

Addendum 02

DOCUMENT 00 91 00

DATE: September 25, 2026

PROJECT: Shenandoah School Corporation New Transportation Center
5100 North Raider Road
Middletown, Indiana 47356

PROJECT #: 25107.00

OWNER: Shenandoah School Corporation
5100 North Raider Road
Middletown, Indiana 47356

ARCHITECT: Garmann Miller
38 South Lincoln Drive
P.O. Box 71
Minster, Ohio 45865

TO: Prospective Bidders

This addendum form is a part of the Contract Documents and modifies the Construction Documents dated September 2, 2026, with amendments and additions noted below.

Acknowledge receipt of this Addendum on the Bid Form. Failure to do so may disqualify the Bidder.

This addendum consists of 2 pages, 7 specification sections, and 8 re-issued drawing sheets.

FOR INFORMATION ONLY

1. Question: Will the owner provide and pay for a testing agency to observe proofrolling and perform subgrade and aggregate density testing? Who schedules the testing agency?
 - a. The owner will provide and pay for a testing agency. The General Contractor will be responsible for scheduling the agency.
2. Question: The geotechnical report and fill specification appear to state different compaction requirements for replacement fill below pavement. Which requirement should we use for pricing and construction?
 - a. For compaction under paving, please use the 97% of maximum dry density requirement for pricing and construction as indicated in specification 31 23 23, section 3.04-J.



CHANGES TO THE PROJECT MANUAL

1. Section 00 41 13 - Bid Form
 - a. Add "Alternate 05".
 - b. Add "UNIT PRICES" section in its entirety.
2. Section 01 21 00 – Allowances
 - a. Article 1.04 Allowances Schedule; remove section B "Aid to Construction".
3. Section 01 22 00 - Unit Prices
 - a. Add section in its entirety.
4. Section 01 23 00 – Alternates
 - a. Section 1.05; add subsection E "Alternate 05".
5. Section 03 35 11 - Concrete Floor Finishes
 - a. Section 1.05 Quality Assurance; add section in its entirety.
 - b. Section 2.01 Applications; revise locations.
 - c. Section 2.03 Coatings, section A High Gloss Clear Coating; Add section 1. Composition: Solvent-based in its entirety.
6. Section 07 61 00 - Sheet Metal Roofing
 - a. Section 2.02 Roof System – B – 1; revise roof panel to be 24 gauge.
 - b. Section 2.04 ; remove section "D – Fascia".
7. Section 13 34 18 - Post Frame Building Systems
 - a. Section 2.01 Manufacturers; add "Meyer Building".
 - b. Section 2.03 Materials; revise all panel thickness to 0.018" minimum.

CHANGES TO THE DRAWINGS

1. Drawing Sheet C1.0 - Site Utilities Plan
 - a. Add cleanouts for the sanitary sewer lines.
2. Drawing Sheet A1.3 - Enlarged Stair Plans, Sections, Details
 - a. Revise keynote 06 20 00.D to be a painted finish.
3. Drawing sheet A6.1 - Door Schedule and Details
 - a. Remove door B203 from door schedule.
4. Drawing Sheet A9.1 - Finish Plans and Details
 - a. Add keynote 09 91 23.A3 to paint wood trim wall cap PT1.
 - b. Add Hardened Concrete to finish schedule.
 - c. Revise floor finish in room B100 to be HC.
5. Drawing Sheet E2.1 - Service Entrance Conduit
 - a. Keynote 15 updated conduit size from 2 inch to 4 inch.
6. Drawing Sheets E1.2, E5.1, E5.2 - Powersync control panel alternate
 - a. Control panels added for alternate Powersync bus heater circuit controls.

ATTACHMENTS

The following attachments are included and are part of this addendum:

Specification Sections: 00 41 13, 01 21 00, 01 22 00, 01 23 00, 03 35 11, 07 61 00, 13 34 18
Drawing Sheets: C1.0, A1.3, A6.1, A9.1, E2.1, E1.2, E5.1, E5.2

END OF ADDENDUM



SECTION 00 41 13 - BID FORM
THE PROJECT AND THE PARTIES

TO:

Shenandoah School Corporation
5100 North Raider Road
Middletown, Indiana 47356

FOR:

Project: 25107.00 Shenandoah School Corporation Transportation Center
Project Number: 25107.00
5100 North Raider Road
Middletown, Indiana 47356

DATE: _____ **(Bidder to enter date)**

SUBMITTED BY:

Bidder's Full Name: _____

Address: _____

City, State, Zip: _____

Telephone: _____

Fax No.: _____

E-mail: _____

OFFER

Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by Garmann/Miller & Associates Inc. for the above mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of:

Item 1 - Contract A, General Construction - Base Bid:

_____ dollars

All Cash and Contingency Allowances described in Section 01 21 00 are included in the Bid Sum.

Item 1a - Alternate 01 - Maintenance Slab Thickness:

If Alternate 01 is accepted, add:

dollars

Item 1b - Alternate 02 - Heavy Duty Asphalt:

If Alternate 02 is accepted, add:

dollars

Item 1c - Alternate 03 - Sectional Door Glazing:

If Alternate 03 is accepted, add:

dollars

Item 1d - Alternate 04 - Fabricated Metal Logo Signage

If Alternate 04 is accepted, add:

dollars

Item 1e - Alternate 05 - PowerSync Control Panel

If Alternate 05 is accepted, add:

dollars

We have included the Bid Bond or security deposit as required by the Advertisement, Notice to Bidders, Instructions to Bidders.

This is a Tax Exempt Project.

Builders Risk Insurance is to be furnished by the Owner.

ACCEPTANCE

This offer shall be open to acceptance and is irrevocable for sixty days from the bid closing date.

If this bid is accepted by Owner within the time period stated above, we will:

Execute the Agreement within ten (10) days of receipt of Notice of Award.

Commence work within ten (10) days after written Notice to Proceed of this bid.

If this bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required Bond(s), the security deposit shall be forfeited as damages to Owner by reason of our failure, limited in amount to the lesser of the face value of the security deposit or the difference between this bid and the bid upon which a Contract is signed.

In the event our bid is not accepted within the time stated above, the required security deposit shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

CONTRACT TIME

Owners desired start date: March 1, 2027

Owners desired completion date: December 31, 2027

If this Bid is accepted, we will:

Complete the Work by Date or at an earlier date of _____ (Bidder to enter completion date or time frame prior to completion date listed.)

UNIT PRICES

The following are Unit Prices for specific portions of the Work as listed. The following is the list of Unit Prices:

Contaminated Soils:

Tested Contaminated:

\$ _____ Per Cubic Yard

Tested Uncontaminated:

\$ _____ Per Cubic Yard

Unsuitable Soils:

Excavated Material:

\$ _____ Per Cubic Yard

Concrete Fill:

\$ _____ Per Cubic Yard

Controlled Density Fill:

\$ _____ Per Cubic Yard

GeoGrid Fabric:

#204 GeoGrid

\$ _____ Per Square Yard

The Owner, Architect, and Contractor must agree to all Unit Prices prior to the award of contract. Lack of agreement of Unit Prices is grounds for rejection of bid.

ADDENDA

The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.

Addendum # _____ Dated _____.

Addendum # _____ Dated _____.

Addendum # _____ Dated _____.

Addendum # _____ Dated _____.

Addendum # _____ Dated _____.

Addendum # _____ Dated _____.

BID FORM SUPPLEMENTS

Bid Bond

Noncollusion Affidavit

Contractor's Affidavit

BID FORM SIGNATURE(S)

(Bidder - print the full name of your firm)
was hereunto affixed in the presence of:

(Authorized signing officer)

(Authorized signing officer, Title)

SEALED SUBMISSION:

Bid is to be submitted in Duplicate.

Bid is to be submitted in a sealed envelope containing bid and bid form supplements and addressed as follows:

Prime Contract Bid for:
Shenandoah School Corporation
5100 North Raider Road
Middletown, Indiana 47356

END OF BID FORM

**SECTION 01 21 00
ALLOWANCES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Contingency allowance.
- B. Payment and modification procedures relating to allowances.

1.02 RELATED REQUIREMENTS

- A. Section 01 20 00 - Price and Payment Procedures: Additional payment and modification procedures.

1.03 CONTINGENCY ALLOWANCE

- A. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, bonding, equipment rental, will be included in Change Orders authorizing expenditure of funds from this Contingency Allowance.
 - 1. All overhead and profit contemplated for the Work performed under each Allowance is to be included in the Base Bid.
- B. Funds will be drawn from the Contingency Allowance by Change Order.
- C. At closeout of Contract, funds remaining in Contingency Allowance will be credited to Owner by Change Order.

1.04 ALLOWANCES SCHEDULE

- A. Contingency Allowance: General Contract - A; Include the stipulated sum/price of \$160,000.00 for use upon Owner's instructions.
- B. ~~Aid to Construction Allowance: General Contract - A; Include the stipulated sum/price of \$60,000.00 for use upon Owner's instructions.~~

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

**SECTION 01 22 00
UNIT PRICES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. List of unit prices, for use in preparing Bids.
- B. Measurement and payment criteria applicable to Work performed under a unit price payment method.
- C. Defect assessment and non-payment for rejected work.

1.02 COSTS INCLUDED

- A. Unit Prices included on the Bid Form shall include full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.

1.03 MEASUREMENT OF QUANTITIES

- A. Take all measurements and compute quantities. Measurements and quantities will be verified by Owner's representatives.
- B. Assist by providing necessary equipment, workers, and survey personnel as required.
- C. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.
- D. Measurement by Area: Measured by square dimension using mean length and width or radius.

1.04 PAYMENT

- A. Payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities of Work that is incorporated in or made necessary by the Work and accepted by the Architect, multiplied by the unit price.

1.05 SCHEDULE OF UNIT PRICES

- A. The Owner, Architect and Contractor must agree to all unit prices prior to the award of contract. A lack of agreement of unit prices is grounds for rejection of bids.
- B. Contaminated soils encounter during excavation.
 - 1. It is not the intent of the project to rid the entire site of all contaminated soils. It is the intent of the project to rid the site of contaminated soils encountered during excavations required to install underground utilities and footings and foundations. The cost of fill and backfill material for the excavation is to be included in the Base Bid.
 - a. Tested Contaminated Soils: Include in the unit price stockpiling suspected material on site for testing by Soils Engineer, if contaminated load on trucks provided by disposing agency. Allen County to contract with disposing agency.
 - 1) Provide cost per Cubic Yard
 - b. Tested Uncontaminated Soils: Include in the unit price stockpile suspected material on site for testing by Soils Engineer, if uncontaminated General Contract to dispose of off site. The cost of fill and backfill is to be included in the Base Bid.
 - 1) Provide cost per Cubic Yard
- C. Unsuitable Soils
 - 1. Excavation: Include in the unit price the removal of unsuitable material and disposal off site.
 - a. Provide cost per Cubic Yard.

2. Backfill with soil. Haul in, place and compact to proper density, the soil material used to backfill an excavated location.
 - a. Provide unit cost per Cubic Yard.
 3. Concrete Fill: Include in the unit price the cost and placement of lean concrete.
 - a. Provide cost per Cubic Yard.
 4. Controlled Density Fill (CDF): Include in the unit price importing and placement of engineered fill.
 - a. Provide cost per Cubic Yard.
- D. Geogrid Fabric
1. Provide #204 GeoGrid. This includes both furnishing and installing this fabric on site.
 - a. Provide cost per Square Yard.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

**SECTION 01 23 00
ALTERNATES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Description of Alternates.
- B. Procedures for pricing Alternates.
- C. Documentation of changes to Contract Sum and Contract Time.

1.02 RELATED REQUIREMENTS

- A. Document 00 41 00 - Bid Form

1.03 GENERAL

- A. Required alternates are worded briefly. Refer to Specification sections and Drawings for additional requirements. Claims for additional compensation will not be granted because of omissions or discrepancies due to the brevity.
- B. Bidders shall indicate the addition or deduction amount from the base bid for each alternate requested in the space provided on the bid form.
- C. The cost indicated on the bid form shall include material and labor as may be necessary for the identified alternate.

1.04 ACCEPTANCE OF ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.05 SCHEDULE OF ALTERNATES

- A. **Alternate 01: Maintenance Slab Thickness**
 - 1. Description: Provide 8" thick slab in lieu of the base bid 6" slab as indicated on the drawings.
- B. **Alternate 02: Heavy Duty Asphalt**
 - 1. Description: Provide heavy duty asphalt pavement in lieu of the base bid standard duty asphalt pavement as indicated on the drawings.
- C. **Alternate 03: Sectional Door Glazing**
 - 1. Description: Provide glazing in sectional doors in lieu of the base bid full panels with no glazing as indicated on the drawings.
- D. **Alternate 04: Fabricated Metal Logo Signage**
 - 1. Description: Provide fabricated metal logo signage as indicated on the drawings.
- E. **Alternate 05: PowerSync Control Panel**
 - 1. Description: Provide power connection for PowerSync control panel, and route all bus heater circuits through the control panel.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

**SECTION 03 35 11
CONCRETE FLOOR FINISHES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Surface treatments.
- B. Liquid densifiers and hardeners.
- C. Clear coatings.
- D. Slip-resistant coatings.

1.02 RELATED REQUIREMENTS

- A. Section 03 30 00 - Cast-in-Place Concrete: Finishing of concrete surface to tolerance; floating, troweling, and similar operations; curing.
- B. Section 03 30 00 - Cast-in-Place Concrete: Curing compounds that also function as sealers.

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate the work with concrete floor placement and concrete floor curing.

1.04 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's published data on each finishing product, including information on compatibility of different products and limitations.
- C. Maintenance Data: Provide data on maintenance and renewal of applied finishes.

1.05 QUALITY ASSURANCE

- A. All sealers, coatings, densifiers and hardeners to be provided by the same manufacturer.

1.06 MOCK-UPS

- A. For coatings, construct mock-up area under conditions similar to those that will exist during application, with coatings applied.
- B. Locate where directed.
- C. Mock-up may remain as part of the work.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in manufacturer's sealed packaging, including application instructions.

1.08 FIELD CONDITIONS

- A. Do not finish floors until interior heating system is operational.
- B. Maintain ambient temperature of 50 degrees F minimum.

PART 2 PRODUCTS

2.01 APPLICATIONS

- A. Liquid Densifier/Hardener
 - 1. Use at following locations: **Where hardened concrete (HC) finish indicated on Drawings.**
- B. High Gloss Clear Sealer

1. Use at following locations: **Where sealed concrete (SC) and Hardened Concrete (HC) finish indicated on Drawings.**
- C. Slip-Resistant Coating: Finely-ground aggregates added to coatings.
 1. Use at the following locations: **Where indicated on Drawings.**

2.02 DENSIFIERS AND HARDENERS

- A. Liquid Densifier and Hardener: Penetrating chemical compound that reacts with concrete, filling the pores, hardening, and dustproofing.
 1. Composition: Lithium silicate.
 2. Products:
 - a. Dayton Superior Corporation; Pentra-Hard Densifier: www.daytonsuperior.com.
 - b. Euclid Chemical Company; ULTRASIL LI+: www.euclidchemical.com/
 - c. PROSOCO, Inc; Consolideck LS: www.prosoco.com/consolideck/
 - d. Sika, Scofield Formula One Lithium Densifier MP: usa.sika.com.
 - e. SpecChem, LLC; LithSeal SC: www.specchemllc.com
 - f. W. R. Meadows, Inc; Liqui-Hard Ultra: www.wrmeadows.com.
 - g. Substitutions: See Section 01 60 00 - Product Requirements.

2.03 COATINGS

- A. High Gloss Clear Coating: Transparent, nonyellowing, acrylic polymer-based coating.
 1. **Composition: Solvent-based.**
 - a. Application: To be used with slip-resistant coating where indicated on the Drawings.
 - b. Products:
 - 1) Dayton Superior Corporation; Tuf Seal J35: www.daytonsuperior.com.
 - 2) Euclid Chemical Company; DIAMOND CLEAR: www.euclidchemical.com/
 - 3) PROSOCO, Inc; Consolideck Concrete Protector SB
 - 4) SpecChem, LLC; All Shield SB: www.specchemllc.com
 2. Composition: Water-based.
 - a. Application: To be used at all other Sealed Concrete locations indicated on the Drawings.
 - b. Products:
 - 1) Dayton Superior Corporation; PENTRA-HARD Guard: www.daytonsuperior.com.
 - 2) Euclid Chemical Company; ULTRAGUARD: www.euclidchemical.com.
 - 3) PROSOCO, Inc; LSGuard: www.prosoco.com/consolideck.
 - 4) Sika, Scofield Formula One Guard-W: usa.sika.com.
 - 5) SpecChem, LLC; SpecGuard: www.specchemllc.com
 - 6) W. R. Meadows, Inc; BELLATRIX: www.wrmeadows.com.
- B. Slip-Resistant Coating:
 1. Plastic Aggregate: Finely ground polymer for addition to coatings for slip resistance.
 - a. Products:
 - 1) Dayton Superior Corporation; Grip Aid: www.daytonsuperior.com/#sle.
 - 2) Euclid Chemical Company; EUCO GRIP: www.euclidchemical.com/#sle.
 - 3) SpecChem, LLC; Surface Grip: www.specchem.com/#sle.
 - 4) Substitutions: See Section 01 60 00 - Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that floor surfaces are acceptable to receive the work of this section.

- B. Verify that flaws in concrete have been patched and joints filled with methods and materials suitable for further finishes.

3.02 GENERAL

- A. Apply materials in accordance with manufacturer's instructions.

3.03 DENSIFIERS AND HARDENERS

- A. Surface Preparation:
 - 1. Verify that surface is free of previous coatings, sealers, curing compounds, water repellents, laitance, efflorescence, fats, oils, grease, wax, soluble salts, residues from cleaning agents, and other impediments to adhesion.
 - 2. Verify that water vapor emission from concrete and relative humidity in concrete are within limits established by coating manufacturer.
 - 3. Remove any concrete laitance and patch or fix all cracks and damaged areas.
 - 4. New concrete should be properly cured a minimum of 7 days in accord with ACI 302 by one of the following methods: water, plastic sheeting, or reinforced paper.
 - 5. Protect adjacent non-coated areas from drips, overflow, and overspray; immediately remove excess material.
- B. Mixing: Mix thoroughly prior to each use.
- C. Placement:
 - 1. Apply densifier to point of rejection (by spray, roller, brush or pouring), then scrub the product using a soft bristle broom or mechanical scrubber. Work in this manner until the product begins to thicken, rewet with water and work. Do not allow the product to dry, apply additional product if needed to keep wet while working. Thoroughly rinse and then squeegee or brush off excess material until dry.
 - 2. On porous or rough surfaces, a second application may be required.
 - a. If a second coat is required, immediately apply it in a similar manner as the first coat. Do not allow the treated surfaces to dry between applications.
- D. The use of a mechanical scrubber will increase the effectiveness of the application. The treated surface will develop a "polished" appearance over time.

3.04 COATING APPLICATION

- A. Surface Preparation:
 - 1. Verify that surface is free of previous coatings, sealers, curing compounds, water repellents, laitance, efflorescence, fats, oils, grease, wax, soluble salts, residues from cleaning agents, and other impediments to adhesion.
 - 2. Verify that water vapor emission from concrete and relative humidity in concrete are within limits established by coating manufacturer.
 - 3. Floors to be mechanically prepared (i.e. shotblast, sandblast) to result in a Concrete Surface Profile (CSP) of between an International Concrete Repair Institute i.e., shotblast, sandblast, to result in a Concrete Surface Profile (ICRI) CSP #1-2, or the texture of medium grit sandpaper to ensure proper adhesion.
 - 4. Protect adjacent non-coated areas from drips, overflow, and overspray; immediately remove excess material.
- B. Apply coatings in accordance with manufacturer's instructions, matching approved mock-ups for color, special effects, sealing and workmanship.
- C. Mixing: Mix thoroughly prior to each use.
- D. Placement:
 - 1. Apply in uniform, even applications.

2. Surface and ambient temperature is recommended and relative humidity to be within manufacturers recommend ranges.
3. Two coats are required
 - a. First Coat: Pour the mixed material onto the floor to be coated. A squeegee can be used to uniformly spread the epoxy on the surface. Immediately back roll with a 1/4 - 3/8 inch phenolic core roller to even out the surface. Avoid over-rolling or over-working the material.
 - b. Slip Resistant Surface
 - 1) Apply a base coat of Spec Cote WB to be applied and clean dry aggregate (silica sand) broadcast on the tacky base coat to the desired texture finish.
 - 2) After the base coat has cured, broom away any loose aggregate and apply a thin topcoat of Spec Cote WB to encapsulate and seal the aggregate.
 - c. Second coat can be applied when the first coat is completely dry and tack free, but must be applied within 16 hours to achieve adequate adhesion and bond between coats to avoid
 - d. Before second coat application check for the presence of imperfections such as epoxy blush, air bubbles etc. Correct imperfections prior to application.

3.05 PROTECTION

- A. Protect installed coatings from subsequent construction operations.
- B. Do not permit traffic over unprotected floor surface.

END OF SECTION

**SECTION 07 61 00
SHEET METAL ROOFING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Complete preformed, roof system, including all materials, associated flashings, trim, closures, fasteners, framing, supports, sealants and underlayment required.
- B. Snow guards.
- C. Vapor Barrier
- D. Underlayment
- E. Eave Protection
- F. Sealants for joints within sheet metal fabrications.
- G. Soffits

1.02 RELATED REQUIREMENTS

- A. Section 09 90 00 - Painting and Coatings: Paint downspout shoe
- B. Section 07 72 00 - Roof Accessories: Manufactured accessories.

1.03 ALTERNATIVES

- A. See Section 01 23 00 - Alternates, for product alternatives affecting this section.

1.04 REFERENCE STANDARDS

- A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2025a.
- B. ASTM B32 - Standard Specification for Solder Metal; 2020.
- C. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2018 (Reapproved 2024).
- D. ASTM E 1646 - Standard Specification for Water Infiltration.
- E. ASTM E 1680 - Standard Specification for Air Infiltration
- F. AISC Catagory MB Certification
- G. SMACNA (ASMM) - Architectural Sheet Metal Manual; 2012.

1.05 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Convene two weeks before starting work of this section.

1.06 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Engineered Drawings: Manufacturer of the roofing system, shall provide engineer stamped drawings certifying that the roof system is designed specifically for this project and will meet all State of Indiana Building Codes. Engineer shall be certified in the State of Indiana.
- C. Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Manufacturer's Field Reports: Indicate procedures followed, ambient temperatures, humidity, wind velocity during application, and supplementary instructions given.

- F. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.
- G. Product Data: Provide data on metal types, finishes, characteristics .
 - 1. Flashing materials
 - 2. Insulation
 - 3. Fasteners
 - 4. Pre-manufactured pipe flashing
 - 5. Accessories
- H. Installation Samples: Submit two samples illustrating metal roofing mounted on plywood backing illustrating typical seam.
- I. Submit three samples illustrating metal finish color.
- J. Color Samples: Submit two samples illustrating metal finish color.

1.07 QUALITY ASSURANCE

- A. Perform work in accordance with SMACNA (ASMM) requirements and standard details, except as otherwise noted.
- B. Manufacturer's Qualifications: Roof system manufacturer has been engaged in the fabrication of metal roof systems for at least ten years.
 - 1. The Manufacturer shall be a member of the Metal Building Manufacturer's Association (MBNA).
 - 2. The American Institute of Steel Construction (AISC) currently certifies the Manufacturer for Category MB.
 - 3. The Manufacturer maintains a certified installer program for its products and maintains an up to date authorized roofing contractor list.
 - 4. The Manufacturer has a written warranty covering durability, color and weather tightness of its roof system.
 - 5. Manufacturer shall produce the metal roof panels on fixed equipment operated by the manufacturer. Portable roll forming shall not be permitted except for special applications and shall be licensed and operated by the Manufacturer in a permanent manufacturing facility.
 - 6. Manufacturing facilities shall be currently under inspection by Underwriters Laboratory personal to verify compliance that the products fabricated are in accordance with the specifications of the products which were originally tested
 - 7. Manufacturer's Field Services: Manufactures Technical Representative Inspection: Minimum of three visits to the jobsite to inspect and monitor the installation of the metal roof system. After each inspection provide the installer with a detailed written report communicating issues and progress of the roof inspection. All inspections must be performed by a technical field representative. A copy of the report shall be forwarded to the Architect for information purposes.
 - a. Should the roofing system not be approved by the manufacturer's technician, correcting the defective work shall be done by the contractor until the roofing system satisfactorily meets all the specifications and manufacturer's requirements.
- C. Installer Qualifications: Company specializing in performing sheet metal roof installations with minimum 10 years of experience on projects of similar size and scope.
 - 1. Roofing Contractor shall be certified by the Manufacturer to install Manufacturer's roof system.

2. Roofing Contractor shall follow the Manufacturer's installation details without exception unless written authorization from the manufacturer and architect are provided on an installation detail revision.
3. Roofing Contractor shall have no viable claims pending regarding negligent acts or defective workmanship on previously performed or current projects.
4. Roofing Contractor shall have not filed for protection from creditors under any state or federal insolvency or debtor relief status or codes.
5. Roofing Contractor shall execute 100% of the roof system installation, utilizing full time employees of the Roofing Contractor. Second and third tier sub-contractors for the installation work in this section are not permitted.

1.08 MOCK-UPS

- A. See Section 01 43 00 Quality Assurance
- B. Mockup: Install roof system mock up to demonstrate aesthetic effects and set quality standards for materials, execution, and workmanship.
 1. Build mockup of a typical roof system as shown on the drawings a minimum of 12 panels wide including vapor barrier, insulation, underlayment, flashings, gutters, fascias, pipe flashings and associated attachments.
- C. Locate where directed.
- D. Mock-up may remain as part of work.

1.09 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roof system components to the project site in Manufacturer's unopened original containers.
- B. Protect roof system components during shipment, storage, handling and erection from mechanical abuse, stains, discoloration and corrosion.
- C. Provide strippable plastic film on all painted surfaces between contact areas to prevent abrasion during shipping, storage, and handling.
- D. Stack material to prevent twisting, bending, or abrasion, and to provide ventilation. Store materials off the ground, under protective cover. Slope metal sheets to ensure drainage.
- E. Prevent contact with materials that could cause discoloration or staining.
- F. Damaged materials will be rejected and removed from the site.

1.10 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
- B. General Warranty: The warranties specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents
- C. Standard Manufacturer Roof Warranty: Provide a written warranty, with no monetary limitation, signed by roofing manufacturer agreeing to promptly repair leaks resulting from defects in materials or workmanship for the following warranty period:
 1. Warranty Period: 20 Years from the date of Substantial Completion
- D. Weathertightness Warranty: Provide manufacturer's written weathertightness warranty for a minimum of 20 years against leaks in roof panel arising out of or caused by ordinary wear and tear under normal weather and atmospheric conditions. Warranty shall be signed by both the roofing system manufacturer and the roofing system contractor.

- E. Finish Warranty: Furnish panel manufacturer's written warranty for twenty (20) years covering the finish of exposed coated metal surfaces including but not limited to roof panels, counterflashings, gutters, downspouts, fascias and trim flashings against blistering, peeling, cracking, flaking, checking, chipping, rusting, and chalking and color change during the warranty period.
- F. Roofing Contractor Warranty: The roofing contractor will guarantee, from the date of Substantial Completion, at his cost and expense make or cause to make such repairs to the roof resulting from faults or defects in material or workmanship as necessary to maintain the roof in a watertight condition. Guarantee shall include, but is not limited, roof panels, flashing, roof insulation, fasteners, valleys, fascia, gutters, downspouts, trim flashings and roof joints. (Copy of the Warranty is included at the end of this Section.)
 - 1. Guarantee shall include, but is not limited, roof membrane, flashing, roof insulation, fasteners, walkways, and roof expansion joints.
 - 2. Warranty Period: 2 Years from the date of Substantial Completion
 - 3. Repairs required, either permanent or temporary, to the roofing or roof flashing under this guarantee shall be made within 3 days after notice of the need for repair. Should the contractor fail to make such repairs within the time period, the Owner may have the repairs made and the cost paid by the Contractor.
 - 4. Copy of the warranty is include at the end of this section.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. McElroy Metal
 - 1. Roof Panel: Mirage II Standing Snap Seam Roof Panel, Smooth with pencil ribs.
 - 2. Soffit: Matrix Concealed Fastener Soffit: Vented-with Rib and Non-Vented-with Rib
- B. Substitutions: No substitutions permitted without express written approval.

2.02 ROOF SYSTEM

- A. Roof panel 16 inch wide x 1 3/4 inch high standing seam with factory applied mastic (in female leg), striations (pencil ribs), smooth texture, concealed fastener, continuous mechanically seamed.
- B. Sheet Materials
 - 1. Roof panels: **24** gauge (.027"), 50 ksi steel sheet Galvalume Aluminum-Zinc Alloy Coated Steel Grade C meeting ASTM A792
 - a. Prepainted by the coil coating process to comply with ASTM A755
 - 2. Trim, Gutters, Downspouts etc: 20 gauge, 50 ksi steel sheet Galvalume Aluminum-Zinc Alloy Coated Steel Grade C meeting ASTM A792
 - a. Prepainted by the coil coating process to comply with ASTM A755
 - 3. Panel continuous length without seam except where noted on the drawings.
 - 4. Texture:
 - a. Roof panels smooth with ribs.
 - b. Trim, gutters, downspouts etc: Smooth.
 - 5. Finish: Premium fluoropolymer coating - Kynar 500 or Hylar 5000
 - a. 2-coat fluoropolymer, 70 percent PDVF resin.
 - 6. Color: Selected from metal roof systems standard offering.

2.03 SOFFIT SYSTEM

- A. Soffit panel to be nominal 12 inches wide perforated to allow 7.5% free air with V groove in the middle, conceal fastener leg with concealed fasteners

- B. Sheet Materials: Soffit and related soffit flashing and trim metal
 - 1. Aluminum Sheet: ASTM B 209 (ASTM B 290M) 0.032 inch thick
 - 2. Panel continuous length.
 - 3. Texture: Smooth and striated
 - 4. Finish: Premium fluorocarbon coating - Kynar 500 or Hylar 5000
 - 5. Color: Selected from metal roof systems standard offering.

2.04 ACCESSORIES

- A. General: Provide trim/flashing, fascias, ridge, valley, closures, gutters, gutter hangers and other related required items to provide a complete system
- B. Clip: One piece floating clip with 3 1/2" x 6" x 18 ga. bearing plates screwed into metal deck at 36 inches on center of per roof manufacturer's requirements.
- C. Fasteners:
 - 1. Use long life fasteners for all interior and exterior applications
 - 2. Provide fasteners with a factory applied coating in a color to match metal roof system.
 - 3. Provide neoprene washers under heads of exposed fasteners.
- D. ~~Fascia:~~
 - 1. ~~Formed to size and configuration as indicated on drawings.~~
 - 2. ~~Fascia shall be 20 gauge or heavier and same finish as roof panel.~~
- E. Vapor Barrier:
 - 1. ASTM C 1136-06
 - 2. Maximum permeance rating of 0.13 perm.
 - 3. Manufacturers:
 - a. Griffolyn Type-65; Reef Industries, Houston, Texas
 - b. DURA-SKRIM 6WW; Raven Industries, Sioux Falls, South Dakota
 - c. WMP-VR; Lamtec Corporation, Mount Bethel, Pennsylvania
- F. Roof Jacks, Crickets and Flashings: Provide roof jacks, crickets and flashings for all roof penetrations - See Section 07 72 00 Roof Accessories
 - 1. Curbs shall be constructed using minimum .080, 3003H14 aluminum, or heavier as required to support the load of the equipment, with fully mitered and heli-arc welded corners, integral base plates, with water diverter cricket.
 - 2. Minimum height of Curb shall be 12" above finished roof.
 - 3. Curbs shall be constructed to match slope of roof and provide a level top surface for mounting of equipment.
 - 4. Curb flange shall be constructed to match configuration of roof panel. Side flange shall extend to the next natural seam in the roof panels and conform to seam configurations.
 - 5. Color: Surfaces exposed to view are to match the color of the roof panels
 - 6. Manufacturers:
 - a. LM Curbs, Longview TX
 - b. ThyBar, Addiston IL
 - c. RPS Accessories, Bensenville IL.
 - d. Substitutions: See Section 01 60 00 - Products Requirements
- G. Soffit Framing
 - 1. Framing System Components: Meeting requirements of ASTM C 645-08; C-channel, roll-formed from hot dipped galvanized steel; complying with ASTM A 1003 and ASTM A653 G40 or equivalent corrosion resistant coating.
 - 2. Studs: C shaped with flat or formed webs.

3. Furring: Hat-shaped sections, minimum depth of 7/8 inch or as noted on drawings.
- H. Vented Soffit Trim:
1. General: Provide trim/flushing, fascias, ridge, valley, closures, gutters, gutter hangers and other related required items to provide a complete system
 2. Color: Surfaces exposed to view to match the color of the soffit.
- I. Pipe flashing: Provide EPDM rubber flashings for vent penetrations.
- J. Snow Guard
1. S-5! ColorGard Snow Guards by Metal Roof Innovations, Ltd. Colorado Spring, CO 80908 with SnoClip: www.s-5.com
 2. Acceptable Manufacturers:
 - a. Metal Roof Innovations, Ltd. Colorado Springs, CO
 - b. Berger Building Products, Feasterville, Pennsylvania
 - c. Colorbar; www.snobar.com
 - d. Sno-Gem Inc
 - e. Zaleski Snow Guards
 - f. Substitutions: See Section 01 60 00 - Products Requirements
 3. Furnish and install where indicated on plans assembly for snow retention as follows: S-5! clamps are to be spaced at every panel seam. Clamps should be on or as near as possible to the hold down clip location without interfering with the ability of the roof to float. All clamps are to be installed true-to-line. Stainless steel fasteners are to be tightened using a tool with a rating of 115 inch-pounds. This tension shall be periodically verified during installation. In no event shall the clamp spacing exceed 24 inches.
 4. The snow guard is to be furnished and installed on each S-5-U clamp with 3/8" x 3/4" stainless steel bolt and washer furnished by manufacturer. The snow guard shall be pre punched on 4" centers. Adjacent sections of snow guard are to be joined using a splice plate provided by manufacturer.
 5. SnoClip: Aluminum component with integrated rubber foot to retard the migration of snow and ice beneath the cross member. Rubber foot to prevent abrasion to the roof panel finish.
 6. The color strip, which is 2" wide x 8' long, that is inserted into the snow guard system shall be furnished with the system. Color shall match the roof panels.
- K. Soffit Framing:
1. Framing System Components: Meeting requirements of ASTM C 645-08; C-channel, roll-formed from hot dipped galvanized steel; complying with ASTM A 1003 and ASTM A653 G40 or equivalent corrosion resistant coating.
 - a. Studs: C shaped with flat or formed webs.
 - b. Furring: Hat-shaped sections, minimum depth of 7/8 inch.
- L. Fasteners: Galvanized steel, with soft neoprene washers.
- M. Protective Backing Paint: Zinc molybdate alkyl.
- N. Sealant to be Concealed in Completed Work: Non-curing butyl sealant.
- O. Sealant to be Exposed in Completed Work: elastomeric sealant, 100 percent silicone with minimum movement capability of plus/minus 25 percent and recommended by manufacturer for substrates to be sealed; clear.
- P. Underlayment (Eave Protection Sheet): Rubberized asphalt bonded to sheet polyethylene, 40 mil total thickness, with strippable treated release paper.
1. Thermal Stability: Stable after testing at 240 deg F; ASTM D 1970.

2. Low-Temperature Flexibility: Passes after testing at minus 20 deg F; ASTM D 1970.
3. Manufacturer:
 - a. W.R. Grace Construction Products, Ultra
 - b. Protecto Wrap, Safe Seal 6640
 - c. Dimensional Metal Inc, Dynaclad Ultra HT
 - d. Substitutions: See Section 01 60 00 - Products Requirements

Q. Solder: Sn50 (50/50) type.

2.05 FABRICATION

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- B. Fabricate cleats of same material as sheet, thickness to match roofing sheet, interlockable with sheet.
- C. Fabricate starter strips, interlockable with sheet.
- D. Form pieces in longest practical lengths.
- E. Hem exposed edges on underside 1/2 inch; miter and seam corners.
- F. Form material with standing seams, except where otherwise indicated. At moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
- G. Fabricate corners from single piece with minimum 18-inch long legs; seam for rigidity, seal with sealant.
- H. Fabricate vertical faces with bottom edge formed outward 1/4 inch and hemmed to form drip.

PART 3 EXECUTION

3.01 GENERAL REQUIREMENTS:

- A. Install roofing and flashing in accordance with approved shop drawings and manufacturer's product data, within specified tolerances.
- B. Isolate dissimilar metals, masonry and concrete from metal roof system with bituminous coating.
- C. Anchorage shall allow for thermal expansion and contraction without stress or elongation of panels, clips or anchors.
- D. Coordinate flashing and sheet metal work to provide watertight conditions at roof terminations. Fabricate and install in accordance with standards set forth in the SMACNA Manual using continuous cleats at all exposed edges.

3.02 EXAMINATION

- A. Inspect roof deck to verify deck is clean and smooth, free of depressions, waves, or projections, properly sloped to drains.
- B. Verify deck is dry and free of snow or ice.
- C. Verify correct placement of wood nailers and insulation positioning between nailers.
- D. Verify roof openings, curbs, pipes, sleeves, ducts, or vents through roof are solidly set, reglets are in place, and nailing strips located.
- E. Verify roofing termination and base flashings are in place, sealed, and secure.

3.03 PREPARATION

- A. Install starter and edge strips, and cleats before starting installation.
- B. Install surface mounted reglets true to lines and levels; seal top of reglets with sealant.

- C. Back paint concealed metal surfaces and surfaces in contact with dissimilar metals with protective backing paint to a minimum dry film thickness of 15 mil, 0.015 inch.
- D. Place eave edge and gable edge metal flashings tight with fascia boards. Weather lap joints 2 inches and seal with plastic cement. Secure flange with nails spaced 16 inches OC.

3.04 INSTALLATION

- A. Roofing:
 - 1. Apply underlayment over entire roof area, as follows:
 - 2. Apply slip sheet in one layer, laid loose.
 - 3. Cleat and seam sheet metal roofing joints.
 - 4. Use butyl tape to seal concealed joints between metal roofing surfaces.

3.05 INSTALLATION - ROOFING

- A. Install Vapor Retarder
 - 1. At acoustical metal deck, install acoustical insulation in roof deck flutes.
 - 2. Loosely lay vapor retarder over entire roof area extending to roof edges and to adjacent walls
 - 3. Side and end laps of each sheet a minimum of 6 inches
 - 4. Seal laps with continuous strip of tape recommended by the vapor retarder manufacturer.
 - 5. Seal at penetrations and at roof edges with manufacturer recommended butyl tape or sealant
 - 6. Vapor retarder shall be positively sealed at all edges, penetrations and wall utilizing manufacturers' vapor retarder accessories
- B. Install Roof Insulation
 - 1. Install in single layer laid perpendicular to slope
 - 2. Install second layer lapping all joints a minimum of 6 inches.
 - 3. At all valley and ridge locations miter edges.
- C. Apply underlayment over entire roof area.
 - 1. Apply in single layer laid perpendicular to slope; weather lap edges 4 inches
- D. Install metal roof system in accordance to manufacturer's instructions and shop drawings.
 - 1. Install metal roof system so that it is weather tight, without waves, warps, buckles, fastening stresses or distortion, allowing for expansion and contraction.
 - 2. Provide concealed anchors at all panel attachment locations
 - 3. Install panels plumb, level and straight with seams and parallel, conforming to design indicated.
- E. Flash around roof mounted equipment. This will become part of the roofing warranty
- F. Install pipe flashing at all pipe penetrations.
- G. Cleat and seam all joints.
- H. Use plastic cement for joints between metal and bitumen and for joints between metal and felts.
- I. Provide gutters, downspouts, and fascias.
- J. Install snow guards, per manufacturer's recommendation, up slope from eaves and valleys.
- K. Install snow guards:
 - 1. Furnish and stall where indicated on drawings for snow retention as follows: S-5-U clamps are to be spaced at every panel seam. Clamps should be on or as near as possible to the hold down clip location without interfering with the ability of the roof to float. All clamps are to be installed true-to-line. Stainless steel fasteners are to be tightened using a tool with a

rating of 115 inch-pounds. This tension shall be periodically verified during installation. In no event shall the clamp spacing exceed 24 inches.

3.06 INSTALLATION - GUTTERS AND DOWNSPOUTS

- A. Comply with SMACNA (ASMM) details.
- B. Install gutter brackets at 32 inches on center.
- C. Seal gutters watertight, and seal joint of gutter to drain.
 - 1. Lap gutter joints a minimum of 4 inches with two rows of butyl tape between gutter pieces and rivet between rows of sealant.
- D. Connect downspouts to downspout boots at 10 inches above grade, and grout connection watertight.
- E. Cut the storm piping to the correct length, Secure downspout boot to site storm piping and building foundation with top of boot at 6 inches above finished grade. Seal connection weathertight.

3.07 INSTALLATION - FLASHINGS

- A. Install flashings, including laps, splices, joints, bonding, adhesion, and attachment, as required by roof panel manufacturer's recommendations and details.
- B. Comply with SMACNA (ASMM) details.
- C. Insert flashings into reglets to form tight fit.
 - 1. Seal flashings into reglets with sealant.
- D. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted.
- E. Cleat and seam all joints.
- F. Apply plastic cement compound between metal flashings and felt flashings.
- G. Fit flashings tight in place, and make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- H. Seal metal joints watertight.

3.08 INSTALLATION - SOFFIT

- A. Inspect soffit framing to verify the framing is smooth, free of waves and projections.
- B. Verify soffit openings, lights, louvers and other recessed equipment are in place.
- C. Install starter, edge strips and molds around perimeter before starting installation.
- D. Start panel installation at one end and continue to the other end of soffit.
- E. Push panel into adjacent panel and fasten through the flange at 24 inches on center (maximum)
- F. Panels to be installed perpendicular to the exterior building wall
- G. Align panel joints at intersections.

3.09 FIELD QUALITY CONTROL

- A. See Section 01 43 00 - Quality Assurance, for general requirements for field quality control and inspection.
- B. Inspection: Roofing manufacturer's technical representative and roofing contractor shall conduct all required inspections. Submit all required drawings, details, and completed questionnaires to the roofing manufacturer before obtaining the specified warranty. After an

authorized Technical Representative has inspected the roof for determining acceptability for warranty issuance, any deficiencies on the final inspection report shall be corrected by the contractor/applicator and made ready for reinspection within five (5) working days.

- C. Warranty: Upon receipt of required materials, certifying inspection, and acceptance of the roofing system by the roofing manufacturer, the warranty shall be duly executed and issued to the Owner. Date of Warranty will be the date of Substantial Completion.

3.10 PROTECTION

- A. Do not permit traffic over unprotected roof surface.

END OF SECTION

SECTION 13 34 18
POST FRAME BUILDING SYSTEM

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Pre-Engineered Timber Column Structure
- B. Roof system with exterior roof panels, panel attachments, sealants, mastics, trim and flashings.
- C. Wall covering system with exterior wall panels, panel attachments, sealants, mastics, trim and flashings.

1.02 RELATED REQUIREMENTS

- A. Section 05 50 00 - Metal Fabrications.
- B. Section 07 90 05 - Joint Sealers.
- C. Section 08 11 13 - Hollow Metal Doors and Frames.
- D. Section 08 36 13 - Sectional Doors.
- E. Section 08 53 13 - Vinyl Windows.

1.03 REFERENCE STANDARDS

- A. Preservative Treated Lumber
 - 1. American Wood Protection Association (AWPA)
 - a. Commodity Specification C2 (2001), Preservative Treatment By Pressure Processes
 - b. Use Category System U1, User Specification for Treated Wood
 - c. UC4A (Important Structural - Ground Contact)
 - d. UC4B (Structural Support - Ground Contact)
 - e. Items treated under AWPA standards shall bear the quality mark of an independent testing agency or service
 - 2. International Code Council Evaluation Service (ICC-ES)
 - a. Items treated under ICC-ES reports shall meet or exceed the applicable standard and shall bear the quality mark of an independent testing agency or service
 - 3. Federal Specification TT-W-571-J.
- B. Framing Lumber shall be in accordance with the 2012 edition of the National Design Specification for Wood Construction
 - 1. Lumber Grading Rules and Wood Species
 - a. National Design Specification for Wood Construction, current edition
 - b. Northeastern Lumber Manufacturer's Association, Inc. (NELMA)
 - c. Southern Pine Inspection Bureau (SPIB)
 - d. West Coast Lumber Inspection Bureau (WCLIB)
 - e. Western Wood Products Association (WWPA)
- C. Wood Trusses
 - 1. All lumber used in the design of wood trusses shall be kiln dried to maximum 19% moisture content and graded in accordance with the current grading rules. Design stresses allowed are those listed in the current editions of the respective Lumber Association's grading rules.
 - 2. The design of wood members shall be in accordance with the formulas published in the 2012 edition of the National Design Specification for Wood Construction.

3. Light metal toothed connector plates and joint design shall conform to specifications as set forth in the 2007 edition of Truss Plate Institute's Design Specification for Metal Plate Connected Wood Trusses (TPI-2007).
 - a. Connector plates shall be fabricated in accordance with applicable ICC-ES standards.
4. Truss members and joints shall be designed in accordance with TPI-2002. All truss designs shall be accompanied by complete and accurate shop drawings and contain the following information:
 - a. Slope or depth, span and spacing of the truss
 - b. Heel bearing height
 - c. Design loading to include:
 - 1) Top chord live load
 - 2) Top chord dead load
 - 3) Bottom chord dead load
 - 4) Concentrated loads and their points
 - 5) Adjustments to lumber and plate design values for conditions of use
 - 6) Plate type, thickness of gauge and size
 - 7) Lumber size, species and grade for each member

1.04 DESIGN REQUIREMENTS

- A. Design members to withstand dead load, applicable snow load, and design loads due to pressure and suction of wind calculated in accordance with applicable code.

1.05 DESIGN REQUIREMENTS

- A. Roof Design Loads
 1. Design in accordance to the OBBC and Ohio Revised Code with minimum of:
 - a. Snow Load 20 PSF
 - b. Roof Dead Load 15 PSF
 - c. Top Chord Live Load: 25 PSF
 - d. Top Chord Dead Load: 6 psf
 - e. Bottom Chord Dead Load: 5 psf
 - f. Bottom Chord Point Loads: 250 pounds
- B. Wind Speed
 1. Design in accordance to the OBBC and Ohio Revised Code with minimum of:
 - a. 90 MPH (V3s). Exposure C
- C. Roof and wall system shall be able to withstand the imposed loads with maximum allowable deflection of $L/180$.
- D. Assembly shall permit movement of components without buckling, failure of joint seals, undue stress on fasteners or other detrimental effects.
- E. Size and fabrication of wall and roof systems to be free of distortion or defects that would be detrimental to appearance or performance.

1.06 SUBMITTALS

- A. Design Data: Provide detailed design criteria and calculations for submission to the State of Ohio, Department of Commerce for approval. Provide seven (7) complete sets of drawings sealed and signed by a structural engineer registered in the state of Ohio.
- B. Certification: Manufacturer certification that the building conforms to the contract documents and manufacturer's standard design procedures.

- C. Shop Drawings: Show building layout, primary and secondary framing member sizes and locations, cross-sections, and product and connection details for submission to the State of Ohio, Department of Commerce for approval.
- D. Color Charts: For selection of colors.

1.07 QUALITY ASSURANCE

- A. Design structural components, develop shop drawings, and perform shop and site work under direct supervision of a Professional Structural Engineer experienced in design of this Work.
 - 1. Design Engineer Qualifications: Licensed in Indiana.
 - 2. Conform to applicable code for submission of design calculations as required for acquiring permits.
 - 3. Cooperate with regulatory agency or authority and provide data as requested.

1.08 QUALIFICATIONS

- A. Design structural components under direct supervision of a Professional Engineer experienced in design of this work and licensed in the State of Indiana.

1.09 PRE-CONSTRUCTION MEETING

- A. The meeting will convene no later than one week prior to commencing work.

1.10 DELIVERY, STORAGE AND HANDLING

- A. Deliver and store prefabricated components (trusses, columns, steel panels and other items) so that they will not be damaged or deformed.
- B. Stack materials on platforms, pallets or other structures covered with tarpaulins or other suitable weather-tight ventilated covering. Handle and store structural parts in a manner that will avoid deforming members or subjecting parts to excessive stresses.
- C. Store roofing and siding panels to allow water to drain freely.
- D. Panels shall not be stored in contact with other materials that may cause staining or discoloration.

1.11 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Correct defective Work within a two year period after Date of Substantial Completion.
- C. Weathertightness Warranty: Provide manufacturer's written weathertightness warranty for a minimum of 20 years against leaks in roof panel arising out of or caused by ordinary wear and tear under normal weather and atmospheric conditions. Warranty shall be signed by both the roofing system manufacturer and the roofing system contractor.
- D. Finish Warranty: Furnish panel (roof and wall) manufacturer's written warranty for twenty (20) years covering the finish of exposed coated metal surfaces including but not limited to roof panels, counterflashings, gutters, downspouts, fascias and trim flashings against blistering, peeling, cracking, flaking, checking, chipping, rusting, and chalking and color change during the warranty period.

PART 2 PRODUCTS

2.01 MANUFACTURERS - BUILDING SYSTEM

- A. Morton Buildings, Morton, Illinois
- B. **Meyer Building, Craigville, Indiana; www.meyerbuilding.com**
- C. Lester Building Systems, Lester Prairie, MN; www.lesterbuildings.com

- D. Hoge Lumber, New Knoxville Ohio
- E. Walters Buildings Inc., Allenton, WI; www.waltersbuildings.com
- F. Substitutions: See Section 01 60 00 - Product Requirements.

2.02 MATERIALS - FRAMING

- A. Columns:
 - 1. Factory fabricated from minimum 3-ply No. 1 SYP
 - 2. Provide factory or field installed blocking on outside face of column between nailers.
- B. Wood Trusses
 - 1. Lumber
 - a. Top Chord: Southern Yellow Pine of size and grade to meet design requirements
 - b. Bottom Chord: Southern Yellow Pine of size and grade to meet design requirements
 - c. Webs: Southern Yellow Pine of size and grade to meet design requirements
 - 2. Trusses shall be constructed of surfaced lumber (S4S) and compliant with SPIB visual and structural grade requirements
 - 3. Plates: Connector plates shall meet design requirements and shall be compliant with applicable ICC-ES standards and specifications
 - 4. Design and fabricate trusses and connections to withstand snow, wind and all dead loads.
 - 5. Fabricate trusses in plant, using mechanical or hydraulic fixtures as required to bring members into contact. Install plates in accordance with manufacturer's instructions.
- C. Baseboards
 - 1. No. 1 Southern Yellow Pine
 - 2. Pressure treated with wood preservative to a retention in compliance with applicable AWPA or ICC-ES standards and specifications and kiln dried after treatment to 19% maximum moisture content
- D. Wall girts
 - 1. No. 2 or better SPF.
- E. Purlins and truss ties
 - 1. No. 2 or better SPF
- F. Wind bracing
 - 1. No. 2 or better SPF.
- G. Framing around openings
 - 1. No. 2 or better SPF.
- H. Headers
 - 1. Provide built-up headers as required for proper installation.
- I. Incidental Framing
 - 1. No. 2 or better SPF

2.03 MATERIALS

- A. Roofing Panels
 - 1. Panel substrate shall be 0.018" minimum thickness commercial steel sheet with AZ55 (aluminum/zinc) coating per ASTM A792.
 - 2. The weather side of the panel shall receive a nominal two tenths mil polyurethane primer and a nominal eight tenths mil topcoat of polyvinylidene difluoride (PVDF) resin to achieve a total nominal paint film thickness of one mil.
 - 3. Color selection of siding panels shall be from the manufacturer's standard color chart.

4. The non-weather side paint system shall consist of a two coat finish with a total nominal thickness of one-half mil.
- B. Siding Panels
1. Panel substrate shall be 0.018" minimum thickness commercial steel sheet with AZ55 (aluminum/zinc) coating per ASTM A792.
 2. The weather side of the panel shall receive a nominal two tenths mil polyurethane primer and a nominal eight tenths mil topcoat of polyvinylidene difluoride (PVDF) resin to achieve a total nominal paint film thickness of one mil.
 3. Color selection of siding panels shall be from the manufacturer's standard color chart.
 4. The non-weather side paint system shall consist of a two coat finish with a total nominal thickness of one-half mil.
- C. Corner bracing
1. Provide 1-1/4" wide high tensile steel strapping in all unobstructed corners in an "X" configuration.
- D. Trim and accessories
1. Die-formed steel from the same quality material as the siding panels
 2. Closure Strips: Closed cell, 2 pcf density polyethylene foam, premolded to match configuration of panels.
- E. Snow Guard
1. S-5 Colorgard Snow Guards by Alpine SnowGuards, Stowe, VT 05672.
 2. Acceptable Manufacturers:
 - a. Berger Building Products, Feasterville, Pennsylvania
 - b. Alpine Snow Guards
 - c. Zaleski Snow Guards
 - d. Sno-Gem Inc
 - e. Substitutions: See Section 01 6000 - Products Requirements
 3. Furnish and install where indicated on plans assembly for snow retention as follows: S-5-U clamps are to be spaced at every panel seam. Clamps should be on or as near as possible to the hold down clip location without interfering with the ability of the roof to float. All clamps are to be installed true-to-line. Stainless steel fasteners are to be tightened using a tool with a rating of 115 inch-pounds. This tension shall be periodically verified during installation. In no event shall the clamp spacing exceed 24 inches.
 4. The snow guard is to be furnished and installed on each S-5-U clamp with 3/8" x 3/4" stainless steel bolt and washer furnished by manufacturer. The snow guard shall be pre punched on 4" centers. Adjacent sections of snow guard are to be joined using a splice plate provided by manufacturer.
 5. The color strip, which is 2" wide x 8' long, that is inserted into the snow guard system shall be furnished with the system. Color shall match the roof panels.
- F. Sealants, Mastics and Closures: Manufacturer's standard type.
1. Provide at roof panel endlaps, sidelaps, rake, eave, transitions and accessories as required to provide a weather resistant roof system; use tape mastic or gunnable sealant at sidelaps and endlaps.
 2. Provide at wall panel rakes, eaves, transitions and accessories.
 3. Closures: Formed to match panel profiles; closed cell elastic material, manufacturer's standard color.
 4. Tape Mastic: Pre-formed butyl rubber-based, non-hardening, non-corrosive to metal; white or light gray.
 5. Gunnable Sealant: Non-skinning synthetic elastomer based material; gray or bronze.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that foundation, floor slab, mechanical and electrical utilities, and placed anchors are in correct position

3.02 GENERAL

- A. Install in accordance with manufacturer's instructions.

3.03 ERECTION - FRAMING

- A. Erect framing in accordance with manufacturer's established construction procedures.
- B. Make all components and building plumb, square, straight and true to lines, according to industry standards.
- C. Provide adequate temporary bracing to assure structure remains plumb and square until permanent bracing is installed.
- D. Altering of structural members will not be permitted.

3.04 ERECTION - WALL AND ROOF PANELS

- A. Install in accordance with manufacturer's instructions.
- B. Exercise care when cutting prefinished material to ensure cuttings do not remain on finish surface.
- C. Locate end laps over supports. End laps minimum 2 inches. Place side laps over bearing.
- D. Provide expansion joints where indicated.
- E. Use exposed fasteners.
- F. Install sealant and gaskets to prevent weather penetration.

END OF SECTION



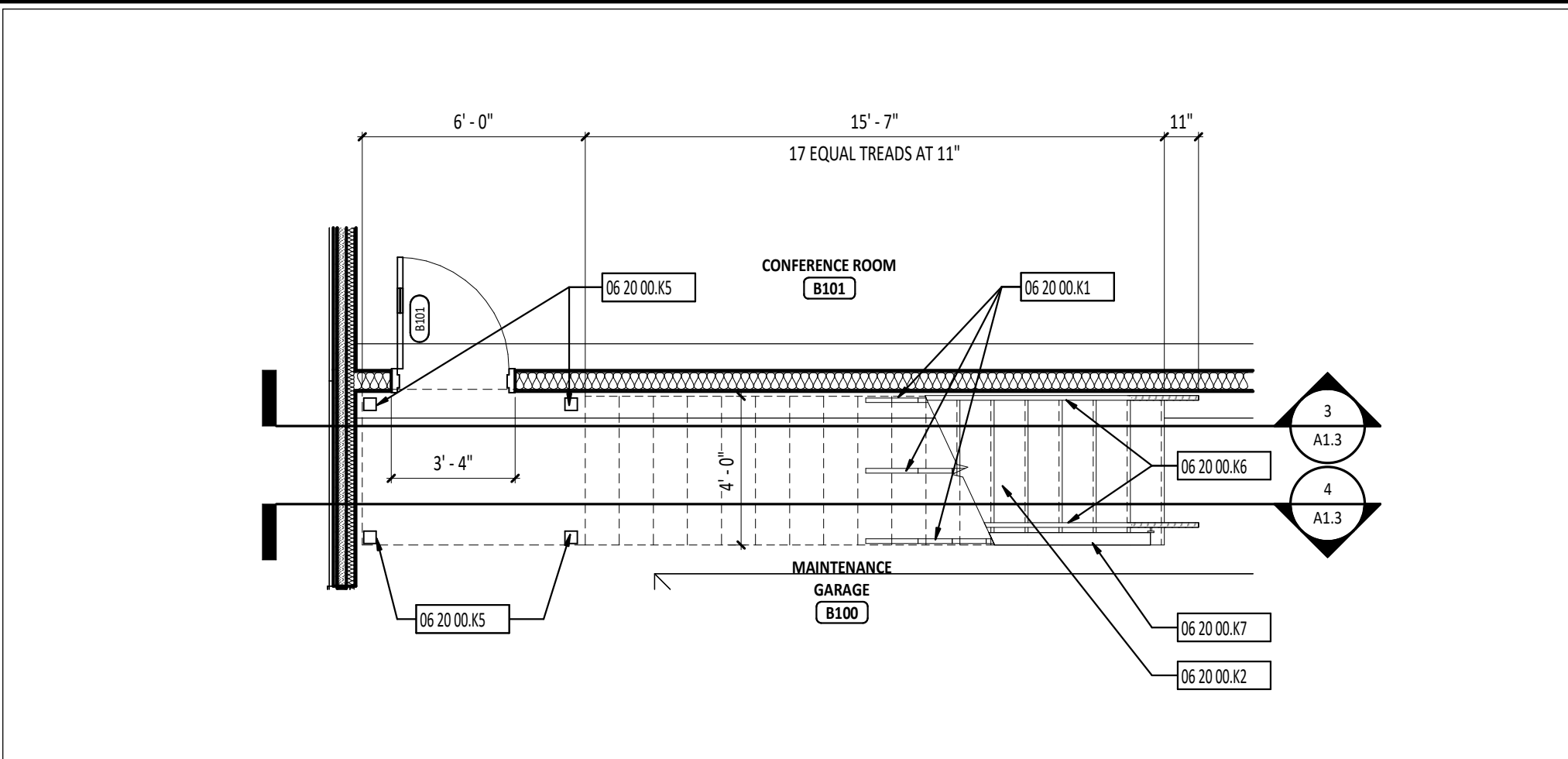
**SHENANDOAH SCHOOL CORPORATION
NEW TRANSPORTATION CENTER**

100 N BAYVIEW DR MIDDELTOWN INDIANA 47957

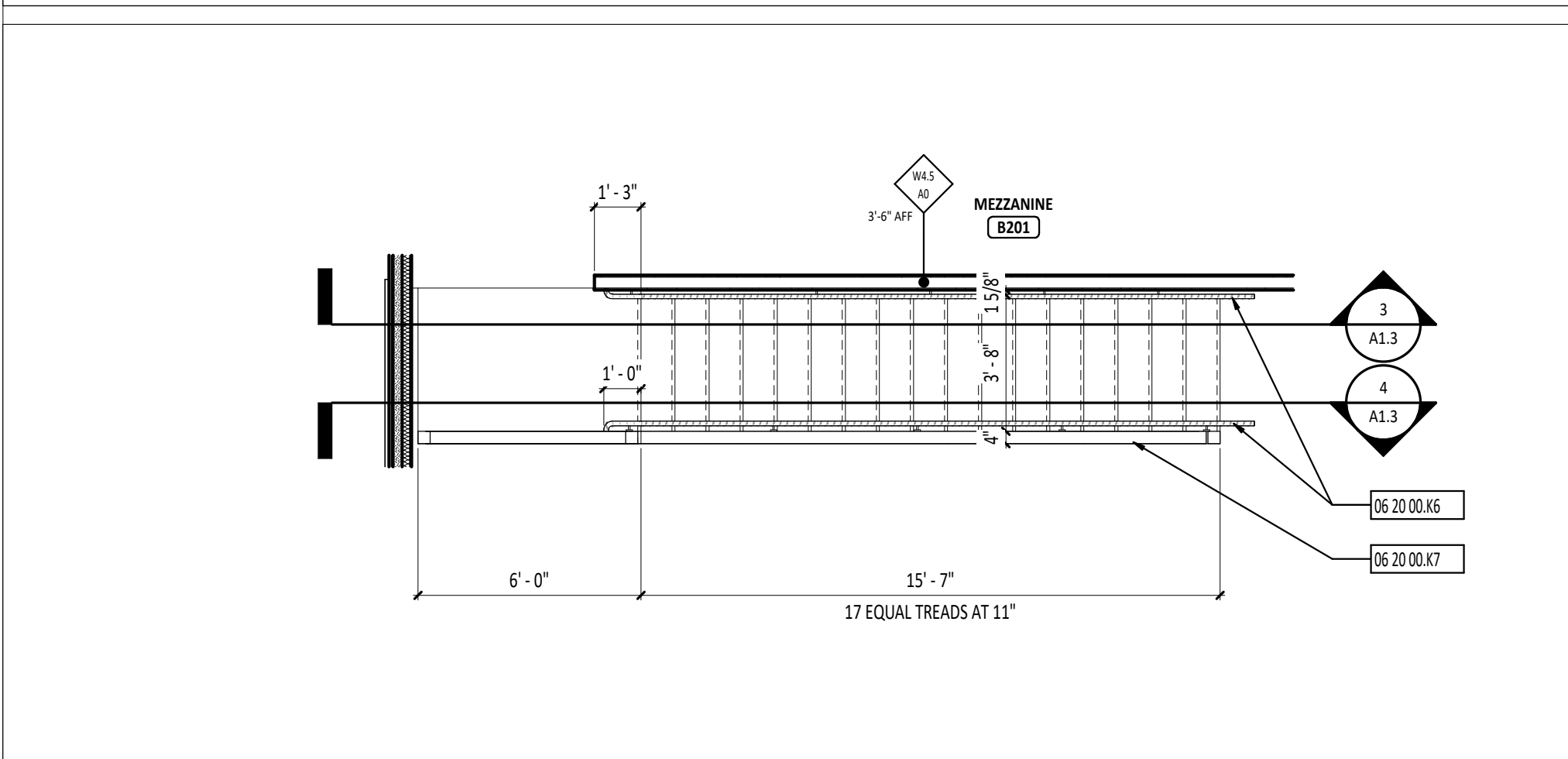
ISSUANCES/REVISIONS	
CONSTRUCTION DOCUMENTS	09/02/2026
ADDENDUM 02	09/25/2026

PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25107.00	NKT	NKT

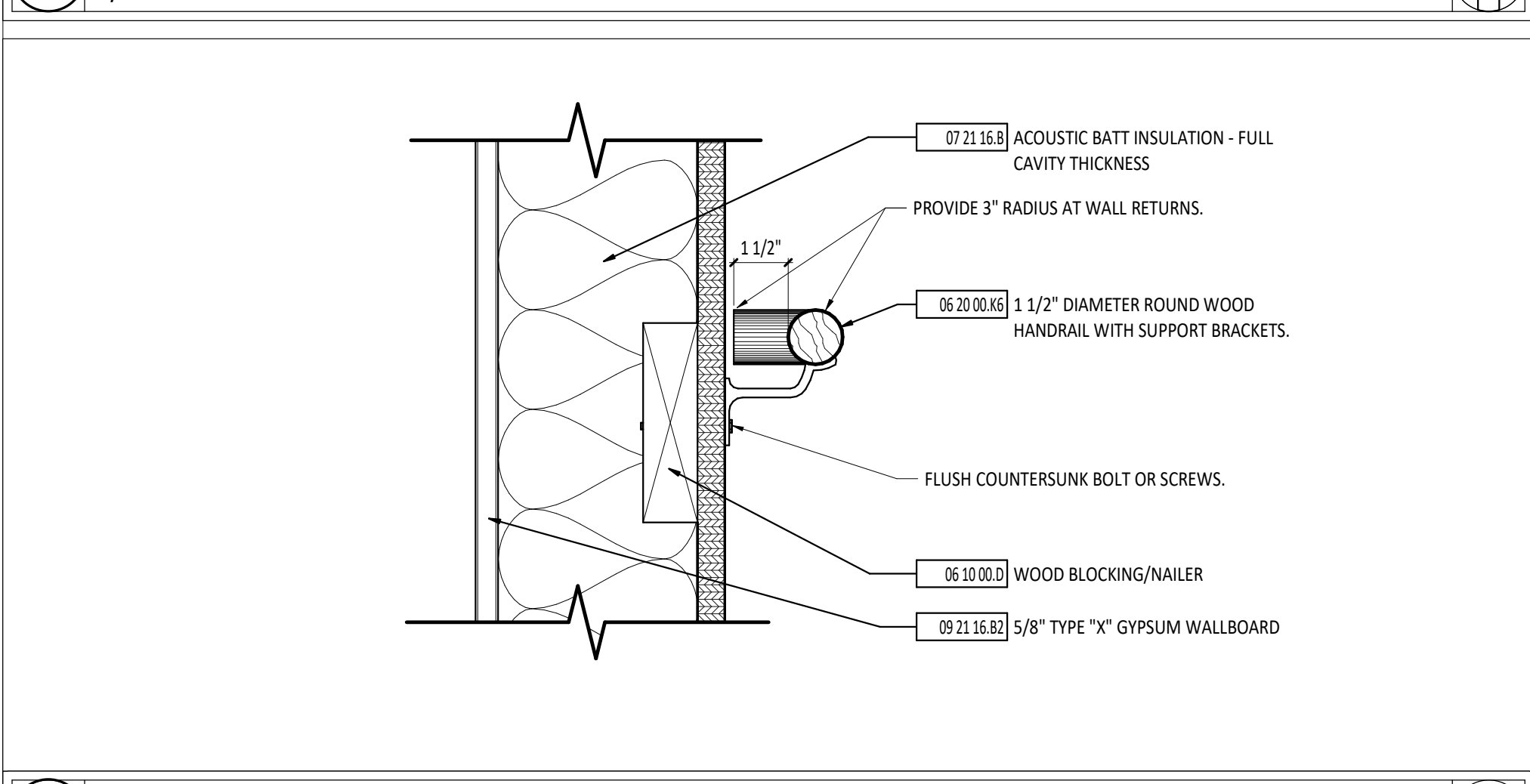
SHEET TITLE:
SITE UTILITIES PLAN
SHEET NUMBER:
C1.0



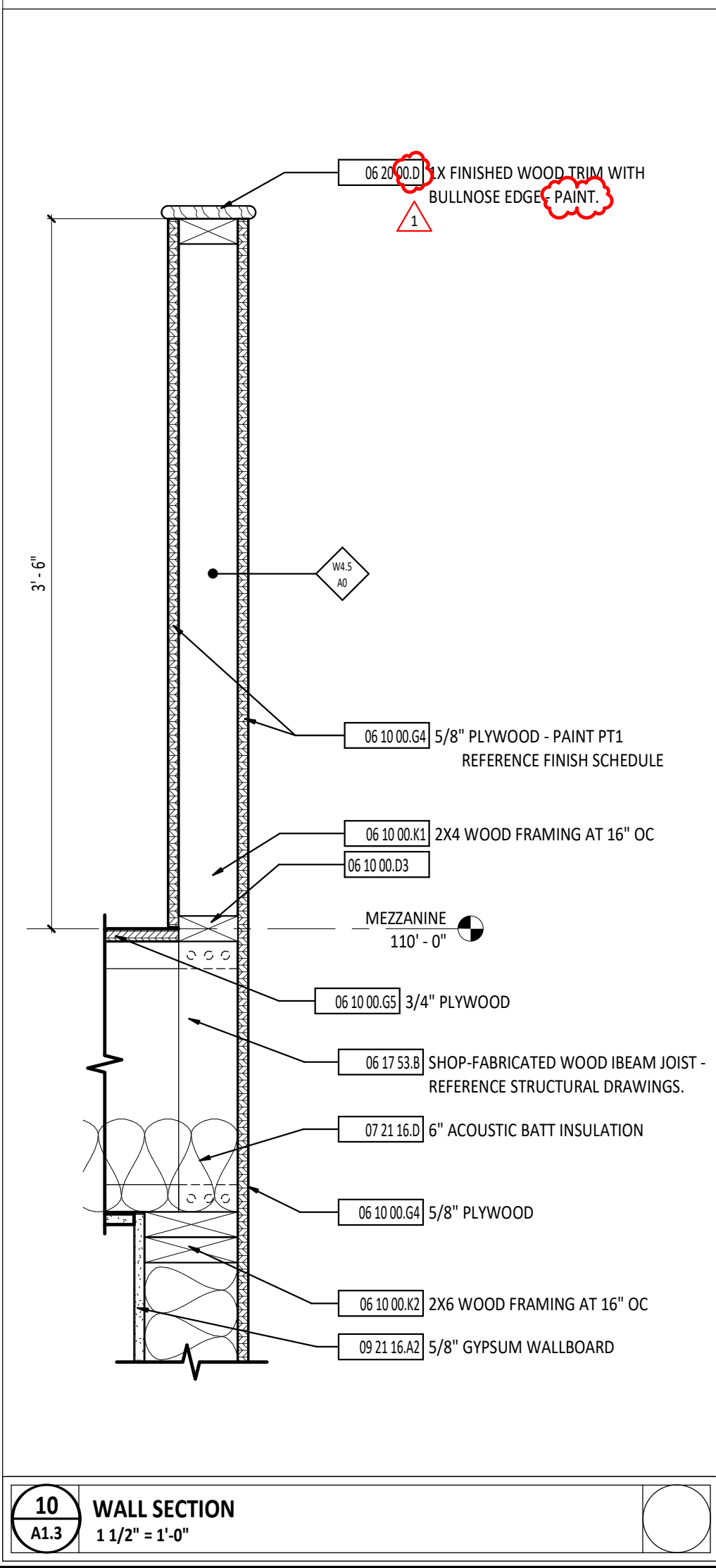
1
A1.3
ENLARGED STAIR PLAN - FIRST FLOOR
1/4" = 1'-0"



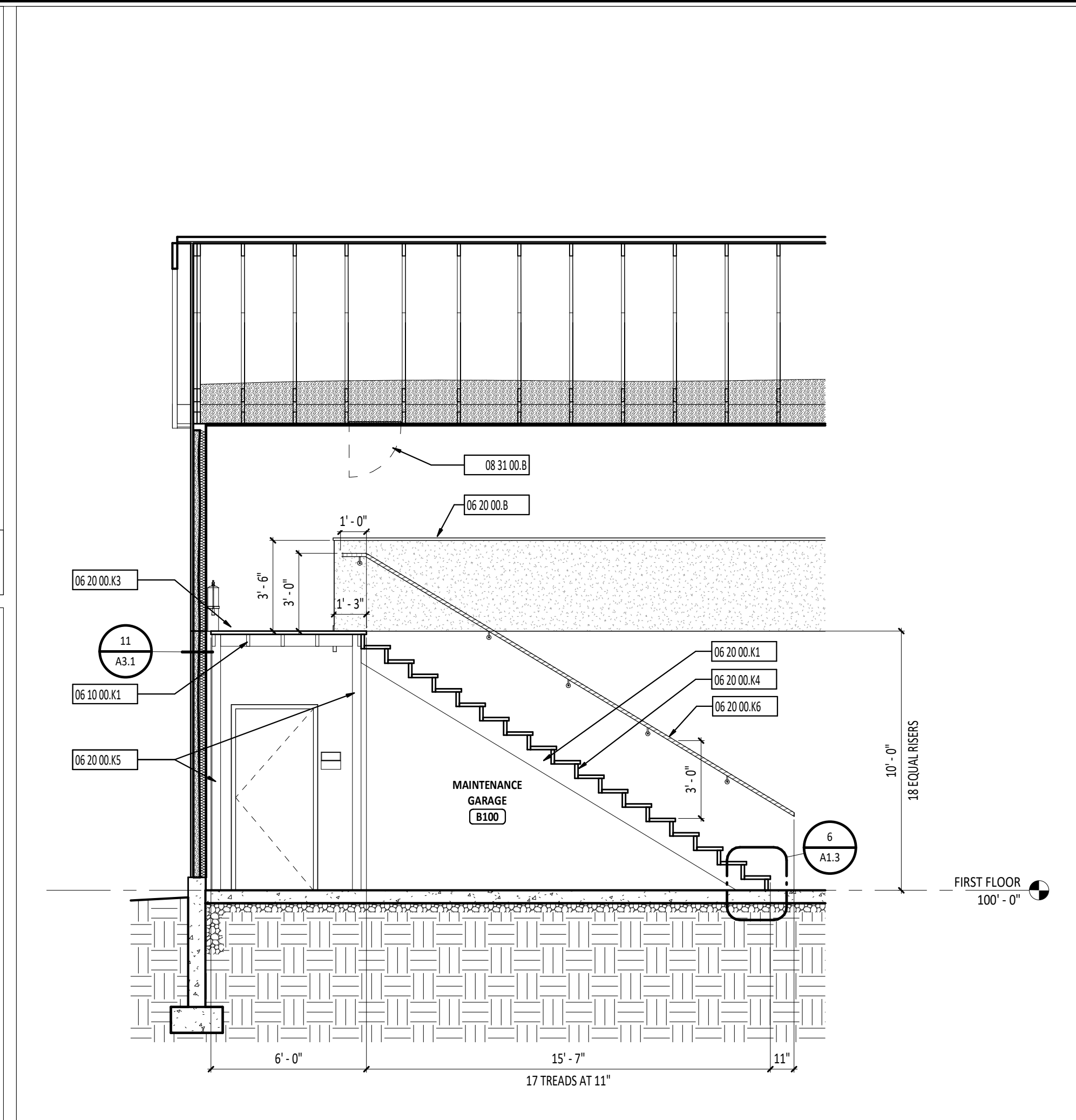
2
A1.3
ENLARGED STAIR PLAN - MEZZANINE FLOOR
1/4" = 1'-0"



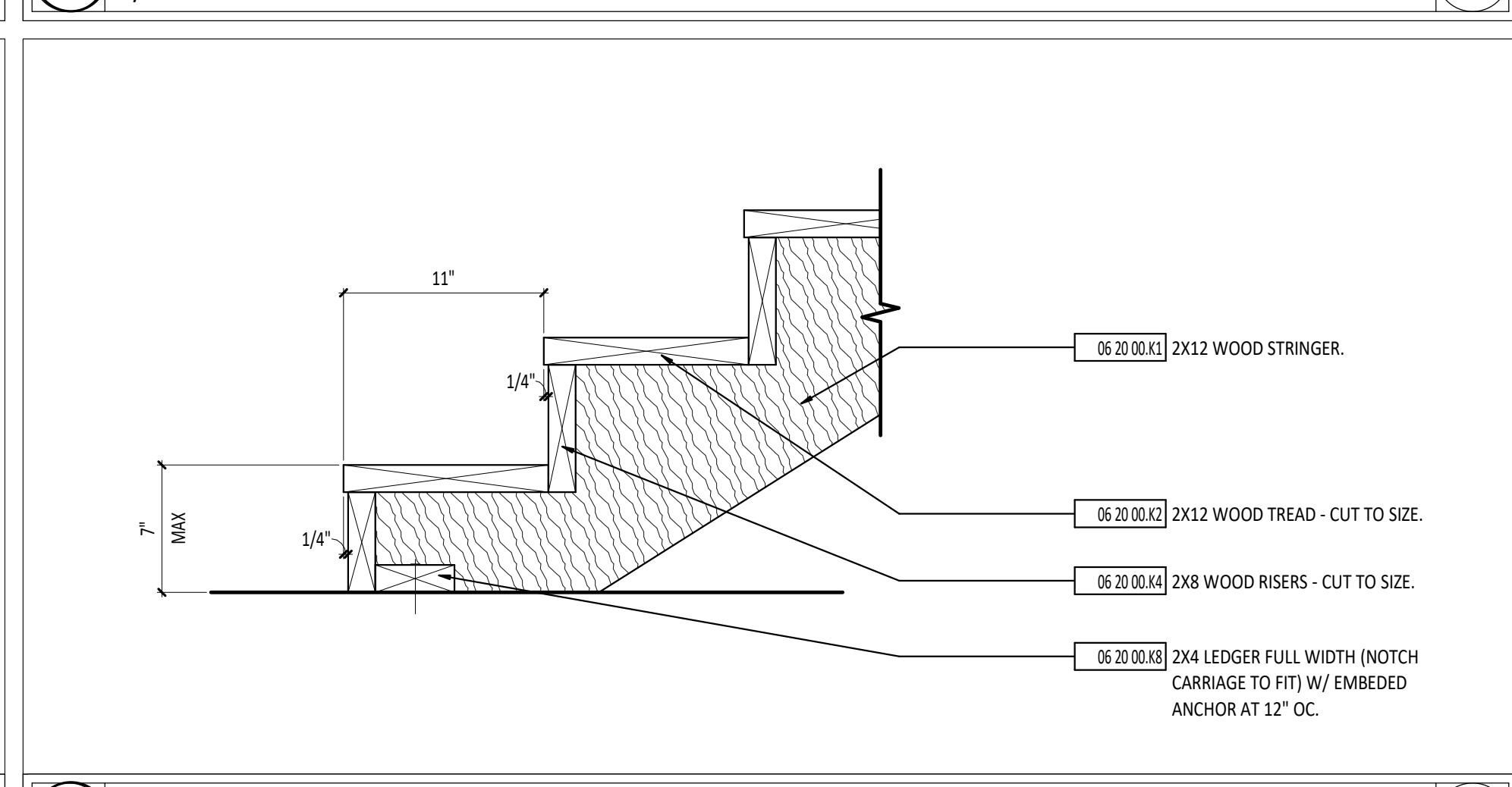
5
A1.3
WOOD HANDRAIL - WALL CONNECTION
3" = 1'-0"



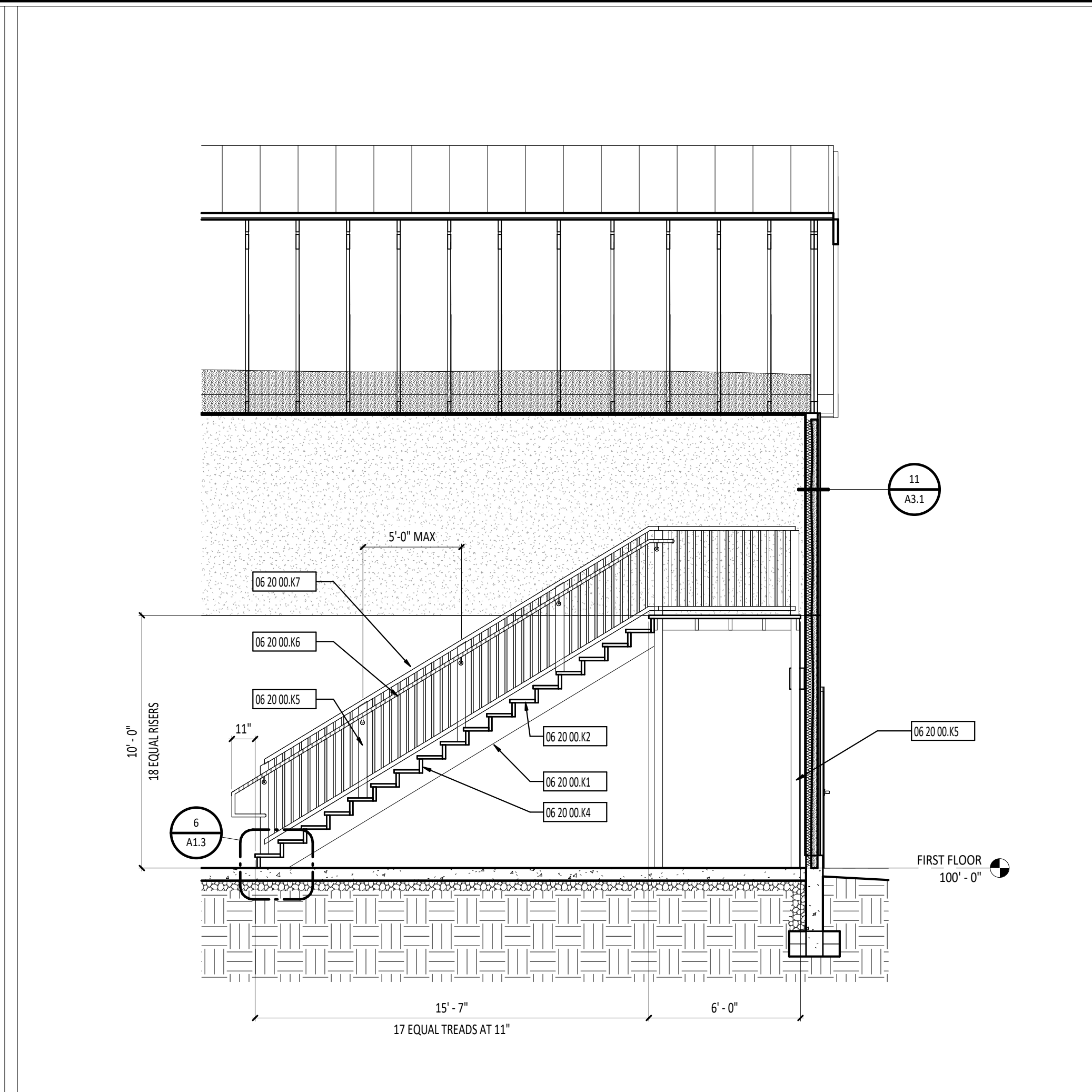
10
A1.3
WALL SECTION
1 1/2" = 1'-0"



3
A1.3
ENLARGED STAIR SECTION
1/4" = 1'-0"

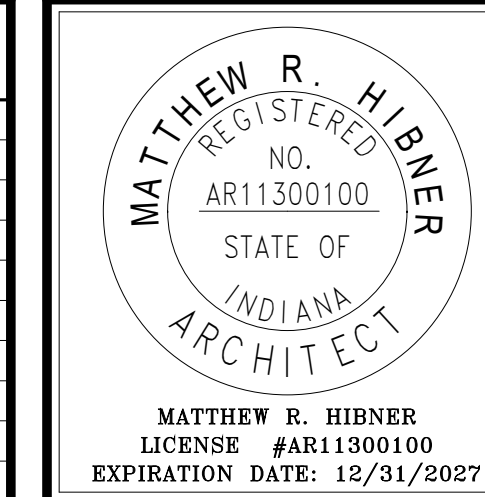


6
A1.3
STAIR AT BASE DETAIL
1 1/2" = 1'-0"



4
A1.3
ENLARGED STAIR SECTION
1/4" = 1'-0"

#	KEYNOTE DESCRIPTION
06 10 00.0	WOOD BLOCKING/NAILER
06 10 00.03	2X WOOD BLOCKING/NAILER BETWEEN STUDS - SEE STRUCTURAL DRAWINGS
06 10 00.04	5/8" PLYWOOD
06 10 00.05	3/4" PLYWOOD
06 10 00.01	2X4 WOOD FRAMING AT 16" OC
06 10 00.02	2X6 WOOD FRAMING AT 16" OC
06 17 53.8	SHOP-FABRICATED WOOD BEAM JOIST - REFERENCE STRUCTURAL DRAWINGS.
06 20 00.0	1X FINISHED WOOD TRIM - PAINT.
06 20 00.01	1X FINISHED WOOD TRIM WITH BULLNOSE EDGES - PAINT.
06 20 00.01	2X12 WOOD STRINGER.
06 20 00.02	2X12 WOOD TREAD - CUT TO SIZE.
06 20 00.03	2X12 WOOD LANDING.
06 20 00.04	2X8 WOOD RISERS - CUT TO SIZE.
06 20 00.05	4X4 WOOD POST.
06 20 00.06	1 1/2" DIAMETER ROUND WOOD HANDRAIL WITH SUPPORT BRACKETS.
06 20 00.07	WOOD GUARDRAIL WITH 3/4" VERTICAL PICKETS EVERY 4" OC.
06 20 00.08	2X4 LEDGER FULL WIDTH (NOTCH CARRIAGE TO FIT) W/ EMBEDDED ANCHOR AT 12" OC.
07 21 16.8	ACOUSTIC BATT INSULATION - FULL CAVITY THICKNESS
07 21 16.0	6" ACOUSTIC BATT INSULATION
08 31 00.0	ATTIC ACCESS PANEL
09 21 16.A2	5/8" GYPSUM WALLBOARD
09 21 16.B2	5/8" TYPE "X" GYPSUM WALLBOARD



NEW BUILDING FOR
**SHENANDOAH SCHOOL CORPORATION NEW
TRANSPORTATION CENTER**

ISSUANCES/REVISIONS		
PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25031.00	MD8	MRH

SHEET TITLE:		
ENLARGED STAIR PLANS, SECTIONS, DETAILS		

SHEET NUMBER:		
A1.3		

DOOR/OPENING SCHEDULE																				
NUMBER	DOOR					FRAME										HARDWARE SET	ROOM KEY SIDE	FUNCTION	LABEL (MIN)	NOTES
	SIZE	THK	MATL	TYPE	GLASS	DEPTH	MATL	TYPE	GLASS	DETAIL NUMBER										
										HEAD	JAMB	SILL								
B100a	3'-0" x 7'-0"	1 3/4"	HM	HG	EG1	7 1/4"	HM	1	-	9/A6.1	13/A6.1	4/A6.1	001	-	Exterior	-	1, 2			
B100b	12'-0" x 12'-0"	2"	STL	OHD	EG1	0"				8/A6.1	7/A6.1	12/A6.1	005	-	Exterior					
B100c	12'-0" x 12'-0"	2"	STL	OHD	EG1	0"				8/A6.1	7/A6.1	12/A6.1	005	-	Exterior					
B100d	3'-0" x 7'-0"	1 3/4"	HM	HG	EG1	7 1/4"	HM	1	-	9/A6.1	13/A6.1	4/A6.1	001	-	Exterior	-	1, 2			
B100e	3'-0" x 7'-0"	1 3/4"	HM	HG	EG1	7 1/4"	HM	1	-	9/A6.1	13/A6.1	4/A6.1	001	-	Exterior	-	1, 2			
B101	3'-0" x 7'-0"	1 3/4"	HM	NL	G1	7 3/4"	HM	1	-	5/A6.1	6/A6.1		003	B100	Interior	-	1			
B102	3'-0" x 7'-0"	1 3/4"	HM	F	-	7 3/4"	HM	1	-	5/A6.1	6/A6.1		004	B100	Interior	-	1			
B103	3'-0" x 7'-0"	1 3/4"	HM	F	-	7 3/4"	HM	1	-	5/A6.1	6/A6.1		004	B100	Interior	-	1			
B104	3'-0" x 7'-0"	1 3/4"	HM	NL	G1	7 3/4"	HM	1	-	5/A6.1	6/A6.1		003	B100	Interior	-	1			
B105	(2) 2'-6" x 7'-0"	1 3/4"	HM	F	-	7 3/4"	HM	2	-	9/A6.1	6/A6.1	4/A6.1	002	-	Exterior	-	1			
B202	(2) 2'-6" x 7'-0"	1 3/4"	HM	F	-	5 3/4"	HM	2	-	5/A6.1	6/A6.1		002	B201	Interior	-	1			

DOOR/OPENING SCHEDULE NOTES

- DOOR AND FRAME/LOCK BY SECTION 08 71 00.
- REFERENCE ELECTRONIC SCHEMATIC WIRING DIAGRAM DETAIL ON ELECTRICAL DRAWINGS.

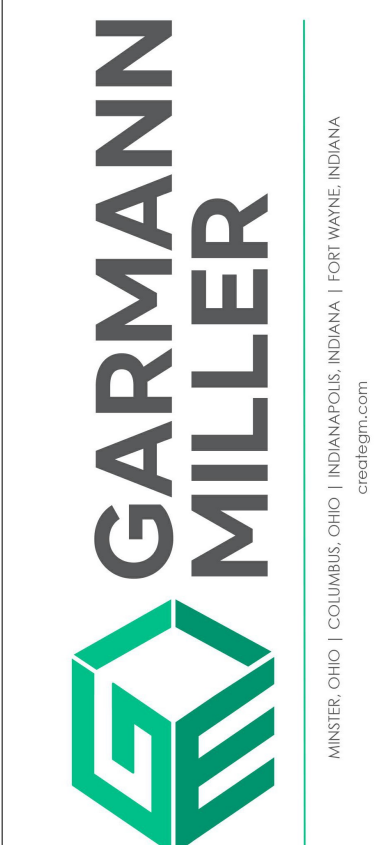
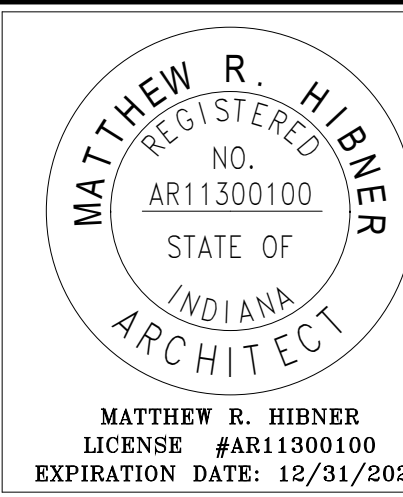
DOOR/OPENING SCHEDULE ABBREVIATIONS

SYMBOL DESCRIPTION

AL ALUMINUM
CD COILING DOOR
DG DIFFUSING GLASS
F FLUSH
FG FULL GLASS
FRG FIRE RATED GLASS
HG HALF GLASS
HM HOLLOW METAL
IG INSULATED GLASS
LG LAMINATED GLASS
N NARROW LITE
SG SAFETY GLASS
TG TEMPERED GLASS
W WOOD

DOOR GENERAL NOTES

- REFERENCE SPECIFICATION SECTION 08 71 00 FOR HARDWARE SETS.
- USE TYPE "X" GYPSUM WALLBOARD WHERE FIRE-RATED WALL ASSEMBLIES ARE CALLED OUT ON THE PLANS.



SHENANDOAH SCHOOL CORPORATION NEW
TRANSPORTATION CENTER

NEW BUILDING FOR

5109 NORTH MAIN RD, MIDDLETOWN, INDIANA 47355

ISSUANCES/REVISIONS

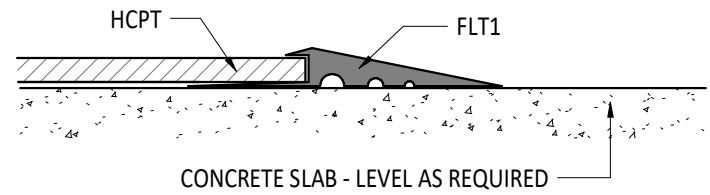
PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25031.00	MOB	TAL

DOOR SCHEDULE
AND DETAILS

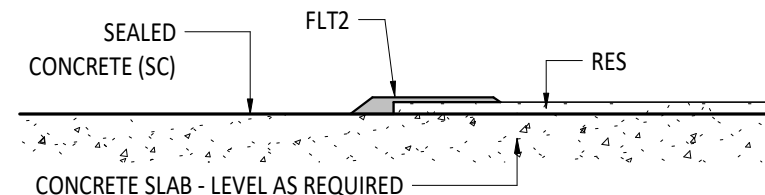
SHEET NUMBER:

A6.1

FINISH MATERIAL SCHEDULE							
NAME	MANUFACTURER	STYLE	NUMBER	COLOR	SIZE	COMMENTS	
03 35 00 CONCRETE FINISHING - HARDENED CONCRETE							
HC	REFER TO SPECIFICATIONS	--	--	--	--	SLIP-RESISTANT COATING REQUIRED AT THIS LOCATION. REFER TO SPECIFICATIONS.	
03 35 00 CONCRETE FINISHING - SEALED CONCRETE							
SC	REFER TO SPECIFICATIONS	--	--	--	--		
09 51 00 ACOUSTICAL CEILINGS - SUSPENSION SYSTEM							
TYPE A	ARMSTRONG	PRELUDE XL		WHITE	15/16" WIDE FACE	DOUBLE WEB CONSTRUCTION, CLASS 1 ZINC COATING, 8 GAUGE STEEL.	
09 51 00 ACOUSTICAL CEILINGS - TILE							
TYPE A	ARMSTRONG	FINE FISSURED	1728	WHITE	2' X 2', 5/8" THICK	CEILING TILES TO MATCH SCHOOL'S STANDARD TILES. SQUARE EDGE PROFILE. MINIMUM .055 NRC. MINIMUM 33 CAC. MINIMUM LIGHT REFLECTANCE 82%. SAG RESISTANT. MOLD AND MILDEW RESISTANT. USE WITH SUSPENSION SYSTEM TYPE A. CORRESPONDS WITH CEILING "TYPE A" ON REFLECTED CEILING PLANS.	
09 65 13 RESILIENT BASE AND ACCESSORIES - RUBBER BASE							
RB1	TARKETT/JOHNSONITE	BASEWORKS (TYPE TS)	VN5	THE BLUES	4" H COVE TOE		
RB2	TARKETT/JOHNSONITE	BASEWORKS (TYPE TS)	VN5	THE BLUES	6" H COVE TOE		
09 67 23 RESINOUS FLOORING							
RES1	SHERWIN WILLIAMS	RESUFLOL DECO FLAKE II		1/4" RHINO		RESUTILE AT TOP COAT, SATIN FINISH	
09 67 23 RESINOUS FLOORING - FLOOR TRANSITIONS							
FLT2	POWERHOLD	3/4" BINDER BAR-OVERLAPPING		HAMMERED MILL FINISH		DRILLED AND COUNTERSUNK, 6" CENTERS FOR #3 FASTENER	
09 68 13 TILE CARPETING - FLOOR TRANSITIONS							
FLT1	POWERHOLD	SMM CARPET TILE REDUCER		ETCHED ALUMINUM			
09 68 13 TILE CARPETING - HYBRID CARPET TILE							
HCP11	JHJ FLOORING	KINETEX, PUT A CORK IN IT	2182	STEIN	24" X 24"	ASHLAR INSTALLATION PATTERN	
09 91 23 PAINTING - EPOXY PAINT							
EPT1	SHERWIN WILLIAMS	REFER TO SPECIFICATIONS	SW7071	GREY SCREEN		REFER TO SPECIFICATIONS FOR SHEEN INFORMATION. COLOR TO MATCH SCHOOL DISTRICT STANDARD GRAY ON FILE AT SHERWIN WILLIAMS.	
09 91 23 PAINTING - PAINT							
PT1	SHERWIN WILLIAMS	REFER TO SPECIFICATIONS	SW 7071	GREY SCREEN		REFER TO SPECIFICATIONS FOR SHEEN INFORMATION. COLOR TO MATCH SCHOOL DISTRICT STANDARD LIGHT GRAY ON FILE AT SHERWIN WILLIAMS.	
PT2	SHERWIN WILLIAMS	REFER TO SPECIFICATIONS	SW 7074	SOFTWARE		REFER TO SPECIFICATIONS FOR SHEEN INFORMATION. COLOR TO MATCH SCHOOL DISTRICT STANDARD MEDIUM GRAY ON FILE AT SHERWIN WILLIAMS.	
PT3	SHERWIN WILLIAMS	REFER TO SPECIFICATIONS	COLOR TO MATCH PPG 1164-7	COLOR TO MATCH PPG COLOR, ANNAPOLIS BLUE		REFER TO SPECIFICATIONS FOR SHEEN INFORMATION. COLOR TO MATCH SCHOOL DISTRICT STANDARD "SHENANDOAH BLUE" ON FILE AT SHERWIN WILLIAMS.	
10 26 23 PROTECTIVE WALLCOVERINGS - FIBER REINFORCED PANELING							
FRP1	MARLITE	STANDARD FRP	P 430N	PEBBLED MEDIUM GREY	4' X 8'	INCLUDE MATCHING EDGE AND DIVISIONAL PVC TRIM. FOR WALLS IN MAINTENANCE BAY.	
FRP2	MARLITE	ARTIZAN MAX FRP		IRON THREADS, STONE	4' X 8'	INCLUDE ALUMINUM TRIM FOR CORNERS AND EXPOSED EDGES. NO DIVISIONAL TRIM BETWEEN PANELS. FOR WALLS IN RESTROOMS.	
12 24 00 WINDOW SHADES- ROLLER SHADE							
RS1	DRAPER	ESCREEN 1% OPENNESS		PEARL/GREY			
12 35 50.13 LAMINATE CASEWORK - CASEWORK HARDWARE							
CH1	STEVENS INDUSTRIES	MODIFIED BAR 128 ADA		NICKEL			
12 35 50.13 LAMINATE CASEWORK - PLASTIC LAMINATE							
LT1	FORMICA	STANDARD HPL	5795-NG	CAMEL ELM		NATURAL GRAIN TEXTURE. WOOD GRAIN TO RUN VERTICALLY.	
12 36 00 COUNTERTOPS - PLASTIC LAMINATE							
LT2	WILSONART	STANDARD HPL	5033-38	HANDSPUN PEARL		FINE VELVET FINISH	



1 FLOOR TRANSITION - HYBRID CARPET TILE TO CONCRETE SLAB
6" = 1'-0"



2 FLOOR TRANSITION - SEALED CONCRETE TO EPOXY POURED FLOORING
6" = 1'-0"

FIRST FLOOR PLAN ROOM INDEX - OVERALL		
ROOM NUMBER	ROOM NAME	AREA
A101	BUS CANOPY	1,479 SF
B100	MAINTENANCE GARAGE	2,220 SF
B101	CONFERENCE ROOM	471 SF
B102	RESTROOM	62 SF
B103	RESTROOM	62 SF
B104	MECHANICAL/ELECTRICAL ROOM	219 SF
B105	OFFICE	373 SF
C101	BUS CANOPY	1,419 SF
D101	MINI BUS CANOPY	1,329 SF
E101	BUS CANOPY	3,849 SF

TYPICAL FINISHES

* UNLESS NOTED OTHERWISE, THESE FINISH SELECTIONS SHALL BE USED THROUGHOUT THE PROJECT. CONTRACTOR SHOULD BRING ANY DISCREPANCIES TO THE ARCHITECT'S ATTENTION IMMEDIATELY.

CASEWORK HARDWARE	CH1
EXPOSED HVAC ELEMENTS (CEILING)	MATCH PT1
EXPOSED HVAC ELEMENTS (WALLS)	MATCH ADJACENT WALL FINISH
EXPOSED STRUCTURE (CEILING)	MATCH PT1
EXPOSED METAL DECK	MATCH PT1
GWB CEILINGS AND BULKHEADS	PT1
HOLLOW METAL DOOR FRAMES	PT3
HOLLOW METAL DOORS	PT3
LAMINATE CASEWORK (HORIZONTAL)	LT2
LAMINATE CASEWORK (VERTICAL)	LT1
SWITCH PLATES AND OUTLET COVERS	WHITE
WOOD STAIRS, RAILINGS, TRIM WORK	PT3

FLOOR FINISHES GENERAL NOTES

- FLOORING TRANSITIONS AND SEAMS AT DOOR SHALL OCCUR DIRECTLY UNDER THE CENTERLINE OF CLOSED DOOR UNLESS NOTED OTHERWISE.
- FLOORING TRANSITIONS ARE TO BE EASED TO ACHIEVE A SMOOTH AND UNIFORM TRANSITION.
- TRANSITION STRIPS ARE REQUIRED IN ALL INSTANCES WHERE A FLOOR MATERIAL TRANSITION OCCURS. REFER TO TYPICAL DETAILS ON SHEET A9.D FOR ADDITIONAL INFORMATION.
- FLOOR FINISHES SHALL EXTEND UNDER BUILT-IN COUNTER AND EQUIPMENT.
- REFERENCE THE FINISH MATERIAL SCHEDULE FOR MANUFACTURERS, TYPES, AND COLOR SELECTIONS.
- REFERENCE INTERIOR ELEVATIONS, WHERE PROVIDED, FOR ADDITIONAL INFORMATION.
- ALL BASE MATERIALS SHALL BE INSTALLED TIGHT TO FLOORING SURFACE.
- REFERENCE FINISH FLOOR MATERIAL LEGEND FOR SPECIFIC FLOORING MATERIAL AND COLOR.
- REFER TO DIRECTIONAL ARROW ON FINISH FLOOR PLANS WHERE PROVIDED FOR FLOORING INSTALLATION INSTRUCTIONS.
- WALL SUPPLY REGISTERS/GRILLES TO BE FIELD PAINTED TO MATCH ADJACENT WALL COLOR. REFERENCE SECTION 23 37 00 AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- EXPOSED CEILING / STRUCTURE TO BE PAINTED, UNLESS NOTED OTHERWISE.
- ALL INTERIOR WALL FINISH TRANSITIONS SHOULD OCCUR AT AN INSIDE CORNER, IF A MATERIAL OR COLOR CHANGE OCCURS AT AN OUTSIDE CORNER, CONTRACTOR SHALL BRING THIS TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
- PRIOR TO FLOORING INSTALLATION, VERIFY SUBFLOOR CONDITIONS MEET MANUFACTURER'S STANDARD REQUIREMENTS.

#	KEYNOTE DESCRIPTION
09 91 23 A1	WOOD STAIRS AND RAILINGS TO BE PAINTED PT3. REFER TO FINISH MATERIAL SCHEDULE.
09 91 23 A3	WOOD TRIM WALL CAP TO BE PAINTED PT1.
12 24 00 B1	MANUAL ROLLER SHADE SYSTEM WITH ROLLER SHADE FABRIC RS1 - REFERENCE FINISH MATERIAL SCHEDULE.

FLOOR FINISH MATERIAL LEGEND

HYBRID CARPET TILE 1	SEALED CONCRETE
HCP1	SC
RESINOUS FLOORING 1	
RES1	

FINISH TAG LEGEND

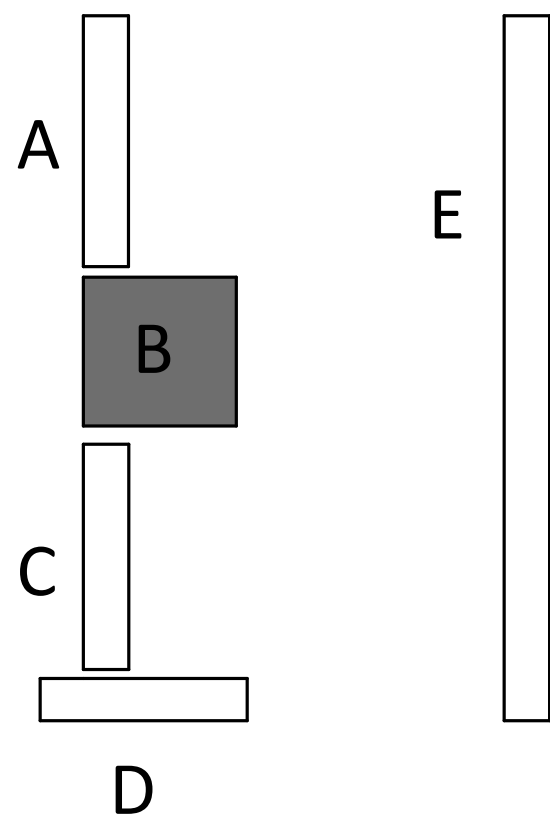
FLOOR FINISH	BASE FINISH	WALL FINISH	FINISH REMARK*
RF1	RB1	PT1	2

*REMARKS NUMBERS COORDINATE WITH "INTERIOR FINISH REMARKS" NOTES LEGEND ABOVE

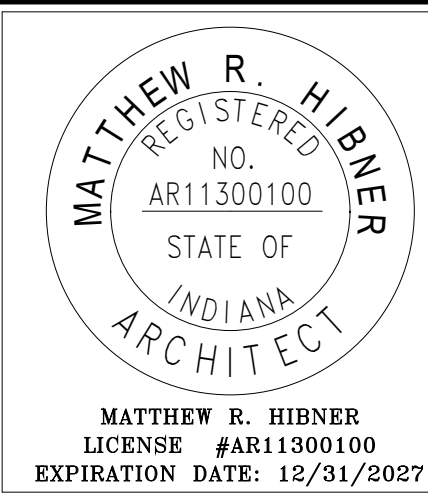
MATERIALS NOTED IN FINISH TAG SHOULD BE CONSIDERED THE OVERALL FINISHES IN THE ROOM MARKED UNLESS NOTED OTHERWISE WITH KEYNOTES ON FINISH PLAN OR INTERIOR ELEVATIONS.

INTERIOR FINISH REMARKS

- MULTIPLE WALL FINISHES IN THIS ROOM. REFER TO INFORMATION NOTED ON FINISH PLANS AND INTERIOR ELEVATIONS.
- MULTIPLE FLOOR FINISHES IN THIS ROOM. REFER TO NOTED INFORMATION ON FINISH PLANS.
- FRP INSTALLED FROM TOP OF WALL BASE UP TO 4'-6" AFF IN THIS ROOM. REFER TO FINISH TAG FOR FRP SELECTION AND FINISH MATERIAL SCHEDULE.



KEY PLAN



SHENANDOAH SCHOOL CORPORATION NEW TRANSPORTATION CENTER

NEW BUILDING FOR

SUB NORTH HARBOR RD, MIDDLETOWN, INDIANA 47055

ISSUANCES/REVISIONS

PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25031.00	CEO	HEF

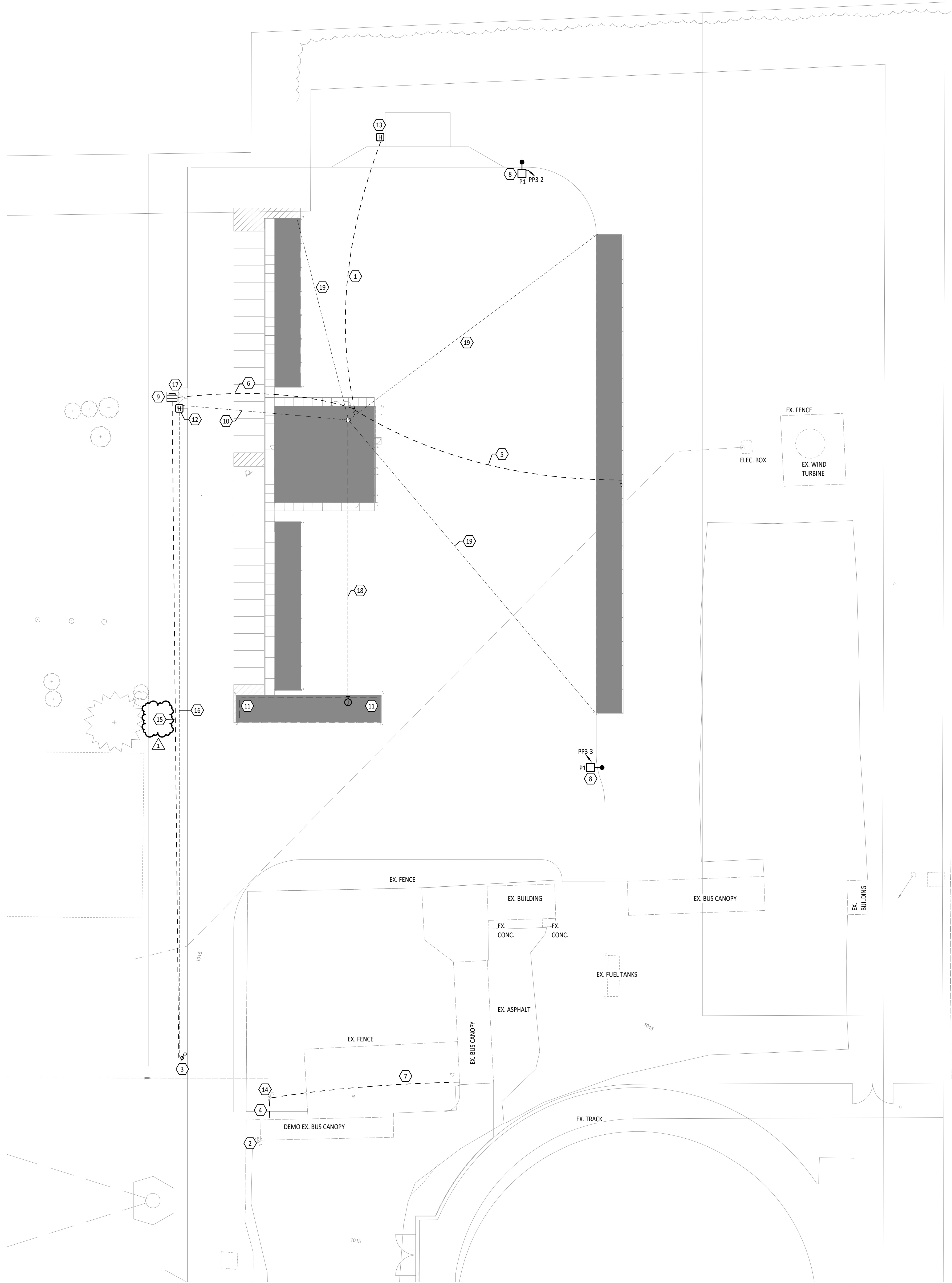
SHEET TITLE:

FINISH PLANS AND DETAILS

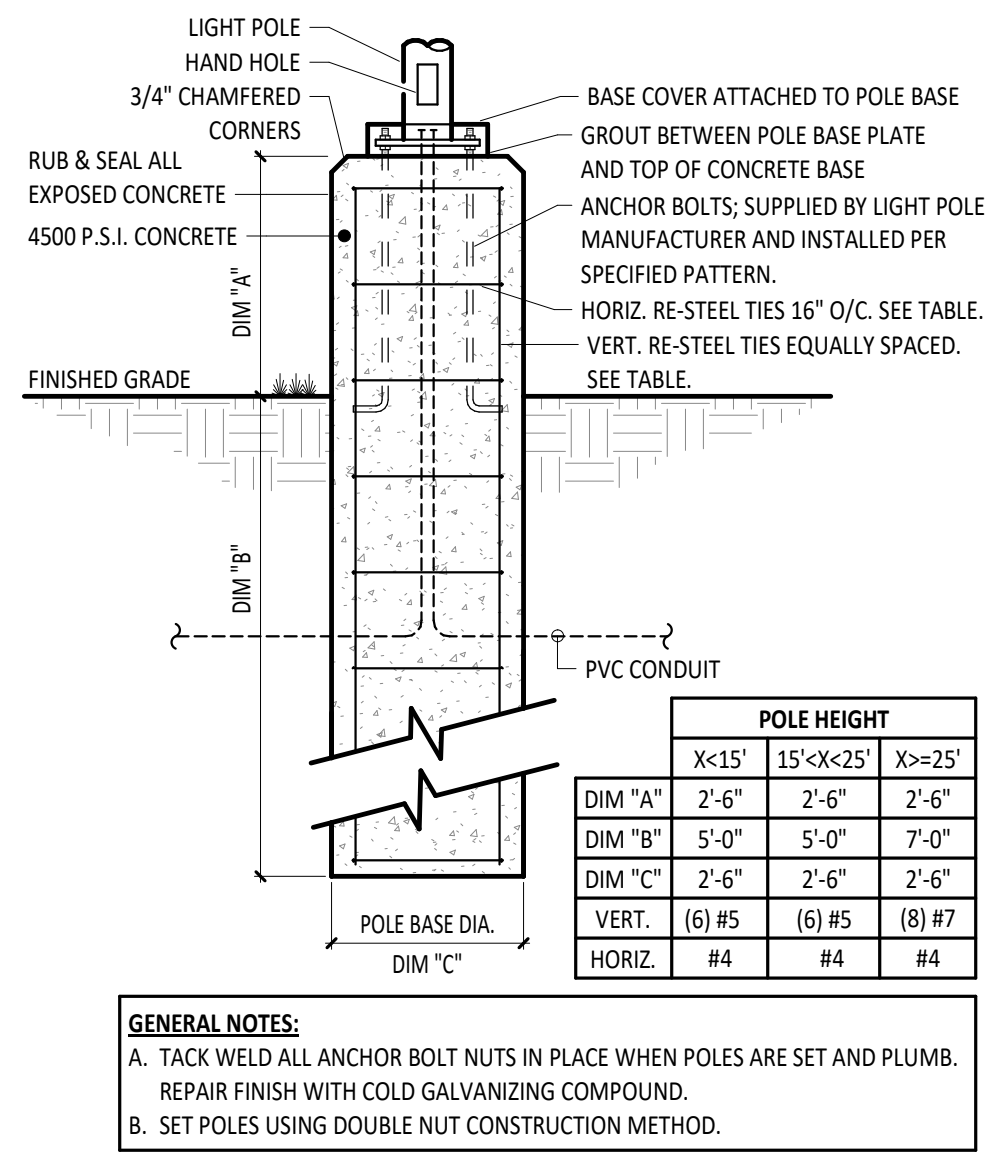
SHEET NUMBER:

A9.1

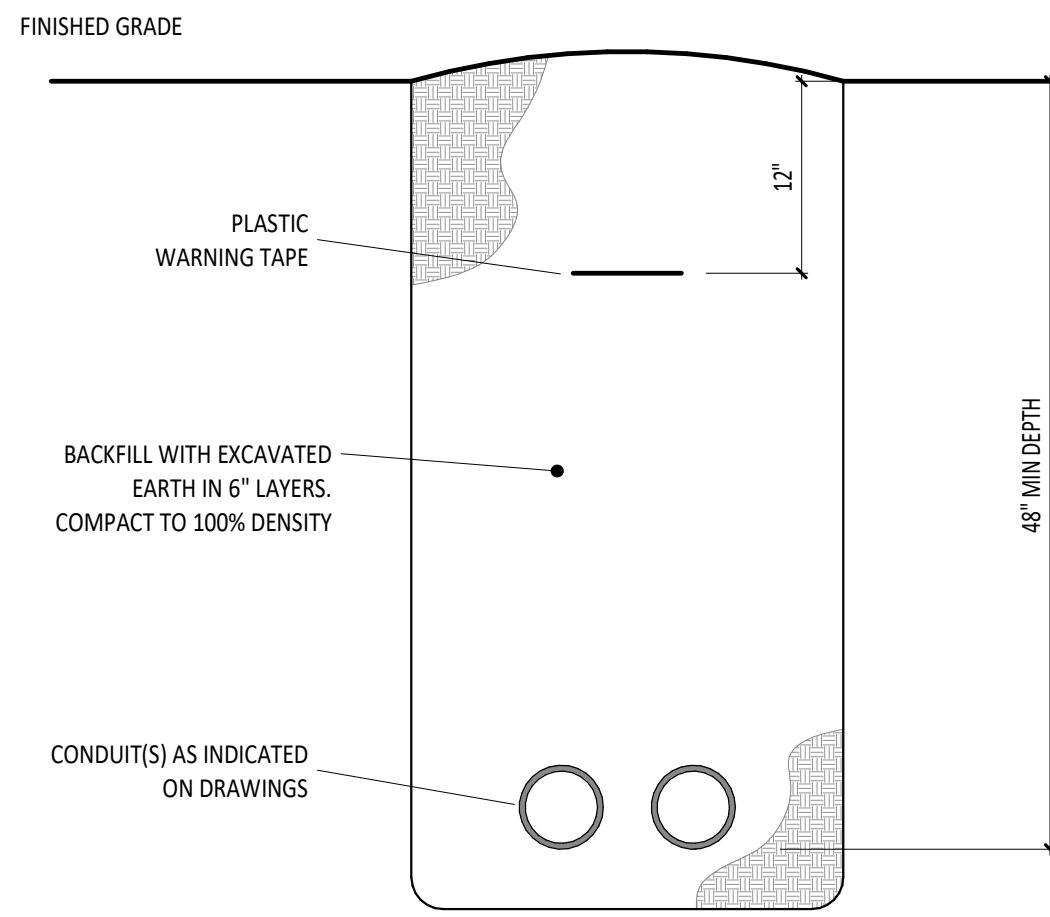
1
E2.1
ELECTRICAL SITE PLAN
1" = 30'-0"



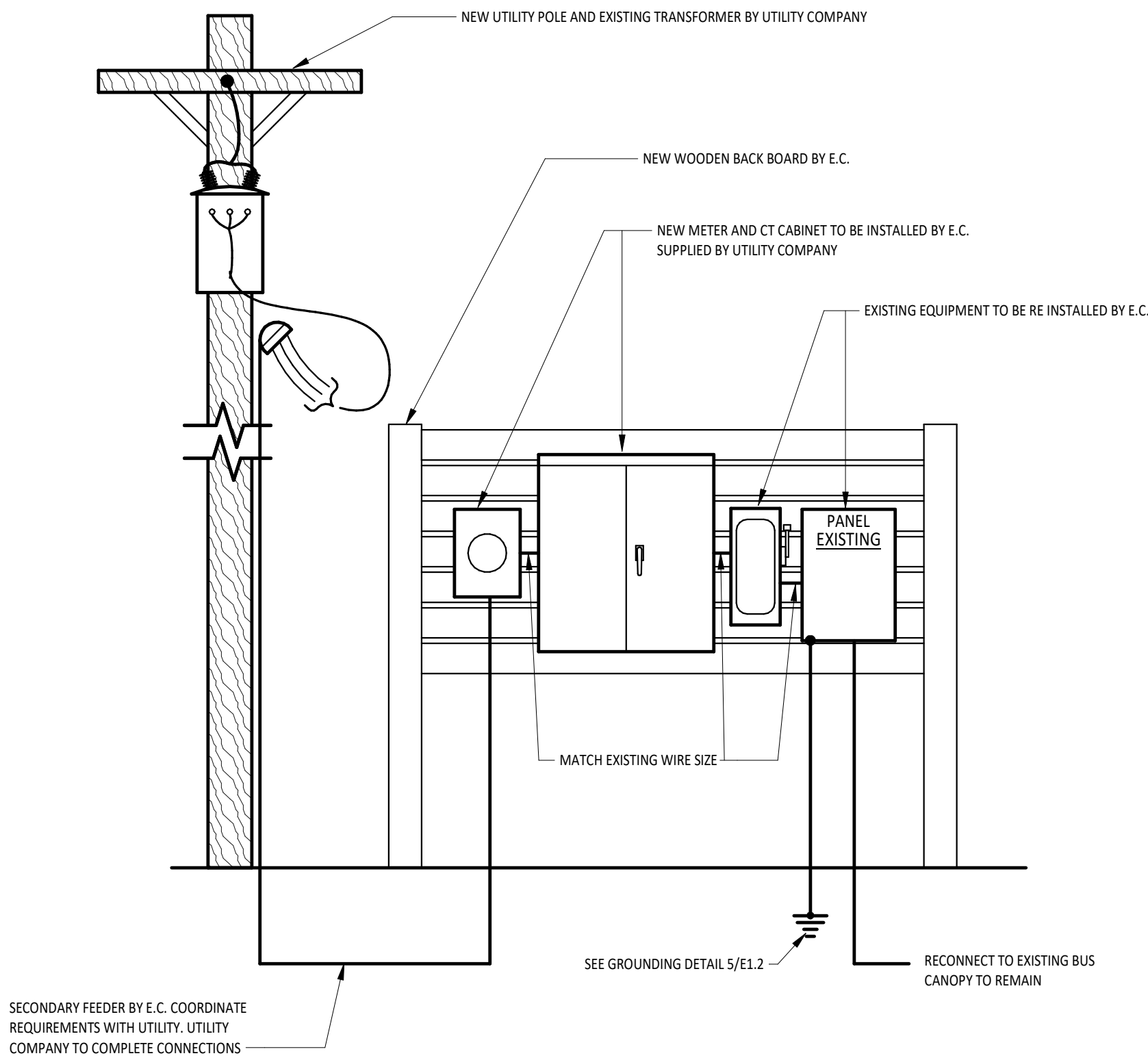
2
E2.1
CONCRETE POLE BASE DETAIL
NTS



3
E2.1
CONDUIT TRENCH DETAIL
NTS



4
E2.1
EXISTING BUS CANOPY ELECTRICAL RISER DIAGRAM
NTS



UTILITY COMPANY CONTACT

DUKE ENERGY 6045 PENDLETON NEW CASTLE RD, NEW CASTLE, IN 47362
JEREMY HALLGARTH DISTRIBUTION ENGINEER
(OFFICE) 980.502.5514

BUS CHARGING CONTROL CONTACT

POWERSYNC
SONNY MARTIN VP-ENGINEERING/PRODUCT DEVELOPMENT
(EMAIL) SONNY@POWER-SYNC.COM
(CELL) 765.650.0372

KURT SCHEPERS
(EMAIL) KURT@POWER-SYNC.COM
(CELL) 317.695.5275

ELECTRICAL SITE GENERAL NOTES

- SEE CIVIL SITE PLAN, AND LANDSCAPE SITE PLANS FOR EXACT LOCATION OF OTHER UTILITIES. INSTALLATION OF ELECTRICAL WORK SHALL BE COORDINATED WITH THE OTHER TRADES.
- ELECTRICAL UTILITY SERVICE CONDUITS TO BE MINIMUM OF 48" BELOW GRADE TO TOP OF CONDUITS.
- PROVIDE PULL WIRES IN ALL EMPTY CONDUITS.
- ALL UNDERGROUND CONDUIT SHALL BE 1" SCHEDULE 40 PVC, UNLESS NOTED OTHERWISE.
- COORDINATE CONSTRUCTION WITH THE ELECTRIC UTILITY COMPANY.
- PROVIDE IDENTIFICATION LABEL FOR EACH POLE LIGHT.

KEYNOTE LEGEND

#	KEYNOTE DESCRIPTION
1	PROVIDE (3) 2 INCH CONDUITS FOR FUTURE FUEL STATION AREA FROM ELECTRICAL ROOM TO HANDHOLE NEAR FUTURE FUEL STATION.
2	EXISTING UTILITY POLE WITH TRANSFORMER TO REMAIN.
3	NEW UTILITY PROVIDED POLE. OVERHEAD PRIMARY SERVICE TO BE EXTENDED TO NEW POLE AND THEN TRANSITION TO UNDERGROUND CONDUIT TO PAD MOUNT TRANSFORMER. COORDINATE WORK WITH UTILITY COMPANY.
4	DEMO POWER FEED FROM BUS CANOPY TO BE DEMOLISHED.
5	UNDERGROUND FEED FROM PANEL PP1 TO PANEL PP2. REFER TO RISER DIAGRAM FOR FEEDER SIZE.
6	PROVIDE 4" UNDERGROUND PVC CONDUIT CAPPED WITH PULL STRING INSTALLED FOR ELECTRICAL FEED FROM SECONDARY OF UTILITY COMPANY TRANSFORMER TO CT CABINET. REFERENCE RISER DIAGRAM FOR FEEDER INFORMATION. FINAL CONNECTIONS BY UTILITY COMPANY. COORDINATE WORK WITH THE UTILITY COMPANY.
7	REROUTE FEED TO THE EXISTING BUS CANOPY TO REMAIN UNDERGROUND THROUGH NEW CONDUIT.
8	PROVIDE NEW LIGHT POLE WITH PHOTOCELL LIGHT CONTROL. REFER TO DETAIL 2/E2.1 FOR MORE INFORMATION.
9	PROVIDE APPROVED PAD FOR NEW UTILITY PROVIDED TRANSFORMER. REFER TO DETAIL 7/E2.1 FOR MORE SPECIFICATIONS ON TRANSFORMER PAD. FINAL CONNECTIONS BY UTILITY CONTRACTOR.
10	PROVIDE 2" UNDERGROUND CONDUIT FOR TECHNOLOGY CABLING FROM RACK IN ELECTRICAL ROOM TO HANDHOLE. REFER TO DETAIL 1/72.1 FOR MORE INFORMATION.
11	PROVIDE (1) 1" CONDUIT WITH PULL STRING FROM JUNCTION BOX IN BUS CANOPY D103 TO CAMERA LOCATIONS. PENETRATE THROUGH CANOPY WALL TO CAMERA ROUGH IN LOCATION WITH WEATHERPROOF BOX. COORDINATE WORK WITH TECHNOLOGY CONTRACTOR.
12	DIVISION 26 TO PROVIDE A 24" X 36" X 24" COMMUNICATIONS PULL BOX FOR TECHNOLOGY CONDUIT AT THIS APPROXIMATE LOCATION.
13	PROVIDE 24"X36"X24" DIVIDED QUARTZITE IN GROUND BOX WITH OPEN BOTTOM. COVER TO BE LABELED COMMUNICATIONS ELECTRICAL.
14	EXISTING UTILITY POLE, METER BASE, AND CT CABINET TO BE REPLACED BY THE UTILITY COMPANY. E.C. TO BUILD/INSTALL NEW H-FRAME. MOUNT METER BASE, CT CABINET, EXISTING BREAKER PANEL, AND EXISTING DISCONNECT TO THE H-FRAME. REFER TO DETAIL 4/E2.1. COORDINATE WORK WITH THE UTILITY COMPANY.
15	PROVIDE 4" UNDERGROUND PVC CONDUIT WITH PULL STRING CAPPED ON BOTH ENDS FROM NEW TRANSFORMER PAD TO NEW UTILITY POLE LOCATION EXTENDING 3FT OUT OF GROUND ON EACH END.
16	PROVIDE 2" UNDERGROUND CONDUIT FOR TECHNOLOGY CABLING FROM HANDHOLE TO NEW UTILITY POLE. REFER TO DETAIL 1/72.1 FOR MORE INFORMATION.
17	COORDINATE LOCATION OF SERVICE GATE IN FRONT OF TRANSFORMER FROM THE BUS DRIVE.
18	PROVIDE (1) 1 1/2" CONDUIT WITH PULL STRING FOR CAMERA CABLING FROM NETWORK RACK IN ELECTRICAL ROOM TO JUNCTION BOX IN BUS CANOPY D101. COORDINATE WORK WITH TECHNOLOGY CONTRACTOR.
19	PROVIDE (1) 1" CONDUIT WITH PULL STRING FOR CAMERA CABLING FROM NETWORK RACK IN ELECTRICAL ROOM TO CAMERA LOCATION. TURN UP CONDUIT INSIDE CANOPY AND PENETRATE THROUGH CANOPY WALL TO CAMERA ROUGH IN LOCATION WITH WEATHERPROOF BOX. COORDINATE WORK WITH TECHNOLOGY CONTRACTOR.



SHENANDOAH SCHOOL CORPORATION
NEW TRANSPORTATION CENTER

ISSUANCES/REVISIONS

PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25107.00	CAE	CDH

PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25107.00	CAE	CDH

SHEET TITLE:

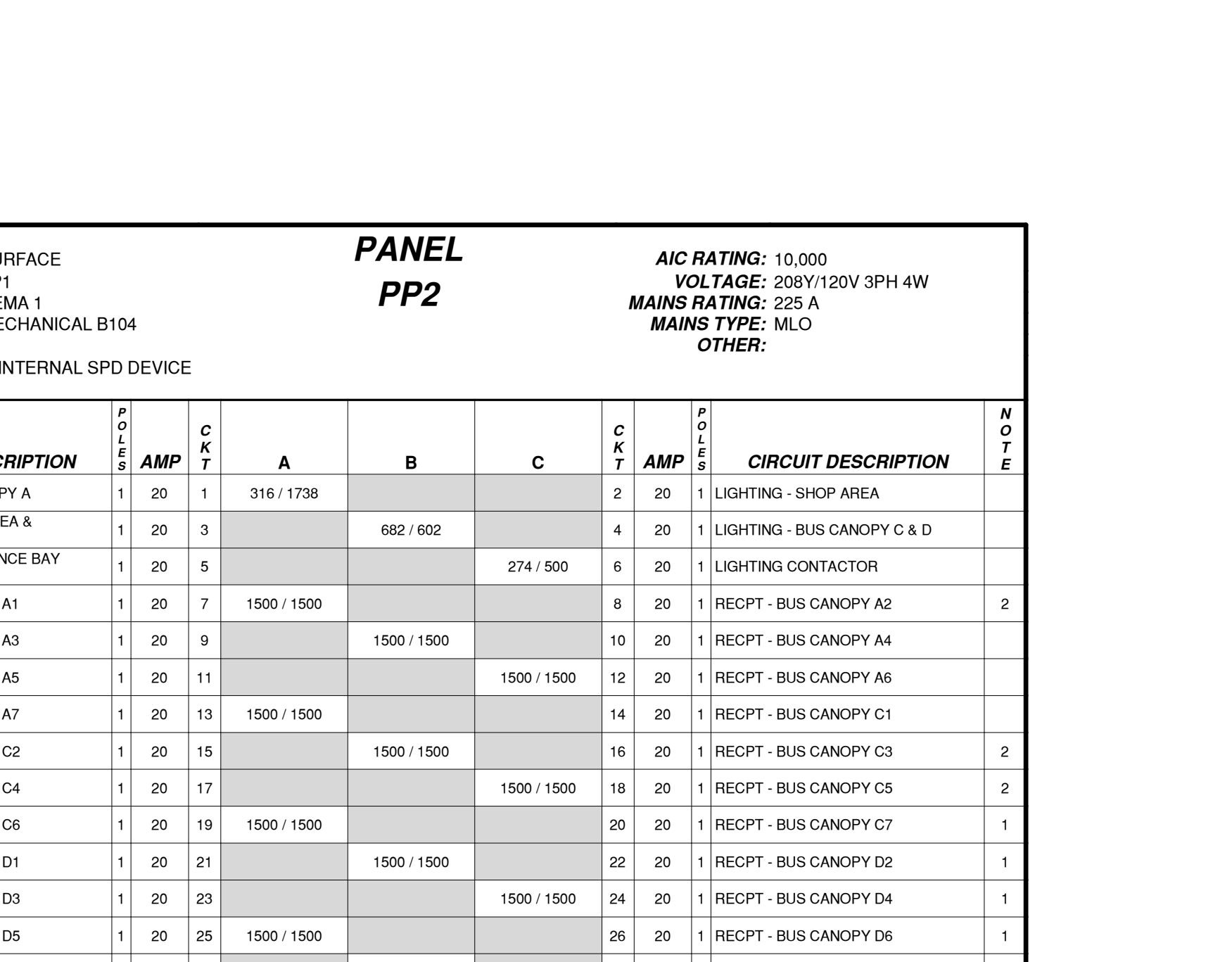
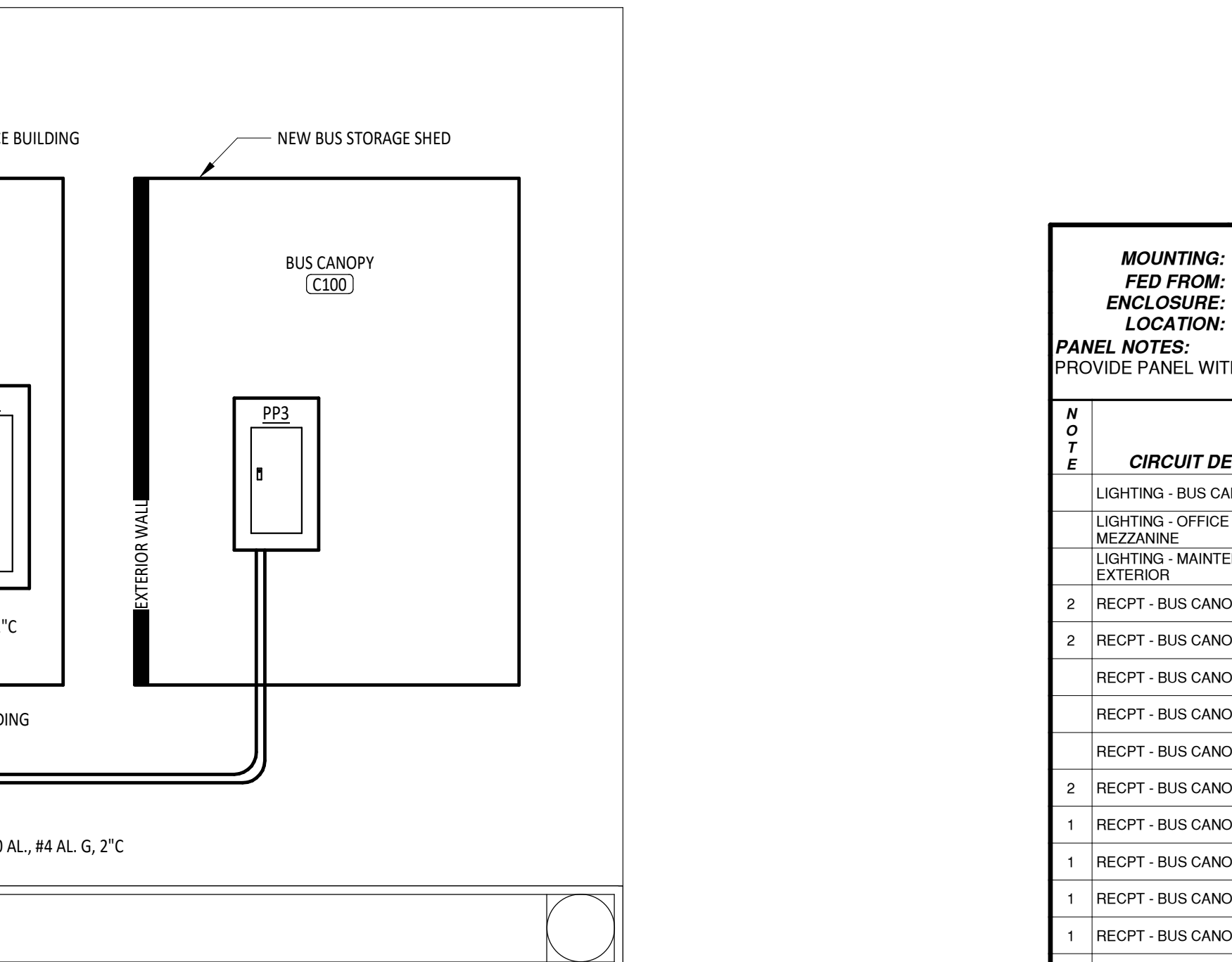
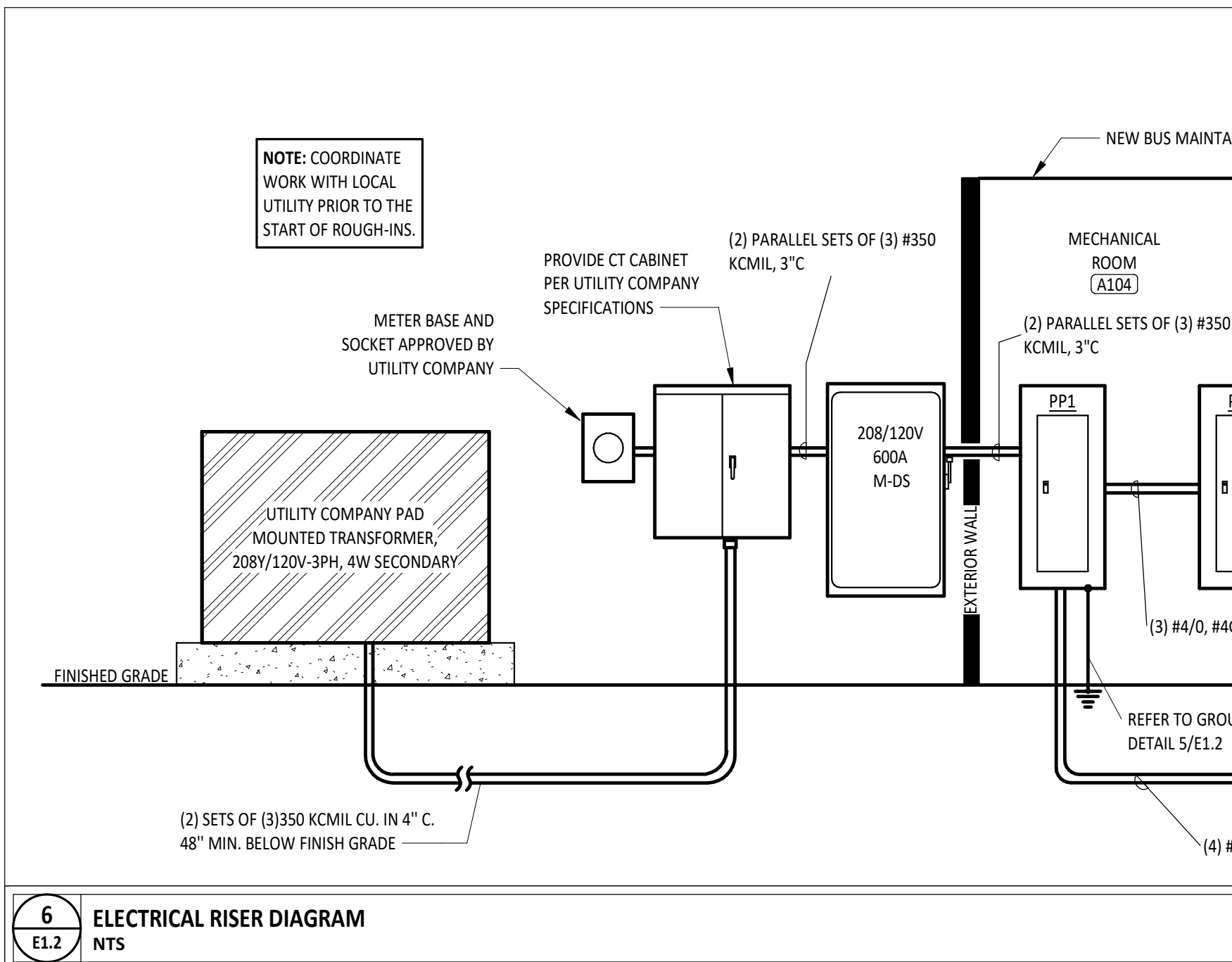
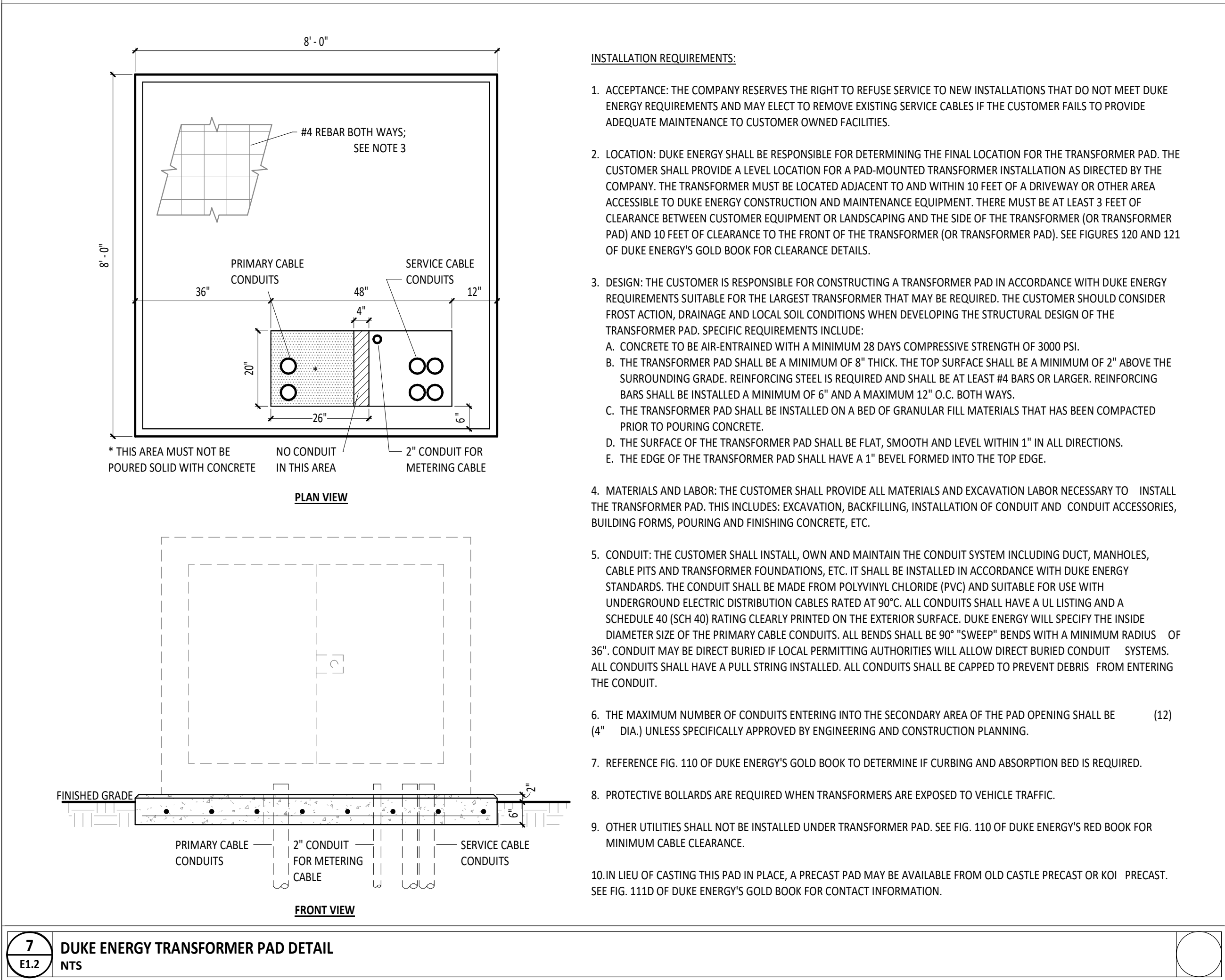
SITE ELECTRICAL
PLAN

SHEET NUMBER:

E2.1



Know what's below.
Call before you dig.



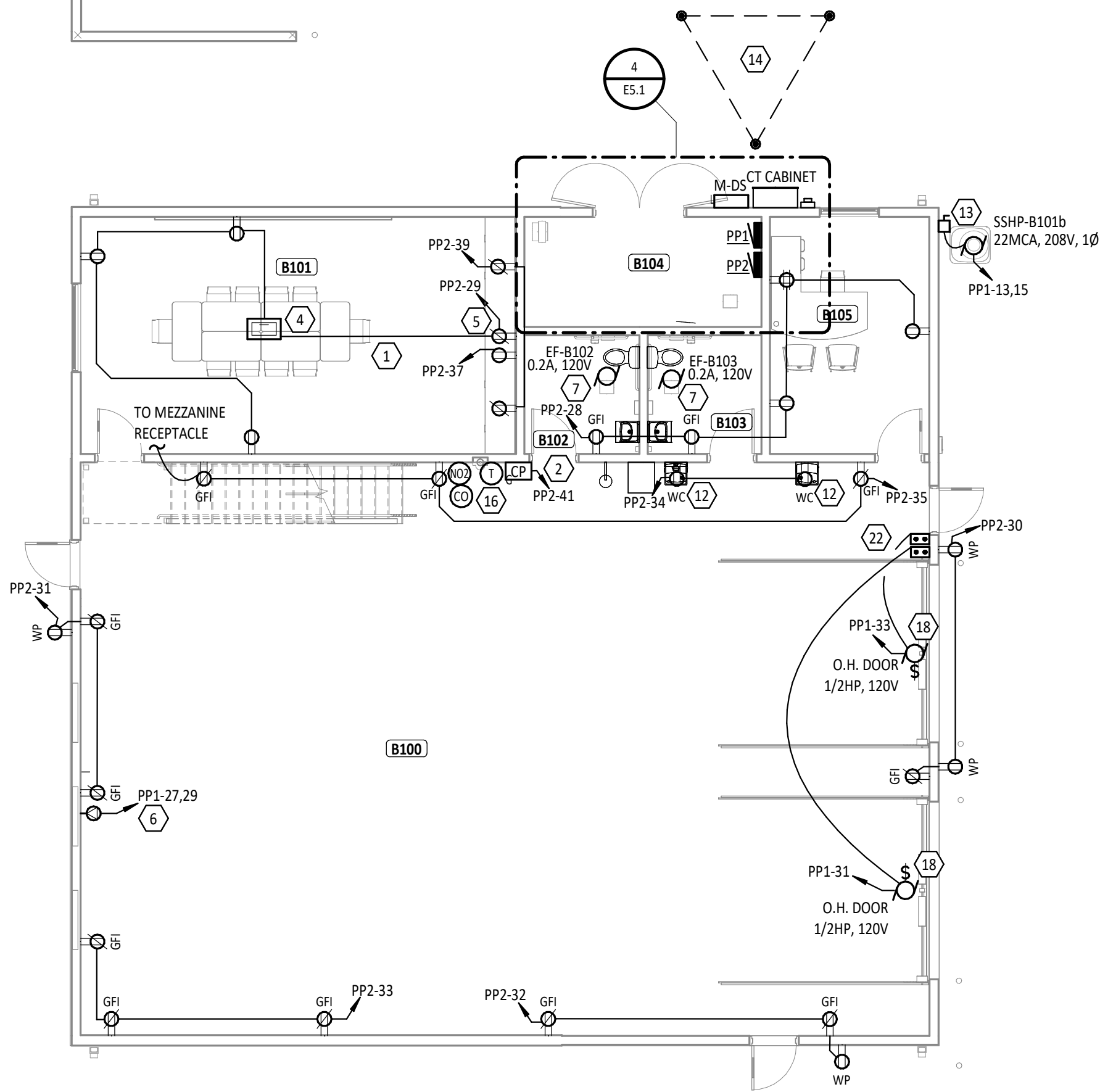
MOUNTING: SURFACE			PANEL			AIC RATING: 10,000		
FED FROM: PP1			PP3			VOLTAGE: 208Y/120V 3PH 4W		
ENCLOSURE: NEMA 3R						MAINS RATING: 125 A		
LOCATION: BUS CANOPY E101						MAINS TYPE: 125 A MCB		
PANEL NOTES: PROVIDE PANEL WITH INTERNAL SPD DEVICE						OTHER:		

N O T E	CIRCUIT DESCRIPTION	PO LES	A MPS	C K T	A	B	C	C K T	A MPS	CIRCUIT DESCRIPTION	N O T E
	LIGHTING - BUS CANOPY	1	20	1	644 / 193			2	20	1 LIGHTING - NORTH POLE	
	LIGHTING - SOUTH POLE	1	20	3		193 / 1500		4	20	1 RECEPT - BUS CANOPY 1	2
2	RECEPT - BUS CANOPY 2	1	20	5			1500 / 1500	6	20	1 RECEPT - BUS CANOPY 3	2
2	RECEPT - BUS CANOPY 4	1	20	7	1500 / 1500			8	20	1 RECEPT - BUS CANOPY 5	
	RECEPT - BUS CANOPY 6	1	20	9		1500 / 1500		10	20	1 RECEPT - BUS CANOPY 7	
	RECEPT - BUS CANOPY 8	1	20	11			1500 / 1500	12	20	1 RECEPT - BUS CANOPY 9	
	RECEPT - BUS CANOPY 10	1	20	13	1500 / 1500			14	20	1 RECEPT - BUS CANOPY 11	
	RECEPT - BUS CANOPY 12	1	20	15		1500 / 1500		16	20	1 RECEPT - BUS CANOPY 13	
	RECEPT - BUS CANOPY 14	1	20	17			1500 / 1500	18	20	1 RECEPT - BUS CANOPY 15	
2	RECEPT - BUS CANOPY 16	1	20	19	1500 / 1500			20	20	1 RECEPT - BUS CANOPY 17	2
	RECEPT - BUS CANOPY 18	1	20	21		1500 / 1500		22	20	1 RECEPT - BUS CANOPY 19	
2	RECEPT - BUS CANOPY 20	1	20	23			1500 / 500	24	20	1 POWERSYNCRON CONTROL PANEL	
	SPARE BREAKER	1	20	25	0 / 0			26	20	1 SPARE BREAKER	
	SPARE BREAKER	1	20	27		0 / 0		28	20	1 SPARE BREAKER	
	SPARE BREAKER	1	20	29			0 / 0	30	20	1 SPARE BREAKER	
VA SUBTOTALS:					9807 VA	10693 VA	11000 VA				
AMP SUBTOTALS:					82 A	90 A	93 A				

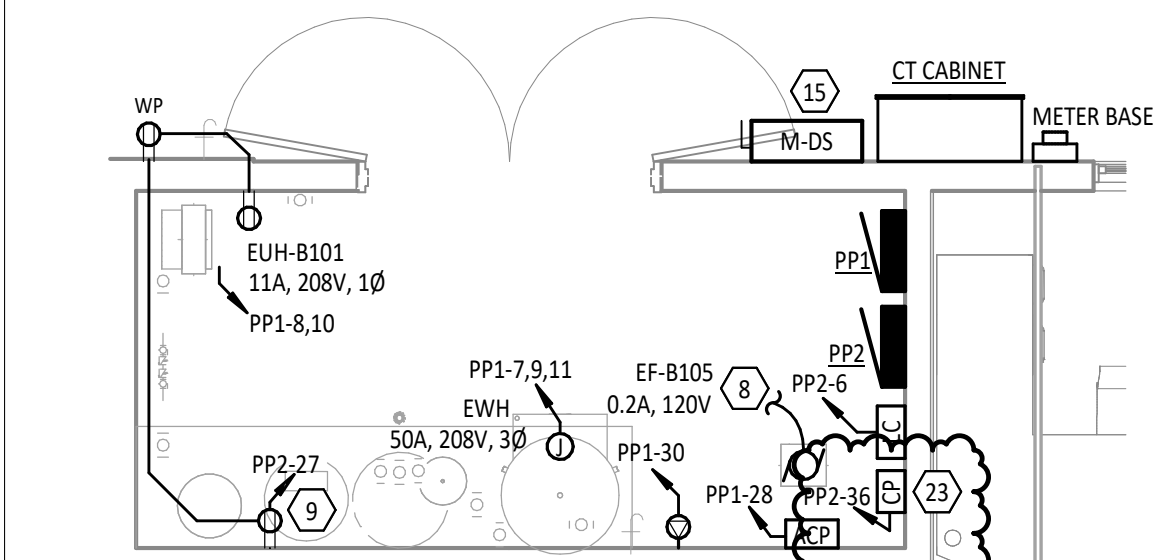
LOAD TYPE:	CONNECTED VA	DEMAND FACTOR	DEMAND VA	DEMAND AMPS	SUBTOTAL	PHASE	CIRCUIT NOTES:
LIGHTING	1017 VA	125.0%	1272 VA	4 A	9807 VA	A	1 - UPSIZE CIRCUIT TO 8AWS FOR VOLTAGE DROP
MISC EQUIPMENT	500 VA	100.0%	500 VA	1 A	10693 VA	B	2 - UPSIZE CIRCUIT TO 10AWG FOR VOLTAGE DROP
BUS PULG	30000 VA	100.0%	30000 VA	83 A	11000 VA	C	
PANEL TOTALS							
	31498 VA		CONNECTED				
	31748 VA		DEMAND				
	87 A		CONNECTED				
	88 A		DEMAND				

SHEET NUMBER:
E1.2

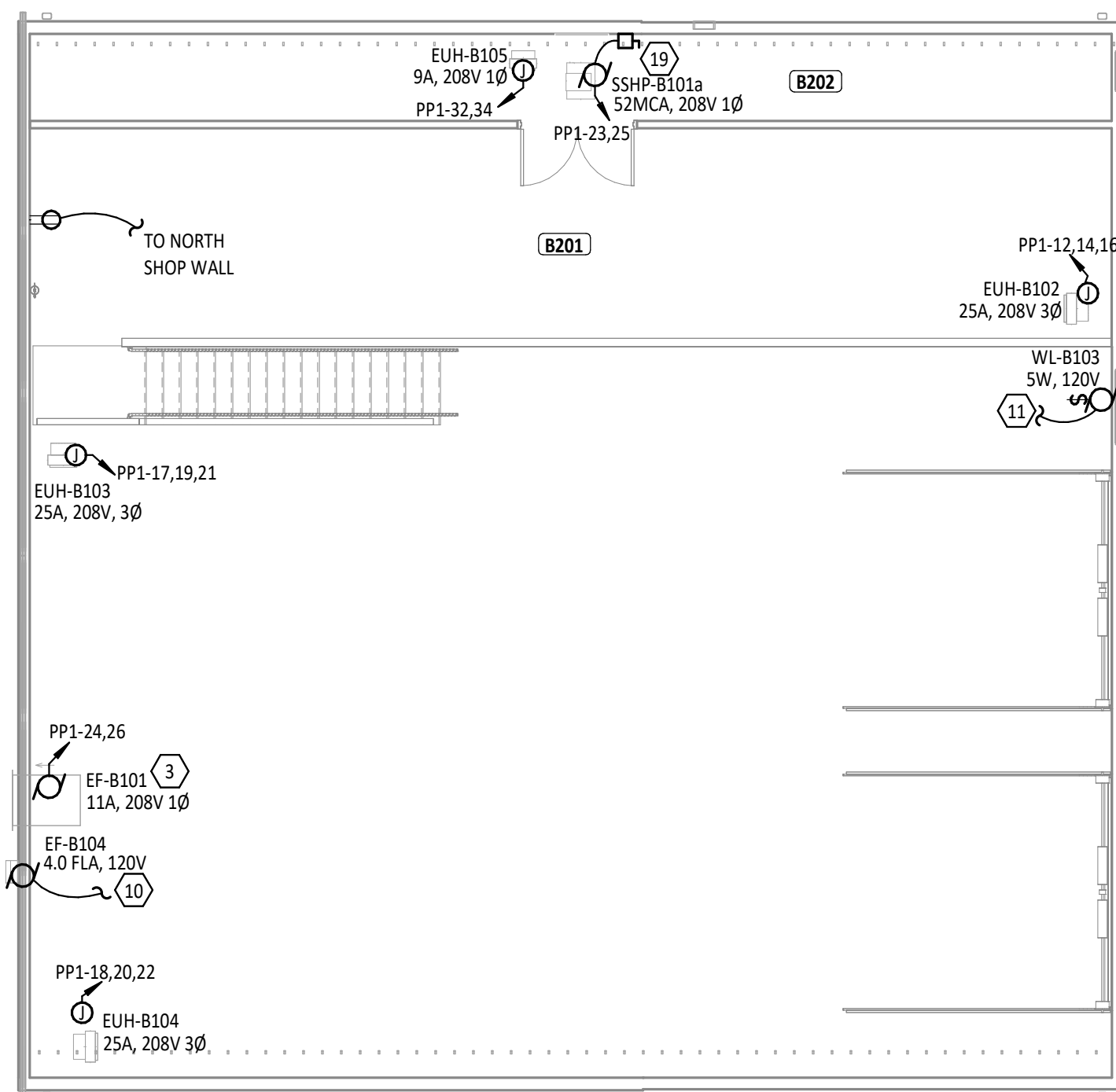
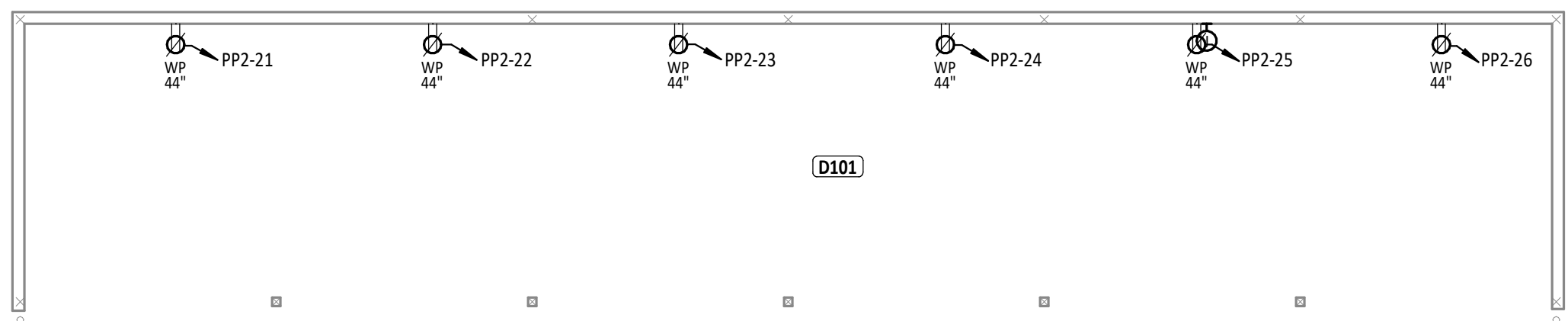
1
ES.1
FIRST FLOOR POWER PLAN - UNIT A & B
1/8" = 1'-0"



4
ES.1
ELECTRICAL ROOM ENLARGED
1/4" = 1'-0"



2
ES.1
FIRST FLOOR POWER PLAN - UNIT C & D
1/8" = 1'-0"



3
ES.1
SECOND FLOOR POWER PLAN - UNIT B
1/8" = 1'-0"

ROOM INDEX - UNIT A		
ROOM NUMBER	ROOM NAME	AREA
A101	BUS CANOPY	1,479 SF

ROOM INDEX - UNIT B		
ROOM NUMBER	ROOM NAME	AREA
B100	MAINTENANCE GARAGE	2,220 SF
B101	CONFERENCE ROOM	471 SF
B102	RESTROOM	62 SF
B103	RESTROOM	62 SF
B104	MECHANICAL/ELECTRICAL ROOM	119 SF
B105	OFFICE	173 SF
B201	MEZZANINE	643 SF
B202	EQUIPMENT PLATFORM	264 SF

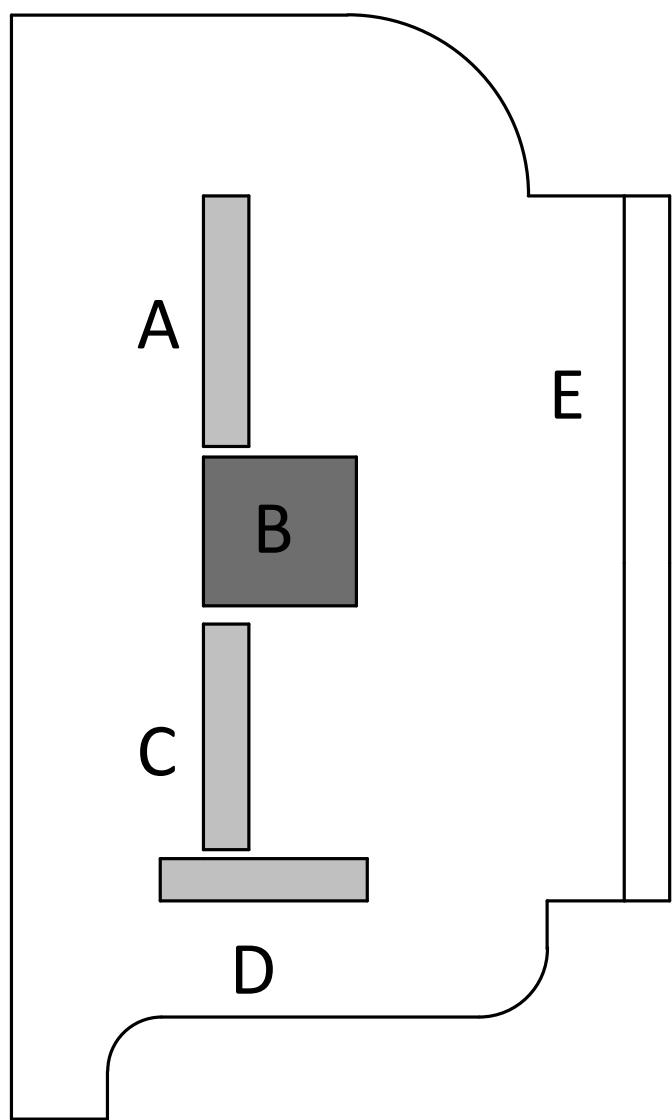
ROOM INDEX - UNIT C		
ROOM NUMBER	ROOM NAME	AREA
C101	BUS CANOPY	1,419 SF

ROOM INDEX - UNIT D		
ROOM NUMBER	ROOM NAME	AREA
D101	MINI BUS CANOPY	1,329 SF

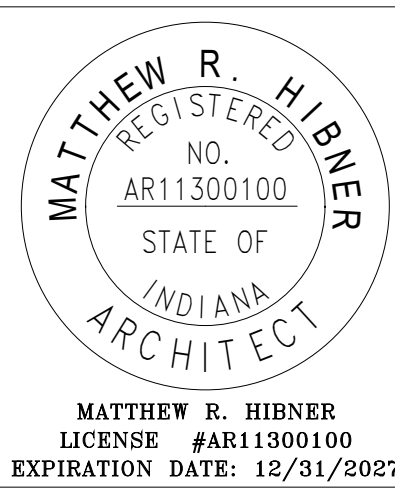
POWER GENERAL NOTES

- WHERE DEVICES ARE SHOWN UNDER CABINETS, CASEWORK, FURNITURE AND THE LIKE, REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT PLACEMENT SO THAT DEVICES SHALL BE LOCATED WITHIN KNEE SPACE OR OPEN AREA.
- CASEWORK INSTALLER SHALL CUT HOLES IN CASEWORK FOR RECEPTACLES, DEVICES, ETC., UNLESS NOTED OTHERWISE.
- ALL CONDUCTORS FOR EQUIPMENT CONNECTIONS SHALL BE COPPER UNLESS NOTED OTHERWISE AND APPROVED BY THE MANUFACTURER.
- COORDINATE WITH ALL OTHER TRADES TO MAINTAIN ALL REQUIRED CLEARANCES ABOUT ELECTRICAL EQUIPMENT WITH ACCORDANCE TO THE NATIONAL ELECTRICAL CODE.
- REFER TO MECHANICAL, PLUMBING, AND OTHER APPLICABLE DRAWINGS FOR EXACT EQUIPMENT LOCATIONS.
- MAINTAIN ALL FIRE RATINGS WHERE CONDUIT PENETRATES WALL, CEILINGS, AND FLOORS WITH ONLY U.L. LISTED FIRE ASSEMBLIES.
- ALL MOUNTING HEIGHTS REFER TO BOTTOM OF BOX, UNO.

KEYNOTE LEGEND	
#	KEYNOTE DESCRIPTION
1	1" CONDUIT TO OUTLET FOR FLOOR BOX POWER.
2	PROVIDE A SELF-CONTAINED CO/NO DETECTION SYSTEM EQUAL TO MACURCO CM-21A. PROVIDE AN OVERRIDE SWITCH, RELAYS AND CONTACTORS NEEDED FOR A COMPLETE SYSTEM. CONTROL PANEL SHALL BE INTERCONNECTED TO EF-101 AND LOUVER WL-103. COORDINATE WITH MECHANICAL CONTRACTOR. REFERENCE DETAIL 2/E1.2
3	EXHAUST FAN AND DAMPER TO BE CONTROLLED BY CO/NO CONTROL PANEL AND OVERRIDE SWITCH. PROVIDE ALL ELECTRICAL CONNECTIONS. SEE DETAIL 2/E1.2 FOR MORE INFORMATION. COORDINATE WORK WITH MECHANICAL CONTRACTOR.
4	FLOOR BOX TO CONTAIN TWO DUPLEX RECEPTACLES AND TWO DATA OUTLETS AND HDMI FOR COMPUTER(S). PROVIDE A BOX EQUAL TO THE WIREMOLD RFBAG300G FLOOR BOX. PROVIDE THE PROPER COVER FOR THE ASSOCIATED ROOM FLOOR TYPE.
5	RECEPTACLE FOR TV SHALL BE COORDINATED WITH TECHNOLOGY CONTRACTOR FOR EXACT HEIGHT.
6	PROVIDE RECEPTACLE FOR OWNER SUPPLIED AIR COMPRESSOR. COORDINATE LOCATION AND RECEPTACLE CONFIGURATION WITH OWNER.
7	EXHAUST FAN TO BE CONNECTED IN LINE WITH LIGHT TO RUN WHEN LIGHT IS ON.
8	EXHAUST FAN TO RUN CONTINUOUSLY FOR AIR CIRCULATION. CONNECT TO POWER TO LIGHTING CIRCUIT.
9	PROVIDE RECEPTACLE FOR WATER SOFTNER SYSTEM. COORDINATE LOCATION WITH PLUMBING CONTRACTOR.
10	EXHAUST FAN EF-B104 TO BE CONNECTED TO SHOP LIGHTING CIRCUIT AND SHALL RUN CONTINUOUSLY. MANUAL OVERRIDE SWITCH BY DIVISION 26.
11	LOUVER POWER TO BE CONNECTED WITH CO/NO SYSTEM CIRCUIT POWER.
12	RECEPTACLE FOR WATER COOLER, COORDINATE EXACT MOUNTING LOCATION OF RECEPTACLE WITH PLUMBING CONTRACTOR. REFERENCE DETAIL 1/E1.2
13	PROVIDE 30A, 208V, 2-POLE HEAVY DUTY NON-FUSED DISCONNECT IN NEMA 3R ENCLOSURE.
14	GROUNDING GRID. REFERENCE DETAIL 5/1.2 FOR ADDITIONAL INFORMATION. COORDINATE LOCATION WITH OTHER EQUIPMENT IN AREA.
15	PROVIDE 600A, 208V, 3-POLE HEAVY DUTY DISCONNECT IN NEMA 3R ENCLOSURE.
16	PROVIDE A 120V CONNECTION FOR LINE VOLT THERMOSTAT. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MECHANICAL CONTRACTOR.
17	PROVIDE 1 1/2" CONDUIT FROM BUS CANOPY A101 TO MAIN ELECTRICAL ROOM FOR ELECTRICAL WIRING.
18	PROVIDE POWER AND CONTROL CONNECTIONS TO OVERHEAD DOOR MOTOR. COORDINATE MOTOR LOCATION WITH G.C. AND OVERHEAD DOOR INSTALLER.
19	PROVIDE 60A, 208V, 2-POLE HEAVY DUTY NON-FUSED DISCONNECT IN NEMA 1 ENCLOSURE.
20	PROVIDE 1" CONDUIT FROM BUS CANOPY C101 TO BUS CANOPY D101 FOR ELECTRICAL WIRING.
21	PROVIDE 2" CONDUIT FROM BUS CANOPY C101 TO MAIN ELECTRICAL ROOM FOR ELECTRICAL WIRING.
22	COORDINATE WITH BUS CANOPY LOCATIONS WITH OWNER.
23	ALTERNATE OS: POWERSYNC CONTROL PANEL FOR BUS HEATER CIRCUIT CONTROLS. PROVIDE 120V DEDICATED CIRCUIT FOR CONTROL PANEL. ALL BUS HEATER CIRCUITS SHALL BE ROUTED THROUGH POWERSYNC CONTROL PANEL.



KEY PLAN



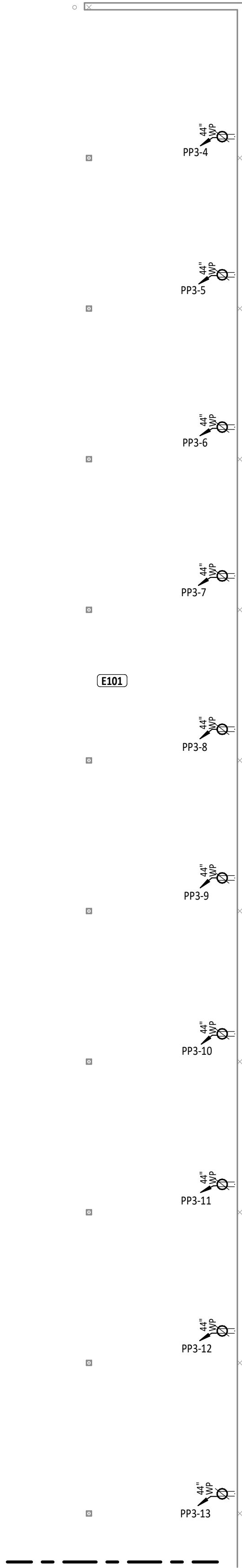
SHENANDOAH SCHOOL CORPORATION NEW TRANSPORTATION CENTER

ISSUANCES/REVISIONS		
PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25107.00	CAE	CDH

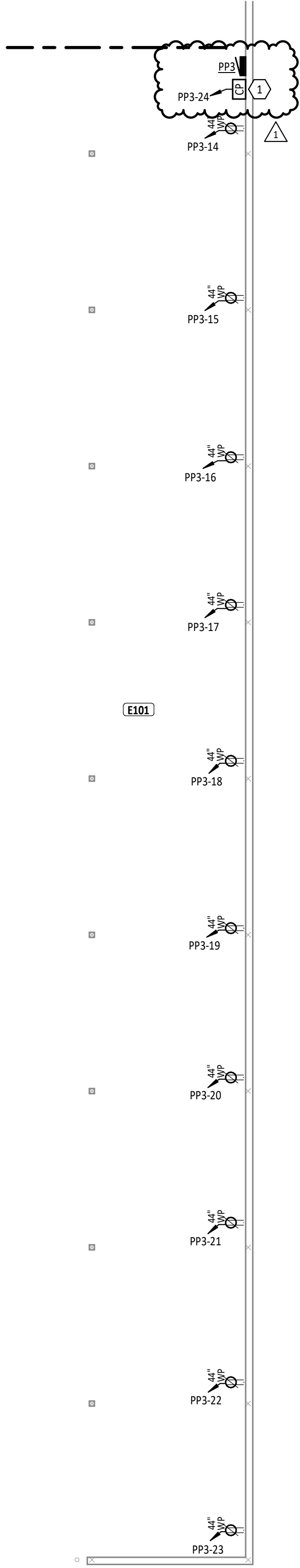
PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25107.00	CAE	CDH

SHEET TITLE:		
POWER PLAN - UNIT A, B, C & D		

SHEET NUMBER:		
E5.1		



1 FIRST FLOOR POWER PLAN - UNIT E NORTH
1/8" = 1'-0"



2 FIRST FLOOR POWER PLAN - UNIT E SOUTH
1/8" = 1'-0"



ROOM INDEX - UNIT E		
ROOM NUMBER	ROOM NAME	AREA
E101	BUS CANOPY	3,849 SF

POWER GENERAL NOTES

A WHERE DEVICES ARE SHOWN UNDER CABINETS, CASEWORK, FURNITURE AND THE LIKE, REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT PLACEMENT SO THAT DEVICES SHALL BE LOCATED WITHIN KNEE SPACE OR OPEN AREA.

B CASEWORK INSTALLER SHALL CUT HOLES IN CASEWORK FOR RECEPTACLES, DEVICES, ETC., UNLESS NOTED OTHERWISE.

C ALL CONDUCTORS FOR EQUIPMENT CONNECTIONS SHALL BE COPPER UNLESS NOTED OTHERWISE AND APPROVED BY THE MANUFACTURER.

D COORDINATE WITH ALL OTHER TRADES TO MAINTAIN ALL REQUIRED CLEARANCES ABOUT ELECTRICAL EQUIPMENT WITH ACCORDANCE TO THE NATIONAL ELECTRICAL CODE.

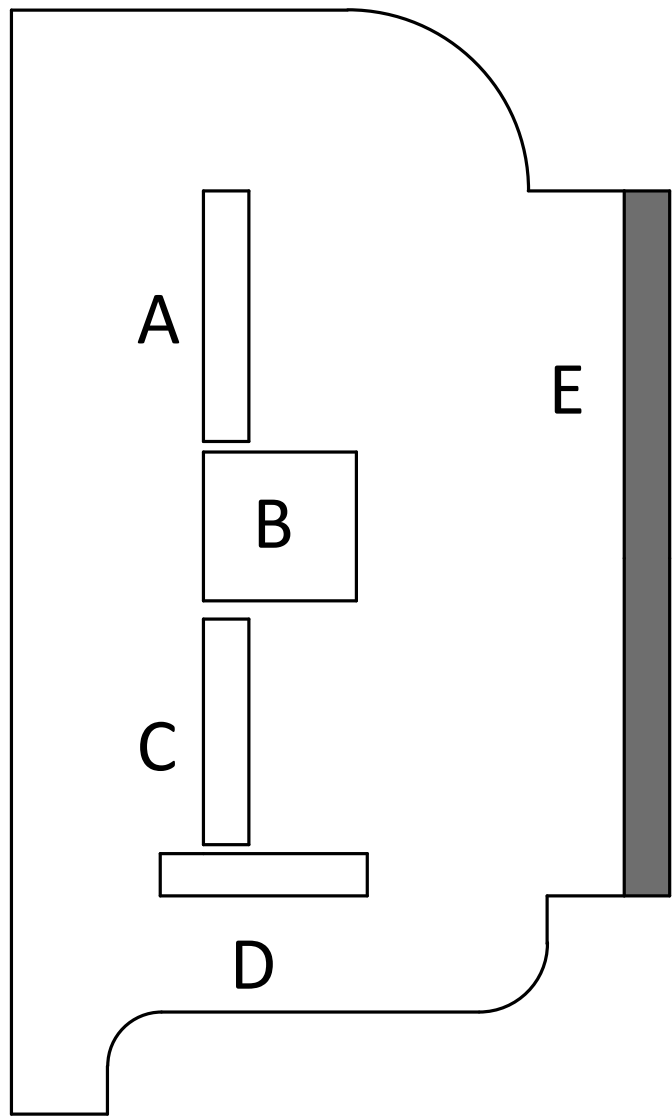
E REFER TO MECHANICAL, PLUMBING, AND OTHER APPLICABLE DRAWINGS FOR EXACT EQUIPMENT LOCATIONS.

F MAINTAIN ALL FIRE RATINGS WHERE CONDUIT PENETRATES WALL, CEILINGS, AND FLOORS WITH ONLY U.L. LISTED FIRE ASSEMBLIES.

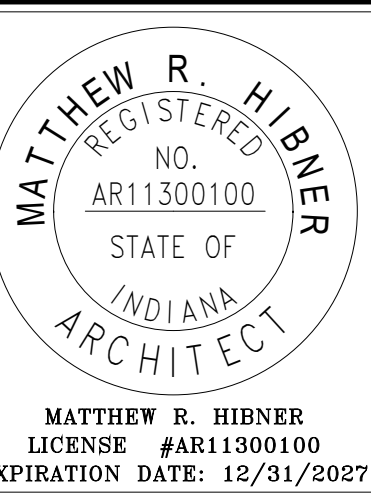
G ALL MOUNTING HEIGHTS REFER TO BOTTOM OF BOX, UNO.

KEYNOTE LEGEND

#	KEYNOTE DESCRIPTION
1	ALTERNATE OS: POWERSYNC CONTROL PANEL FOR BUS HEATER CIRCUIT CONTROLS. PROVIDE 120V DEDICATED CIRCUIT FOR CONTROL PANEL. ALL BUS HEATER CIRCUITS SHALL BE ROUTED THROUGH POWERSYNC CONTROL PANEL.



KEY PLAN



SHENANDOAH SCHOOL CORPORATION
NEW TRANSPORTATION CENTER

5100 N. LAUREL ROAD, JORDANSTOWN, IN 47136

ISSUANCES/REVISIONS

CONSTRUCTION DOCUMENTS	09/10/2006
1. ADDENDUM 02	9/25/2006

PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
25107.00	CAE	CDH

SHEET TITLE:

POWER PLAN -
UNIT E

SHEET NUMBER:

E5.2