DR ENTRANC	162797	2.48
VENDOR 01-004602 TOTALS							3,274.43
DEPARTMENT 326 STREET LIGHTING TOTAL:							4,666.09

** G/L ACCOUNT TOTALS **

YEAR	ACCOUNT	NAME	AMOUNT	=====LINE ITEM=====			=====GROUP BUDGET=====	
				ANNUAL BUDGET	BUDGET AVAILABLE	OVER BUDG	ANNUAL BUDGET	BUDGET AVAILABLE
2025-2026	121-5326-321	NATURAL GAS & ELECTRIC	4,666.09	165,000	134,541.45			
		TOTAL:	4,666.09					

** DEPARTMENT TOTALS **

ACCT	NAME	AMOUNT
121-326	STREET LIGHTING	4,666.09

121 TOTAL	MOTOR FUEL TAX FUND	4,666.09

** TOTAL **		4,666.09

NO ERRORS

VENDOR SET: 01 CITY OF MATTOON

BANK: RLFBN

FUND : 127 REVOLVING LOAN FUND

DEPARTMENT: N/A NON-DEPARTMENTAL

INVOICE DATE RANGE: 1/01/1998 THRU 99/99/9999

PAY DATE RANGE: 6/18/2025 THRU 7/01/2025

BUDGET TO USE: DR-DEPARTMENT REQUESTED

VENDOR	NAME	ITEM #	G/L ACCOUNT	NAME	DESCRIPTION	CHECK #	AMOUNT
=====							
01-004812	MELISSA M HARDEN AT ST I-202506200719		127 4630-022	REVOLVING LOA: RLF LOAN		162714	45,000.00
						VENDOR 01-004812 TOTALS	45,000.00

			DEPARTMENT	NON-DEPARTMENTAL		TOTAL:	45,000.00

01-008200	COLES CO REGIONAL PLAN I-8122		127 5652-519	OTHER PROFESS: RLF BILLING 5/2025		162798	602.00
						VENDOR 01-008200 TOTALS	602.00

			DEPARTMENT 652	REVOLVING LOANS		TOTAL:	602.00

			VENDOR SET 127	REVOLVING LOAN FUND		TOTAL:	45,602.00
							REPORT GRAND TOTAL: 45,602.00

** G/L ACCOUNT TOTALS **

YEAR	ACCOUNT	NAME	AMOUNT	=====LINE ITEM=====			=====GROUP BUDGET=====	
				ANNUAL BUDGET	BUDGET AVAILABLE	OVER BUDG	ANNUAL BUDGET	BUDGET AVAILABLE
2025-2026	127-4630-022	REVOLVING LOAN *NON-EXPENS	45,000.00	83,977-	127,677.00-			
	127-5652-519	OTHER PROFESSIONAL SERVICE	602.00	1,500	898.00			
		TOTAL:	45,602.00					

** DEPARTMENT TOTALS **

ACCT	NAME	AMOUNT
127	NON-DEPARTMENTAL	45,000.00
127-652	REVOLVING LOANS	602.00

127 TOTAL	REVOLVING LOAN FUND	45,602.00

	** TOTAL **	45,602.00

NO ERRORS

Packet: 65417 - Refunds From Zone 03

G/L POSTING DATE: 6/20/2025

										-----DEPOSIT-----	
---ACCOUNT---	-----NAME-----	--DATE--	----TYPE----	-CK #-	----AMOUNT----	CODE	-RECEIPT--	--AMOUNT--	----	-----MESSAGE-----	

19-11300-15	TABOR, BAYLEIGH M	6/20/25	FINAL BILL	162715	40.07CR	100	ONLINE	60.00CR			
21-10200-20	ADAMS, BRIANNA R	6/20/25	FINAL BILL	162716	55.21CR	100	43731	60.00CR			
21-10310-14	ADAMS, SANDRA L	6/20/25	FINAL BILL	162717	25.80CR	100	ONLINE	60.00CR			
22-08500-09	PATTERSON, JADEN L	6/20/25	FINAL BILL	162718	39.36CR	100	ONLINE	60.00CR			
24-19700-01	JEDLICK, MARY R	6/20/25	FINAL BILL	162719	69.68CR	000		0.00			

Packet: 65492 - Refunds From Zone 04

G/L POSTING DATE: 6/26/2025

-----ACCOUNT-----	-----NAME-----	---DATE---	---TYPE---	-CK #-	-----AMOUNT-----	CODE	-----RECEIPT-----	---AMOUNT---	-----MESSAGE-----
27-16300-02	FREDERICK, MATTHEW D	6/26/25	FINAL BILL	162738	40.51CR	100	ONLINE	60.00CR	
28-14500-07	REDDING, LAURA M	6/26/25	FINAL BILL	162739	42.25CR	100	47252	60.00CR	
30-18410-12	APEX PROPERTY MANAGEMENT	6/26/25	FINAL BILL	162740	4.55CR	000		0.00	
36-06100-23	HUBBART, HALEY R	6/26/25	FINAL BILL	162741	59.77CR	100	47608	60.00CR	
36-17980-05	SCHMITT, TRACY A	6/26/25	FINAL BILL	162742	53.35CR	100	ONLINE	60.00CR	

NEW BUSINESS:

1.

CITY OF MATTOON, ILLINOIS

SPECIAL ORDINANCE NO. 2025-1966

AN ORDINANCE GRANTING A SPECIAL USE FOR A TIER II SHORT-TERM RENTAL IN THE CITY OF MATTOON, COLES COUNTY, ILLINOIS

WHEREAS, Todd and Kimberly Fuller, presented a Petition to the City Clerk for a Special Use Permit, which Petition requests that a new property be utilized for a Short-Term Rental, which is a Special Use pursuant to City Ordinance sections 159.45 and 159.46; and,

WHEREAS, petitioner is the owner of the property commonly described as 201 Moultrie Ave. Pin Number: **06-0-02808-000.**: Legal Description: **Grant Park Place Lot 01 Block 21 DO# 07-15-8.**; and,

WHEREAS, a Public Hearing on said Special Use for a ‘Short-Term Rental’ was held before the Mattoon Planning and Zoning Commission on June 24, 2025; and,

WHEREAS, said Petition was recommended for approval by the Mattoon Planning and Zoning Commission at said Public Hearing on June 24, 2025; and

WHEREAS, the City Council of the City of Mattoon, Coles County, Illinois, has determined, that the public interest will be served by allowing for such a Special Use.

NOW, THEREFORE BE IT ORDAINED BY THE CITY COUNCIL FOR THE CITY OF MATTOON, COLES COUNTY, A MUNICIPAL CORPORATION, as follows:

Section 1. Pursuant to enabling authority provided at Sections §159.45 and 159.46 of the Mattoon Code of Ordinances, the property located at 201 Moultrie Avenue as legally described above, shall be granted a Special Use Permit for a ‘Short-Term rental’; and,

Section 2. This ordinance shall be deemed published as of the day of its adoption and approval by the City Council.

Section 3. This ordinance shall be effective immediately.

Upon motion by _____ seconded by _____,
adopted this this 1st day of July, 2025, by a roll call vote, as follows:

AYES (Names):

NAYS (Names):

ABSENT (Names):

Approved this 1st day of July, 2025.

Rick Hall, Mayor
City of Mattoon, Illinois

ATTEST:

APPROVED AS TO FORM:

Susan J. O'Brien, City Clerk

Dan C. Jones, City Attorney

Recorded in the Municipality's Records on 07-01, 2025.

RECEIVED

MAY 29 2025

OFFICE OF THE CITY CLERK
MATTOON, ILLINOIS

PETITION FOR SPECIAL USE

STATE OF ILLINOIS)
COUNTY OF COLES)
CITY OF MATTOON)

1. The undersigned Petitioners, being the property owners of the area for which amendment to the Zoning Ordinance is sought, hereby petition for a **Special Use** within the City of Mattoon, Coles County, Illinois, in compliance with Section 5 and Section 18 of said Ordinance No. 96-4835.
2. The undersigned Petitioners respectfully request a Special Use for the property described as: **Grant Park Place Lot 01 Block 21 DO # 07-15-8. Commonly Known As: 201 Moultrie Ave PIN 06-0-02808-000.**
3. The requested Special Use is for **Lodging-Short Term Rental.**
4. Granting this Special Use will **provide lodging for large groups, will bring in more business for community restaurants & shopping.**
5. Granting this variance will not adversely affect the character of the surrounding area or impair property values.

WHEREFORE, the Petitioners request that this petition be placed on file in the Office of the City Clerk of Mattoon, Coles County, Illinois; that it be set for public hearing in accordance with the city ordinance, and that prescribed notices be given. Upon hearing, Petitioners request the variance be granted as described above.

Dated this 29 day of **May, 2025.**

Petitioner(s) Todd & Kimberly Fuller

Petitioner Email

Petitioner Phone

217-273-5011



Notice of Public Hearing, The Planning Commission of the City of Mattoon will hold a public hearing on **Tuesday June 24**, at **5:30pm** at Mattoon City Hall, 208 N 19th Street, Mattoon, IL 61938. The purpose of this hearing is to consider a petition by Todd & Kimberly Fuller to **Petition for Special Use** for the property located at **201 Moultrie Ave Mattoon, Illinois**, legally described as **Grant Park Place Lot 01 Block 21 DO #07-15-8 & 06-0-02808-000**. All interested parties are invited to attend and will be given an opportunity to be heard. The proposed amendment can be reviewed at Mattoon City Hall at the above address.

2.

CITY OF MATTOON, ILLINOIS

SPECIAL ORDINANCE NO. 2025-1967

AN ORDINANCE GRANTING A SPECIAL USE FOR A DIGITAL DISPLAY SIGN IN THE CITY OF MATTOON, COLES COUNTY, ILLINOIS

WHEREAS, Dusty’s Outdoor Media, presented a Petition to the City Clerk for a Special Use Permit, which Petition requests that a new property be utilized for a Digital Display Sign, which is a Special Use pursuant to City Ordinance Sections §159.45 and 159.46; and,

WHEREAS, petitioner is the owner of the property described Pin Number: **07-1-01425-000**. Legal Description: PT of SEC 36 #681624; and,

WHEREAS, a Public Hearing on said Special Use for a ‘Digital Display Sign’ was held before the Mattoon Planning and Zoning Commission on June 24, 2025; and,

WHEREAS, said Petition was recommended for approval by the Mattoon Planning and Zoning Commission at said Public Hearing on June 24, 2025; and

WHEREAS, the City Council of the City of Mattoon, Coles County, Illinois, has determined, that the public interest will be served by allowing for such a Special Use.

NOW, THEREFORE BE IT ORDAINED BY THE CITY COUNCIL FOR THE CITY OF MATTOON, COLES COUNTY, A MUNICIPAL CORPORATION, as follows:

Section 1. Pursuant to enabling authority provided at Section §159.45 and 159.46 of the Mattoon Code of Ordinances, the property located at 4112 Lake Land Boulevard as legally described above, shall be granted a Special Use Permit for a ‘Digital Display Sign’; and,

Section 2. This ordinance shall be deemed published as of the day of its adoption and approval by the City Council.

Section 3. This ordinance shall be effective immediately.

Upon motion by _____ seconded by _____,
adopted this this 1st day of July, 2025, by a roll call vote, as follows:

AYES (Names): _____

NAYS (Names): _____

ABSENT (Names): _____

Approved this 1st day of July, 2025.

Rick Hall, Mayor
City of Mattoon, Illinois

ATTEST:

APPROVED AS TO FORM:

Susan J. O'Brien, City Clerk

Dan C. Jones, City Attorney

Recorded in the Municipality's Records on 07-01, 2025.

RECEIVED

PETITION FOR SPECIAL USE

MAY 14 2025

STATE OF ILLINOIS)

COUNTY OF COLES)

CITY OF MATTOON)

OFFICE OF THE CITY CLERK
MATTOON, ILLINOIS

1. The undersigned Petitioners, being the property owners of the area for which amendment to the Zoning Ordinance is sought, hereby petition for a **Special Use** within the City of Mattoon, Coles County, Illinois, in compliance with Section 5 and Section 18 of said Ordinance No. 96-4835.
2. The undersigned Petitioners respectfully request a Special Use for the property described as Commonly Known: 4112 Lakeland Blvd, Mattoon, Illinois; Parcel Number: 07-1-01425-000; Legal Description: PT of SEC 36 #681624; See Attached Map & Pin Drop.
3. The requested Special Use is for a digital display sign.
4. Granting this Special Use for this digital billboard will serve as a dynamic gateway to the City of Mattoon, warmly welcoming visitors while promoting local businesses and attractions. It will highlight community events, support economic growth, reinforcing Mattoon as a vibrant destination for residents and visitors alike.
5. Granting this variance will not adversely affect the character of the surrounding area or impair property values.

WHEREFORE, the Petitioners request that this petition be placed on file in the Office of the City Clerk of Mattoon, Coles County, Illinois; that it be set for public hearing in accordance with the city ordinance, and that prescribed notices be given. Upon hearing, Petitioners request the variance be granted as described above.

Dated this 14TH day of May, 2025.

Petitioner(s)

Petitioner Email

Petitioner Phone

217-259-8715

Disclaimer

Information printed from this site should not be used in lieu of a tax bill. IF YOU USE THIS AS A TAXBILL, YOU MUST REMIT A \$5.00 DUPLICATE BILL FEE, OR YOU WILL BE BILLED FOR THE FEE.

Coles County makes every effort to produce and publish the most current and accurate information possible. Coles County accepts no responsibility for the consequences of the inappropriate use or the interpretation of data. No warranties, expressed or implied, are provided for data herein. By proceeding with a property search you are stating that the notice has been read and that you understand and agree with its contents.

City of Mattoon Illinois

SIGN PERMIT APPLICATION

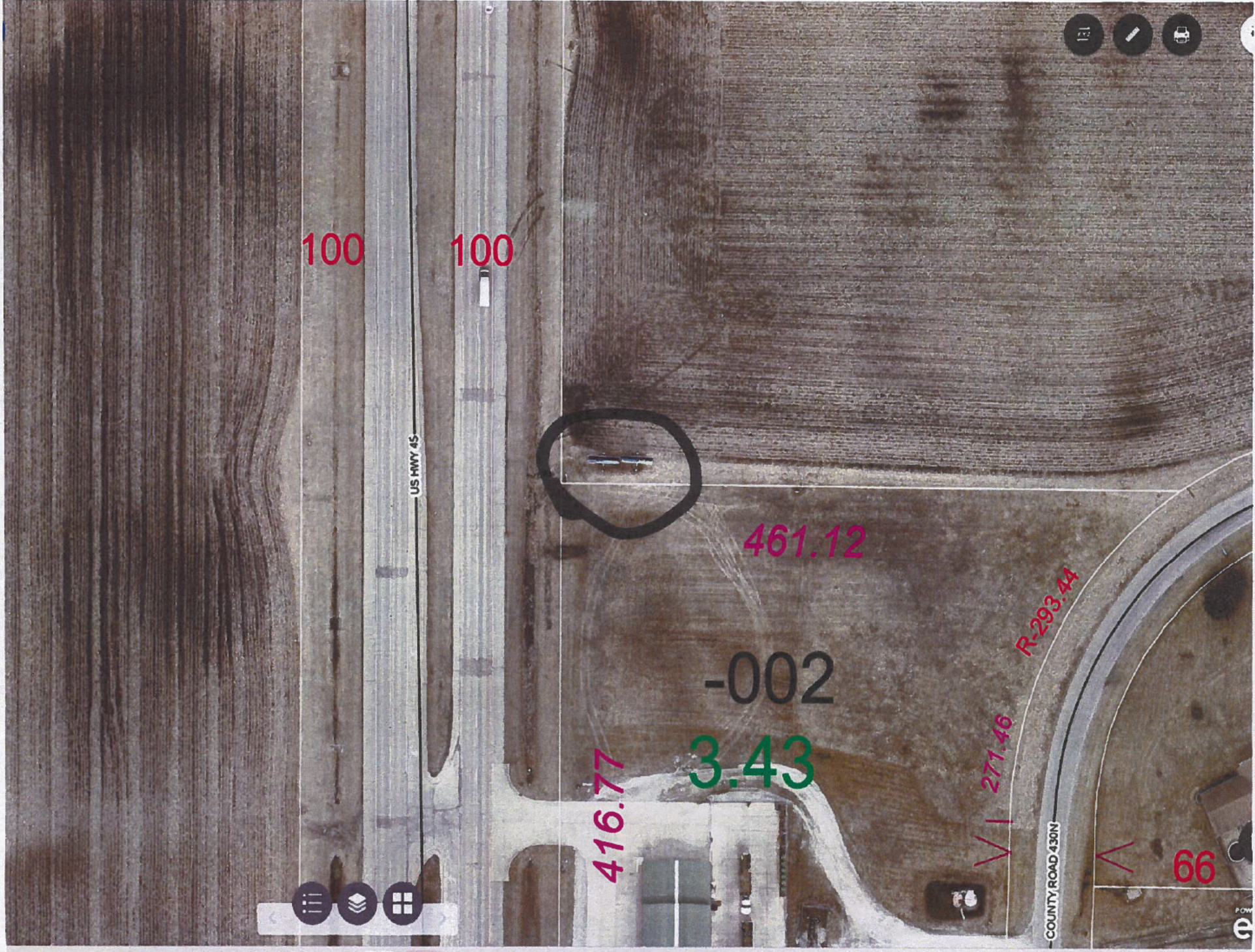
Give a brief description of proposed project stating type of project contemplated, any unusual details regarding said project, and the size of sign being erected:

Construct a back-to-back 'V' sign. Each side will include a state-of-the-art 10' x 30' digital display, providing a modern and engaging platform for city announcements, local business promotions, and community events.

RECEIVED

MAY 14 2025

**OFFICE OF THE CITY CLERK
MATTOON, ILLINOIS**



CITY OF MATTOON, ILLINOIS

SPECIAL ORDINANCE NO. 2025-1968

**AN ORDINANCE GRANTING A SPECIAL USE FOR A MOBILE HOME PARK
IN THE CITY OF MATTOON, COLES COUNTY, ILLINOIS**

WHEREAS, Frederick Family Homes, presented a Petition to the City Clerk for a Special Use Permit, which Petition requests that a new property be utilized for a Mobile Home Park, which is a Special Use pursuant to City Ordinance Sections §159.45 and 159.46; and,

WHEREAS, petitioner is the owner of the property commonly described as 805 N. 8th Street and 808 Piatt Avenue, Legally Described as:

Legal Description:

COMMENCING AT THE NORTHEAST CORNER OF LOT ONE (1) IN BLOCK FOUR (4) IN THE ORIGINAL TOWN OF MATTOON; THENCE ON AN ASSUMED AZIMUTH 569 DEGREES 13 MINUTES 10 SECONDS ALONG THE NORTH LINE OF SAID BLOCK FOUR (4) A DISTANCE OF 80.22 FEET TO THE POINT OF BEGINNING; THENCE AZMUTH 180 DEGREES 03 MINUTES 45 SECONDS A DISTANCE OF 115.91 FEET; THENCE AZIMUTH 269 DEGREES 55 MINUTES 52 SECONDS ALONG THE SOUTH LINE OF SAID BLOCK FOUR (4) A DISTANCE OF 110.21 FEET; THENCE AZIMUTH 0 DEGREES 02 MINUTES 48 SECONDS A DISTANCE OF 114.54 FEET; THENCE AZIMUTH 89 DEGREES 13 MINUTES 10 SECONDS ALONG THE NORTH LINE OF SAID BLOCK FOUR (4) A DISTANCE OF 110.25 FEET TO THE POINT OF BEGINNING, ALL SITUATED IN THE ORIGINAL TOWN OF MATTOON, COLES COUNTY, ILLINOIS.

EXCEPTING ANY INTEREST OR ESTATE IN THE MINERALS UNDERLYING THE SURFACE OF THE LAND WHICH MAY HAVE BEEN HERETOFORE CONVEYED OR RESERVED, AND ALL RIGHTS AND EASEMENTS IN FAVOR OF ANY SUCH MINERAL INTEREST OR ESTATE.

Also Described:

Following: Beginning at the Northeast Corner of Lot One (1), Block Four (4) in the Original Town of Mattoon; Thence West along the North boundary line of said Lot (which line is understood to be the North Section Line of Section Thirteen (13), Township Twelve (12) North, Range Seven (7) East of the Third Principal Meridian) to the Northwest Corner of said Lot; Thence South Fifty (50) feet; thence to the East Line of said Lot and Fifty (50) feet South of Beginning; thence North Fifty (50) feet to the place of beginning;

The East 30 feet of Lots Two (2) and Three (3) in Block Four (4) in the Original Town of Mattoon, Coles County, Illinois;

Also,

All of the vacated alley lying within Block Four (4) in the Original Town of Mattoo, Coles County, Illinois;

Also,

Sixty (60) feet of even width off of the West side of the following described premises, to-wit: All of Lot Four (4) in the Block Four (4) and Lot One (1) in Block Four (4) in the Original Town of Mattoon

, Pin Number: 07-1-02132-000, 07-1-02135-000 & 07-1-02130-000; and

WHEREAS, a Public Hearing on said Special Use for a ‘Mobile Home Park’ was held before the Mattoon Planning and Zoning Commission on June 24, 2025; and,

WHEREAS, said Petition was recommended for conditional approval by the Mattoon Planning and Zoning Commission at said Public Hearing on June 24, 2025; and,

WHEREAS, the City Council of the City of Mattoon, Coles County, Illinois, has determined, that the public interest will be served by allowing for such a Special Use.

NOW, THEREFORE BE IT ORDAINED BY THE CITY COUNCIL FOR THE CITY OF MATTOON, COLES COUNTY, A MUNICIPAL CORPORATION, as follows:

Section 1. Pursuant to enabling authority provided at Section §159.45 and 159.46 of the Mattoon Code of Ordinances, the property located at 805 N. 8th Street and 808 Piatt Avenue as legally described above, shall be granted a Special Use Permit for a ‘Mobile Home Park’ with the condition that parcel numbers 07-1-02132-000 and 07-1-02135-000 shall require a separate application Special Use for a Mobile Home Park prior to the placement of mobile homes on those lots; and,

Section 2. This ordinance shall be deemed published as of the day of its adoption and approval by the City Council.

Section 3. This ordinance shall be effective upon its approval as provided by law.

Upon motion by _____ seconded by _____,
adopted this this 1st day of July, 2025, by a roll call vote, as follows:

AYES (Names): _____

NAYS (Names): _____

ABSENT (Names): _____

Approved this 1st day of July, 2025.

Rick Hall, Mayor
City of Mattoon, Illinois

ATTEST:

APPROVED AS TO FORM:

Susan J. O'Brien, City Clerk

Dan C. Jones, City Attorney

Recorded in the Municipality's Records on _____07-01_____, 2025.

RECEIVED

MAY 21 2025

PETITION FOR SPECIAL USE

OFFICE OF THE CITY CLERK
MATTOON, ILLINOIS

STATE OF ILLINOIS)
COUNTY OF COLES)
CITY OF MATTOON)

1. The undersigned Petitioners, being the property owners of the area for which amendment to the Zoning Ordinance is sought, hereby petition for a **Special Use** within the City of Mattoon, Coles County, Illinois, in compliance with Section 5 and Section 18 of said Ordinance No. 96-4835.
2. The undersigned Petitioners respectfully request a Special Use for the property described as: ORIGINAL TOWN OF MATTOON BLK 4, LOT 1 N 50 FT THEREOF NE 1/4 SEC 13 T12N R07E & **Exhibit "A"**. Commonly Known As: **805 N. 8th St & 808 Piatt, Pin: 07-1-02132-000, 07-1-02135-000 & 07-1-02130-000.**
3. The requested Special Use is for an **Extension to the current "Wilson's Landing" Mobile Home Park.**
4. Granting this Special Use will **ensure the area is kept in orderly development and help to stabilize the current housing shortage in Mattoon. The homes will be a major improvement over the home we demolished, and the adjacent homes.**
5. Granting this variance will not adversely affect the character of the surrounding area or impair property values as there is currently an operating mobile home park in this neighborhood, and this is a small extension.

WHEREFORE, the Petitioners request that this petition be placed on file in the Office of the City Clerk of Mattoon, Coles County, Illinois; that it be set for public hearing in accordance with the city ordinance, and that prescribed notices be given. Upon hearing, Petitioners request the variance be granted as described above.

Dated this 20th day of **May, 2025.**

Petitioner, Matthew Frederick, Frederick Family Homes LLC.

Petitioner Email

Petitioner Phone

217-460-0619

Exhibit "A"

This is to certify that the records of the County of Coles, in the State of Illinois, have been examined and the following has been found as to the following matters regarding the following described real estate:

Legal Description:

COMMENCING AT THE NORTHEAST CORNER OF LOT ONE (1) IN BLOCK FOUR (4) IN THE ORIGINAL TOWN OF MATTOON; THENCE ON AN ASSUMED AZIMUTH 269 DEGREES 13 MINUTES 10 SECONDS ALONG THE NORTH LINE OF SAID BLOCK FOUR (4) A DISTANCE OF 80.22 FEET TO THE POINT OF BEGINNING; THENCE AZIMUTH 180 DEGREES 03 MINUTES 45 SECONDS A DISTANCE OF 115.91 FEET; THENCE AZIMUTH 269 DEGREES 55 MINUTES 52 SECONDS ALONG THE SOUTH LINE OF SAID BLOCK FOUR (4) A DISTANCE OF 110.21 FEET; THENCE AZIMUTH 0 DEGREES 02 MINUTES 48 SECONDS A DISTANCE OF 114.54 FEET; THENCE AZIMUTH 89 DEGREES 13 MINUTES 10 SECONDS ALONG THE NORTH LINE OF SAID BLOCK FOUR (4) A DISTANCE OF 110.25 FEET TO THE POINT OF BEGINNING, ALL SITUATED IN THE ORIGINAL TOWN OF MATTOON, COLES COUNTY, ILLINOIS.

EXCEPTING ANY INTEREST OR ESTATE IN THE MINERALS UNDERLYING THE SURFACE OF THE LAND WHICH MAY HAVE BEEN HERETOFORE CONVEYED OR RESERVED, AND ALL RIGHTS AND EASEMENTS IN FAVOR OF ANY SUCH MINERAL INTEREST OR ESTATE.

Also Described:

following: Beginning at the Northeast Corner of Lot One (1), Block Four (4) in the Original Town of Mattoon; Thence West along the North boundary line of said Lot (which line is understood to be the North Section Line of Section Thirteen (13), Township Twelve (12) North, Range Seven (7) East of the Third Principal Meridian) to the Northwest Corner of said Lot; Thence South Fifty (50) feet; thence to the East Line of said Lot and Fifty (50) feet South of Beginning; thence North Fifty (50) feet to the place of beginning;

The East 30 feet of Lots Two (2) and Three (3) in Block Four (4) in the Original Town of Mattoon, Coles County, Illinois;

Also,

All of the vacated alley lying within Block Four (4) in the Original Town of Mattoon, Coles County, Illinois;

Also,

Sixty (60) feet of even width off of the West side of the following described premises, to-wit: All of Lot Four (4) in Block Four (4) and Lot One (1) in Block Four (4) in the Original Town of Mattoon, except the



CITY OF MATTOON, ILLINOIS

SPECIAL ORDINANCE NO. 2025-1969

**AN ORDINANCE APPROVING A GRANT AGREEMENT BY AND BETWEEN THE
CITY OF MATTOON, ILLINOIS AND WASHINGTON SAVINGS BANK TRUST 5136
FOR 1400 BROADWAY AVE MATTOON IL 61938 (PIN 07-1-03844-000) IN
CONNECTION WITH THE MATTOON MID-TOWN REDEVELOPMENT PROJECT
AREA**

WHEREAS, WASHINGTON SAVINGS BANK TRUST 5136 (the “**Grantee**”), has submitted a proposal to the City of Mattoon, Illinois (the “**Municipality**”) for redevelopment of a part of the Municipality’s Mattoon Mid-town Redevelopment Project Area (the “**Redevelopment Project Area**”); and, thereafter, the Municipality and the Grantee have engaged in negotiations related to a Grant Agreement (including all exhibits and attachments in connection therewith, referred to as the “**Grant Agreement**”) concerning redevelopment incentives and assistance related to the preservation, development and redevelopment of a part of the Redevelopment Project Area.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MATTOON, COLES COUNTY, ILLINOIS, as follows:

Section 1. The Grant Agreement, in substantially the form thereof presented before the meeting of the City Council at which this ordinance is adopted, shall be and is hereby ratified, confirmed and approved, and the Mayor and City Clerk are authorized to execute and deliver the Grant Agreement for and on behalf of the Municipality; and upon the execution thereof by the Municipality and the Grantee, the appropriate officers, agents, attorneys and employees of the Municipality are authorized to take all supplemental actions, including the execution and delivery of related supplemental opinions, certificates, agreements and instruments not inconsistent with the Grant Agreement, desirable or necessary to implement and otherwise give full effect to the Grant Agreement. Upon full execution thereof, the Grant Agreement shall be attached to this ordinance as EXHIBIT “A”.

Section 2. This ordinance shall be deemed published as of the day of its adoption and approval by the City Council.

Section 3. This ordinance shall be effective upon its approval as provided by law.

Upon motion by _____ seconded by _____,
adopted this this 1st day of July, 2025, by a roll call vote, as follows:

AYES (Names): _____

NAYS (Names): _____

ABSENT (Names): _____

Approved this 1st day of July, 2025.

Rick Hall, Mayor
City of Mattoon, Illinois

ATTEST:

APPROVED AS TO FORM:

Susan J. O'Brien, City Clerk

Dan C. Jones, City Attorney

Recorded in the Municipality's Records on 07-01, 2025.

Attachment (1) - EXHIBIT "A"

EXHIBIT "A"

GRANT AGREEMENT

This Grant Agreement is made this _____ day of _____, 2025, by and between the CITY OF MATTOON, Coles County, Illinois, a municipal corporation (hereinafter the "Grantor"), and WASHINGTON SAVINGS BANK TRUST 5136 owner of a building located at 1400 BROADWAY AVE MATTOON IL 61938, Mattoon, Coles County, Illinois, (hereinafter together referred to as the "Grantee"), as follows:

1. Grantor does grant unto Grantee up to the sum of \$42,165 to be disbursed as hereinafter described, subject to the following terms and conditions:

A. It is agreed and understood that the grant shall be for the sole purpose of ROOF REPAIR OR REPLACEMENT to the building located at 1400 BROADWAY AVE MATTOON IL 61938, Mattoon, Coles County, Illinois. Said restorations shall be pursuant to a design which first must be acceptable to the City of Mattoon. The authorized agent acting on behalf of the City is the City Administrator or such other official the City Council may designate. Said restorations must include, but is not necessarily limited to a list of specifications such as material type, colors, and construction methods. Since this is a restoration project, the City of Mattoon reserves the right to demand a high level of detail concerning design, materials, colors and other construction aspects, and, further, demands strict adherence to said restoration. This grant is specifically contingent upon the undersigned first receiving initial design approval from the City. The undersigned acknowledges that the primary consideration for the grant herein from the City of Mattoon unto the undersigned is to achieve a restoration program for the City, and, as such, the undersigned acknowledges this consideration and agrees to abide by the rules and regulations and oversight of the City of Mattoon for implementation and/or construction of said restorations including, but not necessarily limited to: ROOF REPAIR OR REPLACEMENT; prior consent from the City of Mattoon before any alterations or changes to the design; oversight authority on the part of the City of Mattoon during the construction of said renovations if reasonably necessary to ensure said design and specifications are being complied with. Further, as additional consideration herein, the

undersigned covenants that once completed, said City-approved restoration work shall remain the same and not be substantially changed without prior written consent of the City within 15 years of completion of the same, which covenant shall survive the payment of the grant and remain obligatory unto the parties herein whether or not they retain control of the property or transfer the same to a third party within said 15 years. Should the undersigned sell or convey all or a part of said property, it guarantees and promises unto the City of Mattoon that it shall include in the deed of conveyance a restriction on changing said repairs/alteration work for said 15-year period. Said prohibition upon a substantial alteration does not prohibit the undersigned from periodic and regular maintenance of the same, which maintenance shall include, but not necessarily be limited to, cleaning, painting and material replacement if warranted. The undersigned agrees to commence the restoration within 60 days of initial design approval from the City, and to proceed diligently to the completion of the same, but in no event to be completed in not less than 12 months from the date hereof. During said construction, the City, at any time, can issue a written notice to the undersigned that it is in violation of the agreed upon design and specifications heretofore approved by the City. The undersigned will have thirty (30) days from receipt of written notice of noncompliance with design to correct the same to the City's satisfaction or otherwise reach a mutually agreeable resolution of the same. If correction or a mutual resolution is not completed within said thirty (30) day response time, then in that event, the City may consider this grant to be in default, to cease all future payments due hereunder, and shall rescind the grant. Though the City of Mattoon retains approval authority and oversight responsibility for the design and restoration program discussed herein, it is not responsible for the construction of the same nor for the payment of the same. Accordingly, the undersigned hereby agrees to assume all responsibility for any damages or claims for damages as a result of any injuries or claims from injuries for said roof replacement and/or repair, and, further, agrees to indemnify and hold the City of Mattoon free and harmless in association with any damages or claims for damages by the undersigned, or other third parties.

B. It is agreed and understood that the grant shall be for the purpose of ROOF REPAIR OR REPLACEMENT, to the building located at 1400 BROADWAY AVE MATTOON IL 61938, Mattoon, Coles County, Illinois.

C. It is agreed and understood that there is dollar limit flexibility between the elements of construction cost as more fully set forth hereinabove. Said grant proceeds shall be based upon the actual construction cost of work, but not to exceed \$42,165 as determined by the City's authorized agent.

D. Said grant is to be used solely for the following described real estate, commonly known as 1400 BROADWAY AVE MATTOON IL 61938, Mattoon, Illinois, but more specifically described as:

PIN: 07-1-03844-000

LEGAL DESCRIPTION: ORIGINAL TOWN OF MATTOON BLK 119, E1/2 OF LOT 9 & ALL OF LOT 10 SW 1/4 SEC 13 T12N R07E

E. Grantee shall secure the necessary building permits from Grantor, and shall indemnify and hold the Grantor harmless from any and all claims, damages, and injuries associated with or resulting from the rehabilitation and improvement of said real estate.

F. It is agreed and understood that improvement of said real estate shall also include ROOF REPAIR OR REPLACEMENT, to the building located at 1400 BROADWAY AVE MATTOON IL 61938. Grantee warrant that the total value of the improvements at 1400 BROADWAY AVE MATTOON IL 61938 shall not be less than \$56,220, including the grant authorized by this agreement.

G. Any and all work performed under this grant shall be at the prevailing wage in Coles County and as adopted by the City of Mattoon from time to time. Grantee hereby agrees to abide by all the Illinois Prevailing Wage Act, 820 ILCS 130 et.seq.

2. Grantor shall disburse the grant funds to Grantee in One (1) annual payment. These payments shall begin on September 30, in the year following the completion of all the

restoration/renovation work. The amount of this payment shall be no more than \$42,165 or the actual construction cost and architectural fees for the work authorized within the scope of this grant, whichever is less, as certified by the City's authorized agent. The payment shall only be made if this grant is valid and in full force at the time the payments are to be made

3. This Grant is expressly contingent upon the execution of this grant agreement by Grantee and Grantor and upon presentation to Grantor of vouchers or other sufficient proof of work authorized and approved and within the scope of this grant in amounts which exceed the grant money provided herein.

4. Grantee do hereby guarantee and covenant that it will apply the grant money only for the uses intended as set forth herein pursuant to the terms and conditions set forth herein.

5. Grantor's grant as made herein is made contingent upon Grantee performing all of the covenants and conditions by it to be performed.

6. This is an outright grant and is not repayable to Grantor unless Grantee fails to perform one or more of the covenants and conditions herein by it to be performed, and in that event, Grantor shall send written notice of said breach to Grantee and afford it an opportunity to correct the same within 30 days. Should Grantee fail to correct the breach within 30 days of said written notice, then in that event, Grantor shall rescind the grant and shall be entitled to recover from Grantee any and all grant moneys heretofore delivered to Grantee, which grant money Grantee agrees to repay unto Grantor.

7. This grant made herein is duly adopted by the City Council of the City of Mattoon meeting in regular session on July 1, 2025.

8. Grantee covenant unto Grantor that he intends to retain ownership of the buildings for the operation of an office/general business use, and that it is not his intention to use the grant money herein to remodel the building and then resell the same to a third party. To secure this covenant, Grantor and Grantee agree that if the building is sold to a third party, then there shall be a rebate

of the grant based upon the following schedule: if sold within one year of the date of the grant, there shall be a 75% rebate of the funds already paid; if sold after one year from the date of this grant but within two years of the date of this grant, then there shall be a 50% rebate of the funds already paid; and if sold after two years from the date of this grant but within three years of the date of this grant, then there shall be a 25% rebate of the funds already paid. Further, Grantor and Grantee agree that if the business operation ceases for a period in excess of thirty days, and within five years from the date of this grant, then Grantor's obligation to make continuing payments from the grant shall cease immediately and this agreement shall be null and void and of no further force and effect, and there shall be a rebate of the grant money heretofore paid based upon the timeline and percent established herein for the sale of the business, being 75% within one year of the date of this grant, 50% after one year but within two years from the date of this grant, and 25% after two years but within three years of the date of this grant.

9. Grantee shall provide (or cause to be provided) written notice to the City prior to taking any action contesting the assessed value of any or all the property located at 1400 BROADWAY AVE MATTOON IL 61938.

10. This grant is subject to the availability of Mid-town TIF District Funds.

11. Grantor reserves to itself the right to seek reimbursement for the amount expended under this grant from revenues of the Mattoon Mid-town Tax Increment Financing District.

Executed at Mattoon, Illinois, on the day and year first above written.

GRANTOR

Rick Hall, Mayor

Susan J. O'Brien, City Clerk

GRANTEE

WASHINGTON SAVINGS BANK TRUST 5136

CITY OF MATTOON, ILLINOIS

SPECIAL ORDINANCE NO. 2025-1970

AN ORDINANCE APPROVING A GRANT AGREEMENT BY AND BETWEEN THE CITY OF MATTOON, ILLINOIS AND WASHINGTON SAVINGS BANK TRUST 5136 FOR 1406 BROADWAY AVE MATTOON IL 61938 (PIN 07-1-03843-000) IN CONNECTION WITH THE MATTOON MID-TOWN REDEVELOPMENT PROJECT AREA

WHEREAS, WASHINGTON SAVINGS BANK TRUST 5136(the “**Grantee**”), has submitted a proposal to the City of Mattoon, Illinois (the “**Municipality**”) for redevelopment of a part of the Municipality’s Mattoon Mid-town Redevelopment Project Area (the “**Redevelopment Project Area**”); and, thereafter, the Municipality and the Grantee have engaged in negotiations related to a Grant Agreement (including all exhibits and attachments in connection therewith, referred to as the “**Grant Agreement**”) concerning redevelopment incentives and assistance related to the preservation, development and redevelopment of a part of the Redevelopment Project Area.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MATTOON, COLES COUNTY, ILLINOIS, as follows:

Section 1. The Grant Agreement, in substantially the form thereof presented before the meeting of the City Council at which this ordinance is adopted, shall be and is hereby ratified, confirmed and approved, and the Mayor and City Clerk are authorized to execute and deliver the Grant Agreement for and on behalf of the Municipality; and upon the execution thereof by the Municipality and the Grantee, the appropriate officers, agents, attorneys and employees of the Municipality are authorized to take all supplemental actions, including the execution and delivery of related supplemental opinions, certificates, agreements and instruments not inconsistent with the Grant Agreement, desirable or necessary to implement and otherwise give full effect to the Grant Agreement. Upon full execution thereof, the Grant Agreement shall be attached to this ordinance as EXHIBIT “A”.

Section 2. This ordinance shall be deemed published as of the day of its adoption and approval by the City Council.

Section 3. This ordinance shall be effective upon its approval as provided by law.

Upon motion by _____ seconded by _____,
adopted this this 1st day of July, 2025, by a roll call vote, as follows:

AYES (Names): _____

NAYS (Names): _____
ABSENT (Names): _____

Approved this 1st day of July, 2025.

Rick Hall, Mayor
City of Mattoon, Illinois

ATTEST:

APPROVED AS TO FORM:

Susan J. O'Brien, City Clerk

Dan C. Jones, City Attorney

Recorded in the Municipality's Records on 07-01, 2025.

Attachment (1) - EXHIBIT "A"

EXHIBIT "A"

GRANT AGREEMENT

This Grant Agreement is made this _____ day of _____, 2024, by and between the CITY OF MATTOON, Coles County, Illinois, a municipal corporation (hereinafter the "Grantor"), and WASHINGTON SAVINGS BANK TRUST 5136 owner of a building located at 1406 BROADWAY AVE MATTOON IL 61938, Mattoon, Coles County, Illinois, (hereinafter together referred to as the "Grantee"), as follows:

2. Grantor does grant unto Grantee up to the sum of \$17,200 to be disbursed as hereinafter described, subject to the following terms and conditions:

G. It is agreed and understood that the grant shall be for the sole purpose of ROOF REPAIR OR REPLACEMENT to the building located at 1406 BROADWAY AVE MATTOON IL 61938, Mattoon, Coles County, Illinois. Said restorations shall be pursuant to a design which first must be acceptable to the City of Mattoon. The authorized agent acting on behalf of the City is the City Administrator or such other official the City Council may designate. Said restorations must include, but is not necessarily limited to a list of specifications such as material type, colors, and construction methods. Since this is a restoration project, the City of Mattoon reserves the right to demand a high level of detail concerning design, materials, colors and other construction aspects, and, further, demands strict adherence to said restoration. This grant is specifically contingent upon the undersigned first receiving initial design approval from the City. The undersigned acknowledges that the primary consideration for the grant herein from the City of Mattoon unto the undersigned is to achieve a restoration program for the City, and, as such, the undersigned acknowledges this consideration and agrees to abide by the rules and regulations and oversight of the City of Mattoon for implementation and/or construction of said restorations including, but not necessarily limited to: ROOF REPAIR OR REPLACEMENT; prior consent from the City of Mattoon before any alterations or changes to the design; oversight authority on the part of the City of Mattoon during the construction of said renovations if reasonably necessary to ensure said design and specifications are being complied with. Further, as additional consideration herein, the

undersigned covenants that once completed, said City-approved restoration work shall remain the same and not be substantially changed without prior written consent of the City within 15 years of completion of the same, which covenant shall survive the payment of the grant and remain obligatory unto the parties herein whether or not they retain control of the property or transfer the same to a third party within said 15 years. Should the undersigned sell or convey all or a part of said property, it guarantees and promises unto the City of Mattoon that it shall include in the deed of conveyance a restriction on changing said repairs/alteration work for said 15-year period. Said prohibition upon a substantial alteration does not prohibit the undersigned from periodic and regular maintenance of the same, which maintenance shall include, but not necessarily be limited to, cleaning, painting and material replacement if warranted. The undersigned agrees to commence the restoration within 60 days of initial design approval from the City, and to proceed diligently to the completion of the same, but in no event to be completed in not less than 12 months from the date hereof. During said construction, the City, at any time, can issue a written notice to the undersigned that it is in violation of the agreed upon design and specifications heretofore approved by the City. The undersigned will have thirty (30) days from receipt of written notice of noncompliance with design to correct the same to the City's satisfaction or otherwise reach a mutually agreeable resolution of the same. If correction or a mutual resolution is not completed within said thirty (30) day response time, then in that event, the City may consider this grant to be in default, to cease all future payments due hereunder, and shall rescind the grant. Though the City of Mattoon retains approval authority and oversight responsibility for the design and restoration program discussed herein, it is not responsible for the construction of the same nor for the payment of the same. Accordingly, the undersigned hereby agrees to assume all responsibility for any damages or claims for damages as a result of any injuries or claims from injuries for said roof replacement and/or repair, and, further, agrees to indemnify and hold the City of Mattoon free and harmless in association with any damages or claims for damages by the undersigned, or other third parties.

H. It is agreed and understood that the grant shall be for the purpose of ROOF REPAIR OR REPLACEMENT, to the building located at 1406 BROADWAY AVE MATTOON IL 61938, Mattoon, Coles County, Illinois.

I. It is agreed and understood that there is dollar limit flexibility between the elements of construction cost as more fully set forth hereinabove. Said grant proceeds shall be based upon the actual construction cost of work, but not to exceed \$17,200 as determined by the City's authorized agent.

J. Said grant is to be used solely for the following described real estate, commonly known as 1406 BROADWAY AVE MATTOON IL 61938, Mattoon, Illinois, but more specifically described as:

PIN: 07-1-03843-000

LEGAL DESCRIPTION: ORIGINAL TOWN OF MATTOON BLK 119, W1/2 OF LOT 9 SW 1/4 SEC 13 T12N R07E

K. Grantee shall secure the necessary building permits from Grantor and shall indemnify and hold the Grantor harmless from any and all claims, damages, and injuries associated with or resulting from the rehabilitation and improvement of said real estate.

L. It is agreed and understood that improvement of said real estate shall also include ROOF REPAIR OR REPLACEMENT, to the building located at 1406 BROADWAY AVE MATTOON IL 61938. Grantee warrant that the total value of the improvements at 1406 BROADWAY AVE MATTOON IL 61938 shall not be less than \$22,950, including the grant authorized by this agreement.

G. Any and all work performed under this grant shall be at the prevailing wage in Coles County and as adopted by the City of Mattoon from time to time. Grantee hereby agrees to abide by all the Illinois Prevailing Wage Act, 820 ILCS 130 et.seq.

2. Grantor shall disburse the grant funds to Grantee in One (1) annual payment. These payments shall begin on September 30, in the year following the completion of all the

restoration/renovation work. The amount of this payment shall be no more than \$17,200 or the actual construction cost and architectural fees for the work authorized within the scope of this grant, whichever is less, as certified by the City's authorized agent. The payment shall only be made if this grant is valid and in full force at the time the payments are to be made

3. This Grant is expressly contingent upon the execution of this grant agreement by Grantee and Grantor and upon presentation to Grantor of vouchers or other sufficient proof of work authorized and approved and within the scope of this grant in amounts which exceed the grant money provided herein.

4. Grantee do hereby guarantee and covenant that it will apply the grant money only for the uses intended as set forth herein pursuant to the terms and conditions set forth herein.

5. Grantor's grant as made herein is made contingent upon Grantee performing all of the covenants and conditions by it to be performed.

6. This is an outright grant and is not repayable to Grantor unless Grantee fails to perform one or more of the covenants and conditions herein by it to be performed, and in that event, Grantor shall send written notice of said breach to Grantee and afford it an opportunity to correct the same within 30 days. Should Grantee fail to correct the breach within 30 days of said written notice, then in that event, Grantor shall rescind the grant and shall be entitled to recover from Grantee any and all grant moneys heretofore delivered to Grantee, which grant money Grantee agrees to repay unto Grantor.

7. This grant made herein is duly adopted by the City Council of the City of Mattoon meeting in regular session on July 1, 2025.

8. Grantee covenant unto Grantor that he intend to retain ownership of the buildings for the operation of an office/general business use, and that it is not his intention to use the grant money herein to remodel the building and then resell the same to a third party. To secure this covenant, Grantor and Grantee agree that if the building is sold to a third party, then there shall be a rebate

of the grant based upon the following schedule: if sold within one year of the date of the grant, there shall be a 75% rebate of the funds already paid; if sold after one year from the date of this grant but within two years of the date of this grant, then there shall be a 50% rebate of the funds already paid; and if sold after two years from the date of this grant but within three years of the date of this grant, then there shall be a 25% rebate of the funds already paid. Further, Grantor and Grantee agree that if the business operation ceases for a period in excess of thirty days, and within five years from the date of this grant, then Grantor's obligation to make continuing payments from the grant shall cease immediately and this agreement shall be null and void and of no further force and effect, and there shall be a rebate of the grant money heretofore paid based upon the timeline and percent established herein for the sale of the business, being 75% within one year of the date of this grant, 50% after one year but within two years from the date of this grant, and 25% after two years but within three years of the date of this grant.

9. Grantee shall provide (or cause to be provided) written notice to the City prior to taking any action contesting the assessed value of any or all the property located at 1406 BROADWAY AVE MATTOON IL 61938.

10. This grant is subject to the availability of Mid-town TIF District Funds.

11. Grantor reserves to itself the right to seek reimbursement for the amount expended under this grant from revenues of the Mattoon Mid-town Tax Increment Financing District.

Executed at Mattoon, Illinois, on the day and year first above written.

GRANTOR

Rick Hall, Mayor

Susan J. O'Brien, City Clerk

GRANTEE

WASHINGTON SAVINGS BANK TRUST 5136

CITY OF MATTOON, ILLINOIS

SPECIAL ORDINANCE NO. 2025-1971

**AN ORDINANCE APPROVING A GRANT AGREEMENT BY AND BETWEEN THE
CITY OF MATTOON, ILLINOIS AND WASHINGTON SAVINGS BANK TRUST 5136
FOR 1408 BROADWAY AVE MATTOON IL 61938 (PIN 07-1-03841-000) IN
CONNECTION WITH THE MATTOON MID-TOWN REDEVELOPMENT PROJECT
AREA**

WHEREAS, WASHINGTON SAVINGS BANK TRUST 5136 (the “**Grantee**”), has submitted a proposal to the City of Mattoon, Illinois (the “**Municipality**”) for redevelopment of a part of the Municipality’s Mattoon Mid-town Redevelopment Project Area (the “**Redevelopment Project Area**”); and, thereafter, the Municipality and the Grantee have engaged in negotiations related to a Grant Agreement (including all exhibits and attachments in connection therewith, referred to as the “**Grant Agreement**”) concerning redevelopment incentives and assistance related to the preservation, development and redevelopment of a part of the Redevelopment Project Area.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MATTOON, COLES COUNTY, ILLINOIS, as follows:

Section 1. The Grant Agreement, in substantially the form thereof presented before the meeting of the City Council at which this ordinance is adopted, shall be and is hereby ratified, confirmed and approved, and the Mayor and City Clerk are authorized to execute and deliver the Grant Agreement for and on behalf of the Municipality; and upon the execution thereof by the Municipality and the Grantee, the appropriate officers, agents, attorneys and employees of the Municipality are authorized to take all supplemental actions, including the execution and delivery of related supplemental opinions, certificates, agreements and instruments not inconsistent with the Grant Agreement, desirable or necessary to implement and otherwise give full effect to the Grant Agreement. Upon full execution thereof, the Grant Agreement shall be attached to this ordinance as EXHIBIT “A”.

Section 2. This ordinance shall be deemed published as of the day of its adoption and approval by the City Council.

Section 3. This ordinance shall be effective upon its approval as provided by law.

Upon motion by _____ seconded by _____,
adopted this this 1st day of July, 2025, by a roll call vote, as follows:

AYES (Names): _____

NAYS (Names): _____

ABSENT (Names): _____

Approved this 1st day of July, 2025.

Rick Hall, Mayor
City of Mattoon, Illinois

ATTEST:

APPROVED AS TO FORM:

Susan J. O'Brien, City Clerk

Dan C. Jones, City Attorney

Recorded in the Municipality's Records on 07-01, 2025.

Attachment (1) - EXHIBIT "A"

EXHIBIT "A"

GRANT AGREEMENT

This Grant Agreement is made this _____ day of _____, 2025, by and between the CITY OF MATTOON, Coles County, Illinois, a municipal corporation (hereinafter the "Grantor"), and WASHINGTON SAVINGS BANK TRUST 5136 owner of a building located at 1408 BROADWAY AVE MATTOON IL 61938, Mattoon, Coles County, Illinois, (hereinafter together referred to as the "Grantee"), as follows:

3. Grantor does grant unto Grantee up to the sum of \$20,081 to be disbursed as hereinafter described, subject to the following terms and conditions:

M. It is agreed and understood that the grant shall be for the sole purpose of ROOF REPAIR OR REPLACEMENT to the building located at 1408 BROADWAY AVE MATTOON IL 61938, Mattoon, Coles County, Illinois. Said restorations shall be pursuant to a design which first must be acceptable to the City of Mattoon. The authorized agent acting on behalf of the City is the City Administrator or such other official the City Council may designate. Said restorations must include, but is not necessarily limited to a list of specifications such as material type, colors, and construction methods. Since this is a restoration project, the City of Mattoon reserves the right to demand a high level of detail concerning design, materials, colors and other construction aspects, and, further, demands strict adherence to said restoration. This grant is specifically contingent upon the undersigned first receiving initial design approval from the City. The undersigned acknowledges that the primary consideration for the grant herein from the City of Mattoon unto the undersigned is to achieve a restoration program for the City, and, as such, the undersigned acknowledges this consideration and agrees to abide by the rules and regulations and oversight of the City of Mattoon for implementation and/or construction of said restorations including, but not necessarily limited to: ROOF REPAIR OR REPLACEMENT; prior consent from the City of Mattoon before any alterations or changes to the design; oversight authority on the part of the City of Mattoon during the construction of said renovations if reasonably necessary to ensure said design and specifications are being complied with. Further, as additional consideration herein, the undersigned covenants that once completed, said City-approved restoration work shall remain the same and not be substantially changed without prior written consent of the City within 15 years of completion of the same, which covenant shall survive the payment of the grant and remain obligatory unto the parties herein whether or not they retain control

of the property or transfer the same to a third party within said 15 years. Should the undersigned sell or convey all or a part of said property, it guarantees and promises unto the City of Mattoon that it shall include in the deed of conveyance a restriction on changing said repairs/alteration work for said 15-year period. Said prohibition upon a substantial alteration does not prohibit the undersigned from periodic and regular maintenance of the same, which maintenance shall include, but not necessarily be limited to, cleaning, painting and material replacement if warranted. The undersigned agrees to commence the restoration within 60 days of initial design approval from the City, and to proceed diligently to the completion of the same, but in no event to be completed in not less than 12 months from the date hereof. During said construction, the City, at any time, can issue a written notice to the undersigned that it is in violation of the agreed upon design and specifications heretofore approved by the City. The undersigned will have thirty (30) days from receipt of written notice of noncompliance with design to correct the same to the City's satisfaction or otherwise reach a mutually agreeable resolution of the same. If correction or a mutual resolution is not completed within said thirty (30) day response time, then in that event, the City may consider this grant to be in default, to cease all future payments due hereunder, and shall rescind the grant. Though the City of Mattoon retains approval authority and oversight responsibility for the design and restoration program discussed herein, it is not responsible for the construction of the same nor for the payment of the same. Accordingly, the undersigned hereby agrees to assume all responsibility for any damages or claims for damages as a result of any injuries or claims from injuries for said roof replacement and/or repair, and, further, agrees to indemnify and hold the City of Mattoon free and harmless in association with any damages or claims for damages by the undersigned, or other third parties.

N. It is agreed and understood that the grant shall be for the purpose of ROOF REPAIR OR REPLACEMENT, to the building located at 1408 BROADWAY AVE MATTOON IL 61938, Mattoon, Coles County, Illinois.

O. It is agreed and understood that there is dollar limit flexibility between the elements of construction cost as more fully set forth hereinabove. Said grant proceeds shall be based upon the actual construction cost of work, but not to exceed \$20,081 as determined by the City's authorized agent.

P. Said grant is to be used solely for the following described real estate, commonly known as 1408 BROADWAY AVE MATTOON IL 61938, Mattoon, Illinois, but more specifically described as:

PIN: 07-1-03841-000

LEGAL DESCRIPTION: ORIGINAL TOWN OF MATTOON BLK 119, E1/2 OF LOT 8 SW 1/4 SEC 13 T12N R07E

Q. Grantee shall secure the necessary building permits from Grantor, and shall indemnify and hold the Grantor harmless from any and all claims, damages, and injuries associated with or resulting from the rehabilitation and improvement of said real estate.

R. It is agreed and understood that improvement of said real estate shall also include ROOF REPAIR OR REPLACEMENT, to the building located at 1408 BROADWAY AVE MATTOON IL 61938. Grantee warrant that the total value of the improvements at 1408 BROADWAY AVE MATTOON IL 61938 shall not be less than \$26,775, including the grant authorized by this agreement.

G. Any and all work performed under this grant shall be at the prevailing wage in Coles County and as adopted by the City of Mattoon from time to time. Grantee hereby agrees to abide by all the Illinois Prevailing Wage Act, 820 ILCS 130 et.seq.

2. Grantor shall disburse the grant funds to Grantee in One (1) annual payment. These payments shall begin on September 30, in the year following the completion of all the restoration/renovation work. The amount of this payment shall be no more than \$20,081 or the actual construction cost and architectural fees for the work authorized within the scope of this grant, whichever is less, as certified by the City's authorized agent. The payment shall only be made if this grant is valid and in full force at the time the payments are to be made

3. This Grant is expressly contingent upon the execution of this grant agreement by Grantee and Grantor and upon presentation to Grantor of vouchers or other sufficient proof of work authorized and approved and within the scope of this grant in amounts which exceed the grant money provided herein.

4. Grantee do hereby guarantee and covenant that it will apply the grant money only for the uses intended as set forth herein pursuant to the terms and conditions set forth herein.

5. Grantor's grant as made herein is made contingent upon Grantee performing all of the covenants and conditions by it to be performed.

6. This is an outright grant and is not repayable to Grantor unless Grantee fails to perform one or more of the covenants and conditions herein by it to be performed, and in that event, Grantor shall send written notice of said breach to Grantee and afford it an opportunity to correct the same within 30 days. Should Grantee fail to correct the breach within 30 days of said written notice, then in that event, Grantor shall rescind the grant and shall be entitled to recover from Grantee any and all grant moneys heretofore delivered to Grantee, which grant money Grantee agrees to repay unto Grantor.

7. This grant made herein is duly adopted by the City Council of the City of Mattoon meeting in regular session on July 1, 2025.

8. Grantee covenant unto Grantor that he intends to retain ownership of the buildings for the operation of an office/general business use, and that it is not his intention to use the grant money herein to remodel the building and then resell the same to a third party. To secure this covenant, Grantor and Grantee agree that if the building is sold to a third party, then there shall be a rebate of the grant based upon the following schedule: if sold within one year of the date of the grant, there shall be a 75% rebate of the funds already paid; if sold after one year from the date of this grant but within two years of the date of this grant, then there shall be a 50% rebate of the funds already paid; and if sold after two years from the date of this grant but within three years of the date of this grant, then there shall be a 25% rebate of the funds already paid. Further, Grantor and Grantee agree that if the business operation ceases for a period in excess of thirty days, and within five years from the date of this grant, then Grantor's obligation to make continuing payments from the grant shall cease immediately and this agreement shall be null and void and of no further force and effect, and there shall be a rebate of the grant money heretofore paid based upon the timeline and percent established herein for the sale of the business, being 75% within one year of the date of this grant, 50% after one year but within two years from the date of this grant, and 25% after two years but within three years of the date of this grant.

9. Grantee shall provide (or cause to be provided) written notice to the City prior to taking any action contesting the assessed value of any or all the property located at 1408 BROADWAY AVE MATTOON IL 61938.

10. This grant is subject to the availability of Mid-town TIF District Funds.

11. Grantor reserves to itself the right to seek reimbursement for the amount expended under this grant from revenues of the Mattoon Mid-town Tax Increment Financing District.

Executed at Mattoon, Illinois, on the day and year first above written.

GRANTOR

Rick Hall, Mayor

Susan J. O'Brien, City Clerk

GRANTEE

WASHINGTON SAVINGS BANK TRUST 5136

7.

**City of Mattoon
Council Decision Request**

MEETING DATE: 07/01/2025 CDR NO: 2025-2608

SUBJECT: Lake Paradise Dam Inspection RFP

SUBMITTAL DATE: 06/17/2025

SUBMITTED BY: Dave Clark, Public Works Director

APPROVED FOR	Kyle Gill,	<u>06/26/2025</u>
COUNCIL AGENDA:	City Manager	Date

EXHIBITS (If applicable): Collins Engineering Proposal and Cost

EXPENDITURE	AMOUNT	CONTINGENCY FUNDING
ESTIMATE: \$41,295.00	BUDGETED: \$40,000.00	REQUIRED: \$1,295.00

IF IT IS THE WISH OF THE COUNCIL TO SUPPORT RECOMMENDATIONS CONTAINED IN THIS REPORT, THE FOLLOWING MOTION IS SUGGESTED:

“I move to approve entering into a contract with Collins Engineers, Inc. to perform an in-depth inspection and evaluation for the Lake Paradise Dam and authorizing the City Manager to sign the contract.”

SUMMARY OF THE TOPIC FOR WHICH A COUNCIL DECISION IS REQUESTED:

A Request for Proposals (RFP) was advertised for qualified Professional Engineering Consultants to do an in-depth inspection and evaluation of the Lake Paradise Dam. We received 7 proposals. Our review team evaluated all the proposals and found that Collins Engineering Inc. proposal to be the best and most qualified to perform the requirements of the RFP. We did inquire of them to provide some clarification and details of how they planned to handle the gate valve portion of the inspection. They provided those additional details, and it was found to be a good approach to the evaluation of the valve. We then evaluated their cost proposal, which was not the lowest nor the highest of all the submittals but was found to be within a reasonable range of our budgeted funds and addressed all the elements of the RFP. This was a qualifications-based selection process, and the selection was based on qualifications and not based on cost alone.

Once approved we will be setting up a Kickoff Meeting with them and hopefully getting them started soon after the July 4th holiday.

The work will be paid for using funds budgeted under the Fund Code 211-5351-519 for FY 2025-2026.



May 30, 2025

City of Mattoon
Public Works Department
208 N. 19th Street
Mattoon, IL 61938

Attn: Mr. David Clark, Public Works Director

Subject: Cost Proposal for the Lake Paradise Dam Professional Engineering Coles County, Illinois

We propose to perform the services as described in our proposal for the dam inspection and reporting services and the gate valve inspection assuming that the gate valve is freely and safely accessible to our inspection team and only includes a visual inspection of the exterior surfaces of the gate valve assembly and an effort to manipulate the wheel by hand and verify water flow if outflow from discharge line is visible (our only means to determine operability) for a **Total Lump Sum Fee of \$41,295.00**.

If a more in-depth inspection or manipulation of the gate valve is necessary, we would propose working with one or both of the subconsultants/vendors listed in the proposal – Wiss, Janney, Elstner Associates and Lakes & Rivers Contracting, Inc. We would like to have the opportunity to discuss the expectations/results that can be accomplished with the City of Mattoon for this portion of the work. Wiss, Janney, Elstner Associates (WJE) have an abundance of experienced mechanical engineers that could provide a visual inspection and (potentially) advanced testing services of the gate valve. Lakes & Rivers is a local contractor that has excellent waterfront structures and marine construction experience who can be engaged if construction equipment is necessary for access or manipulation of the gate valve. Their service fees range from \$8,000 to \$28,700. A more detailed understanding of the gate valve scope of work is necessary to provide a more detailed cost estimate beyond what is noted in the first paragraph of this letter.

This proposal is based on performing the inspection of bridge in Calendar Year 2025. If the inspection dates change, a cost adjustment may be required. Invoices will be submitted monthly and payment is due within thirty calendar days of the invoice date.

Respectfully Submitted,

COLLINS ENGINEERS, INC.

James M. Hamelka, S.E., P.E.
Senior Vice President - Division Manager

JH:bpd

Collins Engineers, Inc.
Engineering Services Table of Rates
Effective Date Range 01/01/2025 - 12/31/2025

Classification	Rate / Hour	Overtime Rate / Hour
Principal Engineer (E8)	\$ 492.00	\$ 492.00
Principal Engineer (E7)	\$ 382.00	\$ 382.00
Senior Engineer (E6)	\$ 300.00	\$ 300.00
Senior Engineer (E5)	\$ 256.00	\$ 256.00
Engineer (E4)	\$ 226.00	\$ 226.00
Engineer (E3)	\$ 195.00	\$ 195.00
Junior Engineer (E2)	\$ 162.00	\$ 162.00
Junior Engineer (E1)	\$ 140.00	\$ 140.00
Senior Engineering Technician, Designer (T3)	\$ 179.00	\$ 223.75
Senior CAD Technician (D3)	\$ 165.00	\$ 206.25
Technician (T2)	\$ 136.00	\$ 170.00
CAD Technician (D2)	\$ 131.00	\$ 163.75
Junior CAD Technician (D1)	\$ 93.00	\$ 116.25
Junior Technician (T1)	\$ 95.00	\$ 118.75
Project Administrator	\$ 137.00	\$ 137.00
Project Planner	\$ 159.00	\$ 198.75
Clerical (C2)	\$ 131.00	\$ 163.75
Clerical (C1)	\$ 92.00	\$ 115.00

Underwater Investigation	Rate / Day	Overtime Rate / Day
Diver - All Classifications (Additional Labor Cost Per Day at diving site in diving or standby capacity.)	\$ 300.00	\$ 300.00

Rope Access Investigation	Rate / Day	Rate / Day
Rope Access Technician - All Classifications (Additional Labor Cost Per Day at site where Rope Access Techniques are used.)	\$ 165.00	\$ 165.00

Expenses will be billed as follows:

Travel & Lodging	Actual Cost
Sustenance	Current GSA ME&I Per Diem Rates
Printing and Reproduction	Actual Cost
Wi-Fi, Cell phone, and Shipping	Actual Cost
Equipment Rental	Actual Cost
Expendable Supplies	Actual Cost
14 ft. Boat and Motor	\$80.00 per day
15-19 ft. Boat, Motor, and Trailer	\$110.00 per day
20-21 ft. Boat, Motor, and Trailer	\$150.00 per day
22-25 ft. Boat, Motor, and Trailer	\$190.00 per day
Mileage: Automobile	Current IRS rate per mile plus tolls

Testimony and Preparation for Testimony before Courts, Commissions, etc.

Officer-Principal Engineer	At Above Standard Rates
All Other Classifications	

Payment is due within thirty days after submission of invoices.

REQUEST FOR PROPOSALS

LAKE PARADISE DAM PROFESSIONAL ENGINEERING

Mattoon, IL

MAY 30
2025

PREPARED FOR:

MATTOON

MATTOON, ILLINOIS: *Working Together to Build the Future*



COLLINS
ENGINEERS INC.

SUBMITTED BY:

Collins Engineers, Inc.
550 West Jackson Boulevard, Suite 1200
Chicago, IL 60661
312.704.9300



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- V. SCOPE OF WORK**
- VI. PROPOSED SCHEDULE**
- VII. KEY STAFF**
- VIII. RECENT CLIENTS**
- APPENDIX A – RESUMES OF KEY STAFF**
- APPENDIX B – PROJECT HIGHLIGHTS**
- SEPARATE PDF FILE – COST PROPOSAL**



May 30, 2025

City of Mattoon
Public Works Department
208 N. 19th Street
Mattoon, IL 61938

Attn: Mr. David Clark P. E., Public Works Director

Subject: Proposal for the Lake Paradise Dam Professional Engineering Coles County, Illinois

I. BACKGROUND

Collins Engineers, Inc. (Collins) is pleased to offer the City of Mattoon (the City) this proposal for our professional engineering services to provide an in-depth inspection and evaluation of the Lake Paradise Dam in Paradise Township, Coles County, Illinois. The dam (ID No. IL00710), which consists of a concrete spillway structure and adjacent earthen embankment, was originally constructed in 1931, and the Lake is one of the city's main water supplies. This key piece of the City's infrastructure requires periodic inspection to satisfy the requirements of the Illinois Department of Natural Resources' (IDNR) Dam Safety Program. The evaluation of the dam's condition based on the inspection results will provide the City with recommendations for necessary repairs or preventative maintenance.

II. FIRM IDENTIFICATION & QUALIFICATIONS

Established in 1979 and headquartered in Chicago, Collins Engineers, Inc. is a top 500 ENR multi-disciplinary engineering firm with over 300 employees in 25 offices specializing in marine and waterfront structures, infrastructure program management, structural analysis and design, and structural inspections. Collins has over 45 years of experience providing the full suite of infrastructure engineering services including: planning, permitting, design, inspection, and construction management. Collins continues to be a nationally recognized industry leader in infrastructure inspection and assessment, providing technical support and manual preparation to various organizations, state, and federal agencies, including AASHTO, State DOT's, and the FHWA.

Collins is a leader in above and below-water inspection of dams and other water control structures, using highly technical inspection methods, such as diving, sonar, rope-access, and drones, to perform comprehensive inspections of structures of various sizes and configurations. This includes inspections of dams required by the IDNR along the Fox River in Aurora and Elgin, Illinois. Led by a team leader who is a licensed professional engineer, Collins' staff provides thorough, methodical, hands-on inspections of dam faces, penstocks, and other elements. During the inspection, the team maps and photographs deterioration, cracking, and other defects according to client requirements. Collins' engineers establish benchmarks for comparison in future inspection cycles for such things as the measurement of vertical plumb of the dam face.

For the inspection and evaluation of mechanical systems at the dam (18 inch gate valve), Collins has identified two potential firms to assist in the evaluation of existing valve and repair services. Please refer

to the cost estimate for additional information on the potential subconsultant/vendor and how they may be engaged.

PRIME CONSULTANT:

Collins Engineers, Inc.
550 W. Jackson Blvd., Suite 1200
Chicago, Illinois 60661
Ph.: 312.704.9300
Contact: James Hamelka, S.E., P.E.

SUBCONSULTANTS/VENDORS:

Wiss, Janney, Elstner Associates, Inc.
10 South LaSalle Street, Suite 2600,
Chicago, Illinois 60603, Ph.: 312.372.0555

Lakes & Rivers Contracting, Inc.
1200 Internationale Parkway, Suite 250
Woodridge, Illinois 60517 Ph.: 630.739.2460

III. PROJECT UNDERSTANDING

This project requires Collins to conduct an on-site in-depth inspection of the dam, and to provide an engineering evaluation based on the current conditions. The purpose of the inspection and evaluation is to ensure safety of the dam operation and, most importantly, the public.

The pre-inspection will require a team leader to review the available structure information (plans, previous inspection reports, etc.) and coordinate the inspection schedule with the City. The field inspection will require a team of inspectors to access the upstream and downstream surfaces of the reinforced concrete spillway, the spillway concrete wingwalls, the well leading to an 18-inch gate valve, the earthen embankment on both sides of the spillway, and the downstream channel. The data collected will be presented in an inspection report, similar in format to the 2024 report provided by the City. The report will be supplemented with recommendations for repairs and an associated cost and schedule for such repairs.

IV. TECHNICAL APPROACH

Our approach to the project is centered around assembling a qualified team experienced in inspection of dam structures that can perform the various methods of investigation during a single mobilization to the dam site. To achieve this, Collins will provide a team and all necessary equipment capable of performing the investigation of all the dam elements, including a hands-on inspection of the concrete spillway elements, which requires the use of commercial diving techniques to access the upstream/underwater portions of the spillway. That same team will also conduct a survey of the upstream channel via a boat, and a visual/walk-through inspection of the earth embankment. Collins, potentially with the assistance of our subconsultant/vendor, will conduct a visual inspection of the exterior surfaces of the 18-inch cast-iron gate valve and assess its ability to operate by manually (by hand) engaging the wheel. Note that Collins cannot be responsible for the valve failing to close after opening or for any water leakage that occurs following the operation of the valve and we will only attempt to operate the valve if expressly permitted by the City with this full understanding.

The inspection of concrete elements will include visual and tactile techniques (hammer sounding). The concrete will be inspected for cracking, water seepage, efflorescence, rust staining, delamination, spalling, scaling, and displacement/settlement. The inspection of the earth embankment will include a walk-by visual inspection of the dry portions, noting the general condition and any areas of animal borrows, sloughing or eroding soil, or exposed filter fabric, as well as a hydrographic survey of the submerged portions to identify the approximate location of the toe of the slope and extents of any riprap. The inspection of the mechanical

apparatus (gate valve) will include a visual inspection and manipulation of the valve to test functionality (if determined to be safe to access and operate). The well associated with the gate valve (access shaft) will also be inspected for concrete deficiencies on the shaft walls and safety features (ladder rungs, access hatch). The inspection of the well and gate valve will comply with our confined space entry requirements and procedures.

The areas of deficiencies will be measured and the locations clearly identified. Photographs of deficiencies and typical conditions will be recorded and provided in the inspection report. Also, if allowed by the City and FAA airspace regulations, arial images will be recorded with a small unmanned arial system (drone). Collins owns a variety of drone systems, and the field team will include at least one staff member certified as an FAA drone pilot.

Collins' inspectors are trained to analyze the dangers at each site and develop a plan to safely perform the inspection. Prior to the inspection, a review of the structure and overall site location is used to develop a Job Safety Analysis (JSA) that will also include confined space considerations. Once on site, the JSA will be reviewed by the inspection team, discussing hazards and precautions to eliminate potential safety hazards.

V. SCOPE OF WORK

Based on our understanding of the project, we propose the following Scope of Work:

- The inspections will be performed by a team of engineer-divers experienced in structural inspections of dams and spillway structures. The team will be led by a licensed Professional Engineer registered in the State of Illinois.
- The investigations will consist of a visual and tactile inspection of the exposed surfaces of the Dam from the upstream spillway wall/crest to the downstream toe with particular attention given to any observed areas of deterioration or apparent distress. The East and West wingwalls will also be inspected. Photographs will be taken as necessary to document general conditions and observed deficiencies. Observations of the channel adjacent to the upstream spillway and the downstream toe will be made to determine the channel bottom material, the presence or extent of scour, the presence or extent of riprap, and the presence or extent of drift and debris. Water depth soundings will be taken along the crest of the dam. The waterline (both upstream and downstream of the spillway) at the time of inspection will be referenced to a known elevation on the dam structure.
- The members of the inspection team will be properly equipped and trained, and the diving operations will be conducted in accordance with the Occupational Safety and Health Administration Commercial Diving Operations Standard (29 CFR 1910, Subpart T) and Collins Engineers' Manual of Safe Dive Practices.
- A comprehensive inspection report will be prepared for the inspection of the dam. The report text will include the purpose and scope of the inspection, general description of the structure, method of investigation, summary of existing conditions, and evaluation and recommendations. Any repair recommendations will include an estimate of cost and approximate timeline for implementing such repairs. The report figures will include a location map, sounding plan, and the inspection notes. The report will also include color photographs of general conditions and observed deficiencies.

- A table-style inspection report will also be prepared, and follow the format specified by IDNR in the “Guidelines and Forms for Inspection of Illinois Dams”

Please note that the following items are not included with this proposal. If any of the services below are requested by the City, additional fees will apply:

- Repair design/drawings.
- Any necessary Site Training or permitting.
- Destructive or Partially Destructive Testing, including but not limited to soil excavation, material sampling, concrete coring.
- Underwater Acoustic Imaging.
- Extraordinary measures to operate the valve if the valve cannot be operated by hand.
- Any disassembly of the gate valve/appurtenances or water flow measurement.

VI. PROPOSED SCHEDULE

Based on RFP Timetable, this project will take place in Summer/Fall of 2025. It is anticipated that the specific dates for the field inspection will be coordinated with the City during a project kick-off meeting. Our schedule will ensure final report submittal to the City no later than October 31, 2025. Based on our review of the structure details and past experience on inspection projects of similar scale, we propose the following schedule:

- Contract Awarded & Notice to Proceed (NTP)
- Kick-off meeting & site-visit (within 14 days of NTP)
- Inspection planning/preparation/coordination (within 14 days of Kick-off meeting)
- Field Inspection (3 days of field inspection)
- Reporting – Draft Submittal to City (within 30 days of field inspection)
- Reporting – Review by City (within 14 days of Draft Submittal)
- Reporting – Final Submittal to City (within 7 days of comments received; no later than 10/31/2025)

VII. KEY STAFF

Collins safely executes assessments using teams of engineer-divers and technicians helping owners to mitigate risk and increase the safety of their dam facilities. Key staff that will help the City complete this task in a safe and timely manner includes:

PROJECT MANAGER – BRIAN DILWORTH, PE

Mr. Dilworth has 18 years of experience in conducting bridge and water infrastructure inspections, which includes serving as Project Manager for several recent dam inspection projects in Illinois and Indiana. Mr. Dilworth has conducted over 3,000 structure inspections and assessment on various public and private sector structures nationwide, including Eagle Creek Dam in Indianapolis, Indiana, Kimball Street Dam in Elgin, Illinois, Fox River Dam in Aurora, Illinois, and spillway structures in Jacksonville, Illinois. His expertise includes the use of sonar/acoustic imaging for underwater inspections, various non-destructive testing (NDT) techniques, and the inspection and assessment of in-water structures for scour. Mr. Dilworth will serve as the Project Manager. In this role, he will oversee the planning and coordination between

Collins and the City, monitor the budget and apply cost-savings technique when available, and oversee the entire reporting process, from draft stage to final review (quality assurance and quality control).

PROJECT TEAM

The Collins Team's key staff are available and ready to perform the work for this project in a timely manner. For added capacity, Collins has over 220 engineers, technicians, and support staff in 26 offices nationwide. For this project, we plan to staff it with experienced inspectors from our office in Chicago, Illinois, including the following:

	Qualifications			Project Experience		
	Illinois PE	ADCI Diver	FAA Drone Pilot	Eagle Creek Dam	Elgin Dam	Aroua Dam
Brian Dilworth, PE	X	X		X	X	X
Piotr Sawulski, PE	X	X	X	X	X	X
Roderick Breen, PE	X	X	X	X	X	X
Michael Spencer, PE	X	X	X	X	X	X
Jacob Green		X	X	X		
Chris Morrow, E.I.T.		X		X		

Refer to *Appendix A* for Resumes of the key staff shown in **bold**.

VIII. RECENT CLIENTS

City of Elgin
Kimball St. Dam Inspection
Steve Pertzborn
pertzborn_2@cityofelgin.org
847.931.5964

Christopher B. Burke Engineering, LLC
Eagle Creek Dam Inspection
Jeffrey Fox
jfox@cbbel-in.com
317.266.8000

AS Clock Tower Owner, LLC
Clock Tower Dam Inspection
Steve Werst
swerst@lpc.com
(978) 420-8549

Refer to *Appendix B* for Project Sheets highlighting the above projects.

Mr. David Clark, P.E.

May 30, 2025

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We greatly appreciate this opportunity to provide our professional services to the City of Mattoon. If you have any questions regarding the proposal, please do not hesitate to contact me at (312) 236-5117 or jhamelka@collinsengr.com.

Respectfully Submitted,

COLLINS ENGINEERS, INC.

(James Hamelka, S.E., P.E.
Senior Vice President - Central Division Manager

JH:bpd
Attachments

Key Qualifications

Mr. Dilworth is a Civil/Structural Engineer with over 18 years of experience in the inspection, analysis, and design of steel, concrete, masonry, and timber structures. He has conducted over 1,500 inspections on various public and private structures, including multiple dams of various sizes and types. As part of these inspections, he has prepared detailed reports in which complete accounts of the existing conditions, accurate evaluations of the conditions, and detailed repair or replacement recommendations with associated costs have been provided.

Mr. Dilworth is a commercial and surface-supplied diver certified by the Association of Diving Contractors International (ADCI) and trained in accordance with OSHA Diving Standards on the use of tools, equipment, techniques, diving operations, and emergency procedures.

Project Experience

City of Jacksonville, Spillway/Intake Inspections, Jacksonville, IL – Project Manager/Engineer-Diver

Project included the inspection of two spillway structures and two water intake structures located at Lake Jacksonville and Mauvaise Terre Lake. Work included an underwater inspection of exterior portions of two concrete water intakes, as well as a video inspection of the interior portions of these two intakes. An in-water inspection of two spillways was also conducted. Responsible for trip planning, client coordination, on-site safety, inspection, inspection report writing, inspection report drafting and inspection report review.

Middle Fork and Prairie Creek Reservoir Dam Inspections, Muncie and Richmond, IN –Project Manager/Engineer-Diver

Project included inspection and video documentation of the submerged exterior portions and de-watered interior portions of two concrete outfall towers and associated valve components. A detailed letter report including video was prepared to document all deficiencies observed during the inspection. Responsible for trip planning and preparation, cost estimation, and maintaining regular communication with the client.

City of Elgin, Kimball Street Dam Inspection, Elgin, IL – Engineer-Diver

Project included the annual visual and tactile inspection of the Kimball Street Dam in accordance with Illinois Department of Natural Resources (IDNR) requirements. The inspection report included general conditions, defects noted, inspection and sounding plans, photographs, and IDNR forms.

Eagle Creek Reservoir Dam Inspection, Indianapolis and Marion County, IN – Engineer-Diver/Inspection Team Leader/Project Manager

Project included biennial underwater inspection of Eagle Creek Dam. Activities included inspection and video documentation of the submerged portions of the concrete walls and piers and associated intakes and gate components along the upstream side of a 40 foot deep by 300 feet wide gated spillway, water intake structures, and stilling basin. A detailed letter report including inspection figures was prepared to document all deficiencies observed during the inspection.

City of Aurora, Fox River Dam & Canoe Chute Inspection, Aurora, IL – Project Manager

Project included an underwater/in-water inspection of the submerged surfaces of the downstream chute pool, the east wall of the canoe chute (both upstream and downstream of the dam), and along safely accessible portions of the dam structure. Investigation consisted of a team of engineer-divers familiar with underwater structural investigations in hazardous waterway conditions. The findings were documented in an inspection report. The report included an executive summary, the methods of the investigation, details of the observed deficiencies, and any figures, detail drawings, sketches, and/or photographs as determined necessary to clearly define the existing conditions.

Education

B.S., Civil Engineering, Purdue University, 2006

Years of Experience – 18

Professional Engineer

Illinois

Certifications

- ADCI Surface-Supplied Air Diving Supervisor (#51622)
- Certified Bridge Inspection Team Leader, IDOT
- NHI Certified Instructor (#0627)

Training

- Nondestructive Testing ASNT Certified – Level II: Magnetic Particle & Ultrasonic Testing, 2015
- FHWA-NHI Course 130053 – Bridge Inspection Refresher, 2020
- FHWA-NHI Course 130055 – Safety Inspection of In-Service Bridges (80-Hr.), 2015
- FHWA-NHI Course 130091 – Underwater Bridge Inspection, 2013
- FHWA-NHI Course 130078 – Fracture Critical Inspection Techniques for Steel Bridges, 2013
- FHWA-NHI Course 135048 – Countermeasure Design for Bridge Scour and Stream Instability, 2010
- FHWA-NHI Course 135087 – Scour at Highway Bridges Concepts and Definitions Prerequisite Course, 2009
- FHWA-NHI Course 135086 – Stream Stability Factors and Concepts Prerequisite Course, 2009
- First-Aid, CPR, Emergency Oxygen

Key Qualifications

Mr. Breen is a Civil/Structural Engineer with experience in the inspection and construction of transportation structures.

Project Experience

Eagle Creek Dam Inspection (2020, 2024), Indianapolis, IN – Project Engineer

Project included engineering and related services for the inspection of the Eagle Creek Reservoir Dam. Provided all services necessary to complete rope access and underwater structural inspections and provide recommendations for corrective action for the Eagle Creek Reservoir Dam Safety Inspection Report. Also provided all necessary materials, equipment, supplies and incidentals for the services. Responsible for rope access inspection.

Illinois DOT, Underwater Bridge Inspections (2018-2024), Statewide, IL – Engineer-Diver

Project included the underwater diving inspection services for investigating bridge substructure units and other structures in the water. Work included visual and tactile inspection of 100 percent of underwater structures (level 1); providing measurements of pitting and damage not to exceed 10 percent of each underwater structure; providing measurements of scour, water depth around piers, and cross sections of the streambed; providing complete reports with topside photographs, diagrams and underwater photographs necessary to adequately describe conditions and deficiencies found. Responsible for execution of underwater inspections and preparation of inspection reports.

Chicago DOT, CBIT Bridge Inspection Program (2018-2024), Chicago, IL – Engineer-Diver

Project included routine, fracture critical, element level, underwater, and special inspections of the City of Chicago's 376 structures in accordance with the National Bridge Inspection Standards (NBIS) and the Illinois Department of Transportation Structure Information and Procedure Manual. In addition, in-house engineering assistance, emergency on-call services, and load rating services were provided to CDOT. Responsible for coordination and execution of inspections and preparation of inspection reports.

University of St. Mary of the Lake (USML), 2023 Inspections, Mundelein, IL - Project Manager

Project included of the inspection of 4 bridges and 1 dam structure located on the campus of the University of St. Mary's of the Lake in Mundelein, Illinois. A routine inspection was completed of all 5 structures. Soundings were taken in the vicinity of each substructure unit and along with the fascia of each structure. Structures were accessed by car and with the use of a 12-footboat. Inspection reports including cad drawings and photographs were prepared and submitted to USML for each structure. Illinois Department of Natural Resources requires the submittal of an excel-based inspection report annually for the dam structure. This report was prepared in addition to the USML dam inspection report and submitted to the DNR. All structures were previously inspected by Collins. Due to the projects location on a private roadway Illinois Department of Transportation forms are not required. Responsible for planning and coordinating inspection, leading inspection, quality control, Client interaction, and reporting.

City of Bloomington, Potable Water Tank Inspection, (2017), Bloomington, IL – Project Engineer

Project included a visual and tactile inspection of the exposed surfaces of the interior and exterior portions of the water tanks with particular attention given to any observed areas of apparent distress or deterioration that may otherwise reduce the service life of the structures. Noted any presence of sediment on the tank floor and determined or estimated the observed amount. Photographs included underwater photographs as necessary to document general conditions and observed deficiencies Responsible for the underwater inspection.

Education

B.S., Civil Engineering, Marquette University, 2016

Years of Experience – 9

Professional Engineer

Illinois

Certifications

- FAA Remote Pilot (#4266554)
- Society of Professional Rope Access Technician (SPRAT), Level I (#190178)
- ACDI Entry Level Tender-Diver (#61632)

Training

- FHWA-NHI Course 130091 – Underwater Bridge Inspection, 2020
- FHWA-NHI Course 130055 – Safety Inspection of In-Service Bridges (80-Hr.), 2017
- Nondestructive Testing ASNT Certified – Level II: Magnetic Particle & Ultrasonic Testing, 2016
- Nondestructive Testing ASNT Certified – Level II Magnetic Particle, 2016

Key Qualifications

Mr. Sawulski is a Civil/Structural Engineer with experience in the inspection, analysis, and design of steel, concrete, masonry, and timber structures. He has conducted over 1000 above and below water inspections on various public and private sector structures nationwide. As part of these inspections, he has prepared detailed reports in which complete accounts of the existing conditions, accurate evaluations of the conditions, and detailed repair or replacement recommendations with associated costs have been provided.

Project Experience

City of Aurora, Fox River Dam & Canoe Chute Inspection, Aurora, IL – Engineer-Diver

Project included an underwater/in-water inspection of the submerged surfaces of the downstream chute pool, the east wall of the canoe chute (both upstream and downstream of the dam), and along safely accessible portions of the dam structure. Investigation consisted of a team of engineer-divers familiar with underwater structural investigations in hazardous waterway conditions. The findings were documented in an inspection report. The report included an executive summary, the methods of the investigation, details of the observed deficiencies, and any figures, detail drawings, sketches, and/or photographs as determined necessary to clearly define the existing conditions.

City of Elgin, Kimball Street Dam Inspection (2007, 2008, 2016), Elgin, IL – Engineer-Diver

Project included the annual visual and tactile inspection of the Kimball Street Dam in accordance with Illinois Department of Natural Resources (IDNR) requirements. The inspection report included general conditions, defects noted, inspection and sounding plans, photographs, and IDNR forms.

City of Indianapolis, Eagle Creek Dam Inspection, Indianapolis, IN – Engineer Inspector

Project included a structural inspection on the entire above water portion of the dam through the use of rope access. Rope access allowed access to areas of the dam that are otherwise unable to be inspected. A report was submitted to ascertain the condition and necessary repairs to provide long term serviceability.

City of Indianapolis, Eagle Creek Reservoir Dam Underwater Inspection, Indianapolis, IN – Engineer-Diver

Project included an underwater inspection of the exterior portions of the water intake structures, dam gates, and concrete walls of the Eagle Creek Dam. Activities included inspection and video documentation of the submerged portions of the concrete walls and piers and associated intakes and gate components along the upstream side of a 40 foot deep by 300 feet wide gated spillway, water intake structures, and stilling basin. A detailed letter report including inspection figures was prepared to document all deficiencies observed during the inspection.

City of Portland, Portland Dam Inspection, Portland, MI – Engineer-Diver

Project included underwater acoustic imaging and dive inspection services for the Portland Dam. The inspection included a visual and tactile inspection of the downstream toe of the dam to determine if undermining was present. In addition to the dive inspection, underwater acoustic imaging was performed on the concrete pier at the south end of the dam, between the pump house and the dam slopewall.

Underwater Inspection of the Inlet, Recirculation, & Discharge Tunnels WE Energies Oak Creek Power Plant, Oak Creek, WI – Engineer-Diver

Project included an underwater inspection of the discharge and recirculation tunnels during a plant shutdown. The inlet tunnel was dewatered and inspected in the dry. Surface-supply-air diving equipment, two-way communications, and specialized video equipment were used to perform the inspection. During the inspection of the tunnels, the penetrating diver was equipped with hardwire underwater video equipment and communication. The dives involved penetrations of up to 400 feet into the tunnels and in pipes as small as 30-inches in diameter.

Education

B.S., Civil/Structural Engineering,
Illinois Institute of Technology, 2008

Years of Experience – 17

Professional Engineer

Illinois

Certifications

- ADCI Surface Supplied Air Diving Supervisor (#58706)

Training

- FHWA-NHI Course 130053 – Bridge Inspection Refresher Training (3-Day), 2025
- FHWA-NHI Course 130055 – Safety Inspection of In-Service Bridges (80-Hr.), 2015
- FHWA-NHI Course 130091 – Underwater Bridge Inspection, 2013
- FHWA-NHI Course 130078 – Fracture Critical Inspection Techniques for Steel Bridges, 2017
- First-Aid, CPR, Emergency Oxygen

Key Qualifications

Mr. Spencer is a Structural Engineer with 12 years of experience in the inspection and analysis of bridges and various waterfront structures. He has in-depth technical experience with routine, fracture critical, and element level inspections, underwater inspections, various rope access (climbing) inspections, hydrographic surveying, and underwater acoustic imaging. Mr. Spencer has been involved with the inspection and reporting of over 500 bridges and various structures.

Project Experience

City of Aurora, Fox River Dam & Canoe Chute Inspection, Aurora, IL – Engineer-Diver

Project included an underwater/in-water inspection of the submerged surfaces of the downstream chute pool, the east wall of the canoe chute (both upstream and downstream of the dam), and along safely accessible portions of the dam structure. Investigation consisted of a team of engineer-divers familiar with underwater structural investigations in hazardous waterway conditions. The findings were documented in an inspection report. The report included an executive summary, the methods of the investigation, details of the observed deficiencies, and any figures, detail drawings, sketches, and/or photographs as determined necessary to clearly define the existing conditions.

City of Elgin, Kimball Street Dam Inspection, Elgin, IL – Engineer-Diver

Project included the annual visual and tactile inspection of the Kimball Street Dam in Elgin, IL, in accordance with Illinois Department of Natural Resources (IDNR) requirements. Work included an inspection report containing general conditions, defects noted, inspection and sounding plans, photographs, and IDNR forms.

City of Indianapolis, Eagle Creek Dam Inspection, Indianapolis, IN – Team Leader

Project included a multiple-phase in-depth inspection of Eagle Creek Dam. Work included an underwater inspection, including a detailed inspection of the dam's upstream submerged surfaces, with a concentration on potential leaking through joints, and a swim-by inspection of the stilling basin. Work also included rope access climbing inspection of Tainter gates, Tainter arm assemblies, ogee spillway, wet well, and spillway abutment walls. Responsible for leading the inspection team and the structure condition assessment.

CDWM, Crib Inspection and Demo, Chicago, IL – Engineer-Diver

Project included a penetration dive to inspect the condition of the intake shaft for the demolition of the Four Mile and Wilson Avenue Crips in Lake Michigan. A Level I and Level III underwater inspection was performed utilizing surface-supplied air equipment. Hydrographic surveying was also provided. Also developed bulkheading recommendations for sealing the intake and the removal of the crib structures. Responsible for dive inspections and project coordination.

Chicago DOT, Bridge Inspection Program (2017-2024), Chicago, IL – Inspection Team Leader

Project included inspection of all 376 bridges in the City's inventory, including movable bridges, fixed spans over water, viaducts, pedestrian walkways, and expressway overpasses utilizing bucket boats, bucket trucks, manlifts, and SPRAT inspection techniques. The full scope of inspection services include routine, fracture critical, element level, underwater, and special inspections including numerous structures over the Chicago River, Cal-Sag Channel, and Calumet River with main spans over 200 feet. Responsible for leading inspection teams in the field and oversight of the report and form preparation.

WVB East End Partners, LLC, Cabled-Stay Bridge Inspection, Jeffersonville, IN – Engineer Inspector

Project included the initial in-depth and routine inspections of the 2,500 ft long Cable-Stayed Bridge over the Ohio River with a main span of 1,200 ft. The work included a hands-on inspection of all fracture critical members including floor beams, edge girders, and cable anchor boxes and SPRAT inspection techniques were utilized to perform a hands-on inspection of the concrete cable-stayed towers, deck strut post-tensioning, and all cables with protective HDPE ducts. A detailed inspection report including photographs, figures, and element level quantities and ratings was prepared.

Education

B.S., Civil Engineering (Structures),
Southern Illinois University at
Carbondale, 2012

Years of Experience – 12

Professional Engineer

Illinois

Certifications

- IDOT Program Manager (including Element Level)
- ADCI Surface Supplied Diving Supervisor (#48298)
- Society of Professional Rope Access Technician (SPRAT), Level III (#150460)

Training

- FHWA-NHI Course 130055 – Safety Inspection of In-Service Bridges (80-Hr.), 2017
- FHWA-NHI Course 130078 – Fracture Critical Inspection Techniques for Steel Bridges, 2017
- FHWA-NHI Course 130091 – Underwater Bridge Inspection, 2013
- First Aid, CPR, Emergency Oxygen

Gregory P. Newman II | Associate III



EDUCATION

- Gannon University
 - Bachelor of Science, Mechanical Engineering, 2017

PRACTICE AREAS

- Inspections
- Balance Testing and Analysis
- Fluid Power Hydraulics
- Design
- Computer-Aided Drafting
- Finite Element Analysis
- Gear Assessment/Design
- Construction and Field Services

REGISTRATIONS

- Certified International Fluid Power Hydraulic Specialist
- Professional Engineer in PA, MD

PROFESSIONAL AFFILIATIONS

- Heavy Movable Structures

CONTACT

gnewman@wje.com
215.340.5830
www.wje.com

EXPERIENCE

Gregory Newman, a certified fluid power hydraulic specialist, joined the firm in 2017 and has gained experience in movable bridge machinery, including design for new bridges and rehabilitations, hydraulic design, hydraulic troubleshooting, inspection of machinery, balance calculations, strain gage balance testing, and balance testing.

REPRESENTATIVE PROJECTS

Inspections

- Mantoloking Road Bascule Bridge - Ocean County, NJ: Type II mechanical inspection of double-leaf trunnion bascule bridge, including visual assessment of the span drive machinery, trunnion assemblies, live load supports, span locks, and tail locks
- Florida Department of Transportation (FDOT) District 4 Asset Management: Mechanical inspections of twenty-two various bascule-style bridges, gear tooth measurements, bearing clearances, pressure readings, and in-depth analysis of the condition of machinery; work completed according to FDOT safety regulations, including inspection reports documenting overall condition and wear of machinery
- Liberty Bascule Bridge - Bay City, MI: Mechanical inspection of double-leaf trunnion bascule bridge to assess physical and operating conditions of the bridge systems
- Hood River Vertical Lift Bridge - OR: 2020 biennial mechanical inspection of the bridge's mechanical installation to provide recommendations to keep the bridge operating safely and reliably
- Michigan Avenue Lift Bridge - Buffalo, NY: Mechanical inspection of the span drive vertical lift bridge and strain gage recordings to assess machinery loading during operation and the balance condition of the bridge
- Independence Bascule Bridge - Bay City, MI: Mechanical inspection of twin double-leaf rolling lift bascule bridge to assess the physical and operating conditions of the bridge systems
- Main Line Vertical Lift Bridge over Southern Branch of the Elizabeth River - Portsmouth, VA: Mechanical inspection to determine overall condition of mechanical systems of the span drive vertical lift bridge and to identify any deficiencies that required corrective action

- BNSF Fort Madison Swing Bridge - IA: Detailed mechanical inspection of double-decker swing span, full inspection of all machinery components, and end lift and rail lift machinery

Balance Testing and Analysis

- Berkley Bridge over the Elizabeth River - Norfolk, VA: Balance testing of the bridge via the dynamic strain gage method
- Erie Avenue Bascule Bridge - Lorain County, OH: Balance testing of the double-leaf bascule bridge via the dynamic strain gage method during construction
- NJ Transit Rail Bridge Balance Testing, Brielle Drawbridge/Morgan Drawbridge - New Jersey: Balance testing of two bascule leaves

Design

- Bayville Bascule Bridge Design - Nassau County, NY: Rehabilitation design for replacement of span drive machinery, curved and flat treads, and tail lock machinery
- Cherry Street Strauss Trunnion Bascule Bridge - Toronto, ON: 2023, Design of span lock hydraulic power unit and actuators.
- Souris Movable Transfer Bridge, Souris, PEI: 2023-2024 design of new movable transfer bridge mechanical and hydraulic components.
- Hog's Back Swing Bridge, Ottawa, ON. - 2019 Participated in the design of mechanical and hydraulic components for a full rehabilitation of swing bridge span drive and auxiliary components.

Construction and Field Services

- Fairport Vertical Lift Bridge - NY: Engineering services during the rehabilitation of all mechanical machinery
- Pocomoke Swing Bridge, Delmarva Central Railroad - DE: Emergency response to end-wedge operational failure at single-track deck girder swing span. Assisted in response effort to identify the source of the failure, testing to establish operating loads, and provision of interim operating solution
- Brighton Road Swing Bridge - Quinte West, ON, Canada: Mechanical engineering services during construction of the replacement center-bearing swing bridge
- Erie Avenue Bascule Bridge - Lorain County, OH: Movable bridge project coordinator services for mechanical, hydraulic, and structural interfaces for construction

Lakes & Rivers Contracting, Inc.

Marine Services

As the core specialization and focus of Lakes & Rivers Contracting, we provide the knowledge, equipment and problem solving for the most challenging marine projects. Our resources include single and double screw truckable tugboats, multiple sets of sectional barges for access to inland waters, well as full size deck barges for equipment and materials. We are located along the Sanitary and Ship Canal at river mile 301 which allows us immediate access to the navigable waterways of the Chicagoland area. Our experienced team can provide assistance from troubleshooting and design through construction.



Dockwall Repairs at Kinder Morgan / Arrow Terminal

Bridges: Railroad, Vehicular and Pedestrian
Pile Driving: Land and Marine Based Platforms
Dockwalls: New, Rehabilitation and Maintenance
Dock Protection: Timbers, Cells and Dolphins
Diving: Construction, Inspection and Maintenance
Dredging: Mechanical Dredging of Inland Waters
Movable Bridges: Maintenance, Repairs and Retrofits
Shoreline Protection: Rip Rap, Concrete and Pile Walls
Dams and Wiers: Installations and Rehabilitations
Concrete: Foundations, Piers, Pads, Walls, Chambers
River Crossings: Pipelines and Duct Banks



Bridge Shear Fence Repair - Elgin, Joliet & Eastern Railway

Marine and Heavy Construction

15480 Canal Bank Road
P.O. Bx 67
Lemont, IL. 60439

Phone: (630) 739-2460
Fax: (630) 739-3732
E-mail: info@lakesandrivers.com
www.lakesandrivers.com

Lakes & Rivers Contracting, Inc.



Marine and Heavy Construction

Lakes & Rivers Contracting, Inc.

Marine and Heavy
Construction

For more than thirty years Lakes & Rivers Contracting has been constructing, maintaining and repairing structures and facilities in the Greater Chicagoland Area. Specializing in difficult marine and heavy construction projects, Lakes & Rivers Contracting has the equipment, personnel and experience to safely and efficiently complete even the most complex projects.



Lakes & Rivers Contracting, Inc.



Marine and Heavy Construction

15480 Canal Bank Road
P.O. Box 67
Lemont, IL. 60439

Lakes & Rivers Contracting, Inc.

Services

Lakes & Rivers Contracting is committed to providing complete heavy construction and marine services to municipalities, industrial clients, railroads, governmental agencies and other contractors. Lakes & Rivers Contracting's growth demonstrates our success and dedication to serving our clients and providing quality, value and efficiency to all our projects.



Chicago Sanitary and Ship Canal—Fish Barrier Parasitic Structures

Marine and Heavy Construction

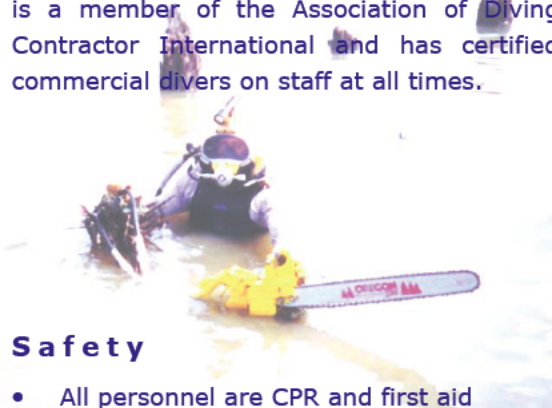
15480 Canal Bank Road
P.O. Bx 67
Lemont, IL. 60439
Phone: (630) 739-2460
Fax: (630) 739-3732
E-mail: info@lakesandrivers.com
www.lakesandrivers.com

Experience

From emergency repairs and upgrades for railroads and manufacturing facilities, to competitively bid projects for the Army Corp. of Engineers and Metropolitan Water Reclamation District, Lakes & Rivers Contracting has completed projects of varying sizes and durations. Lakes & Rivers is a member of the Association of Diving Contractor International and has certified commercial divers on staff at all times.

Safety

- All personnel are CPR and first aid certified.
- All dive team members are certified as Emergency Oxygen Providers.
- Staff OSHA 30 hour and competent person certified
- ISNetworld registered for compliance with governmental and internal Owner/Client requirements for health and safety, insurance and compliance monitoring.
- Railroad safety trained in FRA 214 standards and personnel safety trained and certified by e-Railsafe, CTA and Metra.



Main Street Bridge over the West Branch of the DuPage River
City of Naperville and Illinois Department of Transportation

Client Listing

Lakes & Rivers Contracting has performed work for public and private clients, railroads, institutions, other contractors and developers. We are prequalified with the Illinois Department of Transportation, the Illinois Capital Development Board, and the Ports District of Indiana.



Sunset Meadow Bridge Replacement—FPDCC

In addition, Lakes & Rivers Contracting performs work for multiple Class 1 Railroads in addition to numerous short line railroads.

With insurance limits, bonding capabilities and safety training to meet most any contract requirement, we are able to efficiently and safely perform work in the even the most stringent work environments.



City of Indianapolis | Eagle Creek Dam Inspection

Project included an in-depth inspection of Eagle Creek Dam in Indianapolis, Indiana, a 5,100' long earthen dam with a 240' wide by 85' tall concrete monolith dam utilizing six tainter gates for volume control of the Eagle Creek Reservoir. Work included an underwater diving inspection, including a detailed inspection of the dam's upstream submerged surfaces, with a concentration on potential leaking through joints, and an underwater inspection of the downstream stilling basin, with concentration on the performance of drain outlets. Work also included inspection of tainter gates, tainter arm assemblies, ogee spillway, wet well, and spillway abutment walls using rope-access climbing inspection techniques to get hands-on on difficult access locations. Project required coordination with client and owner to safely access the dam structure while maintaining minimum flow volume for downstream creek. A detailed report of the findings was submitted to the client for inclusion in their report to the owner. Other services provided by Collins included participation in the Potential Failure Mode Analysis (PFMA) of the dam, and structural repair design drawings.

DATE

2024 - 2025

LOCATION

Indianapolis, IN

CLIENT

Christopher B. Burke
Engineering, Ltd.

REFERENCE

Jeffrey Fox
jfox@cbbel.com
847.417.4219

KEY STAFF

» Brian Dilworth, P.E.

CONTRACT VALUE

\$86,689





DATE

2009 - 2010

LOCATION

Elgin, IL

CLIENT

City of Elgin

REFERENCE

Steve Pertzborn
pertzborn_2@cityofelgin.org
(847) 931-5964

CONTRACT VALUE

\$42,600

City of Elgin | Kimball St. Dam Inspection

Collins Engineers, Inc. (Collins), as a prime consultant, was selected for a six-year contract to provide above and underwater dam inspection services for the Kimball Street Dam in Elgin, Illinois, from 2007 to 2012. The dam inspections included four minor inspections and two major inspections. Collins also held the previous contract from 2001 to 2006.

The inspections are performed to ensure the safety of the dam and meet the requirement of the operation and maintenance manual, which mandates annual inspections that include:

- Survey of the structure using established control points to ensure that no vertical or horizontal movement of the dam or its appurtenances has occurred
- Overall visual and tactile inspection of the dam and appurtenances with particular attention being paid to any abnormal conditions that may exist
- Underwater inspection of the dam and appurtenances, including inspection and evaluation of the riprap at the downstream toe of the dam
- Soundings taken around the dam and compared to previous soundings
- Checking for cracks in the dam and appurtenances and monitor as required

For each annual inspection, Collins provided the required documentation to the Illinois Department of Natural Resources Office of Water Resources and provided a thorough inspection report, including photographs, tables, and graphs to detail the conditions found during the inspection. Repairs were also recommended, when needed, along with cost estimates to perform the repairs.

TYPICAL SCOPE OF WORK

- Review of previous inspection findings
- Visual and hands-on inspections, both above and underwater, by Collins' in-house engineer-divers
- Soundings around the dam
- Checking for cracks in the dam and appurtenances



**DATE**

2022

LOCATION

Maynard, MA

CLIENT

AS Clock Tower Owner, LLC

REFERENCE

Steve Werst
swerst@lpc.com
(978) 420-8549

KEY STAFF

» Wally Mosher, P.E.

CONTRACT VALUE

\$9,475

AS Clock Tower Owner, LLC | Clock Tower Dam Inspection

Lincoln Property Management asked Collins Engineers, Inc. (Collins) to provide a proposal for the completion of a Phase 1 underwater and topside inspection of the existing dam located on the property, in accordance with the Massachusetts General Legislature Chapter 253, Sections 44-50 and the Code of Massachusetts Regulations 302 CMR 10. A visual and tactile inspection was conducted along the accessible portions of the Dams between the left and right abutments. The overall condition and discrete locations of significant defects were identified and qualified. Collins completed a stamped Phase 1 inspection report for the dam, including a one-page detail sheet summarizing the overall description and evaluation; and narratives including a description of the project, inspection, assessments, and recommendations. All repair recommendations included an opinion of probable construction costs. The dam was previously inspected by Collins in September 2017 and requires inspection every five years in accordance with the Massachusetts Office of Dam Safety.





COLLINS
ENGINEERS_{INC}

COLLINSENGR.COM

8.

City of Mattoon Council Decision Request

MEETING DATE: 07/01/2025 CDR NO: 2025-2609

SUBJECT: 2025 MFT General Maintenance Pavement Marking Contract

SUBMITTAL DATE: 06/25/2025

SUBMITTED BY: Dave Clark, Public Works Director

APPROVED FOR: Kyle Gill, 06/26/2025
COUNCIL AGENDA: City Manager Date

EXHIBITS (If applicable): Plans, Specifications, and Bid Documents

EXPENDITURE	AMOUNT	CONTINGENCY FUNDING
ESTIMATE: \$	BUDGETED: \$	REQUIRED: \$

IF IT IS THE WISH OF THE COUNCIL TO SUPPORT RECOMMENDATIONS CONTAINED
IN THIS REPORT, THE FOLLOWING MOTION IS SUGGESTED:

“I move to approve the plans and specifications to place paint pavement markings at various locations throughout the City and for the Mayor to sign the document package.”

SUMMARY OF THE TOPIC FOR WHICH A COUNCIL DECISION IS REQUESTED:

We have budgeted for this project under the fund code 121-5321-730.

	Paint	Paint	Paint	Paint	Paint	Pav't Mrk
<u>Location</u>	<u>Ltrs & Sym</u>	<u>Line 4"</u>	<u>Line 6"</u>	<u>Line 12"</u>	<u>Line 24"</u>	<u>Rem.</u>
	Sq.Ft.	Lineal Ft.	Lineal Ft.	Lineal Ft.	Lineal Ft.	Sq. Ft.
Fort Worth Way	250	3,233	160	258	26	
Remington Road		340			45	
Detro Drive	265	5,685	200		50	
Swords Drive North and South	447	3,076		224	166	69
N.33rd Street		530	50		12	
N.32nd Street	123	4,064	92		69	
N.27th Street		4,660	135		42	
Charleton Ave 21st to 27th	83	3,492	96		43	
Richmond Ave. 21st to 12th	64	1,364	662		169	
Western Ave 19th to 21st	172	1,410	320		73	
Western Ave 21st to 43rd		22,500				
Broadway Ave East	135	1,860	590		171	
Noyes Ct			46		8	
Westview			54		11	
Country Gardens West			43		8	
Country Gardens East			44		8	
Western Ave Heights			43		9	
Broadway to Dewitt 14th-16th		1,511				
Broadway Logan to 13th		1,360	372		54	
Commercial Refrigeration			68		20	87
Totals	1,539	55,105	2,975	482	1,004	156



Proposal Submitted By:

Contractor's Name

Contractor's Address

City

State

Zip Code

STATE OF ILLINOIS

Local Public Agency

County

Section Number

Street Name/Road Name

Type of Funds

☐ Material proposal ☒ Deliver and Install Proposal ☐ Plans

For a County and Road District Project

Submitted/Approved

Highway Commissioner Signature & Date

Submitted/Approved

County Engineer/Superintendent of Highways Signature & Date

For a Municipal Project

Submitted/Approved/Passed

Signature & Date

Official Title

Mayor, City of Mattoon

Department of Transportation

Released for bid based on limited review

Regional Engineer Signature & Date

Note: All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed.

Local Public Agency	County	Section Number
City Of Mattoon	Coles	25-00000-05-GM

NOTICE TO BIDDERS

Sealed proposals for the project described below will be received at the office of the Mattoon City Clerk

208 N.19th Mattoon, IL 61938	Name of Office	
	until 11:00 AM	on 07/16/25
Address	Time	Date

1. Plans and proposal forms will be available in the office of

Mattoon City Clerk 208 N.19th Mattoon, IL 61938

2. ☐ Prequalification

If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57) in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.

- The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Material/Deliver and Install Proposals.
- A proposal guaranty in the proper amount, as specified in the BLRS Special Provision for Bidding Requirements and Conditions for Material/Deliver and Install Proposals, will be required. See the attached Special Provisions for specific instructions for proposal guaranty for this proposal packet.
- The successful bidder at the time of execution of the contract will be required to deposit a contract bond or proposal guaranty as provided for in the special provisions. Failure on the part of the contractor to deliver the material within the time specified or to do the work specified herein will be considered just cause to forfeit his surety as provided in Article 108.10 of the Standard Specifications.
- Proposals shall be submitted on forms furnished by the Awarding Authority and shall be enclosed in an envelope endorsed "Material Proposal, Section 25-00000-05-GM".

By Order of

Awarding Authority

City of Mattoon

County Engineer/Superintendent of Highways/

Municipal Clerk

City Clerk	Date
------------	------

Material Proposal or Deliver & Install Proposal

To

Awarding Authority

City of Mattoon

Awarding Authority Address

208 N. 19th	City	State	Zip Code
	Mattoon	IL	61938

If this bid is accepted within 45 days from the date of opening, the undersigned agrees to furnish or to deliver & install any or all of the materials, at the quoted unit prices, subject to the following:

- It is understood and agreed that the "Standard Specifications for Road and Bridge Construction", adopted 01/01/22 and the "Supplemental Specifications and Recurring Special Provisions", adopted 01/01/25, prepared by the Department of Transportation, shall govern insofar as they may be applied and insofar as they do not conflict with the special provision and supplemental specifications attached hereto.
- It is understood that quantities listed are approximate only and that they may be increased or decrease as may be needed to properly complete the improvement within its present limits or extensions thereto, at the unit prices stated and that bids will be compared on the basis of total price bid for each group.
- Delivery in total or partial shipments as ordered shall be made within the time specified in the special provisions or by the acceptance at the point and in the manner specified in the "Schedule of Prices". If delivery on the job site is specified, it shall mean any place or paces on the road designed by the awarding authority or its authorized representative.
- The contractor and/or local public agency performing the actual material placement operations shall be responsible for providing work zone traffic control, unless otherwise specified in this proposal. Such devices shall meet the requirements of and be installed in accordance with applicable provisions of the "Illinois Manual on Uniform Traffic Control Devices" and any referenced Illinois Highway Standards.

Local Public Agency	County	Section Number
City Of Mattoon	Coles	25-00000-05-GM

5. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price. A bid will be declared unacceptable if neither a unit price nor a total price is shown.
6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals, will be required. The proposal guaranty as specified in the special provisions is attached.

If a bid bond is allowed or required, Department form BLR 12230 or a proposal guaranty check, complying with the specifications,

made payable to: _____ Treasurer of _____

The amount of the check is _____ (_____)

Attach Cashier's Check or Certified Check Here

In the event that one proposal guaranty check is intended to cover two or more bid proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual bid proposal. If the proposal guaranty check is placed in another bid proposal, state below where it may be found.

The proposal guaranty check will be found in the bid proposal for: Section Number _____).

Discounts will be allowed for payment as follows: _____ calendar days _____ calendar days

Discounts will not be considered in determining the low bidder

Bidder

By

Title

Address

City

State

Zip Code



Local Public Agency	County	Section Number
City of Mattoon	Coles	25-00000-05-GM

The following Special Provision supplement the "Standard Specifications for Road and Bridge Construction", adopted

January 1, 2022, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures of Materials" in effect on the date of invitation of bids, and the Supplemental Specification and Recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of the above named section, and in case of conflict with any parts, or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

The work in this proposal includes Paint Pavement Markings at various locations in the City of Mattoon. Location sheet is attached.

All work shall be complete by October 31, 2025.

Street Preparation

The City will sweep the streets to be striped in advance of the work. The pavement work on Remington and Swords will need to be completed before striping can begin, that contract has a completion date of September 26, 2025. All pavement markings will be placed on either concrete or asphalt.

The minimum pavement and air temperature shall be 50 degrees F for application.

Traffic Control

The Contractor shall provide the appropriate traffic control for the work in accordance with the Illinois Department of Transportation Traffic Control Standards 701306-04 and 701311-03 and shall be included in price of paint. The Contractor shall protect fresh pavement markings until the paint has cured sufficiently to open to traffic.

Performance Bond

A performance bond and/or inspection period will not be required.

Basis of Payment

The following square foot areas were used to calculate for the Letters & Symbols quantities:

Single Arrow = 16 sq ft

Double Arrow = 27 sq ft

ADA Parking Symbol = 3 sq ft

Letters & Symbols will be paid at the contract unit price, per square foot, for Paint Pavement Marking, Letters & Symbols.

Pavement Marking Lines 4", 6", 12", & 24" will be paid at the contract unit price, per foot, for Paint Pavement Marking Line of the specified width.

Pavement Marking Removal will be paid for at the contract unit price, per square foot, for Pavement Marking Removal- Grinding.

	Paint	Paint	Paint	Paint	Paint	Pav't Mrk
Location	Ltrs & Sym	Line 4"	Line 6"	Line 12"	Line 24"	Rem
	Sq.Ft.	Lineal Ft.	Lineal Ft.	Lineal Ft.	Lineal Ft.	Sq. Ft.
Fort Worth Way	250	3,233	160	258	26	
Remington Road		340			45	
Dettro Drive	265	5,665	200		50	
Swords Drive North and South	447	3,076		224	166	69
N.33rd Street		530	50		12	
N.32nd Street	123	4,064	92		89	
N.27th Street		4,660	135		42	
Charleton Ave 21st to 27th	83	3,492	96		43	
Richmond Ave. 21st to 12th	64	1,384	662		169	
Western Ave 19th to 21st	172	1,410	320		73	
Western Ave 21st to 43rd		22,500				
Broadway Ave East	135	1,860	590		171	
Noyes Ct			46		8	
Westview			54		11	
Country Gardens West			43		8	
Country Gardens East			44		8	
Western Ave Heights			43		9	
Broadway to Dewitt 14th-16th		1,511				
Broadway Logan to 13th		1,360	372		54	
Commercial Refrigeration			68		20	87
Totals	1,539	55,105	2,975	482	1,004	156



Material Proposal Schedule of Prices

Local Public Agency

County

Section Number

City of Mattoon

Coles

25-00000-05-GM

Material Proposal Schedule of Prices

Group No.	Item(s)	Delivery	Unit	Quantity	Unit Price	Total
III	PAINT PVT MK LTR&SYM		SQ FT	1539		
III	PAINT PVT MK LINE 4		FEET	55105		
III	PAINT PVT MK LINE 6		FEET	2975		
III	PAINT PVT MK LINE 12		FEET	482		
III	PAINT PVT MK LINE 24		FEET	1004		
III	PAVT MK REMOVAL		SQ FT	156		
		GROUP III	TOTAL			

The undersigned firm certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm. The undersigned firm further certifies that it is not barred from contracting with any unit of State or local government as a result of a violation of State laws prohibiting bid-rigging or bid rotating.

Bidder Signature & Date

--

Address

City

State

Zip Code

--

--

--

--



Local Public Agency	County	Section Number
City of Mattoon	Coles	25-00000-05-GM

WE, _____ as PRINCIPAL, and
_____ as SURETY, are held jointly,

severally and firmly bound unto the above Local Public Agency (hereafter referred to as "LPA") in the penal sum of 5% of the total bid price, or for the amount specified in the proposal documents in effect on the date of invitation for bids, whichever is the lesser sum. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly pay to the LPA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LPA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the LPA for the above designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void; otherwise it shall remain in full force and effect.

IN THE EVENT the LPA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LPA acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this _____ of _____ Day _____ Month and Year

Principal

Company Name

Signature & Date

By:

Title

Company Name

Signature & Date

By:

Title

(If Principal is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be affixed.)

Surety

Name of Surety

Signature of Attorney-in-Fact Signature & Date

By:

STATE OF IL

COUNTY OF

I _____, a Notary Public in and for said county do hereby certify that

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instruments as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this _____ day of _____ Day _____ Month and Year

(SEAL, if required by the LPA)

Notary Public Signature & Date

Date commission expires _____

Local Public Agency

County

Section Number

City of Mattoon

Coles

25-00000-05-GM

ELECTRONIC BID BOND

☐ **Electronic bid bond is allowed (box must be checked by LPA if electronic bid bond is allowed)**

The Principal may submit an electronic bid bond, in lieu of completing the above section of the Proposal Bid Bond Form. By providing an electronic bid bond ID code and signing below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the LPA under the conditions of the bid bond as shown above. (If PRINCIPAL is a joint venture of two or more contractors, an electronic bid bond ID code, company/Bidder name title and date must be affixed for each contractor in the venture.)

Electronic Bid Bond ID Code

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Company/Bidder Name

--

Signature & Date

--

Title

--



Local Public Agency	County	Street Name/Road Name	Section Number
City of Mattoon	Coles	Various	25-00000-05-GM

All contractors are required to complete the following certification

☒ For this contract proposal or for all bidding groups in this deliver and install proposal.

☐ For the following deliver and install bidding groups in this material proposal.

--

Illinois Department of Transportation policy, adopted in accordance with the provisions of the Illinois Highway Code, requires this contract to be awarded to the lowest responsive and responsible bidder. The award decision is subject to approval by the Department. In addition to all other responsibility factors, this contract or deliver and install proposal requires all bidders and all bidder's subcontractors to disclose participation in apprenticeship or training programs that are (1) approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training, and (2) applicable to the work of the above indicated proposals or groups. Therefore, all bidders are required to complete the following certification:

1. Except as provided in paragraph 4 below, the undersigned bidder certifies that it is a participant, either as an individual or as part of a group program, in an approved apprenticeship or training program applicable to each type of work or craft that the bidder will perform with its own employees.

2. The undersigned bidder further certifies, for work to be performed by subcontract, that each of its subcontractors either (A) is, at the time of such bid, participating in an approved, applicable apprenticeship or training program; or (B) will, prior to commencement of performance of work pursuant to this contract, establish participation in an approved apprenticeship or training program applicable to the work of the subcontract.

3. The undersigned bidder, by inclusion in the list in the space below, certifies the official name of each program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's employees. Types of work or craft that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category for which there is no applicable apprenticeship or training program available.

--

4. Except for any work identified above, if any bidder or subcontractor shall perform all or part of the work of the contract or deliver and install proposal solely by individual owners, partners or members and not by employees to whom the payment of prevailing rates of wages would be required, check the following box, and identify the owner/operator workforces and positions of ownership. ☐

--

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is accounted for and listed. The Department at any time before or afterward may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. In order to fulfill the participation requirement, it shall not be necessary that any applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract or deliver and install proposal.

Bidder

--

Title

--

Signature & Date

--

Address

--

City

--

State

--

Zip Code

--



Local Public Agency	County	Street Name/Road Name	Section Number
City of Ma ttoon	Coles	Various	25-00000-05-GM

I, _____ of _____, _____
Name of Affiant City of Affiant State of Affiant
being first duly sworn upon oath, state as follows:

1. That I am the _____ of _____
Officer or Position Bidder
2. That I have personal knowledge of the facts herein stated.
3. That, if selected under the proposal described above, _____, will maintain a business office in the
Bidder
State of Illinois, which will be located in _____ County, Illinois.
County
4. That this business office will serve as the primary place of employment for any persons employed in the construction contemplated by this proposal.
5. That this Affidavit is given as a requirement of state law as provided in Section 30-22(8) of the Illinois Procurement Code.

Signature & Date

--

Print Name of Affiant

--

Notary Public

State of IL

County _____

Signed (or subscribed or attested) before me on _____ by
(date)

_____, authorized agent(s) of
(name/s of person/s)

Bidder

(SEAL)

Notary Public Signature & Date

--

My commission expires _____



Check Sheet for Recurring Special Provisions

Local Public Agency

County

Section Number

City of Mattoon

Coles

25-00000-05-GM

☐ Check this box for lettings prior to 01/01/2025

The Following Recurring Special Provisions Indicated By An "X" Are Applicable To This Contract And Are Included By Reference:

Recurring Special Provisions

<u>Check Sheet #</u>		<u>Page No.</u>
1	<input type="checkbox"/> Additional State Requirements for Federal-Aid Construction Contracts	79
2	<input type="checkbox"/> Subletting of Contracts (Federal-Aid Contracts)	82
3	<input type="checkbox"/> EEO	83
4	<input type="checkbox"/> Specific EEO Responsibilities Non Federal-Aid Contracts	93
5	<input type="checkbox"/> Required Provisions - State Contracts	98
6	<input type="checkbox"/> Asbestos Bearing Pad Removal	104
7	<input type="checkbox"/> Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	105
8	<input type="checkbox"/> Temporary Stream Crossings and In-Stream Work Pads	106
9	<input type="checkbox"/> Construction Layout Stakes	107
10	<input type="checkbox"/> Use of Geotextile Fabric for Railroad Crossing	110
11	<input type="checkbox"/> Subsealing of Concrete Pavements	112
12	<input type="checkbox"/> Hot-Mix Asphalt Surface Correction	116
13	<input type="checkbox"/> Pavement and Shoulder Resurfacing	118
14	<input type="checkbox"/> Patching with Hot-Mix Asphalt Overlay Removal	119
15	<input type="checkbox"/> Polymer Concrete	121
16	<input type="checkbox"/> Reserved	123
17	<input type="checkbox"/> Bicycle Racks	124
18	<input type="checkbox"/> Temporary Portable Bridge Traffic Signals	126
19	<input type="checkbox"/> Nighttime Inspection of Roadway Lighting	128
20	<input type="checkbox"/> English Substitution of Metric Bolts	129
21	<input type="checkbox"/> Calcium Chloride Accelerator for Portland Cement Concrete	130
22	<input type="checkbox"/> Quality Control of Concrete Mixtures at the Plant	131
23	<input type="checkbox"/> Quality Control/Quality Assurance of Concrete Mixtures	139
24	<input type="checkbox"/> Reserved	155
25	<input type="checkbox"/> Reserved	156
26	<input type="checkbox"/> Temporary Raised Pavement Markers	157
27	<input type="checkbox"/> Restoring Bridge Approach Pavements Using High-Density Foam	158
28	<input type="checkbox"/> Portland Cement Concrete Inlay or Overlay	161
29	<input type="checkbox"/> Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	165
30	<input type="checkbox"/> Longitudinal Joint and Crack Patching	168
31	<input type="checkbox"/> Concrete Mix Design - Department Provided	170
32	<input type="checkbox"/> Station Numbers in Pavements or Overlays	171

Local Public Agency

County

Section Number

City of Mattoon

Coles

25-00000-05-GM

The Following Local Roads And Streets Recurring Special Provisions Indicated By An "X" Are Applicable To This Contract And Are Included By Reference:

Local Roads And Streets Recurring Special Provisions

<u>Check Sheet #</u>			<u>Page No.</u>
LRS 1		Reserved	173
LRS 2	<input type="checkbox"/>	Furnished Excavation	174
LRS 3	<input checked="" type="checkbox"/>	Work Zone Traffic Control Surveillance	175
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LRS 6	<input type="checkbox"/>	Bidding Requirements and Conditions for Contract Proposals	178
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LRS 14	<input type="checkbox"/>	Paving Brick and Concrete Paver Pavements and Sidewalks	201
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LRS 16	<input checked="" type="checkbox"/>	Protests on Local Lettings	205
LRS 17	<input checked="" type="checkbox"/>	Substance Abuse Prevention Program	206
LRS 18	<input type="checkbox"/>	Multigrade Cold Mix Asphalt	207
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**State of Illinois
Department of Transportation
Bureau of Local Roads and Streets**

**SPECIAL PROVISION
FOR
WORK ZONE TRAFFIC CONTROL SURVEILLANCE**

**Effective: January 1, 1999
Revised: January 1, 2018**

Revise Article 701.10 of the Standard Specifications to read:

"The Contractor shall conduct inspections of the worksite at a frequency that will allow for the timely replacement of any traffic control device that has become displaced, worn, or damaged. A sufficient quantity of replacement devices, based on vulnerability to damage, shall be readily available to meet this requirement."

Delete Article 701.20(g) of the Standard Specifications.

CHECK SHEET #LRS4

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

**SPECIAL PROVISION
FOR
FLAGGERS IN WORK ZONES**

Effective: January 1, 1999
Revised: January 1, 2007

Revise the last paragraph of Article 701.13 of the Standard Specifications to read:

"Flaggers are required only when workers are present."

**State of Illinois
Department of Transportation
Bureau of Local Roads and Streets**

**SPECIAL PROVISION
FOR
CONTRACT CLAIMS**

**Effective: January 1, 2002
Revised: January 1, 2007**

Revise the second sentence of subparagraph (a) of Article 109.09 of the Standard Specifications to read:

"All claims shall be submitted to the Engineer."

Revise subparagraph (e) of Article 109.09 of the Standard Specifications to read:

"(e) Procedure. All Claims shall be submitted to the Engineer. The Engineer will consider all information submitted with the claim. Claims not conforming to this Article will be returned without consideration. The Engineer may schedule a claim presentation meeting if, in the Engineer's judgment, such a meeting would aid in resolution of the claim, otherwise a decision will be based on the claim documentation submitted. A final decision will be rendered within 90 days of receipt of the claim.

Full compliance by the Contractor with the provisions specified in this Article is a contractual condition precedent to the Contractor's right to seek relief in the Court of Claims. The Engineer's written decision shall be the final administrative action of the Department. Unless the Contractor files a claim for adjudication by the Court of Claims within 60 days after the date of the written decision, the failure to file shall constitute a release and waiver of the claim."

CHECK SHEET #LRS7

**State of Illinois
Department of Transportation
Bureau of Local Roads and Streets**

**SPECIAL PROVISION
FOR
BIDDING REQUIREMENTS AND CONDITIONS FOR MATERIAL PROPOSALS**

Effective: January 1, 2002

Revised: January 1, 2013

Replace Article 102.01 of the Standard Specifications with the following:

"Prequalification of Bidders. When prequalification is required and the awarding authority for contract construction work is the County Board of a County, the Council, the City Council, or the President and Board of Trustees of a city, village, or town, each prospective bidder, in evidence of competence, shall furnish the awarding authority as a prerequisite to the release of proposal forms by the awarding authority, a certified or photostatic copy of a "Certificate of Eligibility" issued by the Department of Transportation, in accordance with the Department's "Prequalification Manual".

The two low bidders must file, within 24 hours after the letting, a sworn affidavit in triplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work, using the blank form made available for this affidavit. One copy shall be filed with the awarding authority and two copies with the District office.

Issuance of Proposal Forms. The Awarding Authority reserves the right to refuse to issue a proposal form for bidding purposes for any of the following reasons:

- (a) Lack of competency and adequate machinery, plant, and other equipment, as revealed by the financial statement and experience questionnaires required in prequalification procedures.
- (b) Uncompleted work which, in the judgment of the Awarding Authority, might hinder or prevent the prompt completion of additional work awarded.
- (c) False information provided on a bidder's "Affidavit of Availability".
- (d) Failure to pay, or satisfactorily settle, all bills due for labor and material on former contracts in force at the time of issuance of proposal forms.
- (e) Failure to comply with any prequalification regulations of the Department.
- (f) Default under previous contracts.
- (g) Unsatisfactory performance record as shown by past work for the Awarding Authority, judged from the standpoint of workmanship and progress.
- (h) When the Contractor is suspended from eligibility to bid at a public letting where the contract is awarded by, or requires approval of, the Department.

- (i) When any agent, servant, or employee of the prospective bidder currently serves as a member, employee, or agent of a governmental body that is financially involved in the proposal work.
- (j) When any agent, servant, or employee of the perspective bidder has participated in the preparation of plans or specifications for the proposed work.

Interpretation of Quantities in the Bid Schedule. The quantities appearing in the bid schedule are approximate and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided.

Examination of Material Proposal, Specifications, Special Provisions, and Site of Work. The bidder shall, before submitting a bid, carefully examine the provisions of the proposal. The bidder shall inspect in detail the site of the proposed work, investigate and become familiar with all the local conditions affecting the work and fully acquaint themselves with the detailed requirements of the work. Submission of a bid shall be a conclusive assurance and warranty the bidder has made these examinations and the bidder understands all requirements for the performance of the work. If his/her bid is accepted, the bidder will be responsible for all errors in the proposal resulting from his/her failure or neglect to comply with these instructions. The Awarding Authority will, in no case, be responsible for any costs, expenses, losses, or change in anticipated profits resulting from such failure or neglect of the bidder to make these examinations.

The bidder shall take no advantage of any error or omission in the proposal. Any prospective bidder who desires an explanation or interpretation of the specification, or any of the documents, shall request such in writing from the Awarding Authority, in sufficient time to allow a written reply by the Awarding Authority that can reach all prospective bidders before the submission of their bids. Any reply given a prospective bidder concerning any of the documents and specifications will be furnished to all prospective bidders in the form determined by the Awarding Authority including, but not limited to, an addendum, if the information is deemed by the Awarding Authority to be necessary in submitting bids or if the Awarding Authority concludes the information would aid competition. Oral explanations, interpretations or instructions given before the submission of bids unless at a prebid conference will not be binding on the Awarding Authority.

Preparation of the Proposal. Bidders shall submit their proposals on the form furnished by the Awarding Authority. The proposal shall be executed properly, and bids shall be made for all items indicated in the proposal form, except when alternate bids are asked, a bid on more than one alternate for each item is not required, unless otherwise provided. The bidder shall indicate in figures, a unit price for each of the separate items called for in the proposal form; the bidder shall show the products of the respective quantities and unit prices in the column provided for that purpose, and the gross sum shown in the place indicated in the proposal form shall be the summation of said products. All writing shall be with ink or typewriter, except the signature of the bidder which shall be written in ink.

CHECK SHEET #LRS7

When prequalification is required, the proposal form shall be submitted by an authorized bidder in the same name and style as shown on the "Contractor's Statement of Experience and Financial Condition" used for prequalification and shall be submitted in like manner.

Rejection of Proposals. The Awarding Authority reserves the right to reject any proposal for any of the conditions in "Issuance of Proposal Forms" or for any of the following reasons:

- (a) More than one proposal for the same work from an individual, firm, partnership, or corporation under the same name or different names.
- (b) Evidence of collusion among bidders.
- (c) Unbalanced proposals in which the bid prices for some items are, in the judgment of the Awarding Authority, out of proportion to the bid prices for other items.
- (d) If the proposal does not contain a unit price for each pay item listed, except in the case of authorized alternate pay items or lump sum pay items.
- (e) If the proposal form is other than that furnished by the Awarding Authority; or if the form is altered or any part thereof is detached.
- (f) If there are omissions, erasures, alterations, unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite or ambiguous as to its meaning.
- (g) If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- (i) If the proposal is not accompanied by the proper proposal guaranty.
- (i) If the proposal is prepared with other than ink or typewriter, or otherwise fails to meet the requirements of the above "Preparation of Proposal" section.

Proposal Guaranty. Each proposal shall be accompanied by a bid bond on the Department form contained in the proposal, executed by a corporate surety company satisfactory to the Awarding Authority, by a bank cashier's check or a properly certified check for not less than five percent of the amount bid, or for the amount specified in the following schedule:

CHECK SHEET #LRS7

<u>Amount Bid</u>		<u>Proposal Guaranty</u>
Up to	\$5,000	\$150
>\$5,000	\$10,000	\$300
>\$10,000	\$50,000	\$1,000
>\$50,000	\$100,000	\$3,000
>\$100,000	\$150,000	\$5,000
>\$150,000	\$250,000	\$7,500
>\$250,000	\$500,000	\$12,500
>\$500,000	\$1,000,000	\$25,000
>\$1,000,000	\$1,500,000	\$50,000
>\$1,500,000	\$2,000,000	\$75,000
>\$2,000,000	\$3,000,000	\$100,000
>\$3,000,000	\$5,000,000	\$150,000
>\$5,000,000	\$7,500,000	\$250,000
>\$7,500,000	\$10,000,000	\$400,000
>\$10,000,000	\$15,000,000	\$500,000
>\$15,000,000	\$20,000,000	\$600,000
>\$20,000,000	\$25,000,000	\$700,000
>\$25,000,000	\$30,000,000	\$800,000
>\$30,000,000	\$35,000,000	\$900,000
Over	\$35,000,000	\$1,000,000

In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must equal to the sum of the proposal guaranties which would be required for each individual proposal.

Bank cashier's checks or properly certified checks accompanying proposals shall be made payable to the County Treasurer, when a County is the awarding authority; or the City, Village, or Town Treasurer, when a city, village, or town is the awarding authority.

If this proposal contains various groups and the bidder has the option of bidding on one or several groups, the bidder may provide a separate proposal guaranty for each group or combination of groups in lieu of a single proposal guaranty to cover the amount bid for the entire proposal. Each proposal guaranty shall identify the groups covered by the individual proposal guaranty. In the event that one proposal guaranty check is intended to cover two or more groups, the amount must be equal to the sum of the proposal guaranties which would be required for each individual group.

The proposal guaranty checks of all, except the two lowest responsible, will be returned promptly after the proposals have been checked, tabulated, and the relation of the proposals established. Proposal guaranty checks of the two lowest bidders will be returned as soon as the contract and contract bond of the successful bidder have been properly executed and approved. If a contract bond is not required, the proposal guaranty check will be held in lieu thereof. Bid bonds will not be returned.

The awarding authority may deny the use of a bid bond as a proposal guaranty but may not further restrict the proposal guaranty. The Notice of Material Letting will state whether a bid bond is allowed.

CHECK SHEET #LRS7

Delivery of Proposals. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Authority and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Awarding Authority is used, it shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Awarding Authority at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the Notice to Bidders. Proposals received after the time specified will be returned to the bidder unopened.

Withdrawal of Proposals. Permission will be given a bidder to withdraw a proposal if the bidder makes the request in writing or in person before the time for opening proposals.

Public Opening of Proposals. Proposals will be opened and read publicly at the time and place specified in the Notice to Bidders. Bidders, their authorized agents and other interested parties are invited to be present.

Consideration of Proposals. After the proposals are opened and read, they will be compared on the basis of the summation of the products of the quantities shown in the bid schedule by the unit bid prices. In the event of a discrepancy between unit bid prices and extensions, the unit bid price shall govern. In awarding the supply of materials, the Awarding Authority will, in addition to considering the amounts stated in the proposals, take into consideration the responsibility of the various bidders as determined from a study of the data required under "Prequalification of Bidders", and from other investigations which it may elect to make.

The right is reserved to reject any or all proposals, to waive technicalities or to advertise for new proposals, if in the judgment of the Awarding Authority, the best interests of the Awarding Authority will be promoted thereby.

Acceptance of Proposal to Furnish Material. The award will be made within 45 calendar days after the opening of proposals to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified by letter of intent that his/her bid has been accepted, and subject to the following conditions, the bidder will be the Contractor or Supplier.

An acceptance of proposal to furnish materials executed by the Awarding Authority is required before the Awarding Authority is bound. An award may be cancelled any time by the Awarding Authority prior to execution in order to protect the public interest and integrity of the bidding process or for any other reason if, in the judgment of the Awarding Authority, the best interests of the Awarding Authority will be promoted thereby.

If a material proposal is not awarded within 45 days after the opening of proposals, bidders may file a written request with the Awarding Authority for the withdrawal of their bid, and the Awarding Authority will permit such withdrawal.

Requirement of Contract Bond. If the Awarding Authority requires a Contract Bond, the Contractor or Supplier shall furnish the Awarding Authority a performance and payment bond with good and sufficient sureties in the full amount of the award as

CHECK SHEET #LRS7

the penal sum. The surety shall be acceptable to the Awarding Authority, shall waive notice of any changes and extensions of time, and shall submit its bond on the form furnished by the Awarding Authority.

The contract bond shall be returned within 15 days after the notice of award. Failure of the successful bidder to execute and file acceptable bonds within 15 days after the notice of award has been mailed to the bidder shall be just cause for the cancellation of the award and the forfeiture of the proposal guaranty which shall become the property of the Awarding Authority, not as penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be readvertised, or otherwise, as the Awarding Authority may decide.

If the bidder to whom the award is made is a corporation organized under the laws of a State other than Illinois, the bidder shall furnish the Awarding Authority a copy of the corporation's Certificate of Authority to do business in the State of Illinois with the return of the contract bond. Failure to furnish such evidence of a Certificate of Authority within the time required will be considered as just cause for the annulment of the award and the forfeiture of the proposal guaranty to the Awarding Authority, not as a penalty, but in payment of liquidated damages sustained as a result of such failure.

Failure to Execute the Acceptance of Proposal to Furnish Material. If the acceptance of proposal to furnish material is not executed by the Awarding Authority within 15 days following receipt from the bidder of the properly executed bonds, the bidder shall have the right to withdraw his/her bid without penalty."

CHECK SHEET #LRS11

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

SPECIAL PROVISION
FOR
EMPLOYMENT PRACTICES

Effective: January 1, 1999

In addition to all other labor requirements set forth in this proposal and in the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation, during the performance of this contract, the Contractor for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

Selection of Labor. The Contractor shall comply with all Illinois statutes pertaining to the selection of labor.

Equal Employment Opportunity. During the performance of this contract, the Contractor agrees as follows:

- (a) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, age, marital status, physical or mental handicap or unfavorable discharge from military service, and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- (b) That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- (c) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, national origin, ancestry, age, marital status, physical or mental handicap or unfavorable discharge from military service.

That it will send to each labor organization or representative of workers with which it has or is bound by collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with so such Act and Rules and Regulations, the Contractor will promptly so notify the Illinois Department of Human Rights and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

- (e) That it will submit reports as required by the Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
- (f) That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
- (g) That it will include verbatim or by reference the provisions of this clause in every subcontract so that such provisions will be binding upon every such subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by all its subcontractors; and further it will promptly notify the contracting agency and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply therewith. In addition, the Contractor will not utilize any subcontractor declared by the subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

CHECK SHEET #LRS12

**State of Illinois
Department of Transportation
Bureau of Local Roads and Streets**

**SPECIAL PROVISION
FOR
WAGES OF EMPLOYEES ON PUBLIC WORKS**

Effective: January 1, 1999

Revised: January 1, 2015

1. **Prevailing Wages.** All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Illinois Department of Labor publishes the prevailing wage rates on its website. If the Illinois Department of Labor revises the prevailing wage rates, the revised prevailing wage rates on the Illinois Department of Labor's website shall apply to this contract and the Contractor will not be allowed additional compensation on account of said revisions. The Contractor shall review the wage rates applicable to the work of the contract at regular intervals in order to ensure the timely payment of current wage rates. The Contractor agrees that no additional notice is required. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto.
2. **Payroll Records.** The Contractor and each subcontractor shall make and keep, for a period of not less than five years from the date of the last payment on a contract or subcontract, records of all laborers, mechanics, and other workers employed by them on the project; the records shall include information required by 820 ILCS 130/5 for each worker. Upon seven business days' notice, the Contractor and each subcontractor shall make available for inspection and copying at a location within this State during reasonable hours, the payroll records to the public body in charge of the project, its officers and agents, the Director of Labor and his deputies and agents, and to federal, State, or local law enforcement agencies and prosecutors.
3. **Submission of Payroll Records.** The Contractor and each subcontractor shall, no later than the 15th day of each calendar month, file a certified payroll for the immediately preceding month with the public body in charge of the project, except that the full social security number and home address shall not be included on weekly transmittals. Instead the payrolls shall include an identification number for each employee (e.g., the last four digits of the employee's social security number). The certified payroll shall consist of a complete copy of the payroll records, except starting and ending times of work each day may be omitted.

The certified payroll shall be accompanied by a statement signed by the Contractor or subcontractor or an officer, employee, or agent of the Contractor or subcontractor which avers that: (i) he or she has examined the certified payroll records required to be submitted by the Act and such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general

CHECK SHEET #LRS12

prevailing rate of hourly wages required; and (iii) the Contractor or subcontractor is aware that filing a certified payroll that he or she knows to be false is a Class A misdemeanor.

4. **Employee Interviews.** The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor.

CHECK SHEET #LRS13

**State of Illinois
Department of Transportation
Bureau of Local Roads and Streets**

**SPECIAL PROVISION
FOR
SELECTION OF LABOR**

Effective: January 1, 1999
Revised: January 1, 2012

The Contractor shall comply with all Illinois statutes pertaining to the selection of labor.

Employment of Illinois Workers During Periods of Excessive Unemployment.
Whenever there is a period of excessive unemployment in Illinois, which is defined herein as any month immediately following two consecutive calendar months during which the level of unemployment in the State of Illinois has exceeded five percent as measured by the United States Bureau of Labor Statistics in its monthly publication of employment and unemployment figures, the Contractor shall employ at least 90 percent Illinois laborers. "Illinois laborer" means any person who has resided in Illinois for at least 30 days and intends to become or remain an Illinois resident.

Other laborers may be used when Illinois laborers as defined herein are not available, or are incapable of performing the particular type of work involved, if so certified by the Contractor and approved by the Engineer. The Contractor may place no more than three of his regularly employed non-resident executive and technical experts, who do not qualify as Illinois laborers, to do work encompassed by this Contract during a period of excessive unemployment.

This provision applies to all labor, whether skilled, semi-skilled or unskilled, whether manual or non-manual.

**State of Illinois
Department of Transportation
Bureau of Local Roads and Streets**

**SPECIAL PROVISION
FOR
PROTESTS ON LOCAL LETTINGS**

**Effective: January 1, 2007
Revised: January 1, 2013**

Except for apprenticeship and training certification issues, all protests shall be handled according to Sections 6.390 through 6.440 of Title 44 Subtitle A Chapter III Part 6 of the Illinois Administrative Code. For the purpose of a protest under this special provision, a representative of the awarding local authority executing the contract will perform the functions of the Chief Procurement Officer (CPO) and the State Purchasing Officer (SPO).

CHECK SHEET #LRS17

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

**SPECIAL PROVISION
FOR
SUBSTANCE ABUSE PREVENTION PROGRAM**

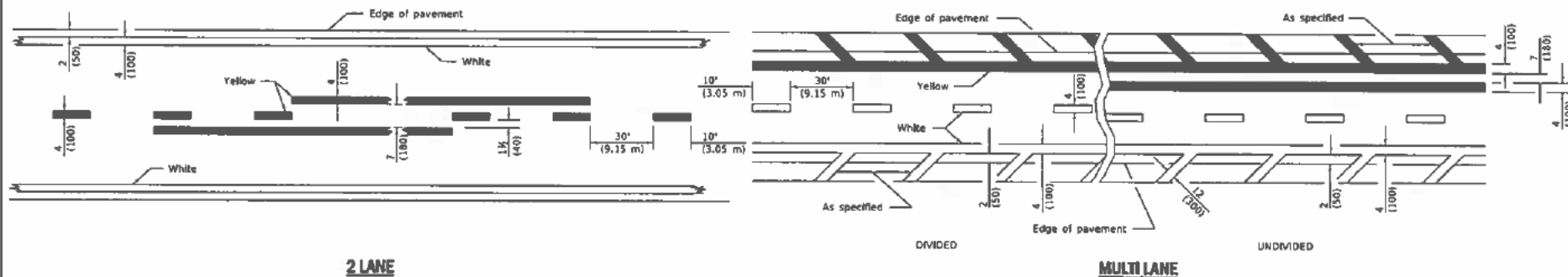
Effective: January 1, 2008

Revised: January 1, 2014

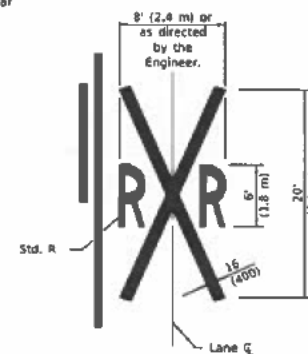
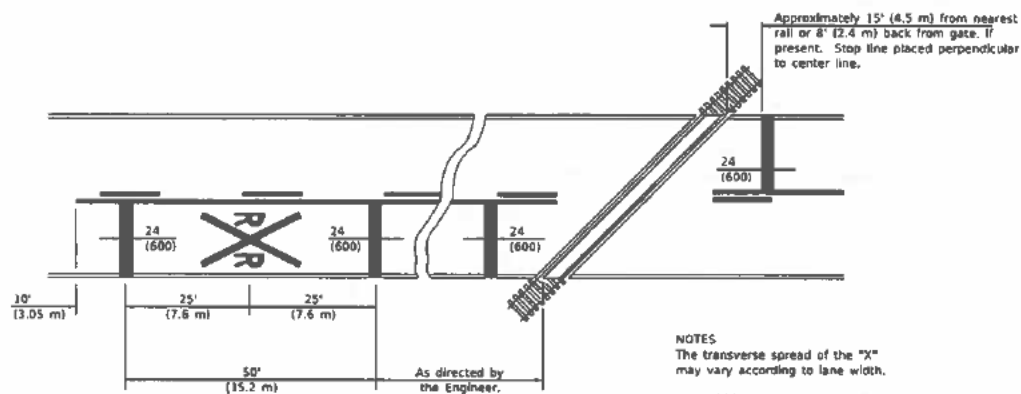
In addition to all other labor requirements set forth in this proposal and in the Standard Specification for Road and Bridge Construction, adopted by the Department, during the performance of this contract, the Contractor for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

Substance Abuse Prevention Program. Before the Contractor and any subcontractor commences work, the Contractor and any subcontractor shall have in place a written Substance Abuse Prevention Program for the prevention of substance abuse among its employees which meets or exceeds the requirements in 820 ILCS 265 or shall have a collective bargaining agreement in effect dealing with the subject matter of 820 ILCS 265.

The Contractor and any subcontractor shall file with the public body engaged in the construction of the public works: a copy of the Substance Abuse Prevention Program along with a cover letter certifying that their program meets the requirements of the Act, or a letter certifying that the Contractor or a subcontractor has a collective bargaining agreement in effect dealing with the subject matter of this Act.



LANE AND EDGE LINES



NOTES

The transverse spread of the "X" may vary according to lane width.

On multi-lane roads, the stop lines shall extend across all approach lanes and separate RURA symbols shall be placed adjacent to each other in each lane.

When the pavement marking symbol is used, a portion of the symbol should be located directly adjacent to the Advance Warning Sign (W10-1) as placed by Table 2C-4, Condition B of the MUTCD.

PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS	TYPICAL PAVEMENT MARKINGS (Sheet 1 of 3)
1-1-15	Added symbols. Revised bike symbol. Revised note for stop line at RR crossing.	
1-1-14	Added bike symbol. Renamed "LANE DROP ARROW" detail to "LANE-REDUCTION ARROW".	
STANDARD 780001-05		

Illinois Department of Transportation

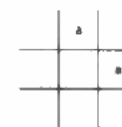
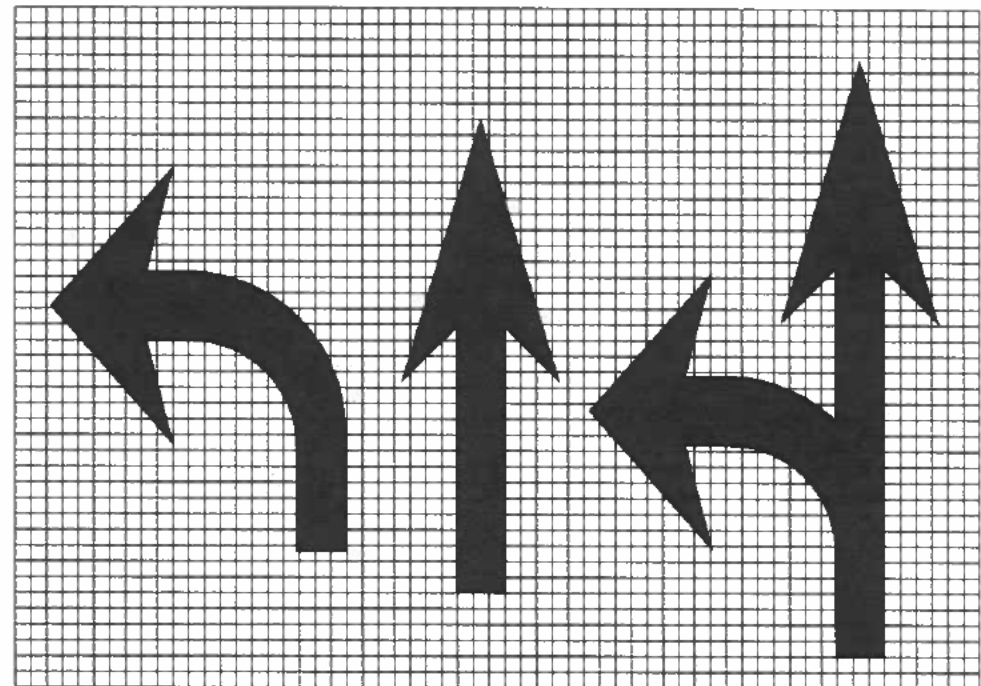
PASSED January 1, 2015

ENGINEER OF OPERATIONS

APPROVED February 1, 2015

ENGINEER OF DESIGN AND ENVIRONMENT

61-1-0108



Legend Height	Arrow Size	a
6' (1.8 m)	Small	2.9 (74)
8' (2.4 m)	Large	3.8 (96)

The space between adjacent letters or numerals should be approximately 3 (75) for 6' (1.8 m) legend and 4 (100) for 8' (2.4 m) legend.

LETTER AND ARROW GRID SCALE

Illinois Department of Transportation

PASSED *[Signature]* MURPHY J. 1015

ENGINEER OF OPERATIONS

APPROVED *[Signature]* 1015

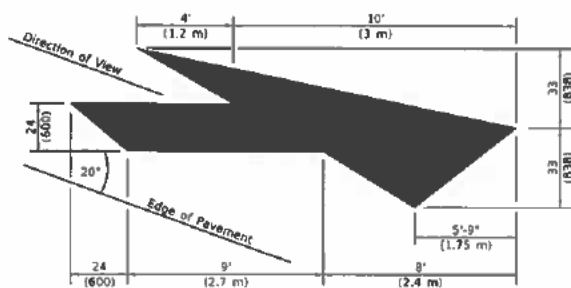
ENGINEER OF DESIGN AND ENVIRONMENT

16-1-E (03/02)

TYPICAL PAVEMENT MARKINGS

(Sheet 2 of 3)

STANDARD 780001-05



LANE-REDUCTION ARROW

Right lane-reduction arrow shown.
Use mirror image for left lane.



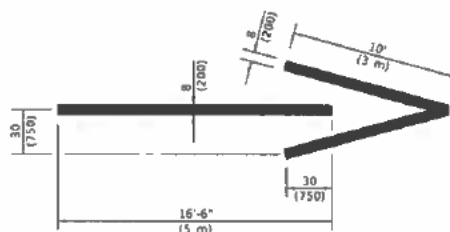
20' (6 m): urban
50' (15 m): rural
(Between arrow
and word or
between words)

ONLY

Small size: urban
Large size: rural

6' (1.8 m): urban
8' (2.4 m): rural

WORD AND ARROW LAYOUT



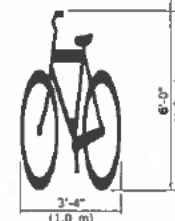
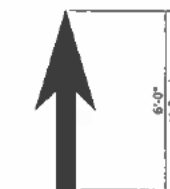
WRONG WAY ARROW



INTERNATIONAL SYMBOL OF ACCESSIBILITY



SHARED LANE SYMBOL



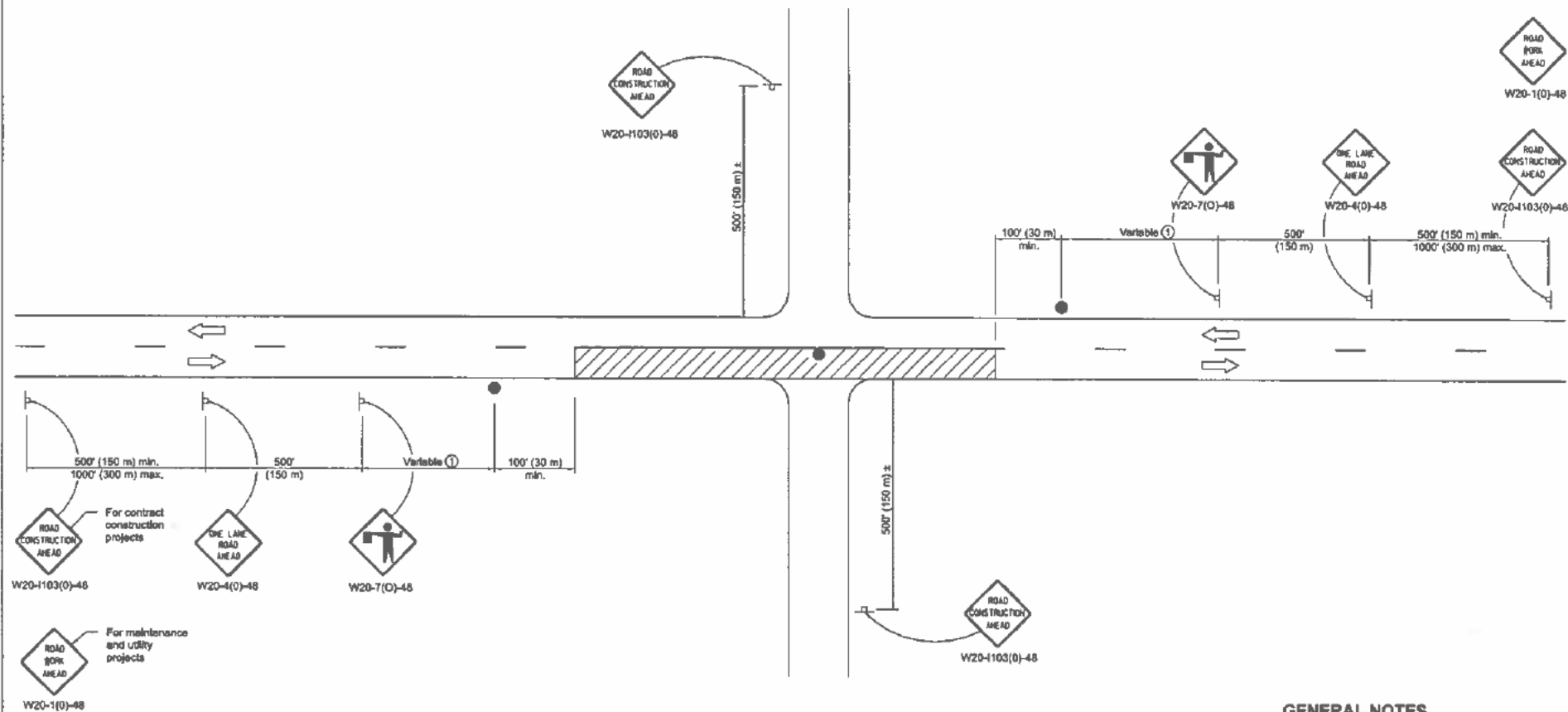
BIKE SYMBOL (Arrow is optional.)

TYPICAL PAVEMENT MARKINGS

(Sheet 3 of 3)

STANDARD 780001-05

Illinois Department of Transportation	
PASSED	January 1, 2015
ENGINEER OF OPERATIONS	
APPROVED	January 1, 2015
ENGINEER OF DESIGN AND ENVIRONMENT	



TYPICAL APPLICATIONS

Bluminous resurfacing
Milling operations
Utility operations
Shoulder operations

SYMBOLS

- Work area
- Sign on portable or permanent support
- Flagger with traffic control sign

- ① Minimum distance is 200' (60 m). Maximum distance to be determined by the Engineer but should not exceed $\frac{1}{2}$ the length required for one normal working day's operation or 2 miles (3200 m), whichever is less.

GENERAL NOTES

This Standard is used where at any time, any vehicle, equipment, workers or their activities require an intermittent or continuous moving operation on the pavement where the average speed of movement is greater than $\frac{1}{2}$ mph (1 km/h) and less than 4 mph (6 km/h).

When the operation does not exceed 60 minutes, traffic control may be according to Standard 701301.

All dimensions are in inches (millimeters) unless otherwise shown.

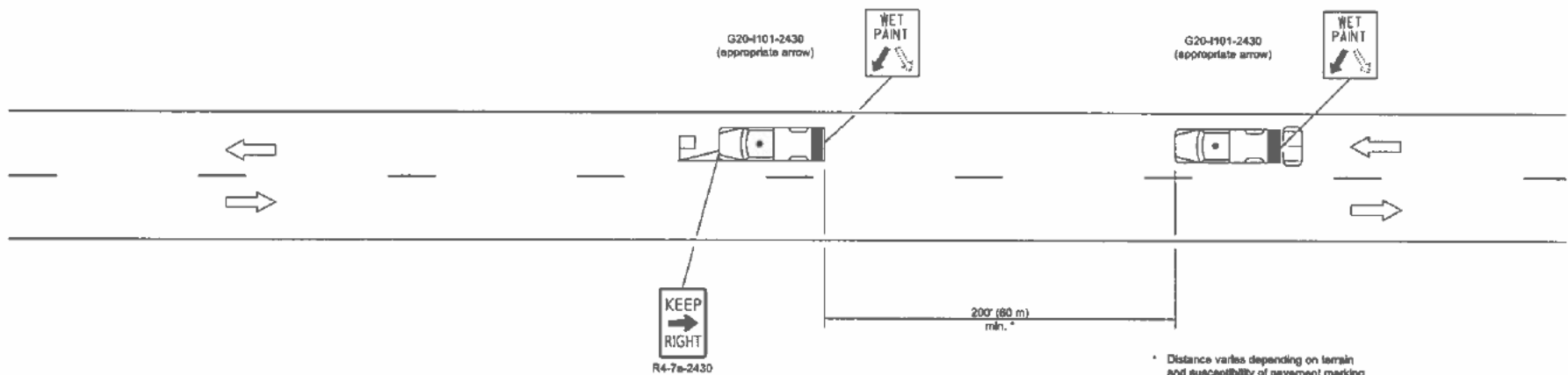
DATE	REVISIONS	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
1-1-18	Revised lower speed limit for operation to $\frac{1}{2}$ mph.	
1-1-11	Revised flagger sign.	STANDARD 701306-04

Illinois Department of Transportation

APPROVED: *[Signature]* 2018
ENGINEER OF SAFETY, PROD. AND ENGINEERING

APPROVED: *[Signature]* 2018
ENGINEER OF DESIGN AND ENVIRONMENT





2/11/18



TYPICAL APPLICATIONS

Landscaping work
Utility work
Pavement marking
Weed spraying
Roadometer measurements
Debris cleanup
Crack pouring

SYMBOLS

-  Arrow board (Hazard Mode only)
-  Truck with headlights, emergency flashers and flashing amber light (visible from all directions)
-  18 x 18 (450x450) min. orange flag (use when guide wheel is used)
-  Truck mounted attenuator

GENERAL NOTES

This Standard is used where any vehicle, equipment, workers or their activities will require a continuous moving operation where the average speed is greater than 3 mph (5 km/h).

For shoulder operations not encroaching on the pavement, use DETAIL A, Standard 701426.

All dimensions are in inches (millimeters) unless otherwise shown.

LANE CLOSURE 2L, 2W MOVING OPERATIONS- DAY ONLY

STANDARD 701311-03

Illinois Department of Transportation	
APPROVED <i>[Signature]</i> January 1, 2008	REVISION 11-07
ENGINEER OF OPERATIONS	
APPROVED <i>[Signature]</i> January 1, 2008	
ENGINEER OF DESIGN AND ENVIRONMENT	

DATE	REVISIONS
1-1-00	Switched units to English (metric).
	Omitted Pass With Care sign.
1-1-00	Eliminated speed restrictions
	in Standard title.

9.

**City of Mattoon
Council Decision Request**

MEETING DATE: 07/01/2025 CDR NO: 2025- 2610

SUBJECT: 2025 MFT General Maintenance - Seal Coating Install

SUBMITTAL DATE: 06/26/2025

SUBMITTED BY: Dave Clark, Public Works Director

APPROVED FOR	Kyle Gill,	<u>06/26/2025</u>
COUNCIL AGENDA:	City Manager	Date

EXHIBITS (If applicable): Bid Documents

EXPENDITURE	AMOUNT	CONTINGENCY FUNDING
ESTIMATE: \$313,160.00	BUDGETED: \$350,000.00	REQUIRED: \$0.00

IF IT IS THE WISH OF THE COUNCIL TO SUPPORT RECOMMENDATIONS CONTAINED IN THIS REPORT, THE FOLLOWING MOTION IS SUGGESTED:

“I move to approve the bid from Earl Walker Co., Inc. in the amount of \$313,160.00 for seal coating streets at various locations around the City of Mattoon under the 2025 MFT General Maintenance Program and for the Mayor to sign the Illinois Department of Transportation BLR 12330.”

SUMMARY OF THE TOPIC FOR WHICH A COUNCIL DECISION IS REQUESTED:

This is the bid from Earl Walker to perform the seal coating work at various locations around the city under the already approved 2025 MFT GM plan. This is just for the installation and does not include the cost of the aggregate. Aggregate is being supplied by Charleston Stone. The bid documents are attached

All work will be paid from 121-5321-451.



**Illinois Department
of Transportation**

**Local Public Agency Material
Proposal or Deliver & Install Proposal**

Proposal Submitted By:

Contractor's Name

EARL WALKER CO., INC

Contractor's Address

915 W. MAGILL

City

SULLIVAN

State

IL

Zip Code

61951

STATE OF ILLINOIS

Local Public Agency

City of Mattoon

County

Coles

Section Number

25-00000-01-GM

Street Name/Road Name

Various

Type of Funds

MFT

☐ Material proposal ☒ Deliver and Install Proposal ☐ Plans

For a County and Road District Project

Submitted/Approved

Highway Commissioner Signature & Date

Submitted/Approved

County Engineer/Superintendent of Highways Signature & Date

For a Municipal Project

Submitted/Approved/Passed

Signature & Date

06/03/2025

Official Title

Mayor, City of Mattoon

Department of Transportation

Released for bid based on limited review

Regional Engineer Signature & Date

06/03/25

Note: All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed.

Local Public Agency	County	Section Number
City of Mattoon	Coles	25-00000-01-GM

NOTICE TO BIDDERS

Sealed proposals for the project described below will be received at the office of Mattoon City Clerk

208 N 19th Street
Address

until 11 am on June 20th
Time Date

1. Plans and proposal forms will be available in the office of

Mattoon City Clerk, 208 N 19th Street, Mattoon, IL 61938

2. ☒ Prequalification

If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57) in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.

- The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Material/Deliver and Install Proposals.
- A proposal guaranty in the proper amount, as specified in the BLRS Special Provision for Bidding Requirements and Conditions for Material/Deliver and Install Proposals, will be required. See the attached Special Provisions for specific instructions for proposal guaranty for this proposal packet.
- The successful bidder at the time of execution of the contract will be required to deposit a contract bond or proposal guaranty as provided for in the special provisions. Failure on the part of the contractor to deliver the material within the time specified or to do the work specified herein will be considered just cause to forfeit his surety as provided in Article 106.10 of the Standard Specifications.
- Proposals shall be submitted on forms furnished by the Awarding Authority and shall be enclosed in an envelope endorsed "Material Proposal, Section 25-00000-01-GM".

By Order of

Awarding Authority

City of Mattoon

County Engineer/Superintendent of Highways/

Municipal Clerk

City Clerk

Date

Material Proposal or Deliver & Install Proposal

To

Awarding Authority

City of Mattoon

Awarding Authority Address

208 N 19th Street

City

Mattoon

State

IL

Zip Code

61938

If this bid is accepted within 45 days from the date of opening, the undersigned agrees to furnish or to deliver & install any or all of the materials, at the quoted unit prices, subject to the following:

- It is understood and agreed that the "Standard Specifications for Road and Bridge Construction", adopted 01/01/22 and the "Supplemental Specifications and Recurring Special Provisions", adopted 01/01/25, prepared by the Department of Transportation, shall govern insofar as they may be applied and insofar as they do not conflict with the special provision and supplemental specifications attached hereto.
- It is understood that quantities listed are approximate only and that they may be increased or decrease as may be needed to properly complete the improvement within its present limits or extensions thereto, at the unit prices stated and that bids will be compared on the basis of total price bid for each group.
- Delivery in total or partial shipments as ordered shall be made within the time specified in the special provisions or by the acceptance at the point and in the manner specified in the "Schedule of Prices". If delivery on the job site is specified, it shall mean any place or places on the road designed by the awarding authority or its authorized representative.
- The contractor and/or local public agency performing the actual material placement operations shall be responsible for providing work zone traffic control, unless otherwise specified in this proposal. Such devices shall meet the requirements of and be installed in accordance with applicable provisions of the "Illinois Manual on Uniform Traffic Control Devices" and any referenced Illinois Highway Standards.



**Illinois Department
of Transportation**

Material Proposal Schedule of Prices

Local Public Agency

City of Mattoon

County

Coles

Section Number

25-00000-01-GM

Material Proposal Schedule of Prices

Group No.	Item(s)	Delivery	Unit	Quantity	Unit Price	Total
I	Bituminous Materials	See Map	Gallon	66,830	\$4.00	267,320.00
	HFE-150 (Cover & Seal Coat)					
	(Furnish & Install)					
I	Seal Coat Aggregate, CA-16	See Map	Ton	2292	\$20.00	45,840.00
	(Install Only)					
	Total Group I					313,160.00
II	Seal Coat Aggregate, CA-16	City Stockpile	Ton	2292		
	(Furnish Only)	Shelby & Logan				
	Total Group II					

The undersigned firm certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm. The undersigned firm further certifies that it is not barred from contracting with any unit of State or local government as a result of a violation of State laws prohibiting bid-rigging or bid rotating.

Bidder Signature & Date

 6/4/25

Address

915 W. MAGILL

City

SULLIVAN

State

IL

Zip Code

61951



**Illinois Department
of Transportation**

**Local Public Agency
Proposal Bid Bond**

Local Public Agency City of Mattoon	County Coles	Section Number 25-00000-01-GM
--	-----------------	----------------------------------

WE, Earl Walker Co. Inc. as PRINCIPAL, and
Cincinnati Insurance Company as SURETY, are held jointly,
severally and firmly bound unto the above Local Public Agency (hereafter referred to as "LPA") in the penal sum of 5% of the total bid
price, or for the amount specified in the proposal documents in effect on the date of invitation for bids, whichever is the lesser sum. We
bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly pay to the LPA this sum under the conditions of this
instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written
proposal to the LPA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the LPA for the above designated section
and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful
performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road
and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void; otherwise it shall remain in
full force and effect.

IN THE EVENT the LPA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any
requirements set forth in the preceding paragraph, then the LPA acting through its awarding authority shall immediately be entitled to
recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their
respective officers this 18th of June 2025
Day Month and Year

Principal

Company Name
Earl Walker Company

Signature & Date
By: [Signature] 6/18/2025

Title
President

Company Name

Signature & Date
By:

Title

(If Principal is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be
affixed.)

Surety

Name of Surety
Cincinnati Insurance Company

Signature of Attorney-in-Fact Signature & Date
By: [Signature] 6/18/2025

STATE OF IL
COUNTY OF MOULTRIE

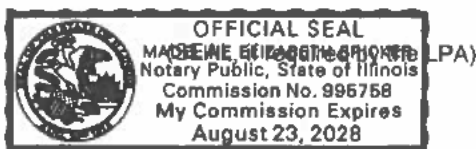
I Madeline E. Bricker, a Notary Public in and for said county do hereby certify that

Bradford O. Wheeler, Gerald R. Wood

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of
PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said
instruments as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 18th day of June 2025
Day Month and Year



Notary Public Signature & Date
[Signature] 6/18/2025

Date commission expires 08/23/28



**Illinois Department
of Transportation**

**Apprenticeship and
Training Program Certification**

Local Public Agency	County	Street Name/Road Name	Section Number
City of Mattoon	Coles	Various	25-00000-01-GM

All contractors are required to complete the following certification

- ☐ For this contract proposal or for all bidding groups in this deliver and install proposal
☒ For the following deliver and install bidding groups in this material proposal.

Group I Furnish & Install Items.

Illinois Department of Transportation policy, adopted in accordance with the provisions of the Illinois Highway Code, requires this contract to be awarded to the lowest responsive and responsible bidder. The award decision is subject to approval by the Department. In addition to all other responsibility factors, this contract or deliver and install proposal requires all bidders and all bidder's subcontractors to disclose participation in apprenticeship or training programs that are (1) approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training, and (2) applicable to the work of the above indicated proposals or groups. Therefore, all bidders are required to complete the following certification:

1. Except as provided in paragraph 4 below, the undersigned bidder certifies that it is a participant, either as an individual or as part of a group program, in an approved apprenticeship or training program applicable to each type of work or craft that the bidder will perform with its own employees.
2. The undersigned bidder further certifies, for work to be performed by subcontract, that each of its subcontractors either (A) is, at the time of such bid, participating in an approved, applicable apprenticeship or training program; or (B) will, prior to commencement of performance of work pursuant to this contract, establish participation in an approved apprenticeship or training program applicable to the work of the subcontract.
3. The undersigned bidder, by inclusion in the list in the space below, certifies the official name of each program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's employees. Types of work or craft that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category for which there is no applicable apprenticeship or training program available.

INTERNATIONAL UNION OF OPERATING ENGINEERS LOCAL 841
INTERNATIONAL BROTHERHOOD OF TEAMSTER JOIN COUNCIL 25 LOCAL 26

4. Except for any work identified above, if any bidder or subcontractor shall perform all or part of the work of the contract or deliver and install proposal solely by individual owners, partners or members and not by employees to whom the payment of prevailing rates of wages would be required, check the following box, and identify the owner/operator workforces and positions of ownership. ☐

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is accounted for and listed. The Department at any time before or afterward may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. In order to fulfill the participation requirement, it shall not be necessary that any applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract or deliver and install proposal.

Bidder
EARL WALKER CO., INC.

Title
PRESIDENT

Signature & Date

 6/4/25

Address
915 W. MAGILL

City
SULLIVAN

State

IL

Zip Code

61951



**Illinois Department
of Transportation**

Affidavit of Illinois Business Office

Local Public Agency City of Mattoon	County Coles	Street Name/Road Name Various	Section Number 25-00000-01-GM
---	------------------------	---	---

I, **BRAD WHEELER** of **SULLIVAN**, **ILLINOIS**
Name of Affiant City of Affiant State of Affiant

being first duly sworn upon oath, state as follows:

1. That I am the **PRESIDENT** of **EARL WALKER CO., INC.**
Officer or Position Bidder
2. That I have personal knowledge of the facts herein stated.
3. That, if selected under the proposal described above, **EARL WALKER CO., INC.**, will maintain a business office in the
Bidder
 State of Illinois, which will be located in **MONTRIE** County, Illinois.
County
4. That this business office will serve as the primary place of employment for any persons employed in the construction contemplated by this proposal.
5. That this Affidavit is given as a requirement of state law as provided in Section 30-22(8) of the Illinois Procurement Code

Signature & Date

[Signature] **4/4/25**

Print Name of Affiant

BRAD WHEELER

Notary Public

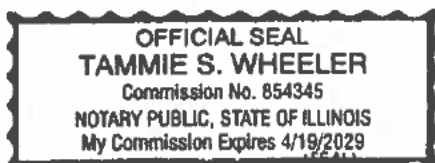
State of IL

County **MONTRIE**

Signed (or subscribed or attested) before me on **6-4-25** by
(date)

BRAD WHEELER, authorized agent(s) of
(name/s of person/s)

EARL WALKER CO., INC.
Bidder



Notary Public Signature & Date

[Signature] **4/4/25**
 My commission expires **4/19/29**

The United States Department of Labor

Office of Apprenticeship

Certificate of Registration of Apprenticeship Program

Illinois Teamsters Joint Council No. 25
Employers JATF

Joliet, Illinois

For The Trade of: Construction Driver

*Registered as part of the National Apprenticeship System
in accordance with the basic standards of apprenticeship
established by the Secretary of Labor*

June 22, 2005

Date Revised: April 8, 2016

IL8151005004

Registration No.



[Signature]

Secretary of Labor

[Signature]

Administrator, Office of Apprenticeship



Certificate of Registration

THREE HOURS OPERATING ENGINEERS

THREE HOURS, INDIANA

for the trade classifications of HEAVY DUTY MECHANIC, PLANT EQUIPMENT
OPERATOR, UNIVERSAL EQUIPMENT OPERATOR,
AND GRADE & PAVING EQUIPMENT OPERATOR

*Issued in recognition of the above apprenticeship system, registered as part of the National
Apprenticeship Program, in accordance with the standards recommended by the*

FEDERAL COMMITTEE ON APPRENTICESHIP

Date October 3, 1958

Registry No. V-15-90114

W. Winifred White
Secretary of Labor

Hugh C. Murphy
Administrator, Bureau of Apprenticeship and Training

THE CINCINNATI INSURANCE COMPANY
THE CINCINNATI CASUALTY COMPANY

Fairfield, Ohio

CB21055101

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That THE CINCINNATI INSURANCE COMPANY and THE CINCINNATI CASUALTY COMPANY, corporations organized under the laws of the State of Ohio, and having their principal offices in the City of Fairfield, Ohio (herein collectively called the "Companies"), do hereby constitute and appoint

Gerald R. Wood

of SULLIVAN IL
their true and legal Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign, execute, seal and deliver on behalf of the Companies as Surety, any and all bonds, policies, undertakings or other like instruments, as follows:

Proposal Bid Bond

This appointment is made under and by authority of the following resolutions adopted by the Boards of Directors of The Cincinnati Insurance Company and The Cincinnati Casualty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the President or any Senior Vice President be hereby authorized, and empowered to appoint Attorneys-in-Fact of the Company to execute any and all bonds, policies, undertakings, or other like instruments on behalf of the Corporation, and may authorize any officer or any such Attorney-in-Fact to affix the corporate seal; and may with or without cause modify or revoke any such appointment or authority. Any such writings so executed by such Attorneys-in-Fact shall be binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company.

RESOLVED, that the signature of the President or any Senior Vice President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Secretary or Assistant Vice-President and the Seal of the Company may be affixed by facsimile to any certificate of any such power and any such power of certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certified by certificate so executed and sealed shall, with respect to any bond or undertaking to which it is attached, continue to be valid and binding on the Company.

IN WITNESS WHEREOF, the Companies have caused these presents to be sealed with their corporate seals, duly attested by their President or any Senior Vice President this 16th day of March, 2021.



STATE OF OHIO)SS
COUNTY OF BUTLER)

THE CINCINNATI INSURANCE COMPANY
THE CINCINNATI CASUALTY COMPANY

Stephen A. Ventre

On this 16th day of March, 2021 before me came the above-named President or Senior Vice President of The Cincinnati Insurance Company and The Cincinnati Casualty Company, to me personally known to be the officer described herein, and acknowledged that the seals affixed to the preceding instrument are the corporate seals of said Companies and the corporate seals and the signature of the officer were duly affixed and subscribed to said instrument by the authority and direction of said corporations.



Keith Collett
Keith Collett, Attorney at Law
Notary Public - State of Ohio

My commission has no expiration date.
Section 147.03 O.R.C.

I, the undersigned Secretary or Assistant Vice-President of The Cincinnati Insurance Company and The Cincinnati Casualty Company, hereby certify that the above is the Original Power of Attorney issued by said Companies, and do hereby further certify that the said Power of Attorney is still in full force and effect.

Given under my hand and seal of said Companies at Fairfield, Ohio, this 18th day of

June 2025



Ed H



Local Public Agency	County	Street Name/Road Name	Section Number
City of Mattoon	Coles	Various	25-00000-01-GM

Bidder's Name

Earl Walker Co., Inc.

Bidder's Address

915 W. Magill

City

Sullivan

State

IL

Zip Code

61651

In accordance with your proposal submitted on 06/20/25, a copy of which is in our files, you have been awarded the contract for
Date of Submittal
furnishing the following materials required in the construction of the above designated project. Materials shall be inspected in
Construction or Maintenance
accordance with current Departmental policies.

Item	Unit of Measure	Quantity	Unit Price	Amount
Bit Matls - Seal Coat, HFE 150 (F&I)	Gallon	66,830	\$4.0000	\$267,320.00
Seal Coat Agg CA 16 (Install Only)	Ton	2,292	\$20.0000	\$45,840.00
Total				\$313,160.00

Terms

2025 Seal Coat Contract

Shipping Instructions

NA

For Municipal Projects

Municipal Official Signature & Date

--

For County And Road District Project

Highway Commissioner Signature & Date

--

Illinois Department of Transportation
Concurrence in Approval of Award

Regional Engineer Signature & Date

--

County Engineer/Superintendent of Highways Signature & Date

--

10.

**City of Mattoon
Council Decision Request**

MEETING DATE: 07/01/2025 CDR NO: 2025-2611

SUBJECT: 2025 MFT General Maintenance – Furnish Seal Coating Aggregate

SUBMITTAL DATE: 06/26/25

SUBMITTED BY: Dave Clark, Public Works Director

APPROVED FOR	Kyle Gill,	<u>06/26/2025</u>
COUNCIL AGENDA:	City Manager	Date

EXHIBITS (If applicable): Bid Documents

EXPENDITURE	AMOUNT	CONTINGENCY FUNDING
ESTIMATE: \$61,081.80	BUDGETED: \$125,000.00	REQUIRED: \$0.00

IF IT IS THE WISH OF THE COUNCIL TO SUPPORT RECOMMENDATIONS CONTAINED IN THIS REPORT, THE FOLLOWING MOTION IS SUGGESTED:

“I move to approve the bid from Charleston Stone in the amount of \$61,081.80 for furnishing the aggregate for seal coating streets at various locations around the City of Mattoon under the 2025 MFT General Maintenance Program and for the Mayor to sign the Illinois Department of Transportation BLR 12330.”

SUMMARY OF THE TOPIC FOR WHICH A COUNCIL DECISION IS REQUESTED:

This is the bid from Charleston Stone to furnish the aggregate for the seal coating work at various locations around the city under the already approved 2025 MFT GM plan. This is just for the cost of furnishing the aggregate. The actual seal coating installation is being performed by Earl Walker. The bid documents are attached

All work will be paid from 121-5321-452.



Proposed Submitted By:			
Contractor's Name			
CHARLESTON STONE			
Contractor's Address		City	State Zip Code
9709 N. Co Rd 2000 E		ABRAMORE	IL 61912

STATE OF ILLINOIS

Local Public Agency	County	Section Number
City of Mattoon	Coles	25-00000-01-GM
Street Name/Road Name		Type of Funds
Various		MFT

☐ Material proposal ☒ Deliver and Install Proposal ☐ Plans

For a County and Road District Project
Submitted/Approved
Highway Commissioner Signature & Date
Submitted/Approved
County Engineer/Superintendent of Highways Signature & Date

For a Municipal Project
Submitted/Approved/Passed
Signature & Date
Official Title
Mayor, City of Mattoon

Department of Transportation
Released for bid based on limited review
Regional Engineer Signature & Date

Note: All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed.

Local Public Agency	County	Section Number
City of Mattoon	Coles	25-00000-01-GM

NOTICE TO BIDDERS

Sealed proposals for the project described below will be received at the office of Mattoon City Clerk

208 N 19th Street until 11 am on June 20th
 Address Time Date

1. Plans and proposal forms will be available in the office of

Mattoon City Clerk, 208 N 19th Street, Mattoon, IL 61938

2. ☒ Prequalification

If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57) in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.

3. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Material/Deliver and Install Proposals.

4. A proposal guaranty in the proper amount, as specified in the BLRS Special Provision for Bidding Requirements and Conditions for Material/Deliver and Install Proposals, will be required. See the attached Special Provisions for specific instructions for proposal guaranty for this proposal packet.

5. The successful bidder at the time of execution of the contract will be required to deposit a contract bond or proposal guaranty as provided for in the special provisions. Failure on the part of the contractor to deliver the material within the time specified or to do the work specified herein will be considered just cause to forfeit his surety as provided in Article 108.10 of the Standard Specifications.

6. Proposals shall be submitted on forms furnished by the Awarding Authority and shall be enclosed in an envelope endorsed "Material Proposal, Section 25-00000-01-GM".

By Order of

Awarding Authority

City of Mattoon

County Engineer/Supintendent of Highways/

Municipal Clerk

City Clerk

Date

Material Proposal or Deliver & Install Proposal

To

Awarding Authority

City of Mattoon

Awarding Authority Address

208 N 19th Street

City

Mattoon

State

IL

Zip Code

61938

If this bid is accepted within 45 days from the date of opening, the undersigned agrees to furnish or to deliver & install any or all of the materials, at the quoted unit prices, subject to the following:

1. It is understood and agreed that the "Standard Specifications for Road and Bridge Construction", adopted 01/01/22 and the "Supplemental Specifications and Recurring Special Provisions", adopted 01/01/25, prepared by the Department of Transportation, shall govern insofar as they may be applied and insofar as they do not conflict with the special provision and supplemental specifications attached hereto.
2. It is understood that quantities listed are approximate only and that they may be increased or decrease as may be needed to properly complete the improvement within its present limits or extensions thereto, at the unit prices stated and that bids will be compared on the basis of total price bid for each group.
3. Delivery in total or partial shipments as ordered shall be made within the time specified in the special provisions or by the acceptance at the point and in the manner specified in the "Schedule of Prices". If delivery on the job site is specified, it shall mean any place or places on the road designed by the awarding authority or its authorized representative.
4. The contractor and/or local public agency performing the actual material placement operations shall be responsible for providing work zone traffic control, unless otherwise specified in this proposal. Such devices shall meet the requirements of and be installed in accordance with applicable provisions of the "Illinois Manual on Uniform Traffic Control Devices" and any referenced Illinois Highway Standards.

Local Public Agency	County	Section Number
City of Mattoon	Coles	25-00000-01-GM

5. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price. A bid will be declared unacceptable if neither a unit price nor a total price is shown.
6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals, will be required. The proposal guaranty as specified in the special provisions is attached.

If a bid bond is allowed or required, Department form BLR 12230 or a proposal guaranty check, complying with the specifications made payable to City of Mattoon, Illinois Treasurer of _____

The amount of the check is _____ (\$ _____)

Attach Cashier's Check or Certified Check Here

In the event that one proposal guaranty check is intended to cover two or more bid proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual bid proposal. If the proposal guaranty check is placed in another bid proposal, state below where it may be found.

The proposal guaranty check will be found in the bid proposal for Section Number _____

Discounts will be allowed for payment as follows _____ calendar days _____ calendar days

Discounts will not be considered in determining the low bidder

Bidder

CHARLESTON STONE

By

JOSH TARBLE

Title

SALES

Address

9709 N. CO RD 2000 E

City

ASHMORE

State

IL

Zip Code

61912



**Illinois Department
of Transportation**

Material Proposal Schedule of Prices

Local Public Agency

City of Mattoon

County

Coles

Section Number

25-00000-01-GM

Material Proposal Schedule of Prices

Group No.	Item(s)	Delivery	Unit	Quantity	Unit Price	Total
I	Bituminous Materials	See Map	Gallon	66,830		
	HFE-150 (Cover & Seal Coat)					
	(Furnish & Install)					
I	Seal Coat Aggregate, CA-16	See Map	Ton	2292		
	(Install Only)					
	Total Group I					
II	Seal Coat Aggregate, CA-16	City Stockpile	Ton	2292	26.65	61,081.80
	(Furnish Only)	Shelby & Logan				
	Total Group II					

The undersigned firm certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm. The undersigned firm further certifies that it is not barred from contracting with any unit of State or local government as a result of a violation of State laws prohibiting bid-rigging or bid rotating.

Bidder Signature & Date

Address

9709 N CO RD 2000 E

City

ASHMOLE

State

IL

Zip Code

61912



Local Public Agency	County	Street Name/Road Name	Section Number
City of Mattoon	Coles	Various	25-00000-01-GM

All contractors are required to complete the following certification

- ☐ For this contract proposal or for all bidding groups in this deliver and install proposal
☒ For the following deliver and install bidding groups in this material proposal.

Group I Furnish & Install Items.

Illinois Department of Transportation policy, adopted in accordance with the provisions of the Illinois Highway Code, requires this contract to be awarded to the lowest responsive and responsible bidder. The award decision is subject to approval by the Department. In addition to all other responsibility factors, this contract or deliver and install proposal requires all bidders and all bidder's subcontractors to disclose participation in apprenticeship or training programs that are (1) approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training, and (2) applicable to the work of the above indicated proposals or groups. Therefore, all bidders are required to complete the following certification:

1. Except as provided in paragraph 4 below, the undersigned bidder certifies that it is a participant, either as an individual or as part of a group program, in an approved apprenticeship or training program applicable to each type of work or craft that the bidder will perform with its own employees.
2. The undersigned bidder further certifies, for work to be performed by subcontract, that each of its subcontractors either (A) is, at the time of such bid, participating in an approved, applicable apprenticeship or training program; or (B) will, prior to commencement of performance of work pursuant to this contract, establish participation in an approved apprenticeship or training program applicable to the work of the subcontract.
3. The undersigned bidder, by inclusion in the list in the space below, certifies the official name of each program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's employees. Types of work or craft that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category for which there is no applicable apprenticeship or training program available.

4. Except for any work identified above, if any bidder or subcontractor shall perform all or part of the work of the contract or deliver and install proposal solely by individual owners, partners or members and not by employees to whom the payment of prevailing rates of wages would be required, check the following box, and identify the owner/operator workforces and positions of ownership. ☐

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is accounted for and listed. The Department at any time before or afterward may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. In order to fulfill the participation requirement, it shall not be necessary that any applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract or deliver and install proposal.

Bidder CHARLESTON STONE	Signature Date 6/18/25
Title SALES	
Address 9709 N. Co Rd 2000 E	City State Zip Code ASHMURE IL 61912



Illinois Department
of Transportation

Affidavit of Illinois Business Office

Local Public Agency	County	Street Name/Road Name	Section Number
City of Mattoon	Coles	Various	25-00000-01-GM

I, JOSH TARBLE of MARSHALL IL
Name of Affiant City of Affiant State of Affiant

being first duly sworn upon oath, state as follows:

1. That I am the SALES of CHARLESTON STONE
Officer or Position Bidder
2. That I have personal knowledge of the facts herein stated.
3. That, if selected under the proposal described above, CHARLESTON STONE, will maintain a business office in the
Bidder
State of Illinois, which will be located in COLES County, Illinois
County
4. That this business office will serve as the primary place of employment for any persons employed in the construction contemplated by this proposal.
5. That this Affidavit is given as a requirement of state law as provided in Section 30-22(8) of the Illinois Procurement Code

Signature & Date
<u>6/18/25</u>
Print Name of Affiant
<u>JOSH TARBLE</u>

Notary Public

State of IL

County Clark

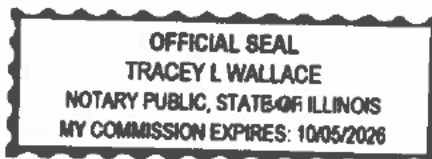
Signed (or subscribed or attested) before me on 6/18/25 by

(date)

Josh Tarble

, authorized agent(s) of

Charleston Stone
Bidder



Notary Public Signature & Date
<u>10/5/2026</u>
My commission expires



Local Public Agency
Proposal Bid Bond

Local Public Agency _____ County _____ Section Number _____
City of Mattoon _____ Coles _____ 25-00000-01-GM
WE, CHARLESTON STONE as PRINCIPAL, and _____ as SURETY, are held jointly.

severally and firmly bound unto the above Local Public Agency (hereafter referred to as "LPA") in the penal sum of 5% of the total bid price, or for the amount specified in the proposal documents in effect on the date of invitation for bids, whichever is the lesser sum. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly pay to the LPA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LPA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the LPA for the above designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void; otherwise it shall remain in full force and effect.

IN THE EVENT the LPA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LPA acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this 18 day of JUNE 2025

Company Name
CHARLESTON STONE
Signature & Date
By: _____
Title
STILES

Company Name

Signature & Date
By: _____
Title

(If Principal is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be affixed.)

Name of Surety

By: _____

Signature of Attorney-in-Fact Signature & Date
By: _____

STATE OF IL
COUNTY OF

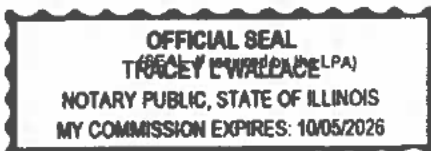
Tracey Wallace, a Notary Public in and for said county do hereby certify that
Josh Tarble
(insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instruments as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 18th day of JUNE 2025

Notary Public Signature & Date

Date commission expires 10/5/2026



ELECTRONIC BID BOND

The Principal may submit an electronic bid bond, in lieu of completing the above section of the Proposal Bid Bond Form. By providing an electronic bid bond ID code and signing below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the LPA under the conditions of the bid bond as shown above. (If PRINCIPAL is a joint venture of two or more contractors, an electronic bid bond ID code, company/Bidder name title and date must be affixed for each contractor in the venture.)

Company/Bidder Name

Title



Special Provisions



Local Public Agency	County	Section Number
City of Mattoon	Coles	25-00000-01-GM

The following Special Provision supplement the "Standard Specifications for Road and Bridge Construction", adopted

January 1, 2022, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures of Materials" in effect on the date of invitation of bids, and the Supplemental Specification and Recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of the above named section, and in case of conflict with any parts, or parts of said Specifications the said Special Provisions shall take precedence and shall govern.

Group I

This work includes A-1 Seal coat Treatment on various city streets in the city of Mattoon. A location map is attached.

No work shall begin before June 1, 2025. All work shall be completed by August 31, 2025. Notification of start date must be received by the Public Works Director a week prior to the work commencing.

Street Preparation & Traffic Control

The city will sweep and prepare all streets in advance of the work. The city will cause parked vehicles to be removed from the work areas. The city will provide 2 flaggers to assist with traffic control. The contractor shall furnish all remaining traffic control.

Bituminous Materials, HFE-150 (Cover & Seal Coat)

Bituminous materials shall be furnished and installed by the contractor. The bituminous materials shall be HFE-150. This work shall be paid at the contract unit price, per gallon, for bituminous materials, HFE-150 (Cover & Seal Coat).

Seal Coat Aggregate, CA-16 (Install Only)

Seal coat aggregate will be furnished by the city for installation by the contractor. The aggregate will be CA-16 crushed limestone or CA-16 crushed gravel. The aggregate will be stockpiled at the city's Yard Waste Facility at the intersection of Logan Street and Shelby Avenue. The contractor shall load and haul the material from the stockpile to the work areas. This work shall be paid at the contract unit price, per ton, for seal coat aggregate, CA-16 (Install Only).

All delivery tickets shall include City of Mattoon Section #25-00000-01-GM

Group II

This work includes furnishing and delivering seal coat aggregate. This work shall be completed consecutively, weather permitting.

Seal Coat Aggregate, CA-16 (Furnish Only)

The seal coat aggregate shall be CA-16 Crushed Limestone or CA-16 Crushed Gravel from an IDOT approved facility. All material shall be furnished and delivered to the city's Yard Waste Facility at the intersection of Logan Street and Shelby Avenue in Mattoon by July 31, 2025. The city will furnish an operator and end loader to stockpile the material. This work shall be paid at the contract unit price, per ton, for Seal Coat Aggregate, CA-16 (Furnish Only).

All delivery tickets shall include City of Mattoon Section #25-00000-01-GM.



Local Public Agency	County	Street Name/Road Name	Section Number
City of Mattoon	Coles	Various	25-00000-01-GM

Bidder's Name

Charleston Stone

Bidder's Address

9709 N. Co Rd 2000 E

City

Ashmore

State

IL

Zip Code

61612

In accordance with your proposal submitted on 06/20/25, a copy of which is in our files, you have been awarded the contract for
Date of Submittal
furnishing the following materials required in the construction of the above designated project. Materials shall be inspected in
Construction or Maintenance
accordance with current Departmental policies.

Item	Unit of Measure	Quantity	Unit Price	Amount
Seal Coat Aggregate CA-16, Furnish	Ton	2,292	\$26.6500	\$61,081.80
Total				\$61,081.80

Terms

2025 Seal Coat Contract

Shipping Instructions

NA

For Municipal Projects

Municipal Official Signature & Date

--

For County And Road District Project

Highway Commissioner Signature & Date

--

Illinois Department of Transportation
Concurrence in Approval of Award

Regional Engineer Signature & Date

--

County Engineer/Superintendent of Highways Signature & Date

--

11.

**City of Mattoon
Council Decision Request**

MEETING DATE: 07/01/2025 CDR NO: 2025-2612

SUBJECT: 2025 MFT HMA Materials Award

SUBMITTAL DATE: 06/26/2025

SUBMITTED BY: Dave Clark, Public Works Director

APPROVED FOR	Kyle Gill,	<u>06/26/2025</u>
COUNCIL AGENDA:	City Manager	Date

EXHIBITS (If applicable): Bid Documents

EXPENDITURE	AMOUNT	CONTINGENCY FUNDING
ESTIMATE: \$97,000.00	BUDGETED: \$100,000.00	REQUIRED: \$0.00

IF IT IS THE WISH OF THE COUNCIL TO SUPPORT RECOMMENDATIONS CONTAINED IN THIS REPORT, THE FOLLOWING MOTION IS SUGGESTED:

“I move to approve the bid from Ne-Co Asphalt Co., Inc. in the amount of \$97,000.00 for supplying Hot Mix Asphalt (HMA) as required at various locations around the City of Mattoon under the 2025 MFT General Maintenance Program and for the Mayor to sign the Illinois Department of Transportation BLR 12330.”

SUMMARY OF THE TOPIC FOR WHICH A COUNCIL DECISION IS REQUESTED:

This is the bid from Ne-Co Asphalt Co., Inc. to provide Hot Mix Asphalt material on an as need basis for various locations around the city under the already approved 2025 MFT GM plan. The bid documents are attached

All work will be paid from 121-5321-354.



Proposal Submitted By:

Contractor's Name

Ne-Co Asphalt Co., Inc.

Contractor's Address

P.O. Box 25

City

Charleston

State

IL

Zip Code

61920

STATE OF ILLINOIS

Local Public Agency

City of Mattoon

County

Coles

Section Number

25-00000-02-GM

Street Name/Road Name

Various

Type of Funds

MFT

☒ Material proposal ☐ Deliver and Install Proposal ☐ Plans

For a County and Road District Project

Submitted/Approved

Highway Commissioner Signature & Date

Submitted/Approved

County Engineer/Superintendent of Highways Signature & Date

For a Municipal Project

Submitted/Approved/Passed

Signature & Date

Official Title

Mayor, City of Mattoon

Department of Transportation

Released for bid based on limited review

Regional Engineer Signature & Date

11 06/02/21

Note: All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed.

Local Public Agency	County	Section Number
City of Mattoon	Coles	25-00000-02-GM

NOTICE TO BIDDERS

Sealed proposals for the project described below will be received at the office of Mattoon City Clerk

208 N 19th Street
 Address

until 11:00 AM on 06/20/25
 Time Date

1. Plans and proposal forms will be available in the office of

Mattoon City Clerk, 208 N 19th Street, Mattoon, IL 61938

2. ☒ Prequalification

If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form 8C 57) in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.

- The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Material/Deliver and Install Proposals.
- A proposal guaranty in the proper amount, as specified in the BLRS Special Provision for Bidding Requirements and Conditions for Material/Deliver and Install Proposals, will be required. See the attached Special Provisions for specific instructions for proposal guaranty for this proposal packet.
- The successful bidder at the time of execution of the contract will be required to deposit a contract bond or proposal guaranty as provided for in the special provisions. Failure on the part of the contractor to deliver the material within the time specified or to do the work specified herein will be considered just cause to forfeit his surety as provided in Article 108 10 of the Standard Specifications.
- Proposals shall be submitted on forms furnished by the Awarding Authority and shall be enclosed in an envelope endorsed "Material Proposal, Section 25-00000-02-GM".

By Order of

Awarding Authority

City of Mattoon

County Engineer/Superintendent of Highways/

Municipal Clerk

City Clerk

Date

Material Proposal or Deliver & Install Proposal

To

Awarding Authority

City of Mattoon

Awarding Authority Address

208 N 19th Street

City

Mattoon

State

IL

Zip Code

61938

If this bid is accepted within 45 days from the date of opening, the undersigned agrees to furnish or to deliver & install any or all of the materials, at the quoted unit prices, subject to the following:

- It is understood and agreed that the "Standard Specifications for Road and Bridge Construction", adopted 01/01/22 and the "Supplemental Specifications and Recurring Special Provisions", adopted 01/01/25, prepared by the Department of Transportation, shall govern insofar as they may be applied and insofar as they do not conflict with the special provision and supplemental specifications attached hereto.
- It is understood that quantities listed are approximate only and that they may be increased or decrease as may be needed to properly complete the improvement within its present limits or extensions thereto, at the unit prices stated and that bids will be compared on the basis of total price bid for each group.
- Delivery in total or partial shipments as ordered shall be made within the time specified in the special provisions or by the acceptance at the point and in the manner specified in the "Schedule of Prices". If delivery on the job site is specified, it shall mean any place or paces on the road designed by the awarding authority or its authorized representative.
- The contractor and/or local public agency performing the actual material placement operations shall be responsible for providing work zone traffic control, unless otherwise specified in this proposal. Such devices shall meet the requirements of and be installed in accordance with applicable provisions of the "Illinois Manual on Uniform Traffic Control Devices" and any referenced Illinois Highway Standards.

Local Public Agency	County	Section Number
City of Mattoon	Coles	25-00000-02-GM

5. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price. A bid will be declared unacceptable if neither a unit price nor a total price is shown.
6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals, will be required. The proposal guaranty as specified in the special provisions is attached.

If a bid bond is allowed or required, Department form BLR 12230 or a proposal guaranty check, complying with the specifications, made payable to: City of Mattoon, Illinois Treasurer of _____

The amount of the check is Three Thousand Dollars and no/100 ----- (\$ 3,000.00)

Attach Cashier's Check or Certified Check Here

In the event that one proposal guaranty check is intended to cover two or more bid proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual bid proposal. If the proposal guaranty check is placed in another bid proposal, state below where it may be found.

The proposal guaranty check will be found in the bid proposal for: Section Number _____).

Discounts will be allowed for payment as follows: _____ calendar days _____ calendar days

Discounts will not be considered in determining the low bidder

Bidder

By

Title

Address

City

State

Zip Code



**Illinois Department
of Transportation**

**Local Public Agency
Proposal Bid Bond**

Local Public Agency

County

Section Number

City of Mattoon

Coles

25-00000-02-GM

WE, _____ as PRINCIPAL, and
_____ as SURETY, are held jointly,

severally and firmly bound unto the above Local Public Agency (hereafter referred to as "LPA") in the penal sum of 5% of the total bid price, or for the amount specified in the proposal documents in effect on the date of invitation for bids, whichever is the lesser sum. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly pay to the LPA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LPA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the LPA for the above designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void; otherwise it shall remain in full force and effect.

IN THE EVENT the LPA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LPA acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this _____ Day of _____ Month and Year

Principal

Company Name

Signature & Date

By:

Title

(If Principal is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be affixed.)

Surety

Name of Surety

Signature of Attorney-in-Fact Signature & Date

By:

STATE OF IL

COUNTY OF

I _____, a Notary Public in and for said county do hereby certify that

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instruments as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this _____ day of _____ Month and Year

(SEAL, if required by the LPA)

Notary Public Signature & Date

Date commission expires _____

Local Public Agency

County

Section Number

City of Mattoon

Coles

25-00000-02-GM

ELECTRONIC BID BOND

☐ Electronic bid bond is allowed (box must be checked by LPA if electronic bid bond is allowed)

The Principal may submit an electronic bid bond, in lieu of completing the above section of the Proposal Bid Bond Form. By providing an electronic bid bond ID code and signing below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the LPA under the conditions of the bid bond as shown above. (If PRINCIPAL is a joint venture of two or more contractors, an electronic bid bond ID code, company/Bidder name title and date must be affixed for each contractor in the venture.)

Electronic Bid Bond ID Code

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Company/Bidder Name

--

Signature & Date

--

Title

--



**Illinois Department
of Transportation**

Material Proposal Schedule of Prices

Local Public Agency

County

Section Number

City of Mattoon

Coles

25-00000-02-GM

Material Proposal Schedule of Prices

Group No.	Item(s)	Delivery	Unit	Quantity	Unit Price	Total
1	HMA Surface CSE	FOB @ Plant	Ton	1000	\$ 97.00	\$97,000.00
	(Furnish Only)					

The undersigned firm certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm. The undersigned firm further certifies that it is not barred from contracting with any unit of State or local government as a result of a violation of State laws prohibiting bid-rigging or bid rotating

Bidder Signature & Date


6/20/2025

Address

City

State

Zip Code

P.O. Box 25

Charleston

IL

61920



Local Public Agency

City of Mattoon

County

Coles

Section Number

25-00000-02-GM

The following Special Provision supplement the "Standard Specifications for Road and Bridge Construction", adopted

January 1, 2022

, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures of Materials" in effect on the date of invitation of bids, and the Supplemental Specification and Recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of the above named section, and in case of conflict with any parts, or parts of said Specifications the said Special Provisions shall take precedence and shall govern.

Group I

This work includes furnishing hot-mix asphalt (HMA) for handwork.

HMA (Furnish Only)

HMA shall be furnished on a 24-hour notice. The HMA shall be available for pick up by the city in Coles County between the hours of 7:00 AM - 3:00 PM. The supplier shall load the material. The City will agree to order a minimum of 16 tons for the 24-hour requirement notice to apply. The city reserves the right to cancel this contract for inability to furnish material meeting these requirements.

All tickets shall include City of Mattoon Section #25-00000-02-GM.



Local Public Agency	County	Street Name/Road Name	Section Number
City of Mattoon	Coles	Various	25-00000-02-GM

Bidder's Name

Ne-Co Asphalt Co., Inc.

Bidder's Address

P.O. Box 25

City

Charleston

State

IL

Zip Code

61920

In accordance with your proposal submitted on 06/20/25, a copy of which is in our files, you have been awarded the contract for
Date of Submittal
furnishing the following materials required in the construction of the above designated project. Materials shall be inspected in
Construction or Maintenance
accordance with current Departmental policies.

Item	Unit of Measure	Quantity	Unit Price	Amount
Hot Mix Asphalt Surface Mix	Ton	1,000	\$97.0000	\$97,000.00
Total				\$97,000.00

Terms

2025 HMA Contract

Shipping Instructions

NA

For Municipal Projects

Municipal Official Signature & Date

--

For County And Road District Project

Highway Commissioner Signature & Date

--

Illinois Department of Transportation
Concurrence in Approval of Award

Regional Engineer Signature & Date

--

County Engineer/Superintendent of Highways Signature & Date

--

12.

**City of Mattoon
Council Decision Request**

MEETING DATE: 07/01/2025 CDR NO: 2025- 2613

SUBJECT: 2025 MFT PCC Materials Bid Award

SUBMITTAL DATE: 06/26/2025

SUBMITTED BY: Dave Clark, Public Works Director

APPROVED FOR	Kyle Gill,	<u>06/26/2025</u>
COUNCIL AGENDA:	City Manager	Date

EXHIBITS (If applicable): Bid Documents

EXPENDITURE	AMOUNT	CONTINGENCY FUNDING
ESTIMATE: \$199,100.00	BUDGETED: \$330,000.00	REQUIRED: \$0.00

IF IT IS THE WISH OF THE COUNCIL TO SUPPORT RECOMMENDATIONS CONTAINED IN THIS REPORT, THE FOLLOWING MOTION IS SUGGESTED:

“I move to approve the bid from Mid-Illinois Concrete in the amount of \$199,100.00 for supplying various Portland Cement Concrete (PCC) mixes on an as needed basis at various locations around the City of Mattoon and for the Mayor to sign the Illinois Department of Transportation BLR 12330.”

SUMMARY OF THE TOPIC FOR WHICH A COUNCIL DECISION IS REQUESTED:

This is the bid from Mid-Illinois Concrete to provide a variety of PCC mixes on an as needed basis at various locations around the city under the already approved 2025 MFT GM plan and the Concrete Cost Share Program. These mixes are as follows:

- PCC CL PP-1
- PCC CL PP-2
- PCC CL SI
- PCC CL PV
- CLSM (Flowable Fill)

The bid documents are attached.

All work will be paid either from 121-5321-351 or 130-5321-730.



**Illinois Department
of Transportation**

**Local Public Agency Material
Proposal or Deliver & Install Proposal**

Proposal Submitted By:

Contractor's Name

Mid-Illinois Concrete

Contractor's Address

1413 Dewitt Ave East

City

Mattoon

State

IL

Zip Code

61938

STATE OF ILLINOIS

Local Public Agency

City of Mattoon

County

Coles

Section Number

25-00000-03-GM

Street Name/Road Name

Various

Type of Funds

MFT

☒ Material proposal ☐ Deliver and Install Proposal ☐ Plans

For a County and Road District Project

Submitted/Approved

Highway Commissioner Signature & Date

Submitted/Approved

County Engineer/Superintendent of Highways Signature & Date

For a Municipal Project

Submitted/Approved/Passed

Signature & Date

Official Title

Mayor, City of Mattoon

Department of Transportation

Released for bid based on limited review

Regional Engineer Signature & Date

11 06/02/24

Note: All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed.

Local Public Agency	County	Section Number
City of Mattoon	Coles	25-00000-03-GM

NOTICE TO BIDDERS

Sealed proposals for the project described below will be received at the office of Mattoon City Clerk

208 N 19th Street	Address	until <u>11:00AM</u> on <u>06/20/25</u>	Name of Office Time Date
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1. Plans and proposal forms will be available in the office of

Mattoon City Clerk, 208 N 19th Street, Mattoon, IL 61938

2. ☐ Prequalification

If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57) in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.

- The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Material/Deliver and Install Proposals.
- A proposal guaranty in the proper amount, as specified in the BLRS Special Provision for Bidding Requirements and Conditions for Material/Deliver and Install Proposals, will be required. See the attached Special Provisions for specific instructions for proposal guaranty for this proposal packet.
- The successful bidder at the time of execution of the contract will be required to deposit a contract bond or proposal guaranty as provided for in the special provisions. Failure on the part of the contractor to deliver the material within the time specified or to do the work specified herein will be considered just cause to forfeit his surety as provided in Article 108.10 of the Standard Specifications.
- Proposals shall be submitted on forms furnished by the Awarding Authority and shall be enclosed in an envelope endorsed "Material Proposal, Section 25-00000-03-GM".

By Order of

Awarding Authority

City of Mattoon

County Engineer/Superintendent of Highways/
Municipal Clerk

City Clerk

Date

Material Proposal or Deliver & Install Proposal

To

Awarding Authority

City of Mattoon

Awarding Authority Address

208 N 19th Street

City

Mattoon

State

IL

Zip Code

61938

If this bid is accepted within 45 days from the date of opening, the undersigned agrees to furnish or to deliver & install any or all of the materials, at the quoted unit prices, subject to the following:

- It is understood and agreed that the "Standard Specifications for Road and Bridge Construction", adopted 01/01/22 and the "Supplemental Specifications and Recurring Special Provisions", adopted 01/01/25, prepared by the Department of Transportation, shall govern insofar as they may be applied and insofar as they do not conflict with the special provision and supplemental specifications attached hereto.
- It is understood that quantities listed are approximate only and that they may be increased or decrease as may be needed to properly complete the improvement within its present limits or extensions thereto, at the unit prices stated and that bids will be compared on the basis of total price bid for each group.
- Delivery in total or partial shipments as ordered shall be made within the time specified in the special provisions or by the acceptance at the point and in the manner specified in the "Schedule of Prices". If delivery on the job site is specified, it shall mean any place or paces on the road designed by the awarding authority or its authorized representative.
- The contractor and/or local public agency performing the actual material placement operations shall be responsible for providing work zone traffic control, unless otherwise specified in this proposal. Such devices shall meet the requirements of and be installed in accordance with applicable provisions of the "Illinois Manual on Uniform Traffic Control Devices" and any referenced Illinois Highway Standards.

Local Public Agency

County

Section Number

City of Mattoon

Coles

25-00000-03-GM

5. Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price. A bid will be declared unacceptable if neither a unit price nor a total price is shown.
6. A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals, will be required. The proposal guaranty as specified in the special provisions is attached.

If a bid bond is allowed or required, Department form BLR 12230 or a proposal guaranty check, complying with the specifications, made payable to: City of Mattoon, Illinois Treasurer of _____

The amount of the check is _____ (_____)

Attach Cashier's Check or Certified Check Here

In the event that one proposal guaranty check is intended to cover two or more bid proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual bid proposal. If the proposal guaranty check is placed in another bid proposal, state below where it may be found.

The proposal guaranty check will be found in the bid proposal for: Section Number _____).

Discounts will be allowed for payment as follows: _____ calendar days _____ calendar days

Discounts will not be considered in determining the low bidder

Bidder

Mid-Illinois Concrete

By

Dru Daily

Title

Operations Manager

Address

1805 S. 4th St. P.O. Box 785

City

Effingham

State

IL

Zip Code

62401



**Illinois Department
of Transportation**

**Local Public Agency
Proposal Bid Bond**

Local Public Agency City of Mattoon	County Coles	Section Number 25-00000-03-GM
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WE, MD-ILLINOIS CONCRETE, INC. as PRINCIPAL, and
MIDLAND STATES BANK as SURETY, are held jointly,

severally and firmly bound unto the above Local Public Agency (hereafter referred to as "LPA") in the penal sum of 5% of the total bid price, or for the amount specified in the proposal documents in effect on the date of invitation for bids, whichever is the lesser sum. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly pay to the LPA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LPA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the LPA for the above designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void; otherwise it shall remain in full force and effect.

IN THE EVENT the LPA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LPA acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this 28TH of MARCH, 2025
Day Month and Year

Principal

Company Name

MD-ILLINOIS CONCRETE, INC.

Signature & Date

By:

[Signature Box]

Title

CONTROLLER

Company Name

[Signature Box]

Signature & Date

By:

[Signature Box]

Title

[Signature Box]

(If Principal is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be affixed)

Surety

Name of Surety

MIDLAND STATES BANK

Signature of Attorney-in-Fact Signature & Date

By:

3/28/25

STATE OF IL
COUNTY OF Effingham

Caleb Mullins

Brian Ste Hartke

, a Notary Public in and for said county do hereby certify that

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instruments as their free and voluntary act for the uses and purposes therein set forth.

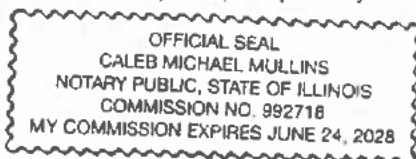
Given under my hand and notarial seal this 28th day of March
Day Month and Year

Notary Public Signature & Date

[Signature Box]

Date commission expires June 24th 2028

(SEAL, if required by the LPA)



Local Public Agency

County

Section Number

City of Mattoon

Coles

25-00000-03-GM

ELECTRONIC BID BOND

☐ **Electronic bid bond is allowed (box must be checked by LPA if electronic bid bond is allowed)**

The Principal may submit an electronic bid bond, in lieu of completing the above section of the Proposal Bid Bond Form. By providing an electronic bid bond ID code and signing below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the LPA under the conditions of the bid bond as shown above. (If PRINCIPAL is a joint venture of two or more contractors, an electronic bid bond ID code, company/Bidder name title and date must be affixed for each contractor in the venture.)

Electronic Bid Bond ID Code

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Company/Bidder Name

--

Signature & Date

--

Title

--



**Illinois Department
of Transportation**

Material Proposal Schedule of Prices

Local Public Agency

County

Section Number

City of Mattoon

Coles

25-00000-03-GM

Material Proposal Schedule of Prices

Group No.	Item(s)	Delivery	Unit	Quantity	Unit Price	Total
I	PV Class, PCC	Jobsite	Cu Yd	200	156. ⁵⁰	31,300. ⁰⁰
	SI Class, PCC	Jobsite	Cu Yd	800	156. ⁵⁰	125,200. ⁰⁰
	CLSM (Flowable Fill)	Jobsite	Cu Yd	100	100. ⁰⁰	10,000. ⁰⁰
	PP Class, PCC	Jobsite	Cu Yd	100	P21 = 160. ⁵⁰	16,050. ⁰⁰
					P22 = 165. ⁵⁰	500. ⁰⁰ Mo-c

The undersigned firm certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm. The undersigned firm further certifies that it is not barred from contracting with any unit of State or local government as a result of a violation of State laws prohibiting bid-rigging or bid rotating.

Bidder Signature & Date

6/10/25

Address

City

State

Zip Code

P.O. Box 785

Effingham

IL

62401



Local Public Agency	County	Section Number
City of Mattoon	Coles	25-00000-03-GM

The following Special Provision supplement the "Standard Specifications for Road and Bridge Construction", adopted

January 1, 2022, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways" and the "Manual of Test Procedures of Materials" in effect on the date of invitation of bids and the Supplemental Specification and Recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of the above named section, and in case of conflict with any parts, or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

Group I

This work includes furnishing Portland Concrete Cement (hereafter PCC) and CLSM for handwork.

PV, PP & SI Class, PCC (Furnish Only)

PV, PP & SI Class PCC shall be furnished on a 24-hour notice. The city shall order a minimum of 3 cubic yards of PCC at a time to be delivered within the city limits of Mattoon. The PCC shall meet Section 1020 mix design criteria located in Standard Specifications for Road and Bridge Construction manual by IDOT, adopted on January 1, 2022.

CLSM (Flowable Fill) (Furnish Only)

CLSM shall be furnished on a 24-hour notice. The city shall order a minimum of 3 cubic yards of PCC at a time to be delivered within the city limits of Mattoon.

These are estimated quantities only. No minimums or maximums have been determined. These are on an as needed basis to handle a variety of maintenance patching and paving needs that the city has needs for between May, 1, 2025 and April 30, 2026.



Local Public Agency	County	Street Name/Road Name	Section Number
City of Mattoon	Coles	Various	25-00000-03-GM

Bidder's Name

Mid-Illinois Concrete

Bidder's Address

1413 Dewitt Ave East

City

Mattoon

State

IL

Zip Code

61938

In accordance with your proposal submitted on 06/20/25, a copy of which is in our files, you have been awarded the contract for
Date of Submittal
furnishing the following materials required in the construction of the above designated project. Materials shall be inspected in
Construction or Maintenance
accordance with current Departmental policies.

Item	Unit of Measure	Quantity	Unit Price	Amount
PC Concrete Class PP1	CY	100	\$160.5000	\$16,050.00
PC Concrete Class PP2	CY	100	\$165.5000	\$16,550.00
PC Concrete Class SI	CY	800	\$156.5000	\$125,200.00
PC Concrete Class PV	CY	200	\$156.5000	\$31,300.00
CLSM (Flowable Fill)	CY	100	\$100.0000	\$10,000.00
Total				\$199,100.00

Terms

2025 PCCContract

Shipping Instructions

NA

For Municipal Projects

Municipal Official Signature & Date

--

For County And Road District Project

Highway Commissioner Signature & Date

--

Illinois Department of Transportation
Concurrence in Approval of Award

Regional Engineer Signature & Date

--

County Engineer/Superintendent of Highways Signature & Date

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13.

**City of Mattoon
Council Decision Request**

MEETING DATE: 07/01/2025 CDR NO: 2025-2614

SUBMITTAL DATE: 06/25/2025

SUBJECT: Plans and specifications for additions and remodeling of Fire Station #3.

SUBMITTED BY: Jeff Hilligoss, Fire Chief

APPROVED FOR	Kyle Gill,	06/26/2025
COUNCIL AGENDA:	City Manager	Date

EXHIBITS (If applicable): Fire Station #3 Plans and Bid Specifications

EXPENDITURE	AMOUNT	CONTINGENCY FUNDING
ESTIMATE: N/A	BUDGETED: N/A	REQUIRED: N/A

IF IT IS THE WISH OF THE COUNCIL TO SUPPORT RECOMMENDATIONS CONTAINED IN THIS REPORT, THE FOLLOWING MOTION IS SUGGESTED:

“I move to approve the plans and specifications for additions and remodeling of Fire Station #3, located at 2700 Marshall Avenue and authorize the solicitation of bids.”

SUMMARY OF THE TOPIC FOR WHICH A COUNCIL DECISION IS REQUESTED:

This project is to construct a new truck bay on the west side of the station, additional rooms on the east side of the station and remodel the existing kitchen and sleeping areas. With the construction of a new truck bay the design is to have a drive-thru bay to eliminate the backing of apparatus off of Marshall Avenue (Rt. 16), creating a safe environment. The existing bay would then be able to house an ambulance to be used when needed to reduce response time.

The remodeling will provide individual sleeping rooms and two separate bathrooms and showers. It will also redesign the roof structure to have a sloped roof over the existing flat roof, reducing the risk of leaks.

If approved the process will be to advertise by paper, email list and software used by the public works department. A pre-bid meeting will be held on July 16 and bids will be opened on July 30th. The City will reserve the right to accept and reject any and all bids.

Specifications are attached and are also available in the City Clerks' Office for viewing.

Project Manual

Mattoon Fire Department 2025 Fire Station #3 Addition

Mattoon, Illinois

Project No. 2824092

June 20, 2025

Architect / Engineer:

The Upchurch Group, Inc.

123 N. 15th St.

Mattoon, Illinois 61938

License #184-003401

Phone: 217.235.3177

upchurchgroup@upchurchgroup.com

OWNER: Mattoon Fire Department

ARCHITECT/ENGINEER: The Upchurch Group, Inc.; 123 N. 15th St.; Mattoon, Illinois 61938; (217) 235-3177

PROJECT MANUAL FOR: **2025 Fire Station #3 Addition**

A/E Project #: 2824092

DATE: June 20, 2025

DIVISION	SECTION	TITLE
0	BIDDING AND CONTRACT REQUIREMENTS	
	00 11 13	Advertisement for Bids
	00 41 13	Bid Form
	00 43 43	Prevailing Wage
1	GENERAL REQUIREMENTS	
	01 10 00	Project Summary
	01 20 00	Allowances
	01 26 00	Change Order Procedures
	01 29 00	Application for Payment Procedures
		Contractor's or Supplier's Partial Lien to Date form,
		Contractor's or Supplier's Final Waiver of Lien form
	01 31 19	Project Meetings
	01 33 00	Submittals
	01 40 00	Quality Control
	01 41 00	Regulatory Requirements
	01 51 00	Construction Facilities and Temporary Controls
	01 51 50	Use of Existing Facilities
	01 60 00	Product Requirements
	01 62 00	Storage & Protection
	01 70 00	Execution Requirements
	01 77 00	Closeout Procedures
2	EXISTING CONDITIONS	
	02 41 19	Selective Demolition
3	CONCRETE	
	03 30 00	Concrete Work
4	MASONRY	
	04 20 00	Unit Masonry
	04 72 00	Cut Stone
5	METALS	
	05 50 00	Miscellaneous Metal
6	WOOD AND PLASTICS	
	06 10 00	Rough Carpentry
	06 16 00	Sheathing
	06 17 53	Shop Fabricated Wood Trusses
	06 20 00	Finish Carpentry

DIVISION	SECTION	TITLE
7	THERMAL AND MOISTURE PROTECTION	
	07 21 00	Thermal Insulation
	07 26 00	Vapor Barrier
	07 42 00	Metal Siding
	07 42 93	Metal Soffit
	07 53 23	EPDM Membrane Roofing
	07 60 00	Flashing and Sheet Metal
	07 84 00	Fire Stopping
	07 92 00	Joint Sealers
8	DOORS AND WINDOWS	
	08 12 13	Metal Doors and Frames
	08 14 16	Wood Doors
	08 36 13	Sectional Overhead Doors
	08 41 13	Aluminum Entrances
	08 52 13	Clad Wood Windows
	08 71 00	Hardware
	08 80 00	Glazing
	08 83 00	Mirrors
9	FINISHES	
	09 05 61	Moisture Vapor Emission Control
	09 21 16	Gypsum Board Systems
	09 51 00	Suspended Acoustical Ceilings
	09 65 13	Rubber Base
	09 67 23	Resinous Flooring
	09 77 00	Fiberglass Reinforced Panels
	09 90 00	Painting
10	SPECIALTIES	
	10 14 00	Identifying Devices
	10 28 00	Toilet and Bath Accessories
	10 44 00	Fire Extinguishers, Cabinets and Accessories
12	FURNISHINGS	
	12 30 40	Manufactured Casework
22	PLUMBING	
	22 05 00	Basic Mechanical Materials and Methods
	22 07 00	Plumbing Insulation
	22 40 00	Plumbing Piping, and Fixtures
23	HEATING, VENTILATING, AND AIR CONDITIONING	
	23 05 93	Air Systems Testing, Adjusting and Balancing
	23 07 00	Mechanical Insulation
	23 09 00	Controls
	23 23 00	Refrigeration Piping and Specialties
	23 30 00	Air Distribution
	23 34 00	HVAC Fans
	23 54 00	Forced Air Furnaces
	23 55 00	Fuel Fired Heaters
	23 63 13	Air Cooled Condensing Units

DIVISION	SECTION	TITLE
26	ELECTRICAL	
	26 05 00	Basic Electrical Materials and Methods
	26 05 03	Equipment Wiring
	26 05 26	Grounding
	26 05 53	Electrical Identification
	26 24 16	Panelboards
	26 28 19	Disconnect Switches
	26 50 00	Lighting Fixtures
27	COMMUNICATIONS	
	27 00 00	Communications Requirements
31	EARTHWORK	
	31 23 10	Earthwork
	31 23 13	Subgrade Preparation
	31 31 16	Termite Protection
32	EXTERIOR IMPROVEMENTS	
	32 11 23	Aggregate Base Courses
	32 13 13	Concrete Paving
	32 13 36	Pavement Markings
	32 92 19	Seeding
33	UTILITIES	
	33 10 00	Water Utilities
	33 40 00	Sewers

AIA Documents (Continued on Next Page)

AIA Documents

DIVISION	SECTION	TITLE
AIA		All AIA Documents, in the back of this book are in Blank Draft Form, if you need a Filled Final Copy please contact A/E
		A-101-2017 Standard Form of Agreement Between Owner and Contractor
		A-101-2017 Exhibit A Standard Form of Agreement Between Owner and Contractor
		A201-2017 General Conditions of the Contract
		A310-2010 Bid Bond
		A312-2010 Performance Bond
		A312-2010 Labor & Material Payment Bond
		A701-2018 Instructions to Bidders
		G701-2017 Change Order
		G702-1992 Application for Payment
		G703-1992 Application for Payment continuation sheet
		G704-2017 Certificate of Substantial Completion
		G705-2001 List of Subcontractors
		G706-1994 Contractor's Affidavit of Debts and Claims
		G706A-1994 Contractor's Affidavit of Release of Liens
		G709-2018 Proposal Request
		G710-2017 Architect's Supplemental Instructions
		G714-2017 Change Directive
		G716-2004 RFI Request for Information

END TOC

BIDDING & CONTRACT REQUIREMENTS
Section 00 11 13 - Advertisement for Bids

Mattoon Fire Station, Mattoon, Illinois will receive bids for the project captioned below. Bid should be clearly marked and sent or delivered to the Mattoon City Clerk's Office located at 208 N. 19th St., Mattoon, IL 61938 for:

2025 Fire Station #3 Addition
Mattoon Fire Department
2700 Marshall Ave.
Mattoon, Coles County, Illinois

Bid Opening will be on **July 30, 2025 at 2:00 p.m.** prevailing time at the Mattoon Fire Department; 208 N. 19th St., Mattoon, IL 61938. Bids will be publicly opened and read immediately after specified closing time.

The project consists of renovating and expanding the existing fire station. A new apparatus bay and sleeping quarters will be constructed. Work also includes plumbing, ventilation, electrical, and concrete paving

Prevailing wages in accordance with Coles County is required.

Bid security is required, in the form of a bid bond or certified check in an amount equal to ten percent (10%) of the base bid as guarantee that the bid will not be withdrawn within 30 days after the date of opening of bids, and that the successful bidder will enter into a Contract for the work awarded to them. Bid security shall be made payable to Mattoon Fire Department.

Bonds are required: Both a Performance Bond and a Labor and Payment Bond are required for this project, each in an amount equal to 100% of the contract price.

Your Bid will be required to be submitted under a condition of irrevocability for a period of 30 days after submission.

The Owner reserves the right to accept or reject any or all Bids or any part thereof, to waive any informality in bidding, and to accept bids deemed most favorable to the owner.

Award of a contract is anticipated to occur on **Tuesday, August 5, 2025**. Begin construction on **Monday, August 25, 2025**. The Work shall be Substantially Complete on or before **Friday, January 30, 2026**.

Prospective Bidders are able to; view, download and print, and/or order hard copies for delivery; full sets of the plans and specifications at www.upchurchgroupplanroom.com. Visit plan room for directions, or send email (include project name, your name, your company name, address, and phone number) requesting instructions to aclimer@upchurchgroup.com. There will be a \$25.00 non-refundable fee to download; the non-refundable fee for hard copies will vary depending on size of plans and specs. You will be able to view full sets before purchasing. All official notifications, meeting minutes, addenda, if any, and other Bidding Documents will be offered only through www.upchurchgroupplanroom.com.

A **Pre-bid meeting** will be held on **July 16, 2025 at 9:00 a.m.** at the job site.

Mattoon Fire Department

Jeff Hilligoss
hilligossj@mattoonillinois.org

END 00 11 13

BIDDING & CONTRACT REQUIREMENTS
Section 00 41 13 - Bid Form

DATE: _____

BID TO: Mattoon Fire Department

BID FROM: _____
(Bidder's Name)

(Bidder's Address)

THE UNDERSIGNED:

1. Acknowledges receipt of:

a. Project Manual for **2025 Fire Station #3 Addition**; dated **June 20, 2025**

b. Drawings; dated **June 20, 2025**

c. Addenda: *(fill in following table as addenda are issued)*

#	Dated:	#	Dated:
#	Dated:	#	Dated:
#	Dated:	#	Dated:

2. Has examined the site and all bidding documents. They shall be responsible for performing all work specifically required of them by all parts of the bidding documents, including all drawings and specifications for the entire project even though such work may be included as related requirements specified in other divisions or sections.

3. Agrees:

a. To hold this bid open until 30 calendar days after bid opening date.

b. To accept the provisions of the "Advertisement for Bids" regarding disposition of bid security.

c. To enter into and execute a contract with the Owner if awarded on the basis of this bid, and in connection therewith to:

(1) Furnish bonds and insurance required by the bidding documents.

(2) Accomplish the work in accordance with the Contract.

(3) Complete the work within the contract time herein specified.

4. **CONTRACT TIME.** The Department anticipates issuing a Notice of Award on **August 5, 2025**. The work shall be substantially complete no later than **January 30, 2026**.

BIDDING & CONTRACT REQUIREMENTS
Section 00 41 13 - Bid Form

BASE BID: Bidder agrees to perform all work including allowance, exclusive of alternate bids, as set forth in the bidding documents, for the sum of:

_____ DOLLARS (\$_____)

PROPOSED PRODUCT SUBSTITUTION LIST

The base bid is understood to include only those products which are specified in the bidding documents. Following is a list of substitute products which bidder proposes to furnish on this project, with the difference in price being added to or deducted from the base bid.

Bidder understands that acceptance of any proposed substitution is at Owner's option. Approval or rejection of any substitutions listed below will be indicated prior to executing the Contract.

<u>MANUFACTURER'S NAME AND PRODUCT</u>	<u>ADD AMOUNT</u>	<u>DEDUCT AMOUNT</u>

Bidder's proposal shall be in accordance with the provisions of, "Product Requirements" section.

EVALUATION: Contract award will be made in accordance with "Instructions To Bidders". Only the successful bidder's proposed product substitution list will be evaluated.

BIDDER'S NAME: _____

BIDDING & CONTRACT REQUIREMENTS**Section 00 41 13 - Bid Form**

REPRESENTATIONS & CERTIFICATIONS: The bidder by the execution of this Bid Form makes the following representations and certifications as a part of his bid on the project identified in the Bid Form. In the case of a joint venture bid, each party represents and certifies as to their own organization.

1. AVAILABILITY. The number and amount of other contracts and awards pending which I am or will become obligated to perform, now and during the course of my work on this project, will not interfere with or hinder the timely prosecution of my work.
2. INDEPENDENT PRICE DETERMINATION. The contract sum in this bid has been arrived at independently, without consultation, communication or agreement for the purpose of restricting competition.
3. OPEN COMPETITION. I have not offered any money or other valuable thing to any person to induce him not to bid on this project or as recompense for his not having bid on this project, and therefor have not violated the prevention of competition provisions contained in the Illinois Purchasing Act in preparing my bid.
4. PREVAILING WAGE. I will pay, and require each subcontractor to pay, not less than the general prevailing rate of hourly wages for work of a similar character in the locality in which the work is performed, and not less than general prevailing rate of hourly wages for legal holidays and overtime work, as determined by the Illinois Department of Labor, pursuant to the Illinois Revised Statutes, ch. 48, par. 39s-1 et. seq.

RESPECTFULLY SUBMITTED, signed and sealed this _____ day of _____, 2025.

Contractor Firm Name

ATTEST:

Name

Signature

Corporate Secretary (Corporations Only)

Title

Official Address

Telephone Number

SIGNATURE IS REQUIRED ON THIS PAGE.

BIDDING & CONTRACT REQUIREMENTS
Section 00 43 43 - Prevailing Wage Act

1. GENERAL

1.01 PREVAILING WAGE ACT

- A. Contractor shall not pay less than the prevailing rates of wages to all laborers, workers, and mechanics performing work under this contract, and shall comply with the requirements of the Illinois Wages of Employees on Public Works Act(820 ILCS 130/1-12).

For information regarding current prevailing wage rates, please refer to the Illinois Department of Labor's website at: <http://www.state.il.us/agency/idol/rates/rates.HTM>.

The General Conditions, Supplementary Conditions and Division 1, General Requirements are hereby made a part of each division and section of the project specifications.

1. GENERAL.

1.01 REQUIREMENTS INCLUDE.

- A. Work covered by contract documents is delineated on the Drawings and specified in the Project Manual, consisting generally of the following:
 - 1. **Base Bid:** The project consists of renovating and expanding the existing fire station. A new apparatus bay and sleeping quarters will be constructed. Work also includes plumbing, ventilation, electrical, and concrete paving.

1.02 DEFINITIONS. The following terms are used throughout the contract documents. The work will be governed in accord with the definitions.

- A. Fabricated: Fabricated pertains to items specifically assembled or made of selected materials or components to meet individual design requirements.
- B. Manufactured: Manufactured means standard units, usually mass produced by an established manufacturer of the respective item.
- C. Provide: Provide means furnish and install.
- D. Shop fabricated or shop made: Shop fabricated, or shop made refers to item made by the Contractor in their own shop.

1.03 PERMITS. Contractor shall apply for and pay for all permits relating to the construction of the project.

1.04 CONSTRUCTION PERIOD.

- A. The work area will become available to the Contractor after **Monday, August 25, 2025.**
- B. The work shall be substantially complete for the Apparatus Bay Addition on or before **Friday, November 21, 2025.**
- C. The work shall be substantially complete for the sleeping quarters on or before **Friday, January 30, 2026.**
- D. The work shall achieve Final Completion on or before **February 13, 2026.**

1.05 PRODUCTS

- A. No Asbestos Containing Materials or Other Hazardous Materials Shall be Furnished.
- B. No paint containing lead shall be furnished.

1.06 CONTRACTOR USE OF PREMISES.

- A. Confine operations at site to area permitted by:
 - 1. Law.
 - 2. Permits.
 - 3. Contract.
 - 4. Owner's representative.
 - a. Confer with Owner's representative and obtain full knowledge of all sites rules and regulations affecting work.
 - b. Conform to site rules and regulations while engaged in project construction.

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Section 01 10 00 - Project Summary

- c. Site rules and regulations take precedence over others that may exist outside such jurisdiction.
 - d. Employee list: The Owner's representative may examine Contractor's list of employees, including those of their subcontractors and their agents.
 - e. Vehicle use: Rigidly enforce the following:
 - 1) Keep all vehicles, mechanized or motorized equipment locked at all times when parked and unattended on Owner's premises.
 - 2) Do not, under any circumstances, leave any vehicle unattended with motor or engine running, or with ignition key in place.
 - 3) Parking: Permitted only in areas designated by Owner's representative.
 - 4) All traffic control subject to Owner's representative's approval.
 - f. Existing paving to remain.
 - 1) Protect and maintain existing paving.
 - 2) Do not damage existing paving with contractor vehicles or equipment.
- B. Do not unreasonably encumber site with materials or equipment.
- C. Do not load structure with weight that will endanger structure.
- D. Assume full responsibility for protection and safekeeping of products stored on premises.
- E. Move all stored products or equipment which interfere with operations of Owner.
- F. Obtain and pay for use of additional storage or work area needed for operations.
- G. Contractors and A/E's will provide reasonable access to the site and shall not prohibit nor interfere with lawfully conducted inspections or site visits by properly identified representatives of regulatory agencies or collective bargaining units.
 - 1. Notwithstanding the above, Owner's regulations governing site security shall be observed.
 - 2. All site visitors shall comply with personal protection regulations, including hard hats.
 - 3. Reasonable proof of identification and signature to the visitor's log may be required of the visitors by the contractor's site superintendent.
- H. Fire Protection:
 - 1. Fires: Each Contractor shall prohibit the lighting of fires about the premises and use due diligence to see that such prohibition is enforced. Debris and waste materials shall not be burned at the construction site but shall be promptly removed to prevent the accumulation of combustibles on the site or within the building.
 - 2. Welding and Cutting: It shall be the responsibility of each Contractor to take precautionary measures to prevent fire.
 - 3. Flammables: Gasoline and other fuels shall be kept and handled in accord with NFPA and in UL Listed and Labeled safety cans and shall be stored away from hazardous work areas.

1.07 SEX OFFENDERS / VIOLENT OFFENDERS AGAINST YOUTH / IL CRIMINAL HISTORY COVICTION
The Contractor, prior to commencing work, shall submit a letter to the A/E certifying compliance with the following requirement:

The Contractor shall not send to the Owner's building or Owner's property any employee or agent who would be prohibited from being employed by the Owner due to a conviction of a crime listed in 105 ILCS 5/10-21.9, or who is listed in the Statewide Sex Offender Registry or the Statewide Violent Offender Against Youth Database. The Contractor shall obtain a fingerprint-based criminal history records check before sending any employee or agent to any Owner building or Owner property, and shall cover any cost incurred by such criminal records check. The Contractor is responsible for providing the Owner and A/E with a completed form IL493-0691 for each affected employee prior to allowing them to work on Owner's property, and shall cover any cost incurred by such background testing.

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Section 01 10 00 - Project Summary

Additionally, at least quarterly, the Contractor shall check if an employee or agent is listed on the Statewide Sex Offender Registry or the Statewide Violent Offender Against Youth Database. The Contractor shall maintain employee copies of this list in the Contractor's Field Office and this list shall be accessible to the Owner and Architect/Engineer to review upon demand.

- 1.08 USE OF TOBACCO PRODUCTS: The use of tobacco products on Owner property is ***not*** permitted.
- 1.09 DRUG FREE WORKPLACE. The Contractor by submitting its bid certifies that it will provide a drug free workplace and that it is in compliance with the requirements of the Drug Free Workplace Act 30 ILCS580.1 et. seq., and the Substance Abuse Prevention on Public Works Projects Act PA095-0635. A contractor employee who is non-compliant with this policy will be denied access to all of the Owner's premises.

END 01 10 00

1. GENERAL

- A. Each Bidder shall include in their proposed Contract Price for Base Bid Work, a contingency allowance in the amount of \$30,000.00.
- B. The Contingency allowance shall only be used as directed for the Owner's purposes and only by way of Change Orders, which shall designate the amounts to be charged to the Contingency Allowance. Contractor's related cost for work so ordered and charged to the Contingency Allowance are not to be included in the Contract Sum. (Other than the allowance itself) since the Change Orders will include such cost and allowable overhead/profit margins.
- C. At the time of project closeout, unused amount remaining in Contingency Allowance will be credited to the Owner by Change Order.

END 01 20 00

1. GENERAL

1.01 DEFINITION

A Contract consists of a scope of work or service to be performed within a definite period of time for a specified compensation. Upon execution of the Owner/Contractor Agreement, the Contract may not be changed except as specified herein. When it becomes necessary to modify any of the elements of the contract (scope, time or compensation) a **Change Order AIA G701 2017** (attached) will be issued. The exception to this is detailed in article 1.06

1.02 REQUESTS FOR CHANGE

- A. Requests for changes must be written (emailed or hard copy).
- B. The Contractor or Owner should make their requests to the Architect/Engineer.
- C. Subcontractors, suppliers and others should make requests through the Contractor.
- D. Requests should be made in a timely manner to allow for proper execution of Change Orders. Article 1.07 addresses the procedure when a change is needed more quickly than the normal procedure allows.
- E. **Request for Information AIA G716 2004** should be made on the form attached and submitted in hard copy or via email transmission.

1.03 PROPOSAL REQUEST: The A/E will issue a **Proposal Request AIA G709 2018** (attached) to the Contractor.

1.04 CONTRACTOR'S PROPOSAL

- A. The Contractor shall respond to the request by providing a Proposal to the A/E. In order for the Proposal to be properly evaluated, it shall include backup data in the form of detailed breakdown of all direct costs and markups. Quotations from subcontractors and/or suppliers may also be required as backup data.
- B. If a change affects work which is covered by unit prices in the Contract, such prices shall be used as the basis for adjustments to the contract sum.
- C. Material:
 - 1. Material is a direct cost that may be reduced, increased or remain unchanged as a result of a change in the Work. Material costs (both reductions and increases) shall be described in the Contractor's Proposal.
 - 2. Material costs shall be listed as follows:
 - a. Material type
 - b. Quantity
 - c. Unit cost
 - d. Total cost
 - e. Miscellaneous cost(s) associated with a material.
 - 3. If applicable, taxes associated with materials may be included.
- D. Labor:
 - 1. Labor is a direct cost that may be reduced, increased or remain unchanged as a result of a change in the Work. Labor costs (both reductions and increases) shall be described in the Contractor's Proposal.
 - 2. Labor costs can include:
 - a. Wages
 - b. Benefits

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Section 01 26 00 - Change Order Procedures

- E. Worker's Compensation Insurance. Other statutory requirements (FUTA, SUTA, etc.)
- F. Equipment
 - 1. Equipment needed to accomplish the Work is a direct cost that may be reduced, increased or remain unchanged as a result of a change in the Work. Equipment costs (both reductions and increases) shall be described in the Contractor's Proposal.
 - 2. Equipment costs can include:
 - a. Cost of equipment at a reasonable rate (hourly, daily, weekly, etc., as appropriate).
 - b. Cost of mobilization of equipment.
 - c. Cost of consumables associated with use of equipment.
- G. Maximum allowable markup for Overhead and Profit
 - 1. Prime Contractor:
 - a. If work is performed is performed by own forces: 18% of the direct costs (Materials + Labor + Equipment).
 - b. If work is performed is performed by a subcontractor: 6% of the subcontractor's direct costs (Materials + Labor + Equipment).
 - 2. Subcontractor:
 - a. If work is performed is performed by own forces: 18% of the direct costs (Materials + Labor + Equipment).
 - b. If work is performed is performed by a sub-subcontractor: 6% of the sub-subcontractor's direct costs (Materials + Labor + Equipment).

1.05 EFFECT ON GUARANTEE/WARRANTY

- A. When a proposed change may affect material, equipment, systems or other assemblies which have a specified guarantee or warranty other than the one year warranty described in Article 13.2.2 of the General Conditions, the Contractor shall submit to the A/E written evidence of the effect the proposed change would have on such guarantee or warranty. This evidence shall be written by an authorized representative of the entity which will be guaranteeing or warranting the material, equipment, system, or other assembly. A form which can be used for this purpose is available from the A/E. A sample is included in this section.
- B. Proposed changes which negatively affect such guarantees or warranties will not be approved.

1.06 EXECUTION OF CHANGE ORDER

- A. The A/E will initiate a Change Order.
- B. The A/E's signature expresses their approval of the change and its terms.
- C. The Contractor's signature expresses their willingness to make the change and acceptance of the terms of the change.
- D. The Owner's signature expresses their approval of the change, acceptance of the terms of the change and authorization to execute the change.

1.07 MINOR CHANGES

- A. The Architect/Engineer may direct the Contractor to make a minor change which does not affect the contract sum, contract time or any guarantee/warranty.
- B. Such **Architect's Supplemental Instructions AIA G710 2017** (attached) will be processed using written communication.

1.08 CONSTRUCTION CHANGE DIRECTIVE

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- A. In order to expedite the work and avoid or minimize delays in the work which may affect the contract sum or contract time, the A/E may amend the contract documents **Construction Change Directive AIA G714 2017** (attached).
 - B. The A/E's signature acknowledges the issuance of the directive and approval of the change.
 - C. The Contractor's signature expresses their willingness to make the change and confirms the cost and time data contained thereon.
 - D. The Owner's signature expresses their approval of the change, acceptance of the cost and time data and authorization to execute the change.
- 1.09 FORMS: The following pages are copies of the forms referenced in this section. Copies are available from the A/E.
- A. **Change Order AIA G701 2017**
 - B. **Proposal Request AIA G709 2018**
 - C. **Architect's Supplemental Instructions AIA G710 2017**
 - D. **Construction Change Directive AIA G714 2017**
 - E. **Request for Information AIA G716 2004**

END 01 26 00

Effect on Guarantee/Warranty

Project Name:

Project No:

Contract for:

Date Initiated:

Name & Address of Contractor:

Name & Address of Guarantor/Warrantor:

Name & Address of Owner:

Name & Address of A/E:

The Upchurch Group, Inc.

123 N. 15th Street

Mattoon, Illinois 61938

Phone: 217/235-3177; FAX 217/258-6115

The entity identified above as **Guarantor/Warrantor** is furnishing or providing:

Identify the material, equipment, systems or other assemblies being furnished or provided for this project.

The Guarantor/Warrantor has examined Request for Proposal No. _____ and has determined that:

- ☐ The proposed change will not have any effect on the guarantee or warrantee specified for this project.
- ☐ The proposed change is not acceptable with regard to the guarantee or warrantee specified for this project for the following reason(s):

Representing the Guarantor/Warrantor:

Signature

Printed Name

Date

1. GENERAL

1.01 REQUIREMENTS INCLUDE

- A. Payment to Contractor(s) will be made monthly in accordance with the progress of the work and the terms of the Contract Documents.
- B. Pay application documents shall be submitted to the Architect/Engineer no later than ten days after the end of the work period.
- C. Within five days of receipt the A/E will review the Contractor's pay application documents for correctness; and either return them for corrections or approve and submit them to the Owner for payment.

1.02 APPLICATION FOR PAYMENT

- A. The values claimed by the Contractor on each progress payment shall be equal to the Work completed and Materials Stored during the period covered by the application and shall not include the value such work or materials anticipated beyond the end of the period.
- B. The Contractor shall submit their application for payment using the forms provided by the A/E (*or reasonable facsimiles of these forms*). (See the sample forms which follow.)
- C. The format of the application shall follow that which appears on the approved Schedule of Values. (See Section 01 33 00).
- D. The A/E will verify that the amounts requested in each category of work are appropriate to the stage of construction in evidence at the end of the work period defined in the Owner/Contractor Agreement.

1.03 STORED MATERIALS

- A. DEFINITION
 - 1. Stored Materials are items which have been appropriated for use on this specific project.
 - 2. Stored Materials consists of items which become a permanent part of the project, including:
 - a. Materials
 - b. Equipment
 - c. Fixtures
- B. The Owner will pay for all material stored for future use on its project. It is in fact encouraged in order that the construction schedule can be maintained or, in some instances, accelerated.
- C. STORED ON-SITE: Materials stored on-site are not subject to any special provisions (except proper storage practices - See Section 01 60 00).
- D. STORED OFF-SITE
 - 1. Materials stored off-site must be clearly tagged, identifying that they are for use on this project.
 - 2. Pay Applications for such materials must be accompanied by a Certificate of Insurance.
 - 3. Materials stored off-site are subject to the same protection requirements as those

stored on-site (See Section 01 60 00).

E. VERIFICATION:

1. The A/E will attest to the existence of stored materials claimed in the Contractor's Pay Application. Off-site storage areas shall be available for inspection by the A/E and/or the Owner's representative upon reasonable notice.
2. The Contractor shall reimburse the A/E for travel expenses associated with verification of materials stored off-site. Travel costs include mileage (at the rate of \$0.70 per mile) and travel time (based on the A/E standard billable rates for the staff involved).

F. FORMAT

1. The value claimed for materials, equipment, fixtures or furnishings appropriated to this project during the period covered by a specific pay application shall be entered in the Application for Payment (on the appropriate line).
2. The value of stored material shall be included with work in place and placed in column 4 of all subsequent Applications for Payment.

1.04 WAIVERS OF LIEN

A. Partial Lien Waivers

1. Beginning with the first payment request, and with each succeeding payment request, the Contractor shall submit to the Architect/Engineer partial lien waivers as follows:
 - a. Contractor: a waiver in an amount equal to the total amount paid to them on the previous month's pay request.
 - b. Subcontractors: a waiver from each subcontractor that was included in the previous month's pay request, in an amount at least equal to the value claimed on the previous month's pay request less retainage. This retainage shall not exceed the percentage retained by the Owner of the Contractor's payment.
 - c. Suppliers: a waiver from each supplier that was included in the previous month's pay request, in an amount at least equal to the value claimed on the previous month's pay request less retainage. This retainage shall not exceed the percentage retained by the Owner of the Contractor's payment.
 - d. Certified Payroll Records
2. See the sample Partial Lien Waiver form which follows (attached **Sample Lien Waiver**)

B. FINAL LIEN WAIVERS: The Contractor's request for final payment shall include:

1. From the Contractor: a Final Lien Waiver in an amount equal to the total amount of their contract, including all Change Orders.
2. From Subcontractors: a Final Lien Waiver in an amount equal to the total value of their work on the project, including all change orders.
3. From Suppliers: a Final Lien Waiver in an amount equal to the total value of all materials furnished to the project, including all change orders.
4. See the sample Final Lien Waiver form which follows (attached **Sample Final Lien Waiver**).

1.05 CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS

- A. Beginning with the second request for payment and with each succeeding request for payment, the Contractor shall certify that to the best of their knowledge, the waivers of lien provided represent all those that have or may have liens against the Owner's property

which would arise out of the performance of this contract, with any exceptions noted.

- B. The Contractor shall make their final Release of Liens conditional upon receipt of final payment.
- C. See the sample lien waiver form which follows (attached **Sample Lien Waiver**).

1.06 CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS

- A. The Contractor's final request for payment shall be accompanied by an affidavit which certifies that they have paid in full all obligations arising out of their performance of this contract, noting any exceptions.
- B. See the sample form which follows (attached **Document: AIA G706-1994**).

1.07 CERTIFIED PAYROLL RECORDS

- A. General Contractor shall submit Certified Payroll Records for all employees employed to work on project.
- B. Certified Payroll Register shall include the minimum information:
 - 1. Project Name
 - 2. Contractor
 - 3. Customer (General Contractor) or Subcontractor
 - 4. Employee Name, Social Security (Last Four digits)
 - 5. Days worked each week
 - 6. Rate of Pay
 - 7. Gross Pay
 - 8. Deductions
 - 9. Net Pay
- C. Form shall be certified by Payroll Officer of each contractor or subcontractor to which workers are employed.

1.08 SUMMARY

- A. The **first** request for payment shall consist of an original and one copy of the Application and Certification for Payment (attached **Document AIA G702-1992 & G703-1992**). Partial waiver of lien from General Contractor for amount requested and Certified Payroll Records to date.
- B. **Subsequent** requests for payment shall consist of:
 - 1. An original + one copy of the Application and Certification for Payment (**attached Document: AIA G702-1992 & G703-1992 Continuation**).
 - 2. An original + one copy of the Contractor's Affidavit of Release of Liens (**attached Document: AIA G706A-1994**).
 - 3. An original + one copy of all required sample partial lien waivers (attached **Document: TUG sample form**).
 - 4. Certified Payroll records from General Contractor employees and all Sub-Contractor employees to date.
- C. The **Final** Request for Payment shall consist of:
 - 1. An original + one copy of the Application and Certification for Payment (attached **Document: AIA G702-1992 & G703-1992 Continuation**).
 - 2. An original + one copy of the Contractor's Affidavit of Release of Liens (attached **Document: AIA G706A-1994**)
 - 3. An original + one copy of the Contractor's Affidavit of Payment of Debts and Claims

DIVISION 1 - GENERAL REQUIREMENTS

Section 01 29 00 - Application for Payment Procedures

(attached **Document: AIA G706-1994**).

4. An original + one copy of all required final lien waivers (attached **Document: TUG sample lien waiver form**).
5. Certified Payroll records from General Contractor employees and all Sub-Contractor employees to date.

1.09 FORMS: The following pages are copies of the Documents referenced in this section. Copies (and some electronic files) for Contractor use are available from the Architect/Engineer.

END 01 29 00

Contractor's or Supplier's Partial Waiver of Lien to Date

State of Illinois

County of:

To Whom it many concern:

Whereas the undersigned has been employed by: _____
Name of Contractor

To furnish for the premise known as: _____
Name of Project

Which is located at: _____

Of which the Owner is: _____

The undersigned, for and in consideration of:

_____ Dollars (\$_____)

and other good and valuable considerations, the receipt of which is hereby acknowledged, do(es) hereby waive and release any and all lien or claim or right of lien under the statutes of the state in which the premises is located, relating to Mechanic's Liens, on account of labor or services, materials, fixtures, apparatus or machinery heretofore ***furnished to this date*** by the undersigned for the premises described above, conditional upon receipt of payment.

Given under _____ hand and seal this _____ day of _____, 20_____.

By: _____
Name, address and telephone number of Sole Ownership, Corporation or Partnership

Its: _____

{SEAL} Signature

Printed name and title

Notary Section

Notarized in the State of Illinois; County of _____. Subscribed and sworn to before me
this _____ day of _____ in the year _____.

Notarized by _____; by my signature: _____

My Commission expires:

Contractor's or Supplier's Final Waiver of Lien

State of: _____

County of: _____

To Whom it may concern:

Whereas the undersigned has been employed by: _____
Name of Contractor

To furnish for the premise known as: _____
Name of Project

Which is located at: _____

Of which the Owner is: _____

The undersigned, for and in consideration of:

_____ Dollars (\$ _____)

and other good and valuable considerations, the receipt of which is hereby acknowledged, do(es) hereby waive and release any and all lien or claim or right of lien under the statutes of the state in which the premises is located, relating to Mechanic's Liens, on account of labor or services, materials, fixtures, apparatus or machinery heretofore ***furnished or which may be furnished at any time hereafter***, by the undersigned for the premises described above, conditional upon receipt of payment.

Given under _____ hand and seal this _____ day of _____, 20____.

By: _____
Name, address and telephone number of Sole Ownership, Corporation or Partnership

Its: _____
{SEAL} Signature
Printed name and title

Notary Section

Notarized in the State of Illinois, County of _____, Subscribed and sworn to before me
this _____ day of _____ in the year _____.

Notarized by _____; by my signature: _____

1. GENERAL

1.01 REQUIREMENTS INCLUDE

- A. Contractor:
 - 1. Attend specified meetings.
 - 2. Ensure attendance of subcontractors, suppliers and manufacturer's representatives when specified or directed.

1.02 PRE-CONSTRUCTION CONFERENCE:

- A. Will be scheduled by A/E within fifteen (15) days after notice of award.
- B. Attendance:
 - 1. Owner's Representative(s)
 - 2. Contractor.
 - 3. A/E
- C. Minimum Agenda:
 - 1. Distribute contract documents
 - 2. Submit pertinent information about subcontractors & suppliers
 - 3. Designate responsible personnel
 - 4. Discuss chain of authority
 - 5. Discuss project schedule
 - 6. Discuss coordination with Building Occupants
 - 7. Set date, time, location and purpose of next meeting.
 - 8. Walk-through inspection.

1.03 PAY/PROGRESS MEETINGS:

- A. Attendance:
 - 1. Owner's Representative(s)
 - 2. Contractor
 - 3. Subcontractor(s), as appropriate.
 - 4. A/E
- B. Minimum agenda:
 - 1. Review work progress.
 - 2. Discuss field observations, problems, and decisions.
 - 3. Identify problems which may impede planned progress.
 - 4. Compare actual progress with construction schedule.
 - 5. Discuss corrective measures to regain construction schedule or consider revising schedule.
 - 6. Discuss progress anticipated for next work period.
 - 7. Discuss any other business relating to work.
 - 8. Set date, time, location and purpose of next meeting.

1.04 Substantial Completion Meeting

- A. Attendance:
 - 1. Owner's Representative(s)
 - 2. Contractor
 - 3. Subcontractor(s), as appropriate.
 - 4. A/E

- B. Minimum agenda:
 - 1. Inspect the work.
 - 2. Develop a Punch List (list of items that need to be completed or corrected).
 - 3. Make determination whether or not the work is Substantially Complete.
 - 4. If the work is deemed Substantially Complete: determine length of time required to take care of the Punch List items. If the work is not Substantially Complete: set date and time for subsequent Substantial Completion Meeting.
 - 5. Process Substantial Completion documents.
 - 6. Set date and time for Final Acceptance Meeting.

1.05 Final Acceptance Meeting

- A. Attendance:
 - 1. Owner's Representative(s)
 - 2. Contractor
 - 3. A/E
- B. Minimum agenda:
 - 1. Inspect the work to verify that the Punch List items have be completed and/or corrected.
 - 2. Discuss the project closeout requirements needed for processing Final Acceptance.

END 01 31 19

1. GENERAL

1.01 REQUIREMENTS INCLUDE

- A. Contractor:
 - 1. **Construction Schedules**
 - a. Submit projected construction schedule for work to A/E within twenty (20) business days after preconstruction meeting. Maintain, coordinate and distribute schedule.
 - b. Revise schedule(s) monthly.
 - 2. **Shop Drawings, Product Data & Samples:** Submit shop drawings, product data, installation instructions, samples, etc. as specified in the individual specification sections.
 - 3. **Schedule of Values:** Submit Schedule of Values to Architect/Engineer at least 15 business days prior to submitting first application for payment.
 - a. Support values given with date to substantiate their correctness upon request by the A/E.
 - b. Use Schedule of Values as only basis for application for payment.
 - c. Payment for materials stored on or off site will be limited to those materials listed in Schedule of Values.

1.02 CONSTRUCTION SCHEDULE

- A. Form. Prepare a standard horizontal bar chart.
 - 1. Provide separate horizontal bar for each class of work, activity or long-lead equipment item.
 - 2. Columns should follow table of contents of Project Manual.
- B. Content. Indicate complete sequence of construction by activity.
 - 1. Shop drawings, product data and samples: Submittal dates and dates when reviewed copies will be required.
 - 2. Decision dates for: Selection of finishes.
 - 3. Product procurement date, fabrication time and delivery dates.
 - 4. Dates for beginning, and completion of, each element of construction.
- C. Updating. Update monthly. Indicate:
 - 1. Progress of each activity since previous submission.
 - 2. Projected completion dates for all activities.
 - 3. Activities modified since previous submission.
- D. Submission Requirements. Submit initial schedules within ten (10) business days after date of preconstruction meeting.
 - 1. A/E will review schedules and return reviewed copy within ten (10) business days after receipt.
 - 2. When required, re-submit within five (5) business days after return of reviewed copy.
 - 3. Submit monthly updated schedules accurately depicting progress to first day of each month.
- E. Distribution. Distribute copies of reviewed schedules to:
 - 1. Owner
 - 2. Architect/Engineer.
 - 3. Job site file.
 - 4. Subcontractors and suppliers on as needed-basis.

1.03 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC - DEFINITIONS

- A. Shop drawings: Shop drawings are original drawings prepared by Contractor, subcontractor,

sub-subcontractor, supplier or distributor, which illustrate some portion of the work, showing fabrication, layout, setting or erection details.

1. Prepared by qualified detailer.
2. Identify details by reference to sheet and detail numbers - shown on contract drawings.
3. Minimum sheet size: 8 1/2" x 11"
4. Reproductions for submittals: Opaque diazo or photocopy

B. Product data:

1. Manufacturer's standard schematic drawings:
 - a. Modify to delete information which is not applicable to project.
 - b. Supplement standard information to provide additional information applicable to project.
2. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data.
 - a. Clearly mark each copy to identify pertinent materials, products or models.
 - b. Show dimensions and clearances required.
 - c. Show performance characteristics and capacities.
 - d. Show wiring diagrams and controls.

1.04 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC. - SPECIFIED PRODUCTS LIST:

- A. Within 15 business days after date of Notice of Award, submit to the Architect/Engineer 6 copies of complete list of all products which are proposed for installation.
- B. Tabulate list of each specification section.
- C. For products specified under reference standards, include with listing of each product:
 1. Name and address of manufacturer.
 2. Trade name.
 3. Model or catalog designation.
 4. Manufacturer's data.
 - a. Performance and test data.
 - b. Reference standards.

1.05 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC. - EXHIBIT SUBMITTAL:

- A. Submit all exhibits within 15 business days after the preconstruction meeting.
- B. Submit number of copies of shop drawings, product data and samples which contractor requires for distribution plus one copy which will be retained by Architect/Engineer.
- C. Accompany submittals with transmittal letter, in duplicate, containing:
 1. Date.
 2. Project title and number.
 3. Contractor's name and address.
 4. The number of shop drawings, product data and samples submitted.
 5. Notification of deviations from Contract.
 6. Other pertinent data.
- D. Submittals shall include:
 1. Date and revision dates.
 2. Project title and number.
 3. Names of:
 - a. Architect/Engineer.
 - b. Subcontractor.
 - c. Supplier.
 - d. Manufacturer.

- e. Separate detailer when pertinent.
- 4. Identification of product or material.
- 5. Relation to adjacent structure or material.
- 6. Field dimensions, clearly identified as such.
- 7. Specification section and page number.
- 8. Applicable standards, such as ASTM number or ANSI.
- 9. A blank space, 5" x 3", for Architect/Engineer's stamp.
- 10. Identification of previously approved deviation(s) from contract documents.
- 11. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of field measurements and compliance with Contract.

1.06 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC. - RESUBMISSION REQUIREMENTS:

- A. Shop drawings:
 - 1. Revise initial drawings as required and resubmit in accordance with submittal procedures.
 - 2. Indicate on drawings all changes which have been made in addition to those requested by Architect/Engineer.
- B. Product data and samples: Submit new data and samples as required for initial submittal.
- C. Make all resubmittals within ten business days after date of Architect/ Engineer's previous review.

1.07 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC - DISTRIBUTION OF SUBMITTALS AFTER REVIEW:

- A. Contractor will distribute copies of shop drawings and product data which carry Architect/Engineer's stamp to:
 - 1. Contractor's file.
 - 2. Job site file.
 - 3. Record documents file.
 - 4. Other contractors.
 - 5. Subcontractors.
 - 6. Suppliers.
 - 7. Fabricators.
- B. Distribute samples as directed in accordance with contract documents.

1.08 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC. - CONTRACTOR RESPONSIBILITIES:

- A. Review shop drawings, product data and samples prior to submission to the next level of authority.
- B. Verify:
 - 1. Field dimensions.
 - 2. Field construction criteria.
 - 3. Catalog numbers and similar data.
- C. Coordinate each submittal with requirements of:
 - 1. The work.
 - 2. The contract documents.
- D. Contractor's responsibility for errors and omissions in submittals is not relieved by Architect/Engineer's review of submittals.
- E. Prior to submission notify Architect/Engineer in writing of all proposed deviations in submittals from contract requirements.
- F. Contractor's responsibility for deviations in submittals from contract document requirements is not

relieved by Architect/Engineer's review of submittals.

- G. Do not begin any work which requires submittals without having Architect/Engineer's stamp and initials or signature indicating approval.
- H. After Architect/Engineer's review, make response required by Architect/Engineer's stamp and distribute copies. Indicate by transmittal that copy of approved data has been distributed to installer.

1.09 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC. - ARCHITECT/ENGINEER'S DUTIES:

- A. Review submittals within 10 business days.
- B. Review for:
 - 1. Design concept of project.
 - 2. Compliance with contract documents.
- C. Review all request for proposed deviations.
- D. Review of separate item does not constitute review of an assembly in which item functions.
- E. Affix stamp, date and initials or signature certifying to review of submittal, and with instructions for contractor response.
- F. Return submittals to Contractor for response or distribution.

1.10 SHOP DRAWINGS, PRODUCT DATA, SAMPLES, ETC. - SPECIFIED EXHIBIT SUBMITTALS:
See individual specification sections (NOTE: the Architect/Engineer may require additional submittals which they deem necessary.)

1.11 SCHEDULE OF VALUES - FORM OF SUBMITTAL

- A. Submit typewritten or computer generated Schedule of Values.
- B. Use the CSV form provided by the A/E (*or reasonable facsimiles of these forms*). (See the sample forms which follow.)
- C. Use Project Manual Table of Contents as basis of format for listing costs of all work.

1.12 SCHEDULE OF VALUES - PREPARATION.

- A. Itemize separate line item cost for each of following cost items:
 - 1. Overhead and profit.
 - 2. Bonds.
 - 3. Insurance.
 - 4. General Requirements.
- B. Each work category shall appear as a separate line item. Identify work of:
 - 1. Contractor's own labor forces.
 - 2. All subcontractors.
 - 3. All major suppliers of products or equipment.
- C. Break down installed costs into:
 - 1. Delivered cost of product (with taxes paid, if applicable)
 - 2. Labor cost, excluding overhead and profit.
- D. Each item of work which has an installed value of more than \$5,000 shall be a separate line item.

- E. Round off figures to nearest dollar.
- F. Make sum of total costs of all items listed in Schedule equal to total contract sum.

1.13 SCHEDULE OF VALUES - SUBMISSION REQUIREMENTS

- A. Review and resubmittal. After review by Architect/Engineer, revise and resubmit Schedule as required. Follow original submittal procedure.
- B. Update. Update Schedule of Values when directed by A/E, change of subcontractor or supplier occurs or change of product or equipment occurs.
- C. Forms. Following are sample forms to be used for the Schedule of Values. The second form is a continuation sheet to be used if required. They are available from the A/E.

END 01 33 00

Contractor's Schedule of Values

Project Name:

Project Number:

Name & Address of Contractor:

Contract for:

Date Submitted:

Name & Address of Owner:

Name & Address of A/E:

The Upchurch Group, Inc.
123 N. 15th Street
Mattoon, Illinois 61938

Contractor, Subcontractor or Material Supplier	Description of Work or Material	Scheduled Value	% of Contract
Total (or Subtotal if Continuation page(s) is required)			

Contractor Section

Submitted by Contractor listed above in accordance with the provisions of the Contract Documents. Upon request by the A/E, contracts and other relevant documentation will be provided to substantiate this schedule of values.

For the Contractor: _____
Signature Printed name and title

Architect/Engineer Section

Reviewed and approved for certifying payment for work completed and materials stored. Approval of this schedule by the A/E in no way relieves the Contractor of his responsibility for the performance of the Work in accordance with the Contract Documents.

For the A/E: _____
Signature Date of approval

Contractor's Schedule of Values - Continuation Sheet

Contractor, Subcontractor or Material Supplier	Description of Work or Material	Scheduled Value	% of Contract
Subtotal brought forward			
Total (or Subtotal if additional Continuation page(s) is required)			

1. GENERAL

1.01 REQUIREMENTS INCLUDE

- A. The Contractor will hire a Testing Agency to perform the specified services.

1.02 LABORATORY DUTIES - LIMITS OF AUTHORITY

- A. Testing Agency will provide qualified personnel on notice.
- B. Contractor will acquaint Testing Agency's personnel with all special conditions encountered on site.
- C. Testing Agency will perform specified inspections, sampling and testing of materials and construction methods:
 - 1. Comply with specified standards, ASTM, other recognized authorities.
 - 2. Ascertain compliance with contract requirements.
 - 3. Obtain written acknowledgment of each inspection, sampling and test made from Contractor whose work is being tested or from their superintendent.
- D. Promptly notify the Contractor, and Architect/Engineer of irregularities or deficiencies of work which are observed during performance of services.

1.03 CONTRACTOR'S RESPONSIBILITIES

- A. Cooperate with Testing Agency's personnel, provide access to work, to manufacturer's operations.
- B. Provide to laboratory, preliminary representative samples of materials to be tested, in specified quantities.
- C. Furnish copies of material certifications.
- D. Furnish verification of compliance with contract requirements for materials and equipment.
- E. Furnish casual labor and facilities:
 - 1. To provide access to work to be tested.
 - 2. To obtain and handle samples at the site.
 - 3. To facilitate inspections and tests.
 - 4. For laboratory's exclusive use for storage and curing of test samples.
- F. Notify laboratory sufficiently in advance of operations to allow for its assignment of personnel and scheduling of tests.
- G. Correct work which is defective or which fails to conform to the contract documents. Corrective work shall not delay the project schedule or the work of other contractors.
- H. Pay all costs of retesting when test results indicate non-compliance with contract requirements.
- I. Patch all surfaces and areas disturbed by testing operations.

1.04 QUALITY CONTROL

- A. Cost of retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to the Contractor, and the Contract Sum will be adjusted by Change Order.

END 01 40 00

1. GENERAL

1.01 REQUIREMENTS INCLUDE

- A. Contractor to comply with all laws, rules and regulations governing the work:
 - 1. When Contractor observes that contract documents are at variance with specified codes, notify A/E in writing immediately. Architect/Engineer will issue all changes in accord with General Conditions.
 - 2. When Contractor performs any work knowing or having reason to know that the work is contrary to such laws, rules and regulations and fails to so notify the Architect/Engineer, Contractor shall pay all costs arising therefrom. However, it is not the Contractor's primary responsibility to make certain that the contract documents are in accordance with such laws, rules and regulations.
 - 3. NOTE: A person trained in the provisions of 40 CFR Part 61, Subpart M (Asbestos Rules and Building Demolition) must be on site during demolition, having in his or her possession evidence of training. Please refer to the State of Illinois Demolition/Renovation/Asbestos Project Notification Form, Section 17.
- B. Related Requirements:
 - 1. Drawings and general provisions of the Contract, including General Conditions and other Division 1 Specification Sections, apply to work of this Section.

1.02 DEFINITIONS & ABBREVIATIONS

- A. Definitions:
 - 1. Dates: Reference Codes, Regulations and Standards are the issue current at date of bidding documents unless otherwise specified.
 - 2. Codes: Codes are rules, regulations or statutory requirements of government agencies.
 - 3. Standards: Standards are requirements set by authorities, custom or general consent and established as accepted criteria.
- B. Abbreviations:
 - ADA Americans with Disabilities Act.
 - AGCI Associated General Contractors in Illinois
 - AIA American Institute of Architects
 - ANSI American National Standards Institute.
 - ASHRAE American Society of Heating, Refrigeration and Air-Conditioning Engineers.
 - ASTM American Society for Testing and Materials.
 - AWWA American Water Works Association.
 - CDB Capital Development Board.
 - IBC International Building Code.
 - IDM Initial Decision Maker
 - FM Factory Mutual Engineering Corporation.
 - ICC International Code Council.
 - ICCB Illinois Community College Board.
 - ISBE Illinois State Board of Education
 - IDOT Illinois Department of Transportation.
 - IDPH Illinois Department of Public Health.
 - IDPR Illinois Department of Professional Regulation.
 - NFPA National Fire Protection Association.
 - OSFM Office of State Fire Marshal.
 - ROE Regional Office of Education
 - SOS Secretary of State.
 - OSHA Occupational Safety and Health Administration

DIVISION 1 - GENERAL REQUIREMENTS
Section 01 41 00 - Regulatory Requirements

1.03 QUALITY ASSURANCE

- A. Architect/Engineer has designed the project with full knowledge of code requirements and has copies of all specified codes available for Contractor's inspection.
- B. Contractor:
 - 1. Ensure that copies of specified codes and standards are readily available to Contractor's personnel. Copies are available at Contractor's expense from source or publisher.
 - 2. Ensure that Contractor's personnel are familiar with workmanship and installation requirements of specified codes and standards.

1.04 REGULATORY REQUIREMENTS

- A. Source and requirements:
 - 1. CDB:
 - a. Illinois Accessibility Code, October 23, 2018
 - b. Requirements for Seismic Load Design, August 1977.
 - 2. FED:
 - a. CPSC: Architectural Glazing Materials, as amended 1981.
 - b. DHEW:
 - 1) Title V - Handicapped Accessibility
 - 2) Title IX - Regulations Prohibiting Sex Discrimination in Education.
 - c. ADA, September 15, 2010
 - 3. IBC: International Building Code, 2015 edition.
 - 4. IDPH: Illinois Plumbing Code, 2014.
 - 5. IFC: International Fire Code, 2015 IFC Amendments
 - 6. NEC: National Electrical Code, 2015
 - 7. IMFGC: International Mechanical and Fuel Gas Code, 2015
 - 8. IECC: International Energy Conservation Code, 2015
 - 9. ICC 500: Standard for the Design and Construction of Storm Shelters, 2014
 - 10. IDOT:
 - a. Standard Specifications for Road and Bridge Construction, including all supplements, April 1, 2016, except where otherwise specified.
 - 1) Change all references to "Engineer" to "Architect/Engineer".
 - 2) References to "Method of Measurement" and "Basis of Payment" do not apply.
 - 11. IDPR: Illinois Roofing Industry Licensing Act, as amended (Illinois Revised Statutes, ch. 111, par. 7501 et. seq.).
 - 12. OSFM:
 - a. Boiler and Pressure Vessel Safety Act and Rules and Regulations (Illinois Revised Statutes, ch. 127½, par. 151 et. seq.).
 - b. Tactile identification on Certain Elevators (Illinois Revised Statutes, ch. 111½, par. 3901 et. seq.).
 - c. Installation of Elevators (Illinois Revised Statutes, ch. 111½ par. 4001 et. seq.).
 - d. Illinois Rules and Regulations for Fire Prevention and Safety, NFPA 101-2012.
 - 13. SOS: Ramp on All New or Reconstructed Curbs for Persons Using Wheelchairs. (Illinois Revised Statutes, ch. 24, "Illinois Municipal Code", Sec. 11-80-11. Public Act 78-322, as amended.).
 - 14. STANDARDS:
 - a. AGCI/ISPE: Standard Specifications for Water and Sewer Main Construction in Illinois, Revised.
 - b. ANSI No. A.17.1, American Standard Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks, April 1, 1974.

DIVISION 1 - GENERAL REQUIREMENTS
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- c. ANSI No. C-2, National Electrical Safety Code, 2015 Edition.
 - d. ASHRAE No. 62, Standard for Natural and Mechanical Ventilation, 2004.
 - e. ASHRAE No. 90, Energy Conservation in New Building Design, revised 2010.
 - f. ASHRAE 15, Safety Code for Mechanical Refrigeration, 2016.
 - g. AWWA: Water and Sewer Main Construction.
 - h. NFPA: National Fire Codes
 - 1) No. 70-96, National Electrical Code, 2015.
 - 2) No. 101-12, Life Safety Code.
15. OSHA: Occupational Safety and Health Administration
- B. The Architect/Engineer may reference other codes or standards throughout the Project Manual when deemed appropriate for proper compliance with regulatory requirements.

END 01 41 00.

1. GENERAL

1.01 REQUIREMENTS INCLUDE

A. Contractor provide:

1. ***Temporary Utilities:*** Provide and maintain specified temporary utilities for specified times during construction period. Contractor provide all utilities required by them which are in excess of those specified or exceed capacity of existing or permanent systems.
 - a. Utilities for field offices, except those specifically identified as provided by others.
 - b. Toilets.
 - c. Telephone service and telephones.
 - d. Payment of all utility, telephone, and fuel bills, except charges specifically identified as provided by others.
 - e. Temporary power, extend from Owner's electrical system.
 - f. Temporary lighting (work, security, safety, and lamps).
 - g. Temporary heat.
 - h. Temporary ventilation.
 - i. Provide hoses and fittings from existing water service connection to their work.
2. ***Construction Aids:*** Provide and maintain construction aids and equipment for personnel use and to facilitate execution of the work:
 - a. Chutes.
 - b. Cranes.
 - c. Hoists.
 - d. Platforms.
 - e. Railings.
 - f. Ramps.
 - g. Runways.
 - h. Stairs.
 - i. Ladders
 - j. Temporary Enclosure
 - k. Construction Fence

Provide and maintain for their own forces all other construction aids required to complete their work.
3. ***Barriers:*** Provide and maintain suitable barriers (temporary gates and fences) to:
 - a. Prevent unauthorized entry to the construction area, including students and staff.
 - b. Protect the work
 - c. Protect adjacent facilities and utilities from construction operations.
 - d. Do not interfere with existing traffic adjacent to the site.

Remove when no longer needed, at completion of the work or as directed.
4. ***Temporary Environmental Controls:*** Provide controls over environmental conditions at the construction site and related areas under the Contractor's control. Remove physical evidence of temporary controls at completion of work or as directed.
5. ***Construction Cleaning:*** Provide cleaning and disposal of waste materials, debris and rubbish during construction.

1.02 TEMPORARY UTILITIES

A. Owner will authorize use of existing facilities for temporary use:

1. Electrical power

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Section 01 51 00 - Construction Facilities & Temporary Controls

- 2. Water
- 3. Natural gas
- B. Owner will pay all costs of consumables used for construction purposes for utilities that it furnishes.
- C. Contractor requiring Owner furnished services shall provide and pay for any extensions or modifications of services required by them, and for restoration of services at completion of work.

1.03 DEFINITIONS

- A. Temporary Heat: Provision, operation and maintenance of approved portable heating devices, including costs of fuel, from start of construction until the permanent enclosure has been certified by the A/E as substantially complete and the permanent heating system, including permanent metered fuel line (except electric) is, in the A/E's and installing contractor's opinion, sufficiently complete to allow safe operation.
- B. Temporary Ventilation: Provision, operation and maintenance of approved portable fans, louvers, ductwork, dampers necessary from start of construction until the permanent enclosure has been certified as substantially complete, and the permanent ventilating system is in the A/E's and installing contractor's opinion, sufficiently complete to allow safe operation.
- C. Temporary Enclosure: Sufficient enclosure of an area, structure or building to prevent entrance or infiltration of rainwater, wind or other natural elements, and which will prevent undue heat loss from within enclosed areas.
- D. Permanent Enclosure: Stage of construction at which all moisture and weather protection elements of construction have been installed in accord with the contract for the building or part thereof. The A/E may certify in writing that the building or defined portion thereof is substantially permanently enclosed when walls, windows, and roof are complete and openings left for construction access are adequately closed with movable material having an "R" value equivalent to the finished opening.

1.04 DESCRIPTION OF TEMPORARY UTILITY SYSTEMS

- A. Heating System:
 - 1. Provide specified temporary heating in enclosed areas throughout construction period in order to:
 - a. Facilitate progress of work by all contractors.
 - b. Protect work and products against dampness and cold.
 - c. Prevent moisture condensation on surfaces.
 - d. Provide specified ambient temperatures for installation and curing of finish materials.
 - 2. Minimum heating temperatures
 - a. Minimum temperatures shall be at least that specified in specific specification sections.
 - b. Unless otherwise specified, areas in temporary enclosures shall be maintained at temperatures of at least 45 degrees F, 24 hours per day, seven days per week.
 - c. Unless otherwise specified, areas in permanent enclosures or during placement of interior finishes (woodwork, flooring, painting, drywall, etc) shall be maintained at temperatures of at least 65 degrees F, 24 hours per day, seven days per week.
 - 3. Temporary Heating:
 - a. If temporary heat is required for the protection of the work before permanent heating apparatus is available for use, the General Contractor shall provide approved

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temporary heating apparatus and shall provide adequate and proper fuel as required for protecting and drying out of the work. Temporary apparatus shall be installed and operated in such a manner, including proper venting, that the finished work will not be damaged. No salamanders will be permitted.

- b. After the building is enclosed, in whole or in sufficient part to prevent damage to permanent heating apparatus, and after the permanent heating apparatus is available for use within the enclosed space, the General Contractor may make application in writing to the Architect for temporary use of the permanent system as required to protect the work. At the time of such application all permanent controls and safety devices shall be installed on heating equipment.
- c. Permanent heating equipment installed in their final position may be used for temporary heat, provided the building is ready for final installation of these units. If said finished equipment is used, the General Contractor shall provide, install, and maintain protective coverings over the finished units.
- d. The General Contractor shall assume responsibility for all heating apparatus used for temporary heating during the period of such use. After the period of temporary heat has ended and prior to final acceptance of the building by the Owner, the General Contractor shall clean all heating apparatus and return same in an undamaged condition to the Heating Contractor, taking his receipt thereof. The cost of repairing or replacing any equipment which is damaged during the temporary heating period shall be borne by the General Contractor, if such equipment is being used for temporary heat.

B. Ventilating System:

- 1. Provide specified temporary ventilation in enclosed areas throughout construction period to:
 - a. Facilitate progress of work.
 - b. Protect work and products against dampness and heat.
 - c. Prevent moisture condensation on surfaces.
 - d. Provide suitable ventilation for installation and curing of finish materials.
 - e. Provide adequate ventilating to meet health regulations for safe working environment.
 - f. Prevent hazardous accumulations of dusts, fumes, mists, vapors or gases in areas occupied during construction.
- 2. Duration of ventilating operations:
 - a. At all times personnel occupy an area, when subject to hazardous accumulations of harmful elements.
 - b. Continue operation of ventilating system after cessation of work to assure removal of harmful elements.
- 3. Temporary ventilation/cooling:
 - a. If temporary ventilation/cooling is required for the protection of the work before permanent ventilation/cooling apparatus is available for use, the General Contractor shall provide approved temporary ventilation/cooling apparatus as required for protecting and drying out of the work. Temporary apparatus shall be installed and operated in such a manner, that the finished work will not be damaged.
 - b. After the building is enclosed, in whole or in sufficient part to prevent damage to permanent ventilation/cooling apparatus, and after the permanent ventilation/cooling apparatus is available for use within the enclosed space, the General Contractor may make application in writing to the Architect for temporary use of the permanent system

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as required to protect the work. At the time of such application all permanent controls and safety devices shall be installed on ventilation/cooling equipment.

- c. Permanent ventilation/cooling equipment installed in their final position may be used for temporary ventilation/cooling, provided the building is ready for final installation of these units. If said finished equipment is used, the General Contractor shall provide, install, and maintain protective coverings over the finished units.
- d. The General Contractor shall assume responsibility for all ventilation/cooling apparatus used for temporary ventilation/cooling during the period of such use. After the period of temporary ventilation/cooling has ended and prior to final acceptance of the building by the Owner, the General Contractor shall clean all ventilation/cooling apparatus and return same in an undamaged condition to the Ventilation Contractor, taking his receipt thereof. The cost of repairing or replacing any equipment which is damaged during the temporary ventilation/cooling period shall be borne by the General Contractor, if such equipment is being used for temporary ventilation/cooling.

C. Toilets

- 1. Provide temporary toilet facilities for use of all workers and authorized parties throughout construction period.
- 2. Provide a minimum number of enclosed combination toilet and urinal units for construction personnel: One for every 20 employees, or fraction thereof.

D. Electrical system:

- 1. Provide and maintain specified temporary primary electric power system throughout construction period.
 - a. Provide main distribution panel, complete with meter:
- 2. All other connections are to be made at secondary power centers.
- 3. Contractors who require primary power, secondary power centers or service connections in excess of that specified may, at their option:
 - a. Make arrangements with Electrical Contractor for excess service and pay all associated costs, including consumables, or
 - b. Make arrangements with Power Company for separate service and pay all costs thereof, including consumables.

E. Lighting:

- 1. Provide temporary lighting for:
 - a. Construction needs.
 - b. Safety lighting.
 - c. Security lighting.
- 2. Basic requirements, all lighting:
 - a. Lamps:
 - 1.) Covered with safety guard or deeply recessed in reflector.
 - 2.) Not suspended by their electric cords unless cord and fixture designed for that purpose.

1.05 DEBRIS CONTROL

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- A. Maintain all areas under Contractor's control free of extraneous debris.
- B. Initiate and maintain a specific program to prevent accumulation of debris at construction site, storage and parking areas or along access roads and haul routes.
 - 1. Provide containers for deposit of debris.
 - 2. Prohibit overloading of trucks to prevent spillages on access and haul routes. Provide daily inspection of traffic areas to enforce requirements.

1.06 POLLUTION CONTROL

- A. Prevent contamination of soil, water or atmosphere by the discharge of noxious substances from construction operations.
- B. Provide equipment and personnel to perform emergency measures to contain all spillages and to remove contaminated soils or liquids. Excavate and dispose of all contaminated earth off-site. Replace with suitable compacted fill and topsoil.
- C. Take special measures to prevent harmful substances from entering public waters. Prevent disposal of wastes, effluents, chemicals or other such substances adjacent to streams, or in sanitary or storm sewers.
- D. Provide systems for control of atmospheric pollutants.
 - 1. Prevent toxic concentrations of chemicals.
 - 2. Prevent harmful dispersal of pollutants into the atmosphere.

2. PRODUCTS

2.01 CONSTRUCTION AIDS

- A. Materials may be new or used. Comply with specified codes and standards.
- B. Provide a weather-tight environment for continuing operations of materials installation that require specified temperature control.

2.02 BARRIERS

- A. Materials may be new or used, suitable for purpose. Comply with specified codes and standards.

2.03 CLEANING EQUIPMENT

- A. Provide covered containers for deposit of waste materials, debris, and rubbish.
- B. Provide brooms and other tools necessary for proper cleaning during construction.

3. EXECUTION

3.01 INSTALLATION

- A. Heating and Ventilating: Locate units to meet project progress, and as approved by Architect/Engineer. Avoid interference with:
 - 1. Work or traffic areas.
 - 2. Materials handling or storage areas.
 - 3. Stairwells, access ramps and ladders.

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- B. Electrical:
 - 1. Do not run branch circuits on floor or on ground.
 - 2. Verify proper operation of all safety devices.
- C. Water service:
 - 1. Do not run piping on floor or on ground.
 - 2. Provide drip pan under each water service connection located within building.
 - 3. Provide insulation, or other means, to prevent pipes from freezing.
 - 4. When necessary to maintain pressure, provide temporary pumps, tanks and compressors.
- D. Toilets:
 - 1. Service regularly.

3.02 CONSTRUCTION AIDS

- A. Preparation. Consult with Architect/Engineer, review site conditions and factors which affect construction procedures and construction aids, including adjacent properties and public facilities which may be affected by execution of the work.
- B. Removal
 - 1. Remove temporary materials, equipment and service when construction needs can be met by authorized use of permanent construction or when authorized by the A/E.
 - 2. Clean and repair damage caused by installation or use of temporary facilities.
 - 3. Restore facilities used for temporary purposes to specified condition.

3.03 BARRIERS

- A. Installation. Install facilities of a neat and uniform appearance.
- B. Removal
 - 1. Remove when authorized by the A/E.
 - 2. Clean and repair damage caused by installation, fill and grade areas to original elevations and slopes (unless indicated otherwise), and clean the area.

3.04 CONSTRUCTION CLEANING

- A. Cleaning
 - 1. Maintain areas under Contractor's control free of waste materials, debris, and rubbish.
 - 2. Periodically clean areas to provide suitable conditions for safe and healthy construction activities.
 - 3. Control cleaning operations so that dust and other particulate's will not adhere to wet or newly coated surfaces.
- B. Disposal. Remove waste materials, debris, and rubbish from site periodically and lawfully dispose of off-site.

END 01 51 00

1. GENERAL

- 1.01 The project will be constructed at an occupied facility. These requirements supplement the Standard Documents for Construction and other sections of the Project Manual.
- 1.02 The Owner will occupy area(s) for purpose of their normal operations. Interruptions in their normal operations can be accommodated with advanced notice and as long as they are kept to a practical minimum.
- 1.03 REQUIREMENTS INCLUDE
 - A. General Contractor provide:
 - 1. Scheduling
 - 2. Security and site regulations
 - 3. Construction aids
 - 4. Temporary enclosures and barriers
 - 5. Temporary utilities
 - 6. Construction Cleaning
 - 7. Field Offices
 - 8. Storage

2. EXECUTION

- 2.01 SCHEDULING. Schedule the work to allow the Owner to conduct normal operations uninterrupted to the maximum extent that is reasonably possible.
- 2.02 SITE REGULATIONS. Confer with the Owner and A/E and obtain full knowledge of all site rules and regulations affecting work.
- 2.03 ENTRANCES. Existing parking and road entrance to remain clear to the existing facility during construction.
- 2.04 CONSTRUCTION AIDS. Except as noted, Contractor provide and maintain construction aids and equipment for common use and to facilitate execution of the work.
- 2.05 TEMPORARY UTILITIES. See 01 51 00.
- 2.06 ACCESS ROADS & PARKING AREAS. The Contractor is allowed to use existing site streets, drives and walks to facilitate his work as coordinated with the Owner. Any damage to pavements, turf, buildings, site amenities, etc. arising out of the Contractor's operations shall be repaired to the pre-existing condition or replaced.

The Contractor shall consult with the Owner to learn the location of an area to be used for parking Contractor vehicles.
- 2.07 CONSTRUCTION CLEANING
 - A. Contractor to provide cleaning and disposal of waste materials, debris and rubbish during construction.
 - B. Contractor to provide covered containers for deposit of waste materials, debris and rubbish.
 - C. Clean User occupied areas daily of debris, waste materials, packaging materials and dirt emanating from the Contractor's operations.

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Section 01 51 50 - Use of Existing Facilities

2.08 FIELD OFFICES

- A. The Owner may authorize use of existing space for temporary office. Make arrangements with Owner or Owner's Representative.

2.09 STORAGE Protection and security for stored materials and equipment is solely contractor's responsibility.

2.10 CLOSEOUT

- A. Upon completion of need to use existing user-provided facilities, or when directed by A/E, restore each to original or specified condition.
- B. At completion of work in each area, provide final cleaning and return space to a condition suitable for use of Owner.

END 01 51 50

1. GENERAL

1.01 REQUIREMENTS INCLUDE

- A. Contractor provide:
 - 1. **Materials and equipment**
 - a. Specified materials and equipment.
 - b. Transportation and delivery.
 - c. Equipment and personnel at site.
 - 2. **Product Substitutions**
 - a. Base all bids on providing all products exactly as specified.
 - b. For products specified only by reference or performance standards, select any product which meets or exceeds standards, by any manufacturers, subject to the Architect/Engineer's approval.
 - c. For products specified by naming several products or manufacturers, select any product and manufacturer named.

1.02 MANUFACTURER'S INSTRUCTIONS

- A. When contract documents require that installation shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to all parties involved in the installation, including 1 copy to the Architect/Engineer for their files plus copies required by section 01 70 00.
- B. Maintain one set of complete instructions with the Project Record Documents at the jobsite during installation and until completion.

1.03 SUBSTITUTIONS, BIDDER/CONTRACTOR OPTIONS:

- A. **PRIOR TO BID OPENING:** The Architect/Engineer will consider written requests to amend the bidding documents to add products not specified provided such requests are received at least 10 calendar day prior to bid opening date. Requests received after that time will not be considered. When a request is approved, the Architect/Engineer will issue an appropriate addendum not less than seven calendar days prior to bid opening date.
- B. **WITH BID:** A bidder may propose substitutions with their bid by completing the Proposed Product Substitution List in the Bid Form, subject to the provisions stated thereon. Architect/Engineer will review Proposed Product Substitution List of low bidder and recommend approval or rejection by Owner prior to award of contract.
- C. **AFTER AWARD OF CONTRACT:** No substitutions will be considered after Notice of Award except under one of more of the following conditions:
 - 1. Substitutions required for compliance with final interpretations of code requirements or insurance regulations.
 - 2. Unavailability of specified products, through no fault of Contractor.
 - 3. Subsequent information discloses inability of specified product to perform properly or to fit in designated space.
 - 4. Manufacturer/fabricator refusal to certify or guarantee performance of specified product as specified.
 - 5. When a substitution would be substantially to Owner's best interests.

1.04 SUBSTITUTION REQUIREMENTS:

- A. Submit 3 copies of each request for substitution. Include in request:
 - 1. Complete data substantiating compliance of proposed substitution with contract documents.

2. For products:
 - a. Product identification, including manufacturer's name and address.
 - b. Manufacturer's literature:
 - 1) Product description.
 - 2) Performance and test data.
 - 3) Reference standards.
 - c. Samples.
 - d. Name and address of similar projects on which product was used and date of installation.
 3. For construction methods:
 - a. Detailed description of proposed method.
 - b. Drawings illustrating methods.
 4. Itemized comparison of proposed substitution with product or method specified.
 5. Data relating to changes in construction schedule.
 6. Identify:
 - a. Changes or coordination required.
 7. Accurate cost data on proposed substitution in comparison with product or method specified.
- B. In making request for substitution, bidder/contractor represents:
1. It has personally investigated proposed product or method and determined that it is equal or superior in all respects to that specified.
 2. It will provide the same guarantee for substitution as for product or method specified.
 3. It will coordinate installation of accepted substitutions into work, making all changes as may be required for work to be complete in all respects.
 4. Cost data is complete and includes all related costs under its contract, but excludes:
 - a. Architect/Engineer's redesign.
 - b. Administrative costs of Architect/Engineer.
 - c. Costs under separate contracts.
 5. It will pay all additional costs and expenses for Owner, Architect/Engineer and other contractors.
- C. Substitutions will not be considered when:
1. They are indicated or implied on shop drawings or product data submittals without formal request submitted in accordance with Paragraph 1.04.
 2. Acceptance will require substantial revision of contract documents.

2. PRODUCTS

2.01 MATERIALS & EQUIPMENT INCORPORATED INTO THE WORK

- A. Conform to project specifications and standards.
- B. Comply with size, make, type and quality specified.
- C. Manufactured and fabricated products:
 1. Design, fabricate and assemble in accord with best engineering and shop practices.
 2. Manufacture like parts of duplicate units to standard sizes and gages, to be interchangeable.
 3. Two or more items of the same kind shall be identical from the same manufacturer.
 4. All parts of systems shall be from the same manufacturer to the greatest extent practicable.
 5. Adhere to equipment capacities, sizes and dimensions shown or specified unless variations are specifically approved by Change Order.

3. EXECUTION

3.01 TRANSPORTATION, DELIVERY & HANDLING

- A. Arrange for transportation and deliveries of materials and equipment in accord with approved current construction schedules and in ample time to facilitate inspection prior to installation.
- B. Coordinate deliveries to avoid conflict with work and conditions at site:
 - 1. Work of Owner, or their use of premises.
 - 2. Limitations of storage space.
 - 3. Availability of equipment and personnel for handling products.
- C. Deliver products in undamaged condition in original containers or packaging, with identifying labels intact and legible.
- D. Clearly mark partial deliveries of component parts of assemblies or equipment to permit easy identification of parts and to facilitate assembly.
- E. Immediately on delivery, inspect shipment to assure:
 - 1. Product complies with Contract documents and Architect/Engineer approved submittals.
 - 2. Quantities are correct.
 - 3. Containers and packages are intact, labels are legible.
 - 4. Products are properly protected and undamaged.
- F. Provide equipment and personnel to handle products and equipment. Leave alone those furnished by Owner. Prevent damage to products or packaging.
- G. Provide additional protection during handling to prevent scraping, marring or otherwise damaging products, equipment or surrounding surfaces.
- H. Handle products and equipment in a manner to prevent bending or overstressing.
- I. Lift packages, equipment or components only at designated lift points.

END 01 60 00

1. GENERAL

1.01 REQUIREMENTS INCLUDE

- A. Contractor provide and maintain:
 - 1. Storage for materials and equipment to be installed in Project.
 - 2. Protection and security for stored materials and equipment, on and off site.

1.02 OFF-SITE AUTHORIZATION. Off-site storage will be permitted only on Owner's prior written authorization in accordance with General Conditions.

2. PRODUCTS

2.01 MATERIALS, EQUIPMENT. May be new or used, but shall be serviceable, adequate for required purpose, and shall not create unsafe conditions nor violate specified codes.

2.02 PROTECTIVE MATERIALS

- A. For duration of storage period, provide materials which will provide proper protection against the elements or other harmful environmental conditions. Materials may be new or used at Contractor's option, but shall be:
 - 1. Of sufficient strength and durability for proposed use.
 - 2. Recommended by manufacturer of products or equipment to be protected.
 - 3. Non-staining.
 - 4. Non-hazardous.

3. EXECUTION

3.01 LOCATION. Where authorized by Owner.

3.02 INSTALLATION

- A. Mount fire extinguishers in prominent location with clear access to use.
- B. Mount identifying signs adjacent to entrance doors, in conspicuous locations.

3.03 LIMITATIONS

- A. Do not exceed capacity of structure
- B. Do not inhibit use of:
 - 1. Fire lanes.
 - 2. Parking.
 - 3. Owner's operations.
- C. Store combustible materials in accordance with Fire Marshall's regulations.

3.04 PROTECTION

- A. Protect all products and equipment from damage.
- B. Methods:
 - 1. Store moisture or water vulnerable materials off grade.

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Section 01 62 00 - Storage & Protection

2. Store finished products and equipment in an enclosed building, on or off site.
3. Maintain integrity of shipping cartons until ready for installation
4. Provide separate storage of combustible and non-combustible products.
5. Follow storage recommendations of product and equipment manufacturers.
6. Other methods shall be subject to Architect/Engineer's prior written approval.

END 01 62 00

1. GENERAL

1.01 REQUIREMENTS INCLUDE

- A. ***Final Cleaning.*** Contractor provide final cleaning, including:
 - 1. Supervise and coordinate the cleaning operations of all subcontractors on this project.
 - 2. At Project completion, leave Project clean and ready for occupancy.
- B. ***Project Record Documents.*** Contractor:
 - 1. At project site, maintain one copy of:
 - a. Contract drawings.
 - b. Project Manual.
 - c. Interpretations and supplemental instructions.
 - d. Addenda.
 - e. Reviewed, approved shop drawings and product data.
 - f. Other modifications to Contract, Change Orders and Directives etc..
 - g. Field test records.
 - h. All schedules.
 - i. Correspondence file.
 - 2. Store documents apart from documents used for field construction.
 - 3. Maintain documents in clean, dry, legible condition.
 - 4. Do not use record documents for field construction purposes.
 - 5. Make documents available at all times for inspection by Architect/Engineer and Owner.
- C. ***Operations and Maintenance Manuals.*** Contractor shall provide Operating and Maintenance Data in accordance with the Project Manual.
- D. ***Warranties and Bonds.*** Contractor comply with project warranty and bond requirements as specified herein, including delivery of manufacturer warranty documents.
- E. ***Training.*** Contractor provide training to Owner's designated personnel regarding equipment and systems provided in the project.

1.02 SAFETY REQUIREMENTS DURING CLEANING OPERATIONS

- A. Standards: Maintain project in accord with following safety and insurance standards:
 - 1. Federal and State regulations.
 - 2. National Fire Protection Association (NFPA).
- B. Hazards Control:
 - 1. Store volatile wastes in covered metal containers and remove from premises daily.
 - 2. Prevent accumulation of wastes which create hazardous conditions.
 - 3. Provide adequate ventilation during use of volatile or noxious substances.
- C. Conduct cleaning and disposal operations to comply with Federal and State anti-pollution laws.
 - 1. Do not burn or bury rubbish and waste materials on project site.
 - 2. Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in storm or sanitary drains.
 - 3. Do not dispose of wastes into streams or waterways.

1.03 PROJECT RECORD DOCUMENTS

- A. Marking Devices. Provide felt tip marking pens for marking. Conform to the following color code.
 - 1. Red - General Work.

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Section 01 70 00 - Execution Requirements

2. Orange - Mechanical Work.
 3. Green - Electrical Work.
- B. Recording
1. Label each document "PROJECT RECORD DOCUMENTS" in 2" high printed letters.
 2. Keep record documents current.
 3. Do not permanently conceal any work until specified information has been recorded.
 4. Contract Drawings: Legibly mark to record actual construction:
 - a. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
 - b. Field changes of dimension and detail.
 - c. Changes made by change order.
 - d. Details not on original Contract Drawings.
 5. Specifications and addenda: Legibly mark up each section to record:
 - a. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
 - b. Changes made by change order or field order.
 - c. Other matters not originally specified.
 6. Shop drawings: Maintain as record documents; legibly annotate drawings to record changes made after review.
- C. Submission requirements
1. At completion of project, deliver record documents to Architect/Engineer.
 2. Accompany submittal with transmittal letter, in duplicate, containing:
 - a. Date.
 - b. Project title and number.
 - c. Contractor's name and address.
 - d. Title and number of each record document.
 - e. Certification that each document as submitted is complete and accurate.
 - f. Signature of Contractor, or their authorized representative.

1.04 OPERATING AND MAINTENANCE MANUALS

- A. General
1. Contractor shall compile product data related to the maintenance and operation of products and equipment provided under the contract. Provide O & M information for products specified in specific work sections of the project manual.
 2. Each manual shall include a typewritten table of contents for each volume, arranged in project manual order.
 3. For each product, include the name, address and telephone number of subcontractor, maintenance contractor, and parts vendor.
 4. Supplement product data with drawings to clearly illustrate the relationship of component parts and control and flow diagrams. Include a copy of each warranty, bond, and service contract. Submit two copies of each manual.
- B. For Materials and Finishes
1. Provide full information on products, including catalog number, size, composition, color and texture designations, and information for reordering special-manufactured products.
 2. Provide manufacturer's recommendations for cleaning agents/methods and recommended cleaning and maintenance schedule.
- C. For Equipment & Systems. Provide operating characteristics and limiting conditions; performance curves, engineering data, and tests.
1. Include operating procedures: start-up, break-in, routine and normal operating instructions;

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Section 01 70 00 - Execution Requirements

- regulation, control, stopping, shutdown, and emergency instructions; summer and winter operating instructions; maintenance procedures; servicing and lubrication schedule.
 2. Provide manufacturer's operating and maintenance instructions; sequence of operation by control manufacturer; manufacturer's parts list, illustrations, assembly drawings, and diagrams for maintenance; predicted life of parts subject to wear; recommended spare parts.
 3. Provide as-installed control diagrams by control manufacturer. Each Contractor's coordination drawings with color-coded piping diagrams and charts of valve tag numbers, with location and function of each valve.
- D. For Electric & Electronic Systems. Provide circuit directories of panel boards and color-coded wiring diagrams.
- E. Submittal. When contract is assigned, Contractor will send submittals to A/E.

1.05 WARRANTIES AND BONDS

- A. *General.* The Contractor warrants that all work provided under the contract will be in conformance with the contract and free from defects in workmanship, materials, and equipment for a period of one year or such longer period as may be specified in the contract documents, except as provided below.

Warranty time periods shall commence with the date which appears on the Certificate of Substantial Completion of the whole, or any part of the project. The warranty time period for any incomplete or uncorrected work including punch list work at the time of substantial completion shall commence with the date of final completion.

- B. *Extended Warranties.* The responsible Contractor warrants that its workmanship, materials and equipment for those building systems subject to seasonal loads will be in conformance with the contract and free from defects for a period of two years, commencing with the date of the certificate of substantial completion. This includes, but is not limited to, heating, ventilating, air conditioning, temperature control and test and balance work, as specified in the project manual.
- C. *Latent Defects.* On demand by the Owner at any time within the ten year period following substantial completion or final acceptance, if applicable, the Contractor shall promptly repair or replace all defective or non-conforming work resulting from, or constituting, latent defects, fraud, fraudulent concealment or gross negligence. The Owner will give timely notice of such defects.
- D. *Prompt Repair.* Upon notice from the Owner or along with the A/E of such defects or non-conforming work, the Contractor shall promptly visit the site in the company of the Owner or the Owner's representative to determine the extent of all defects or nonconforming work.

The Contractor shall provide all labor, material and equipment to promptly repair or replace the defective or non-conforming work.

The repair shall include all adjacent work not necessarily provided by the Contractor but damaged as a result of such defects or non-conforming work or as a result of remedying them. If the Contractor does not promptly repair or replace defective or non-conforming work, The Owner may repair or replace such work and charge the cost thereof to the Contractor.

Work which is repaired or replaced by the Contractor shall be inspected and shall be warranted by the Contractor in accordance with this Article. The warranties set forth herein are in addition to all warranties or guarantees expressed or implied by operation of law, statute or ordinance.

- E. *Commercial Warranties.* The Contractor shall deliver all commercial warranties received from manufacturers prior to final completion but this shall not reduce Contractor's obligations under this

Article.

- F. *Other Warranties.* The Owner may require the Contractor to furnish other warranties as specified in the Project Manual.
- G. *Submittal.* Each Contractor shall assemble executed warranties and bonds. Contractor shall send one original signed copy, bound with a table of contents to the A/E for approval and transmittal to the Owner.

1.06 TRAINING. Provide formal training in operation and maintenance of all building systems. Provide O & M manuals to serve as the basis for Owner training. Submit records of dates, duration of each training session, material covered and documented attendance of Owner.

2. PRODUCTS

2.01 MATERIALS

- A. Select and use all cleaning materials and equipment with care to avoid scratching, marring, defacing, staining or discoloring surfaces cleaned.
- B. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

3. EXECUTION

3.01 FINAL CLEANING

- A. Employ experienced workers for final cleaning.
- B. Remove grease, dust, dirt, stains, labels, fingerprints, protection and other foreign materials from sight-exposed interior and exterior finished surfaces; polish surfaces so designated to specified finish.

In preparation for substantial completion or occupancy, conduct final inspection of sight-exposed interior and exterior surfaces, and of concealed spaces to ensure performance.
- C. Repair, patch and touch up marred surfaces to specified finish, to match adjacent surfaces.
- D. General Contractor soft broom clean all exposed concrete surfaces clean; other paved areas with soft or stiff broom as directed. Rake clean other surfaces on grounds.
- E. General Contractor sweep and mop clean all flooring within the project work site, vacuum clean all carpet.
- F. Maintain finally cleaned areas until project, or designated portion thereof, is accepted by Owner.

END 01 70 00

1. GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.

1.02 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities.
 - 5. Prepare and submit Project Record Documents, lawn maintenance manuals, utility locations, and similar final record information.
 - 6. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, construction fencing and similar elements.
 - 7. Advise Owner of changeover in utilities.
 - 8. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for Final Completion.

1.03 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
Revise five subparagraphs below to match the Supplementary Conditions.
 - 1. Submit a final Application for Payment according to Division 1 Section "Payment Procedures."
 - 2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will

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Section 01 77 00 – Closeout Procedures

notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.04 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit three (3) copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Organize list of areas in sequential order.

END 01 77 00

1. GENERAL

1.01 SUMMARY

A. Section Includes

1. Selective demolition and removal of existing building materials.
2. Demolishing designated construction.
3. Cutting and alternations for completion of the Work.
4. Removing designated items for reuse and Owner's retention.
5. Protecting items designated to remain.
6. Removing demolished materials.
7. Demolition and removal of selected portions of building and structure.
8. Interruption, capping, or removal of utilities as applicable.
9. Notification to Owner of schedule of shut-off of utilities which serve occupied spaces.
10. Protection of portions of building adjacent to or affected by selective demolition.

B. Hazards Materials:

1. There may be some Hazards or Asbestos Containing Materials, discovered during the building demolition, that may be hidden in the existing construction; the contractor shall contact the Owner: Beecher City C.U.S.D. #20 for removal of said items.

1.02 DESCRIPTION OF WORK

A. Unless directed otherwise in the Construction Documents, the Contractor shall:

1. Remove all materials from the demolition site in accordance with federal, state, and local regulations.
2. Disconnect all gas, plumbing, electrical, mechanical services before demolition.
3. Complete the demolition work in accordance with the plans and technical specifications, and any special provisions included in the Contract Documents.
4. Existing items of construction to remain or any portions of building adjacent to work should be protected from any damaged that may occur during construction.

1.03 REFERENCES

A. ANSI: American National Standards Institute

1. ANSI / ASSE A10.6: Safety Requirements for Demolition Operations

B. NFPA: National Fire Protection Association

1. NFPA 241: Standard for Safeguarding Construction, Alternation, and Demolition Operations.

1.04 DEFINITIONS

- A. Remove:** Remove and legally dispose of items, except those identified for use in recycling, re-use, and salvage programs.
- B. Environmental Pollution and Damage:** The presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human or animal life; affect other species of importance to humanity; or degrade the utility of the environment for aesthetic, cultural or historical purposes.
- C. Inert Fill:** A permitted facility that accepts inert waste such as asphalt and concrete exclusively for the purpose of disposal.
- D. Inert Solids/Inert Waste:** Non-liquid solid waste including, but not limited to, soils and concrete, that does not contain hazardous substances or soluble pollutants at concentrations in excess of water-quality standards established by a regional water board and does not contain significant quantities of decomposable solid waste.

- E. Class III Landfill: A landfill that accepts non-hazardous materials such as household, commercial, and industrial waste, resulting from construction, remodeling, repair and demolition operations. A Class III landfill must have a solid waste facilities permit from the governing state/local entity.
- F. Demolition Waste: Building materials and solid waste resulting from construction, remodeling, repair cleanup, or demolition operations that are not hazardous. This term includes, but is not limited to, asphalt concrete, Portland cement concrete, brick, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, plastic pipe and steel. The materials may include rock, soil, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction or land development projects.

1.05 MATERIALS OWNERSHIP

- A. Demolished materials shall become the Contractor's property and shall be removed, recycled, or disposed from project site in an appropriate and legal manner.

1.06 QUALITY ASSURANCE

- A. Demolition firm Qualifications: Engage an experienced contractor that has successfully completed demolition work similar to that indicated for this project.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before starting demolition. Comply with hauling and disposal regulations of authorities having jurisdiction. Obtain and pay for all permits required.
- C. Conform to applicable code for demolition work, dust control, and products requiring electrical disconnections and re-connection.
- D. Conform to applicable code for procedures when hazardous or contaminated materials are discovered.

1.07 PROJECT CONDITIONS

- A. The areas of selective demolition are within an existing building with ongoing occupant activities. Conduct selective demolition so ongoing operations will not be disrupted.
- B. Notify A/E of discrepancies between existing conditions and Drawings , or if structure appears to be in danger, before proceeding with Selective Demolition.
- C. Hazardous Materials: Hazardous materials are present in buildings and structures to be selectively demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.
- D. Sale of removed items or materials on-site will not be permitted.
- E. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
- F. Maintain fire protection equipment in service during selective demolition operations.

1.08 PROTECTION OF THE PUBLIC AND PROPERTIES

- A. The Contractor shall be responsible for protection of portions of building adjacent to or affected by selective demolition.
- B. Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials to match existing and so as not to void existing warranties.
- C. The Contractor shall be responsible for removing any demolition debris of mud from any street, alley, or right of way resulting from the execution of the demolition work.
- D. If it should become necessary to close any traffic lanes, it shall be the Contractor's responsibility to acquire the necessary permits and to place adequate barricades and warning signs as

required.

- E. The Contractor shall be responsible for any damage to public sidewalks abutting or adjacent to the demolition site resulting from the execution of the demolition work.
- F. It shall be the Contractor's responsibility to place and construct the necessary warning signs, barricades, fencing and temporary pedestrian sidewalks to maintain access around the demolitions site.

2. PRODUCTS (NOT USED)

3. EXECUTION

3.01 EXAMINATION

- A. Verify that utilities have been disconnected and capped. Sanitary sewer lines, water lines, and gas lines shall be capped before demolition begins. Electric utilities, telephone and cable services shall be terminated above ceiling or panel box. Mark location and terminations of utilities.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Engage A/E to survey condition of the building to determine whether removing any element might result in a structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during demolition.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to A/E.
- E. Perform surveys as the work progresses to detect hazards resulting from demolition activities.

3.02 PREPARATION

- A. As part of the project scope, the Contractor shall obtain all government agency approvals and permits required for demolition activities.
- B. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
- C. Provide temporary weather protection, weatherproof closures, during interval between selective demolition of existing construction on exterior surfaces to prevent water leakage and damage to structure and interior areas.
- D. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
- E. Cover and protect furniture, furnishings, and equipment that have not been removed.
- F. Comply with requirements for temporary enclosures, dust control, heating and cooling specified elsewhere.
- G. Conduct demolition operations to ensure minimum interference with roads, streets, walks, and other adjacent occupied and utilized facilities
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or utilized facilities without permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- H. Provide and maintain interior and exterior shoring, bracing or structural support to preserve stability and prevent movement, settlement, or collapse of existing building.
 - 1. Strengthen or add new supports when required during progress of demolition.

- I. Provide appropriate temporary signage including signage for exit or building egress.
- J. Do not disable or disrupt building fire or life systems without 3 days prior written notice to the Owner.

3.03 EXPLOSIVES

- A. Explosives: Use of explosives will not be permitted.

3.04 ENVIRONMENTAL CONTROLS

- A. Comply with federal, state and local regulations pertaining to water, air, solid waste, recycling, chemical waste, sanitary waste, sediment and noise pollution.

3.05 GENERAL SELECTIVE DEMOLITION

- A. Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the work within limitations of governing regulations and as follows:
 - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
 - 2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
 - 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify conditions and contents of hidden space before starting flame-cutting operations. See Division 1 for fire suppression requirements and for welding, cutting, and burning requirements.
 - 5. Maintain adequate ventilation when using cutting torches.
 - 6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
 - 7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
 - 8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 - 9. Dispose of demolished items and materials promptly. Comply with requirements in Division 1 regarding solid waste management and construction waste management.
- B. Reuse of Building Elements: Do not demolish building elements beyond what is indicated on drawings without approval.
- C. Removed and Salvage Items:
 - 1. Clean salvaged items.
 - 2. Store items in a secure location.
- D. Removed and Reinstalled Items:
 - 1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match existing equipment as required.
 - 2. Store items in a secure location.
 - 3. Reinstall items in locations as indicated on drawings. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- E. Existing Items to Remain:
 - 1. Protect construction indicated to remain against damage and soiling during selective

demolition. When permitted, items may be removed to a suitable, protected storage location during selective demolition, cleaned, and reinstalled in their original locations after selective demolition operations are complete.

- F. Demolition Operations: Do not damage building elements and improvements indicated to remain. Items of salvage value, not included on schedule of salvage items to be returned to Owner, shall be removed from structure. Storage or sale of items at project site is prohibited.
- G. Utilities: Locate, identify, disconnect, and seal or cap off utilities in buildings to be demolished.
- H. Shoring and Bracing: Provide and maintain interior and exterior shoring and bracing.
- I. Occupied Spaces: Do not close or obstruct streets, walks, drives, or other occupied or used spaces or facilities without written permission of the Owner and the authorities having jurisdiction. Do not interrupt utilities serving occupied or used facilities without the written permission of the Owner and authorities having jurisdiction. If necessary, provide temporary utilities.
- J. Operations: Cease operations if public safety or remaining structures are endangered. Perform temporary corrective measures until operations can be continued properly.
- K. Security: Provide adequate protection against accidental trespassing. Secure project after work hours.
- L. Restoration: Restore finishes of patched areas.

3.06 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Concrete: Demolish in small sections, cut concrete full depth at junctures with construction to remain, using power-driven saw, then remove masonry between saw cuts.
- B. Masonry: Demolish in small sections. Cut masonry at junctions with construction to remain, using power-driven saw, then remove masonry between saw cuts.
- C. Concrete Slabs-on-Grade: Saw cut perimeter of area to be demolished, then break-up and remove.
- D. Structural Steel: Demolish in small sections. Cut structural steel and steel joist at junctions with construction to remain, using power-driven saw, then remove between saw cuts.
- E. Wood joist/studs, etc.: Demolish in small sections. Cut joist, studs, etc. at junctions with construction to remain, using power-driven saw, then remove between saw cuts.

3.07 HANDLING OF DEMOLISHED MATERIALS

- A. General: Promptly re-use, salvage, recycle or dispose of demolished materials. Do not allow demolished materials to accumulate or be stored on-site for more than fourteen (14) days.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off the District's property and legally reuse, salvage, recycle or dispose of materials.

END 02 41 19

1. GENERAL

1.01 WORK INCLUDES

A. Base Bid: Contractor, provide concrete work shown and specified for:

1. Slabs.
2. Formwork.
3. Steel Reinforcement.
4. Admixtures.
5. Accessories.
6. Expansion & Control Joints.
7. Concrete Placement.
8. Finishing.
9. Curing.
10. Portland Cement Concrete Sidewalks

1.02 QUALITY ASSURANCE

A. Qualifications of Ready-Mix Plant: IDOT certified concrete plant.

B. Regulatory Requirements: See 01 41 00.

1. IBC - 2024.
2. ACI.
3. CRSI.
4. Illinois Steel Products Procurement Act (83-1030).

C. Contact vapor barrier manufacturer to schedule a pre-construction meeting and to coordinate a review, in person or digital record of the vapor barrier installation.

D. Vapor Barrier manufacturer must provide Life of Building warranty or equivalent.

1.03 REFERENCES

A. Codes and Standards: Cited Codes and Standards, or specified parts thereof, govern the work. In conflict between specified Codes and Standards and project specifications or Regulatory Requirements, make written request to Architect/Engineer for decision regarding governing requirements. Do not perform any work until receipt of Architect/ Engineer's written instructions.

1. American Concrete Institute (ACI):
 - a. ACI 301 - Specifications for Structural Concrete for Buildings, including all ACI and ASTM Standards therein referenced.
 - b. ACI 318 - Building Code Requirements for reinforced concrete.
2. Concrete Reinforcing Standard Practice.
 - a. CRSI Manual of Standard Practice.
 - b. CRSI Recommended Practice for Placing Reinforcing.

B. Manufacturer's Catalogs: The catalogs of specified manufacturers, current at date of bidding documents, are incorporated herein by reference to the same effect as if repeated herein in full.

C. Illinois Department of Transportation (IDOT): Standard Specifications for Road and Bridge Construction, adopted April 1, 2016 and all updates current at time of bidding, except references to "Method of Measurement: and "Basis of Payment" shall be deleted. All references to "Engineer" change to "Architect/Engineer".

1.04 SUBMITTALS: In accord with 01 33 00, submit:

A. Reinforcement, placement, laps, connections.

B. Product Data:

1. Concrete Mix Designs; Interior Concrete and Exterior Concrete
2. Admixtures
3. Surface treatment and Grout.

1.05 DELIVERY, STORAGE & HANDLING

- A. Deliver all products in sufficient quantity and time to maintain approved construction schedule. Deliver all packaged materials in manufacturer's original containers, with all labels and markings intact and legible. Remove materials and damaged containers immediately from the site.
- B. Store all products in a secure, dry location, out of way of construction operations. Store materials on pallets, a minimum of 4 in. off the ground. Prevent intermixing of granular materials.
- C. Handle materials in a manner to prevent damage to the materials, to other stored products, to existing construction and project work. Follow product manufacturer's instructions.

1.06 SEQUENCING/SCHEDULING

- A. Schedule all work in a manner to maintain the approved construction schedule. Cooperate and coordinate with other contractors to ensure timely completion and to eliminate interferences.

2. PRODUCTS

2.01 MATERIALS

- A. Formwork: Comply with ACI 301 and ACI 347.
 1. Plywood forms: Any species, sound, undamaged sheets. Thickness in accord with ACI 347.
 2. Lumber forms: Any species, sound, undamaged boards. Grade stamp clearly visible. Size suitable for supporting weight of fresh concrete with minimum deflection.
 3. Steel forms: Suitably stiffened to support weight of fresh concrete with minimum deflection.
 4. Form Ties: Removable or snap-off metal; adjustable length.
 5. Contractor may omit forms for footings when soil is suitable and excavations have been accurately made; otherwise, use forms. Obtain Architect/Engineer's written approval before placing any concrete against earth sides.
- B. Metallic Reinforcement:
 1. Bars: ASTM A615, Grade 60 yield grade billet-steel, deformed bars; uncoated finish.
 2. Welded steel wire fabric: ANSI/ASTM A185 plain type in flat sheets; uncoated finish.
 3. Accessories:
 - a. Tie Wires: FS QQ-W-461, Annealed steel, black, minimum 15 gage.
 - b. Chairs, bolsters, bar supports, spacers: Sized and shaped for strength and support of reinforcement during installation and placement of concrete. Include load bearing pad on bottom to prevent vapor retarder puncture.
- C. Fibrous Concrete Reinforcement: micro-filament polypropylene fibers provide one 1.0 pound bag of 3/4 inch per cubic yard of concrete. Fibers shall be mixed for a sufficient time (minimum 5 minutes at full mixing speed), add fibrous concrete reinforcement to concrete material at the time concrete is batched.
 1. Specific Gravity: 0.91
 2. Tensile Strength: 70 to 110 ksi
- D. Cement: ASTM C150, Portland cement; grey Type I normal.

- E. Normal-Weight Aggregates: ASTM C 33/C 33M, Class 3S coarse aggregate or better, graded. Provide aggregates from single source with documented service record data of at least 10 years' satisfactory service in similar applications and service conditions using similar aggregates and cementitious materials.
 - 1. Maximum Coarse-Aggregate Size: 1 inch nominal.
 - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement
- F. Lightweight Aggregate: ASTM C 330/C 330M, 3/4" nominal maximum aggregate size.
- G. Water: Clean, fresh, potable. Free from oils or other substances injurious to concrete or reinforcement.
- H. Admixtures:
 - 1. Air Entrainment: ASTM C260.
 - 2. Calcium Chloride: NOT PERMITTED.
 - 3. Superplasticizer at the manufacturer's recommended rate and appropriate for the placement requirements of the project.
- I. Expansion and Construction Joints:
 - 1. Formed Construction Joints: Galvanized steel, tongue and groove type, with removable top strip exposing sealant trough; knockout holes spaced 6 in o.c., ribbed spikes with tongue to fit top screed edge.
 - 2. Joint Filler. ANSI/ASTM D1752, Type II; reggranulated cork particles impregnated and bound with asphalt or resins; resiliency recovery of 95% if not compressed more than 50% or original thickness.
 - 3. Sealant: See 07 92 00
- J. Accessories:
 - 1. Bonding Agent: Two component epoxy resin.
 - 2. Polyethylene Film: Vapor Resistant Sheet: Must meet or exceed all requirements of ASTM E 1745, Class A; B, and C.
 - a. 15 mil thick
 - b. Sheet barrier type; Green, Yellow or Blue polyethylene film for under floor slab on grade application
 - c. Do not use on hard troweled surfaces
 - d. Permeance of less than 0.01 perms
 - e. Tensile Strength: ASTM E 1745, 70 lbs-f/in. (Min) - MD. 70 lbs-f/in. (Min) - CD
 - f. Puncture Resistance: ASTM D 1745, 2200 grams, minimum
 - g. Resistance to Organisms and Substrate in contact with Soil, ASTM E154, Section 13
 - h. Vapor Transmission Rate: ASTM E 96, 0.008 WVTR or less
 - i. All vapor resistant sheet system components must be manufactured by a single manufactures and be compatible with each other.
 - j. Seam Tape: High Density Polyethylene Tape with pressure sensitive adhesive. Minimum 4" width

- k. Vapor Proof Mastic: As approved by Vapor Resistant Sheet System manufacturer
- l. Pipe Boots: Construct pipe boots from vapor barrier material and pressure sensitive tape per manufacturers instructions
- 3. Vapor Barrier: Sheet barrier type, Green, Yellow or Blue, polyethylene film under floor slab on grade type, 15 mil thick.
- 4. Curing Materials:
 - a. Absorptive Mat: Burlap-polyethylene, 8 oz./sq.yd. Bonded to prevent separation during use.
 - b. Membrane Curing Compound: ASTM C309, Type 1
- 5. Sealing of Interior Exposed Concrete. For interior concrete floors which are to remain exposed to view (see Room Finish Schedule): provide Sonneborn's Sonothane HS, Concrete Impressions CI-MPRS-30 or Sherwin Williams .
- J. Waterstops:
 - 1. Shall be placed at all cold joints and penetrations.

2.02 CONCRETE MIX

A. Normal-Weight Concrete: (Footings, Walls, Grade Beams)

- 1. Comply with ASTM C94. If conflict between referenced Standard and project specifications, notify Architect/Engineer immediately. Confirm notification in writing. Do not proceed with concrete work until Architect/Engineer provides written direction.
- 2. Provide specified concrete as follows:
 - a. Compressive Strength @ 28 days: 4000 psi (minimum)
 - b. Air Entrainment: 4 - 8 percent
 - c. Slump: 2 - 4 inches
 - d. Maximum W/C Ratio: 0.45
 - e. Minimum Cementitious Materials Content: 540 lb/cu. yd.
- 3. If at any time during construction concrete strength falls below specified strength, or proves unsatisfactory for any reason, immediately notify Architect/Engineer. Confirm notification in writing.
- 4. Use air entrainment admixture for all concrete that will be exposed to freeze / thaw cycling.
- 5. Do not use other admixtures without Architect/Engineer's prior written authorization.

B. Normal-Weight Concrete: (Slabs-on-Grade)

- 1. Comply with ASTM C94. If conflict between referenced Standard and project specifications, notify Architect/Engineer immediately. Confirm notification in writing. Do not proceed with concrete work until Architect/Engineer provides written direction.
- 2. Provide specified concrete as follows:
 - a. Compressive Strength @ 28 days: 4000 psi (minimum)
 - b. Air Entrainment: 4 - 8 percent
 - c. Slump: 2 - 4 inches
 - d. Maximum W/C Ratio: 0.45
 - e. Minimum Cementitious Materials Content: 540 lb/cu. yd.
- 3. If at any time during construction concrete strength falls below specified strength, or proves unsatisfactory for any reason, immediately notify Architect/Engineer. Confirm notification in writing.
- 4. Use air entrainment admixture for all concrete that will be exposed to freeze / thaw cycling.
- 5. Do not use other admixtures without Architect/Engineer's prior written authorization.

C. Lightweight Concrete: (Suspended Slabs)

- 1. Provide specified concrete as follows:
 - a. Compressive Strength @ 28 days: 4350 psi (minimum)

- b. Air Entrainment: 3 percent (maximum)
 - c. Slump: 4 - 6 inches
 - d. Calculated Equilibrium Unit Weight: 110 lb/cu. ft. plus 6 or minus 3 lb/cu. ft. as determined by ASTM C 567/ C567M.
- 2. If at any time during construction concrete strength falls below specified strength, or proves unsatisfactory for any reason, immediately notify Architect/Engineer. Confirm notification in writing.
 - 3. Do not use other admixtures without Architect/Engineer's prior written authorization.

2.03 REINFORCING BARS

A. General Conditions:

- 1. All fabrication shall be done at the mill or shop prior to shipment.
- 2. No substitutions shall be obtained before the bars or fabric are fabricated or ordered. At the time of shipment, the surface of all reinforcement bars, fabric, and prestressing strands shall be free from loose mill scale, dirt, oil, grease, or other foreign substances. A light coating of rust, which may form during storage under acceptable conditions at the mill or warehouse, will not be deemed cause for rejection. Stocks of reinforcement bars, fabric or strand either at the mill or warehouse, which have not been protected in an adequate manner during storage, will not be accepted.
- 3. At the time the bars and fabric are placed in the work, they shall be free from rust which pits the surface or scales off dirt, oil grease, or other foreign substances. A light coating of rust, which may form during storage on the work under acceptable conditions, will not be deemed cause to require cleaning. Thin powdery rust and tight rust is not considered detrimental and need not be removed.

B. Reinforcement Bars:

- 1. Reinforcement bars, including epoxy coated reinforcement bars, shall conform to the requirements of ASTM A615, Grade 60 deformed bars.

3. EXECUTION

3.01 INSPECTION:

- A. Inspect all prior construction and conditions under which work will be performed. Report in writing to Architect/Engineer all conditions that would adversely affect proper execution of the work. Do not proceed with the work until all unsatisfactory conditions have been corrected.
- B. Site verification of conditions for Vapor Retarder Sheet System:
 - 1. Apply Vapor Retarder Sheet System within range of ambient and substrate temperatures recommended by vapor barrier manufacturer. Do not apply on frozen ground. Prepare surfaces in accordance with manufacturer's instructions.
 - 2.

3.02 FORMWORK

- A. Design: Design, engineer, construct, maintain and remove all formwork in accord with ACI 301, Chapter 4.
- B. Preparation:
 - 1. Verify lines, levels and measurements before proceeding with formwork.
 - 2. Hand trim sides and bottoms of earth forms; remove loose dirt prior to placing concrete.
 - 3. Ensure that forms conform to shape, lines and dimensions of members shown on drawings.
 - 4. Minimize and symmetrically align form joints and make watertight to prevent leakage of mortar.

5. Arrange and assemble formwork so that concrete will not be damaged during stripping of forms.
- C. Erection:
1. Provide bracing to ensure stability of formwork. Strengthen formwork liable to be overstressed by construction loads.
 2. Provide temporary ports in formwork to facilitate cleaning and inspection. Locate openings at bottom of forms to allow flushing water to drain. Close ports with tight fitting panels, flush with inside face of forms, neatly fitted so that joints will not show in exposed concrete surfaces.
 3. Do not displace or damage in-place vapor retarder.
 4. Construct formwork to maintain tolerances in accord with ACI 301.
- D. Form Release Agent:
1. Apply form release agent on formwork in accord with manufacturer's current printed instructions. Apply prior to placing reinforcement, anchoring devices and embedded items.
- E. Form Removal:
1. Notify Architect/Engineer 24 hours prior to removing formwork.
 2. Do not remove forms and bracing until concrete has sufficient strength to support its own weight, and construction and design loads which may be imposed on it.
- F. Cleaning:
1. Clean forms to remove foreign matter as erection proceeds.
 2. Ensure that water and debris drain to exterior through clean-out ports.
 3. During cold weather, remove ice and snow from forms. Do not use de-icing salts. Do not use water to clean out completed forms, unless formwork and construction proceed within heated enclosure. Use compressed air to remove foreign matter.
- G. Form Re-use:
1. Contractor may reuse formwork that is free from defects, cracks or damage caused by previous use.
 2. Remove, replace or repair all portions of formwork designated for reuse. Make all repairs using same type of material as originally used. Make all repaired areas smooth and flush.

3.03 REINFORCEMENT BARS

- A. Storage and Protection:
1. The reinforcement bars, when delivered on the job, shall be stored above the surface of the ground upon platforms, skids or other supports, and shall be protected from mechanical injury and from deterioration by exposure. When placed in the work, they shall be free from dirt, detrimental scale, paint, oil, or other foreign substances.
- B. Cutting and Bending:
1. Reinforcement bars shall be cut and bent at the mill or shop to the shapes shown on the plans before shipment to the work. Bending in the field will not be permitted **except** to correct errors, damage by handling and shipping, and minor omissions in shop bending.
- C. Patching and Securing:

1. All reinforcement bars shall be placed and tied securely at the locations and in the configuration shown on the plans prior to the placement of concrete. Reinforcement bars shall not be placed by sticking or floating into place during or immediately after placement of the concrete.
2. Bars shall be tied at all intersections except where the center to center dimension is less than 300 mm (1 ft.) in each direction, in which case alternate intersections shall be tied. The number of ties as specified shall be doubled for lap splices at the stage construction line of concrete bridge floors when traffic is allowed on the first completed stage during the pouring of the second stage.
3. Prior to the placement of any concrete, all mortar or other foreign material shall be removed from the reinforcement. Placement of the concrete shall not commence until the A/E has inspected and approved the reinforcement placement. The Contractor shall correct any misalignment of the reinforcement bars occurring during the placement of the concrete.
4. The clearances from the face of the form shall be maintained by the use of chairs or other supports approved by the A/E. Clearance from the bottom of footing shall be maintained by concrete blocks, cement bricks, suspended in place, or other supports system approved by the A/E. Pebbles, stones, building bricks, and wood blocks shall not be used for bar supports.

D. Splicing:

1. Reinforcement bars shall be furnished in the full lengths indicated upon the plans. No splicing of bars, except where indicated on the plans, will be permitted without the written approval of the A/E. All reinforcement bars specified along a continuous line of bars shall be lapped the specified length and shall be contact spliced and wired together. All lapping reinforcement bars, not specified along a continuous line and contact spliced, shall be placed a clear distance apart of at least 65 mm (2½") or contact spliced, whichever requires the least adjustment in the bar spacing specified.
2. Splicing of reinforcement bars by welding will not be allowed.

E. Fibrous Concrete Reinforcement:

1. Fibers shall be mixed for a sufficient time (minimum 5 minutes at full mixing speed), add fibrous concrete reinforcement to concrete material at the time concrete is batched.

3.04 ADMIXTURES

- A. Air Entrainment: Add air entrainment admixture to achieve specified percentages of air content. Follow admixture manufacturer's current printed instructions.
- B. Chemical Admixtures. Use only upon receipt of Architect/Engineer's prior written approval.

3.05 ACCESSORIES

A. Bonding Agent:

1. Prepare previously placed concrete by cleaning with a steel brush.
2. Apply bonding agency in strict accord with manufacturer's current printed instructions.

B. Fill and Vapor Retarder Sheet

1. Surface preparation:

- a. Granular fill: Clean mixture of crushed stone or crushed or uncrushed gravel; ASTM D448, Size 57, with 100 percent passing a 1-1/2-inch (38-mm) sieve and 0 to 5 percent passing a No. 4 (4.75-mm) sieve.
Granular course: Install granular fill over proof rolled base, moisten, and compact
- b.

with mechanical equipment to elevation tolerances of plus 0 inches or minus 3/4 inches. Install fines over top of granular base to provide a flat surface for vapor retarder covering above.
Verify that fill materials are dry and clean, ready to receive the work.

- c. Remove all loose or foreign matter and all protuberances that would puncture or otherwise damage the membrane.
- 2. Installation:
 - Installation shall be in accordance with manufacturer's instructions and ASTM E 1643-98.
 - a. Unroll vapor barrier with the longest dimension parallel with the direction of the concrete placement.
 - b. Lap vapor barrier over footings and seal to foundation walls.
 - c. Overlap joints 6" and seal with manufacturer's tape
 - d. Seal all penetrations (including pipes) per manufacturer's instructions.
 - d. No penetration of the vapor barrier is allowed except for reinforcing steel and permanent utilities. Do not cut or puncture vapor retarder.
 - e. Repair damaged areas by cutting patches of vapor barrier, overlapping damaged area 6", and taping all four sides with tape.
 - f.
- B. Waterstops and groutable hose waterstop system components: Install in accordance with Concrete Admixture Manufacturer's recommendations and the drawings.
 - Bentonite waterstops:
 - 1. Shall be placed at all cold joints and penetrations
 - a. Preparation:
 - b.
 - 1. Brush off all dust and debris and apply a coat of primer or spray adhesive to the area where the waterstop is to be placed on the standing structural member.
 - 2. Using moderate hand pressure press a continuous bead of waterstop firmly into position on the standing structure. Check to be certain that the waterstop has bonded to the primed area.
 - 3. For proper joining, cut ends with sharp tool at 45 degree angle, and then place ends over one another
 - 4. Peel the protective backing from the exposed side of the waterstop. Knead the overlapped ends together to form continuous, uninterrupted gasket.
 - 5. For shotcrete applications, in addition to the instructions above, utilize masonry nails to hold the waterstop in place on the concrete. Masonry nails should be spaced approximately 12 inches apart. Waterstop must be glued and tied with the use of tie wires to all penetrations.
 - c. Bentonite waterstops must not be installed more than 2 days prior to concrete placement. After installation of waterstops, cover the waterstop with a plastic sheet to protect from weather damage.
Bentonite waterstops shall be dry and not activated when concrete is placed. If
 - d. the waterstops have been water damaged they shall be replaced before the concrete is placed.

3.06 EXPANSION & CONSTRUCTION JOINTS

- A. Preparation: Properly locate and form expansion, control and contraction joints in accord with drawings and approved shop drawings.
- B. Installation:
 - 1. Expansion Joints:
 - a. Install expansion joints at right angles to concrete surface; extend through full depth or thickness of concrete.
 - b. Cut-back exposed expansion joint material a minimum of 3/8 in. from surface of concrete; fill with sealant flush to surface; tool smooth.
 - 2. Place formed construction joints in floor slab. Set top screed to indicated elevations. Secure to resist movement of wet concrete.
 - 3. Install joint anchorage in accord with manufacturer's current printed instructions. Use primers recommended by joint filler and sealant manufacturer.
 - 4. Apply sealants in accord with 07 90 00.
 - 5. Joints for Concrete Curb and Gutter shall be according to Article 606 of the IDOT Standard Specifications.

3.07 CONCRETE PLACEMENT

- A. Preparation:
 - 1. Notify Architect/Engineer and Testing Agency at least 48 hours prior to scheduled placements of all concrete. Confirm notification in writing.
 - a. Prior to placement, Architect/Engineer will inspect all lines, grades, elevations, formwork, reinforcement and accessories.
 - b. Do not proceed with concrete work without Architect/Engineer's written approval of all items.
 - 2. Ensure that forms are properly coated with form release agent.
 - 3. Ensure that all reinforcement, sleeves, conduits, pipes, frames for openings, anchors, inserts, and other embedded items are in place and properly anchored.
 - 4. Ensure that all reinforcement is clean and free of all material harmful to concrete.
 - 5. Verify proper placement of vapor retarder and perimeter insulation.
- B. Placement:
 - 1. Place all concrete in accord with ACI 301.
 - 2. Ensure that in-place items, reinforcement, embedded items, vapor retarder and insulation are not dislodged or displaced during placement.
 - 3. Convey all concrete from mixer to place of deposit as rapidly as possible by means that will prevent segregation or loss of materials.
 - 4. Deposit concrete as nearly as practicable in its final position to avoid segregation due to rehandling or flowing.
 - a. Place concrete at the rate that will keep concrete plastic at all times and flowing readily into spaces around reinforcement.
 - b. Do not use concrete that has partially hardened or that has been contaminated with foreign materials.

- c. retempering will not be allowed.
- d. Do not allow concrete to free fall more than 4 ft.
- e. Place all concrete on clean, well-thawed, damp surfaces, free from water; never upon soft mud or dry porous earth.
- 5. Once started, place concrete continuously between predetermined construction and control joints. Continue placing until panel or section is completed; keep top surfaces level. (Do not break or interrupt successive pours so that cold joints occur.)
- 6. Slabs on Fill:
 - a. Place a porous fill over subgrade, consisting of clean washed gravel or crushed stone graded from 3/4 in. to 1-1/2 in.; 4 in. thick. Roll or tamp fill until thoroughly compacted.
 - b. Install vapor retarder, insulation, reinforcement, embedded items as specified.
 - c. Provide wood runways for wheeled equipment for transporting concrete over in-place construction. Prevent dislodgement or damage to in-place items.
 - d. Saw cut control joints at an optimum time after finishing. Use 3/16 in. thick blade; cut 1/4 depth of slab thickness.
 - e. Separate slabs from vertical surfaces with joint filler. Extend joint filler from bottom of slab to within 1/2 in. of finished slab surface.
 - f. Place concrete of indicated thickness and strike off at proper levels to receive specified finishes.
 - g. Set continuous expansion joint strips, seal joint tightly at strips and spaces around pipes, sleeves or conduits penetrating slabs.
 - h. See Finish Schedule at end of Section.
 - i. Tolerances: Provide Class A tolerances to floor slabs in accord with ACI 301.

C. Weather Conditions:

- 1. Place all concrete in accordance with ACI 305R-89 (hot weather placement) and ACI 306-88 (cold weather placement).
- 2. Concrete temperature when deposited: Minimum 50°F; maximum 85°F.
- 3. In freezing weather, provide suitable means for maintaining concrete temperature at a minimum of 70°F. for three days, or 50°F. for five days after placing.
- 4. Cooling of concrete to outside temperature: Not faster than 1° per hour for first day and 2° per hour thereafter until outside temperature is reached.
- 5. Maximum temperature of concrete produced with heated aggregated, heated water, or both, at any time during its production or transportation: 90°F.
- 6. Do not mix salt, chemicals or other foreign materials in concrete to prevent freezing or to accelerate hardening of concrete.

3.08 PATCHING

- A. Upon completion of each concrete placement, Architect/Engineer will inspect the work, and will order all concrete not formed as shown on drawings or approved shop drawings, or which is out of level or alignment, or which shows defective surfaces, to be removed and replaced with satisfactory work.

1. Upon Contractor's written request, Architect/Engineer may give written authorization to patch specific defective surfaces.
2. The Architect/Engineer's authorization to patch any defective area will not be considered a waiver of the Architect/Engineer's right to order removal and replacement of defective work when patching is not satisfactory.
3. When authorized, perform patching in accord with ACI 301, Section 5.
4. At Contractor's option, a bonding agent may be used instead of or in addition to bonding grout, provided the bonding agent does not affect color of concrete. Use bonding agent in accord with manufacturer's current printed instructions. Apply after all cutting, chipping and cleaning of oil, dust, dirt, grease or loose surface materials have been removed.
5. Building up patching to match appearance of surrounding exposed concrete surfaces. Apply bonding agent to honeycombed areas, aggregate pockets or other voids, and fill with mortar consisting of Portland cement and aggregate selected to match existing concrete and finish of existing surfaces. Cure patches to prevent cracks.
6. Patching and surfacing compound may be used for thin patches where it is not necessary to match the color, texture and finish of surrounding concrete surfaces.

3.09 DEFECTIVE CONCRETE

- A. Modify or replace concrete not conforming to indicated lines and levels, details and elevations.
- B. Repair or replace concrete not properly placed or finished, or not of specified type.

3.10 FINISHES

- A. Slabs: Provide level slabs except where otherwise indicated on drawings. Determine all top-of-slab elevations by use of preset runners supported by adjustable chairs set to proper elevation. Architect/Engineer will obtain readings by use of surveyor's level to verify elevations of runners and supporting formwork. Schedule the work so that these readings may be obtained before beginning concrete placement and without causing delay in the work.
 1. Place concrete for all slabs continuously between construction joints; consolidate by vibration. Bring to correct level with a straight edge and strike off. Use bull floats or darbies to force coarse aggregate down and to produce a smooth surface, free from humps and hollows.
 2. Power float all slabs to a texture consistent with the existing tennis courts. Begin power floating when water sheen has disappeared or the mix has stiffened sufficiently that the weight of a man standing on it leaves only a slight imprint on the surface. If two power floating operations are necessary to bring the surface to the specified state, allow the concrete to stiffen or become harder before beginning the second floating operation.
 3. Perform additional finishing, including brooming, flushing and steel troweling as specified.
 4. When steel trowel finish is specified, provide power and hand troweling. Begin power troweling as soon as little or no cement paste clings to the blades. Continue troweling until the surface is dense, smooth and free of all minor blemishes such as trowel marks.
 5. Maximum variation in surface tolerance for troweled finishes "B" and "C": 1/8 in. in 10 ft. If variations greater than this exist, the Architect/Engineer may direct the Contractor to grind the surfaces to bring them within the tolerance specified. Patching of low spots will not be permitted. Perform grinding as soon as possible, preferably within three calendar days, but not until the concrete is sufficiently strong to prevent dislodging coarse aggregate particles.
 6. Sprinkling of dry cement or a mixture of dry cement and sand on the surface of the fresh concrete to absorb water or to stiffen the mix will not be permitted.
 7. Finishes:

- a. Finish "A". (For exposed concrete floors which will remain exposed, receive finished flooring, special coatings, paint, harder or sealer): Finish with a steel trowel. Use final hand troweling to remove slight imperfections left by troweling machines and to bring surface to a dense, smooth polished final finish. Continue hand troweling until a ringing sound is heard as the trowel passes over the surface.
- b. Finish "B". For coarse-textured, concrete -formed surfaces intended to receive plaster, stucco or wainscoting.
- c. Finish "C" (Interior or exterior ramps, exterior slabs, platforms, sidewalks, curb and gutter, and steps): Trowel to a smooth, dense surface. Finish with a fine-hair push broom, perpendicular to the direction of pedestrian or vehicular traffic. Finish gutter parallel to the direction of water flow.
- d. Finish "D". For a minimum quality surface where roughness is not objectionable and applied where surface will be permanently concealed. I.e. footings, foundation walls, etc. .
- e. Exposed aggregate finish shall be constructed as follows:
 - 1) Materials:
 - a) An IDOT approved Class SI concrete mix from an IDOT certified ready-mix plant that incorporates gravel as the coarse aggregate.
 - 2) Installation:
 - a) Install and compact subbase per plan details, place concrete, finish, spray retarder to 1/8" deep on top, let cure 4 - 24 hours.
 - b) Hose and brush-off evenly. Let dry and cure for 4 - 6 weeks.
 - c) Power wash off top surface to remove remaining cement matrix and clean exposed aggregates.
 - d) Wash off, let dry and spray a sealer approved by the A/E.

3.11 FIELD QUALITY CONTROL - INSPECTIONS & TESTS

- A. General Contractor shall employ a Testing Agency whom shall make the following inspections and tests in accord with ACI 301.
 - 1. Compression strength test for each 50 cu. yds. of concrete, or fraction thereof, on specimens taken at point of discharge from the truck immediately before placing of each design mix daily. A set of test specimens will consist of four standard 4 in. x 8 in. cylinders in accord with ASTM C172 and ASTM C39. Two cylinders will be tested at seven days, the other two at 28 days. The complete test set will be picked up by the Testing Agency in 24 hours after casting and taken to the Testing Agency's laboratory for further curing and testing.
 - 2. Three additional cylinders will be made during a placement which requires temporary heating. These cylinders will be left in the enclosure in the same environment as concrete placed. One cylinder will be tested at three days, one at seven days, the third at 28 days to verify adequacy of temporary heating system.
 - 3. Slump test will be performed in accord with ASTM C143, with one test made for each 50 cu. yds. of concrete, or fraction thereof.
 - 4. Air entrainment test will be performed in accord with ASTM C173 or C231, with one test made for each 50 cu. yds. of concrete, or fraction thereof.
 - 5. When tests indicate concrete strength below that specified, improper slump or air entrainment, or when visual defects indicate poor quality concrete has been placed, Architect/Engineer or Testing Agency will immediately notify Contractor. Contractor may, at its own expense, have additional tests made; including compression tests on cored cylinders in accord with ACI 318. Architect/Engineer will order the removal of all non-conforming or defective concrete, and its replacement with concrete meeting project specifications.

6. Testing Agency shall provide copies of all test and locations of test to the Architect/engineer within 7 days of the test results.

- B. The General Contractor shall give the Testing Agency and Architect/Engineer 48 hours advance notice of placing any concrete. The Testing Agency shall make test cylinders, air and slump tests and witness placement of concrete. If the Testing Agency or Architect/Engineer is not present to perform or witness the foregoing because of less than 48 hours notice, the General Contractor shall hire, at his own expense, an independent testing lab to take and test core samples at locations directed by the Architect/Engineer.

3.12 LIQUID HARDENER AND SEALER -

- A. Seal interior concrete floors which will remain exposed and make dust-proof by applying one additional coat of curing compound as specified. Make every effort to eliminate staining of concrete during construction.
- B. Apply the second coat after completion of construction, at the minimum rate of 1 gal. per 450 sq. ft. Verify that surfaces are thoroughly set, sound, dry, clean and free from dust, dirt, oil or paint. Repair holes and depressions and finish smooth or to match texture of adjacent floor areas. Uniformly apply with spray, roller or soft pushbroom, ensuring that all voids and minor depressions are fully coated.

3.13 ADJUST & CLEAN

- A. Upon completion, thoroughly inspect all work. Correct all defects. Remove defective work when patching is not authorized by Architect/Engineer.
- B. Clean up and remove all surplus materials, packing, rubbish and debris resulting from the work and legally dispose of off site.

3.14 PROTECTION

- A. Protect finished concrete work so that work will be without flaw or damage at Architect/Engineers's acceptance.

END 03 30 00

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid: Contractor provide brick masonry work, including:
1. Mortar for unit masonry.
 2. Brick masonry units.
 3. Reinforcement, anchorages, and accessories.
 4. Form control joints.
 5. Cut and fit for other trades
 6. Loose steel angles, including any openings for ductwork and other mechanical equipment.

1.02 REFERENCES

- A. ASTM
1. ASTM C91 - Masonry Cement.
 2. ASTM C94 - Ready-Mixed Concrete.
 3. ASTM C144 - Aggregate for Masonry Mortar.
 4. ASTM C150 - Portland Cement.
 5. ASTM C207 - Hydrated Lime for Masonry Purposes.
 6. ASTM C270 - Mortar for Unit Masonry.
 7. ASTM C387 - Packaged, Dry, Combined Materials for Mortar and Concrete.
 8. ASTM C476 - Grout for Reinforced and Non-reinforced Masonry.
 9. ASTM C780 - Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry.
 10. ASTM A153 - Zinc-Coated Wire for Wall Reinforcement.
 11. ASTM 90 - Hollow Loadbearing Concrete Masonry Units.
 12. ASTM C145 - Solid Loadbearing Concrete Masonry Units.
 13. ASTM E514 - Test for Water Permeance of Masonry.
- B. International Masonry Industry All-Weather Council (IMIAC) - Recommended Practices and Guide Specifications for Cold Weather Masonry Construction.
- C. BIA - Brick Institute of America "Technical Notes"

1.03 QUALITY ASSURANCE

- A. Installer: Masonry contractor shall have at least 5 years experience in similar types of work and be able to furnish a list of previous jobs and references if requested by the Architect.
- B. Expansion Joints: Provide expansion joints as shown on the Drawings or if not shown, install as recommended by the Brick Institute of America.

1.04 ENVIRONMENTAL REQUIREMENTS

- A. Maintain materials and surrounding air temperature to minimum 50 degrees F prior to, during, and 48 hours after completion of masonry work. If environmental conditions do not allow this, follow 'B' below for cold weather. In hot weather (above 99 degrees F with less than 50% relative humidity) protect masonry construction from direct exposure to sun and wind.
- B. Cold Weather Requirements: IMIAC - Recommended Practices and Specifications for Cold Weather Masonry Construction.

1.05 PROTECTION

- A. Store mortar materials on dunnage in a dry place. During freezing weather, protect masonry units with tarpaulins or other suitable material. Protect reinforcement and accessories from elements.

1.06 SUBMITTALS

- A. In accord with 01 33 00: Furnish product literature and samples of:
1. Mortar for color selection;

2. Brick masonry samples for color selection;
3. Weep/cell vents for color selection;

1.07 NOTE

- A. The drawings use both the terms "CMU" and "Concrete Blocks"; both of these terms refer to the same product.

2. PRODUCTS

2.01 MORTAR

A. Acceptable Manufacturers

1. General Portland.
2. Gifford Hill.
3. Holnam Rainbow Products

B. Materials

1. Portland Cement: ASTM C150, normal-Type I; Color to be selected by architect from manufacturer's full range.
2. Mortar Aggregate: ASTM C144, standard masonry type; clean, dry, protected against dampness, freezing, and foreign matter.
3. Grout Course Aggregate: Maximum 3/8 inch size.
4. Grout Fine Aggregate: Standard masonry type sand.
5. Hydrated Lime: ASTM C207, Type S.
6. Premix Mortar: ASTM C387, using gray cement.
7. Water: Clean and potable.

C. Mixes

1. Mortar for Non-load Bearing Walls and Partitions: ASTM C270, Type S unreinforced below grade and Type N above grade.
2. Mortar for load bearing walls: ASTM C270, Type S.
3. Pointing Mortar: ASTM C270, Type N with maximum 2 percent ammonium stearate or calcium stearate per cement weight.
4. Grout for Embedment of Reinforcing Bars: Coarse Grout per ASTM C 476

D. Mortar Mixing

1. Thoroughly mix mortar ingredients in quantities needed for immediate use in accordance with ASTM C270 and C476. Measure materials by volume or equivalent weight. Dry batch materials for 3 - 5 minutes before adding water. Only add as much water as necessary to produce workable consistency.
2. Add mortar color in accordance with manufacturer's instructions. Provide uniformity of mix and coloration.
3. Do not use antifreeze compounds to lower the freezing point of mortar or grout.
4. If water is lost by evaporation, do not retemper. Do not use mortar or grout after it has begun initial set.

E. Retempering

1. Partially hardened mortar may be re-tempered to replace water lost through evaporation.
2. Do not retemper mortars out of mixer for more than 2 ½ hours.
3. Repointing mortar shall be used within 30 minutes of final mixing. Do not retemper or use partially hardened repointing mix.

2.02 CONCRETE MASONRY

- A. Concrete block. ASTM C90 Hollow Core Loadbearing, Grade S, Type I; Modular Size. Normal Weight. Nominal face dimensions of 8"x16" and thickness as shown on drawings. Light Weight Block is acceptable on non-bearing, interior walls in existing building.

2.03 FACE BRICK.

- A. Match existing building face brick in color, size, texture, and pattern.

1. Color #1 - See drawing for location & orientation
Brick Manufacturer: Yankee Hill Brick & Tile
Dark Smoke Bronze Smooth, Modular Size
Brickworks Supply Center - Champaign, 3200 West Springfield Ave, Champaign, IL
Contact: Jim Hedderich, Office #: 217-689-1693, Cell: 217-841-6072
Email: jim.hedderich@brickworkssupply.com
- B. Brick shall be stockpiled on the project site in sufficient number to complete the entire job. Manufacturer shall verify that the color run uniformly throughout the building with no definite lines of change in color.
- C. Special Brick Shape: Furnish special units for 90 degree corners with surface texture on sides and ends.

2.04 REINFORCEMENT AND ANCHORAGES

- A. Acceptable Manufacturers. Use only the specified products of the following manufacturers:
 1. Hohmann & Barnard, Inc.
 2. Wire-Bond, Inc.
 3. York Flashings
- B. Reinforcing steel: ASTM A615, grade 60, deformed billet-steel bars, uncoated.
- C. Brick Veneer Anchor System / Wood Reinforcements:
 1. Hohmann & Barnard, Inc: HB - DW-10HS Veneer Anchor.
 - a. Anchor : 14 Gauge
 - b. Finish: Hot Dip Galvanized
 - c. Vee Byna-Tie Diameter: 3/16" Diameter Standard
 - d. Vee Byna-Tie Length: Field Verify
- D. Block Horizontal Joint Reinforcement
 1. Hohmann & Barnard, Inc. - 120 Truss- Mesh
 - a. (S) Standard: 9 ga. side rods x 9 ga. cross rods
 - b. Hot Dip Galvanized

2.05 CONCEALED FLASHINGS

- A. Flashing For In-Wall and Thru-Wall Conditions: Self Adhering Stainless Steel Composite Flashing:
 1. Hohmann & Barnard, Inc. - Mighty-Flash SA - Flashing
 - a. Roll width - Verify with details
 - b. Stainless Steel Drip Plate, 3"
 - c. Stainless Steel Termination Bar, T2
 - d. Mastic & Primer: As recommended by manufacturer.
 - e. Tape: X-SEAL Tape
- B. Support For Membrane Flashing: Where cavity width exceeds 2", provide shop fabricated galvanized metal sheet in configuration to bridge the cavity.

2.06 MISCELLANEOUS MATERIALS

- A. Weep/Cell Vents:
 1. Hohmann & Barnard, Inc. - QV Quadro-Vent
 - a. Color as selected by A/E.,
 - b. Size: 2 1/2" x 3 5/8" x 3/8 "
- B. Mortar Net / Cavity Drainage:
 1. Hohmann & Barnard, Inc. - Mortar Trap
 - a. High-quality polypropylene strands woven into 90% open mesh.
 - b. Size: 2 inch x 10 inch, or size as fits opening, as noted on drawings.
- C. End Dams

1. Hohmann & Barnard, Inc. - End Dams
 - a. Pre-fabricated Soldered end dams.
 - b. Stainless Steel

D. Corners

1. Hohmann & Barnard, Inc. - Inside & Outside Corners
 - a. Pre-fabricated Soldered end dams.
 - b. Stainless Steel

E. Control Joint/Expansion Joint

1. Hohmann & Barnard, Inc.- RS Series.
 - a. Rubber Control Joint
 - b. Standard
2. Hohmann & Barnard, Inc. - Backer Rod - Standard

2.07 ACCESSORIES

- A. Bond Breaker: Provide building paper ASTM D226, Type II, No. 30 unperforated asphalt felt . See construction for locations.

2.08 CLEANING AGENTS

- A. Consult the brick manufacturer for recommendation on what cleaning agent is acceptable for use and the recommended cleaning procedures. Use only manufacturer recommended methods and materials. Use cleaning agents in strict conformance with cleaning agent manufacturer's instructions.

3. EXECUTION

3.01 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive work.
- B. Verify items provided by other sections of work are properly sized and located.
- C. Verify that built-in work items are in proper location, and ready for roughing into masonry work.
- D. Beginning of installation means installer accepts existing conditions.

3.02 PREPARATION

- A. Direct and coordinate placement of metal anchors supplied to other sections.
- B. Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.
- C. Scaffolding: Provide, erect, maintain, move, and finally remove scaffolding and staging required for masonry installation. Construct and maintain scaffolding in compliance with applicable ordinances, laws, rules and regulations. Scaffolding shall be sufficiently substantial to support workmen and necessary materials and equipment. Provide adequate guard rails for protection of property, workmen and passersby.

3.03 COURSING

- A. Establish lines, levels and coursing indicated. Protect form displacement.
- B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints to uniform thickness.
- C. Lay brick units in **Running bond**. Form concave mortar joints.
- D. Modular Brick Unit Coursing: Three units and three mortar joints to equal 8 inches
- E. Utility Brick Unit Coursing: Two units and two mortar joints to equal 8 inches.

3.04 PLACING AND BONDING

- A. Lay brick units with face shell bedding on head and bed joints.
- B. Buttering corners of joints or excessive furrowing of mortar joints are not permitted.
- C. Remove excess mortar as work progresses.
- D. Do not shift or tap masonry units after mortar has achieved initial set.
- E. Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.

3.05 WEEPS/CELL VENTS

- A. Install weep vents in exterior veneer at a maximum of 16 inches on center horizontally above through-wall flashing, above shelf angles, and at bottom of walls.

3.06 REINFORCEMENT AND ANCHORAGES

- A. Install veneer reinforcement at 32" on center horizontally and at 16" centers vertically, attach reinforcement to studs thru exterior wall sheathing.
- B. At Concrete Masonry Units:
 - 1. Install horizontal joint reinforcement at 16" on center typically and 8" at intersection of walls.
 - 2. Place masonry joint reinforcement in second horizontal joints above and below openings. Extend 16" minimum each side of opening.
 - 3. Place joint reinforcement continuous in first and second joint below top of walls.

3.07 LINTELS

- A. Support opening over 16" wide with loose steel lintels.
Where a control joint is shown to cross the end of a lintel, install flashing material over and under the end of the lintel and leave a space for expansion movement at the end of the lintel.
- B. Lintels for miscellaneous openings not shown on the Drawings shall be furnished by the trade requiring the opening.

3.08 TOLERANCES

- A. Maximum variation from unit to adjacent unit: 1/32".
- B. Maximum variation from plane of wall: 1/4" in 10' & 1/2" in 20' or more.
- C. Maximum variation from plumb: 1/4" per story, noncumulative.
- D. Maximum variation from level coursing: 1/8" in 3' & 1/4" in 10" and 1/2" in 30'.
- E. Maximum variation in joint thickness: 1/8" in 3'.
- F. Maximum variation in cross sectional thickness: 1/4".

3.09 CAVITY WALL CONSTRUCTION

- A. Install mortar net at base of all cavity walls. Even though mortar net is installed, work to minimize dropping of mortar into the cavity.
- B. Insulation: Fit boards tightly between the masonry reinforcement and provide insulation caps to hold the insulation boards securely against the wood backup. Butt joints as tightly as possible and stagger vertical joints between courses.
 - 1. Corners: At major inside and outside corners of the building, extend the insulation boards across the cavity to the inside face of the exterior wythe, to block air movement around the corner.

3.10 MASONRY FLASHINGS

- A. Locations: Install thru-wall flashings at the following masonry locations, whether shown or not:

1. At base of exterior walls.
2. Over all exterior lintels.
3. Over all exterior shelf angles
4. Under all window sills

B. Thru-Wall Flashing Fabrication: Form typical thru wall flashings by adhering self-adhesive flashing membrane to a stainless steel edge drip, adhering membrane all across the top of the sheet metal. Trim membrane at edge of metal drip.

1. Install the metal drip edge to make continuous runs. Lap the metal joints and fill with mastic used to set the edge drip. Trim the metal length to match the width of the flashing.

C. Thru-Wall Flashing Installation

1. Comply with the flashing membrane manufacturer's temperature limitations.
2. Install in one piece to the extent practicable. Lap flashing 6" at joints and seal joint edges continuously.
3. Lintel Flashings: Extend flashings past ends of lintel and fold flashing up into the first head joints beyond end of lintel to form a positive end dam.
4. Step Flashings: At the end of each section of flashing, fold flashing at least 1" up into a head joint so as to form a positive end dam.
5. Secure top of flashing membrane to substrate with continuous termination bar, secure at 8" centers to substrate. Provide sealant as recommended by flashing manufacturer along top of flashing membrane.

3.11 MORTAR JOINT FINISHING

A. Tooled Joints: Tool **all** joints either exposed or considered concealed.

1. At time of laying, strike masonry joints flush.
2. When mortar in joints become thumbprint hard, tool to a hard, concave finish using sled type jointer, with diameter 1/8" to 1/4" larger than joint.
3. Jointing tools shall be same diameter for each type of masonry.

3.12 CUTTING AND FITTING

- A. Cut and fit for chases, pipes, conduits and sleeves. Coordinate with other sections of work to provide correct size, shape and location.
- B. Obtain A/E approval prior to cutting or fitting masonry work not indicated or where appearance or strength of masonry may be impaired.

3.13 CLEANING

A. Cut out any defective joints and holes in exposed masonry and repoint with mortar.

B. Clean all exposed unglazed masonry:

1. Apply cleaning agent to sample wall area of 20 sq. ft. in location acceptable to the A/E.
2. Do not proceed with cleaning until sample area is approved by A/E.
3. Clean initially with stiff brushes and water.
4. When cleaning agent is required:
 - a. Follow brick manufacturer's recommendations.
 - b. Thoroughly wet surface of masonry on which no green efflorescence appears.
 - c. Scrub with acceptable cleaning agent.
 - d. Immediately rinse with clear water.
 - e. Do small sections at a time.
 - f. Work from top to bottom.
 - g. Protect all sash, metal lintels and other corrodible parts when masonry is cleaned with acid solution.
 - h. Remove efflorescence in accordance with brick manufacturer's recommendations.

3.14 PROTECTION OF FINISHED WORK

A. Protect finished installation.

B. Without damaging completed work, provide protective boards at exposed external corners which may

be damaged by construction activities.

END 04 20 00

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid:
 - 1. General Contractor:
 - a. Provide all labor and material necessary to furnish and satisfactorily install Cut Indiana Limestone as shown on drawings and as specified herein.

1.02 DEFINITIONS

- A. ACI - American Concrete Institute
- B. AISC - American Institute of Steel Construction
- C. ASTM - American Society for Testing and Materials
- D. AWS - American Welding Society
- E. ILIA - Indiana Limestone Institute of America
- F. IMI - International Masonry Institute

1.03 REFERENCE STANDARDS

- A. ASTM A36/A36M -Standard Specification for Carbon Structural Steel
- B. ASTM A123/A123M - Standard Specification for Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products.
- C. ASTM C144 - Aggregate for Masonry Mortar.
- D. ASTM C150 - Portland Cement.
- E. ASTM C170 - Standard Test Method for Compressive Strength of Dimension Stone
- F. ASTM C207 - Hydrated Lime for Masonry Purposes.
- G. ASTM C270 - Mortar for Unit Masonry.
- H. ASTM C387 - Packaged, Dry, Combined Materials for Mortar and Concrete.
- I. International Masonry Industry All-Weather Council (IMIAC) - Recommended Practices and Guide Specifications for Cold Weather Masonry Construction.

1.04 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Company specializing in manufacturing products specified in this section with at least twenty years of documented experience and a member of Indiana Limestone Institute of America, Inc.
- B. Fabricator Qualifications: Company specializing in custom fabrication of limestone masonry products as specified in this section and shown on drawings, with at least ten years of documented experience and recommended by the manufacturer.
- C. Installer Qualifications: Contractor shall have at least ten years of documented experience in similar types of work of this section and be able to furnish a list of previous jobs and references if requested by the Architect.
- D. Stone and workmanship quality shall be in accordance with **Industry Standards and Practices** as set forth by the Indiana Limestone Institute of America, Inc., Bedford, Indiana. The stone supplier shall be a member in good standing of that organization.
- E. Testing Agency Qualifications: Contractor shall engage independent testing laboratories to preform post construction testing:

1. Test limestone for compliance with specified performance requirements
2. Conduct tests using specimens randomly selected from proposed materials designated for use in this work.

F. Welder Qualifications: Company with welding operators qualified for processes required for this work in accordance with AWS standard qualifications procedures.

1.05 SUBMITTALS

- A. In accord with 01 33 00:
- B. Samples. The supplier or fabricator shall submit three (3) samples, 6" x 6", for approval by the A/E. The samples shall in general be typical of the grade, color and finish specified. This sample and the standards established by the Indiana Limestone Institute shall form the basis of the contract agreement.
- C. Cutting and setting drawings
1. The cut stone supplier shall prepare and submit to the A/E for approval, complete cutting and setting drawings for all of the cut Indiana Limestone work.
 2. Such drawings shall show in detail the sizes, sections, and dimensions of stone, the arrangement of joints and bonding, anchoring and other necessary details.
 3. All jointing as shown by the architect on the contract drawings shall be followed, unless modifications are agreed upon in writing, or indicated upon the approved shop drawings. If the contract drawings do not show the intent of the jointing, it will be the fabricator's responsibility to establish the jointing in accordance with industry standards and practices.
 4. The general contractor shall furnish all field dimensions necessary for fabrication.
 5. The cutting and setting drawings shall be based upon and follow the drawings and full size details prepared by the A/E except where it is agreed in writing or shown on the approved shop drawings that changes be made.
 6. Each stone indicated on the setting drawings shall bear the corresponding number marked on an unexposed surface.
 7. Provision for the anchoring, doweling, and cramping of work, in keeping with standard practices, and for the support of stone by shelf angles and loose steel, etc., when required, shall be clearly indicated on the cutting and setting drawings.

1.06 DELIVERY, STORAGE AND PROTECTION

- A. Loading and shipment. The cut Indiana Limestone shall be carefully packed for transportation with exercise of all customary and reasonable precautions against damage in transit. All cut stone under this contract shall be loaded and shipped in the sequence and quantities mutually agreed upon by the general contractor or erector and the material supplier.
- B. Deliver store and handle materials and products in strict compliance with manufacture's instructions, recommendations and industry standards.
- C. Unloading and storage at jobsite.
1. All stone shall be received and unloaded at the site with necessary care in handling to avoid damaging or soiling.
 2. Do not use pinch or wrecking bars on stonework.
 3. Lift limestone using wide-belt type slings where possible, do not use wire ropes, ropes containing tar or other substances that may cause staining.
 4. Stone shall be stored clear of the ground on nonstaining skids (cypress, white pine, poplar, or yellow pine without an excessive amount of resin). Chemically treated wood should not be used. DO NOT use chestnut, walnut, oak, fir, and other woods containing tannin.
 5. Stone shall be covered with waterproof paper, clean canvas or polyethylene.

1.07 ENVIRONMENTAL REQUIREMENTS

- A. Maintain materials and surrounding air temperature to minimum 50 degrees F prior to, during, and 48 hours after completion of masonry work. If environmental conditions do not allow this, follow 'B' below for cold weather. In hot weather (above 99 degrees F with less than 50% relative humidity) protect masonry construction from direct exposure to sun and wind.
- B. Cold Weather Requirements: IMIAC - Recommended Practices and Specifications for Cold Weather

Masonry Construction.

C. Protect limestone work during construction as follows:

1. Cover top of walls with non-staining waterproof sheets and end of each work day.
2. Cover partially completed stone work while work is not in progress.
3. Extend cover at least 24 inches down both sides and hold securely in place.
4. Prevent staining from mortar, grout, sealants and other materials, immediately remove such materials from stone without damaging stonework.
5. Protect base of walls from rain-splashed mud and mortar splatter using approved coverings spread on ground and applied over wall surface.
6. Protect sills, ledges, and projections from droppings of mortar and sealants.

2. PRODUCTS

2.01 STONE MATERIAL.

1. Indiana Limestone Company; 123 South College Ave., Bloomington, Indiana 47404
Phone: (800).457.4026, Fax: (812)287.7522
2. Provide limestone for entire project from one quarry

2.02 LIMESTONE MATERIALS

- A. Limestone to comply with ASTM C568/C568M, Type II (Medium Density) Classification
1. Variety: Indiana Limestone
 2. Absorption by Weight: 7.5. maximum percentage; ASTM C97/C97M
 3. Density: 135lbs/cu ft, minimum; ASTM C97,C97M
 4. Compressive Strength: 4000 psi, minimum; ASTM C170/C170M
 5. Modulus of Rupture: 700 psi, minimum; ASTM C99/C99M
- B. Color: As selected by A/E from manufactures standard color chart and samples
- C. Limestone Finishes: Provide limestone of the following finish at locations indicated on the drawings in compliance with samples and shop drawings approved by the Architect
1. Smooth

2.03 PRODUCT TYPE

- A. Sills - Vanderbilt Classic Smooth
1. Smooth face with sawn top, bottom, back, and each end, provide 1/4" drip.
 2. Thickness: see drawings
 3. Height: see drawings
 4. Length: see drawings

2.04 PERFORMANCE REQUIREMENTS

- A. Physical Properties: Provide limestone with physical properties that meet or exceed values listed in the ILIA Indiana Limestone Handbook, latest edition.
- B. Safety Factors: Provide safety factors for design loads and stresses of limestone masonry assembly that meet or exceed values indicated in ILIA Technote on Safety Factors.
- C. Limestone Connections and Attachments: Design steel supports, shapes, plates, bolts and attachments to support design loads with safety factors and allowable stresses in accordance with ASTM C1242 and AISC Steel Construction Manual, Latest edition and the following:
1. Do not stress steel supports carry gravity loads more than 50 percent of yield stress in bending.
 2. Welds: Comply with AWS D1.1/D1.1M
 3. Concrete Embedded Items: Comply with ACI or manufactures recommendations, with safety factor not less than 4 to 1 based on concrete failure.
- D. Design Loads: Design cladding and cladding attachments in compliance with following design loads with safety factors as specified.
1. Wind Loads, Dead and Live Loads, and Seismic Loads per building code.
- E. Corrosion and Stain Control: Prevent galvanic and other types of corrosion or staining by isolating metals and other materials from direct contact with incompatible materials, or by applying suitable coatings; staining of stone and joint surfaces is not permitted.

2.05 JOINT TOOLING

- A. Concave.

2.06 MORTAR

- A. SETTING MORTAR: Full Bed Veneer, shall be ASTM C-270 Proportion Specifications, Type N non-staining, composed of one part portland cement, one part mason's lime, and six parts sand mixed with potable water or as recommended by manufacturer.
- B. SETTING MORTAR: Adhered Thin Veneer, shall be ASTM C-270 Proportion Specifications, Type S non-staining and in proportions as recommended by manufacturer.
- C. POINTING MORTAR: Pointing mortar shall be as recommended by manufacturer.
- D. JOINT WIDTH: 3/8 inch minimum width, 1/2 inch maximum width concave mortar joints, unless otherwise noted.
- E. Portland Cement: ASTM C150/C150M, Type 1
 - 1. Provide gray or white cement as necessary for selected mortar color.
 - 2. For cold weather applications, use ASTM C150/C150M, Type 111 (high early strength).
- F. Hydrated Lime: ASTM C207, Type S (special hydrated lime for masonry purposes).
- G. Aggregate: ASTM C144; for mortar joints less than 1/4 inch provide with 100 percent passing No. 8 Sieve and 95 percent passing No. 16 Sieve.
- H. Water: clean, non-alkaline and potable.
- I. Mixing: Combine and thoroughly mix cementitious materials, aggregates, and water in a mechanical batch mixer; comply with ASTM C305 for mixing time and water content.
- J. Do not add mixtures such as coloring pigments, air-entraining agents, accelerators, retarders, water repellants, anti-freeze compounds, or calcium chloride.

2.07 STONE ANCHORS AND ATTACHMENTS

- A. Provide anchors and attachments of type and size required to support the stonework fabricated from the following metals for conditions indicated below:
 - 1. Anchorage to be provided on shop drawings by Limestone manufacturer
 - 2. Anchors and Expansion Bolts embedded within the stone: Stainless Steel, AISI Type 304 or 316
 - 3. Hot-Dip Galvanized Steel as follows:
 - a. Galvanized malleable iron for adjustable inserts embedded in the concrete structure.
 - b. Anchor bolts, nuts and washers not in direct contact with stone; comply with ASTM A 307, Grade A, for material and ASTM C 153, Class C, for galvanizing.
 - c. Steel plates, shapes and bars not in direct contact with stone; comply with ASTM A 36 for materials and ASTM A 123 for galvanizing.
 - d. Expansion bolts not in direct contact with stone: Zinc plated or cadmium plated bolts with stainless steel expansion clips.
 - e. Steel angles supporting limestone; comply with ASTM A 36 for materials and ASTM A 123 for galvanizing.
 - f. Supports protected with one shop coat of zinc-rich or other rust-inhibiting paint, and one job coat of similar, compatible paint, may be used at the discretion of the A/E.
 - 4. Dovetail Slots: Provide dovetail slots with filler strips, and slot size to receive anchors, with at least 22 gage, 0.0036 inch thick galvanized steel sheet, ASTM A653/A653M, G90 Coating Designation.

2.08 ACCESSORIES

- A. EXPANSION JOINTS. Joints shall be adequate to allow for thermal and structural differential movement. Filler material for these joints shall be nonstaining.

- B. WEEPS. Provide medium density polyethylene Plastic weep tubes , 1/4 inch outside diameter and length as required to extend from interior cavity out to exterior face of limestone, or rope wicks, shall be placed in joints where moisture may accumulate within the wall, such as at base of cavity, continuous angles, flashing, etc., or as shown on architectural drawings.
- C. SEALANTS; Refer to Section 07 90 00
- D. THROUGH WALL FLASHINGS.
 - 1. Flashing For In-Wall and Thru-Wall Conditions: 40 mil rubberized asphalt membrane, faced with cross-laminated polyethylene film 8 mil thick on one side. Use one of the following:
 - a. W.R. Grace "Perm-A-Barrier"
 - b. Mirafi "Miradri TWF"
 - c. Nevastral "Bitu-Rap"
 - d. Polyguard "400 Flashing"
 - e. Carlisle "CCW-705-TWF"
- E. SETTING SHIMS: Sized to suit stone joint thicknesses and bed depths without intruding into depths required for joint sealants.
 - 1. Materials: Lead, stainless steel, plastic shims; non-staining to limestone

2.09 CUTTING

- A. All stone shall be cut accurately to shape and dimensions and full to the square, with jointing as shown on approved drawings.
- B. All exposed faces shall be dressed true. Beds and joints shall be at right angles to the face, and joints shall have a uniform thickness to match existing.
- C. Reglets for flashing, etc., shall be cut in the stone where so indicated on the drawings.
- D. Molded work shall be carefully executed from full size details supplied by architect, and must match satisfactorily at joints.
- E. All exposed arrses shall be in true alignment and slightly eased to prevent snipping.

2.10 REPAIRING DAMAGED STONE

- A. Repair of stone is an accepted practice and will be permitted.
- B. Some chipping is expected; repair of small chips is not required if it does not detract from the overall appearance of the work, or impair the effectiveness of the mortar.
- C. The criteria for acceptance of chips and repairs will be per standards and practices of the industry and in keeping with the condition of the existing stonework on the building.

2.11 BACK-CHECKING AND FITTING TO STRUCTURE OR FRAME

- A. Stone coming in contact with structural work shall be back-checked as indicated on the approved shop drawings.
- B. Stones resting on structural work shall have beds shaped to fit the supports as required.
- C. Maintain a minimum of 1" between stone backs and adjacent structure; adhere to large-scale details in shop drawings.

2.12 CUTTING FOR ANCHORING, SUPPORTING, AND LIFTING DEVICES

- A. Holes and sinkages shall be cut in stones for all anchors, cramps, dowels and other tie-back and support devices per industry standard practice and/or approved shop drawings. However, expansion anchor holes shall be drilled at jobsite by mason or erector to facilitate alignment.
- B. No holes or sinkages will be provided for contractor's handling devices unless arrangement for this service is made by the contractor with the stone supplier. Note: Lewis pins shall not be used for stones less than 3-1/2" thick.

2.13 CUTTING AND DRILLING FOR OTHER TRADES

- A. Miscellaneous cutting and drilling of stone necessary to accommodate other trades shall be done by the cut stone fabricator, whether at the fabricators or on the jobsite, including incidental cutting such as for window frame clips, etc.

2.14 DAMPPROOFING FOR STAIN PREVENTION

- A. Where indicated on drawings, coatings of either (a) cementitious waterproof stone backing or (b) bituminous dampproofing shall be applied on backs, beds, and joints of all stones used at grade. Dampproof all adjacent concrete surfaces on which limestone will rest, including concrete or cmu haunches and ledges, as well as support angles.
 - 1. Dampproof unexposed surfaces of stone to at least 18" above grade.
 - 2. Dampproof joints only to within 1" of finished surfaces when using bituminous or asphaltic solutions.
 - 3. Stones extending below grade shall be dampproofed as above, and in addition shall be dampproofed to the level of grade on their face surfaces which are covered.
 - 4. Cementitious coatings must be allowed to cure before treated stone is set. Due care must be exercised in handling all dampproofed stone to avoid chipping or off-setting.

3. EXECUTION

3.01 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive work.
- B. Verify items provided by other sections of work are properly sized and located.
- C. Verify that built-in work items are in proper location, and ready for roughing into masonry work.
- D. Beginning of installation means installer accepts existing conditions.

3.02 SETTING

- A. All Indiana Limestone shall be set accurately in strict accordance with the contract and shop drawings.
- B. Installer shall install all required inserts , weld plates (if required) anchors, lintels, and flashings.
- C. When necessary, before setting in the wall, all stones shall be thoroughly cleaned on all exposed surfaces by washing with fiber brush and soap powder, followed by a thorough drenching with clear water.
- D. All stone joint surfaces not thoroughly wet shall be drenched with clear water just prior to setting.
- E. Except as otherwise specially noted, every stone shall be set in full beds of mortar with all vertical joints slushed full. Completely fill all anchor, dowel, and similar holes. Unless otherwise noted, all bed and joint widths shall match the existing joints.
- F. Lead or plastic setting pads shall be placed under heavy stones, column drums, etc., in same thickness as joint, and in sufficient quantity to avoid squeezing mortar out. Heavy stones or projecting courses shall not be set until mortar in courses below has hardened sufficiently to avoid squeezing.
- G. Joints can be tooled when initial set has occurred, or raked out 1" and pointed later. If pointed with sealant, the raked depth and sealant applications shall conform to manufacturer's instructions.
- H. Projecting stones shall be securely propped or anchored until the wall above is set.
- I. Only the ends of lugged sills and steps shall be embedded in mortar. Balance of joint shall be left open until finally pointed.
- J. All cornice, copings, projecting belt courses, other projecting courses, steps, and platforms (in general, all stone areas either partially or totally horizontal) should be set with unfilled vertical joints. After setting, insert properly sized backup material or backer rod to proper depth, and gun in sealant.
- K. In cold weather, International Masonry Industry All-Weather Council recommendations for setting from 40 degrees to 20 degrees F shall be followed, except that no additives shall be used in the setting mortar, and below 20 degrees F all work shall be done in heated enclosures.

3.03 FLASHINGS

- A. Extend flashings through stone, turn up minimum 8" and bed into mortar joint of masonry back-up. Lap end joints minimum of 6" and seal watertight per manufacturer's recommendations.

3.04 PROTECTION OF FINISHED WORK

- A. Receipt, storage, and protection of cut stonework prior to, during and subsequent to installation shall be the responsibility of the mason contractor.
- B. During construction, tops of walls shall be carefully covered at night, and especially during any precipitation or other inclement weather.
- C. At all times, walls shall be adequately protected from droppings.
- D. Whenever necessary, substantial wooden covering shall be placed to protect the stonework. Nonstaining building paper or membrane shall be used under the wood. Maintain all covering until removed to permit final clearing of the stonework.

3.05 CLEANING

- A. Stone shall be washed with fiber brushes, mild soap powder or detergent and clean water or approved mechanical cleaning process.
- B. Special consideration and protection shall be provided when brickwork is cleaned above the limestone. Strong acid compounds used for cleaning brick will burn and discolor the limestone.
- C. Use of sand blasting, wire brushes or acids will only be permitted under special circumstances, approved by A/E.
- D. Clean work as work progresses.
- E. Remove excess mortar and mortar smears.
- F. Replace defective mortar. Match adjacent work.
- G. Clean soiled surfaces with cleaning solution.
- H. Use non-metallic tools in cleaning operations.

END 04 72 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. All miscellaneous iron and steel items not specifically described in other Sections of these Specifications but required for a complete and operable facility; including but not limited to lintels, closures, sill angles, structural steel, railings, etc.

1.02 QUALITY ASSURANCE:

- A. Qualifications of welders: Use only certified welders and the shielded arc process for all welding performed in connection with the work of this Section.
- B. Codes and standards: In addition to complying with all pertinent codes and regulations, comply with:
 - 1. "Specification for Design, Fabrication, and Erection of Structural Steel for Buildings" of the American Institute of Steel Construction.
 - 2. "Code for Welding in Building Construction" of the American Welding Society.
- C. Conflicting requirements: In the event of conflict between pertinent codes and regulations and the requirements of the referenced standards or these Specifications, notify the Architect/Engineer in writing and request instructions.

2. PRODUCTS

2.01 STEEL TUBING

- A. Steel tubing shall be new, free from rust, & conforming to requirements of ASTM A-501.

2.02 STEEL PLATE

- A. Shall be new, free from rust, and conforming with the requirements of ASTM A-36.

2.03 LINTELS

- A. All steel lintels shall be new, free from rust and conforming to the requirements of ASTM A-36. ***All lintels exposed to the exterior shall be galvanized***, conforming to the requirements of ASTM A653.

2.04 BOLTS AND NUTS

- A. All bolts and nuts shall be new, free from rust, and conforming with the requirements of ASTM A307.

2.05 ELECTRODES

- A. All arc welding electrodes used shall be only those specifically recommended for the purpose by the American Welding Society.

2.06 PRIMER PAINT

- A. All primer paint shall be compatible with the finish coats specified in Section 09 90 00 of these Specifications.

2.07 OTHER MATERIALS

- A. All other materials not specifically described but required for a complete and proper installation of miscellaneous metal, shall be new, free from rust, best quality of their respective kinds, and subject to the approval of the Architect/Engineer.

3. EXECUTION

3.01 SURFACE CONDITIONS

- A. Inspection:
 - 1. Prior to all work of this Section, carefully inspect the installed work of all other trades and

verify that all such work is complete to the point where fabrication and installation of the work of this Section may properly commence.

2. Make all required measurements in the field to ensure proper and adequate fit of miscellaneous metal items.
3. Verify that miscellaneous metal may be fabricated and installed in strict accordance with the original design and the approved Shop Drawings.

B. Discrepancies:

1. In the event of discrepancy, immediately notify the Architect/Engineer.
2. Do not proceed with fabrication or installation in areas of discrepancy until all such discrepancies have been fully resolved.

3.02 FABRICATION

- A. Compliance: Fabricate all miscellaneous metal in strict accordance with the approved Shop Drawings and the referenced standards.
- B. Prefabrication: Insofar as possible, shop prefabricate all items complete and ready for installation.
- C. Welding:
 1. Unless otherwise indicated on the Drawings, weld all shop connections.
 2. make all joints and intersections of metal tightly fitting and securely fastened.
 3. Make all work square, plumb, straight, and true.
- D. Holes:
 1. Drill or punch all holes required for the attachment of work of other trades and for bolted connections.
 2. Burned holes are not acceptable.

3.03 SHOP PAINTING

- A. Preparation:
 1. Thoroughly clean all metal as described in Section 09 90 00.
 2. Provide all required protection for metal to be encased in concrete to prevent accumulation of deleterious foreign material.
- B. Painting: Shop prime all steel except:
 1. Steel to be encased in concrete.
 2. Surfaces to be welded.
 3. Contact surfaces to be high strength bolted; and

3.04 ERECTION

- A. Coordination: Coordinate installation schedule with the schedules of other Contractors to ensure orderly and timely progress of the total work.
- B. Compliance: Erect and install all miscellaneous metal in strict accordance with the Drawings, the approved Shop Drawings, and the referenced standards, aligning straight, plumb, and level within a tolerance of one in 200.
- C. Touching up: After the erection and installation are complete, touch-up all shop priming coats damaged during transportation and erection, using the priming paint specified for shop priming.

END 05 50 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid:
Contractor provide all rough carpentry, including miscellaneous items normally provided by carpentry trade, including but not limited to the following:
1. Exterior sheathing (plywood or oriented strand board sheathing, thickness as shown on drawings).
 2. Moisture preservative treated wood.
 3. Wood nailers, plates, blocking, furring, grounds, etc.
 4. Rough hardware including bolts, nuts, washers, nails, spikes, "H" clips, etc.
 5. Wood blocking and supports.

1.02 QUALITY ASSURANCE

- A. Lumber grading rules and wood species to conform with Voluntary Product Standard PS 20-70; Grading rules of the following associations apply to materials furnished under this section.
1. Northeastern Lumber Manufacturer's Association, Inc. (NELMA).
 2. Southern Pine Inspection Bureau (SPIB).
 3. West Coast Lumber Inspection Bureau (WCLIB).
 4. Western Wood Products Association (WWPA).
 5. Northern Hardwood and Pine Manufacturer's Association (NHPMA).
- B. Plywood and OSB grading rules:
1. Softwood Plywood - Construction and Industrial: Product Standard PS1-66.
 2. American Plywood Association Performance Rating Standard PRP 108.
- C. Grade Marks: Identify all lumber and plywood by official grade marks:
1. Lumber: Grade stamp to contain symbol of grading agency, mill number or name, grade of lumber, species or species grouping or combination designation, rules under which graded, where applicable and condition of seasoning at time of manufacture.
 - a. S-GRN: Unseasoned.
 - b. S-DRY: Maximum 19% moisture content.
 - c. MC-15 or KD: Maximum of 15% moisture content.
 - d. Dense.
 2. Preservative Treatment of lumber shall be treated according to appropriate AWWA Standards. Each piece of treated material shall bear an identification stamp or end tag which includes the name of the inspection agency, product class, and preservative.
 3. Softwood Plywood & OSB: Appropriate grade trademark of the American Plywood Association.
 - a. Type, grade, class and identification index.
 - b. Inspection and testing agency mark.
- D. Testing Agency Qualifications: For testing agency providing classification marking for fire-retardant treated material, an inspection agency acceptable to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.

1.03 SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
1. Include data for fire-retardant treatment from chemical treatment manufacturer and certification by treating plant that treated plywood complies with requirements. Include physical properties of treated materials.
 2. For fire-retardant treatments, include physical properties of treated plywood both before and after exposure to elevated temperatures, based on testing by a qualified independent testing agency according to ASTM D5516.

1.04 WORKMANSHIP QUALITY

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- A. Workmanship for rough carpentry shall be in accordance with requirements of National Lumber Manufacturers Association.
 - 1. Cut members square on bearings and fit closely.
 - 2. Set accurately to lines and levels and plumb.
 - 3. Secure rigidly in place at bearings and connections.
 - 4. Use bolts and strap iron where required for best possible results.
 - 5. Use metal framing anchors where needed to strengthen structure and to anchor against wind uplift.

1.05 DELIVERY, STORAGE, HANDLING

- A. Stack panels flat with spaces beneath and between each bundle to provide air circulation. Protect sheathing, lumber, etc. from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

2. PRODUCTS

2.01 LUMBER

- A. Dimensions:
 - 1. Specified lumber dimensions are nominal.
 - 2. Actual dimensions conform to industry standards established by American Lumber Standards Committee and rules writing agencies.
- B. Moisture Content: Kiln dried to 15% maximum at time of installation for framing and decking.
- C. Surfacing: Surface four side (S4S) unless specified otherwise.
- D. Framing lumber, 2" to 4" thick, 2" to 12" wide, any commercial softwood species:
 - 1. General Framing: Stud grade of standard and better.
 - 2. Plates, blocking, bracing, bulk headings, nailers, and general utility purposes: Utility grade.
 - 3. Economy grade shall not be used.

2.02 EXTERIOR WALL SHEATHING

- A. See Section 06 16 00 Sheathing.

2.03 INTERIOR WALL SHEATHING

- A. Size: 1/2 inch, 5/8 inch, or 3/4 inch thick (see drawings) x 4 feet wide x 8, 9, or 10 feet long.
- B. Composition: 5 ply Plywood, Grade BC.
- C. Each sheet shall bear the stamp of the American Plywood Association which includes a span rating which is equal to or greater than the spacing of the framing members to which sheets are applied.

2.04 EXTERIOR ROOF DECKING

- A. Size: 5/8 inch thick x 4 feet wide x 8 feet long.
- B. Composition: 5 ply Plywood
- C. Each sheet shall bear the stamp of the American Plywood Association which includes a span rating which is equal to or greater than the spacing of the framing members to which sheets are applied.

2.05 ROUGH HARDWARE:

- A. Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacturer.
- B. Nails, Spikes and Staples: Hot-dipped galvanized stainless steel or aluminum for exterior locations and high humidity locations; plain finish for other interior locations; size and type to suit application; staples shall not be used for fastening wood structurally.

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- C. Bolts, Nuts, Washers, Lags, Pins, and Screws: Medium carbon steel; sized to suit application; galvanized for exterior locations, high humidity locations, plain finish for other interior locations.
- D. Fasteners: Toggle bolt type for anchorage to hollow masonry and expansion shield and lag bolt type for anchorage to solid masonry or concrete.
- E. Bar or Strap Anchors: ASTM A525 zinc-coated steel, 16 gauge minimum.
- F. Framing Anchors: Minimum of 18 gauge zinc-coated steel, size and configuration determined by type of connection required.
- G. Wood Structural Panel Edge Reinforcement commonly called "H" clips, 18 ga. or 20 ga. to match thickness of sheathing.
- H. Screws for fastening Wood Structural Panels to Cold-Formed Metal Framing: ASTM C 954, except with wafer heads and reamer wings, length as recommended by screw manufacturer for material being fastened.
- I. Screws for Fastening Sheathing to Wood Framing: ASTM C 1002.

3. EXECUTION

3.01 INSTALLATION - GENERAL

- A. Blocking and all other carpentry items shall be laid out as called for by drawings or required by the nature of the work and shall be cut and fitted as necessitated by conditions encountered. All work shall be plumbed, leveled and braced with sufficient nails, spikes, bolts, etc., to ensure rigidity.
- B. All pieces of wood or other carpentry material with a defect or defects that prevent it from serving its intended purposes satisfactorily, including crooked, warped, bowed, or otherwise defective material, even if within the limits of grade specified, will be rejected and shall be replaced with an acceptable piece. Blocking used as reveals as detailed on drawings shall be free of exposed knots.
- C. Wood furring, including blocking and stripping necessary to maintain lines of and support finishes shown on the drawings shall be provided.
 - 1. Wood furring shall be provided to receive trim at windows and other openings in outside walls.
 - 2. Wood blocking, nailers and grounds shall be provided to receive engaging woodwork, cabinets, grab bars, toilet partitions, toilet accessories and/or other finished items.
 - 3. Wood furring, blocking, stripping, nailers, grounds, called for by drawings or necessitated by conditions, shall be secured in place with approved types and sizes of nails, ties, bolts, inserts, spaced to provide secure and rigid support.
- D. Verify that surfaces to receive rough carpentry materials are prepared to exact grades and dimensions. Application or installation of materials constitutes acceptance of existing conditions.
- E. Frame wood members to a close fit, set accurately to required lines and levels and secure rigidly in place in accordance with details. Cut and fit framing, blocking, and furring to accommodate other work as required.
- F. Coordinate wall and sheathing installation with flashing and joint sealant installation so these materials are installed in sequence and manner that prevent exterior moisture from passing through completed assembly.
- G. Coordinate sheathing installation with installation of materials installed over sheathing so sheathing is not exposed to precipitation or left exposed at end of the work day when rain is forecast.

3.02 PRESSURE TREATED WOOD PRODUCTS

- A. Provide preservative pressure treated wood base plates in direct contact with concrete or masonry
- B. Apply two brush coats of same preservative used in original treatment to all sawed or cut surfaces

of treated lumber.

3.03 INSTALLATION OF EXTERIOR WALL SHEATHING

- A. See Section 06 16 00 Sheathing.

3.04 INSTALLATION OF EXTERIOR SHEATHING / DECKING

- A. Place sheathing with end joints staggered.
- B. Secure ends of sheets over firm bearing; maintain minimum of 1/16" and 1/8" spacing between joints of sheets.
- C. Place the long dimension of sheathing sheets perpendicular to framing members.
- D. Provide "H" clips at midspan between roof trusses at each row of roof sheathing.
- E. Secure to framing members using 10d common nails at 6" o.c. along the sheet edges and 12" o.c. in the field of the sheet.

3.05 ROOF BLOCKING

- A. Furnish and install all wood roof blocking and nailers required by drawings.
- B. Blocking shall be sizes and shapes indicated on details and as required by conditions encountered.

3.06 ROUGH HARDWARE

- A. Rough hardware needed for proper installation of all carpentry and millwork shall be provided.
- B. Nails, spikes, screws, bolts and similar items shall be of proper types and ample sizes to fasten and hold various members securely in place.

3.07 ADJUST AND CLEAN

- A. Remove from site all rubbish, debris and packaging produced by operations and leave site in a "broom clean" condition.
- B. Adjust all working items to fit snugly yet work freely.

3.08 PROTECTION

- A. All carpentry items subject to damage during construction or affected by weather shall be properly protected.
- B. Protect completed work from damage until project is completed and accepted.

END 06 10 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide wall sheathing with integral water-resistive barrier and air barrier.

1.02 REFERENCES

- A. ASTM International:
 - 1. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
 - 2. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials.
 - 3. ASTM E108 - Standard Test Methods for Fire Tests of Roof Coverings.
 - 4. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
 - 5. ASTM E2357 - Standard Test Method for Determining Air Leakage of Air Barrier Assemblies.
- B. American Society of Mechanical Engineers (ASME)
 - 1. ASME B18.6.1 - Wood Screws (Inch Series)

1.03 SUBMITTALS

- A. Refer to Section 01 33 00 Submittal Procedures.
- B. Product Data: Submit manufacturer current technical literature for each component.
- C. Quality Assurance Submittals: Provide manufacturers written installation instructions.

1.04 PERFORMANCE REQUIREMENTS

- A. Air-Barrier Assembly Air Leakage: Less than 0.04 cfm/sq. ft at 1.57 lbf/sq.ft., per ASTM E96/E96M.
- B. Water-Vapor Permeance, Facer: Minimum 12 perms, ASTM E96/E96M.
- C. Weather Exposure: Manufacturer warranty applies for maximum allowable exposure period of 180 days.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 Product Requirements.
- B. Comply with manufacturer's written instructions for protection of sheathing products from weather prior to installation.

1.06 WARRANTY

- A. Manufacturer's standard form in which sheathing manufacturer agrees to repair or replace sheathing products that demonstrate deterioration or failure under normal use due to manufacturer defects within warranty period specified, when installed according to manufacturer's instructions.
 - 1. Warranty Period for Sheathing Products: **Thirty (30) years** following date of Substantial Completion.

2. PRODUCTS

2.01 MANUFACTURERS

- A. Huber Engineered Woods LLC

2.02 WOOD PANEL PRODUCTS

- A. Single Source Limitations: Provide wall sheathing by single manufacturer.

- B. Certified Wood: Provide sheathing produced from wood obtained from forests certified by an accredited certification body.
- C. Oriented Strand Board: DOC PS 2 made with binder containing no added urea formaldehyde.

2.03 WALL SHEATHING WITH INTEGRAL WATER-RESISTIVE BARRIER AND AIR BARRIER

- A. Oriented Strand Board Wall Sheathing: Exposure 1 sheathing with factory-laminated water resistive barrier facer with printed fastener location symbols.
- B. Span Rating, Panel Grade and Performance Category: 24/16; Structural 1; 7/16 Performance Category.
- C. Size: See Drawings x 4 feet wide x 8, 9, or 10 feet long.
- D. Edge Profile: Square Edge
- E. Facer: Medium-density, phenolic-impregnated sheet material qualifying as a Grade D weather-resistive barrier in accordance with ICC AC38
 - 1. Provide fastener spacing symbols on facer for 16 inch on center spacing.

2.04 FASTENERS

- A. Fasteners, General: Size and type complying with manufacturer's written instructions for project conditions and requirements of authorities having jurisdiction.
 - 1. Corrosion Resistance: Hot-Dip zinc coating, ASTM A153/A153M
- B. Nails, Brads, and Staples: ICC AC116 and ICC AC201
- C. Power-Driven Fasteners: ICC-ES-1539 or NER-272
- D. Wood Screws: ASME B18.6.1

2.05 SHEATHING JOINT-AND-PENETRATION TREATMENT MATERIAL

- A. Self-Adhering Seam and Flashing Tape: Pressure-sensitive, self-adhering, cold-applied, seam tape consisting of polyolefin film with acrylic adhesive, meeting ICC-ES AC148, and tested as part of an assembly meeting performance requirements.
 - 1. Huber Engineered Woods; ZIP System Tape.
 - 2. Thickness: 0.012 inch.
- B. Liquid-Applied Flashing Membrane: Gun-grade, cold-applied, silyl-terminated polyether liquid flashing membrane compatible with sheathing/weather barrier and self-adhering seam and flashing tape, and tested as part of an assembly meeting performance requirements. Follow manufacturer's recommendation for integration with ZIP System Tape.
 - 1. Huber Engineered Woods; ZIP System Liquid Flash.
 - 2. Hardness, Shore A, ASTM C 661: 40 to 45.

3. EXECUTION

3.01 EXAMINATION

- A. Examine framing spacing and alignment to determine if work is ready to receive sheathing. Proceed with sheathing work once conditions meet requirements.

3.02 INSTALLATION

- A. Install sheathing panels in accordance with manufacturer's written instructions, requirements of applicable Evaluation Reports, and requirements of authorities having jurisdiction.

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- B. Air and Moisture Barrier: Coordinate sheathing installation with flashing and joint sealant sequencing and installation with adjacent building air and moisture barrier components to provide complete, continuous air-and moisture-barrier.
- C. Do not bridge expansion joints; allow joint spacing equal to spacing of structural supports.
- D. Install panels with laminated facer to exterior. Stagger end joints of adjacent panel runs. Support all panel edges.
 - 1. Space square-edged panels 0.125 inch.
- F. Attach sheathing panels securely to substrate with manufacturer-approved fasteners in compliance with the following:
 - 1. ICC-ES ESR-1539 or ICC-NES NER-272 for power-driven fasteners.
 - 2. IBC: Table 2304.9.1 Fastening Schedule.
- G. Apply ZIP System Tape at all panel seams, penetrations, and facer defects or cracks to form continuous weathertight surface. Apply tape according to manufacturer's written instructions and requirements of ICC-ES applicable to tape application.
- H. Apply liquid-applied flashing membrane at penetrations, gaps, and cracks to form continuous weathertight surface. Apply liquid membrane according to manufacturer's written instructions. Follow manufacturer's recommendation for integration with ZIP System Tape.

END 06 16 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid:
 - 1. General Contractor provide shop-fabricated wood trusses as shown on the drawings and as specified herein. Work to include anchorage, blocking, curbing, miscellaneous framing and bracing.

1.02 DEFINITIONS

- A. MANUFACTURER: A manufacturer who is regularly engaged in design and fabrication of wood truss components.
- B. TRUSS: The terms "truss" and "wood truss component" refer to open web load-carrying assemblies suitable for support of roof decks or floors in buildings.
- C. TRUSS INSTALLER: Builder, contractor, or sub-contractor who is responsible for the field storage, handling, and installation of trusses.

1.03 DESIGN

- A. Trusses shall be designed in accordance with these specifications and where any applicable design feature is not specified herein, design shall be in accordance with applicable provisions of latest edition of *National Design Specifications for Wood Construction (NDS)* of the American Forest and Paper Association (AF&PA), and *Design Specifications for Metal Plate Connected Wood Trusses (ANSI/TPI 1)*, of the Truss Plate Institute (TPI), and code of jurisdiction.
- B. Manufacturer shall furnish design drawings bearing seal and registration number of an Illinois licensed structural engineer. Drawings shall be approved by the A/E prior to fabrication.
- C. Truss design drawings shall include as minimum information:
 - 1. Span, depth or slope and spacing of trusses
 - 2. Required bearing width
 - 3. Design loads, as applicable:
 - a. top chord live load
 - b. top chord dead load
 - c. bottom chord live load
 - d. bottom chord dead load
 - e. concentrated loads and their points of application
 - f. wind and seismic criteria as shown on drawing sheet S0.01.
 - 4. Adjustment to lumber and plate design loads for condition of use
 - 5. Reactive forces, their points of occurrence and direction
 - 6. Plate type, gage, size and location of plate at each joint
 - 7. Lumber size, species and grade for each member
 - 8. Location of any required continuous lateral bracing
 - 9. Calculated deflection ratio and/or maximum deflection for live and total load
 - 10. Maximum axial compressive forces in truss members
 - 11. Location of joints
 - 12. Connection requirements for
 - a. truss to truss girders
 - b. truss ply to ply
 - c. field splices.

1.04 SUBMITTALS

- A. Shop Drawings in accordance with Section 01 33 00.
- B. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
 - 1. Include data for fire-retardant treatment from chemical treatment manufacturer and certification by treating plant that treated plywood complies with requirements. Include physical properties of treated materials.
 - 2. For fire-retardant treatments, include physical properties of treated plywood both before and after exposure to elevated temperatures, based on testing by a qualified independent testing agency according to ASTM D5516.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Stack trusses flat with spaces beneath and between each truss bundle to provide air circulation. Protect trusses from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

2. PRODUCTS

2.01 MATERIALS

- A. Lumber
 - 1. Lumber used for truss members shall be in accordance with published Values of lumber rules writing agencies approved by board of review of American Lumber Standards Committee. Lumber shall be identified by Grade mark of a lumber inspection bureau or agency approved by that Board, and shall be as shown on design drawings.
 - 2. Moisture content of lumber shall be no less than 7 percent nor greater than 19 percent at time of fabrication.
 - 3. Adjustment of values for duration of load or conditions of use shall be in accordance with *National Design Specifications for Wood Construction (NDS)*.
 - 4. Fire retardant treated lumber, if applicable, shall meet specifications of truss design, use category UCFA as specified by the American Wood Protection Association, section 2303.2 of the International Building Code from the International Building Code Council, and ANSI/TPI 1, par 6.4.9 and NDS par 2.3.4. Lumber treater shall supply certificate of compliance including specified design values and use conditions, including minimum acceptable galvanizing level for galvanized steel fasteners used with their FRT lumber.
- B. Metal connector plates shall be manufactured by truss manufacturer and shall be not less than 20 gage and shall meet or exceed ASTM A653-94 grade 37, and shall be hot dipped galvanized according to ASTM A653-94, coating designation G60. Working stresses in steel are to be applied to effective ratios for plates as determined by test in accordance with ANSI/TPI.

2.02 FABRICATION

- A. Trusses shall be fabricated in a properly equipped manufacturing facility of a permanent nature. Trusses shall be manufactured by experienced workmen, using precision cutting, jigging and pressing equipment meeting requirements of ANSI/TPI 1-1995, Section 3. Truss members shall be accurately cut to length angle and true to line to assure proper fitting joints within tolerances set forth in ANSI/TPI 1, Chapter 3, and proper fit with other work.

3. EXECUTION

3.01 HANDLING, INSTALLATION AND BRACING

- A. Trusses shall be handled during fabrication, delivery and at job site so as not to be subjected to excessive bending.
- B. Trusses shall be unloaded on smooth ground to avoid lateral strain. Trusses shall be protected from damage that might result from on-site activities and environmental conditions. Prevent toppling when banding is removed.
- C. Handle during installation in accordance with latest version of *Building Component Safety Information* (BCSI 1) from TPI, and ANSI/TPI 1. Installation shall be consistent with good workmanship and good building practices and shall be responsibility of Truss Installer.
- D. Apparent damage to trusses, if any, shall be reported to Manufacturer prior to installation.
- E. Trusses shall be set and secured level and plumb, and in correct location. Trusses shall be held in correct alignment until specified permanent bracing is installed.
- F. Cutting and altering of trusses is not permitted.
- G. Concentrated loads shall not be placed atop trusses until all specified bracing and bridging has been installed and decking is permanently nailed in place. Specifically avoid stacking full bundles of decking or other heavy materials onto unsheathed trusses.
- H. Erection bracing is always required. Exercise care to prevent toppling or dominoing of trusses during installation.

END 06 17 53

1. GENERAL**1.01 WORK INCLUDES****A. Base Bid:**

Contractor provide finish carpentry work shown on the drawings and specified herein including:

1. Shelves, including brackets, standards and other miscellaneous hardware.
2. Counters.
3. Miscellaneous window, door, wood trim, casing, veneer core panels, and shelving.
4. All hardware needed for proper installation of work.
5. Installation of work of other sections, including but not necessarily limited to doors and specialties.
6. Power circuits, data wiring, and terminations in table top benches and cabinetry as noted or shown on plans.

1.02 QUALITY ASSURANCE**A. Lumber grading rules and wood species shall conform with Voluntary Product Standards PS 20-70: Grading rules of the following associations apply to materials furnished.**

1. Northeastern Lumber Manufacturer's Association, Inc. (NELMA).
2. Southern Pine Inspection Bureau (SPIB).
3. West Coast Lumber Inspection Bureau (WCLIB).
4. Western Wood Products Association (WWPA).
5. Redwood Inspection Service (RIS).
6. Northern Hardwood and Pine Manufacturer's Association (NHPMA).
7. Architectural Woodwork Institute (AWI) -Quality Standards

B. Plywood Grading Rules:

1. Softwood Plywood - Construction and Industrial: Product Standard PS 1/ANSI A199.1.
2. Hardwood Plywood: Product Standard PS 51.

C. Grade Marks: Identify all lumber and plywood by official grade mark:

1. Lumber: Grade stamp to contain symbol of grading agency, mill number or name, grade of lumber, species or species grouping or combination designation, rules under which graded, where applicable, and condition of seasoning at time of manufacture.
 - a. S-GRN: Unseasoned.
 - b. S-DRY: Maximum 19% moisture content.
 - c. MC-15 or KD: Maximum of 15% moisture content.
 - d. Dense.
2. Softwood Plywood: Appropriate grade mark of the American Plywood Association.
3. Hardwood Plywood: Appropriate grade mark of qualified inspection, testing or grading agency.

D. Quality Standards of Architectural Woodwork Institute (AWI) shall apply and by reference are hereby made a part of this Specification.

1. Any reference to Premium, Custom or Economy, in this Specification shall be defined in 1984 edition of AWI "Quality Standards".
2. Any item not given a specific quality grade in this Specification shall be Custom Grade as defined in AWI "Quality Standards".

E. Woodwork manufacturer must have a reputation for doing satisfactory work on time and shall have successfully completed comparable work.

1. Regularly and actively engaged in manufacture of this type of work for a period of 10 years.
2. Woodwork manufacturer shall, in addition have fabricated and installed work of a similar

character and magnitude, and which has been in satisfactory use for a least 7 years.

F. Woodwork manufacturer shall be responsible for all details and dimensions not controlled by job conditions and shall show on his shop drawings all required field measurements beyond his control.

G. Contractor and woodwork manufacturer shall cooperate to establish and maintain field dimensions.

1.03 SUBMITTALS

A. In accord with 01 33 00:

1. Shop drawings: Wood trim, Counters
2. Samples: Set of plastic laminate samples for color and texture selection.

2. PRODUCTS

2.01 LUMBER MATERIALS

A. Softwood and Hardwood Lumber: Premium grade in accordance with AWI, maximum moisture content of six percent (6%), with mixed grain, of quality capable of transparent finish.

1. Red Oak species for stain & varnish finish.
2. See drawings for wood trim sizes and locations.

2.02 PLASTIC LAMINATE COUNTERS

A. Manufactured Casework

1. Counters shall conform to drawings, details, and AWI Section 400B Custom Grade requirements for plastic laminate clad cabinets.
2. Plastic laminate colors and patterns as selected by Architect/Engineer from samples submitted by Contractor.

2.03 PLYWOOD

A. Veneer Core: Comply with PS-51 for hardwood and decorative plywood. Face veneers shall be plain sliced Red Oak, AWI Grade 1, A-4 for transparent finish.

B. Lumber Core: When used, provide at least 5-ply consisting of face veneer, back veneer, two crossband veneers, and a core composed of strips of lumber edge-glued into a solid slab. Face veneers shall be plain sliced.

C. Provide only plywood fabricated with water-resistant glue by the hot plate method.

D. For use with transparent finish, achieve uniformity of color, figure, and grain character within each panel, and from panel to panel within each fixture and group of fixtures, as approved by the Architect/Engineer.

E. Provide back veneers to properly balance the face veneers.

F. All plywood panels to be edged with a solid hardwood nosing per details; match grain.

2.04 PARTICLE BOARD

A. Conform to ANSI A208.1 Grade 1-M-1.

B. All particle board shall be medium density panels of 37 to 50 pounds per cubic foot.

- C. All particle board shall be in thickness as detailed on drawings.
- D. Provide solid hardwood edging if used as veneer core material for finish panels; match grain.

2.05 PLASTIC LAMINATE OVERLAY

- A. Also see Section 12 32 16 Manufactured Casework for casework
 - 1. Plastic laminate shall be a decorative laminate, 0.060" thickness with 60" impact resistance.
 - 2. Acceptable Manufacturers:
 - a. Formica Corporation, P. O. Box 338, Piscataway, NJ; 201/469-1555.
 - b. Wilsonart, Ralph Wilson Plastics Company, 600 General Bruce Drive, Temple TX; 910/890-5880.
 - c. Pionite, Laminated Products Group, 1715 Indian Wood Circle, Maumee, OH 43537; 419/891-2500.

2.06 ROUGH HARDWARE

- A. Rough hardware needed for proper installation of all carpentry and millwork shall be provided.
- B. Nails, spikes, screws, bolts and similar items shall be of proper types and ample sizes to fasten and hold various members securely in place.
- C. Bolts: FS FF-B-584.
- D. Nuts: FS FF-N-836.
- E. Expansion Shields: FS FF-B-561.
- F. Lag Screws and Bolts: FS FF-B-561.
- G. Toggle Bolts: FS FF-B-588.
- H. Wood Screws: FS FF-S-111.
- I. Nails and Staples: FS FF-N-105.
 - 1. Staples shall not be used for fastening wood structurally.

2.07 ACCESSORIES

- A. Lumber for shimming: Softwood lumber of cedar species
- B. Wood Filler: Solvent based, tinted to match surface finish color

2.08 MISCELLANEOUS MATERIALS

- A. Adhesives:
 - 1. For millwork, use water resistant and mold resistant adhesive complying with Fed Spec MM-A-125, type II.
 - 2. For plastic laminates, use phenol, resorcinol or melamine base, complying with Fed Spec MM-A-181, in type, grade and class best suited for intended use.
- B. Adjustable shelving. Provide heavy duty shelf brackets and standards where shown on drawings.
 - 1. Brackets: double slot brackets of 16 gauge anochrome steel. Size according to shelf sizes as shown on drawings.
 - 2. Standards: double slot standards 1-1/4" wide x 1/2" high, constructed of anochrome steel.

Lengths as called out and shown on drawings.

2.09 FABRICATION OF COUNTERS

- A. Also see Section 12 30 40 Manufactured Casework
- B. General:
 - 1. Fabricate and assemble units complete in the shop insofar as their dimensions will permit transportation and proper handling and installation.
 - 2. For units with sectional construction:
 - a. Accurately fit and align the separate parts.
 - b. Provide ample screw, glue-and-bolt blocks, drawbolts, tongues, grooves, splines, dowels, tenons, mortises, and other means of fastening to render the work of this section substantial, rigid and permanently secured in the proper position.
- C. Scribe members:
 - 1. Provide sufficient additional material to permit scribing to walls, floors, and related work.
 - 2. Provide adequate allowance for shrinkage occurring after installation.
- D. Framing and blocking:
 - 1. Assemble with bolted and screwed connections, securing to structural backings with cinch anchors, expansion screws, or toggle bolts as necessary.
 - 2. Assemble fixtures without face nails or face screws, except as needed to attach trim.
 - a. Countersink face nails and face screws, fill with plastic wood or wood plug, sand smooth, and touch up to be nearly invisible.
 - b. Countersink the heads of all screws in every surface.
- E. Cut and fit the work of this section as necessary to receive, clear, engage, or support other parts of the work, and as needed for interface with electrical, plumbing, and other units.
- F. Provide hardware for sliding glass at pass thru counter.

3. EXECUTION

3.01 COORDINATION

- A. Verify that surfaces are ready to receive work and field measurements are as shown on drawings.
- B. Coordinate the time of installation with availability of other trades to make required utility connections.
 - 1. Provide access panels as needed for connection and maintenance of utilities.
- C. Verify plumbing, mechanical, electrical, and building items affecting work of this Section are placed and ready to receive this work.
 - 1. Test each plumbing and electrical item through at least five operating cycles, and adjust as needed to achieve optimum operation.
- D. Beginning of installation means acceptance of existing conditions.

3.02 PREPARATION

- A. Before installation, prime paint all surfaces of items or assemblies to be in contact with cementitious materials.

3.03 INSTALLATION

- A. Install work in accordance with AWI Premium quality standards.
- B. Set and secure materials and components in place, plumb and level.
- C. Install trim with nails at 16 inches of center.
- D. Install all hardware in accordance with manufacturers written instructions.
- E. Set exposed fasteners. Apply wood filler to exposed fastener locations. Sand work smooth.

3.04 DECORATIVE PLYWOOD INSTALLATION

- A. Install work in accordance with AWI Custom Quality Standard.
- B. Set and secure materials and components in place, plumb, and level.
- C. Scribe work abutting other components to AWI tolerances. Do not use additional overlay trim to conceal larger gaps.
- D. Coordinate installation of blocking behind decorative plywood.
- E. Install components with wall adhesive by gun application.
- F. Install paneling with cleats or wall adhesive by bead method at 8 inch on center. Face nailing shall only be permitted behind trim applications.
 - 1. Set exposed fasteners. Apply wood filler in exposed fasteners indentations. Sand work smooth.

3.05 INSTALLATION OF CASEWORK AND COUNTERS

- A. See Section 12 30 40 Manufactured Casework
- B. Install at the locations shown on the drawings, and in accordance with the approved shop drawings.
 - 1. Scribe units to wall, floor, and other surfaces as appropriate, with not more than 1/32" clear between the cabinet or fixture and the abutting permanent surface, and with no change of clearance in excess of 0.01" in any 4".
 - 2. Set each unit square, level, plumb, and aligned within a tolerance of one in 1000 vertically and horizontally, and within 1/4" of the designated location for free-standing work.
 - 3. Use purposed designed fixture attachments at concealed locations for wall mounted components.
 - 4. Secure cabinets to floor using appropriate angles and anchors.
 - 5. Counter sink anchorage devices at exposed locations used to wall mount components and conceal with solid plugs to match surrounding material. Finish flush with surrounding surfaces.

3.06 ADJUST AND CLEAN

- A. Upon completion of installation, thoroughly clean each item by use of only such cleaning materials as are recommended by the manufacturer of the item being cleaned.
- B. Touch up scratches and abrasions to be completely invisible to the unaided eye from a distance of five feet.

END 06 20 00

1. GENERAL

1.01 WORK INCLUDES

A. Base Bid: Contractor Provide:

1. Extruded polystyrene rigid board insulation at perimeter of foundation walls
2. Batt and blanket insulation used for thermal resistivity in exterior wall and ceiling construction.
3. Batt and blanket insulation used for sound attenuation in interior wall construction.
4. Low-expanding foam insulation for filling perimeter window and door shim spaces and crevices in exterior walls and ceilings/roof.
5. Sill sealer between top of foundation and sill plate.
6. Polyisocyanurate in cavities of exterior masonry walls, at exterior walls constructed of concrete masonry units and exterior walls constructed of wood studs with sheathing .
7. Insulation used in conjunction with the membrane roofing portion of this project is specified in the roofing section of the Project Manual.

1.02 REFERENCES

A. ASTM International:

1. ANSI/ASTM C209 - Insulating Board (Cellular Fiber), Structural and Decorative.
2. ASTM C552 - Standard Specification for Cellular Glass Thermal Insulation
3. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation
4. ASTM C612 - Standard Specification for Mineral Fiber Block and Board Thermal Insulation
5. ASTM C665 - Insulation Blankets, Acoustical.
6. ASTM C1289 - Standard Specification for Faced Rigid Cellular Thermal Insulation Board
7. ANSI/ASTM D2842 - Standard Test Method for Water Absorption of Rigid Cellular Plastics.
8. ANSI/ASTM E84 - Surface Burning Characteristics of Building Materials.
9. ASTM E96 - Water Vapor Transmission of Materials.
10. ASTM E970 - Standard Test Method for Critical Radiant Flux of Exposed Attic Floor Insulation Using a Radiant Heat Energy Source
11. FS L-P-375 - Plastic Film, Flexible, Vinyl Chloride.
12. FS HH-I-524C - Insulation Board, Thermal (Polystyrene).
13. FS HH-I-530 - Insulation Board, Thermal (Urethane).
14. FS-HH-I-521F, Type I, II, III - Thermal Insulation Blankets.
15. FS L-P-375 - Plastic Film, Flexible, Vinyl-Chloride.

B. National Fire Protection Association:

1. NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Materials

C. Underwriters Laboratories Inc.

1. UL - Tests for Surface Burning Characteristics of Building Materials

1.03 SUBMITTALS.

A. In accord with 01 33 00, provide product literature, including data on product characteristics, performance criteria, limitations, and manufacturer's installation instructions for insulation materials.

B. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

1.04 QUALITY ASSURANCE

A. Surface Burning Characteristics of Insulation Installed in Concealed Locations:

1. Batt Insulation: Maximum 25/450 flame spread/smoke developed index when tested according to ASTM E84.

B. Surface Burning Characteristics of Insulation Installed in Exposed Locations:

1. Maximum 25/450 flame spread/smoke developed index when tested according to ASTM E84.
2. Attic Floor Insulation: Minimum 0.038 BTU/sq. ft.-h critical radiant flux when tested according to ASTM E970.

1.05 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 - Product Requirements
- B. Do not install adhesives when temperature or weather conditions are detrimental to successful installation.

1.06 SEQUENCING

- A. Sequence Work to ensure firestopping materials are in place before beginning Work of this section.

1.07 DELIVERY, STORAGE AND HANDLING

- A. Protect products under provisions of Section 01 60 00.
- B. Inspection: Accept materials on site in manufacturer's original packaging and inspect for damage
- C. Store according to manufacture's instructions.
- D. Protection:
 - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
 - 2. Remove insulation that becomes wet or damp.
 - 3. Provide additional protection according to manufacture's instructions.

2. PRODUCTS

2.01 RIGID BOARD INSULATION

- A. Acceptable Manufacturers:
 - 1. Carlisle Coating & Waterproofing
 - 2. Dow Chemical
 - 3. Kingspan Insulation
 - 4. Owens Corning, Inc.
- B. Insulation Materials - Perimeter of Foundation: Extruded Polystyrene Continuous Insulation;
 - 1. Type VI per ASTM C578 certified by independent third party testing agency.
 - 2. Compressive Strength: 40 psi, minimum per ASTM D1621.
 - 3. Thermal Resistance (180 day real-time aging as mandated by ASTM C578, measured per ASTM C518 at mean temperature of 75F): R-5.0 per inch of thickness with 90% lifetime limited warranty on thermal resistance.
 - 4. Water Absorption (ASTM C272): Maximum 0.30 percent by volume.
 - 5. Surface Burning Characteristics (ASTM E84): Flame spread less than 25; smoke developed less than 450, certified by independent third-party testing agency.
 - 6. Square board edge.
 - 7. Thickness as indicated on drawings.
- C. Molded Polystyrene Insulation "Bead Board" is not acceptable
- D. Adhesive Materials: Adhesive: as recommended by insulation manufacturer for application.
- E. Accessories:
 - 1. Nails or Staples: Steel wire; type and size to suit application.
 - 2. Tape: Bright aluminum or Polyester, self-adhering; 2 inches wide.

2.02 BATT AND BLANKET INSULATION AND SOUND ATTENUATION

- A. Acceptable Manufacturers:
 - 1. Owens Corning Fiberglas Corp.
 - 2. Certain Teed Insulation

3. Johns Manville Corp.

B. Materials:

1. Batt Insulation: ASTM C665, Type II (nonreflective faced), Class A (faced surface with a flame spread index of 25 or less), Category I; preformed glass fiber batts, friction fit, conforming to the following:
 - a. Thickness 7 1/4" or R25 value as called out on drawings for 2x8 wall thickness.
 - b. Thickness 5 1/2" or R20 value as called out on drawings for 2x6 wall thickness.
 - c. Thickness 3 1/2" or R13 for 2x4 wall thickness.
 - d. Thickness 12" or R38 for attic, install on bottom of roof deck.
 - e. Facing: Kraft Face
2. Sound Attenuation Batts: Thickness 3 1/2", non-fire rated
 - a. Type: Kraft face glass fiber acoustical insulation, meeting ASTM C 665, Type II, Class C
 - b. Surface Burning Characteristics: ASTM E84
 - c. Maximum Flame Spread: Not Rated
 - d. Maximum Smoke Developed: Not Rated
4. Fire safety insulation: as manufactured by USG, Thermafiber, Owens-Corning or Fibrex.
5. Nails or Staples: Steel wire; type and size to suit application.
6. Tape: Polyester self-adhering type.

C. Tape:

1. Material: Bright aluminum polyethylene or polyester.
2. Type: Self-adhering, mesh reinforced.
3. Width: 2 inches.

D. Insulation Fasteners:

1. Description: Steel impaling spindle and clip on flat metal base.
2. Backing: Self-adhering
3. Length: To suit insulation thickness.
4. Capable of securely and rigidly fastening insulation in place.

2.03 SILL SEALER

- A. 1 inch by 6 inch wide fiberglass insulation laid between top of foundation and wood sill plates.

2.04 INSULATION BAFFLE

- A. Similar to Accuvent Black Soffit Insulation Baffle.
- B. Size: 41" High x 22 1/2" Wide x 1 1/2 " Deep.

3. EXECUTION

3.01 RIGID BOARD INSULATION

A. Examination:

1. Verify that wall, opening framing, bridging, and structural bracing, and other framing support members and anchorage have been installed per requirements of the Product.
2. Verify adjacent materials are dry per requirements of the Project.
3. Do not begin installation until substrates have been properly prepared. If substrate preparation is unsatisfactory, notify Architect of unsatisfactory condition in writing before proceeding. Do not proceed with work until unsatisfactory conditions have been corrected.
4. Installation of products specified in this Section constitutes acceptance of existing conditions and assumption of responsibility for satisfactory performance.

B. Preparation:

1. Verify substrate and adjacent materials and insulation boards are dry and ready to receive insulation.
2. Verify substrate surface is flat, free of honeycomb, fins and irregularities, and that

3. waterproofing is in place on exterior foundation wall.
Prepare surface using methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Installation - Foundation Perimeter

1. Apply adhesive in three continuous beads per board length, 1/8 inch thick beads.
2. Install boards on foundation wall perimeter, horizontally. Place boards in a method to maximize contact bedding. Stagger end joints. Butt edges and ends tight to adjacent board and to protrusions.
3. Cut and fit insulation tight to protrusions or interruptions to insulation plane.
4. Immediately following application of board insulation, place protective boards over exposed insulation surfaces to prevent damage.

3.02 BATT AND BLANKET INSULATION

A. Examination:

1. Verify adjacent materials are dry and ready to receive installation.

B. Preparation:

1. Verify mechanical and electrical services within walls have been installed and tested.

C. Installation:

1. Install batt insulation and vapor/air barrier in accordance with manufacturer's instructions.
2. Install batt insulation in exterior walls shown as having this type of insulation without gaps or voids, to form a continuous thermal envelope.
3. Trim insulation neatly to fit spaces. Use batts free of damage.
4. Fit insulation tight in spaces and tight to exterior side of mechanical and electrical services within the plane of insulation. Leave no gaps or voids. Fit insulation into voids created at corners and intersection of interior and exterior walls while these voids are accessible from the exterior (prior to installation of wall sheathing).
5. Do not compress insulation.
6. Place vapor barrier facing to warm side of wall, adhere to studs with adhesive or by stapling at 8 inch on center.
7. Lap and seal retarder joints over member face. Tape seal tears or cuts in vapor retarder facing.
8. Extend vapor retarder tight to full perimeter of adjacent window and door frames to to other items interrupting plane of membrane and tape -seal in place.
9. Provide fire safing insulation packed tightly around penetrations through fire rated elements.

3.03 SILL SEALER

- A. 1 inch by 6 inch wide fiberglass insulation laid between top of foundation and wood sill plates

3.04 REPAIR OF DAMAGED MATERIALS

- A. Any insulation that has become damaged, displaced, or water soaked shall be removed and replaced with new insulation material.

3.05 PROTECTION

- A. Protect insulation from damage due to weather and physical abuse until protected by permanent construction.
- B. Touch-up, repair, or replace damaged products before Substantial Completion.

END 07 21 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide vapor barrier assembly, includes sheet and sealant materials for controlling vapor diffusion.

1.02 REFERENCES

- A. ASTM International:
 - 1. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.
 - 3. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials
- B. Sealant, Waterproofing, and Restoration Institute:
 - 1. SWRI - Sealant Specification

1.03 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Submittal procedures.
- B. Product Data: Submit data on material characteristics, performance criteria, and limitations.
- C. Samples: Weather Barrier Membrane, minimum 8 ½ inches X 11 inches.
- D. Manufacturer's Installation Instructions: Submit preparation, installation requirements and techniques, product storage, and handling criteria.

1.04 PERFORMANCE REQUIREMENTS

- A. Vapor Retarded Permeance: Maximum 1 perm when tested in accordance with ASTM E96.
- B. Floor Slab Vapor Retarder: Barrier shall meet WVTR less than or equal to 0.006 as tested by ASTM E96.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 Product Requirements
- B. Deliver weather barrier materials and components in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Store weather barrier materials as recommended by weather barrier manufacturer.

1.06 SCHEDULING

- A. Review requirements for sequencing of installation of weather barrier assembly with installation of other retardant materials and seals, and air barrier assemblies.
- B. Do not install vapor retarder until items penetrating vapor retarder are in place.

2. PRODUCTS

2.01 COMPONENTS

- A. Sheet Retarder Type 1: Clear polyethylene film for above grade application, 6 mil thick for use on the warm in winter side of exterior walls and at bottom of roof joist.

- B. Sheet Retarder Type 2: Multi-layer plastic extrusion of polyolefin resin, 15 mil thick for use between rock fill and interior concrete floor slab.
- C. Cleaner: Non-corrosive type; recommended by sealant manufacturer; compatibility with adjacent materials.
- D. Mastic Adhesive: Compatible with sheet retarder and substrate, thick mastic of uniform consistency.
- E. Adhesive: Compatible with sheet retarder and substrate, permanently non-curing.

2.02 ACCESSORIES

- A. Seam Tape: Polyethylene or polyester self-adhering type, mesh reinforced, 2 inch wide, compatible with sheet material.

3. EXECUTION

3.01 EXAMINATION

- A. Verify substrate and surface conditions are in accordance with vapor barrier manufacturer recommended tolerance prior to installation of vapor barrier and accessories.
- B. Remove loose or foreign matter capable of impairing adhesion.
- C. Clean and prime substrate surfaces to receive adhesive.

3.02 INSTALLATION

- A. Vapor Retarder for stud framed walls: Secure sheet retarder to stud faces with adhesive. Lap edges over stud faces. Lap ends onto adjacent construction, lap all joints 6 inches, tape ends and laps to ensure complete seal.
 - 1. Use sheets as wide as can be conveniently handled.
 - 2. Patch, tape, and seal all tears, punctures or voids in vapor barrier.
- B. Polyethylene membrane shall be installed under concrete floor slabs in Section 03 30 00, Cast in Place Concrete, in accord with the following:
 - 1. Membrane shall be placed directly over gravel or crushed rock fill.
 - 2. Width of sheets shall be at the contractor's option, but shall be as wide as can be conveniently handled.
 - 3. Joints shall be lapped 6 inches and taped continuously.
 - 4. Membrane shall be turned up around any pipes, conduits, sleeves, and at foundation walls and securely taped in place.
 - 5. Contractor shall take precautions to prevent puncturing membrane. Tears and punctures shall be promptly taped.
 - 6. At completion of membrane placing, entire area shall be effectively sealed.
 - 7. Protect from damage, before and while placing concrete.
- C. Vapor Retarder Seal for Openings: Install sheet retarder between window and door frames and adjacent vapor retarder and seal with sealant or adhesive to ensure complete seal. Position laps over film bearing.
- D. Apply sealant within recommended application temperature ranges.

END 07 26 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor to provide factory-formed panels in vertical installation. Metals flashings and trim.

1.02 REFERENCES

- A. NAAMM - Metal Finishes Handbook.
- B. SMACNA - Architectural Sheet Metal Manual.
- C. ASTM - American Society for Testing and Materials
 - 1. ASTM A653/A653M Standard Specification for Steel Sheets, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 2. ASTM A792/A792M Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy Coated by the Hot-Dip Process.
 - 3. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
 - 4. ASTM D2247 Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity.
 - 5. ASTM E1680 Standard Test Method for Determining the Rate of Air Leakage Through Exterior Metal Systems Under Specified Pressure Differences Across the Specimen.
 - 6. ASTM E1646 Standard Test Method for Water Penetration of Metal Systems by Uniform Static Air Pressure Difference.

1.03 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 01 33 00.
- B. Indicate material profile, jointing pattern, jointing details, fastening methods, and installation details.
- C. Submit manufacturer's installation instructions under provisions of Section 01 33 00.
- D. Submit samples under provisions of Section 01 33 00.

1.04 SYSTEM DESCRIPTION

- A. Panel Performance Requirements: Provide panels, which have been manufactured, fabricated, and installed to withstand structural and thermal movement, wind loading, and weather exposure to maintain manufacturer's performance criteria without defects, damage, failure, or infiltration of water.
- B. Finish Performance Requirements:
 - 1. Two coat coil applied, baked on full strength (70% resin, PVF2) fluorocarbon coating: thickness of 0.7-0.8 mil color coat for a total 0.9 to 1.1. mil total system dry film thickness.
 - 2. Color change and fade resistance: No cracking, peeling, blistering or loss of adhesion when tested in accordance with ASTM G23; color change, after removal of surface deposits such as dirt or chalk, maximum 5 NBS units.
 - 3. Humidity resistance: No blistering, peeling or loss of adhesion after 1000 hours testing, in accordance with ASTM D2247.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
 - 1. Provider of "hands on" installer training programs at manufacturer facility.
 - 2. Minimum of ten years' experience in manufacturing metal wall system.
 - 3. Provider of product produced in a permanent factory environment with fixed roll-forming equipment.
- B. Installer Qualifications:
 - 1. Experience on at least five projects of similar size, type, and complexity as this project that have been in service for a minimum of two years with satisfactory performance of the metal panel system.
 - 2. Employer of works for this project who are competent in techniques required by manufacturer for installation indicated and who shall be supervised at all times when material is being installed.

1.06 SOURCE QUALITY

- A. Source Quality: Obtain metal panel products from a single manufacturer.

1.07 STORAGE AND HANDLING

- A. Deliver materials in manufacturer's ordering instructions and lead time requirements to avoid construction delays.
- B. Packing, Shipping, Handling, and Unloading:
 - 1. Bundle panels in waterproof wrapping paper when nested, or wooden crates when panels cannot be nested.
 - 2. Package trim and accessories in waterproof wrapping paper.
- C. Store products under provisions of Section 01 60 00.
- D. Stack preformed and prefinished material to prevent twisting, bending, abrasion, scratching, or denting. Elevate one end of each skid to allow for moisture runoff and to provide ventilation.
- E. Maintain dry, heated storage area for products of this section until installation of products.
- F. Remove strippable plastic film before storage under high-heat conditions.
- G. Prevent contact with materials during storage which may cause discoloration or staining.

1.08 WARRANTY

- A. Panel Material: Furnish manufacturers **25 Year** warranty covering the panel against rupture, structural failure, or perforation.
- B. Panel Coating:
 - 1. Polyvinylidene Fluoride: Furnish manufacturer's **40 Year** warranty covering cracking, checking, and peeling, and 30 year warranty covering fade and chalk on the two coat coil applied, baked on full strength (70% resin, PVF2) fluorocarbon coating. Manufacturer's warranty may exclude surface deterioration due to physical damage and corrosive environments.
 - 2. Silicone Modified Polyester: Furnish manufacturer's **30 Year** warranty covering cracking, checking, and peeling, and 30 year warranty covering fade and chalk. Manufacturer's warranty may exclude surface deterioration due to physical damage and corrosive environments.
- C. Special Warranty: Installer's standard form in which installer agrees to repair or replace panels that fail due to poor workmanship or faulty installation within the specified warranty period.
 - 1. Warranty Period: **1 Year** from date of Substantial Completion.

2. PRODUCTS

2.01 ACCEPTABLE WALL PANEL MANUFACTURER

- A. McElroy Metal, Inc. - "Max-Rib Panel"
- B. MBCI - "Perma-Clad"

2.02 METAL WALL PANELS

- A. Profile: Major longitudinal ribs 3/4" deep, spaced 9" on center; minor longitudinal ribs centered between major ribs, spaced 3" on center panel, normal-run where ribs protrude from panel plane, viewed from exterior, reverse-run where ribs receded from panel plane, viewed from exterior.
- B. Size: 36" cover width, lengths indicated on drawings.
- C. Material: Galvalume steel sheet conforming to ASTM A792, AZ50 coating for painted 24 gauge sheet thickness.

- D. Finishes:
 - 1. Two coat coil applied, baked on full strength (70% resin, PVF2) fluorocarbon coating consisting of a nominal 0.25 mil dry film thickness primer, and a nominal dry film thickness of 0.7 -0.8 mil color coat for a total 0.9 to 1.1 mil total system dry film thickness. Finish to be selected from manufacturer's standard color selection. The back side of the material should be 0.25 mil primer and a 0.25 mil polyester wash coat.
 - 2. Metal Panel Color: Color selected from full range of manufacturer's standard colors.
 - 3. Metal Related Trim and Accessories Color: Color selected from full range of manufacturer's standard colors.

2.03 METAL WALL PANEL ACCESSORIES

- A. General: Provide complete metal panel assembly incorporating trim and miscellaneous flashing. Provide required fasteners, closure strips, and sealants as indicated in manufacturer's written instructions.
- B. Flashing and Trim: Match material, thickness, and finish of metal panel face sheet.
- C. Panel Fasteners: Self-tapping screws and other acceptable corrosion-resistant fasteners recommended by metal panel manufacturer. Where exposed fasteners cannot be avoided, supply fasteners with EPDM or neoprene gaskets, with heads matching color of metal panels by means of factory-applied coating.
- D. Joint Sealers: Manufacturer's standard or recommended liquid and preformed sealers and tapes, and as follows:
 - 1. Tape Sealers: Manufacturer's standard non-curing butyl tape, AAMA 809.2.
 - 2. Concealed Joint Sealant: Non-curing butyl, AAMA 809.2
- E. Steel Sheet Miscellaneous Framing Components: ASTM C645, with ASTM A 653/A 653M, G60 (Z180) hot-dip galvanized zinc coating.
- F. Metal Accessories: Approved by metal panel manufacturer.

3. EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

- A. Compliance: Comply with manufacturer's product data, recommendations and installation instructions for substrate verification, preparation requirements and installation.
- B. Strippable Film: Remove manufacturer's protective film, if any, from surfaces of metal panels.
- C. Site Verification of Conditions: Verify substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.
 - 1. Verification of Conditions:
 - a. Panel support systems are ready for construction activities of this section and within specified tolerances.
 - b. Rough-in utilities are in correct locations.
 - 2. Installer's Examination:
 - a. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable.
 - b. Transmit 2 copies of installer's report to A/E within 24 hours of receipt.
 - c. Delay construction activities of this section until unacceptable conditions have been corrected.
 - d. Begin construction activities of this section indicates installer's acceptance of conditions.
- D. Verify work of other trades has been completed.

3.02 PREPARATION

- A. Coordination: Coordinate metal panel work with other trades to provide a noncorrosive and leak free

metal installation.

1. Install substrate boards, hat channels, purlins, or furring channels in accordance with manufacturer's recommendations.
2. Coordinate work, with installation of other associated work, to ensure quality applications.
3. Coordinate work with installation of associated metal flashings and building walls.
4. Coordinate work to minimize foot traffic and construction activity on installed finished surfaces.
5. Dissimilar metals: Prevent galvanic action of dissimilar metals.

3.03 INSTALLATION

- A. General: Install metal panels to profiles, patterns, and drainage indicated and required for leak-free performance. Provide for structural and thermal movement of work. Seal joints for leak-free metal installation.
1. Shim or otherwise plumb substrates receiving metal panels.
 2. Flash and seal metal panels at perimeter of all openings. Fasten with self-tapping screws.
 3. Do not begin installation until air or water resistive barriers and flashings that will be concealed by metal panels are installed.
 4. Locate and space fasteners in uniform vertical and horizontal alignment.
 5. Install flashing and trim as metal panel work proceeds.
 6. Install continuous length panels if at all possible. If splices are required, locate panel splices over, but not attached to, structural supports and only with prior Architect approval.
 7. Align bottoms of metal panels and fasten with blind rivets, bolts, or self-tapping screws.
 8. Fasten flashings and trim around openings and similar elements with self-tapping screws.
 9. Provide weathertight EPDM Flashing for pipe and conduit penetrating panels.
 10. Fix panels at locations depicted on reviewed shop drawings.
 11. Allow for required panel clearance at penetrations for thermal movement.
 12. Align pipe penetrations to occur in the flat of the metal panel. Report and have corrected improperly placed penetrations before proceeding with panel installation. Remove and replace metal panels which have improperly placed penetration flashings.
 13. Allow for required panel clearance at penetrations for thermal movement.
- B. Metal Installation:
1. Install metal panels plumb, true and in correct alignment with structural framing, in accordance with shop drawings and manufacturer's printed installation instructions.
 2. Install metal panels using manufacturer's concealed fastening system or non-corroding fasteners color matched to trim are permitted on vertical surfaces only.
- C. Metal Panel Installation Tolerances:
1. Variation from Plumb: Max 1/8" in 20 feet.
 2. Variation from Level: Max 1/8" in 20 feet.
 3. Variation from True Plane: Max 1/8" in 20 feet.
- D. Accessory Installation: Install accessories using techniques recommended by manufacturer and which will assure positive anchorage to building and weather tight mounting. Provide for thermal movement. Coordinate installation with flashings and other components.
- E. Execute metal work in accordance with manufacturer's printed instructions.
- F. Provide sealant between metal work and adjacent construction.

3.04 FIELD QUALITY CONTROL

- A. Installation shall result in properly aligned seams and joints, free of sagging panels, oil-canning or other visual deficiencies.

3.05 CLEANING

- A. Cleaning: Remove temporary coverings and protection of adjacent work areas.
- B. Repair or replace damaged installed products.
- C. Clean installed products in accordance with manufacturer's instructions prior to Owner's acceptance.
- D. Remove construction debris from project site and legally dispose of debris.

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- E. Remove strippable coating and perform dry wipe-down cleaning of panels as erected.

3.06 PROTECTION

- A. Protect installed product's finish surfaces from damage during construction:
 - 1. Protect installed products from damage by subsequent construction activities.
 - 2. Replace products having damage other than minor finish damage.
 - 3. Repair products having minor damage to finish in accordance with panel Manufacturer's recommendation.
 - 4. Architect shall be sole judge of acceptability of repair to damaged finishes; replace products having rejected repairs.

END 07 42 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide prefinished aluminum soffit with concealed fastening system and matching trim as required for a complete installation.

1.02 REFERENCES

- A. NAAMM - Metal Finishes Handbook.
- B. SMACNA - Architectural Sheet Metal Manual.

1.03 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 01 33 00.
- B. Indicate material profile, jointing pattern, jointing details, fastening methods, and installation details.
- C. Submit manufacturer's installation instructions under provisions of Section 01 33 00.
- D. Submit samples under provisions of Section 01 33 00.

1.04 STORAGE AND HANDLING

- A. Store products under provisions of Section 01 60 00.
- B. Stack preformed and prefinished material to prevent twisting, bending, or abrasion, and to provide ventilation.
- C. Prevent contact with materials during storage which may cause discoloration or staining.

2. PRODUCTS

2.01 ACCEPTABLE SOFFIT MANUFACTURER

- A. Rollex

2.02 SOFFIT PANELS:

- A. 0.019 gauge thickness, prefinished aluminum **non-vented** panels, similar to Rollex System 3, SYS312 12" wide nominal panels, color as selected by A/E.

2.03 TRIM AND ACCESSORIES.

- A. Fascia, trim, and support sections, same manufacturer, material and finish as panels.

2.04 SEALANT

- A. Compatible with aluminum materials, including finish. Color to be selected by the A/E.

3. EXECUTION

3.01 INSPECTION

- A. Inspect substrates to verify sheathing is clean and smooth, free of depressions, waves, or projections.
- B. Verify work of other trades has been completed.

3.02 INSTALLATION.

- A. Execute metal work in accordance with manufacturer's printed instructions.

B. Provide sealant between metal work and adjacent construction.

3.03 FIELD QUALITY CONTROL

A. Installation shall result in properly aligned seams and joints, free of sagging panels, oil-canning or other visual deficiencies.

END 07 42 93

1. GENERAL

1.01 WORK INCLUDES

A. Base Bid:

1. General Contractor provide single-ply **60-mil EPDM** fully adhered membrane roofing and flashing system with a **20-Year Warranty** as shown and herein specified.
 - a. Remove existing construction:
 - (1) EPDM
 - (2) Thermal insulation down to existing concrete deck
 - b. Install new:
 - (1) Insulation.
 - (2) Coverboard.
 - (3) Roof membrane.
 - (4) Seam tape.
 - (5) Seam cover.
 - (6) Base flashing.
 - (7) Roof projection flashings.
 - (8) Termination bar.
 - (9) Walkway pads.
 - (10) Counterflashing.
 - (11) Coping cap.
 - (12) Equipment curbs.

1.02 DEFINITIONS

- A. Roofing System Manufacturer: Any of the manufacturers whose systems are specified under "Acceptable Roofing System Manufacturers" in this section hereinafter called "manufacturer."

1.03 QUALITY ASSURANCE

- A. Qualifications:
1. The installing contractor shall be approved or franchised by the roofing system manufacturer.
 2. The job foreman shall be trained by the manufacturer in the installation of the specified system.
 3. The installing contractor shall comply with the Illinois Roofing Industry Licensing Act.
- B. Manufacturer's Qualifications:
1. Examined project drawings, specifications and warranty requirements.
 2. Their specified products are acceptable for and compatible with the roofing and flashing system design.
 3. They will issue the specified warranty if the roofing and flashing systems are installed in accord with their requirements.
- C. Unless otherwise noted in this specification, the installing contractor must strictly comply with the manufacturer's current specifications and details.
- D. Upon completion of the installation, the applicator shall arrange for an inspection to be made by a non-sales technical representative of the membrane manufacturer in order to identify any needed corrective repairs that will be required for warranty issuance. Notify the building owner seventy-two (72) hours prior to the manufacturer's final inspection.
- E. Inspector shall be employed and trained by the manufacturer and have received product-specific training from the manufacturer of the products.

1.04 REFERENCES

- A. Cited Standards and specified manufacturers' catalogs, current at the date of bidding documents, unless otherwise specified, are incorporated herein by reference and govern the work. If conflict is discovered between referenced Standards or catalogs and the project specifications, request written clarification from the A/E. Do not proceed with the work until receiving clarification.
- B. Standards:
1. American Society for Testing and Materials (ASTM).
 2. Factory Mutual Laboratories (FM).
 3. Underwriters Laboratories (UL).
 4. Sheet Metal and Air Conditioning Contractors National Assoc. (SMACNA).
 5. National Roofing Contractors Association (NRCA).
 6. Thermal Insulation Manufacturer's Association (TIMA).

1.05 SUBMITTALS

- A. Make all submittals in accord with the Standard Documents for Construction, Section 01 33 23.
- B. Endorsement of Roofing Firm: Contractor: Within 15 days of receiving the Notice of Award, submit the manufacturer's endorsement of the installing firm.
- C. Shop Drawings:
1. Submit shop drawings to the manufacturer for review and comment.
 2. Submit only manufacturer reviewed shop drawings to the A/E.
 3. Minimum Scale for Roof Plan: 1/8" = 1' 0".
 4. Minimum Scale for Details: 1-1/2" = 1' 0".
 5. Submit the following:
 - a. Tapered roof insulation plan.
 - b. Insulation fastener pattern.
 - c. Base flashings.
 - d. Membrane terminations.
 - e. Roof projection flashings.
 - f. Sheet metal:
 - (1) Counterflashing.
 - (2) Gravel stop/fascia.
 - (3) Copings.
 - (4) Expansion joint cover.
 - (5) Equipment curbs.
 - (6) Gutters.
 - (7) Downspouts.
- D. Samples:
1. Roof insulation, 8" x 10", 2 pieces.
 2. Insulation fastener and plate, 2 of each.
 3. EPDM membrane, 8" x 10", 3 pieces.
 4. Sheet Metal:
 - a. Metal used with roofing, 4" x 4" of each type, 3 pieces.
- E. Product Data:
1. Manufacturer's specifications for roofing system, 2 sets.
 2. Roof insulation specifications, 2 sets.

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1.06 DELIVERY, STORAGE AND HANDLING

- A. Per roofing manufacturer's recommendations.
- B. Deliver materials requiring fire resistant classifications packaged with labels intact and legible.
- C. Any materials which are found to be damaged after delivery, shall be removed and replaced at the applicator's expense.

1.07 JOB CONDITIONS

- A. Temporary Protection: Maintain continuous temporary protection against water intrusion during and prior to installation of the roofing system.
- B. Protection:
 - 1. Protect roof membrane, building surfaces, paving, and landscaping from traffic and roofing equipment.
 - 2. Restore or replace all work or materials damaged by the roofing operation.
 - 3. Remove protection materials upon completion of the work.
- C. During the roofing contractor's performance of the work, the building owner will continue to occupy the existing building. The contractor shall take precautions to prevent the spread of dust and debris, particularly where such material may sift into the building. The roofing contractor shall provide labor and material to construct, maintain, and remove necessary temporary enclosures to prevent dust or debris in the construction area from entering the remainder of the building. The contractor will be responsible for any clean-up associated with dust and debris from this project.
- D. Do not overload any portion of the building, either by use of or placement of equipment, storage of debris, or storage of materials.
- E. Protect against fire and flame spread. Maintain proper and adequate fire extinguishers.
- F. Take precaution to prevent drains from clogging during the roofing application. Remove debris at the completion of each day's work and clean drains, if required. At completion, test drains to ensure the system is free running and drains are watertight. Remove stainers and plug drains in areas where work is in progress. Install flags or other telltales on plugs. Remove plugs each night and screen drain.
- G. Roofing work, remove and install only as much insulation and roofing as can be completed by the end of each work day.
- H. All details to be completed at a minimum by latest edition of manufacturer's standard details as supplied by roofing manufacturer.

1.08 FASTENER PULLOUT / ADHESIVE REQUIREMENTS

- A. Substrate for base sheet attachment are required to provide sufficient resistance for the base sheet fasteners, adhesive and roof system.
- B. Roofing contractor shall have pull test completed prior to start of project.
 - 1. Minimum Fastener Resistance shall be 300 lbs. per base sheet fastener.
 - 2. Number of Pull Tests Required: Roof Size: Less than 10,000 Sq. Ft. = 2 Pull Out Tests per roof level. This project has 2 levels, provide 4 tests.

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1.09 WARRANTY

A. Base Bid Warranty:

1. Roofing Contractor: **Two (2) Year**
2. Manufacturer Warranty: **Twenty (20) Year** Warranty Period
3. Warranty Wind Speed: **72 mph** measured at 33 feet (10 meters).

2. PRODUCTS

2.01 MATERIALS

- A. For the entire roofing system provide adhesives, sealants, pre-molded and field fabricated flashings, fasteners, and other related components manufactured or recommended by the selected manufacturer.

2.02 ACCEPTABLE ROOFING SYSTEM MANUFACTURERS

<u>CODE</u>	<u>BRAND</u>	<u>MANUFACTURER</u>
CAR	Sure-Seal	Carlisle SynTec Systems, Carlisle, PA.
ELE	LSFR Rubbergard	HolcimElevate, Inc., Nashville, TN.
VER	Versigard	Versico, Inc., Akron, OH.

2.03 ACCEPTABLE SYSTEMS:

A. Base Bid:

1. Fully adhered .060 EPDM.
 - a. CAR Design "A"
 - b. ELE LSFR Rubbergard
 - c. VER Versigard
2. Manufacturer's 6" wide, pressure-sensitive, self-adhering EPDM seam cover.
3. Color: Black

2.04 ROOF INSULATION

- A. The Contractor shall select a brand acceptable to the roofing manufacturer.

1. INSULATION TYPE
 - a. BASE INSULATION
Polyisocyanurate

ASTM	R/INCH
C1289	5.70
2. Roof Insulation for Non-Tapered Areas:
 - a. Bottom Layer: Polyisocyanurate; Thickness 2.6 inches. Maximum Size 4'x4'.
 - b. Second Layer: Coverboard/Polyisocyanurate; Thickness: 3 inches. Maximum Size 4'x4'.
 - i) Carlisle SynTec Systems SecurShield HD Composite.
3. Roof Insulation for Tapered Areas:
 - a. Polyisocyanurate. Minimum Thickness 1/2", Slope 1/4 in./ft unless otherwise noted on drawings.
3. Roof Insulation for Crickets, Saddles, & Tapered Edge Strips:
 - a. Polyisocyanurate. Minimum Thickness 1/2", Slope 1/2 in./ft unless otherwise

noted on drawings.

2.05 COVER BOARD

A. Cover all tapered insulation, crickets, and saddles with coverboard.

1. COVERBOARD: ½" Thick.
 - a. SecurShield HD – Carlisle
 - b. Isogard HD – Elevate
 - c. H-Shield – Hunter Panels

2.06 BASE SHEET

A. Base Sheet Primer, All concrete and wood decks to be primed prior to base sheet installation. Primer to be approved by manufacturer. Prep surface prior to priming. Install per manufacturer's recommendations.

B. Wood Decks, 40-mil composite consisting of 35 mils of self-adhering rubberized asphalt laminated to a 5-mil woven polypropylene film. Install per manufacturer's recommendations.

1. Carlisle: VapAir Seal 725 TR – Air and Vapor Barrier/Temporary Roof
2. Elevate: V-Gard – Air & Vapor Control Membrane
3. Versico: VAPAIR SEAL 725 TR – Air and Vapor Barrier/Temporary Roof

2.07 PRIMER/ADHESIVE

A. Spray applied aerosol contact adhesive and primer between nailable base sheet and base layer of insulation.

1. CAV-GRIP III Adhesive/Primer – Carlisle.
2. I.S.O. Twin Pack – Elevate
3. CAV-GRIP IIIV – Versico

B. Adhesives to be applied per manufacturers written instructions.

1. First and second layers of polyisocyanurate insulation to be set in adhesive at 4 inch center ribbons.
2. All tapered polyisocyanurate insulation including crickets and saddles to be set in adhesive at 4 inch center ribbons.
3. Cover board to be set in adhesive at 4 inch center ribbons.

2.08 MECHANICAL FASTENERS

A. Fasteners manufactured or approved by the roofing system manufacturer, and that have Factory Mutual approval.

B. Wood to Wood:

1. Galvanized, common, annular ring nail.
2. Length: Sufficient to penetrate underlying blocking 1-1/4 inches.

C. Drawband:

1. General Purpose Slotted Stainless Steel Worm Drive Clamp by Murray Corporation.

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- D. Insulation to Steel Deck:
 - 1. Olympic No. 12-11 Standard Roofing Fasteners (or Approved Equal), with CR-10 fluorocarbon coating; three (3) inch diameter plastic or metal disc.
 - 2. Length: Sufficient to penetrate the steel deck 3/4" or penetrate underlay blocking 1 1/4".
- E. Wood to Steel Deck:
 - 1. FM approved fastener intended for purpose and application.
 - 2. Length: Sufficient to penetrate steel deck minimum 3/4 inch.
- F. Sheet Steel to Wood Blocking:
 - 1. FS-FF-N-105B (3) Type II, Style 20 roofing nails, galvanized, steel wire, flat head, diamond point, round, barbed, shank.
 - 2. Length: Sufficient to penetrate wood blocking minimum 1 1/4 inch.
- G. Termination Bar to Sheet Metal:
 - 1. 10-8 stainless steel screw with aluminum sleeve.
- H. Wood to Masonry:
 - 1. Concrete anchor screw, coated, 1/4 inch diameter, minimum embedment 1 inch, similar to Tapcon fastener.

2.09 OTHER MATERIALS

- A. Wood Nailers: See 06 10 00 for material specification. See drawings for width and thickness.
- B. Manufacturer's EPDM Flashing and Cover Strips.
- C. Termination Bar: Required on all wall terminations. **Attach 6" o.c.**
 - 1. .040" x 1" aluminum bar under counterflashing or other restricted spaces.
 - 2. 1/8" x 1-1/2" aluminum bar with 45° sealant pocket where space permits.
- D. Rubber Walkway Pads: Furnished by the roofing manufacturer.

3. EXECUTION

3.01 ENVIRONMENTAL CONDITIONS

- A. Remove existing roofing only in dry weather.
- B. Install roofing only in dry weather.
- C. Comply with manufacturer's climatic restrictions.

3.02 REMOVE EXISTING CONSTRUCTION

- A. Temporary Removals: Remove roof top equipment when required to increase curb heights prior to installation of new roofing

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A. Permanent Removals:

1. Remove all existing roof membrane, roof insulation, flashing, and related components down to the roof deck on the areas indicated on the drawings.
2. Remove selected roof penetrations as shown or called for on the drawings.

3.03 INSPECTION

- A. Examine all surfaces for inadequate anchorage, foreign material, moisture, unevenness, or other conditions which could prevent the best quality and longevity of roofing, flashing, and accessory components. Notify the A/E of all deficiencies.
- B. Do not proceed with the work until all deficiencies have been corrected to the satisfaction of the A/E and the roofing manufacturer.

3.04 PREPARATION

- A. Ensure that all surfaces are clean and dry before starting and during performance of work.
- B. Verify that all work of other contractors and subcontractors which penetrates the roof deck or requires men and equipment to traverse the roof deck has been completed.

3.05 INSTALLATION

- A. Install the roof insulation with end joints staggered at mid-point in each layer. Offset all joints between layers a minimum of six inches.
1. Base sheet adhered to wood deck, approved by Roofing System Manufacturer.
 2. First Layer (thermal insulation adhered to base sheet or fastened to metal deck).
 3. Second/Tapered Layer (thermal insulation adhered to first layer).
 4. Crickets & Saddles (thermal insulation adhered to second layer).
 5. Cover Board (Adhered to thermal insulation).
 6. EPDM Roof system (Adhered to cover board).
- B. Adhesive Attached Insulation: Using products provided or recommended by the roofing system manufacturer, and in accordance with the adhesive manufacturer's printed instructions, use field-applied foam adhesive to secure items as listed above. Application of adhesive shall be by ribbons at 4" centers at perimeter, and 4" centers in the field, rather than a spray application to eliminate problems associated with overspray.
- C. Install the roofing and flashing system and all accessory items in accord with the manufacturer's printed instructions.
- D. Install all field seams using the manufacturer's seam tape, primers, and cleaners, and in accord with the manufacturer's recommendations.
- E. Centered over all field seams, apply a minimum 6" wide strip of pressure sensitive, self-adhering EPDM.
- F. Install coping cap.

3.06 FIELD QUALITY CONTROL

- A. The A/E will provide onsite observation during installation.

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- B. The roofing manufacturer will provide onsite observation and instruction as they deem necessary.

3.07 REPAIRS

- A. Wrinkles: When within 18" of splice running towards a splice or positioned to interrupt drainage, cut out wrinkle and repair with unspliced roof membrane at least 3" beyond wrinkle.
- B. Cuts and Punctures: Patch over with roof membrane at least 3" beyond the break.

3.08 ADJUST AND CLEAN

- A. Carefully inspect all completed work and correct all defects.
- B. Remove from the job site and legally dispose of all debris.
- C. Remove all tools, equipment, and construction aids.
- D. Prevent storage of materials and equipment on the completed roof.
- E. Accompany the manufacturer's technical inspector and assist with equipment and workmen if necessary to provide access to the roof. Correct all defects noted during the inspection.

END 07 53 23

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor Provide:
 - 1. Fabricated and pre-finished roof edging and coping's as detailed on drawings and prefinished steel sheet metal and as specified herein, counter-flashing's, scuppers, downspouts, and coping caps.

1.02 SYSTEM DESCRIPTION

- A. Work of this Section is to physically protect membrane roofing and base flashings from damage that would permit water leakage to building interior.

1.03 QUALITY ASSURANCE

- A. High Performance roof edge and coping system shall be certified by the manufacturer to comply with ANSI/SPRI Standard ES-1, for Roof Edge and Coping shall meet the performance design criteria according to the following test standards:
 - 1. ANSI/SPRI ES-1 Test Method RE-1 Test for Roof Edge Termination of Single Ply Roofing Membranes: the fascia system shall be tested to secure membrane to minimum 100 lbs/ft in accord with this test method.
 - 2. ANSI/SPRI ES-1 Test Method RE-3 Test for Coping: Wind Design Standard for Edge Systems used with Low Slope Roofing Systems (current edition). The coping system shall be tested simultaneously on horizontal and vertical surfaces and shall exceed horizontal and vertical design and wind pressure as calculated in accord with this test method.
- B. Applicator: Company specializing in sheet metal flashing work with Five (5) years minimum experience.
- C. Conform to SMACNA Manual and Drawings for nominal sizing of components for rainfall intensity determined by a storm occurrence of 1 in 10 years.

1.04 REFERENCES

- A. AAMA
 - 1. AAMA 611 – Voluntary Specification for Anodized Architectural Aluminum.
 - 2. AAMA 2603 – Voluntary Specifications, Performance Requirements, and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels.
 - 3. AAMA 2604 – Voluntary Specifications, Performance Requirements, and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels.
 - 4. AAMA 2605 – Voluntary Specifications, Performance Requirements, and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.
- B. ASTM International
 - 1. ASTM A240/A240M – Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
 - 2. ASTM A625/A625M – Standard Specification for Tin Mill Products, Black Plate, Single Reduced.
 - 3. ASTM A653/A653M – Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvanized) by the Hot-Dip Process.
 - 4. ASTM A755/A755M – Standard Specification for Steel Sheet, Metallic Coated by the

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Hot- Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products.

5. ASTM B32 – Standard Specification for Solder Metal.
6. ASTM B101 – Standard Specification for Lead-Coated Copper Sheet and Strip for Building Construction.
7. ASTM B209 – Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
8. ASTM B370 – Standard Specification for Copper Sheet and Strip for Building Construction.
9. ASTM B749 – Standard Specification for Lead and Lead Alloy Strip, Sheet, and Plate Products.
10. ASTM D226 – Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
11. ASTM D4397 – Standard Specification for Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications.
12. ASTM D4586 – Standard Specification for Asphalt Roof Cement, Asbestos-Free.

C. Federal Specification Unit

1. FS TT-C-494 – Coating Compound, Bituminous, Solvent Type, Acid Resistant.

D. SMACNA – Architectural Sheet Metal Manual.

E. NAAMM – Metal Finishes Handbook.

F. NRCA – Roofing Metal.

G. FMRC

H. SPRI – Sheet Membrane and Component Suppliers to the Commercial Roofing Industry.

1.05 SUBMITTALS

A. Section 01 33 00 – Submittal Procedures: Submittal procedures.

B. Submit shop drawings and product data.

C. Describe material profile, jointing pattern, jointing details, fastening methods, and installation details.

D. Product Data: Submit data on manufactured components metal types, finishes, and characteristics.

E. Submit manufacturer's installation instructions in accordance with the Standard Documents for Construction.

F. Installation Guide: The product manufacturer shall provide a written installation guide.

G. Samples:

1. Submit two samples, 12"x12" in size illustrating typical seam, internal corner, and junction to vertical dissimilar surface, material, and finish.
2. Submit two samples 12"x12" in size illustrating metal finish color.

1.06 DELIVERY, STORAGE AND HANDLING

A. Store products, in manufacturers original sealed, labeled containers in accord with Standard Documents for Construction.

- B. Stack pre-formed and pre-finished material to prevent twisting, bending, or abrasion, and to provide ventilation.
- C. Prevent contact with material during storage which may cause discoloration, staining, or damage.
- D. Remove protective plastic surface film immediately after installation.

1.07 WARRANTY

- A. General Contractor provide the following minimum warranties.
 - 1. General Contractor's: **Two (2) Years**.
 - 2. Manufacturer's: Provide manufacturer's Full System Warranty for roof edge and coping System **Twenty (20) Years** on the painted finish, covering color fade, chalk and film integrity.
 - 3. Warranty shall guarantee sheet metal work to be free of leaks and defects in materials and workmanship.
 - 4. Wind Warranty: 120 MPH

2. PRODUCTS

2.01 SHEET MATERIALS (COUNTER FLASHINGS & DOWNSPOUTS)

- A. Pre-finished Steel 24 gauge: G-90 galvanized with a 70% Kynar 500 finish. Color as selected by A/E.
- B. Components:
 - 1. Downspouts: See drawings for sizes and configurations
 - 2. End caps, downspout straps, supports brackets, joint fasteners, downspout strainers, downspout headers.
- C. Accessories.
 - 1. Anchorage Devices: SMACNA Requirements
 - 2. Downspout Supports: Brackets
- D. See drawing for sizes and configurations.

2.02 ACCESSORIES

- A. Fastener: Stainless steel with soft neoprene washers at exposed fasteners. Exposed fasteners shall not be used except with authorization of the A/E.
- B. Sealant: See Section 07 90 00 Joint Protection.

2.03 FABRICATION (COUNTER FLASHINGS & DOWNSPOUTS)

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- B. Fabricate cleats and starter strips of same material as sheet, interlockable with sheet.
- C. Form pieces in longest practical lengths.
- D. Hem exposed edges on underside ½"; miter and seam corners.

- E. Form material with cover plate seam.
- F. Fabricate corners form one piece with minimum 18" long legs; solder for rigidity, seal with sealant.
- G. Fabricate vertical faces with bottom edge formed outward ¼" and hemmed to form drip.

2.04 PARAPET COPING SYSTEM

- A. Manufacturer:
 - 1. METAL-ERA – Perma-Tite Continuous Cleat Coping, Tapered
 - 2. Elevate – Continuous Cleat Coping, Tapered
 - 3. Hickman – PermaSnap Continuous Cleat Coping, Tapered
- B. Metal coping cap with continuous galvanized steel anchor/support cleats for capping any parapet wall. The system shall be watertight, maintenance free, and does not require exposed fasteners. Joints shall be a butt type with concealed splice plates. Standard model is (PTCC) for all sizes.
 - 1. Coping sections shall expand and contract freely while locked in place on anchor plates.
 - 2. Coping sections shall lock to anchor cleats by mechanical pressure from hardened stainless steel springs factory attached to anchor cleats.
 - 3. All splice plates include factory applied dual non-curing sealant strips capable of providing a watertight seal.
- C. Metal: 24 ga. Galvanized steel with Kynar Coating.
- D. Coping Cap: Length to be 12'-0", width to be 24" maximum, see plans for dimensions. Vertical face and back leg 2 ½" minimum and 12 ½" maximum, see plans for dimensions.
- E. Concealed Splice Plates: 8" wide, finish to match finish of coping cap with factory applied dual non-curing sealant strips.
- F. Continuous Anchor/Support Cleat: 20 ga. pre-punched galvanized cleat with stainless steel spring mechanically locked to cleat normally 12" wide at 6'-0" on center. Mechanically fastened as indicated and detailed.
- G. Fasteners: #12 x 1 5/8" corrosion resistant fasteners provided with drivers. No exposed fasteners shall be permitted. Fasteners shall be electrolytically compatible.
- H. Finishes: Shall be standard pre-coated Kynar 500 from manufacturer's color list.
- I. Accessories
 - 1. Corners, end caps, pier caps, etc. shall be fabricated by the coping manufacturer.
 - 2. Welded or quicklock assembly shall be used to maintain watertight integrity.

2.05 ROOF EDGE SYSTEM

- A. Manufacturer:
 - 1. METAL-ERA – Anchor-Tite Standard Fascia
 - 2. Elevate – AnchorGard SP Fascia
 - 3. Hickman – TerminEdge EX Fascia
- B. Description:
 - 1. Decorative metal fascia with continuous 22 ga. metal cleat secured at 12" centers, top and bottom. To terminate adhered single ply roofing at perimeter. The system shall be watertight with no exposed fasteners. The rise above the nailer is 1/2".

- C. Performance Characteristics:
 - 1. Continuous cleat shall lock membrane prevent wind pullback.
 - 2. Injection molded EPDM splices to allow thermal expansion.
 - 3. Fascia shall freely thermal cycle, preventing periodic maintenance.
- D. Decorative metal gauge shall be 24 ga. Galvanized steel with Kynar 500 finish.
- E. Fascia and Continuous Cleat: Standard 12'-0" lengths. Stagger lap minimum 3 inches.
- F. Fasteners: #9x2" stainless steel fasteners provided with drivers. No exposed fastener permitted.
- G. Exterior Fascia Finish: Kynar 500 standard color from manufacturer's standard colors.
- H. Accessories:
 - 1. Miters shall be fabricated by manufacturer.
 - 2. Welded base assembly shall be used to maintain watertight integrity.

2.06 WATER CONTROL

- A. Gutter: "Wind Resistant":
 - 1. Profile: Box
 - 2. Approvals:
 - a. ANSI/SPRI GT-1
 - 3. Wind Warranty: 30 year, 160 MPH
 - 4. Gutter Size: Face: 5.75", Bottom: 5.75", Back: 6.75"
 - 5. Formed Lengths: 12'-0"
 - 6. Material: 24 ga. Galvanized Steel
 - 7. Fastener Holes: Pre-Punched
 - 8. Color: Selected from Manufacturer's standard color chart
 - 9. Internal Brackets: 2-piece adjustable size
 - a. Material: Extruded Aluminum
 - b. Finish: Mill
 - c. Width: 1"
 - d. Spacing: 24" O.C.
 - 10. Concealed Splice Plates
 - a. Material: Same as Gutters
 - b. Finish and Color: Same as Gutters.
 - c. Width: 6"
- B. Manufacturers:
 - 1. METAL ERA – Seal-Tite WR Gutter
 - 2. Elevate – Industrial Gutter
 - 3. Hickman Edge Systems – Wind Resistant Gutter

3. EXECUTION

3.01 INSPECTION

- A. Verify roof openings, curbs, pipes, sleeves, ducts, or vents through roof are solidly set, cant strips and reglets in place, and nailing strips located.

- B. Verify membrane termination and base flashings are in place, sealed, and secure.
- C. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION (COUNTER FLASHINGS, DOWNSPOUTS, & COPING CAP)

- A. Field measure site conditions prior to fabricating work.
- B. Install starter and edge strips, and cleats before starting installation.
- C. Install surface mounted reglets true to lines and levels. Seal top of reglets with sealant.
- D. Insert flashings into reglets to form tight fit. Secure in place with lead wedges at maximum 8 inches on center. Seal flashings into reglets with sealant.
- E. Secure flashings in place using concealed fasteners. Use exposed fasteners only in locations approved by Architect.
- F. Cleat and seal all joints.
- G. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- H. Seal metal joints watertight.
- I. Provide separation between dissimilar metals.

3.03 INSTALLATION (FACTORY FABRICATED & FINISHED COPING & ROOF EDGING)

- A. Submit product design drawings for review and approval before fabrication.
- B. Installing contractor shall check as-built conditions and verify manufacturers coping details for accuracy to fit wall assembly prior to fabrications.
- C. The installer shall comply with the manufacturer's installation guide when setting copings.
- D. Installer shall use provided fasteners consistent with manufacturer's instructions suitable with for the substrate to which is being installed.
- E. Install manufacturer's water block sealant as recommended under the anchor bar at roof edging.
- F. Provide separation between dissimilar metals.

3.04 ADJUST AND CLEAN

- A. Carefully inspect all completed work. Correct all defects.
- B. Remove surplus materials.
- C. Provide adequate protection of completed work until substantial completion.
- D. Clean up all rubbish, debris, surplus materials, tools, and equipment and remove from site.

END 07 60 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor Provide:
 - 1. Section includes firestopping and through-wall penetration protection systems materials and accessories; firestopping tops of fire rated walls.

1.02 REFERENCES

- A. ASTM International
 - 1. ASTM E84 - Standard Test Method for Surface Burning Characterists of Building Materials
 - 2. ASTM E119 - Standard Rest Methods for Test of Building Construction and Materials.
 - 3. ASTM E814 - Standard Test Method for Fire Tests of Through-Penetration Fire Stops.
 - 4. ASTM E1966 - Standard Test Method for Fire-Resistive Joint Systems.
- B. Intertek Testing Services (Warnock Hersey Listed)
 - 1. WH - Certification Listings
- C. National Fire Protection Association
 - 1. NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Materials.
- D. Underwriters Laboratories Inc.
 - 1. UL 263 - Fire Test of Building Construction and Materials
 - 2. UL 723 - Test of Surface Burning Characteristics of Building Materials.
 - 3. UL 1479 - Fire Test of Through-Penetration Fire Stops
 - 4. UL 2079 - Tests for Fire Resistance of Building Joint Systems
 - 5. UL - Fire Resistance Directory

1.03 DEFINITIONS

- A. Firestopping (Through-Penetration Protection System): Sealing or stuffing material or assembly placed in spaces between and penetrations through building materials to arrest movement of fire, smoke, heat, and hot gases through fire-rated construction.

1.04 SYSTEM DESCRIPTION

- A. Firestopping Materials: ASTM E814 to achieve fire ratings as noted on Drawings for adjacent construction, but not less than 1-hour fire rating.
- B. Firestopping Materials: UL 263, UL 1479, to achieve fire ratings of adjacent construction in accordance with UL Design Numbers noted in schedule at the end of this section.
- C. Surface Burning: ASTM E84 with maximum flame spread / smoke developed rating of 25/450.
- D. Firestopping interruptions to fire rated assemblies, materials and components.

1.05 PERFORMANCE REQUIREMENTS

- A. Conform to applicable code for fire resistance ratings and surface burning characteristics.

- B. Provide certificate of compliance from authority having jurisdiction indicating approval of materials used.

1.06 SUBMITTALS.

- A. In accord with 01 33 00, provide product literature and installation instructions for Firestopping materials.
- B. Submit Manufacturer's Certificate certifying products meet or exceed specified requirements.

1.07 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with a minimum three years experience.
- B. Applicator: Company specializing in performing Work of this section with a minimum three years experience and approved by the manufacturer.

1.08 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 - Product Requirements
- B. Do not apply materials when temperature of substrate material and ambient air is below 60 degrees F.
- C. Maintain minimum temperature before, during and for a minimum 3 days after installation of materials.
- D. Provide proper ventilation in areas to receive solvent cured materials.

2. PRODUCTS

2.01 FIRESTOPPING

- A. Acceptable Manufacturers
 - 1. DOW Corning Corp.
 - 2. Hilti Corp.
 - 3. 3M Fire Protection Products
- B. Product Description: Different types of products by multiple manufactures are acceptable as required to meet specified system description and performance requirements; provide only one type for each similar application.
 - 1. Silicone Firestopping Elastomeric Firestopping: Single or Multiple component silicone elastomeric component and compatible silicone sealant.
 - 2. Foam Firestopping Compounds: Multiple component foam compound
 - 3. Formulated Firestopping Compound of Incombustible Fibers: Formulated compound mixed with incombustible non-asbestos fibers.
 - 4. Fire Stuffing and Sealant Firestopping: Composite of mineral or ceramic fiber stuffing insulation with silicone elastomer for smoke stopping.
 - 5. Mechanical Firestopping Device with Fillers: Mechanical device with incombustible fillers and silicone elastomer, covered with sheet stainless steel jacket, joined with collars, penetration sealed with flanged stops.
 - 6. Intumescent Firestopping: Intumescent putty compound which expands on exposure to surface heat gain.

7. Firestop Pillows: Formed mineral fiber pillows.

C. Color: Red or Yellow.

2.02 ACCESSORIES

A. Primer: Type recommended by firestopping manufacturer for specific substrate surfaces and suitable for required fire rating

B. Dam Material- Permanent:

1. Mineral Fireboard
2. Mineral Fiber matting
3. Sheet Metal

C. Installation Accessories: Provide clips, fasteners, collars, temporary stops or dams and other devices required to position and retain materials in place.

3. EXECUTION

3.01 EXAMINATION

A. Section 01 33 00 Submittals

B. Verify openings are ready for to receive firestopping.

3.02 PREPARATION

A. Clean substrate surfaces of dirt, dust, grease, oil, loose material, or other matter affecting bond of firestopping material

B. Remove incompatible material affecting bond.

C. Install backing and damming materials to arrest liquid material leakage.

3.03 APPLICATION

A. Install material at fire rated construction perimeters and openings containing penetrating sleeves, piping, ductwork, conduit, and other items, requiring firestopping

B. Apply primer where recommended by manufacturer for type of firestopping material and substrate involved, and as required for compliance with required fire ratings.

C. Apply firestopping material in sufficient thickness to achieve required fire and smoke rating, to uniform density and texture.

D. Compress fibered material to maximum 40 percent of its uncompressed size.

E. See Section 07 92 00 for joint protection at non-fire rated construction perimeters and openings containing penetrating sleeves, piping, ductwork, conduit and other items.

3.04 FIELD QUALITY CONTROL

A. Section 01 40 00 - Quality Control and 01 70 00 - Execution Requirements:

B. Inspect installed firestopping for compliance with specifications and submitted schedule.

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3.05 CLEANING

- A. Section 01 70 00 - Execution Requirements: Final Cleaning
- B. Clean adjacent surfaces of firestopping materials

3.06 PROTECTION OF INSTALLED CONSTRUCTION

- A. Section 01 70 00 - Execution Requirements: Protecting installed construction.
- B. Protect adjacent surfaces from damage by material installation.

END 07 84 00

1. GENERAL

1.01 SECTION INCLUDES

- A. Base Bid: Contractor provide:
 - 1. Sealant substrate surfaces.
 - 2. Sealant and backing

1.02 REFERENCES

- A. ANSI/ASTM D1056 - Flexible Cellular Materials - Sponge or Expanded Rubber.
- B. ANSI/ASTM D1565 - Flexible Cellular Materials - Vinyl Chloride Polymers and Copolymers (Open-Cell Foam).
- C. ASTM C790 - Use of Latex Sealing Compounds.
- D. ASTM C804 - Use of Solvent-Release Type Sealants.
- E. ASTM C834 - Latex Sealing Compounds.
- F. FS TT-S-001657 - Sealing Compound, Single Component, Butyl Rubber Based, solvent Release Type.
- G. FS TT-S-00227 - Sealing Compound: Elastomeric Type, Multi-Component.
- H. FS TT-S-00230 - Sealing Compound: Elastomeric Type, Single Component.
- I. SWI (Sealing and Waterproofers Institute) - Sealant and Caulking Guide Specification.

1.03 SUBMITTALS

- A. Submit product data under provisions of Section 01 33 00.
- B. Submit product data indicating sealant chemical characteristics, performance criteria, limitations, color availability and application instructions.

1.04 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in manufacturing the products specified in this Section with minimum 3 years documented experience.
- B. Applicator: Company specializing in applying the work of this Section with minimum 3 years documented experience and approved by sealant manufacturer.
- C. Conform to Sealant and Waterproofers Institute requirements for materials and installation.

1.05 ENVIRONMENTAL REQUIREMENTS

- A. Do not install solvent curing sealants in enclosed building spaces.
- B. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

1.06 SEQUENCING AND SCHEDULING

- A. Coordinate the work of this Section with all Sections referencing this Section.

1.07 WARRANTY

- A. Provide **three (3) year** warranty under provisions of Section 01 70 00.
- B. Warranty: Include coverage of installed sealants and accessories which fail to achieve air tight and watertight seal, exhibit loss of adhesion or cohesion, or do not cure.

1.08 DELIVERY AND STORAGE

- A. Deliver materials in unopened containers as packaged by manufacturer. Store in a manner to protect materials from weather.

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Pecora Chemical Corp.
- B. Tremco Manufacturing Co.
- C. Sonneborn Division of Contech

2.02 BUILDING SEALANTS

- A. Urethanes:
 - 1. Type 1: Two-Part Urethane: Self-Leveling, ASTM C920, Type M, Grade P, Class 25.
 - 2. Type 2: Two-Part Urethane: Non-Sag, ASTM C920, Type M, Grade NS, Class 25.
 - 3. Type 3: One-Part Urethane: Self-Leveling, ASTM C920, Type S, Grade P, Class 25.
 - 4. Type 4: One-Part Urethane: Non-Sag ASTM C920, Type S, Grade NS, Class 25.
- B. Silicones:
 - 1. Type 1: One-Part Silicones: ASTM C920, Type S, Grade NS, Class 50.
 - 2. Type 2: One-Part Silicones: ASTM C920, Type S, Grade NS, Class 25. Vertical Surfaces Only.
 - 3. Type 3: One-Part Silicones: ASTM C920, Type S, Grade NS, Class 25 or 50.
- C. Acrylics, Latex:
 - 1. Type 1: One-Part Acrylic Latex, Non-Sag, ASTM-C-834-76.

2.03 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
- C. Joint Backing: ANSI/ASTM D1056 and D1565 round. In vertical joints use closed cell polyethylene foam rod; oversized 30 to 50 percent larger than joint width. In horizontal joints, use solid neoprene or butyl rubber, Shore A hardness of 70.
- D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

2.04 COLORS

- A. Generally use sealant colors matching color of material joint is located in.
- B. Where a joint occurs between two materials of differing colors and Contractor cannot determine which material to match, contact Architect / Engineer for selection.

3. EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces and joint openings are ready to receive work and field measurements are as shown on Drawings and recommended by the manufacturer.
- B. Beginning of installation means installer accepts existing substrate.

3.02 PREPARATION

- A. Clean and prime joints in accordance with manufacturer's instructions.
- B. Remove loose materials and foreign matter which might impair adhesion of sealant.
- C. Verify that joint backing and release tapes are compatible with sealant.
- D. Perform preparation in accordance with ASTM C804 for solvent release and C790 for latex base sealants.
- E. Protect elements surrounding the work of this Section from damage or disfiguration.

3.03 INSTALLATION

- A. Install sealant in accordance with manufacturer's instructions.
- B. Measure joint dimensions and size materials to achieve required width/depth ratios.
- C. Install joint backing to achieve a neck dimension no greater than 1/3 the joint width.
- D. Install bond breaker where joint backing is not used.
- E. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- F. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- G. Tool joints concave. Sealant shall achieve a firm skin before surface coating is applied.

3.04 CLEANING AND REPAIRING

- A. Clean adjacent soiled surfaces.
- B. Repair or replace defaced or disfigured finishes caused by work of this Section.

3.05 PROTECTION OF FINISHED WORK

- A. Protect finished installation.
- B. Protect sealants until cured.

3.06 SCHEDULE

- A. Interior, where shown on drawings and:
 - 1. Perimeter of door and window frames.
 - 2. Juncture of casework and adjacent walls.
 - 3. Juncture of plumbing fixtures and adjacent construction.
 - 4. Juncture of steel tube members and adjacent construction.
 - 5. Junction where dissimilar materials meet.
- B. Exterior, where shown on drawings and:
 - 1. Perimeter of door frames and windows.
 - 2. Joints in metal copings counterflashings.
 - 3. Juncture of EIFS and adjacent construction.
 - 4. Horizontal joints in pavements and sidewalks.
 - 5. Masonry control or expansion joints

END 07 92 00

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid: Contractor provide non-rated and fire rated interior rolled steel doors and frames and exterior thermal break rolled steel doors and frames.

1.02 REFERENCES

- A. American National Standards Institute:
 - 1. ANSI A250.8 - Recommended Specifications for Standard Steel Doors and Frames
- B. ASTM International:
 - 1. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 2. ASTM C1363 - Standard Test Method for the Thermal Performance of Building Assemblies by Means of a Hot Box Apparatus
 - 3. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials
 - 4. ASTM E152 - Methods of Fire Tests of Door Assemblies.
 - 5. ASTM E413 - Classification for RATING Sound Insulation
- C. Hollow Metal Manufacturer's Association
 - 1. HMMA 810 - Hollow Metal Doors
- D. Door Hardware Institute
 - 1. DHI -: The Installation of Commercial Steel Doors and Steel Frames, Insulated Steel Doors in Wood Frames and Builder's Hardware.
- E. Steel Door Institute:
 - 1. SDI-100 - Specifications for Standard Steel Doors and Frames.
 - 2. SDI-105 - Recommended Erection Instructions for Steel Frames.
- F. Underwriters Laboratory
 - 1. UL 10B - Fire Tests of Door Assemblies.
 - 2. UL 10C - Positive Pressure Fire Tests of Door Assemblies.
 - 3. UL 1784 - Air Leakage Tests of Door Assemblies.
- G. International Code Council
 - 1. ICC500 - 2014 Standard for the Design and Construction of Storm Shelters
- H. Federal Emergency Management Agency
 - 1. FEMA 361-2015
- I. National Fire Protection Association
 - 1. NFPA 80 - Standard for Fire Doors and Fire Windows.
 - 2. NFPA 105 - Standard for the Installation of Smoke Door Assemblies and other Opening Protective.
 - 3. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.

1.03 SUBMITTALS

- A. Submit a schedule of hollow metal work with shop drawings, and manufacturer's installation instructions, under provisions of Section 01 33 00.
- B. Indicate frame configuration, anchor types and spacings, location of cutouts for hardware, reinforcement, and finish.
- C. Indicate door elevations, internal reinforcement, closure method, and cut outs for glazing.
- D. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

1.04 QUALITY ASSURANCE

- A. Conform to requirements of SDI-100.

- B. Perform work in accordance with ANSI A250.8
- C. Installed frame and door assembly to conform to UL 10B for fire rated class indicated as scheduled.
- D. Surface Burning Characteristics:
 - 1. Foam Insulation: Maximum 75/450 flame spread/smoke developed index when tested in accordance with ASTM E84.
- E. Apply label from agency approved by authority having jurisdiction to identify each foam plastic insulation board.
- F. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three year's experience.

1.05 REGULATORY REQUIREMENTS:

- A. Conform to applicable local building codes for fire rated requirements of metal door/metal frame and wood door/metal frame assemblies.
- B. Fire Rated Assemblies: Complying with NFPA 80 and listed and labeled by qualified testing agency acceptable to authorities having jurisdiction for fire-protection rating indicated, based on testing at positive pressure according to NFPA-252 or UL 10C.
 - 1. Smoke and Draft Control Assemblies: Provide an assembly with gaskets listed and labeled for smoke and draft control by a qualified testing agency acceptable to authorities having jurisdiction, based on testing according to UL 1784 and installed in compliance with NFPA 257 or UL9.
- C. Fire Rated, Borrow-Light Assemblies: Complying with NFPA 80 and listed and labeled by qualified testing agency acceptable to authorities having jurisdiction for fire-protection rating indicated, based on testing according to NFPA 257 or UL9.

1.06 DELIVERY, STORAGE AND PROTECTION

- A. Protect products under provisions of Section 01 60 00.
- B. Protect doors and frames with resilient packaging.
- C. Deliver hollow metal welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.
- D. Store hollow metal frames and doors vertically with heads up. Place on minimum 4" wood blocking with minimum 1/4" between stacked doors to permit air circulation.

2. PRODUCTS

2.01 MANUFACTURES

- A. Acceptable Manufactures
 - 1. Curries, Assa Abloy

2.02 DOORS AND FRAMES

- A. Doors ANSI A250.8, SDI-108, 1-3/4 inch thick,
 - 1. Exterior Doors (Insulated): Level 3 - Extra Heavy Duty, Model 2, seamless design, Face Metallic-Coated, cold rolled steel sheet, minimum thickness of 0.0053 inch, minimum A40 (ZF120) coating.
 - 2. Interior Doors (Non-Rated): Level 2 - Heavy Duty, Model 2, seamless design, Face Uncoated (Metallic-Coated where noted) cold rolled steel sheet, minimum thickness of 0.0042 inch.
 - 3. Interior Doors (Fire Rated): Level 2 - HeavyDut, Model 2, seamless design, Face Uncoated (Metallic-Coated where noted) cold rolled steel sheet, minimum thickness of 0.0042 inch.
- B. Unless scheduled otherwise on drawings:
 - 1. Exterior Frames: 14 gage thick material, Zinc-Iron Alloy-Coated (Galvannealed)
 - 2. Interior Frames: 16 gage thick material, Zinc-Iron Alloy-Coated (Galvannealed)

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- 3. Exterior Doors: 16 gage thick material, Extra Heavy Duty. (Galvannealed)
- 4. Interior Doors: 18 gage thick material, Heavy Duty. (Galvannealed)
- C. All doors shall have flush seamless face sheets with edges welded and ground smooth. Top and bottom channels shall be 16 gage steel. Hinge reinforcement shall be 7 gauge steel minimum.
- D. Frames:
 - 1. Metallic-Coated, cold rolled steel sheet, minimum thickness of 0.0053 inch, minimum A40 (ZF120) coating.
 - 2. Full profile welded.
 - 3. Exposed Finish: Prime
- E. Obtain hollow metal work from single source from single manufacturer.

2.03 DOOR COMPONENTS

- A. Face: Steel sheet in accordance with ANSI A250 and SDI 108.
- B. End Closure: Channel, 0.04 inches tick, flush.
- C. Exterior doors shall include 20 ga. Steel Top/Bottom Filler Cap Seams to shed water.
- D. Core: Impregnated cardboard honeycomb at interior, non-rated doors; Thermal Insulated Polyurethane at exterior doors. Provide fire-rated cores as scheduled and/or as required to meet local codes.
- E. Insulated door, insulation "U" value of 0.10, "R" value of 4, for a polyurethane core.

2.04 ACCESSORIES

- A. Rubber Silencers: Resilient rubber.
- B. Glazing Stops: Rolled steel channel shape, mitered corners; prepared for countersink style screws.

2.05 PROTECTIVE COATINGS:

- A. Primer: Zinc chromate type.
- B. Undercoating: At Interior of all steel frames, provide bituminous coating on the inside face of all hollow metal door frames at all exterior door locations or scheduled to receive grout.

2.06 FRAME FABRICATION

- A. Fabricate frames as welded unit type. Knock down frames shall not be acceptable.
- B. Fabricate frames and doors with hardware reinforcement plates welded in place. Provide mortar guard boxes.
- C. Reinforce frames wider than 48 inches with roll formed steel channels fitted tightly into frame head.
- D. Prepare frame for silencers. Provide three single rubber silencers for single doors and mullions of double doors on strike side, and two single silencers on frame head at double doors without mullions
- E. Attach fire rated label to each frame and door unit.
- F. Close top edge of exterior door flush with inverted steel channel closure. Seal joints watertight.

2.07 FINISH

- A. Steel Sheet: Galvannealed to ASTM A653 A60.
- B. Primer: Frames and frame components are required to be cleaned, phosphatized, and finished with one coat of baked-on rust inhibiting prime paint in accordance with the ANSI/SDI A250.10 "Test Procedures and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames."

- C. Field finish per Section 09 90 00.
- D. Coat inside of frame profile with bituminous coating to minimum thickness of 1/16 inch.

3. EXECUTION

3.01 EXAMINATION

- A. Verify opening sizes and tolerances are acceptable.

3.02 INSTALLATION

- A. Install frames in accordance with SDI-250.11 and ANSI A250.8.
- B. Install doors in accordance with DHI and ANSI A250.8.
- C. Coordinate with masonry and wallboard construction for anchor placement.
- D. Coordinate installation of glass and glazing.
- E. Coordinate installation of frames and doors with installation of hardware.
- F. Install roll formed steel reinforcement channels between two abutting frames. Anchor to structure and floor.

3.03 TOLERANCES

- A. Maximum Diagonal Distortion: 1/8 inch measured with straight edge, corner to corner.

3.04

ADJUSTING AND CLEANING

- A. Adjust hardware for smooth, quiet and balanced door movement.

END 08 12 13

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid: Contractor provide:
1. Fire rated Wood Doors, composite core
 2. Non-rated Wood Doors, solid core.
 3. Wood Louvers, Glass Stops and Astragals
 4. Glazing
 5. Factory Finishing and factory machining for hardware.

1.02 REFERENCES

- A. American National Standards Institute
1. ANSI / WMA I.S.1A - Industry Standard For Wood Flush Doors (Includes Standards I.S.1.1 through I.I.S.1.7).
 2. ANSI /WDMA I.S.6A, latest edition
 3. ANSI A135.4 - Basic Hardboard.
- B. ASTM International:
1. ASTM E90 - Measurement of Airborne Sound Transmission Loss of Building Partitions.
 2. ASTM E152 - Methods of Fire Tests of Door Assemblies.
 3. ASTM E413 - Classification for Sound Rating Insulation
- C. Architectural Woodwork Institute:
1. AWI - Quality Standards of Architectural Woodwork Institute.
- D. Hardwood Plywood and Veneer Association:
1. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood
- E. Wood Window and Door Manufacturer's Association:
1. WDMA I.S 1A - Architectural Wood Flush Doors
- F. Underwriters Laboratory
1. UL 10B - Fire Tests of Door Assemblies.
 2. UL 10C - Positive Pressure Fire Tests fo Door Assemblies
 3. UL 1784 - Air Leakage Tests of Door Assemblies
- G. National Fire Protection Association
1. NFPA 80 - Standard for Fire Doors, Fire Windows
 2. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies

1.03 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 01 33 00.
- B. Indicate door elevations, stile and rail reinforcement, internal blocking for hardware attachment, and cutouts for glazing.
- C. Submit manufacturer's sample warranty, installation instructions, factory finish color chart and samples under provisions of Section 01 33 00.
- D. Provide samples:
1. Factory finish applied to actual door face material, 8"x10", for each material and finish.
 2. Provide construction sample of door, 5"x5", with door faces and vertical edge representing actual construction to be used.
 3. Provide sample of frame for light openings, 6" long, material, type and finish.

1.04 QUALITY ASSURANCE

- A. Work shall be in accordance with Custom Grade or Grades specified of the Architectural Woodwork Standards.
- B. Woodwork manufacturer shall have minimum 5 years of production experience similar to this project

and whose qualifications indicate the ability to comply with the requirements in this section.

- C. Fire Rated Door Construction: Conform to NFPA 252.
- D. Installed Fire Rated Door Assembly: Conform to NFPA 80 for fire rated class as indicated on Drawings.
- E. Attach label from agency approved by authority having jurisdiction to identify each fire rated door.

1.05 REGULATORY REQUIREMENTS

- A. Conform to applicable local building code for fire rated doors.

1.06 DELIVERY, STORAGE, AND PROTECTION

- A. Protect products under provisions of Section 01 60 00.
- B. Delivery of architectural millwork shall be made only when the area of operation is enclosed, all concrete and interior finish work is dry and area broom clean.
- C. Package, deliver, and store doors in accordance with AWI requirements.
- D. Maintain indoor temperature and humidity within the range recommended by the Architectural Woodwork Standards for the location of the project.

1.07 WARRANTY.

- A. Warranty period for Solid Core Interior Doors: Life of Installation, under provisions of Section 01 70 00. Guarantee shall provide for complete replacement of defective doors, including hanging and finishing.
- B. Manufacturer agrees to repair or replace doors that fail in materials or workmanship within specified warranty period.
 - 1. Failures include but are not limited to the following:
 - a. Warping (bow, cup or twist) more than 3/16" in a 36 inch by 84 inch section.
 - b. Telegraphing of core construction in face veneers exceeding 0.01 inch in a 3 inch span.
 - 2. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective doors.
- C. Warranty Periods:
 - 1. Solid-Core Interior Doors: Life of installation.
 - 2. Interior Stile and Rail Doors: Life of Installation

2. PRODUCTS

2.01 FLUSH WOOD DOORS

- A. Acceptable Manufacturers
 - 1. Masonite Architectural - Graham Wood Doors
 - 2. Substitutions - Not Permitted
- B. Obtain flush wood doors from single manufacturer.

2.02 DOOR TYPES:

- A. Flush Interior Doors: 1-3/4 inches thick; solid core construction; five ply wood veneer faces, fire rated as indicated.
- B. Performance / Design Criteria:

1. Performance Duty Level: WDMA I.S 1A

2.03 DOOR CONSTRUCTION (AWI or WDMA I.S.1-A-11 QUALITY STANDARD) "Architectural Wood Flush Doors

- A. Solid, Non-Rated Core: Wood based Standard LD1 Particleboard.
- B. Solid, Fire Rated Core: Fire resistant composite, Type FD 45, FD 60 OR FD 90. in locations as scheduled and as required to meet codes.
- C. Lights shall be tempered safety glass at interior doors.
- D. WDMA I.S.1-A Performance Grade: Extra Heavy Duty

2.04 VENEER FACED DOORS

- A. Facing Quality: WDMA "A" grade - **Premium** grade, with Grade A faces.
- B. Flush Interior Door Veneer: **Red Oak** species wood, plain sliced with book matched grain, for transparent finish.
- C. Exposed Vertical Edges: Hardwood of same species as face, minimum ½" thickness, bonded to structural composite lumber, leaving edges of crossband exposed.
- D. Exposed Horizontal Edges: Structural composite lumber.

2.05 LOUVERS

- A. Solid Core Select Wood Veneer Flush Doors with Louvers
 1. Match appearance grade and applicable construction and performance requirements of other standard veneer flush solid core wood doors.
 2. Metal Louvers: Equal to "Masonite 600A1". Paint finish in color selected by Architect from Manufacturer's standard colors.

2.06 ADHESIVES

- A. Interior Doors: AWI, Type I, water proof.
- B. Fabricate doors with adhesives and composite wood products that do not contain added urea formaldehyde.

2.07 ACCESSORIES: Glass Stops:

- A. Wood type designed to conform to UL requirements.

2.08 FABRICATION

- A. Slab doors shall be 5 ply construction.
- B. Fabricate non-rated doors in accordance with AWI AWS Quality Standards requirements.
- C. Fabricate fire rated doors in accordance with AWI Quality Standards and to UL requirements. Conform with the requirements of all applicable labeling agencies. Attach fire rating label to door edge.
- D. Vertical Exposed Edge of Stiles: Hardwood lumber with 1/2 inch thick edge strips of wood species to match face veneer.
- E. Fit door edge trim to edge of stiles after applying veneer facing.
- F. Factory premachine doors for finish hardware in accordance with hardware requirements and dimensions. Do not machine for surface hardware. Furnish solid blocking for through bolted hardware.
- G. Factory fit doors for frame opening dimensions identified on shop drawings.
- H. Provide metal astragals in one piece to UL requirements for double fire doors to rating required.

2.09 FINISH

- A. All products in this section shall be factory finished using Architectural Woodwork Standards Premium finish system.
- B. Finish faces and vertical edges, seal top and bottom edges as required for warranty purposes.
- C. Provide transparent finish, Premium Grade, stain as selected from door manufacturers standard colors, UV cured polyurethane finish, stain sheen.

3. EXECUTION

3.01 INSTALLATION

- A. Install doors in accordance with manufacturer's instructions, and NFPA for fire-rated doors.
- B. Machine cut relief for hinges and closers and coring for handsets and cylinders.
- C. Trim door width by cutting equally on both jamb edges. Trim fire door width from lock edge only, to a maximum of 3/16 inch. edges.
- D. Prepare doors to receive finish hardware in accordance with ANSI/AWMA requirements.
- E. Conform to ANSI/AWMA requirements for fit tolerances.
- F. Coordinate installation of glass and glazing.

3.02 INSTALLATION TOLERANCES

- A. Maximum Diagonal Distortion: 1/8 inch measured with straight edge, corner to corner.

3.03 ADJUSTING AND CLEANING

- A. Adjust for smooth and balanced door movement.
- B. Clearances (Non-Fire Rated Doors).
 - 1. Maximum 1/8" at jamb & head for job fit doors; 3/16" for prefit doors.
 - 2. Maximum 3/16" at threshold or saddle; 1/2" over decorative floors without thresholds.
- C. Clearances (Fire Rated Doors)
 - 1. Maximum 1/8" between door and frame and between pairs of doors.
 - 2. Maximum 1/2" at bottom of single door over decorative floor.
 - 3. Maximum 3/8" at bottom of double doors over decorative floor.
- D. Finished Doors: replace doors that are damaged or that do not comply with requirements. Doors may be repaired or refinished if work complies with requirements and shows no evidence of repair or refinishing.

END 08 14 16

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid:
 - 1. General Contractor provide:
 - a. Electrically operated overhead sectional door.
 - b. Steel, insulated panels of flush design.
 - c. Operating hardware and supports.
 - d. Glass and glazing.

1.02 REFERENCES

- A. ANSI A216.1 - Section Overhead Type Door (NAGDM 102).
- B. ANSI/ASTM A446 - Steel Sheet, Zinc-Coated (Galvanized) by the Hot Dip Process, Structural (Physical) Quality.
- C. ANSI/ASTM A526 - Steel Sheet, Zinc-Coated (Galvanized) by the Hot Dip Process, Commercial Quality.
- D. ASTM B209 - Aluminum and Aluminum-Alloy Sheet and Plate.
- E. ASTM B221 - Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
- F. NEMA - National Electrical Manufacturer's Association.

1.03 SYSTEM DESCRIPTION

- A. Panels: Flush steel; 2" thick.
- B. Low profile headroom track and hardware.
- C. Electric operation on 208 volt, single phase, 60 Hz service. Horsepower of motor as determined by door manufacturer to facilitate the door size and have a transit time of 12 inches per second (minimum). Capable of manual operation in case of power failure.

1.04 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in overhead door construction with three years minimum experience.
- B. Installer: Company specializing in installing overhead doors with two years documented experience.
- C. Door Construction: ANSI A216.1.
- D. Single Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.

1.05 SUBMITTALS

- A. Submit shop drawings, product data and manufacturer's installation instructions under provisions of Section 01 33 00.
- B. Indicate opening dimensions and tolerances, component construction, connections and details, anchorage methods and spacing, hardware and locations and installation details.

1.06 OPERATION AND MAINTENANCE DATA

- A. Submit operation and maintenance data under provisions of Section 01 78 23.
- B. Include data for motor and transmission, shaft and gearing, lubrication frequency, control

adjustments, and spare part sources.

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Overhead Door Corporation- model 529 series Thermacore Insulated Steel Doors.
- B. Raynor Manufacturing Company
- C. Clopay Door Products
- D. CHI Overhead Door Company

2.02 DESCRIPTION

- A. 2" thick sections, roll-formed commercial quality hot-tipped galvanized steel per ASTM A924 & A653.
- B. Door sections constructed of 26 ga. Stucco-embossed, exterior & 29 ga. Hot dipped galvanized interior skins, mechanically interlocked and pressure bonded to a 1-7/8" thick expanded polystyrene core.
- C. Exterior and interior skins to be separated by a continuous dual durometer vinyl extrusion held in place by a mechanical interlock, to form an effective thermal break and complete weather-tight seal along the entire section joints.
- D. Stiles to be 18ga., separated from exterior skin with vinyl thermal break.
- E. When tested in accordance with ASTM C177, shall exhibit the following thermal value: R 12 minimum.
- F. Finish: Exterior and interior skins shall be pre-coated prior to roll-forming with a two coat process of baked-on polyester finish over epoxy primer. Exterior color will be selected by the A/E from manufacturer's standard colors. Interior skin shall be white.
- G. Glazing. Provide two lite inserts for each overhead door. Each insert to be secured in 24" x 8" (nominal) opening with rubber glazing gasket. Provide ½" thick clear insulated glass.
- H. Tracks: 3 inch 12 ga. hot-dipped galvanized, continuous angle mounted and fully adjustable for sealing door to jamb. Continuous angle size shall not be less than 3-1/2" x 6" x 1/8". Horizontal track to be adequately reinforced with continuous angle.
- I. Hardware. Provide hinges and brackets of galvanized steel. Heavy Duty steel rollers shall have hardened steel balls.
- J. Spring counterbalance. Heavy duty oil-tempered torsion springs on a continuous ball bearing cross-header shaft. Galvanized aircraft type lifting cables with minimum safety factor of 5 to 1.
- K. Provide electric operation with properly protected 208 volt single phase, 1 HP motors. Totally enclosed fan cooled, NEMA operator for wet locations..
- L. Provide electric operating controls - side mount trolley, to be mounted on wall where shown on drawings. Controls to include a safety edge to reverse downward action.
Include the following Operator controls:
 - 1. Interior mounted Push-button and key operated control station with open, close and stop buttons.
 - 2. On board radio receiver, radio two button transmitters/operators (2 units) for electric operator.
- M. Provide jamb seals to seal the door when in the closed position.
- N. Windload: 12 p.s.f. (70 mph standard) Material U-bar 18 ga.

3. EXECUTION

3.01 INSPECTION

- A. Verify that wall openings are ready to receive work and opening dimensions and tolerances are within limits.
- B. Beginning of installation means acceptance of existing surfaces.

3.02 PREPARATION

- A. Prepare opening to permit correct installation of door unit and air and vapor barrier seal.
- B. Apply sealer.

3.03 INSTALLATION

- A. Install door unit assembly in accordance with manufacturer's instructions.
- B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
- C. Securely brace door tracks suspended from structure. Secure tracks to structural members only.
- D. Fit and align door assembly including hardware, level and plumb, to provide smooth operation.
- E. Coordinate installation of electrical service. Complete wiring from disconnect to unit components.
- F. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07 92 00.
- G. Install perimeter trim and closures.
- H. Install glass and glazing watertight.

3.04 TOLERANCES

- A. Maintain dimensional tolerances and alignment with adjacent work.
- B. Variation from Plumb: 1/16 inch maximum.
- C. Variation from Level: 1/16 inch maximum.
- D. Longitudinal or Diagonal Warp: Plus or minus 1/8 inch from 10 ft straight edge.

3.05 ADJUSTING AND CLEANING

- A. Adjust door assembly.
- B. Clean doors, frames and glass.
- C. Remove labels and visible markings.

END 08 36 13

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid: Contractor provide thermally broken aluminum storefront systems to include:
1. Aluminum doors, frames and glazed lights.
 2. Anchors, brackets, and attachments.
 3. Door hardware.
 4. Perimeter sealant.

1.02 REFERENCES

- A. ANSI/ASTM A36 - Structural Steel
- B. ANSI/ASTM A386 - Zinc Coating (Hot-Dip) on Assembled Steel Products.
- C. ANSI/ASTM A446 - Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Structural (Physical) Quality.
- D. ANSI/ASTM B221 - Aluminum-Alloy Extruded Bar, Rod, Wire, Shape, and Tube.
- E. ANSI/ASTM E283 - Rate of Air Leakage through Exterior Windows, Curtain Walls and Doors.
- F. ANSI/ASTM E330 - Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
- G. ASTM B209 - Aluminum and Aluminum-Alloy Sheet and Plate.
- H. FS TT-P-641 - Primer Coating; Zinc Dust-Zinc Oxide (for Galvanized Surfaces).
- I. FS TT-P-645 - Primer, Paint, Zinc Chromate, Alkyd Type.

1.03 SYSTEM DESCRIPTION AND PERFORMANCE

- A. Architectural Requirements:
1. Drawings are diagrammatic and do not purport to identify or solve problems of thermal or structural movement, glazing or anchorage.
 2. Requirements shown by details are intended to establish basic dimensions of units, sightlines and profiles of members.
 3. Provide concealed fastening wherever possible.
- B. Structural Requirements:
1. System to provide for expansion and contraction within system components caused by a cycling temperature range of 170 F degrees without causing detrimental effects to system or components.
 2. Design and size members to withstand dead loads and live loads caused by pressure and suction of wind as calculated in accordance with building code, and measured in accordance with ANSI/ASTM E330.
 3. Limit mullion deflection to L/200, or flexure limit of glass with full recovery of glazing materials, whichever is less.
 4. System to accommodate, without damage to system or components, or deterioration of perimeter seal: Movement within system; movement between system and perimeter framing components; dynamic loading and release of loads; and deflection of structural support framing.
 5. Attachment considerations shall take into account site peculiarities and expansion and contraction movements so there is no possibility of loosening, weakening or fracturing connection between units and building structure or between units themselves.
 6. Design anchors, fasteners and braces to be structurally stressed not more than 50% of allowable stress when maximum loads are applied.
 7. Engineer entrances to be free from rattles, wind whistles and noise due to thermal and structural movement and wind pressure.

C. Environmental Requirements:

1. Drain water entering joints, condensation occurring in glazing channels, or migrating moisture occurring within system, to exterior. No leakage shall occur in wall when tested in accordance with ASTM E331 at test pressure of 6.24 psi.
2. Limit air infiltration through assembly to 0.06 cu ft/min/sq ft of assembly surface area, measured at a reference differential pressure across assembly of 0.3 inches water gage as measured in accordance with ANSI/ASTM E283.
3. Thermal performance: "U" value .58 (maximum).

1.04 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 01300.
- B. Include system and component dimensions; descriptive literature on components within assembly; framed opening requirements and tolerances; anchorage and fasteners; glass and infills; door hardware requirements; and affected related work.
- C. Submit manufacturer's installation instructions under provisions of Section 01300.
- D. Submit samples under provisions of Section 01300.
- E. Submit 2 samples, illustrating prefinished aluminum surface (4 x 4 inches) and specified glass (12 x 12 inches), and 6 inch door corner section.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and handle system components under provisions of Section 01600.
- B. Store and protect system components under provisions of Section 01600.
- C. Provide wrapping to protect prefinished aluminum surfaces.

1.06 WARRANTY

- A. Provide **Two (2) year** warranty jointly signed by manufacturer and installer under provisions of Section 01 70 00. Provide an additional **Three (3) year** warranty on sealed glass units.
- B. Warranty: Cover complete system for failure to meet specified requirements.

1.07 COORDINATION

- A. Manufacturer shall be responsible for details and dimensions not controlled by job conditions and shall show on his shop drawings required field measurements beyond his control. Coordinate with responsible trades to establish, verify and maintain field dimensions and job conditions.

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Kawneer Co., Inc.

2.02 MATERIALS

- A. Extruded Aluminum: ANSI/ASTM B221; 6063-T5 alloy, temper.
- B. Sheet Aluminum: ASTM B209; 5005-H16 alloy, temper.
- C. Sheet Steel: ANSI/ASTM A446; hot-dipped galvanized.
- D. Steel Sections: ANSI/ASTM A36; shapes to suit mullion sections.
- E. Primer and Touch-Up Primer for Galvanized Surfaces: FS TT-P-645.

- F. Fasteners: compatible with aluminum.
- G. Thermal barrier: Two-part, chemical curing, high density polyurethane; mechanically and adhesively bound to the aluminum.

2.03 FRAME

- A. Kawneer 450 Trifab, thermally broken with flush glazing stops and internal weep drainage system. Nominal dimensions 2" x 4.5". Screw spline joinery, center glazed from either interior or exterior, EPDM gaskets in reglets.

2.04 DOORS

- A. Kawneer 550 wide stile door (5 1/2" top rail and vertical stiles, 6" mid rail, and 10" bottom rail).
- B. 1-3/4 inches thick; with glazing stops for insulated glazed units.

2.05 GLASS AND GLAZING MATERIALS

- A. Glass and Glazing Materials: As specified in Section 08 80 00.

2.06 HARDWARE

- A. Weatherstripping: Polymeric, continuous at head, jamb, sill, and meeting stile. Provide at exterior pair.
- B. Sill Sweep Strips: Resilient seal type, of neoprene compound. Provide at exterior pair.
- C. Threshold: Extruded aluminum, one piece per door opening, ribbed surface, similar to Reese S239D. Provide at each exterior pair.
- D. Hinges: Mortised Ball Bearing Butt type, 4-1/2" x 4-1/2". Provide at each leaf. Non-rising pins at exterior locations.
- E. Closer: Heavy duty, meeting the requirements of ADA, with 100 degree hold-open. Provide at each leaf at each opening., similar to LCN 4041 EDA Cush Arm with Arm Support and Blade stop spacer.
- F. Exit Device: Von Duprin 99NL Rim mounted exit device with full width bar of rectangular cross section. Provide at each leaf of each opening.
- G. Lock: Provide cylinder lock, complete with cylinder escutcheon. Provide at one leaf of each opening.
- H. Provide Keyed Removable Mullion, Von Duprin 4954
- I. Pull: Standard pull handle, finish to match door, one for each leaf.
- J. Push: Standard push plate/paddle, finish to match door, one for each leaf.
- K. Door Shoe.
- L. Exterior floor-mounted stop.
- M. Electrified Keyed Removable Mullion by Von Duprin.

2.07 HARDWARE SCHEDULE

- A. Exterior Door
 - 1. Weatherstripping
 - 2. Sill sweep strips
 - 3. Threshold
 - 4. Hinges - 1-1/2 pair
 - 5. Closer
 - 6. Exit device (Entrance Function)

- 7. Lock
- 8. Pull
- 9. Push
- 10. Wall mounted stop
- 11. Door Shoe
- 12. Keyed Removable Mullion
- 13. Access Controls, Coordinate with Owner to connect to existing system.

2.08 KEYING

- A. All locks shall be keyed to the Owner's lock system, coordinate system with owner.
- B. Furnish 2 key blanks for each lock specified + 4 additional blanks to be used as master keys.

2.09 FABRICATION

- A. Fabricate doors and frames allowing for minimum clearances and shim spacing around perimeter of assembly, yet enabling installation.
- B. Rigidly fit and secure joints and corners with internal reinforcement, except that door corners will be welded. Make joints and connections flush, hairline, and weatherproof.
- C. Develop drainage holes with moisture pattern to exterior.
- D. Prepare components to receive anchor devices. Fabricate anchorage items.
- E. Arrange fasteners, attachments, and jointing to ensure concealment from view.
- F. Prepare components with internal reinforcement for door hardware.

2.10 FINISHES

- A. Finish all exposed areas of aluminum frames, doors, and components with electronically deposited color in accordance with Aluminum Association Designation AA-M10-C22.
- B. Extruded Aluminum Surfaces: Color to match existing.

3. EXECUTION

3.01 INSPECTION

- A. Verify wall openings and adjoining air and vapor seal materials are ready to receive work of this Section.
- B. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION

- A. Install doors, frames, windows, glazing and hardware in accordance with manufacturer's instructions.
- B. Use anchorage devices to securely attach frame assembly to structure.
- C. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.
- D. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.
- E. Install hardware using templates provided.
- F. Install glass in accordance with Section 08 80 00, using exterior combination method of glazing.
- G. Install perimeter 1 part polyurethane type sealant, backing materials, and installation requirements in accordance with Section 07 92 00.

H. Adjust operating hardware for smooth operation.

3.03 TOLERANCES

A. Variation from Plane: 0.03 inches per foot maximum or 0.25 inches per 30 feet, whichever is less.

B. Misalignment of Two Adjoining Members Abutting in Plane: 0.015 inches.

3.04 CLEANING/REPAIRING/REPLACEMENT

A. Remove protective material from prefinished aluminum surfaces.

B. Wash down exposed surfaces using a solution of mild detergent in warm water, applied with soft, clean wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean.

C. Remove excess sealant by moderate use of mineral spirits or other solvent acceptable to sealant manufacturer.

D. Replace scratched, cracked, chipped or otherwise damaged glass and framing.

END 08 41 13

1. GENERAL

1.01 WORK INCLUDED

- A. Base bid: Contractor to provide windows with extension jambs as required.

1.02 REFERENCES

- A. ASTM C 1036 - Flat Glass
- B. ASTM C 1048 - Heat Treated Flat Glass-Kind HS, Kind FT Coated and Uncoated Glass.
- C. ANSI/ASTM E 283 - Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors under specified pressure difference across the specimen.
- D. ANSI/ASTM E 330 - Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
- E. ANSI/ASTM E 547 - Water Penetration of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.
- F. ASTM E 1105 - Standard Test Method for Field Determination of Water Penetration of Exterior Windows, Doors, Skylights, and Curtain Walls by Uniform Static Air Pressure Difference.
- G. ANSI/AAMA/NWDA 101/1.S.2 - Specifications for Aluminum, Vinyl (PVC) Wood Windows.
- H. SMA 1201- Specifications for Insect Screens for Windows.
- I. ANSI/AAMA/WDMA 101/1.S.2 NAFS -02 Voluntary Performance Specifications for Windows.
 - 1. Design pressure number in pounds force per square foot (pascals) used to determine the structural test pressure and water test pressure.
 - 2. Structural Test Pressure: For uniform load structural test, is equivalent to 150% of the design pressure.

1.03 SYSTEM PERFORMANCE

- A. Air Leakage: ANSI/ASTM E283; 1.57psf (25 mph): 0.05 cfm per square foot of frame or less.
- B. Vapor Seal of Operable Sash: To withstand without failure, 73 degrees F 40 percent relative humidity condition at design exterior ambient conditions while maintaining interior atmospheric pressure of one inch static pressure.
- C. Window Unit Water Penetration of Sash Unit: None, when subjected to ANSI/ASTM E 547 under static pressure of 7.5 lb./sq. ft. after 4 cycles of 5 minutes each, with water applied at a rate of 5 gallons per hour per square foot.
- D. Wind and Suction Loads Acting Normal to Plane of Window Unit: In accordance with applicable code.
- E. Deflection: 1/175 of span maximum, when subjected to ANSI/ASTM E330, with wind and suction loads acting normal to plane of glazed window unit, measured on any framing member.

1.04 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in wood window manufacture with five years experience.

- B. Installer: Company licensed or franchised by window manufacturer with three years experience.

1.05 SUBMITTALS

- A. Submit shop drawings, product data and manufacturer's installation instructions under provisions of Section 01 33 00.
- B. Include dimensions, relation to construction of adjacent work, air and vapor barrier seal to adjacent construction, component anchorage and locations, anchor methods and materials, and hardware installation details.
- C. Submit manufacturer's certificate that window units meet or exceed specified requirements.
- D. Submit glazing sample of window illustrating glazing system, quality of construction, and color of finish.
- E. Warranty: Submit manufacturer's standard warranty.

1.06 DELIVERY, STORAGE and HANDLING

- A. Delivery: Deliver materials to site in manufactures original opened containers and packaging, with labels clearly identifying manufacturer and product name, Include installation instructions.
- B. Storage: Store materials in upright position, off ground under cover and protected from weather and construction activities.
- C. Handling: Protect materials and finish during handling and installation to prevent damage.

1.07 WARRANTY

- A. Obtain aluminum clad wood windows through one source from a single manufacturer.
- B. Provide 10 year manufacturer's warranty.
- C. Warranty: Include coverage of insulating glass units and delamination or separation of finish cladding from window member and blinds.

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Pella Corporation, contact Illini Pella; Ray Brazelton
P.O. Box 1509, 2801 South Banker, Suite 2, Effingham, IL 62401
Office phone: 217-500-0806
Cell phone: 217-822-8381
Email: raybrazelton@illinipella.com

2.02 ALUMINUM-CLAD WOOD WINDOW UNITS

- A. Type: Aluminum clad wood Pella "Reserve-Traditional" Double Hung, Casement and Awning Windows as shown on the drawings.
 - 1. Sash shall tilt to interior without removal for cleaning.
- B. Frame:
 - 1. Select softwood, water-repellent, preservative-treated with EnduraGuard in accordance with

- WDMA I.S.-4. EnduraGuard includes water-repellency, three active fungicides and an insecticide applied to the frame.
- 2. Interior Exposed Surfaces: *Clear Pine* with no visible fastener holes.
- 3. Exterior Surfaces: Clad with aluminum.
- 4. Components are assembled with screws, staples, and concealed corner locks.
- 5. Vinyl jamb liner with wood / clad inserts.
- 6. Overall frame depth including jamb extensions: See Drawings
- 7. Factory-applied fold-out installation fins with flexible fin corners.
- 8. Factory-applied aluminum exterior trim with finish to match exterior.

C. Sash:

- 1. Select softwood, water-repellent, preservative-treated with EnduraGuard in accordance with WDMA I.S.-4. EnduraGuard includes water-repellency, three active fungicides and an insecticide applied to the sash.
- 2. Interior Exposed Surfaces: *Clear Pine* with no visible fastener holes.
- 3. Exterior Surfaces: Clad with extruded aluminum butt-joined at all corners of the sash with through-stile construction to reflect historic window joinery.
- 4. Sash Profile: Exterior profile is *Putty Glaze*, interior profile is ogee.
- 5. Corners: Mortised and tenoned, glued, and secured with metal fasteners.
- 6. Operable sash tilt to interior for cleaning or removal.
- 7. Sash Thickness: 1 7/8" inches.
- 8. Sash Face to Glass Reveal: 0.63 inches.
- 9. Factory-applied sash lugs that align to exterior sash with a sliding mechanism to allow the sash to pivot to the interior. Color to match exterior.

D. Weatherstripping:

- 1. Water-stop santoprene wrapped foam at head and sill.
- 2. Thermal-plastic elastomer bulb with slip coating set into lower sash for tight contact at checkrail.
- 3. Vinyl-wrapped foam inserted into jamb liner to seal to sides of sash.

2.03 GLAZING

A. Float Glass: ASTM C 1036, Quality 1.

- 1. Tempered Glass: ASTM C 1048. As noted on drawings.
- 2. Type: Silicone-glazed 11/16 inch dual-seal, annealed, insulating glass, gray argon-filled multi-layer, Low-E coated, with non-glare spacer.

2.04 SCREENS

A. Insect Screens: Standard - Half

- 1. Compliance: ASTM D 3656 and SMA 1201.
- 2. Screen Cloth: Vinyl-coated fiberglass, 21/17 mesh, with minimum 78 percent light transmissivity.
- 3. Set in standard aluminum frame fitted on exterior side of window.
- 4. Complete with necessary hardware.
- 5. Full screen spreader bar placed on units > 37" width or > 65" height.
- 6. Screen Frame Finish: Baked enamel.
 - a. Color: Finish to match exterior window cladding.

2.05 HARDWARE

A. Balances:

- 1. Block and tackle balances connected to self-locking shoes with zinc die cast terminals concealed within the frame.
- 2. Balances are attached to frame and connected to sash with polyester cord.

- B. Locking System:
 - 1. Two piece locking system with lock and keeper *standard cam action*.
 - 2. One installed on units with frame width less than 37 inches, 2 locks installed on units with frame width of 37 inches or greater.
- C. Sash Lifts
 - 1. Sash lift furnished for field installation.
 - 2. One sash lift on units with frame width less than 37 inches, 2 sash lifts on units with frame width of 37 inches or greater.
- D. Lock and Sash Lift Finish:
 - 1. Baked Enamel, color selected from manufacturers standard colors.
- E. Window opening control device: Factory-applied window opening control device. Device allows window to open less than 4" with normal operation, with a release mechanism that allows the sash to open completely. Complies with ASTM F2090-10.

2.06 FINISH

- A. Exterior Finish System: Pella EnduraClad Plus
 - 1. Exterior aluminum surfaces shall be finished with the following multi-stage system:
 - a. Clean and etch aluminum surface of oxides.
 - b. Pre-treat with chrome phosphate conversion coating.
 - c. Pre-treat with chromic acid sealer/rinse.
 - d. Top coat with baked-on 70% fluoropolymer-based enamel Omni 2605.
 - 2. Color: Selected from custom paint finish.

2.07 INSTALLATION ACCESSORIES

- A. Flashing/Sealant Tape: Pella SmartFlash.
 - 1. Aluminum-foil-backed butyl window and door flashing tape.
 - 2. Maximum Total Thickness: 0.013 inch.
 - 3. UV resistant.
 - 4. Verify sealant compatibility with sealant manufacturer.
- B. Interior Insulating-Foam Sealant: Low expansion, low-pressure polyurethane insulating window and door foam sealant.
- C. Exterior Perimeter Sealant: "Pella Window and Door Installation Sealant" or equivalent high quality, multipurpose sealant as specified in the joints sealant section.

2.08 SOURCE QUALITY CONTROL

- A. Factory Testing: Factory test individual standard operable windows for air infiltration in accordance with ASTM E 283, to ensure compliance with this specification.

3. EXECUTION

3.01 INSPECTION

- A. Verify rough openings are correctly sized and located.
- B. Notify Architect of conditions that would adversely affect installation or subsequent use.
- C. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION

- A. Install windows in accordance with manufacturer's instructions.
- B. Maintain alignment with adjacent work. Secure assembly to frame openings without distortion or stress.
- C. Ensure air and vapor barrier is sealed to window frame. Coordinate placement of insulation in shim spaces around unit perimeter as specified in Section 07 21 00.
- D. Install sealant and related backing materials at exterior of installed assembly as specified in Section 07 90 00.
- E. Install self adhering butyl flashing tape over nailing (Fins) flange.
- F. Install perimeter trim and closures.
- G. Close and latch operating sash.

3.03 TOLERANCES.

- A. Plumb and Level: +/- 1/8 inch from true measurement.
- B. Longitudinal or Diagonal Warp: +/- 1/8 inch from 10' straight edge.

3.04 CLEANING

- A. Clean window frames and glass in accordance with Division 1 requirements.
- B. Do not use harsh cleaning materials or methods that would damage finish.
- C. Remove labels and visible markings.

3.05 PROTECTION

- A. Protect installed windows to ensure that, except for normal weathering, windows will be without damage or deterioration at time of substantial completion.

END 08 52 13

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide finish hardware as indicated on the hardware schedule and specified herein:
 - 1. All finish hardware to meet the requirements of this building the requirements as follows:
 - a. Quantities
 - b. Templating
 - c. Detailing
 - d. Ordering
 - e. Installation
 - f. Keying
 - g. Servicing

1.02 REFERENCES

- A. ANSI A117.1 - Specifications for Making Buildings and Facilities Accessible to and Usable by Physically Handicapped People.
- B. ANSI/NFPA 80 - Fire Doors and Windows.
- C. AWI - Architectural Woodwork Institute.
- D. BHMA - Builders' Hardware Manufacturers Association.
- E. DHI - Door and Hardware Institute.
- F. NAAMM - National Association of Architectural Metal Manufacturers.
- G. NFPA 101 - Life Safety Code.
- H. SDI - Steel Door Institute.
- I. UL - Underwriters Laboratories, Inc.

1.03 COORDINATION

- A. Coordinate work of this Section with other directly affected Sections involving manufacturer of any internal reinforcement for door hardware.

1.04 QUALITY ASSURANCE

- A. Manufacturers: Specializing in manufacturing door hardware with 3 years (min) experience.
- B. Hardware Supplier: Company specializing in supplying commercial door hardware with 2 years experience, with AHC designation.
- C. Hardware Installer: Employ a qualified carpentry person to perform the work of this Section.
- D. Manufacturers: Items of manufacturers other than those scheduled will be acceptable for substitution provided they meet the quality standards of this Specification for finish, function and grade. For the purpose of establishing quality standards and design, only one manufacturer of each type of hardware has been scheduled.

1.05 SUBMITTALS

- A. Submit schedule, shop drawings, and product data under provisions of Section 01 33 00.
- B. Indicate locations and mounting heights of each type of hardware.
- C. Provide product data on specified hardware.

1.06 OPERATION AND MAINTENANCE DATA

- A. Submit operation and maintenance data under provisions of Section 01 70 00.
- B. Include data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Store and protect products under provisions of Section 01 62 00.
- B. Package hardware items individually; label and identify package with door opening code to match hardware schedule.
- C. Deliver permanent keys to Owner direct from hardware supplier.
- D. Protect hardware from theft by cataloging and storing in secure area.

1.08 MAINTENANCE MATERIALS

- A. Provide special wrenches and tools applicable to each different or special hardware component.
- B. Provide maintenance tools and accessories supplied by hardware component manufacturer.

2. PRODUCTS

2.01 MANUFACTURERS

- A. Door hardware to be supplied by single manufacturer.
- B. Approved manufacturer's
 - 1. Allegion

2.02 GENERAL

- A. Fasteners: Hardware shall be complete with all necessary screws, bolts, anchors or other fasteners for proper application. Such fasteners shall be of suitable size and type, and shall harmonize with hardware as to materials and finish.
- B. Door Closers: Closers shall not be installed on the outside of any exterior door. Whenever it is necessary to install a closer on the side of the door away from the butts, a parallel arm shall be used. Corner of soffit brackets are not permitted unless no other method of installation is possible. All closers shall be fastened with through bolts and grommet nuts.

2.03 KEYING

- A. All locks shall be keyed to the Owner's lock system, coordinate system with owner.
- B. Furnish 2 key blanks for each lock specified + 10 additional blanks to be used as master keys.
- C. Cylinders: IC-6 PIN 59B1, 59B2, 59D1, or 60 Keyway.

2.04 FINISHES

- A. US26D (Satin Chromium Plated) unless otherwise noted in the Schedule.

2.05 HINGES

- A. Description:
 - 1. Each leaf: 1-1/2 pair on each leaf to 7'-2" high; 2 pair on taller doors.
 - 2. 4-1/2" x 4-1/2" at doors not more than 36" wide
 - 3. 5" x 4-1/2" at doors more than 36" wide.
 - 4. Non-removable pins at exterior locations
- B. Acceptable Manufacturers:

1. Hager BB 1278

2.06 LOCK/LATCH (Single Source to Match Existing System)

- A. Description:
 1. Handicapped accessible lever design
 2. 2-3/4" backset typical.
 3. Knurled surface to warn of danger at mechanical/electrical and janitor rooms in accordance with ADA. "Newport NZ"
- B. Acceptable manufacturers:
 1. Keyed Lock - Entrance or Office Function: Schlage ND53PD Series, ANSI F109
 2. Keyed Lock - Passage Function: Schlage ND10S Series, ANSI F75
 3. Keyed Lock - Privacy Function: Schlage ND 40S Series, ANSI 76

2.07 CLOSER (Single Source to Match Existing System)

- A. Description: Unless called out to be otherwise, mount on face of door on push side; with hold-open and delayed action features, reversible with removable covers. Heavy Duty Arm with bracket
- B. Acceptable manufacturers
 1. LCN 4040XP - RWPA

2.08 EXIT DEVICES (Single Source to Match Existing System)

- A. Surface mounted Panic Rim Device. Provide trim, locks, etc. as scheduled and necessary for a complete installation. Provide fire rated device where scheduled. Provide lever handle and interchangeable core.
 1. Von Duprin 98 Rim Exit Device, L Series Lever Trim

2.09 BUMPER

- A. Description:
 1. Wall type bumper
 2. Cast brass construction with convex/concave (as appropriate) rubber inserts.
 3. Tamper proof mounting
 4. Mount with toggle bolts at hollow walls, with expansion shields at masonry or concrete walls.
- B. Acceptable manufacturers:
 1. Rockwood 403-405 series.

2.10 FLOOR STOPS

- A. Stops shall be the product of one company and shall be the type listed throughout. Provide anchoring screws as required for floor surface to which bumper will be attached.
 1. Rockwood 442
 2. Rockwood 468-RKW - Heavy Duty

2.11 KICKPLATES

- A. Type A:
 1. 34 inches wide (or 2" less door width) x 8 inches high
 2. 0.050 inch thick with beveled edges
 3. Place on kick side of scheduled doors
- B. Acceptable Manufacturers:
 1. Rockwood K1050

2.12 WEATHERSTRIPPING

- A. Description:
 1. Clear anodized aluminum retainer
 2. Flexible vinyl bulb
 3. Run continuous at both jambs and head (cope at closer).

- B. Acceptable manufacturers:
 - 1. Pemko 315 CR

2.13 DOOR BOTTOM PROTECTION

- A. Description:
 - 1. Clear anodized aluminum extrusion
 - 2. Finned cold weather vinyl bulb
 - 3. With integral drip
 - 4. Make continuous along bottom of scheduled doors
- B. Acceptable manufacturers:
 - 1. Pemko 3452

2.14 EXTENDED RAIN DRIP

- A. Designed for overhead installations, mount to head of door frame
 - 1. Pemko 346C

2.15 THRESHOLD

- A. Heavy Duty, ADA Compliant
 - 1. Pemko 1715A

2.16 ACCESS CONTROLS

- A. Coordinate with owner's installer for location and installation.

3. EXECUTION

3.01 INSPECTION

- A. Verify that doors and frames are ready to receive work and dimensions are as instructed by the manufacturer.
- B. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and requirements of SDI, ANSI/NFPA 80, BHMA and DHI.
- B. Use the templates provided by hardware item manufacturer.
- C. Mount locksets 40-1/4" (from finished floor to center line of lock)
- D. Conform to ANSI A117.1 for positioning requirements for the handicapped.
- E. All butts, locks, plates, etc., shall be neatly and accurately mortised flush, properly place and accurately aligned for smooth and quiet operation without sticking, binding, hanging, or rattling. All doors shall be hung with equal clearance at jambs and heads. Adjust all hardware properly and leave in smooth operating condition.

- 3.03 DOOR HARDWARE SCHEDULE. When a door opening has a pair of doors, provide listed hardware for each door leaf unless called out otherwise in the schedule.

DIVISION 8 - DOORS & WINDOWS
Section 08 71 00 - Hardware

A. **Hardware Set A** Door(s) **102A, 106A, 107A, 109A, 112A, 115A, 116A**

Hinges	
Lock/Latch	Passage Function
Bumper	
Kickplate	

B. **Hardware Set B** Door(s) **103C**

Hinges	
Exit Device	Exit Only - No Outside Trim
Closer	
Floor Stop	Heavy Duty
Kickplate	
Threshold	
Weatherstripping	
Door Bottom Protection	
Extended Rain Drip	

C. **Hardware Set C** Door(s) **111A, 111B**

Hinges	
Lock/Latch	Privacy Function
Bumper	
Kickplate	

D. **Hardware Set D** Door(s) **114A**

Hinges	
Exit Device	Entrance Function
Closer	
Bumper	
Kickplate	
Threshold	
Weatherstripping	
Door Bottom Protection	
Extended Rain Drip	

E. **Hardware Set E** Door(s) **101A**

All hardware by Aluminum Door Manufacturer/Installer.....See Section 08 41 13.

END 08 71 00

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid: Contractor provide:
 - 1. Glass and glazing for doors in related specifications or as shown on drawings.
 - 2. Glass and glazing for windows in related specifications or as shown on drawings.

1.02 REFERENCES

- A. ANSI Z97.1 - Safety Performance Specifications and Methods of Test for Safety Glazing Material Used in Buildings.
- B. ASTM E84 - Surface Burning Characteristics of Building Materials.
- C. FS DD-G-451 - Glass, Float or Plate, Sheet, Figured (Flat, for Glazing, Mirrors and Other Uses).
- D. FS DD-G-1403 - Glass, Plate (Float), Sheet, Figured, and Spandrel (Heat Strengthened and Fully Tempered).
- E. FS TT-G-410 - Glazing Compound, Sash (Metal) for Back Bedding and Face Glazing (Not for Channel or Stop Glazing).
- F. FS TT-S-227 - Sealer Compound: Rubber Base, Two Component (for Calking, Sealing and Glazing in Building Construction).
- G. FS TT-S-230 - Sealing Compound: Synthetic Rubber Base, Single Component, Chemically Curing for Calking, Sealing & Glazing in Building Construction.
- H. FS TT-S-1543 - Sealing Compound: Silicone Rubber Base (for Calking, Sealing, and Glazing in Buildings and Other Structures).
- I. FS TT-S-001657 - Sealing Compound: Single Component, Butyl Rubber Based Solvent Release Type (for Buildings and Other Types of Construction).
- J. SIGMA No. 64-7-2 - Specification for Sealed Insulating Glass Units.

1.03 QUALITY ASSURANCE

- A. Conform to Flat Glass Marketing Association (FGMA) Glazing Manual and Glazing Sealing Systems Manual for glazing installation methods.

1.04 SUBMITTALS

- A. Submit product data under provisions of Section 01 33 00.
- B. Provide structural, physical and environmental characteristics, size limitations, special handling or installation requirements.
- C. Provide data on glazing sealant. Identify colors available.

1.05 DELIVERY, STORAGE, AND PROTECTION

- A. Deliver products to site under provisions of Section 01 60 00.
- B. Store and protect products under provisions of Section 01 62 00.

1.06 WARRANTY

- A. Provide **10 Year** manufacturer's warranty for sealed units, under provisions of Section 01 70 00.
- B. Warranty: Include coverage of sealed glass units from seal failure, interpane dusting or misting, and replacement of same.

2. PRODUCTS

2.01 ACCEPTABLE GLASS MANUFACTURERS

- A. P.P.G. Industries, Inc.
- B. Oldcastle

2.02 GENERAL

- A. Tempered glass lights as required by code and as recommended by manufacturer complying with FS DD-G-1403 and ANSI Z97.1.
- B. Temper units without tong marks.

2.03 GLASS MATERIALS

- A. Interior Doors: 1/4" thick polished plated, tempered, clear.
- B. Interior Sidelights and Borrowed Lights: 1/4" thick polished plated, tempered, clear.
- C. Exterior Aluminum Doors, Storefronts, & Exterior Sidelights: 1" thick insulated units consisting of 1/4" glazing Grey Lite on exterior face, ½ inch argon gas fill air space and 1/4" Energy Advantage LOW-E on the interior face, clear on the exterior face. See door schedule for locations of tempered and/or annealed glazing.
- D. Exterior Aluminum Framed Windows: See Section 08 52 11 Aluminum Windows.

2.04 ACCEPTABLE GLAZING COMPOUND MANUFACTURERS

- A. PPG Industries, Inc. .
- B. Oldcastle

2.05 GLAZING COMPOUNDS

- A. Glazing Compound: FS TT-G-410; color selected by architect.
- B. Butyl Sealant: FS TT-S-001657; Shore A hardness of 10-20; color selected by Architect; non-skinning.
- C. Acrylic Sealant: FS TT-S-230, Type II, Class A; single component; cured 2Shore A hardness of 15-25; color selected by Architect.
- D. Polysulphide Sealant: FS TT-S-227; Class A, Type 2; two component; cured Shore A hardness of 15-25; color selected by Architect.
- E. Silicone Sealant: FS TT-S-1543; Class A; single component; chemical curing; capable of water immersion without loss of properties; cured Shore A hardness of 15-25; color selected by Architect.

2.06 GLAZING ACCESSORIES

- A. Setting Blocks: Neoprene; 79-90 Shore A durometer hardness; 4 inch long x 3/8 inch wide x 1/4 high.
- B. Spacer Shims: Neoprene; 50 Shore A durometer hardness; 3 inch long x 1/4 inch wide x 1/4 inch thick; self adhesive one face.
- C. Glazing Tape: Preformed butyl compound with integral resilient tube spacing device; 10-15 Shore A durometer hardness; coiled on release paper; black color.
- D. Glazing Splines: Resilient polyvinylchloride extruded shape to suit glazing channel retaining slot;
- E. Glazing Clips: Manufacturer's standard type.

2.07 FIRE RATED GLAZING

- A. Material: PYRAN Platinum F 20-180 minute fire protective safety filmed glass ceramic with hose

stream.

- B. Manufacturer: PYRAN Platinum F as manufactured by SCHOTT Technical Glass Solutions and distributed by SAFTI *FIRST* Fire Rated Glazing Solutions.
 - 1. Contact: 100 N Hill Drive, Suite 12, Brisbane, CA 94005; Telephone 888.653.3333; Fax 888.653.4444; email info@safti.com; Web site www.safti.com
- C. Design Requirements:
 - 1. Thickness: Must be 3/16" (5 mm) thick.
 - 2. Weight: Must weigh 2.5 lbs./sq. ft.
 - 3. Sound Transmission Rating: Must meet 31 STC.
 - 4. Appearance: Must have neutral coloration free of amber tints.
 - 5. Fire Rating: Must be fire rated from 20 - 180 minutes with hose stream.
 - 6. Impact Safety Rating: Must meet CPSC 16 CFR 1201 Category I & II.
 - 7. Cradle 2 Cradle Certification: Must be C2C Silver Certified.
 - 8. Environmental Impact: Manufacturing process and final product composition must be free from toxins or hazardous heavy metals.
- D. Manufacturer's Fire Rated Glazing Material:
 - 1. Each piece of fire-rated glazing material shall be labeled with a permanent logo including name of product, manufacturer, testing laboratory and fire rating.
- E. Substitutions: No substitutions allowed.

3. EXECUTION

3.01 INSPECTION

- A. Verify surfaces of glazing channels or recesses are clean, free of obstructions, and ready for work of this Section.
- B. Beginning of installation means acceptance of substrate.

3.02 PREPARATION

- A. Clean contact surfaces with solvent and wipe dry.
- B. Seal porous glazing channels or recesses.
- C. Prime surfaces scheduled to receive sealant.
- D. Carefully measure glass openings and provide minimum required tolerances and clearances.

3.03 GENERAL

- A. Install in accordance with manufacturers' printed instructions
- B. Prevent nicks, abrasions & other damage likely to develop stress on edges.

3.04 EXTERIOR COMBINATION METHOD (TAPE AND SEALANT)

- A. Cut glazing tape to length and set against permanent stops, 3/16 inch below sightline. Seal corners by butting tape and dabbing with butyl sealant.
- B. Apply heel bed of butyl sealant along exterior void ensuring full contact with pane.
- C. Place setting blocks at 1/3 points.
- D. Rest glass on setting blocks and push against tape and heel bead of sealant with sufficient pressure to attain full contact at perimeter of pane.
- E. Place glazing tape on glass with tape 1/4 inch below sightline.

- F. Apply cap bead of sealant along exterior void, to uniform line, flush with sightline. Tool or wipe sealant surface with solvent for smooth finish.

3.05 INTERIOR DRY METHOD (TAPE AND TAPE)

- A. Cut glazing tape to length and set against permanent stops, projecting 1/16 inch above sightline.
- B. Place setting blocks at 1/3 points.
- C. Rest glass on setting blocks and push against tape for full contact at perimeter of pane.
- D. Place glazing tape on free perimeter of pane in same manner described above.
- E. Install removable stop without displacement of tape. Exert pressure on tape for full continuous contact.
- F. Knife trim protruding tape.

3.06 INSTALLATION OF FIRE RATED GLAZING

- A. Comply with referenced GANA manuals and instructions of manufacturers of glass, glazing, sealants and glazing compounds.
- B. Protect glass from edge damage during handling and installation. Inspect glass during installation and set aside pieces with edge damage that could affect performance.
- C. Set units of glass in each series with uniformity of pattern, draw, bow and similar characteristics.
- D. Cut glazing tape to length and set against permanent stops, flush with sight lines to fit openings exactly, with stretch allowance during installation.
- E. Arrange two setting blocks located at quarter points of glass with edge block no more than 6 inches from corners.
- F. Glaze vertically into labeled fire rated frames or fire rated walls with the same fire rating as the glass and push against tape for full contact at perimeter of pane or unit.
- G. Place glazing tape on free perimeter of glazing in same manner described above.
- H. Install removable stop and secure without displacing the tape.
- I. Install so that appropriate marking remain permanently visible.
- J. Field cutting or tampering is strictly prohibited.

3.07 CLEANING/PROTECTION

- A. After installation, mark pane with an "X" by using plastic tape or removable paste.
- B. Clean all surfaces of glazing materials, mortar, plaster, paint and other soiling or contaminants.
- C. Remove labels after work is completed.
- D. Replace broken, scratched, chipped, or otherwise damaged glass.

END 08 80 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide glass mirrors, for franchise installations.

1.02 REFERENCES

- A. American National Standard Institute:
 - 1. ANSI Z97.1 - Safety Glazing Materials Used in Building Safety.
- B. ASTM International:
 - 1. ASTM C 1048 - Standard Specification for Heat-Treated Flat Glass HS, Kind FT Coated and Uncoated Glass.
- C. Consumer Product Safety Commission:
 - 1. CPSC 16 CFR 1201; Safety Standard for Architectural Glazing.
- D. Glass Association of North America:
 - 1. GANA - Glazing Manual.

1.03 SUBMITTALS

- A. Section 01 33 00 Submittal Procedures: Submittal procedures.
- B. Product Data:
 - 1. Mirror Types: Submit structural, physical and environmental characteristics, size limitations, special handling or installation requirements.
 - 2. Glazing Materials: Submit chemical, functional, and environmental characteristics limitations, special application requirements. Identify available colors.
- C. Samples: Submit two samples 12 x 12 inch in size, illustrating mirrors, coloration, edge detail and finish.
- D. Manufacturer's Certificate: Certify mirrors meet or exceed specified requirements.

1.04 QUALITY ASSURANCE

- A. Perform Work in accordance with GANA Glazing Manual and GANA Sealant Manual for mirror installation methods.

1.05 ENVIRONMENTAL REQUIREMENTS

- A. Section 01 60 00 - Product Requirements.
- B. Do not install glazing when ambient temperature is less than 50 degrees F.
- C. Maintain minimum ambient temperatures before, during and 24 hours after installation of glazing sealants.

1.06 WARRANTY

- A. Section 01 70 00 - Execution and Closeout Requirements: Product warranties and product bonds.
- B. Furnish five year warranty to include coverage for reflective coating on mirrors and replacement of same.

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS:

- A. Bobrick
- B. Bradley Corp
- C. ASI

2.02 COMPONENTS

- A. Tempered and Back Coated Safety Mirror Glass (Type MR-ST): ASTM C 1048, Kind FT fully tempered, Type 1 transparent flat, Class 1 clear, Quality Q1 mirror select; type with copper and silver coatings, organic over coating, and special back coating as required to comply with CPSC 16 CFR 1201 Category II safety glazing standard.
 - 1. Edges: Squared
 - 2. Thickness: Minimum 1/4 inch unless otherwise indicated.
 - 3. Size: As indicated on Drawings.

2.03 ACCESSORIES

- A. Provide all mounting hardware, adhesives and accessories necessary for proper installation in accordance with the manufacturer's published installation instructions.

3. EXECUTION

3.01 PREPARATION

- A. Clean contact surfaces with solvent and wipe dry.
- B. Seal porous substance with compatible primer or sealer.

3.02 INSTALLATION

- A. Perform installation in accordance with GANA Glazing Manual.
 - 1. Set mirrors plumb and level, free of optical distortion.
 - 2. Set mirrors with edge clearance free of surrounding construction.
- B. Frameless Mechanical and Adhesive Installation:
 - 1. Set mirrors with adhesive and clips. Anchor rigidly to wall construction.
 - 2. Place plumb and level without visible distort.

3.03 FIELD QUALITY CONTROL

- A. Inspect for quality of glazing.

3.04 CLEANING

- A. Section 01 70 00 - Execution and Closeout Requirements: Final Cleaning.
- B. Remove labels after work is complete.
- C. Clean mirrors and adjacent surfaces.

END 08 83 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Moisture vapor Emission (MVE) Control System to prepare surface of concrete to receive moisture sensitive adhesives and floor coverings. MVE Control System will protect finish flooring from moisture and pH Alkalinity.
- B. MVE Control System required in all locations where existing floor slabs are asbestos abated.**

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM):
1. ASTM F 1869: Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
 2. ASTM F 2170: Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.
 3. ASTM 1907: Standard Practice for Determining the Moisture-Related Acceptability of Concrete Floors to Receive Moisture Sensitive Finishes.
 4. ASTM E 96: Standard Test Method for Water Vapor Transmission of Materials
 5. ASTM 4541B: Pull-off Strength of Coatings
 6. ASTM C 109: Standard Test Method for the Compressive Strength of Hydraulic Cement Mortars.
 7. ASTM C 1708: Standard Test Method for Self-Leveling Mortars Containing Hydraulic Cement.
 8. ASTM F 2873: Standard Practice for the Installation of Self-Leveling Underlayment and the Preparation of Surface to Receive Resilient Flooring.
 9. ASTM E 1155: Standard Test Method for Determining FF (Floor Flatness) and FL (Floor Levelness)
 10. ASTM F 3010: Standard practice for Two-Component Resin Based Membrane-Forming Moisture Mitigation System for use Under Resilient Floor Covering.
 11. ASTM D 7234: Standard Test Method for Pull-Off Adhesion Strength of Coatings on Concrete Using Portable Pull-Off Adhesion Tester.
 12. ASTM C1583: Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method)
 13. ASTM 710: Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
- B. International Concrete Repair Institute (ICRI)
1. Guide 310.2R Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays and Concrete Repair.
- C. Resilient Floor Covering Institute (RFCI)
1. Recommended Work Practices for Removal of Resilient Floor Coverings.
- D. American Concrete Institutes (ACI)
1. ACI 503.1R: Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension
 2. ACI 504 R-90: Guide to Sealing Joints in Concrete Structures
 3. ACI 302.1: Guide for Concrete Floor Slab Construction
 4. ACI 302.2: Guide for Concrete Slabs that Receive Moisture - Sensitive Flooring Materials

1.03 SUBMITTALS

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- B. Shop Drawings: Details of construction and relationship with adjacent construction. Indicate location of building movement joints.
- C. Pre-Installation Moisture Vapor Test Reports
- D. Field Quality Control Reports including Moisture Vapor Tests and Bond Strength Pull Tests on coating and repair mortars.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 5 years manufacturing concrete resurfacing and rehabilitation products. Employs factory trained personnel who are available for product knowledge training.
- B. Installer Qualifications: Minimum 5 years installing moisture vapor emission control systems.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened original packaging until ready for installation. Record product codes and batch numbers and shelf life.
- B. Store products in a dry area with temperature maintained between 50 deg F and 85 deg F and protect from direct sunlight.
- C. Store and dispose of solvent based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.06 FIELD CONDITIONS

- A. Environmental Limitations: Comply with MVE control systems manufacturer's written instructions for substrates and ambient temperature, but not less than 50 deg F and not more than 90 deg F at least 48 hours before use.
- B. Maintain ambient air temperatures and relative humidity in installation areas within range recommended in writing by MVE control systems manufacturer, but not less than 50 deg F or more than 90 deg F and not less than 40 or more than 60 percent air relative humidity for 48 hours before, during installation, and for 48 hours after installation, unless longer period is recommended in writing by manufacturer.
- C. Install MVE control systems where concrete surface temperature will remain a minimum of 5 deg F higher than the dew point for ambient temperature and relative humidity conditions in installation areas for 48 hours before installation, during installation, and 48 hours after installation unless longer period is recommended in writing by manufacturer.

1.07 WARRANTY

- A. MVE Control System Manufacturers Lifetime Warranty

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS:

- A. MAPEI Americas USA
- B. No Substitutions Allowed.

2.02 MVE SYSTEM

- A. Components of MVE Control System from single source manufacturer. Do not mix products from different manufacturers. Subject to compliance with requirements, provide the following:
- B. Concrete Repair Mortar: Minimum compressive strength after 24 hours greater than 2,700 psi and after 28 days greater than 4,000 psi when tested in accordance with ASTM C 109 / C 109M. Repair mortar to be exterior rated with no moisture limitations for use to repair concrete prior to application of MVE control system.
 - 1. Basis of Design: MAPEI *Mapecem Quickpatch with Planicrete UA Additive*.
- C. Crack Repair Resin for static non-moving joints.
 - 1. Basis of Design: MAPEI *Epojet LV* or MAPEI *Planibond EBA with Mapesand Coarse* broadcast to rejection.
- D. Crack Repair for dynamic movement joints.
 - 1. Basis of Design: MAPEI *Mapectflex P1 SL* one-component, Self-Leveling Elastomeric Polyurethane Sealant.
- E. MVE Control Epoxy Coating component of the MVE Control System: ASTM E 3010 qualified, fluid-applied, two component, 100% solids epoxy resin, low viscosity, penetrating, one-coat membrane forming system; formulated for application on concrete substrates to reduce MVER level required for installation of floor covering indicated, including adhesives.
 - 1. Basis of Design: MAPEI *Planiseal VS*.
 - a. Performance for MVER ASTM F 1869: up to 25 lbs per 1000 square feet.
 - b. Performance for Relative Humidity ASTM F 2170: up to 100% RH.
 - c. VOC Content SCAQMD Rule No 1113: less than 50 g/L.
 - d. Viscosity: 250 cps
 - e. Pull Off/Bond Strength/Concrete Adhesion ASTM D 7234: less than 1000 psi at 28 days with failure in concrete substrate.
 - f. Permeability ASTM E 96: less than or equal to 0.1 perm at greater than or equal to 10 mil Dry Film Thickness.
 - g. Reduction of Moisture Vapor Transmission ASTM E 96: 96% at 10 mil DFT.
 - h. Alkali Resistance ASTM D 1308: No affect up to pH 14 at 14 days.
 - i. Relative Humidity Resistance ASTM 2170: Resists up to 100% RH.
- F. Bond Promoting Primer over non-absorbent MVE Control Epoxy Coating to receive up to 3/8 inch thickness of Self-Leveling Underlayment.
 - 1. Basis of Design: MAPEI *Primer X*
- G. Bond Promoting Primer over non-absorbent MVE Control Epoxy Coating to receive over 3/8 inch thickness of Self-Leveling Underlayment.
 - 1. Basis of Design: MAPEI *Primer E* with sand broadcast. Consult Manufacturer when required.

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- H. Self=Levelign Underlayment to be shrinkage compensated to smooth and flatten floors while creating a blotter layer. Blotter layer, an absorptive layer required for water-based floor covering adhesives used to install finish floors. Minimum compressive strength after 24 hours greater than 2,000 psi, and after 28 days greater than 4,100 psi when tested in accordance with ASTM C 109 / C109M.
 - 1. Basis of Design: MAPEI *Ultraplan 1 Plus*.
- I. Final skim coat as needed prior to installing floor finish.
 - 1. Basis of Design: MAPEI *Planiprep SC*.

3. EXECUTION

3.01 EXAMINATION

- A. Allow at least 7 days after placement of concrete to begin this work.
- B. Examine substrates and conditions for compliance with requirements for maximum moisture RH content ASTM F 2170 and/or MVE ASTM F 1869 per the floor covering manufacturer.
- C. Verify slab has not been contaminated.
- D. Perform water bead test and photographically record contact angle of water bead meniscus to the floor to ensure concrete is hydrophilic.
- E. Record alkalinity testing per ASTM F 710.
- F. Record ambient air RH, dew point and temperature.
- G. Record slab temperature.
- H. Concrete substrates must be structurally sound, solid, and meet industry standards as defined in ACI Committee 201 Report "Guide to Durable Concrete".
- I. Notify Architect of out of tolerance conditions that will affect work. Proceed with installation only after unsatisfactory conditions have been corrected. Installation of moisture control system indicates acceptance of surfaces and conditions.

3.02 PREPARATION TESTING

- A. Pre-installation Testing by independent Testing Agency: Contractor to engage a qualified testing agency to perform tests. Testing performed by an ICRI Concrete Moisture Testing Technician - Grade 1.
- B. Alkalinity Testing: Perform pH testing according to ASTM F 710. Install MVE control system in areas where pH readings are less than 7.0 and in areas where pH readings are greater than 9.0.
*Note verify pH range with flooring manufacturer's recommendations.
- C. Moisture Testing: Conform to ICRI test standards for three tests in the first 1,000 sq ft. and one test per 1,000 sq ft after that. Perform no fewer than three tests in each installation area and with tests evenly spaced in installation to best represent the widest range of conditions.
 - 1. Perform Anhydrous Calcium Chloride Test: ASTM F 1869. Install MVE Control system in locations where concrete substrate MVER exceed 3 lbs of water / 1000 sq ft / 24 hours.
*Note verify lbs of water with flooring manufacturer's recommendations.

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2. Perform Internal Relative Humidity Testing D2170. Install MVE Control System in locations where concrete substrate RH exceeds **95%.**
*Note verify RH requirements with flooring manufacturer's recommendations.
- D. Bond Testing: Install minimum 100 sq ft test area of complete assembly of MVE Control System bonded to prepared concrete substrate. Proceed with installation if tensile bond strength on MVE Control System is greater than 200 psi in heavy commercial traffic and 150 psi for normal foot traffic when tested in accordance with ASTM C 1583.

3.03 SURFACE PREPARATION

- A. Clean and prepare concrete substrate according to MVE control system manufacturer's written instructions to ensure adhesion of systems to concrete.
- B. For direct application of epoxy MVE control coating without mechanical profiling, concrete must be porous, have CSP of #2 to #3, and be in pristine condition with no contamination present.
- C. Mechanically remove coatings and other substances that are incompatible with MVE control systems and that contain soap, wax, oil, or silicone, using mechanical methods recommended in writing by MVE control systems manufacturer. Do not use solvents. Do not acid etch. Mechanically remove troweled CSP 1 finish. Concrete surface must be mechanically profiled using dustless, engineer approved methods to obtain CSP of #2 to #3.
 1. Method One: Achieve ICRI 310.2R Minimum CSP 3 by shot blasting using apparatus that abrades the concrete surface with shot, contains the dispensed shot within the apparatus and recirculates the shot by vacuum pick-up. Shot-blast with spherical steel shot SAE size range 230-300 as necessary to produce the required profile. Remove all residual shot with a magnet. Use a handheld grinder to CSP 2 only in areas that cannot be reached with bead blasting.
 2. Method Two: Achieve ICRI 310.2R Minimum CSP 2 by diamond grinding that abrades the concrete surface. Remove all dust by vacuuming with HEPA filter.
- D. Excessively weak, soft, dusty, cracked, or uneven surfaces may not be suitable substrates and may require additional concrete removal techniques such as scarification and then patching prior to application of MVE Control System.
- E. **Asbestos abated slabs have hydrophobic organic compounds in the capillaries of the concrete which will be a bond break for coatings. Microscopic petrographic examination according to ASTM C 856 to evaluate the concrete condition. Slab prep using mechanical preparation is required (Ex: Shot-blasting and/or mechanical grinding, or greater method). Consult manufacturer for recommended CSP level required for recommended mitigation system.** Once mechanical prep is completed, perform an ASTM F3191 Test for Standard Practice for Field Determination of Substrate Water Absorption/Porosity for Substrates. Continuously perform the mechanical preparation until the substrate passes ASTM 3191 prior to mitigation installation.
- F. Reinforcing fibers that become visible after shot blasting must be removed and vacuumed leaving no fibers exposed above the concrete surfaces.
- G. Do not install MVE Control System if substrate testing reveals unacceptable conditions.
- H. Ensure that all old adhesives, contaminants, curing compounds, oils, silicates, dust, and other bond breakers are completely removed.
- I. Remove dust and debris by broom sweeping and then vacuuming with HEPA filter. Do not use sweeping compound as they contain oils and wax that would contaminate the concrete surface and inhibit bond of MVE Control System.

- J. After shot blasting, repair damaged and deteriorated concrete according to MVE control system manufacturer's written instructions.
- K. Prior to application of MVE Control Epoxy Coating, fill substrate surface depressions, ruts spalls, and other irregularities with exterior grade patch: MAPEI *Mapecem*, *Quickpatch* with *Planicrete UA* Additive.
- L. Do not skimcoat entire concrete slab prior to application of epoxy MVE control system.
- M. Allow concrete to off-gas after bead blasting for a minimum of 24 hours but no more than 48 hours to avoid contamination by other trades. Failure to wait may result in the epoxy coatings ability to perform as a MVE control due to pin-holing, blisters and fish-eyes.

3.04 CRACK PREPARATION

- A. Consult with an experienced engineer to determine the appropriate substrate repair procedures and joints treatment methods. Engineer to address contraction as well as potential expansion, movement and isolation joints. Cracks or de-bonding in the MVE control system that results from substrates movement are not required to be warranted.
- B. Record location of cracks, both static and dynamic, on shop drawings.
- C. Do not apply MVE control system across substrate expansion, isolation, and other dynamic moving joints.
- D. Mechanically prepare non-moving control and construction joints with a diamond crack-chasing/concrete-cutting blade. Overcut joint width to obtain a sound, clean edge. Clean cracks or joints with oil-free compressed air and dustless high-efficiency particulate arrestance HEPA filter vacuum to completely remove contaminants
- E. Pre-filling static thin random drying shrinkage cracks (less than 0.01 inch width) and not vertically displaced is not required. Apply MAPEI *Planiseal VS* normally over areas of thin shrinkage cracked concrete.
- F. Fill static cracks, less than 1/8" and not vertically displaced, with MVE Crack Repair Resin. Prefill cracks with 20 to 30 sieve size clean washed kiln dried sand and apply *Epojet LV*.
- G. Fill static cracks, wider than 1/8" and not vertically displaced, with high modulus epoxy MAPEI's *Planibond EBA*; thickened with sand to create an epoxy mortar.
- H. Should contraction, control or saw-cut joint dormant joints appear not filled flush to top of surface after installation of MVE Crack Repair Resin, fill static non-moving joints with high-modulus MAPEI *Planibond EBA* Epoxy. Fill joints full depth and flush to surface.
- I. Fill dynamic joints with self-leveling polyurethane sealant MAPEI *Mapeflex P1 SL*. Do not span movement joint with self-leveling underlayment non flooring.
- J. Reinforcing fibers that become visible after crack preparation must be removed and vacuumed leaving no fibers exposed above the concrete surface.

3.05 INSTALLATION MVE CONTROL SYSTEM - EPOXY

- A. General: Install MVE control system according to ASTM F3010 and manufacturer's written instructions to product a uniform, monolithic surface free of surface deficiencies such as pin holes, fish eyes and voids.
- B. Adjust application methods per manufacturer's written instruction as determined by site

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conditions, presence of sub-slab vapor barrier, concrete mix design, lightweight aggregates, suspended slab vs slab on grade, and age of concrete.

- C. Refer to the Safety Data Sheet (SDS) for details on handling and safety equipment.
- D. Mixing: Mix in accordance with Manufacturer's instructions. Mix only full units. Strictly follow minimum mixing time.
- E. In a single coat application, apply MVE control system epoxy to manufacturer's recommended rate with no less than dry film thickness of 10 mils minimum to achieve design perm rating. Apply with notched squeegee or notched trowel and back roll with 3/8 nap roller. Adjust application rate depending on job site concrete conditions including porosity and profile.
- F. Cure MVE Control System components according to the manufacturer's written instruction. Prevent contamination or other damage during curing processes.
- G. After curing, examine MVE control system for surface deficiencies. Repair surface deficiencies according to manufacturer's written instructions.

3.06 FIELD QUALITY CONTROL

- A. Inspect MVE Control System to ensure that all voids and pinholes are filled/sealed before moving on to the next flooring phase. Do so by filling any voids and/or shaving off the tops of any bubbles and reapplying a thin coating of MVE Control System over the surface. Verify no bond break present.

3.07 INSTALLATION OF PRIMER FOR SELF-LEVELER

- A. Self-Leveling Underlayment up to 3/8 inch thickness: Apply *Primer X* to epoxy MVE control system and allow primer to dry completely.
- B. Self-Leveling Underlayment over 3/8 inch thickness: Apply *Primer E™* to epoxy MVE control system and broadcast 20/30 sieve clean washed kiln dried sand to rejection. After 24 hours, vacuum non-bonded sand.

3.08 INSTALLATION OF SELF-LEVELING UNDERLAYMENT

- A. Read all installation instructions thoroughly before installation.
- B. Before installation, close doors and windows, and turn off HVAC systems to prevent drafts during application and until the floor cures. Protect areas from direct sunlight.
- C. Make sure concrete substrate and ambient room temperatures are between 50°F and 95°F (10°C and 35°C) before application. In large applications, allow for indirect air circulation to dissipate humidity created by leveler application. Temperatures must be maintained within this range for at least 72 hours after the installation of self-leveler. In cooler conditions, use indirect auxiliary heaters to maintain ambient and substrate temperatures within the required range. For temperatures above 85°F (29°C), follow ACI hot-weather application guidelines to ensure a successful installation.
- D. Water to be clean, potable, and cool, not warmer than 70 deg F.
- E. Conventional piston, rotor-stator or underlayment-type pumps may be used for application of self-leveling over large areas.
- F. Strictly follow manufacturer's mixing instructions for exact water cement ratios, mixing times, speed and type of mixing blade. Mix full unit quantities, if working from bulk containers (ie super sacks), mixer must be able to accommodate entire unit of unmixed product. Self-leveler is a

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calcium aluminate quick setting, fast drying shrinkage compensated product when mixed correctly. Overwatering will cause shrinkage and potential delamination.

- G. Maintain continuous flow of wet material to avoid trapping air or creating a cold joint.
- H. Maintaining a wet edge throughout placement. Quickly pour or pump self-leveler onto properly prepared and primed surface in ribbon pattern.
- I. Spread self-leveler with gauge rake to desired depth. Break surface tension of material with smoother or needle roller to allow self-leveler to flow. Apply at 3/16 inch minimum thickness.
- J. Apply self-leveler to flatness of 1/8 inch in 10 feet.
- K. Verify with Manufacturer regarding minimum time to install ceramic tile, or non-breathable floor coverings on self-leveler.

3.09 CLEANUP

- A. Use soap with water or use denatured alcohol to clean equipment before MVE Control System cures to a hardened state. Cured material can only be removed mechanically.

3.10 PROTECTION - MVE CONTROL SYSTEM

- A. Protect the surface of the cured MVE control system from traffic and damage until covered by floor finish. Protection may include plywood, or other suitable protection board.

END 09 05 61

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. Wood stud or metal stud framing system (see drawings for wall type).
 - 2. Metal furring and support systems.
 - 3. Gypsum wall board for walls, bulkheads, soffits and ceilings.
 - 4. Drywall accessories as shown on drawings or required for complete installation.
 - 5. Taping and finishing of drywall.

1.02 REFERENCES

- A. ASTM A525 - General Requirements for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.
- B. ANSI/ASTM A591 - Steel Sheet, Cold-Rolled, Electrolytic Zinc-Coated.
- C. ASTM C645 - Non-Load (Axial) Bearing Steel Studs, Runners (Track) and Rigid Furring Channels for Screw Application of Gypsum Board.
- D. ASTM C 754 - Installation of Steel Framing Members to Receive Screw-Attached Gypsum Wallboard, Backing Board, or Water-Resistant Backing Board.
- E. FS TT-P-645 - Primer, Paint, Zinc-Chromate, Alkyd Type.
- F. GA 203 - Installation of Screw-Type Steel Framing Members to Receive Gypsum Board.
- G. ANSI/ASTM C36 - Gypsum Wallboard.
- H. ANSI/ASTM C442 - Gypsum Backing Board.
- I. ANSI/ASTM C475 - Joint Treatment Materials
- J. ANSI/ASTM C630 - Water Resistant Gypsum Backing Board.
- K. ANSI/ASTM C754 - Installation of Framing Members to Receive Screw Attached Gypsum Wallboard, Backing Board, or Water Resistant Backing Board.
- L. ANSI/ASTM E90 - Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions.
- M. ANSI/ASTM E119 - Fire Tests of Building Construction and Materials.
- N. GA-201 - Gypsum Board for Walls and Ceilings.
- O. GA-216 - Recommended Specs. for Application/Finishing of Gypsum Board.
- P. U.S.G. - Gypsum Construction Handbook.

1.03 ENVIRONMENTAL REQUIREMENTS

- A. Room Temperature: A uniform temperature between 60 and 70 degrees F shall be maintained in cold weather one week prior to application, during application and until completely dry. Temperature shall not be allowed to fluctuate more than 2 degrees in a 24 hour period.
- B. Ventilation: Drywall subcontractor shall assure adequate ventilation for drying out of joint compounds without allowing drying to be to rapid.

1.04 SYSTEM DESCRIPTION

- A. Wood stud framing system for exterior wall, with exterior sheathing specified in Section 06 10 00, metal stud framing specified in this section, insulation specified in Section 07 21 00 and interior gypsum board specified in this section.

- B. Wood stud framing system for interior walls specified in 06 10 00, metal studs specified in this section, with batt type acoustic insulation specified in Section 07 21 00, and gypsum board specified in this section.
- C. Maximum Allowable Deflection: 1/270 span.
- D. Design system to accommodate construction tolerances, deflection of building structural members, and clearances of intended openings.
- E. Gypsum board finish for walls and ceilings as shown or scheduled on the drawings, including taping and finishing in preparation for painting or receiving other finish materials.

1.05 QUALITY ASSURANCE

- A. Perform metal framing work in accordance with GA 203 and ASTM C754.
- B. Applicator Qualifications: Company specializing in gypsum board systems work with 3 years experience.
- C. All gypsum board and accessories shall be of one manufacturer unless noted otherwise.

1.06 COORDINATION

- A. Openings and chases for heating, plumbing and electrical ducts, pipes and conduits shall be built into drywall partitions and ceilings as required. Consult other trades in advance and make provisions for their work to avoid cutting and patching. Coordinate installation of sheathing with cold-formed metal framing erector.

1.07 DELIVERY AND STORAGE

- A. Deliver materials to project site with manufacturer's labels intact and legible. Deliver fire-rated materials bearing testing agency label and required fire classification numbers. Store materials under cover in dry area, off floor. Damaged, deteriorated or wet materials shall be rejected and replaced.

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS - GYPSUM BOARD SYSTEM

- A. U.S. Gypsum.
- B. National Gypsum.
- C. Georgia-Pacific

2.02 GYPSUM BOARD MATERIALS.

- A. Standard Gypsum Board: ANSI/ASTM C36; 48 x 5/8 or 1/2 inch thick, maximum permissible length; ends square cut, tapered edges. See drawings for thickness.
- B. Fire Rated Gypsum Board: ANSI/ASTM C36; 48 x 5/8 inch thick, fire resistive type 'X', UL rated; otherwise same as standard gypsum board.
- C. Moisture Resistant Gypsum Board: ANSI/ASTM C630; 48 x 5/8 inch thick, otherwise same as standard gypsum board.
- D. Exterior Gypsum Sheathing: Gypsum panel made of a treated, water-resistant core, surfaced with fiberglass mats and a primer coating.; 48 x 5/8 inch thick, maximum permissible length; ends square cut, tapered edges; rated for exterior installation.
 - 1. Similar to Georgia-Pacific: DensGlass Sheathing.
- E. High Abuse Gypsum board: Fire resistant gypsum core (type X) encased in abrasion resistant paper (finish side) and heavy liner paper (backside). Capable of taking a being loaded by a steel ball (.438 inches diameter) at a rate of 0.25" per minute and not indent more than 0.1" by a 230 pound load nor indent more than 0.2" by a 460 pound load.

- F. Gypsum board in horizontal applications (ceilings, soffits, etc.) shall be listed for such use by the manufacturer. See drawings for thickness.

2.03 ACCESSORIES

- A. Corner Beads: Metal, Durabead No. 101, galvanized.
- B. Casing Beads: No. 200-B, galvanized.
- C. Control Joint: No. 093, galvanized.
- D. Joint Treatment Materials: ANSI/ASTM C475; perforated reinforcing tape, joint compound, adhesive, water, and fasteners. Materials used on exterior shall be rated for such exposure.
- E. Acoustical Sealant and Tape: Non-hardening, non-skinning, for use in conjunction with gypsum board; manufactured by Tremco, Pecora, or USG.
- F. Miscellaneous: Provide all necessary trim, anchors, etc, as required to complete installation.

2.04 METAL STUD FRAMING MATERIALS, See drawings for locations

- A. See Section 09 22 16 - Non Structural Metal Framing

2.05 WOOD STUD FRAMING

- A. See Section 06 10 00 - Rough Carpentry.

3. EXECUTION

3.01 EXAMINATION

- A. Verify that conditions are ready to receive work.
- B. Verify field measurements are as shown on Drawings and instructed by the manufacturer of items to be installed in metal stud constructions.
- C. Verify that rough-in utilities are in proper location.
- D. Beginning of installation means installer accepts existing conditions.

3.02 GYPSUM BOARD INSTALLATION

- A. Install gypsum board in accord with GA 201, 216, and USG Gypsum Construction Handbook
- B. Erect board with ends and edges occurring over firm bearing. Stagger end joints to occur at different locations on opposite sides of wall.
- C. Abut boards without forcing. Neatly fit ends and edges of boards and make cuts and penetrations so that paper facing and gypsum core are not damaged.
- D. Use screws to fasten gypsum board. Stagger fasteners opposite each other on adjacent ends and edges. Space fasteners as recommended in U.S.G., "Gypsum Construction Handbook".
- E. Install sound attenuation sealant at perimeters of all sound -deadened partitions, and at all openings in walls to prevent sound transmission thru wall.
- F. Double Layer Applications: Use gypsum backing board for first layer, placed perpendicular to framing or furring members. Use fire rated gypsum backing board for fire rated partitions. Place second layer parallel to first layer. Offset joints of second layer from joints of first layer.
- G. Erect exterior gypsum soffit board perpendicular to supports, with edges butted tight , staggered end joints over supports and ends occurring over firm bearing.
- H. Treat cut edges and holes in moisture resistant gypsum board and exterior gypsum ceiling board with sealant.

- I. Place control joints at changes in backup material, at maximum 20'-0" o.c. in exterior walls; and at maximum 30'-0" o.c. at interior partitions. In ceilings, install at maximum 30'-0" o.c. each way. Provide fire resistant protections behind control joints in fire rated assemblies. longest practical length. Place edge trim where gypsum board abuts dissimilar materials.
- J. On fire rated assemblies, seal all penetrations and make air-tight.
- K. Thicken partitions to eliminate wall surface jogs for the full length of the wall within a room to conceal structural members, pipes, panels, specialty items, and accessories.
- L. Coordinate door and other frame thicknesses as required.
- M. Use Type "S" bugle head screws spaced at 12 inch centers for sidewall and 12 inch centers for ceilings. Verify current spacing recommendations with manufacturer.

3.03 JOINT TREATMENT

- A. Tape, fill, and sand exposed joints, edges, and corners to produce surface ready to receive finishes. The intent of this paragraph is to provide the highest quality of joint treatment work consistent with commercial construction. Texturing work prior to painting will be very light. Leave surfaces smooth, uniform, and free of fins, depressions, ridges, cracks, and other imperfections.
- B. Feather coats onto adjoining surfaces so that camber is maximum 1/32 inch.
- C. Taping, filling, and sanding is not required at surfaces behind adhesive applied ceramic tile.
- D. Tape all joints in fire rated partitions and wrapping where concealed from view.

3.04 LEVELS OF GYPSUM BOARD FINISH

<u>Level</u>	<u>Joints</u>	<u>Interior Angles</u>	<u>Accessories</u>	<u>Fasteners</u>	<u>Surface</u>
#1.	Tape set in Joint compound Specified in plenum areas above finish ceilings, in areas where assembly would be concealed.	Tape set in Joint compound			Tool marks Acceptable
#2.	Tape embedded in Joint compound and wiped leaving a thin coat of compound over tape Specified where water resistant gypsum backing board (ASTM C630) is used as a substrate for tile.	Tape embedded in Joint compound and wiped leaving a thin coat of compound over tape	Shall be covered with one coat of Joint compound	Shall be covered with one coat of	Free of excess Joint compound Joint compound
#3.	Taped as in level #2 then covered with one separate coat of joint compound Specified in areas to receive heavy or medium texture (spray-knockdown) finish before painting.	Taped as in level #2 then covered with one separate coat of joint compound	Shall be covered with two coats of joint compound	Shall be covered with two coats of joint compound	Joint compound shall be free of tool marks and ridges
#4.	Taped as in level #2 then covered with two separate coat of joint compound Specified where light paints, light textures or light wall coverings are to be applied. Flat paints are acceptable	Taped as in level #2 then covered with one separate coat of joint compound	Shall be covered with three coats of joint compound	Shall be covered with three coats of joint compound	Joint compound shall be free of tool marks and ridges
#5.	Taped as in level #2 then covered with two separate coat of joint compound Recommended where gloss, semi-gloss, enamel paints are specified or where severe lighting conditions occur	Taped as in level #2 then covered with one separate coat of joint compound	Shall be covered with three coats of joint compound	Shall be covered with three coats of joint compound	A thin skim coat of joint compound or a material manufactured for this use

3.05 FINISHES

- A. All gypsum wallboard surfaces shall be left smooth and uniform, and ready to receive painting and decoration. Sand surfaces as necessary to achieve the desired finish, Level 4 Finish through out project..

3.06 TOLERANCES

- A. Maximum Variation from True Flatness: 1/8 inch in 10 feet in any direction.

3.07 CLEAN UP

- A. After completion of the gypsum wallboard work, all debris resulting from this work shall be removed from the building and site. All surfaces cleaned of spills and splatters resulting from the work.

END 09 21 16

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. Suspended metal grid ceiling system, including acoustical panels, perimeter trim and accessories.
 - 2. Cut openings in tiles for installation of Ventilating and Electrical Contractors' fixtures, devices, etc.

1.02 REFERENCES

- A. ASTM A 1008 - Standard Specification for Steel, Sheet, Cold Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
- B. ASTM A 641 - Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.
- C. ASTM A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.
- D. ASTM C 423 - Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
- E. ASTM C 635 - Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
- F. ASTM C 636 - Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
- G. ASTM D 3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
- H. ASTM E 84 - Surface Burning Characteristics of Building Materials.
- I. ASTM E 580 - Installation of Metal Suspension Systems in Areas Requiring Moderate Seismic Restraint.
- J. ASTM E 1111 - Standard Test Method for Measuring the Interzone Attenuation of Ceilings Systems.
- K. ASTM E 1414 - Standard Test Method for Airborne Sound Attenuation Between Room Sharing a Common Ceiling Plenum.
- L. ASTM E 1264 - Classification for Acoustical Ceiling Products.
- M. UL - Underwriter's Laboratories System Ratings.

1.03 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in manufacture of ceiling suspension system and ceiling tile with ten years minimum experience.
- B. Installer: Company with three years minimum experience.
- C. Single-Source Responsibility: Provide acoustical panel units and grid components by a single manufacturer to ensure fit and function.

1.04 SUBMITTALS

- A. Submit product data and manufacturer's installation instructions under provisions of Section 01 33 00.
- B. Provide product data on metal grid system components, and acoustic units.
- C. Submit samples under provisions of Section 01 33 00.
- D. Samples shall be 8 x 12 inches in size, illustrating material and finish of acoustic units.

1.05 ENVIRONMENTAL REQUIREMENTS

- A. Maintain uniform temperature of minimum 60 degrees F, and humidity of 40 to 60 percent prior to, during, and after installation.

1.06 SEQUENCING/SCHEDULING

- A. Do not install acoustical ceilings until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- B. Schedule installation of acoustic units after interior wet work is dry.

1.07 COORDINATION

- A. Coordinate installation with other trades and make provisions for their work to prevent cutting and patching.

1.08 DELIVERY, STORAGE, AND HANDLING

- A. Deliver acoustical panels, suspension-system components, and accessories to Project site and store them in fully enclosed, conditioned space where they will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.
- B. Before installing acoustical panels, permit them to reach room temperature and a stabilized moisture content.
- C. Handle acoustical ceiling units carefully to avoid chipping edges or damaging units in any way.

1.09 WARRANTY

- A. Manufacturer's System Warranty: Provide manufacturer's standard written warranty, to replace materials that fail due to defects in materials and factory workmanship during the warranty period on manufacturer's standard form warranting acoustical ceiling systems.
 - 1. Failure of material includes, but is not limited to the following:
 - a. Sagging and warping.
 - b. Delimitation.
 - c. Occurrence of 50% red rust on suspension system as defined by ASTM D610 or ASTM B117 test procedures.
 - d. Growth of mold and mildew.
 - 2. Grid System: Rusting and manufacturer's defects.
- B. The warranty period shall be a minimum of **Thirty (30) years** from the date of Substantial Completion.

1.10 MAINTENANCE STOCK

- A. At time of completing installation, deliver a stock of extra ceiling panels to the Owner equal to at least 3% of each type of ceiling panels used in Project. Panels shall be packaged with protective covering for storage and identified with appropriate labels.

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS - SUSPENSION SYSTEM

- A. Armstrong.

2.02 SUSPENSION SYSTEM MATERIALS

- A. Components: Main beams and cross tees, base material, and end detail, fabricated from commercial quality hot dipped galvanized steel complying with ASTM A 653. Main beams and cross tees are double-web steel construction exposed flange design. Exposed surfaces chemically cleansed, capping pre-finished galvanized steel in baked polyester paint. Main beams and cross tees shall have rotary stitching.
 - 1. Structural Classification: ASTM C 653 Intermediate or Heavy Duty.

2. Prelude XL 15/16" Exposed Tee.

- B. Accessories: Stabilizer bars, clips, splices, edge moldings, and hold down clips required for suspended grid system.
- C. Grid Materials: Commercial quality cold rolled steel with galvanized coating. All components die-cut and interlocking.
- D. Grid Finish: White color.
- E. Support Channels and Hangers: Primed steel; size and type to suit application, to rigidly secure acoustic ceiling system including integral mechanical and electrical components with maximum deflection of 1/360.

2.03 ACCEPTABLE MANUFACTURERS - ACOUSTIC UNITS

- A. Armstrong

2.04 CEILING TILE - DESCRIPTION

- A. Armstrong; "Fine Fissured" #465, 24 inch by 24 inch by 5/8 inch, square edge lay-in 15/16 inch.
 - 1. HumiGuard Plus / Sag Resistance
 - 2. NRC: 0.55
 - 3. Light Reflectance: 82%
 - 4. BioBlock; to resist growth of mold and mildew
- B. Toilets: Armstrong "Clean Room FL" #1715, 24 inch by 24 inch, by 5/8 inch, square edge lay-in.
 - 1. HumiGuard Plus / Sag Resistance
 - 2. NRC: 0.55
 - 3. Light Reflectance: 79%
 - 4. Washable, Soil Resistant, scrubbable
 - 5. BioBlock; to resist growth of mold and mildew

2.05 ACCESSORIES

- A. Attachment Devices: Size for five times design load indicated in ASTM C635, Table 1, Direct Hung unless otherwise indicated.
- B. Hanger Wire & Ties: ASTM A641, Class 1 zinc coated, soft annealed, with yield stress load of at least three times design load, but not less than 12 gauge.

3. EXECUTION

3.01 INSPECTION

- A. Verify that existing conditions are ready to receive work.
- B. Verify that layout of hangers will not interfere with other work.
- C. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION - LAY-IN PANEL SYSTEM

- A. Install system in accordance with ASTM C636, manufacturer's instructions and as supplemented in this Section, to produce a ceiling true to lines and levels, free from warp and soiled or damaged grid or panels.
- B. Install system capable of supporting imposed loads to a deflection of 1/360 maximum.
- C. Install after major above ceiling work is complete. Coordinate the location of hangers with other work.
- D. Do not use rivets where they are exposed to view or where they prevent tiles from setting in the grid system properly.

DIVISION 9 - FINISHES
Section 09 51 00 - Suspended Acoustical Ceilings

- E. Hang system independent of walls, columns, ducts, pipes and conduit. Hang wires directly from structure (not from bridging or roof decks). Locate first hanger 6 inches from wall or bulkhead and space 4'-0" along carrying channel. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
- F. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
- G. Center system on room axis leaving equal border units unless shown otherwise on drawings.
- H. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability. Support fixture loads by supplementary hangers located within 6 inches of each corner; or support components independently.
- I. Do not eccentrically load system, or produce rotation of runners.
- J. Install edge molding at intersection of ceiling and vertical surfaces, using longest practical lengths. Miter corners. Provide edge moldings at junctions with other interruptions. Field rabbett panel edges. Where round obstructions occur, provide preformed closers to match edge molding. Provide prefabricated radiused edge moldings around radiused wall corners.
- K. Form expansion joints as detailed. Form to accommodate plus or minus one inch movement. Maintain visual closure.
- L. Fit acoustic units in place, free from damaged edges or other defects detrimental to appearance and function.
- M. Lay directional patterned units one way with pattern parallel to shortest room axis. Fit border neatly against abutting surfaces.
- N. Install acoustic units level, in uniform plane, and free from twist, warp and dents.
- O. Install hold-down clips to retain panels tight to grid system in entry vestibules and within 20 feet of exterior doors where such door is not surrounded by a vestibule.

3.03 TOLERANCES

- A. Variation from Flat and Level Surface: 1/8 inch in 10 ft.
- B. Variation from Plumb of Grid Members Caused by Eccentric Loads: Two degrees maximum.

3.04 ADJUSTING AND PATCHING

- A. Replace damaged members of exposed suspension system. Replace ceiling board and tile that is damaged, installed improperly, or shows visible signs of sagging.

3.05 CLEANING

- A. Clean soiled areas of ceiling material with mild soap and water. Replace ceiling board and tile damaged by improper cleaning. Existing grid that is to be re-used shall also be thoroughly cleaned with mild soap and water before new tile is installed.

END 09 51 00

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid: Contractor provide rubber base where shown or called for on the drawings.

1.02 REFERENCES

- A. ASTM E84 - Surface Burning Characteristics of Building Materials.
- B. FS L-F-475A - Floor Covering, Vinyl Surface (Tile and Roll), with Backing.
- C. FS SS-W-40 - Wall Base: Rubber and Vinyl Plastic.

1.03 REGULATORY REQUIREMENTS

- A. Conform to applicable building code for flame/ fuel/smoke rating requirements in accordance with ASTM E84.

1.04 SUBMITTALS

- A. In accordance with Section 01 33 00.
- B. Submit material samples, manufacturer's installation instructions and product data.
- C. Submit two samples 2 x 2 inches (minimum) in size, illustrating color of materials specified.
- D. Color as selected by A/E from manufacturer's full range.

1.05 ENVIRONMENTAL REQUIREMENTS

- A. Store materials for three days prior to installation in area of installation to achieve temperature stability.
- B. Maintain ambient temperature required by adhesive manufacturer three days prior to, during, and 24 hours after installation of materials.

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS - BASE

- A. Johnsonite
- B. Roppe

2.02 BASE MATERIALS.

- A. Provide 1/8 in. thick, 4 in. high wall base with a matte finish, conforming to ASTM F 1861, Type TP - Rubber, Style B – Cove

2.03 ACCESSORIES

- A. Primers and Adhesives: Waterproof; types recommended by flooring manufacturer.
- B. Sealer and Wax: Types recommended by flooring manufacturer.

2.04 COLORS:

- A. Colors to be selected by Architect/Engineer from manufacturer's full range of colors.

3. EXECUTION

3.01 EXAMINATION

- A. Examine substrates prior to installation to determine that surfaces are smooth and free from cracks, holes, ridges, and other defects that might prevent adhesive bond or impair durability or appearance of the base material. Verify that surfaces are smooth and flat with maximum variation of 1/4 inch in 10 ft.
- B. Beginning of installation means acceptance of existing substrate and site conditions.

3.02 INSTALLATION

- A. Apply top set wall base to walls, columns, casework, and other permanent fixtures in areas where top-set base is required. Install base in lengths as long as practical, with inside corners fabricated from base materials that are mitered or coped. Tightly bond base to vertical substrate with continuous contact at horizontal and vertical surfaces.
- B. Scribe and fit to door frames and other interruptions. Install base on cabinets where finished base is not present.

3.03 PROTECTION

- A. Protect installed flooring as recommended by the flooring manufacturer against damage from rolling loads, other trades, or the placement of fixtures and furnishings.

3.04 CLEANING AND WAXING

- A. Remove excess adhesive from base, and wall surfaces without damage.
- B. Clean, and seal base surfaces in accordance with manufacturer's instructions.

END 09 65 13

1. GENERAL

1.01 SUMMARY

- A. This Section includes:
 - 1. High-performance resinous flooring systems.

1.02 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Installer Certificates for Qualification: Signed by manufacturer stating that installers comply with specified requirements.
- C. Material Certificates: For each resinous flooring component, from manufacturer.
- D. Maintenance Data: For maintenance manuals.
- E. Samples: Submit two 6" X 6" samples of each resinous flooring system applied to a rigid backing. Provide sample which is a true representation of proposed field applied finish. Provide sample color and texture for approval from Owner in writing or approved by General Contractor prior to installation.
- F. Product Schedule: For resinous flooring.

1.03 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of flooring systems required for this Project.
 - 1. Engage an installer who is approved in writing by resinous flooring manufacturer as qualified to apply resinous flooring systems indicated.
 - 2. Installer Letter of Qualification: Installer to provide letter stating that they have been in business for at least 5 years and listing 5 projects in the last 2 years of similar scope. For each project provide: project name, location, date of installation, contact information, size of project, and manufacturer of materials with system information.
- B. Source Limitations: Obtain primary resinous flooring materials, including primers, resins, hardening agents, grouting coats, and topcoats, from single source from single manufacturer. Provide secondary materials, including patching and fill material, joint sealant, and repair materials, of type and from source recommended by manufacturer of primary materials.
- C. Pre-installation Conference: Conduct conference at Project site before work and mockups begin.
- D. Mockups: Apply mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution. Do not cover up mockup area.
 - 1. Apply full-thickness mockups on 16 square foot floor area selected by Architect.
 - 2. Finish surfaces for verification of products, color, texture, and sheen.
 - 3. Simulate finished lighting conditions for Architect's review of mockups.
 - 4. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
 - 5. Mockup shall demonstrate desired slip resistance for review and approval by Owner's representative in writing.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer's labels indicating brand name and directions for storage and mixing with other components.
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.05 PROJECT CONDITIONS

- A. Environmental Limitations: Comply with resinous flooring manufacturer's written instructions for substrate temperature, ambient temperature, moisture, ventilation, and other conditions affecting resinous flooring application.
- B. Lighting: Provide permanent lighting or, if permanent lighting is not in place, simulate permanent lighting conditions during resinous flooring application.
- C. Close spaces to traffic during resinous flooring application and for not less than 24 hours after application unless manufacturer recommends a longer period.

2. PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by:
 - 1. The Sherwin Williams Company, Cleveland, OH 44115. Manufacturer Representative Contact: Jim Davison, (217) 201-4110.
Email: james.h.davison@sherwin.com
 - 2. Or Equal, as approved by Architect.
- B. Resinous Flooring #1 – Decorative Flake Resinous System EXP-1: Resuflor Deco Flake BC, 20-30 mils nominal thickness. Floor colors to match school colors. Up to 6 colors could be mixed in blend. Flakes to be 1/8" or 1/4" as selected by A/E.
 - 1. Primer: Resuprime 1400 at 160-250 sq. ft. per gallon.
 - 2. Body Coat: Resuflor 3746 at 200-300 sq. ft. per gallon.
 - 3. Broadcast: Decorative Flakes 6750 or 6755 to excess at 100-200 lbs. per 1,000 sq. ft.
 - 4. Grout Coat: Resuflor 3746 at 160-250 sq. ft. per gallon.
 - 5. Seal Coat: Resutile 4685 at 250-400 sq. ft. per gallon.
- C. Resinous Flooring #2 – FasTop Multi Topfloor SL45. For number of colors and locations, see drawings. Total system thickness to be 1/4"
 - 1. Primer: Resuflor Aqua 3477 at 250 sq. ft. per gallon.
 - 2. Slurry (3/16"): FasTop Multi SL45 at 32-35 sq. ft. per unit.
 - 3. Broadcast: 5310 Dry Silica (20-40 mesh) into wet slurry.
 - 4. Grout Coat: Resuflor 3746, 15 mils at 100 sq. ft per gallon.
 - 5. Top Coat: Resutile HPS 100, 3 mils at 500 sq. ft per gallon.
- D. Clear Industrial Finish CLR-1: Armorseal Rexthane I Gloss Clear
 - 1. 1st Finish Coat: ArmorSeal Rexthane I Gloss Clear, 2.0-3.0 mils DFT.
 - 2. 2nd Finish Coat: ArmorSeal Rexthane I Gloss Clear, 2.0-3.0 mils DFT.

2.02 MATERIALS

- A. VOC Content of Resinous Flooring: Provide resinous flooring systems, for use inside the weatherproofing system, that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24)].
 - 1. Resinous Flooring: 100 g/L.

2.03 HIGH-PERFORMANCE RESINOUS FLOORING

- A. Resinous Flooring: Abrasion-, impact- and chemical-resistant, high-performance, resin-based, monolithic floor surfacing designed to produce a seamless floor.
- B. System Characteristics:
 - 1. Color and Pattern: As indicated from manufacturers listed above.
 - 2. Slip Resistance: Provide slip resistant finish.

3. EXECUTION

3.01 PREPARATION

- A. Inspection: Prior to commencing Work, thoroughly examine all underlying and adjoining work, surfaces and conditions upon which Work is in any way dependent for perfect results. Report all conditions which affect Work. No "waiver of responsibility" for incomplete, inadequate or defective underlaying and adjoining work, surfaces and conditions will be considered, unless notice of such unsatisfactory conditions has been filed and agreed to in writing before Work begins. Commencement of Work constitutes acceptance of surfaces.
- B. Surface Preparation: Remove all surface contamination, loose or weakly adherent particles, laitance, grease, oil, curing compounds, paint, dust and debris by blast track method or approved mechanical means (acid etch not allowed). If surface is questionable try a test patch. Create a minimum surface profile for the system specified in accordance with the methods described in ICRI No. 03732 to achieve profile numbers as follows:
- C. Concrete surface Profile as per ICRI Guideline 310.2R-2013
 - 1. Thin film, to 10 mils CSP-1 to CSP-3
 - 2. Thin and medium films, 10 to 40 mils CSP-3 to CSP-5
 - 3. Self-leveling mortars, to 3/16" CSP-4 to CSP-6
 - 4. Mortars and laminates, to 1/4" or more CSP-5 to CSP-10
- D. Verify that concrete substrates are dry and moisture-vapor emissions are within acceptable levels according to manufacturer's written instructions.
 - 1. Moisture Testing: Perform tests indicated below.
 - a. Calcium Chloride Test: Perform anhydrous calcium chloride test per ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours. Perform tests so that each test area does not exceed 1000 sq. ft. and perform 3 tests for the first 1000 sq. ft. and one additional test for every additional 1000 sq. ft.
 - b. In-Situ Probe Test: Perform relative-humidity test using in-situ probes per ASTM F 2170. Proceed with installation only after substrates have a maximum 75 percent relative-humidity-level measurement.

3.02 ENVIRONMENTAL CONDITIONS

- A. All applicators and all other personnel in the area of the RF installation shall take all required and necessary safety precautions. All manufacturers' installation instructions shall be implicitly instructions shall be implicitly followed.
- B. Repair damaged and deteriorated concrete according to resinous flooring manufacturer's written instructions.
- C. Alkalinity and Adhesion Testing: Verify that concrete substrates have pH within accepta-

ble range. Perform tests recommended by manufacturer. Proceed with application only after substrates pass testing.

- D. Resinous Materials: Mix components and prepare materials according to resinous flooring manufacturer's written instructions.
- E. Use patching and fill material to fill holes and depressions in substrates according to manufacturer's written instructions.
- F. Treat control joints and other nonmoving substrate cracks to prevent cracks from reflecting through resinous flooring according to manufacturer's written instructions.

3.03 APPLICATIONS

- A. Install resinous floor over properly prepared concrete surface in strict accordance with the manufacturer's directions.
 - 1. Install the primer and/or base coats over thoroughly cleaned and prepared concrete.
 - 2. Install topcoat over flooring after excess aggregate has been removed.
 - 3. Maintain a slab temperature of 60°F to 80°F for 24 hours minimum before applying floor topping, or as instructed by manufacturer.
- B. Apply components of resinous flooring system according to manufacturer's written instructions to produce a uniform, monolithic wearing surface of thickness indicated.
 - 1. Coordinate application of components to provide optimum adhesion of resinous flooring system to substrate, and optimum intercoat adhesion.
 - 2. Cure resinous flooring components according to manufacturer's written instructions. Prevent contamination during application and curing processes.
 - 3. At substrate expansion and isolation joints, comply with resinous flooring manufacturer's written instructions.
- C. Sealant: Saw cut resinous floor topping at expansion joints in concrete slab. Fill saw cuts with sealant prior to final seal coat application. Follow manufacturer's written recommendations.
- D. Apply primer over prepared substrate at manufacturer's recommended spreading rate.
- E. Slip Resistant Finish: Provide grit for slip resistance.
- F. Apply topcoats in number indicated for flooring system and at spreading rates recommended in writing by manufacturer.

3.04 COMPLETED WORK

- A. Cleaning: Upon completion of the Work, clean up and remove from the premises surplus materials, tools, appliances, empty cans, cartons and rubbish resulting from the Work. Clean off all spattering and drippings, and all resulting stains.
- B. Protection: Protect Work in accordance with manufacturer's directions from damage and wear during the remainder of the construction period. Use protective methods and materials, including temporary covering, recommended in writing by resinous flooring manufacturer.
- C. Contractor shall insure that coating is protected from any traffic until it is fully cured to the satisfaction of the coating manufacturer.

END 09 67 23

1. General

1.01 WORK INCLUDES:

- A. Contractor to provide and install prefinished polyester glass reinforced plastic sheets and adhered to unfinished gypsum or untreated plywood.

1.02 SUBMITTALS

- A. Product Data: Submit manufacturer's data to indicate compliance with these specifications, including:
 - 1. Storage, handling, and preparation instructions and recommendations.
- B. Shop Drawings: Submit elevations of each wall showing location of paneling and trim members with respect to all discontinuities in the wall elevation.
- C. Selection Samples: Submit manufacturer's standard color pattern selection samples representing manufacturer's full range of available colors and patterns.
- D. Samples Verification: Submit appropriate section of panel for each finished selected indicating the color, texture, and pattern required.
 - 1. Submit complete with specified applied finish.
 - 2. For selected patterns show complete pattern repeat.
 - 3. Exposed Trim Molding: Provide samples of each type, finish, and color.
- E. Manufacturer's Safety Data Sheets (SDS) for adhesives, sealants, and other pertinent materials prior to their delivery to the site.

1.03 QUALITY ASSURANCE

- A. Conform to building code requirements for interior finish for smoke and flame spread requirements as tested in accordance with ASTM E 84.

1.04 ENVIRONMENTAL CONDITIONS:

- A. Building should be fully enclosed prior to installation with sufficient heat (70°) and ventilation consistent with good working conditions for finish work

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials factory packaged on strong pallets.
- B. Store panels and trim lying flat, under cover and protected from the elements. Allow panels and adhesives to acclimate to room temperature for 48 hours prior to installation.

1.06 WARRANTY

- A. Furnish one-year guarantee against defects in material.

2. Products

2.01 MANUFACTURERS:

- A. Marlite: Standard FRP panels
- B. Substitutions to be approved by A/E.

2.02 MATERIALS

- A. Panel Information
 - 1. Size: 4'x8'x3/32"
 - 2. Color: White
 - 3. Surface: Pebbled

2.03 ACCESSORIES

- A. All trim specified shall be heavy weight extruded aluminum 6063-T5 alloy prefinished at the factory.
 - 1. Trim Profiles for .090" thick panels
 - a. Inside Corner
 - b. Outside Corner
 - c. Division
 - d. Edge
- B. All PVC Base Molding shall be a Rigid extruded PVC with integral color.
 - 1. Base Profiles for .090" thick panels
 - a. FRP Base Molding
 - b. Inside Corner
 - c. Outside Corner
 - d. LH End Cap
 - e. RH End Cap
 - 2. Base Finish
 - a. P 200 Black
- C. Adhesive: Compatible and approved by manufacturer.
- D. Sealant: Compatible and approved by manufacturer.

3. EXECUTION

3.01 EXAMINATION

- A. Open cartons and carefully inspect all panels.

3.02 PREPARATION

- A. Panels must be applied over a smooth , solid, flat, clean substrate of plywood.
- B. Examine sub wall to determine that corners are plumb and straight, surfaces are smooth, uniform, clean and free from foreign matter, nails countersunk, joints and cracks filled flush and smooth with the adjoining surface.
 - 1. Verify stud spacing does not exceed 24" on-center.
- C. Repair defects prior to installation. Level wall surfaces to panel manufacturer's requirements. Remove protrusions and fill indentions.

3.03 CONDITIONING

- A. Panels should be opened and allowed to acclimate for 48 hours prior to installation. Room temperature should be approximately 70° F.

3.04 INSTALLATION

DIVISION 9 - Finishes
Section 09 77 00 - Fiberglass Reinforced Panels

- A. Install all panels in strict accordance with manufacturer's installation instructions.
- B. All moldings must provide for a minimum 1/8 inch expansion joint to insure proper installation.
- C. FRP Adhesive, A water- resistant, non-flammable adhesive, that meets ASTM Specification C557.
- D. Construction Adhesive, A strong, flexible, water-resistant , solvent based adhesive formulated for fast, easy application, that meets ASTM Specification C557.

3.05 SEALANT

- A. Clear Silicone Sealant.
- B. White Silicone Sealant.

3.06 CLEANING

- A. Wipe down using a damp cloth and mild soap solution or cleaner.
- B. Refer to manufacturer's specific cleaning recommendations Do not use abrasive cleaners.

END OF 09 77 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. Complete interior and exterior surface preparation and finishing.
 - a. Painting new exterior and interior hollow metal frames, exterior and interior hollow metal doors.
 - b. Painting interior concrete masonry units.
 - c. Painting new and existing interior face brick.
 - d. Painting new interior gypsum board partitions, bulkheads and ceilings.
 - e. Painting new interior steel hand and guard rails.
 - f. Painting of exposed structural metal deck, joist, and beams.
 - g. Stain and finish of exposed wood trim.
 - h. Painting of bare and covered pipes, conduit, duct and other mechanical items and electrical equipments exposed to public view in areas of new work and remodeling.
 - i. Touch up any voids with gypsum board compound, cracks and linear voids with sealant visible after application of primer.
 - j. Painting precast concrete wall panels.
 - 2. Examine specifications for various other trades and their provisions regarding their painting. Surfaces that are left unfinished by other sections of specifications, shall be painted or finished as a part of this Section.
 - 3. Colors, including deep tones, will be selected by the Architect. Deep tones or accent colors will not exceed 30% of surfaces to be painted. Number of colors to be used on job will be determined by Architect.
 - 4. Complete interior field application of stains and varnishes.
 - 5. Painting shall also include gas piping and exposed duct work.
 - 6. Protection of surfaces not scheduled for painting, cleanup of paint splatters, protection of newly painted surfaces.

1.02 SURFACES NOT TO RECEIVE FIELD FINISHING

- A. Copper, bronze, chromium plate, nickel, stainless steel, Monel metal, lead, lead-coated copper weathering steel shall not be painted or finished except as otherwise specified or scheduled. Other surfaces not to be painted include prefinished wall, ceiling, and floor coverings; items with factory applied final finish; plenums above suspended ceilings.

1.03 REFERENCES

- A. ASTM International
 - 1. ASTM D16 - Definitions of Terms Relating to Paint, Varnish, Lacquer, and Related Products.
 - 2. ASTM D4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood Base Materials
 - 3. ASTM D2016 - Test Method for Moisture Content of Wood.
 - 4. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
- B. Green Seal:
 - 1. GS-03 Anti-Corrosive Paints
 - 2. GS-11 Paints and Coatings
- C. Master Painters Institute:
 - 1. MPI - Approved Products List
 - 2. MPI - Architectural Painting Manual

1.04 DEFINITIONS

- A. Conform to ANSI/ASTM D16 for interpretation of terms used in this Section.

1.05 QUALITY ASSURANCE

- A. Product Manufacturer: Company specializing in manufacturing quality paint and finish products with 3 years experience.
- B. Applicator: Company specializing in commercial painting and finishing with 2 years experience.

- C. Product Labels: Include manufacturer's name, type of paint, stock number, color and label analysis on label of containers.

1.06 SUBMITTALS

- A. Submit product data, color selection samples and manufacturer's application instructions under provisions of Section 01 33 00.
- B. Provide product data including manufacturer's written application instructions on all finishing products.
- C. Samples for color selection.
 - 1. Provide a fan deck or other color display illustrating the full range of colors available from the paint manufacturer for initial color selection.
 - 2. Provide samples illustrating the full range of textures (Flat, Eggshell, Semi-gloss, Glossy, etc.) available from the manufacturer for initial selection.
 - 3. Provide two (2) samples for each color/texture selected of actual paint applied to a stiff card stock of minimum dimensions 5"x8" for verification.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Store and protect products under provisions of Section 01 62 00.
- B. Deliver products to site in sealed and labeled containers; inspect to verify acceptance.
- C. Container labeling to include manufacturer's name, type of paint, brand name, brand code, coverage, surface preparation, drying time, cleanup, color designation, and instructions for mixing and reducing.
- D. Store paint materials at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in well ventilated area, unless required otherwise by manufacturer's instructions.
- E. Take precautionary measures to prevent fire hazards and spontaneous combustion.

1.08 ENVIRONMENTAL REQUIREMENTS

- A. Provide continuous ventilation and heating facilities to maintain surface and ambient temperatures above 45 degrees F for 24 hours before, during, and 48 hours after application of finishes, unless required otherwise by manufacturer's instructions.
- B. Do not apply exterior coatings during rain or snow, or when relative humidity is above 75 percent, unless required otherwise by manufacturer's instructions.
- C. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.
- D. Minimum Application Temperature for Varnish and Finishes: 65 degrees F for interior or exterior, unless required otherwise by manufacturer's instructions.
- E. Provide lighting level of 80 ft. candles measured mid-height at substrate surface.

1.09 SEQUENCING

- A. Do not apply finish coats until paintable sealant is applied.

1.10 SCAFFOLDS

- A. Provide adequate safe ladders, scaffolds, and stages necessary to complete work.

1.11 PROTECTION

- A. Protect completed finish and paint work, and protect adjacent finish surfaces from paint splatter, spills and stains. Use adequate drop cloths and masking procedures during progress of work.

1.12 PRECAUTIONS

- A. Paints, oils, thinners and other flammable items shall be stored outside the building if possible, and whenever necessary to store inside they shall be stored in approved containers when not in actual

use during the painting job. The fire hazard shall be kept at a minimum.

- B. Precaution shall be taken to protect the public and construction workers during the progress of the work.
- C. Fire Extinguishers: Contractor shall furnish a temporary fire extinguisher of suitable chemicals and capacity, located near the flammable materials as described.

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Sherwin Williams.

2.02 MATERIALS

- A. Coatings: Ready mixed. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating.
- B. Coatings: Good flow and brushing properties; capable of drying or curing free of streaks or sags.
- C. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified, of commercial quality.

2.03 PRODUCTS

- A. Interior Metal Primer:
 - 1. Sherwin-Williams "S-W Pro Industrial Pro-Cryl Universal Primer, B66-1310 Series"
(5-10 mils wet, 1.9-3.8 mils dry)
- B. Interior Metal Finish:
 - 1. Sherwin-Williams "S-W ProIndustrial WB Alkyd, Urethane, B53"
(4.0 mils wet, 1.4 mils dry per coat)
- C. Masonry Block Filler:
 - 1. Sherwin-Williams "S-W Prep Rite Block Filler B25-W25"
(75-100 sq ft/gal)
 - 2. Block filler applied brush and back rolled to fill all voids, at a maximum s.f./gal. rate recommended by manufacturer for 16 mil thickness.
- D. Masonry Primer:
 - 1. Sherwin-Williams "S-W Pro-Mar 200 Zero VOC Latex Primer, B28W2600"
(4.0 mils wet, 1.0 mils dry)
- E. Masonry Finish:
 - 1. Sherwin-Williams "S-W Pro-Mar 200 Zero VOC Latex Eg-Shell, B20-2600 Series"
(4.0 mils wet, 1.7 mils dry per coat)
- F. Gypsum Board Primer:
 - 1. Sherwin-Williams "S-W Pro-Mar 200 Zero VOC Latex Primer, B28W2600"
(4.0 mils wet, 1.0 mils dry)
- G. Gypsum Board Finish:
 - 1. Sherwin Williams "S-W Pro-Mar 200 Zero VOC Latex Eg-Shell, B20-2600 Series"
(4.0 mils wet, 1.7 mils dry per coat)
- H. Interior Wood Stain:
 - 1. Sherwin-Williams "Minwax Wood Finish"
- I. Interior Polyurethane:
 - 1. Sherwin-Williams "Polyurethane - Semi-Gloss"
- J. Hollow Metal Doors & Frames
 - 1. Sherwin-Williams "Pro Industrial Pre-Catalyzed Waterbased Epoxy Semi-Gloss, K46 Series."

- K. Exterior Ferrous Metals Primer:
 - 1. Sherwin-Williams B50WZ4 Kem Bond HS High Solids Alkyd Universal Primer
- L. Exterior Ferrous Metals Finish:
 - 1. Sherwin-Williams B54Y157 Pro Industrial Urethane Alkyd Enamel - Gloss
 - 2. Sherwin-Williams B53 Series Pro Industrial Waterbased Alkyd Urethane Enamel - Gloss
- M. Concrete Floors: For interior concrete floors which are to remain exposed to view (see Room Finish Schedule)
 - 1. Sherwin-Williams "H&C Clarishield" - Wetlook Concrete Sealer.

3. EXECUTION

3.01 INSPECTION

- A. Verify that surfaces and substrate conditions are ready to receive work as instructed by the product manufacturer.
- B. Examine surfaces scheduled to be finished prior to commencement of work. Report to Architect any condition that may potentially affect proper application.
- C. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
 - 1. Plaster and Gypsum Wallboard: 12 percent.
 - 2. Masonry, Concrete, and Concrete Unit Masonry: 12 percent.
 - 3. Interior Located Wood: 12 percent, measured in accordance with ASTM D2016.
 - 4. Exterior Located Wood: 15 percent, measured in accordance with ASTM D2016.
- D. **Beginning the Work of this Section without reporting unsuitable conditions to the Owner constitutes acceptance of conditions by the Contractor. Any required removal, repair, or replacement, of the Work caused by unsuitable conditions shall be done at no additional cost to the Owner.**

3.02 PREPARATION - GENERAL

- A. Remove electrical plates, hardware, light fixture trim, and fittings prior to preparing surfaces or finishing.
- B. The surface must be dry and in sound condition. Remove oil, dust, dirt, loose rust, peeling paint, or other contamination to ensure good adhesion.
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- D. Correct minor defects and clean surfaces which affect work of this Section. Remove or repair existing paint or finishes that exhibit surface defects.
- E. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- F. Shellac and seal marks which may bleed through surface finishes.
- G. Block (Cinder and Concrete): Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement, and hardeners. Concrete and mortar must be cured at least 30 days at 75°F, unless the manufacturer's products are designed for application prior to the 30-day period. The pH of the surface should be between 6 and 9, unless the products are designed to be used in high pH environments.
- H. Gypsum Board Surfaces: Must be clean and dry, all nail and screw heads must be set and spackled. Joints must be taped and covered with a joint compound. Spackled nail and screw heads and tape joints must be sanded smooth and all dust removed prior to painting.
- I. Interior Wood: Must be clean and dry. Knots and pitch streaks must be scrapped, sanded, and spot primed before a full priming coat is applied. Patch all nail holes and imperfections with a wood filler

or putty and sand smooth.

- J. Previously Coated Surfaces: Maintenance painting will frequently not permit or require complete removal of all old coatings prior to repainting. However, all surface contamination such as oil, grease, loose paint, mill scale dirt, foreign matter, rust, mold, mildew, mortar, efflorescence, and sealers must be removed to assure sound bonding to the tightly adhering old paint. Glossy surfaces of old paint films must be clean and dull by sanding. Spot prime any bare areas with an appropriate primer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system. Check for compatibility by applying a test patch of the recommended coating system, covering at least 2 to 3 square feet. Allow to dry one week before testing adhesion per ASTM D3359. If the coating system is incompatible, complete removal is required per ASTM D4259.
- K. All marred or abraded spots on shop-primed and factory finished surfaces shall receive touch-up restoration prior to any other coating application.
- L. Surfaces shall be free of drips, runs, drops, ridges, waves, laps, brush marks, and variations in color, texture, and finish. Sand substrate to remove imperfections prior to applying primer coat.

3.03 APPLICATION - GENERAL

- A. The intent of these Specifications is to produce the highest quality appearance of paint and finish surfaces. Employ skilled mechanics only. The proper preparation of all surfaces will be strictly enforced and wherever finished surfaces show any defects due to improper preparation, workmanship, etc., the defects shall be removed and the work refinished at the expense of the Contractor.
- B. Apply products in accordance with manufacturer's instructions. Final finish costs shall have visual evidence of solid hiding and uniform appearance, and shall be free and smooth of brush marks, streaks, sags, runs, laps, or skipped areas.
- C. Do not apply finishes to surfaces that are not dry.
- D. Apply each coat to uniform finish and thickness.
- E. **Apply each coat of paint slightly darker than preceding coat unless otherwise approved.**
- F. Sand lightly between coats to achieve required finish.
- G. Allow applied coat to dry before next coat is applied.
- H. Where clear finishes are required, tint fillers to match wood. Work fillers into the grain before set. Wipe excess from surface.
- I. Prime back surfaces of interior and exterior woodwork scheduled to be painted with primer paint.
- J. Prime back surfaces of interior woodwork scheduled to receive stain or varnish finish with gloss varnish reduced 25 percent with mineral spirits.
- K. Edges of paint adjoining other materials or colors shall be sharp and clean with no overlapping.
- L. Paint both sides and edges of plywood backboards for electrical and telephone equipment before installing equipment.
- M. Move electrical plates, hardware, light fixture trim, and fittings prior to finishing.
- N. Paint exposed roof ventilators, goose necks, exhaust fans and other items on the roof with 2 coats exterior enamel.

3.04 PROTECTION

- A. Protect elements surrounding the work of this Section from damage or disfigurement.
- B. Repair damage to other surfaces caused by work of this Section.
- C. Furnish drop cloths, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces.

- D. Remove empty paint containers from site.

3.05 CLEANING/TOUCH-UP

- A. As Work proceeds, promptly remove paint where spilled, splashed, or spattered.
- B. During progress of Work maintain premises free of unnecessary accumulation of tools, equipment, surplus materials, and debris.
- C. Collect cotton waste, cloths, and material which may constitute a fire hazard, place in closed metal containers and remove daily from site.
- D. Spot painting will be allowed to correct soiled or damaged paint surfaces only when touch-up spot will blend into surrounding finish and is invisible to normal viewing. Otherwise, re-coat entire section to corners or visible stopping point.

3.06 SCHEDULE OF FINISHES

A. Interior Surfaces:

- 1. Hollow Metal Doors and Door Frames:
 - a. One prime coat if unprimed; if primed, touch up defects or blemished in prime coat.
 - b. Two finish coats.
- 2. Masonry Block:
 - a. One coat block filler.
 - b. Two finish coats.
- 3. Existing Masonry Block:
 - a. One prime coat.
 - b. Two finish coats.
- 4. Gypsum Board:
 - a. One prime coat.
 - b. Two finish coats.
- 5. Wood Doors and Wood Trim:
 - a. One coat of wood stain.
 - b. One coat of gloss varnish.
 - c. One coat of satin varnish.
- 6. Other ferrous metals:
 - a. One prime coat if unprimed; if primed, touch up defects or blemished in prime coat.
 - b. Two finish coats.

B. Exterior Surfaces:

- 1. Ferrous Metals:
 - a. One coat rust-inhibitive alkyd primer.
 - b. Two coats of alkyd metal enamel.
- 2. Exterior metal doors:
 - a. One coat alkyd rust inhibitive primer on ferrous metal and acrylic metal primer on galvanized metal
 - b. Two coats waterbased alkyd urethane enamel.

END 09 90 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide all identification devices and accessories shown on drawings, specified and required for complete and proper installation.

1.02 QUALITY ASSURANCE

- A. Acceptable Manufacturers: Not less than 5 years experience in manufacture of identifying devices of type specified for the project.

1.03 SUBMITTALS. In accord with 01 33 00:

- A. Shop drawings showing details of anchoring and anchor sizes for signs.
- B. Manufacturer's color charts and alphabet styles for selection.
- C. Sample of signs.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. In accord with 01 62 00.

1.05 CODES AND STANDARDS

- A. Identifying signs shall conform in size, format and mounting location to "State of Illinois" Accessibility Standards illustrated and the Federal "Americans with Disabilities Act".

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. ASI Signage and Innovations, 2630-C West Bradley Place, Chicago, IL 60618. Contact Tom Wilcoxon, tom.wilcoxon@asisignage.com
- B. Acceptable Product: ASI Series InTouch ADA Ready Sign System with requirements indicated for materials, thickness, finish color, designs, shapes, sizes, and details.

2.02 SIGN MATERIALS

- A. Interior Sign Face: InTouch Photopolymer Face, In matte (non-glare) finish.
- B. Exterior Sign Face and Composition: Exterior-Rated photopolymer, in-matte (non-glare) finish
- C. Backing Plate: Acrylic

2.03 FABRICATION OPTIONS

- A. Tactile Graphics and Text
 - 1. Fabrication process: Provide tactile copy (and Grade 2 Braille) raised 1/32 inch minimum from plaque first surface by manufacturer's photopolymer bonded process. Sign face of single material, tactile character and Braille integral to photopolymer. Adhesive-fixed characters are not acceptable.
 - 2. Provide lettering and graphics precisely formed, uniformly opaque to comply with relevant ADA regulations and requirements indicated for size, style, spacing, content, position, and colors. Tactile characteristics to be raised min. 1/32" from surface. Computerized translation of sign copy to be responsibility of the manufacturer.

3. EXECUTION

3.01 INSPECTION

- A. Check areas to receive signage for conditions that would affect quality and execution of work.
- B. Commence installation when all checks have been made.
- C. Start of work constitutes acceptance of job conditions.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's printed instructions and where directed by A/E.
- B. Identifying devices shall be plumb and level.
- C. The project includes a cast plaque to be installed by the contractor, plaque is being furnished by Owner.

3.03 CLEANING

- A. Clean to original finish after installation.

END 10 14 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide toilet accessories listed herein, complete with attachment hardware.

1.02 REFERENCES

- A. ASTM A167 - Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
- B. ASTM A366 - Cold-Rolled Carbon Steel Sheets, Commercial Quality.

1.03 SUBMITTALS

- A. Submit manufacturers product data under provisions of Section 01 33 00.
- B. Data to illustrate each accessory at large scale and show installation method.
- C. Submit manufacturer's installation instructions under provisions of Section 01 33 00.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver accessories to site until rooms in which they are to be installed are ready to receive them.
- B. Pack accessories individually in a manner to protect accessory and its finish.

1.05 PROTECTION

- A. Protect adjacent or adjoining finished surfaces and work from damage during installation of work of this Section.

1.06 COORDINATION

- A. Coordinate installation details of items being installed on toilet partitions with partition manufacturer. Supply installation and rough-in data in sufficient time to be built-in to other work.

2. PRODUCTS - See schedule on drawings.

3. EXECUTION

3.01 PREPARATION

- A. Deliver inserts and rough-in frames to jobsite at appropriate time for building-in. Provide templates and rough-in measurements as required.
- B. Before starting work notify Architect in writing of any conflicts detrimental to installation or operation of units.
- C. Verify with Architect exact location of accessories.

3.02 INSTALLATION

- A. Install fixtures using skilled mechanics, accessories and items in accordance with manufacturer's instructions.

DIVISION 10 - SPECIALITES
Section 10 28 00 - Toilet & Bath Accessories

- B. Install true, plumb, and level, securely and rigidly anchored to substrate.
- C. Use tamper proof fasteners. No fiber or rawl type plugs permitted.
- D. Locate accessories in order that they do not interfere with door swings or use of fixtures. Install recessed accessories after wall finishes have been completed. Anchor accessories with bolts, plates, and approved type fasteners. Take down any loose items and repair damaged wall surfaces.

3.03 SCHEDULE OF ACCESSORIES (See the drawings.)

END 10 28 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide fire extinguisher and fire extinguisher cabinet where shown on drawings and wall mounting bracket where shown on drawings.

1.02 REFERENCES

- A. NFPA 10 - Portable Fire Extinguishers.
- B. ADA Accessibility Guidelines

1.03 QUALITY ASSURANCE

- A. Conform to NFPA 10 requirements for extinguishers.
- B. Provide fire extinguishers, cabinets, and accessories by single manufacturer.

1.04 SUBMITTALS

- A. In accord with 01 33 00: Provide shop drawings, product data and manufacturer's installation instructions. Information shall include physical dimensions, operational features, color and finish, anchorage details, rough-in measurements, location, and details.

1.05 OPERATION AND MAINTENANCE DATA

- A. Submit manufacturer's operation and maintenance data under provisions of Section 01 70 00.
- B. Include test, refill or recharge schedules, procedures, and re-certification requirements.

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS:

- A. J. L. Industries
- B. Larsen's Manufacturing Co.

2.02 EXTINGUISHER

- A. Dry Chemical Type, 10 pound capacity, with pressure gauge, UL rating: 4A- 80BC

2.03 CABINET

- A. Semi recessed, with rolled edge. Fired rated tub (size 24" high x 10.5 inches wide x 6 inches deep). Vertical Duo panel door glazed with 1/4" thick gray tempered glass.
 - 1. Similar to J.L. Industries, Series 1037V10.
 - 2. Similar to J.L. Industries "Cosmopolitan" series.

2.04 ACCESSORIES

- A. Extinguisher wall brackets

3. EXECUTION

3.01 INSPECTION

Section 10 44 00 - Fire Extinguishers, Cabinets & Accessories

- A. Verify rough openings for cabinet are correctly sized and located. Beginning of installation means acceptance of existing conditions.

3.02 INSTALLATION

- A. Install cabinets plumb and level in wall openings 48 inches from finished floor to center line and in accord with the manufacturer's instructions.

END 10 44 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide manufactured plastic laminate casework with plastic laminate counter tops as shown and detailed on drawings and specified herein, including:
 - 1. Provide all prefabricated base and wall cabinets shown.
 - 2. Provide all fillers, scribes, finished ends, finished backs, work surfaces / backsplashes and cutouts required to provide a complete and finished project.
 - 3. Provide locks where shown on casework drawings or described in equipment list.

1.02 REFERENCES

- A. American National Standards Institute (ANSI)
 - 1. ANSI A156.9 - Cabinet Hardware
 - 2. ANSI A208.1 - Mat formed Particleboard.
- B. Architectural Woodwork Institute (AWI)
 - 1. AWI - Quality Standards Illustrated
- C. National Electrical Manufacturers Association (NEMA)
 - 1. NEMA LD3 - High Pressure Decorative Laminates
- D. ASTM International (ASTM)
 - 1. D570 - Standard Test Method for Water Absorption of Plastics.
 - 2. D635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position.
 - 3. D648 - Standard Test Method for Deflection Temperature of Plastics Under Flexural Load in edge-wise Position.
 - 4. D695 - Standard Test Method for Compressive Properties of Rigid Plastics.
 - 5. D696 - Standard Test Method for Coefficient of Linear Thermal Expansion of Plastics Between 30°C and 30°C with a Vitreous Silica Dilatometer.
 - 6. D785 - Standard Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials.
 - 7. D790 - Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
 - 8. D792 - Standard Test Method for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
 - 9. D3801 - Standard Test Method for Measuring the Comparative Burning Characteristics of Solid Plastics in a Vertical Position.
 - 10. E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

1.03 QUALITY ASSURANCE

- A. Manufacturer : Company specializing in manufacture of institutional and commercial casework, shall have a minimum of 5 years documented successful experience in the manufacture of casework of the type specified in this section. Furnish evidence of meeting this requirement at the request of the A/E.
- B. Installer Qualifications: Installer with 5 years experience who has successfully completed installation of casework similar in material, design and extent to that indicated for this project.
- C. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication, where possible, to ensure proper fitting of work. However, allow for the adjustments and fitting wherever taking of field measurements before fabrication might delay work.

1.04 SUBMITTALS. In accord with Section 01 33 00:

- A. Shop Drawings shall consist of floor plans indicating arrangement and relation to adjacent work and equipment plus complete elevations of casework. Additionally:
 - 1. Fabrication and installation drawings
 - 2. Details, frame type, hardware, anchorage and accessory items.
 - 3. Standard manufacturer's fabric and trim colors.
- B. Product Data, catalog cuts, details and samples of hardware as requested by Architect/Engineer.

- C. Color samples shall be submitted for selection by the Architect/Engineer.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Protect cabinet and countertops during transit, delivery, storage and handling to prevent damage, soiling and deterioration.
- B. Store cabinets and countertops at project site in spaces which have ambient conditions similar to those of the final installation. Storage areas shall be kept dry, heated with low relative humidity and away from construction work such as painting, wet work, grinding and similar operations.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. During and after installation of Work this Section, maintain same temperature and humidity conditions in building spaces as will occur after occupancy.

1.07 RELATED WORK

- A. Provide and install all necessary nailers and blocking as required for proper anchorage and attachment of all casework.

1.08 WARRANTY.

- A. Casework Manufacturer shall warrant for a period of **Three (3) Years** (commencing on the date of substantial completion), the product furnished under this section, to be free from defects in material and workmanship.

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Stevens Industries, Inc.
704 West Main Street
Teutopolis, IL 62467
217-857-6411

2.02 SURFACE MATERIAL

- A. Exposed finished ends, fronts, modesty panels and finished backs shall be faced with vertical grade PF-28 high pressure decorative laminated (HPL) tested under National Electrical Manufacturers Association (NEMA) LD3 -2005. Decorative laminate shall be thermoset to core using catalyzed polyvinyl acetate (PVA) glue with minimum 8- pounds per square inch pressure and average 180 degree F temperature.
 - 1. Panels with exterior PF-28 surfaces shall have 0.020 inch cabinet liner surface interior.
- B. Exposed doors and drawer fronts: shall be faced with vertical grade PF-28 high pressure decorative laminated (HPL) tested under National Electrical Manufacturers Association (NEMA) LD3 -2005. Decorative laminate shall be thermoset to core using catalyzed polyvinyl acetate (PVA) glue with minimum 8- pounds per square inch pressure and average 180 degree F temperature.
- C. Exposed interiors shall be permanently thermofused melamine laminate, fused to core using a minimum average pressure of 320 PSI and average 320 degree F. temperature. Thermofused melamine laminate shall meet ALA 1996 specification standards, as tested against the high pressure laminate NEMA LD 3-1995, VGS.028 specification standards. (Warranted for life against delamination.) or be faced with vertical grade PF-28 high pressure laminate (HPL), tested under National Electrical Manufacturers Association (NEMA) LD3 -2005.
- D. Semi-exposed and concealed surfaces shall be permanently thermofused melamine laminate or high pressure decorative plastic laminate cabinet liner, 0.020" thickness for balanced construction. Thermofused melamine laminate shall meet the ALA 1996 specifications standards, as tested against the high pressure laminate NEMA LD 3-1995, VGS.028 specification standards.

2.03 CORE MATERIALS

- A. Particle board with a minimum density of 45 lb/cu ft; M-2 industrial grade, when tested in accordance with ANSI A208.1-93 and/or ASTM D1037-91A.
- B. Medium density fiberboard with minimum density of 48 lb./cu ft; MD-21 grade and tested under ANSI 208.2 1994 standards.
- C. Industrial hardboard shall be pre-finished, 1/4 inches thick and composed of wood fibers, phenolic resin binders and moisture inhibitors that meet or exceed product standard ANSI/AHA A135.4 1988.

2.04 EDGING

- A. Door and drawer front : Edges shall have 0.020 inch flat edge extrusion banding to match face patterns and colors. Automated waterproof hot melt adhesive application and trimming, and shaped to provide radiused edges and radiused corners.
- B. Cabinet edges: Cabinet sides, top, bottom adjustable shelves shall be edged with 0.020 inch flat edge extrusion. Automated waterproof hot melt adhesive application and trimming.
- C. Drawer Components: 3/4 inch by 1 inch sides shall be edged with 0.020 inch flat edge extrusion. Automated waterproof hot melt adhesive application and trimming.
- D. All other interior components, shall be banded with a PVC extrusion, 0.020" in thickness, resistant to chip, crack and high impact. Edging shall have a satin finish with a UV cured top coat for additional durability. Edging to be machine applied with waterproof hot melt adhesive application and trimming.

2.05 HARDWARE

- A. Hinges shall be fully concealed from view when door is closed and shall permit 165 degree door swing. Hinge crank shall be heavy steel with a concealed, integral self-closing spring mechanism. Hinge boss shall be heavy stamp steel. Nylon inserts shall be provided in the door for positive screw attachment. Hinge attachment to sides of cabinet shall employ special 5mm threaded fasteners for additional strength. Hinges shall have three dimensional adjustment capability. Hinge shall have a lifetime guarantee warranted by the hinge manufacturer. Doors less than 48" in height shall have two (2) hinges each door; doors 48" - 63" in height shall have three (3) hinges each door; all doors greater than 63" in height shall have four (4) hinges each door.
- B. Door catches shall be a heavy-duty spring loaded, large diameter (17.5mm - 11/16") roller type catch mounted at bottom edge. All doors over 48" in height shall be provided with roller catch at both top and bottom of door.
- C. Catch strike plate shall be injection molded ABS, with an integrally molded engagement ridge. Strike plate shall also provide a wide face bumper insuring a positive door stop.
- D. Drawer and slide out shelves shall be suspended with bottom mount, side and bottom attached nylon roller epoxy coated steel slides to ensure quiet, smooth operation. Lateral stability is achieved thru a special formed captive profile. Slides shall have 100 lb. load rating, with both in and out drawer stop, 3" self close feature and a side adjustment cam allowing 3mm side to side alignment. Slides shall also be tested under the Scientific Equipment and Furniture Association (SEFA) 6.5 Drawer Cycle Test.
- E. Drawers specifically noted for full extension file use shall be suspended with bottom mount, side and bottom attached nylon roller epoxy coated steel slides to ensure quiet, smooth operation. Lateral stability is achieved thru a special formed captive profile. Slides shall have 150 lb. load rating, with both in and out drawer stop, and 3" self close feature. File drawer shall include extruded top mounted molded side rails to accept standard hanging file folders.
- F. Knee-space, pencil drawers, and keyboard trays, shall be designed to permit under counter or support frame mounting, with 100 lb. nylon roller epoxy coated steel slides.
- G. Hanger rods shall be heavy chrome plated oval tubing. Rod shall securely affixed to cabinet shelves in adjustable end wall sockets.
- H. Tote trays shall be of high impact polystyrene with smooth edges. Each tray to include an identification card holder and shall be suspended from rails securely attached to cabinet verticals.

- I. Shelf support clips for 1" thick adjustable shelves shall be injection molded clear polycarbonate. Support clips shall incorporate integral molded lock tabs to retain shelf from tipping or inadvertently being lifted out. Support clip shall have 5mm dia. double pin engagement into precision bored hole pattern in cabinet vertical members. Adjustment shall be 1 1/4 inch spacing. Clips shall have a molded ridge which provide pressure against edge of shelving to maintain positive pin engagement. Clip shall be designed in such a manner to provide means for permanent retention to shelf. Static test load must exceed 200 lb. per clip.
- J. Dividers that are 1/4" thick shall be fully adjustable and retained with injection molded clear polycarbonate clip.
- K. Locks shall be cylinder type, diecast, with six (6) disc tumbler mechanism. Locks shall have diecast body with dead bolt engagement tang. Locks shall be removable and interchangeable core for easy field and customer re-keying. Locks shall be master keyed and available key-alike of key-different with 250 standard key changes and the possibility of up to 2000 total changes.
- L. Sliding door track shall be double channel rigid PVC extrusion at both top and bottom of doors. Track shall be available in pearl, black or grey colors.

2.06 COMPONENTS

- A. Base, wall and tall cabinet ends shall be 3/4" thick particle board, laminated for balanced construction. Wall cabinet tops and bottoms include back groove and minimum four dowel pins per joint for insertion into cabinet ends. Wall cabinets ends shall be 3/4 inch thick with back groove and precision Computer Numerical Control (CNC) drill pattern for accurate location of fixed members, hardware and shelf supports. Wall cabinets shall have two integral dowel into end mounting frames.
- B. Base and tall cabinet tops and bottoms shall be 3/4" thick particle board, laminated for balanced construction, surfaced as described in Article 2.02, and edged as described in Article 2.04.
- C. Wall cabinet top and bottom shall be 1" thick particle board, laminated for balanced construction, surfaced as described in Article 2.02, and edged as described in Article 2.04.
- D. Vertical cabinet members shall be 3/4" thick particle board, laminated for balanced construction, surfaced as described in Article 2.02, and edged as described in Article 2.04.
- E. Cabinet backs shall be 1/4" thick pre-finished industrial hardboard.
- F. Frame rails shall be 3/4" thick x 3 3/4" wide particle board, laminated for balanced construction, surfaced as described in Article 2.02, and edged as described in Article 2.04.
- G. Fronts: Door and drawer fronts shall be 3/4 inch thick. Fronts shall be edged with 0.020 inch flat edge extrusion banding to match face patterns and colors. Automated waterproof hot melt adhesive application and trimming.
- H. Toe Kicks: Base shall be an integral base design. Construction of end panels, cabinet bottoms and horizontal toe kick members shall be integrally joined. Separate detached bases shall not be acceptable.
- I. Mounting rails incorporated in wall units, tall units, and base units shall be 3/4" thick x 3 3/4" wide particle board, with minimum two dowel pins per mounting frame end joint. Wall cabinets shall have rails positioned at the top and bottom. Tall cabinets shall have rails positioned at the top and intermediate location. Base cabinet shall have rails positioned at the top of unit.
- J. Adjustable Shelves: All adjustable shelves shall be 1" thick. Shelving shall have end 4 point support for spans under 27 inches and 5 point support with backs drilled to receive additional mid-span shelf support for spans over 27 inches.
- K. Drawers shall be full box design with a separate attached front to be provided. Drawer sides and ends shall be constructed of 3/4" medium density fiberboard with pearl or grey color thermofused melamine laminate and matching PVC top edges. Bottoms shall be 1/4" thick medium density fiberboard, trapped in groove four edges as well as mechanically attached.
- L. Sliding display doors shall be constructed of 1/4" thick distortion free glazing sheet. Center edge shall be capped with full length aluminum channel. Aluminum channel shall be custom extruded,

clear etched and anodized. Full length extruded aluminum channel shall be used on outer edges.

- M. Solid hinged doors, sliding doors and drawer fronts shall be 3/4" thick material of balanced construction, surfaced as described in Article 2.03. and edged as described in Article 2.04.
- N. File Drawers: Shall have formed cold rolled 16 gauge metal sides. Sides shall be powder coated and included formed in file hanger rails. File drawers shall be suspended on full extension ball bearing side mounting slides. Full extension ball bearing suspensions shall be BIFMA 120 pound load rated slides. ID tags are not necessary for fronts of file drawers.

2.07 COLOR SELECTIONS

- A. Exposed cabinet exteriors shall be chosen from vertical grade PF-28 high pressure decorative laminated (HPL) laminate selections as depicted in manufacturer's color selector guide. A minimum of seventy (70) colors and patterns shall be available as standard selection.
- B. Exposed doors and drawer fronts shall be chosen from vertical grade PF-28 high pressure decorative laminated (HPL) laminate selections as depicted in manufacturer's color selector guide. A minimum of seventy (70) colors and patterns shall be available as standard selection.
- C. Semi-exposed surfaces, including drawer box components, shall be finished selected from casework manufacturer's standard interior color selections.
- D. Exposed interior components, including both faces of shelves and interior face of backs shall be finished selected from casework manufacturer's standard interior color selections.
- E. Five knuckle hinges shall be available with black, pearl or chrome epoxy finish.
- F. Pulls shall be impact resistant, injection molded pulls in bent wire design, to be available in twenty (20) colors as selected from manufacturer's color selector.
- G. Casework of substitute brands with lesser amounts or more restrictive selection requirements will not be considered equal and shall be rejected.
- H. Finishes to be laminate manufacturer's matte, suede or equivalent finish as approved by architect. Samples will be reviewed by architect for color, texture and pattern only.

2.08 CONSTRUCTION

- A. Cabinet parts shall be accurately machined and precision bored for premium grade quality joinery construction, utilizing automatic machinery to ensure consistent sizing on modular cabinets. Cabinets shall be assembled under controlled case clamp conditions, assuring final cabinet squareness and proper joint compressions.
- B. Cabinet ends shall be bored to receive 8mm, industrial grade hardwood laterally fluted dowels with chamfered ends. Cabinet ends shall be prepared to receive adjustable shelf hardware at 32mm (approximately 1 1/4") centers. Door hinges and drawer slides shall be machined drilled to maintain vertical and horizontal alignment of components. Inset grooving with chamfer shall be machined 3/4" from rear edge to accept the 1/4" back. Base and tall units shall have one piece end panels continuous to floor for added load capabilities.
- C. Tops and bottoms shall be joined to cabinet ends using a minimum of six (6) dowels at each joint for twenty-four (24) inch deep cabinets and a minimum of four (4) dowels at each joint for twelve (12) inch deep cabinets. All dowels to be industrial grade hardwood, laterally fluted, with chamfered ends and 8mm in diameter. Top of base cabinet will be full depth. Inset grooving with chamfer shall be machined 3/4" from rear edge to accept the 1/4" back.
- D. Vertical dividers shall be bored to receive adjustable shelf hardware at 32mm (approximately 1 1/4") centers. Dividers shall be joined to tops and bottoms with 8mm diameter hardwood dowels.
- E. Frame rails shall be joined to ends with 8mm diameter hardwood dowels.
- F. Two (2) toe kick supports shall be inset from cabinet front and back edges, and doweled into cabinet ends with 8mm hardwood dowels.
- G. Mounting rails shall be fully concealed behind backs. Rails shall be 3/4" thick and fastened to

cabinet ends with 8mm hardwood dowels. Wall and tall cabinet shall incorporate two mounting rails. Wall cabinets shall have rails positioned at top and bottom. Tall cabinets shall have rails positioned at top and intermediate location. Base units shall have rail positioned in the upper back area.

- H. Back panels shall be 1/4" thick and inset 3/4" from rear edge of cabinet. Back shall be glued and continuously trapped in top, bottom and ends of cabinets.
- I. Drawer corner joints shall be interlocking dowel pin design. Hardwood dowel pins, 8mm diameter shall be inserted into drawer fronts and backs to fit into machined hole patterns in drawer sides. Bottoms shall be trapped into grooves on all four sides glued and mechanical fastened. Drawers shall be suspended on slides as described in Article 2.06.E.

2.09 LAMINATE TOPS

- A. Countertops shall be high pressure decorative laminate, thermoset to core using catalyzed PVA glue with minimum average pressure of 80 pounds per square inch and average 180 degree F temperature. Decorative laminate shall meet NEMA LD3-2005 PF-42 specification standard.
- B. Back and side splashed shall be surfaced with the same laminate as the countertop.
- C. Countertops shall be square self-edge.
- D. Laminate tops shall be solid particle board core structures and laminated with backer sheet.

2.10 FABRICATION

- A. Fabricated tops and accessories in accordance with manufacturer's recommendations, approved Shop Drawings, and SEFA 3.

3. EXECUTION

3.01 INSTALLATION

- A. Examine the job site and the conditions under which the work in this section is to be performed, and notify the A/E in writing of any unsatisfactory conditions. Do not proceed with work under this section until unsatisfactory conditions have been corrected in an acceptable manner.
- B. Casework, countertops and related materials shall be conditioned to average prevailing humidity condition in installation areas prior to start of work.
- C. Install casework and countertops with factory-trained supervision authorized by manufacturer. Casework shall be installed plumb, level, true and straight with no distortions. (Shim as required.) Securely attached to building structure with anchorage devices of appropriate type, size and quantity to meet applicable codes, specifications and safety conditions. Where laminate clad casework and countertops abuts other finished work, scribe and trim to accurate fit.
- D. Scribe to adjacent surfaces in accordance with manufacturer's recommendations.
- E. Fasten tops to supporting construction with adhesives appropriate for use with adjoining construction and as recommended by manufacturer.
- F. Adjust casework and hardware so that doors and drawers operate smoothly without warp or bind. Lubricate operating hardware as recommended by the manufacturer.
- G. Form field joints using manufacturer's recommended adhesives. Form joints to be inconspicuous and nonporous.
- H. Repair, or remove and replace defective work as directed upon completion of installation.
- I. Clean plastic surfaces, repair minor damage per plastic laminate manufacturer's recommendations. Replace other damaged parts of units.
- J. Protect casework and countertops from damage by other trades until Substantial Completion.

- K. Cover casework with 4-mil polyethylene film for protection against soiling and deterioration during remainder of construction period.
- L. Install sinks level and plumb, as per manufacturers recommendations.
- M. Casework manufacturer shall coordinate hole location for plumbing fittings with plumbing contractor.

3.02 CLEANING

- A. General: Immediately upon completion of installation, clean cabinets in accordance with manufacturer's recommended cleaning methods.
- B. Remove surplus materials, rubbish and debris resulting from installation as work progresses and upon completion of work.
- C. Adjust all movable components to operate freely and smoothly. Clean all exposed surfaces.

3.03 PROTECTION

- A. Protect installed materials to prevent damage from other trades. Use materials that may be easily removed without leaving residue or permanent stains.

END 12 30 40

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. Valves.
 - 2. Supports and anchors.

2. PRODUCTS

2.01 VALVES

- A. General:
 - 1. Provide valves of same manufacturer throughout where possible.
 - 2. Provide valves with manufacturer's name and pressure rating clearly marked on outside of body.
- B. Valve Connections:
 - 1. Provide valves suitable to connect to adjoining piping as specified for pipe joints. Use pipe size valves.
 - 2. Thread pipe sizes 2 inches and smaller.
 - 3. Flange pipe sizes 2-1/2 inches and larger.
 - 4. Solder or screw to solder adaptor for copper tubing.
- C. Ball Valves:
 - 1. Up to 2 inches: Bronze body, glass reinforced TFE seats, chrome plated carbon steel ball. solder or threaded.
- D. Globe Valves:
 - 1. Up to 2 inches: Bronze body, bronze trim, threaded or union bonnet, Buna-N composition disc, solder or threaded ends.
 - 2. Over 2 inches: Cast iron body, bronze trim, outside screw and yoke, flanged.
- E. Check Valves:
 - 1. Up to 2 inches: Bronze body and cap, bronze seat, Buna-N disc, solder or threaded ends.
 - 2. Over 2 inches: Cast iron body, bolted cap, bronze or cast iron disc, renewable disc seal and seat, flanged.
- F. Plug Cocks:
 - 1. Up to 2 Inches: Iron body, brass plugs and washers, air tested, solder or screwed ends.
 - 2. Over 2 Inches: Iron body and plug, pressure lubricated type, flanged ends.
- G. Pressure Ratings: Unless otherwise indicated, use valves suitable for 125 minimum psig WSP and 450° F and maximum 200 psig and 250° F.
- H. Valve Operators:
 - 1. Provide suitable operators for all valves.
 - a. Ball valve: Lever handle.
 - b. Globe valve: Hand wheel.
 - c. Plug cock: Plug cock wrench.
- I. Drain Valves:
 - 1. Bronze compression stop with nipple and cap or hose thread.

2.02 PIPE HANGERS AND SUPPORTS

- A. Hangers for Pipe Sizes ½ to 1-1/2 Inch: Malleable iron or Carbon steel, adjustable swivel, split ring.
- B. Hangers for all Pipe Sizes 2 to 4 Inches, and cold pipe sizes up to 10 inches: Carbon steel, adjustable, clevis.
- C. Multiple or Trapeze Hangers: Steel channels with welded spacers and hanger rods.

- D. Copper Pipe Support: Carbon steel ring, adjustable, copper plated.
- E. Shield for Insulated Piping 2 Inches and Smaller: 18 gage galvanized steel shield over insulation in 180 degree segments, minimum 12 inches long at pipe support.

2.03 HANGER RODS: Steel Hanger Rods: Threaded both ends, threaded one end, or continuous threaded.

2.04 SLEEVES

- A. Sleeves for Pipes Through Walls, and Footings: Form with steel pipe or 18 gage galvanized steel.
- B. Stuffing Insulation: Glass fiber type, noncombustible.
- C. Caulk: Acrylic sealant.

2.05 FABRICATION

- A. Size sleeves large enough to allow for movement due to expansion and contraction. Provide for continuous insulation wrapping.
- B. Design hangers without disengagement of supported pipe.
- C. Provide copper plated hangers and supports for copper piping.

2.06 FINISH: Prime coat exposed steel hangers and supports. Hangers and supports located in crawl spaces, pipe shafts, and suspended ceiling spaces are not considered exposed.

3. EXECUTION

3.01 INSTALLATION

- A. Install valves with stems upright or horizontal, not inverted.
- B. Install ball valves for shut-off and isolating service, to isolate equipment, part of systems, or vertical risers.
- C. Use plug cocks for gas service.
- D. Provide drain valves at main shut-off valves, and low points of piping and apparatus.

3.02 PIPE HANGERS AND SUPPORTS

- A. Support horizontal piping as follows:

<u>PIPE SIZE</u>	<u>MAX. HANGER SPACING</u>	<u>HANGER DIAMETER</u>
½ to 1¼ inch	6'-6"	3/8"
1-1/2 to 2 inch	10'-0"	3/8"
2-1/2 to 3 inch	10'-0"	1/2"
4 to 6 inch	10'-0"	5/8"
PVC (All Sizes)	6'-0"	3/8"

- B. Install hangers to provide minimum ½ inch space between finished covering and adjacent work.
- C. Place a hanger within 12 inches of each horizontal elbow.
- D. Use hangers with 1-1/2 inch minimum vertical adjustment.
- E. Where several pipes can be installed in parallel and at same elevation, provide multiple or trapeze hangers.
- F. Support riser piping independently of connected horizontal piping.

3.03 SLEEVES

- A. Set sleeves in position in formwork. Provide reinforcing around sleeves.
- B. Install chrome plated steel escutcheons at finished surfaces.

END 22 05 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. Piping insulation on domestic water piping.
 - 2. Piping insulation on sanitary piping under wall hung lavatories.

1.02 REFERENCES

- A. ASTM E84 - Surface Burning Characteristics of Building Materials.
- B. NFPA 255 - Surface Burning Characteristics of Building Materials.
- C. UL 723 - Surface Burning Characteristics of Building Materials.

1.03 QUALITY ASSURANCE

- A. Applicator: Company specializing in piping insulation application with three years minimum experience.
- B. Materials: Flame spread/smoke developed rating of 25/50 in accordance with ASTM E84 and UL 723.

1.04 SUBMITTALS

- A. Submit product data under including product description, list of materials and thickness for each service, and locations.

2. PRODUCTS

2.01 DOMESTIC WATER PIPING INSULATION

- A. Glass Fiber Insulation; ANSI/ASTM C547; 'k' value of 0.24 at 75°F, noncombustible.

2.02 PIPE JACKETS

- A. Interior Applications:
 - 1. Vapor Barrier Jackets: Kraft reinforced foil vapor barrier with self-sealing adhesive joints.
 - 2. PVC Jackets: one piece, pre-molded type.

2.03 LAVATORY INSULATION KIT

- A. Smooth vinyl coated surface insulated with closed cell foam 3/16" thick, ADA compliant. White U/V inhibited surface with antimicrobial coating. Insulation shall comply with ASTM-E-84..

3. EXECUTION

3.01 PIPING INSULATION

- A. Preparation: Install materials after piping has been tested and approved.
- B. Installation:
 - 1. Install materials in accordance with manufacturer's instructions.
 - 2. In exposed piping, locate insulation and cover seams in least visible locations.
 - 3. On insulated piping: Insulate flanges, unions, strainers, valves, and pumps.
 - 4. Neatly finish insulation at supports, protrusions, and interruptions.
 - 5. Install insulation as scheduled and metal jackets on exposed exterior piping.
 - 6. Do not insulate below grade domestic water piping.
 - 7. Apply insulation as close as possible to pumps by grooving, scoring, and beveling insulation, if necessary.
 - 8. Do not insulate over nameplate or ASME stamps. Bevel and seal insulation around such.
- C. Pipe Insulation Schedule:

DIVISION 22 - PLUMBING
Section 22 07 00 - Plumbing Insulation

<u>Description of Piping</u>	<u>Pipe Size</u>	<u>Insulation Data Thickness</u>
Domestic Hot Water	All	1"
Domestic Cold Water	All	1"

3.02 JACKETS

- A. Interior Piping.
 - 1. Provide vapor barrier jackets.
 - 2. Insulate fittings, joints, and valves with insulation of like material and thickness as adjoining pipe and finish with glass cloth and vapor barrier adhesive. Provide PVC jackets.

3.03 LAVATORY INSULATION KIT

- A. All lavatory fixtures shall have the P-trap, and supply piping shall be insulated for ADA compliance. Provide a molded safety cover conforming to ANSI A177.1.

END 22 07 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. Plumbing piping.
 - 2. Plumbing specialties.
 - 3. Plumbing fixtures.
 - 4. Plumbing equipment.
 - 5. Natural Gas piping.

1.02 REFERENCES

- A. ANSI/ASME B16.3 - Malleable Iron Threaded Fittings Class 150 NS 300.
- B. ANSI/ASME Sec. 9 - Welding and Brazing Qualifications.
- C. ANSI/ASTM B32 - Solder Metal.
- D. ASTM A53 - Pipe, Steel, Black and Hot-Dipped Zinc Coated, Welded and Seamless.
- E. ASTM A120 - Pipe, Steel, Black and Hot-Dipped Zinc Coated (Galvanized), Welded and Seamless, for Ordinary Uses.
- F. ASTM B88 - Seamless Copper Water Tube.
- G. AWWA C601 - Standard Methods for the Examination of Water and Waste Water.
- H. ASTM B306 - Copper Drainage Tube (DWV)
- I. ASTM D2680 - Acrylonitrile-Butadiene-Styrene (ABS) Composite-Sewer Piping.
- J. ASTM D2751 - Acrylonitrile-Butadiene-Styrene (ABS) Sewer Pipe and Fittings.
- K. ASTM D2665 - Poly Vinyl Chloride (PVC) plastic Drain, Waste, and Vent Pipe and Fittings.
- L. ASTM D2729 - Poly Vinyl Chloride (PVC) Sewer Pipe and Fittings.
- M. ANSI/ASSE 1011 - Hose Connection Vacuum Breakers.
- N. ANSI/ASSE 1019 - Wall Hydrants, Frost Proof Automatic Draining Anti-Backflow Types.
- O. ANSI A112.21.1 - Floor Drains.
- P. ANSI A112.18.1 - Finished and Rough Brass Plumbing Fixture Fittings.
- Q. ANSI A112.19.2 - Vitreous China Plumbing Fixtures.
- R. ANSI A112.19.3 - Stainless Steel Plumbing Fixtures.
- S. ANSI A112.19.5 - Trim for Water Closet - Bowls, Tanks, and Urinals.
- T. ANSI/NFPA 70 - National Electrical Code.

1.03 QUALITY ASSURANCE

- A. Each length of pipe fitting, trap, fixture or device used shall be stamped or indelibly marked with the weight and quality thereof, and the makers name or mark.
- B. Manufacturer: For each product throughout specified, provide by same manufacturer.

1.04 SUBMITTALS: Submit product data to include, but not limited to materials, finishes, load ratings, and dimensional information.

1.05 STORAGE AND HANDLING: Store and protect products on site to avoid damage.

1.06 WARRANTY. Provide one year parts and labor on all plumbing fixtures and equipment.

A. Water Heater: Five year warranty on defective equipment

2. PRODUCTS

2.01 PLUMBING PIPING (See Division 33 for Water and Sanitary outside of building)

- A. Sanitary Sewer Piping, Below Grade:
 - 1. ABS Pipe: ASTM D2661 or D2751. Fittings: ABS. Joints: ASTM D2235, solvent weld.
 - 2. Schedule 40 PVC Pipe: ASTM D2665. Fittings: PVC. Joints: ASTM D2855, solvent weld.
- B. Sanitary Sewer and Vent Piping, Above Grade:
 - 1. ABS Pipe: ASTM D2661 or D2751. Fittings: ABS. Joints: ASTM D2235, solvent weld.
 - 2. Schedule 40 PVC Pipe: ASTM D2665. Fittings: PVC. Joints: ASTM D2855, solvent weld.
- C. Water Piping, Above Grade:
 - 1. Copper Tubing: ASTM B88, Type L, hard drawn. Fittings: ANSI/ASME B16.23, cast brass, or ANSI/ASME B16.29, wrought copper. Joints: ANSI/ASTM B32, solder, Grade 95TA.
- D. Water Piping, Below Grade (Under Building):
 - 1. Copper tubing: ASTM B88, Type K, hard drawn. Fittings: ANSI/ASME B16.29, wrought copper. Joints: ANSI/ASTM B32, solder, Grade 95TA.
- E. Natural Gas Piping, Above Grade:
 - 1. Steel Pipe: ASTM A53 or A120, schedule 40 black. Fittings: ANSI/ASME B163, malleable iron, or ASTM 234, forged steel welding type. Joints: Screwed for pipe two inches and under; ANSI/AWS D1.1, welded for pipe over two inches.
- F. Natural Gas Piping, Below Grade:
 - 1. Polyethylene Pipe: ASTM D2513, SDR 11.5. Fittings: ASTM D2683 or ASTM D2513 socket type. Joints: Fusion welded.
- G. HVAC Condensate piping:
 - 1. Plastic Pipe: ASTM D1785. Schedule 40 PVC; Fittings: PVC, ASTM D2665; Joints: Solvent Weld, ASTM D2564.
- H. Flanges, Unions, and Couplings:
 - 1. Pipe Size 2 Inches and Under: 150 psig malleable iron unions for threaded ferrous piping; bronze unions for copper pipe, soldered joints.
 - 2. Pipe Size Over 2 Inches: 150 psig forged steel slip-on flanges for ferrous piping; bronze flanges for copper piping; 1/16 inch thick preformed neoprene bonded to non-combustible material.
 - 3. Dielectric Connections: Union with galvanized or plated steel threaded end, copper solder end, water impervious isolation barrier.

2.02 PLUMBING SPECIALTIES See Plumbing Fixture Schedule on drawings.

2.03 PLUMBING FIXTURES See Plumbing Fixture Schedule on drawings.

2.04 PLUMBING EQUIPMENT See Plumbing Fixture Schedule on drawings.

3. EXECUTION

3.01 PLUMBING PIPING

- A. Preparation:
 - 1. Ream pipe and tube ends. Remove burrs.
 - 2. Remove scale and dirt, on inside and outside, before assembly.
 - 3. Prepare piping connections to equipment with flanges or unions.
- B. Installation:

1. Provide non-conducting dielectric connections wherever jointing dissimilar metals.
2. Route piping in orderly manner and maintain gradient.
3. Install piping to conserve building space and not interfere with use of space.
4. Group piping whenever practical at common elevations.
5. Install piping to allow for expansion and contraction without stressing pipe, joints, or connected equipment.
6. Provide clearance for installation of insulation and access to valves and fittings.
7. Slope water piping and arrange to drain at low points.
8. Establish elevations of buried piping outside the building to ensure not less than 3 ft. of cover.
9. Establish invert elevations, slopes for drainage to 1/8 inch per foot minimum. Maintain gradients.
10. Bury a tracer wire adjacent to all nonmetallic gas piping. Provide access at valve boxes and terminate above ground at each end.
11. Install air chambers on hot and cold water supply on each fixture or group of fixtures. Air chambers shall be at least 12 inches in length and the same diameter as the fixture supply. Manufactured water hammer arrestors may be used in-lieu of air chambers they shall be sized to have an equivalent volume as the air chamber.

C. Application:

1. Install unions downstream of valves and at equipment or apparatus connections.
2. Install gate or ball valves for shut-off and to isolate equipment.

D. Testing:

1. Test all piping systems in accordance with Illinois Plumbing Code.
2. Test gas piping for leaks before putting into service.

3.02 PLUMBING SPECIALTIES

- A. Preparation: Coordinate forming of floor construction to receive drains and clean-outs to required invert elevations.
- B. Installation and Application:
1. Install specialties in accordance with manufacturer's instructions to permit intended performance.
 2. Extend clean-outs to finished floor or wall surface. Lubricate threaded clean-out plugs with mixture of graphite and linseed oil. Ensure clearance at clean-out for rodding of drainage system.
 3. Encase exterior clean-outs in concrete flush with grade.

3.03 PLUMBING FIXTURES

A. Inspection:

1. Review millwork shop drawings. Confirm location and size of fixtures and openings before rough-in and installation.
2. Verify adjacent construction is ready to receive rough-in work of this Section.

B. Installation:

1. Install each fixture with trap, easily removable for servicing and cleaning.
2. Provide chrome plated rigid or flexible supplies to fixtures with stops, reducers, and escutcheons.
3. Install components level and plumb.
4. Install and secure fixtures in place with wall supports, wall carriers (as required) and bolts.
5. Seal fixtures to wall and floor surfaces with sealant.
6. Sink shall be installed using a compression style clip and bolt mount. No snap ring installations will be allowed.
7. Provide offset traps for handicap fixtures in order for piping to fit behind casework.

C. Adjusting and Cleaning:

1. Adjust stops or valves for intended water flow rate to fixtures without splashing, noise, or overflow.
2. At completion clean plumbing fixtures and equipment.

D. Fixture Rough-In Schedule:

1. Rough-in fixture piping connections in accordance with following table of minimum sizes for

particular fixtures.

Fixture	Hot Water	Cold Water	Waste	Vent
Water Closet	N/A	1/2"	3"	2"
Lavatory	1/2"	1/2"	1½"	1½"
Sink	½"	½"	1½"	1½"
Laundry Tub	1/2"	1/2"	2"	1½"
Interior Hose Bibb	N/A	3/4"	N/A	N/A
Exterior Hose Bibb	N/A	3/4"	N/A	N/A
Shower	½"	½"	2"	1½"
Floor Drain	N/A	N/A	2"	1½"
Water Heater	3/4"	3/4"	N/A	N/A
Oil Separator	N/A	N/A	3"	3"
Washer Box	½"	½"	1½"	1½"

3.04 PLUMBING EQUIPMENT

- A. Installation:
 - 1. Install water heaters in accordance with manufacturer's instructions and to UL and NFPA requirements.
 - 2. Coordinate plumbing piping, and electrical work to achieve operating system.

3.05 DISINFECTION OF DOMESTIC WATER PIPING SYSTEM

- A. Prior to starting work, verify system is complete, flushed and clean.
- B. Inject disinfectant, free chlorine in liquid, powder, tablet or gas form, throughout system to obtain 50 to 80 mg/L residual.
- C. Bleed water from outlets to ensure distribution and test for disinfectant residual at minimum 15 percent of outlets.
- D. Maintain disinfectant in system for 24 hours.
- E. If final disinfectant residual tests less than 25 mg/L, repeat treatment.
- F. Flush disinfectant from system until residual equal to that of incoming water or 1.0 mg/L.
- G. Take samples no sooner than 24 hours after flushing, from 5 percent of outlets and from water entry, and analyze in accordance with AWWA C601.

3.06 SERVICE CONNECTIONS

- A. Provide connection to sanitary sewer services and domestic water. Before commencing work check invert elevations required for sewer connections, confirm inverts and ensure that these can be properly connected with slope for drainage and cover to avoid freezing.
- B. Provide for connection to existing gas service. Equipment shall have initial minimum pressure of 7 inches wg.

END 22 40 00

DIVISION 23 - HEATING, VENTILATING, AND AIR CONDITIONING
Section 23 05 93 - Air Systems Testing, Adjusting & Balancing

1. GENERAL

1.01 WORK INCLUDES:

- A. Base Bid: Contractor shall provide testing, adjusting and balancing of air system.

1.02 JOB CONDITIONS

- A. Heating, ventilating, air conditioning equipment shall be completely installed and in continuous operation to accomplish the testing, adjusting and balancing work specified.
- B. Perform testing, adjusting and balancing when outside conditions approximate design conditions for heating and cooling functions or when system is operating at design capacity.

1.03 QUALITY ASSURANCE

- A. Only qualified personnel shall perform testing and balancing work.
- B. Submit evidence that the personnel who will perform the testing and balancing of the project systems are qualified personnel for review and approval.
- C. Perform all corrective measures caused by faulty installation. Retest, readjust and rebalance system until satisfactory results are achieved.

1.04 DEFINITION

- A. Qualified personnel are Personnel who have been certified by one of the following organizations:
 - 1. AABC-Associated Air Balance Council.
 - 2. Certified TBAB-Certified Testing, Balancing and Adjusting Bureau.
 - 3. NEBB-National Environmental Balancing Bureau, Illinois Chapter.
 - 4. SMARTA-Sheet Metal, Air Conditioning & Roofing Contractors Trade Association of Illinois.
 - 5. TABIC-Test and Balancing Institute for Certification.

1.05 SUBMITTALS

- A. Submit a report containing all test data and other related information recorded during testing and balancing, placed on appropriate forms for Architect/Engineer review and approval. Reports shall certify that the methods used and results achieved are as specified.
- B. Provide reports in letter size, 3-ring binder manuals, complete with index page and indexing tabs, with cover identification at front and side. Include set of reduced drawings with air outlets and equipment identified to correspond with data sheets, and indicating humidistat and thermostat locations.

1.06 REPORT FORMS

- A. Forms shall include the following information:
 - 1. Title Page:
 - a) Company name.
 - b) Company address.
 - c) Company telephone number.
 - d) Project name.
 - e) Project location.
 - f) Project architect.
 - g) Project engineer.
 - h) Project contractor.
 - i) Project altitude.
 - 2. Instrument List:
 - a) Instrument.
 - b) Manufacturer.
 - c) Model.
 - d) Serial number.
 - e) Range.
 - f) Calibration date.
 - 3. Air Moving Equipment:
 - a) Location.

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- b) Manufacturer.
- c) Model.
- d) Air flow, specified and actual.
- e) Outside air flow, specified and actual.
- f) Total static pressure (total external), specified and actual.
- g) Inlet pressure.
- h) Discharge pressure.
- 4. Air Distribution Test Sheet:
 - a) Air terminal number.
 - b) Room number/location.
 - c) Terminal type.
 - d) Terminal size.
 - e) Area factor.
 - f) Design velocity.
 - g) Design air flow.
 - h) Test (final) velocity.
 - i) Test (final) air flow.
 - j) Percent of design air flow

2. PRODUCTS

2.01 TESTING EQUIPMENT

- A. Provide instruments required for testing, adjusting, and balancing operations. Make instruments available to Engineer or Engineer's representative to facilitate spot checks during testing.
- B. Provide additional balancing instruments as required.

3. EXECUTION

3.01 EXAMINATION

- A. Verify that systems are complete and operable before commencing work. Ensure the following conditions are met:
 - 1. Systems are started and operating in a safe and normal condition.
 - 2. Temperature control systems are installed complete and operable.
 - 3. Proper thermal overload protection is in place for electrical equipment.
 - 4. Final filters are clean and in place.
 - 5. Duct systems are clean of debris.
 - 6. Fans are rotating correctly.
 - 7. Fire and smoke dampers are in place and open.
 - 8. Air coil fins are cleaned and combed.
 - 9. Access doors are closed and duct end caps are in place.
 - 10. Air outlets are installed and connected.
 - 11. Duct system leakage is minimized.
- B. Report any defects or deficiencies noted during performance of services to A/E.

3.02 INSTALLATION TOLERANCES

- A. Air Handling Systems: Adjust to within plus or minus 5 percent of design for supply systems and plus or minus 10 percent of design for return and exhaust systems.
- B. Air Outlets and Inlets: Adjust total to within plus 10 percent and minus 5 percent of design to space. Adjust outlets and inlets in space to within plus or minus 10 percent of design.
- C. Exhaust Fans: Adjust to within plus or minus 10 percent of design.

3.03 ADJUSTING

- A. Ensure recorded data represents actual measured or observed conditions.
- B. Permanently mark settings of valves, dampers, and other adjustment devices allowing settings to be

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restored. Set and lock memory stops.

- C. After adjustment, take measurements to verify balance has not been disrupted or that such disruption has been rectified.
- D. Leave systems in proper working order, replacing belt guards, closing access doors, closing doors to electrical switch boxes, and restoring thermostats to specified settings.
- E. At final inspection, recheck random selections of data recorded in report.

3.04 AIR SYSTEM PROCEDURE

- A. Adjust air handling and distribution systems to provide required or design supply, return, and exhaust air quantities. Perform this work with cooling system energized where applicable to obtain the extra resistance of wet coils.
- B. Make air quantity measurements in ducts by Pitot tube traverse of entire cross sectional area of duct.
- C. Measure air quantities at air inlets and outlets.
- D. Adjust distribution system to obtain uniform space temperatures free from objectionable drafts and noise.
- E. Use volume control devices to regulate air quantities only to extend that adjustments do not create objectionable air motion or sound levels. Effect volume control by duct internal devices.
- F. Vary total system air quantities by adjustment of fan speeds. Provide drive changes required. Vary branch air quantities by damper regulation.
- G. Provide system schematic with required and actual air quantities recorded at each outlet or inlet.
- H. Measure static air pressure conditions on air supply units, including filter and coil pressure drops, and total pressure across the fan. Make allowances for dirty filters.
- I. Adjust outside air automatic dampers, outside air, return air, and exhaust dampers for design conditions.
- J. Measure temperature conditions across outside air, return air, and exhaust dampers to check leakage.
- K. Measure building static pressure and adjust supply, return, and exhaust air systems to provide required relationship between each to maintain approximately 0.05 inches positive static pressure.

3.02 REPORT SUBMITTAL

- A. Fill in test results on appropriate forms.
- B. Submit three (3) certified copies of test reports for approval.
- C. Include in the report a list of instruments used and the last date of calibration.

3.03 SCHEDULE

- A. Equipment requiring TAB work:
 - 1. Furnace.
 - 2. Grilles, registers, and diffusers.
 - 3. Exhaust fans.

END 23 05 93

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. Ductwork insulation.
 - 2. Piping insulation for refrigerant piping

1.02 REFERENCES

- A. ASTM E84 - Surface Burning Characteristics of Building Materials.
- B. NFPA 255 - Surface Burning Characteristics of Building Materials.
- C. UL 723 - Surface Burning Characteristics of Building Materials.

1.03 QUALITY ASSURANCE

- A. Applicator: Company specializing in piping insulation application with three years minimum experience.
- B. Materials: Flame spread/smoke developed rating of 25/50 in accordance with ASTM E84 and UL 723.

1.04 SUBMITTALS

- A. Submit product data under including product description, list of materials and thickness for each service, and locations.

2. PRODUCTS

2.01 DUCTWORK INSULATION

- A. Duct Liner (spiral and rectangular): Flexible glass fiber; ANSI/ASTM C553; 'k' value of 0.24 at 75° F 1.5 lb/cu ft minimum density; coated air side for maximum 4,000 ft/min air velocity.
- B. Adhesives: Waterproof type.
- C. Impale Anchors: Galvanized steel, 12 gage, self-adhesive pad.
- D. Joint Tape: Glass fiber cloth, open mesh.
- E. Tie Wire: Annotated steel, 16 gage.

2.02 REFRIGERANT PIPING INSULATION

- A. Closed cell elastomeric; flexible, rubber; maximum thermal conductivity value of 0.27 Btu-in./h-ft²-°F at 75°F.
- B. Adhesives shall be the insulation manufacturer's recommended contact adhesive.

3. EXECUTION

3.01 DUCTWORK INSULATION

- A. Preparation: Clean surfaces for adhesives.
- B. Installation:
 - 1. Liner Application:
 - a. Adhere insulation with adhesive for 100 percent coverage. Secure insulation with

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Section 23 07 00 - Mechanical Insulation

mechanical fasteners on 15 inch centers maximum on top and side of ductwork with dimension exceeding 20 inches. Seal and smooth joints. Do not use nail-type fasteners. Seal vapor barrier penetrations by mechanical fasteners with vapor barrier adhesive.

- b. Ductwork dimensions indicated are net inside dimensions required for air flow. Increase ductwork to allow for insulation thickness
2. Laminated insulation must be installed in compression and sealed with contact adhesive. Cover the seams using white seal tape.
3. Install in accordance with the manufacturer's instruction

C. Schedule:

Ductwork:

Interior Rectangular Supply	1" thick duct liner
Interior Rectangular Return Air Ducts and Transfers.....	1" thick duct liner
Outside Air Intake and Relief Ducts.....	1" thick duct liner
Exhaust Air Ducts.....	None
Flexible Duct (only in hidden areas - max. 5 foot).	R-6 equivalent minimum

3.02 PIPING INSULATION

A. Preparation: Install materials after piping has been tested and approved.

B. Installation:

1. Install materials in accordance with manufacturer's instructions.
2. In exposed piping, locate insulation and cover seams in least visible locations.
3. On insulated piping: Insulate flanges, unions, strainers, valves, and pumps.
4. Neatly finish insulation at supports, protrusions, and interruptions.
5. Install insulation as scheduled and metal jackets on exposed exterior piping.
6. Do not insulate below grade domestic water piping.
7. Apply insulation as close as possible to pumps by grooving, scoring, and beveling insulation, if necessary.
8. Do not insulate over nameplate or ASME stamps. Bevel and seal insulation around such.

C. Pipe Insulation Schedule:

<u>Description of Piping</u>	<u>Pipe Size</u>	<u>Insulation Data</u>
		<u>Thickness</u>
Refrigerant Liquid	All	1"
Refrigerant Vapor	All	1"

END 23 07 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor to provide:
 - 1. Complete system of automatic controls, including programmable thermostats, wiring, etc. for furnace/condensing unit.

1.02 SUBMITTALS

- A. Submit shop drawings and product data including wiring diagram and programming guide.

2. PRODUCTS

2.01 GENERAL

- A. Furnish and install products as required to provide a complete control system. This includes, but is not necessarily limited to the following: sensors, controller, wiring, raceway, etc.

2.02 THERMOSTAT/CONTROLLER (Furnace/Condensing Unit combination)

- A. Acceptable Manufacturers
 - 1. Carrier
 - 2. Lennox
 - 3. Trane
 - 4. Honeywell
 - 5. Johnson
- B. Controller shall be low voltage 24 VAC, with digital thermometer, with subbase for heating and cooling (HEAT-AUTO-COOL) and fan switch (ON-AUTO), and include 7-day programable (Mon.-Fri., Sat., Sun.) 40° - 80° F degree range. Controller shall include modes for occupied/unoccupied with manual override.
- C. Controllers shall include contacts for controlling furnace/condensing unit combination and electronic damper actuators.
- D. Individual unit controllers shall be capable of performing the following sequence of operation:

Cooling Mode

- A. Definition: If the controller experiences a temperature above its cooling set point, (initial set point 75°F), the unit is said to be in cooling mode.
- B. Fan:
 - 1. Shall not run unless the temperature rises above the setpoint. The setpoint temperature shall be adjustable. (Initial set point shall be 80°F.)
 - 2. Once the temperature drops below the unoccupied setpoint, the fan shall be commanded off.
- C. Cooling:
 - 1. Compressors shall cycle to maintain space temperature set point (initial set point 75°F).

Heating Mode

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- A. Definition: If the controller experiences a temperature below its heating set point (initial set point 68°F), the unit is said to be in heating mode.
- B. Fan:
 - 1. Shall not run unless the temperature of the zone drops below the low limit. (Initial set point shall be 68°F.)
 - 2. Once the temperature rises above the unoccupied setpoint, the fan shall be commanded off.
- C. Heating:
 - 1. Gas heat exchanger shall cycle to maintain space temperature (initial set point 68°F).

3. EXECUTION

3.01 INSTALLATION

- A. Equipment: Install all system components and appurtenances in accord with the manufacturer's printed instructions.
- B. Do not install conduit on roof surfaces unless specifically indicated on drawings.
- C. Mount thermostat/controllers 48" A.F.F., unless otherwise noted.

3.02 TRAINING

- A. General:
 - 1. The Contractor shall provide training of Using Agency designated personnel. Such training shall be for the purpose of teaching the following:
 - a. System architecture.
 - b. Purposes and features of individual system components.
 - c. Overview of all control and related programs in the system.
 - d. Proper operation, maintenance and troubleshooting of the system.
 - 2. One of the requirements for Substantial Completion on this project is that all training be complete.
- B. Training to take place after the system is operational to the extent that realistic instruction can take place using the front end equipment and distributed control units.
- C. Coordinate training periods with Using Agency.
- D. Contractor shall provide printed materials which illustrate and explain the discussion topics.

END 23 09 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor to provide:
 - 1. Piping.
 - 2. Refrigerant.
 - 3. Moisture and liquid indicators.
 - 4. Filter-driers.

1.02 REFERENCES

- A. ANSI/ARI 495 - Refrigerant Liquid Receivers.
- B. ANSI/ARI 710 - Liquid Line Dryers.
- C. ANSI/ASHRAE 34 - Number Designation of Refrigerants.
- D. ANSI/ASME B16.22 - Wrought Copper and Copper Alloy Solder Joint Pressure Fittings.
- E. ANSI/ASME B16.26 - Cast Copper Alloy Fittings for Flared Copper Tubes.
- F. ANSI/ASME B31.5 - Refrigeration Piping.
- G. ASTM B280 - Seamless Copper Tube for Air Conditioning and Refrigeration Field Service.

1.03 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store piping and specialties in shipping containers with labeling in place.
- B. Protect piping and specialties from entry of contaminating material by leaving end caps and plugs in place until installation.

2. PRODUCTS

2.01 PIPING

- A. Copper Tubing: ASTM B280, Type ACR hard drawn.
 - 1. Fittings: ANSI/ASME B16.22 wrought copper.
 - 2. Joints: ANSI/ASTM B32, solder Grade 95TA.
- B. Copper Tubing to 7/8 inch OD: ANSI/ASTM B88, Type k, annealed.
 - 1. Fittings: ANSI/ASME B16.26 cast copper.
 - 2. Joints: Flared.

2.02 REFRIGERANT: ANSI/ASHRAE 34; R454B .

2.03 MOISTURE AND LIQUID INDICATORS: Indicators: Single port type, UL listed, with copper or brass body, flared or solder ends, sight glass, color coded paper moisture indicator and plastic cap; for maximum working pressure of 500 psi, and maximum temperature of 200°F.

2.04 FILTER-DRIERS: Permanent Straight Thru Type: ANSI/ARI 710, UL listed, steel shell with molded desiccant filter core, for maximum working pressure of 350 psi.

3. EXECUTION

3.01 PREPARATION

- A. Ream pipe and tube ends. Remove burrs.
- B. Remove scale and dirt on inside and outside before assembly.

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Section 23 23 00 - Refrigeration Piping & Specialties

- C. Prepare piping connections to equipment with flanges or unions.

3.02 INSTALLATION

- A. Install refrigeration specialties in accordance with manufacturer's instructions.
- B. Route piping in orderly manner, with plumbing parallel to building structure, and maintain gradient.
- C. Install piping to conserve building space and not interfere with use of space.
- D. Group piping whenever practical at common elevations and locations. Slope piping one percent in direction of oil return.
- E. Provide non-conducting dielectric connections when joining dissimilar metals.
- F. Install piping to allow for expansion and contraction without stressing pipe, joints, or connected equipment.
- G. Provide clearance for installation of insulation and access to valves and fittings.
- H. Fully charge completed system with refrigerant after testing.

3.03 APPLICATION

- A. Provide line size liquid indicators in main liquid line leaving condenser, or if receiver is provided, in liquid line leaving receiver.
- B. Provide permanent filter-drier.
- C. Provide refrigerant charging (packed angle) valve connections in liquid line between receiver shut-off valve and expansion valve.

- 3.04 FIELD QUALITY CONTROL:** Test refrigeration system in accordance with ANSI/ASME B31.5.

END 23 23 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. Low pressure ducts, including hangers, drives, cleats and miscellaneous items for a complete installation.
 - 2. Air inlets and outlets.
 - 3. Ductwork accessories.

1.02 REFERENCES

- A. ASHRAE - Handbook 1993 Fundamentals; Chapter 32 - Duct Design.
- B. ASHRAE - Handbook 1992 Equipment; Chapter 16 - Duct Construction.
- C. ASTM A 90 - Weight of Coating on Zinc-Coated (Galvanized) Iron or Steel Articles.
- D. ASTM A 167 - Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
- E. ASTM A 525 - General Requirements for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.
- F. ASTM A 527 - Steel Sheet, Zinc-Coated (Galvanized) by Hot-Dip Process, Lock Forming Quality.
- G. NFPA 90A - Installation of Air Conditioning and Ventilating Systems.
- H. NFPA 90B - Installation of Warm Air Heating and Air Conditioning Systems.
- I. SMACNA - HVAC Duct Construction Standards, Metal and Flexible.
- J. UL 181 - Factory-Made Air Ducts and Connectors.
- K. ADC 1062 - Certification, Rating and Test Manual.
- L. AMCA 500 - Test Method for Louvers, Dampers and Shutters.
- M. ARI 650 - Air Outlets and Inlets.
- N. ASHRAE 70 - Method of Testing for Rating the Air Flow Performance of Outlets and Inlets.

1.03 QUALITY ASSURANCE

- A. Test and rate performance of air outlets and inlets in accordance with ADC Equipment Test Code 1062 and ASHRAE 70.
- B. Test and rate performance of louvers in accordance with AMCA 500.

1.04 REGULATORY REQUIREMENTS: Construct ductwork to NFPA 90A and NFPA 90B.

1.05 SUBMITTALS

- A. Submit product data including schedule of outlets, inlets and terminal units indicating type, size, location, and application, and noise level.
- B. Review requirements of outlets and inlets as to size, finish, and type of mounting prior to submitting

product data and schedules of outlets and inlets.

2. PRODUCTS

2.01 DUCTWORK

- A. Materials:
 - 1. General: Non-combustible or conforming to requirements for Class 1 air duct materials, or UL 181.
 - 2. Steel Ducts: ASTM A525 or ASTM A527 galvanized steel sheet, lock-forming quality, having zinc coating of 1.25 oz. per sq. ft. for each side in conformance with ASTM A90.
 - 3. Insulated Flexible Ducts: Flexible duct wrapped with flexible glass fiber insulation, enclosed by seamless aluminum pigmented plastic vapor barrier jacket; max. 0.23 K value at 75° F.
 - 4. Fasteners: Rivets, bolts, or sheet metal screws.
 - 5. Sealant: Non-hardening, water resistant, fire resistive, compatible with mating materials; liquid used alone or with tape, or heavy mastic.
 - 6. Hanger Rod: Steel, galvanized; threaded both ends, threaded one end, or continuously threaded.
- B. Low Pressure Ductwork ($\frac{1}{2}$ " to 2" wg, less than 2,000 fpm):
 - 1. Fabricate and support in accordance with SMACNA Low Pressure Duct Construction Standards and ASHRAE handbooks, except as indicated. Provide duct material, gages, reinforcing, and sealing for operating pressures indicated.
 - 2. Size round ducts installed in place of rectangular ducts in accordance with ASHRAE table of equivalent rectangular and round ducts. No variation of duct configuration or sizes permitted except by written permission.
 - 3. Construct T's, bends, and elbows with radius of not less than 1-1/2 times width of duct on centerline. Where not possible and where rectangular elbows are used, provide single thickness turning vanes.
 - 4. Increase duct sizes gradually, not exceeding 15 degrees divergence wherever possible. Divergence upstream of equipment shall not exceed 30 degrees; convergence downstream shall not exceed 15 degrees.
 - 5. Provide easements where low pressure ductwork conflicts with piping and structure. Where easements exceed 10 percent duct area, split into two ducts maintaining original duct area.
 - 6. Connect flexible ducts to metal ducts with draw bands.
 - 7. Use crimp joints with or without bead for joining round duct sizes 12 inch and smaller with crimp in direction of air flow.
 - 8. Use double nuts and lock washers on threaded rod supports.

2.02 AIR INLETS AND OUTLETS

- A. See Grille, Register, and Diffuser Schedule on the drawings.
- B. Acceptable Manufacturers (in addition to those called out in the Schedule on the Drawings):
 - 1. Metalaire.
 - 2. Titus.
 - 3. Anemostat
 - 4. Nailor
 - 5. Price
 - 6. Carnes
- C. All grilles, registers, and diffusers shall be similar to the Krueger units shown in the Schedule on the drawings.

2.03 AIR TUNING DEVICES: Multi-blade device with blades aligned in short dimension; steel or aluminum

construction; with individually adjustable blades, mounting straps.

3. EXECUTION

3.01 DUCTWORK

- A. Locate ducts with sufficient space around equipment to allow normal operating and maintenance activities.
- B. Connect diffusers or troffer boots to low pressure ducts with 5 feet maximum length of flexible duct. Hold in place with strap or clamp.
- C. During construction provide temporary closures of metal or taped polyethylene on open ductwork to prevent construction dust from entering ductwork system.
- D. Install in accordance with SMACNA standards.
- E. Seal all penetrations with caulk or fill with fiberglass insulation.
- F. Duct straps shall not be allowed for ducts larger than 18" wide. Beam clamps or unistrut hung from structure shall be used. Duct straps shall not be screwed into the bottom of the roof deck.
- G. Duct straps shall be screwed into the side of the flute of the metal deck.

3.02 AIR INLETS AND OUTLETS

- A. Install items in accordance with manufacturers' instructions.
- B. Check location of outlets and inlets and make necessary adjustments in position to conform with architectural features, symmetry, and lighting arrangement.
- C. Install diffusers to ductwork with air tight connection.

END 23 30 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. Roof exhausters
 - 2. Roof mounted penthouse intake louvers.

1.02 REFERENCES

- A. AMCA 99 - Standards Handbook.
- B. AMCA 210 - Laboratory Methods of Testing Fans for Rating Purposes.
- C. AMCA 261 - Directory of Products Licensed to Bear the AMCA Certified Ratings Seal.
- D. AMCA 300 - Test Code for Sound Rating Air Moving Devices.
- E. AMCA 301 - Method of Publishing Sound Ratings for Air Moving Devices.
- F. NEMA MG1 - Motors and Generators.
- G. NFPA 70 - National Electrical Code.
- H. UL 705 - Power Ventilators.

1.03 QUALITY ASSURANCE

- A. Performance Ratings: Conform to AMCA 210 and bear the AMCA Certified Rating Seal.
- B. Sound Ratings: AMCA 301, tested to AMCA 300 and bear AMCA Certified Sound Rating Seal.
- C. Fabrication: Conform to AMCA 99.
- D. Test and rate performance of louvers in accordance with AMCA 500.

1.04 SUBMITTALS

- A. Submit product data on roof exhausters including sound power levels, fan curves, bhp, and electrical requirements.

1.05 OPERATION AND MAINTENANCE DATA

- A. Submit operation and maintenance data including installation instructions, assembly views, lubrication instructions, and replacement parts list.

1.06 DELIVERY, STORAGE, AND HANDLING:

- A. Deliver products to site in factory-fabricated protective containers, with factory-installed shipping skids and lifting lugs.
- B. Store and protect products. Store in clean dry place and protect from weather and construction traffic. Handle carefully to avoid damage to components, enclosures, and finish.

1.07 WARRANTY. Provide one (1) year labor and material guarantee on exhaust fans.

2. PRODUCTS: See Schedule on drawings.

2.01 ROOF EXHAUSTERS

- A. See Exhaust Fan Schedule on drawings.
- B. Centrifugal Fan: Direct-drive or belt driven, with spun aluminum housing; resilient mounted motor; ½ inch mesh, 16 gage aluminum birdscreen; square base with continuous curb gaskets; secured with

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cadmium plated bolts and screws.

- C. Disconnect Switch: Factory wired, non-fusible, in housing for thermal overload protected motor.
- D. Backdraft Damper: Motor operated, either line voltage or integral transformer

2.02 OUTSIDE AIR INTAKE

- A. 4 inch deep louvers with blades on 45° slope, heavy channel frame, birdscreen with 3/4" square mesh for intake. Fabricated of 12 gauge extruded aluminum, welded assembly, with factory color anodized finish. Fabricate louvered penthouse with mitered corners and reinforce with structural angles. Backdraft Damper: Motor operated, either line voltage or integral transformer.

3. EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Secure roof exhausters and intakes with lag screws to roof curb.

END 23 34 00

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid: Contractor provide:
 - 1. Forced-air furnaces with refrigerant cooling coil on unit specified.

1.02 REFERENCES

- A. AGA - Directory of Certified Appliances and Accessories.
- B. ANSI/AGA 223.1 - National Fuel Gas Code.
- C. ANSI/NFPA 70 - National Electrical Code.
- D. ARI 210 - Standard for Unitary Air-Conditioning Equipment.

1.03 QUALITY ASSURANCE

- A. Conform to requirements of UL and applicable codes.
- B. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum of five (5) years experience.

1.04 SUBMITTALS

- A. Submit shop drawings and product data, showing dimensions, connections, arrangement, accessories, and controls.
- B. Submit manufacturer's installation instructions.

1.05 OPERATION AND MAINTENANCE DATA

- A. Submit manufacturer's descriptive literature, operating instructions, and maintenance and repair data.

1.06 WARRANTY

- A. Provide ten (10) year parts warranty on heat exchanger portion.
- B. Provide one (1) year parts, and labor warranty on the entire unit from the date of substantial completion.

2. PRODUCTS

2.01 FORCED-AIR FURNACE

- A. ACCEPTABLE MANUFACTURERS
 - 1. Carrier
 - 2. Lennox
 - 3. Trane
- B. General:
 - 1. Provide upflow, fixed capacity, condensing type with natural gas burner with cold air plenum and filter rack.
 - 2. Provide self-contained, packaged, factory assembled, pre-wired unit consisting of cabinet, supply fan, heat exchanger(s), burner, controls, air filter, and refrigerant cooling coil (on specified unit(s)).
- C. Fabrication:
 - 1. Cabinet: Galvanized steel with baked enamel finish, easily removed and secured access doors, glass fiber insulation with reflective liner.
 - 2. Heat Exchanger: Aluminized steel, fold and crimp sectional construction.
 - 3. Supply Fan: Centrifugal type, rubber mounted with direct or belt drive, adjustable variable pitch motor pulley.

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5. Air Filters: One inch thick glass fiber, disposable type.
 6. Gas Burner: Stainless atmospheric type with adjustable combustion air supply, equipped with combustion gas valve and pressure regulator incorporating manual shut-off, pilot valve, automatic 100 percent shut-off, and thermocouple pilot safety device.
- D. Burner Operation Controls:
1. Provide low voltage, adjustable room thermostats, to control burner operation to maintain room temperature settings.
 2. Provide high temperature limit control and flue gas temperature limit control, to de-energize burner on excessive temperature and energize burner when temperature drops to lower safe value.
 3. Provide controls for supply fan in accordance with bonnet temperatures independent of burner controls. Include manual switch for continuous fan operation.
 4. Gas Burner Safety Controls: Thermocouple sensor prevents opening of solenoid gas valve until pilot flame is proven and stops gas flow on ignition failure.
- E. Evaporator Coil:
1. Mount in factory supplied casing copper tube aluminum fin coil assembly, with galvanized drain pan, drain connection, refrigerant piping connections. Provide transition from furnace supply to casing.
 2. Provide factory installed thermostatic expansion valve.
- F. Output rating: See Schedule on drawings.

3. EXECUTION

3.01 INSTALLATION

- A. Install according to manufacturer's printed instructions.
- B. Heaters shall be vented in accordance with manufacturer's recommendations.
- C. Provide condensate piping to the nearest floor drain. Piping shall be PVC with glued joints.

3.02 TRAINING

- A. General:
 1. The Contractor shall provide up to 2 hours of training of Owner designated personnel. Such training shall be for the purpose of teaching the proper operation, and maintenance of the equipment.
- B. Training to take place after the equipment is operational.
- C. Coordinate training periods with Using Agency.

END 23 54 00

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid: Contractor provide:
 - 1. Gas-fired infrared heating units and controls.

1.02 REFERENCES

- A. AGA - Directory of Certified Appliances and Accessories.
- B. ANSI/AGA 223.1 - National Fuel Gas Code.
- C. ANSI/NFPA 70 - National Electrical Code.

1.03 QUALITY ASSURANCE

- A. Conform to requirements of UL and applicable codes.
- B. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum of five (5) years experience.

1.04 SUBMITTALS

- A. Submit shop drawings and product data showing capacities, dimensions, connections, arrangement, accessories, clearance requirements, and controls.

1.05 OPERATION AND MAINTENANCE DATA. Submit manufacturer's descriptive literature, operating instructions, and maintenance and repair data.

1.06 WARRANTY. Provide written warranty, by manufacturer, agreeing to replace/repair, within warranty period, components of gas fired infrared systems furnished by manufacturer, which are defective in either material or workmanship, warranty periods follows: Three (3) year warranty on the burner system from the date of final acceptance of the infrared heaters, Two years on all other parts of heater.

2. PRODUCTS

2.01 APPROVED MANUFACTURES

- A. Gas Fired Infrared heater
 - 1. Re-Verber-Ray
 - 2. Roberts Gordon
 - 3. Schwank
- B. Output rating: See Schedule on drawings.

2.02 GAS-FIRED INFRARED HEATER

- A. Burner Box
 - 1. Natural Gas model, moisture-resistant design including fully gasketed burner doors, nickel plated steel burner cup, outside air adapter, one (1) fresh air inlet weather vent cap (for wind and rain protection) supplied as standard equipment, direct spark ignition, three try ignition module, all components easily accessed, durable spot welded construction, internal mica flame observation window, external LED burner status light, balanced air rotor, gas and electrical controls are housed in a separate compartment from the combustion air stream and burner cup, and CSA certified for indoor or outdoor use.

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2. Heater shall be equipped with the following moisture-resistant design standard features, including:
 - a. Two silicone fully-gasketed burner access doors.
 - b. Each burner access door shall be secured with no less than four screws to completely engage the entire silicone seal and create a watertight barrier. All burner door-securing screws shall be stainless steel self-sealing securing screws. Each screw shall have a rubber o-ring to provide a watertight seal at all points of entry into the doors.
 - c. Each screw penetrating the top surface of the burner box shall utilize nylon washers to prevent entry of standing water into any internal compartment.
 - d. Internal power connection coupled with burner electrical connection for use with liquid tight electrical conduit.
 - e. Flexible gas line provided with burner. Flexible gas line shall be ¾" ID and at least 36" in length. Flexible gas line shall be corrugated Type 304 stainless steel with exterior PVC coating for additional moisture resistance. High-pressure gas shut off cock shall be supplied as part of the flexible gas line assembly.
 - f. Burner box paint shall be 2.0-3.0 MILS epoxy-polyester powder coat for toughness, chemical and corrosion resistance.
 3. Heater shall be equipped with totally enclosed, permanently lubricated combustion blower with thermal overload protection.
- B. Burner Controls
1. Factory Wired: All burners shall be factory wired for 120 volts AC with transformer for 24 volts AC DSI operation and supplied with a grounded three wire pigtail located at rear of burner.
 2. Fail-Safe Controls: To assure a high degree of fail-safe operation, the design shall include an air proving safety pressure switch to verify blower operation before gas valve opens. In the event of a power failure the gas valve in burners close in safe position.
 3. Ignition Controls: All gas firing burner units shall be equipped with a direct spark ignition module (DSI) fully automatic. The DSI module shall have a 15-second flame response time per ignition trial before lockout occurs. In addition, the DSI module shall be capable of a minimum of 3 trials for ignition to provide maximum reliability.
- C. Reflectors - Standard
1. Provide high radiant reflective stainless steel reflectors installed over all heat exchangers. Provide reflector joint pieces over heat exchanger fittings such as elbows so reflector covers heat exchanger continuously. In order to maximize radiant output and reduce convective heat losses, reflectors are to extend below the bottom of the heat exchanger tube.
 - a. Over all fittings: All reflectors at termination of the heat exchanger pipe and any elbows shall have end caps to prevent convective heat from escaping.
- D. Outside Air
1. Provide fresh outside air to supply to each burner for the support of combustion air.
 2. Outside air intake piping shall conform to schedule 40 PVC pipe: ASTM D2665. Fittings: PVC. Joints: ASTM D2855, solvent weld.
- E. Thermostats
1. Provide where indicated, moisture resistant line voltage thermostat connected to radiant heater. Mount thermostat 5 ft. - 6 ft. above finish floor or otherwise as noted on the drawing.
- F. Radiant Piping - Heat Exchanger
1. Radiant Tube: Shall be new 4 in. O.D. heat treated aluminized steel tube 16 gauge wall with an emissivity factor of 0.80 or greater. Aluminized steel tubing will be supplied on the first 10 ft. of each radiant heater.
 2. Fittings: Shall be 4 in. O.D. aluminized steel 16 gauge wall.
 3. Hanging Materials: All system's tube must be supported in accordance with acceptable practices, local codes, seismic requirements, and applicable standards and as shown on

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plans. Heat exchanger tube shall pitch down at least .5 in. per 20' away from burner box.

- G. Exhaust Flue
 - 1. Type B double wall, inner wall shall be constructed of 0.015 thick AL29-4C superferritic stainless steel, outer wall shall be constructed of 0.018 aluminized steel.

3. EXECUTION

3.01 INSTALLATION

- A. General
 - 1. Install gas fired infrared heaters as indicated, in accordance with manufacturer's installation operation and service manual and in compliance with applicable codes and approvals. Allow adequate space for servicing or removal of the unit without disturbing other piping or equipment.
- B. Support
 - 1. Suspend heat exchanger, burner, gas piping, conduit, and reflectors from building substrate in a manner to provide durable and safe installation; and in accordance with manufacturer's installation operation and service manual.
- C. Clearance to Combustibles
 - 1. Always maintain clearance to combustibles as outlined and printed on burner nameplate and in manufacturer's product data. Measure clearance distance from surface of heat exchanger or as indicated by approval agency's listing.
- D. Venting
 - 1. Install vent piping as indicated on plans. Terminate where indicated on the drawings with a vent terminal assembly as supplied by the manufacturer. The venting must be installed in accordance with the requirements within the installation operation and service manual and the following codes: National Fuel Gas Code NFPA 54/ANSI Z223.1.
- E. Gas Piping
 - 1. Install gas piping as indicated and in accordance and in compliance with applicable codes and approval: National Fuel Gas Code NFPA 54/ANSI Z223.1.
 - a. Required Gas Supply Inlet Pressures:

Natural Gas Units	Required Min. Gas Pressure	Max. Gas Pressure
40,000-150,000 Btu/h	4.6" wc	14" wc
 - 2. Connection from supply line to burner unit must be made in accordance with installation operation and service manual. Gas shut-off cock, as supplied with unit, and controls in unit must not be subjected to more than 1/2 lb. or 14" wc pressure.
 - 3. Drip Legs: Provide drip legs at all gas risers.
- F. Electrical Wiring
 - 1. Install electrical wiring as indicated. Connect power wiring to burners and control wiring between burners and thermostats in accordance with manufacturer's wiring diagrams.
 - a. Provide liquid tight flexible conduit for all applications.
- G. Thermostats
 - 1. Mount thermostats 5 ft. - 6 ft. above finished floor, if not otherwise indicated. Moisture resistant thermostats to be used in vehicle wash bay areas.

3.02 FIELD QUALITY CONTROL

- A. Start-Up
 - 1. Start-up, test, and adjust gas fired infrared heaters in accordance with manufacturer's start-up instructions in the installation operation and service manual. Check and calibrate controls, adjust burners if applicable according to manufacturer's installation operation and service manual instructions for maximum efficiency.

3.03 TRAINING

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- A. General:
 - 1. The Contractor shall provide up to 2 hours of training of Owner designated personnel. Such training shall be for the purpose of teaching the proper operation, and maintenance of the equipment.
- B. Training to take place after the equipment is operational.
- C. Coordinate training periods with Using Agency.

END 23 55 00

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid: Contractor to provide:
 - 1. Condensing unit package.
 - 2. Internal piping and accessories.

1.02 SUBMITTALS

- A. Submit with shop drawings, schematic layouts showing condensing units, cooling coils, refrigerant piping, and accessories required for complete system.
- B. Submit complete suction and liquid pipe sizing data.

1.03 OPERATION AND MAINTENANCE DATA

- A. Submit manufacturer's descriptive literature, operating instructions, and maintenance and repair data.

1.04 WARRANTY: In accord with General Conditions.

- A. Manufacturer: Provide five (5) year standard warranty on compressor section of air cooled condensing unit.
- B. Provide one (1) year parts, refrigerant, and labor warranty on the entire unit from the date of substantial completion.

2. PRODUCTS

2.01 EQUIPMENT

- A. ACCEPTABLE MANUFACTURERS
 - 1. Carrier
 - 2. Lennox
 - 3. Trane
- B. General: Factory-assembled, single piece, air-cooled condensing unit suitable for rooftop or ground installation. Contained within the unit enclosure shall be all factory wiring, piping, controls, fan, compressor, and refrigerant charge (R454B).
- C. Unit Cabinet:
 - 1. Unit cabinet shall be constructed of galvanized steel, bonderized and coated with a pre-painted baked enamel finish.
- D. Fans:
 - 1. Condenser fans shall be direct driven, propeller-type, discharging air vertically upward.
 - 2. Fan blades shall be balanced.
 - 3. Condenser fan discharge shall be equipped with coated steel wire safety guards.
 - 4. Condenser fan and motor shaft shall be corrosion resistant.
- E. Compressor:
 - 1. Compressor shall be of the hermetically sealed.
 - 2. Compressor shall be mounted on vibration isolators.
- F. Condenser Coil:
 - 1. Condenser coil shall be air-cooled.
 - 2. Coil shall be constructed of aluminum fins mechanically bonded to internally grooved seamless copper tubes.
- G. Refrigeration Components: Refrigeration circuit components shall include liquid line service valve, vapor line service valve, liquid filter drier, a full charge of compressor oil, and a system charge of refrigerant (R-454B).
- H. Controls and Safeties:

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1. Minimum control functions shall include:
 - a. Control wire terminal blocks.
 - b. Five-minute recycle protection to prevent compressor short-cycling.
 - c. Compressor lockout on auto-reset safety until reset from thermostat.
 2. Minimum safety devices which are equipped with automatic reset (after resetting first at thermostat), shall include:
 - a. High discharge pressure cutout.
 - b. Loss-of-charge cutout.
- I. Electrical Requirements:
1. Unit shall operate on 1-phase, 60-Hz power at 230 volts.
 2. Unit electrical power shall be single-point connection.
 3. Unit control circuit shall contain a 24-v transformer for unit control.
- J. Performance:
1. See Equipment Schedule on drawings.

3. EXECUTION

3.01 INSTALLATION

- A. Complete structural, mechanical, and electrical connections in accordance with manufacturer's installation instructions.
- B. Ensure interlock between condensing unit and fan coil.

3.02 ADJUSTING

- A. Inspect and test for refrigerant leaks. Repair leaks, put system into operation, and test equipment performance. Replace losses of oil or refrigerant prior to end of correction period.
- B. If initial start-up and testing takes place in winter and machines are to remain inoperative, provide start-up and testing operation at beginning of first cooling season.

END 23 63 13

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide raceway and wiring shown including electrical power distribution, and lighting system.

1.02 SYSTEM DESCRIPTION

- A. Basic materials include:
 - 1. Raceways.
 - 2. Fittings.
 - 3. Wire and Cables.
 - 4. Boxes.
 - 5. Wiring Devices.
 - 6. Supporting Devices.
- B. Provide all new materials, without blemish or defect, in accord with standards specified and listed or labeled by a nationally recognized independent testing lab.

1.03 REFERENCES

- A. ANSI C80.1 - Specification for Rigid Steel Conduit, zinc coated.
- B. ANSI C80.3 - Specification for Electrical Metallic Tubing, zinc coated.
- C. ANSI C80.4 - Specification for Fittings for Rigid Metal Conduit and EMT.
- D. ANSI/NEMA FB1 - Fittings and Supports for Conduit and Cable Assemblies.
- E. ANSI/NEMA OS-1 - Sheet Steel Outlet Boxes, Device Boxes, Covers and Box Supports.
- F. NEMA TC-2 - Electrical Conduit.
- G. NEMA WC-3 - Rubber Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy.
- H. NEMA WC-5 - Thermoplastic insulated wire and cable for the transmission and distribution of electrical energy.
- I. UL44 - Rubber-Insulated Wires and Cables.
- J. UL83 - Thermoplastic-Insulated Wires and Cables.
- K. UL493 - Thermoplastic-Insulated Underground Feeder and Branch Circuit Cables.
- L. UL884 - Underfloor Raceways and Fittings
- M. NEMA 250 Enclosures for Electrical Equipment.
- N. UL50 - Cabinets and Boxes.
- O. UL514 - Outlet Boxes.
- P. NEMA WD-1, WD-5 - General Purpose Wiring Devices.

Q. NEMA WD-5 - Specific-Purpose Wiring Devices.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Material shall be suitably packaged by manufacturer to prevent damage during shipment. Damaged materials will not be acceptable for use.
- B. Store materials on site in clean, dry storage area; when outside, elevated above grade and enclosed with durable watertight wrapping.
- C. Handle all materials carefully to prevent damage. Minor scratches, marks or blemishes to finish shall be repaired to satisfaction of Architect/Engineer.

2. PRODUCTS

2.01 RACEWAYS

- A. Conduit:
 - 1. Steel Rigid Metal. ANSI C80.1.
 - 2. Steel Flexible Metal. UL-1.
 - 3. Steel Liquid-tight Flexible. UL-1.
 - 4. Rigid Nonmetallic, NEMA TC-2, PVC, Schedule 40 and 80 (see 3.02 B).
- B. Tubing:
 - 1. Steel Electrical Metallic. Comply with ANSI C80.3.

2.02 FITTINGS

- A. Rigid:
 - 1. Locknuts: Steel or malleable iron.
 - 2. Bushings: Insulating or insulated throat type.
 - 3. Couplings: Threaded type.
- B. Electrical Metallic Tubing:
 - 1. Couplings and Connectors: Steel Compression type.
- C. Flexible:
 - 1. Connectors; malleable iron, threadless, squeeze clamp type for non-jacketed conduit.
 - 2. Connectors; steel or malleable iron compression type with insulated throat and "O" ring assembly for liquid-tight conduit.

2.03 BUILDING WIRE (all copper)

- A. Feeders and Branch Circuits: Copper, 98% conductivity, 600 volt insulation, THW, THWN, XHHW, or dual rated THHN/THWN complying with US-83; #8 and larger, stranded conductor; wire thru #10, solid or stranded conductor.
- B. Branch Circuit Wiring: Conductors sized in accord with N.E.C. 75°C ampacity tables but not less than No. 12 AWG. Increase size when farthest outlet is greater than 75 feet from panelboard.
- C. Wiring for Systems Other Than Power: Comply with system manufacturer's standards. No. 14 AWG unless otherwise specified.
- D. Color code conductors to designate neutral and phase.

2.04 BOXES

- A. Pull Boxes and Junction Boxes:
1. NEC 2020 - Article 314
 2. Surface Mounted Boxes: Screw-on or hinged cover. Provide silicon bronze standard retaining screws where accessible only to authorized personnel; security type in all other locations. Spaced twelve (12) inches maximum.
 3. Boxes of 14 gauge steel minimum, galvanized or prime coated in finished areas.
 4. Cast Metal Boxes for Outdoor and Wet Locations: NEMA 250; Type 4 and Type 6, flat-flanged, surface-mounted junction box, UL listed as watertight. Cast aluminum box and cover with ground flange, neoprene gasket, and stainless steel cover screws.
 5. Exterior junction boxes: Polymer concrete construction with gasketed lid labeled "ELECTRIC". Interior size to be 8" x 8" x 8" minimum. Lid and box to be rated at 8000 lbs. minimum. Lids to have (2) stainless steel safety screws in cover to prevent unauthorized entry. Open bottom.
- B. Outlet Boxes:
1. Hot dipped galvanized, 1.25 oz./sq. ft., sherardized or cadmium plated.
 2. Interior Boxes: Sheet steel with conduit knockouts, attached lugs for locating.
 3. Exterior Boxes or Exposed Interior in Wet/Damp Locations: Cast aluminum, deep type, corrosion proof fasteners, watertight, gasketed, threaded hubs.
 4. For Suspended or Surface Mounted Fixtures:
 - a. Four (4) inch octagonal or square according to devices used, minimum of 1½" deep boxes for poured concrete ceilings. Furnished with fixture studs. Installed with ¾" minimum depth plaster rings on suspended ceilings. 4" octagonal or square for all exposed conduit work with fixture extension pan or deep fixture canopy to enclose the box. Use #14 stranded, type AF, 300 volt wire in pipe pendants.
 - b. Four (4) inch octagonal or square two-gang box according to devices used, minimum of 2½" deep, 3 ½" deep for 1" conduit, boxes for masonry wall.
 5. For Recessed Fixtures:
 - a. Four (4) inch octagonal or square. A minimum of 1½" deep. Complete with blank cover. Wire in Greenfield: #12 type THHN, 600 volt.
 6. Switch and Receptacle Boxes:
 - a. Wall - 4" square for up to two devices. Solid gang boxes for over two devices. Complete with ¾" minimum depth tile ring where used in exposed tile, concrete, block or paneled walls. Complete with ¾" minimum depth plaster ring where used in plastered walls. Install with ½" raised galvanized device covers where used for exposed conduit work.
 7. Provide corrosion resistant steel knockout closures for unused openings.

2.05 WIRING DEVICES

- A. Wall Switches:
1. 120 v., quiet, slow make, slow break design, toggle handle, totally enclosed case, rated 20 a., specification grade. Equivalent 2 pole, 3-way and 4-way switches.
 2. Switch and Pilot Light: Toggle type with integral long-life pilot, rated 20 a., 120v.
 3. Color: White.
 4. All switches shall be specification grade and shall be manufactured by Arrow-Hart, Pass & Seymour, Leviton, or Hubbell.
 5. Color: White.
- B. Receptacles:
1. Standard Duplex: Full gauge size, polarized, parallel blade, U-grounding slot, spec. grade, rated 20 a., 125 v., NEMA line 5, designed for split feed service.

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- a. Color: White.
 2. 208 & 240 V receptacles: Full gauge size, spec. grade. Verify NEMA type and rating with equipment to be installed.
 3. **Per NEC 406.12 all non-locking type receptacles shall be tamper resistant.**
- C. Ground Fault Circuit Interrupter:
1. General duty feed thru type capable of protecting downstream receptacles on single circuit, grounding type, UL Class A, Group 1, 20 a., rating, 125 v.
 2. Solid state ground fault sensing and signaling, 5 ma. ground fault trip level.
 3. Wallplate compatible with receptacle configuration.
 4. Seal all connections with seal coat compound and wrap two layers tape.
 5. Color: White.
- D. Covers:
1. Materials: Nylon, smooth, high abuse, color to match device.
 2. Plates:
 - a. Flush Mounting: Bevelled type with smooth rolled outer edge.
 - b. Surface: Bevelled, steel, pressure formed for smooth edge to fit box.
 - c. Weatherproof: Weatherproof covers to be listed as "weatherproof while in use". Cast metal, gasketed.

2.06 SUPPORTING DEVICES

- A. Suspended Conduits Less than 1":
1. For exposed construction, provide strap type hangers supported from beam clamps or threaded rods.
 2. For conduits suspended above ceilings, anchor to building structural steel. When span exceeds NEC limits, provide channel steel between framing members. Tie wiring of conduit to air ducts, or other piping not permitted. Plumber's perforated strap not permitted.
- B. Suspended Conduit 1" or larger.
1. Provide threaded rod with "U" type hangers for single conduit.
 2. Anchor threaded rod to inserts in concrete or beam clamp on steel structure.
 3. Provide trapeze hanger assemblies and threaded rod for two or more conduits.
- C. Surface Mounted Conduit:
1. Provide one-hole galvanized steel straps for conduits 1" or less.
 2. For conduit larger than 1", use malleable iron pipe straps.
 3. For multiple conduits, provide channel anchored to wall with conduit attached to channel with split pipe clamps.
- D. Anchoring:
1. Hollow Masonry: Toggle bolts or spider type expansion anchors.
 2. Solid Masonry: Lead expansion anchors or preset anchors.
 3. Concrete: Self-drilling anchor or power driven studs.
 4. Metal: Machine screws, bolts or welded studs.
 5. Wood: Wood screws.

3. EXECUTION

3.01 INSTALLATION

- A. Cooperate with other contractors engaged in project. Execute work in a manner not to interfere

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- with other contractors.
- B. Coordinate work with other contractors regarding location and size of pipes, raceways, ducts, openings, switches, outlets, so there is no interference between installation or of progress of any contractor.
 - C. Install all equipment with ample space allowed for removal, repair, or changes to equipment. Provide ready accessibility to removable parts of equipment and to all wiring without moving equipment installed or already in place.
 - D. Where cutting is required to facilitate construction, patch and repair, cut items to original state. Do not cut structural work without prior written approval of Architect/Engineer.
 - E. Cut holes through concrete and masonry with a diamond core drill or concrete saw. Pneumatic hammer, impact, electric, hand or manual hammer type drills not allowed, except where permitted by Architect/Engineer because of limited working space.
 - F. Make floor, exterior wall and roof seals watertight. Sleeve walls and floors which are cored for installation of conduit with steel tubing, grouted and space between the conduit and sleeve fill as specified herein.
 - G. At project completion, clean all equipment to the original finish. Remove all shipping labels.
 - H. Install metal cable tray in accordance with NEMA VE 2, install warning signs at 50 foot centers.

3.02 CONDUIT

- A. Conduit Schedule. Minimum Conduit Size: 3/4" unless otherwise specified. Install switch legs in 1/2" conduit where in accordance with NEC.
- B. Install conduit as follows:
 - 1. Use EMT conduit for branch circuits in partitions and drop ceiling areas and telephone and data systems.
 - 2. Use flexible conduit as herein specified.
 - 3. Use Sch. 40 and Sch. 80 PVC conduit for underground applications. Sch. 80 PVC under roadways and parking lots, Sch. 40 may be used for 1" and smaller.
 - 4. Use rigid steel for all conduit larger than 2" trade size in floor slab, rigid schedule 40 PVC may be used under slabs. Sch. 40 PVC conduit may be used for conduit smaller than 2" trade size in floor slabs.
 - 5. EMT with steel compression fittings is acceptable in masonry walls.
 - 6. Sch. 40 PVC conduit may be used for conduit below floor slabs.
- C. Conduit Runs:
 - 1. Size all conduit as indicated on Drawings; where not shown, in accordance with National Electrical Code. Make all conduit systems mechanically and electrically continuous from source of current to all outlets, and ground in accordance with the National Electric Code.
 - 2. Conceal conduit wherever possible, or expose as shown or noted on the drawings and as specified herein. Run all exposed conduit parallel to building walls using right angle bends. Exposed diagonal runs of conduit will not be permitted. Do not install conduit on roof surfaces unless specifically indicated on drawings.
 - 3. Ream conduit after threads are cut. Cut ends square and butt solidly into couplings.
 - 4. Prevent the accumulation of water, foreign matter or concrete in the conduits during execution of work. Temporarily plug conduit, blowout and swab before wires are pulled.
 - 5. Fasten conduits to all sheet metal boxes and cabinets with two (2) locknuts, in accord with NEC, where insulated bushings are used and where bushings cannot be brought into firm

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- contact with the metal enclosures; otherwise, use at least a single locknut and bushing.
- 6. Seal each underground joint and make watertight.
- 7. Where building construction or other conditions make it impossible to use standard threaded couplings, install watertight threaded unions.
- 8. Make changes in direction of runs with symmetrical bends or cast-metal fittings. Make field-made bends and offsets with conduit bending machine to avoid changing the internal diameter of the conduit and not damage its protective coating either inside or outside. Individual bends shall not exceed 90° and not more than 270° total bends will be allowed in any one conduit run. Where more bends are necessary and conduit runs exceed 150 lin. ft., install a suitable pull box or junction box.
- 9. Provide empty conduits installed with a pull-line. Use pull-line of plastic having not less than 200 lb. tensile strength. Leave not less than 12" of slack at each end of pull-line.
- 10. Use flexible conduit for final connection to motors, portable equipment and for equipment subject to vibration and noise transmission. For conduit sizes up to 1" trade size, use minimum length of 12" and maximum length of 36"; for conduit sizes above 1" trade size, use minimum length of 20" and maximum length of 48".
- 11. Use flexible metal conduit to connect light fixture to adjacent junction boxes where not an integral part of the light fixture. Flexible conduit shall be a minimum 3/8" trade size, minimum 4 ft. long and maximum 6 ft. long.

3.03 WIRE AND CABLE

- A. Make conductors continuous from outlet to outlet. Do not make splices except in outlet or junction boxes. Make all feeder cables continuous from origin to panel or equipment terminations without running splices in intermediate pull or boxes, unless specifically indicated on the Drawings or approved in writing by Architect/Engineer.
- B. Do not exceed conduit fill established by the National Electrical Code for number of conductors installed in a raceway.
- C. Use minimum wire sizes in no case less than shown on the drawings or specified herein:
 - 1. Control and Signal: #14 AWG.
 - 2. Branch Circuits:
 - a. Where the farthest outlet of a single 120 v. or 208 v. branch circuit is less than 75 ft. from panelboard, use #12 AWG wire between all outlets and for home run of that circuit.
 - b. Where the farthest outlet of a circuit is more than 75 ft. from panelboard, use #10 AWG wire for home run of that circuit and #12 AWG wire between all other outlets, except where larger sizes are indicated.
- D. Do not pull any cable or wire in a raceway until conduit system is complete and internal raceway has been cleaned. Strain on cables shall not exceed manufacturer's recommendations during pulling. Use pulling lubricant, compatible with insulation and covering, that will not cause deterioration of insulation or jacket covers of cables or conductors. Use pulling lubricant recommended by wire manufacturer.
- E. Provide each cable or conductor in panels, pullboxes or troughs with a permanent pressure-sensitive label with suitable numbers or letter for identification.
- F. Provide wires and cables entering equipment or panels with enough slack to eliminate stretched, angular connection. Neatly arrange wiring, bundle and fan out to termination panels. Make minimum bending radius for conductors in accord with National Electrical Code.
- G. Support all conductors in vertical raceways in accord with National Electrical Code.

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- H. Leave at least 6" loops or ends at each outlet for installation of devices or fixtures. Roll up all wires in outlet boxes not for connection to fixture or device at that outlet, connect together and tape.
- I. Upon completion of wire installation, but before termination to equipment, test each wire for grounds and short circuits. Replace or correct defective wiring.

3.04 BOXES

- A. Location of proposed outlets shown on the drawings is diagrammatic only. Coordinate exact location of outlets in field with architectural details, equipment connection requirements and work of other contractors. Architect/Engineer may alter the location of outlets shown within a six feet radius prior to installation.
- B. Protect all outlet boxes from entry of foreign materials.
- C. Independently support all boxes. No parts of the weight or stress thereof shall be borne by conduits terminating therein.
- D. Install suitable pull boxes in convenient intermediate locations in all conduits runs requiring more than three-90° bends.
- E. Plug all unused openings. Use snap-in metal plugs for sheet metal boxes.
- F. In all common boxes used for gang installation with switches, receptacles and low voltage devices, include barriers between the devices, switches or receptacles.
- G. Provide permanent barriers in common boxes to limit voltage between adjacent switches to 300 v. or less.
- H. Height of outlets and devices is indicated on the drawings. Use the following as a guide for mounting of outlet boxes:

	<u>Height Above Finished Device</u>	<u>Floor to Bottom of Box</u> (unless otherwise noted)
1.	Receptacles	16"
2.	Switches	44"
3.	Communication Outlet	16"
4.	Telephone	44"

- I. Coordinate height of outlets with drawings and equipment installations drawings and properly locate height of all outlets.

3.05 DEVICES

- A. Flush mount all switches and receptacles where possible. Fit all flush type outlets with device plate that completely conceals opening. Use multiple gang plates where several devices are grouped.
- B. Connect wiring device grounds in accordance with NEC.
- C. Locations shown are approximate. Determine exact locations at site by reference to building drawings and in conjunction with work by other crafts.

3.06 RACEWAY SUPPORTS AND HANGERS

- A. Securely fasten raceways in place and support from ceiling or walls at spacings not exceeding:

<u>Material</u>	<u>Max. Spacing of Supports</u>
1. ½" thru 1" Trade Size Conduit	6 ft.
2. 1¼" thru 1½" Trade Size Conduit	8 ft.
3. 2" thru 4" Trade Size Conduit	10 ft.
4. Flexible Metal Conduit	4½ ft.

- B. Support rigid or EMT conduits within 3 ft. of every outlet box, junction box, pull box, cabinet or termination. Support flexible conduit within 12" of every outlet box or fitting.
- C. Support conduits by pipe straps, wall brackets, hangers, or ceiling trapeze. The use of perforated iron or wire for supporting conduits is prohibited. Fasten with wood screws or screw nails to wood; use toggle bolts or hollow wall fasteners in hollow masonry, plaster or gypsum board partitions and walls; self-drilling anchors or expansion anchors on concrete surfaces; sheet metal screws in sheet metal studs.
- D. Do not fasten supports to piping, ductwork, mechanical equipment or conduit.
- E. The load applied to fasteners or hangers shall not exceed one-third the proof test load of the fasteners or hangers.
- F. For fasteners attached to concrete, use vibration and shock resistant type.
- G. Where two or more conduits 1" trade size or larger run parallel, trapeze hangers may be used consisting of threaded solid rods, washers, nuts and galvanized "L" angle or channel iron. Individually fasten conduits to the cross member of every other trapeze hanger with one hole straps or clamp backs with proper size bolts, washers and nuts. When adjustable trapeze hangers are used, use U-bolt type clamps at end of conduit runs, at each elbow and at each third intermediate hanger to fasten each conduit.
- H. Make hangers of durable materials suitable for the application involved.
- I. All screws, bolts, washers and miscellaneous hardware used for conduit supports shall be fabricated from rust-resisting metal. Trapeze hangers shall have hanger assemblies protected with galvanized finish.

END 26 05 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide electrical connections to equipment shown on drawings.

2. PRODUCTS Not used

3. EXECUTION

3.01 INSPECTION: Verify that equipment is ready for electrical connection, wiring, and energization.

3.02 PREPARATION: Review equipment submittals prior to installation and electrical rough-in. Verify location, size, and type of connections. Coordinate details of equipment connections with supplier and installer.

3.03 INSTALLATION

- A. Use wire and cable with insulation suitable for temperatures encountered in heat-producing equipment.
- B. Make conduit connections to equipment using flexible conduit. Use liquid-tight flexible conduit in damp or wet locations.
- C. Install pre-finished cord set where connection with attachment plug is indicated or specified, or use attachment plug with suitable strain-relief clamps.
- D. Provide suitable strain-relief clamps for cord connections to outlet boxes and equipment connection boxes.
- E. Make wiring connections in wiring compartment of pre-wired equipment in accordance with manufacturer's instructions. Provide interconnecting wiring where indicated.

END 26 05 03

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid: Contractor provide general grounding and bonding of electrical equipment as specified herein and as shown on plans.

1.02 REFERENCES: The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.

- A. National Fire Protection Association (NFPA): 70-2014 - National Electrical Code (NEC)
- B. Underwriters Laboratories, Inc. (UL):
 - 1. 83-83 - Thermoplastic-Insulated Wires and Cables
 - 2. 44-83 - Rubber-Insulated Wires and Cables
 - 3. 467-84 - Grounding and Bonding Equipment

1.04 SUBMITTALS

- A. Shop Drawings: Showing the location of system grounding electrode connections and the routing of grounding electrode conductor.

2. PRODUCTS

2.01 GROUNDING WIRES

- A. General Purpose: Listed and NEC approved types, copper, with TW, THW, XHHW or dual rated THHN-THWN insulation color identified green.
- B. Isolated Power System: Type XHHW insulation with a dielectric constant of 3.5 or less.
- C. Size wire not less than what is shown and not less than required by the NEC.
- D. Grounding field conductors to be bare between field grounding rods.

2.02 GROUND RODS:

- A. Buried: Copperclad steel, 3/4-inch diameter by 8 feet long.

3. EXECUTION

3.01 INSTALLATION, GENERAL

- A. Ground in accordance with the NEC as shown, and as hereinafter specified.
- B. System Grounding:
 - 1. Secondary service neutrals ground at the supply side of the secondary disconnecting means and at the related transformers.
 - 2. Separately derived systems (transformers downstream from the service entrance) ground the secondary neutral.
 - 3. Isolation transformers and isolated power systems shall not be system ground.
 - 4. Provide ground wire to additional water pipe ground from panels containing second ground bus.
- C. Equipment Grounding. Metallic structures, enclosures, raceways, junction boxes, outlet boxes, cabinets, machine frames, and other conductive items in close proximity with electrical circuits shall be grounded for personnel safety and to provide a low impedance path for possible ground fault currents.

3.02 PRIMARY EQUIPMENT AND CIRCUITS

- A. Switchgear: Provide a bare grounding electrode conductor from the switchgear ground bus to a grounding electrode system, metal underground water pipe or driven ground rods for the grounding

electrode.

- B. **Metallic Conduit:** Metallic conduits which terminate without mechanical connection to a housing of electrical equipment by means of locknut and bushings or adapters, provided with grounding bushings. Connect bushings with a bare grounding conductor to the equipment ground bus.

3.03 SECONDARY EQUIPMENT AND CIRCUITS

- A. **Main Bonding Jumper:** Connect the secondary service neutral to the ground bus in the service equipment.
- B. **Switchgear, Switchboards, and Unit Substations:**
 - 1. Connect the various feeder green grounding conductors to the ground bus in the enclosure with suitable pressure connectors.
 - 2. Connect the grounding electrode conductor to the ground bus.
 - 3. Connect the neutral to the ground bus (main bonding jumper).
 - 4. Connect metallic conduits, which terminate without mechanical connection to the housing, by grounding bushings and ground wire to the ground bus.
 - 5. Provide water pipe, grounding field, and structural ground as required by 2017 NEC.
- C. **Conduit Systems:**
 - 1. Ground all metallic conduit systems.
 - 2. Non-metallic conduit systems shall contain a grounding conductor.
 - 3. Conduit provided for mechanical protection containing only a grounding conductor, bond to that conductor at the entrance and exit from the conduit.
- D. All power and lighting circuits to have a green grounding conductor.
- E. **Boxes, Cabinets, Enclosures, and Panelboards:**
 - 1. Bond the grounding wires to each pullbox, junction box, outlet box, cabinets, and other enclosures through which the ground wires pass (except for special grounding systems for intensive care units and other critical units shown).
 - 2. Provide lugs in each box and enclosure for ground wire termination.
 - 3. Provide ground bars in panelboards, bolted to the housing, with sufficient lugs for terminating the ground wires.
- F. **Motors and Starters:**
 - 1. Provide lugs in motor terminal box and starter housing for ground wire termination.
 - 2. Make ground wire connections to ground bus in motor control centers.
- G. Receptacles are not approved for grounding through their mounting screws. Ground with a ground wire from green ground terminal on the receptacle to the outlet box ground screw.
- H. Ground lighting fixtures to the green grounding conductor of the wiring system when the green ground is provided; otherwise, ground the fixtures through the conduit systems. Fixtures connected with flexible conduit shall have a green ground wire included with the power wires from the fixture through the flexible conduit to the first outlet box.
- I. Fixed electrical appliances and equipment shall have a ground lug installed for termination of the green ground conductor.
- J. **Communications Systems:**
 - 1. Provide a copper ground busbar, 4" x 8" x ½" thick with pilot holes for ground lug. Mount in or near data rack.
 - 1. Install grounding for each rack & equipment using #6 AWG THHN, rated for 90°C, insulated, copper stranded conductor to copper communication grounding bus bar.
 - 2. Bond main telecommunications grounding system to building grounding electrode system at main electrical service entrance location with #6 AWG THHN, rated for 90°C, insulated, copper stranded conductor.

- 3.04 **CONDUCTIVE PIPING:** Bond all conductive piping systems in the building to the electrical system ground. Bonding connections shall be made as close as practical to the water pipe ground or service equipment ground bus.

3.05 GROUND RESISTANCE

- A. Grounding system ground resistance must not exceed 5 ohms. Final tests shall assure that this requirement is met.
- B. Make necessary modifications to the ground electrodes for compliance that are needed without additional cost to the Client, including the provisions of a multi rod system.

3.06 GROUND ROD INSTALLATION

- A. Drive each rod vertically in the earth for not less than ten feet in depth.
- B. Where permanently concealed ground connections are required, make the connections by the exothermic process to form solid metal joints. Make accessible ground connections with mechanical pressure type ground connectors.
- C. Where rock prevents the driving of vertical ground rods, install grounding electrodes in horizontal trenches to achieve the specified resistance.

END 26 05 26

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide nameplates, tape labels, wire and cable markers, and panel schedules.

2. PRODUCTS

2.01 MATERIALS

- A. General:
 - 1. Nameplates and Labels:
 - a. Type: Laminated engraved plastic identification labels.
 - b. Colors: White with black recessed letters, attached with adhesive or screws.
 - c. Labels shall include complete identification of equipment including area served, identifying numbers and names used on drawings (i.e., "Lighting Panel", "Power Panel", "Main Distribution Panel MDP-1").
 - d. Labels on electrical panels shall include voltage characteristics.
 - 2. Electrical wire marker tape:
 - a. Listed: UL 510.
 - b. Type: 5.5 mil epoxy film type.
 - c. Acrylic pressure sensitive.
 - d. High tack adhesive.

3. EXECUTION

3.01 INSTALLATION

- A. Degrease and clean surfaces to receive nameplates.
- B. Install nameplates parallel to equipment lines.
- C. Secure nameplates to equipment fronts using screws, rivets or adhesive.
- D. Install labels on TT switches and panelboard.
- E. Provide a typed card directory for each panel. Directory shall designate breaker number and load served and shall be mounted inside front cover doors under glass or plastic. Panel shall have all breakers individually numbered and panel shall have an interior nameplate provided by manufacturer with voltage, amperage, phase and hertz listed.
- F. Embossed tape will not be permitted for any application.

3.02 WIRE IDENTIFICATION: Provide wire markers on each conductor in panelboard and load center gutters, pull boxes, outlet and junction boxes, and at load connection. Identify with branch circuit and feeder number for power and lighting circuits.

3.03 NAMEPLATE ENGRAVING SCHEDULE: Provide nameplates to identify all electrical distribution and control equipment. Letter Height: 1/4" for distribution and control equipment identification.

END 26 05 53

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. New 400A main switchboard, 'MDP'.
 - 2. New 225A main switchboard, 'A'.

1.02 REFERENCES

- A. FS W-C-375 - Circuit Breakers, Molded Case, Branch Circuit and Service.
- B. FS W-P-115 - Power Distribution Panel.
- C. NEMA AB 1 - Molded Case Circuit Breakers.
- D. NEMA PB 1 - Panelboards.
- E. NEMA PB 1.1 - Instructions for Safe Installation, Operation and Maintenance of Panelboards Rated 600 Volts or Less.
- F. NEMA PB 2.

1.03 SUBMITTALS

- A. Submit shop drawings for equipment and component devices including front view elevation, nameplate schedule, component list, outline and support point dimensions, voltage, main bus ampacity, integrated short circuit ampere rating, circuit breaker arrangement and sizes of switchboard and new panels.

2. PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Panelboards and Circuit Breakers
 - 1. Cutler Hammer
 - 2. GE
 - 3. Siemens
 - 4. Square D

2.02 PANELBOARD

- A. Panelboards: NEMA PB 1; circuit breaker type. Listed for non-linear loads by a Nationally Recognized Testing Laboratory.
- B. Enclosure: NEMA PB 1; Type 1.
- C. Provide cabinet front with concealed trim clamps, screw cover, and hinged door with flush lock. Enclosure shall be thoroughly cleaned, phosphate treated and primed by a phosphate or similar treatment, and followed immediately with a rust-inhibiting paint. Final finish coat shall be the ANSI 61 light gray.
- D. Provide panelboards with copper bus, ratings as scheduled on Drawings. Provide copper ground bus in all panelboards.
- E. Molded Case Circuit Breakers: NEMA AB 1; provide bolt-on type circuit breakers with integral thermal and instantaneous magnetic trip in each pole; See power riser on Sheet E6.01 for ampere interrupting capacity. Provide circuit breakers UL listed as Type HACR for air conditioning equipment branch circuits.
- F. Minimum Integrated Short Circuit Rating:
 - 1. 10,000 amperes RMS symmetrical.

2.03 CIRCUIT BREAKERS

- A. Molded Case Circuit Breakers: NEMA AB 1; bolt-on type thermal magnetic trip circuit breakers, with common trip handle for all poles. Provide circuit breakers listed as Type SWD for lighting circuits. Provide Class A ground fault interrupter circuit breakers where scheduled on Drawings.
- B. Circuit breakers to have minimum integrated short circuit rating matching the panel in which they reside.
- C. All circuit breakers shall be constructed and tested in accordance with UL 489 and NEMA AB1-1975 standards. The circuit breaker shall carry a label from an independent testing lab.
- D. An indicator shall be located on the faceplate of the breaker to provide a color indication of the breaker position.
- E. Do not use tandem circuit breakers.

3. EXECUTION

3.01 INSTALLATION

- A. For panels listed on plans as recessed mounted, install panelboard plumb and flush with wall finishes in conformance with NEMA PB 1.1.
- B. For panels listed on plans as surface mounted, install panelboard plumb with wall.
- C. Height: 5 ft.
- D. Provide filler plates for unused spaces in panelboards.

3.02 FIELD QUALITY CONTROL

- A. Measure steady state load currents at each panelboard feeder. Should the difference at any panelboard between phases exceed 20 percent, rearrange circuits in the panelboard to balance the phase loads within 20 percent. Take care to maintain proper phasing for multi-wire branch circuits.
- B. Visual and Mechanical Inspection: Inspect for physical damage, proper alignment, anchorage, and grounding. Check proper installation and tightness of connections for circuit breakers.

END 26 24 16

1. GENERAL

1.01 WORK INCLUDED

- A. Base Bid: Contractor provide:
 - 1. Disconnect switches, fuses and enclosures for same.

1.02 REFERENCES

- A. ANSI/UL 198C - High-Intensity Capacity Fuses; Current Limiting Types.
- B. ANSI/UL 198E - Class R Fuses.
- C. FS W-F-870 - Fuseholders (For Plug and Enclosed Cartridge Fuses).
- D. FS W-S-865 - Switch, Box, (Enclosed), Surface-Mounted.
- E. NEMA KS 1 - Enclosed Switches.

1.03 SUBMITTALS

- A. Submit product data including outline drawings with dimensions, and equipment ratings for voltage, capacity, horsepower, and short circuit.

2. PRODUCTS

2.01 DISCONNECT SWITCHES

- A. Fusible Switch Assemblies: NEMA KS 1; Type HD; quick-make, quick-break, load interrupter enclosed knife switch with externally operable handle interlocked to prevent opening front cover with switch in ON position. Handle lockable in OFF position. Fuse Clips: FS W-F-870.
- B. Nonfusible Switch Assemblies: NEMA KS 1; Type HD; quick-make, quick-break, load interrupter enclosed knife switch with externally operable handle interlocked to prevent opening front cover with switch in ON position. Handle lockable in OFF position.
- C. Enclosures:
 - a. Outdoor: NEMA 3R
 - b. Indoor: NEMA 1

2.02. CIRCUIT AND MOTOR DISCONNECTS

- 1. Heavy-duty enclosed safety switch, surface mounted, fusible or non-fused as specified, rated at 600 v., U.L. listed.
- 2. Quick-make, quick-break mechanisms, position of blades visible with cover open.
- 3. Operating handle integral part of enclosure base with position easily identified, handle lockable in "OFF" position with padlocks. Handle interlocked to prevent opening of front cover with switch in "ON" position.
- 4. Meet NEMA Enclosed Safety Switch Standard KS-1 for H.D. type.
- 5. Current carrying parts of high conductivity copper with silver-tungsten type contact surfaces.
- 6. Positive pressure reinforced fuse clips for fused type.
- 7. Enclosures:
 - a. Outdoor: NEMA 3R
 - b. Indoor: NEMA 1

2.03 FUSES

- A. Fuses: ANSI/UL 198C, Class J; Class RK1; dual element, current limiting, time delay, one-time fuse, 250- 600 volt.
- B. Interrupting Rating: 200,000 rms amperes.

3. EXECUTION

3.01 INSTALLATION

- A. Install disconnect switches where indicated on Drawings.
- B. Install fuses in fusible disconnect switches.
- C. Disconnects and Starters:
 - 1. Supply motor or load from individual branch circuit in separate branch conduit except where otherwise shown.
 - 2. Make all final connections to motors with flexible conduit, not less than 18" or more than 24" long. Provide ground wire to motor frame. Adequately support conduit at each motor.
 - 3. Verify proper direction of rotation of all motors.
 - 4. Provide nameplates or legends indicating equipment served or the function of all disconnects, combination starters, and control devices furnished by Contractor. Size nameplates or legends relative to the device. Make from engraved phenolic compound, and properly secure to device.
 - 5. Starters and other disconnects furnished by the other contractors, shall be installed by the Electrical Contractor. Installation shall include all power field wiring between equipment and starters. The Contractor furnishing the equipment shall be fully responsible for providing adequate and correct wiring diagrams and instructions to the Electrical Contractor.

END 26 28 19

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. Interior luminaires and accessories, including occupancy sensors.
 - 2. Exterior luminaires and accessories.

1.02 SUBMITTALS

- A. Submit product data and manufacturer's installation instructions including outline drawings, lamp and ballast data, support points, weights, and accessory information for each luminaire type.

1.03 DELIVERY, STORAGE, AND HANDLING

- A. Store in a warm, dry location with uniform temperature. Keep in packaging until ready to install.

1.04 WARRANTY: Provide 5 year parts and labor warranty on LED fixtures, and occupancy sensors.

2. PRODUCTS

2.01 GENERAL

- A. Provide lighting fixtures, drivers, and lamps as indicated on the Drawings or required for the Project. Lighting fixtures shall be of the types indicated on the LIGHTING FIXTURE SCHEDULE. The fixtures manufacturers catalog numbers are not to be construed as all inclusive.
- B. Equal light fixtures by other manufacturers may be submitted for approval by the Engineer a minimum of ten (10) days before bids are due.
- C. The Electrical Contractor shall furnish and install all accessories or hardware required for a complete installation.
- D. Lighting fixtures shall bear a label listed by a nationally recognized testing lab and such labels shall apply to the entire fixture as installed.
- E. Exit signs: Spec. grade fixtures, single and double faced, diffused red LED light source. Provide with universal mounting for wall or ceiling mounting. 2 Knock out arrows on each face. Arrows activated as required by code. Nickel cadmium battery for emergency power.

2.02 EXTERIOR FIXTURES AND ACCESSORIES

- A. Site Lighting
 - 1. LED, see schedule for size.
 - 2. Low profile architectural design
 - 3. Extruded aluminum housing
 - 4. Gasketed housing
 - 5. Driver designed for -20 degree F starting
 - 6. Dark bronze finish

2.03 OCCUPANCY SENSORS

- A. Manufacturers/model numbers
 - a. Hubbell - LHDMMS2-N
 - b. Acuity - WSX-PDT-D
 - c. Wattstopper - DW-311
 - d. Or approved equal
- B. Wall mounted dimming switch with infra-red sensor
- C. 1,000 sq. ft. coverage area
- D. Adjustable 4 to 30 minute delay

- E. 180° coverage
- F. White finish
- G. Low voltage transformer and wiring included for each device and location
- H. Mount at 44" AFF
- I. Tested by independent testing lab
- J. 1,000W RMS AC rating

3. EXECUTION

3.01 INSTALLATION

- A. Install lamps in luminaires and lampholders.
- B. Install recessed luminaires to permit removal from below. Use plaster frames or grid clips when appropriate.
- C. Support surface-mounted luminaires directly.
- D. Do not support fixtures from conduit.

3.02 RELAMPING: Relamp luminaires which have been utilized as temporary/construction lighting or have failed lamps at completion of Work.

3.03 ADJUSTING AND CLEANING

- A. Align luminaires and clean lenses and diffusers at completion of Work. Clean paint splatters, dirt, and debris from installed luminaires.
- B. Touch up luminaries finish at completion of work.

END 26 50 00

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid: Contractor provide:
 - 1. Conduit, junction and pull boxes, for communications system as shown on the drawings and specified.
 - 2. Complete and functional intercom system including wiring, and speakers connected to the existing intercom front end.

1.02 PROJECT/SITE CONDITIONS:

- A. Verify all dimensions by field measurements.
- B. Verify final locations for rough-ins with field measurements and with the requirements of the actual equipment to be connected.
- C. Examine areas and conditions under which all items are to be installed, and notify A/E in writing of conditions detrimental to proper completion of the work. Do not proceed with that portion of the work affected until unsatisfactory conditions have been corrected in an acceptable manner.

1.03 SEQUENCING/COORDINATION:

- A. Sequence, coordinate, and integrate installations of communications materials and equipment for efficient flow of the Work.
- B. Coordinate communications equipment and materials installation with other building components.
- C. Coordinate the cutting and patching of building components to accommodate the installation of communications equipment and materials.
- D. Install communications equipment to facilitate maintenance, repair and replacement of equipment components. Connect equipment for ease of disconnecting, minimizing interference with other installations.
- E. Coordinate the installation of communications materials and equipment with other Contractors.

1.04 REGULATORY REQUIREMENTS:

- A. All communications wiring, devices and Work shall conform to the most recent requirements of the following codes, standards and organizations where applicable.
 - 1. American National Standards Institute (ANSI)
 - 2. Electronic Industries Association (EIA)
 - 3. Federal Communications Commission (FCC)
 - 4. Institute of Electrical and Electronics Engineers (IEEE)
 - 5. International Standards Organization (ISO)
 - 6. National Electrical Code (NEC)
 - 7. National Fire Protection Association (NFPA)
 - 8. Uniform Building Code (UBC)
 - 9. Underwriters Laboratories (UL)
 - 10. Building Officials and Administrators (BOCA)

1.05 EQUIPMENT IDENTIFICATION. Engrave and/or label all removable equipment with name of the school district and/or appropriate identification number as specified.

1.06 SUBMITTALS

DIVISION 27 - COMMUNICATIONS

Section 27 00 00 - Communications Requirements

- A. Submit Product Data including catalog sheets with complete technical data for all materials being furnished. Exact part/model numbers being provided shall be highlighted. Cabling and wiring type and capabilities.

1.07 QUALIFICATIONS

- A Contractor shall have at least four (4) years experience in the installation of similar systems.
- B. Contractor shall have current approval to install all of the equipment specified herein.

- 1.08 WARRANTY. Contractor will effect replacement or repair of any defective part of the entire system for a period of one (1) year after substantial completion.

2. PRODUCTS

2.01 GENERAL

- A. All products bid shall be the most current and up-to-date versions available, unless otherwise specified.
- B. Provide written notification to A/E of any discrepancies in model or part numbers specified.
- C. Provide all miscellaneous materials including mounting hardware and accessories which are necessary and reasonably incidental for a complete system.

2.02 INTERCOM

- A. Wall mount speakers shall be; Bogen model: WBS8T725.

2.03 SPEAKER WIRE AND CABLE

- A. 22 AWG copper conductor, 300 volt insulation, rated 60°C, paired conductors twisted together, shielded, and covered with PVC jacket.

3. EXECUTION

3.01 GENERAL

- A. Install all equipment and components in accordance with manufacturer's written instructions. Comply with the NEC, and recognized industry practices, to ensure that all items comply with specifications and serve intended purposes.
- B. All Cabling and equipment shall be installed in accordance with good engineering practices as established by the EIA and the NEC. Cabling shall meet all applicable local, State, and Federal building codes
- C. Record serial numbers of all items provided that are serialized. This data to be included on Record Drawings.

3.02 INSTALLATION

- A. Cabling:
 - 1. Conduit, Raceways and Outlet Boxes, to be provided as required.
 - 2. Furnish and install Faceplates and Faceplate Jacks in Outlet Boxes for all information outlets specified on drawings.

DIVISION 27 - COMMUNICATIONS

Section 27 00 00 - Communications Requirements

3. Furnish and install grommets and/or bushing in conduit ends to prevent damage to insulation or conductors.

END 27 00 00

1 GENERAL

1.01 WORK INCULDES

A. Base Bid:

1. Preparing subgrades for slabs-on-grade walks, pavements, turf, grasses, and plants.
2. Excavating and backfilling for buildings and structures
3. Excavating and backfilling for pavements and walks.
4. Excavating and backfilling trenches for utilities and pits for buried utility structures.
5. Excavating and backfilling topsoil.
6. Engineered Fill

1.02 DEFINITIONS

A. Backfill: Soil material or controlled low-strength material used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
2. Final Backfill: Backfill placed over initial backfill to fill a trench.

B. Base Course: Structural aggregate layer placed beneath a flexible hot mix asphalt surface or bituminous surface treatment.

C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.

D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

E. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.

F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.

1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Engineer. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
2. Bulk Excavation: Excavation more than 10 feet in width and more than 30 feet in length.
3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work directed by Engineer, shall be without additional compensation.

G. Fill: Satisfactory soil materials used to raise existing grades.

H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

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- I. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.
- J. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- K. Surface Course: Structural aggregate layer which serves as the finished roadway surface.
- L. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

1.03 REFERENCES:

- A. Specified references, or cited portions thereof, current at date of bidding documents, govern the work.
- B. American National Standards Institute/American Society for Testing and Materials (ANSI/ASTM):
 - 1. C136 - Sieve Analysis of Fine and Course Aggregate
 - 2. ASTM D698: Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 5 lb. Rammer and 12 in. Drop.
 - 3. Illinois Modified AASHTO T 310 - Direct Transmission Density/Backscatter Moisture
- C. Specifications for Road and Bridge Construction in Illinois, adopted January 1, 2022, and all updates current at time of bidding.
- D. Standard Specifications for Water & Sewer Main Construction in Illinois, 8th Edition, 2020.
- E. Illinois Department of Transportation Subgrade Stability Manual, May 1, 2005.
- F. Illinois Department of Bureau of Materials and Physical Research's Policy Memorandum, "Recycling Portland Cement Concrete into Aggregate", June 1, 2012.

1.04 COMPACTION TESTING

- A. Testing will be performed by a qualified testing agency in accordance with section 01 40 00.
- B. When, during progress of work, tests indicate that compacted materials do not meet specifications, remove defective work, replace and retest, as directed in writing by Engineer.
- C. Ensure that all compacted fills are tested before proceeding with placement of surface materials.

1.05 ADHERENCE TO SPECIFICATIONS

- A. Any proposed deviations from earthwork construction presented in the project specifications and plan drawings shall be coordinated with the Civil Consultant, the Geotechnical Consultant, the Architect, and the Owner.
- B. Trenching and backfilling for utilities shall be performed according to the provisions of the Standard Specifications for Water and Sewer Construction in Illinois, except references to measurement and payment, unless various items are specifically addressed in these Project Specifications.

2 PRODUCTS

2.01 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D 2487, or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter; also included as satisfactory soils are those soil groups listed as “unsatisfactory soils” provided they are modified as necessary and/or approved for use by the project Geotechnical Engineer.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487, or a combination of these groups.
 - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Fill Soils: Satisfactory soils placed and compacted to bring subgrade up to plan grade.
 - 2. Satisfactory Soils placed beneath paved areas or under floor slabs shall have a maximum liquid limit (LL) of 40 and a maximum plasticity index (PI) of 20.
- E. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand according to ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve, 30 to 60 percent passing the No. 4 sieve, and not more than 12 percent passing a No. 200 sieve. Alternatively, provide CA-6 or CA-10 Aggregate per Illinois Department of Transportation's Standard Specifications Section 1004. Also acceptable is crushed concrete according to IDOT Standard Specification 1004 and the IDOT Bureau of Materials and Physical Research's Policy Memorandum, "Recycling Portland Cement Concrete into Aggregate", graded into the IDOT gradations called for in the plans. Low plasticity earth from on-site excavation or from off-site sources that are moisture controlled, placed in lifts, and compacted per the Geotechnical Report is acceptable.
- F. Bedding and haunching for pipes: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand according to ASTM D 2940; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve. Alternatively, provide CA-6, CA-9, CA-10, CA-18, FA-1, FA-2, FA-5, FA-6, FA-10, or FA-21 aggregate per Illinois Department of Transportation's Standard

Specifications Sections 1003 and 1004. Also acceptable is crushed concrete according to IDOT Standard Specification 1004 and the IDOT Bureau of Materials and Physical Research's Policy Memorandum, "Recycling Portland Cement Concrete into Aggregate", graded into the IDOT gradations called for in the plans.

- G. Drainage Course (or Drainage Fill): Narrowly graded mixture of washed crushed stone, or crushed gravel according to ASTM D 448, coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and 0 to 5 percent passing a No. 8 sieve. Alternatively, provide *CA-07 or CA-11 Aggregate per Illinois Department of Transportation's Standard Specifications Section 1004.* Also acceptable is crushed concrete according to IDOT Standard Specification 1004 and the IDOT Bureau of Materials and Physical Research's Policy Memorandum, "Recycling Portland Cement Concrete into Aggregate", graded into the IDOT gradations called for in the plans.
- H. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand according to ASTM D 448, coarse-aggregate grading Size 67; with 100 percent passing a 1-inch sieve and 0 to 5 percent passing a No. 4 sieve. Alternatively, provide *CA-07 or CA-11 Aggregate per Illinois Department of Transportation's Standard Specifications Section 1004.* Also acceptable is crushed concrete according to IDOT Standard Specification 1004 and the IDOT Bureau of Materials and Physical Research's Policy Memorandum, "Recycling Portland Cement Concrete into Aggregate", graded into the IDOT gradations called for in the plans.
- I. Sand: ASTM C 33; fine aggregate. Alternatively, provide *FA-1, FA-2, FA-5, FA-6, FA-10, or FA-21 aggregate per Illinois Department of Transportation's Standard Specifications Section 1003.*
- J. Impervious Fill: Clayey gravel and sand mixture capable of compacting to a dense state.
- K. Topsoil: Friable loam free from subsoil, roots, grass, excessive amount of weeds, stones and foreign matter; acidity range (pH) of 5.5 to 7.5; containing a minimum of 4% and a maximum of 25% organic matter.
- L. Backfill and Fill: Satisfactory soil materials.
- M. Base Course: Gravel, crushed gravel, or crushed stone aggregate CA-6 or CA-10 per Illinois Department of Transportation's Standard Specifications Section 1004. The Plasticity Index (PI) shall be 0-6 for gravel and 0-4 for crushed stone and crushed gravel.
- N. Subbase Course: Gravel, crushed gravel, or crushed stone aggregate CA-6 or CA-10 per Illinois Department of Transportation's Standard Specifications Section 1004. The Plasticity Index (PI) shall be 0-9 for gravel. Also acceptable is crushed concrete according to IDOT Standard Specification 1004 and the IDOT Bureau of Materials and Physical Research's Policy Memorandum, "Recycling Portland Cement Concrete into Aggregate", graded into the IDOT gradations called for in the plans.
- O. Surface Course: Gravel, crushed gravel, or crushed stone aggregate CA-6 or CA-10 per Illinois Department of Transportation's Standard Specifications Section 1004. The Plasticity Index (PI) shall be 2-9 for gravel.
- P. Trench Backfill: Fine aggregate sand FA-1, FA-2, FA-6, or FA-21 per Illinois Department of Transportation's Standard Specification Section 1003. Also acceptable is crushed concrete according to IDOT Standard Specification 1004 and the IDOT Bureau of

Materials and Physical Research's Policy Memorandum, "Recycling Portland Cement Concrete into Aggregate", graded into the IDOT gradations called for in the plans.

- Q. Initial Backfill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand according to ASTM D 2940; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve. Alternatively, provide *CA-6, CA-9, CA-10, CA-18, FA-1, FA-2, FA-5, FA-6, FA-10, or FA-21 aggregate per Illinois Department of Transportation's Standard Specifications Sections 1003 and 1004*. Also acceptable is crushed concrete according to IDOT Standard Specification 1004 and the IDOT Bureau of Materials and Physical Research's Policy Memorandum, "Recycling Portland Cement Concrete into Aggregate", graded into the IDOT gradations called for in the plans.

2.02 CONTROLLED LOW STRENGTH MATERIAL (CLSM)

- A. Mixture of Portland Cement, sand, and water with a compressive strength at 28 and 180 days greater than or equal to 30 psi and less than 150 psi per Illinois Department of Transportation's Standard Specifications Section 1019.04. Fly ash may be added to the mixture per the above IDOT specification.

2.03 DRAINAGE GEOTEXTILES

- A. Woven or non-woven fabrics consisting of filaments of polypropylene, polyester, or polyethylene meeting the requirements of Article 1080.05 of the Illinois Department of Transportation's Standard Specifications, "Geotextile Fabric for French Drains".

3 EXECUTION

3.01 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth moving operations.
- B. Protect excavations by shoring, bracing, sheet piling, underpinning or other methods to prevent cave-in or loose soil from falling into excavation.
- C. Protect and maintain erosion and sedimentation controls during earth moving operations.
- D. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.
- E. Before starting excavation, establish location and extent of underground utilities occurring in work area. Contact – Joint Utility Locating Information for Excavators (J.U.L.I.E.)
- F. Notify utility companies to remove and relocate lines which are in the way of excavation.
- G. Maintain, reroute, or extend existing utility lines to remain which pass through work area.
- H. Notify Architect/Engineer immediately of unexpected subsurface conditions. Confirm notification in writing. Discontinue work until Architect/Engineer issues written notification to resume work.

- I. Protect bottom of excavations and soil adjacent to and beneath foundations from frost.
- J. Trees, shrubs, fences and all other property and surface structures shall be protected during construction unless their removal is called for in the contract documents. All properties destroyed shall be restored to original conditions.
- K. Pay costs for this work, except work performed by utility companies.

3.02 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.

3.03 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions that are identified in the bidding documents.
 - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
- B. Excavations at Edges of Tree- and Plant-Protection Zones:
 - 1. Excavate by hand to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
 - 2. Cut and protect roots according to Article 201.06(a) of the Illinois Department Standard Specifications.
- C. Excavate topsoil from areas to be further excavated, re-landscaped or re-graded including under proposed buildings pavement, and sidewalk. Stockpile in designated area on site. Excess topsoil shall be removed from site.

3.04 EXCAVATION FOR STRUCTURES

- A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
 - 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.

2. Correct unauthorized excavation in accord with Engineer's written authorization.
3. Protect existing foundations during excavation of new foundation system. Excavations shall not interfere with normal 45 degree bearing splay of any foundation.

3.05 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.06 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
 1. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.
- B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.
 1. Clearance: Maximum 12" each side of pipe when trench width is less than 5 feet without trench protection, 18" each side of pipe when trench width is greater than 5 feet, or less than 5 feet with protection.
- C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.
 1. For pipes and conduit less than 6 inches in nominal diameter, hand-excavate trench bottoms and support pipe and conduit on an undisturbed subgrade.
 2. For pipes and conduit 6 inches or larger in nominal diameter, shape bottom of trench to support bottom 90 degrees of pipe or conduit circumference. Fill depressions with tamped sand backfill.
 3. For flat-bottomed, multiple-duct conduit units, hand-excavate trench bottoms and support conduit on an undisturbed subgrade.
 4. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.
- D. Trenches in Tree- and Plant-Protection Zones:
 1. Hand-excavate to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
 2. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.

3. Cut and protect roots according to Article 201.06(a) of the Illinois Department Standard Specifications.
- E. Where a firm foundation is not encountered at the required depth due to soft, spongy, or otherwise unsuitable soil, all such unsuitable soil under the pipe and for the width of the trench shall be removed and replaced with well-compacted foundation material.
- F. If the excavation has been made beyond or below the required lines or grades, such excavated space shall be filled and the foundation brought to grade with well-compacted foundation material.
- G. Where rock is encountered, the Contractor shall notify the Engineer to have the material classified as rock prior to excavation. When rock is encountered in the bottom of the trench, it shall be removed to an elevation eight (8) inches below the bottom of the pipe and replaced with well-compacted foundation material.

3.07 SUBGRADE INSPECTION

- A. Notify Engineer when excavations have reached required subgrade.
- B. If Engineer determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
- C. Prepare, compact, and proof roll the subgrade in accordance with the Specification "Subgrade Preparation".
- D. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Engineer, without additional compensation.

3.08 UNAUTHORIZED EXCAVATION

- A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, shall be used unless otherwise directed by Engineer.
 1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by Engineer.

3.09 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent erosion.
 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees. Stockpile height shall not exceed 8 feet.

Remove excess or unsatisfactory soil materials from site.

3.10 BACKFILL PREPARATION

- A. Prior to backfill operations, complete the following:

1. Construction below finish grade including, where applicable, sub drainage, damp proofing, waterproofing, perimeter insulation and underground utilities.
 2. Surveying locations of underground utilities and locations provided by utility companies for Record Documents.
 3. Testing and inspecting underground utilities.
 4. Removing concrete formwork.
 5. Removing trash and debris.
 6. Removing temporary shoring and bracing, and sheeting.
 7. Installing permanent or temporary horizontal bracing on horizontally supported walls.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.11 UTILITY TRENCH BACKFILL

- A. Place backfill on subgrades free of mud, frost, snow, or ice.
- B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
- C. Trenches under Footings: Backfill trenches excavated under footings and within 18 inches of bottom of footings with satisfactory soil; fill with concrete to elevation of bottom of footings.
- D. Pipe laying and stabilizing:
1. pipe shall be laid and jointed to the applicable requirements for the type of pipe line and pipe material being installed.
 2. After the pipe has been laid and, when required, well-compacted haunching material shall be placed for the entire width of the trench and length of the pipe; except where the pipe outlets from an embankment or natural ground, impervious material shall be placed for the last three (3) feet of the pipe. Haunching material will be required for all pipe installations; except, where rigid pipe materials are used for water mains or force mains. The haunching material shall be place longitudinally along the pipe in maximum six (6) inch layers, loose measure. The elevation of the haunching material on each side of the pipe shall be the same. Special care shall be taken to completely fill the space under the pipe haunches.
 3. Compaction of foundation, bedding, and haunching material shall be by ramming or tamping to the satisfaction of the Engineer.
- E. Place and compact haunching and initial backfill to a height of 12 inches over the pipe or conduit.
1. Initial backfill shall be carefully deposited in uniform layers not exceeding six (6) inches thick, loose measure. The filling of the trench shall be carried on

simultaneously on both sides of the pipe in such a manner that damage to the pipe or injurious side pressures do not occur. The material in each layer shall be well-compacted by mechanical means to the satisfaction of the Engineer. Care shall be taken to avoid contact between the pipe and compaction equipment. Compaction equipment shall not be used directly over the pipe until sufficient backfill has been placed to insure that such equipment will not damage or disturb the pipe.

- F. Backfill voids with satisfactory soil while removing shoring and bracing.
- G. Place and compact final backfill to final subgrade elevation.
 - 1. Under Pavement or Sidewalk to 2 feet outside of pavement or sidewalk
 - a. Trench backfill shall be deposited in uniform layers not exceeding six (6) inches thick, loose measure, and each layer shall be compacted by mechanical means.
 - 2. Outside 2 feet from pavement or sidewalk
 - a. Satisfactory soils for fill material above middle of pipe for rigid pipe and above the initial backfill for flexible pipe.
 - 3. Controlled Low Strength Material (CLSM) shall be placed at locations shown on the plans, or, at the contractor's option with the approval of the Engineer. The CLSM shall be distributed evenly in the trench and allowed to harden. The mix may be subjected to loading upon approval of the Engineer, or, when a penetration of one and one-half (1.5) inches/blow or less has been obtained with a dynamic cone penetration (DCP) test. The mix shall not be exposed to freezing temperatures or wet weather conditions during the first twenty-four hours (24) after placement.
 - 4. When sheeting and bracing trench protection have been used, it shall be removed as soon as practicable; however, sufficient bracing shall be left across the trench as the backfilling progresses to hold the sides firmly in place without caving or settlement. Any depressions which may develop within the area involved in the construction operation due to settlement of the backfilling material shall be filled in a manner meeting the approval of the Engineer. When the Contractor constructs the trench with sloped or benched sides, backfilling for the full width of the excavation shall be as hereinbefore specified, except no additional compensation will be allowed for backfill material required outside the limits of the specified trench width.

3.12 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:
 - 1. Under grass and planted areas, use satisfactory soil material.
 - 2. Under walks and pavements, use satisfactory soil material.
 - 3. Under steps and ramps, use engineered fill.

4. Under building slabs, use engineered fill.
5. Under footings and foundations, use engineered fill.
- C. Place soil fill on subgrades free of mud, frost, snow, or ice.
- D. Place topsoil, during dry weather, in areas where seeding, sodding, and planting will be performed. Place to the following minimum depths, up to finished grade elevations:
 1. 6" for seeded areas
 2. 4" for sodded areas
 3. 24" for shrub beds
 4. 18" for flower beds

3.13 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each engineered fill, fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
 1. Do not place engineered fill, backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
 2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.
 3. Moisten site soils as necessary to eliminate conditions that would cause dust or soil loss due to wind erosion. Do not apply water in a manner that will cause surface erosion of the soils due to water runoff.
 4. If site grading is performed when soils are wet, the subgrade may pump to such a degree that it may have to be removed and replaced, or, require hydrated lime incorporated per IDOT Standard Specification Section 302 for drying prior to compaction. Such lime modification may be specifically required elsewhere in these contract documents for this project, regardless of soil moisture levels.

3.14 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 698:
 1. Under structures, building slabs, steps, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 98 percent if cohesive structural fill, or 100 percent if granular structural fill.

2. Under pavements, scarify and recompact top 12 inches below subgrade and compact each layer of backfill or fill soil material at 95 percent.
 3. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 95 percent.
 4. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 90 percent.
 5. For utility trenches, compact each layer of final backfill material at 95 percent under paved areas and building floors, and at 90 percent under turf or unpaved areas.
- D. Compact aggregate Engineered Fill to not less than the 100% of maximum dry unit weight according to ASTM D 698.

3.15 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
1. Provide a smooth transition between adjacent existing grades and new grades.
 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
1. Turf or Unpaved Areas: Plus or minus 1 inch.
 2. Walks: Plus or minus 1 inch.
 3. Pavements: Plus or minus 1/2 inch.
- C. Grading inside Building Lines: Finish subgrade to a tolerance of 1/2 inch when tested with a 10-foot straightedge.

3.16 Reserved

3.17 FIELD QUALITY CONTROL

- A. Special Inspections: A qualified special inspector will be engaged in accordance with 01 45 00 to perform the following special inspections:
1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
 2. Determine that fill material and maximum lift thickness comply with requirements.
 3. Determine, at the required frequency, that in-place density of compacted subgrade and fill complies with requirements.

- B. Testing Agency: A qualified geotechnical engineering testing agency will be engaged in accordance with 01 45 00 to perform tests and inspections.
- C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
- D. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Engineer.
- E. Testing agency will test compaction of soils in place according to ASTM D 1556 or AASHTO T191 (sand cone), ASTM D 2167 (rubber balloon), ASTM D 6938 or Illinois Modified AASHTO T310 (Direct Transmission Density/Backscatter Moisture) (nuclear), and ASTM D 2937 (drive cylinder), as applicable. Tests will be performed at the following locations and frequencies:
 - 1. Paved and Building Slab Areas: At subgrade and at each compacted fill and backfill layer, at least one test for every 2000 sq. ft. or less of paved area or building slab, but in no case fewer than three tests.
 - 2. Foundation Wall Backfill: At each compacted backfill layer, at least one test for every 100 feet or less of wall length, but no fewer than two tests.
 - 3. Trench Backfill: At each compacted initial and final backfill layer, at least one test for every 150 feet or less of trench length, but no fewer than two tests.
- F. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

3.18 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 - 1. Scarify or remove and replace soil material to depth as directed by Engineer; reshape and recompact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.19 RESTORATION OF UTILITY TRENCHES

- A. Wherever conduits are constructed under traveled roadways, driveways, sidewalks, or other traveled surfaces, a temporary surface shall be placed over the top of the trench as soon as possible after compaction has been satisfactorily completed. The temporary

surface shall be a minimum of 8 inches of surface course aggregate, unless otherwise shown on the plans, mechanically compacted to the satisfaction of the Engineer.

1. Where ordered by the Engineer, dust control over temporary surfaces shall be accomplished by treatments of calcium chloride, bituminous material with seal coat aggregate, or water per Section 24 of the Standard Specifications for Water and Sewer Construction in Illinois.
- B. Restore any paved or grass surfaces not otherwise addressed on the project drawings per the applicable provisions of Section 21 of the Standard Specifications for Water and Sewer Construction in Illinois.

3.20 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus waste materials, including unsatisfactory trash, and debris, and legally dispose of them off Owner's property.
- B. Stockpile excess soil & aggregate on the property as directed by the owner. Care should be taken to stockpile the aggregate separate from the soil.
- C. All material to be removed will be legally disposed of off Owner's property.

END 31 23 10

1 GENERAL

1.01 WORK INCLUDES

- A. Shall consist of preparing the completed or existing earthwork as an unimproved subgrade prior to constructing the building slab, pavement structure, curb and gutter, sidewalk, or appurtenance.

1.02 REFERENCES

- A. Specified references, or cited portions thereof, current at date of bidding documents, govern the work.
- B. American National Standards Institute/American Society for Testing and Materials (ANSI/ASTM):
 - 1. ANSI/ASTM C-136 - Sieve Analysis of Fine and Coarse Aggregates.
 - 2. AASHTO T 99 (Method C) - Standard Proctor Test
 - 3. AASHTO T 224 – Correction for Coarse Particles
 - 4. Illinois Modified AASHTO T 310 - Direct Transmission Density/Backscatter Moisture
- C. Illinois Department of Transportation (IDOT) Standard Specifications for Road and Bridge Construction in Illinois, adopted January 1, 2022, and all updates current at time of bidding
- D. IDOT Manual of Test Procedures for Materials
 - 1. Illinois Test Procedure 501 (Dynamic Cone Penetrometer Test)
 - 2. Illinois Test Procedure 502 (Static Cone Penetrometer Test)
- E. IDOT Subgrade Stability Manual

1.03 SUBGRADE COMPACTION AND STABILTY TEST

- A. Testing will be performed by a qualified testing agency in accordance with section 01 40 00.
- B. The IBV will be determined according to Illinois Test Procedure 501 or 502.
- C. The standard laboratory density shall be the maximum dry density determined according to AASHTO T 99 (Method C). A coarse particle correction according to AASHTO T 224 shall be used.
- D. The dry density of the compacted embankment will be determined at regular intervals according to AASHTO T 191, Illinois Modified AASHTO T 310 (Direct Transmission Density/Backscatter Moisture).

2 PRODUCTS

NONE

3 EXECUTION

3.01 SUBGRADE PREPARATION

- A. All vegetation and topsoil shall be removed prior to preparing the subgrade.
- B. The subgrade shall be prepared such that after compaction, it will be smooth and conform to the alignment, grades, and cross sections shown on the plans.
- C. Proof roll subgrade to identify areas of unstable/unsuitable soils in accordance with the IDOT Subgrade Stability Manual.
- D. After proof rolling, in areas of paving, the subgrade shall be tested for stability and/or compaction where the proof roll has identified areas of concern. It shall have a minimum dry density of 95 percent of the standard laboratory dry density or a minimum immediate bearing value (IBV) of 3.0. Under non-structural bearing building slabs, the subgrade shall be required to have a minimum dry density of 90 percent of the standard laboratory dry density, a minimum immediate bearing value (IBV) of 3.0, or approval of the A/E.
- E. In cut sections, the Contractor shall take the following steps in an effort to obtain the required density and stability.
 - 1. Air dry the top 8 in. of subgrade. This procedure shall include at least two 8 in. deep processing utilizing disks or tillers each day for three consecutive good drying days.
 - 2. Recompact
 - 3. When the above steps have been performed and the required density and stability still have not been attained, the Engineer will make a determination as to whether additional drying and recompaction will be needed or whether the ground and soil conditions warrant more extensive treatments. Soft and unstable material that will not compact when rolled or tamped, shall be removed.
- F. Where rolling of the subgrade is required, any areas which are inaccessible to a roller shall be compacted by either a mechanical or hand tamper meeting the approval of the Engineer.
- G. The subgrade will be approved by the Engineer before construction of the pavement structure, shoulders, building slab, or appurtenances is started.

3.02 DRAINAGE

- A. The subgrade shall be kept drained during the construction of the pavement structure or building slab. If earth berms are deposited along the edge of the subgrade, provision shall be made for surface drainage by cutting lateral ditches through the berms.

3.03 MAINTENANCE

- A. The prepared subgrade shall be maintained in a smooth and compacted condition.

END 31 23 13

1. GENERAL

1.01 WORK INCLUDES

- A. Termite control as specified herein.

1.02 Related work

- a. Specified elsewhere
 - 1. Section 01 33 00 – Submittals
 - 2. Section 01 77 00 – Closeout Procedures
 - 3. Section 31 23 10 - Earthwork

1.03 REFERENCES

- A. Publication Dates: Comply with standards in effect as of the date of the Contract Documents except for those having different revision dates as referenced in the codes indicated on the Drawings, or unless otherwise indicated.
- B. EPA – Federal Insecticide, Fungicide, and Rodenticide Act.
- C. Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).
- D. National Pest Control Association (NPCA).

1.04 QUALITY ASSURANCE

- A. Applicator: Company specializing in treatment for termite control with five (5) years documented experience. Operator to be licensed and certified by the State.
- B. Materials: Provide certification that toxicants conform to specified requirements.
- C. Material Packaging: Manufacturer's labels and seals identifying content.
- D. Regulatory Requirements: Formulate and apply termiticides according to the EPA-Registered Label.

1.05 SUBMITTALS

- A. Submit:
 - 1. Manufacturer's Literature and Product Data:
 - a. Indicate termiticide to be used, composition by percentage, dilution schedule, and intended application rate.
 - b. Installation instructions.
 - c. Include the EPA registration information.
 - 2. Service Agreement: Signed copies.

3. Soil Treatment Application Reports: After application of termiticide is completed, submit report for Owner's record information, including the following:

- a. Date and time of each application.
- b. Moisture content of soil before applications.
- c. Brand name and manufacturer of termiticide.
- d. Quantity of undiluted termiticide used.
- e. Dilutions, methods, volumes, and rates of application used.
- f. Areas of application.
- g. Water source for application.

1.06 SERVICE AGREEMENT

- A. The Contractor shall provide a service agreement which maintains the termite control to be fully effective for a period of five (5) years from the date of substantial completion. A SERVICE Agreement shall be signed by the Contractor and the termiticide applicator.
- B. The Service Agreement shall state that the application was made at the concentration, rates, and methods which comply with these specifications.
- C. Inspect work annually during service agreement period and report in writing to the Owner.
- D. The service agreement shall be non-cancelable by all parties to the Contract except the Owner.
- D. At the end of the FIVE-YEAR period the Owner shall be offered a renewable contract at the Owner's option, at a mutually agreed upon annual fee and duration.

1.07 PROJECT CONDITIONS

- A. Environmental Limitations: To ensure penetration, do not treat soil that is water saturated or frozen. Do not treat soil while precipitation is occurring. Comply with THE REQUIREMENTS of the EPA-Registered Label and requirements of authorities having jurisdiction.

1.08 COORDINATION

- A. Coordinate soil treatment application with excavating, filling, grading, and concreting operations. Treat soil at foundations and grade beams and underground-supported slabs before construction.

1.09 WARRANTY

- A. Special Warranty: Manufacturer's standard form, signed by Applicator and Contractor certifying that termite control work, consisting of applied soil termiticide treatment, will prevent infestation of subterranean termites. If subterranean termite activity or damage is discovered during warranty period, re-treat soil and repair or replace damage caused by termite infestation.

1. Warranty Period: Five years from date of Substantial Completion.

2. PRODUCTS

2.01 MATERIALS

- A. Termiticide: Provide an EPA-registered termiticide complying with requirements of authorities having jurisdiction, in an aqueous solution formulated to prevent termite infestation. Provide quantity required for application at the label volume and rate for the maximum termiticide concentration allowed for each specific use, according to product's EPA-registered Label.
 - 1. Acceptable products/manufacturers of termiticides.
 - a. BASF / Termidor
 - b. Bayer Corp. / Premise 75
 - c. FMC Corp. / Talstar Professional Insecticide
 - d. Syngenta / Demon MAX

3. EXECUTION

3.01 PREPARATION

- A. General: Comply with the most stringent requirements of authorities having jurisdiction and with THE MANUFACTURER'S written instructions for preparation before beginning application of termite control treatment. Remove all extraneous sources of wood cellulose and other edible materials such as wood debris, tree stumps and roots, stakes, formwork, and construction waste wood from soil within and around foundations.
- B. Examine substrates, areas, and conditions with Applicator present, for compliance with requirements for moisture content of soil, interfaces with earthwork, slab and foundation work, landscaping, and other conditions affecting performance of termite control.
- C. Remove foreign matter and impermeable soil materials that could decrease treatment effectiveness on areas to be treated. Loosen, rake, and level soil to be treated except previously compacted areas under slabs and footings. Soil treatment shall not proceed when surface water is present, or when soil is frozen or otherwise unacceptable. Apply only when all preparation for slab placement has been completed. Apply immediately prior to vapor barrier installation.
- D. Post signs in the area of termiticide application to alert other workers until surface has been covered by other construction.

3.02 LOCATION AND RATE OF APPLICATION

- A. Application: Mix soil treatment termiticide solution to a uniform consistency. Provide quantity required for application at the label volume and rate for the maximum specified concentration of termiticide, according to manufacturer's EPA-Registered Label, to the following so that a continuous horizontal and vertical termiticidal barrier or treated zone is established around and under building construction. Distribute treatment evenly. Apply soil treatment to the following areas:

DIVISION 31 - EARTHWORK
Section 31 31 16 – Termite Protection

1. Slabs-on-Grade and Basement Slabs: Under ground-supported slab construction, including building slabs, and attached slabs as an overall treatment. Treat soil materials before concrete slabs are placed.
 2. Foundations: Adjacent soil including soil along the entire inside perimeter of foundation walls, along both sides of interior partition walls, around plumbing pipes and electric conduit penetrating the slab, and around interior column footings, piers, and chimney bases; ALSO, along the entire outside perimeter, from grade to bottom of footing. Avoid soil washout around footings.
 3. Crawlspace: Soil under and adjacent to foundations as previously indicated. Treat adjacent areas including around entrance platform, porches, and equipment bases. Apply overall treatment only where attached concrete platform and porches are on fill or ground.
 4. Slab Penetrations: At expansion joints, control joints, and areas where slabs will be penetrated.
- B. Reapply soil treatment to any areas disturbed by subsequent excavations or other construction activity following application.

END 31 31 16

1 GENERAL

1.01 WORK INCLUDES

A. Base Bid:

1. Place Sub-Base Granular Material, Type B to lines and grades shown on the construction drawings.

1.02 REFERENCES

- A. IDOT Standard Specifications for Road and Bridge Construction adopted January 1, 2022, and all updates current at time of bidding.
- B. American National Standards Institute (ANSI) and American Society for Testing and Materials (ASTM):
1. ANSI/ASTM C-136 - Sieve Analysis of Fine and Coarse Aggregates.
 2. AASHTO T 99 (Method C) - Standard Proctor Test
 3. AASHTO T 224 – Correction for Coarse Particles
 4. Illinois Modified AASHTO T 310 - Direct Transmission Density/Backscatter Moisture

1.03 SUBMITTALS

- A. Submit product information showing gradation analysis, quality, plasticity index, and producer qualifications for the aggregate materials.

2 PRODUCTS

2.01 MATERIALS

- A. Sub-Base Granular Material, Type B as per Article 1004.04 of the IDOT Standard Specifications.

3 EXECUTION

3.01 SUBBASE COURSE

- A. Prepare subgrade in accordance with the Specification “Subgrade Preparation”.
- B. Place, finish, and compact Subbase Granular Material, Type B as follows and in accordance with Section 311 of the IDOT Standard Specifications.
1. The granular material shall be placed and compacted as specified for the particular type of granular subbase. If any earth is worked into the granular material during the compacting or finishing operations, all granular material within the affected area shall be removed and replaced with new granular material. The Engineer may restrict hauling over the completed or partially completed work

DIVISION 32 – EXTERIOR IMPROVEMENTS
Section 32 11 23– Aggregate Base Courses

after inclement weather or at any time when the earth subgrade is soft and there is a tendency for the earth to work into the granular material.

2. If the moisture content is insufficient to maintain satisfactory compaction or to prevent segregation or raveling when hauling is permitted over the granular material, water shall be added as directed by the Engineer.
3. In addition to the requirements for Subbase Granular Material, Type B found in Section 311.05 (b) of the IDOT Standard Specifications, compaction shall be in accordance with 1.03 of this section.
4. When construction of the granular subbase has been completed at a location, or when directed by the Engineer, the Contractor shall salvage the excess granular material outside the construction limits of the granular subbase. The salvaged granular material shall be carried forward and utilized in the construction of the granular subbase. The Contractor shall salvage the granular material in such a manner as to prevent segregation and the incorporation of earth.
5. The subbase shall be constructed in lifts not more than 6 in. thick when compacted, except that if tests indicate that the desired results are being obtained, the compacted thickness of any lift may be increased to a maximum of 8 in. Each lift of material shall be compacted in a manner approved by the Engineer. If the moisture content of the material is such that compaction satisfactory to the Engineer cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.
6. The subbase shall be constructed to the thickness shown on the plans.

END 32 11 23

1 GENERAL

1.01 WORK INCLUDES

A. Base Bid:

1. Includes PCC Pavement, sidewalk, curb and gutter as shown on plans.

1.02 REFERENCES

- A.** IDOT Standard Specifications for Road and Bridge Construction adopted January 1, 2022, and all updates current at time of bidding.

1.03 QUALITY ASSURANCE

- A.** Manufacturer Qualifications: Manufacturer of ready-mixed concrete products who complies with ASTM C94/C 94M requirements for production facilities and equipment.
1. Manufacturer's certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- B.** ACI Publications: Comply with ACI 301, "Specifications for Structural Concrete" unless modified by requirements in the Contract Documents
- C.** The concrete pavement work shall conform to Section 420 of the IDOT Standard Specifications.
- D.** The concrete sidewalk work shall conform to Section 424 of the IDOT Standard Specifications.
- E.** The curb and gutter work shall conform to Section 606 of the IDOT Standard Specifications
- F.** Obtain materials from same source throughout.
- G.** Equipment: Conform to IDOT Standard Specifications Section 420 for pavement, 424 for sidewalk, and 606 for curb and gutter, except that a vibrating screed may be allowed for pavement if satisfactory strike off, consolidation, and finishing of the plastic concrete can be demonstrated.

1.04 WARRANTY

- A.** Concrete Pavement, Concrete Base Course, sidewalk, curb, and gutter:
1. Contractor's warranty of 1 year from date of Substantial Completion and in accordance with General Requirements.

1.05 TESTS

- A. Testing will be performed by a qualified testing agency in accordance with section 01 40 00.
- B. The testing firm will notify the contractor when the test results indicate the mix is not in compliance with the specifications. It is the contractor's responsibility to take corrective action to bring the concrete in compliance.
- C. Contractor will notify the testing firm a minimum of 24 hours before placing concrete.
- D. Strength, slump, and air tests will be performed for every 50-cu. yd. of concrete placed with a minimum of 1 test per day. If 6x12 test cylinders are used, a set of 4 test cylinders will be made for each test performed. Each set will have two 7 day and two 14-day compressive strength tests. If 4x8 test cylinders are used, a set of 6 test cylinders will be made for each test performed. Each set will have three 7 day and three 14-day compressive strength tests.
- E. Requirements:
 - 1. Air – 5% to 8%
 - 2. Slump - 2 to 4 inches
 - 3. Water Cement Ratio – 0.32 to 0.42 lb/lb
 - 4. Compressive Strength – 3,500 psi at 14 days

1.06 SUBMITTALS

- A. Submit mix design for review.

2 PRODUCTS

2.01 P.C. CONCRETE

- A. P.C. Concrete material shall be IDOT Class PV for pavement and base course, and Class SI for sidewalk and curb and gutter per Section 1020 of the IDOT Standard Specifications and as modified herein:
 - 1. Fine aggregate shall conform with Article 1003.02 of the IDOT Standard Specifications.
 - 2. Coarse aggregate shall conform with Article 1004.02 of the IDOT Standard Specifications, except that uncrushed gravel will not be allowed.
 - 3. Portland Cement Type I shall comply with Section 1001 of the IDOT Standard Specifications.
 - 4. Calcium Chloride: NOT PERMITTED
 - 5. Curing of the plain concrete shall be by the Membrane Curing Method, Article 1020.13(a)(4) and Article 1022.01 Type III of the IDOT Standard Specifications.

2.02 PREFORMED EXPANSION JOINT FILLERS

- A. In accordance with Sec. 1051 of the IDOT Standard Specifications.

2.03 METALLIC REINFORCEMENT

- A. Reinforcing bars: ASTM A775, $f_y = 60,000$ psi

3 EXECUTION

3.01 LOCATION & LAYOUT

- A. The Contractor shall lay out the new work. All cuts and fills associated with the location of the pavements shall be included in the contract cost.
- B. The Contractor shall provide control stakes before the actual construction begins.
- C. The Contractor shall provide the new pavement in accordance with the drawings.

3.02 BASE PREPARATION

- A. Portland Cement Concrete Pavement and Base Course
 - 1. The contractor shall strip all existing vegetation and topsoil from the area of the proposed concrete pavement locations.
 - 2. The sub-grade shall be excavated, and lime modified to receive the proposed Portland cement concrete pavement or base course in accordance with the plan sheets and Specifications “Earthwork”, and “Lime-Treated Subgrades” if required elsewhere by the contract documents for this project.
 - 3. The aggregate subbase, if required, shall be placed, and compacted in accordance with the plan sheets and the Specification “Aggregate Base Courses”.
 - 4. The subgrade and subbase granular material shall be approved by the testing agency before the concrete pavements are poured.
- B. Portland Cement Concrete Sidewalk
 - 1. The contractor shall strip all existing vegetation and topsoil per applicable section from the area of the proposed concrete sidewalk locations.
 - 2. The sub-grade shall be excavated to receive the proposed Portland cement concrete sidewalk in accordance with the plan sheets. The existing sub-grade to remain shall be compacted in accordance with applicable section. Over-excavated areas shall be either filled with concrete as used for the rest of the sidewalk or CA-06.
 - 3. The Testing Lab shall approve the compacted sub-grade and any compacted fill before the concrete sidewalks are poured.

C. Curb and Gutter

1. The contractor shall strip all existing vegetation and topsoil per applicable section from the area of the proposed concrete sidewalk locations.
2. The sub-grade shall be excavated to receive the new sub-base granular material, type B, and the new curb and gutter in accordance with the plan sheets. The sub-base granular material shall be placed and compacted in accordance with applicable section. The existing sub-grade to remain shall be compacted in accordance with applicable section.

3.03 MIXING

- A. Portland Cement Concrete shall be mixed in accordance with Article 1020.11 of the Standard Specifications.

3.04 PLACING AND FINISHING

- A. Placement and finishing of the Portland cement concrete pavement shall be as per Article 420 of the IDOT Standard Specifications except control joints as follows: The transverse concrete control joints shall be placed at a maximum of 10' spacing, or as shown in the plans. Tied longitudinal joints shall be placed at locations as shown on the plans.
- B. Concrete shall be mixed, placed, or finished when the natural light is sufficient, unless an adequate and approved artificial lighting system is in operation. Concrete shall not be placed on soft, muddy, or frozen subgrade or subbase; nor when the subgrade is frozen under permanent adjacent pavement.
- C. Curb ramps shall be constructed according to the ADAAG, The Illinois Accessibility Code, and as shown on the plans.
- D. Control joints, longitudinal joints, and expansion joints shall be constructed as per the project details.
- E. Concrete shall be mixed, placed, or finished when the natural light is sufficient, unless an adequate and approved artificial lighting system is in operation. Concrete shall not be placed on soft, muddy, or frozen subgrade or subbase; nor when the subgrade is frozen under permanent adjacent pavement.
- F. Curb ramps shall be constructed according to the ADAAG, The Illinois Accessibility Code, and as shown on the plans.

3.05 TRANSVERSE CONCRETE CONTROL JOINTS

- A. Transverse concrete control joints shall be sawed in the concrete per the project details. These joints may be sawed with either a "wet" or "dry" concrete saw so long as satisfactory results are obtained. The sawed joints shall be sawed within 24 hours of the concrete placement. The control joints shall be sawed or formed so as to form as near a square as possible while the Contractor is cognizant of irregular adjoining concrete shapes. Resultant slab shapes that have excessive length compared to width that will be

prone to crack will not be allowed. Transverse control joints in sidewalk paving may be tooled into the wet concrete with an acceptable groove tool.

3.06 EXPANSION JOINTS

- A. Expansion joints shall be constructed as per the project details. Where the pavement is constructed adjacent to pavement or curb having expansion joints, the expansion joints in the concrete shall be placed in line with the existing expansion joints as nearly as practicable. Expansion joints shall also be placed where the pavement abuts existing sidewalks, buildings, between driveway pavement and sidewalk, and between sidewalk accessibility ramps and curbs where the ramp abuts a curb.

3.07 FINAL FINISH

- A. The final finish for pavement shall be obtained using a carpet drag composed of an artificial turf approved by the Engineer in accordance with Article 420.09(e)(2) of the IDOT Standard Specifications. As an alternative, the surface may be broomed to develop a skid-resistant surface and uniform appearance.
- B. The final finish for the sidewalk shall be done with a wooden float, leaving an even surface. Steel trowels shall not be permitted. After the water sheen has disappeared, the surface shall be given a final finish by brushing with a whitewash brush. The brush shall be drawn across the sidewalk at right angles to the edges of the walk, with adjacent strokes slightly overlapping, producing a uniform, slightly roughened surface with parallel brush marks.
- C. The final finish for curb and gutter shall be attained with a brush.

3.08 CURING

- A. Curing of the concrete work shall be as per the Membrane Curing Method, Article 1020.13(a)(4) and Article 1022.01, Type III of the IDOT Standard Specifications. Membrane curing will not be permitted between November 1 and April 15.
- B. Curing of the concrete work from November 1 to April 15 shall be as per the Polyethylene Sheeting Method, Article 1020.13(a)(2) and Article 1022.03, of the IDOT Standard Specifications. Other curing methods per Article 1020.13 may be used with the approval of the Engineer.

3.09 COLD WEATHER MIXING, PLACING, AND PROTECTION

- A. Mixing of concrete shall be controlled such that the temperature of the concrete on the site immediately before placement is a minimum of 50°F (10°C) and a maximum of 90°F (32°C).
- B. Concrete may be placed when the air temperature is above 35°F (2°C) and rising, and concrete placement shall stop when the falling temperature reaches 40°F (4°C) or below, unless otherwise approved by the Engineer. The subgrade or subbase shall not be frozen, nor the subgrade under permanent adjacent pavement.

DIVISION 32 – EXTERIOR IMPROVEMENTS
Section 32 13 13 – Concrete Paving

- C. Protection of Portland Cement Concrete, Other Than Structures, From Low Air Temperatures. When the official National Weather Service forecast for the construction area predicts a low of 32 °F (0 °C), or lower, or if the actual temperature drops to 32 °F (0 °C), or lower, concrete less than 72 hours old shall be provided at least the following protection.

Minimum Temperature Protection

25 – 32 °F Two layers of polyethylene sheeting, one layer of polyethylene and one layer of burlap, or two layers of waterproof paper.

Below 25 °F 6 in. of straw covered with one layer of polyethylene sheeting or waterproof paper; or approved insulating blankets having a thermal resistance (R) value of: R=16 for concrete slab 6 inches or less in thickness (T), R=10 for T>6 inches to 12 inches, R=6 for T>12 inches to 18 inches, and R=4 for T>18 inches. The insulating manufacturer shall clearly mark the insulating material with the R value.

These protective covers shall remain in place until the concrete is at least 96 hours old. When straw is required on pavement cured with membrane curing compound, the compound shall be covered with a layer of burlap, polyethylene sheeting or waterproof paper before the straw or blankets are applied.

END 32 13 13

DIVISION 32 - EXTERIOR IMPROVEMENTS
Section 32 13 36 - Pavement Markings

1. GENERAL

1.01 WORK INCLUDES

A. Base Bid:

1. Contractor to provide painted pavement markings as shown on the construction drawings.

1.02 REFERENCES

- A. IDOT Standard Specifications for Road and Bridge Construction adopted January 1, 2022, and all updates current at time of bidding.

1.03 QUALITY ASSURANCES

- A. Installer: Shall have a minimum of 2 years' experience in the layout and stripping of parking lots.

1.04 SUBMITTALS. Submit manufacturer's product specification and installation instructions.

2. PRODUCTS

2.01 MATERIALS:

- A. Paint shall Sherwin-Williams Premium Alkyd Zone Marking Paint. – A303 Yellow

2.02 EQUIPMENT: Pressurized, self-contained paint machine capable of applying a straight line from 2" to 6" wide, with consistent coverage of a minimum of 100 S.F. per gallon.

3. EXECUTION

3.01 PAINT

- A. Locate markings as required by construction drawings. Provide qualified technician to supervise equipment and application of markings. Lay out markings using guide lines, templates and forms.
- B. Prior to application of the paint pavement marking, the Contractor shall make certain the pavement surface is dry and free of dirt or grease and, if necessary, clean the surface to the satisfaction of the Engineer.
- C. Paint shall not be applied at air temperatures below 50 °F, unless approved by the Architect/Engineer. The paint shall be applied at a minimum thickness of 16 mils and beads shall be applied to all painted surfaces at the minimum rate of 6.0 lb/gal of paint used.
- D. Allow hot mix asphalt without protective coating to cure before painting as required by manufacturer of traffic paint.
- E. Allow concrete pavement to cure for 30 days and be dry before starting pavement marking unless directed otherwise by the Architect/Engineer.

END 32 13 36

1 GENERAL

1.01 SUMMARY

- A. This work shall consist of preparing the seed bed and placing the seed, fertilizer, agricultural limestone, mulch, and other materials required in seeding operations in areas disturbed by construction.

1.02 REFERENCES

- A. IDOT Standard Specifications for Road and Bridge Construction adopted January 1, 2022, and all updates current at time of bidding.

1.03 WARRANTY

- A. The contractor shall provide a warranty of 1 year from the date of substantial completion plus 1 growing season.
- B. Unacceptable areas identified by this inspection shall be reworked, fertilized, seeded, mulched, and watered at the Contractor's expense.
- C. The permitted original seeding dates listed in the IDOT Standard Specifications shall be observed for this remedial work necessary.

2 PRODUCTS

2.01 TOPSOIL

- A. Provide topsoil in accordance with Section "Earthwork" of the Project Specifications.

2.02 FERTILIZER

- A. Fertilizer shall be in accordance with Article 1081.08 of the IDOT Standard Specifications.
- B. Fertilizer shall be ready-mixed material of an analysis specified. In cases where a single nutrient is specified, the analysis shall be optional, provided that it carries sufficient filler to ensure adequate distribution of the nutrient.
- C. The following information shall be shown on the fertilizer bag or package, or on an attached tag.
 - 1. Name and address of manufacturer
 - 2. Name, brand, or trademark
 - 3. Number of net pounds of ready-mixed material in the package
 - 4. Chemical composition or analysis
 - 5. Guarantee of analysis

- D. If a brand or grade of fertilizer is delivered in bulk, a written statement having the above listed information shall accompany each load.

2.03 AGRICULTURAL LIMESTONE

- A. Agricultural Limestone shall be in accordance with Article 1081.07 of the IDOT Standard Specifications.
- B. Agricultural ground limestone shall contain particles ground sufficiently fine so that essentially all material pass a No. 4 sieve and is graded relatively uniform through the Nos. 8, 30, and 60 sieves. Agricultural ground limestone shall come from an IDOT approved source and shall be tested by the Department of Agriculture and rated with a source correction factor.

2.04 SEED

- A. Seed shall be in accordance with Article 1081.04 of the IDOT Standard Specifications.
- B. Seeds shall be packed for delivery in suitable bags according to standard commercial practice. Each bag shall be tagged or labeled. If it is necessary to store the seeds after their arrival on the work site, they shall be stored in an approved weatherproof building in such a manner as to protect the seeds from deterioration and to permit easy access for inspection.
- C. Seeding mixtures shall be Class 1 in accordance with Article 250.07 of the IDOT Standard Specifications as listed below:

<u>Class - Type</u>	<u>Seeds</u>	<u>lb/acre</u>
1 Lawn Mixture	Ky Bluegrass	100
	Perennial Ryegrass	60
	Creeping Red Fescue	40

2.05 MULCH

- A. Straw shall be stalks of wheat, rye, oats, or other approved straw, and shall be air dried, reasonably free from weeds, foreign matter detrimental to plant life. Hay or chopped corn stalks is not acceptable.
- B. Hydraulic mulch shall be in accordance with Article 1081.06(a)(2) of the IDOT Standard Specifications.

3 EXECUTION

3.01 SEED BED PREPARATION

- A. For bare earth seeding, seed bed preparation shall not be started until all requirements of Specification "Earthwork" have been completed. The area to be seeded shall be worked to a minimum depth of 3" with a disk, tiller, or other equipment approved by the Engineer,

reducing all soil particles to a size not larger than 2" in the largest dimension. The prepared surface shall be relatively free from weeds, clods, stones, roots, sticks, rivulets, gullies, crusting, and caking.

3.02 FERTILIZER

A. For bare earth areas, fertilizer nutrients and agricultural ground limestone shall be uniformly spread over the designated areas immediately prior to seed bed preparation.

B. 270 lb of fertilizer nutrients per acre shall be applied at 1:1:1 ratio as follows.

Nitrogen Fertilizer Nutrients	90 lb/acre
Phosphorus Fertilizer Nutrients	90 lb/acre
Potassium Fertilizer Nutrients	90 lb/acre

C. Do not apply grass seed and fertilizer at same time, in same machine.

3.03 AGRICULTURAL LIMESTONE

A. For bare earth areas, agricultural ground limestone shall be uniformly spread over the designated areas immediately prior to seed bed preparation.

B. When agricultural ground limestone is specified, it shall be applied at a rate of 2 tons/acre multiplied by the source correction factor.

3.04 SEEDING

A. Seed all areas disturbed by construction in accordance with Article 250.06 of the IDOT Standard Specifications at a rate of specified above

B. No seed shall be sown during high winds or when the ground is not in a proper condition for seeding. Prior to starting work, seeders shall be calibrated and adjusted to sow seeds at the required seeding rate. Equipment shall be operated in a manner to ensure complete coverage of the entire area to be seeded. When seed or fertilizer is applied with a hydraulic seeder, the rate of application shall be not less than 1000 gal of slurry per acre. This slurry shall contain the proper quantity of seed or fertilizer nutrients specified per acre. When using a hydraulic seeder, the fertilizer nutrients and seed shall be applied in two separate operations.

C. All legumes (clover and alfalfa) shall be inoculated with the proper bacteria in the amounts and manner recommended by the manufacturer of the inoculant before sowing or being mixed with other seeds for sowing. The inoculant shall be furnished by the Contractor and shall be approved by the Engineer. The seed shall be sown as soon as possible after inoculation. Seed that has been standing more than 24 hours after inoculation shall be reinoculated before sowing. If legumes are applied by a hydraulic seeder, three times the normal amount of inoculant shall be used.

D. Seeding Class 1 shall be sown with a machine that mechanically places the seed in direct contact with the soil, packs, and covers the seed in one continuous operation.

- E. Broadcasting or hydraulic seeding will be allowed as approved by the Engineer on steep slopes (over 1:3 (V:H)) or in inaccessible areas where use of the equipment specified is physically impossible.

3.05 MULCHING

- A. Within 24 hours of seed placement, mulch shall be placed on the areas specified. On slopes steeper than 1:3, mulch shall be applied the same day as seeded. Mulch shall be applied uniformly at the rate specified.
- B. Mulch Method 2. This method shall consist of hand or machine application of straw mulch at the rate of 2 tons/acre. The mulch shall be loose enough to permit air to circulate but compact enough to reduce erosion. If baled mulch material is used, care shall be taken that the material is in a loosened condition and contains no lumps or knots of compacted material. Spread by hand, blower, or other suitable equipment. Mulch shall also be thoroughly stabilized. The contractor has the option of any of the following procedures for stabilizing the straw.
 - 1. Procedure 1. This procedure shall consist of anchoring the straw into the soil by means of a mechanical stabilizer with dull blades or disks. These blades or disks shall be without camber, approximately 20 in. (500 mm) in diameter, notches spaced at approximately 8 in. (200 mm) intervals and equipped with scrapers. The stabilizer shall be approximately 1000 lb (450 kg), have a working width not exceeding 72 in. (1.8 m), and shall be equipped with a ballast compartment, so that when directed, the weight (mass) can be increased. This procedure shall not be used on slopes steeper than 3:1.
 - 2. Procedure 2. This procedure shall consist of stabilizing the straw with a mulch blower followed immediately by an overspray application of light-duty hydraulic mulch. The hydraulic mulch shall be according to Article 251.03(c) except that it shall be applied as a slurry of 900 lb (1020 kg) of mulch and 1000 gal (9500 L) of water per acre (hectare) using a hydraulic mulch applicator. The light-duty hydraulic mulch shall be agitated a minimum of five minutes before application and shall be agitated during application. The light-duty hydraulic mulch shall be applied from opposing directions to ensure even coverage.
 - 3. Procedure 3. This procedure shall consist of stabilizing the straw with a chemical mulch binder. The chemical mulch binder may be applied simultaneously with the straw or as an overspray.
 - a. Simultaneous Application. The coated straw shall be placed by equipment which will blow or eject, by means of a constant air stream, controlled quantities of straw and binder in a uniform pattern. The binder shall be introduced into the air stream of the machine by means of a spray which will partially coat the straw with a spotty tack. If the straw is excessively cut or broken, corrective measures shall be taken.
 - b. Overspray Application. The overspray application shall be performed according to Procedure 2.
 - c. The chemical mulch binder shall be approved by the Engineer and shall be applied at the rate recommended by the supplier and approved by the Engineer.
- C. Method 3 and 3a. These methods shall consist of the machine application of a light duty or heavy-duty hydraulic mulch at locations shown on the plans. Seeding shall be conducted as a separate operation and shall not be added to the hydraulic mulch slurry. Hydraulic mulch shall not be applied when the ambient temperature is at or below

freezing. To achieve full and even coverage, the hydraulic mulch shall be applied from two opposing directions. Mixing and application rates shall be according to the manufacturer's recommendations and meet the minimum application rates set in Article 1081.06(a)(2) of the IDOT Standard Specifications. Heavy duty hydraulic mulch shall be applied using a mechanically agitated hydraulic mulching machine. Light duty hydraulic mulch shall be limited to slopes 3:1 or flatter.

- D. Following the mulching operation, foot and vehicular traffic, or the movement of equipment over the mulched area shall be prohibited. At any location where mulching has been displaced by any Contractor's equipment or personnel, the seeding and mulch or other work damaged as a result of that displacement shall be repaired or replaced immediately.

3.06 REPAIR OF SEEDING

- A. The General Contractor is responsible for the proper care of the seeded areas during the period when the vegetation is being established. If, at any time before completion and acceptance of the entire work covered by this contract, any portion of the topsoil surface becomes eroded, gullied, or otherwise damaged or vandalized following seeding, has been winter killed or otherwise destroyed, the affected portion shall be repaired to re-establish the conditions and grade of the soil and re-seed the areas as specified herein to attain established turf.

3.07 MAINTENANCE OF SEEDING

- A. Maintenance, including fertilizing, mowing and all watering necessary to keep the grass in a live, healthy condition shall continue until all seeding under this contract has been completed and accepted.
- B. Mowing shall consist of cutting the grass when it reaches the height of three inches, maintaining a minimum height of two inches. The contractor shall catch and remove grass clippings.
- C. Mowing and all extra fertilizer and water necessary to keep the grass in a live, healthy condition shall be the contractor's responsibility.
- D. Apply weed killer when weeds start developing, during calm weather when the air temperature is above 50 degrees, and the wind speed is less than 10 mph.

3.08 FINAL INSPECTION AND ACCEPTANCE

- A. Fall seeding shall be inspected the following Spring (April 1 thru April 30) and spring seeding shall be inspected the following Fall (August 15 thru September 15).
- B. The turf areas to be accepted shall be in a live, green, and healthy condition void of bare spots. Turf areas shall achieve satisfactory establishment or germination and produce a lawn area of uniform density, free of water retaining depressions.

DIVISION 32 – EXTERIOR IMPROVEMENTS
Section 32 92 19 – Seeding

- C. Areas not draining properly or not producing the required uniform dense stand of grass for any reason, shall be repaired, and replaced as specified herein until all areas are covered with a satisfactory stand of grass.
- D. The contractor shall repair, re-seed, fertilize, re-mulch, and water the unacceptable seeded areas to the satisfaction of the owner.
- E. No additional payment to the Contractor shall be made for this seeding repair and maintenance work.

3.09 REPAIR TO EXISTING APPURTENANCES AND CLEAN-UP

- A. The contractor shall be held responsible for the repair of all damage to existing roadways, curbs, sidewalks, utilities, plant material, turf, and site furnishing caused by their work.
- B. At the completion of the work under this contract, the contractor shall remove all their debris and accumulated materials caused by engaging in the work.
- C. This debris and refuse shall be legally disposed of in accordance with Article 202.03 of the IDOT Standard Specifications.

END 32 92 19

1. GENERAL

1.01 WORK INCLUDES

- A. Base Bid:
 - 1. Contractor shall provide:
 - a. All water services of the size and type as shown on the drawings unless otherwise indicated on the plan sheets.

1.02 REFERENCES

- A. The work shall be done in conformance with the Standard Specifications for Water and Sewer Main Construction in Illinois, 8th Edition/ 2020. Copies may be obtained from the following association:
 - 1. Illinois Society of Professional Engineers
100 E. Washington
Springfield, IL 62701
- B. State of Illinois Plumbing Code
- C. City of Mattoon Ordinances

1.03 SUBMITTALS

- A. Submit shop drawings, including the manufacturer's literature, for each type and size of pipe being provided.
- B. Submit shop drawings, including the manufacturer's literature, for each valve size being provided, and for valve vault.
- C. Submit shop drawings, including the manufacturer's literature, for all the types and sizes of pipe fittings being provided.
- D. Submit shop drawings, including the manufacturer's literature, for joint restraint system for thrust blocking at all bends, tees, caps, valves, and hydrants to be installed.

1.04 PROJECT RECORD DOCUMENTS

- A. Accurately record location of pipe runs, connections, and invert elevations.
- B. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.
- C. Disinfection Report - accurately recorded:
 - 1. Type and form of disinfectant used.
 - 2. Date and time of disinfection injection start and time of completion.
 - 3. Test locations.
 - 4. Initial and 24-hour disinfection residuals (quantity in treated water) in parts per million (PPM) for each outlet tested.
 - 5. Date and time of flushing start and completion.
 - 6. Disinfectant residual after flushing in PPM for each outlet tested.

DIVISION 33 - UTILITIES
Section 33 10 00 – Water Utilities

- D. Bacteriological report: accurately recorded:
 - 1. Date issued, project number and name, and testing laboratory name, address and telephone number.
 - 2. Time and date of water sample collection.
 - 3. Name of person collecting samples.
 - 4. Test locations.
 - 5. Initial and 24-hour disinfection residuals in PPM for each outlet tested.
 - 6. Coliform bacteria test results for each outlet tested.
 - 7. Certification that water conforms, or fails to conform, to bacteriological standards of IDPH.
 - 8. Bacteriologist's signature.

2. PRODUCTS

2.01 WATER SERVICE ACCESSORIES

- A. Water service piping shall be Type K copper pipe for underground service and conforming to ASTM B88 and ASTM B251.
- B. Brass Corp Stops – Brass Corp Stops shall be taper thread (CC) by CTS compression. Corp Stops shall include a full-port ball valve. Corp Stops shall be; Mueller 300 P-25008 or Ford equivalent.
- C. Brass Fittings – All other brass fittings listed on the bid form shall be; Mueller or Ford.

2.02 FILL MATERIAL

- A Trench shall be backfilled in accordance with the Earthwork Specification.

3. EXECUTION

3.01 WATER MAIN TESTING AND DISINFECTION

- A. Under this item, all finished water mains shall be pressure tested and disinfected in accordance with Section 41-2.13 and Section 41-2.14 of the Standard Specifications.
- B. The public water utility shall have the right to draw water samples and conduct laboratory tests for bacterial contamination.
- A. Flushing:
 - 1. Flushing and testing shall proceed from the supply source outward where practical so that flushing water can be re-used on succeeding segments.
 - 2. Water required for further flushing due to failed bacterial contamination tests shall be purchased by the Contractor from the public water utility at the rates specified by the public water utility.

3.02 CONNECTION OF NEW WATER SERVICE TO EXISTING WATER MAIN

DIVISION 33 - UTILITIES
Section 33 10 00 – Water Utilities

- A. Under this item, connect the new water main to the existing water main as shown on the Drawings and in accordance with the following portion of the Standard Specifications:
 - 1. DIVISION IV WATER DISTRIBUTION
 - a. Section 41 - Pipe Installation for Water Mains.
Paragraph 41-2.13 – Water Service Connection.
- B. The following requirements modify or are in addition to the Standard Specifications.
- C. For each segment of water main being installed, the main shall be initially connected to the existing main as indicated on the Drawings. Connection points shall be valved and shall be the source of water for flushing, chlorination, and testing.
- D. Connection of services to the new mains shall be made after the new main has been tested and passed for leakage and bacteriological contamination.
- E. The Contractor shall be responsible for determining the type and outside diameter of the existing water main pipe to obtain the proper fittings.
- F. Connections to existing mains shall have no visible leakage.
- G. Where short lengths of main must be returned to service immediately after installation, all pipe and fittings shall be swabbed with chlorine solution prior to installation.

END 33 10 00

1 GENERAL

1.01 WORK INCLUDES

A. Contractor provide:

1. Storm sewer pipe and fittings of the type and size shown on the construction drawings.
3. Granular bedding and initial backfill.
4. Select granular backfill.
5. Precast reinforced concrete drainage structures at the locations and elevations shown on the construction drawings.
6. Grates, covers, and frames as shown on the construction drawings.
7. Downspout drains.

1.02 SYSTEM DESCRIPTION

A. Description of Systems: Manholes, inlets, grates, covers, and frames, and pipes shall be installed at the locations and elevations as shown and specified for the purpose of conveying surface water.

B. Tolerances:

1. Install drainage piping and structures at the locations and elevations indicated on the plans.
2. Pipe inverts, and lawn area grates and cover elevations shall be within $\pm 0.05'$ of the elevations shown but shall provide proper drainage and shall not interfere with other work.
3. Pavement area grate and cover elevations shall be within $\pm 0.01'$ of the elevations shown on the plans except as directed by the Architect/Engineer.

1.03 REFERENCES

- A. IDOT Standard Specifications for Road and Bridge Construction adopted January 1, 2022, and all updates current at the time of bidding.
- B. Standard Specifications for Water & Sewer Construction in Illinois, 8th Addition, 2020.
- C. American Society for Testing and Materials (ASTM): A48-83 Class 35 B, Specification for Gray Iron; D 3034, for Poly Vinyl Chloride (PVC) pipe; D2321-83a, Standard Practice for Installation of Flexible Thermoplastic Sewer Pipe; C76-85a, Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe; F405-85, Specification for Corrugated Polyethylene (PE) Tubing and Fittings; F449-76, Standard Recommended Practice for Subsurface Installation of Corrugated Thermoplastic Tubing for Agriculture Drainage or Water Table Control.
- D. American Water Works Association (AWWA): C151 (ANSI A21.51) for ductile iron pipe; bell and spigot or mechanical joints.

- E. ASTM C412 - Concrete Drain Tile.
- F. ASTM D1784 - Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
- G. AASHTO M252 - Standard Specification for Corrugated Polyethylene Drainage Pipe
- H. Illinois Department of Public Health – 2013 Private Sewage Disposal Licensing Act and Code.
- I. Soil Evaluation Report – See Section 02 24 23

1.04 SUBMITTALS

- A. Submit shop drawings and product data, and manufacturer's installation instructions under provisions of Section 01 33 00.
- B. Submit shop drawings indicating dimensions, layout of piping, high and low points of pipe inverts, gradient of slope between corners and intersections.

1.05 PROJECT RECORD DOCUMENTS

- A. Accurately record location of pipe runs, connections, cleanouts, and invert elevations.

2 PRODUCTS

2.01 STORM SEWERS

- A. The type of storm sewer pipe shall be Reinforced Concrete Pipe in accordance with Section 50-301A, HDPE Pipe in accordance with Section 50-301B, or SDR-26 PVC Sewer Pipe in accordance with Section 50-3.01C of the Standard Specifications for Water and Sewer Main Construction in Illinois and as follows:
 - 1. Reinforced concrete pipe shall conform to ASTM Designation C76, Classes I, II, III, IV, or V. Class of pipe shall conform to the manufacturer's recommendations based on minimum cover, backfill type and other considerations.
 - 2. High Density Polyethylene (HDPE) pipe shall conform to the requirements of AASTHO M 252 for pipe three (3) inches to ten (10) inches in diameter and AASHTO M 294 for pipe twelve (12) inches to sixty (60) inches.
 - 3. Polyvinyl Chloride (PVC) pipe shall conform the ASTM D3034, type PSM for pipe four (4) inches to fifteen (15) inches in diameter and ASTM F679 for pipe eighteen (18) inches to thirty-six (36) inches in diameter. Standard Dimension Ratio shall be SDR 26. The pipe shall be made of PVC plastic, having a minimum cell classification of 12454-C and shall have a minimum pipe stiffness of forty-six (46) lbs. per inch per inch.
- B. Sewer inlets, manholes, and castings shall be as per IDOT Standard Specifications.

2.02 WATER MAIN QUALITY SEWER PIPE (WMQSP)

- a) All materials, including ductile iron pipe, steel pipe, concrete pipe, plastic pipe, pipe liners, joints, fittings, valves, and fire hydrants, must conform to the AWWA, ASTM, ANSI or NSF standards incorporated by reference at 35 Ill. Adm. Code 601.115.

- b) Plastic Pipe
 - 1) Plastic Pipe Specifications. Polyvinyl Chloride (PVC), Chlorinated Polyvinyl Chloride (CPVC), Molecularly Oriented Polyvinyl Chloride (PVCO) and Polyethylene (PE) must conform to NSF Standard 14, incorporated by reference in 35 Ill. Adm. Code 601.115.
 - 2) PVC, CPVC, PVCO and PE pipe may be used for WMQSP in accordance with this Section.
 - A) PVC may be used for WMQSP in accordance with the following standards, incorporated by reference:
 - i) AWWA C900-07;
 - ii) ASTM D 1784-11;
 - iii) ASTM D 1785-15;
 - iv) ASTM D 2241-09.
 - B) PE pipe may be used for WMQSP in accordance with AWWA C906, incorporated by reference.
 - C) PVCO pipe may be used for WMQSP in accordance with AWWA C909, incorporated by reference.
 - D) CPVC pipe may be used for WMQSP in accordance with the following standards, incorporated by reference:
 - i) ASTM F 441/F 441M;
 - ii) ASTM F 442/F 442M;
 - iii) ASTM D 1784.
 - 3) Jointing
 - A) Jointing must be pressure slip jointed, solvent welded, heat welded, flange or threaded joint.
 - B) Clean, dry contact surfaces are required when making solvent or heat welded joints. Adequate setting time must be allowed for maximum strength.
 - C) Elastomeric seals (gaskets) used for push-on joints must comply with ASTM F 477 and must be pressure rated in accordance with ASTM D 3139.
 - D) Solvent cement must be specific for the piping material and must comply with ASTM D 2564 for PVC and ASTM F 493 for CPVC and must comply with Section 604.105(f).
 - 4) Plastic Pipe Fittings

- A) PVC fabricated fittings, 4-inch through 60-inch, must conform to AWWA C900.
 - B) Polyethylene pressure pipe fitting, 4-inch through 63-inch, must conform to AWWA C906.
 - C) Injection-molded PVC pressure fittings, 4-inch through 12-inch, must conform to AWWA C907.
 - D) Schedule 40 or 80 PVC and CPVC pipe fittings must be of the same material as the pipe and must comply with ASTM Standards as follows:
 - i) ASTM D 2466 for PVC Schedule 40;
 - ii) ASTM D 2467 for PVC Schedule 80;
 - iii) ASTM D 2464 for threaded Schedule 80;
 - iv) ASTM F 438 for Socket-Type CPVC Schedule 40;
 - v) ASTM F 439 for CPVC Schedule 80; and
 - vi) ASTM F 437 for threaded CPVC Schedule 80.
 - E) Plastic fitting material must conform to ANSI/NSF Standard 14 and comply with Section 604.105(f).
 - F) All fittings must bear the NSF seal of approval.
- c) Protection from Organic Compounds
- 1) When distribution systems are installed in areas contaminated by organic compounds:
 - A) pipe and joint materials must be protected; and
 - B) protection must extend at least 25 feet laterally from the areas contaminated by organic compounds.
 - 2) Where distribution systems are installed within 25 feet of potential sources of organic compound contamination, including any unit at a facility or a site that stores or accumulates petroleum at any time above ground or below ground, pipe and joint materials must be protected from organic compounds.
 - 3) Protection from organic compounds may include the following:
 - A) use of ductile iron pipe with a Viton® or nitrile gaskets, unless otherwise approved by the Engineer;
 - B) remediation;
 - C) use of steel pipe;
 - D) encasement of the pipe; and
 - E) secondary containment of the source.

2.03 DOWNSPOUT DRAINS

- A. Downspout Drainpipe: The pipe used for downspout drainpipe will be one of the following requirements: Poly Vinyl Chloride (PVC) SDR 26 and fittings meeting the requirements of ASTM D-3034; or High-Density Polyethylene (HDPE) meeting the requirements of AASHTO M252.
- B. Downspout drain connections to downspouts and other piping shall be Poly Vinyl Chloride (PVC) with connections intended for HDPE piping. Downspouts shall be connected to drains as specified by the owner. Connections to other downspout piping shall be with PVC cleanout structures manufactured for that purpose.

2.04 FILL MATERIAL

- A. Trench backfill shall be in accordance with Specification "Earthwork".

3 EXECUTION

3.01 SEWER WORK

- A. Remove and dispose of existing excavated materials in areas where trench backfill is required and remove off the site.
- B. Installation
 - 1. Install piping in trenches in conformance with the Specifications for Water and Sewer Main Construction in Illinois. Backfill trenches in accordance with Specification "Earthwork".
 - 2. Inlets, manholes, frames, grates, and covers:
 - a. Precast concrete drainage structures shall be installed on bedding and foundation in accordance with Section 32-3 of the Standard Specifications for Water and Sewer Main Construction in Illinois. Drainage structures placed under or within 2' of a paved surface shall be backfilled to within 6" of the surface with trench backfill as specified in Section "Earthwork". A continuous 1" bituminous mastic rope shall be installed between layers of precast. New and existing pipes shall be extended into new and existing drainage structures, as required, and sealed all around by means of a pre-set rubber gasket insert or by packing with non-shrink grout. Excavation and backfill shall be as specified in Specification "Earthwork".
 - b. Iron frames with grates or covers shall be installed level centered and at the elevations shown with a continuous 1" bituminous mastic rope installed between the steel frame and the precast concrete drainage structure.

3.02 SANITARY SEPARATION FOR FINISHED WATER MAINS

Water mains and water service lines shall be protected from sanitary sewers, storm sewers, combined sewers, house sewer service connections and drains as follows:

- a) Horizontal Separation

- 1) Water mains must be laid at least 10 feet horizontally from any existing or proposed drain, storm sewer, sanitary sewer, combined sewer, or sewer service connection. The distance must be measured edge to edge.
 - 2) Water mains may be laid closer than 10 feet to a sewer line when:
 - A) local conditions prevent a lateral separation of 10 feet.
 - B) the water main invert is at least 18 inches above the crown of the sewer;
and
 - C) the water main is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.
 - 3) When it is impossible to meet subsection (a)(1) or (a)(2), the following requirements must be met:
 - A) Required Materials
 - i) Both the water main and drain or sewer must be constructed of water main quality materials; or
 - ii) The sewer has a structural lining meeting ASTM F1216. The Engineer may approve an alternate structural lining.
 - B) The drain or sewer must be pressure tested to the maximum expected surcharge head before backfilling.
 - 4) Water mains must be laid at least 25 feet horizontally from any existing or proposed sanitary lift station, unless otherwise approved by the Engineer.
- b) Vertical Separation
- 1) When possible, the water main must be placed above the sewer.
 - A) A water main must be laid so that its invert is 18 inches above the crown of the drain or sewer whenever water mains cross storm sewers, sanitary sewers, or sewer service connections.
 - B) The vertical separation must be maintained for that portion of the water main located within 10 feet horizontally of the outer edge of any sewer or drain crossed.
 - C) A length of water main pipe must be centered over the sewer to be crossed with joints equidistant from the sewer or drain.
 - D) When it is impossible to maintain the 18-inch separation specified in subsection (b)(1)(A), the Engineer may approve an alternate construction method that reduces the risk of sanitary contamination, including:
 - i) Both the water main and sewer are constructed of water main quality materials, extending on each side of the crossing until at least 10 feet separates the two pipes.
 - ii) The sewer has a structural lining meeting ASTM F1216, or an alternate structural lining approved by the Engineer.

- iii) The water main or the sewer is encased in a carrier pipe equivalent to water main quality materials, extending on each side of the crossing until at least 10 feet separate the two pipes:
or
 - iv) When the water main crosses a storm sewer, the storm sewer is constructed with reinforced concrete pipe conforming to ASTM C76 with ASTM C443 flat gasket joints or ASTM C361 "O-ring" joints within 10 feet of the water main.
- 2) When it is impossible to place the water main above the storm sewers, sanitary sewers or sewer service connections, the water main may be placed below the sewer if:
 - A) The water main is laid so that it is at least 18 inches below the invert of the drain or sewer wherever water mains cross storm sewers, sanitary sewers, or sewer service connections.
 - B) Construction
 - i) Both the water main and sewer are constructed of water main quality materials, extending on each side of the crossing until at least 10 feet separates the two pipes.
 - ii) The sewer has a structural lining meeting ASTM F1216, or an alternate structural lining approved by the Engineer.
 - iii) The water main or the sewer is encased in a carrier pipe equivalent to water main materials, extending on each side of the crossing until at least 10 feet separate the two pipes: or
 - iv) when the water main crosses a storm sewer, the storm sewer is constructed with reinforced concrete pipe conforming to ASTM C76 with ASTM C443 flat gasket joints or ASTM C361 "O-ring" joints within 10 feet of the water main.
 - C) The sewer or drain lines must be supported to prevent settling and breaking the water main.
- c) Water mains must be separated from sewage disposal systems, disposal fields and seepage beds by a minimum of 25 feet.
- d) Notwithstanding subsection (a) or (b), a sanitary sewer force main must have at least the following minimum separation:
 - 1) When the sanitary sewer force main and the water main are parallel, a 10-foot horizontal separation from water mains; and
 - 2) When the sanitary sewer force main and the water main cross, an 18-inch vertical separation, with the water main above the sanitary sewer force main.

3.03 DOWNSPOUT DRAINS:

- A. Install downspout drains in accordance with the specification for Storm Sewer, above, as applicable.

3.04 COORDINATION:

DIVISION 33 - UTILITIES
Section 33 40 00 – Sewers

- A. Coordinate the work of this Section with the work of other Contractors to minimize the disturbance of existing and proposed work.
- B. All disturbed areas over sewer trenches and around sewer structures in lawn areas shall be restored by the Contractor created the disturbance.

END 33 40 00

DRAFT AIA® Document A101® – 2017

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum

AGREEMENT made as of the day of in the year
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

« »

« »

and the Contractor:
(Name, legal status, address and other information)

«»« »

« »

« »

« »

for the following Project:
(Name, location and detailed description)

«

The Architect:
(Name, legal status, address and other information)

«The Upchurch Group, Inc.»« »

«123 N 15th Street»

«Mattoon, IL 61938»

« »

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

The parties should complete A101®-2017, Exhibit A, Insurance and Bonds, contemporaneously with this Agreement. AIA Document A201®-2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

ELECTRONIC COPYING of any portion of this AIA® Document to another electronic file is prohibited and constitutes a violation of copyright laws as set forth in the footer of this document.

TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
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EXHIBIT A INSURANCE AND BONDS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be:

(Check one of the following boxes.)

☐ The date of this Agreement.

☒ A date set forth in a notice to proceed issued by the Owner.

☐ Established as follows:

(Insert a date or a means to determine the date of commencement of the Work.)

☐

If a date of commencement of the Work is not selected, then the date of commencement shall be the date of this Agreement.

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work.

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work:

(Check one of the following boxes and complete the necessary information.)

[☐] Not later than () calendar days from the date of commencement of the Work.

[☒] By the following date:

§ 3.3.2 Subject to adjustments of the Contract Time as provided in the Contract Documents, if portions of the Work are to be completed prior to Substantial Completion of the entire Work, the Contractor shall achieve Substantial Completion of such portions by the following dates:

Portion of Work	Substantial Completion Date
<input type="text"/>	<input type="text"/>

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be (\$), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

Item	Price
<input type="text"/>	<input type="text"/>

§ 4.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement.
(Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance
<input type="text"/>	<input type="text"/>	<input type="text"/>

§ 4.3 Allowances, if any, included in the Contract Sum:
(Identify each allowance.)

Item	Price
Contingency Allowance	Will fill in when awarded, if applicable

§ 4.4 Unit prices, if any:

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price per Unit (\$0.00)
<input type="text"/>	<input type="text"/>	<input type="text"/>

§ 4.5 Liquidated damages, if any:

(Insert terms and conditions for liquidated damages, if any.)

§ 4.6 Other:

(Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.)

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

§ 5.1.3 Provided that an Application for Payment is received by the Architect not later than the «12» day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the «TBD» day of the «TBD» month. If an Application for Payment is received by the Architect after the application date fixed above, payment of the amount certified shall be made by the Owner not later than «sixty» («60») days after the Architect receives the Application for Payment.

(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Architect may require. This schedule of values shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 In accordance with AIA Document A201™–2017, General Conditions of the Contract for Construction, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.6.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
- .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing; and
- .3 That portion of Construction Change Directives that the Architect determines, in the Architect's professional judgment, to be reasonably justified.

§ 5.1.6.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- .2 The amount, if any, for Work that remains uncorrected and for which the Architect has previously withheld a Certificate for Payment as provided in Article 9 of AIA Document A201–2017;
- .3 Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Architect may withhold payment, or nullify a Certificate of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017; and
- .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

«10%»

§ 5.1.7.1.1 The following items are not subject to retainage:

(Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

«NA»

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

«Until Substantial Completion, the Owner may withhold ten percent (10%) of the amount due the Contractor on account of progress payments, as applied to each line item in the Schedule of Values approved by the Architect.»

§ 5.1.7.3 Except as set forth in this Section 5.1.7.3, upon Substantial Completion of the Work, the Contractor may submit an Application for Payment that includes the retainage withheld from prior Applications for Payment pursuant to this Section 5.1.7. The Application for Payment submitted at Substantial Completion shall not include retainage as follows:

(Insert any other conditions for release of retainage upon Substantial Completion.)

«NONE»

§ 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201–2017.

§ 5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 Final Payment

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Certificate for Payment has been issued by the Architect.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment, or as follows:

« »

§ 5.3 Interest

Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

(Insert rate of interest agreed upon, if any.)

«1.5» % «per month (18% A.P.R.)»

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Initial Decision Maker

The Architect will serve as the Initial Decision Maker pursuant to Article 15 of AIA Document A201–2017, unless the parties appoint below another individual, not a party to this Agreement, to serve as the Initial Decision Maker.

(If the parties mutually agree, insert the name, address and other contact information of the Initial Decision Maker, if other than the Architect.)

« »

« »

« »

« »

§ 6.2 Binding Dispute Resolution

For any Claim subject to, but not resolved by, mediation pursuant to Article 15 of AIA Document A201–2017, the method of binding dispute resolution shall be as follows:

(Check the appropriate box.)

☐ Arbitration pursuant to Section 15.4 of AIA Document A201–2017

☒ Litigation in a court of competent jurisdiction

☐ Other (Specify)

« »

If the Owner and Contractor do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, Claims will be resolved by litigation in a court of competent jurisdiction.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2017.

§ 7.1.1 If the Contract is terminated for the Owner's convenience in accordance with Article 14 of AIA Document A201–2017, then the Owner shall pay the Contractor a termination fee as follows:

(Insert the amount of, or method for determining, the fee, if any, payable to the Contractor following a termination for the Owner's convenience.)

«Termination fee shall be

Seven and a Half percent (7.5%) of the value of the unpaid Contract Sum for the Work remaining to be performed as the date of Notice of Termination.»

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 The Owner's representative:

(Name, address, email address, and other information)

«TBD»

« »
« »
« »
« »
« »

§ 8.3 The Contractor's representative:

(Name, address, email address, and other information)

«TBD»

« »
« »
« »
« »

§ 8.4 Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.

§ 8.5 Insurance and Bonds

§ 8.5.1 The Owner and the Contractor shall purchase and maintain insurance as set forth in AIA Document A101™-2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum, Exhibit A, Insurance and Bonds, and elsewhere in the Contract Documents.

§ 8.5.2 The Contractor shall provide bonds as set forth in AIA Document A101™-2017 Exhibit A, and elsewhere in the Contract Documents.

§ 8.6 Notice in electronic format, pursuant to Article 1 of AIA Document A201-2017, may be given in accordance with AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, if completed, or as otherwise set forth below:

(If other than in accordance with AIA Document E203-2013, insert requirements for delivering notice in electronic format such as name, title, and email address of the recipient and whether and how the system will be required to generate a read receipt for the transmission.)

« »

§ 8.7 Other provisions:

« »

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A101™-2017, Standard Form of Agreement Between Owner and Contractor
- .2 AIA Document A101™-2017, Exhibit A, Insurance and Bonds
- .3 AIA Document A201™-2017, General Conditions of the Contract for Construction
- .4 AIA Document E203™-2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:

(Insert the date of the E203-2013 incorporated into this Agreement.)

«NA»

- .5 Drawings

Number	Title	Date
See G1.01	Drawings	

- .6 Specifications

Section	Title	Date	Pages
See Table of Contents	TOC		

- .7 Addenda, if any:

Number	Date	Pages

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.

- .8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

[«NA»] AIA Document E204™-2017, Sustainable Projects Exhibit, dated as indicated below:

(Insert the date of the E204-2017 incorporated into this Agreement.)

« »

[«NA»] The Sustainability Plan:

Title	Date	Pages

[«NA»] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages

.9 Other documents, if any, listed below:

(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201™-2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.)

« »

This Agreement entered into as of the day and year first written above.

OWNER (Signature)

(Printed name and title)

CONTRACTOR (Signature)

«TBD»« »

(Printed name and title)

DRAFT AIA® Document A101® – 2017

Exhibit A

Insurance and Bonds

This Insurance and Bonds Exhibit is part of the Agreement, between the Owner and the Contractor, dated the <> day of <> in the year <>
(In words, indicate day, month and year.)

for the following PROJECT:
(Name and location or address)

<>
<>

THE OWNER:
(Name, legal status and address)

<><>
<>

THE CONTRACTOR:
(Name, legal status and address)

<TBD><>
<>

TABLE OF ARTICLES

- A.1 GENERAL
- A.2 OWNER'S INSURANCE
- A.3 CONTRACTOR'S INSURANCE AND BONDS
- A.4 SPECIAL TERMS AND CONDITIONS

ARTICLE A.1 GENERAL

The Owner and Contractor shall purchase and maintain insurance, and provide bonds, as set forth in this Exhibit. As used in this Exhibit, the term General Conditions refers to AIA Document A201™-2017, General Conditions of the Contract for Construction.

ARTICLE A.2 OWNER'S INSURANCE

§ A.2.1 General

Prior to commencement of the Work, the Owner shall secure the insurance, and provide evidence of the coverage, required under this Article A.2 and, upon the Contractor's request, provide a copy of the property insurance policy or policies required by Section A.2.3. The copy of the policy or policies provided shall contain all applicable conditions, definitions, exclusions, and endorsements.

§ A.2.2 Liability Insurance

The Owner shall be responsible for purchasing and maintaining the Owner's usual general liability insurance.

ADDITIONS AND DELETIONS:
The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document is intended to be used in conjunction with AIA Document A201®-2017, General Conditions of the Contract for Construction. Article 11 of A201®-2017 contains additional insurance provisions.

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§ A.2.3 Required Property Insurance

§ A.2.3.1 Unless this obligation is placed on the Contractor pursuant to Section A.3.3.2.1, the Owner shall purchase and maintain, from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located, property insurance written on a builder's risk "all-risks" completed value or equivalent policy form and sufficient to cover the total value of the entire Project on a replacement cost basis. The Owner's property insurance coverage shall be no less than the amount of the initial Contract Sum, plus the value of subsequent Modifications and labor performed and materials or equipment supplied by others. The property insurance shall be maintained until Substantial Completion and thereafter as provided in Section A.2.3.1.3, unless otherwise provided in the Contract Documents or otherwise agreed in writing by the parties to this Agreement. This insurance shall include the interests of the Owner, Contractor, Subcontractors, and Sub-subcontractors in the Project as insureds. This insurance shall include the interests of mortgagees as loss payees.

§ A.2.3.1.1 **Causes of Loss.** The insurance required by this Section A.2.3.1 shall provide coverage for direct physical loss or damage, and shall not exclude the risks of fire, explosion, theft, vandalism, malicious mischief, collapse, earthquake, flood, or windstorm. The insurance shall also provide coverage for ensuing loss or resulting damage from error, omission, or deficiency in construction methods, design, specifications, workmanship, or materials. Sub-limits, if any, are as follows: *(Indicate below the cause of loss and any applicable sub-limit.)*

Causes of Loss	Sub-Limit

§ A.2.3.1.2 **Specific Required Coverages.** The insurance required by this Section A.2.3.1 shall provide coverage for loss or damage to falsework and other temporary structures, and to building systems from testing and startup. The insurance shall also cover debris removal, including demolition occasioned by enforcement of any applicable legal requirements, and reasonable compensation for the Architect's and Contractor's services and expenses required as a result of such insured loss, including claim preparation expenses. Sub-limits, if any, are as follows: *(Indicate below type of coverage and any applicable sub-limit for specific required coverages.)*

Coverage	Sub-Limit

§ A.2.3.1.3 Unless the parties agree otherwise, upon Substantial Completion, the Owner shall continue the insurance required by Section A.2.3.1 or, if necessary, replace the insurance policy required under Section A.2.3.1 with property insurance written for the total value of the Project that shall remain in effect until expiration of the period for correction of the Work set forth in Section 12.2.2 of the General Conditions.

§ A.2.3.1.4 **Deductibles and Self-Insured Retentions.** If the insurance required by this Section A.2.3 is subject to deductibles or self-insured retentions, the Owner shall be responsible for all loss not covered because of such deductibles or retentions.

§ A.2.3.2 **Occupancy or Use Prior to Substantial Completion.** The Owner's occupancy or use of any completed or partially completed portion of the Work prior to Substantial Completion shall not commence until the insurance company or companies providing the insurance under Section A.2.3.1 have consented in writing to the continuance of coverage. The Owner and the Contractor shall take no action with respect to partial occupancy or use that would cause cancellation, lapse, or reduction of insurance, unless they agree otherwise in writing.

§ A.2.3.3 Insurance for Existing Structures

If the Work involves remodeling an existing structure or constructing an addition to an existing structure, the Owner shall purchase and maintain, until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, "all-risks" property insurance, on a replacement cost basis, protecting the existing structure against direct physical loss or damage from the causes of loss identified in Section A.2.3.1, notwithstanding the undertaking of the Work. The Owner shall be responsible for all co-insurance penalties.

§ A.2.4 Optional Extended Property Insurance.

The Owner shall purchase and maintain the insurance selected and described below.

(Select the types of insurance the Owner is required to purchase and maintain by placing an X in the box(es) next to the description(s) of selected insurance. For each type of insurance selected, indicate applicable limits of coverage or other conditions in the fill point below the selected item.)

[« »] § A.2.4.1 Loss of Use, Business Interruption, and Delay in Completion Insurance, to reimburse the Owner for

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User Notes:

(1668511301)

loss of use of the Owner's property, or the inability to conduct normal operations due to a covered cause of loss.

« »

- [« »] **§ A.2.4.2 Ordinance or Law Insurance**, for the reasonable and necessary costs to satisfy the minimum requirements of the enforcement of any law or ordinance regulating the demolition, construction, repair, replacement or use of the Project.

« »

- [« »] **§ A.2.4.3 Expediting Cost Insurance**, for the reasonable and necessary costs for the temporary repair of damage to insured property, and to expedite the permanent repair or replacement of the damaged property.

« »

- [« »] **§ A.2.4.4 Extra Expense Insurance**, to provide reimbursement of the reasonable and necessary excess costs incurred during the period of restoration or repair of the damaged property that are over and above the total costs that would normally have been incurred during the same period of time had no loss or damage occurred.

« »

- [« »] **§ A.2.4.5 Civil Authority Insurance**, for losses or costs arising from an order of a civil authority prohibiting access to the Project, provided such order is the direct result of physical damage covered under the required property insurance.

« »

- [« »] **§ A.2.4.6 Ingress/Egress Insurance**, for loss due to the necessary interruption of the insured's business due to physical prevention of ingress to, or egress from, the Project as a direct result of physical damage.

« »

- [« »] **§ A.2.4.7 Soft Costs Insurance**, to reimburse the Owner for costs due to the delay of completion of the Work, arising out of physical loss or damage covered by the required property insurance: including construction loan fees; leasing and marketing expenses; additional fees, including those of architects, engineers, consultants, attorneys and accountants, needed for the completion of the construction, repairs, or reconstruction; and carrying costs such as property taxes, building permits, additional interest on loans, realty taxes, and insurance premiums over and above normal expenses.

« »

§ A.2.5 Other Optional Insurance.

The Owner shall purchase and maintain the insurance selected below.

(Select the types of insurance the Owner is required to purchase and maintain by placing an X in the box(es) next to the description(s) of selected insurance.)

- [« »] **§ A.2.5.1 Cyber Security Insurance** for loss to the Owner due to data security and privacy breach, including costs of investigating a potential or actual breach of confidential or private information.
(Indicate applicable limits of coverage or other conditions in the fill point below.)

« »

- [« »] **§ A.2.5.2 Other Insurance**
(List below any other insurance coverage to be provided by the Owner and any applicable limits.)

ARTICLE A.3 CONTRACTOR'S INSURANCE AND BONDS

§ A.3.1 General

§ A.3.1.1 Certificates of Insurance. The Contractor shall provide certificates of insurance acceptable to the Owner evidencing compliance with the requirements in this Article A.3 at the following times: (1) prior to commencement of the Work; (2) upon renewal or replacement of each required policy of insurance; and (3) upon the Owner's written request. An additional certificate evidencing continuation of commercial liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment and thereafter upon renewal or replacement of such coverage until the expiration of the periods required by Section A.3.2.1 and Section A.3.3.1. The certificates will show the Owner as an additional insured on the Contractor's Commercial General Liability and excess or umbrella liability policy or policies.

§ A.3.1.2 Deductibles and Self-Insured Retentions. The Contractor shall disclose to the Owner any deductible or self-insured retentions applicable to any insurance required to be provided by the Contractor.

§ A.3.1.3 Additional Insured Obligations. To the fullest extent permitted by law, the Contractor shall cause the commercial general liability coverage to include (1) the Owner, the Architect, and the Architect's consultants as additional insureds for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions for which loss occurs during completed operations. The additional insured coverage shall be primary and non-contributory to any of the Owner's general liability insurance policies and shall apply to both ongoing and completed operations. To the extent commercially available, the additional insured coverage shall be no less than that provided by Insurance Services Office, Inc. (ISO) forms CG 20 10 07 04, CG 20 37 07 04, and, with respect to the Architect and the Architect's consultants, CG 20 32 07 04.

§ A.3.2 Contractor's Required Insurance Coverage

§ A.3.2.1 The Contractor shall purchase and maintain the following types and limits of insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, unless a different duration is stated below:

(If the Contractor is required to maintain insurance for a duration other than the expiration of the period for correction of Work, state the duration.)

« »

§ A.3.2.2 Commercial General Liability

§ A.3.2.2.1 Commercial General Liability insurance for the Project written on an occurrence form with policy limits of not less than «One Million» (\$ «1,000,000») each occurrence, «Two Million» (\$ «2,000,000») general aggregate, and «Two Million» (\$ «2,000,000») aggregate for products-completed operations hazard, providing coverage for claims including

- 1 damages because of bodily injury, sickness or disease, including occupational sickness or disease, and death of any person;
- 2 personal injury and advertising injury;
- 3 damages because of physical damage to or destruction of tangible property, including the loss of use of such property;
- 4 bodily injury or property damage arising out of completed operations; and
- 5 the Contractor's indemnity obligations under Section 3.18 of the General Conditions.
- 6 Additional Insured (CG2010) and include Ongoing and Completed Operations (CG2037). Owner and Architect/Engineer and their employees, shall, by endorsement, be listed as an Additional Insured on a primary/noncontributory basis. - Attach copies of endorsements to COI.
- 7 Waiver of Subrogation. Waiver of Subrogation is added in favor of Owner and Architect/Engineer and their employees, by endorsement, shall be listed. - Attach copy of endorsement to COI.

§ A.3.2.2.2 The Contractor's Commercial General Liability policy under this Section A.3.2.2 shall not contain an exclusion or restriction of coverage for the following:

- 1 Claims by one insured against another insured, if the exclusion or restriction is based solely on the fact that the claimant is an insured, and there would otherwise be coverage for the claim.

- .2 Claims for property damage to the Contractor's Work arising out of the products-completed operations hazard where the damaged Work or the Work out of which the damage arises was performed by a Subcontractor.
- .3 Claims for bodily injury other than to employees of the insured.
- .4 Claims for indemnity under Section 3.18 of the General Conditions arising out of injury to employees of the insured.
- .5 Claims or loss excluded under a prior work endorsement or other similar exclusionary language.
- .6 Claims or loss due to physical damage under a prior injury endorsement or similar exclusionary language.
- .7 Claims related to residential, multi-family, or other habitational projects, if the Work is to be performed on such a project.
- .8 Claims related to roofing, if the Work involves roofing.
- .9 Claims related to exterior insulation finish systems (EIFS), synthetic stucco or similar exterior coatings or surfaces, if the Work involves such coatings or surfaces.
- .10 Claims related to earth subsidence or movement, where the Work involves such hazards.
- .11 Claims related to explosion, collapse and underground hazards, where the Work involves such hazards.

§ A.3.2.3 Automobile Liability covering vehicles owned, and non-owned vehicles used, by the Contractor, with policy limits of not less than «One Million» (\$ «1,000,000») per accident, for bodily injury, death of any person, and property damage arising out of the ownership, maintenance and use of those motor vehicles along with any other statutorily required automobile coverage.

- .1 Additional Insured. Owner and Architect/Engineer and their employees are listed as an Additional Insured on a primary/noncontributory basis. - Attach copy of endorsement to COI.
- .2 Waiver of Subrogation. Waiver of Subrogation is added in favor of Owner and Architect/Engineer and their employees. – Attach copy of endorsement to COI.

§ A.3.2.4 The Contractor may achieve the required limits and coverage for Commercial General Liability and Automobile Liability through a combination of primary and excess or umbrella liability insurance, provided such primary and excess or umbrella insurance policies result in the same or greater coverage as the coverages required under Section A.3.2.2 and A.3.2.3, and in no event shall any excess or umbrella liability insurance provide narrower coverage than the primary policy. The excess policy shall not require the exhaustion of the underlying limits only through the actual payment by the underlying insurers.

§ A.3.2.5 Workers' Compensation at statutory limits.

§ A.3.2.6 Employers' Liability with policy limits not less than «five hundred thousand dollars» (\$ «500,000») each accident, «five hundred thousand» (\$ «500,000») each employee, and «five hundred thousand» (\$ «500,000») policy limit.

§ A.3.2.7 Jones Act, and the Longshore & Harbor Workers' Compensation Act, as required, if the Work involves hazards arising from work on or near navigable waterways, including vessels and docks

§ A.3.2.8 If the Contractor is required to furnish professional services as part of the Work, the Contractor shall procure Professional Liability insurance covering performance of the professional services, with policy limits of not less than « » (\$ « ») per claim and « » (\$ « ») in the aggregate.

§ A.3.2.9 If the Work involves the transport, dissemination, use, or release of pollutants, the Contractor shall procure Pollution Liability insurance, with policy limits of not less than « » (\$ « ») per claim and « » (\$ « ») in the aggregate.

§ A.3.2.10 Coverage under Sections A.3.2.8 and A.3.2.9 may be procured through a Combined Professional Liability and Pollution Liability insurance policy, with combined policy limits of not less than « » (\$ « ») per claim and « » (\$ « ») in the aggregate.

§ A.3.2.11 Insurance for maritime liability risks associated with the operation of a vessel, if the Work requires such activities, with policy limits of not less than « » (\$ « ») per claim and « » (\$ « ») in the aggregate.

§ A.3.2.12 Insurance for the use or operation of manned or unmanned aircraft, if the Work requires such activities, with policy limits of not less than « » (\$ « ») per claim and « » (\$ « ») in the aggregate.

§ A.3.3 Contractor's Other Insurance Coverage

§ A.3.3.1 Insurance selected and described in this Section A.3.3 shall be purchased from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Contractor shall maintain the required insurance until the expiration of the period for correction of Work as set forth in Section 12.2.2 of the General Conditions, unless a different duration is stated below:

(If the Contractor is required to maintain any of the types of insurance selected below for a duration other than the expiration of the period for correction of Work, state the duration.)

« »

§ A.3.3.2 The Contractor shall purchase and maintain the following types and limits of insurance in accordance with Section A.3.3.1.

(Select the types of insurance the Contractor is required to purchase and maintain by placing an X in the box(es) next to the description(s) of selected insurance. Where policy limits are provided, include the policy limit in the appropriate fill point.)

- [☐] § A.3.3.2.1 Property insurance of the same type and scope satisfying the requirements identified in Section A.2.3, which, if selected in this section A.3.3.2.1, relieves the Owner of the responsibility to purchase and maintain such insurance except insurance required by Section A.2.3.1.3 and Section A.2.3.3. The Contractor shall comply with all obligations of the Owner under Section A.2.3 except to the extent provided below. The Contractor shall disclose to the Owner the amount of any deductible, and the Owner shall be responsible for losses within the deductible. Upon request, the Contractor shall provide the Owner with a copy of the property insurance policy or policies required. The Owner shall adjust and settle the loss with the insurer and be the trustee of the proceeds of the property insurance in accordance with Article 11 of the General Conditions unless otherwise set forth below:

(Where the Contractor's obligation to provide property insurance differs from the Owner's obligations as described under Section A.2.3, indicate such differences in the space below. Additionally, if a party other than the Owner will be responsible for adjusting and settling a loss with the insurer and acting as the trustee of the proceeds of property insurance in accordance with Article 11 of the General Conditions, indicate the responsible party below.)

« »

- [☐] § A.3.3.2.2 Railroad Protective Liability Insurance, with policy limits of not less than « » (\$ « ») per claim and « » (\$ « ») in the aggregate, for Work within fifty (50) feet of railroad property.

- [☐] § A.3.3.2.3 Asbestos Abatement Liability Insurance, with policy limits of not less than « » (\$ « ») per claim and « » (\$ « ») in the aggregate, for liability arising from the encapsulation, removal, handling, storage, transportation, and disposal of asbestos-containing materials.

- [☐] § A.3.3.2.4 Insurance for physical damage to property while it is in storage and in transit to the construction site on an "all-risks" completed value form.

- [☐] § A.3.3.2.5 Property insurance on an "all-risks" completed value form, covering property owned by the Contractor and used on the Project, including scaffolding and other equipment.

- [☒] § A.3.3.2.6 Other Insurance

(List below any other insurance coverage to be provided by the Contractor and any applicable limits.)

Builder's Risk Insurance (Course of Construction Insurance)

- a. Purchaser. Builder's Risk Insurance shall be purchased and maintained by the Contractor.
- b. The policy shall be a Completed Value All Risk Builder's Risk/Installation Floater policy or a combination thereof. **The policy shall be written in an amount equal to 100% of the total of the contract.**
- c. Coverage shall include the following work and property:

- 1) The installed work of all contractors until substantial completion of the entire project.
 - 2) Building materials and supplies, equipment, machinery and fixtures intended to become a permanent part of the project. Coverage shall include on the premises, at temporary storage locations and in transit.
 - 3) Construction forms, scaffolding and temporary structures on the premises.
 - 4) Drawings and specifications used to document as-constructed conditions.
 - 5) Debris removal resulting from a covered peril.
 - 6) Fire or collapse resulting from excluded perils.
- d. Coverage may only exclude the following property:
- 1) tools, equipment and other personal property of the contractors and their employees;
 - 2) vehicles of any kind;
 - 3) lawns, trees, shrubs or plants; and,
 - 4) the value of existing buildings prior to renovation under this contract.
- e. Perils excluded may only include:
- 1) earth movement, including earthquake, landslide or mud slide;
 - 2) flood, sewer backup, and seepage;
 - 3) dishonest acts of the insured or its employees;
 - 4) trick or fraud;
 - 5) mysterious disappearance;
 - 6) inventory shortage;
 - 7) corrosion, rust, rot, mold, wear and tear, except resulting unexcluded loss;
 - 8) changes or extremes of temperature and humidity;
 - 9) settling, cracking, shrinking, expanding of walls, ceilings, floors, foundations, etc.;
 - 10) operation of building ordinances or laws;
 - 11) loss of use or occupancy;
 - 12) design error, except resulting damage;
 - 13) war, rebellion, insurrection, radioactive contamination, and.
 - 14) pollution clean up, unless the release results from a covered peril.
- f. Additional Insured. Owner and Architect/Engineer shall, by endorsement, be included as additional named insureds.
- g. Deductible. A deductible clause of maximum of \$5,000 per loss shall be included.
- 1) Owner will assume responsibility for the deductible amount for installed work unless responsibility for the loss can be attributed to a negligent act by Contractor.
- h. Owner Rights. Owner reserves the right to take over the policy or extend coverage after default, cancellation or termination of coverage for any reason.
- i. Beneficial Occupancy. The policy by its terms or endorsement shall specifically permit and allow for beneficial or partial occupancy prior to substantial completion of the project by Architect/Engineer.
- j. Waiver of Damages. Owner, the Architect/Engineer and Contractor waive all rights each against the others for damages caused by fire or any other peril to the extent any loss or claim is covered by Builder's Risk Insurance or any other valid insurance applicable to the project except such rights as they may have to the proceeds of such insurance held by any of the insured as a result of loss. Contractor shall require similar waivers of subrogation from all subcontractors.

Coverage**Limits****§ A.3.4 Performance Bond and Payment Bond**

The Contractor shall provide surety bonds, from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located, as follows:

(Specify type and penal sum of bonds.)

Type

Penal Sum (\$0.00)

Payment Bond

Performance Bond

Payment and Performance Bonds shall be AIA Document A312™, Payment Bond and Performance Bond, or contain provisions identical to AIA Document A312™, current as of the date of this Agreement.

ARTICLE A.4 SPECIAL TERMS AND CONDITIONS

Special terms and conditions that modify this Insurance and Bonds Exhibit, if any, are as follows:

« »

DRAFT AIA® Document A201® – 2017

General Conditions of the Contract for Construction

for the following PROJECT:

(Name and location or address)

<<>>
<<>>

THE OWNER:

(Name, legal status and address)

<< >>
<<>>

THE ARCHITECT:

(Name, legal status and address)

«The Upchurch Group, Inc.»«123 N 15th Street»
«Mattoon, IL 61938»

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ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, Guide for Supplementary Conditions.

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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding or proposal requirements.

§ 1.1.2 The Contract

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect's consultants, or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

§ 1.1.3 The Work

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 The Project

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

§ 1.1.5 The Drawings

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.1.8 Initial Decision Maker

The Initial Decision Maker is the person identified in the Agreement to render initial decisions on Claims in accordance with Section 15.2. The Initial Decision Maker shall not show partiality to the Owner or Contractor and shall not be liable for results of interpretations or decisions rendered in good faith.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, subject to any protocols established pursuant to Sections 1.7 and 1.8, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner, Architect, and the Architect's consultants.

§ 1.5.3 Wherever confidentiality, privacy & security are expected and intrinsic to the work, the instruments of service shall be kept confidential and only for the contracted parties involved.

§ 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission if a method for electronic transmission is set forth in the Agreement.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

The parties shall agree upon protocols governing the transmission and use of Instruments of Service or any other information or documentation in digital form. ~~The parties will use AIA Document E203™ 2013, Building Information Modeling and Digital Data Exhibit, to establish the protocols for the development, use, transmission, and exchange of digital data.~~

~~§ 1.8 Building Information Models Use and Reliance~~

~~Any use of, or reliance on, all or a portion of a building information model without agreement to protocols governing the use of, and reliance on, the information contained in the model and without having those protocols set forth in AIA Document E203™ 2013, Building Information Modeling and Digital Data Exhibit, and the requisite AIA Document G202™ 2013, Project Building Information Modeling Protocol Form, shall be at the using or relying party's sole risk and without liability to the other party and its contractors or consultants, the authors of, or contributors to, the building information model, and each of their agents and employees.~~

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

§ 2.2 Evidence of the Owner's Financial Arrangements

§ 2.2.1 Prior to commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract. The Contractor shall have no obligation to commence the Work until the Owner provides such evidence. If commencement of the Work is delayed under this Section 2.2.1, the Contract Time shall be extended appropriately.

§ 2.2.2 Following commencement of the Work and upon written request by the Contractor, the Owner shall furnish to the Contractor reasonable evidence that the Owner has made financial arrangements to fulfill the Owner's obligations under the Contract only if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due; or (3) a change in the Work materially changes the Contract Sum. If the Owner fails to provide such evidence, as required, within fourteen days of the Contractor's request, the Contractor may immediately stop the Work and, in that event, shall notify the Owner that the Work has stopped. However, if the request is made because a change in the Work materially changes the Contract Sum under (3) above, the Contractor may immediately stop only that portion of the Work affected by the change until reasonable evidence is provided. If the Work is stopped under this Section 2.2.2, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided in the Contract Documents.

§ 2.2.3 After the Owner furnishes evidence of financial arrangements under this Section 2.2, the Owner shall not materially vary such financial arrangements without prior notice to the Contractor.

§ 2.2.4 Where the Owner has designated information furnished under this Section 2.2 as "confidential," the Contractor shall keep the information confidential and shall not disclose it to any other person. However, the Contractor may disclose "confidential" information, after seven (7) days' notice to the Owner, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by court or arbitrator(s) order. The Contractor may also disclose "confidential" information to its employees, consultants, sureties, Subcontractors and their employees, Sub-subcontractors, and others who need to know the content of such information solely and exclusively for the Project and who agree to maintain the confidentiality of such information.

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

§ 2.3.2 The Owner shall retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.3 If the employment of the Architect terminates, the Owner shall employ a successor to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect.

§ 2.3.4 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.3.5 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.3.6 The Owner shall provide the Contractor online "Plan Room" access to the Contract Documents. If the Contractor requires paper documents, the Contractor shall be responsible for the costs of reproducing such paper documents.

§ 2.3.7 It is strongly recommended that the contractor provide only full sets of documents for the subcontractors to help maintain a comprehensive understanding and bidding of the project.

§ 2.4 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

§ 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and the Architect may, pursuant to Section 9.5.1, withhold or nullify a Certificate for Payment in whole or in part, to the extent reasonably necessary to reimburse the Owner for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Architect's additional services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the Architect, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.4, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Architect may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Architect issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to Section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contractor shall not be liable to the Owner or Architect for damages resulting from errors, inconsistencies or omissions in the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

§ 3.2.5 The Owner is entitled to reimbursement from the Contractor for amounts paid to the Architect for evaluating and responding to the Contractor's requests for information that are not prepared in accordance with the Contract Documents or where the requested information is available to the Contractor from a careful study and comparison of the Contract Documents, field conditions, other Owner-provided information, Contractor-prepared coordination drawings, or prior Project correspondence or documentation.

§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner and Architect, and shall propose alternative means, methods, techniques, sequences, or procedures. The Architect shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Architect objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences, or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work approved by the Architect in accordance with Section 3.12.8 or ordered by the Architect in accordance with Section 7.4, the Contractor may make substitutions only with the consent of the Owner, after evaluation by the Architect and in accordance with a Change Order or Construction Change Directive.

§ 3.4.2.1 After the Contract has been executed, the Owner and Architect may consider requests for the substitution of products in place of those specified. The Owner and Architect may, but are not obligated to, consider only those substitution requests that are in full conformance with the conditions set forth in the General Requirements (Division 1 of the Specifications). By making

requests for substitutions, the Contractor:

- .1 represents that it has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to the product specified;
- .2 represents that it will provide the same warranty for the substitution as it would have provided for the product specified;
- .3 certifies that the cost data presented is complete and includes all related costs for the substituted product and for Work that must be performed or changed as a result of the substitution, except for the Architect's redesign costs, and waives all claims for additional costs related to the substitution that subsequently become apparent;
- .4 agrees that it shall, if the substitution is approved, coordinate the installation of the accepted substitute, making such changes as may be required for the Work to be complete in all respects; and
- .5 represents that the request includes a written representation identifying any potential effect the substitution may have on the Project's achievement of a Sustainable Measure or the Sustainable Objective.

§ 3.4.2.2 The Owner shall be entitled to reimbursement from the Contractor for amounts paid to the Architect for reviewing the Contractor's proposed substitutions and making agreed-upon changes in the Drawings and Specifications resulting from such substitutions.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.4.4 EXEMPTION FROM SALES TAX ON MATERIALS.

The Owner is exempted by Section Three of the Illinois Use Tax Act (Sec 3, House Bill 1610, approved July 31, 1961. IL. Rev. Stat. 1961, Chap. 120 Sec 439.3) from paying any of the taxes imposed by that act and sales to the Owner are exempt by Section Two of the Illinois Retailer's Occupational Tax Act (Section 2, House Bill 1609, Approved July 31, 1961 IL. Rev. Stat. 1961, Chap. 120 Sec. 441) from any of the taxes imposed by that Act.

§ 3.4.5 WAGE SCALE.

Not less than the general prevailing rates of per diem wages for work of similar character in the locality where the work is performed shall be paid all laborers, workman, and mechanics employed in the construction of public works. The Contractor and each Subcontractor shall keep or cause to be kept, an accurate record showing the names of occupations of all laborers, workmen and mechanics employed by him, in connection with said public work, and showing also the actual per diem wages paid to each of the workers. These records shall be open at all reasonable hours to the inspection of the Illinois Department of Labor or its authorized agents.

§ 3.4.6 EQUAL OPPORTUNITY EMPLOYMENT

- A. The Contractor shall not discriminate against any employee or applicant for employment because of race, creed, color or national origin. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to race, creed, color or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other

- forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of the nondiscrimination clause.
- B. The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color or national origin.
 - C. The Contractor shall send to each labor union or representative of workers with which he had a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or worker's representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
 - D. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government Contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked and provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.
 - E. The Contractor shall include the provisions of Paragraph (A) through (D) in every Subcontractor purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each Subcontractor or Vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agent may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a Subcontractor or Vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States

§ 3.5 Warranty

§ 3.5.1 The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

§ 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 3.7 Permits, Fees, Notices and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.

§ 3.7.4 Concealed or Unknown Conditions

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Architect before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Architect will promptly investigate such conditions and, if the Architect determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Architect determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Architect shall promptly notify the Owner and Contractor, stating the reasons. If either party disputes the Architect's determination or recommendation, that party may submit a Claim as provided in Article 15.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner and Architect. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities to whom the Contractor has reasonable objection.

§ 3.8.2 Unless otherwise provided in the Contract Documents,

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum but not in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.8.3 Provide a \$TBD "Contingency Allowance" for minor adjustments to be managed by the architect and the unused amount will be credited back to the owner.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the name and qualifications of a proposed superintendent. Within 14 days of receipt of the information, the Architect may notify the Contractor, stating whether the Owner or the Architect (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

§ 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's and Architect's information a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project.

§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Architect's approval. The Architect's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner and Architect.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Architect and Owner, and delivered to the Architect for submittal to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Architect, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them, (2) determined and verified

materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Architect.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Architect's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Architect of such deviation at the time of submittal and (1) the Architect has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Architect's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Architect on previous submittals. In the absence of such notice, the Architect's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

§ 3.12.11 The Architect's review of Contractor's submittals will be limited to examination of an initial submittal and one (1) resubmittals. The Contractor shall reimburse the Owner for amounts paid to the Architect for evaluation of additional resubmittals.

§ 3.13 Use of Site

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

The Contractor shall provide the Owner and Architect with access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner or Architect. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Architect.

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 4 ARCHITECT

§ 4.1 General

§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

§ 4.1.2 Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld.

§ 4.2 Administration of the Contract

§ 4.2.1 The Architect will provide administration of the Contract as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect issues the final Certificate for Payment. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

§ 4.2.2 The Architect will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

§ 4.2.2.1 The Owner is entitled to reimbursement from the Contractor for amounts paid to the Architect for site visits made necessary by the fault of the Contractor or by defects and deficiencies in the Work.

§ 4.2.3 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Owner (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of, and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 4.2.4 Communications

§ 4.2.4 The Owner and Contractor shall communicate with each other through the Architect about matters arising out of or relating to the Project. Communications by and with the Architect's consultants shall be through the Architect. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.5 Based on the Architect's evaluations of the Contractor's Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 4.2.6 The Architect has authority to reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 The Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.7.1 In no case will the Architect's review period on any submittal be less than 7 days after receipt of the submittal from the Contractor.

§ 4.2.8 The Architect will prepare Change Orders and Construction Change Directives, and may order minor changes in the Work as provided in Section 7.4. The Architect will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.9 The Architect will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; receive and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.

§ 4.2.10 If the Owner and Architect agree, the Architect will provide one or more Project representatives to assist in carrying out the Architect's responsibilities at the site. The Owner shall notify the Contractor of any change in the duties, responsibilities and limitations of authority of the Project representatives.

§ 4.2.11 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.12 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both Owner and Contractor, will not show partiality to either, and will not be liable for results of interpretations or decisions rendered in good faith.

§ 4.2.13 The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.14 The Architect will review and respond to requests for information about the Contract Documents. The Architect's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will prepare and issue supplemental Drawings and Specifications in response to the requests for information.

§ 4.2.14.1 Contractor's requests for information shall be prepared and submitted in accordance with Division 1 "General Requirements" sections on AIA Document G716–2004. The Architect will return without action requests for information that do not conform to requirements of the Contract Documents.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a Separate Contractor or the subcontractors of a Separate Contractor.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall notify the Owner and Architect of the persons or entities proposed for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design. Within 14 days of receipt of the information, the Architect may notify the Contractor whether the Owner or the Architect (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Architect to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.3 If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner or Architect makes reasonable objection to such substitution.

§ 5.2.5 MANUFACTURERS AND FABRICATORS

§ 5.2.5.1 Not later than 10 days after the date of commencement of the Work, the Contractor shall furnish in writing to the Owner, through the Architect, the names of persons or entities proposed as manufacturers or fabricators for certain products, equipment and systems identified in the General Requirements (Division 1 of the Specifications) and, where applicable, the name of the installing Subcontractor. The Architect may reply in writing to the Contractor within 14 days stating 1) whether the Owner or the Architect has reasonable objection to any such proposed person or entity or 2) that the Architect requires additional time to review. Failure of the Owner or Architect to reply within the 14 day period shall constitute notice of no reasonable objection.

§ 5.2.5.2 The Contractor shall not contract with a proposed person or entity to whom the Owner or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 5.2.5.3 If the Owner or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner or Architect has no reasonable objection. If the proposed but rejected manufacturer or fabricator was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute manufacturer's or fabricator's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work that the Contractor, by these Contract Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

§ 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- .1 assignment is effective only after termination of the Contract by the Owner for cause pursuant to Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each Separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, Separate Contractors, and the Owner until subsequently revised.

§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

§ 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Architect of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Architect of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the construction or operations by the Owner or Separate Contractor that are not apparent.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner

shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5.

§ 6.2.5 The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Architect will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner, Contractor, and Architect. A Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Architect alone.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.1.4 The combined overhead and profit included in the total cost to the Owner for a change in the Work shall be based on the following schedule:

- .1** For the Contractor, for Work performed by the Contractor's own forces, _____ percent of the cost.
- .2** For the Contractor, for Work performed by the Contractor's Subcontractors, _____ percent of the amount due the Subcontractors.
- .3** For each Subcontractor involved, for Work performed by that Subcontractor's own forces, _____ percent of the cost.
- .4** For each Subcontractor involved, for Work performed by the Subcontractor's Sub-subcontractors, _____ percent of the amount due the Sub-subcontractor.
- .5** Cost to which overhead and profit is to be applied shall be determined in accordance with Section 7.3.4.

§ 7.1.5 In order to facilitate checking of proposals for increases or decreases to the contract sum, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials and Subcontracts. Labor and materials shall be itemized in the manner prescribed above. Where major cost items are Subcontracts, they shall be itemized also. In no case will a change involving over \$500 be approved without such itemization.

§ 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument **signed** by the Architect and signed by the Owner, Contractor, and Architect stating their agreement upon all of the following:

- .1** The change in the Work;
- .2** The amount of the adjustment, if any, in the Contract Sum; and
- .3** The extent of the adjustment, if any, in the Contract Time.

§ 7.2.2 Except as otherwise provided in the Contract Documents, the Contractor shall prepare the Change Order form, which may include supporting materials prepared by the Architect, for review and approval by the Owner and Architect.

§ 7.3 Construction Change Directives

§ 7.3.1 A Construction Change Directive is a written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Architect shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Architect;
- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
- .5 Costs of supervision and field office personnel directly attributable to the change.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Architect. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Architect determines, in the Architect's professional judgment, to be

reasonably justified. The Architect's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made by the Architect concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Architect will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean working day, excluding weekends and legal holidays.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts, and the Architect determines, justify delay, then the Contract Time shall be extended for such reasonable time as the Architect may determine.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Architect before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Architect. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Architect and supported by such data to substantiate its accuracy as the Architect may require, and unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

§ 9.2.1 The format of the Schedule of Values shall generally conform to the AIA Document G702™-1992, Application and Certificate for Payment and AIA Document G703™-1992, Continuation Sheet.

§ 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect an itemized Application for Payment prepared in accordance with the schedule of values, ~~if required under Section 9.2,~~ for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner or Architect require, such as copies of requisitions, and releases and waivers of liens from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

The form of Application for Payment, duly notarized, shall be a current authorized edition of AIA Document G702™-1992, Application and Certificate for Payment, supported by a current authorized edition of AIA Document G703™-1992, Continuation Sheet.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Architect, but not yet included in Change Orders.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials, and equipment relating to the Work.

§ 9.4 Certificates for Payment

§ 9.4.1 The Architect will, within **five** days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner of the Architect's reasons for withholding certification in part as

provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in whole as provided in Section 9.5.1.

§ 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect's evaluation of the Work and the data in the Application for Payment, that, to the best of the Architect's knowledge, information, and belief, the Work has progressed to the point indicated, the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion, and to specific qualifications expressed by the Architect. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences, or procedures; (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment; or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.

§ 9.5.3 When the reasons for withholding certification are removed, certification will be made for amounts previously withheld.

§ 9.5.4 If the Architect withholds certification for payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify the Architect and the Contractor shall reflect such payment on its next Application for Payment.

§ 9.6 Progress Payments

§ 9.6.1 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Architect.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate

agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Architect will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Architect and Owner on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. Neither the Owner nor Architect shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 9.7 Failure of Payment

If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents, the amount certified by the Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the Contractor's list, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor

shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Architect. In such case, the Contractor shall then submit a request for another inspection by the Architect to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Architect will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Architect as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Architect.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner, Contractor, and Architect shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection. When the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect's knowledge, information and belief, and on the basis of the Architect's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect's final Certificate for Payment will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.1.1 The Architect will perform no more than **two** (2) inspections to determine whether the Work or a designated portion thereof has attained Final Completion in accordance with the Contract Documents. The Owner is entitled to reimbursement from the Contractor for amounts paid to the Architect for any additional inspections.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as

manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance. If a lien, claim, security interest, or encumbrance remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging the lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Architect so confirms, the Owner shall, upon application by the Contractor and certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

§ 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

§ 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

§ 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner and Architect.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials and Substances

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner and Architect of the condition.

§ 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor and the Architect will promptly reply to the Owner in writing stating whether or not either has reasonable objection to the persons or entities proposed by the Owner. If either the Contractor or Architect has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Architect, and Architect's consultants shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents.

§ 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.1.4 Notice of Cancellation or Expiration of Contractor's Required Insurance. Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

§ 11.2.2 Failure to Purchase Required Property Insurance. If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform the Contractor in writing prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the

Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.3 Notice of Cancellation or Expiration of Owner's Required Property Insurance. Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors to the extent any loss to the Owner would have been covered by the insurance had it not expired or been cancelled. If the Contractor purchases replacement coverage, the cost of the insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

§ 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other; (2) the Architect and Architect's consultants; and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor and Architect for loss of use of the Owner's property, due to fire or other hazards however caused.

§ 11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the

allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK

§ 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect, be uncovered for the Architect's examination and be replaced at the Contractor's expense without change in the Contract Time.

§ 12.1.2 If a portion of the Work has been covered that the Architect has not specifically requested to examine prior to its being covered, the Architect may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the costs of uncovering the Work, and the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Architect's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct nonconforming Work within a reasonable time during that period after receipt of notice from the Owner or Architect, the Owner may correct it in accordance with Section 2.5.

§ 12.2.2.2 The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.2.4 Upon request by the Owner and prior to the expiration of one year from the date of Substantial Completion, the Architect will conduct, and the Contractor shall attend, a meeting with the Owner to review the facility operations and performance.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for

correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

§ 13.3 Rights and Remedies

§ 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No action or failure to act by the Owner, Architect, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Architect, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Architect of when and where tests and inspections are to be made so that the Architect may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Architect's services and expenses, shall be at the Contractor's expense.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

§ 13.4.5 If the Architect is to observe tests, inspections, or approvals required by the Contract Documents, the Architect will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

§ 13.6 Non-Discrimination and Affirmative Action.

Contractor certifies and agrees that all persons employed by it, its affiliates, subsidiaries, or holding companies are and shall be treated equally without regard to or because of race, color, religion, ancestry, national origin, sex, age, physical or mental disability, marital status, or political affiliation, in compliance with all applicable Federal and State anti-discrimination laws and regulations.

§ 13.7 Confidential Information

If the Owner or Contractor receives information specifically designated by the other party as “confidential” or business proprietary,” the receiving party shall keep such information strictly confidential and shall not disclose it to any other person except to (1) those who need to know the content of such information in order to perform services or construction solely and exclusively for the Project, including its employees, or (2) its consultants and contractors whose contracts include similar restrictions on the use of confidential information. However, the party receiving “confidential” or “business proprietary” information may disclose such information, after seven (7) days’ Notice to the party providing the confidential or business proprietary information, where disclosure is required by law, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or by arbitrator(s) order. Notice shall be provided, and deemed to have been duly served, in accordance with §1.6.2 of A201-2017.

ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Architect has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days’ notice to the Owner and Architect, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner and the Architect, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
- .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
- .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, and upon certification by the Architect that sufficient cause exists to justify such action, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Initial Decision Maker, upon application, and this obligation for payment shall survive termination of the Contract.

§ 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and

- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim. This Section 15.1.1 does not require the Owner to file a Claim in order to impose liquidated damages in accordance with the Contract Documents.

§ 15.1.2 Time Limits on Claims

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. In such event, no decision by the Initial Decision Maker is required.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, the Claim shall be documented by data substantiating that the weather conditions upon which the Claim is based (1) were abnormal when compared to the previous (10)-year period, during the same time frame and at the

location of the Work, (2) could not have been reasonably anticipated, and (3) had an adverse effect on the date of substantial completion of the Work.

§ 15.1.6.3 Claims for increase in the Contract Time shall set forth in detail the circumstances that form the basis for the Claim, the date upon which each cause of delay began to affect the progress of the Work, the date upon which each cause of delay ceased to affect the progress of the Work, and the number of days' increase in the Contract Time claimed as a consequence of each such cause of delay. The Contractor shall provide such supporting documentation as the Owner may require including, where appropriate, a revised construction schedule indicating all the activities affected by the circumstances forming the basis of the Claim.

§ 15.1.6.4 The Contractor shall not be entitled to a separate increase in the Contract Time for each one of the number of causes of delay which may have concurrent or interrelated effects on the progress of the Work, or for concurrent delays due to the fault of the Contractor.

§ 15.1.7 Waiver of Claims for Consequential Damages

The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit, except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 Initial Decision

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

§ 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

§ 15.2.6.1 Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days after receipt thereof, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Mediation

15.3.0 Any claim, dispute or other matter in question arising out of or related to this Agreement shall be subject to a Meet and Confer session as a condition precedent to Mediation.

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 15.3.3 Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.

§ 15.3.4 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 Arbitration

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be

made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 15.4.4 Consolidation or Joinder

§ 15.4.4.1 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 15.4.4.2 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.

DRAFT AIA® Document A310™ – 2010

Bid Bond

CONTRACTOR:

(Name, legal status and address)

«TBD»« »
« »

SURETY:

(Name, legal status and principal place of business)

« »« »
« »

OWNER:

(Name, legal status and address)

«

BOND AMOUNT: \$ «TBD»

PROJECT:

(Name, location or address, and Project number, if any)

«

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

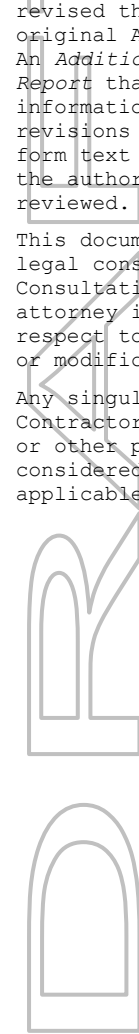
When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.



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Signed and sealed this « » day of « », « »

(Witness)

(Witness)

« »

(Contractor as Principal)

(Seal)

« »

(Title)

« »

(Surety)

(Seal)

« »

(Title)



DRAFT AIA® Document A312™ – 2010

Performance Bond

CONTRACTOR:

(Name, legal status and address)

«TBD»« »
« »

SURETY:

(Name, legal status and principal
place of business)

« »« »
« »

OWNER:

(Name, legal status and address)

«

CONSTRUCTION CONTRACT

Date: « »

Amount: \$ «TBD»

Description:

(Name and location)

«

BOND

Date:

(Not earlier than Construction Contract Date)

« »

Amount: \$ « »

Modifications to this

Bond:



None



See Section 16

CONTRACTOR AS PRINCIPAL

Company: (Corporate Seal)

Signature:

Name and « »« »

Title:

SURETY

Company: (Corporate Seal)

Signature:

Name and « »« »

Title:

(Any additional signatures appear on the last page of this Performance Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or BROKER:

« »
« »
« »

OWNER'S REPRESENTATIVE:

(Architect, Engineer or other party:)

« »
« »
« »
« »
« »
« »

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.



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§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

§ 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after

- .1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;
- .2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
- .3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

§ 4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

§ 5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

§ 5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

§ 5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

§ 5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

§ 5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

- .1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
- .2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

§ 6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

§ 7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to

the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

- .1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
- .2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and
- .3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

§ 8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

§ 9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

§ 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

§ 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 14 Definitions

§ 14.1 Balance of the Contract Price. The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

§ 14.2 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

§ 14.3 Contractor Default. Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

§ 14.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 14.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 16 Modifications to this bond are as follows:

« »

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL

Company: (Corporate Seal)

Signature:

Name and Title: « »« »

Address: « »

SURETY

Company: (Corporate Seal)

Signature:

Name and Title: « »« »

Address: « »

DRAFT AIA® Document A312™ – 2010

Payment Bond

CONTRACTOR:

(Name, legal status and address)

«TBD»« »
« »

SURETY:

(Name, legal status and principal
place of business)

« »« »
« »

OWNER:

(Name, legal status and address)

«»«»
«»

CONSTRUCTION CONTRACT

Date: « »

Amount: \$ «0.00»

BOND

Date:

(Not earlier than Construction Contract Date)

« »

Amount: \$ « »

Modifications to this Bond:



None



See Section
18

CONTRACTOR AS PRINCIPAL

Company: (Corporate Seal)

SURETY

Company: (Corporate
Seal)

Signature:

Name and « »« »

Title:

Signature:

Name and « »« »

Title:

(Any additional signatures appear on the last page of this Payment Bond.)

(FOR INFORMATION ONLY — Name, address and telephone)

AGENT or BROKER:

« »
« »
« »

OWNER'S REPRESENTATIVE:

(Architect, Engineer or other
party:)

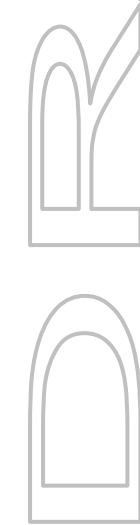
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ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.



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§ 1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

§ 2 If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

§ 3 If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

§ 4 When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

§ 5 The Surety's obligations to a Claimant under this Bond shall arise after the following:

§ 5.1 Claimants, who do not have a direct contract with the Contractor,

- .1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
- .2 have sent a Claim to the Surety (at the address described in Section 13).

§ 5.2 Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

§ 6 If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

§ 7 When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

§ 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

§ 7.2 Pay or arrange for payment of any undisputed amounts.

§ 7.3 The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

§ 8 The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

§ 9 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

§ 10 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

§ 11 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

§ 12 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

§ 13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

§ 14 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

§ 15 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

§ 16 Definitions

§ 16.1 Claim. A written statement by the Claimant including at a minimum:

- .1 the name of the Claimant;
- .2 the name of the person for whom the labor was done, or materials or equipment furnished;
- .3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- .4 a brief description of the labor, materials or equipment furnished;
- .5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
- .6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim;
- .7 the total amount of previous payments received by the Claimant; and
- .8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.

§ 16.2 Claimant. An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

§ 16.3 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

§ 16.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

§ 16.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

§ 17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

§ 18 Modifications to this bond are as follows:

« »

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL

Company: (Corporate Seal)

Signature:

Name and Title: « »« »

Address: « »

SURETY

Company: (Corporate Seal)

Signature:

Name and Title: « »« »

Address: « »

DRAFT AIA® Document A701™ – 2018

Instructions to Bidders

for the following Project:

(Name, location, and detailed description)

«

THE OWNER:

(Name, legal status, address, and other information)

«

«»

«»

THE ARCHITECT:

(Name, legal status, address, and other information)

«The Upchurch Group, Inc.»«General Corporation»
«123 N 15th Street
Mattoon, IL 61938»
«Telephone Number: 217-235-3177»
«Fax Number: 217-258-6115»

TABLE OF ARTICLES

- 1 DEFINITIONS
- 2 BIDDER'S REPRESENTATIONS
- 3 BIDDING DOCUMENTS
- 4 BIDDING PROCEDURES
- 5 CONSIDERATION OF BIDS
- 6 POST-BID INFORMATION
- 7 PERFORMANCE BOND AND PAYMENT BOND
- 8 ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

FEDERAL, STATE, AND LOCAL LAWS MAY IMPOSE REQUIREMENTS ON PUBLIC PROCUREMENT CONTRACTS. CONSULT LOCAL AUTHORITIES OR AN ATTORNEY TO VERIFY REQUIREMENTS APPLICABLE TO THIS PROCUREMENT BEFORE COMPLETING THIS FORM.

It is intended that AIA Document G612™-2017, Owner's Instructions to the Architect, Parts A and B will be completed prior to using this document.

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ARTICLE 1 DEFINITIONS

§ 1.1 Bidding Documents include the Bidding Requirements and the Proposed Contract Documents. The Bidding Requirements consist of the advertisement or invitation to bid, Instructions to Bidders, supplementary instructions to bidders, the bid form, and any other bidding forms. The Proposed Contract Documents consist of the unexecuted form of Agreement between the Owner and Contractor and that Agreement's Exhibits, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, all Addenda, and all other documents enumerated in Article 8 of these Instructions.

§ 1.2 Definitions set forth in the General Conditions of the Contract for Construction, or in other Proposed Contract Documents apply to the Bidding Documents.

§ 1.3 Addenda are written or graphic instruments issued by the Architect, which, by additions, deletions, clarifications, or corrections, modify or interpret the Bidding Documents.

§ 1.4 A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.

§ 1.5 The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents, to which Work may be added or deleted by sums stated in Alternate Bids.

§ 1.6 An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from, or that does not change, the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

§ 1.7 A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, as described in the Bidding Documents.

§ 1.8 A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.

§ 1.9 A Sub-bidder is a person or entity who submits a bid to a Bidder for materials, equipment, or labor for a portion of the Work.

§ 1.10 The bidding requirements are included in the contract documents.

ARTICLE 2 BIDDER'S REPRESENTATIONS

§ 2.1 By submitting a Bid, the Bidder represents that:

- .1 the Bidder has read and understands the Bidding Documents;
- .2 the Bidder understands how the Bidding Documents relate to other portions of the Project, if any, being bid concurrently or presently under construction;
- .3 the Bid complies with the Bidding Documents;
- .4 the Bidder has visited the site, become familiar with local conditions under which the Work is to be performed, and has correlated the Bidder's observations with the requirements of the Proposed Contract Documents;
- .5 the Bid is based upon the materials, equipment, and systems required by the Bidding Documents without exception; and
- .6 ~~the Bidder has read and understands the provisions for liquidated damages, if any, set forth in the form of Agreement between the Owner and Contractor.~~

ARTICLE 3 BIDDING DOCUMENTS

§ 3.1 Distribution

§ 3.1.1 Bidders shall obtain complete Bidding Documents, as indicated below, from the issuing office designated in the advertisement or invitation to bid, for the deposit sum, if any, stated therein.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Bidders shall obtain Bidding Documents.)

«See Project Summary Section 010100 »

§ 3.1.2 Any required deposit shall be refunded to Bidders who submit a bona fide Bid and return the paper Bidding Documents in good condition within ten days after receipt of Bids. The cost to replace missing or damaged paper documents will be deducted from the deposit. A Bidder receiving a Contract award may retain the paper Bidding Documents, and the Bidder's deposit will be refunded.

§ 3.1.3 Bidding Documents will not be issued directly to Sub-bidders unless specifically offered in the advertisement or invitation to bid, or in supplementary instructions to bidders.

§ 3.1.4 Bidders shall use complete Bidding Documents in preparing Bids. Neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete Bidding Documents.

§ 3.1.5 The Bidding Documents will be available for the sole purpose of obtaining Bids on the Work. No license or grant of use is conferred by distribution of the Bidding Documents.

§ 3.2 Modification or Interpretation of Bidding Documents

§ 3.2.1 The Bidder shall carefully study the Bidding Documents, shall examine the site and local conditions, and shall notify the Architect of errors, inconsistencies, or ambiguities discovered and request clarification or interpretation pursuant to Section 3.2.2.

§ 3.2.2 Requests for clarification or interpretation of the Bidding Documents shall be submitted by the Bidder in writing and shall be received by the Architect at least seven days prior to the date for receipt of Bids.
(Indicate how, such as by email, website, host site/platform, paper copy, or other method Bidders shall submit requests for clarification and interpretation.)

« Provide "request" via email with confirmation by Upchurch response via email. »

§ 3.2.3 Modifications and interpretations of the Bidding Documents shall be made by Addendum. Modifications and interpretations of the Bidding Documents made in any other manner shall not be binding, and Bidders shall not rely upon them.

§ 3.3 Substitutions

§ 3.3.1 The materials, products, and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance, and quality to be met by any proposed substitution.

§ 3.3.2 Substitution Process

§ 3.3.2.1 Written requests for substitutions shall be received by the Architect at least ten days prior to the date for receipt of Bids. Requests shall be submitted in the same manner as that established for submitting clarifications and interpretations in Section 3.2.2.

§ 3.3.2.2 Bidders shall submit substitution requests on a Substitution Request Form if one is provided in the Bidding Documents.

§ 3.3.2.3 If a Substitution Request Form is not provided, requests shall include (1) the name of the material or equipment specified in the Bidding Documents; (2) the reason for the requested substitution; (3) a complete description of the proposed substitution including the name of the material or equipment proposed as the substitute, performance and test data, and relevant drawings; and (4) any other information necessary for an evaluation. The request shall include a statement setting forth changes in other materials, equipment, or other portions of the Work, including changes in the work of other contracts or the impact on any Project Certifications (such as LEED), that will result from incorporation of the proposed substitution.

§ 3.3.3 The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.

§ 3.3.4 If the Architect approves a proposed substitution prior to receipt of Bids, such approval shall be set forth in an Addendum. Approvals made in any other manner shall not be binding, and Bidders shall not rely upon them.

§ 3.3.5 No substitutions will be considered after the Contract award unless specifically provided for in the Contract Documents.

§ 3.4 Addenda

§ 3.4.1 Addenda will be transmitted to Bidders known by the issuing office to have received complete Bidding Documents.

(Indicate how, such as by email, website, host site/platform, paper copy, or other method Addenda will be transmitted.)

« Addenda will be transmitted via email and placed on The Upchurch Group, Inc. "Plan Room". »

§ 3.4.2 Addenda will be available where Bidding Documents are on file. Plan room at <https://www.upchurchgroupplanroom.com>

§ 3.4.3 Addenda will be issued no later than four days prior to the date for receipt of Bids, except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.

§ 3.4.4 Prior to submitting a Bid, each Bidder shall ascertain that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.

ARTICLE 4 BIDDING PROCEDURES

§ 4.1 Preparation of Bids

§ 4.1.1 Bids shall be submitted on the forms included with or identified in the Bidding Documents.

§ 4.1.2 All blanks on the bid form shall be legibly executed. Paper bid forms shall be executed in a non-erasable medium.

§ 4.1.3 Sums shall be expressed in both words and numbers, unless noted otherwise on the bid form. In case of discrepancy, the amount entered in words shall govern.

§ 4.1.4 Edits to entries made on paper bid forms must be initialed by the signer of the Bid.

§ 4.1.5 All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change" or as required by the bid form.

§ 4.1.6 Where two or more Bids for designated portions of the Work have been requested, the Bidder may, without forfeiture of the bid security, state the Bidder's refusal to accept award of less than the combination of Bids stipulated by the Bidder. The Bidder shall neither make additional stipulations on the bid form nor qualify the Bid in any other manner.

§ 4.1.7 Each copy of the Bid shall state the legal name and legal status of the Bidder. As part of the documentation submitted with the Bid, the Bidder shall provide evidence of its legal authority to perform the Work in the jurisdiction where the Project is located. Each copy of the Bid shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid by a corporation shall further name the state of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current power of attorney attached, certifying the agent's authority to bind the Bidder.

§ 4.1.8 A Bidder shall incur all costs associated with the preparation of its Bid.

§ 4.2 Bid Security

§ 4.2.1 Each Bid shall be accompanied by the following bid security:

(Insert the form and amount of bid security.)

« **Bid security is required**, in the form of a bid bond or certified check in an amount equal to ten percent (10%) of the base bid. Bid security shall be made payable to the Owner. The successful Bidder shall furnish a Performance Bond and Labor & Material Payment Bond each in an amount equal to 100% of the contract price. »

§ 4.2.2 The Bidder pledges to enter into a Contract with the Owner on the terms stated in the Bid and shall, if required, furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder. Should the Bidder refuse to enter into such Contract or fail to furnish such bonds if required, the amount of the bid

security shall be forfeited to the Owner as liquidated damages, not as a penalty. In the event the Owner fails to comply with Section 6.2, the amount of the bid security shall not be forfeited to the Owner.

§ 4.2.3 If a surety bond is required as bid security, it shall be written on AIA Document A310™, Bid Bond, unless otherwise provided in the Bidding Documents. The attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of an acceptable power of attorney. The Bidder shall provide surety bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 4.2.4 The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until (a) the Contract has been executed and bonds, if required, have been furnished; (b) the specified time has elapsed so that Bids may be withdrawn; or (c) all Bids have been rejected. However, if no Contract has been awarded or a Bidder has not been notified of the acceptance of its Bid, a Bidder may, beginning 30 days after the opening of Bids, withdraw its Bid and request the return of its bid security.

§ 4.3 Submission of Bids

§ 4.3.1 A Bidder shall submit its Bid as indicated below:

(Indicate how, such as by website, host site/platform, paper copy, or other method Bidders shall submit their Bid.)

« The bid shall be submitted in paper (hard copy) form on the required bid form incorporated into the specifications. »

§ 4.3.2 Paper copies of the Bid, the bid security, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name and address, and, if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.

§ 4.3.3 Bids shall be submitted by the date and time and at the place indicated in the invitation to bid. Bids submitted after the date and time for receipt of Bids, or at an incorrect place, will not be accepted.

§ 4.3.4 The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

§ 4.3.5 A Bid submitted by any method other than as provided in this Section 4.3 will not be accepted.

§ 4.4 Modification or Withdrawal of Bid

§ 4.4.1 Prior to the date and time designated for receipt of Bids, a Bidder may submit a new Bid to replace a Bid previously submitted, or withdraw its Bid entirely, by notice to the party designated to receive the Bids. Such notice shall be received and duly recorded by the receiving party on or before the date and time set for receipt of Bids. The receiving party shall verify that replaced or withdrawn Bids are removed from the other submitted Bids and not considered. Notice of submission of a replacement Bid or withdrawal of a Bid shall be worded so as not to reveal the amount of the original Bid.

§ 4.4.2 Withdrawn Bids may be resubmitted up to the date and time designated for the receipt of Bids in the same format as that established in Section 4.3, provided they fully conform with these Instructions to Bidders. Bid security shall be in an amount sufficient for the Bid as resubmitted.

§ 4.4.3 After the date and time designated for receipt of Bids, a Bidder who discovers that it made a clerical error in its Bid shall notify the Architect of such error within two days, or pursuant to a timeframe specified by the law of the jurisdiction where the Project is located, requesting withdrawal of its Bid. Upon providing evidence of such error to the reasonable satisfaction of the Architect, the Bid shall be withdrawn and not resubmitted. If a Bid is withdrawn pursuant to this Section 4.4.3, the bid security will be attended to as follows:

(State the terms and conditions, such as Bid rank, for returning or retaining the bid security.)

« Bids cannot be withdrawn unless the award of contract has been delayed beyond 30 days after bid date. »

ARTICLE 5 CONSIDERATION OF BIDS

§ 5.1 Opening of Bids

If stipulated in an advertisement or invitation to bid, or when otherwise required by law, Bids properly identified and received within the specified time limits will be publicly opened and read aloud. A summary of the Bids may be made available to Bidders.

§ 5.2 Rejection of Bids

Unless otherwise prohibited by law, the Owner shall have the right to reject any or all Bids.

§ 5.3 Acceptance of Bid (Award)

§ 5.3.1 It is the intent of the Owner to award a Contract to the lowest responsive and responsible Bidder, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents. Unless otherwise prohibited by law, the Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's best interests.

§ 5.3.2 Unless otherwise prohibited by law, the Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the lowest responsive and responsible Bidder on the basis of the sum of the Base Bid and Alternates accepted.

ARTICLE 6 POST-BID INFORMATION

§ 6.1 Contractor's Qualification Statement

Bidders to whom award of a Contract is under consideration shall submit to the Architect, upon request and within the timeframe specified by the Architect, a properly executed AIA Document A305™, Contractor's Qualification Statement, unless such a Statement has been previously required and submitted for this Bid.

§ 6.2 Owner's Financial Capability

A Bidder to whom award of a Contract is under consideration may request in writing, fourteen days prior to the expiration of the time for withdrawal of Bids, that the Owner furnish to the Bidder reasonable evidence that financial arrangements have been made to fulfill the Owner's obligations under the Contract. The Owner shall then furnish such reasonable evidence to the Bidder no later than seven days prior to the expiration of the time for withdrawal of Bids. Unless such reasonable evidence is furnished within the allotted time, the Bidder will not be required to execute the Agreement between the Owner and Contractor.

§ 6.3 Submittals

§ 6.3.1 After notification of selection for the award of the Contract, the Bidder shall, as soon as practicable or as stipulated in the Bidding Documents, submit in writing to the Owner through the Architect:

- .1 a designation of the Work to be performed with the Bidder's own forces;
- .2 names of the principal products and systems proposed for the Work and the manufacturers and suppliers of each; ~~and~~
- .3 names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.
- .4 a statement of cost and percentage of project for each major item of Work included in the bid

§ 6.3.2 The Bidder will be required to establish to the satisfaction of the Architect and Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents.

§ 6.3.3 Prior to the execution of the Contract, the Architect will notify the Bidder if either the Owner or Architect, after due investigation, has reasonable objection to a person or entity proposed by the Bidder. If the Owner or Architect has reasonable objection to a proposed person or entity, the Bidder may, at the Bidder's option, withdraw the Bid or submit an acceptable substitute person or entity. The Bidder may also submit any required adjustment in the Base Bid or Alternate Bid to account for the difference in cost occasioned by such substitution. The Owner may accept the adjusted bid price or disqualify the Bidder. In the event of either withdrawal or disqualification, bid security will not be forfeited.

§ 6.3.4 Persons and entities proposed by the Bidder and to whom the Owner and Architect have made no reasonable objection must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and Architect.

ARTICLE 7 PERFORMANCE BOND AND PAYMENT BOND

§ 7.1 Bond Requirements

§ 7.1.1 If stipulated in the Bidding Documents, the Bidder shall furnish bonds covering the faithful performance of the Contract and payment of all obligations arising thereunder.

§ 7.1.2 If the furnishing of such bonds is stipulated in the Bidding Documents, the cost shall be included in the Bid. If the furnishing of such bonds is required after receipt of bids and before execution of the Contract, the cost of such bonds shall be added to the Bid in determining the Contract Sum.

§ 7.1.3 The Bidder shall provide surety bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 7.1.4 Unless otherwise indicated below, the Penal Sum of the Payment and Performance Bonds shall be the amount of the Contract Sum.

(If Payment or Performance Bonds are to be in an amount other than 100% of the Contract Sum, indicate the dollar amount or percentage of the Contract Sum.)

« »

§ 7.2 Time of Delivery and Form of Bonds

§ 7.2.1 The Bidder shall deliver the required bonds to the Owner not later than three days following the date of execution of the Contract. If the Work is to commence sooner in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this Section 7.2.1.

§ 7.2.2 Unless otherwise provided, the bonds shall be written on AIA Document A312, Performance Bond and Payment Bond.

§ 7.2.3 The bonds shall be dated on or after the date of the Contract.

§ 7.2.4 The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix to the bond a certified and current copy of the power of attorney.

ARTICLE 8 ENUMERATION OF THE PROPOSED CONTRACT DOCUMENTS

§ 8.1 Copies of the proposed Contract Documents have been made available to the Bidder and consist of the following documents:

- 1 AIA Document A101™–2017, Standard Form of Agreement Between Owner and Contractor, unless otherwise stated below.
(Insert the complete AIA Document number, including year, and Document title.)

« »

- 2 AIA Document A101™–2017, Exhibit A, Insurance and Bonds, unless otherwise stated below.
(Insert the complete AIA Document number, including year, and Document title.)

« »

- 3 AIA Document A201™–2017, General Conditions of the Contract for Construction, unless otherwise stated below.
(Insert the complete AIA Document number, including year, and Document title.)

« »

- 4 ~~AIA Document E203™–2013, Building Information Modeling and Digital Data Exhibit, dated as indicated below:~~
~~*(Insert the date of the E203–2013.)*~~

« »

.5 Drawings

Number	Title	Date

.6 Specifications

Section	Title	Date	Pages

.7 Addenda:

Number	Date	Pages

.8 Other Exhibits:

(Check all boxes that apply and include appropriate information identifying the exhibit where required.)

[☐] ~~AIA Document E204™ – 2017, Sustainable Projects Exhibit, dated as indicated below:~~
(Insert the date of the E204 2017.)

☐ ☐

[☐] The Sustainability Plan:

Title	Date	Pages

[☐] Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages

.9 Other documents listed below:

(List here any additional documents that are intended to form part of the Proposed Contract Documents.)

☐ ☐

DRAFT

AIA® Document G701™ – 2017

Change Order

PROJECT: <i>(Name and address)</i>	CONTRACT INFORMATION: Contract For: Date:	CHANGE ORDER INFORMATION: Change Order Number: Date:
OWNER: <i>(Name and address)</i>	ARCHITECT: <i>(Name and address)</i> The Upchurch Group, Inc. 123 N 15th Street Mattoon, IL 61938	CONTRACTOR: <i>(Name and address)</i> TBD

THE CONTRACT IS CHANGED AS FOLLOWS:

(Insert a detailed description of the change and, if applicable, attach or reference specific exhibits. Also include agreed upon adjustments attributable to executed Construction Change Directives.)

The original Contract Sum was	\$	0.00
The net change by previously authorized Change Orders	\$	0.00
The Contract Sum prior to this Change Order was	\$	0.00
The Contract Sum will be increased by this Change Order in the amount of	\$	0.00
The new Contract Sum including this Change Order will be	\$	0.00
The Contract Time will be increased by Zero (0) days.		
The new date of Substantial Completion will be		

NOTE: This Change Order does not include adjustments to the Contract Sum or Guaranteed Maximum Price, or the Contract Time, that have been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.

NOT VALID UNTIL SIGNED BY THE ARCHITECT, CONTRACTOR AND OWNER.

The Upchurch Group, Inc.	TBD	
ARCHITECT <i>(Firm name)</i>	CONTRACTOR <i>(Firm name)</i>	OWNER <i>(Firm name)</i>
SIGNATURE	SIGNATURE	SIGNATURE
PRINTED NAME AND TITLE	PRINTED NAME AND TITLE	PRINTED NAME AND TITLE
DATE	DATE	DATE

DRAFT AIA® Document G702® - 1992

Application and Certificate for Payment

TO OWNER:		PROJECT:	APPLICATION NO: 000	Distribution to:
				OWNER: <input type="checkbox"/>
FROM		VIA	PERIOD TO:	ARCHITECT: <input type="checkbox"/>
CONTRACTOR:		ARCHITECT:	CONTRACT FOR: General Construction	CONTRACTOR: <input type="checkbox"/>
		The Upchurch Group, Inc.	CONTRACT DATE:	FIELD: <input type="checkbox"/>
		123 N 15th Street	PROJECT NOS: / /	OTHER: <input type="checkbox"/>
		Mattoon, IL 61938		

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.

AIA Document G703®, Continuation Sheet, is attached.

1. ORIGINAL CONTRACT SUM	\$0.00
2. NET CHANGE BY CHANGE ORDERS	\$0.00
3. CONTRACT SUM TO DATE (Line 1 ± 2)	\$0.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703)	\$0.00
5. RETAINAGE:	
a. 0 % of Completed Work	
(Column D + E on G703: \$0.00)=	\$0.00
b. 0 % of Stored Material	
(Column F on G703: \$0.00)=	\$0.00
Total Retainage (Lines 5a + 5b or Total in Column I of G703)	\$0.00
6. TOTAL EARNED LESS RETAINAGE	\$0.00
(Line 4 Less Line 5 Total)	
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT	\$0.00
(Line 6 from prior Certificate)	
8. CURRENT PAYMENT DUE	\$0.00
9. BALANCE TO FINISH, INCLUDING RETAINAGE	
(Line 3 less Line 6)	\$0.00

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$0.00	\$0.00
Total approved this Month	\$0.00	\$0.00
TOTALS	\$0.00	\$0.00
NET CHANGES by Change Order		\$0.00

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By: _____ Date: _____

State of: _____

County of: _____

Subscribed and sworn to before

me this _____ day of _____

Notary Public: _____

My Commission expires: _____

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the

AMOUNT CERTIFIED. \$0.00

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: _____ Date: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

AIA Document G702[®], Application and Certification for Payment, or G732[™], Application and Certificate for Payment, Construction Manager as Adviser Edition, containing Contractor's signed certification is attached.
Use Column I on Contracts where variable retainage for line items may apply.

ARCHITECT'S PROJECT NO:

[illegible]

DRAFT

AIA® Document G704™ – 2017

Certificate of Substantial Completion

PROJECT: <i>(name and address)</i>	CONTRACT INFORMATION: Contract For: General Construction Date:	CERTIFICATE INFORMATION: Certificate Number: Date:
OWNER: <i>(name and address)</i>	ARCHITECT: <i>(name and address)</i> The Upchurch Group, Inc. 123 N 15th Street Mattoon, IL 61938	CONTRACTOR: <i>(name and address)</i>

The Work identified below has been reviewed and found, to the Architect's best knowledge, information, and belief, to be substantially complete. Substantial Completion is the stage in the progress of the Work when the Work or designated portion is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use. The date of Substantial Completion of the Project or portion designated below is the date established by this Certificate.

(Identify the Work, or portion thereof, that is substantially complete.)

The Upchurch Group,
Inc.

ARCHITECT *(Firm Name)*

SIGNATURE

PRINTED NAME AND TITLE

DATE OF SUBSTANTIAL COMPLETION

WARRANTIES

The date of Substantial Completion of the Project or portion designated above is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below:

(Identify warranties that do not commence on the date of Substantial Completion, if any, and indicate their date of commencement.)

WORK TO BE COMPLETED OR CORRECTED

A list of items to be completed or corrected is attached hereto, or transmitted as agreed upon by the parties, and identified as follows:

(Identify the list of Work to be completed or corrected.)

The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. Unless otherwise agreed to in writing, the date of commencement of warranties for items on the attached list will be the date of issuance of the final Certificate of Payment or the date of final payment, whichever occurs first. The Contractor will complete or correct the Work on the list of items attached hereto within () days from the above date of Substantial Completion.

Cost estimate of Work to be completed or corrected: \$

The responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work, insurance, and other items identified below shall be as follows:

(Note: Owner's and Contractor's legal and insurance counsel should review insurance requirements and coverage.)

The Owner and Contractor hereby accept the responsibilities assigned to them in this Certificate of Substantial Completion:

CONTRACTOR *(Firm Name)*

SIGNATURE

PRINTED NAME AND TITLE

DATE

OWNER *(Firm Name)*

SIGNATURE

PRINTED NAME AND TITLE

DATE

DRAFT AIA® Document G705™ – 2001

List of Subcontractors

PROJECT: *(Name and address)*

DATE:

TO ARCHITECT: *(Name and address)*

The Upchurch Group, Inc.

123 N 15th Street

Mattoon, IL 61938

ARCHITECT'S PROJECT NUMBER:

FROM CONTRACTOR: *(Name and address)*

CONTRACTOR'S PROJECT NUMBER:

(List Subcontractors and others proposed to be employed on the above Project as required by the bidding documents.)

Work/Firm Name

Address/Phone

Superintendent

DRAFT

AIA® Document G706™ – 1994

Contractor's Affidavit of Payment of Debts and Claims

PROJECT: (Name and address)

ARCHITECT'S PROJECT NUMBER:

TO OWNER: (Name and address)

CONTRACT FOR: General Construction

CONTRACT DATED:

OWNER: ☐

ARCHITECT: ☐

CONTRACTOR: ☐

SURETY: ☐

OTHER: ☐

STATE OF:

COUNTY OF:

The undersigned hereby certifies that, except as listed below, payment has been made in full and all obligations have otherwise been satisfied for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or Owner's property might in any way be held responsible or encumbered.

EXCEPTIONS:

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Consent of Surety to Final Payment. Whenever Surety is involved, Consent of Surety is required. AIA Document G707, Consent of Surety, may be used for this purpose

Indicate Attachment ☐ Yes ☐ No

CONTRACTOR: (Name and address)

BY:

(Signature of authorized representative)

(Printed name and title)

The following supporting documents should be attached hereto if required by the Owner:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.
3. Contractor's Affidavit of Release of Liens (AIA Document G706A).

Subscribed and sworn to before me on this date:

Notary Public:

My Commission Expires:

DRAFT

AIA[®] Document G706A[™] – 1994

Contractor's Affidavit of Release of Liens

PROJECT: *(Name and address)*

ARCHITECT'S PROJECT NUMBER:

OWNER: ☐

CONTRACT FOR: General
Construction

ARCHITECT: ☐

TO OWNER: *(Name and address)*

CONTRACT DATED:

CONTRACTOR: ☐

SURETY: ☐

OTHER: ☐

STATE OF:
COUNTY OF:

The undersigned hereby certifies that to the best of the undersigned's knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of Work, labor or services who have or may have liens or encumbrances or the right to assert liens or encumbrances against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS:

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.

CONTRACTOR: *(Name and address)*

BY:

*(Signature of authorized
representative)*

(Printed name and title)

Subscribed and sworn to before me on this date:

Notary Public:

My Commission Expires:

DRAFT

AIA® Document G709™ – 2018

Proposal Request

PROJECT: *(name and address)*

CONTRACT INFORMATION:

Contract For: General Construction
Date:

Architect's Project Number:

Proposal Request Number:

Proposal Request Date:

OWNER: *(name and address)*

ARCHITECT: *(name and address)*

The Upchurch Group, Inc.
123 N 15th Street
Mattoon, IL 61938

CONTRACTOR: *(name and address)*

The Owner requests an itemized proposal for changes to the Contract Sum and Contract Time for proposed modifications to the Contract Documents described herein. The Contractor shall submit this proposal within Zero (0) days or notify the Architect in writing of the anticipated date of submission.

(Insert a detailed description of the proposed modifications to the Contract Documents and, if applicable, attach or reference specific exhibits.)

THIS IS NOT A CHANGE ORDER, A CONSTRUCTION CHANGE DIRECTIVE, OR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED IN THE PROPOSED MODIFICATIONS.

REQUESTED BY THE ARCHITECT:

PRINTED NAME AND TITLE

DRAFT

AIA[®] Document G710™ – 2017

Architect's Supplemental Instructions

PROJECT: <i>(name and address)</i>	CONTRACT INFORMATION: Contract For: General Construction Date:	ASI INFORMATION: ASI Number: Date:
OWNER: <i>(name and address)</i>	ARCHITECT: <i>(name and address)</i> The Upchurch Group, Inc. 123 N 15th Street Mattoon, IL 61938	CONTRACTOR: <i>(name and address)</i>

The Contractor shall carry out the Work in accordance with the following supplemental instructions without change in Contract Sum or Contract Time. Proceeding with the Work in accordance with these instructions indicates your acknowledgment that there will be no change in the Contract Sum or Contract Time.
(Insert a detailed description of the Architect's supplemental instructions and, if applicable, attach or reference specific exhibits.)

ISSUED BY THE ARCHITECT:

The Upchurch Group, Inc.
ARCHITECT *(Firm name)*

SIGNATURE

PRINTED NAME AND TITLE

DATE

DRAFT

AIA® Document G714™ – 2017

Construction Change Directive

PROJECT: <i>(name and address)</i>	CONTRACT INFORMATION: Contract For: General Construction Date:	CCD INFORMATION: Directive Number: Date:
OWNER: <i>(name and address)</i>	ARCHITECT: <i>(name and address)</i> The Upchurch Group, Inc. 123 N 15th Street Mattoon, IL 61938	CONTRACTOR: <i>(name and address)</i>

The Contractor is hereby directed to make the following change(s) in this Contract:
(Insert a detailed description of the change and, if applicable, attach or reference specific exhibits.)

PROPOSED ADJUSTMENTS

- The proposed basis of adjustment to the Contract Sum or Guaranteed Maximum Price is:
 - ☐ Lump Sum increase of \$0.00
 - ☐ Unit Price of \$ per
 - ☐ Cost, as defined below, plus the following fee:
(Insert a definition of, or method for determining, cost)
 - ☐ As follows:
- The Contract Time is proposed to be adjusted. The proposed adjustment, if any, is (an increase of 2 days).

NOTE: The Owner, Architect and Contractor should execute a Change Order to supersede this Construction Change Directive to the extent they agree upon adjustments to the Contract Sum, Contract Time, or Guaranteed Maximum price for the change(s) described herein.

When signed by the Owner and Architect and received by the Contractor, this document becomes effective IMMEDIATELY as a Construction Change Directive (CCD), and the Contractor shall proceed with the change(s) described above.

Contractor signature indicates agreement with the proposed adjustments in Contract Sum and Contract Time set forth in this CCD.

The Upchurch Group, Inc.

ARCHITECT *(Firm name)*

OWNER *(Firm name)*

CONTRACTOR *(Firm name)*

SIGNATURE

SIGNATURE

SIGNATURE

PRINTED NAME AND TITLE

PRINTED NAME AND TITLE

PRINTED NAME AND TITLE

DATE

DATE

DATE

DRAFT

AIA® Document G716™ – 2004

Request for Information ("RFI")

TO:

FROM:

The Upchurch Group, Inc.
123 N 15th Street
Mattoon, IL 61938

PROJECT:

ISSUE DATE:

RFI No.

PROJECT NUMBERS:

/

REQUESTED REPLY DATE:

COPIES TO:

RFI DESCRIPTION: *(Fully describe the question or type of information requested.)*

REFERENCES/ATTACHMENTS: *(List specific documents researched when seeking the information requested.)*

SPECIFICATIONS:

DRAWINGS:

OTHER:

SENDER'S RECOMMENDATION: *(If RFI concerns a site or construction condition, the sender may provide a recommended solution, including cost and/or schedule considerations.)*

RECEIVER'S REPLY: *(Provide answer to RFI, including cost and/or schedule considerations.)*

BY

DATE

COPIES TO

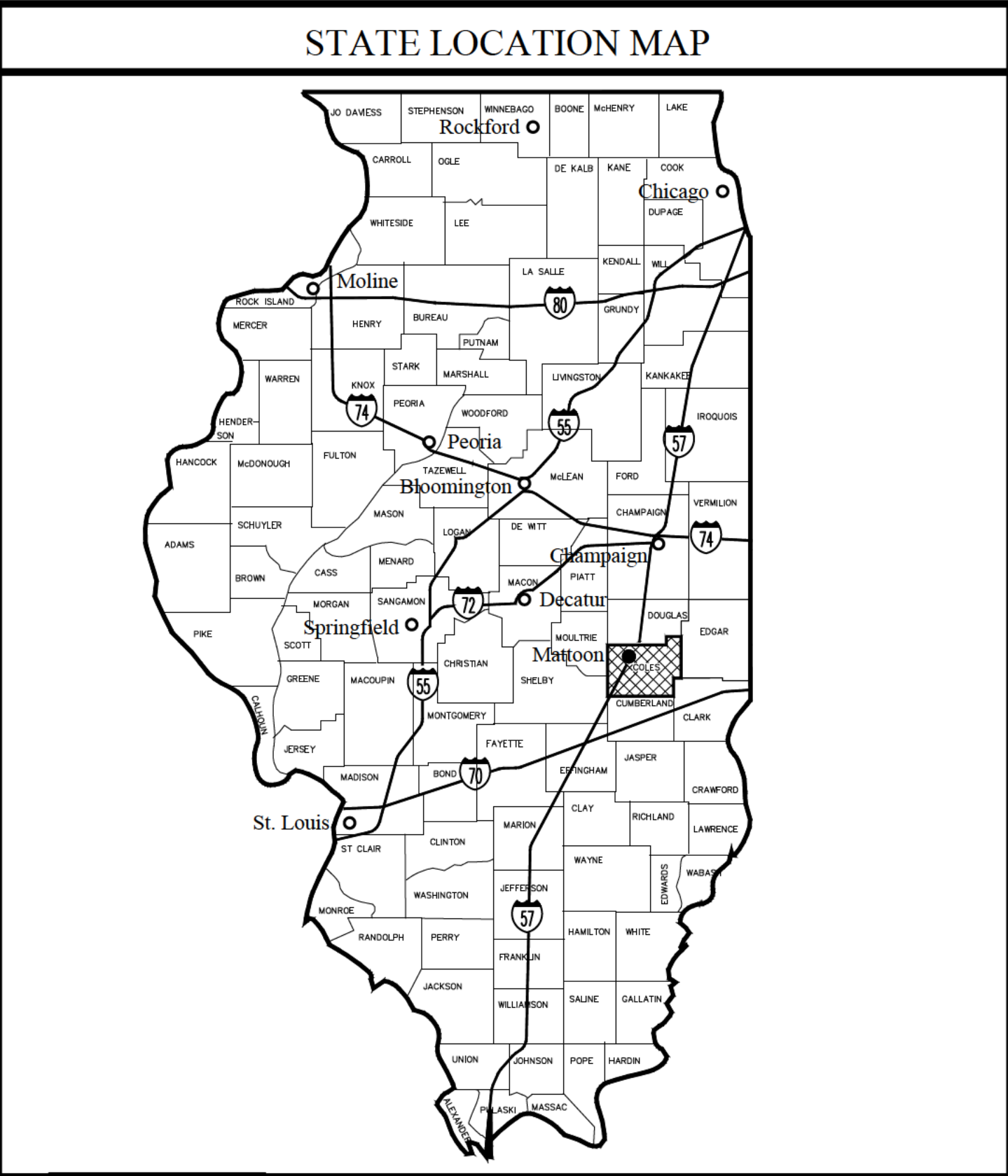
Note: This reply is not an authorization to proceed with work involving additional cost, time or both. If any reply requires a change to the Contract Documents, a Change Order, Construction Change Directive or a Minor Change in the work must be executed in accordance with the Contract Documents.

Mattoon Fire Department

Station #3 Addition

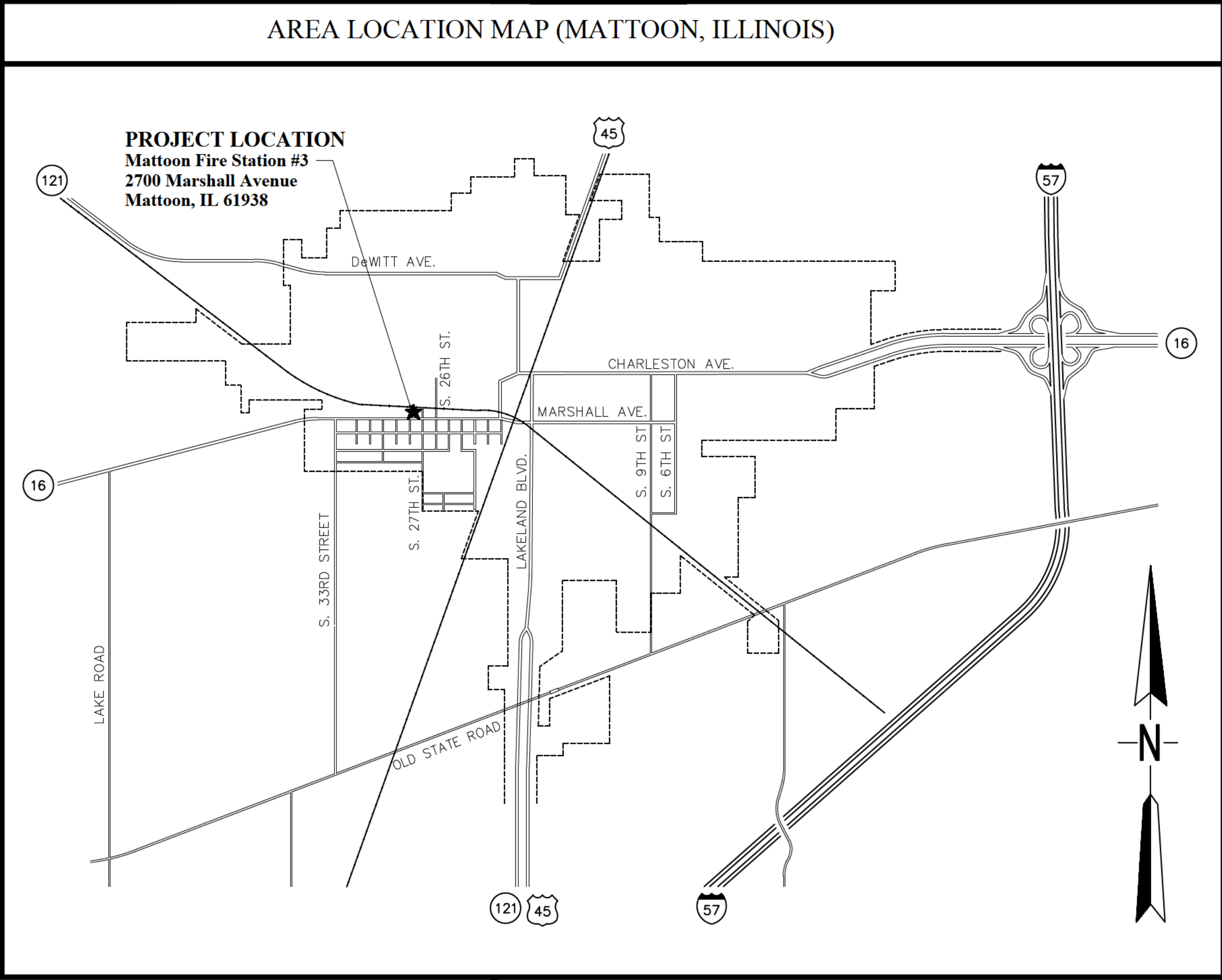
2700 Marshall Avenue

Mattoon, Coles County, IL 61938



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DRAWINGS RELEASED FOR:

- ☐ REVIEW
- ☒ BIDDING
- ☐ CONSTRUCTION
- 6/20/2025 DATE

Prepared By:

THE UPCHURCH GROUP, INC.
123 N. 15th Street, Mattoon, IL 61938

The Contractor shall obtain and verify all dimensions and conditions at job site and be fully responsible for same.

The Upchurch Group

architects
engineers
surveyors

123 North 15th Street
Mattoon, IL 61938
Phone: 217 235 3177
upchurchgroup@upchurchgroup.com

Professional Design
Firm Corporation
License No. 184-003401

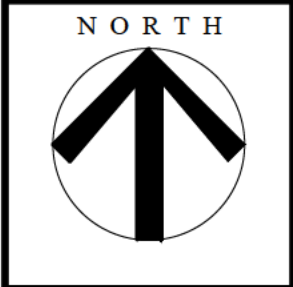
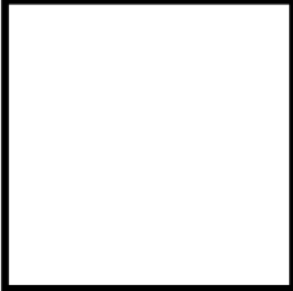
COVER SHEET

Mattoon Fire Department
Station #3 Addition
2700 Marshall Avenue
Mattoon, Coles County, Illinois

Drawn T6

Date June 20, 2025

Project No 2724092



sheet no.
G1.01

EXISTING / DEMOLITION
SITE PLAN

Mattoon Fire Department
Station #3 Addition
2700 Marshall Avenue
Mattoon, Coles County, Illinois

Drawn S. Ewing
Date June 20, 2025
Project No.
2724042



sheet no.

C1.01

KEYED DEMOLITION NOTES

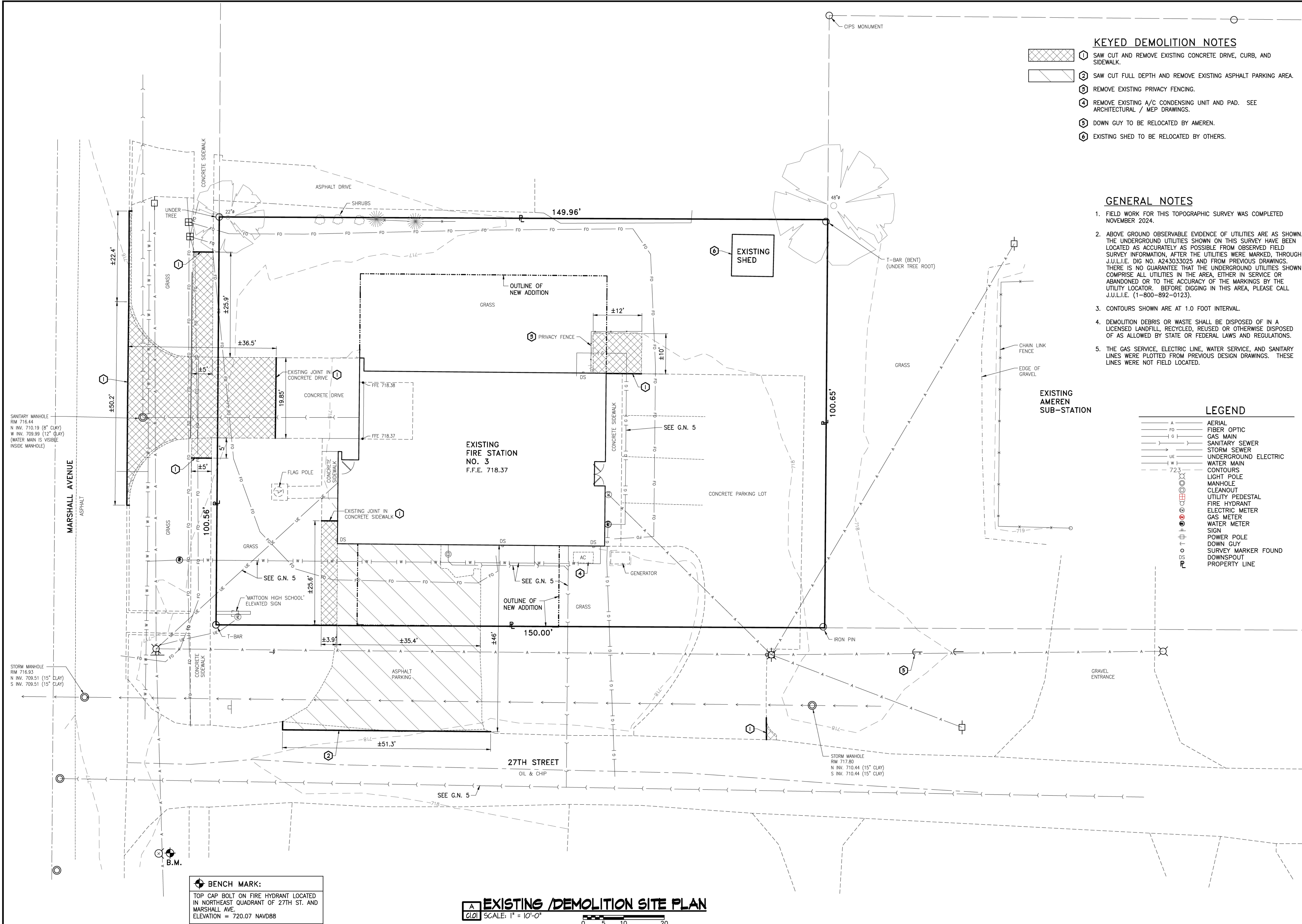
- 1 SAW CUT AND REMOVE EXISTING CONCRETE DRIVE, CURB, AND SIDEWALK.
- 2 SAW CUT FULL DEPTH AND REMOVE EXISTING ASPHALT PARKING AREA.
- 3 REMOVE EXISTING PRIVACY FENCING.
- 4 REMOVE EXISTING A/C CONDENSING UNIT AND PAD. SEE ARCHITECTURAL / MEP DRAWINGS.
- 5 DOWN GUY TO BE RELOCATED BY AMEREN.
- 6 EXISTING SHED TO BE RELOCATED BY OTHERS.

GENERAL NOTES

1. FIELD WORK FOR THIS TOPOGRAPHIC SURVEY WAS COMPLETED NOVEMBER 2024.
2. ABOVE GROUND OBSERVABLE EVIDENCE OF UTILITIES ARE AS SHOWN. THE UNDERGROUND UTILITIES SHOWN ON THIS SURVEY HAVE BEEN LOCATED AS ACCURATELY AS POSSIBLE FROM OBSERVED FIELD SURVEY INFORMATION, AFTER THE UTILITIES WERE MARKED, THROUGH J.U.L.I.E. DIG NO. A243033025 AND FROM PREVIOUS DRAWINGS. THERE IS NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED OR TO THE ACCURACY OF THE MARKINGS BY THE UTILITY LOCATOR. BEFORE DIGGING IN THIS AREA, PLEASE CALL J.U.L.I.E. (1-800-892-0123).
3. CONTOURS SHOWN ARE AT 1.0 FOOT INTERVAL.
4. DEMOLITION DEBRIS OR WASTE SHALL BE DISPOSED OF IN A LICENSED LANDFILL, RECYCLED, REUSED OR OTHERWISE DISPOSED OF AS ALLOWED BY STATE OR FEDERAL LAWS AND REGULATIONS.
5. THE GAS SERVICE, ELECTRIC LINE, WATER SERVICE, AND SANITARY LINES WERE PLOTTED FROM PREVIOUS DESIGN DRAWINGS. THESE LINES WERE NOT FIELD LOCATED.

LEGEND

- A AERIAL
- FO FIBER OPTIC
- G GAS MAIN
- S SANITARY SEWER
- SS STORM SEWER
- UE UNDERGROUND ELECTRIC
- W WATER MAIN
- 72.3 CONTOURS
- LIGHT POLE
- MANHOLE
- CLEANOUT
- UTILITY PEDESTAL
- FIRE HYDRANT
- ELECTRIC METER
- GAS METER
- WATER METER
- SIGN
- POWER POLE
- DOWN GUY
- SURVEY MARKER FOUND
- DOWNSPOUT
- PROPERTY LINE



The Contractor shall obtain and verify all dimensions and conditions at job site and be fully responsible for same.

KEYED PLAN NOTES

- NEW PORTLAND CEMENT CONCRETE SIDEWALK. SEE DETAIL 1 SHEET C5.01.
- NEW PORTLAND CEMENT CONCRETE PAVEMENT. SEE DETAILS 2, 3, & 4 SHEET C5.01.
- NEW MONOLITHIC CONCRETE CURB. SEE DETAIL 6 SHEET C5.01.
- NEW PIPE GUARD (10 EACH). SEE DETAIL 7 SHEET C5.01. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL PIPE GUARDS AT BUILDING.
- NEW CONCRETE PAD FOR CONDENSING UNIT (4'x4').
- NEW FIBERGLASS PAD FOR CONDENSING UNIT (3'x3'). PLACE PAD ON NEW CONCRETE PAVEMENT.
- NEW 1" ISOLATION (EXPANSION) JOINT. SEE SPECIFICATIONS FOR ADDITIONAL LOCATIONS.
- TEMPORARY CONSTRUCTION FENCE.
- PROPOSED EASEMENT LINE FROM AMEREN. (32' x 100.67' = ±3622 SQ. FT.)
- NEW AGGREGATE MULCH LANDSCAPING.
- ALL PAVEMENT MARKINGS SHALL BE PAINTED 4" WIDE YELLOW STRIPES IN PARKING LOT.
- HANDICAP PARKING SPACE TO HAVE AN ACCESS AISLE WITH DIAGONAL MARKINGS PERMANENTLY AFFIXED PER THE ILLINOIS ACCESSIBILITY CODE.
- NEW HANDICAP SIGN. SEE DETAIL 9 SHEET C5.01.

GENERAL NOTES

- PROVIDE TOPSOIL IN ALL AREAS DISTURBED DURING CONSTRUCTION. RE-GRADE, FERTILIZE, SEED, AND MULCH AS REQUIRED.

ENTRANCE PROFILE

SCALE: H: 1"=10' V: 1"=2'

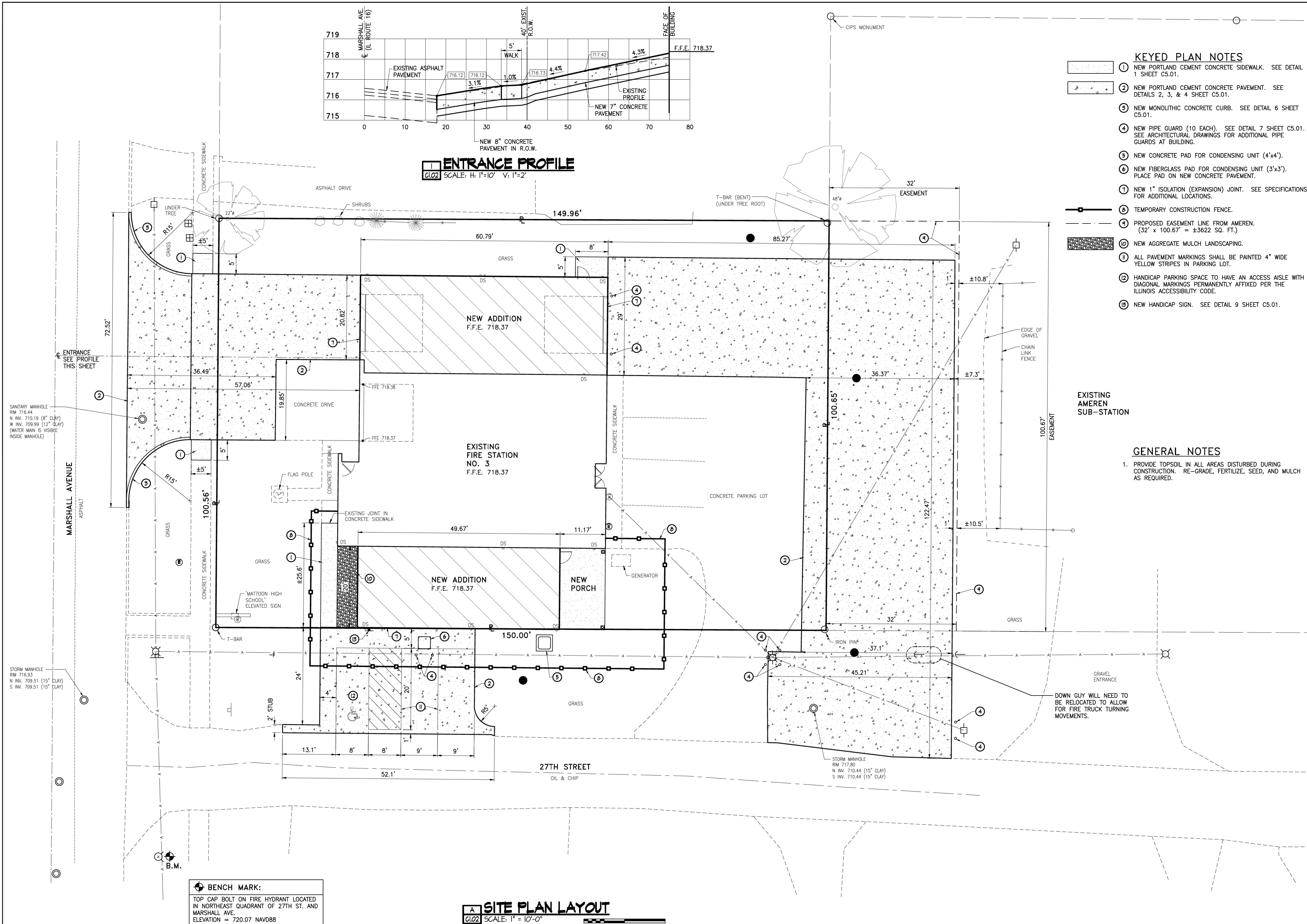
SITE PLAN LAYOUT

SCALE: 1" = 10'-0"

0 5 10 20

BENCH MARK:

TOP CAP BOLT ON FIRE HYDRANT LOCATED IN NORTHEAST QUADRANT OF 27TH ST. AND MARSHALL AVE.
ELEVATION = 720.07 NAVD88



STORM SEWER SCHEDULE	
SEGMENT	DESCRIPTION
SS-1	12" SS x 43 L.F. @ 1%
SS-2	12" SS x 67 L.F. @ 1%
SS-3	12" SS x 17 L.F. @ 11%
SS-4	12" SS x 6 L.F.
SS-5	6" DOWNSPOUT x 10 L.F. @ 1%
SS-6	6" DOWNSPOUT x 9 L.F. @ 1%
SS-7	6" DOWNSPOUT x 70 L.F. @ 1%
SS-8	6" DOWNSPOUT x 97 L.F. @ 1%

STORM SEWER STRUCTURE TABLE			
NO.	TYPE	TOP ELEV.	INVERTS
A	INLET, TY. A 2'Ø W/ TY. 1 F&OL	717.00	714.00 (12" NE) 714.25 (6" S)
B	INLET, TY. A 2'Ø W/ TY. 1 F&OL	717.64	713.57 (12" E) 713.57 (12" SW)
C	INLET, TY. A 2'Ø W/ TY. 1 F&OL	717.78	712.90 (12" SE) 712.90 (12" W)
D	EXISTING MANHOLE ADJUST RIM ELEVATION	717.80 EX 718.03 PR	710.44 (EX) 711.00 (12" NW)
E	INLET, TY. A 2'Ø W/ TY. 1 F&OL	717.00	714.00 (12" E) 714.25 (6" W)

GENERAL NOTES

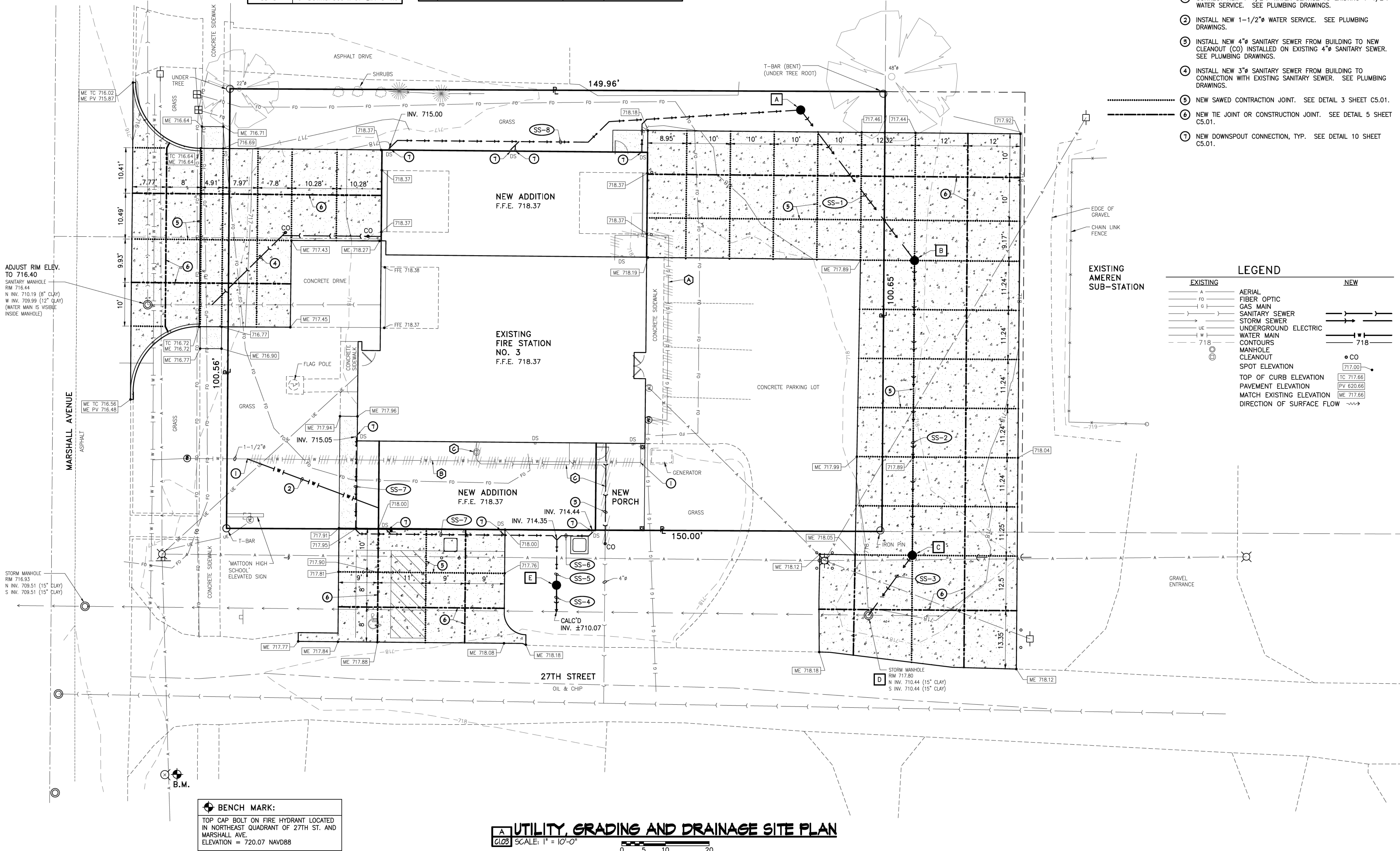
- ALL STORM SEWER PIPE SHALL BE SDR-35 PVC OR HDPE.
- ALL FRAME AND GRATES ARE SPECIFIED AS NEENAH OR APPROVED EQUAL.
TYPE 1 F&OL: NEENAH R-2553
- TOP ELEVATION IN STORM SEWER STRUCTURE TABLE IS DEFINED AS FOLLOWS:
TYPE 1: AT TOP OF LID.
- PROPOSED SPOT ELEVATIONS SHOWN ARE PAVEMENT ELEVATIONS UNLESS NOTED OTHERWISE.

KEYED DEMOLITION NOTES

- REMOVE OR ABANDON EXISTING GAS SERVICE. SEE PLUMBING DRAWINGS.
- REMOVE EXISTING WATER SERVICE UNDER NEW ADDITION. SEE PLUMBING DRAWINGS.
- REMOVE EXISTING SANITARY SEWER AND CLEANOUT UNDER NEW ADDITION. SEE PLUMBING DRAWINGS.

KEYED PLAN NOTES

- CONNECT NEW 1-1/2"Ø WATER SERVICE TO EXISTING 1-1/2"Ø WATER SERVICE. SEE PLUMBING DRAWINGS.
- INSTALL NEW 1-1/2"Ø WATER SERVICE. SEE PLUMBING DRAWINGS.
- INSTALL NEW 4"Ø SANITARY SEWER FROM BUILDING TO NEW CLEANOUT (CO) INSTALLED ON EXISTING 4"Ø SANITARY SEWER. SEE PLUMBING DRAWINGS.
- INSTALL NEW 3"Ø SANITARY SEWER FROM BUILDING TO CONNECTION WITH EXISTING SANITARY SEWER. SEE PLUMBING DRAWINGS.
- NEW SAWED CONTRACTION JOINT. SEE DETAIL 3 SHEET C5.01.
- NEW TIE JOINT OR CONSTRUCTION JOINT. SEE DETAIL 5 SHEET C5.01.
- NEW DOWNSPOUT CONNECTION, TYP. SEE DETAIL 10 SHEET C5.01.

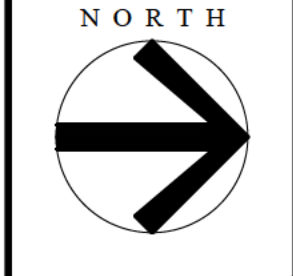
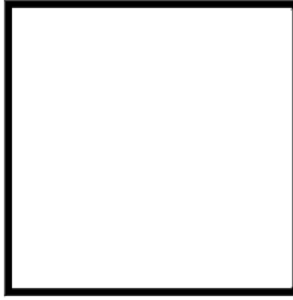


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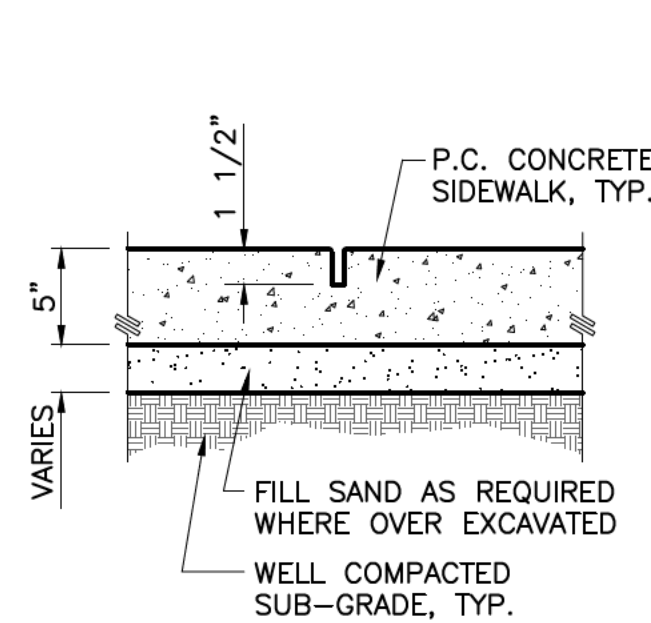
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UTILITY, GRADING AND DRAINAGE SITE PLAN
Mattoon Fire Department Station #3 Addition
2700 Marshall Avenue
Mattoon, Coles County, Illinois

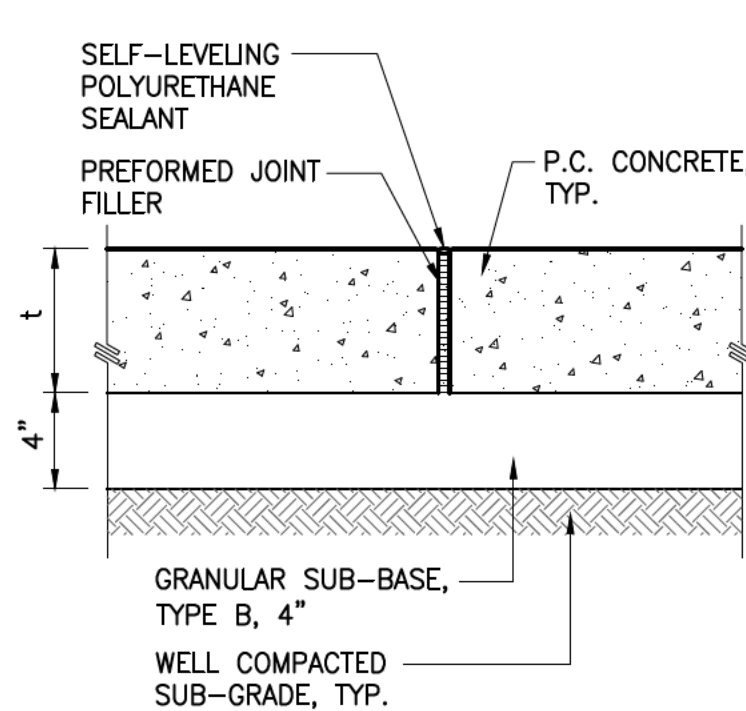
Drawn: **S. Ehling**
Date: **June 20, 2025**
Project No: **2724042**



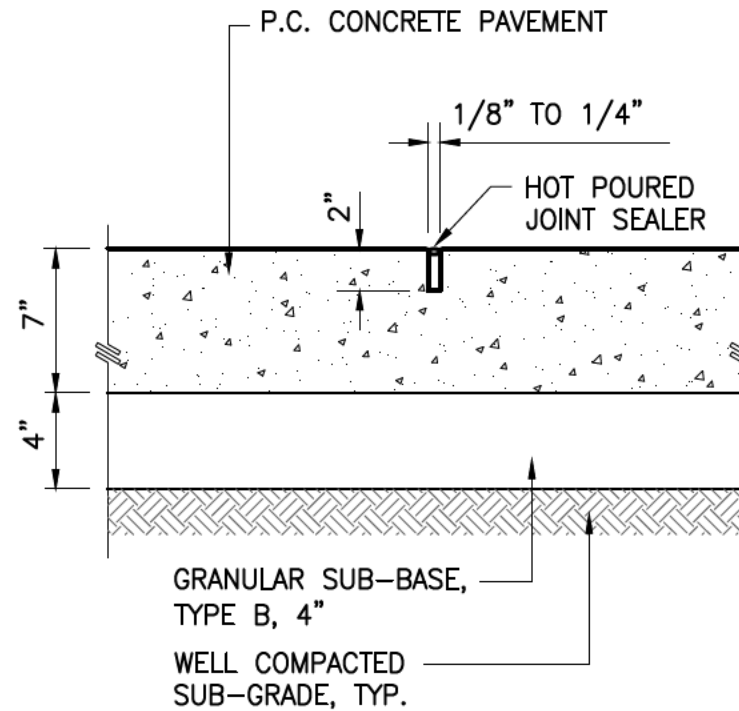
sheet no.
C1.03



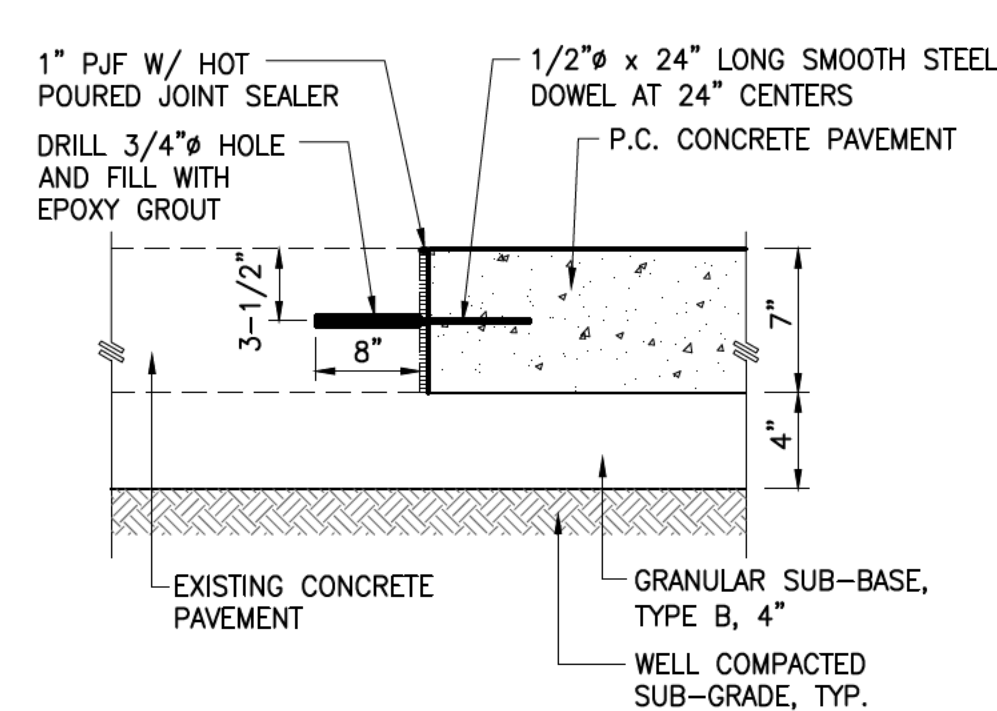
① SIDEWALK DETAIL
SIDEWALK: 6' MAX. JOINT SPACING



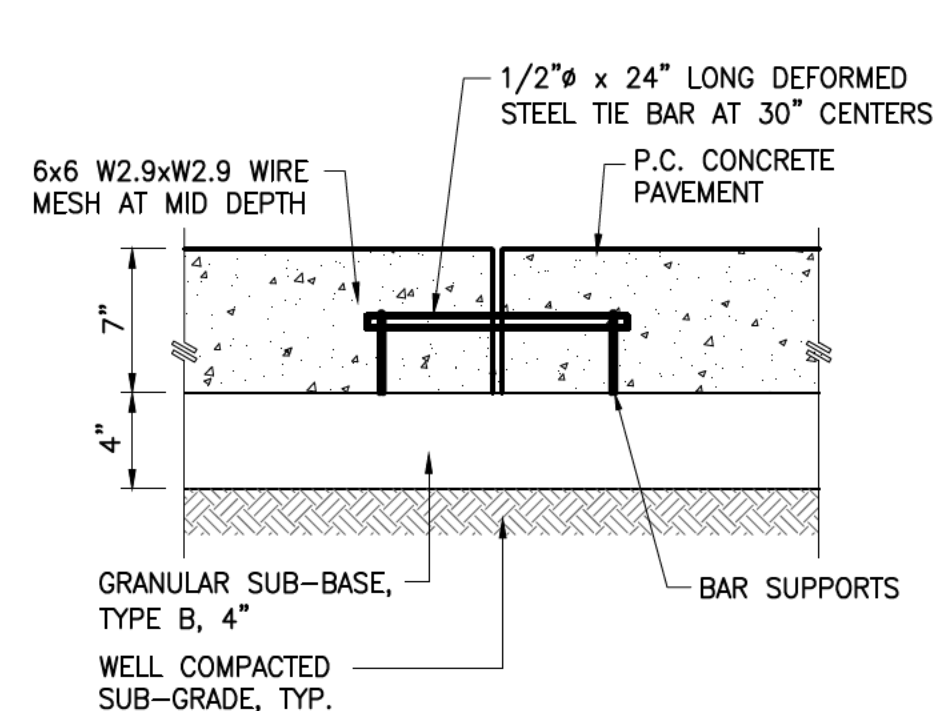
② ISOLATION JOINT
NOTE:
PROVIDE 1" EXP. JOINT WHERE PCC BUTT
UP TO BUILDING



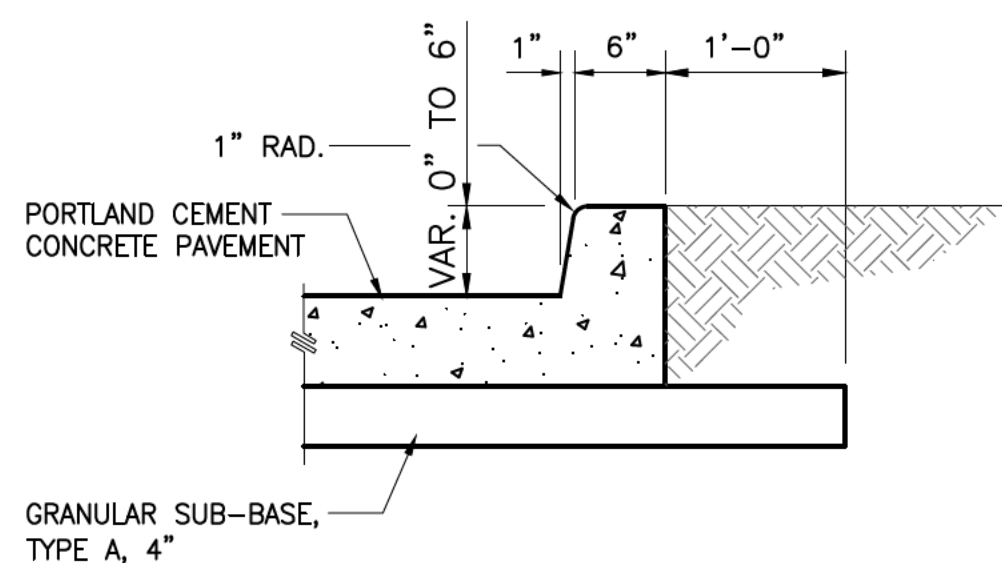
③ PAVEMENT DETAIL
SAW CUT AT MAXIMUM 15' SPACING EACH
DIRECTION.



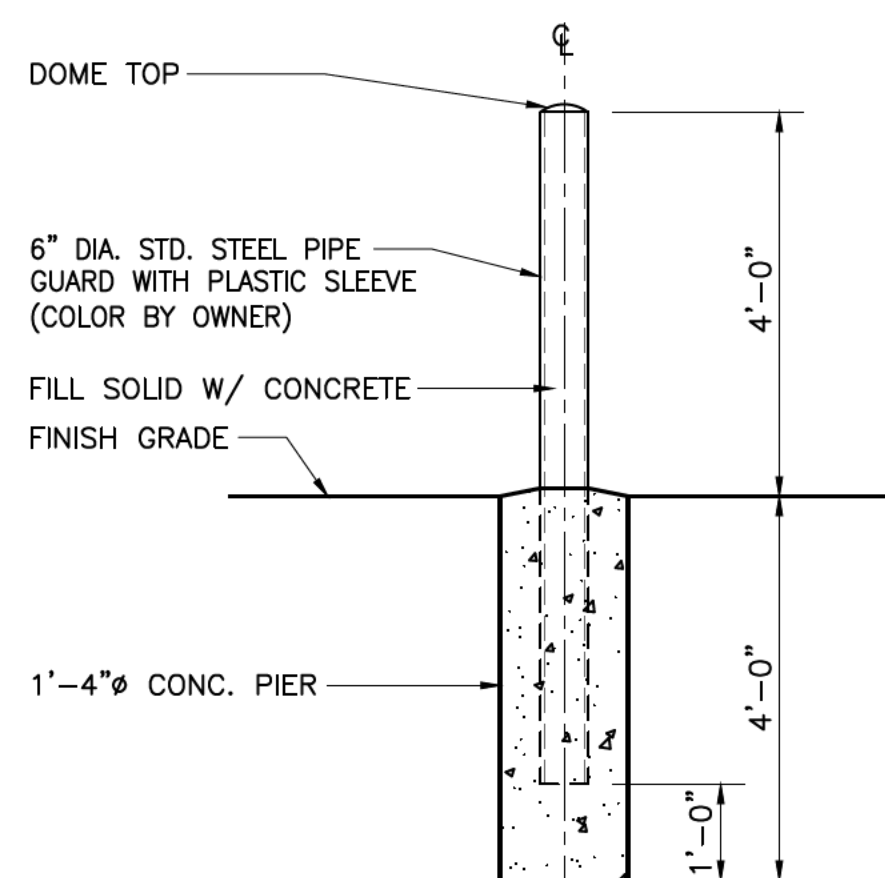
**④ CONSTRUCTION JOINT DETAIL
AT EXISTING CONCRETE PAVEMENT**



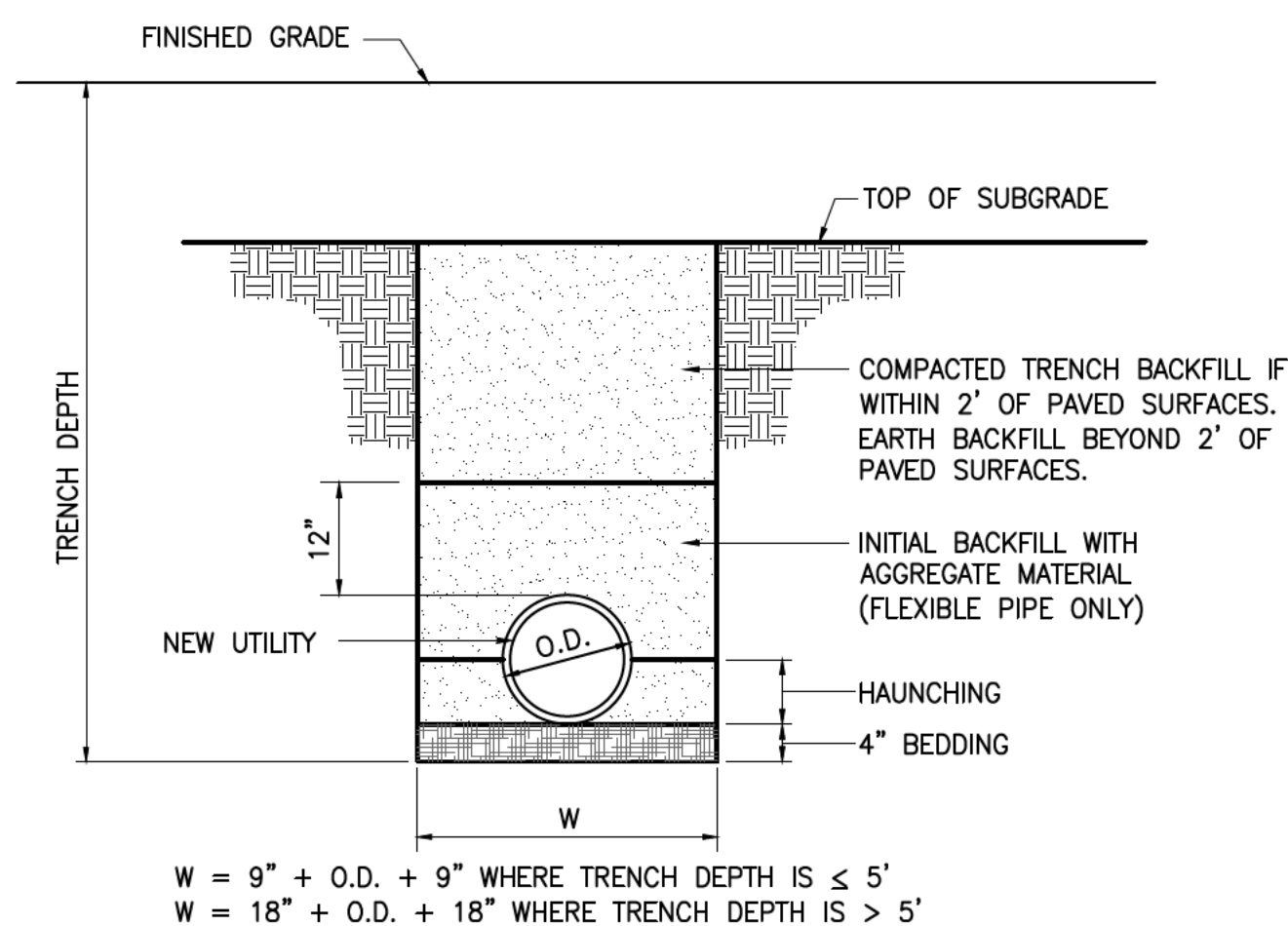
**⑤ PCC PAVEMENT DETAIL AT
TIED/CONSTRUCTION JOINT**
TO BE USED AT ALL P.C. PAVEMENT CONSTRUCTION JOINTS



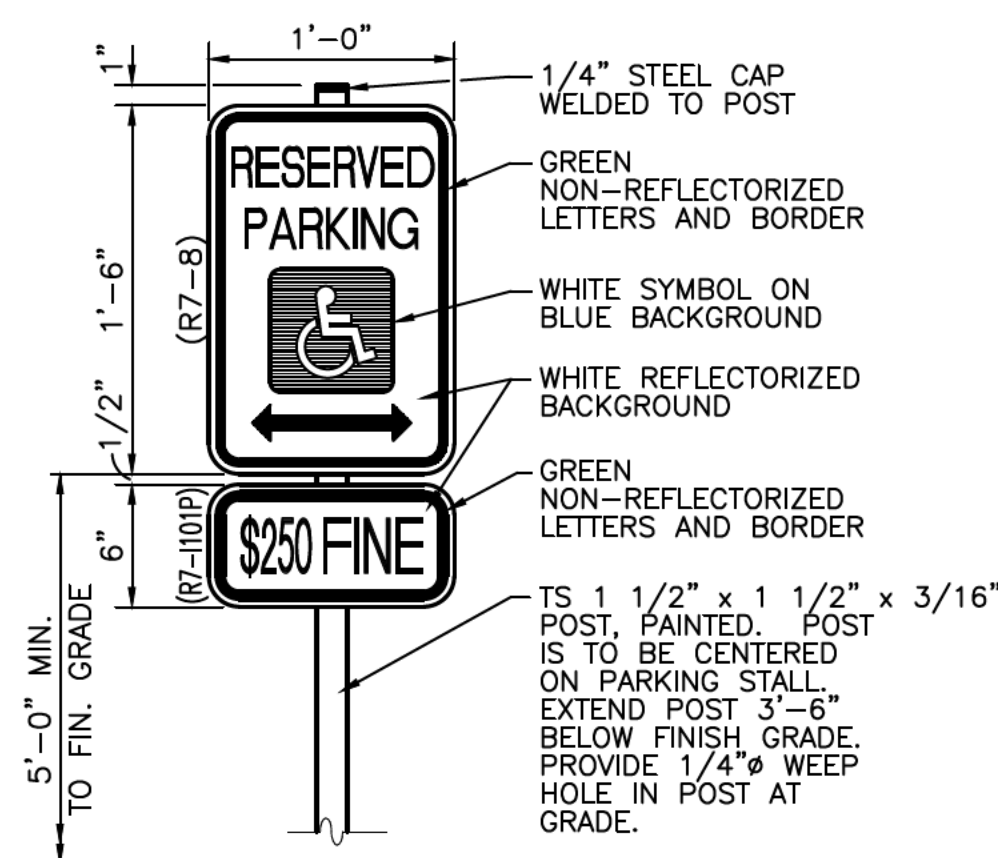
⑥ MONOLITHIC CURB



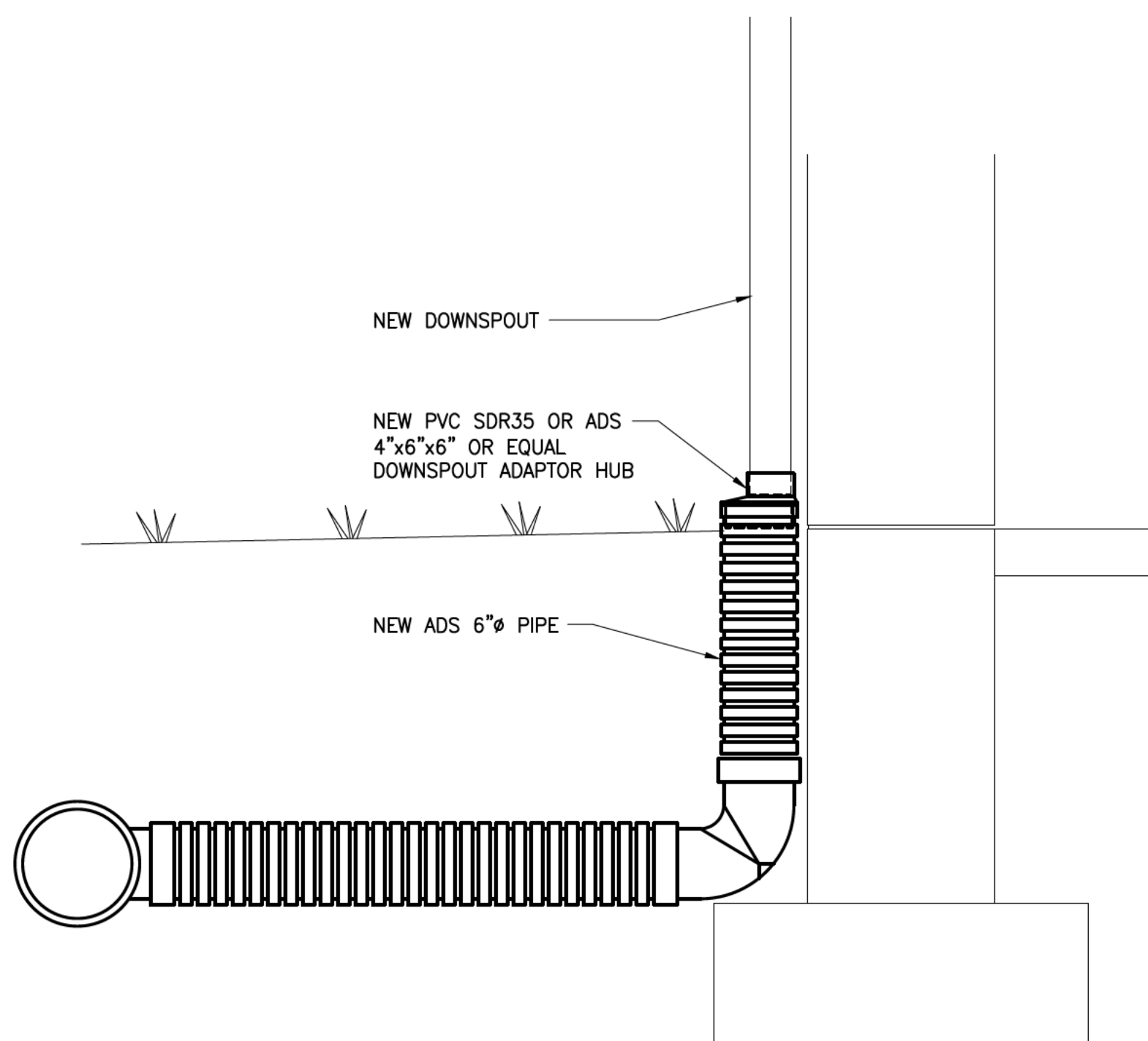
⑦ PIPE GUARD



⑧ TRENCH DETAIL

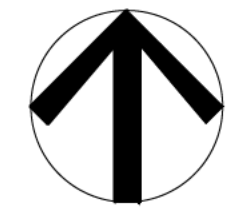


⑨ HANDICAP SIGN



⑩ DOWNSPOUT CONNECTION

The Contractor shall obtain and verivf all dimensions and conditions at job site and be fully responsible for same.

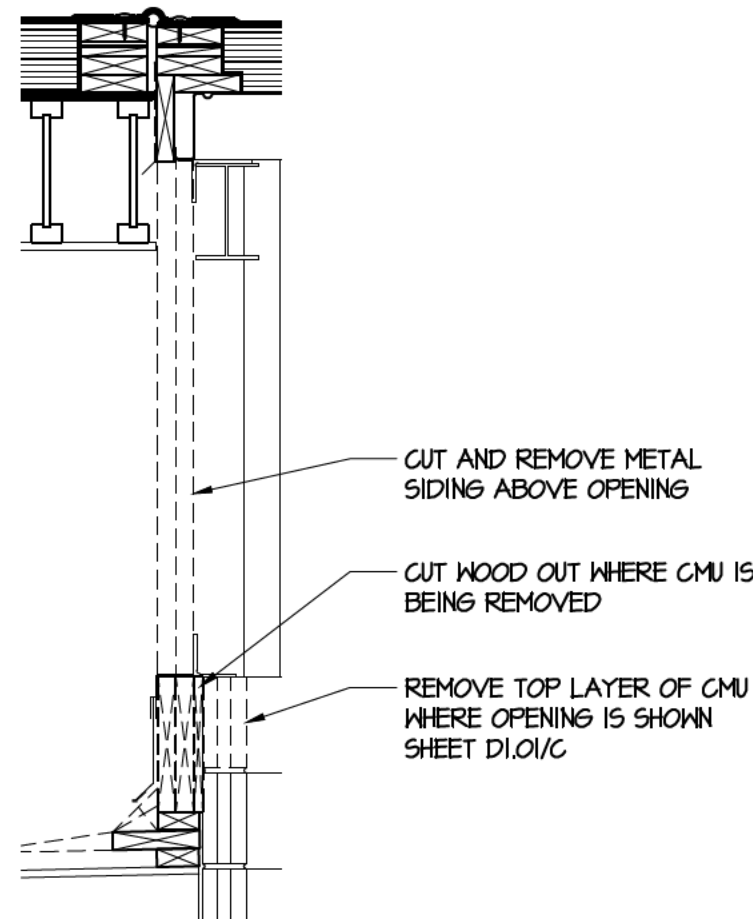


DEMOLITION GENERAL NOTES:

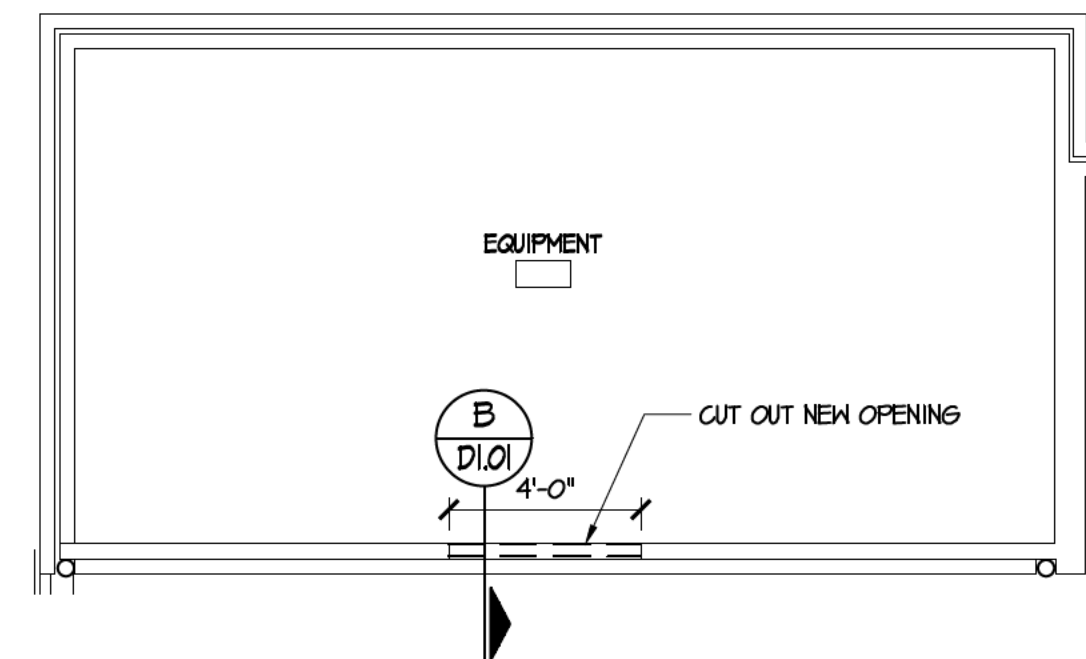
1. REMOVE ALL METAL ROOF, ROOF INSULATION, METAL WALL PANELS, WALL INSULATION AND LINER PANEL IN CAFETERIA AND KITCHEN AREA.
2. REMOVE ALL METAL ROOF AND ROOF INSULATION OVER UNIT OFFICE AREA.
3. GENERAL CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
4. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF PROPERTY DURING THE COURSE OF WORK, BOTH INTERIOR AND EXTERIOR.
5. ALL TROPHY'S AND DISPLAY BOARDS MOUNTED TO WALL WILL BE REMOVED BY OWNER PRIOR TO CONSTRUCTION.

DEMOLITION PLAN NOTES:

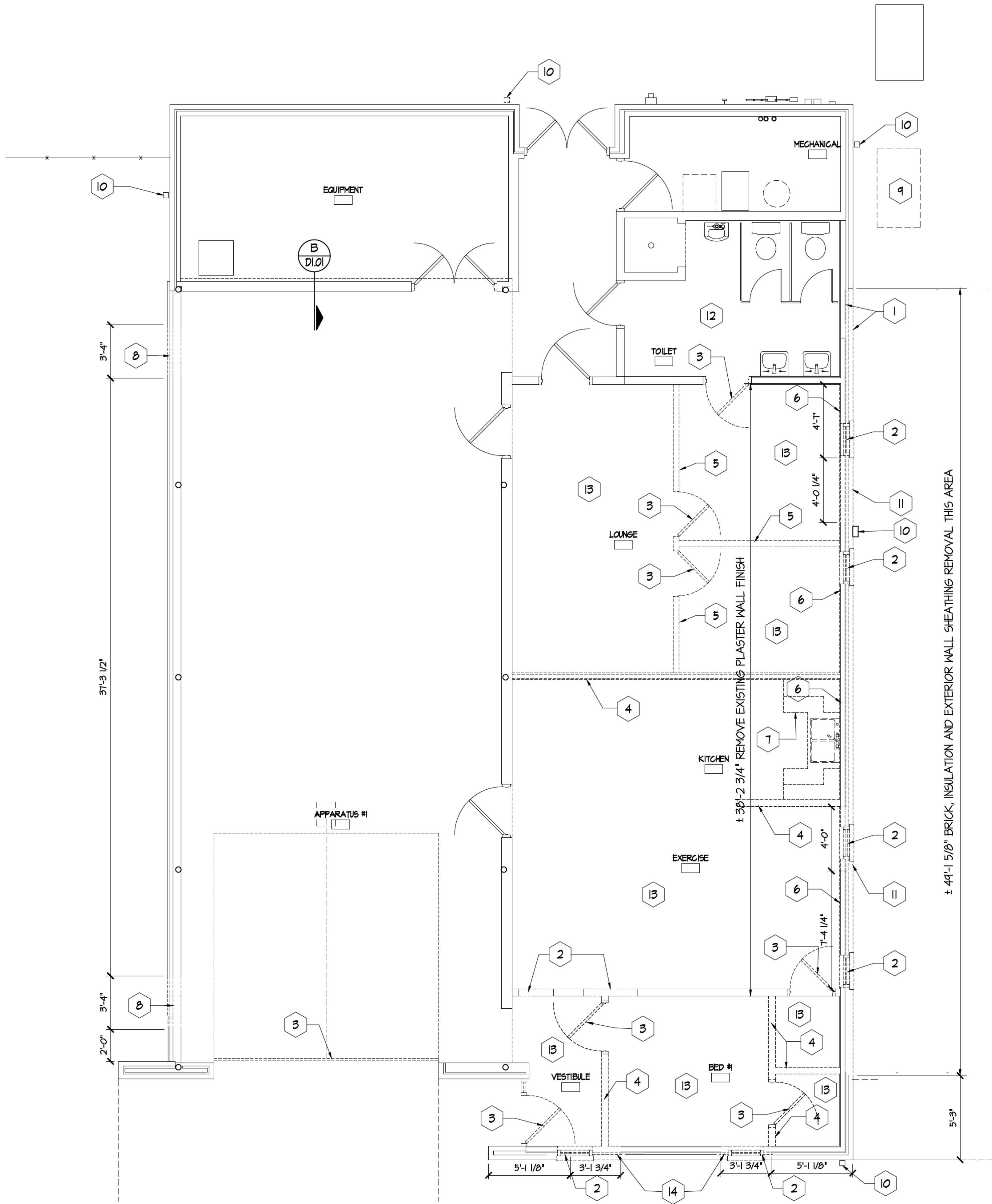
- 1 REMOVE EXISTING EXTERIOR FACE BRICK TO LIMITS SHOWN.
- 2 REMOVE EXISTING WINDOWS, SILL, TRIM, AND ACCESSORIES
- 3 REMOVE EXISTING DOOR, HARDWARE AND FRAME.
- 4 REMOVE EXISTING PLASTER AND WOOD STUD INTERIOR PARTITION TO LIMITS SHOWN
- 5 REMOVE EXISTING GYPSUM BOARD AND WOOD STUD INTERIOR PARTITION TO LIMITS SHOWN
- 6 REMOVE EXISTING INTERIOR PLASTER WALL FINISH AND INSULATION
- 7 REMOVE EXISTING BASE AND WALL CASEWORK, AND COUNTERTOPS.
- 8 REMOVE EXISTING METAL WALL PANEL, EXTERIOR METAL WALL PANEL AND CONCRETE FOUNDATION AT NEW OPENING
- 9 REMOVE EXISTING CONCRETE PAD
- 10 REMOVE EXISTING DOWNSPOUTS AND GUTTERS
- 11 REMOVE WOOD STUDS FOR NEW OPENING
- 12 REMOVE EXISTING PLASTER CEILING
- 13 FLOOR AND BASE REMOVAL BY ABATEMENT CONTRACTOR UNDER SEPARATE CONTRACT
- 14 SAWCUT EXISTING BRICK, MODIFY STUD WALLS FOR NEW WINDOW OPENING



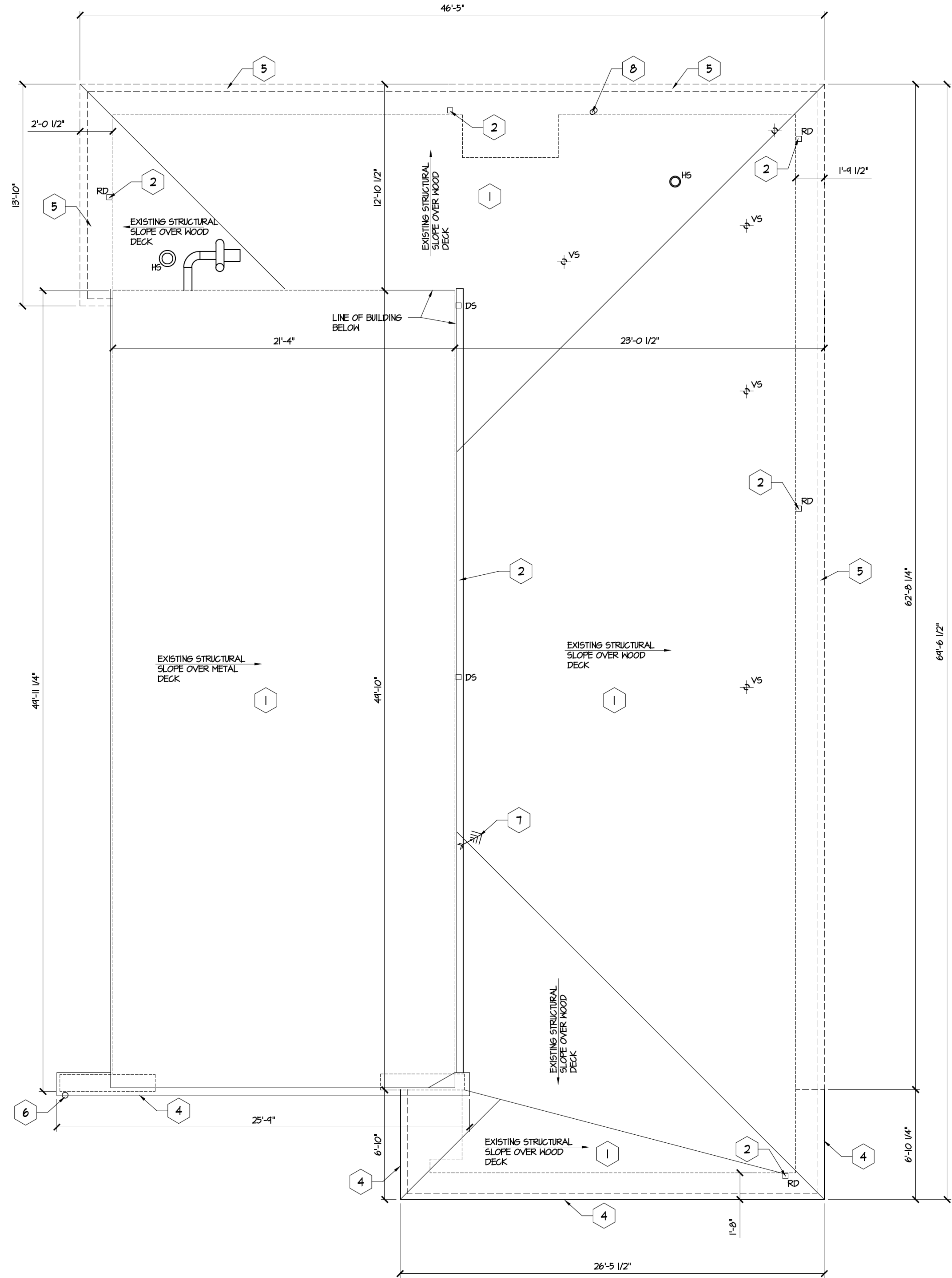
B DEMO UPPER FLOOR SECTION
SCALE: 1/4"=1'-0"



C DEMO UPPER FLOOR PLAN
SCALE: 1/4"=1'-0"



A DEMOLITION FLOOR PLAN
SCALE: 1/4"=1'-0"



DEMOLITION ROOF PLAN
SCALE: 1/4" = 1'-0"

DEMOLITION GENERAL NOTES:

- GENERAL CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF PROPERTY DURING THE COURSE OF WORK, BOTH INTERIOR AND EXTERIOR.

DEMOLITION PLAN NOTES:

- REMOVE EXISTING ROOF SYSTEM TO METAL OR WOOD DECK. ROOF SYSTEM CONSISTS OF TPO MEMBRANE, ADHERED TO 2 LAYERS OF POLY-ISO, MECHANICALLY ATTACHED TO METAL OR WOOD DECK.
- REMOVE EXISTING GUTTERS, DOWNSPOUTS, AND SPLASH BLOCKS.
- REMOVE EXISTING METAL WALL PANELS.
- REMOVE EXISTING METAL FASCIA PANEL, TRIMS, ACCESSORIES.
- REMOVE EXISTING METAL FASCIA PANELS, TRIMS, ACCESSORIES, SOFFIT. CUT WOOD RAFTER OVERHANG.
- REMOVE EXISTING HEATHER STATION, SALVAGE FOR REINSTALLATION.
- REMOVE EXISTING RADIO ANTENNA EQUIPMENT, SEE ARCHITECTURAL/STRUCTURAL DRAWINGS FOR NEW MOUNT.
- MODIFY EXISTING ELECTRIC MAST. COORDINATE WITH ELECTRIC DRAWINGS.

**The
Upchurch
Group**

architects
engineers
surveyors

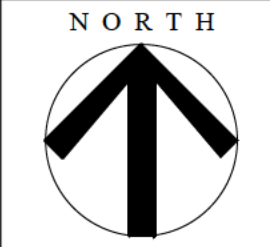
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**DEMOLITION ROOF
PLAN**

**Mattoon Fire Department
Station #3 Addition**
2700 Marshall Avenue
Mattoon, Coles County, Illinois

Drawn **TG**
Date **June 20, 2025**
Project No
2724092



sheet no.

D1.02

The Contractor shall obtain and verify all dimensions and conditions at job site and be fully responsible for same.



PIPING LEGEND

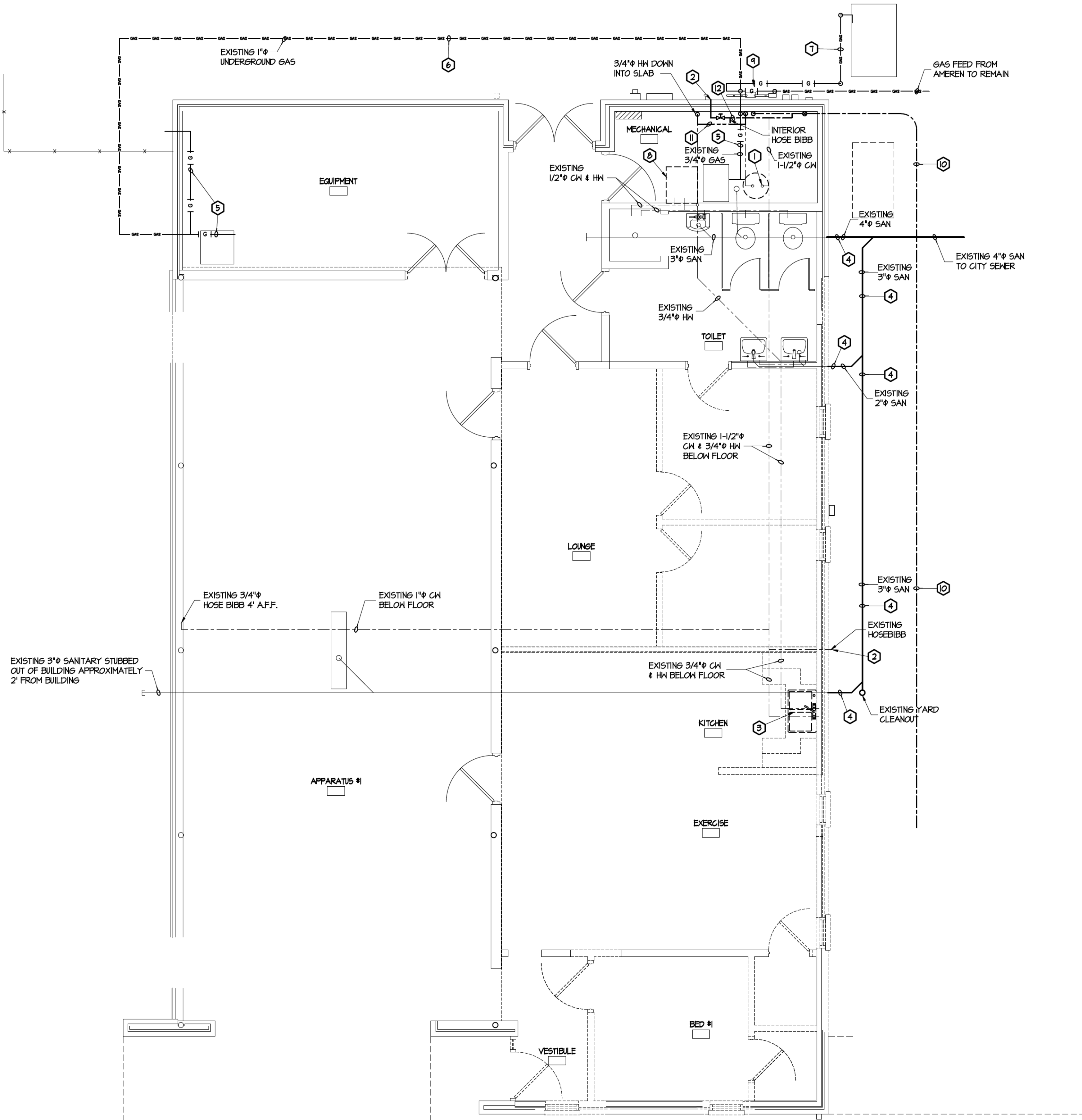
-----	DOMESTIC COLD WATER SUPPLY (CW)
-----	DOMESTIC HOT WATER SUPPLY (HW)
-----	HOT WATER RETURN LINE (HWR)
-----	SANITARY PIPING (SAN)
-----	VENT PIPING (VENT)
-----	ABOVE GRADE GAS
-----	BELOW GRADE GAS

ABBREVIATIONS:

CW	- DOMESTIC COLD WATER PIPING
HW	- DOMESTIC HOT WATER PIPING
HWR	- HOT WATER RETURN PIPING
SAN	- SANITARY PIPING
VENT	- VENT PIPING
GAS	- NATURAL GAS PIPING

DEMOLITION NOTES:

- 1 REMOVE EXISTING WATER HEATER, MODIFY PIPING FOR CONNECTION TO NEW WATER HEATER AT SAME LOCATION, SEE SHEET P1.01.
- 2 REMOVE EXISTING HOSE BIBB AND CAP WATER LINE INSIDE BUILDING.
- 3 REMOVE THE EXISTING SINK WITH GARBAGE DISPOSAL AND CAP THE SUPPLY AND SANITARY PIPING.
- 4 REMOVE THE EXISTING EXTERIOR SANITARY PIPING AND PROVIDE NEW, SEE SHEET P1.01.
- 5 REMOVE EXISTING GAS PIPE IN MECHANICAL ROOM AND EQUIPMENT ROOM.
- 6 REMOVE UNDERGROUND GAS PIPING UNDER NEW ADDITION, ABANDON PIPING UNDER EXTERIOR CONCRETE TO REMAIN.
- 7 REMOVE ALL GAS PIPING TO GENERATOR.
- 8 REMOVE EXISTING LAUNDRY TUB AND CAP SUPPLY AND SANITARY PIPING.
- 9 GAS METER TO BE REMOVED AND REPLACED, SEE DETAIL 4/P6.01.
- 10 EXISTING 1-1/2" CW SERVICE TO BE RELOCATED, SEE SHEET C1.03, AND P1.01.
- 11 REMOVE 3/4" HW PIPE BACK TO RISER SO IT CAN BE RELOCATED UNDER NEW ELECTRICAL PANEL.
- 12 REMOVE 1/2" CW PIPING BACK TO RISER SO NEW ELECTRICAL PANELS CAN BE INSTALLED.



A PLUMBING DEMOLITION PLAN
D1.03 SCALE: 1/4" = 1'-0"

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PIPING LEGEND

-----	DOMESTIC COLD WATER SUPPLY (CW)
-----	DOMESTIC HOT WATER SUPPLY (HW)
-----	HOT WATER RETURN LINE (HWR)
-----	SANITARY PIPING (SAN)
-----	VENT PIPING (VENT)
-----	NATURAL GAS PIPING (GAS)

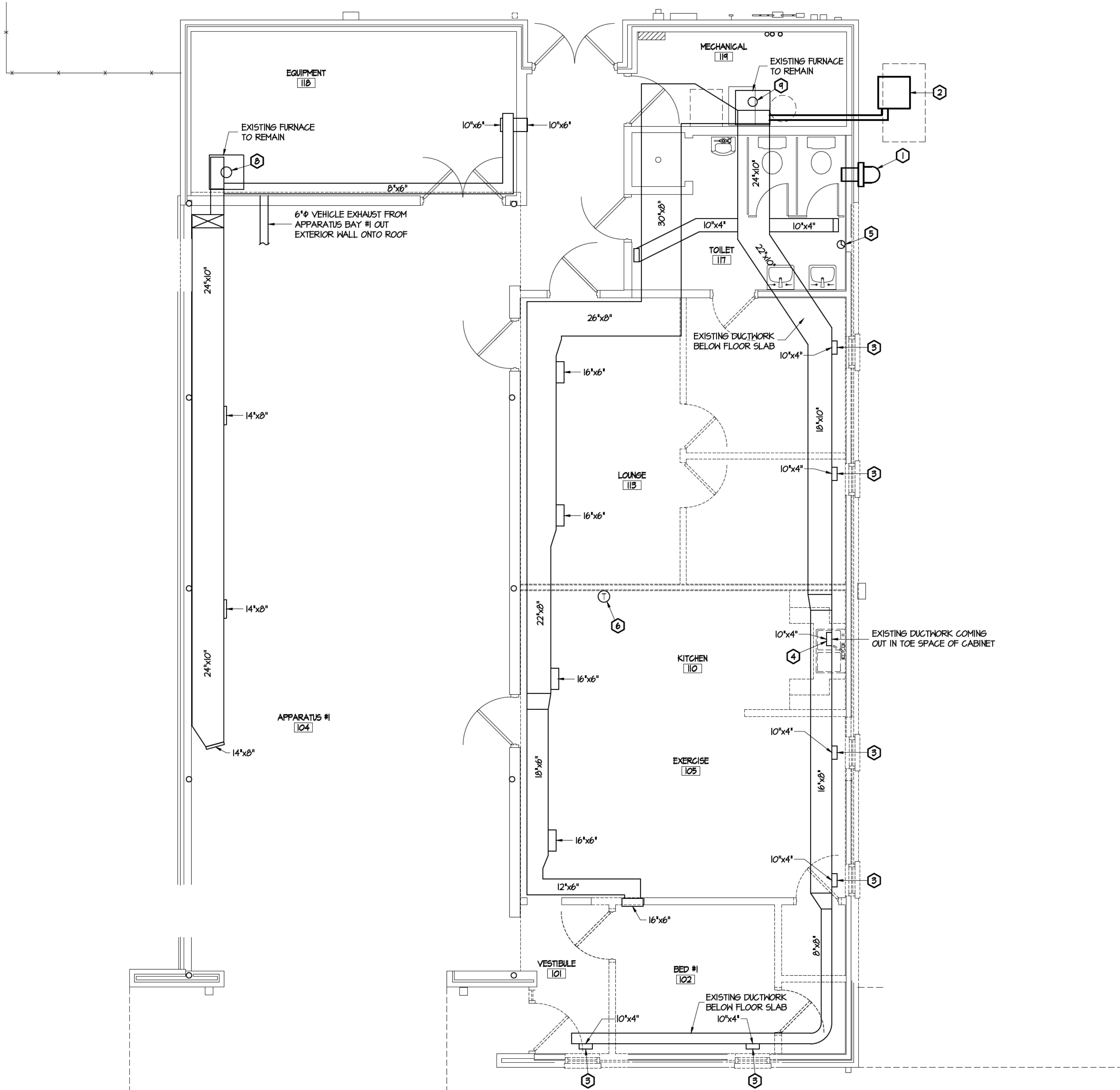
ABBREVIATIONS:

CW	- DOMESTIC COLD WATER PIPING
HW	- DOMESTIC HOT WATER PIPING
HWR	- HOT WATER RETURN PIPING
SAN	- SANITARY PIPING
VENT	- VENT PIPING
GAS	- NATURAL GAS PIPING

DEMOLITION NOTES :

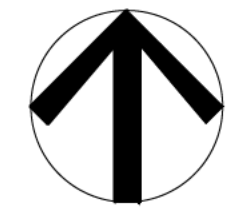
- 1 REMOVE EXISTING WALL MOUNTED EXHAUST FAN, DUCTWORK, AND GRILLE IN TOILET.
- 2 RECLAIM REFRIGERANT AND DISCONNECT EXISTING 4-TON AC UNIT. SALVAGE UNIT FOR REINSTALLATION IN NEW LOCATION, SEE SHEET V1.01.
- 3 EXISTING FLOOR REGISTER TO REMAIN, PROTECT DURING CONSTRUCTION.
- 4 REMOVE GRILLE AND MODIFY DUCTWORK TO EXTEND INTO TOE SPACE OF NEW CASEWORK.
- 5 REMOVE AND SALVAGE TIMER FOR EXHAUST FAN, TO BE REUSED FOR NEW EXHAUST FAN EF-3.
- 6 REMOVE THERMOSTAT AND SALVAGE FOR REINSTALLATION, SEE V1.01.
- 7 REMOVE THE EXISTING NEDERMAN VEHICLE EXHAUST FAN AND SALVAGE FOR REINSTALLATION ON THE NEW ROOF ABOVE MEZZANINE. SEE SHEET V1.01.
- 8 REMOVE THE EXISTING 8"Ø FLUE PIPING FROM FURNACE.
- 9 REMOVE THE EXISTING 1"Ø FLUE PIPING FROM FURNACE.

B VENTILATION ROOF EQUIPMENT DEMOLITION PLAN
D1.04 SCALE: 1/4" = 1'-0"



A VENTILATION DEMOLITION PLAN
D1.04 SCALE: 1/4" = 1'-0"

The Contractor shall obtain and verify all dimensions and conditions at job site and be fully responsible for same.



GENERAL NOTES

- CONNECTIONS TO, AND SHUTDOWNS OF, EXISTING SYSTEMS SHALL BE COORDINATED WITH OWNER TO ALLOW MINIMUM INTERFERENCE WITH OWNERS OPERATION AND DOWN TIME OF EXISTING SERVICES.

PLAN LEGEND

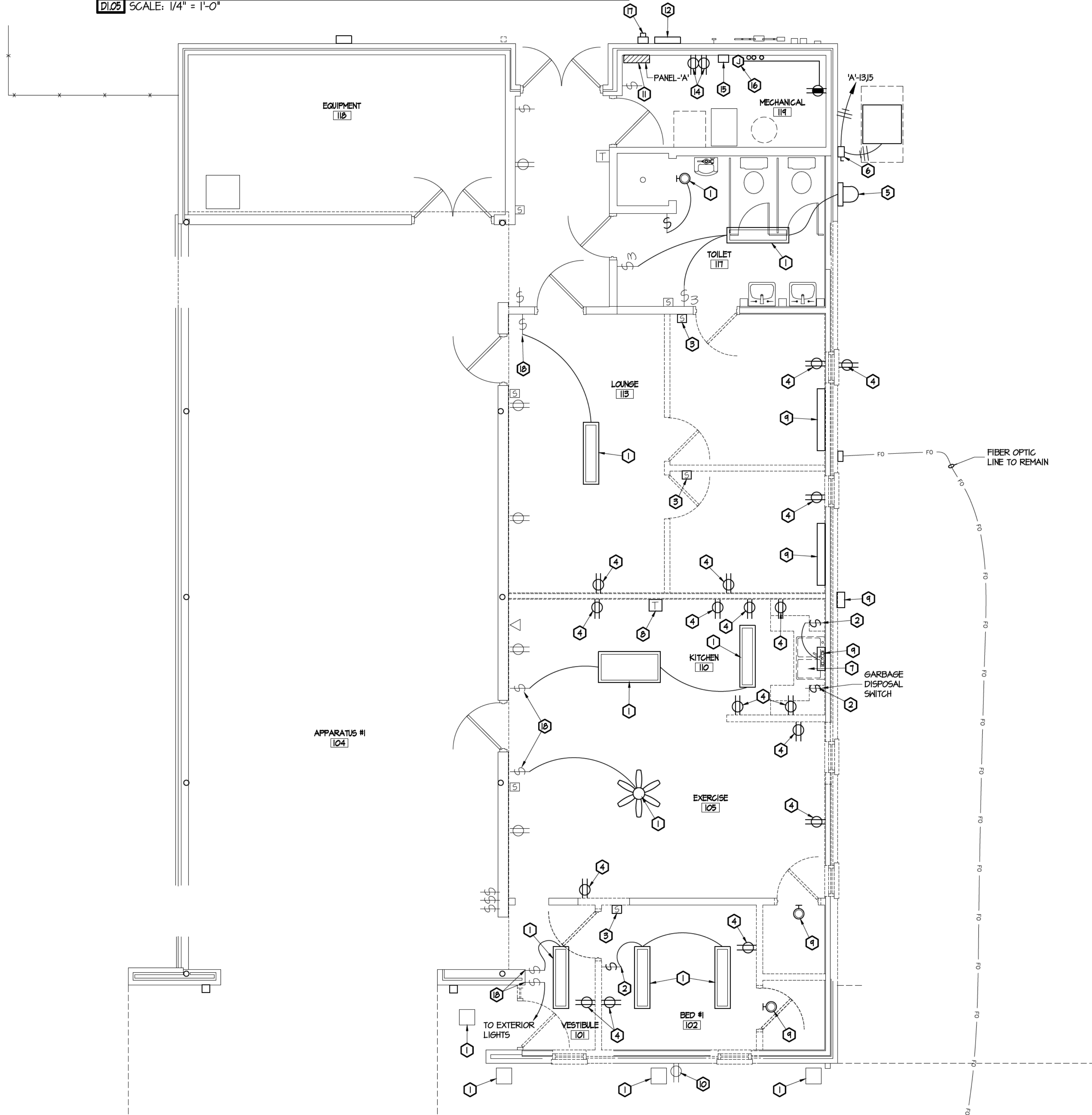
- WIRING CONCEALED IN RACEWAY OR CONDUIT LOCATED IN WALL OR CEILING. EQUIPMENT GROUND TO BE INCLUDED FOR EACH CIRCUIT
- 120V, 20 AMP DUPLEX RECEPTACLE W/ BOTTOM MOUNTED 16" A.F.F. UNLESS OTHERWISE NOTED
- 6F.C.I. TYPE 120V. DUPLEX RECEPTACLE
- ELECTRICAL PANEL W/ DESIGNATION
- ELECTRIC MOTOR
- MANUAL MOTOR STARTER (TT SWITCH) @ 44" A.F.F. 3" DESIGNATES 3-POLE
- SAFETY SWITCH SIZED AS NOTED
- 208V-240V RECEPTACLE, NEMA TYPE
- CEILING MOUNTED RECEPTACLE, MOUNTED FLUSH IN CEILING
- 6F.C.I. WEATHERPROOF DUPLEX TYPE 120V DUPLEX RECEPTACLE W/ COVER
- 120V, 20 AMP QUADPLEX RECEPTACLE W/ BOTTOM MOUNTED 16" A.F.F. UNLESS OTHERWISE NOTED
- BOSON SPEAKER
- WALL LIGHT
- JUNCTION BOX

DEMOLITION NOTES:

- REMOVE EXISTING LIGHT OR FAN AND ASSOCIATED CONDUCTORS CONDUIT. REUSE THE EXISTING HOMERUN FOR NEW LIGHTING IN THE SAME ROOM.
- REMOVE SWITCH AND ASSOCIATED CONDUCTORS, AND CONDUIT.
- REMOVE SPEAKER AND SALVAGE FOR REINSTALLATION.
- REMOVE EXISTING RECEPTACLE AND ASSOCIATED CONDUIT AND CONDUCTORS BACK TO PANEL OR NEAREST JUNCTION BOX.
- REMOVE POWER TO EXHAUST FAN INCLUDING CONDUIT AND CONDUCTORS BACK TO PANEL 'A' SO VENTILATION SUB-CONTRACTOR CAN REMOVE FAN.
- REMOVE DISCONNECT AND POWER FEED BACK TO PANEL 'A' FOR AIR CONDITIONER TO BE RELOCATED BY VENTILATION SUB-CONTRACTOR.
- REMOVE POWER FEED TO GARBAGE DISPOSAL SO PLUMBING SUB-CONTRACTOR CAN REMOVE.
- REMOVE TELEPHONE OUTLET AND SALVAGE FOR REINSTALLATION, SEE PLAN E1.03 FOR NEW LOCATION.
- REMOVE EXISTING LIGHT AND ASSOCIATED CONDUIT AND CONDUCTORS BACK TO NEAREST JUNCTION BOX.
- EXISTING RECEPTACLE TO REMAIN, REMOVE CONDUCTORS AND TIE INTO NEW CIRCUIT, SEE SHEET E1.02.
- REMOVE THE EXISTING PANELBOARD 'A' AND REPLACE WITH NEW PANELBOARD 'A'. SEE SHEET E1.02 AND E6.02.
- REMOVE AND SALVAGE THE EXISTING AUTOMATIC TRANSFER SWITCH, SEE E1.02 AND E6.02 FOR NEW LOCATION.
- DISCONNECT POWER AND REMOVE VEHICLE EXHAUST FAN DISCONNECT, SALVAGE DISCONNECT FOR REINSTALLATION ON NEW ROOF. SEE SHEET E1.02.
- REMOVE RECEPTACLES AND ASSOCIATED CONDUIT AND CONDUCTORS SO NEW ELECTRICAL EQUIPMENT CAN BE INSTALLED ON THAT WALL.
- REMOVE AND SALVAGE TELEPHONE POWER SUPPLY FOR REINSTALLATION, SEE SHEET E1.03.
- REMOVE JUNCTION BOX, AND CONDUIT AND RECEPTACLE TO WASHER/DRYER.
- REMOVE THE EXISTING METER AND WEATHER HEAD AND CONDUCTORS, SEE SINGLE LINE DIAGRAM I/E6.02.
- REMOVE EXISTING SWITCH AND CONDUCTORS, REUSE BOX AND CONDUIT FOR NEW LIGHTS.

B ELECTRICAL ROOF MEZZANINE DEMOLITION PLAN

D1.05 SCALE: 1/4" = 1'-0"



A ELECTRICAL DEMOLITION PLAN

D1.05 SCALE: 1/4" = 1'-0"

GENERAL NOTES:

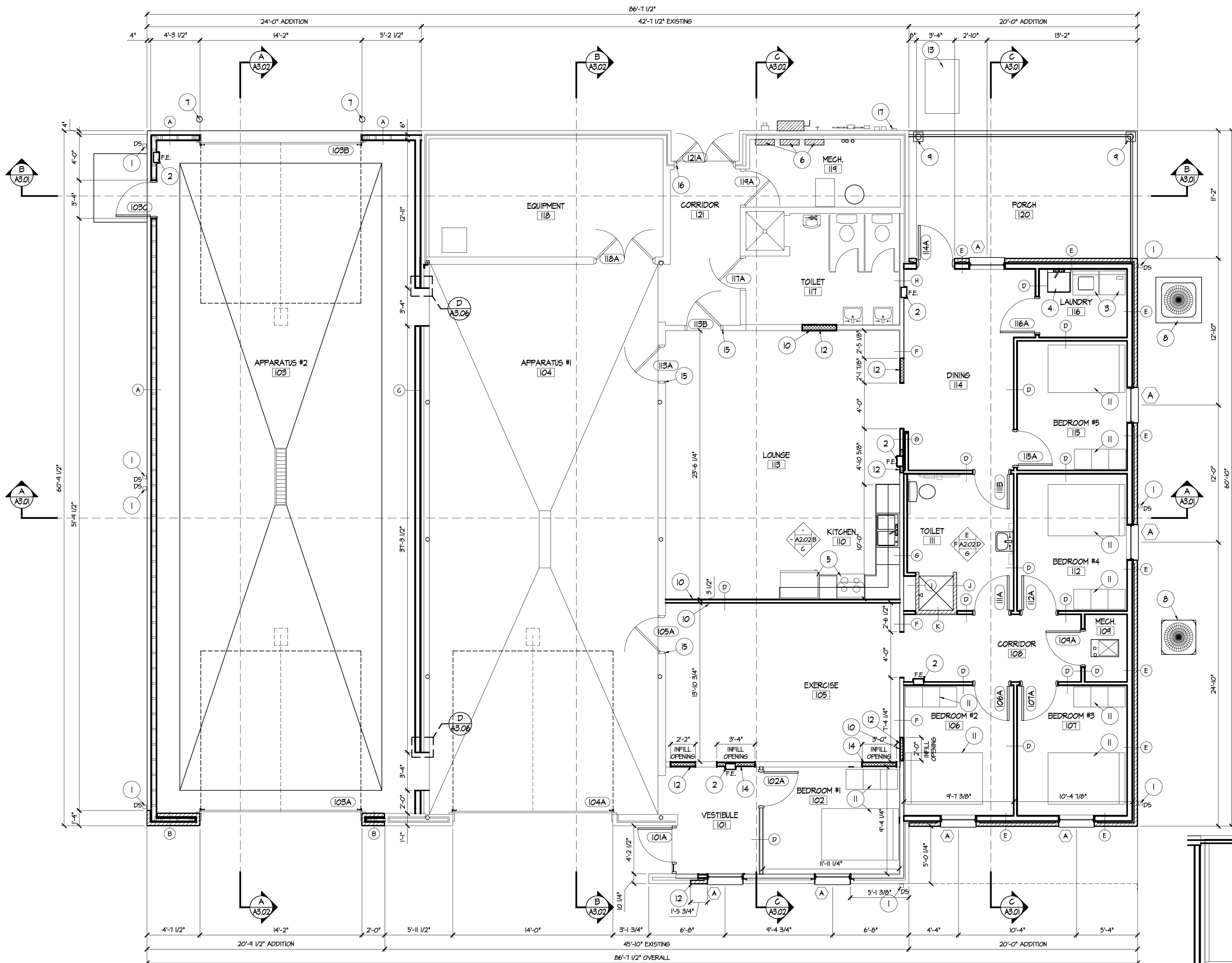
- ALL DIMENSIONS AT BRICK OR BLOCK WALLS ARE TO FACE OF MASONRY. ALL DIMENSIONS TO EXTERIOR WALL ARE TO FACE OF EXTERIOR WALL SHEATHING. INTERIOR DIMENSIONS TO STUD WALLS ARE TO FACE OF STUD.
- CONTRACTOR TO PROVIDE ADEQUATE BLOCKING BEHIND ALL WALL HUNG EQUIPMENT, GRAB BARS, CABINETS, ETC.
- UNLESS OTHERWISE NOTED OR DIMENSIONED, ALL DOORS SHALL BE INSTALLED WITH A MINIMUM OF 12" CLEAR SPACE FROM EDGE OF DOOR TO NEAREST WALL OR OBSTRUCTION ON PUSH SIDE OF DOOR AND WITH A MINIMUM OF 18" CLEAR SPACE FROM EDGE OF DOOR TO NEAREST WALL OR OBSTRUCTION ON PULL SIDE OF DOOR.

LEGEND:

- (PX) PARTITIONWALL TYPE, SEE SHEET A6.02
(XXX) DOOR NUMBER, SEE DOOR SCHEDULE SHEET A6.01
(A) WINDOW TYPE, SEE SHEET A6.02
F.E. CABINET MOUNTED FIRE EXTINGUISHER
D/A2.02B/C INTERIOR ELEVATIONS, SEE SHEET A2.02
DS DOWNSPOUT, CONNECT TO STORM SEWER

KEYED PLAN NOTES:

- DOWNSPOUT, CONNECT TO NEW STORM SEWER PIPING, SEE CIVIL DRAWINGS.
- SEMI-RECESSED FIRE EXTINGUISHER CABINET WITH FIRE EXTINGUISHER, SEE SPECIFICATION.
- WASHER & DRYER, PROVIDED AND INSTALLED BY OWNER.
- UTILITY SINK, SEE PLUMBING DRAWINGS.
- KITCHEN APPLIANCES, PROVIDED & INSTALLED BY OWNER.
- ELECTRIC PANELS, SEE ELECTRICAL DRAWINGS.
- PIPE BOLLARD, SEE CIVIL DRAWINGS.
- TRANSFORMER, GENERATOR & CONDENSING UNIT CONCRETE PADS, SEE CIVIL AND MECHANICAL/ELECTRICAL DRAWINGS.
- 6" SQUARE ALUMINUM COLUMN, TYP.
- PROVIDE SOLID 2X12 WOOD BLOCKING FOR OWNER FURNISHED & INSTALLED TV AT 64" A.F.F., 4'-0" IN LENGTH COORDINATE EXACT LOCATIONS WITH OWNER.
- BEDS AND FURNITURE BY OWNER.
- INFILL EXISTING WINDOW/DOOR OPENING MATCH WALL CONSTRUCTION.
- EXISTING GENERATOR UNIT.
- INFILL EXISTING DOOR OPENING, MATCH WALL CONSTRUCTION.
- PREP, PRIME, AND PAINT EXISTING DOOR FRAME.
- PREP, PRIME, AND PAINT EXTERIOR DOOR AND FRAME.
- PATCH DRY VENT HOLE WITH BRICK VENEER, MATCH EXISTING.



A FLOOR PLAN
A1.01 SCALE: 1/4"=1'-0"

B UPPER FLOOR PLAN
B1.01 SCALE: 1/4"=1'-0"

The Contractor shall obtain and verify all dimensions and conditions at job site and be fully responsible for same.

PLAN LEGEND:

- 2' x 2' LED FIXTURE
- 1' x 4' LED STRIP FIXTURE
- 1' x 4' LED FIXTURE
- RECESSED CAN LED FIXTURE
- EXIT LIGHT
- EMERGENCY/EXIT LIGHT COMBINATION
- SUPPLY DIFFUSER
- RETURN AIR DIFFUSER
- 120V DUPLEX RECEPTACLE MOUNTED IN THE CEILING FLUSH WITH CEILING TILE
- CARBON MONOXIDE/SMOKE DETECTOR
- CEILING TYPE
- ROOM NUMBER
- CEILING HEIGHT
- PLASTER CEILING PATCH AT LOCATIONS WHERE EXISTING WALLS WERE REMOVED, PAINT ENTIRE CEILING WALL TO WALL, TYPICAL
- CEILING FAN

CEILING MATERIAL TYPES:

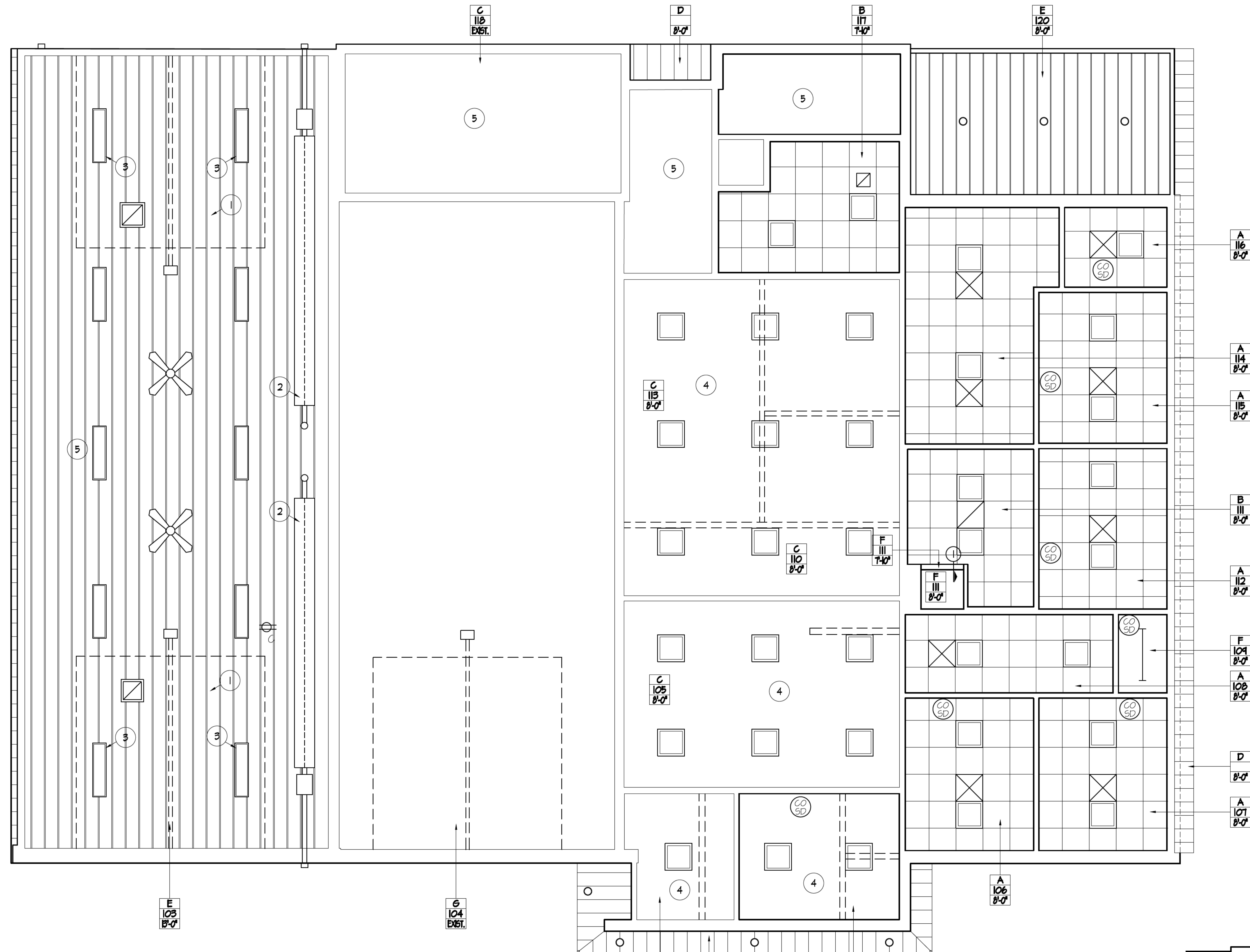
- TYPE A 24" x 24" x 5/8" SUSPENDED ACOUSTICAL TILE CEILING, SEE SPECIFICATIONS
- TYPE B 24" x 24" x 5/8" MOISTURE RESISTANCE SUSPENDED CEILING TILE, SEE SPECIFICATIONS
- TYPE C EXISTING PLASTER CEILING, PATCH AND PAINT
- TYPE D PREFINISHED ALUMINUM SOFFIT
- TYPE E PREFINISHED STEEL TYPE "R" CEILING PANEL
- TYPE F 5/8" TYPE "X" GYPSUM BOARD CEILING, PAINTED
- TYPE G EXISTING 6" METAL DECK, NO WORK

PLAN NOTES:

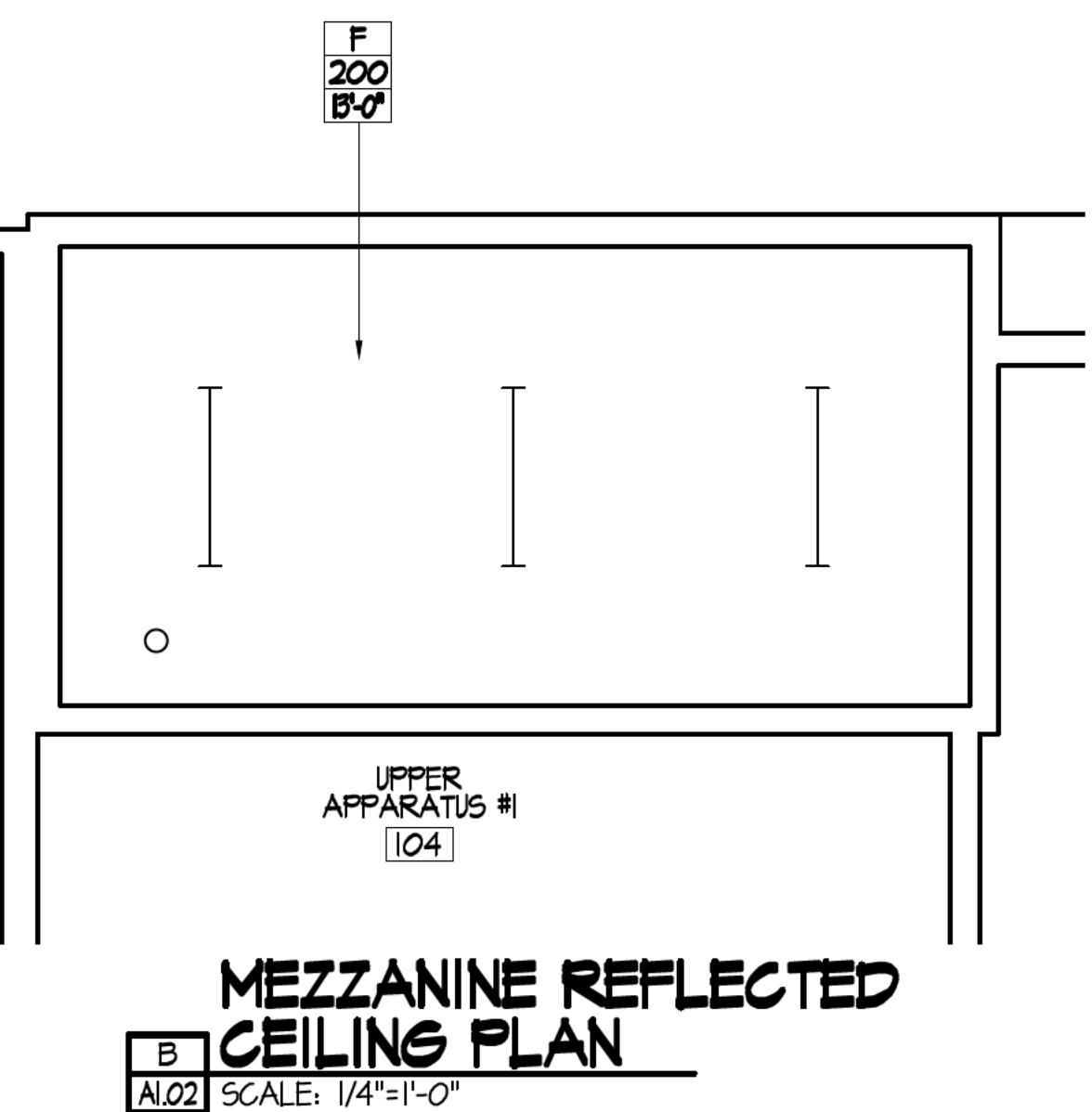
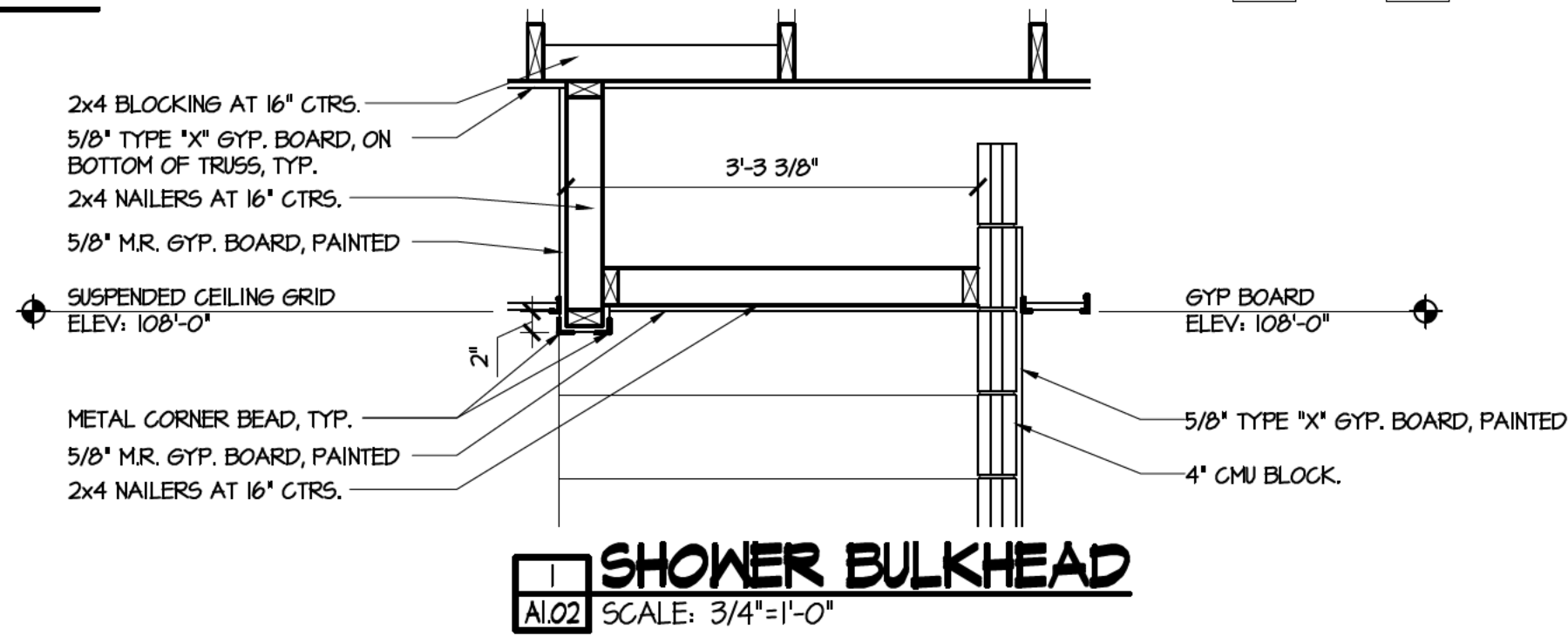
- 1 OUTSIDE AIR AND EXHAUST FAN, SEE VENTILATION DRAWINGS
- 2 TUBE HEATER AND FLUE PIPE, SEE VENTILATION DRAWINGS
- 3 COORDINATE LIGHT FIXTURE HEIGHT W/ OVERHEAD DOOR
- 4 PAINT EXPOSED CONDUIT
- 5 PAINT EXPOSED GAS PIPING

GENERAL NOTE:

ALL INTERIOR WALLS SHALL EXTEND TO BOTTOM OF WOOD TRUSSES



REFLECTED CEILING PLAN
A1.02 SCALE: 1/4"=1'-0"



LEGEND:

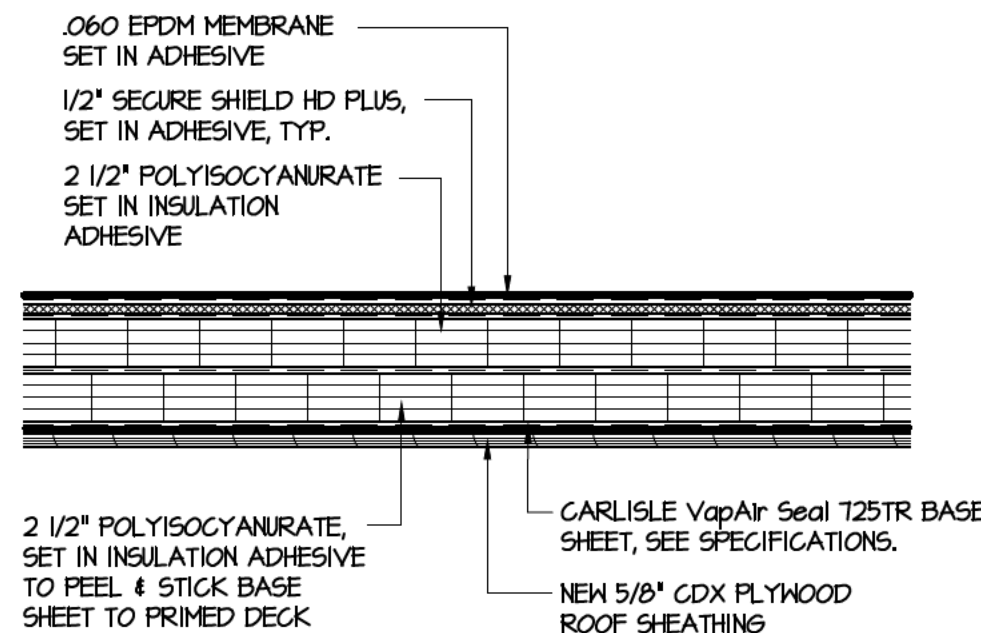
- DS DOWNSPOUT, SEE DTL. 12/A5.01 FOR CONNECTION TO BUILDING EXPANSION JOINT, SEE DTL. 2/A5.01
EJ VENT STACK, SEE DTL. 1/A5.01
HS HOT STACK, SEE DTL. 4/A5.01

KEYED PLAN NOTES:

- 1 PROVIDE TAPERED SADDLE AT HIGH SIDE OF EQUIPMENT CURB, TYP. SLOPE 1/2"/FT.
2 SALVAGE EXISTING ANTENNA AND MOUNTING BRACKET FOR REINSTALLATION, SEE DTL. 10/A5.01
3 SALVAGE AND REINSTALL EXISTING WEATHER STATION
4 EXISTING ELECTRICAL SERVICE TO BE MODIFIED, SEE ELECTRICAL DRAWINGS

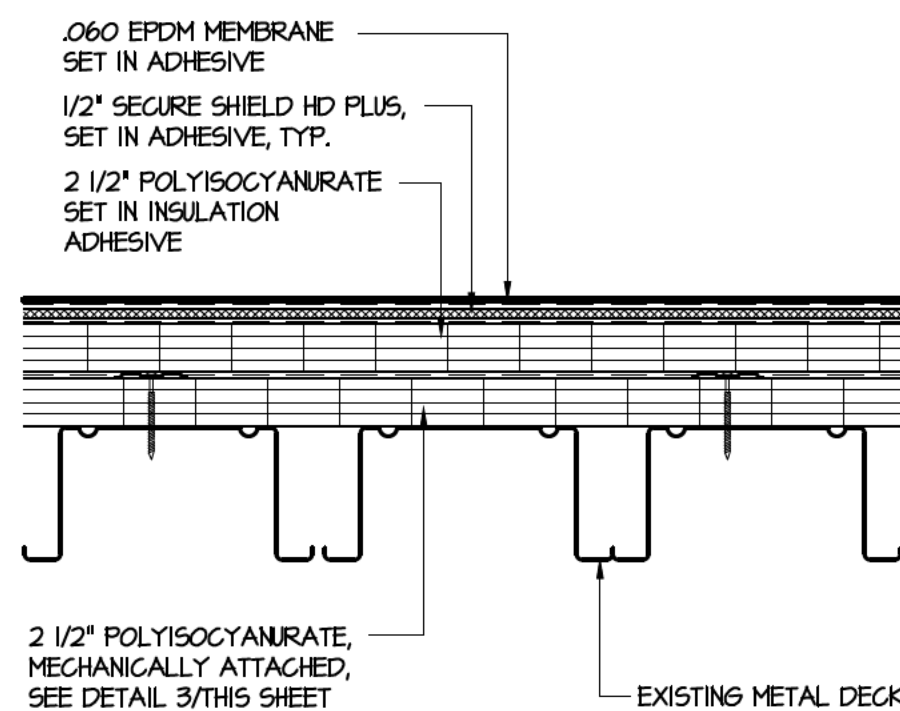
GENERAL NOTES:

1. ALL METAL WORK TO BE IN 24 GA. PREFINISHED STEEL, SEE SPECIFICATIONS
2. THE ROOFING CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, SIZE, QUALITY, COMPOSITION AND LOCATION OF ALL ROOF PENETRATIONS
3. UPON REMOVAL OF EXISTING ROOF SYSTEM, THE CONTRACTOR SHALL INSPECT THE DECK FOR ANY POSSIBLE DAMAGE AND NOTIFY THE A/E OF ANY DEFECT THAT MAY AFFECT WORK OR WORKMANSHIP
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF PROPERTY DURING THE COURSE OF WORK, BOTH INTERIOR AND EXTERIOR.



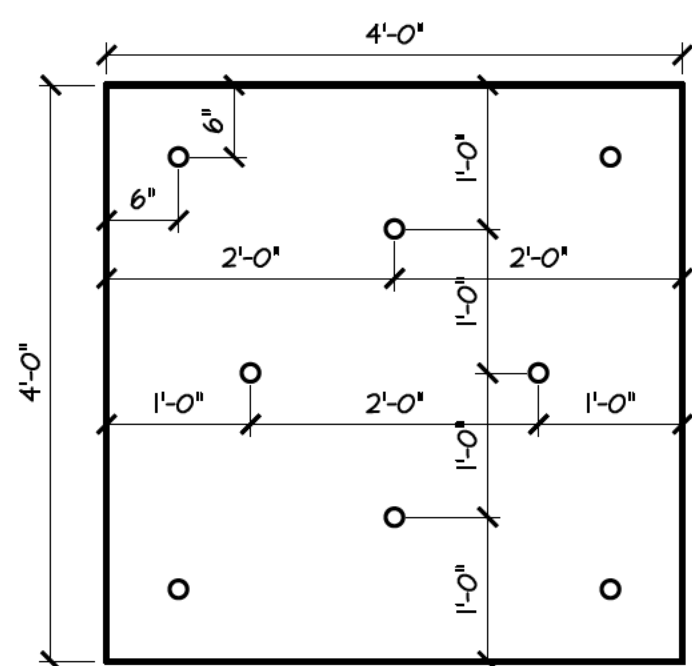
1 TYPICAL ROOF SECTION "A"

SCALE: 1 1/2" = 1'-0"



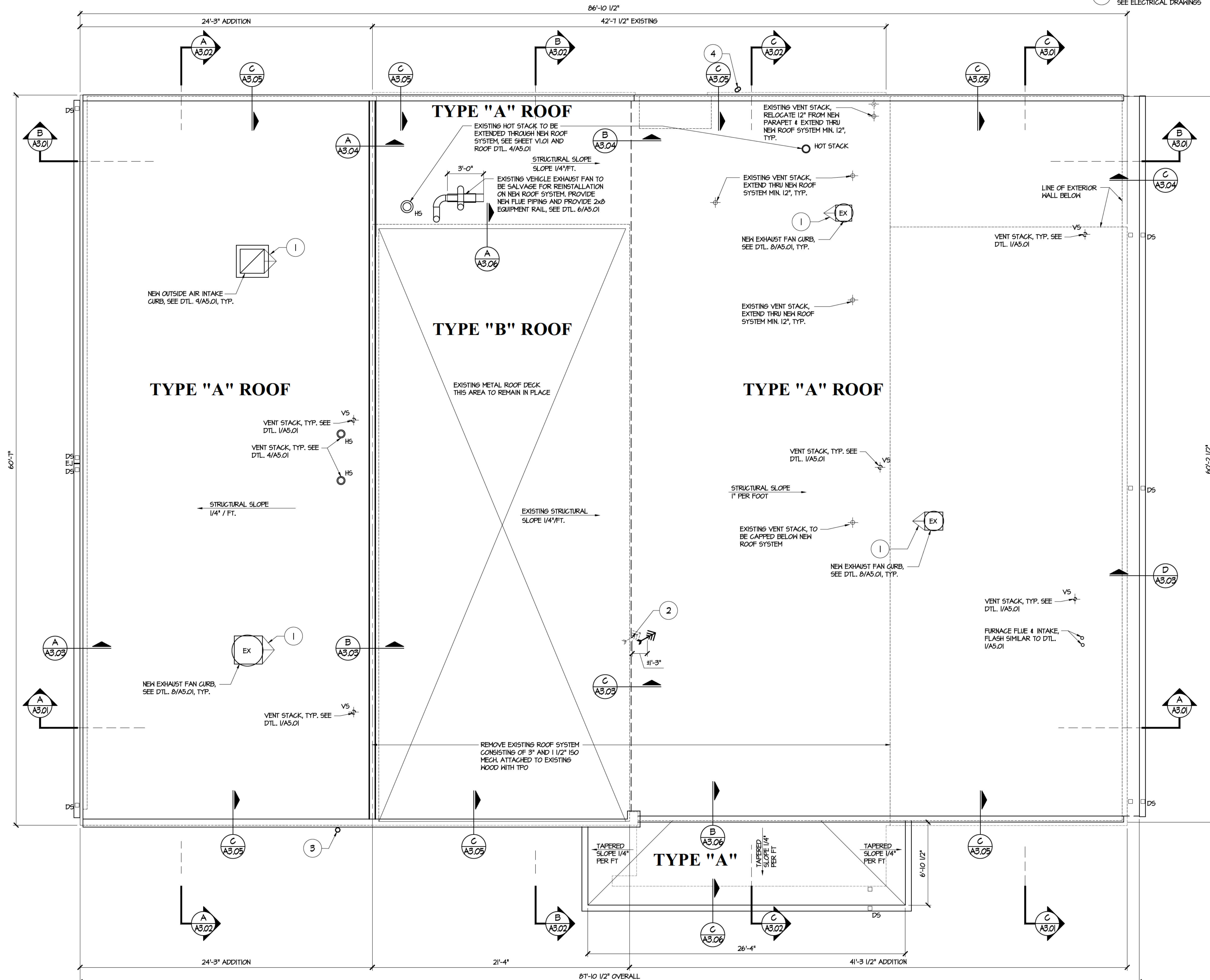
2 TYPICAL ROOF SECTION "B"

SCALE: 1 1/2" = 1'-0"



**BASE INSULATION AT METAL
DECK FASTENER PATTERN**

SCALE: 3/4" = 1'-0"



A ROOF PLAN

SCALE: 1/4" = 1'-0"

The Contractor shall obtain and verify all dimensions and conditions at job site and be fully responsible for same.

GENERAL NOTES:

- ALL FLOORING TO BE INSTALLED WALL TO WALL PRIOR TO INSTALLATION OF FIXTURES AND CASEWORK

FLOORING LEGEND

- SHERWIN-WILLIAMS: ARMORSEAL REXTHANE SEALED CONCRETE, SEE SPECIFICATIONS
- SHERWIN-WILLIAMS: RESINOUS FLOOR #1 - RESIFLOR DECO FLAKE, BG, SEE SPECIFICATIONS
- SHERWIN-WILLIAMS: RESINOUS FLOOR #2 - FastTop Multi-Top Floor SL 45 - RESINOUS FLOORING, SEE SPECIFICATIONS
- 4" RUBBER COVE BASE, COLOR SELECTED BY A/E
- 6"x36" LUXURY VINYL TILE, SEE SPECIFICATIONS
- RESINOUS COVE BASE, SEE DETAIL 2/THIS SHEET.

RESINOUS FLOORING LEGEND:

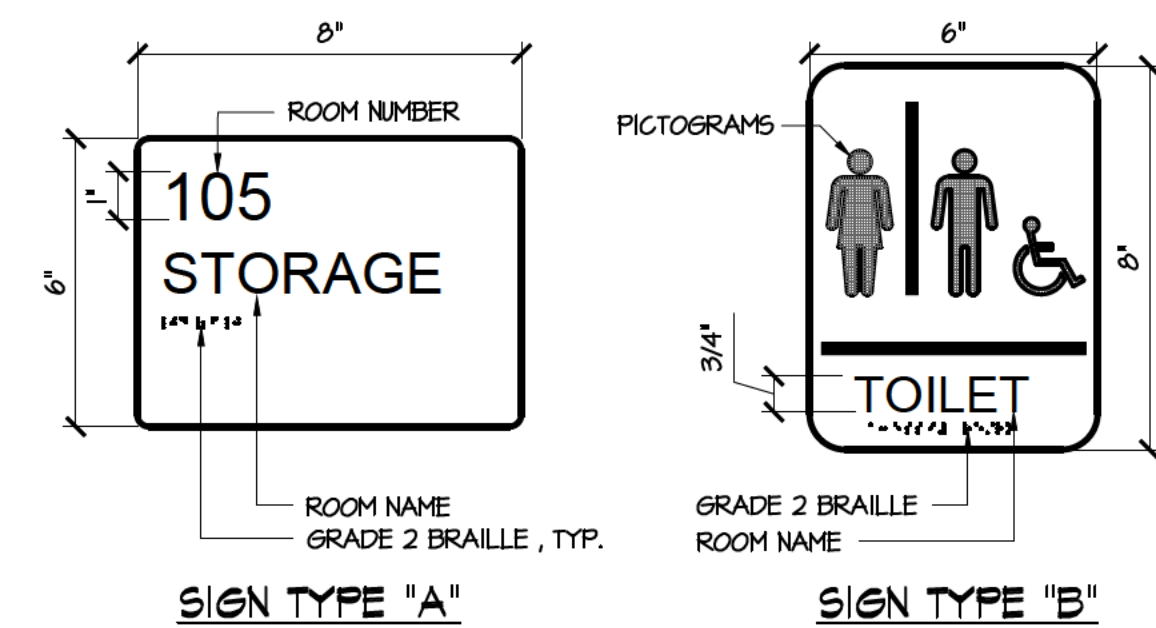
- RESINOUS FLOOR #2, COLOR #1 "YELLOW"
- RESINOUS FLOOR#2, COLOR #2 "RED"
- RESINOUS FLOOR#2, COLOR #3 "GRAY"

INTERIOR SIGNAGE SCHEDULE

RM. NO.	NAME OF ROOM	TYPE	QTY.
101	VESTIBULE	-	-
102	BEDROOM #1	-	-
103	APPARATUS #2	-	-
104	APPARATUS #1	-	-
105	EXERCISE	-	-
106	BEDROOM #2	-	-
107	BEDROOM #3	-	-
108	CORRIDOR	-	-
109	MECHANICAL	A	1
110	KITCHEN	-	-
111	TOILET	B	2
112	BEDROOM #4	-	-
113	LOUNGE	-	-
114	DINING	-	-
115	BEDROOM #5	-	-
116	LAUNDRY	A	1
117	TOILET	B	1
118	EQUIPMENT	-	-
119	MECHANICAL	-	-
120	CORRIDOR	-	-
121	PORCH	-	-

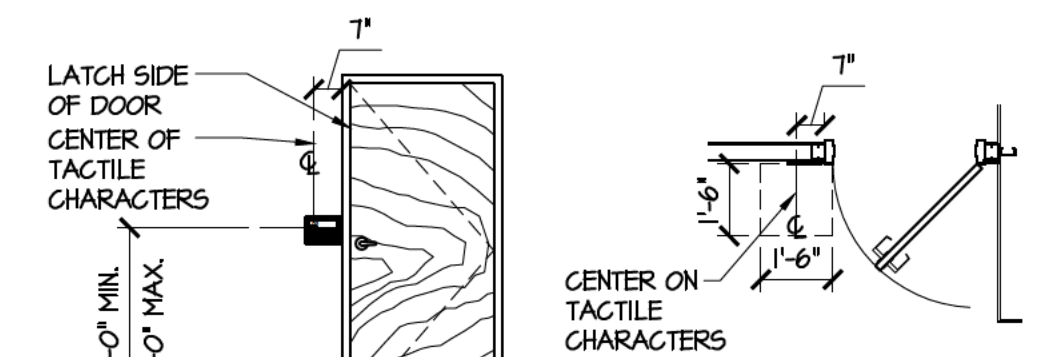
KEYED PLAN NOTES

- PROVIDE INTERIOR ROOM SIGNAGE, SEE DET. 1 SEE SCHEDULE AND SPECIFICATIONS
- PROVIDE NEW ALUMINUM THRESHOLD



3 INTERIOR SIGNAGE DETAILS

SCALE: NOT TO SCALE

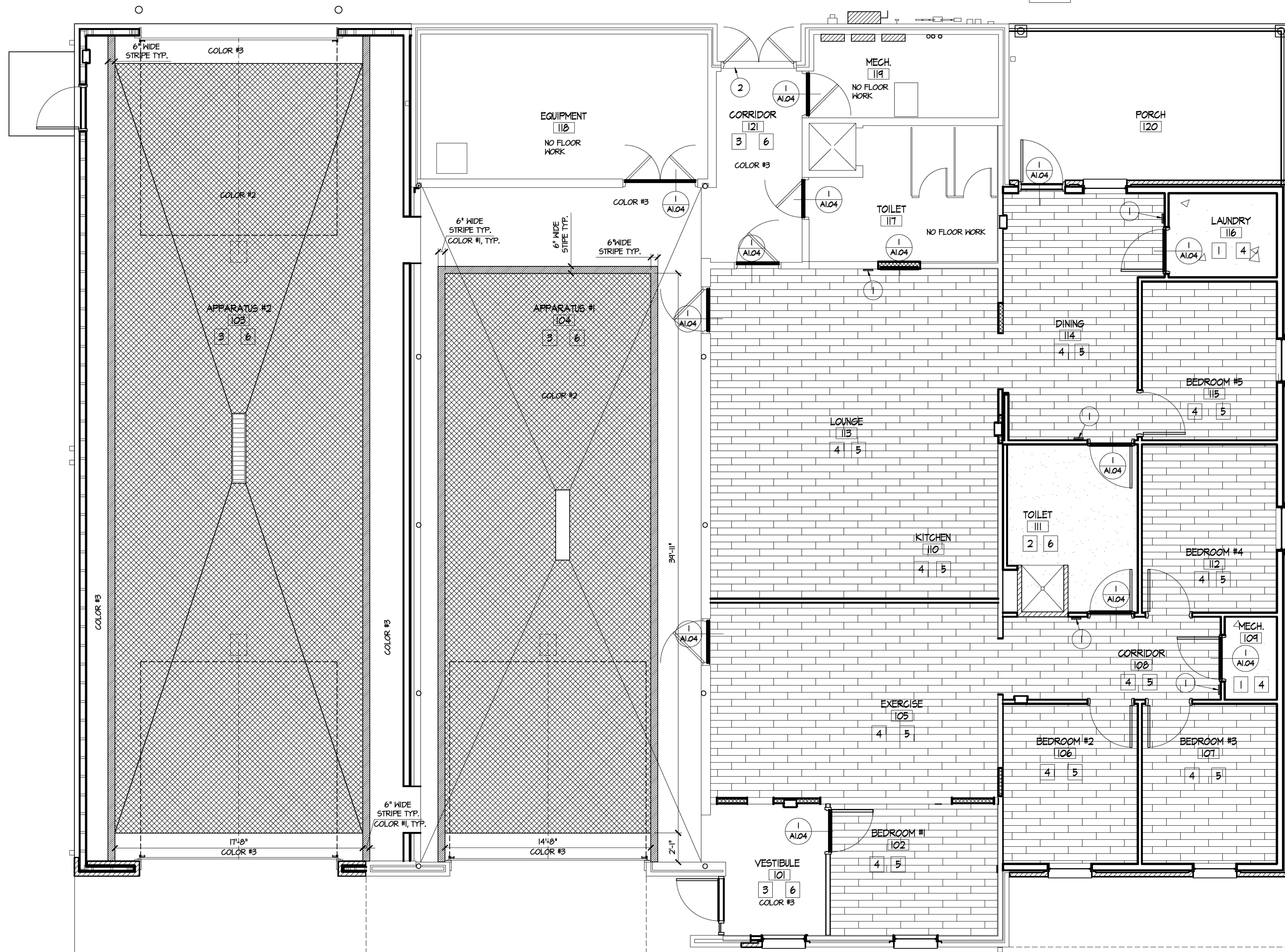


TYPICAL SIGNAGE NOTES:
SIGNAGE TO BE INSTALLED AT SPACES WITHOUT DOOR WAYS, SHALL BE COORDINATED IN THE FIELD WITH THE A/E.

2010 ILLINOIS ACCESSIBILITY CODE:
TACTILE CHARACTERS ON SIGNS SHALL BE LOCATED 48\"/>

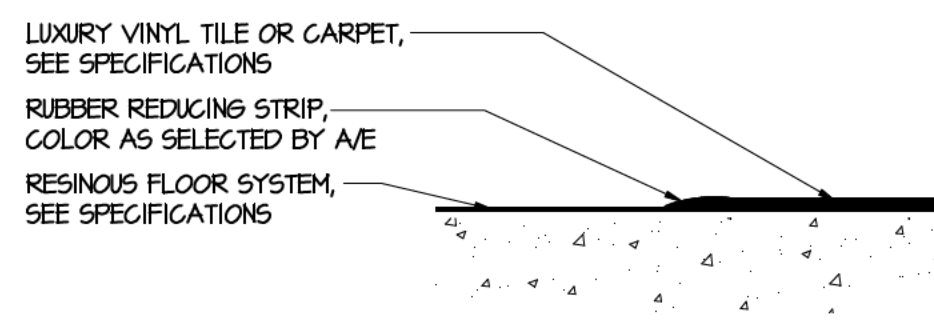
4 INTERIOR SIGNAGE LOCATION

SCALE: NOT TO SCALE



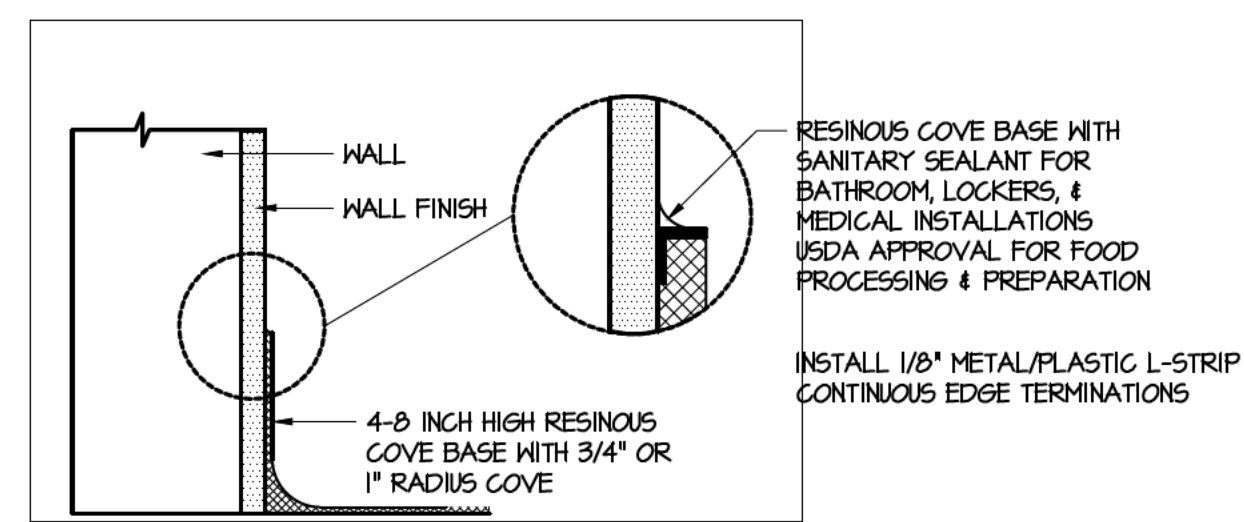
A FLOOR PLAN

SCALE: 1/4"=1'-0"



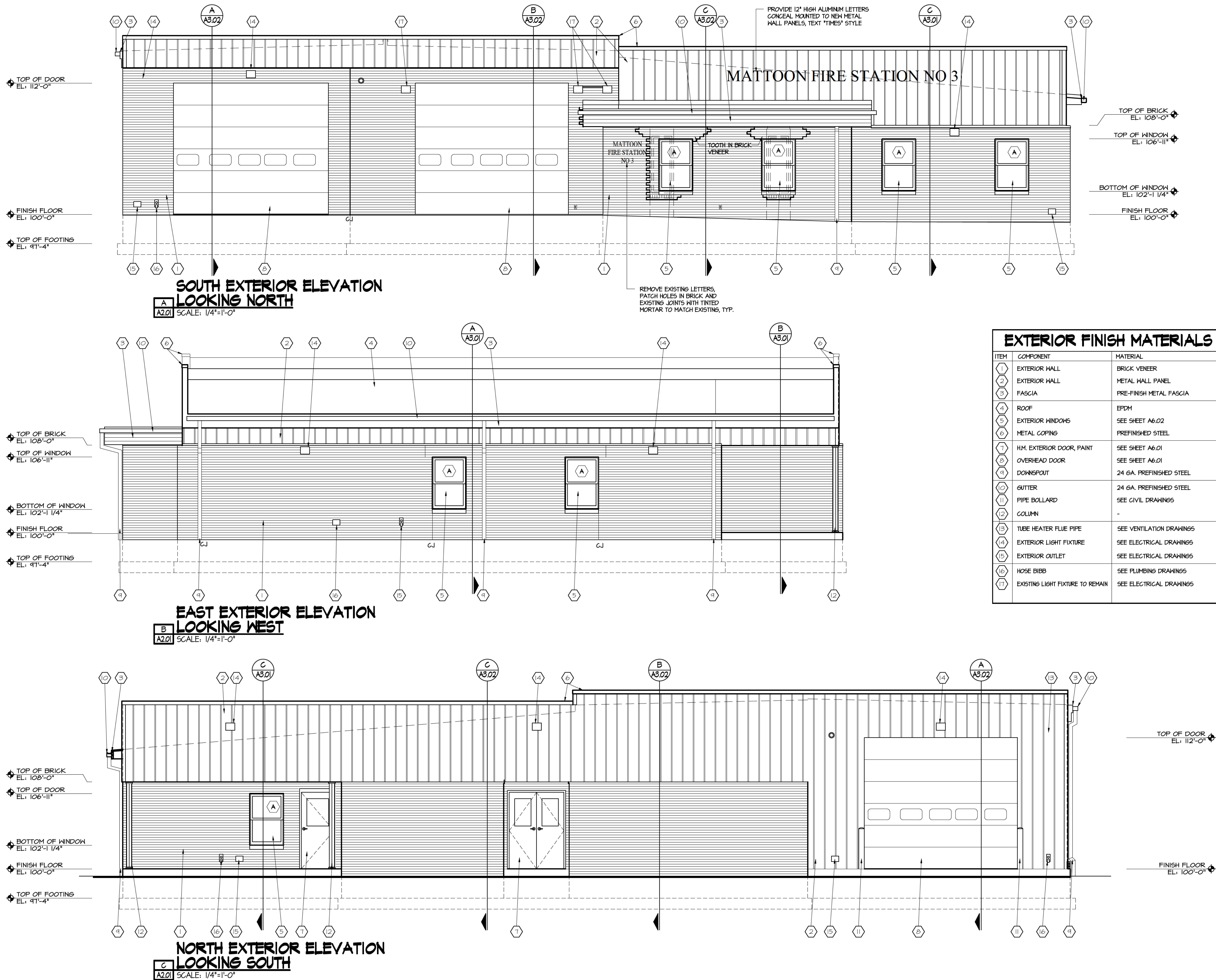
1 TRANSITION STRIP DETAIL

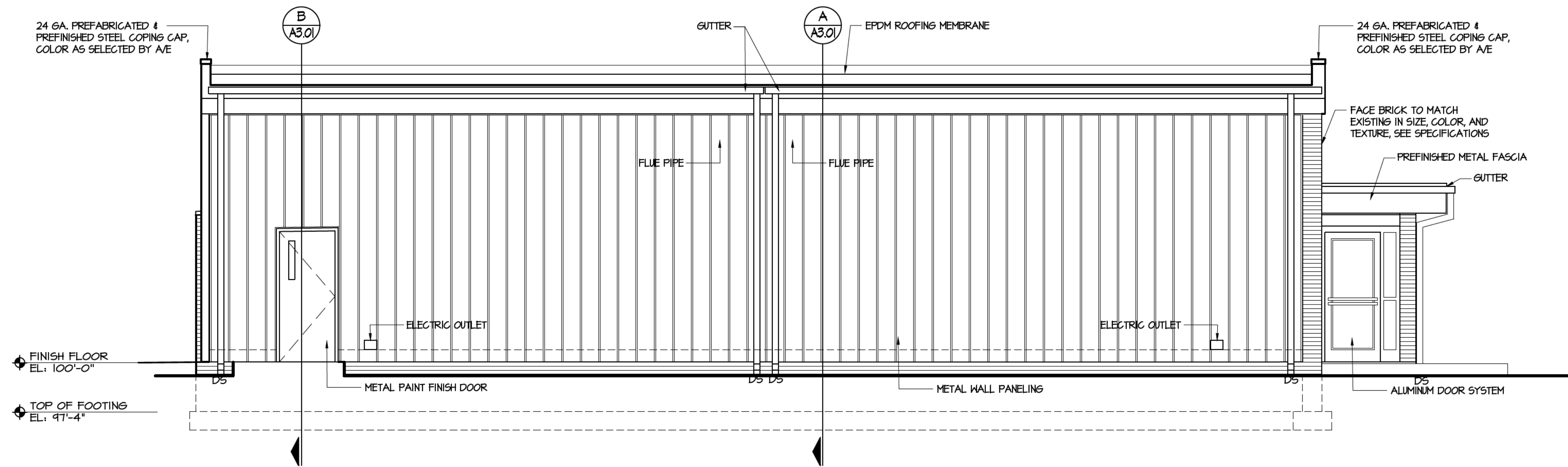
SCALE: 3" = 1'-0"



2 RESINOUS COVE DETAIL

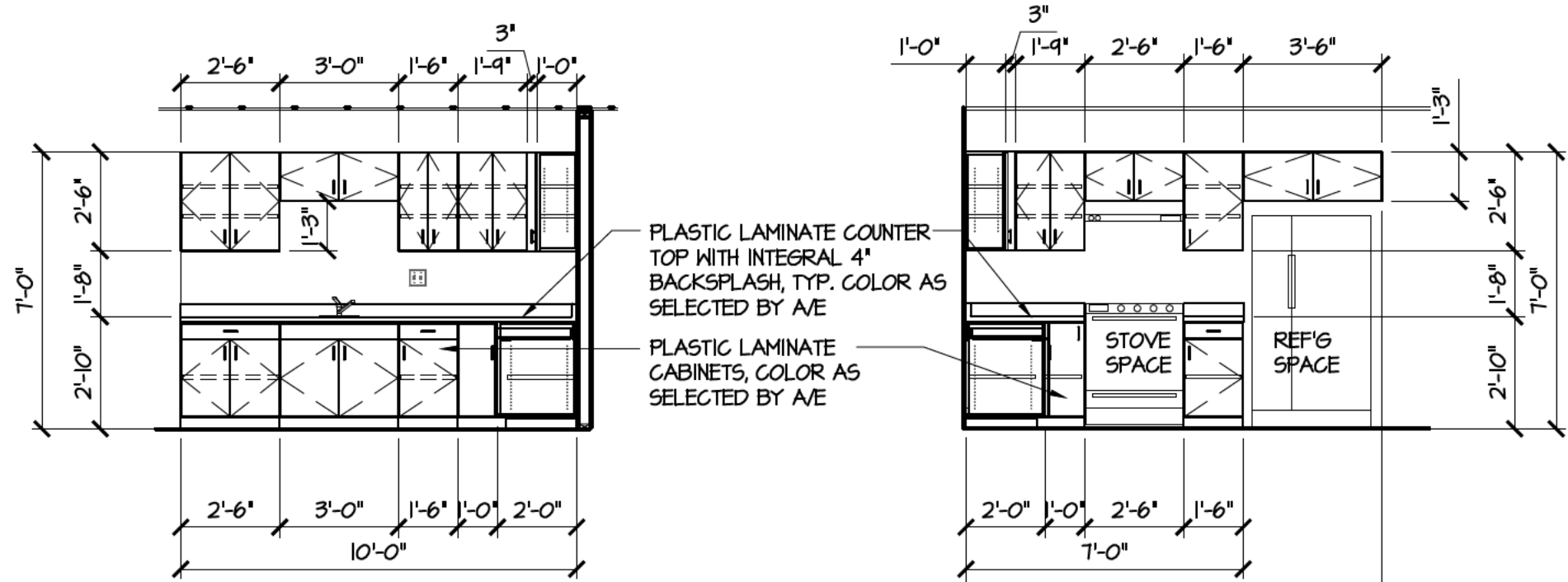
SCALE: NOT TO SCALE





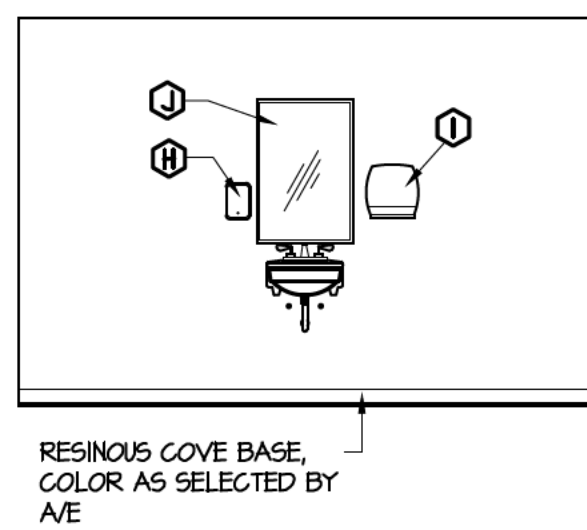
**WEST EXTERIOR ELEVATION
LOOKING EAST**
A2.02 SCALE: 1/4"=1'-0"

TOILET ACCESSORY SCHEDULE			
MARK	DESCRIPTION	MARK	DESCRIPTION
A	DUAL ROLL SURFACE MOUNTED TOILET TISSUE DISPENSER OWNER FURNISHED, CONTRACTOR INSTALLED	F	CONCEALED MOUNTING S.S. GRAB BAR, 36" BOBRICK MODEL NO. 6806-99 X 36 BRADLEY MODEL NO. 812-2 ASI MODEL NO. 3801-P
B	NOT USED	G	CONCEALED MOUNTING S.S. GRAB BAR, 18" BOBRICK MODEL NO. 6806-99 X 18 BRADLEY MODEL NO. 812-2 ASI MODEL NO. 3801-P
C	SURFACE MOUNTED FOR SIDEWALL SANITARY NAPKIN DISPOSAL BOBRICK MODEL NO. B-254 BRADLEY MODEL NO. 4122-15 ASI MODEL NO. 0413-A	H	SURFACE MOUNTED, VERTICAL TANK LIQUID SOAP DISPENSER OWNER FURNISHED, CONTRACTOR INSTALLED
D	NOT USED	I	TOWEL DISPENSER, SURFACE MOUNTED STAINLESS STEEL OWNER FURNISHED, CONTRACTOR INSTALLED
E	CONCEALED MOUNTING S.S. GRAB BAR, 42" BOBRICK MODEL NO. 6806-99 X 42 BRADLEY MODEL NO. 812-2 ASI MODEL NO. 3801-P	J	24" x 36" TEMPERED MIRROR BOBRICK MODEL NO. B2408 BRADLEY MODEL NO. 181-2436 ASI MODEL NO. 20650

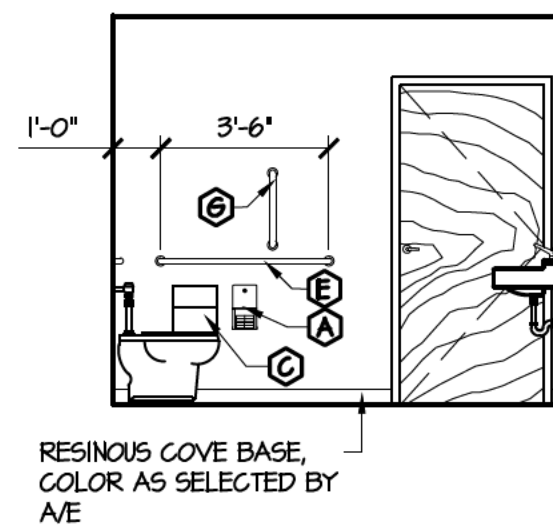


**KITCHETTE CASEWORK
EAST ELEVATION**
B2.02 SCALE: 1/4"=1'-0"

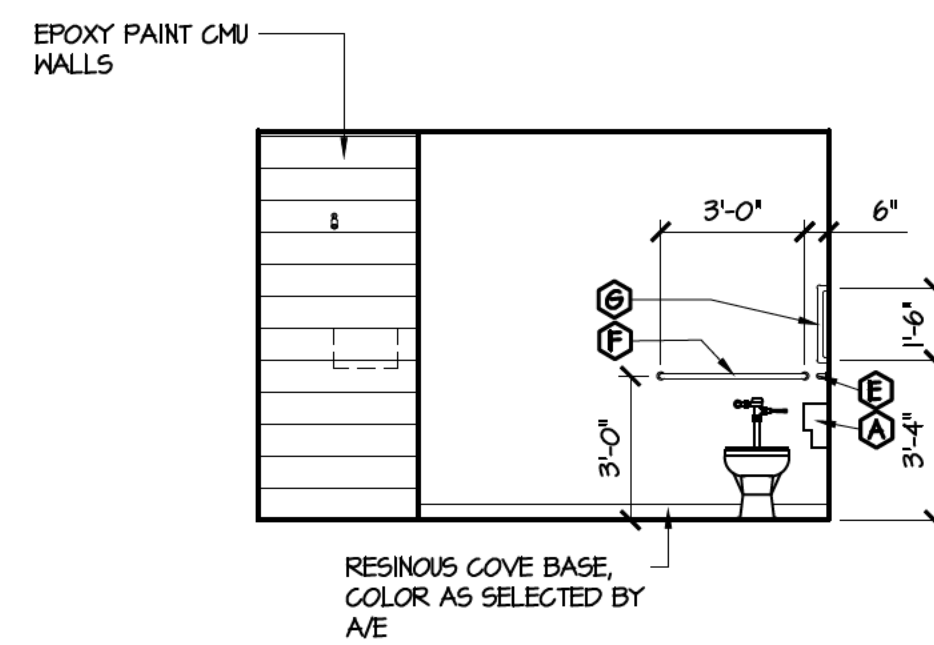
**KITCHETTE CASEWORK
SOUTH ELEVATION**
C2.02 SCALE: 1/4"=1'-0"



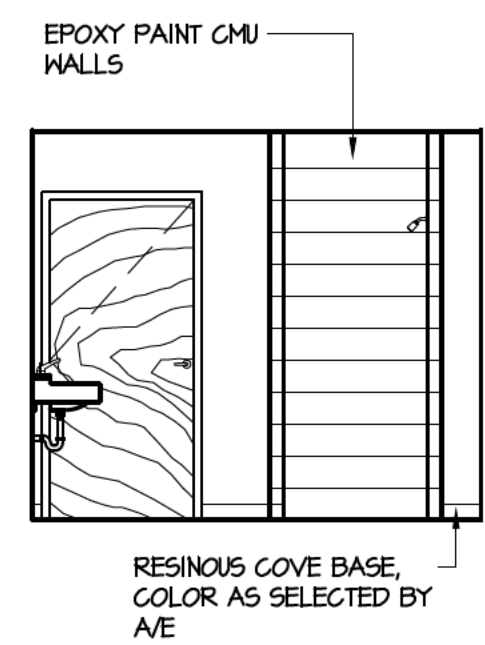
**EAST ELEVATION
TOILET ELEVATIONS**
D2.02 SCALE: 1/4"=1'-0"



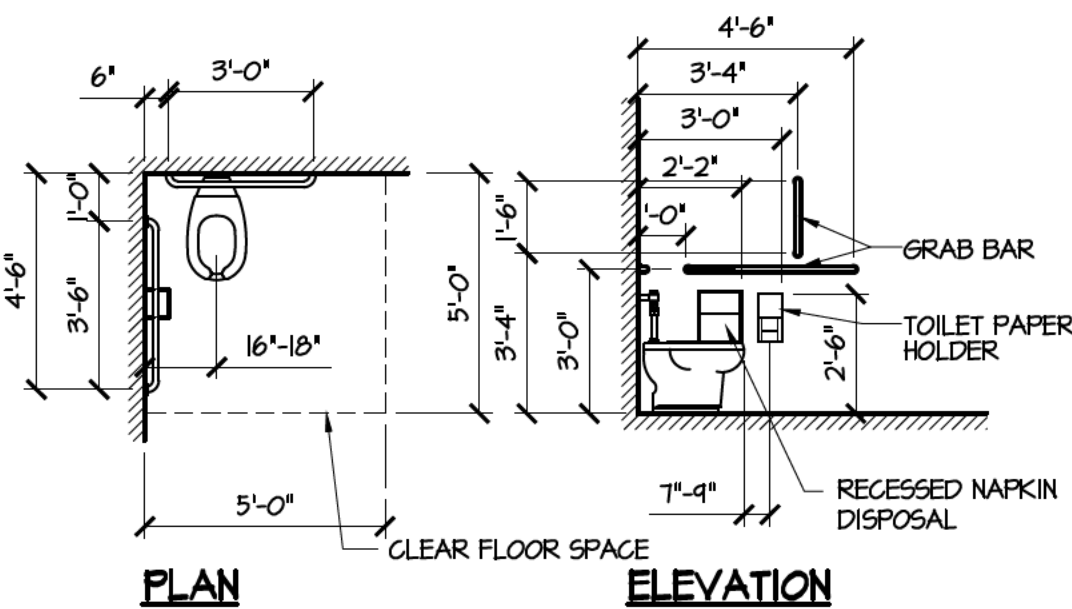
**NORTH ELEVATION
TOILET ELEVATIONS**
E2.02 SCALE: 1/4"=1'-0"



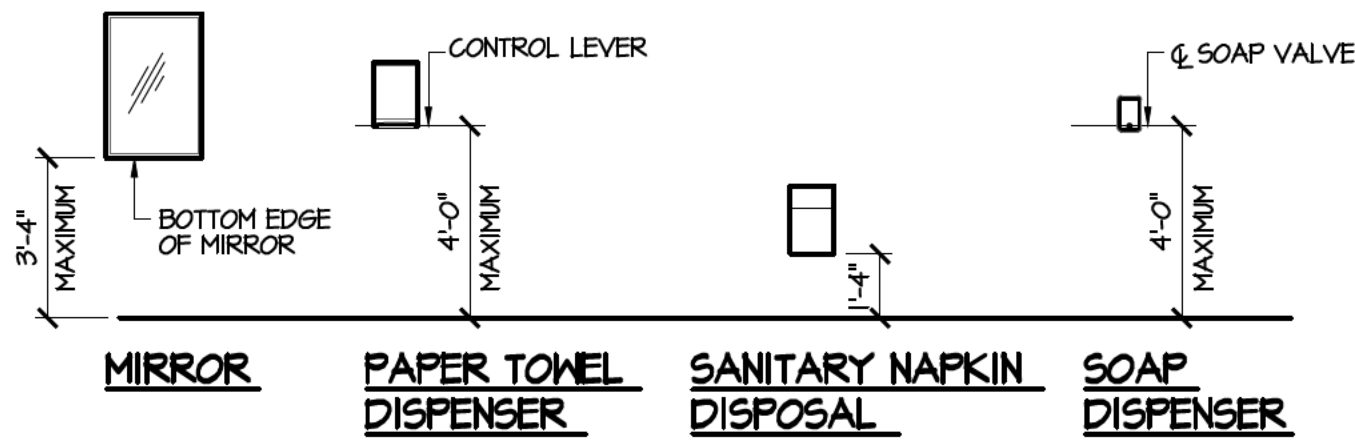
**WEST ELEVATION
TOILET ELEVATIONS**
F2.02 SCALE: 1/4"=1'-0"



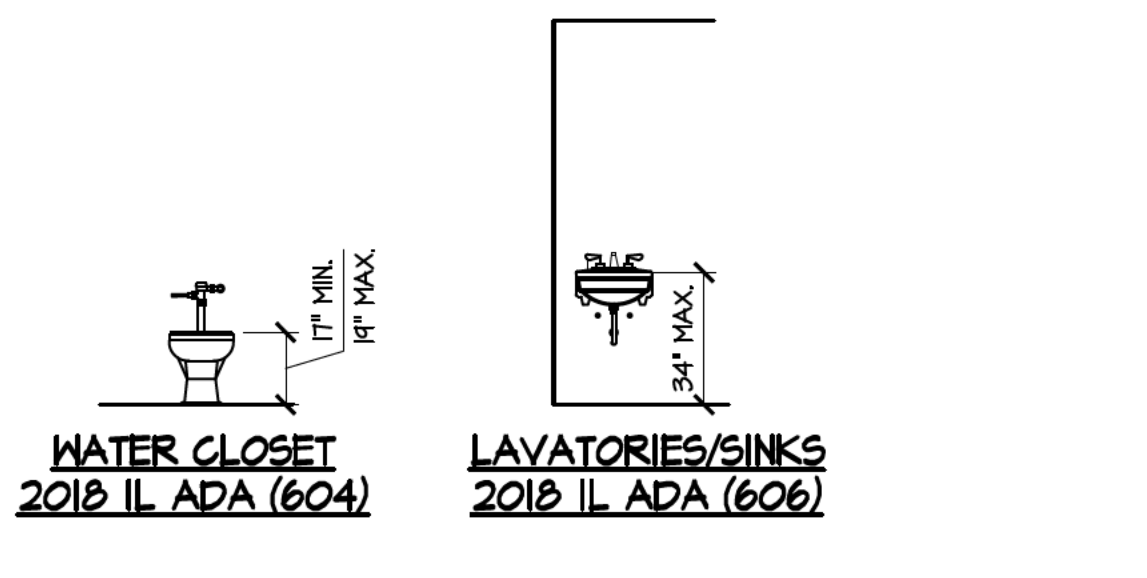
**SOUTH ELEVATION
TOILET ELEVATIONS**
G2.02 SCALE: 1/4"=1'-0"



TYPICAL HC TOILET STALL
I2.02 SCALE: 1/4"=1'-0"



TOILET ACCESSORY MOUNTING HEIGHTS
J2.02 SCALE: 1/4"=1'-0"



FIXTURE ADA MOUNTING HEIGHTS
K2.02 SCALE: 1/4"=1'-0"

The Contractor shall obtain and verify all dimensions and conditions at job site and be fully responsible for same.

BUILDING CROSS
SECTIONS

Mattoon Fire Department
Station #3 Addition
2700 Marshall Avenue
Mattoon, Coles County, Illinois

Drawn _____

Date **June 20, 2025**

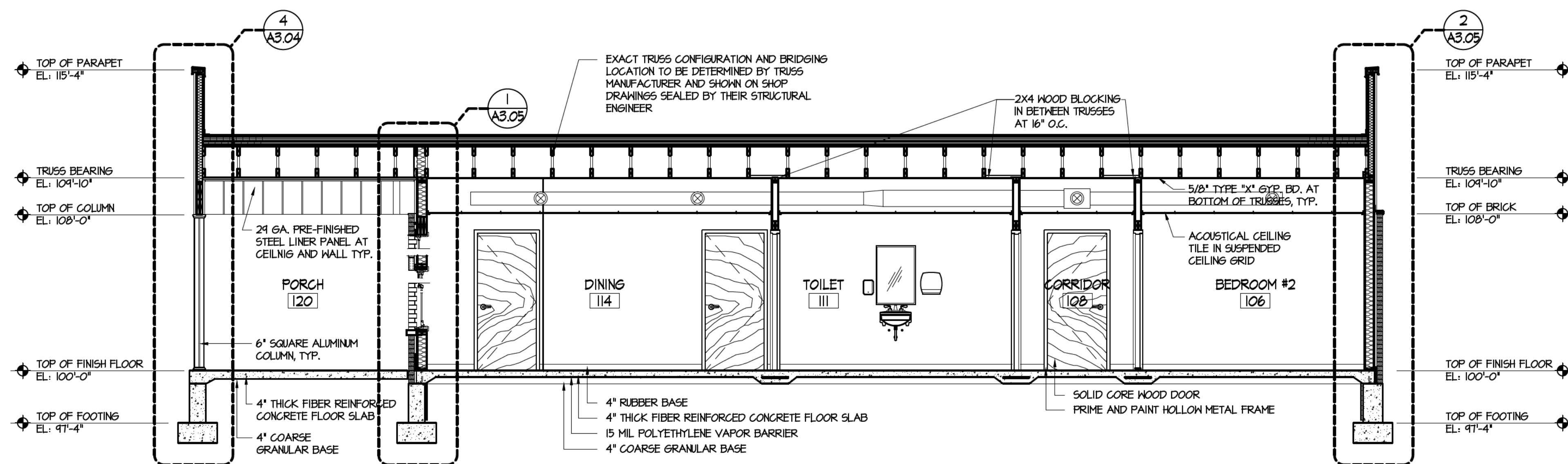
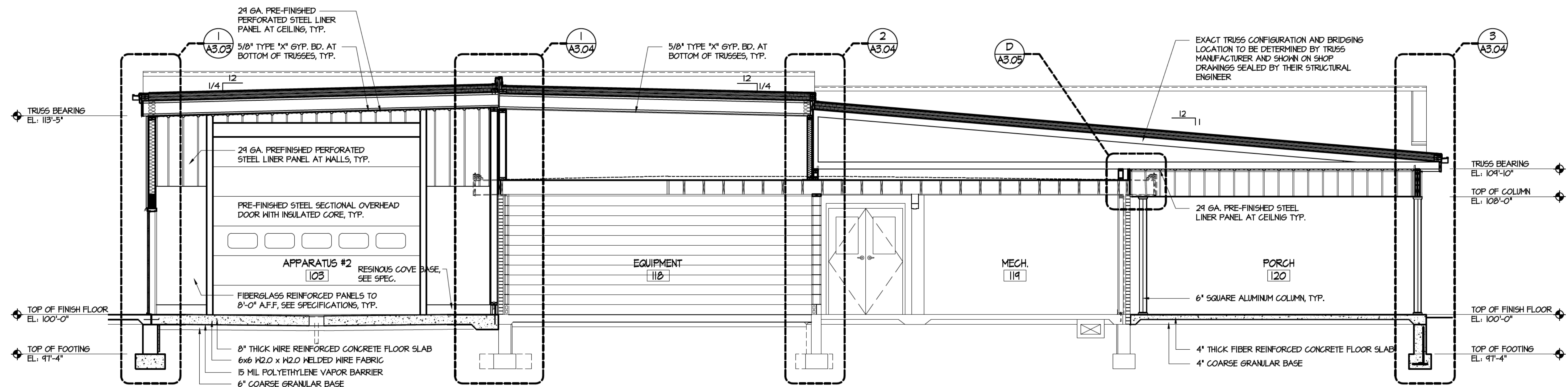
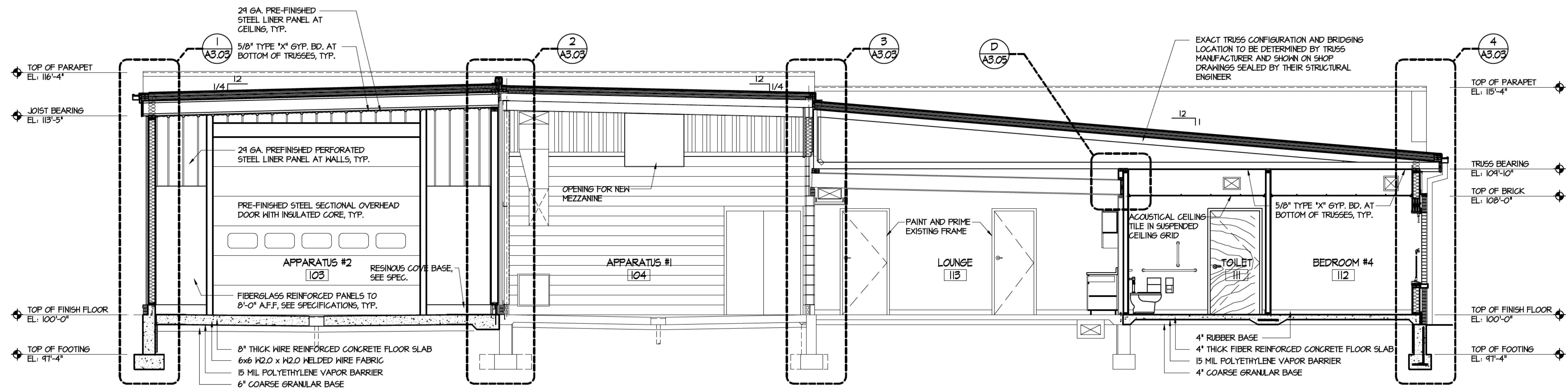
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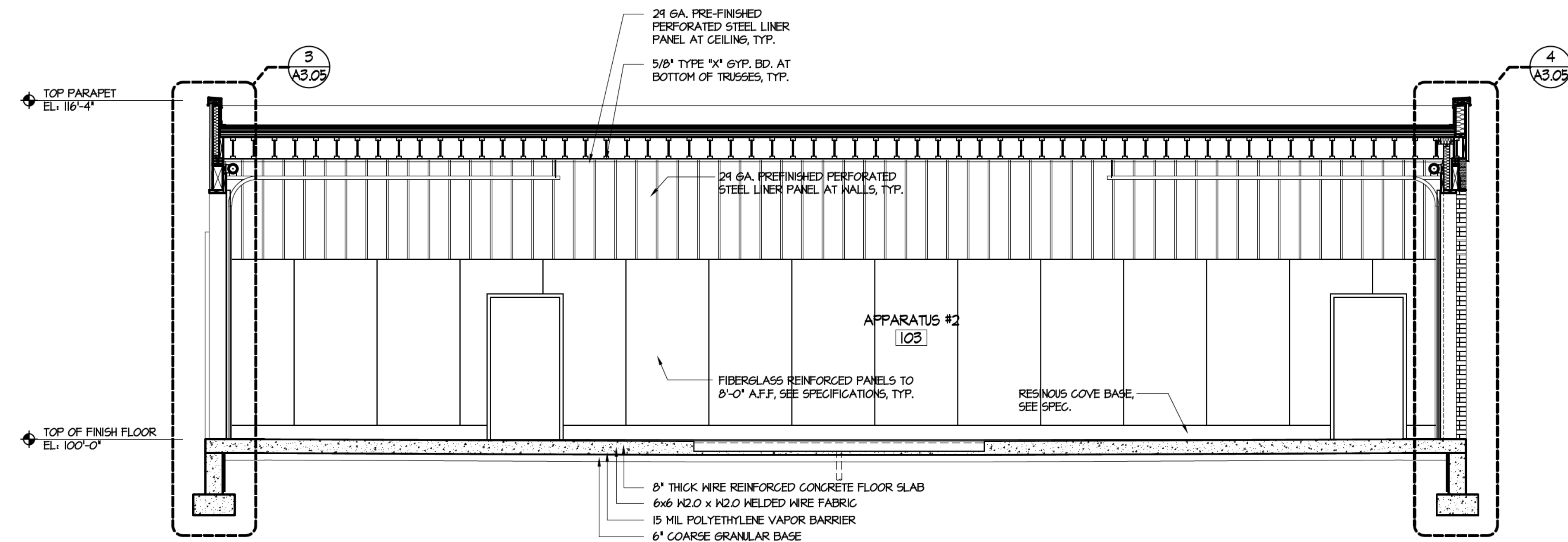
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NORTH

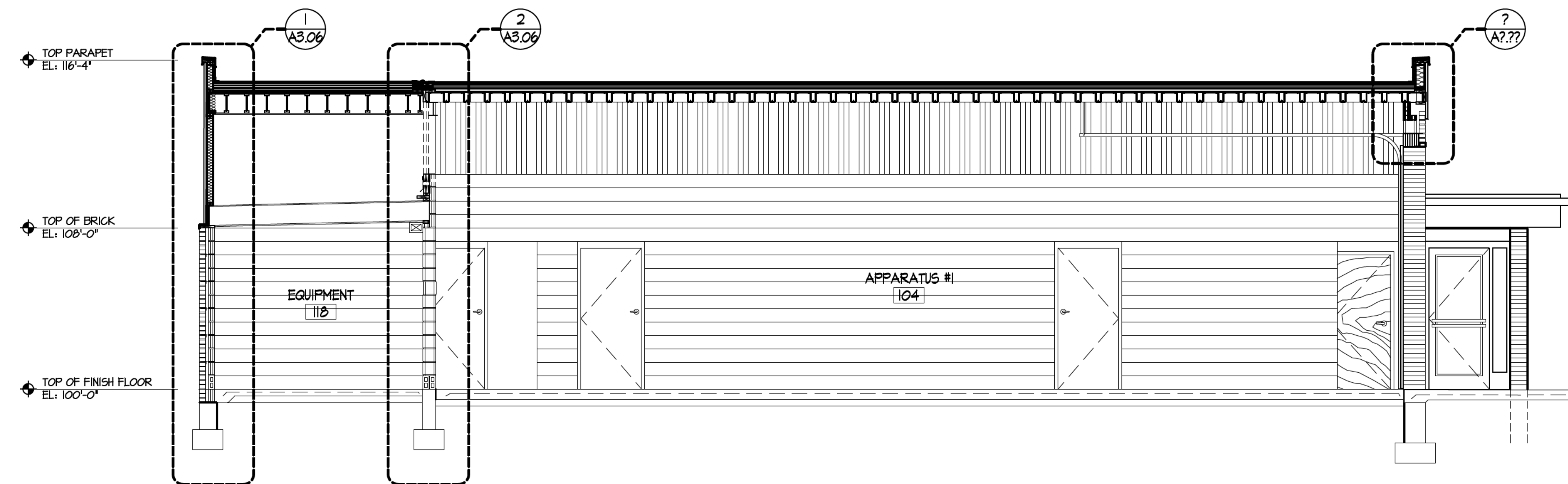
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A3.01

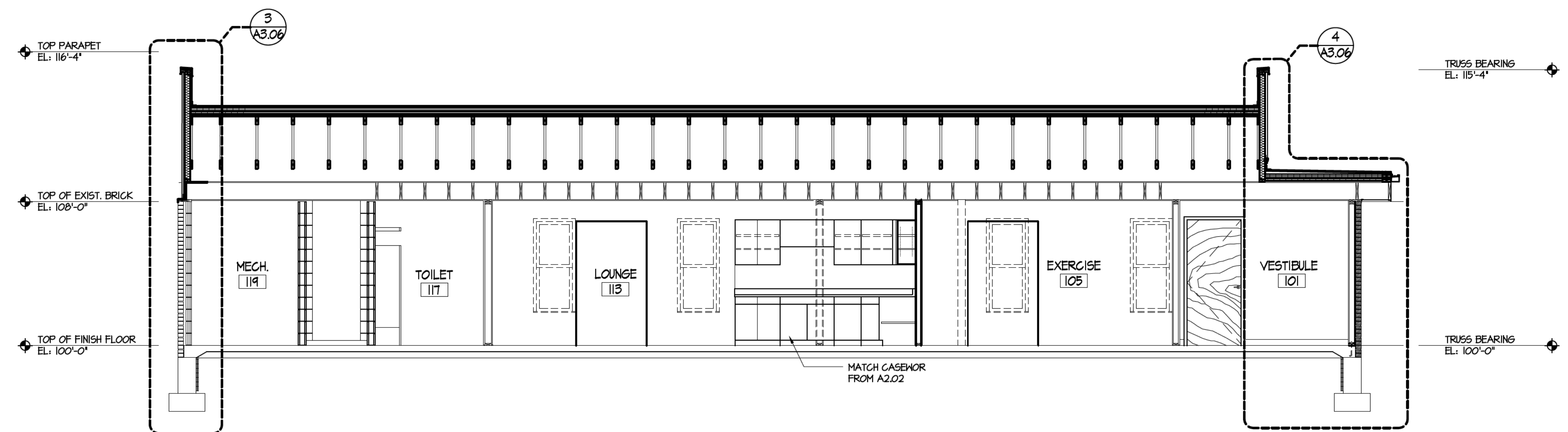




A LONGITUDINAL SECTION AT NEW APPARATUS BAY #1
A3.02 SCALE: 1/4"=1'-0"



B LONGITUDINAL SECTION AT EXTG. APPARATUS BAY #2
A3.02 SCALE: 1/4"=1'-0"

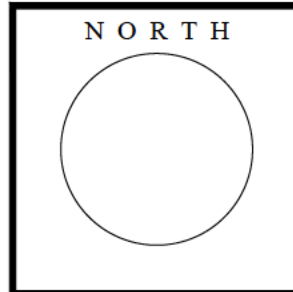


C LONGITUDINAL SECTION AT EXERCISE / LOUNGE
A3.02 SCALE: 1/4"=1'-0"

WALL SECTIONS & DETAILS

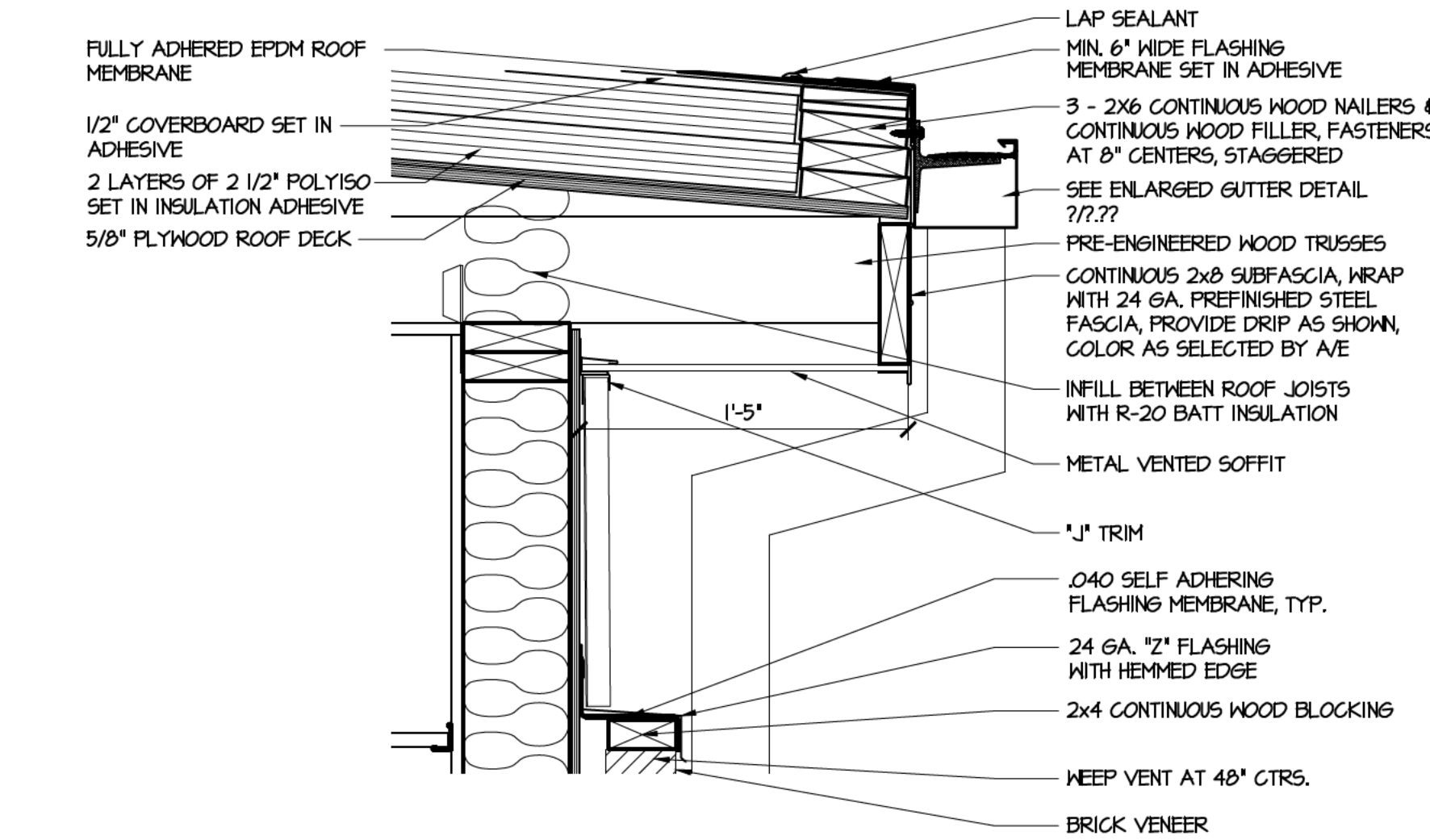
Mattoon Fire Department
Station #3 Addition
2700 Marshall Avenue
Mattoon, Coles County, Illinois

Drawn _____
Date **June 20, 2025**
Project No
2724042

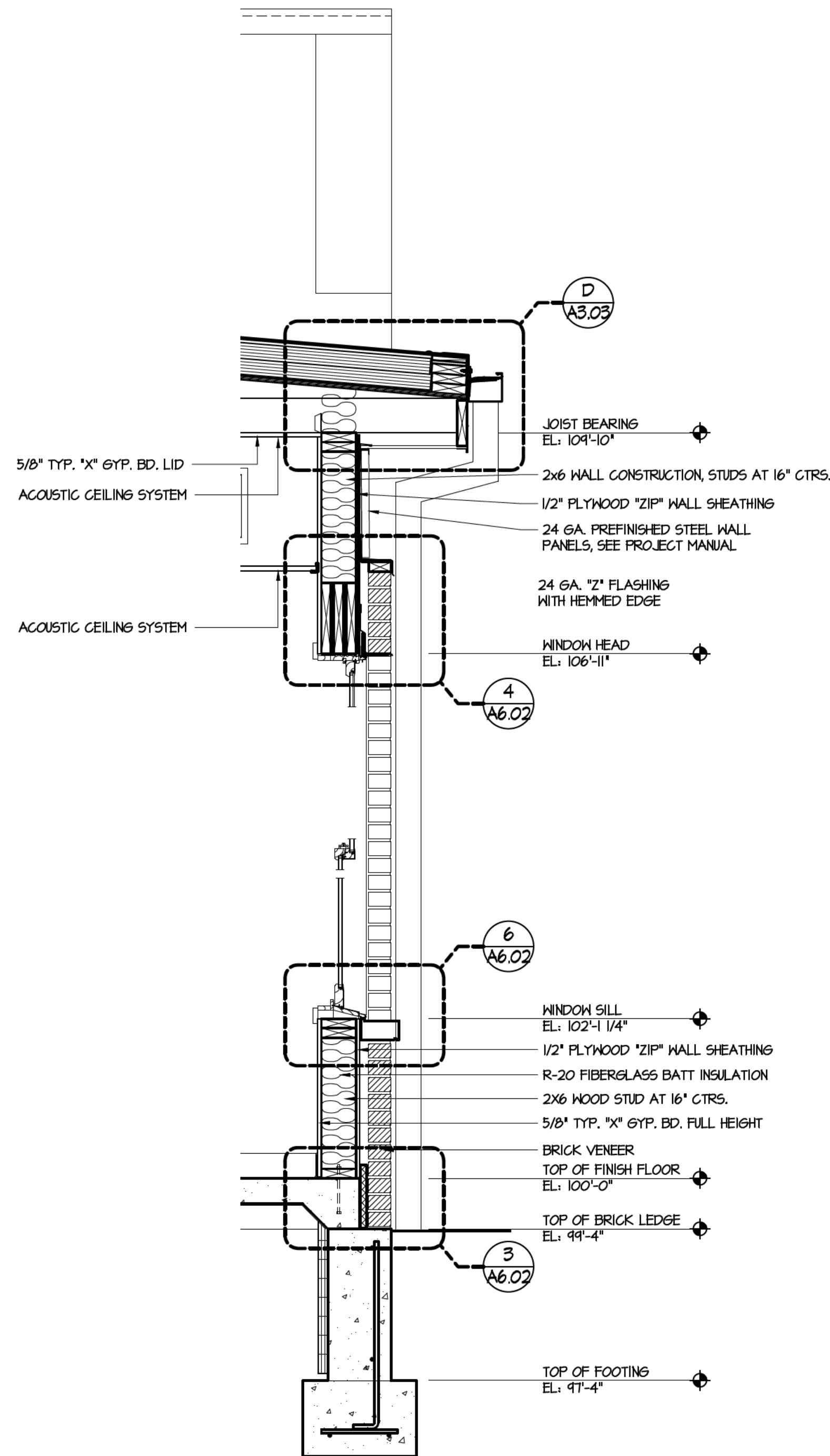


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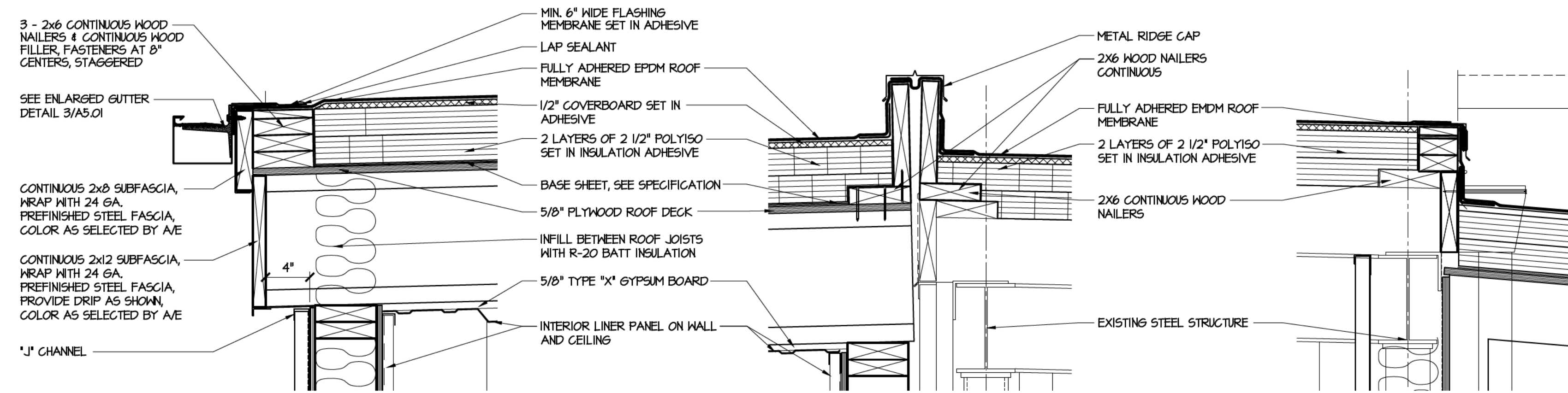
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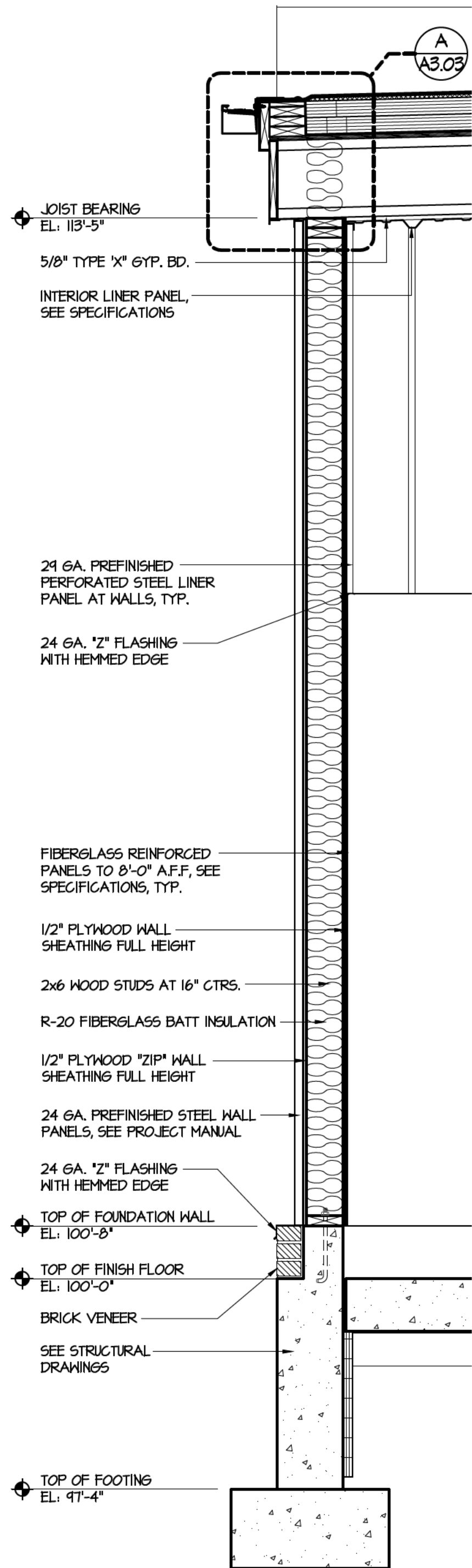
D EAVE DETAIL
A3.03 SCALE: 1 1/2"=1'-0"



4 WALL SECTION
A3.03 SCALE: 3/4"=1'-0"

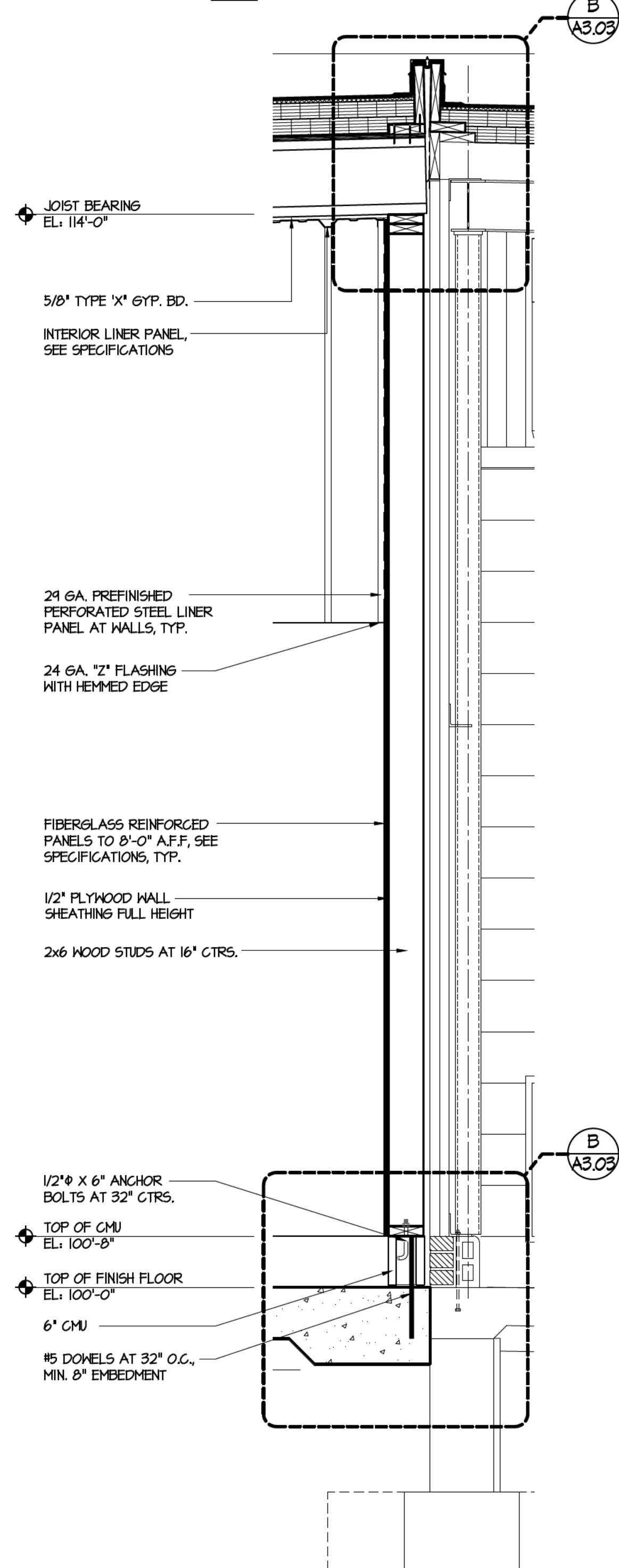


A EAVE DETAIL
A3.03 SCALE: 1 1/2"=1'-0"



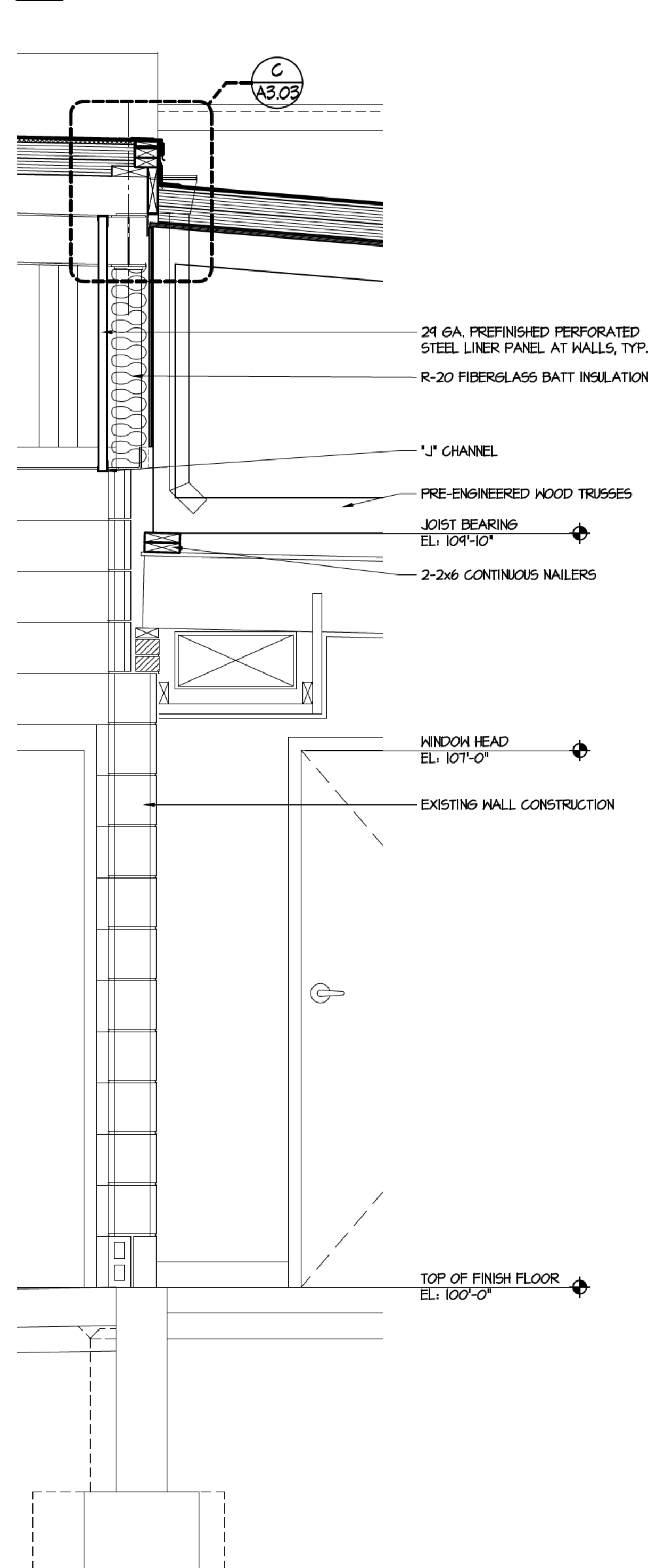
1 WALL SECTION
A3.03 SCALE: 3/4"=1'-0"

B AREA DIVIDER DETAIL
A3.03 SCALE: 1 1/2"=1'-0"



2 WALL SECTION
A3.03 SCALE: 3/4"=1'-0"

C AREA DIVIDER DETAIL
A3.03 SCALE: 1 1/2"=1'-0"

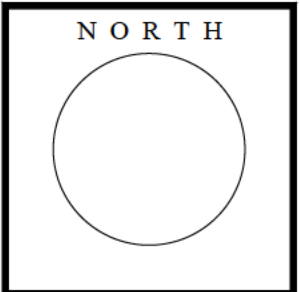


3 WALL SECTION
A3.03 SCALE: 3/4"=1'-0"

WALL SECTIONS & DETAILS

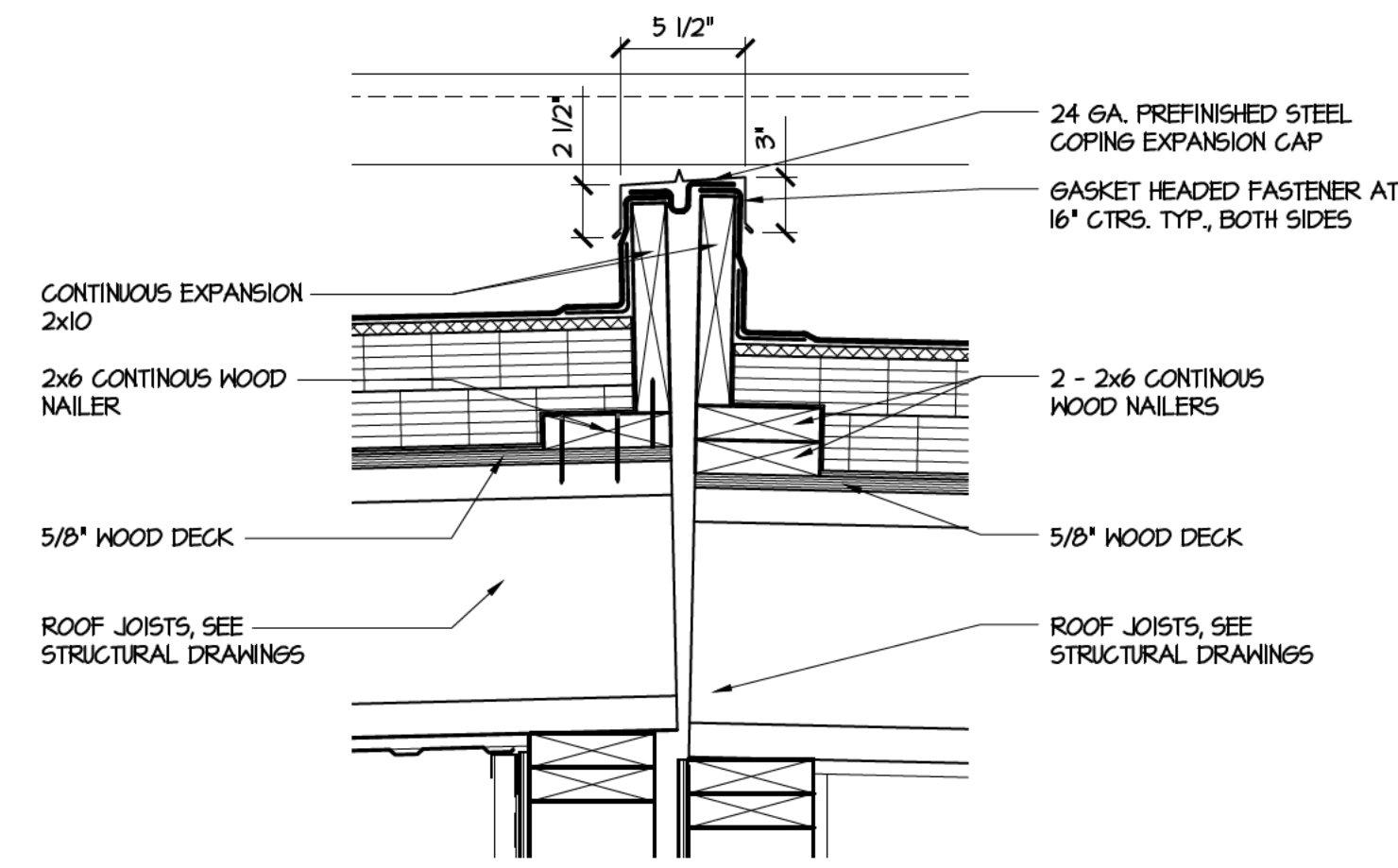
Mattoon Fire Department
Station #3 Addition
2700 Marshall Avenue
Mattoon, Coles County, Illinois

Drawn
Date **June 20, 2025**
Project No
2724042

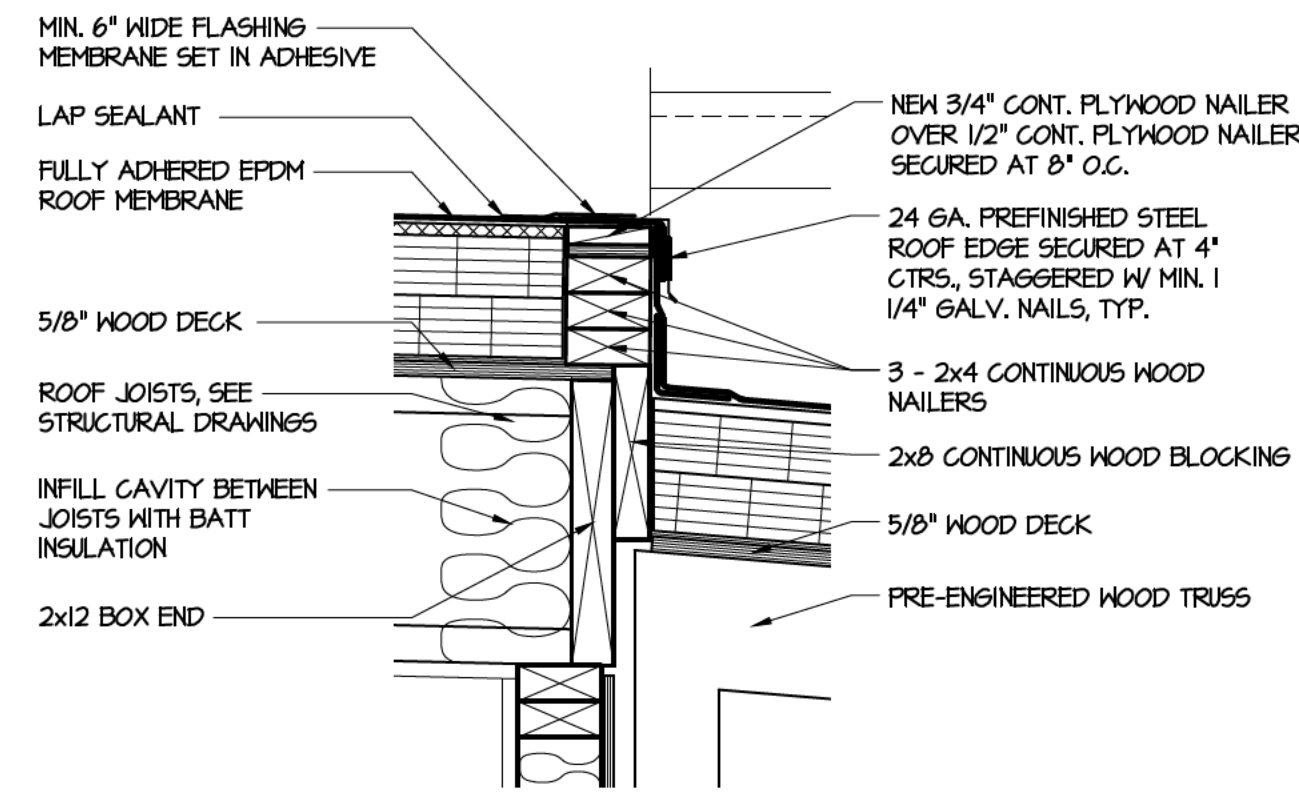


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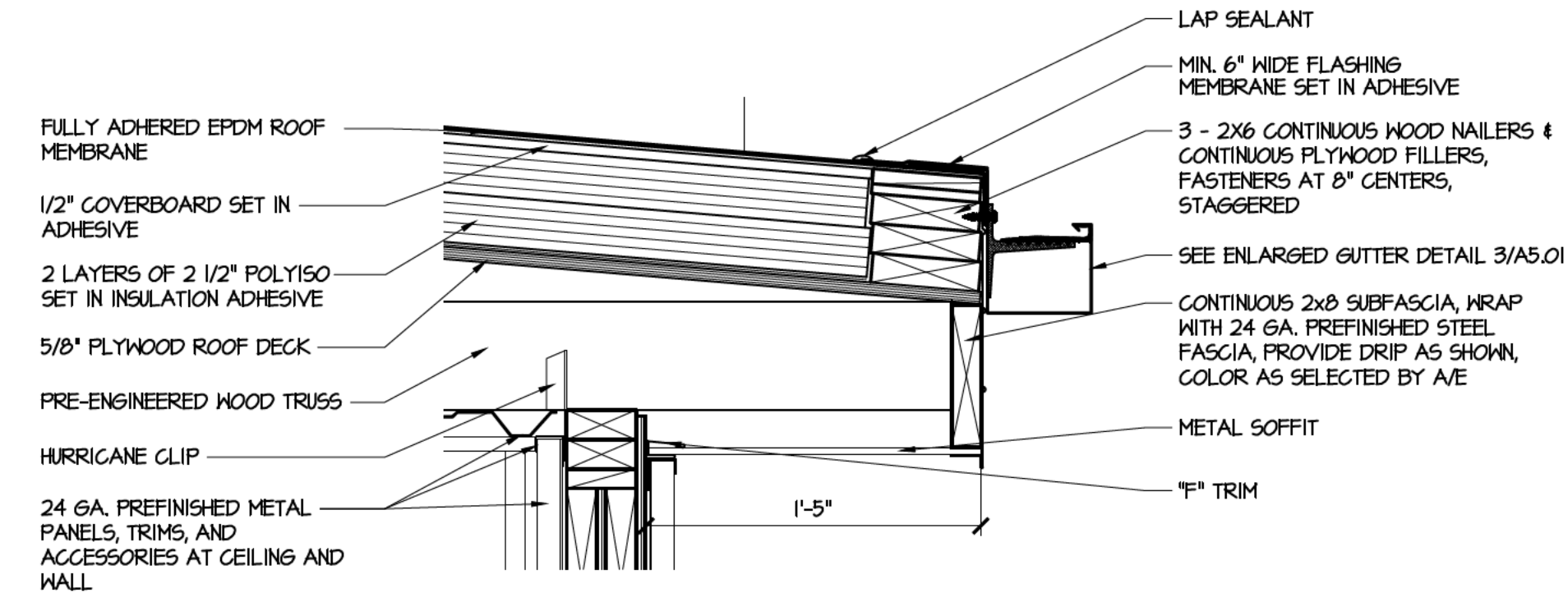
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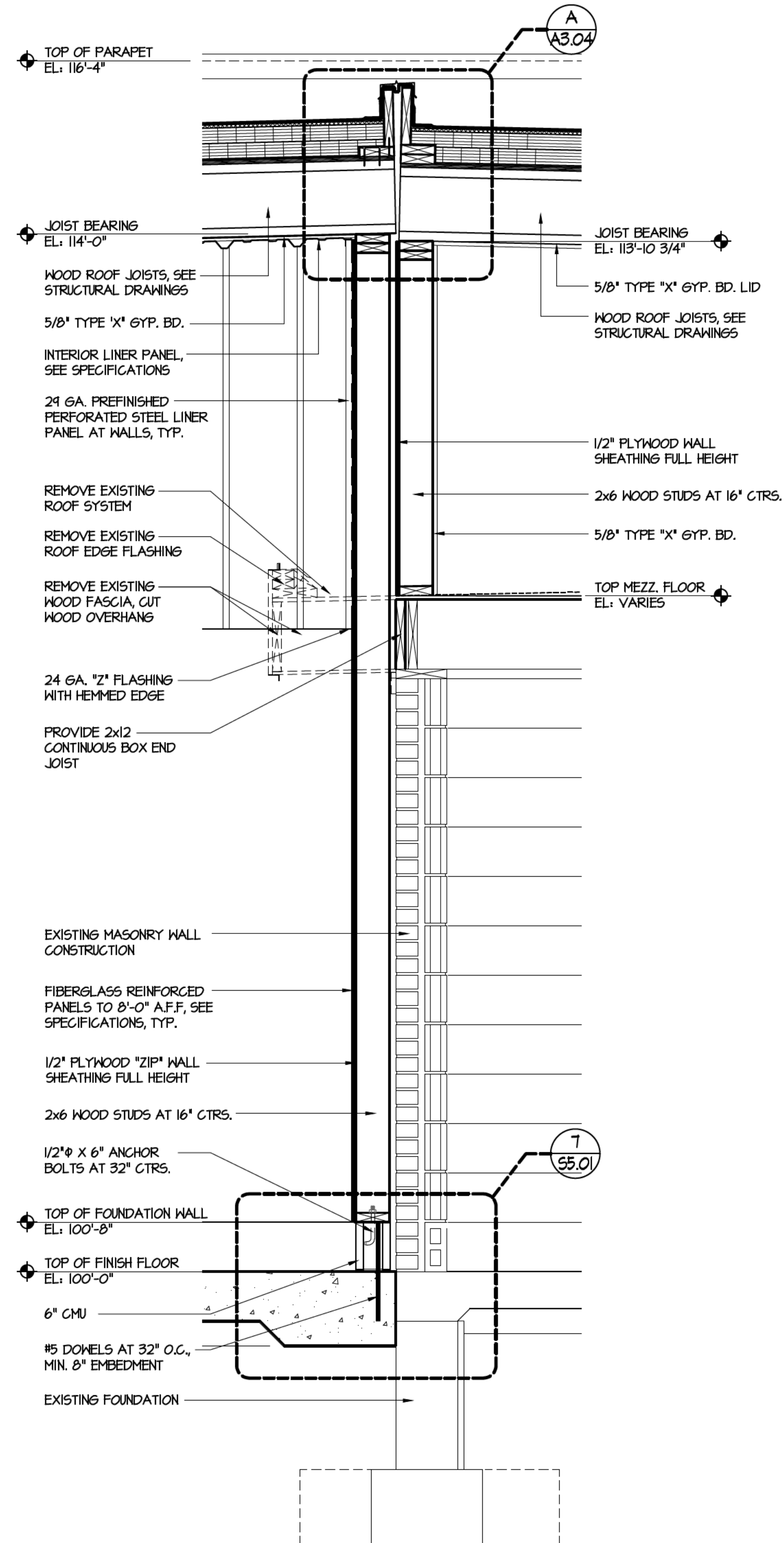
A AREA DIVIDER DETAIL
A3.04 SCALE: 1 1/2"=1'-0"



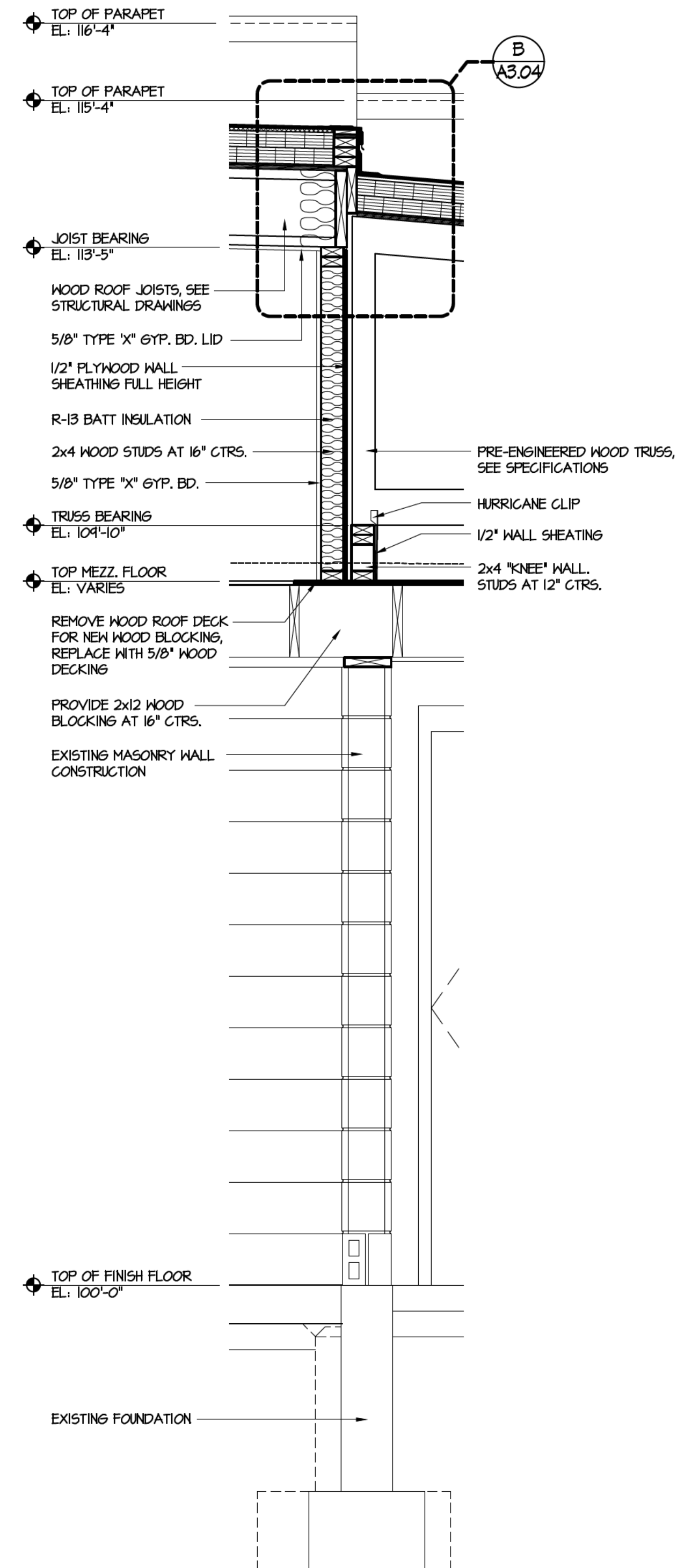
B ROOF EDGE DETAIL
A3.04 SCALE: 1 1/2"=1'-0"



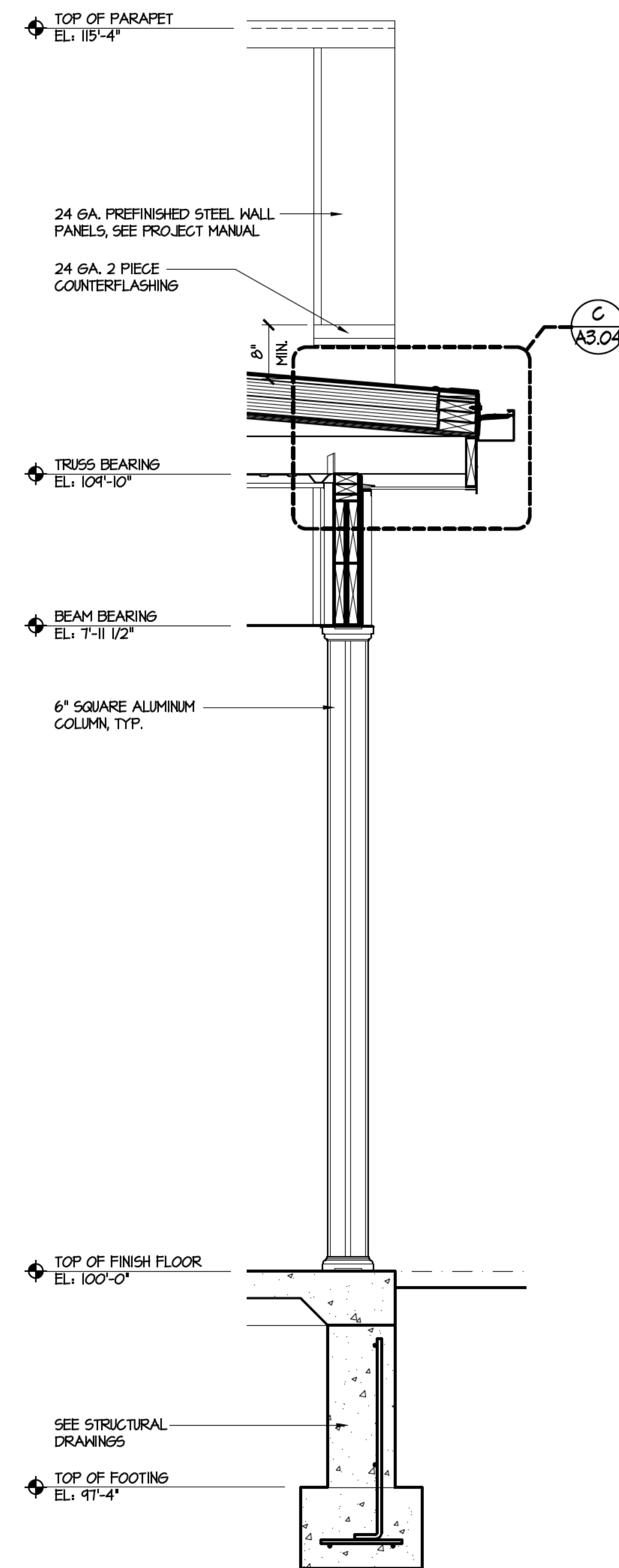
C GUTTER EDGE DETAIL
A3.04 SCALE: 1 1/2"=1'-0"



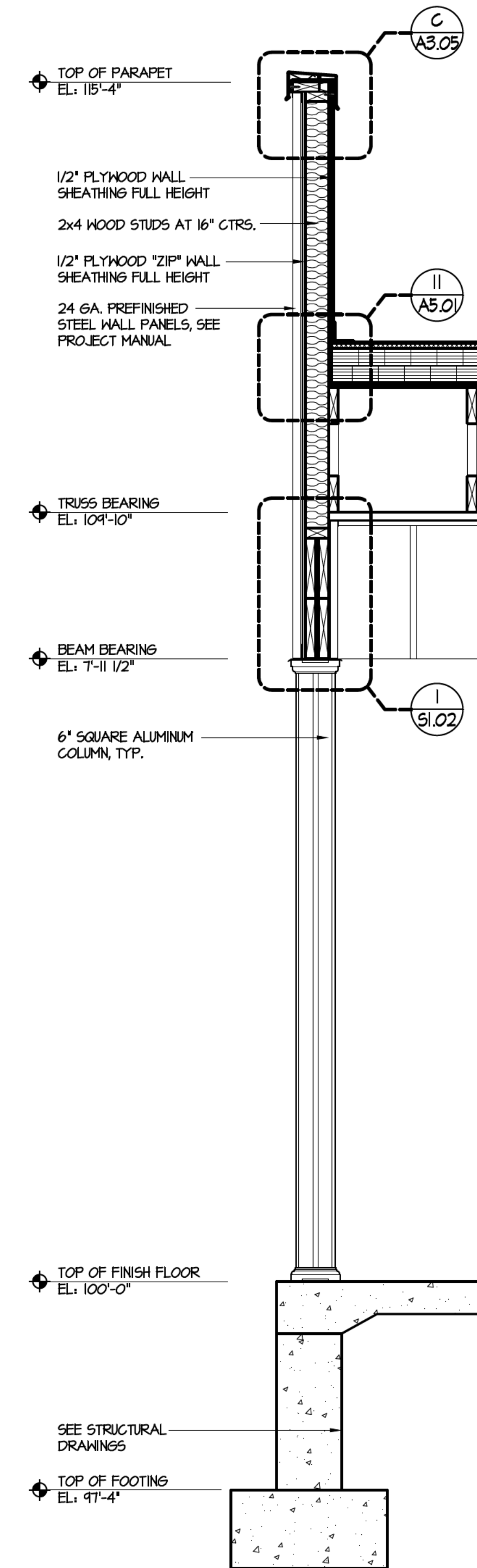
1 WALL SECTION
A3.04 SCALE: 3/4"=1'-0"



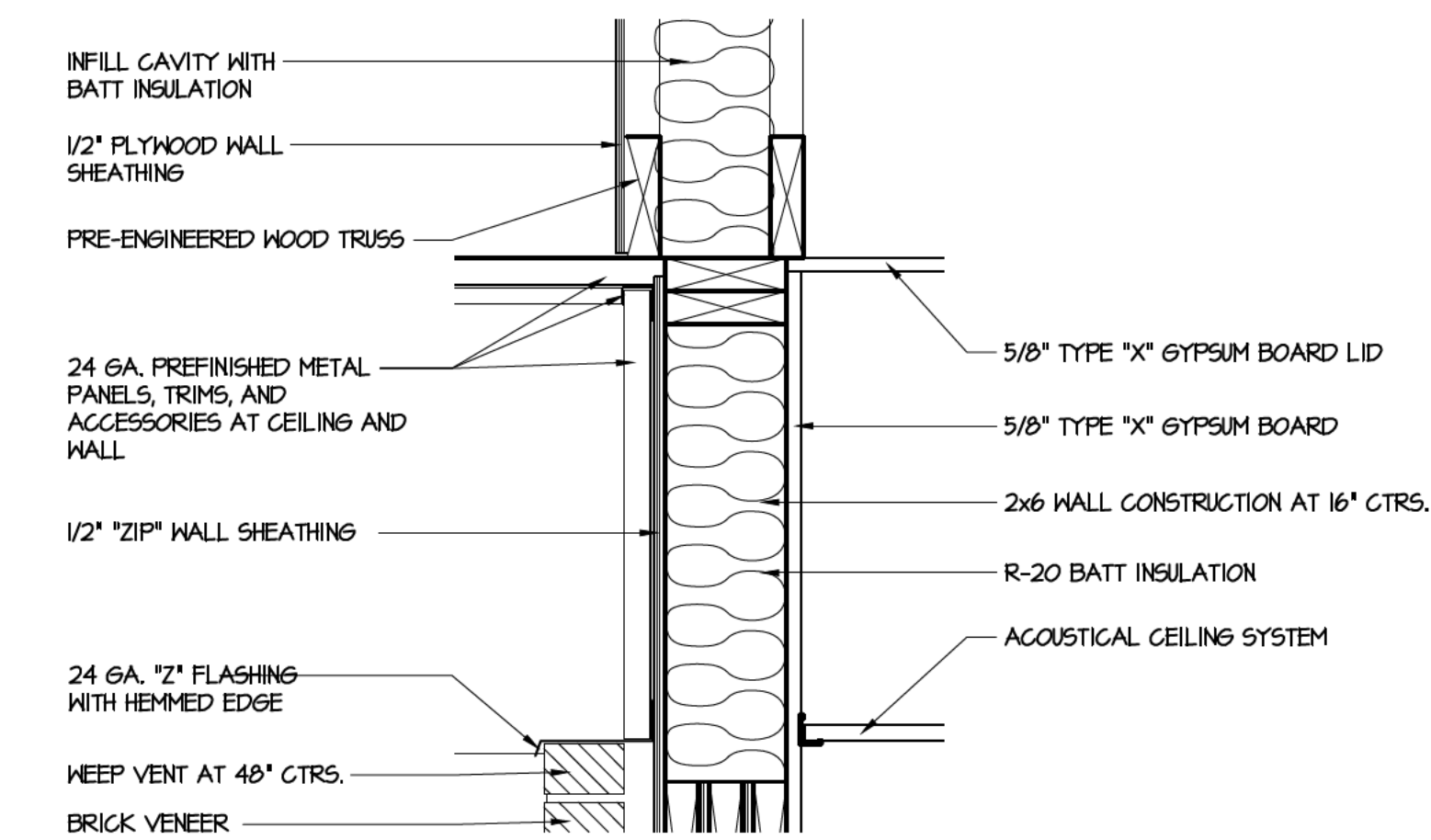
2 WALL SECTION
A3.04 SCALE: 3/4"=1'-0"



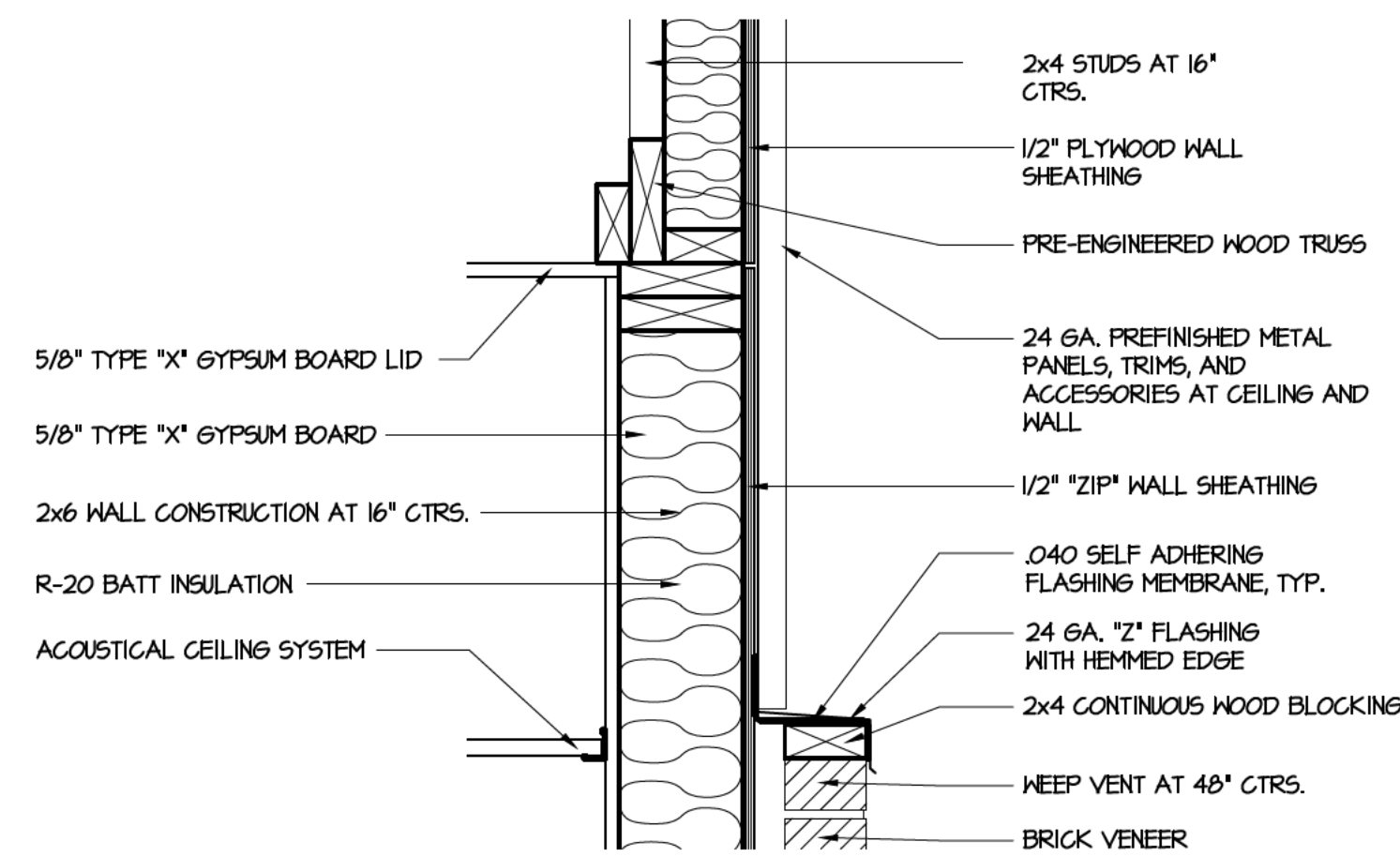
3 WALL SECTION
A3.04 SCALE: 3/4"=1'-0"



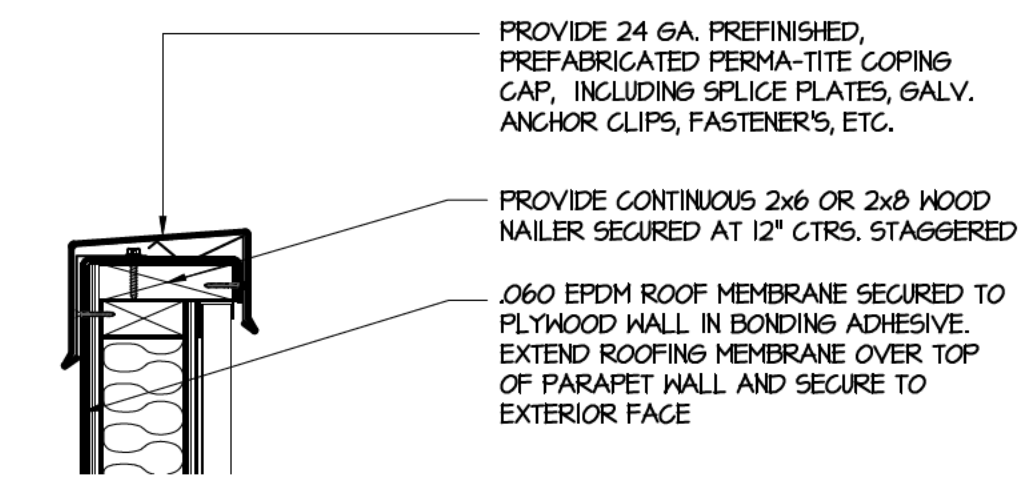
4 WALL SECTION
A3.04 SCALE: 3/4"=1'-0"



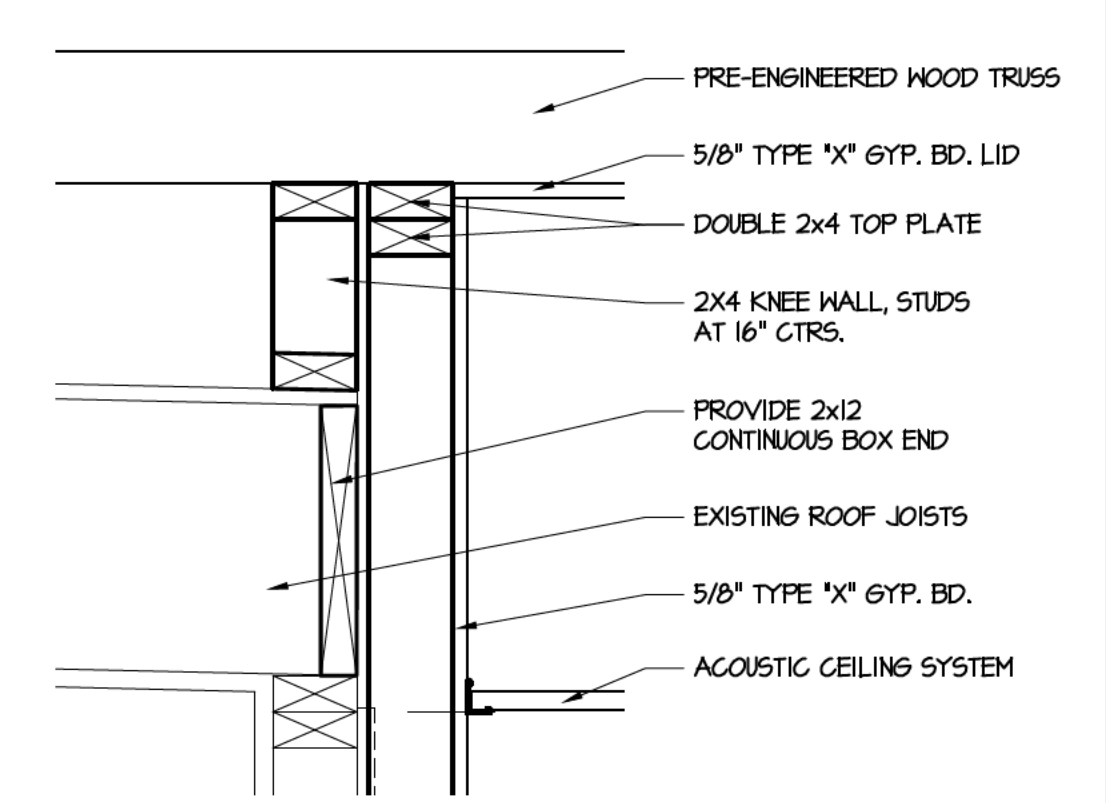
A WALL DETAIL
A3.05 SCALE: 1 1/2"=1'-0"



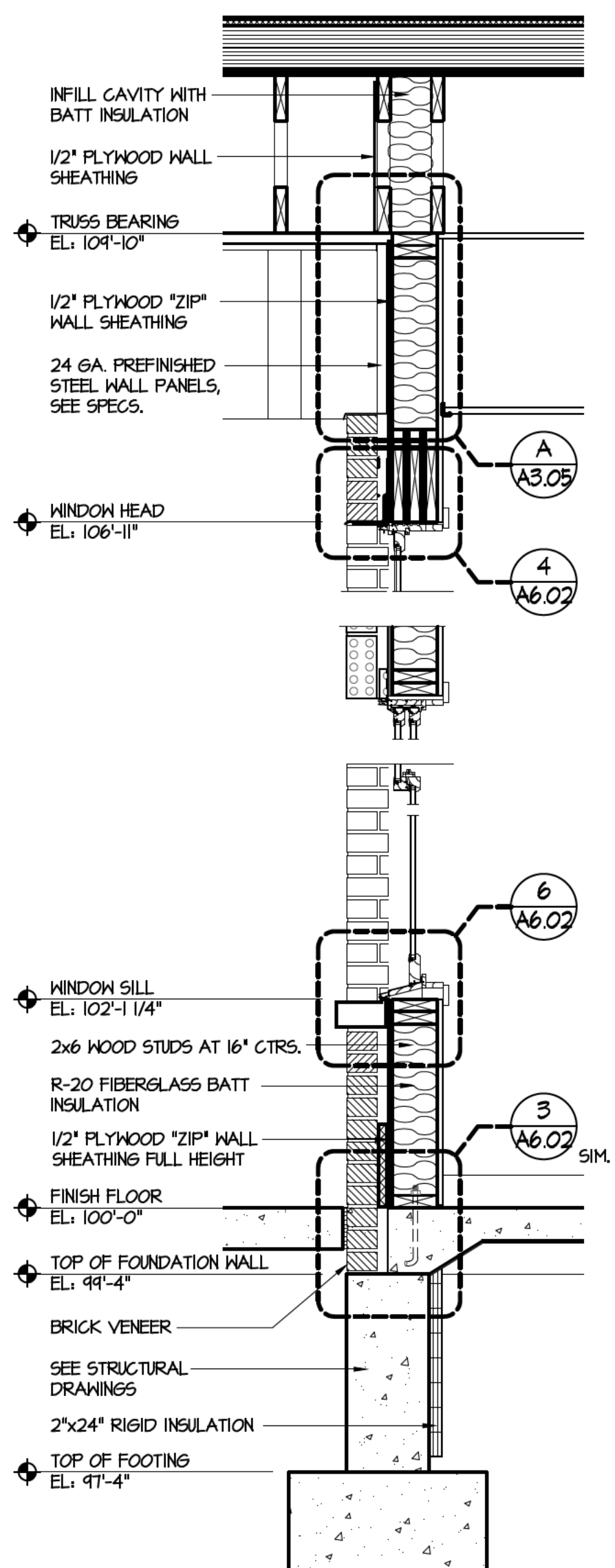
B WALL DETAIL
A3.05 SCALE: 1 1/2"=1'-0"



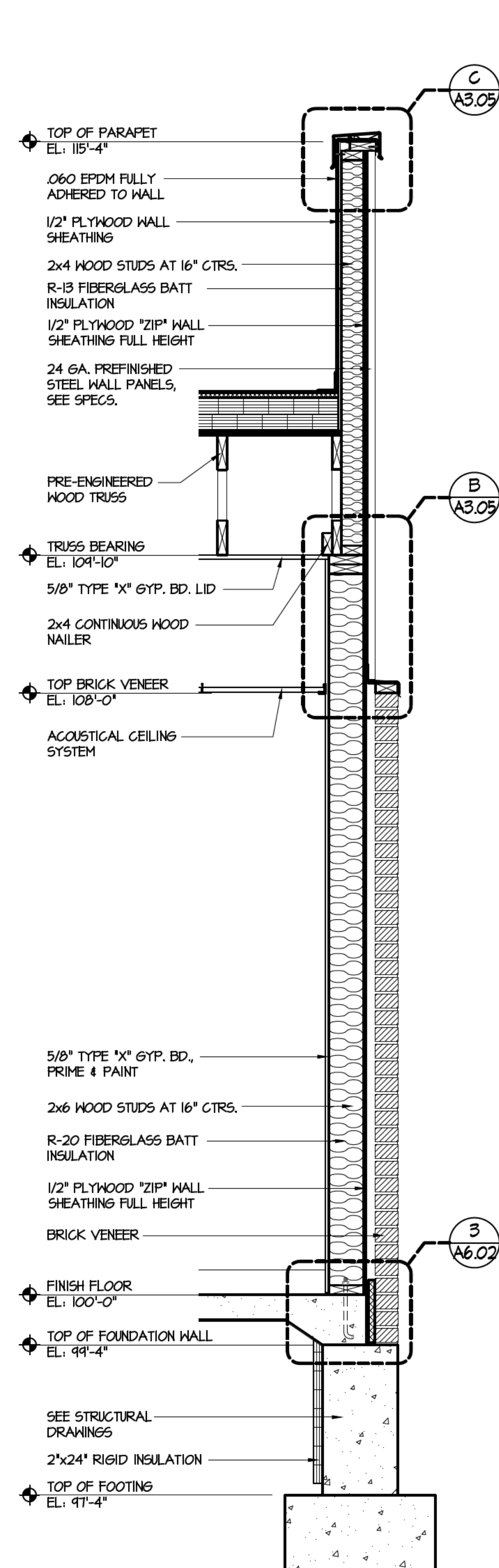
C COPING CAP DETAIL
A3.05 SCALE: 1 1/2"=1'-0"



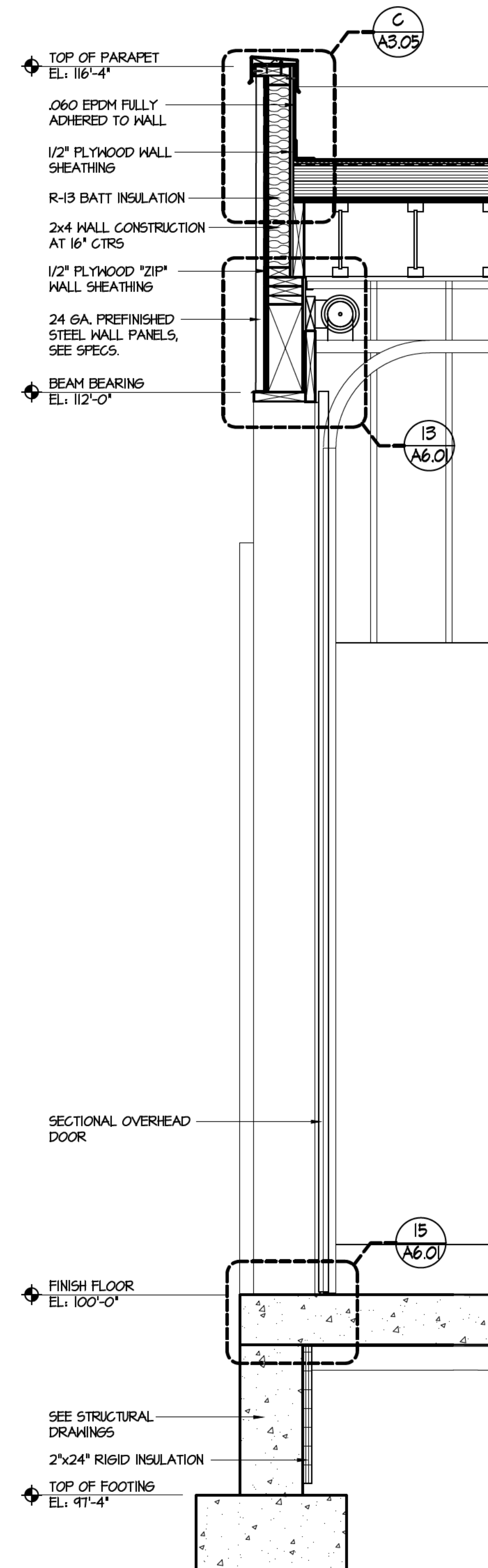
D TRUSS SUPPORT DETAIL
A3.05 SCALE: 1 1/2"=1'-0"



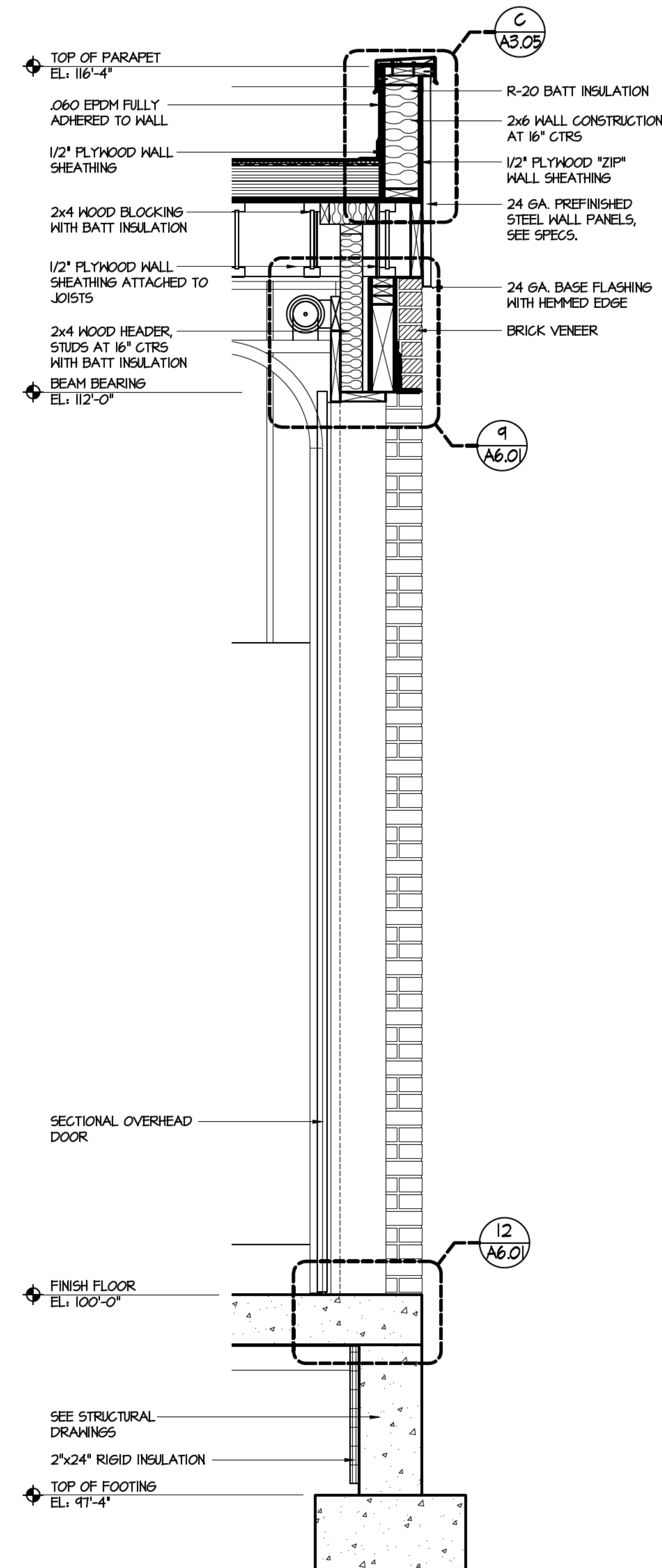
1 WALL SECTION
A3.05 SCALE: 3/4"=1'-0"



2 WALL SECTION
A3.05 SCALE: 3/4"=1'-0"



3 WALL SECTION
A3.05 SCALE: 3/4"=1'-0"



4 WALL SECTION
A3.05 SCALE: 3/4"=1'-0"

The Contractor shall obtain and verify all dimensions and conditions at job site and be fully responsible for same.

The
Upchurch
Group

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engineers
surveyors

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Mattoon, IL 61938
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Professional Design
Firm Corporation
License No. 184-003401

WALL SECTIONS & DETAILS

Mattoon Fire Department
Station #3 Addition
2700 Marshall Avenue
Mattoon, Coles County, Illinois

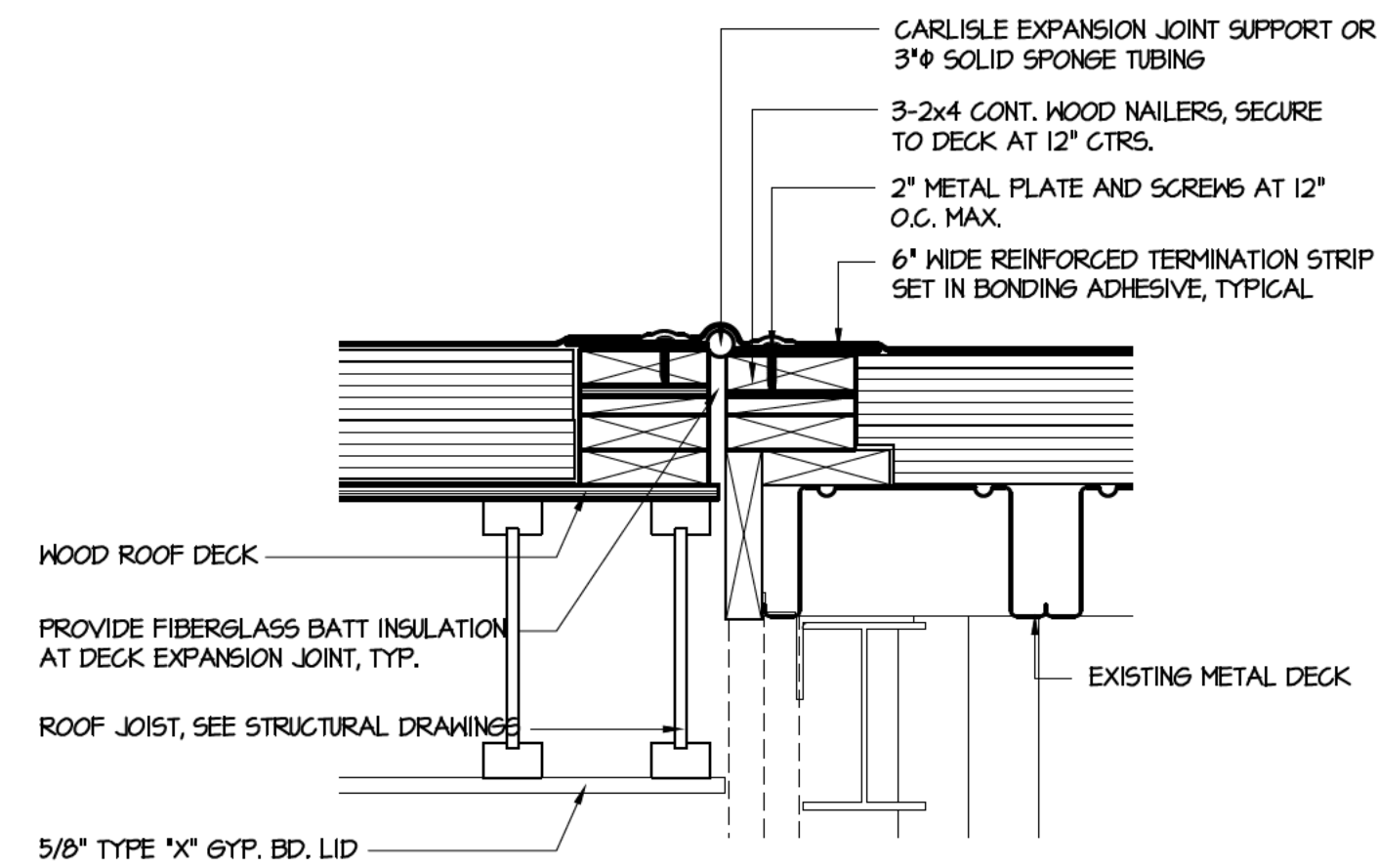
Drawn
Date **June 20, 2025**

Project No
2724042

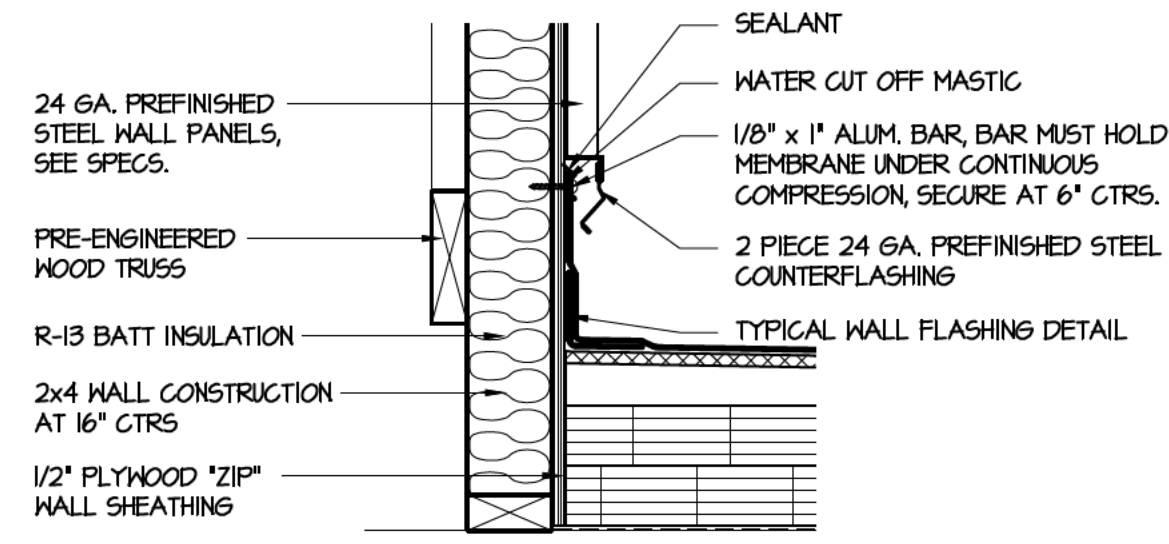
NORTH

sheet no.

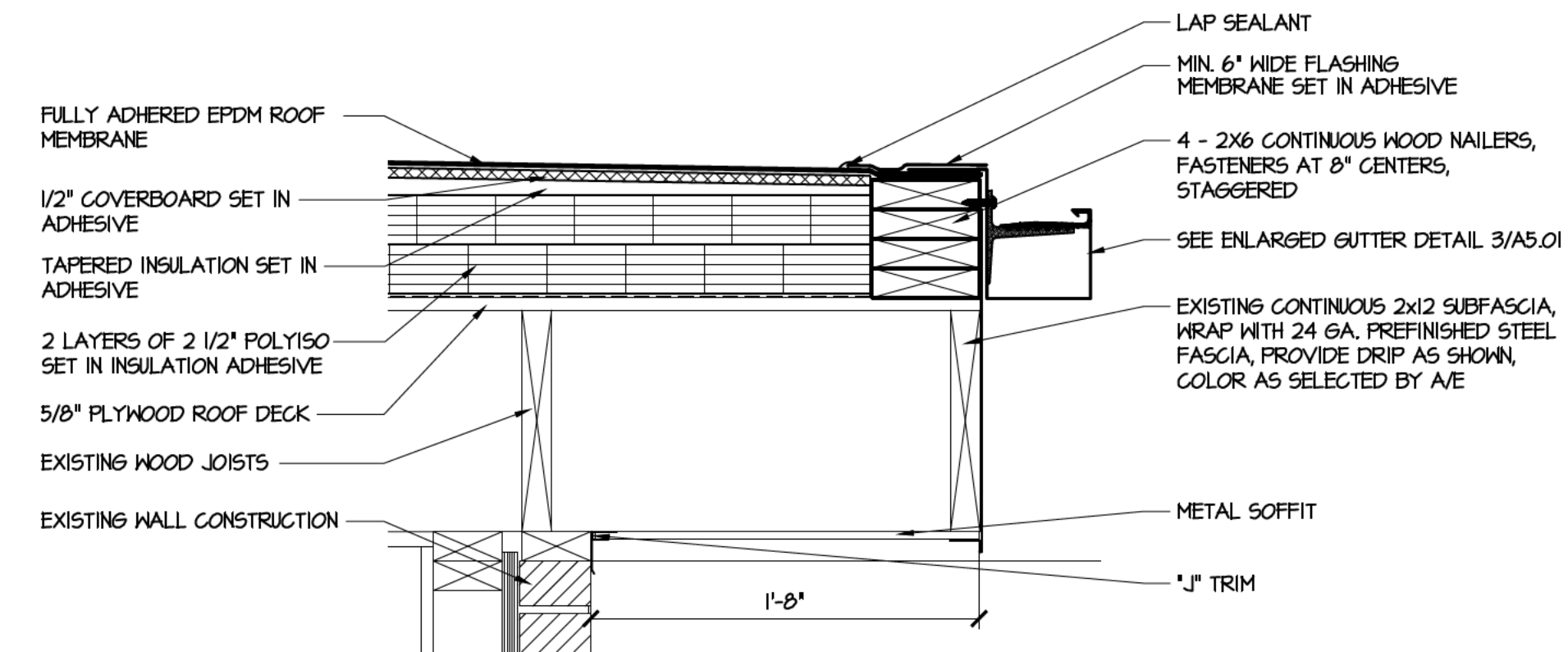
A3.05



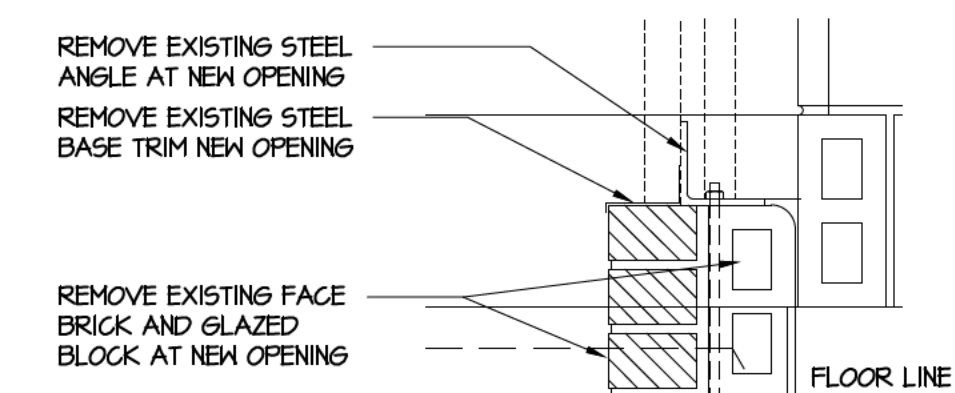
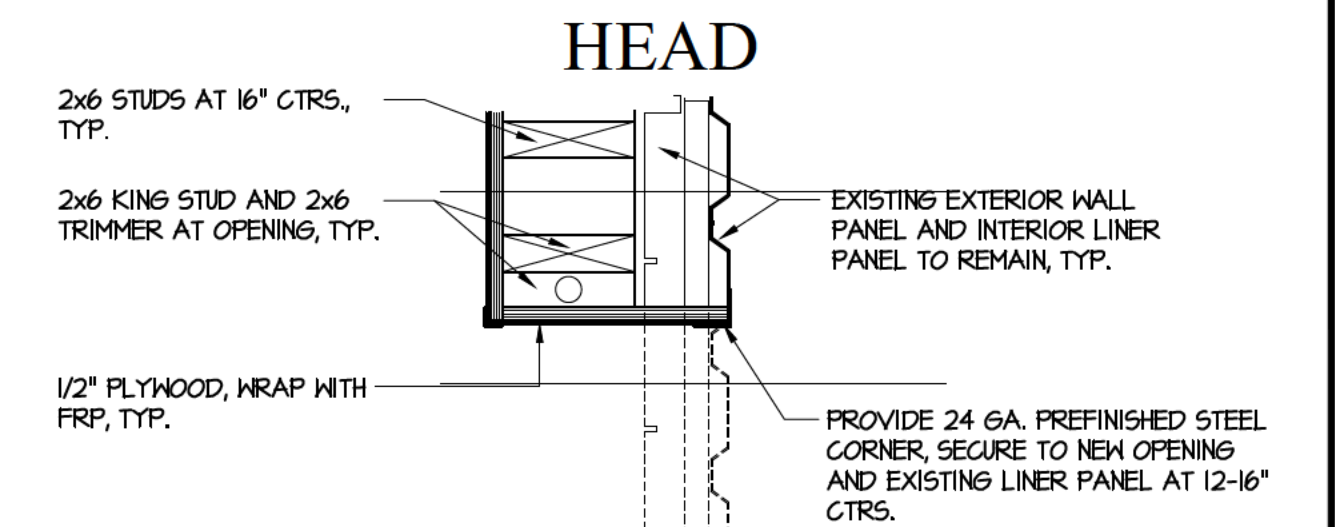
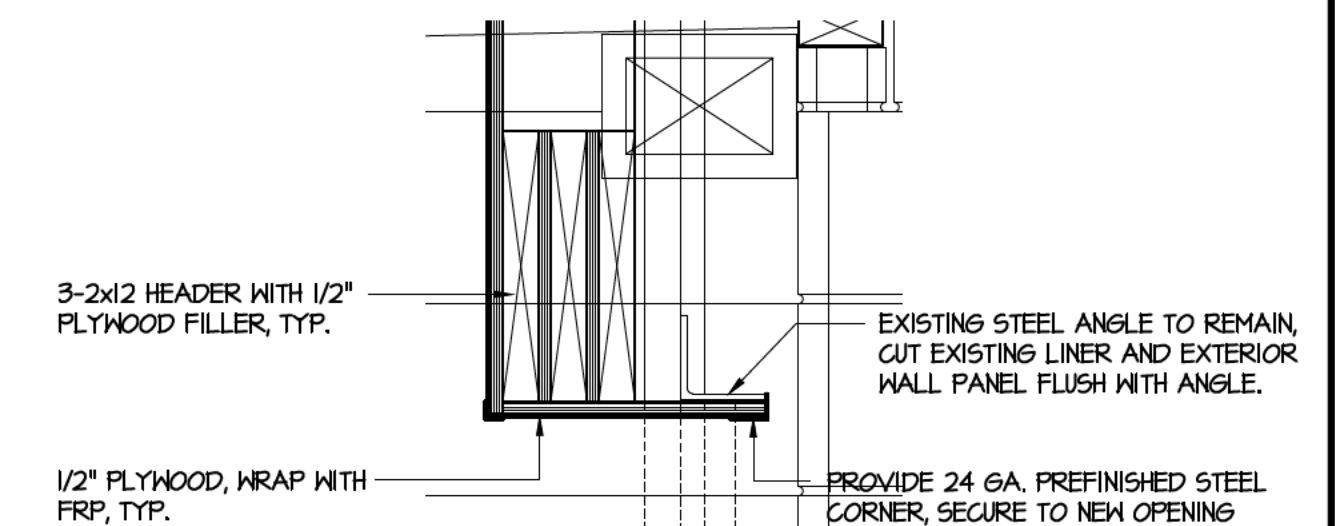
A ROOF EXPANSION JOINT DETAIL
A3.06 SCALE: 1 1/2"=1'-0"



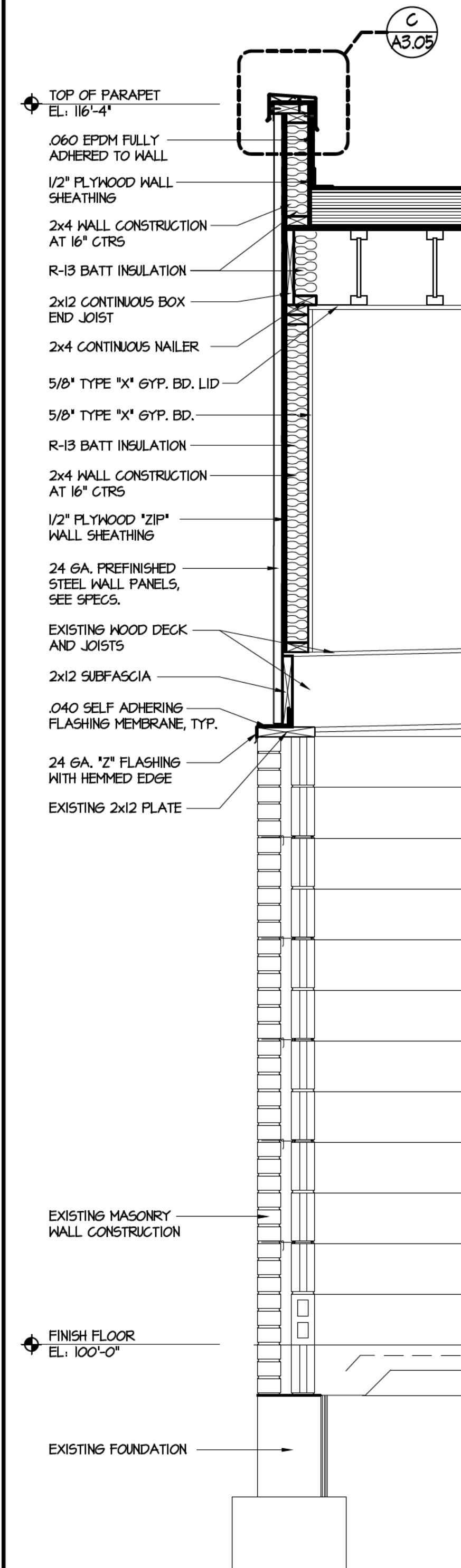
B WALL FLASHING DETAIL
A3.06 SCALE: 1 1/2"=1'-0"



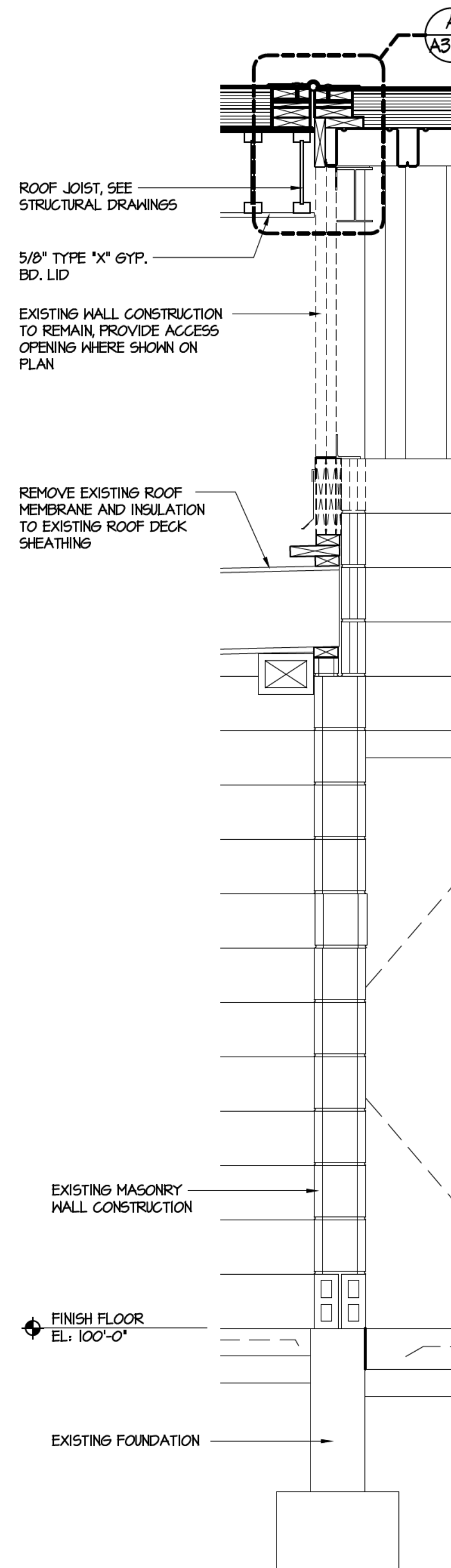
C GUTTER EDGE DETAIL
A3.06 SCALE: 1 1/2"=1'-0"



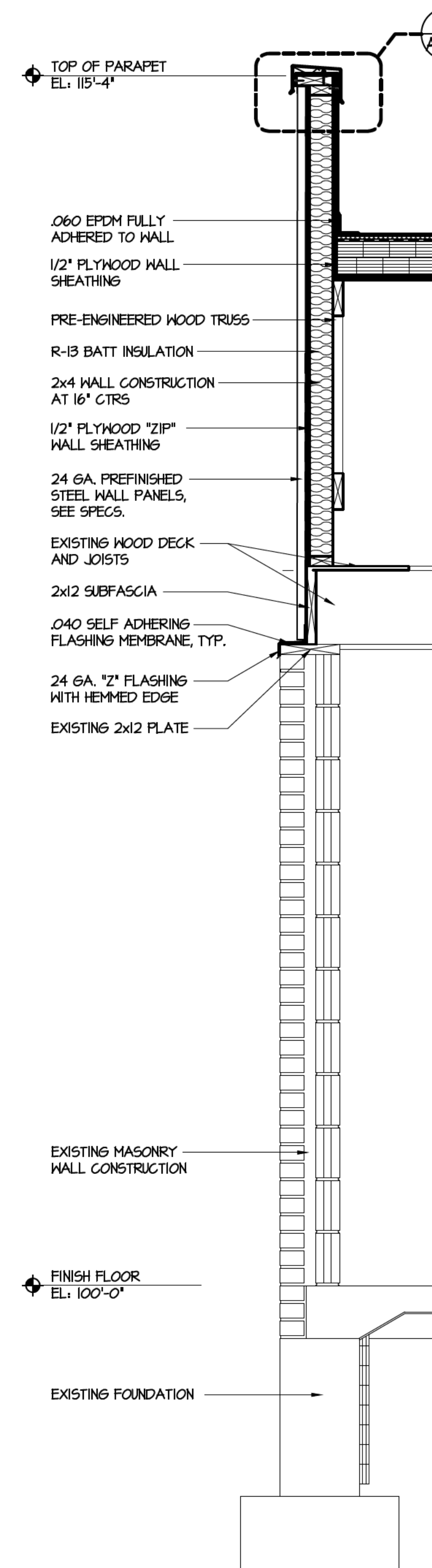
D CASED OPENING DTL
A3.06 SCALE: 1 1/2"=1'-0" OPENING 104B & 104C



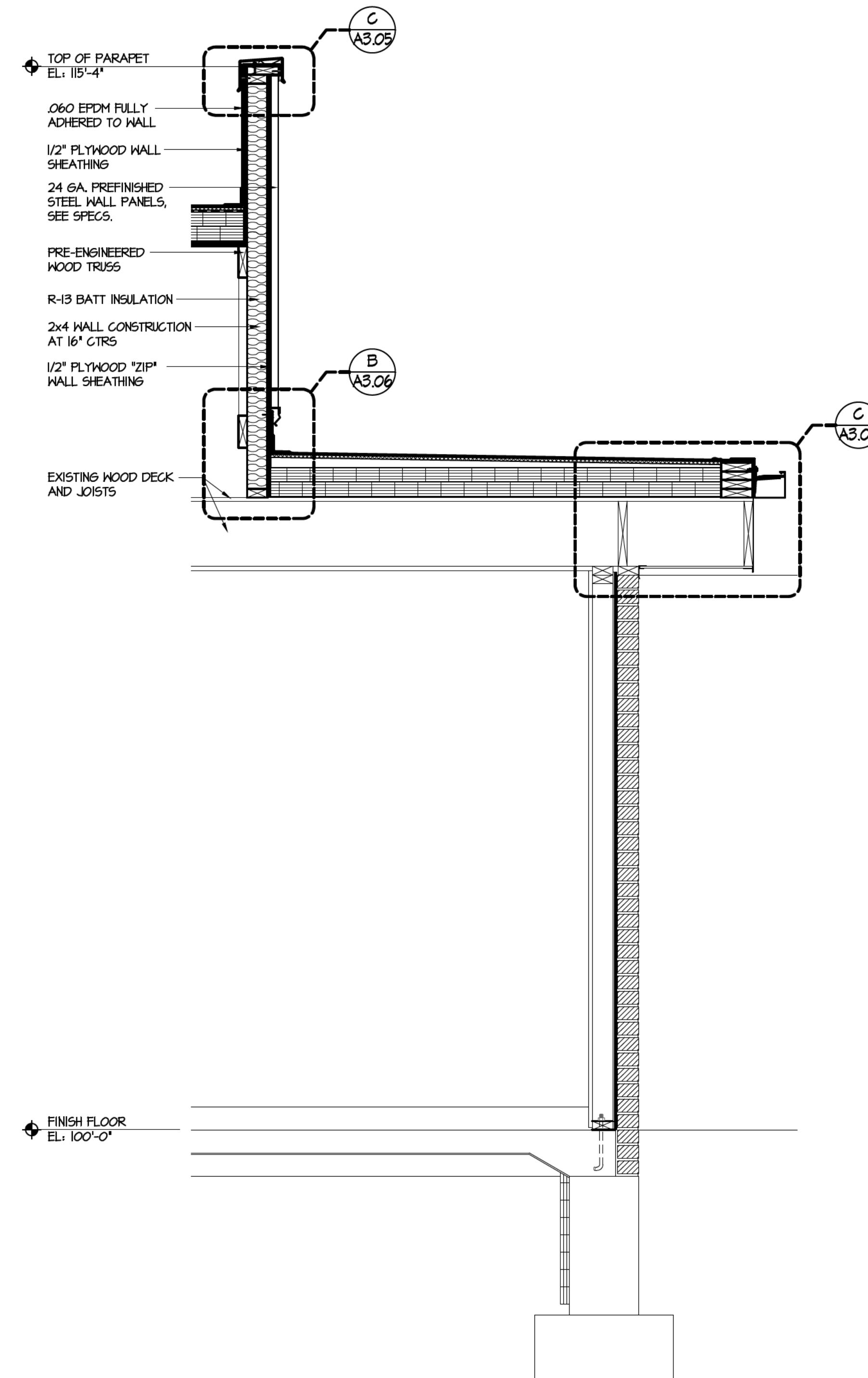
1 WALL SECTION
A3.06 SCALE: 3/4"=1'-0"



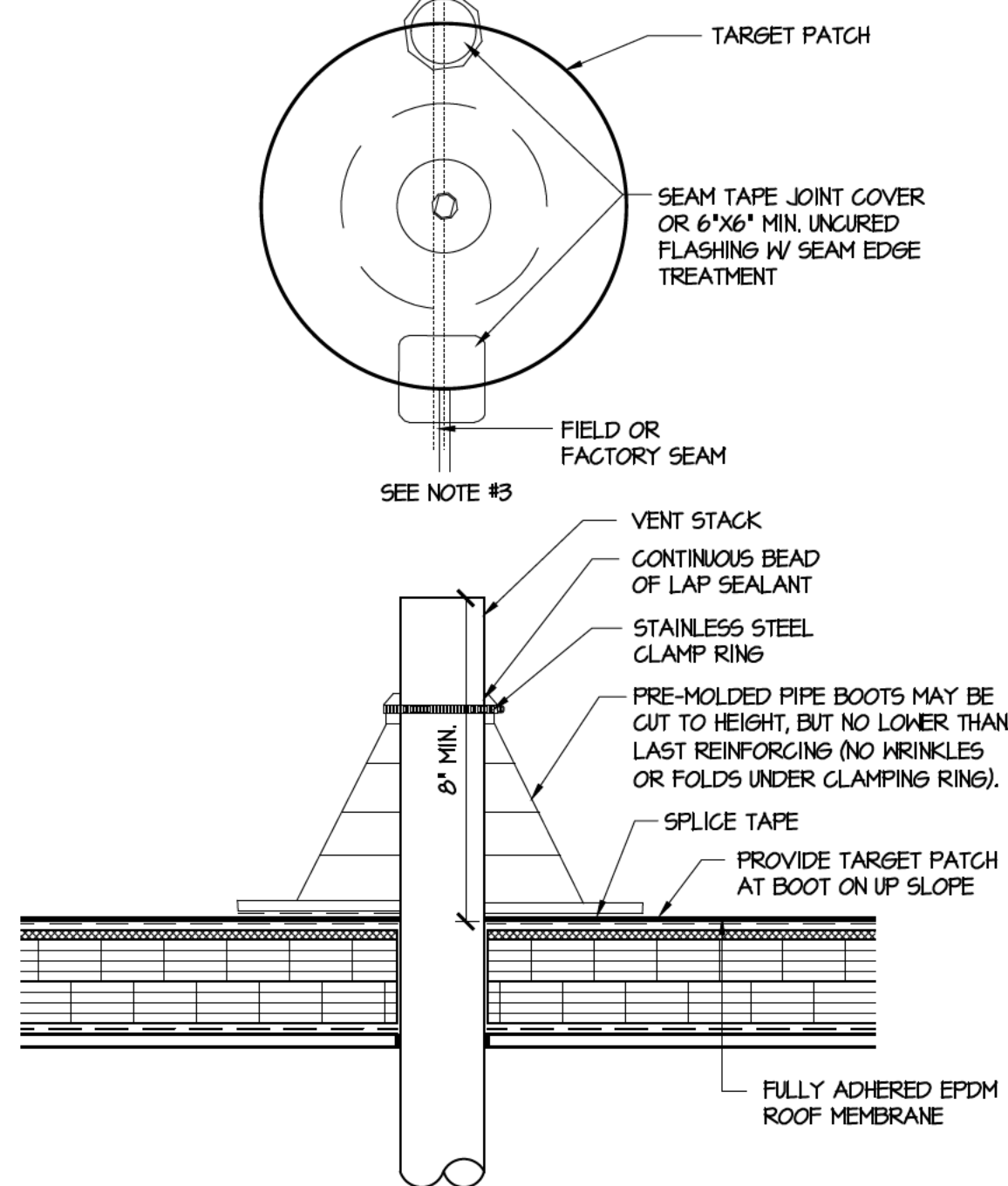
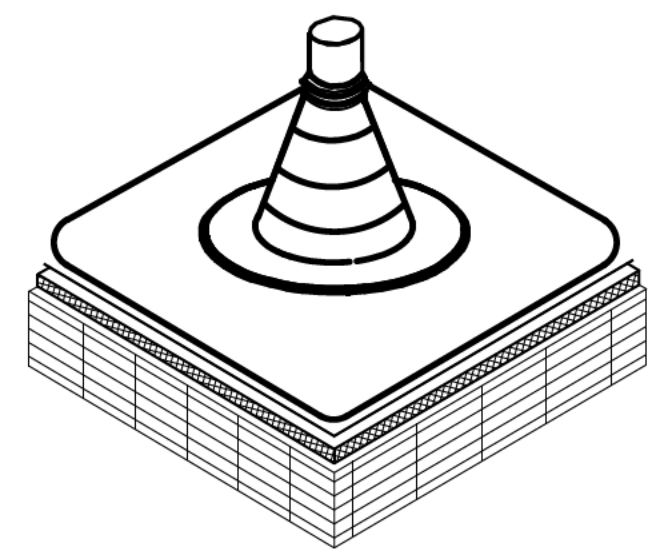
2 WALL SECTION
A3.06 SCALE: 3/4"=1'-0"



3 WALL SECTION
A3.06 SCALE: 3/4"=1'-0"



4 WALL SECTION
A3.06 SCALE: 3/4"=1'-0"

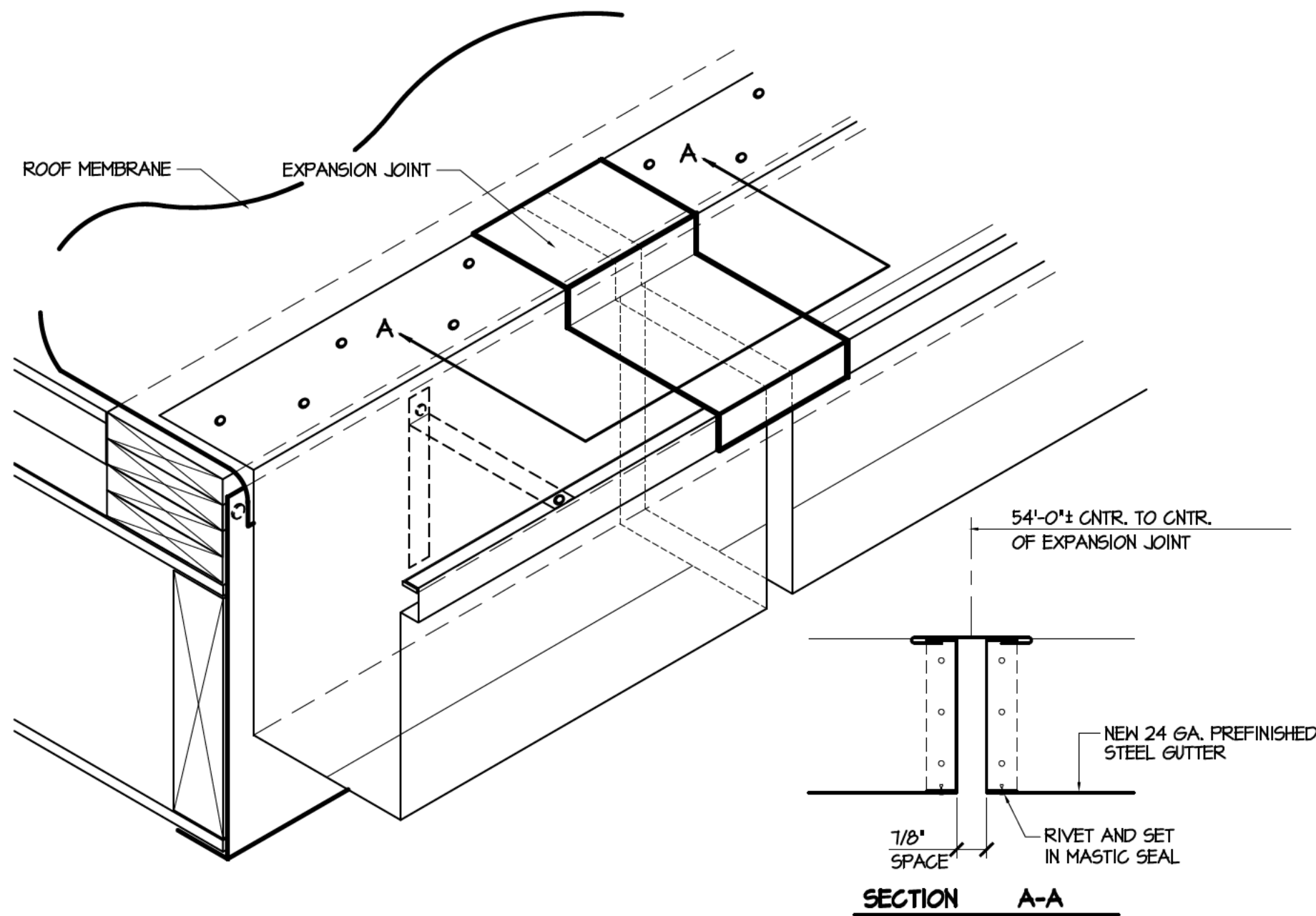


1 TYPICAL VENT STACK OR PIPE PENETRATION DTL.

A5.01 SCALE: NOT TO SCALE

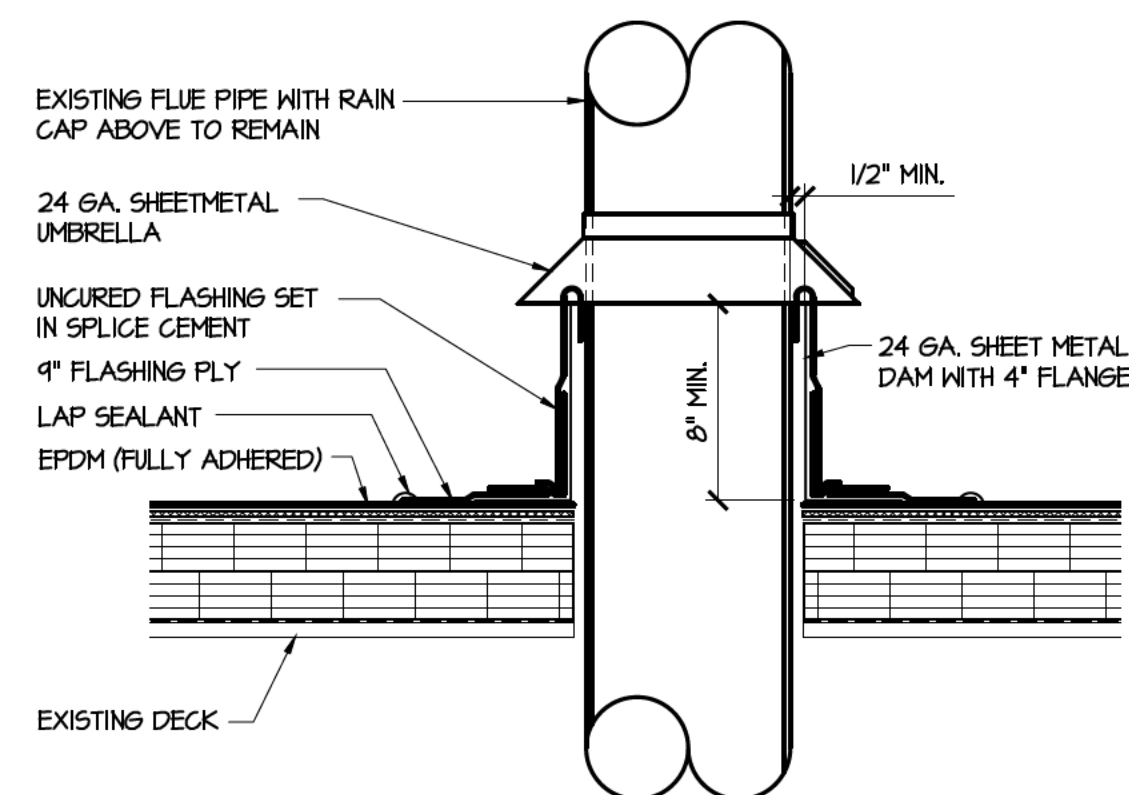
ROUND PENETRATION FLASHING NOTES:

1. PIPE MUST BE AN ANCHORED TO BOTTOM SIDE OF DECK TO ASSURE STABILITY.
2. PRE-MOLDED PIPE BOOTS WITHOUT SEAM TAPE ARE ACCEPTABLE FOR USE WITH SPLICE WASH, ADHESIVE AND SEAM EDGE TREATMENT
3. IF THE FLANGE OF THE PIPE BOOT OVERLAPS A FIELD OR FACTORY SEAM, A "T" JOINT PATCH OR 6" X 6" MIN. PIECE OF UNCURED FLASHING CENTERED OVER THE INTERSECTION, IS REQUIRED.



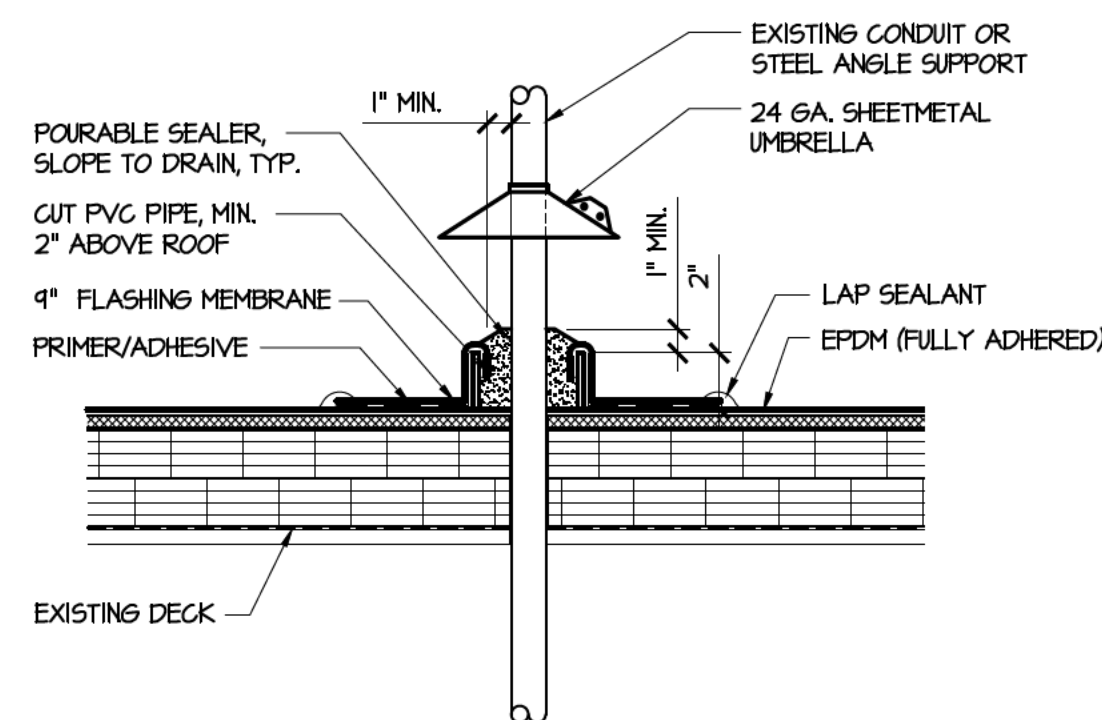
2 GUTTER EXPANSION JOINT DTL.

A5.01 SCALE: NOT TO SCALE



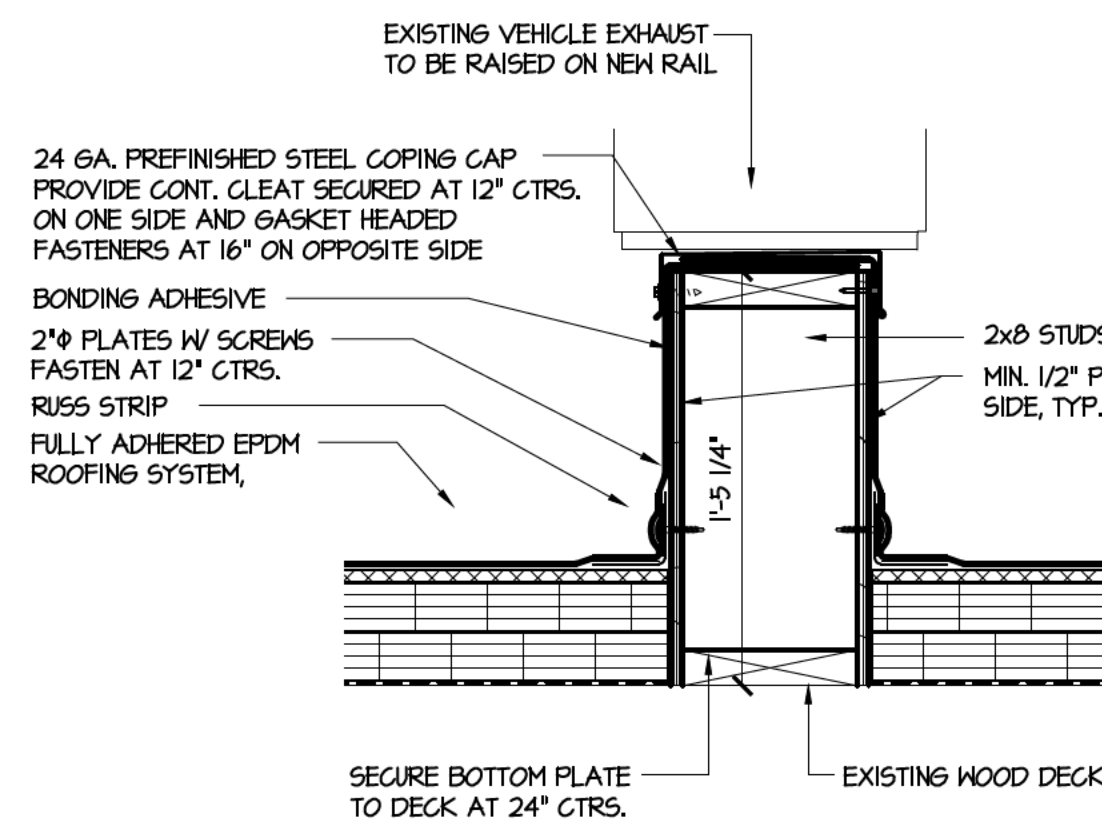
4 HOT STACK DETAIL

A5.01 SCALE: 1 1/2" = 1'-0"



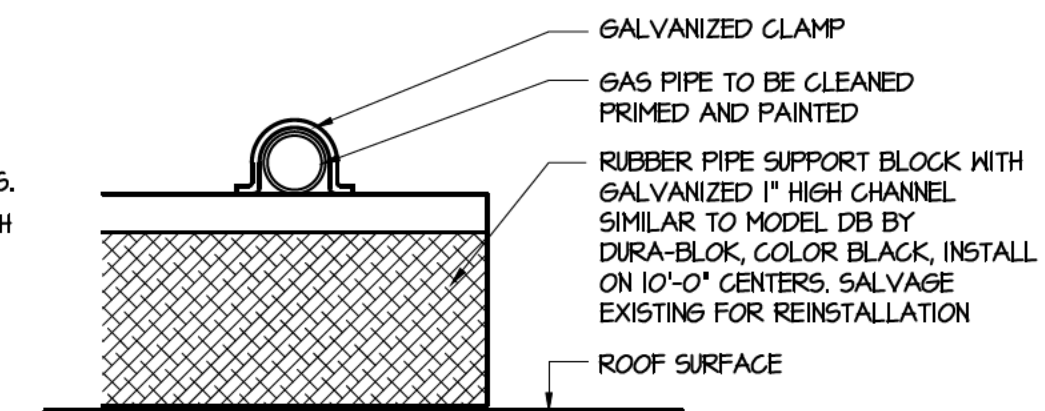
5 PITCH PAN DETAIL

A5.01 SCALE: 1 1/2" = 1'-0"



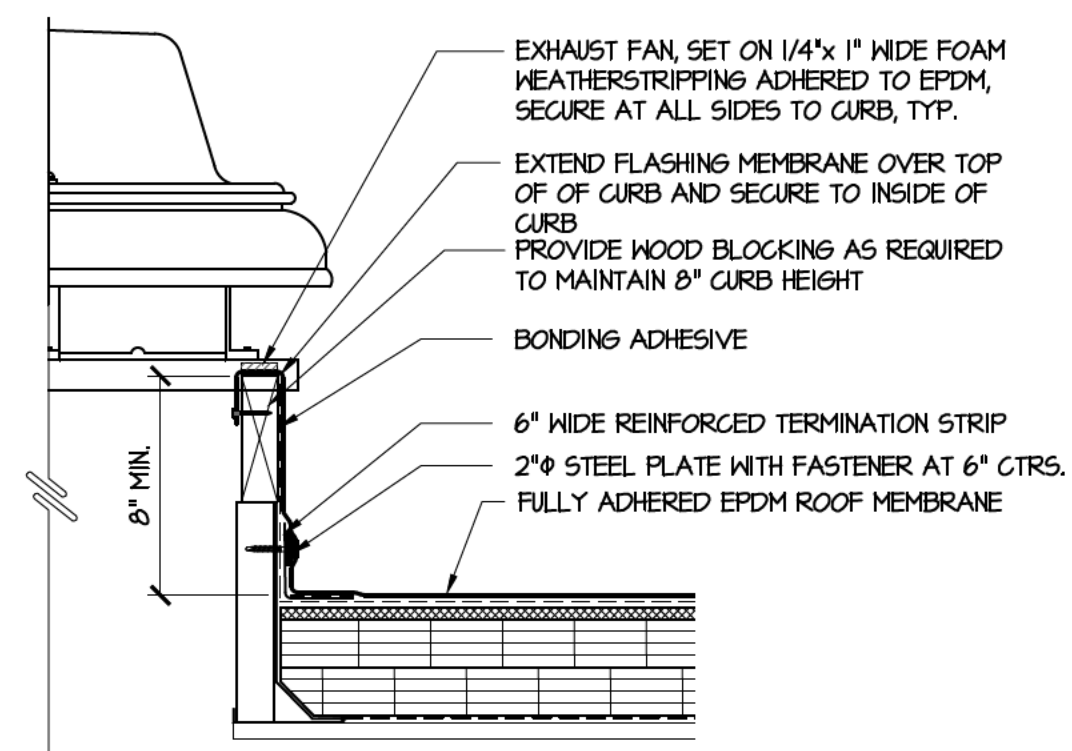
6 EQUIPMENT RAIL DTL.

A5.01 SCALE: N.T.S.



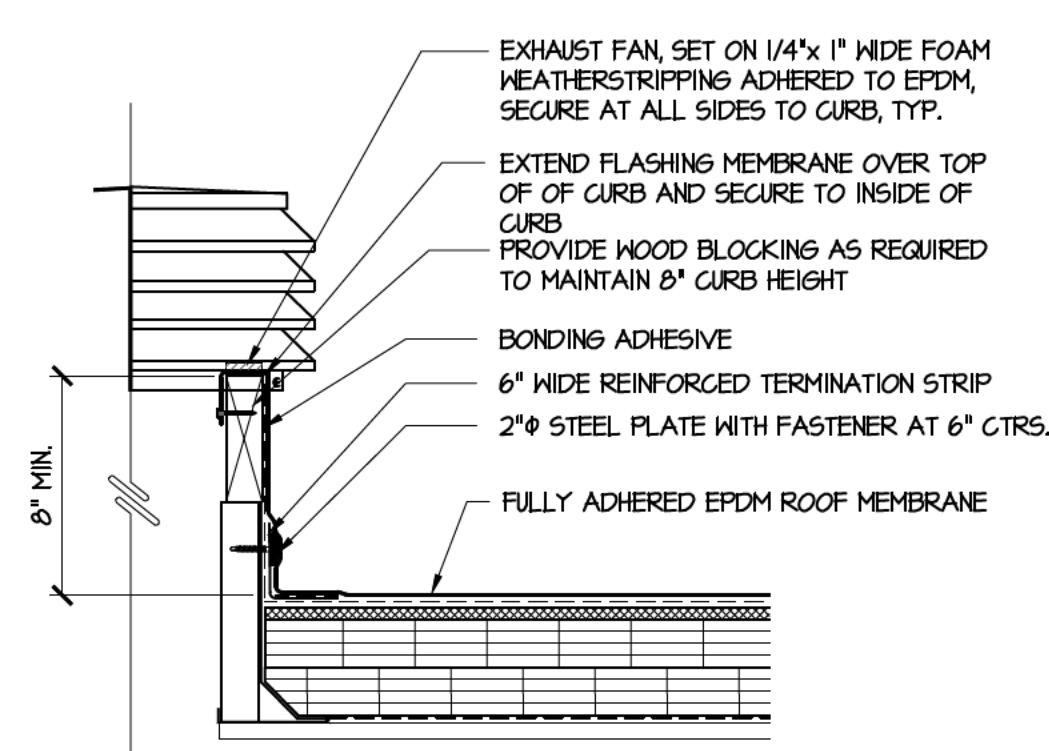
7 GAS PIPE SUPPORT

A5.01 SCALE: N.T.S.



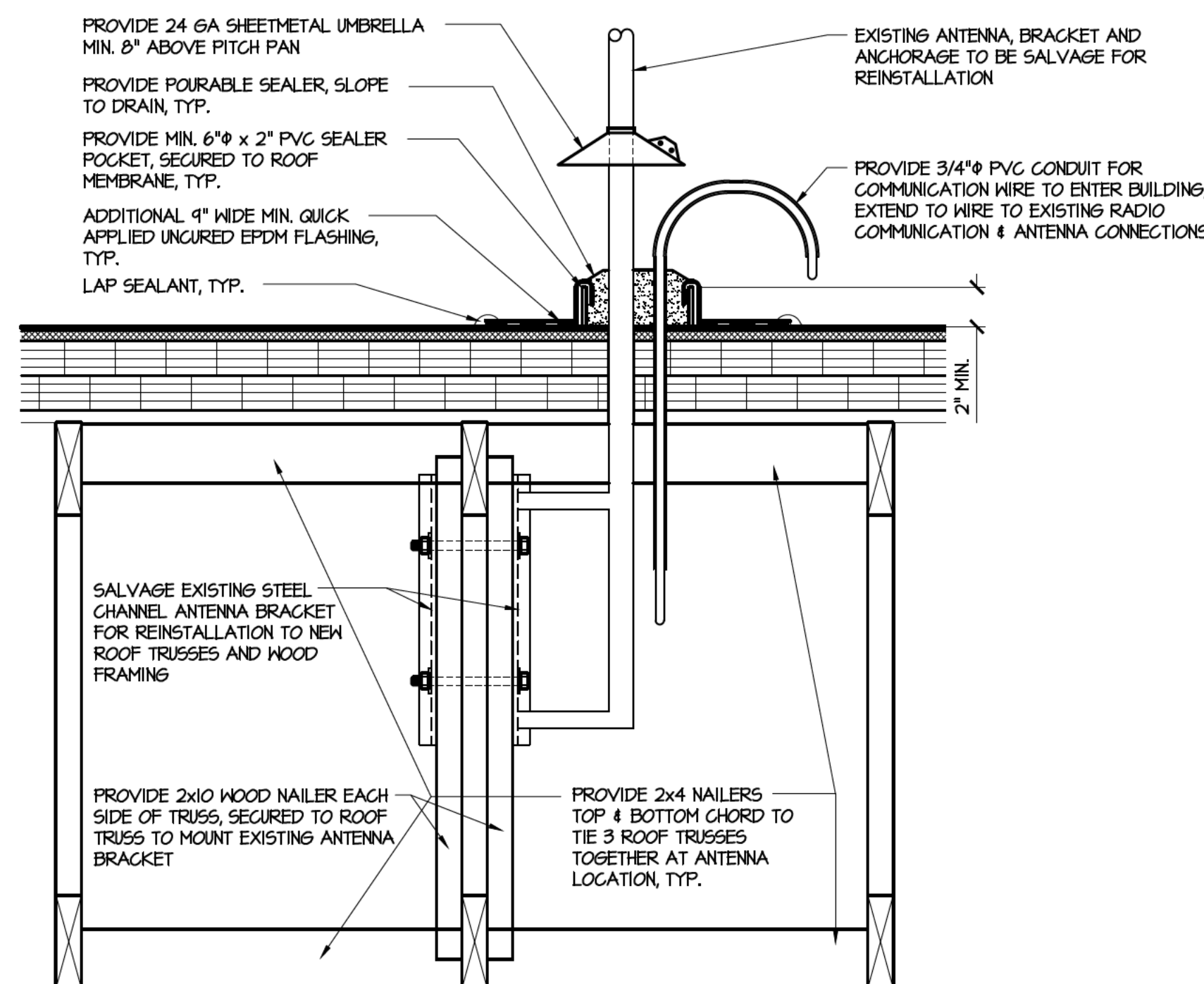
8 EXHAUST FAN CURB DETAIL

A5.01 SCALE: 1 1/2" = 1'-0"



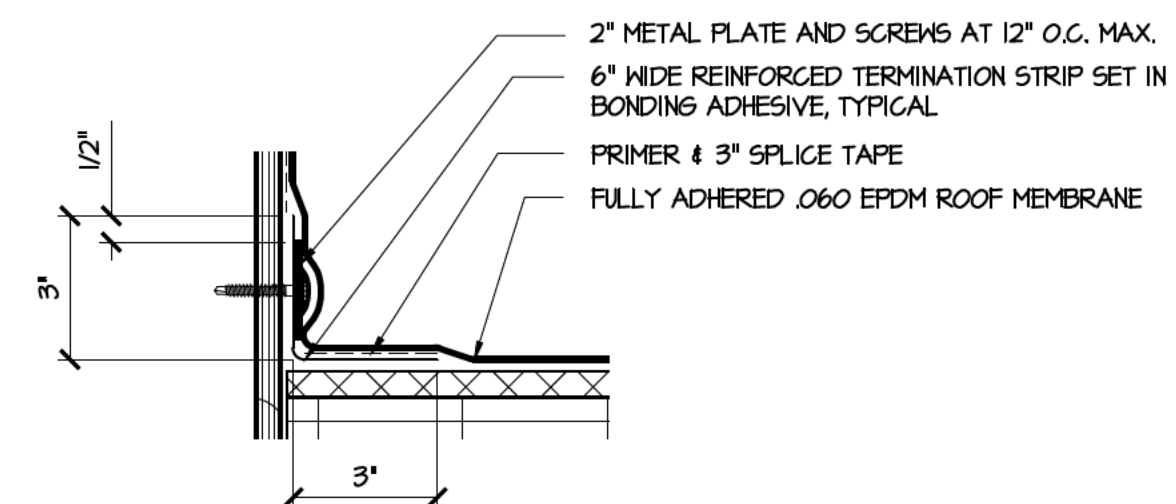
9 OUTSIDE AIR INTAKE CURB DETAIL

A5.01 SCALE: 1 1/2" = 1'-0"



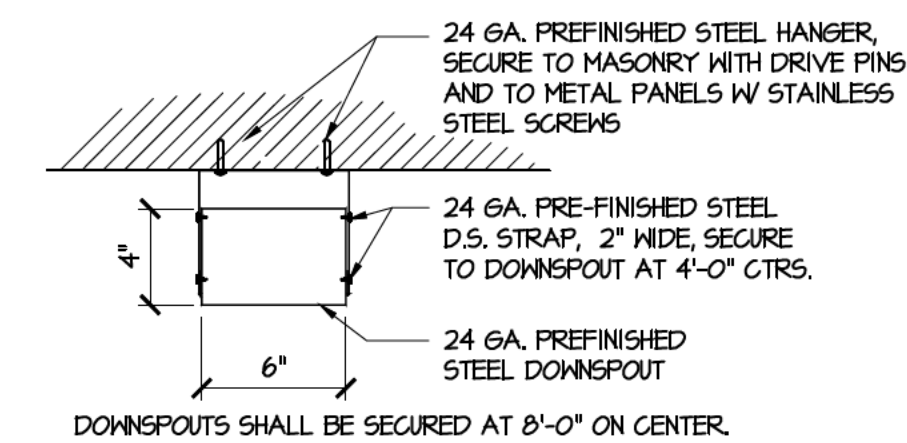
10 EXISTING ANTENNA SUPPORT FLASHING DTL.

A5.01 SCALE: 1 1/2" = 1'-0"



11 BASE WALL TIE-IN DETAIL

A5.01 SCALE: 3" = 1'-0"



12 DOWNSPOUT CONNECTION DTL.

A5.01 SCALE: 1 1/2" = 1'-0"

Door Details

SCALE: 1 1/2"=1'-0"

1 HEAD door 102A, 106A, 107A, 109A, 111A, 112A, 115A, 116A

4 3/4"

EXTEND 5/8" GYPSUM BOARD INTO FRAME THROAT, TYP.

2-2x6 WOOD HEADER WITH 1/2" PLYWOOD FILLER

SEALANT AT PERIMETER OF DOOR FRAME, TYP. EACH SIDE

16 GA. H.M. FRAME, PAINT

SOLID CORE WOOD DOOR OR H.M. DOOR, SEE SPECIFICATIONS

5 3/4"

2 JAMB door 102A, 106A, 107A, 109A, 111A, 112A, 115A, 116A

2x4 KING STUD WITH 2x4 TRIMMER STUD UNDER HEADER, TYP.

EXTEND 5/8" GYPSUM BOARD INTO FRAME THROAT, TYP.

SEALANT AT PERIMETER OF DOOR FRAME, TYP. EACH SIDE

PROVIDE WOOD STUD FRAME ANCHOR, MIN. 3 PER JAMB, TYP.

16 GA. H.M. FRAME, PAINT

SOLID CORE WOOD DOOR OR H.M. DOOR, SEE SPECIFICATIONS

3 HEAD door 114A

BRICK VENEER, TYP.

3-2x12 WOOD HEADER WITH 1/2" PLYWOOD FILLER BETWEEN EACH 2x12, GLUE & NAIL, TYP.

040 SELF-ADHERING FLASHING MEMBRANE, SEE SPECIFICATIONS, TYP.

4"x3 1/2" x 5/16" STEEL GALV. ANGLE

3" STAINLESS STEEL DRIP, TYP.

SEALANT, TYPICAL AT PERIMETER OF FRAME BOTH SIDES.

14 GA. H.M. FRAME, PAINT

16 GA. H.M. DOOR, PAINT

8 3/4"

PROVIDE 1" ALUM. TERMINATION STRIP, SECURED AT 12" CTRS.

PAINTED GYP. BD.

4 JAMB

PAINTED GYP. BD.

2x6 KING STUD WITH 2x6 TRIMMER STUD UNDER HEADER, TYP.

1x4 CONTINUOUS WOOD NAILER

SEALANT, TYPICAL AT PERIMETER OF FRAME BOTH SIDES.

14 GA. H.M. FRAME, PAINT

16 GA. H.M. DOOR, PAINT

8 3/4"

5 SILL

HOLLOW METAL DOOR WITH INSULATED CORE, PAINT

DOOR BOTTOM SKEEP, SIM. PEMKO #345_PK

NEW ALUMINUM THRESHOLD, SET IN SEALANT, SECURED TO CONCRETE SLAB, TYP.

1/2" P.J.F., TYP.

#3 SMOOTH BAR AT 16" CTRS., MIN. 6" EMBED SET IN EPOXY GROUT, TYP.

6 JAMB

EXISTING WALL PANELS TO BE CUT AS SHOWN ON PLAN. PROVIDE 24 GA. PREFINISHED CORNER, TYP.

7 JAMB

SEALANT BOTH SIDES, TYP.

1/4" SHIM

4 1/2" THERMALLY BROKE ALUMINUM STOREFRONT ENTRY, SEE SPECIFICATIONS

4 1/2"

8 JAMB

2x6 CONTINUOUS NAILER SECURED TO EXISTING MASONRY AT 16"-18" CTRS. WITH 5/16" Ø EXPANSION ANCHORS WITH MIN. 3 1/2" EMBED, TYP.

EXISTING MASONRY

VINYL WEATHERSTRIPPING WRAP WOOD JAMB W/ AIR BARRIER AND COVER WITH 24 GA. PREFINISHED STEEL, COLOR AS SELECTED BY A/E

2x6 CONTINUOUS NAILER SECURED TO EXISTING MASONRY AT 16"-18" CTRS. WITH 5/16" Ø EXPANSION ANCHORS WITH MIN. 3 1/2" EMBED, STAGGERED, TYP.

9 HEAD

24 GA. EXT. PREFINISHED STEEL WALL PANEL, SEE SPECIFICATIONS

2x4 STUDS AT 16" CTRS.

1/2" PLYWOOD "ZIP" WALL SHEATHING EACH SIDE

3 1/2"x1'-4" PSL BEAM/HEADER

040 SELF-ADHERED FLASHING MEMBRANE, SECURE TO WALL WITH TERM. BAR FASTENED AT 8" CTRS., TYP.

6"x4"x3/8" STEEL GALV. ANGLE, MIN. 8" BRG. EACH END

3" STAINLESS STEEL DRIP

TREATED 2x6 JAMB

WRAP 2x6 WOOD JAMB W/ AIR BARRIER AND COVER WITH 24 GA. PREFINISHED STEEL, VINYL WEATHERSTRIPPING

10 JAMB

2x6 OVERHEAD DOOR JAMB

VINYL WEATHERSTRIPPING WRAP WOOD JAMB W/ AIR BARRIER AND COVER WITH 24 GA. PREFINISHED STEEL

TREATED 2x6 JAMB, RIP TO FIT WALL THICKNESS SHOWN

SEALANT AT PERIMETER

TRIPLE 2x6 TRIMMER STUD UNDER HEADER, TYP.

2 - 2x6 KING STUDS

11 JAMB

2x6 OVERHEAD DOOR JAMB

VINYL WEATHERSTRIPPING WRAP WOOD JAMB W/ AIR BARRIER AND COVER WITH 24 GA. PREFINISHED STEEL, COLOR AS SELECTED BY A/E

2x6 CONTINUOUS NAILER SECURED TO EXISTING MASONRY AT 16"-18" CTRS. WITH 5/16" Ø EXPANSION ANCHORS WITH MIN. 3 1/2" EMBED, STAGGERED, TYP.

TRIPLE 2x6 TRIMMER STUD UNDER HEADER, TYP.

2 - 2x6 KING STUDS

12 SILL

FINISH FLOOR ELEV. 100'-0"

TOP/FOUNDATION ELEV. 99'-4"

13 HEAD

2x6 STUDS AT 16" CTRS.

1/2" PLYWOOD "ZIP" WALL SHEATHING EACH SIDE

24 GA. EXT. PREFINISHED STEEL WALL PANEL, SEE SPECIFICATIONS

3-2x12 WITH 1/2" OSB FILLER HEADER, GLUED AND NAILED OR 5 1/2" x 1'-2" PSL BEAM

24 GA. PREFINISHED STEEL BASE FLASHING

WRAP 2x6 1/4" WOOD JAMB W/ AIR BARRIER AND COVER WITH 24 GA. PREFINISHED STEEL, EXTEND VERTICAL LEG UP 2" BEHIND SIDING, TYP.

TREATED 2x10 JAMB, RIP TO FIT WALL THICKNESS AS SHOWN

CONT. 2x10 OVERHEAD DOOR HEAD

VINYL WEATHERSTRIPPING

14 JAMB

VINYL WEATHERSTRIPPING WRAP 2x6 WOOD JAMB W/ AIR BARRIER AND COVER WITH 24 GA. PREFINISHED STEEL, COLOR AS SELECTED BY A/E

2-2x6 KING STUDS WITH 3-2x6 TRIMMER STUDS UNDER HEADER, TYP.

2x6 CONTINUOUS NAILER SECURED AT 12"-14" CTRS STAGGERED, TYP.

15 SILL

FINISH FLOOR ELEV. 100'-0"

TOP/FOUNDATION ELEV. 99'-4"

Door Schedule																			
Opg. No.	Frame				Details			Wall Type	Label or Louver	Door								Remarks	Opg. No.
	Mat.	Ga.	Depth	Elev.	Hd.	Jmb.	Sill			Qty.	Width	Hgt.	Thick.	Mat.	Ga.	Elev.			
101A	ALUM.	-	4 1/2"	1	-	7	-	EXIST. MASONRY	-	1	3'-0"	7'-0"	1 3/4"	ALUM.	-	F6		101A	
102A	H.M.	16	5 3/4"	2	1	2		WOOD STUD	-	1	3'-0"	7'-0"	1 3/4"	S.C. MD.	-	F		102A	
103A	WOOD	-	-	-	-	9	10/11	MASONRY	-	1	14'-2"	12'-0"	1 3/4"	METAL	-	G	INSULATED CORE	103A	
103B	WOOD	-	-	-	-	13	14	WOOD STUD	-	1	14'-2"	12'-0"	1 3/4"	METAL	-	G	INSULATED CORE	103B	
103C	WOOD	14	1 1/2"	2	17	16	18	WOOD STUD	-	1	3'-0"	7'-0"	1 3/4"	METAL	-	F	INSULATED CORE	103B	
104A	WOOD	-	-	-	-	9 5/8"	10/11 SIM.	EXIST. MASONRY	-	1	14'-0"	12'-0"	1 3/4"	METAL	-	G	INSULATED CORE	104A	
105A	EXTG.	EXISTING FRAME TO REMAIN PAINT					-	EXIST. MASONRY	-		EXISTING DOOR TO REMAIN PAINT					PAIN	105A		
106A	H.M.	16	5 3/4"	2	1	2	-	WOOD STUD	-	1	3'-0"	7'-0"	1 3/4"	S.C. MD.	-	F		106A	
107A	H.M.	16	5 3/4"	2	1	2	-	WOOD STUD	-	1	3'-0"	7'-0"	1 3/4"	S.C. MD.	-	F		107A	
109A	H.M.	16	5 3/4"	2	1	2	-	WOOD STUD	-	1	3'-0"	7'-0"	1 3/4"	S.C. MD.	-	F		109A	
III A	H.M.	16	5 3/4"	2	1	2	-	WOOD STUD	-	1	3'-0"	7'-0"	1 3/4"	S.C. MD.	-	F		IIIA	
IIIB	H.M.	16	5 3/4"	2	1	2	-	WOOD STUD	-	1	3'-0"	7'-0"	1 3/4"	S.C. MD.	-	F		IIIB	
II2A	H.M.	16	5 3/4"	2	1	2	-	WOOD STUD	-	1	3'-0"	7'-0"	1 3/4"	S.C. MD.	-	F		II2A	
I13A	EXTG.	EXISTING FRAME TO REMAIN PAINT					-	EXIST. MASONRY	-		EXISTING DOOR TO REMAIN PAINT					PAIN	I13A		
I13B		EXISTING FRAME TO REMAIN PAINT					-		-		EXISTING DOOR TO REMAIN PAINT					PAIN	I13B		
II4A	H.M.	14	8 3/4"	2	3	4	5	WOOD STUD	-	1	3'-0"	7'-0"	1 3/4"	S.C. MD.	-	H6		II4A	
II5A	H.M.	16	5 3/4"	2	1	2	-	WOOD STUD	-	1	3'-0"	7'-0"	1 3/4"	S.C. MD.	-	F		II5A	
II6A	H.M.	16	5 3/4"	2	1	2	-	WOOD STUD	-	1	3'-0"	7'-0"	1 3/4"	S.C. MD.	-	F		II6A	
II7A	EXTG.	EXISTING FRAME TO REMAIN PAINT					-	MASONRY	-		EXISTING DOOR TO REMAIN PAINT					PAIN	II7A		
II8A	EXTG.	EXISTING FRAME TO REMAIN PAINT					-	MASONRY	-		EXISTING DOOR TO REMAIN PAINT					PAIN	II8A		
II9A	EXTG.	EXISTING FRAME TO REMAIN PAINT					-	MASONRY	-		EXISTING DOOR TO REMAIN PAINT					PAIN	II9A		
121A	EXTG.	EXISTING FRAME TO REMAIN PAINT					-	MASONRY	-		EXISTING DOOR TO REMAIN PAINT					PAIN	121A		

Architectural drawings of four door styles: FG (Framed Glass), F (Framed), HG (Half Glass), and NL (No Glass). Below these is a detailed section view of a door assembly with dimensions and material callouts.

DOOR ELEVATIONS

B
A6.01 SCALE: 1/4"=1'-0"

1

ALUMINUM FRAME, TYP

1" INSULATED TEMPERED GLAZING

2"

4'-2 1/2"

3'-0"

2"

2"

5"

8 1/2"

3'-6"

2"

1'-5 1/2"

2'-6"

1'-0"

10"

2

H.M. FRAME PAINT

3'-4"

2"

3'-0"

2"

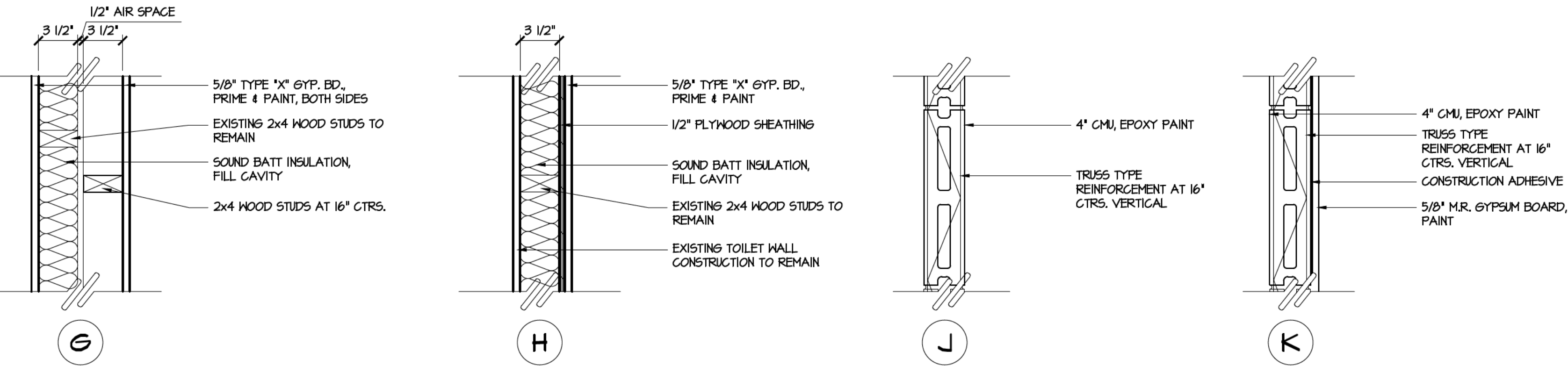
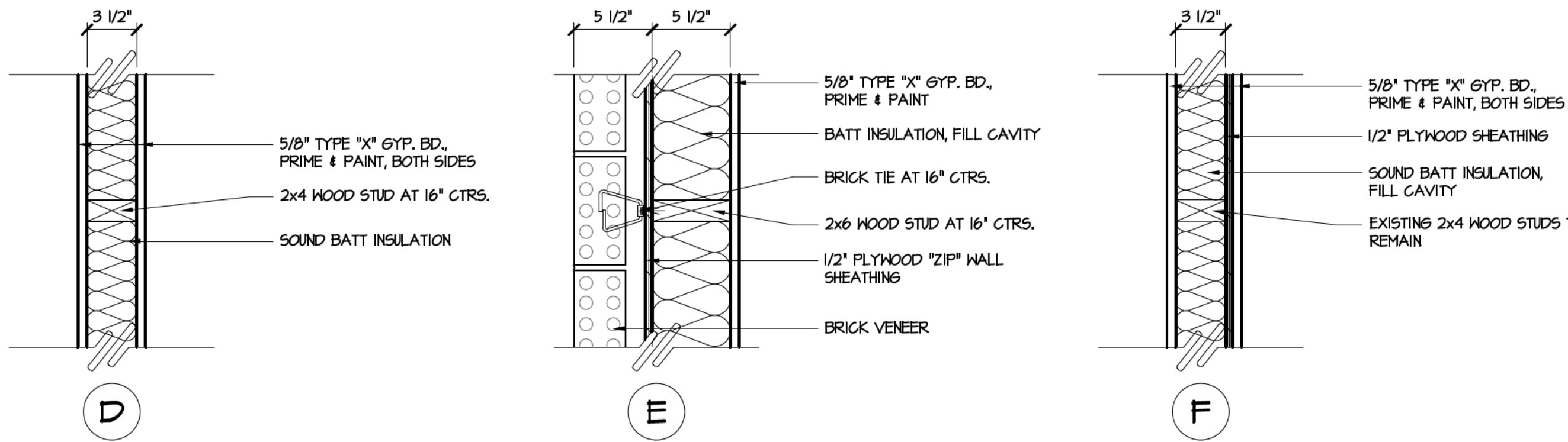
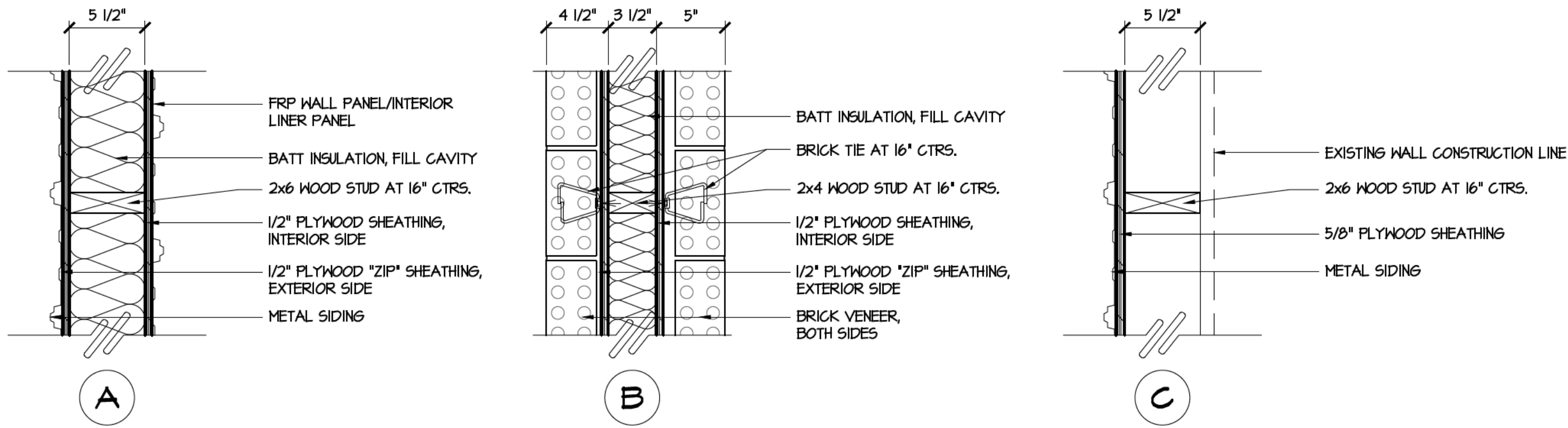
2"

1'-0"

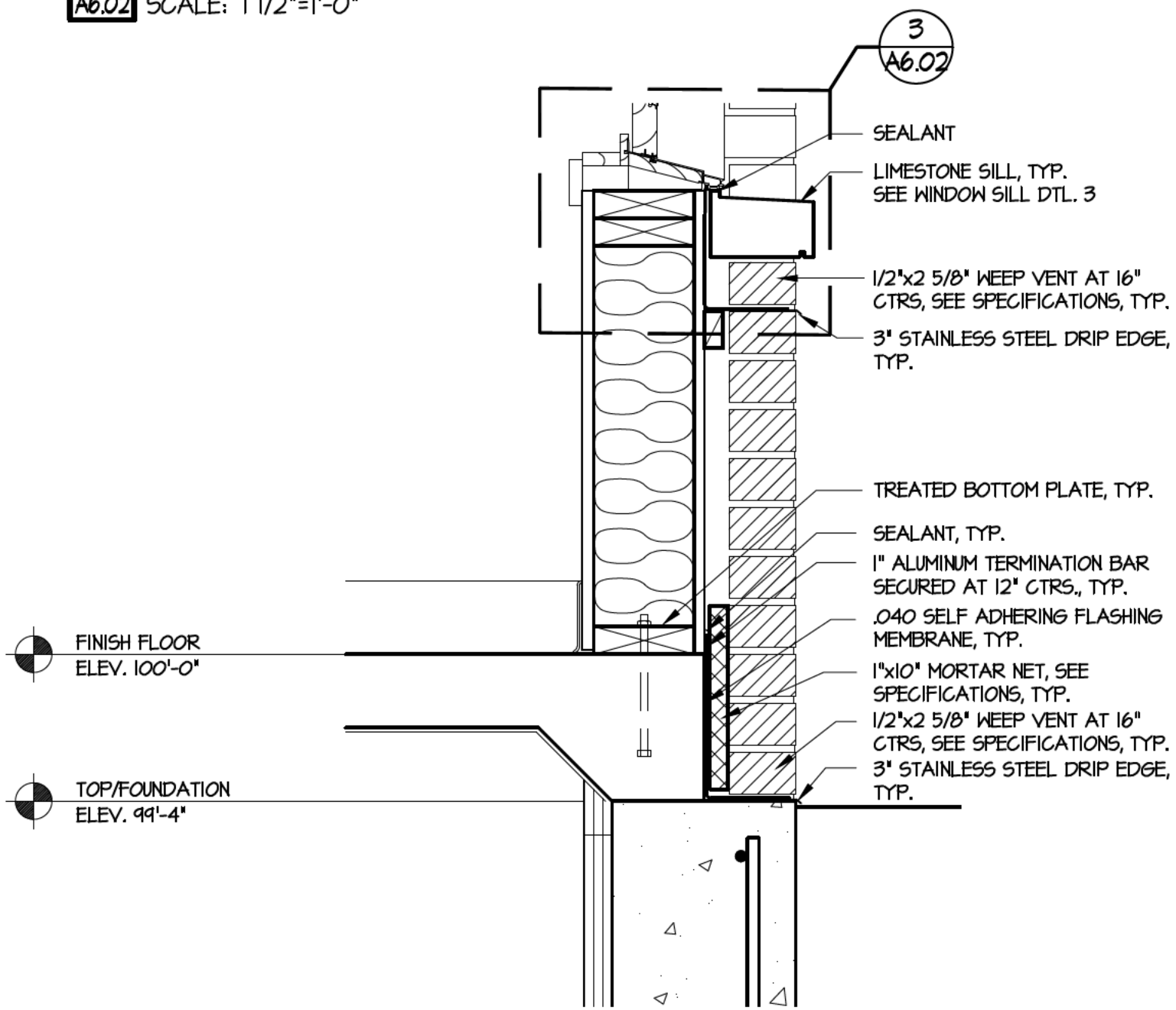
1'-2"

The image contains three technical cross-section drawings of a door assembly, labeled JAMB, HEAD, and SILL.

- JAMB:** Shows a side view of the door frame. Callouts include: "2x6 KING STUD WITH 2x6 TRIMMER STUD UNDER HEADER, TYP.", "EXTEND 1/2\" PLYWOOD INTO FRAME THROAT, TYP.", "SEALANT AT PERIMETER OF DOOR FRAME, TYP. EACH SIDE", "PROVIDE WOOD STUD FRAME ANCHOR, MIN. 3 PER JAMB, TYP.", "14 GA. H.M. FRAME, PAINT", "WEATHERSTRIPPING, SEE SPECIFICATIONS", "16 GA. H.M. DOOR WITH INSULATED CORE, SEE SPECIFICATIONS, PAINT". A dimension of "1 1/2\"" is shown at the bottom.
- HEAD:** Shows a top-down view of the door frame. Callouts include: "3-2x12 WITH 1/2\" PLYWOOD FILLER HEADER, TYP.", "EXTEND 1/2\" PLYWOOD INTO FRAME THROAT, TYP.", "SEALANT AT PERIMETER OF DOOR FRAME, TYP. EACH SIDE", "RAIN DRIP. SEE SPECIFICATIONS", "14 GA. H.M. FRAME, PAINT", "WEATHERSTRIPPING, SEE SPECIFICATIONS", "16 GA. H.M. DOOR WITH INSULATED CORE, SEE SPECIFICATIONS, PAINT".
- SILL:** Shows a side view of the door threshold. Callouts include: "HOLLOW METAL DOOR WITH INSULATED CORE, PAINT", "DOOR BOTTOM SHEEP, SIM. PEMKO #345_PK", "NEW ALUMINUM THRESHOLD SET IN SEALANT, SECURED TO CONCRETE SLAB, TYP.", "#3 SMOOTH BAR AT 16\" CTRS., MIN. 6' EMBED SET IN EPOXY GROUT, TYP.", "1/2\" P.J.F. TYP.". A dimension of "5'" is shown between the door frame and the concrete slab.



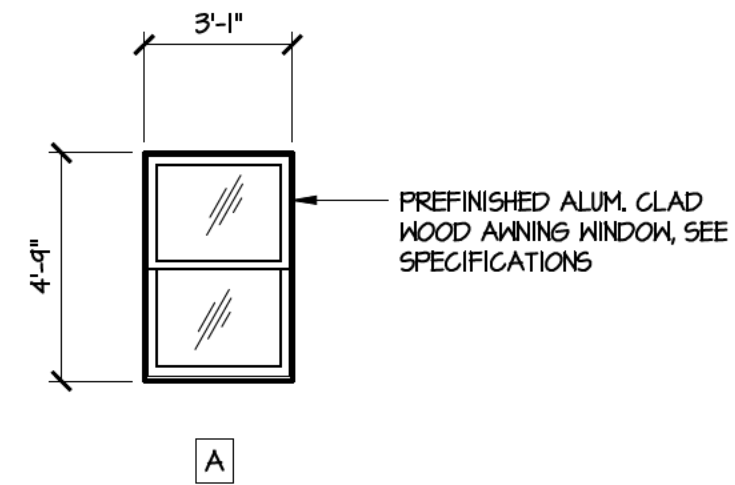
WALL TYPES
A6.02 SCALE: 1 1/2"=1'-0"



BASE FLASHING DETAIL
A6.02 SCALE: 1 1/2"=1'-0"

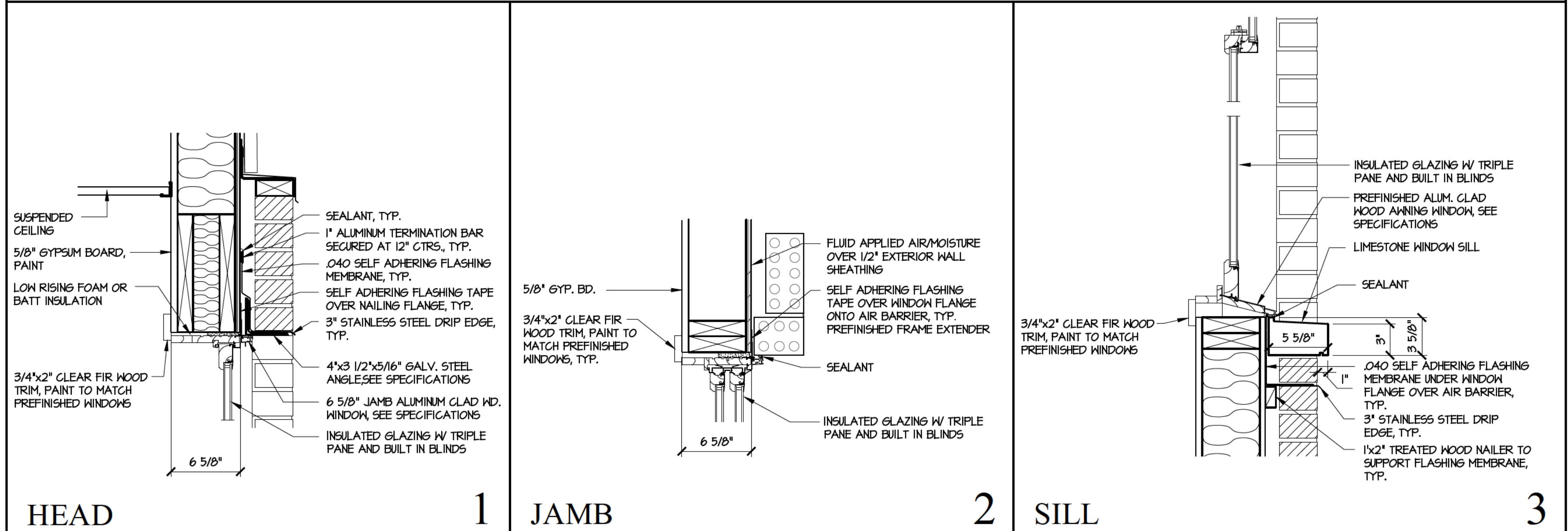
Room Finish Schedule

No.	Room Name	Floor	Base	North Wall	South Wall	East Wall	West Wall	Ceiling	Remarks	No.
101	VESTIBULE	RESINOUS #2	RESINOUS COVE	PAINT - I	PAINT - I	PAINT - I	PAINT - I	EXTG. PLASTER, PAINT	-	101
102	BEDROOM #1	LVT	RUBBER	PAINT - I	PAINT - I	PAINT - I	PAINT - I	EXTG. PLASTER, PAINT	-	102
103	APPARATUS #2	RESINOUS #2	RESINOUS COVE	FRP/ LINER PANEL	FRP/ LINER PANEL	FRP/ LINER PANEL	FRP/ LINER PANEL	LINER PANEL	-	103
104	APPARATUS #1	RESINOUS #2	RESINOUS COVE	EXTG. MASONRY	EXTG. MASONRY	EXTG. MASONRY	EXISTING	EXTG. METAL DECK	-	104
105	EXERCISE	LVT	RUBBER	PAINT - I	PAINT - I	PAINT - I	PAINT - I	EXTG. PLASTER, PAINT	-	105
106	BEDROOM #2	LVT	RUBBER	PAINT - I	PAINT - I	PAINT - I	PAINT - I	SUSP. ACOUS. TILE	-	106
107	BEDROOM #3	LVT	RUBBER	PAINT - I	PAINT - I	PAINT - I	PAINT - I	SUSP. ACOUS. TILE	-	107
108	CORRIDOR	LVT	RUBBER	PAINT - I	PAINT - I	PAINT - I	PAINT - I	SUSP. ACOUS. TILE	-	108
109	MECH.	SEALED CONC.	RUBBER	PAINT - I	PAINT - I	PAINT - I	PAINT - I	GYP. BD, PAINT	-	109
110	KITCHEN	LVT	RUBBER	PAINT - I	PAINT - I	PAINT - I	PAINT - I	EXTG. PLASTER, PAINT	-	110
111	TOILET	RESINOUS #1	RESINOUS COVE	PAINT - I	PAINT - I	PAINT - I	PAINT - I	SUSP. ACOUS. TILE	-	111
112	BEDROOM #4	LVT	RUBBER	PAINT - I	PAINT - I	PAINT - I	PAINT - I	SUSP. ACOUS. TILE	-	112
113	LOUNGE	LVT	RUBBER	PAINT - I	PAINT - I	PAINT - I	PAINT - I	EXTG PLASTER, PAINT	-	113
114	DINING	LVT	RUBBER	PAINT - I	PAINT - I	PAINT - I	PAINT - I	SUSP. ACOUS. TILE	-	114
115	BEDROOM #5	LVT	RUBBER	PAINT - I	PAINT - I	PAINT - I	PAINT - I	SUSP. ACOUS. TILE	-	115
116	LAUNDRY	SEALED CONC.	RUBBER	PAINT - I	PAINT - I	PAINT - I	PAINT - I	SUSP. ACOUS. TILE	-	116
117	TOILET - EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	SUSP. ACOUS. TILE	PROTECT EXISTING FLOOR AND WALLS DURING CONSTRUCTION.	117
118	EQUIPMENT	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	-	118
119	EXISTING MECHANICAL	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	-	119
120	COVERED PORCH	CONCRETE	EXISTING	-	BRICK VENEER	-	BRICK VENEER	LINER PANEL	-	120
121	CORRIDOR	RESINOUS #2	RESINOUS COVE	PAINT - I	PAINT - I	PAINT - I	PAINT - I	EXISTING	-	121



WINDOW ELEVATIONS
A6.02 SCALE: 1/4"=1'-0"

WINDOW DETAILS



GENERAL:

THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, BRACING, SHORING FOR LATERAL LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURE OF CONSTRUCTION OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENTAL THERE TO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS). TEMPORARY SUPPORT FOR EXISTING STRUCTURES IS THE RESPONSIBILITY OF THE CONTRACTOR.

CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.

WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA.

ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.

CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCIES WITH THE ARCHITECT.

TYPICAL DETAILS MAY NOT NECESSARILY BE SHOWN ON PLANS, BUT APPLY UNLESS NOTED OTHERWISE.

ANY STRUCTURAL ENGINEERING DESIGN, PROVIDED BY OTHER AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF ILLINOIS.

THE STRUCTURE IS DESIGNED AS A STABLE UNIT AFTER ALL COMPONENTS ARE IN PLACE AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY BRACING AS REQUIRED FOR VERTICAL AND LATERAL STABILITY OF THE ENTIRE STRUCTURE OR PORTION THEREOF DURING CONSTRUCTION.

DESIGN CODE:

OCCUPANCY GROUP: B/S2
THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE
STRUCTURAL OCCUPANCY CATEGORY III

DESIGN LOADS:

FLOOR LIVE LOAD
LIVE LOAD = 100 PSF
ROOF DEAD LOAD = 15 PSF
ROOF LIVE LOAD = 20 PSF
ROOF SNOW LOAD
Pg = 24 PSF
Pf = 22 PSF
Ce = 1.0
I = II
Is = IMPORTANCE Factor 1.20
Ct = 1.0 THERMAL FACTOR

WIND DESIGN DATA
Basic Wind Speed = 120 mph
Wind Exposure C
Iw = IMPORTANCE FACTOR 1.15
Internal Pressure Coefficient, GCpi = ± 0.18
Roof Joist, Negative Pressure (Zone 1) = -28.61 psf
Roof Joist, Negative Pressure (Zone 2) = -34 psf
Roof Joist, Negative Pressure (Zone 3) = -34.45 psf

EARTHQUAKE DESIGN DATA
Seismic Importance Factor, Ie = 1.25
Mapped Spectral Response Acceleration, Ss = 0.256
Mapped Spectral Response Acceleration, S1 = 0.114
Site Class: D
Spectral Response Coefficient, Sds = 0.212
Spectral Response Coefficient, S1 = 0.181
Seismic Design Category: C
Special Reinforced Masonry Shear Wall System
Seismic Response Coefficient, Cs = 0.0181
Response Modification Factor, R = 5.50
Equivalent Lateral Force Procedure Used

STANDARDS:

ACI AMERICAN CONCRETE INSTITUTE
AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ANSI AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM AMERICAN SOCIETY OF TESTING AND MATERIALS
AWS AMERICAN WELDING SOCIETY
CRSI CONCRETE REINFORCING STEEL INSTITUTE
UL UNDERWRITER'S LABORATORY

DRYPACK:

DRYPACK SHALL BE 5,000 PSI NON-SHRINK GROUT.
INSTALL DRYPACK UNDER BEARING PLATES BEFORE FRAMING MEMBER IS INSTALLED.
AT COLUMNS, INSTALL DRYPACK UNDER BASEPLATES AFTER COLUMN HAS BEEN PLUMBED BUT PRIOR TO FLOOR OR ROOF INSTALLATION.

SHOP DRAWINGS:

SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS IN ADDITION TO ITEMS REQUIRED BY SPECIFICATIONS.

THE CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTAL. ITEMS NOT IN ACCORDANCE WITH CONTRACT DOCUMENTS SHALL BE FLAGGED UPON HIS REVIEW. ALL SHOP DRAWINGS SHALL BE REVIEW STAMPED BY THE CONTRACTOR PRIOR TO SUBMITTAL.

ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM CONTRACT DOCUMENTS SHALL BE CLOUDED BY THE MANUFACTURER OR FABRICATOR, ANY OF THE AFOREMENTIONED WHICH ARE NOT CLOUDED OR FLAGGED BY SUBMITTING PARTIES SHALL NOT CONSIDERED APPROVED AFTER A/E REVIEW, UNLESS NOTED ACCORDINGLY.

THE A/E MAY DISAPPROVE CHANGES TO THE SHOP DRAWINGS IDENTIFIED AND SUBMITTED BY THE CONTRACTOR DURING SHOP DRAWING REVIEW.

THE SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT ARE NOT TO BE CONSIDERED CHANGES TO CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE SURE ITEMS ARE CONSTRUCTED TO CONTRACT DOCUMENTS.

THE ADEQUACY OF ENGINEERING DESIGNS AND LAYOUT PERFORMED BY OTHERS RESTS WITH THE DESIGNING OR SUBMITTING AUTHORITY.

REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. RESPONSIBILITY FOR CORRECTNESS SHALL REST WITH THE CONTRACTOR.

THE CONTRACTOR SHALL NOT REPRODUCE ANY PORTION OF CONTRACT DOCUMENTS AS SHOP DRAWINGS.

THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR STRUCTURAL STEEL FRAMING. BRACING SHALL BE ABLE TO PROVIDE LATERAL STABILITY FOR FULL DESIGN STRENGTH OF FRAMING MEMBERS.

ONLY TWO REVIEWS PER SHOP DRAWINGS SHALL BE ALLOWED. ANY SUBSEQUENT REQUIRED REVIEWS OF THE SAME SHOP DRAWING SHALL BE AT THE COST OF THE CONTRACTOR.

FOUNDATION AND EARTH WORK:

EXTERIOR SPREAD FOOTINGS SHALL BE FOUNDED AT A MINIMUM DEPTH OF 36"
INTERIOR FOOTINGS MAY BE FOUNDED AT A DEPTH OF 1' BELOW THE FINAL SUBGRADE ELEVATION
DESIGN SOIL BEARING PRESSURE = 2,000 PSF.

SOILS SHALL BE INSPECTED BY A SOILS ENGINEER PRIOR TO PLACEMENT OF CONCRETE. ALL FOUNDATION AND EARTHWORK SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH ARCHITECT/ENGINEER AND SHALL BE INSPECTED AND APPROVED BY A SOILS ENGINEER PRIOR TO ANY TYPE OF CONSTRUCTION.

CONCRETE:

MINIMUM 28 DAY STRENGTH (F'c) = 4,000 PSI. ALL EXTERIOR CONCRETE, I.E. WALKS, CURBS AND GUTTERS, ETC.

MINIMUM 28 DAY STRENGTH (F'c) = 4,000 PSI. ALL BUILDING FOOTINGS, FOUNDATION WALL AND BUILDING FLOOR SLAB.

NECESSARY INSERTS, TIES, CLIPS, ANCHORS AND OTHER FASTENING DEVICES SHALL BE PROVIDED AS REQUIRED.

MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE NEED BE VIBRATED ONLY AROUND UNDER-FLOOR DUCTS, ETC. MAXIMUM SLUMP 4" FOR CONCRETE WITHOUT PLASTICIZER. IF PLASTICIZER IS USED, A HIGHER FINAL SLUMP MAY BE ALLOWED UPON STRUCTURAL ENGINEER'S APPROVAL. CAST CLOSURE POUR AROUND COLUMNS AFTER COLUMN DEAD LOAD IS APPLIED. UNLESS OTHERWISE APPROVED IN WRITING BY THE ARCHITECT, ALL CONCRETE SLABS ON GRADE SHALL BE BOUND BY CONTROL JOINTS (KEYED OR SAW CUT), AS SHOWN ON THE FOUNDATION PLAN, OR AS SUCH THAT THE ENCLOSED AREA DOES NOT EXCEED 400 SQUARE FEET. KEYED CONTROL JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING POURING; ALL OTHER JOINTS MAY BE SAW CUT. SAW CUTS MUST OCCUR WITHIN 12 HOURS OF CONCRETE PLACEMENT.

REINFORCING:

ASTM A615 (Fy = 60 KSI) DEFORMED BARS FOR ALL REINF. ALL GRADE 60 REINF. TO BE WELDED SHALL BE ASTM A106, WELDED WIRE FABRIC PER ASTM A185, WIRE PER ASTM A82. NO TACK WELDING OF REINFORCING BARS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE WITH THE STRUCTURAL ENGINEER. LATEST ACI CODE AND DETAILING MANUAL APPLY. CLEAR CONCRETE COVERAGE AS FOLLOWS:

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH _____ 3"
EXPOSED TO EARTH OR WEATHER _____ 2"
#6 OR LARGER _____ 1 1/2"
#5 OR SMALLER _____ 3/4"
FLAT SLAB INTERIOR _____ 3/4"
FLAT SLAB EXTERIOR _____ 1 1/2"
ALL OTHER PER LATEST EDITION OF ACI 318

SLAB ON GRADE, UNLESS OTHERWISE NOTED ON DRAWING, TO HAVE REINFORCEMENT 2 INCHES FROM TOP OF SLAB.

LAP SPLICES IN CONCRETE:

SEE LAP SPLICE SCHEDULE FOR REBAR. LAPS IN WELDED WIRE FABRIC SHALL BE MADE SO THAT THE OVERLAP, MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET, IS NOT LESS THAN THE SPACING OF CROSS WIRES PLUS 2 INCHES. ALL WELDED WIRE FABRIC SHALL BE CHAIRED TO ENSURE PROPER CLEARANCES.

ALL SPLICE LOCATIONS SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT ALL CORNERS AND INTERSECTIONS PER TYPICAL DETAILS. REINFORCING BAR SPACING GIVEN ARE MAXIMUM ON CENTERS. ALL BARS PER CRSI SPECIFICATIONS AND HANDBOOK. DONEL ALL VERTICAL REINFORCING TO FOUNDATION WITH STANDARD 90 DEGREE HOOKS UNLESS NOTED OTHERWISE. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE.

MIN. LAP SPLICE LENGTH SCHEDULE									
BAR TYPE	BAR SIZE								
	#3	#4	#5	#6	#7	#8	#9	#10	#11
CONCRETE	16"	22"	28"	32"	40"	52"	64"	82"	100"
CONCRETE TOP BARS	21"	28"	35"	42"	50"	66"	83"	106"	130"
MASONRY	—	24"	30"	36"	42"	48"	—	—	—

MASONRY:

HOLLOW MASONRY UNITS SHALL CONFORM TO ASTM C40, GRADE N, TYPE I, WITH A MINIMUM ULTIMATE COMPRESSIVE STRENGTH (fm) OF 3,750 PSI OF THE NET SECTION. MASONRY GROUT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2,000 PSI. MORTAR AND UNIT MASONRY SUCH THAT fm = 2500 PSI MINIMUM FOR THE ASSEMBLY. MAXIMUM GROUT LIFT SHALL BE 4'-0", UNLESS NOTED OTHERWISE ON THE PLANS. GROUT SHALL BE CONSOLIDATED BY METHODS WHICH ENSURE COMPLETE FILLING OF THE CELLS. ALL CELLS CONTAINING REINFORCING BARS AND/OR ANCHOR BELTS SHALL BE FULLY GROUTED. BEARING ZONES FOR LINTELS, ETC. SHALL BE OVER A MINIMUM OF TWO COURSES OF HOLLOW MASONRY UNITS GROUTED SOLID OR 100% SOLID BRICK OR BLOCK. ALL WALLS SHALL HAVE HORIZONTAL REINFORCEMENT AT 16" ON CENTER VERTICALLY. ALL BARS SHALL BE COMPLETELY EMBEDDED IN GROUT. ALL BARS SHALL BE PLACED AT THE MID POINT OF THE MASONRY WIDTH, BEARING PLATES AND ANCHOR BOLTS FOR ALL JOIST, BEAMS, AND LINTELS BEARING ON MASONRY SHALL PROVIDE AS REQUIRED.

VERTICAL REINFORCING:

(1) #5 (OR AS NOTED ON DRAWINGS) IN CENTER OF GROUT AT CENTER OF WALL, CONTINUOUS FULL HEIGHT OF WALL AT ALL CORNERS, INTERSECTIONS, WALL ENDS, BEAM BEARINGS, JAMBS, EACH SIDE OF CONTROL JOINTS AND AT INTERVALS NOT TO EXCEED 32" O.C. UNLESS NOTED OTHERWISE. TIE AT 8'-0" VERTICALLY, WITH SINGLE WIRE LOOP TIE. LAP SPLICES SHALL BE 48 BAR DIAMETERS FOR GRADE 60 BARS. DONEL ALL VERTICAL REINFORCING TO FOUNDATION WITH DOWELS TO MATCH VERTICAL REINFORCING. MECHANICAL CONNECTORS MAY BE USED IN LIEU OF LAPS. MECHANICAL CONNECTORS MUST BE ABLE TO DEVELOP 125 PERCENT OF THE BAR YIELD STRENGTH.

HORIZONTAL REINFORCING:

(2) #5 IN MINIMUM 8" DEEP GROUTED CONTINUOUS BOND BEAM AT ROOF LINE. (1) #5 IN MINIMUM 8" DEEP GROUTED CONTINUOUS BOND BEAM AT TOP OF PARAPET OR TOP OF FREESTANDING WALL. PLACE THESE BARS CONTINUOUS THRU CONTROL JOINTS PER TYPICAL DETAIL. PROVIDE BENT BARS PER TYPICAL DETAILS, TO MATCH HORIZONTAL BOND BEAM REINFORCING. AT CORNERS AND WALL INTERSECTION TO MAINTAIN BOND BEAM CONTINUITY. LAP SPLICES SHALL BE 48 BAR DIAMETERS FOR GRADE 60 BARS. STAGGER SPLICES A MINIMUM OF 40 BAR DIAMETERS. DO NOT SPLICE WITHIN 8'-0" OF CONTROL JOINTS. STANDARD HEIGHT (NO. 9 GAUGE WIRE) LADDER TYPE JOINT REINFORCEMENTS AT 16" O.C. IN MASONRY WALLS. PROVIDE HORIZONTAL REINFORCEMENT EVERY COURSE AT 8" O.C. BELOW GRADE.

WOOD NOTES:

- ALL SAWN LUMBER SHALL BE NO. 2 4 BETTER, SOUTHERN PINE WITH MC = 19%, WITHOUT CHECKS.
- ALL STEEL CONNECTORS SHALL BE SIMPSON STRONG TIE CONNECTORS OR APPROVED EQUAL.
- PROVIDE TEMPORARY BRACING UNTIL THE PERMANENT BRACING IS IN PLACE.
- ALL SOLE PLATES SUPPORTED ON THE MASONRY WALL OR STEEL BEAM SHALL BE PRESSURE TREATED AS RECOMMENDED BY THE AMERICAN WOOD PRESERVERS INSTITUTE (AWPI).
- ALL CUTS, NOTCHES AND DRILL HOLES IN PRESSURE TREATED WOOD SHALL BE RETREATED IN THE FIELD ACCORDING TO AWPA M4 REQUIREMENTS.
- ALL WALL SHEATHING SHALL BE EXPOSURE 1, C-D PLUGGED, STRU II, APA RATED.
- ALL PROTRUDING NAILS SHALL BE CLINCHED.
- THE FOLLOWING NAILING SCHEDULE SHALL BE USED UNLESS NOTED OTHERWISE

CONNECTION
BRIDGING TO TRUSS
TOP PLATE TO STUD
STUD TO SOLE PLATE
DOUBLE STUDS
DOUBLED TOP PLATES
BUILT UP COLUMNS
CONTINUOUS HEADER, TWO OR MORE PIECES

NAILING
2-16d
2-16d END NAIL
2-16d END NAIL OR 4-8d TOE NAIL
16d AT 12"
16d AT 8"
16d AT 12"
16d AT 16" ALONG EACH EDGE

5/8" ROOF SHEATHING PLYWOOD OR OSB

1/2" PLYWOOD WALL SHEATHING OR OSB

1/2" PLYWOOD SHEATHING OR OSB ON SHEAR WALLS

K. ALL SHEAR WALLS SHALL BE BLOCKED.

L. NOT USED

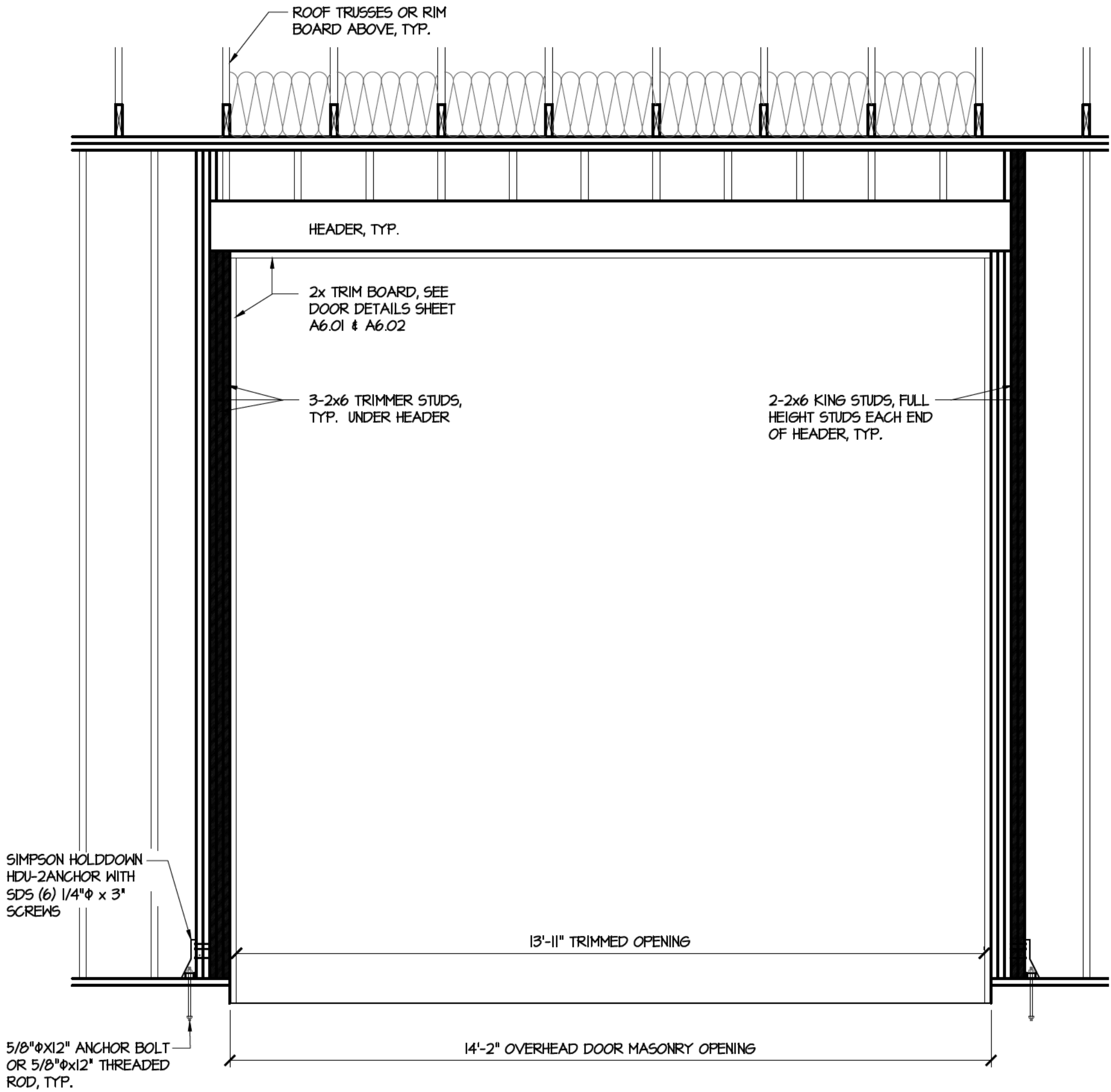
M. TIMBER ROOF TRUSS LOADING
TOP CHORD LL = 30 PSF ROOF LIVE LOAD AND/OR SNOW DRIFT
DL = 10 PSF + RTU HEIGHTS INDICATED ON PLAN
BOTTOM CHORD DL = 10 PSF

N. CONNECTOR PLATES SHALL BE DESIGNED IN ACCORDANCE WITH T.P.I. SPECIFICATIONS. ALLOWABLE STRESS INCREASE FOR SHORT TERM LOADING SHALL BE 25%. PROVIDE METAL HANGERS AT HEADERS, SIMILAR TO (SIMPSON HIT424 OR EQUAL).

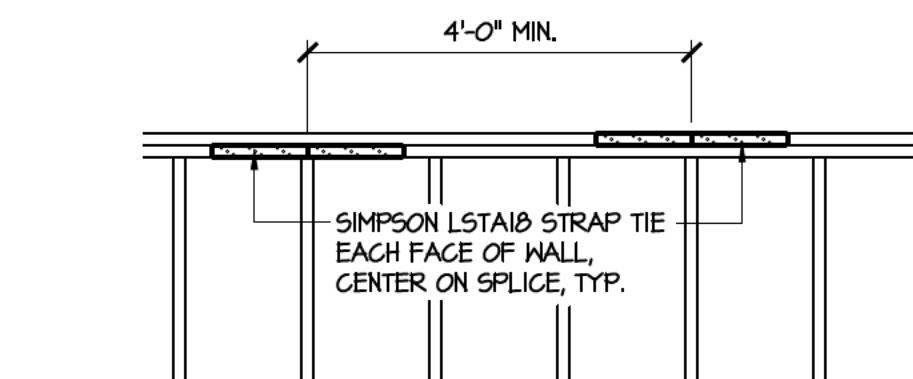
O. HARDWARE AND FASTENERS IN CONTACT WITH THE PRESSURE TREATED FIRE RETARDANT LUMBER SHALL BE HOT-DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL.

P. PROPER ERECTION BRACING SHALL BE INSTALLED TO HOLD THE TRUSSES TRUE AND PLUMB AND IN SAFE CONDITION UNTIL PERMANENT TRUSS BRACING AND BRIDGING CAN BE SOLIDLY NAILED PLACE TO FORM A STRUCTURALLY SOUND FRAMING SYSTEM. ALL ERECTION AND PERMANENT BRACING SHALL BE INSTALLED AND ALL COMPONENTS PERMANENTLY FASTENED BEFORE THE APPLICATION OF ANY LOADS TO THE TRUSSES. ALL BRACING AND BRIDGING SHALL BE DESIGNED BY THE TRUSS MANUFACTURER AND INDICATED ON THE SHOP DRAWINGS. ALL PREFABRICATED WOOD TRUSSES ARE TO BE INSTALLED IN ACCORDANCE WITH BRACING WOOD TRUSSES COMMENTARY (BWT-16). OR (HFT-80) AS PUBLISHED BY THE TRUSS PLATE INSTITUTE, DESIGN OF ROOF TRUSSES SHALL BE PERFORMED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ILLINOIS. DESIGN CALCULATIONS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION. THESE CALCULATIONS SHALL BE SEALED BY THE DESIGN ENGINEER.

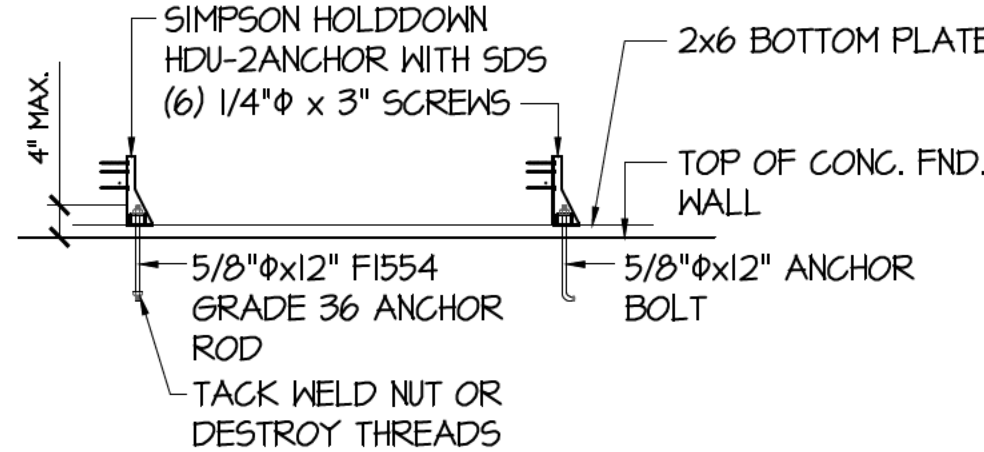
Q. INTERIOR AND EXTERIOR GYP. BOARD SHEATHING SHALL BE FASTENED TO ALL STUDS AND TOP AND BOTTOM WALL PLATES WITH DRYWALL NAILS OR SCREWS AT 7" O.C. INTERIOR GYP. BOARD SHALL EXTEND FULL HEIGHT OF WALL FROM FLOOR SLAB TO ROOF TRUSS BEARINGS.



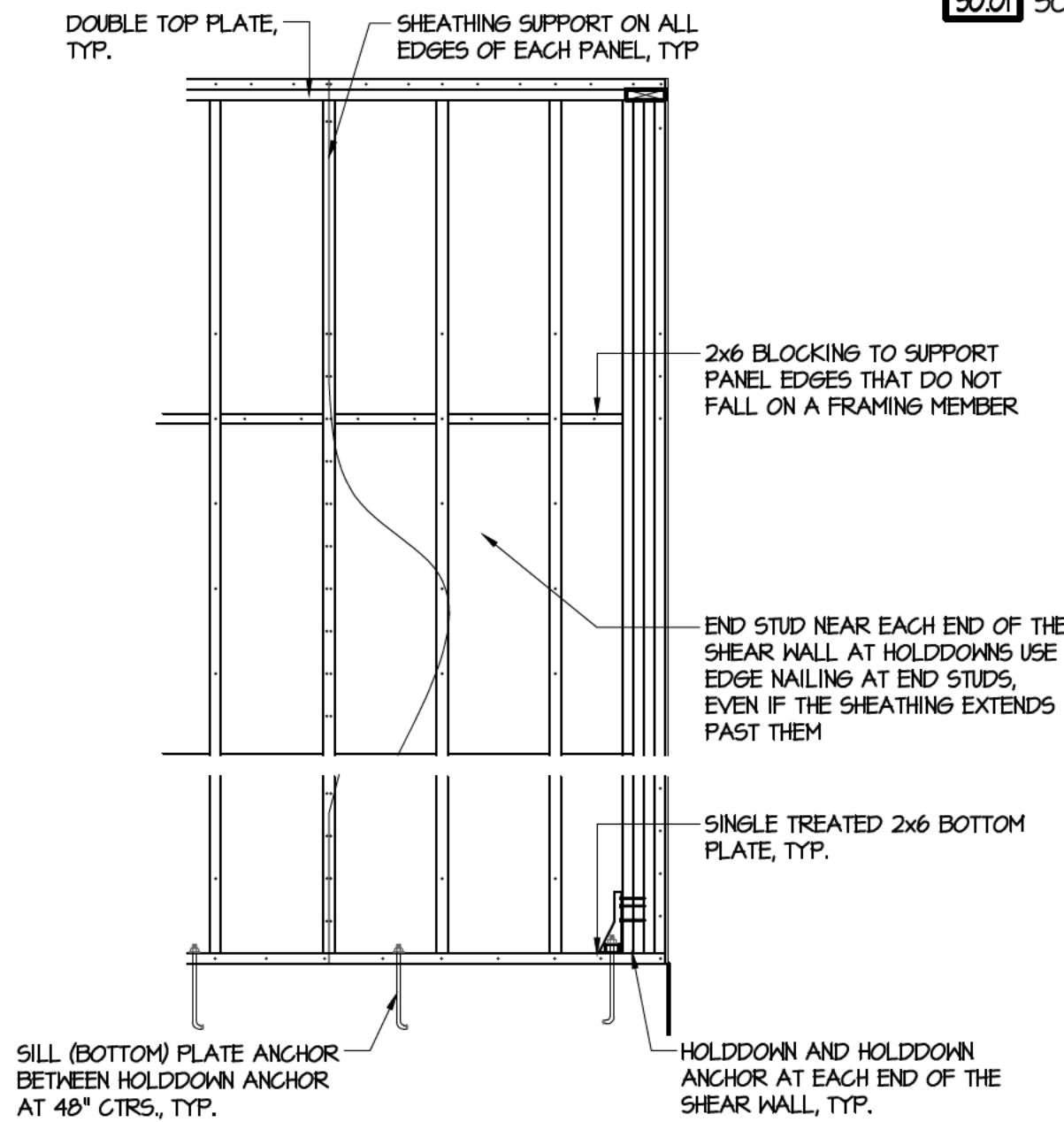
A TYP. OVERHEAD DOOR OPENING
SCALE: 1/2"=1'-0"



B TYP. TOP PLATE SPLICE
SCALE: 1/2"=1'-0"



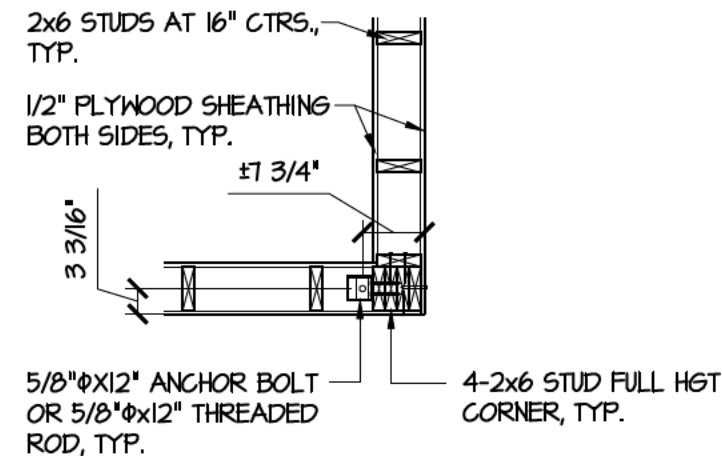
C HOLD DOWN ANCHOR
SCALE: 1/2"=1'-0"



D TYP. SHEAR WALL
SCALE: 1/2"=1'-0"

SILL (BOTTOM) PLATE ANCHOR BOLT NOTES:

- ANCHOR BOLTS SHALL MEET ASTM 1554 GRADE 36 REQUIREMENTS AND SHALL BE GALVANIZED
- ANCHOR BOLTS SHALL BE MIN. 1/2"
- ANCHOR BOLTS SHALL BE EMBEDDED MINIMUM 7" IN CONCRETE FOUNDATION (STEM) WALL
- ANCHOR BOLTS SHALL REMAIN PLUMB AFTER CONCRETE POUR
- CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE THREADS
- PLACEMENT SHALL START 12" OFF CORNERS AND 48" CTRS. FROM FIRST BOLT
- LOCATE AN ANCHOR NO FARTHER THAN 8" FROM EACH OPENING (DOORWAYS, ETC.)
- PROVIDE 4" VERTICAL PROTECTION ON ANCHOR BOLTS (SINGLE 2x6 SILL PLATE)



E WALL CORNER DTL.
SCALE: 1/2"=1'-0"

The Upchurch Group

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engineers
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Professional Design
Firm Corporation
License No. 184.003401

STRUCTURAL NOTES

Mattoon Fire Department
Station #3 Addition
2700 Marshall Avenue
Mattoon, Coles County, Illinois

Drawn: **Enire, R.**

Date: **June 20, 2025**

Project No.

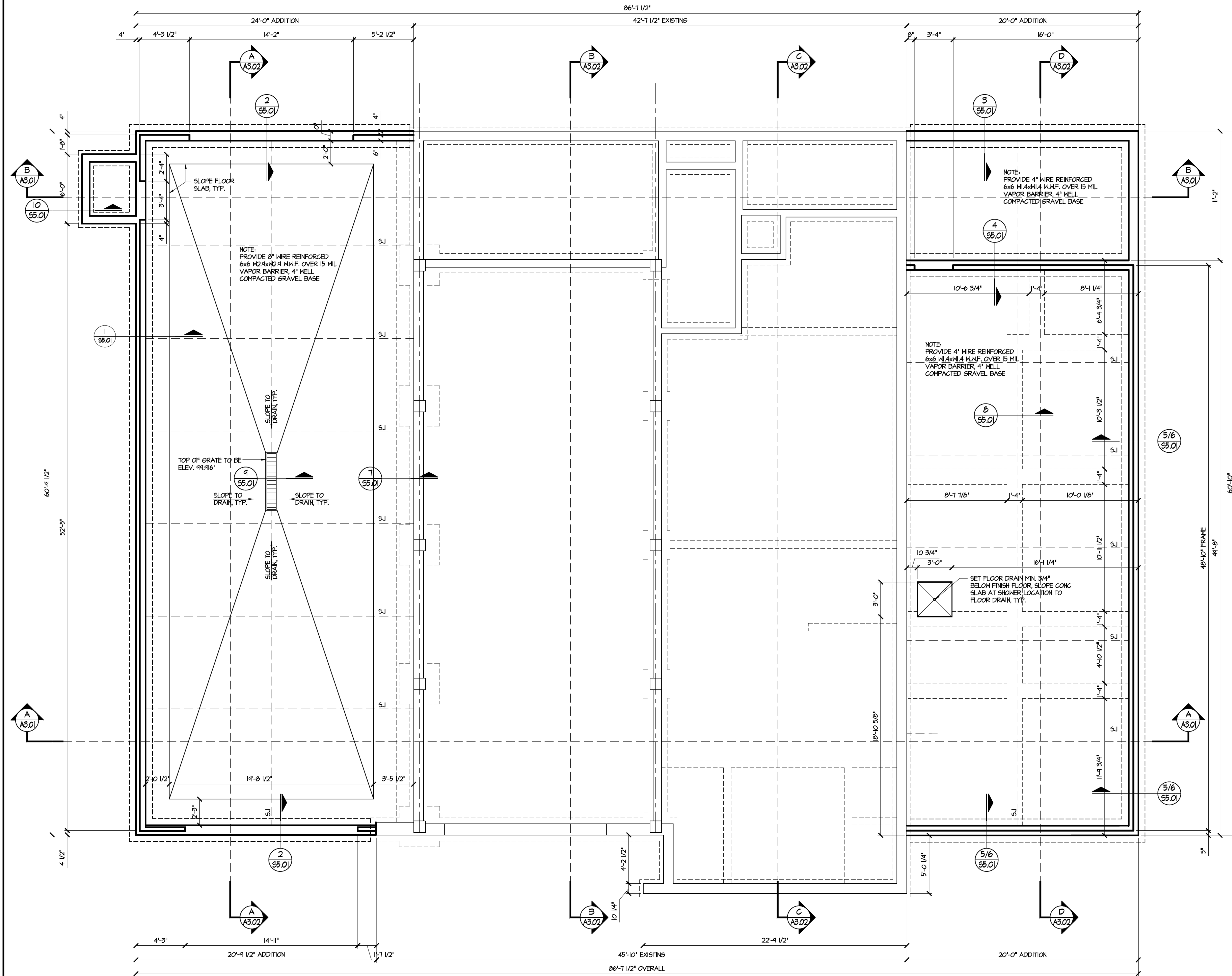
2724042

NORTH

sheet no.

S0.01

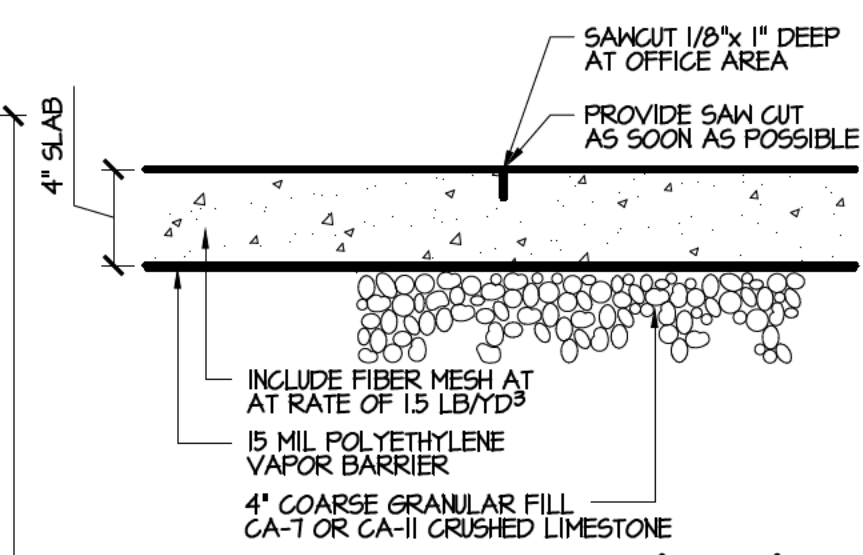
The Contractor shall obtain and verify all dimensions and conditions at job site and be fully responsible for same.



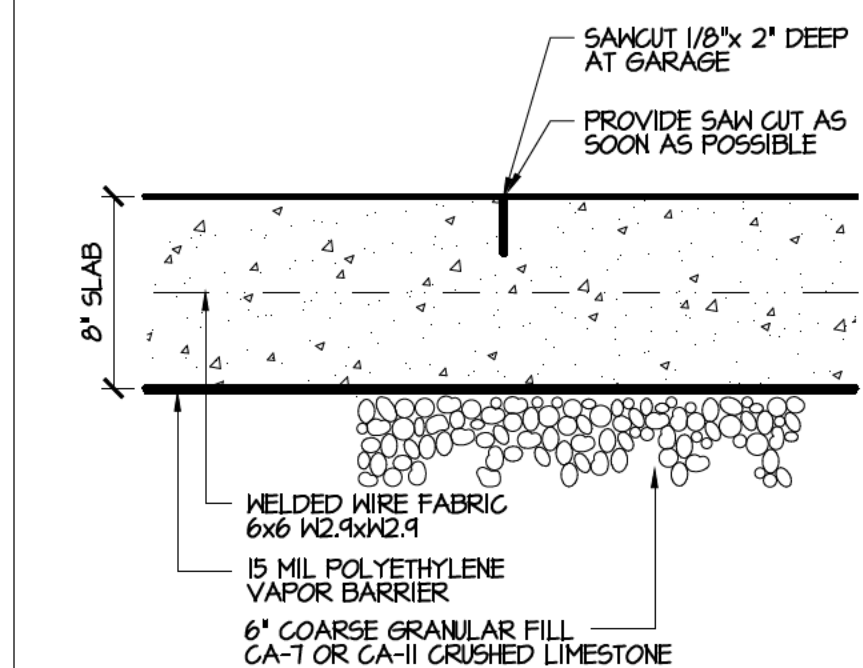
FLOOR PLAN
SCALE: 1/4"=1'-0"

CONTINUOUS FOOTING SCHEDULE			
PLAN MARK	FOOTING SIZE	REINFORCEMENT LONGITUDINAL	REINFORCEMENT TRANSVERSE
CF1	2'-0" x 1'-0"	(3) - #4 BARS CONTINUOUS	(1) - #5 TIE BAR AT 12" CTRS.
CF2	1'-4" x 1'-0"	(2) - #4 BARS CONTINUOUS	(1) - #5 TIE BAR AT 12" CTRS.

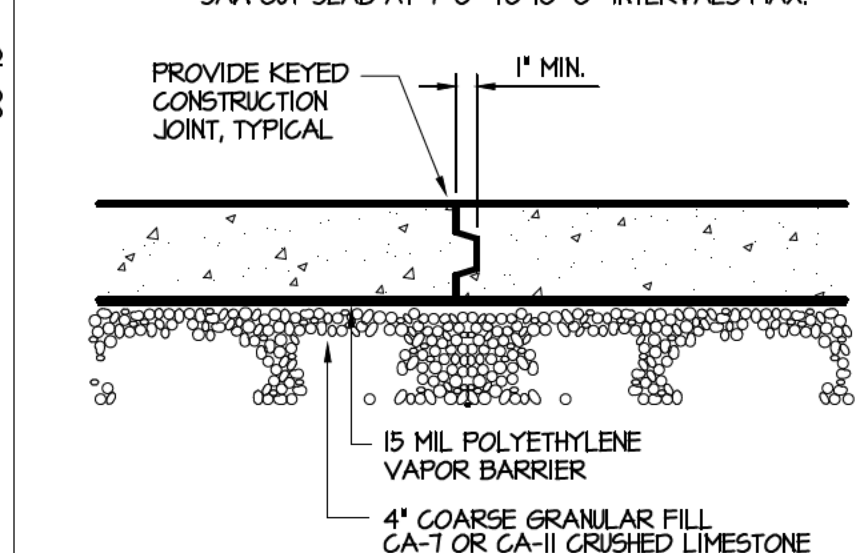
SPREAD FOOTING SCHEDULE			
PLAN MARK	FOOTING SIZE	REINFORCEMENT LONGITUDINAL	REINFORCEMENT TRANSVERSE
CF1	2'-0" x 1'-0"	(3) - #4 BARS CONTINUOUS	(1) - #5 TIE BAR AT 12" CTRS.



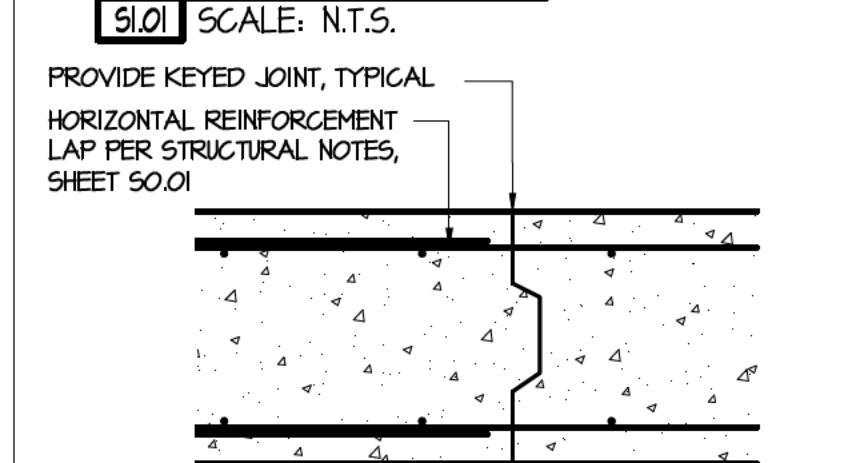
SAWED JOINT (S.J.)
SCALE: N.T.S.
SAW CUT SLAB AT 10'-0" INTERVALS MAX.



SAWED JOINT (S.J.)
SCALE: N.T.S.
SAW CUT SLAB AT 1'-0" TO 10'-0" INTERVALS MAX.



CONSTRUCTION JOINT (C.J.)
SCALE: N.T.S.



TYPICAL WALL CONST. JOINT (C.J.)
SCALE: N.T.S.

- ENGINEERED FILL**
- ENGINEERED FILL SHALL BE PROVIDED AT EXCAVATION AREA. THE NEW FILL SHALL EXTEND FROM UNDISTURBED SOIL TO THE BOTTOM OF NEW SPREAD FOOTINGS. THE FILL SHALL CONSIST OF CRUSHED LIMESTONE (SEE SPECIFICATIONS) INSTALLED IN 8" LOOSE LAYERS AND COMPACTED TO A MINIMUM 98% OF STANDARD PROCTOR. ENGINEERED FILL SHALL BE PLACED AT ANY LOCATION WITH IN 48" OF PROPOSED FOUNDATION. SEE SPECIFICATIONS
 - FILL MATERIAL ABOVE THE PROPOSED FOOTING ELEVATION SHALL BE THE SAME MATERIAL INSTALLED IN 8" LOOSE LIFTS COMPACTED TO 95% OF MAXIMUM STANDARD LABORATORY DRY DENSITY

LEGEND	
---	NEW FOOTING
---	NEW FOUNDATION WALL
---	THICKENED SLAB
S.J.	SEE DETAIL 1 & 2 THIS SHEET
C.J.	SEE DETAIL 3 THIS SHEET

The Upchurch Group

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License No. 184-003401

FOUNDATION PLAN

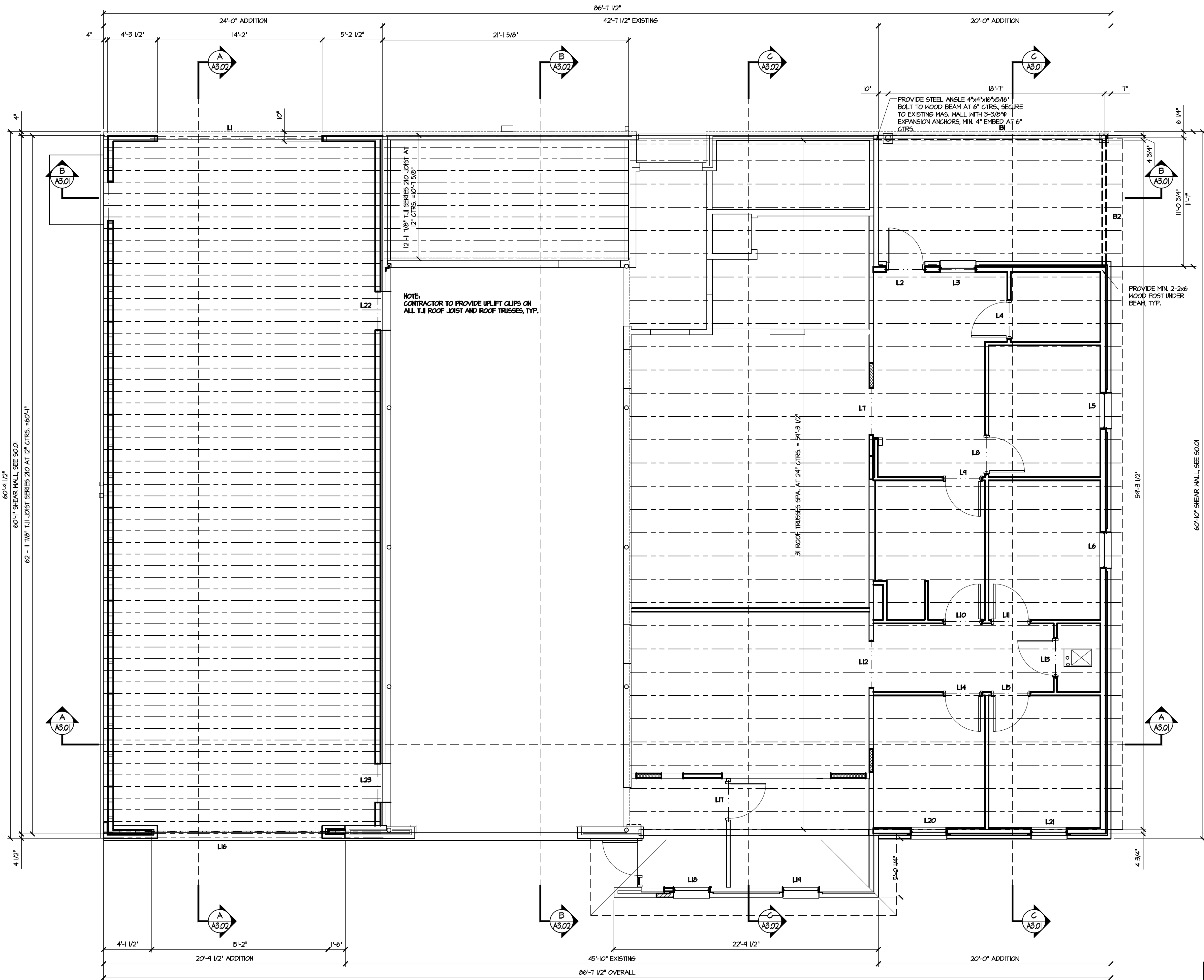
Mattson Fire Department
Station #3 Addition
2700 Marshall Avenue
Mattson, Coles County, Illinois

Drawn: _____
Date: **June 20, 2025**
Project No: **2724042**

NORTH
↑

sheet no.
S1.01

The Contractor shall obtain and verify all dimensions and conditions at job site and be fully responsible for same.



ROOF FRAMING PLAN
9.02 SCALE: 1/4"=1'-0"

BEAM SCHEDULE			
MARK	SIZE	BEAM TYPE	BEARING ELEV.
B1	WOOD	I	107'-11 5/8" BRG
B2	WOOD	I	107'-11 5/8" BRG

1/2" PLYWOOD "ZIP" SHEATHING ON INTERIOR SIDE OF BEAM, TYP.
2-2x10 AND 2-2x10 WITH SOLID 1/2" PLYWOOD SANDWICHED BETWEEN, GLUED & NAILLED
1/2" PLYWOOD "ZIP" SHEATHING ON EXTERIOR SIDE OF BEAM, TYP.

BEAM BRG
ELEV. 107'-11 5/8"

BEAM TYPE "I"

BEAM TYPES
9.02 SCALE: 3/4"=1'-0"

LINTEL SCHEDULE			
MARK	LINTEL SIZE/TYP.	BEARING ELEV. A.F.F.	SPAN
L1	E	112'-0"	14'-2"
L2	D	107'-2"	3'-4"
L3	C	107'-2"	3'-4"
L4	A	107'-2"	3'-4"
L5	C	107'-2"	3'-4"
L6	C	107'-2"	3'-4"
L7	B	107'-2"	4'-0"
L8	A	107'-2"	3'-4"
L9	A	107'-2"	3'-4"
L10	A	107'-2"	3'-4"
L11	A	107'-2"	3'-4"
L12	B	107'-2"	4'-0"
L13	A	107'-2"	3'-4"
L14	A	107'-2"	3'-4"
L15	A	107'-2"	3'-4"
L16	F	112'-0"	15'-2"
L17	A	108'-8"	3'-4"
L18	C	107'-2"	3'-4"
L19	C	107'-2"	3'-4"
L20	C	107'-2"	3'-4"
L21	C	107'-2"	3'-4"
L22	D/A3.06	± 107'-2"	3'-4"
L23	D/A3.06	± 107'-2"	3'-4"

2-2x6 HEADER WITH 1/2" PLYWOOD FILLER BETWEEN, GLUED & NAILLED
LINTEL/HDR. BRG
ELEV. 107'-2"

2-2x10 HEADER WITH 1/2" PLYWOOD FILLER BETWEEN, GLUED & NAILLED
LINTEL/HDR. BRG
ELEV. 107'-0"

LINTEL TYPE "A"

LINTEL TYPE "B"

3-2x12 WITH SOLID 1/2" PLYWOOD SANDWICHED BETWEEN, GLUED & NAILLED
4"x3 1/2"x5/16" STEEL ANGLE WITH GALVANIZED FINISHED, 8" BRG, EACH END
HEADER BRG
ELEV. 106'-11"
LINTEL BRG
ELEV. 106'-10 5/8"

2-2x12 WITH 2-BLOCKING AT 12" CTRS. SANDWICHED BETWEEN, GLUED & NAILLED, PROVIDE BATT INSULATION
4"x3 1/2"x5/16" STEEL ANGLE WITH GALVANIZED FINISHED, 8" BRG, EACH END
HEADER BRG
ELEV. 107'-2"
LINTEL BRG
ELEV. 107'-1 5/8"

LINTEL TYPE "C"

LINTEL TYPE "D"

3 1/2" x 1'-4" PARALLAM PSL HEADER
3 1/2" x 6" x 3/8" STEEL GALV. ANGLE
LINTEL/HDR. BRG
ELEV. 112'-0"

LINTEL TYPE "E"

5 1/4" x 11 7/8" MICROLAM LVL HEADER
LINTEL/HDR. BRG
ELEV. 112'-0"

LINTEL TYPE "F"

LINTEL TYPES
9.02 SCALE: 3/4"=1'-0"

The Upchurch Group

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engineers
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Professional Design
Firm Corporation
License No. 184-003401

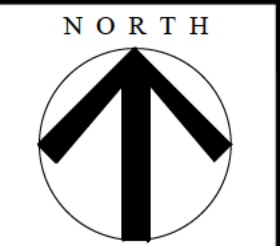
ROOF FRAMING PLAN

Mattoon Fire Department
Station #3 Addition
2700 Marshall Avenue
Mattoon, Coles County, Illinois

Drawn

Date: June 20, 2025

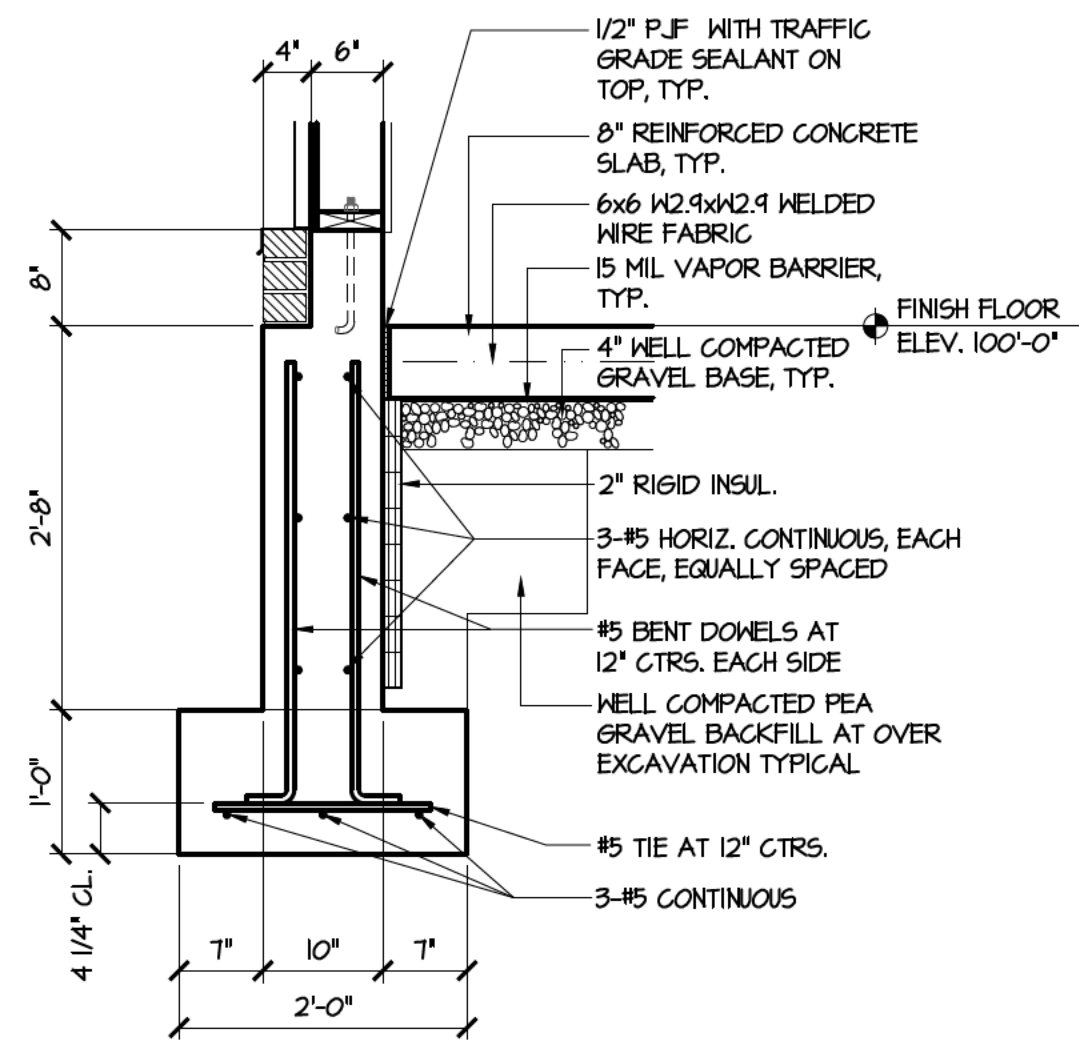
Project No.
2724042



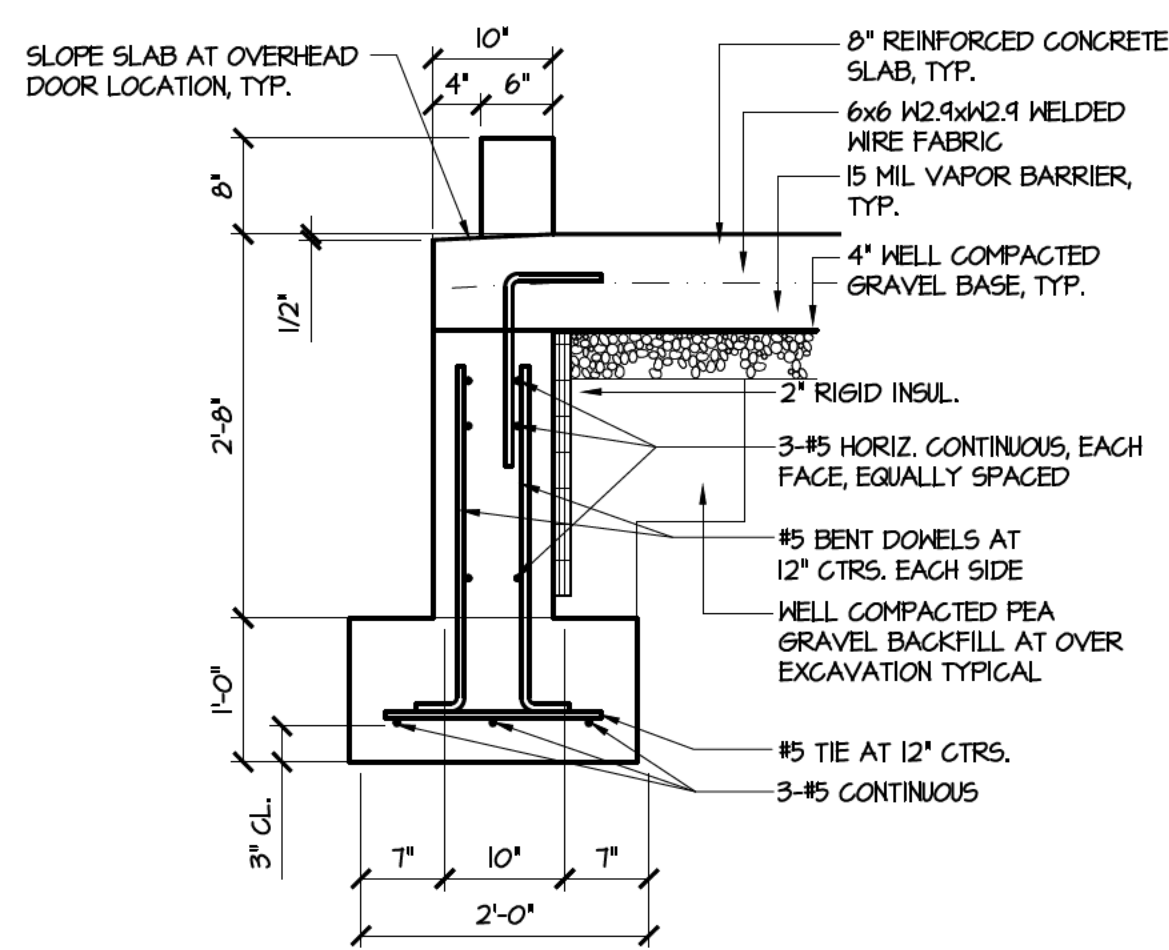
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S1.02

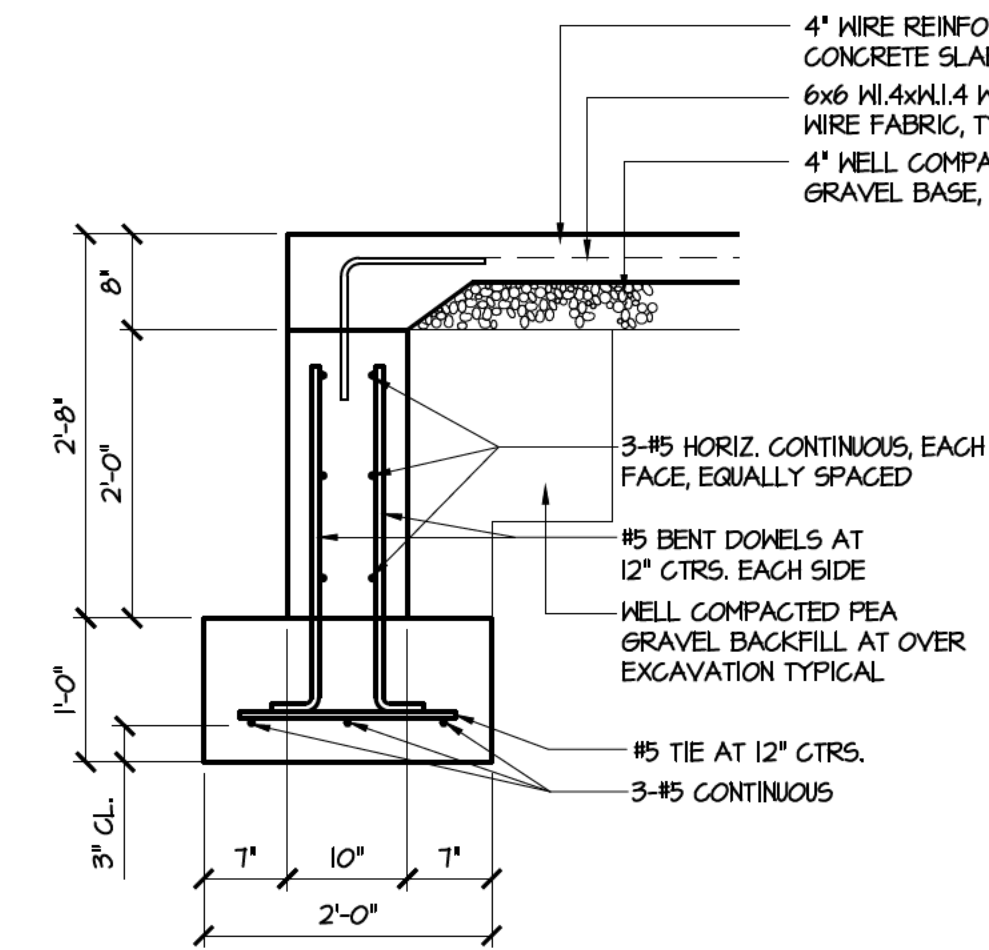
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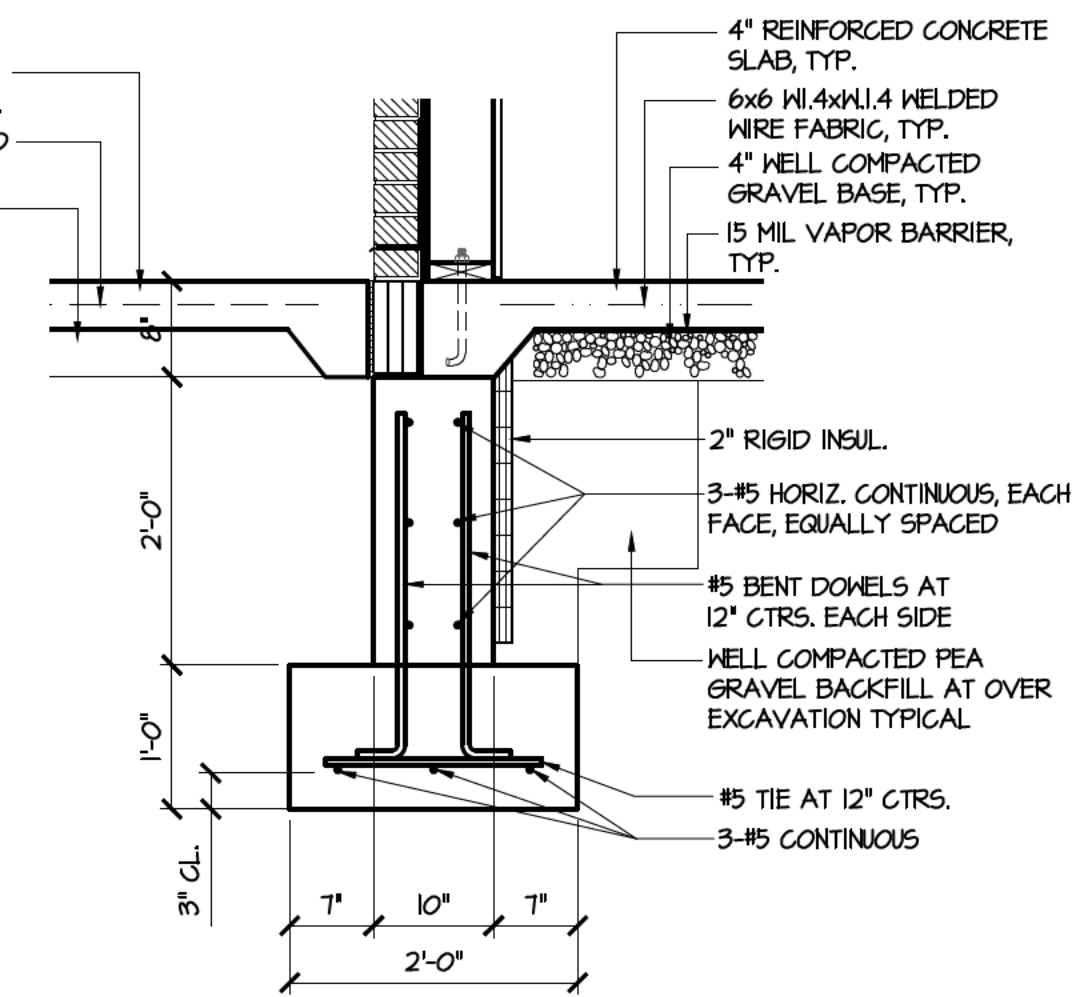
EXTERIOR FOUNDATION WALL DETAIL
SCALE: 3/4"=1'-0"



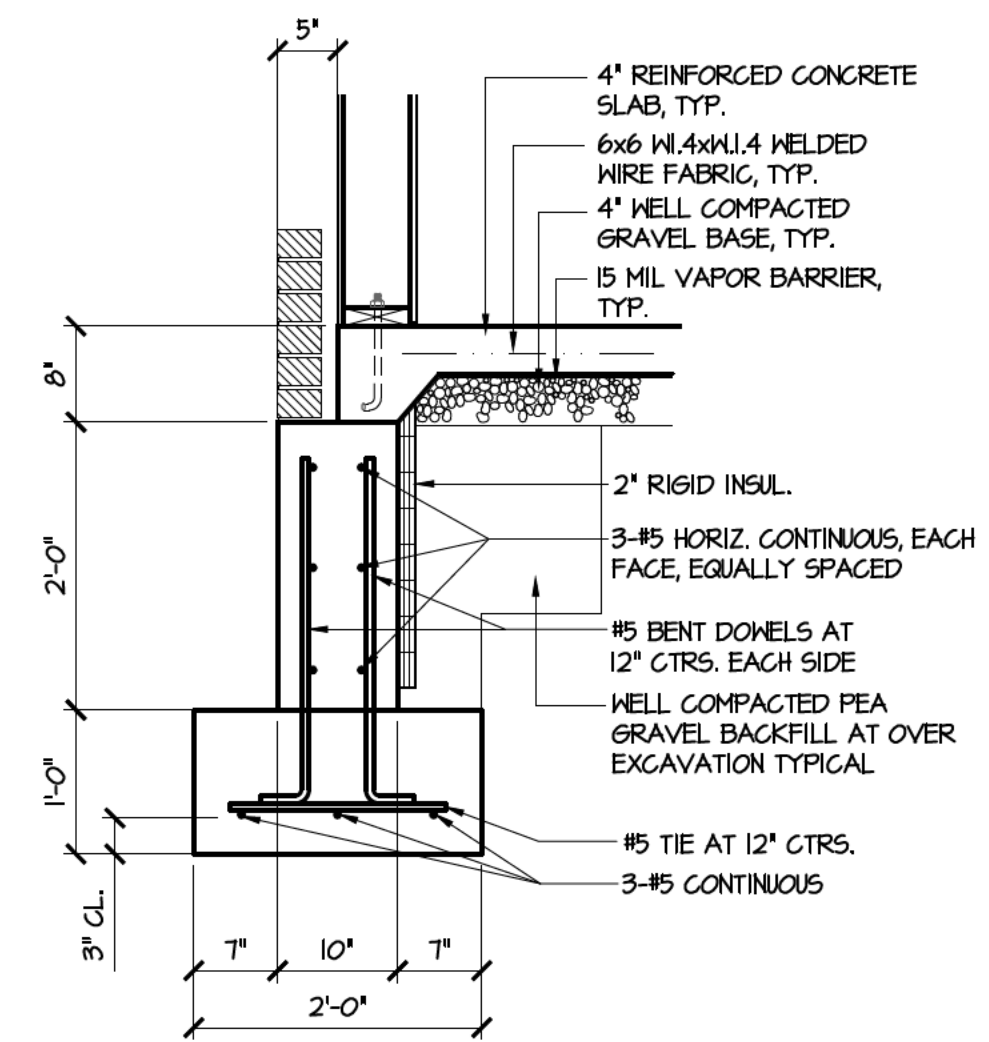
EXTERIOR FOUNDATION WALL DETAIL
SCALE: 3/4"=1'-0"



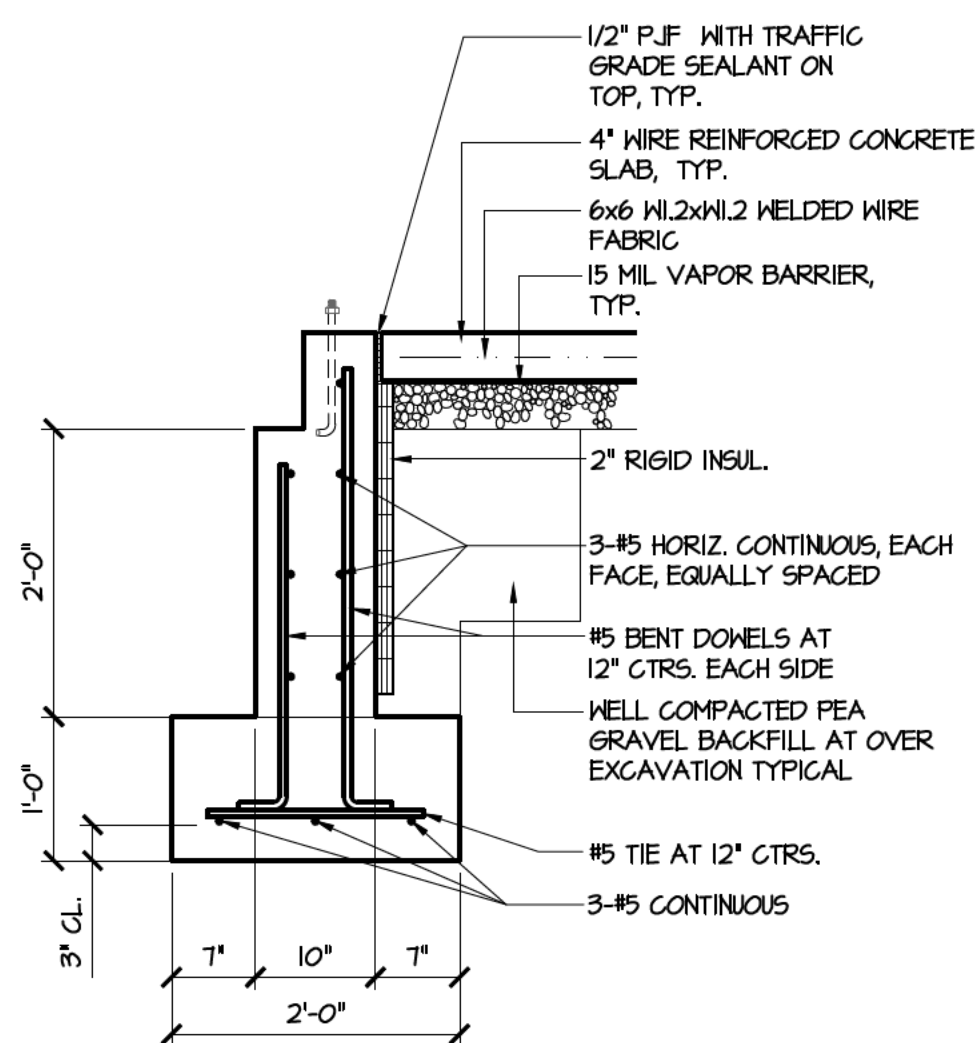
EXTERIOR FOUNDATION WALL DETAIL
SCALE: 3/4"=1'-0"



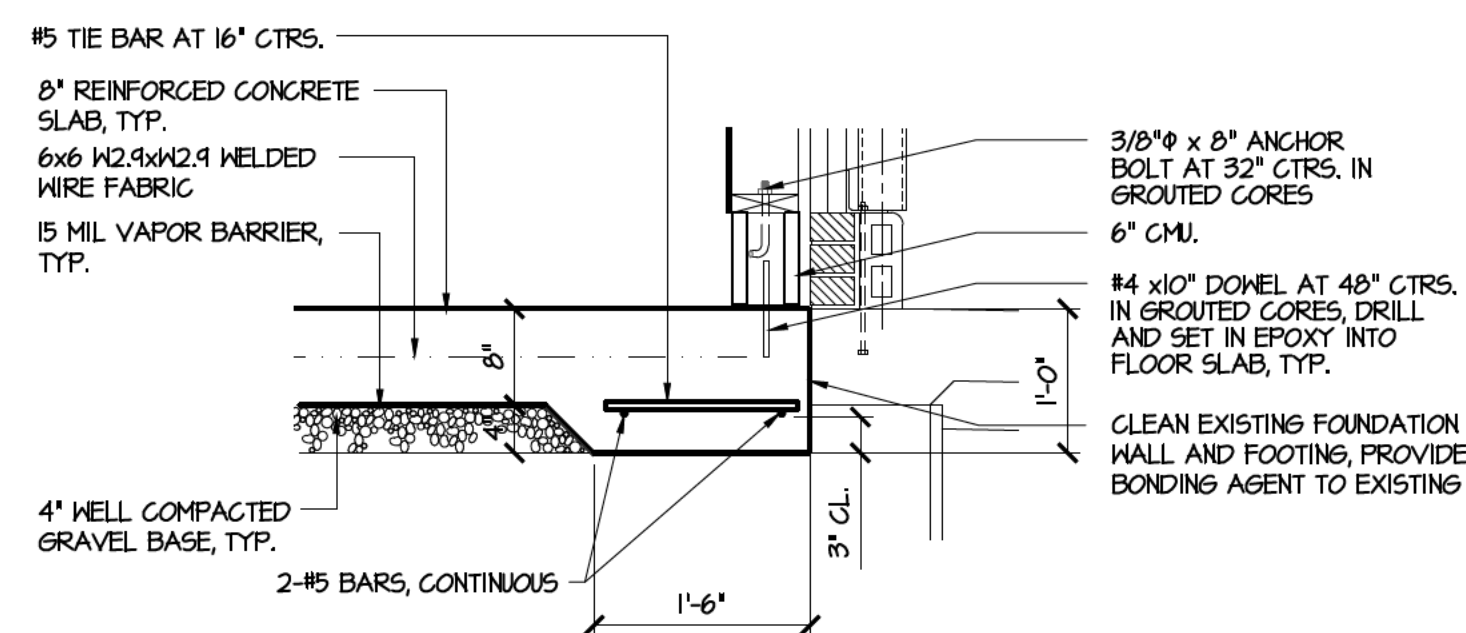
EXTERIOR FOUNDATION WALL DETAIL
SCALE: 3/4"=1'-0"



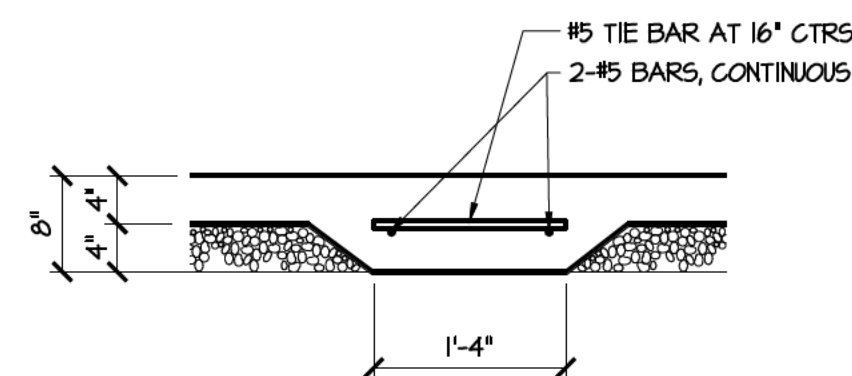
EXTERIOR FOUNDATION WALL DETAIL
SCALE: 3/4"=1'-0"



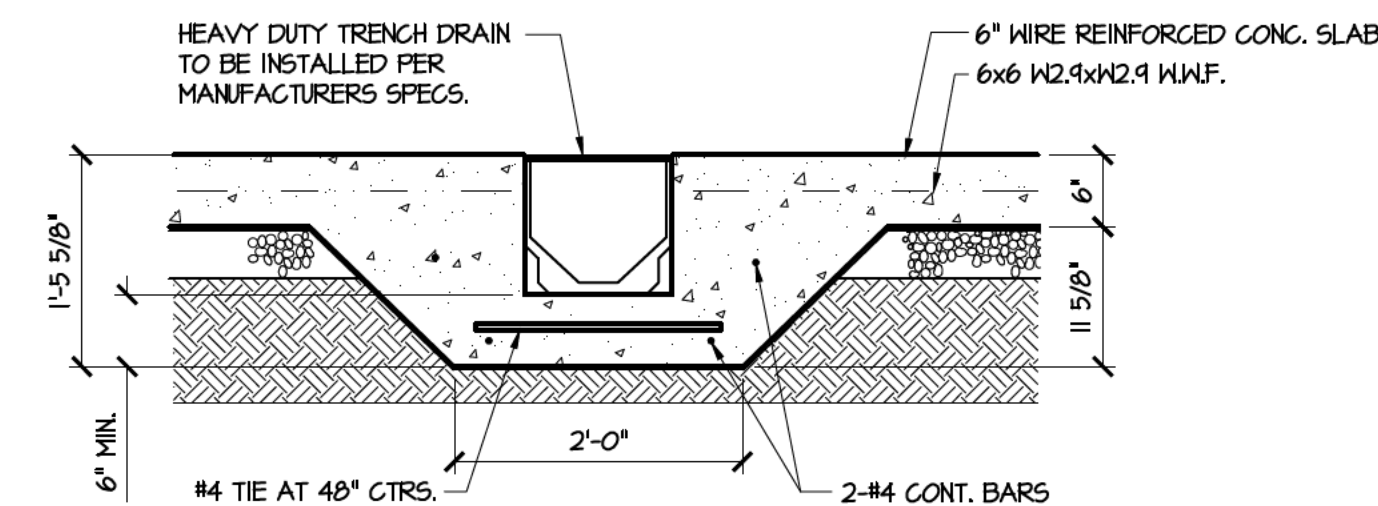
EXTERIOR FOUNDATION WALL DETAIL (optional)
SCALE: 3/4"=1'-0"



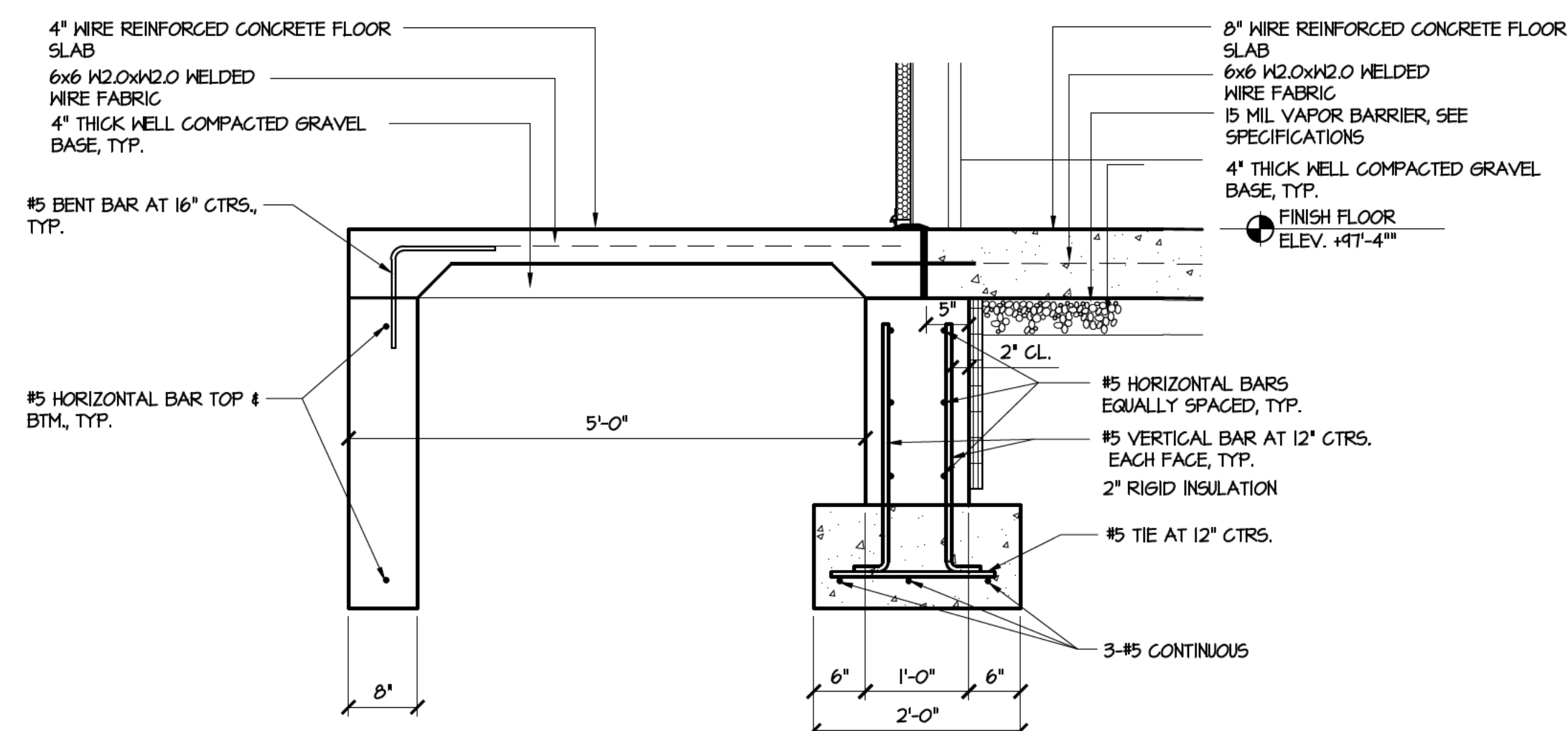
THICKENED EDGE FOOTING DETAIL
SCALE: 3/4"=1'-0"



THICKENED SLAB DETAIL
SCALE: 3/4"=1'-0"



TRENCH DRAIN DTL.
SCALE: 3/4"=1'-0"



TYP. STOOP DETAIL
SCALE: 3/4"=1'-0"

PIPING LEGEND

-----	EXISTING DOMESTIC COLD WATER SUPPLY (CW)
-----	NEW DOMESTIC COLD WATER SUPPLY (CW)
-----	EXISTING DOMESTIC HOT WATER SUPPLY (HW)
-----	NEW DOMESTIC HOT WATER SUPPLY (HW)
-----	EXISTING HOT WATER RETURN LINE (HWR)
-----	NEW HOT WATER RETURN LINE (HWR)
-----	EXISTING SANITARY PIPING (SAN)
-----	NEW SANITARY PIPING (SAN)
-----	EXISTING VENT PIPING (VENT)
-----	NEW VENT PIPING (VENT)
-----	ABOVE GRADE GAS
-----	BELOW GRADE GAS

ABBREVIATIONS:

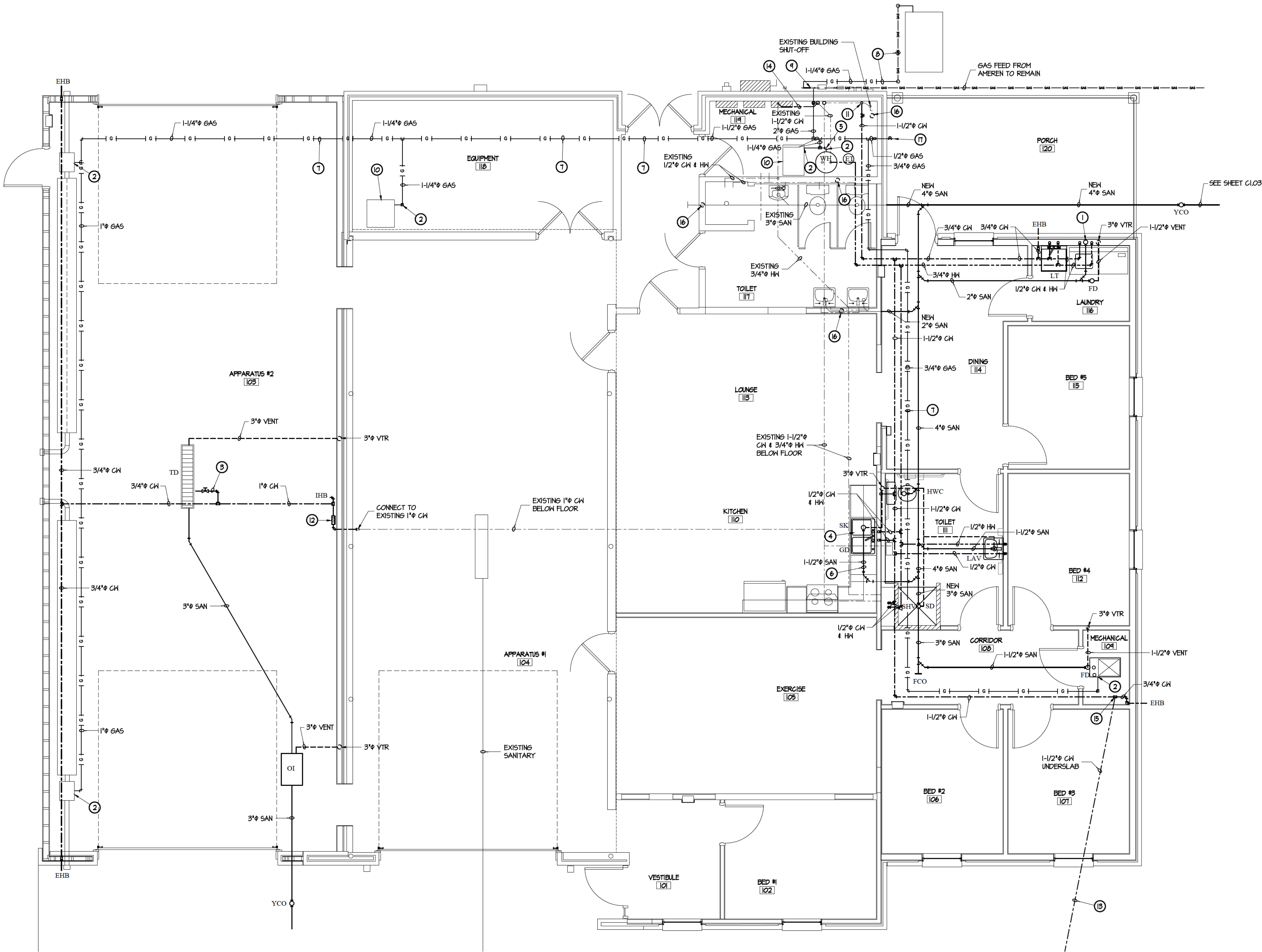
CW	- DOMESTIC COLD WATER PIPING
HW	- DOMESTIC HOT WATER PIPING
HWR	- HOT WATER RETURN PIPING
SAN	- SANITARY PIPING
VENT	- VENT PIPING
GAS	- NATURAL GAS PIPING
AIR	- COMPRESSED AIR

GENERAL NOTES:

- ALL HORIZONTAL SANITARY PIPING SHALL BE SLOPED AT 1/8" PER LF. UNLESS OTHERWISE NOTED.
- ALL CLEANOUTS SHALL HAVE A CLEARANCE OF 18" MINIMUM FOR RODDING.
- REFER TO ARCHITECTURAL PLANS FOR REQUIRED HORIZONTAL DISTANCES AND FIXTURE MOUNTING HEIGHTS.
- REFER TO SPECIFICATIONS SECTION 22 40 00 FOR PLUMBING FIXTURE ROUGH-IN REQUIREMENTS.
- INSTALL PLUMBING PIPING IN ACCORDANCE WITH ILLINOIS PLUMBING CODE.
- PROVIDE VENTING PER ILLINOIS PLUMBING CODE. NO EXPOSED VENT PIPING SHALL BE ALLOWED, EXCEPT IN MECHANICAL OR APPARATUS BAY #2.
- ANY DOMESTIC WATER, GAS, OR COMPRESSED AIR PIPING INSTALLED WITHIN 3 FEET OF INFRA-RED HEATERS SHALL BE INSTALLED ABOVE REFLECTORS.

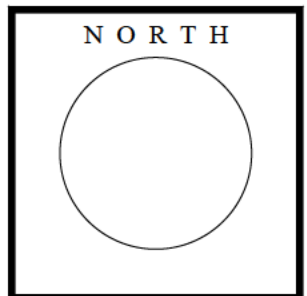
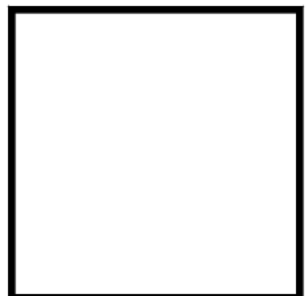
PLAN NOTES

- PROVIDE WASHER BOX WITH HOT/COLD AND DRAIN CONNECTION FOR CLOTHES WASHING MACHINE.
- SEE DETAIL 3/P6.01 FOR GAS PIPING CONNECTION AT GAS FIRED HEATING EQUIPMENT.
- PROVIDE 1" CW LINE WITH VALVE FOR FIRE TRUCK TANK FILL.
- PROVIDE GARBAGE DISPOSAL UNDER SK FIXTURE, SEE SCHEDULE ON SHEET P6.01.
- PROVIDE NEW WATER HEATER AND EXPANSION TANK IN LOCATION OF EXISTING WATER HEATER. MODIFY EXISTING SUPPLY AND VENT PIPES, SEE DETAIL 1/P6.01.
- CONNECT SANITARY FROM NEW SKI TO EXISTING SANITARY LINE.
- INSTALL NEW GAS LINE UNDER EXISTING PLASTER CEILING IN CORRIDOR AND EQUIPMENT ROOM. NEW GAS LINE SHALL BE EXPOSED IN APPARATUS BAY #2, AND INSTALLED ABOVE LAY-IN CEILING IN NEW ADDITION.
- PROVIDE NEW GAS PIPING TO EXISTING GENERATOR, SEE DETAILS 4/P6.01, AND 6/P6.01.
- MODIFY EXISTING GAS PIPING AT METER, SEE DETAIL 6/P6.01.
- EXISTING FURNACE TO REMAIN, CONNECT TO NEW GAS PIPING.
- PROVIDE CONNECTION TO EXISTING 1-1/2" CW PIPE WITH SHUT OFF VALVE.
- PROVIDE 1" RPZ VALVE ON CW LINE FEEDING APPARATUS BAY #2, PIPE RELIEF TO 6" A.F.F.
- NEW 1-1/2" CW SERVICE, SEE SHEET C1.03.
- PROVIDE NEW 3/4" HW FROM RISER TO PIPING GOING UNDERSLAB. NEW PIPING SHALL RUN UNDER NEW PANELBOARDS.
- NEW 1-1/2" CW SERVICE TO COME UP IN MECHANICAL ROOM 104, PROVIDE 1-1/2" SHUT-OFF VALVE 12" A.F.F.
- PROVIDE EXTENSION FOR EXISTING 3" OR 4" PLUMBING VENT TO EXTEND UP THROUGH NEW ROOF.
- PROVIDE 1/2" GAS TO EXTERIOR WITH 1/2" VALVE AND QUICK CONNECT FITTING FOR FLEX GAS CONNECTION FOR GRILL, MOUNT AT 16" A.F.F.



A PLUMBING PLAN
P1.01 SCALE: 1/4" = 1'-0"

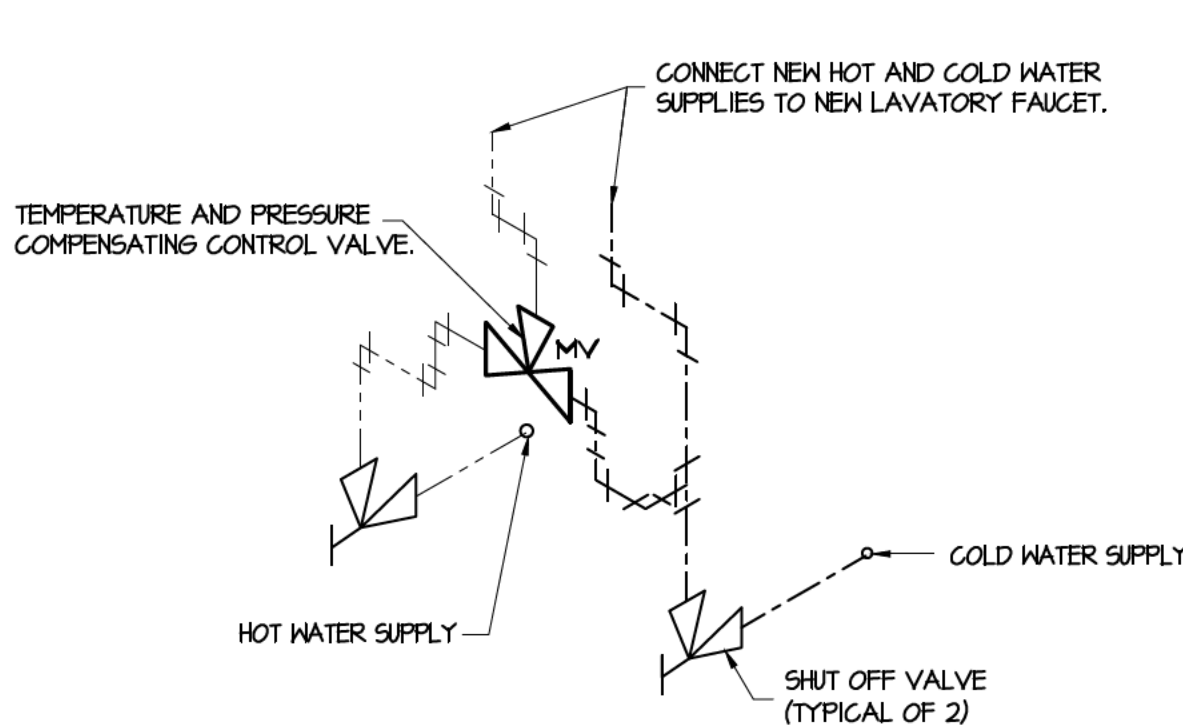
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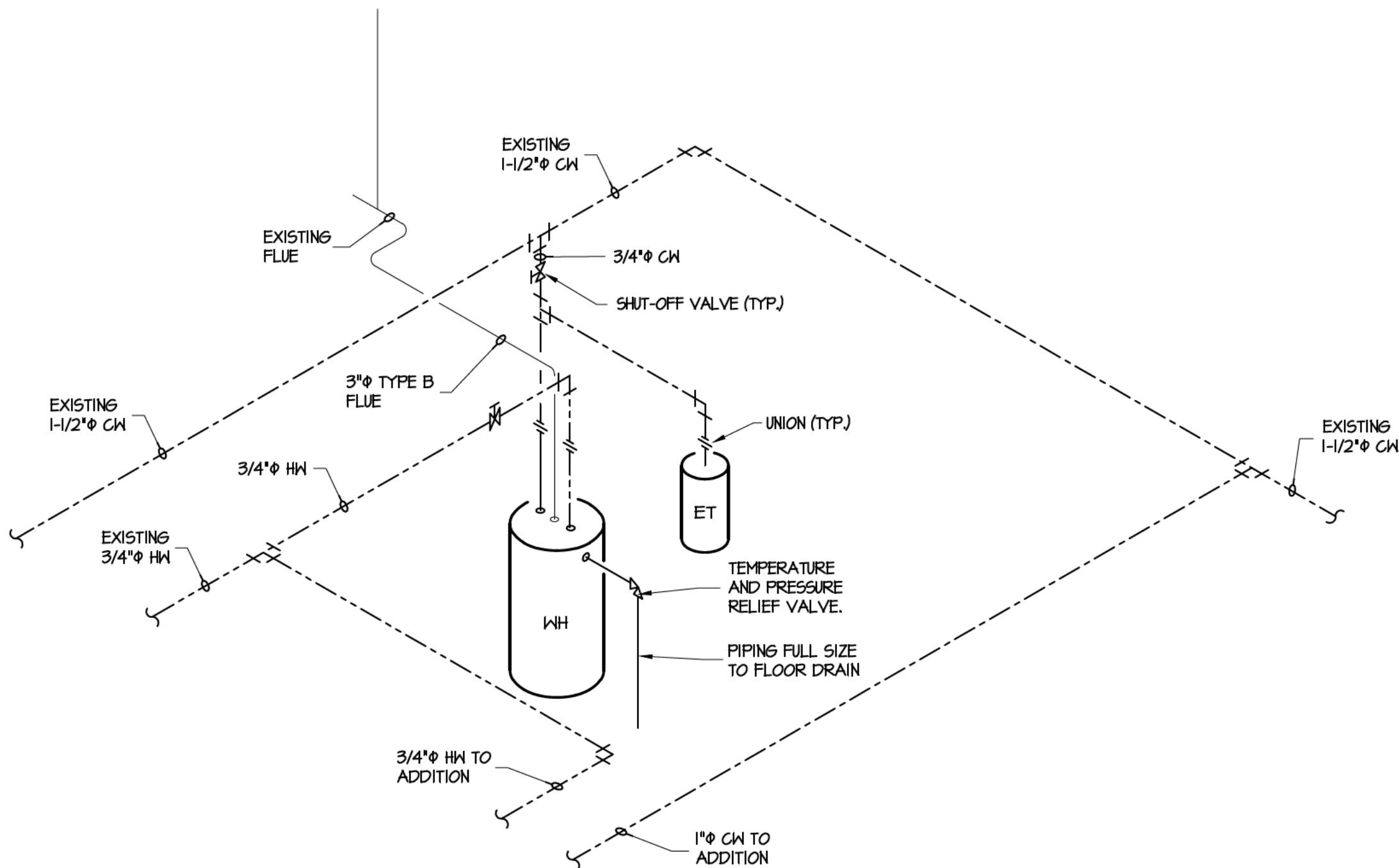
PLUMBING FIXTURE SCHEDULE					
MARK	DESCRIPTION	MANUFACTURER	MOD. NO.	FITTINGS	REMARKS
WC	TANK TYPE ADA COMPLIANT WATER CLOSET, FLOOR MOUNTED W/ELONGATED BOWL, VITREOUS CHINA, 16" GPF, WHITE	AMERICAN STANDARD	2467.016		SEATS:
		KOHLER	K-3493-RA		BEMIS 2155-C
		ZURN	Z5560		BERNEKE 528PC OLSONITE 10CG/AM
LAV	LAVATORY AND FAUCET WALL HUNG, VITREOUS CHINA, WHITE, ADA COMPLIANT	AMERICAN STANDARD	0355.012	FAUCET	PROVIDE 3/8" WALL SUPPLY
		ZURN	Z5344	T4S B-0870	W/ LOOSE KEY STOP
		KOHLER	K-1729	ZURN Z-81104 CHICAGO 802A-31T	CAST BRASS 1" TRAP PROVIDE MIXING VALVE; SEE MV AND DETAIL
MV	LAVATORY MIXING VALVE	BRADLEY	559-4004	INSTALL ON ALL LAV	PRESSURE AND TEMP.
		POWERS	E480	FIXTURES;	COMPENSATING, SET
		LEONARD	220		POINT 110"
SK	2NO COMPARTMENT STAINLESS STEEL SINK WITH FAUCET	ELKAY	DLR332210	FAUCET	PROVIDE 3/8" WALL SUPPLY W/LOOSE
BB	EXTERIOR HOSE BIBB W/INTEGRAL BACKFLOW PROTECTION	HOODFORD	B61	LKD2443C	KEY STOP, CAST BRASS 1" TRAP,
		SMITH	5519	JRL-1191	PROVIDE SINK STRAINER & 2" DRAIN
		ZURN	Z1320		FREEZE PROOF AND
IB	INTERIOR HOSE BIBB WITH INTEGRAL VACUUM BREAKER	PRIER	C-165		KEYED FOR
		HOODFORD	26		OPERATION
		ZURN	Z1341-BFP		
SH	COMPLETE SHOWER UNIT INCLUDING BALANCING MIXING VALVE, AND SHOWER HEAD	ZURN	ZT121-S6-LH		
FCO	FLOOR CLEANOUT POLISHED BRASS, SMOOTH TOP	HADE	H-6000-2		
YCO	YARD CLEANOUT	SMITH	4040		
		ZURN	ZB-1400		
		HADE	H-8550		
FD	FLOOR DRAIN - POLISHED BRASS, WITH VANDAL PROOF GRATE;	SMITH	4431		
		ZURN	Z-1440		
		HADE	H-1100-6		
SD	SHOWER DRAIN, PVC BODY STAINLESS STEEL STRAINER ADJUSTABLE HEAD	SMITH	2005		
		ZURN	Z-415-5		
		SIOUX CHIEF	B21-CR		
TD	NOMINAL 12" x 5' TRENCH DRAIN HEAVY DUTY WITH CLASS C IRON GRATE	SMITH	2216-HO2X		
		ZURN	FD-2250		
		POLYCAST	Z-882-HD6-D6G		
OI	STEEL OIL INTERCEPTOR WITH HEAVY DUTY REINFORCED COVER, AND ANCHOR FLANGE	J.R. SMITH	800 GRATE-D6084I		
		ROCKFORD SEPERATOR	05-5624		25 GPM, 6 CUBIC FOOT (45 GALLON)
		MIFAB	MI-O-1-FL-HD		MINIMUM HOLDING CAPACITY
WH	40 GALLON, 40,000 BTU/Hr, NATURAL GAS, ATMOSPHERIC VENT, WATER HEATER;	A. O. SMITH	GCBL-40	PROVIDE VALVES AND UNIONS	PROVIDE VENT PER
		BRADFORD WHITE	R624056N	AS REQUIRED (SEE DETAIL	MANUFACTURERS RECOMMENDATION
		STATE	656 40 BRB5	2/P6.01)	
ET	2 GALLON HYDRONIC EXPANSION TANK, RATED 150 PSI	AMITROL	5T-5-C		PROVIDE HANGERS PER
GD	1/3 HP CONTINUOUS FEED GARBAGE DISPOSAL	A. O. SMITH	1N-5		MANUFACTURERS RECOMMENDATIONS,
		WATTS	PLT-5		SEE DETAIL 2/P6.01
		IN-SINK-ERATOR	BADGER 1		PROVIDE POWER CORD OPTION
LT	FREE STANDING POLY LAUNDRY TUB WITH FAUCET	GE	6FC325N		
		MASTEKING	L-III		
		FIAT	P-1	FAUCET	
		MUSTEE	14GP	A-1	
				43,600	

SCHEMATIC NOTE:

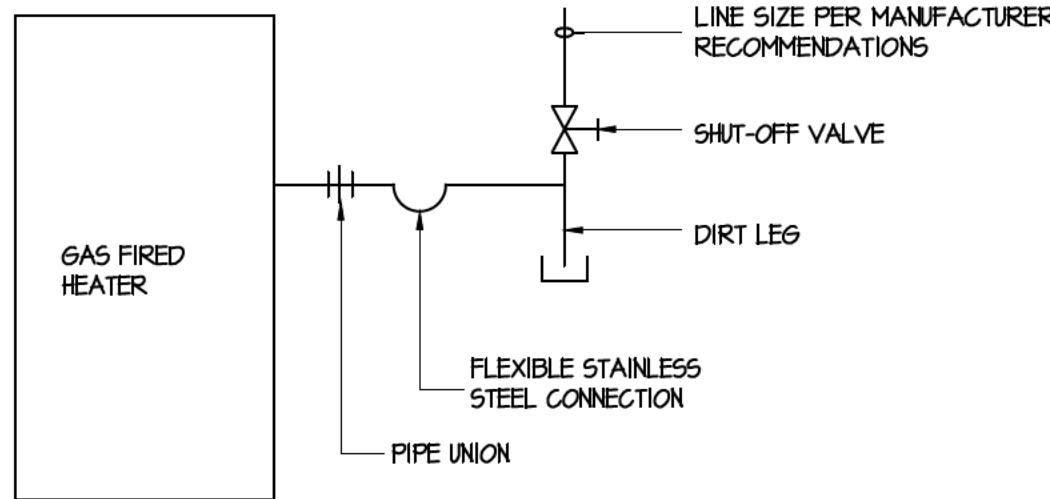
INSTALL MIXING VALVE TO ALL LAVATORY (LAV) FIXTURES; MIXING VALVE SHALL BE INSTALLED ON WALL BELOW LAVATORY RIM.



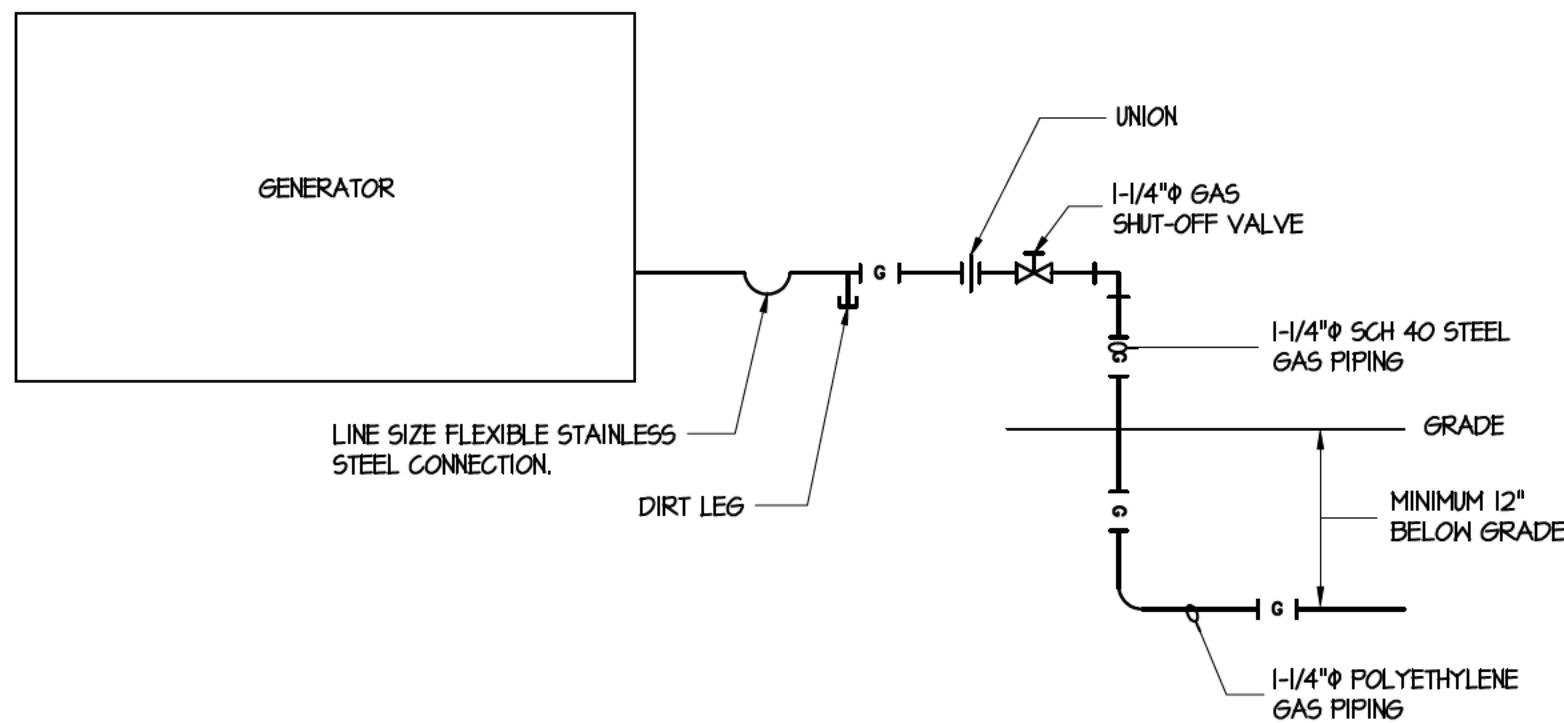
1 MIXING VALVE SCHEMATIC
P6.01 SCALE: N.T.S.



2 WATER HEATING PIPING SCHEMATIC
P6.01 SCALE: N.T.S.



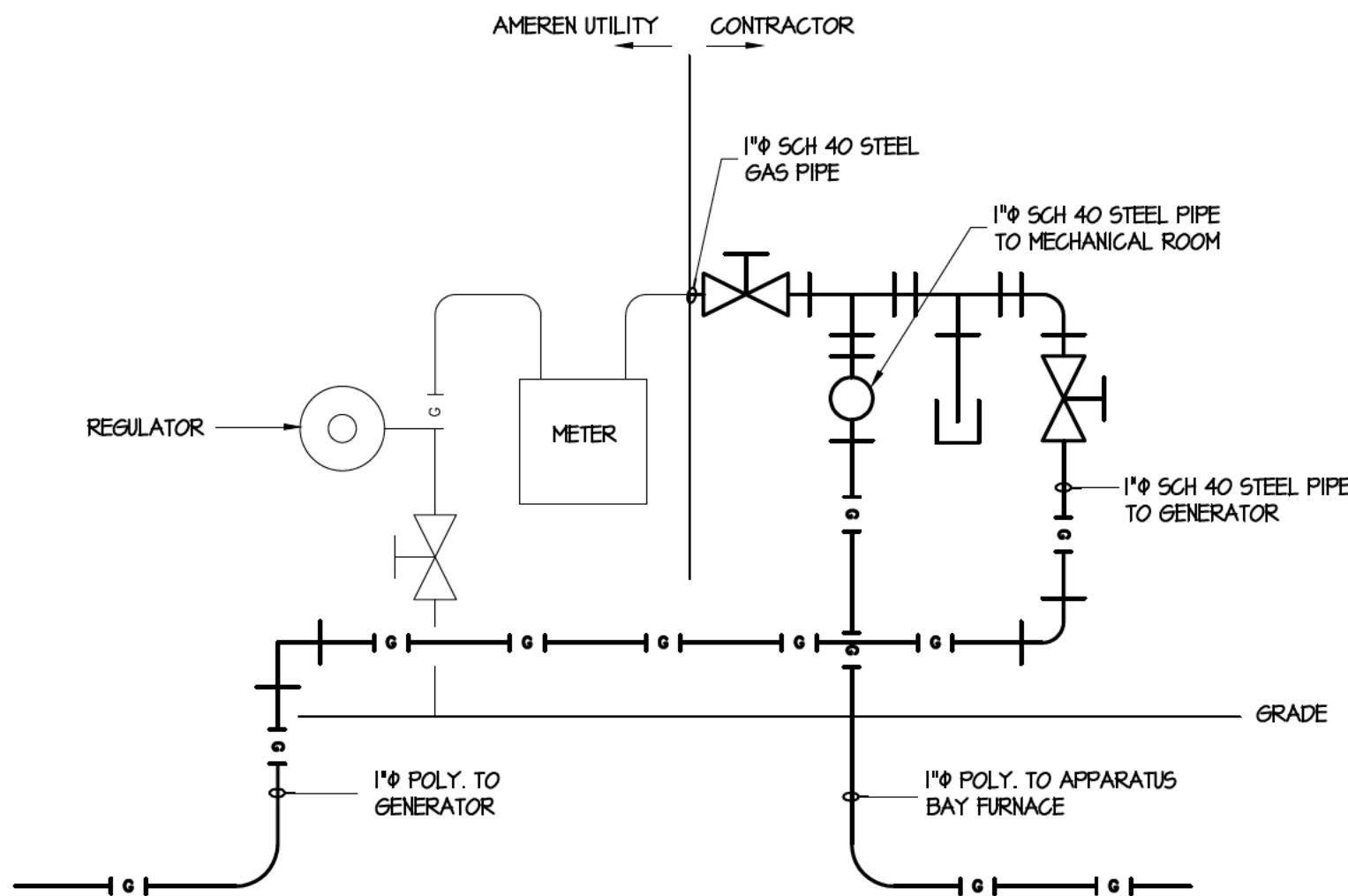
3 GAS FIRED EQUIPMENT TYPICAL PIPING
P6.01 SCALE: N.T.S.



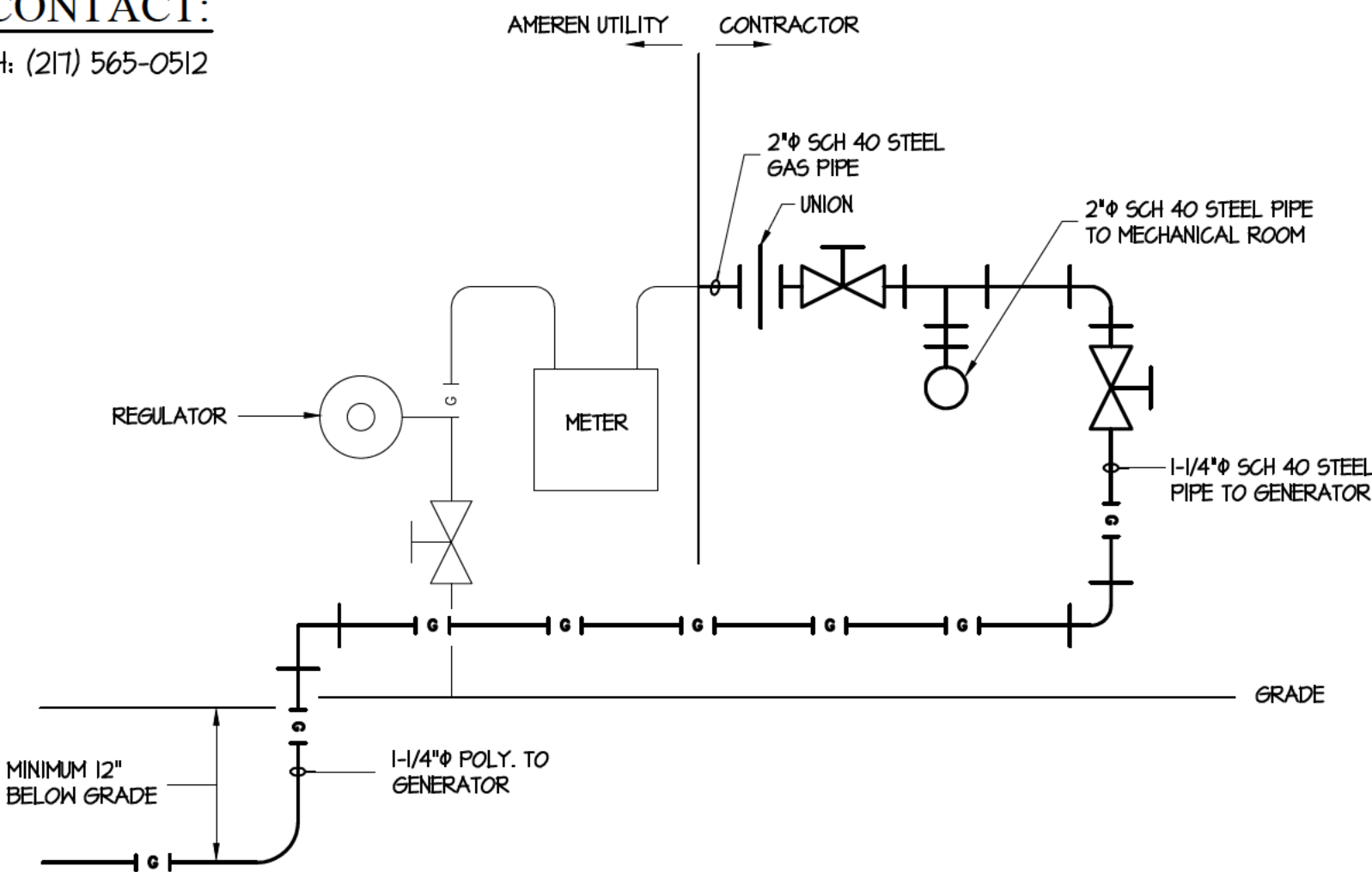
4 GAS PIPING AT GENERATOR
P6.01 SCALE: N.T.S.

AMEREN CONTACT:

SCOTT COPPLE PH: (217) 565-0512



5 EXISTING GAS METER DIAGRAM
P6.01 SCALE: N.T.S.



6 REVISED GAS METER DIAGRAM
P6.01 SCALE: N.T.S.

GENERAL NOTES

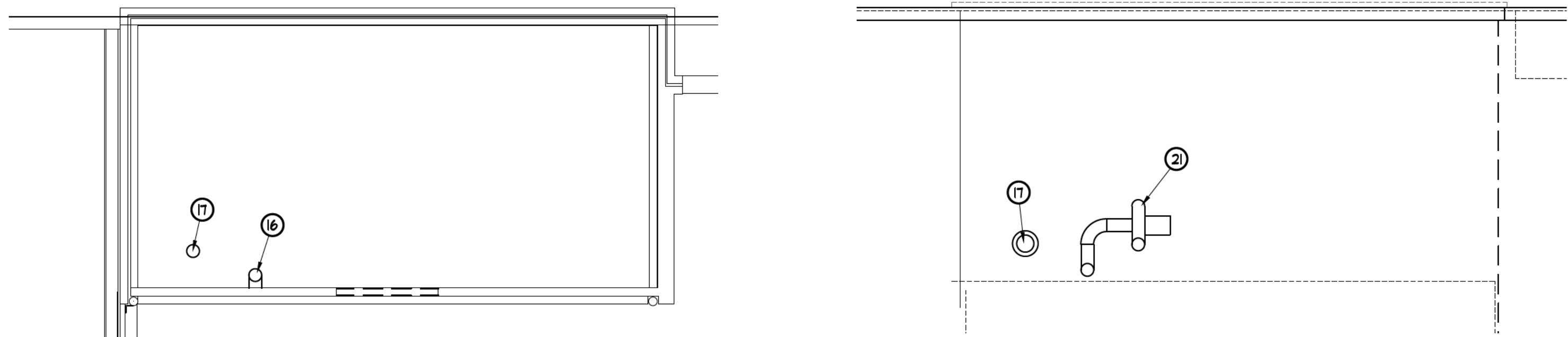
- 1) ALL DIMENSIONS FOR DUCTS ARE FREE AREA (WIDTH x HEIGHT).
- 2) ALL ROOF PENETRATIONS SHALL BE MADE A MINIMUM OF 3' FROM EXTERIOR WALLS.
- 3) VENTILATION SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WALL OPENINGS & SEALING WALL OPENINGS REQUIRED FOR DUCTWORK; COORDINATE WITH E.C.
- 4) PROVIDE TRANSITIONS AS NECESSARY AT GRILLES, REGISTERS AND DIFFUSERS.

PLAN LEGEND

- ⚡_{TT} MANUAL MOTOR STARTER (TT SWITCH)
@ 48" A.F.F.
- ⬡₆₀ GRILLE OR DIFFUSER
G.F.M. REQUIRED
- ▭ DUCTWORK SIZE AS SHOWN
- ⊠ SUPPLY AIR DIFFUSER
- ▭ RETURN AIR GRILLE
- BALANCING DAMPER
- ⌒ RAT - RETURN AIR TRANSFER
SEE DETAIL
- ⌚ PROGRAMMABLE THERMOSTAT,
MOUNT AT 48" A.F.F.
- ⌚ EXHAUST FAN TIMER

PLAN NOTES

- 1) PROVIDE WEATHER PROOF ALUMINUM HOOD WITH INTEGRAL DAMPER AND BIRDSCREEN. COLOR TO BE SELECTED.
- 2) PROVIDE 4'X4'X4" CONCRETE EQUIPMENT PAD WITH WIRE MESH REINFORCEMENT FOR NEW CONDENSING UNITS.
- 3) PROVIDE 3/4"Ø PVC CONDENSATE TO FLOOR DRAIN. COORDINATE FLOOR DRAIN LOCATION WITH PLUMBING SUB-CONTRACTOR, SEE DETAIL 3/V6.01.
- 4) THERMOSTAT TO BE PROVIDED AND INSTALLED BY MECHANICAL SUB-CONTRACTOR INCLUDING LOW VOLTAGE WIRING AND CONDUIT.
- 5) PROVIDE CONCENTRIC PVC COMBUSTION AIR AND FLUE FROM NEW FURNACE THROUGH ROOF. SEAL PENETRATION WATERTIGHT, SEE DETAIL 1/V6.01.
- 6) PROVIDE VENT TERMINAL THROUGH THE ROOF WITH WEATHERPROOF CAP, MINIMUM 24" ABOVE ROOF.
- 7) PROVIDE OUTSIDE AIR INTAKE WITH WEATHERPROOF CAP, IF REQUIRED BY MANUFACTURER.
- 8) ROTATE UNIT SO SHIELD IS ORIENTED AT 45° FACING AWAY FROM WALL.
- 9) REINSTALL THE EXISTING 4-TON CONDENSING UNIT, REINSTALL THE RECLAIMED REFRIGERANT, AND PROVIDE NEW REFRIGERANT LINES FROM THE NEW LOCATION TO EXISTING COOLING COIL IN EXISTING FURNACE.
- 10) PROVIDE A STAND ALONE VEHICLE EXHAUST (CO/NO2) MONITOR INTERLOCKED TO EF-1, IF THE MONITOR DETECTS CARBON MONOXIDE OR NITROGEN DIOXIDE AT AN ELEVATED LEVEL (ADJUSTABLE) THEN EF-1/OA-1 SHALL OPERATE OTHERWISE EF-1 SHALL REMAIN OFF. THE MONITOR SHALL BE CAPABLE OF COVERING 1200 SQUARE FEET, AND OPERATE ON 120V.
- 11) PROVIDE STAINLESS STEEL 30" UNDER-CABINET RANGE HOOD SIMILAR TO MODEL BXT13055 BY BROAN-NUTONE.
- 12) PROVIDE 4"Ø METAL DRYER VENT FROM DRYER TO EXTERIOR.
- 13) DO NOT INSULATE STUD SPACE UTILIZE FOR RETURN AIR CHASE. INSTALL RETURN AIR GRILLE 12" A.F.F. PAINT SPACE BEHIND DIFFUSER FLAT BLACK PRIOR TO INSTALLING RETURN AIR GRILLE.
- 14) REINSTALL EXISTING TIMER FOR EXHAUST FAN EF-3. CONNECT CONTROL WIRING TO NEW EF-3.
- 15) REINSTALL SALVAGED THERMOSTAT LOW VOLTAGE/CONTROL WIRING BY VENTILATION SUB-CONTRACTOR.
- 16) TURN 6"Ø SPIRAL DUCT UP AT LOCATION OF EXTERIOR WALL AND EXTEND 6"Ø SPIRAL DUCT UP TO THE NEW ROOF ABOVE MEZZANINE. NEW DUCTWORK SHALL MEET NEDERMAN EXHAUST REQUIREMENTS.
- 17) PROVIDE NEW 8"Ø TYPE B DOUBLE WALL FLUE FOR FURNACE FROM EXISTING ROOF TO MINIMUM 2' ABOVE NEW MEZZANINE STORAGE ROOF, PROVIDE NEW WEATHERPROOF CAP.
- 18) PROVIDE NEW 1"Ø TYPE B DOUBLE WALL FLUE FOR FURNACE/WATER HEATER TO MINIMUM 2' ABOVE NEW ROOF, PROVIDE NEW WEATHERPROOF CAP.
- 19) PROVIDE 2'X12" SUPPLY GRILLE IN TOE SPACE OF NEW CASEWORK.
- 20) PROVIDE 3"Ø TYPE B FLUE FROM NEW WATER HEATER TO EXISTING FLUE. MODIFY THE EXISTING FLUE TO CONNECT NEW WATER HEATER FLUE.
- 21) REINSTALL SALVAGED VEHICLE EXHAUST FAN ON NEW ROOF OF MEZZANINE, CONNECT TO NEW EXTENDED 6"Ø SPIRAL DUCT.
- 22) PROVIDE 3'X3'X3" FIBERGLASS EQUIPMENT PAD FOR CONDENSING UNIT ON TOP NEW CONCRETE DRIVEWAY.

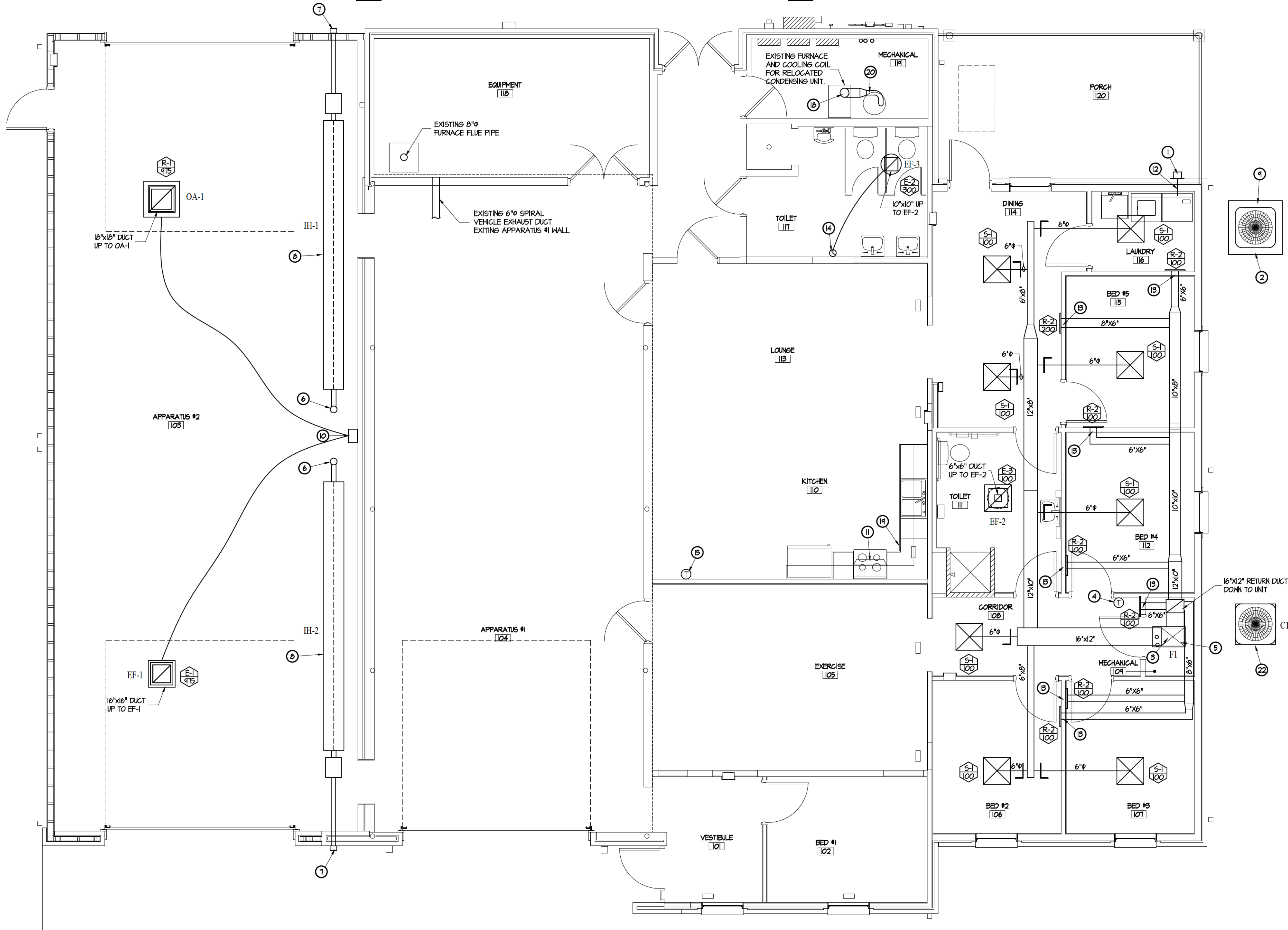


B VENTILATION MEZZANINE PLAN

V1.01 SCALE: 1/4" = 1'-0"

B VENTILATION MEZZANINE ROOF PLAN

V1.01 SCALE: 1/4" = 1'-0"



A VENTILATION PLAN

V1.01 SCALE: 1/4" = 1'-0"

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FURNACE SCHEDULE

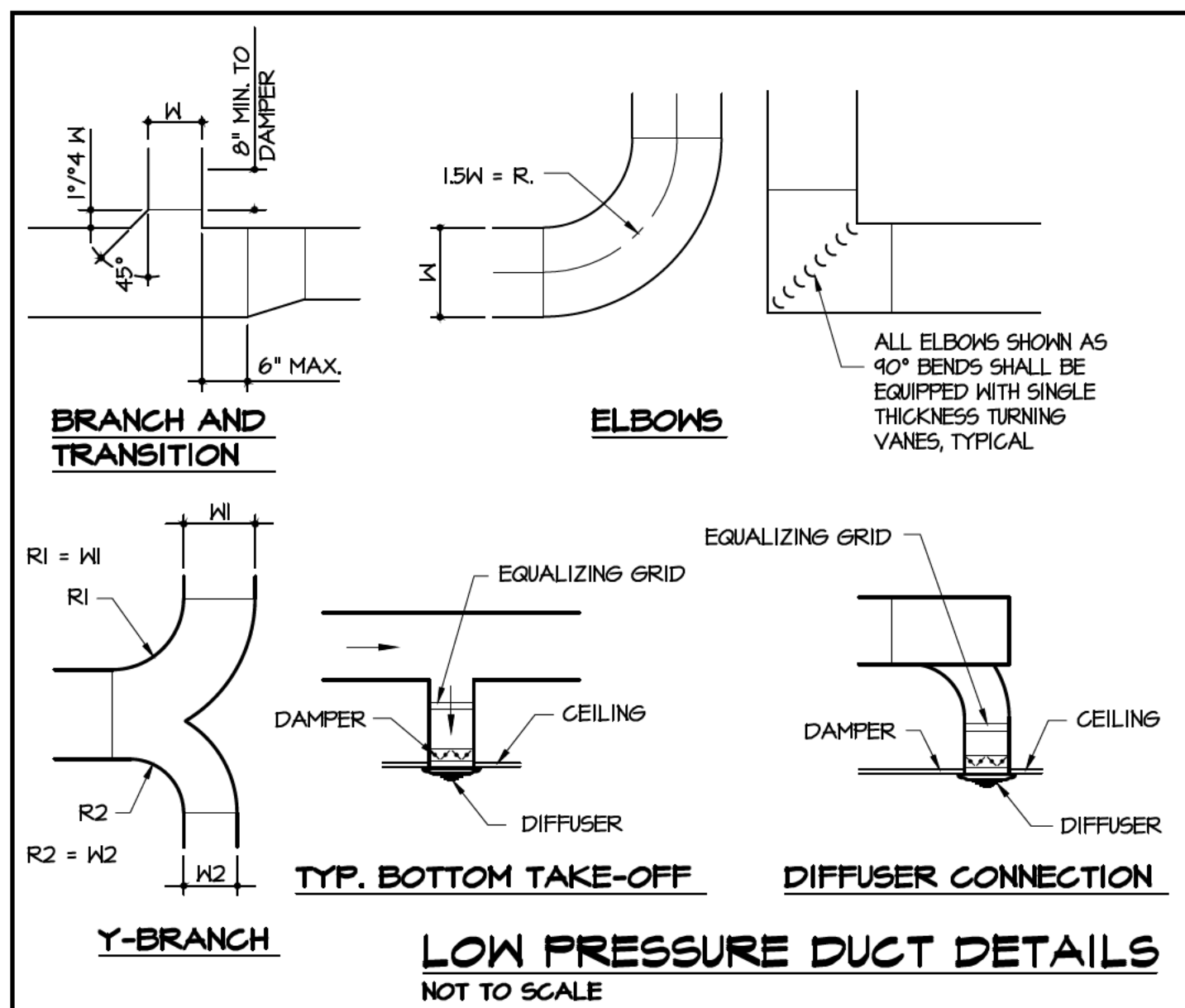
MARK	MANUFACTURER	MODEL #	HEATING OUTPUT/MIN.	CFM	OUTSIDE AIR (CFM)	HP	VOLTAGE/PH/Hz	MCA	MOCP
F1	CARRIER	54SC6	39,000 BTU/HR	800 @ 0.7 ESP	100	1/2	120V/1Ø/60	10.3	20
	LENNOX	ML146							
	TRANE	54X1							
NOTES: 1. 96% GAS FIRED, POWER VENTED CONDENSING UP-FLOW FURNACE 2. PROVIDE A CONCENTRIC VENT/CA TERMINATION FOR NEW FURNACE. 3. CONTROLS: 1-DAY PROGRAMMABLE THERMOSTAT WITH FAN AUTO/ON/OFF HEAT/COOL.									

CONDENSING UNIT SCHEDULE

MARK	MANUFACTURER	MODEL #	NOMINAL CAPACITY	SEER	VOLTAGE/PH/Hz	MCA	MOCP
C1	CARRIER	26SCA	2 - TON	14.0	230V/1Ø/60	14.0	25
	LENNOX	ML14KCI					
	TRANE	5TTR4					
NOTES: 1. PROVIDE - CASED A-COIL MATCHED TO FURNACE & CONDENSING UNIT COMBINATION 2. SHALL USE TYPE R454B REFRIGERANT; 3. SIZE CONDENSOR LIQUID & VAPOR PIPING PER MANUFACTURERS RECOMMENDATIONS FOR UNIT SELECTED.							

GRILLES, REGISTERS AND DIFFUSER SCHEDULE

MARK	MANUFACTURER *	MODEL NUMBER	FUNCTION			MODULE SIZE	NECK SIZE	REMARKS
			SA	RA	EA			
S-1	CARNES	SEFA(N/SXTA)	●			12"x12"	6"ø	FLUSH FACE, ALUMINUM LAY-IN CEILING, COLOR WHITE PROVIDE FILLER PANEL
	KRIEGER	55HR						
	PRICE	ASHD/SR						
R-1	CARNES	RSHA	●			18"x18"	N/A	STAINLESS STEEL, HEAVY DUTY GRILLE, HORIZONTAL 1/2" FIXED, 38" DEFLECTION
	KRIEGER	5480						
	PRICE	40						
R-2	CARNES	RAAA	●			14"x6"	N/A	ALUMINUM CONSTRUCTION, SINGLE DEFLECTION 3/4" SPACING, SURFACE MOUNTED, COLOR WHITE
	KRIEGER	5580						
	PRICE	630						
E-1	CARNES	RSHA	●			18"x18"	N/A	STAINLESS STEEL, HEAVY DUTY GRILLE, HORIZONTAL 1/2" FIXED, 38" DEFLECTION
	KRIEGER	5480						
	PRICE	40						
E-2	CARNES	RAPAF	●			10"x10"	N/A	ALUMINUM, 1/2" X 1/2" X 1/2" GRID 24"x24" LAY-IN CEILING
	KRIEGER	E6C5						
	PRICE	80						
E-3	CARNES	RAPAF	●			6"x6"	N/A	ALUMINUM, 1/2" X 1/2" X 1/2" GRID 24"x24" LAY-IN CEILING
	KRIEGER	E6C5						
	PRICE	80						
* SEE SPECIFICATION SECTION 23 30 00 (2.02) FOR ADDITIONAL ACCEPTABLE MANUFACTURERS.								
1. CONTRACTOR SHALL PROVIDE TRANSITIONS AS REQUIRED OR NECESSARY FOR DUCT TO GRILLE, DIFFUSER OR REGISTER CONNECTION.								

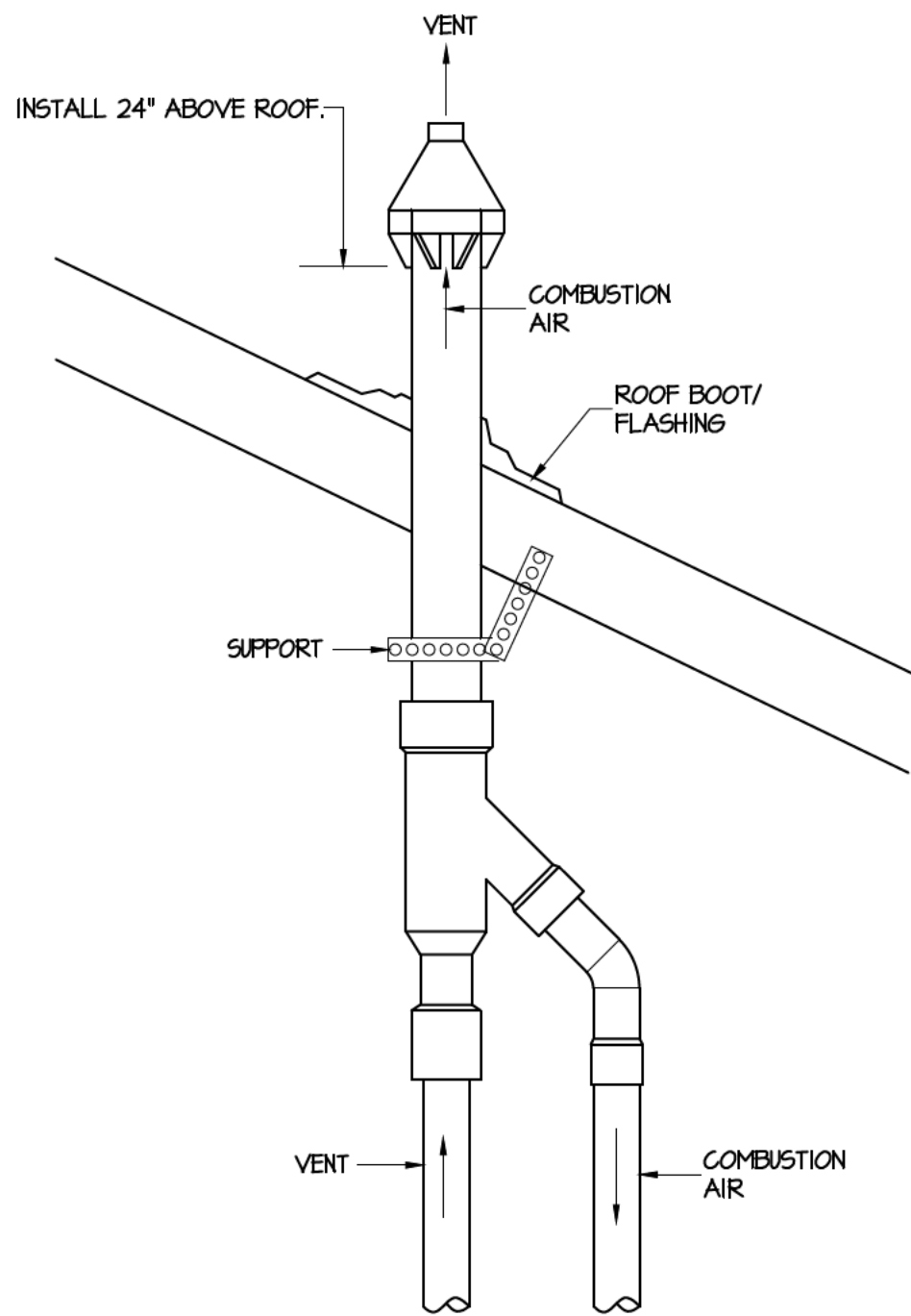


EXHAUST FAN SCHEDULE

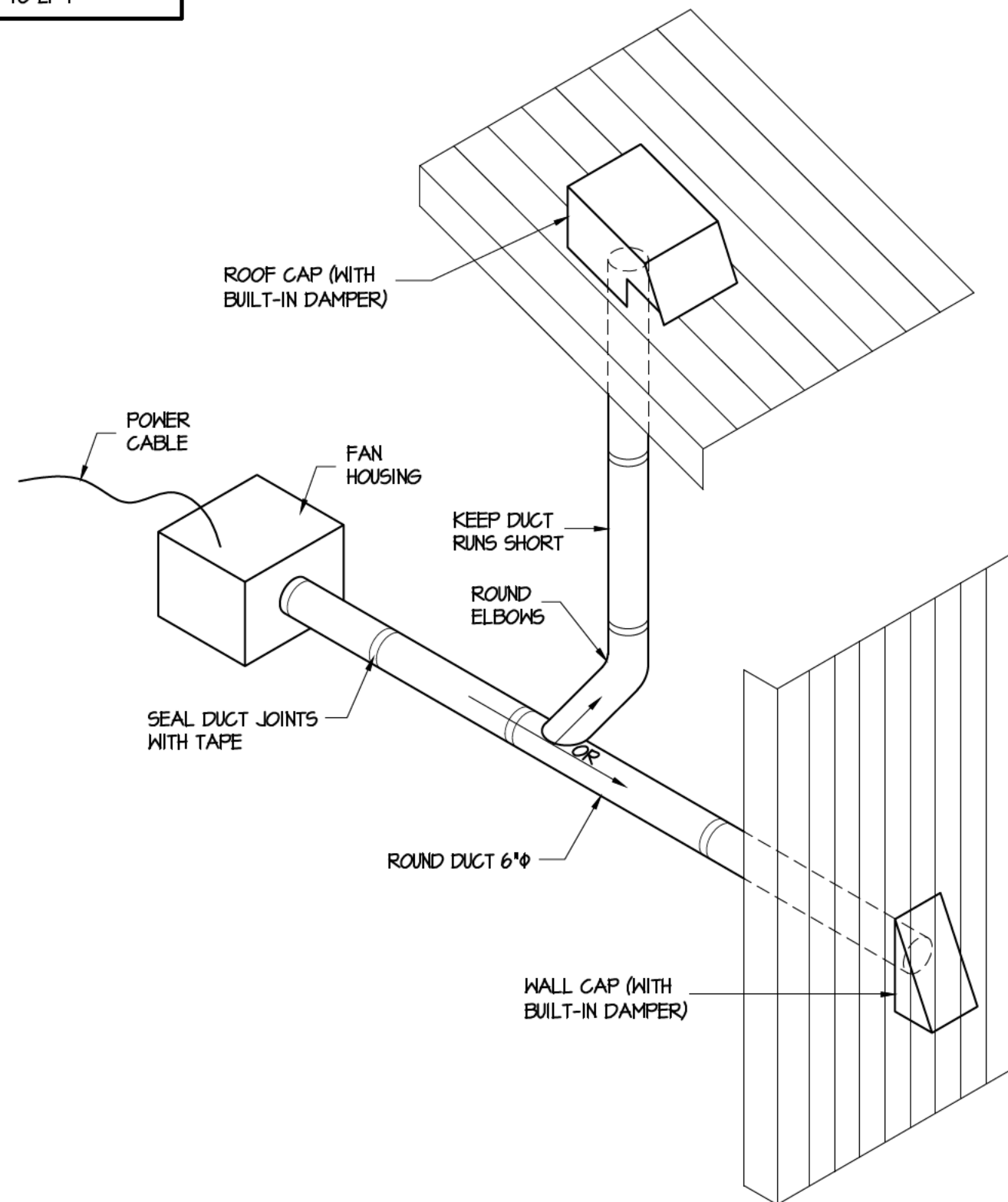
MARK	AREA(S) SERVED	PURPOSE	MANUFACTURER	MODEL #	CFM	E.S.P.	HP	MOTOR DATA		ACCESSORIES
								ELECTRICAL	CONTROL	
EF-1	APPARATUS #2	REMOVE ODORS	COOK GREENHECK PENNBARRY	120 ACED 6-049 DX13G	975	0.25	1/4	120V 1 PHASE 60 Hz	CO2/NO2 MONITOR/ CONTROLLER	PROVIDE MOTORIZED DAMPER, BIRDSGREEN, ROOF CURB, & INTEGRAL DISCONNECT SWITCH;
EF-2	NEW TOILET III	REMOVE ODORS	COOK GREENHECK PENNBARRY	70 ACED 6-060 DX06R	100	0.25	1/60	120V 1 PHASE 60 Hz	THROUGH LIGHTING CIRCUIT	PROVIDE MOTORIZED DAMPER, BIRDSGREEN, ROOF CURB, & INTEGRAL DISCONNECT SWITCH;
EF-3	EXISTING TOILET IIT	REMOVE ODORS	COOK GREENHECK PENNBARRY	90 ACED 6-080 DX13V	300	0.25	1/6	120V 1 PHASE 60 Hz	THROUGH EXISTING TIMER	PROVIDE MOTORIZED DAMPER, BIRDSGREEN, ROOF CURB, & INTEGRAL DISCONNECT SWITCH;

FRESH AIR INTAKE SCHEDULE

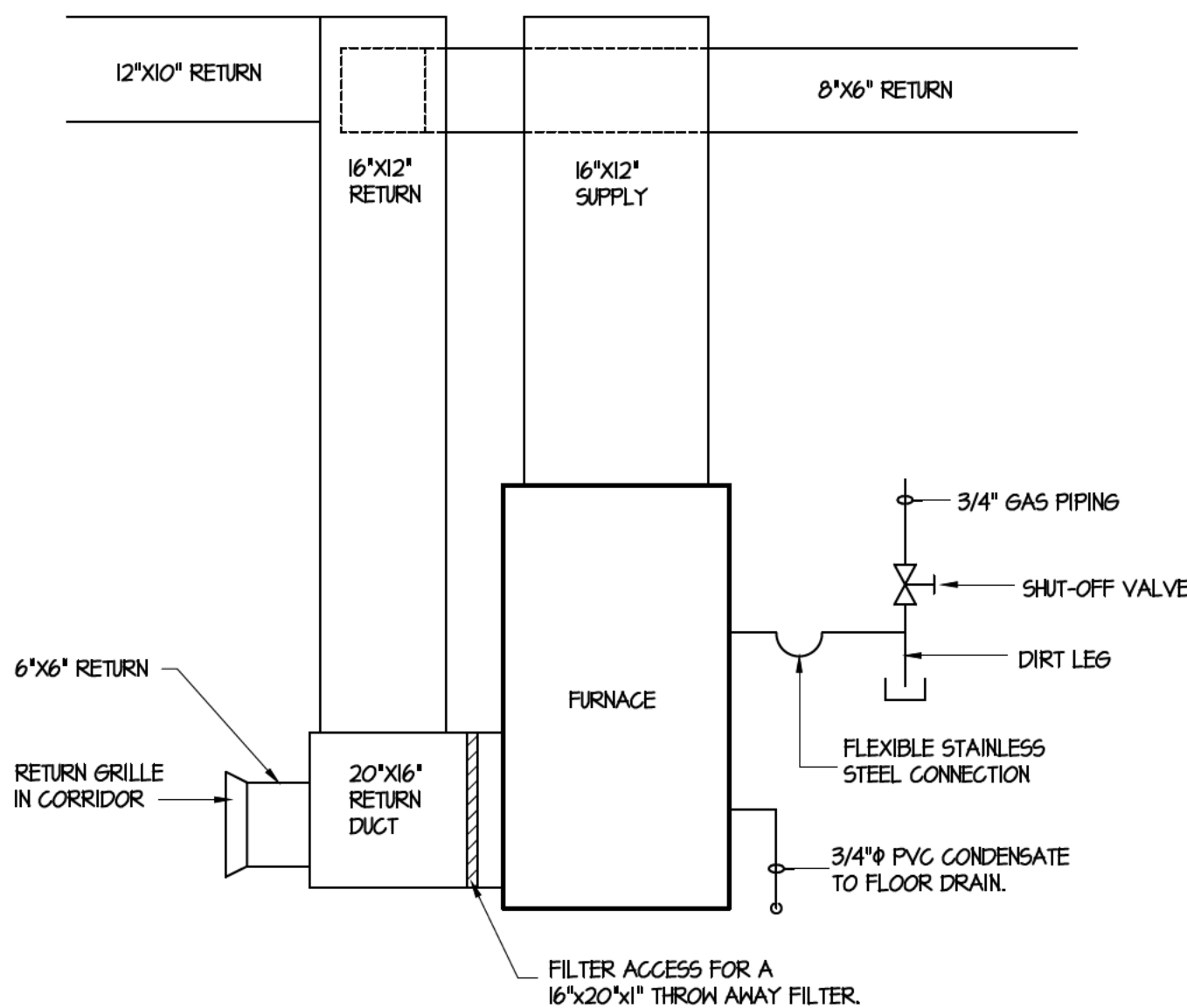
MARK	AREA(S) SERVED	PURPOSE	MANUFACTURER*	MODEL NUMBER	CFM	THROAT VELOCITY	THROAT SIZE	PD	ACCESSORIES
OA-1	APPARATUS #2	INTAKE AIR	COOK	TRE	975	500 fpm	18" x 18"	0.05" MAX	PROVIDE BIRDSGREEN INSULATED CURB AND MOTORIZED DAMPER INTERLOCKED TO EF-1
			GREENHECK	MH					
			PENNBARRY	PH					



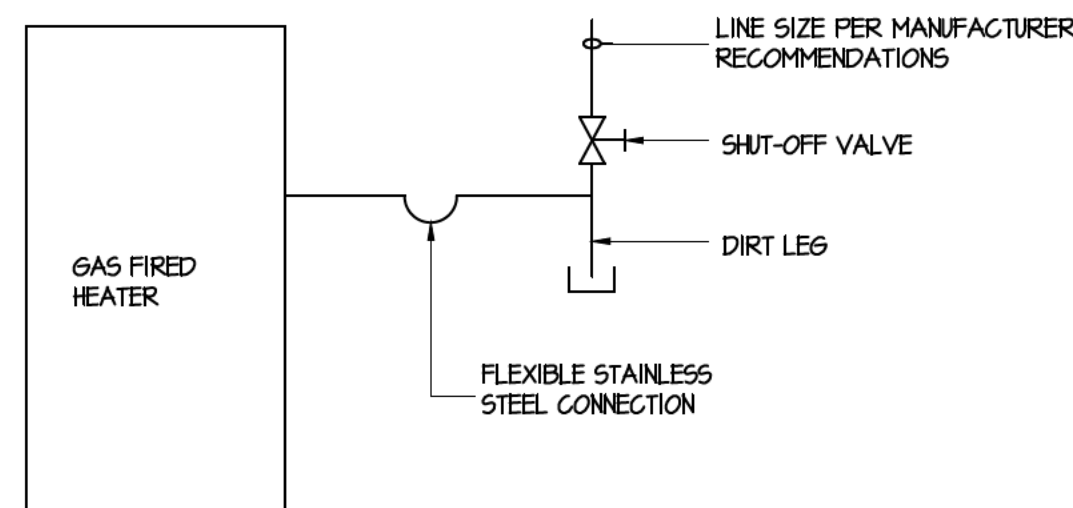
1 CONCENTRIC VENT ROOF DETAIL
V6.01 SCALE: N.T.S.



2 EXHAUST FAN DUCT CONNECTIONS
V6.01 SCALE: NOT TO SCALE



3 FURNACE DETAIL
V6.01 SCALE: N.T.S.



4 INFRARED HEATER CONNECTION
V6.01 SCALE: N.T.S.

GENERAL NOTES

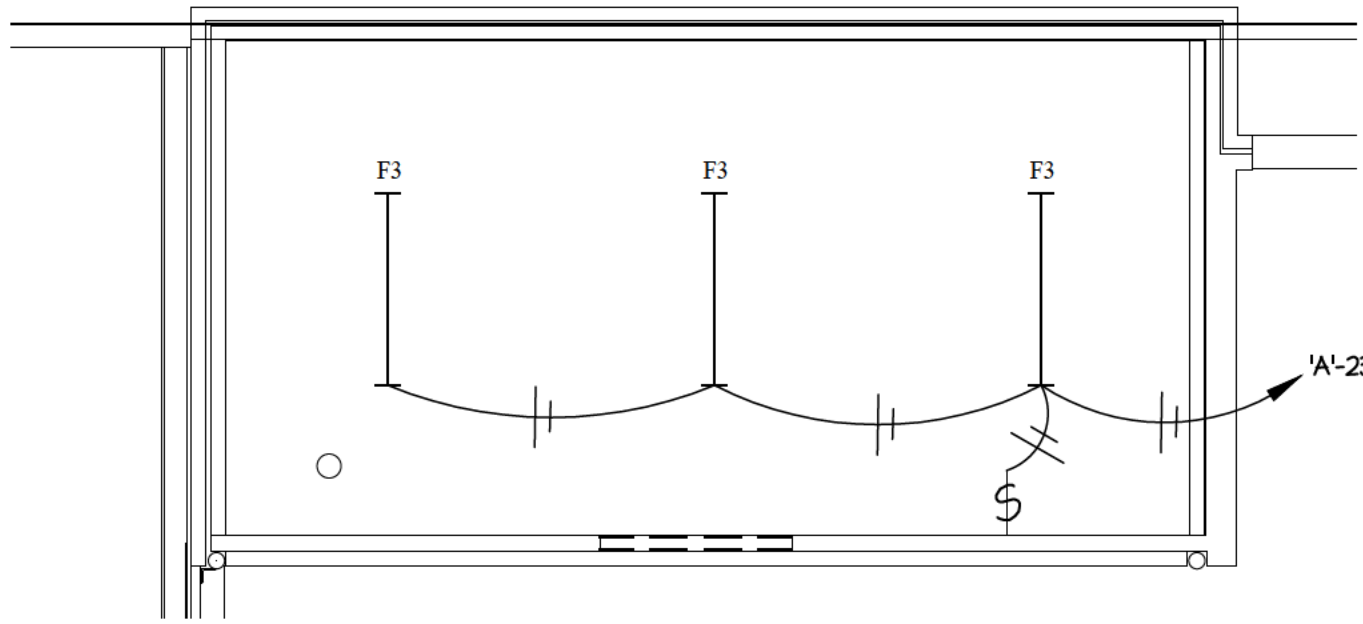
1. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF NATIONAL ELECTRIC CODE 2020 EDITION.

PLAN LEGEND

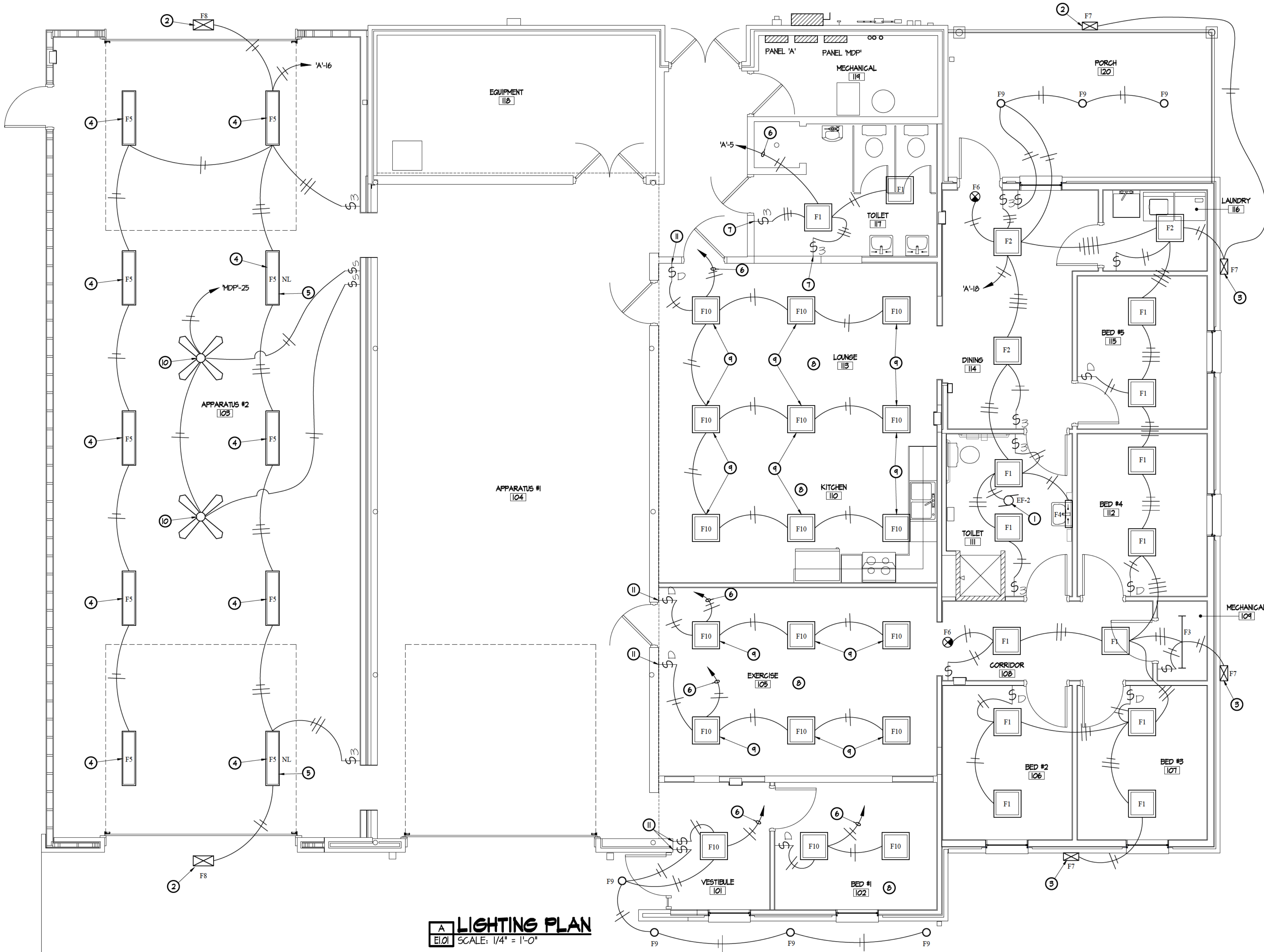
- WIRING CONCEALED IN RACEWAY OR CONDUIT LOCATED IN MALL OR CEILING. EQUIPMENT GROUND TO BE INCLUDED FOR EACH CIRCUIT
- ⌚ SINGLE POLE SWITCH, MTD. W/ BOTTOM 44" A.F.F. UNLESS OTHERWISE NOTED
- ⌚ 3 WAY SWITCH
- ⌚ DIMMER SWITCH
- ⌚ 3-WAY DIMMER SWITCH
- ⌚ CEILING FAN SPEED CONTROLLER
- 2' x 4' TROFFER
- 2' x 2' TROFFER
- EXTERIOR WALLPACK FIXTURE
- RECESSED DOWNLIGHT
- EXIT LIGHT
- 4' STRIP FIXTURE
- NL FIXTURE TO BE ON NIGHT LIGHT CIRCUIT
- WALL MOUNTED OCCUPANCY SENSOR WITH DIMMER. MOUNT 44" A.F.F. UNLESS OTHERWISE NOTED. SEE PROJECT MANUAL

PLAN NOTES

- 1 EXHAUST FAN SHALL OPERATE ON LIGHT CIRCUIT. WHEN LIGHTS ARE ON THE FAN SHALL OPERATE. EXHAUST FAN PROVIDED BY VENTILATION SUB-CONTRACTOR. ELECTRICAL SUB-CONTRACTOR SHALL PROVIDE WIRING THROUGH LIGHTING CIRCUIT.
- 2 MOUNT FIXTURE AT 156" A.F.F.
- 3 MOUNT FIXTURE AT 90" A.F.F.
- 4 SURFACE MOUNT FIXTURE AND CONDUIT TO CEILING.
- 5 THIS FIXTURE SHALL BE ON AT ALL TIMES.
- 6 REUSE EXISTING HOMERUN, MODIFY AND EXTEND CONDUCTORS TO CONNECT TO EXISTING HOME RUN.
- 7 REUSE EXISTING SWITCH, PROVIDE NEW CONDUIT (ABOVE CEILING) AND CONDUCTORS TO NEW LIGHTS.
- 8 SURFACE MOUNT NEW CONDUIT IN THIS ROOM.
- 9 SURFACE MOUNT NEW FIXTURE, PROVIDE NEW CONDUIT AND CONDUCTOR, REUSE EXISTING HOME RUN.
- 10 PROVIDE NEW 52" LOW PROFILE CEILING FAN WITHOUT LIGHT, SIMILAR TO MODEL DEMPSEY BY HUNTER FAN, COLOR: WHITE.
- 11 PROVIDE NEW SWITCH AND SWITCH LEG CONDUCTORS FOR NEW LIGHTS, REUSE EXISTING BOX AND CONDUIT.



B MEZZANINE LIGHTING PLAN
SCALE: 1/4" = 1'-0"



A LIGHTING PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF NATIONAL ELECTRIC CODE 2020 EDITION.
- ALL NEW RECEPTACLES EXCEPT IN APPARATUS BAY #2 SHALL BE TAMPER RESISTANT.

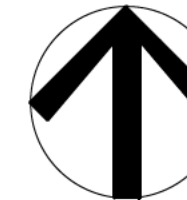
PLAN LEGEND

- WIRING CONCEALED IN RACEWAY OR CONDUIT LOCATED IN WALL OR CEILING. EQUIPMENT GROUND TO BE INCLUDED FOR EACH CIRCUIT
- 120V, 20 AMP DUPLEX RECEPTACLE W/ BOTTOM MOUNTED 16" A.F.F. UNLESS OTHERWISE NOTED
- 6F.C.I. TYPE 120V, DUPLEX RECEPTACLE
- ELECTRICAL PANEL W/ DESIGNATION
- ELECTRIC MOTOR
- MANUAL MOTOR STARTER (TT SWITCH) @ 44" A.F.F. '3' DESIGNATES 3-POLE
- SAFETY SWITCH SIZED AS NOTED
- 208V-240V RECEPTACLE, NEMA TYPE
- CEILING MOUNTED RECEPTACLE, MOUNTED FLUSH IN CEILING
- 6F.C.I. WEATHERPROOF DUPLEX TYPE 120V DUPLEX RECEPTACLE W/ COVER
- 120V, 20 AMP QUADPLEX RECEPTACLE W/ BOTTOM MOUNTED 16" A.F.F. UNLESS OTHERWISE NOTED
- 3-BUTTON OVERHEAD DOOR CONTROLLER
- MOTOR STARTER
- KEYPAD OPENER BY GARAGE DOOR SUPPLIER

PLAN NOTES

- PROVIDE CONTROL AND POWER WIRING TO DOOR OPERATOR AND DOOR SENSOR, SEE OB TI 23 IN THE PROJECT MANUAL.
- PROVIDE (3) #10 THINS AND (1) #10 COPPER GROUND IN 3/4"Ø CONDUIT.
- TT SWITCH FOR FURNACE PROVIDED BY ELECTRICAL SUB-CONTRACTOR.
- PROVIDE FUSIBLE HEAVY DUTY 30-AMP, 2-POLE DISCONNECT IN NEMA 3R ENCLOSURE, FUSE AT 25 AMP.
- PROVIDE 30-AMP NEMA RECEPTACLE FOR DRYER.
- CO/NO2 MONITOR SUPPLIED BY VENTILATION SUB-CONTRACTOR, INSTALLED BY ELECTRICAL SUB-CONTRACTOR, INCLUDING POWER WIRING AND CONTROL WIRING.
- PROVIDE FUSIBLE HEAVY DUTY, 30-AMP, 2-POLE DISCONNECT IN NEMA 3R ENCLOSURE, FUSE AT 30 AMPS.
- PROVIDE 6FCI RECEPTACLE UNDER SINK FOR NEW GARBAGE DISPOSAL, COORDINATE EXACT LOCATION WITH PLUMBING SUB-CONTRACTOR AND CASEWORK SUPPLIER.
- CONNECT NEW EF-3 TO LIGHT CIRCUIT SAME AS THE EXISTING WALL MOUNTED EXHAUST FAN, PROVIDE WIRING TO RELOCATED EXISTING TIMER.
- REINSTALL EXISTING SALVAGED VEHICLE EXHAUST FAN DISCONNECT ONTO FAN. MODIFY AND EXTEND POWER FEED TO VEHICLE EXHAUST FAN ON NEW ROOF.
- PROVIDE NEW PANELBOARDS AND POWER DISTRIBUTION EQUIPMENT, SEE SINGLE LINE DIAGRAM ON SHEET E6.02.
- REINSTALL THE EXISTING SALVAGED AUTOMATIC TRANSFER SWITCH. REMOVE THE 200AMP BREAKER AND WIRING TO IT, THE ATS IS NO LONGER THE SERVICE DISCONNECT, SEE SINGLE LINE DIAGRAM ON SHEET E6.02.
- IN LOCATION OF EXISTING REMOVED JUNCTION BOX PROVIDE NEW RECESSED RECEPTACLE FOR TELEPHONE POWER SUPPLY.





GENERAL NOTES

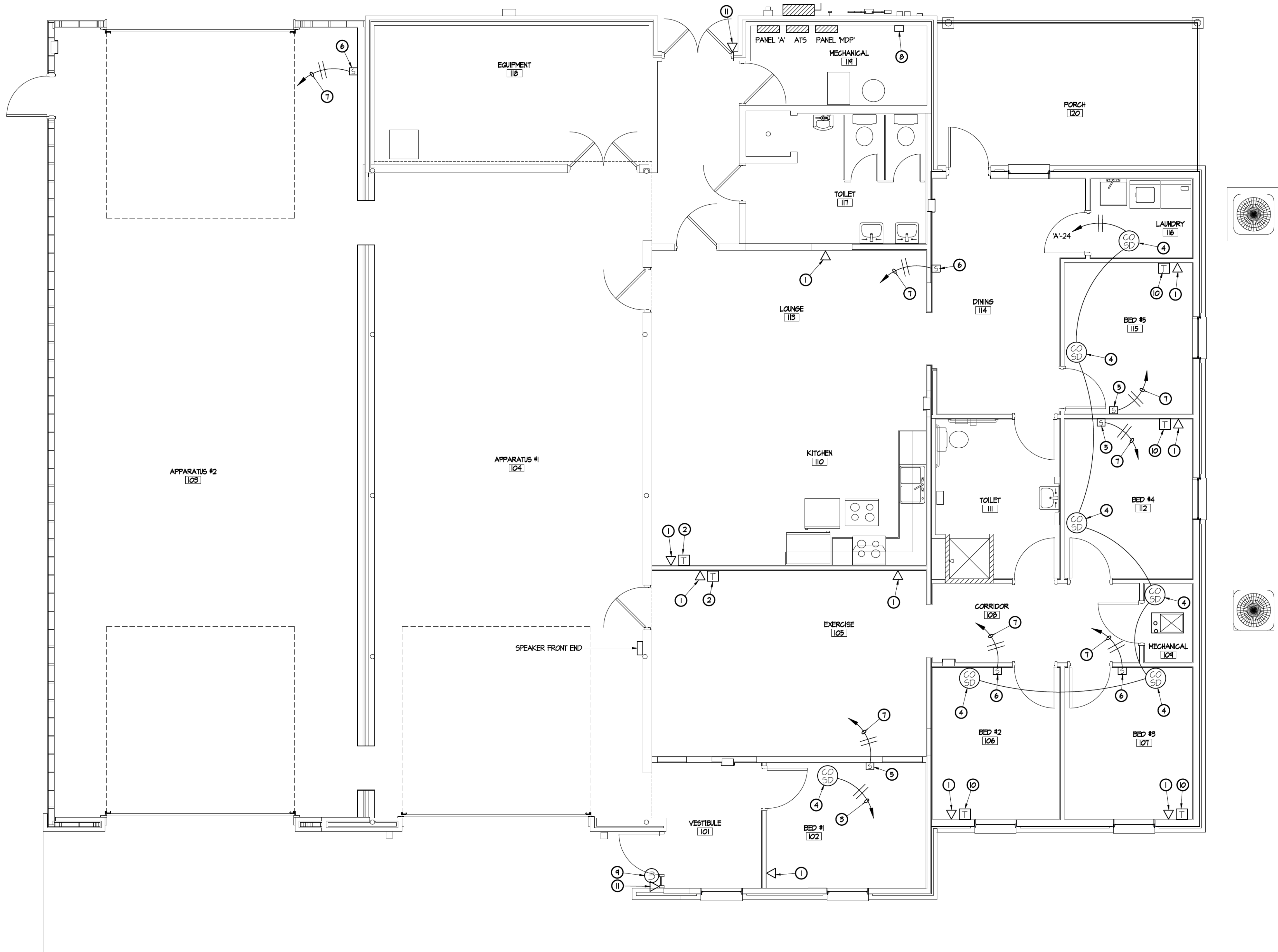
- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF NATIONAL ELECTRIC CODE 2020 EDITION.
- CONNECTIONS TO, AND SHUTDOWNS OF, EXISTING SYSTEMS SHALL BE COORDINATED WITH OWNER TO ALLOW MINIMUM INTERFERENCE WITH OWNERS OPERATION AND DOWN TIME OF EXISTING SERVICES.
- ALL WIRING SHALL BE INSTALLED IN CONDUIT OR BE PLENUM RATED.

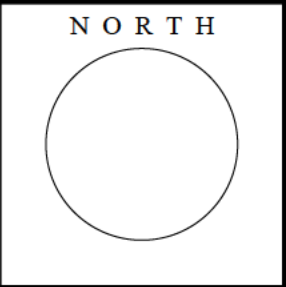
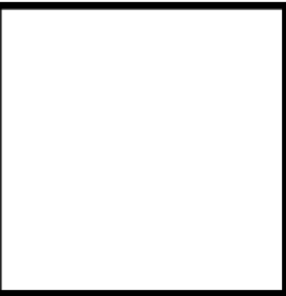
PLAN LEGEND

- HARD WIRED COMBINATION SMOKE/CARBON MONOXIDE DETECTOR
- WIRELESS ACCESS POINT
-

PLAN NOTES

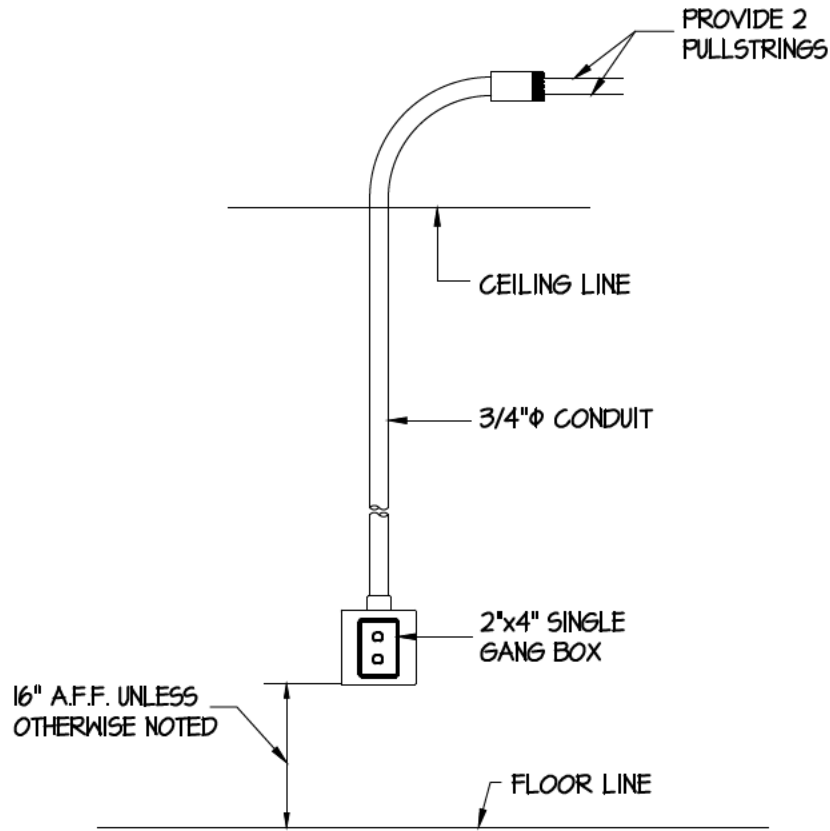
- PROVIDE DATA OUTLET, SEE DETAIL 1/66.01.
- REINSTALL EXISTING SALVAGED TELEPHONE OUTLET AT 44" A.F.F.
- CONNECT TO NEAREST AVAILABLE 120V SOURCE.
- PROVIDE NEW COMBINATION HARD WIRED SMOKE/CARBON MONOXIDE DETECTOR.
- REINSTALL EXISTING SALVAGED BOGEN SPEAKER.
- PROVIDE NEW BOGEN SPEAKER, SEE SPECIFICATIONS.
- PROVIDE SPEAKER CABLE FROM NEW OR RELOCATED SPEAKER TO SPEAKER FRONT END LOCATED IN APPARATUS #1.
- REINSTALL THE EXISTING SALVAGED TELEPHONE POWER SUPPLY, PLUG INTO NEW RECEPTACLE.
- PROVIDE NEW DOOR BELL PUSH BUTTON, REUSE EXISTING WIRING
- PROVIDE TELEPHONE OUTLET, SEE DETAIL 3/66.01.
- PROVIDE SURFACE MOUNTED CONDUIT ON INTERIOR TO ABOVE CEILING FOR FUTURE ACCESS CONTROL



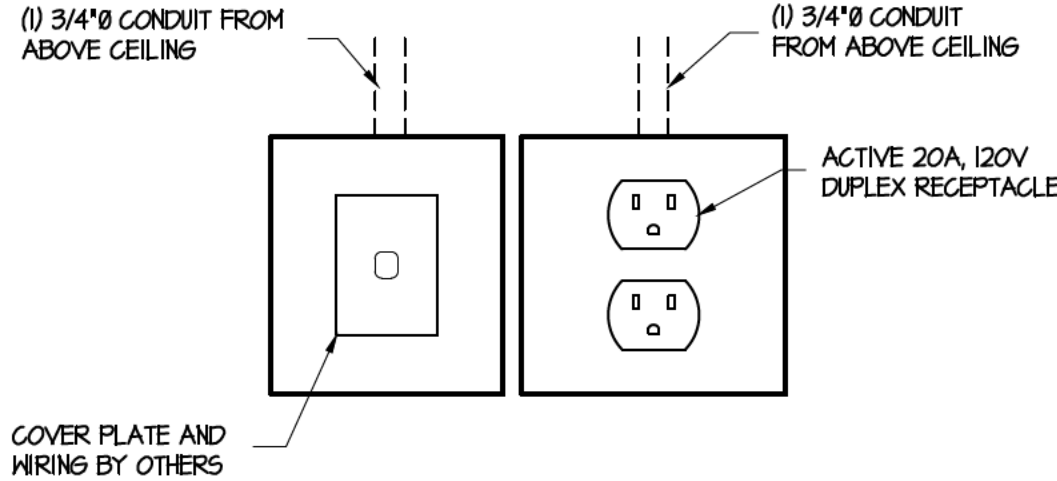


LIGHTING FIXTURE SCHEDULE

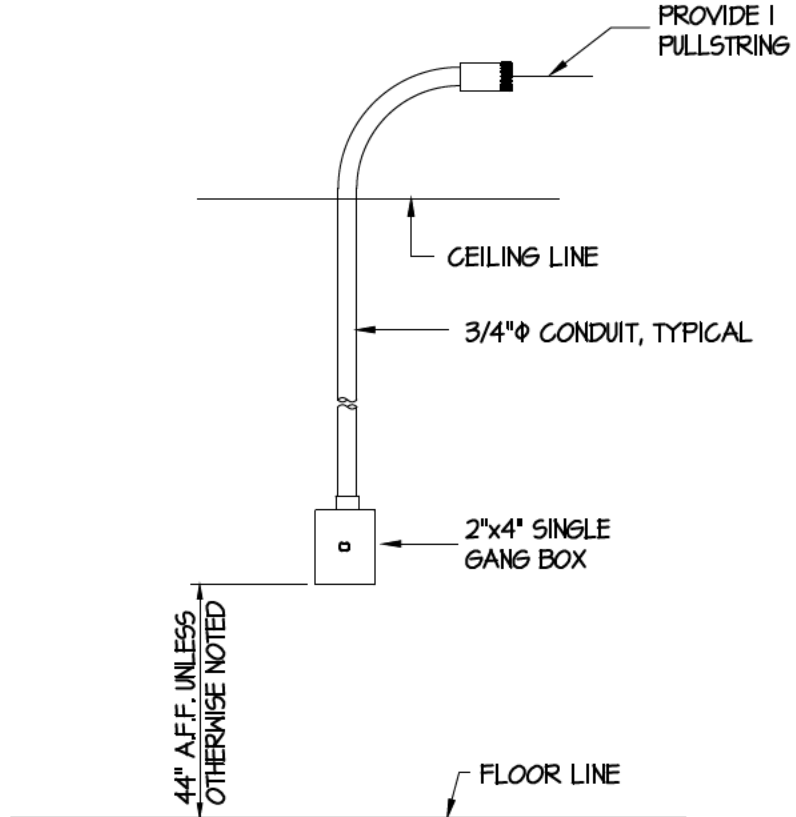
MARK	MOUNTING		MANUFACTURER	MODEL NO.	LAMP	REMARKS
	SURFACE	RECESSED				
F1		CEILING	COLUMBIA	LGAT22-30ML6-EDU	21 WATT LED	2'x2', LAY-IN CEILING, 3,300 LUMEN VOLUMETRIC
			LITHONIA	2BLT2 33L AD5M EZI LP830		WHITE FINISH, UNIVERSAL VOLTAGE, 3,000K
			H. E. WILLIAMS	LT-22-L39/830-AF-DIM-INV		DIMMING BALLAST
F2		CEILING	COLUMBIA	LGAT22-30HL6-EDU	32 WATT LED	2'x2', LAY-IN CEILING, 4,000 LUMEN VOLUMETRIC
			LITHONIA	2BLT2 40L AD5M EZI LP830		WHITE FINISH, UNIVERSAL VOLTAGE, 3,000K
			H. E. WILLIAMS	LT-22-L39/830-AF-DIM-INV		DIMMING BALLAST
F3	UNV.		COLUMBIA	LC64-40ML-EDU	25 WATT LED	46" LED STRIPLIGHT, 3,000 LUMEN, 4,000K
			LITHONIA	ZLIN L46 3000LM FST MVOLT 40K 80CRI		WHITE FINISH, UNIVERSAL VOLTAGE
			H. E. WILLIAMS	16-4-L32/840-DRV-INV		
F4	WALL		COLUMBIA	HBB2-30VH-SFA-EDU	16 WATT LED	2' VANITY FIXTURE, 1,300 LUMEN,
			LITHONIA	FMVTSL 24IN MVOLT 30K 90CRI BN M4		WALL MOUNT, 3,000 K
			WILLIAMS	WH1A-2-L20/830-AF-DRV-INV		MOUNT ABOVE BATHROOM MIRROR
F5	CEILING		METALUX	LHB-08-UNV-L840	60 WATT LED	13'x4' LOW BAY, 8,000 LUMEN, NON-DIMMING
			LITHONIA	UFIT L48 8000LM SEF MVOLT 40K 80CRI WH		UNIVERSAL VOLTAGE, WHITE FINISH
			ILP LIGHTING	H8B-8L-U-40-FRL		4,000K, DAMP LISTED
F6	UNV		DUAL-LITE	EVE U R H E	LED	SINGLE FACE EXIT SIGN, RED LETTERS
			LITHONIA	LGM S W 3 R 120/271 EL N		WHITE FACE, DIFFUSED LED LIGHT SOURCE,
			H. E. WILLIAMS	EXIT-R-EH-HIT		DUAL 120/271 VOLTAGE
F7	WALL		HUBBELL	HGH1QL-4K-U-M-PBT-I	54 WATT LED	WALL PACK, BOROSILICATE GLASS REFRACTOR
			LITHONIA	THX2 LED P4 40K MVOLT PE DDBXD		DARK BRONZE, INTEGRAL PHOTOCELL, 6,000 LUMEN,
			LUMARK	HFMLED255		4,000K, UNIVERSAL VOLTAGE
F8	WALL		HUBBELL	HGH-225L-4K-L-PBT-I	102 WATT LED	WALL PACK, BOROSILICATE GLASS REFRACTOR
			LITHONIA	THX3 LED P3 40K MVOLT PE DDBXD		DARK BRONZE, INTEGRAL PHOTOCELL, 12,000 LUMEN,
			LUMARK	HFMLED255		4,000K, UNIVERSAL VOLTAGE
F9		CEILING	GOTHAM	EVO6SH 40/35 DFF 5MO MVOLT EZIO ELR	31 WATT LED	NEW CONSTRUCTION FLUSH LENSE DOWNLIGHT, WHITE
			H. E. WILLIAMS	6DR-L30/840-EM/1WRTS-UNV-LM-OF-WH		FINISH, WITH BATTERY BACKUP, UNIVERSAL VOLTAGE,
			PRESCOLITE	LFR-6RD-M-50L-40K8-MD-DM-EMR/LFR-6RD-T-SH-WT		SHOWER DOWNLIGHT, 3,000 DELIVERED LUMENS, 4,000K
F10	CEILING		COLUMBIA	LGAT22-30ML5H-EDU	21 WATT LED	2'x2', LAY-IN CEILING, 3,300 LUMEN VOLUMETRIC
			LITHONIA	2VTLX2 33L ADP EZI LP830		WHITE FINISH, UNIVERSAL VOLTAGE, 3,000K
			H. E. WILLIAMS	LT-22-L39/830-AF-LT-22-5MK-W-DIM-INV		DIMMING BALLAST



1 DATA OUTLET DETAIL
E6.01 SCALE: N.T.S.



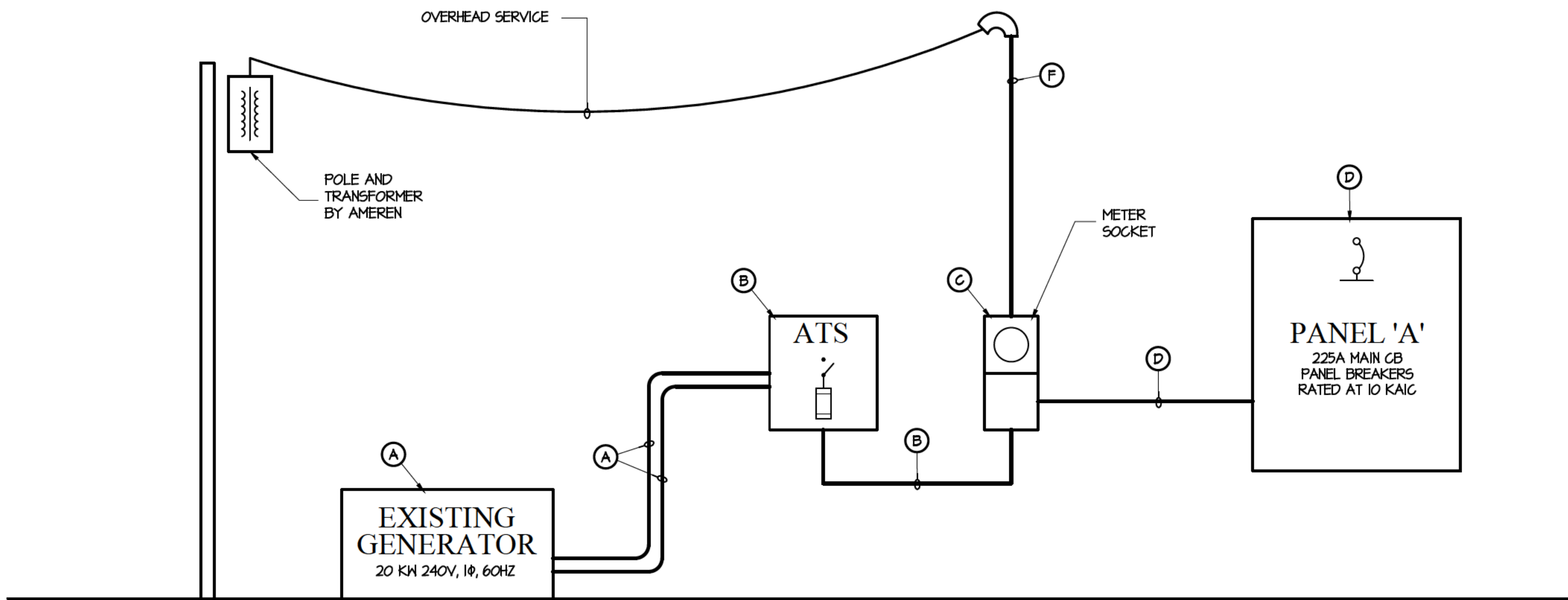
2 DATA/TV OUTLET DETAIL
E6.01 SCALE: N.T.S.



3 TELEPHONE JACK DETAIL
E6.01 SCALE: N.T.S.

NEW PANEL 'MDP' SCHEDULE		MAIN: <u>M.L.O.</u>		VOLTAGE: <u>120/240</u>		PHASE: <u>1</u> WIRE: <u>3</u>	
		BUS: <u>400</u> AMPERE		TYPE: <u>NEMA-1</u>		MOUNTING: <u>SURFACE</u>	
DESCRIPTION	LOAD (WATTS)	BREAKER AMP.	P	Ø T. Ø	BREAKER AMP.	LOAD (WATTS)	DESCRIPTION
NEW PANEL 'A'	25,040	125	2	1 3	2 4	3,060	EXISTING AIR CONDITIONER
ELECTRIC RANGE	4,800	60	2	5 7	6 8	2,700	NEW AIR CONDITIONER
EF-1/OA-1	1,600	20	1	9	10	5,200	NEW CLOTHES DRYER
CLOTHES WASHER	1,200	20	1	11	12		
RECEPT. - KITCHEN COUNTER	180	20	1	13	14	180	RECEPT. - KITCHEN COUNTER
RECEPT. - EXERCISE NORTH	540	20	1	15	16	830	RECEPT. - GARBAGE DISPOSAL
RECEPT. - BEDROOM #1 (102)	900	20	1	17	18	900	RECEPT. - BEDROOM #2 (106)
RECEPT. - BEDROOM #3 (107)	900	20	1	19	20	900	RECEPT. - BEDROOM #4 (112)
RECEPT. - TOILET (111)	360	20	1	21	22	900	RECEPT. - BEDROOM #5 (115)
RECEPT. - DINING (114) & LAUNDRY (116)	540	20	1	23	24	1,260	RECEPT. - APPARATUS BAY #2 WEST WALL
CEILING FANS - APPARATUS BAY #2	170	20	1	25	26	540	RECEPT. - KITCHEN LOUNGE
SPARE	-	20	1	27	28	-	SPARE
SPARE	-	20	1	29	30	-	SPARE
20,630	TOTAL VA/ Ø A						
27,070	TOTAL VA/ Ø B						
55,100	TOTAL VA						

NEW PANEL 'A' SCHEDULE		MAIN: <u>M.L.O.</u>		VOLTAGE: <u>120/240</u>		PHASE: <u>1</u> WIRE: <u>3</u>	
		BUS: <u>225</u> AMPERE		TYPE: <u>NEMA-1</u>		MOUNTING: <u>SURFACE</u>	
DESCRIPTION	LOAD (WATTS)	BREAKER AMP.	P	Ø T. Ø	BREAKER AMP.	LOAD (WATTS)	DESCRIPTION
LIGHTS - APPARATUS BAY #1	700	20	1	1	2	700	LIGHTS - APPARATUS BAY #1
LIGHTS - OFFICE, VESTIBULE, SOUTH SOFFIT	585	20	1	3	4	265	LIGHTS - DORMITORY & KITCHEN
LIGHTS - FURNACE, TOILET, HALL, & EQUIPMENT STORAGE	735	20	1	5	6	1,800	RECEPT. - EQUIPMENT STOR, APPARATUS BAY #1, & EXTERIOR
RECEPT. - FURNACE, TOILET, DORMITORY, KITCHEN, GARBAGE D	2,520	20	1	7	8	2,700	RECEPT. - LOUNGE, OFFICE, VESTIBULE, & EXTERIOR
NEW INFRA-RED HEATERS	270	20	1	9	10	1,500	FURNACE #1 (EQUIPMENT STORAGE & APPARATUS #1)
NEW FURNACE	1,400	20	1	11	12	1,500	FURNACE #2 (EXISTING LIVING AREAS)
NEW NORTH GARAGE DOOR OPERATOR	1,200	20	1	13	14	1,200	GARAGE DOOR OPENER (APPARATUS #1)
RECEPT. - TELEPHONE EQUIP.	540	20	1	15	16	805	LIGHTS - APPARATUS BAY #2
WARNING LIGHT & SIREN/VEHICLE EXHAUST	3,450	30	2	17	18	700	LIGHTS - EAST ADDITION AND EF-2
LIGHTS - MEZZANINE	70	20	1	19	20	360	RECEPT. - FURNACE ROOM NORTH
RECEPT. - APPARATUS BAY #2 EAST WALL AND CEILING	540	20	1	21	22	300	EXISTING NOT LABELED
SPARE	-	20	1	23	24	-	SPARE
SPARE	-	20	1	25	26	-	SPARE
SPARE	-	20	1	27	28	-	SPARE
SPARE	-	20	1	29	30	-	SPARE
11,910	TOTAL VA/ Ø A						
13,130	TOTAL VA/ Ø B						
25,040	TOTAL VA						

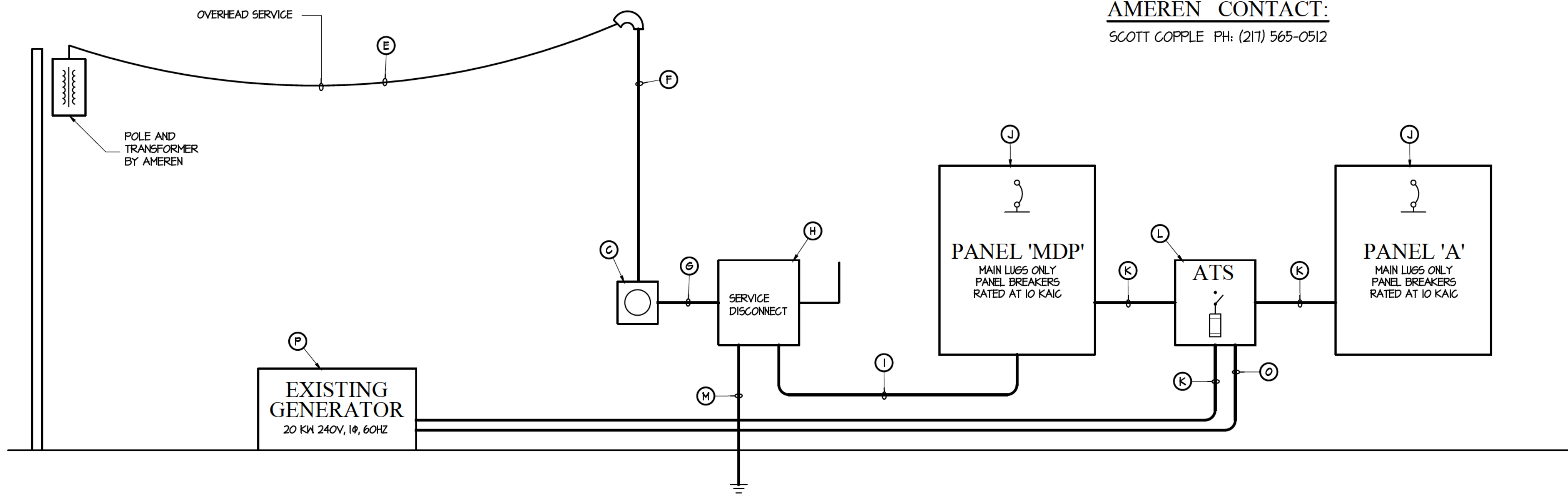


1 EXISTING POWER RISER DIAGRAM
E6.02 SCALE: N.T.S.

EXISTING PANEL 'A' SCHEDULE		MAIN: <u>225</u>		VOLTAGE: <u>120/240</u>		PHASE: <u>1</u> WIRE: <u>3</u>	
		BUS: <u>225</u> AMPERE		TYPE: <u>NEMA-1</u>		MOUNTING: <u>SURFACE</u>	
DESCRIPTION	LOAD (WATTS)	BREAKER AMP.	P	Ø T. Ø	BREAKER AMP.	LOAD (WATTS)	DESCRIPTION
LIGHTS - APPARATUS BAY #1	1,400	20	1	1	2	1,400	LIGHTS - APPARATUS BAY #1
LIGHTS - OFFICE, VESTIBULE, SOUTH SOFFIT	1,170	20	1	3	4	525	LIGHTS - DORMITORY & KITCHEN
LIGHTS - FURNACE, TOILET, HALL, & EQUIPMENT STORAGE	1,465	20	1	5	6	1,800	RECEPT. - EQUIPMENT STOR, APPARATUS BAY #1, & EXTERIOR
RECEPT. - FURNACE, TOILET, DORMITORY, KITCHEN, GARBAGE D	2,520	20	1	7	8	2,700	RECEPT. - LOUNGE, OFFICE, VESTIBULE, & EXTERIOR
RANGE	4,800	60	2	9	10	1,500	FURNACE #1 (EQUIPMENT STORAGE & APPARATUS #1)
AIR CONDITIONER	3,060	40	2	11	12	1,500	FURNACE #2 (EXISTING LIVING AREAS)
RECEPT. - TELEPHONE EQUIP.	540	20	1	13	14	1,200	GARAGE DOOR OPENER (APPARATUS #1) ?
WARNING LIGHT & SIREN/VEHICLE EXHAUST	3,450	30	2	15	16	5,280	WASHER/DRYER COMBO
SPACE	-	-	1	17	18	360	RECEPT. - FURNACE ROOM NORTH
SPACE	-	-	1	19	20	300	EXISTING NOT LABELED
SPACE	-	-	1	21	22	-	SPACE
SPACE	-	-	1	23	24	-	SPACE
SPACE	-	-	1	25	26	-	SPACE
SPACE	-	-	1	27	28	-	SPACE
SPACE	-	-	1	29	30	-	SPACE
20,400	TOTAL VA/ Ø A						
19,570	TOTAL VA/ Ø B						
39,970	TOTAL VA						

RISER DIAGRAM NOTES

- (A) EXISTING GENERATOR TO REMAIN, REMOVE THE EXISTING FEEDERS AND CONTROL WIRING INCLUDING CONDUIT AND CONDUCTORS.
- (B) REMOVE AND SALVAGE THE EXISTING AUTOMATIC TRANSFER SWITCH FOR REINSTALLATION AT NEW LOCATION. REMOVE CONDUIT AND CONDUCTORS FROM ATS TO METER.
- (C) REMOVE THE EXISTING METER SOCKET AND PROVIDE NEW METER SOCKET WITH LEVER BYPASS SIMILAR TO U5186-X-K3-K2-516-BL-AMS BY MILLBANK, METER PROVIDED BY AMEREN.
- (D) REMOVE THE EXISTING PANEL 'A' AND CONDUIT AND FEEDERS FROM THE METER.
- (E) NEW POLE TRANSFORMER AND WIRING FROM TRANSFORMER TO WEATHER HEADS PROVIDED BY AMEREN.
- (F) REMOVE THE EXISTING CONDUCTORS, CONDUIT, AND WEATHERHEAD. PROVIDE (3) #350 MCM THINNS IN 3"Ø RIGID METALLIC CONDUIT WITH NEW WEATHERHEAD. PROVIDE SLACK, FINAL CONNECTION BY AMEREN.
- (G) PROVIDE (3) #350 MCM THINNS IN 3"Ø RIGID STEEL CONDUIT.
- (H) PROVIDE 400 AMP FUSED HEAVY DUTY 2-POLE DISCONNECT IN NEMA 3R ENCLOSURE, FUSE AT 300 AMPS.
- (I) PROVIDE (3) #350 MCM THINNS AND (1) #3 COPPER GROUND IN 3"Ø RIGID STEEL CONDUIT.
- (J) PROVIDE NEW PANEL, SEE SCHEDULE THIS SHEET AND PROJECT MANUAL.
- (K) PROVIDE (3) #3/0 THINNS AND (1) #6 COPPER GROUNDING CONDUCTOR IN 2"Ø CONDUIT.
- (L) REINSTALL THE EXISTING SALVAGED GENERATOR AUTOMATIC TRANSFER SWITCH.
- (M) PROVIDE (1) #3 COPPER GROUND TO (3) 8' LONG 3/4"Ø COPPER-GLAD STEEL GROUND RODS MINIMUM 6' APART.
- (N) PROVIDE NEW CONTROL WIRING FROM ATS TO GENERATOR (1) #12 THINNS AND (3) #10 THINNS IN 3/4"Ø CONDUIT.
- (O) PROVIDE (3) #3 THINNS AND (1) #6 COPPER GROUND IN 1-1/4"Ø SCH 40 PVC CONDUIT.
- (P) EXISTING GENERATOR TO REMAIN CONNECT NEW FEEDERS AND CONTROL WIRING TO RELOCATED AUTOMATIC TRANSFER SWITCH.
- (Q) EXISTING CIRCUITS FROM PANEL 'A' TO BE RECONNECTED IN NEW PANEL 'A'.



2 NEW POWER RISER DIAGRAM
E6.02 SCALE: N.T.S.

14.

**City of Mattoon
Council Decision Request**

MEETING DATE: 07/01/2025 CDR NO: 2025-2615

SUBJECT: Purchase one 2025 Ford Explorer Police Interceptor

SUBMITTAL DATE: 06/26/2025

SUBMITTED BY: Sam Gaines, Chief of Police, Mattoon Police Dept.

APPROVED FOR	Kyle Gill,	<u>06/26/2025</u>
COUNCIL AGENDA:	City Manager	Date

EXHIBITS (If applicable): 2025 Ford Explorer Police Interceptor Bid

EXPENDITURE	AMOUNT	FUNDS	CONTINGENCY
ESTIMATE:	BUDGETED:	REMAINING:	FUNDING:
\$50,405.00	\$53,000.00	\$53,000.00	\$0.00

IF IT IS THE WISH OF THE COUNCIL TO SUPPORT RECOMMENDATIONS
CONTAINED IN THIS REPORT, THE FOLLOWING MOTION IS SUGGESTED:

“I move that the City Council authorize the Chief of Police to purchase one 2025 Ford Explorer Police Interceptor for use by the Mattoon Police Department.”

SUMMARY OF THE TOPIC FOR WHICH A COUNCIL DECISION IS REQUESTED:

A 2022 Ford Explorer Police Interceptor, 2C10, has over 73,000 miles currently and needs replaced.

Pilson Auto Center has one new 2025 Ford Police Interceptor Utility Vehicle.

Trading in the 2022 Ford Explorer 1FM5K8ABXNGB04505 with a \$4,200 value.

Dr. Lic. _____
Soc. Sec. _____
D.O.B. _____
Lic. No. _____

DAN PILSON AUTO CENTER, INC.

2212 Lake Land Blvd. • Mattoon, IL 61938 (217) 234-6461 1506 18th St. Charleston, IL 61920 (217) 345-3673
2000 Lake Land Blvd Mattoon, IL 61938 • (217) 234-2397

Stock No. **F25247**

Date **06/25/2025**

Dealer No. **93180**



LINCOLN



CHRYSLER

Jeep

RETAIL BUYERS ORDER

Purchaser's Name **CITY OF MATTOON**

Cust. No. **MA5460**

Salesman **JAMES JAVENS**

Address **208 N 19TH ST**

City **MATTOON**

State **IL**

Zip **61938-2897**

Enter my order for Year **2025**

Make **FORD**

Model **Expedition**

Phone **217/235-6654**

Serial No. **1FMJU1G83SEA28192**

New ☒

Used ☐

Car ☐

Truck ☐

Mileage **31**

Color **AGATE_BLACK**

PURCHASED ACCESSORIES		Base Price	\$	54432.00		
		Equipment, Accessories, Freight or other charges if not included in above price	\$	N/A		
		Total	\$	54432.00		
		Used Car Allowance	\$	4200.00		
		Difference	\$	50232.00		
		Vehicle Protection Pkg.	\$	N/A		
		Optional Electronic Filing Fee	\$	N/A		
		Unit Handling & Documentary Fees	\$	N/A		
		Taxable Sub-Total	\$	50232.00		
		Tax	\$	N/A		
		License & Title Fee	\$	173.00		
		VSI	\$	N/A		
		Extended Warranty	\$	N/A		
Show Lien To:		GAP	\$	N/A		
Address		Road Hazard Tire	\$	N/A		
		Total Loss Care	\$	N/A		
Trade #1	YR 2022 Make FORD Model EXPLORER	Purchase Total	\$	50405.00		
VIN #	1FM5K8ABXNGB04505 Mileage 73476	Deposit And/Or Cash on Delivery	\$	N/A		
Trade #2	YR Make Model	Rebate	\$	N/A		
VIN #	Mileage	Cancellations From PAC	\$	N/A		
Trade #3	YR Make Model	Balance	\$	50405.00		
VIN #	Mileage	Pay Off #1	\$	N/A		
		Pay Off #1 to				
		Pay Off #2	\$	N/A		
		Pay Off #2 to				
I/WE GUARANTEE DAN PILSON AUTO CENTER, INC. A TITLE FREE AND CLEAR OF ALL INCUMBRANCES AND NOT TO BE A REBUILT OR SALVAGE TITLE. I/ WE AGREE TO REIMBURSE DAN PILSON AUTO CENTER THE COST OF A DUPLICATE TITLE IF I/WE CANNOT PRODUCE A TITLE WITHIN 14 DAYS. SIGNED _____		Total	\$	50405.00		
		Credit Life Insurance	\$	N/A		
		Credit Disability Insurance	\$	N/A		
TOTAL OPTIONS		\$	N/A	Total to Finance	\$	50405.00

IMPORTANT!

SEE REVERSE SIDE FOR WARRANTY PROVISIONS, WARRANTY EXCLUSIONS, LIMITATION OF REMEDIES, ARBITRATION, AND OTHER CONTRACT TERMS. THE BUYER'S ACCEPTANCE OF THIS CONTRACT IS EXPRESSLY LIMITED TO THE TERMS OF THIS CONTRACT. ANY TERMS OR CONDITIONS OR BUYER'S ACCEPTANCE OF THIS CONTRACT WHICH ARE IN ADDITION TO OR INCONSISTENT WITH THE TERMS OF THIS CONTRACT SHALL BE UNENFORCEABLE AND VOID AND SHALL NOT BECOME A PART OF THIS CONTRACT. THIS CONTRACT CONTAINS THE ENTIRE AGREEMENT BETWEEN BUYER AND SELLER, AND THERE ARE NO ORAL REPRESENTATIONS OR WARRANTIES WHICH ARE A PART OF OR WHICH INDUCED BUYER TO ENTER INTO THIS CONTRACT

PURCHASER'S SIGNATURE _____

FINAL ORDER

ACCEPTED DAN PILSON AUTO CENTER, Inc. BY _____

NO PUBLIC LIABILITY INSURANCE ISSUED WITH THIS ORDER

Nothing follows