

**Addendum No. 2**  
**July 29, 2024**

Project: Brandon Valley Elementary School  
Brandon, South Dakota  
Project #3023

Architect: Architecture Incorporated

Letting: **2:00 p.m. (prevailing local time)**  
**Thursday, August 8, 2024**  
Brandon Valley School District Administration Center Conference Room  
300 South Splitrock Boulevard  
Brandon, South Dakota

Scope of this Addendum:

To all bidders and all others to whom drawings and specifications have been issued by Architecture Incorporated, this Addendum forms a part of the Contract Documents. Acknowledge receipt of this addendum by listing its number and date in the bidder's Form of Proposal. Failure to do so may subject bidder to disqualification. This addendum modifies the drawings and specifications as follows:

**GENERAL ITEMS:**

1) SECTION 042000 – UNIT MASONRY

a) Replace Article 2.5.B.4.a. with the following:

*a. Color 1 (Dark): [Endicott Clay Products – **GRAPHITE**].*

2) SECTION 096723 – RESINOUS FLOORING

a) Replace original specification Section 096723 with NEW Section 096723 – *Resinous Flooring* (dated July 29, 2024) which is attached to the end of this addendum.

3) SECTION 210500 – FIRE SUPPRESSION

a) Replace Paragraph 4 of Article 1.01 in Section 210500 with the following:

*The fire protection system shall be a wet system. The system in office areas shall be designed for light hazardous classification. The storage and mechanical areas shall be designed for ordinary hazard, group 1 classification. Provide coverage for all concealed combustible spaces including, but not limited to the attics. The system shall be complete with sprinkler heads, piping, valves, alarm bell, fire department connection and controls necessary for a complete system. All piping going into clear stories, gyms, or other two-story spaces shall enter from adjacent mechanical rooms or utilize a pipe chase. Coordinate pipe chase locations with architectural plans. Exposed piping rising up into these spaces will not be allowed without approval from the Architect/Engineer.*

4) SECTION 220100 – GENERAL PROVISIONS

- a) Add the following to Article 1.27 (PIPE AND PIPE FITTINGS) for the cold, hot, recirculating hot water, hot water heating supply and return, chilled water supply and return, and ice storage supply and return systems:

*Piping for cold, hot, recirculating hot water, hot water heating supply and return, chilled water supply and return, and ice storage supply and return may be PP-RCT resin meeting the short-term properties and long-term strength requirements of ASTM F2389 and CSA B137.11.*

*Pipe shall be listed for potable water (shall have listings to NSF 14 and 61g), regardless of the whether the pipe and fittings are to be used for potable water service or HVAC service. All pipe shall be made in an extrusion process. The piping shall be extruded with a middle layer that has glass fiber content to restrict thermal expansion. Cold, chilled water supply and return, and ice storage supply and return shall be SDR 17. Hot water heating supply and return, hot, and recirculating hot water shall be SDR 11.*

*Fittings shall be manufactured from a PP-RCT resin meeting the short-term properties and long-term strength requirements of ASTM F 2389. All fittings shall comply with NSF 14, ASTM F 2389 and CSA B137.11. Fittings shall be PP-RCT piping and be provided by the same manufacturer as the pipe.*

*Fittings may be either socket fusion through nominal 5 inch (125 mm), electrofusion through 10 inch (200mm) or butt fusion in nominal 2 inch through 24 inch sizes (63mm through 630 mm). Electrofusion may also be performed in nominal sizes 12 inch through 24 inch (315mm through 630mm) by means of the use of electrofusion couplings as applied on butt fusion fittings and pipe.*

*Pipe and fittings shall be covered by a factory warranty for 30 years to be free of defects in materials or manufacturing.*

*Valves shall be provided by the same manufacturer as the pipe and fittings and shall comply with the performance requirements of ASTM F 2389 or CSA B137.11.*

*Where piping and fittings are installed in a plenum the pipe shall be wrapped/or insulated to meet the requirements of ASTM E84. The systems shall have a Flame Spread Classification of less than 25 and Smoke Development rating of less than 50.*

*Where piping is exposed to UV light for more than 30 days, it shall be protected with a factory applied, UV-resistant coating or alternative UV protection.*

*Insulate piping per the requirements found in specification section 220700.*

*Install fittings and joints using socket-fusion, electrofusion, butt-fusion or compression joining as applicable for the fitting or joint type. All fusion-weld joints shall be made in accordance with the specifications and product standards of the manufacturer.*

*Provide piping supports, guides, and allow for expansion for horizontal and vertical piping according to Uniform Plumbing Code (UPC) section 313.0 "Hangers and Supports" minimum requirements, the pipe manufacturer's installation instructions, and the Authority Having Jurisdiction, whichever is more stringent.*

*Support vertical piping at each floor and as specified in the applicable Plumbing or Mechanical Code. Piping 2" (63mm) or smaller shall be installed with mid-story guides.*

*Fire stopping shall be provided to both be compatible with the PP-RCT piping and meet the requirements of ASTM E 814 or ULC S115, "Fire Tests of Through-Penetration Firestops".*

*While still accessible all piping shall be pressure/leak tested to the manufacturer's standards. Tests shall be carried out using water, compressed air or a mixture of the two. The test pressure for a hydrostatic test shall be 1.5 times the design pressure or 150 psi, whichever is greater, and for an air test shall be 1.1 times the design pressure or 150 psi, whichever is greater. Any leaks detected shall be repaired at the contractor's expense by removing the leaking part and replacing with new parts welded per the manufacturer's guidelines.*

*Pipe sizes currently shown on the drawings are for copper pipe. Upsize all 3" and 4" heating water supply and return system piping by one pipe size to accommodate for piping material difference.*

*Provide expansion loops or expansion compensators per the manufacturer's design guide and recommendations. Contractor shall provide a drawing showing expansion loops and/or expansion compensators prior to the installation of any PP-RCT piping.*

*Domestic water piping in block wall construction may be Type L, hard drawn copper tubing, ASTM B88 and Federal Specification WW-T-799. Fittings shall be wrought copper solder type, ANSI B16.22. Joints for pipe and fittings shall be made with No. 95-5 (tin-antimony) solder and No. 50 non-corrosive flux.*

*Piping from the heating and cooling coils to the shutoff valves can be Schedule 40 black steel pipe shall conform to ASTM A120/ASTM A53 and Federal Specification WW-P-406, Weight A or hard drawn Type L copper tubing, ASTM B88 and Federal Specification WW-T-799. Fittings shall be wrought copper solder type, ANSI B16.22. Joints for pipe and fittings shall be made with No. 95-5 (tin-antimony) solder and No. 50 non-corrosive flux.*

*Heating water supply and return piping in the boiler room shall be schedule 40 black steel pipe.*

*Piping shall be Niron, Aquatherm, Uponor or approved equal.*

5) SECTION 261400 – WIRING DEVICES

- a) Omit Article 2.8 in its entirety. Provide "Xlerator" Model XL-SB hand dryers as manufactured by Excel Dryer, Inc, as specified per Article 2.9.

6) SECTION 277250 – PAGING INTERCOM & PROGRAM CLOCK SYSTEM

- a) Delete any references to interface with the wireless clock system specified in Section 277350. The intercom system shall obtain NTP time from the Owners LAN. Coordinate the requirements with the Owner and provide the cabling as required.
- b) The intercom outlets shown on the electrical drawings shall be a staff telephone (not a call-in switch). Add the following to the specification:

1) *2.02 Equipment*

a) *Third-party equipment support*

i) *Third-party hardware FXS gateway support includes:*

- (1) *24 port FXS gateway Yeastar TA-2400 typically used for analog staff phone support along with associated NQ-7000SSL Software Licensing*

b) *Cortelco 8150 Trendline analog staff telephones (Staff Station)*

i) *Staff Station shall have the following features:*

(1) *Wall Mount with RJ11 Jack Wall Plate*

ii) *The classroom Staff Station shall be capable of the following features depending on how the station CoS is configured:*

(1) *Emergency intercom call – Staff Stations shall be capable of making an Emergency intercom call, which is then routed to the assigned Admin Station. This requires the display of the architectural number and call in level on the Admin Station. Systems that do not provide this feature are not equivalent..*

(2) *Speed dial*

(3) *Toggle audio distribution on and off*

(4) *Call Forward activation and deactivation for All-Calls/Busy/No Answer/Busy or No Answer*

(5) *Conference Calling*

(6) *Transfer Call*

(7) *Dial Administrative station– Staff Stations can allow the user to dial the station number to call to the Admin phone or its associated speaker. The call shall be routed to the Admin Station showing the architectural number that is calling.*

(8) *Emergency All-Call – An emergency page shall be broadcasted to all the stations in the facility.*

(9) *Place Outside Call*

(10) *Remote Answer*

(11) *Single-Zone/All-Station Page*

(12) *Call Waiting Tone for Outside Calls – It shall be possible to feed the call waiting tone to the Administrative Phone during a conversation*

(13) *Transfer call from VoIP speaker in classroom down to an associated Staff Station.*

(14) *Transfer call from analog speaker in classroom down to an associated Staff Station.*

(15) *Transfer call from VoIP Staff Station in classroom up to an associated VoIP speaker.*

(16) *Transfer call from Staff Station in classroom up to an associated analog speaker.*

c) *Classroom phone/speaker cabling shall be 22/2PR EPS Plenum Rated.*

7) SECTION 277350 – SYNCHRONIZED WIRELESS MASTER – SATELLITE TIME SYSTEM

a) Delete any references references to obtaining time using a GPS receiver. This system shall obtain NTP time from the Owner's LAN. Coordinate the requirements with the owner and provide the cabling as required.

b) Delete any references to a tone generator switch and interface with the paging intercom system specified in section 277250 as that system shall obtain NTP time from the owner's LAN.

8) SECTION 287210 – FIRE ALARM

a) CLARIFICATION: The system in the Bus Garage shall be an extension of the fire alarm system in the school.

- i) Notification in the school shall be voice and utilize speaker/strobes. Notification in the bus garage can utilize either speaker/strobes or horn/strobes.
- b) ARTICLE 2.14: The system shall utilize cellular service for communicating with a remote alarm receiving station in lieu of POTS lines.
  - i) In order to aid responders, the communication shall differentiate if the alarm, trouble, and supervisory signals are initiated in the school or if the signals are initiated in the bus garage.
- 8) SECTION 332200 – WATER DISTRIBUTION
  - a) Omit specification Section 332200 in its entirety. The Contractor and his supplier(s) shall comply with all City of Brandon specifications and requirements for all water utility work, as referenced on the Civil drawings.
- 9) SECTION 334100 – STORM DRAINAGE
  - a) Omit specification Section 334100 in its entirety. The Contractor and his supplier(s) shall comply with all City of Brandon specifications and requirements for all storm drainage work, as referenced on the Civil drawings.
- 10) SECTION 334200 – SANITARY SEWERAGE
  - a) Omit specification Section 334200 in its entirety. The Contractor and his supplier(s) shall comply with all City of Brandon specifications and requirements for all sanitary sewer work, as referenced on the Civil drawings.
- 11) SHEET 2.31– ENLARGED SITE PLAN – SOUTH PARKING
  - a) Reference *revised* drawing Sheet 2.31, *revision* dated 7-23-2024, attached to the end of Addendum #2 for the following modifications:
    - i) 6” Black topsoil finish grade note shown originally around the island located around the ADA stalls (south of drop off area) shall be changed to **4” Landscape Rock Over Weed Barrier**.
    - ii) Reference Item #5 in the Addendum #1 (Revised drawing Sheet 2.31 was not attached in Addendum #1).
- 12) SHEET 2.42 – STORM SEWER PLAN
  - a) Civil drawing Sheet 2.42 has been updated to reflect the modifications to storm sewer line and inlet originally shown along the east and south sides of asphalt pavements located east of the new bus garage.
    - i) Omit storm sewer line and inlet from bus garage parking lot to the pond.
- 13) SHEET 2.50 – PAVEMENT PLAN
  - a) Reference *revised* Civil drawing Sheet 2.50, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
    - i) The Contractor shall install drop curb for snow removal at the east end of the north driveway as part of the base bid.

- ii) Disregard if Alternate #1 is accepted.
- 14) SHEET 2.51– PAVEMENT PLAN
- a) Reference *revised* drawing Sheet 2.51, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
    - i) Omit concrete curb & gutter originally shown along the east and south sides of asphalt pavements located east of the new bus garage.
    - ii) Provide 3' curb taper at northeast corner of the bus garage parking lot where the curb and gutter ends as indicated in the *revised* drawing.
- 15) SHEET 2.61 – GRADING PLAN
- a) Civil drawing Sheet 2.61 has been updated to reflect modifications to grading to provide more cover over proposed sanitary sewer.
    - i) Reference *revised* Sheet 2.61, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the locations of revised grading.
- 16) SHEET 2.82 – DETAILS
- a) Reference *revised* Sheet 2.82, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
    - i) Refer to Concealed Pick Hole for Sanitary Manhole Covers detail.
    - ii) The Contractor shall use Neenah R-1772 frame and cover on all new sanitary sewer manholes.
    - iii) Manhole external frame seals will be required in manholes within pavement areas.
- 17) SHEET 2.91 – LANDSCAPE PLAN – ALTERNATE #1
- a) Legend and General Notes Clarifications:
    - i) Omit all notes that reference grass seed and plant materials to be provided by the Owner.
    - ii) All seeding, plants, trees, fertilizing and mulching will be provided and installed by the Contractor not the Owner.
    - iii) Reference Section 329200 – Turf and Grasses specification attached with Addendum #1.
    - iv) Reference Section 329300 – Plants specification attached with Addendum #1.
- 18) SHEET 3.11 – FOOTING AND FOUNDATION PLAN – AREA A
- a) Reference *revised* drawing Sheet 3.11, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:

- i) The Contractor shall be responsible for coordinating underground utility installations at all locations where utility lines enter the building envelope with all subcontractors. Step exterior footings down at utility entrance points as required per the Structural drawings; reference typical detail 3/3.40.
  - ii) Reference architectural drawing Sheet 4.40 for slopes to drain at shower locations.
  
- 19) SHEET 3.12 – FOOTING AND FOUNDATION PLAN – AREA B
  - a) Reference *revised* drawing Sheet 3.12, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
    - i) Reference architectural drawing Sheet 4.40 for slopes to drain at shower locations.
  
- 20) SHEET 3.13 – FOOTING AND FOUNDATION PLAN – AREA C
  - a) Reference *revised* drawing Sheet 3.13, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
    - i) The Contractor shall be responsible for coordinating underground utility installations at all locations where utility lines enter the building envelope with all subcontractors. Step exterior footings down at utility entrance points as required per the Structural drawings; reference typical detail 3/3.40.
    - ii) Add L3 lintel over all recessed cabinet unit heaters located within CMU walls in vestibules - as indicated.
  
- 21) SHEET 3.14 – FOOTING AND FOUNDATION PLAN – AREA D
  - a) Reference *revised* drawing Sheet 3.14, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
    - i) The Contractor shall be responsible for coordinating underground utility installations at all locations where utility lines enter the building envelope with all subcontractors. Step exterior footings down at utility entrance points as required per the Structural drawings; reference typical detail 3/3.40.
    - ii) Add L3 lintel over all recessed cabinet unit heaters located within CMU walls in vestibules - as indicated.
  
- 22) SHEET 3.23 – ROOF FRAMING PLAN – AREA C
  - a) Omit the L4 Lintel originally shown over door C100, as indicated per *revised* structural drawing Sheet 3.23, *revision* dated 7-26-2024, attached to the end of Addendum #2.
  
- 23) SHEET 3.31 – HIGH ROOF FRAMING PLAN – AREA A
  - a) The Contractor shall reference detail 9/3.46 and coordinate typical framing at openings in steel roof deck with his mechanical contractor.

24) SHEET 3.43 – STRUCTURAL DETAILS

- a) Revise location of steel stud back-up framing at Canopy Columns as indicated in the revised detail 1/3.43; reference *revised* Sheet 3.43, *revision* dated 7-26-2024, attached to the end of Addendum #2.

25) SHEET 3.54 – STRUCTURAL DETAILS

- a) Omit the Lintel L4 originally shown over door C100 as indicated in revised detail 1/3.54; reference *revised* Sheet 3.54, *revision* dated 7-26-2024, attached to the end of Addendum #2.

26) SHEET 4.10D – FLOOR PLAN – AREA D

- a) Reference *revised* drawing Sheet 4.10D, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
- i) Add (3) tackboards to the east wall of D114 Classroom, D113 Classroom, D112 Classroom, and D111 Classroom as indicated.

27) SHEET 4.11B – MEZZANINE PLAN – AREA B

- a) Reference *revised* drawing Sheet 4.11B, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
- i) The floor plan has been adjusted to show clerestory windows originally not visible on the floor plan.

28) SHEET 4.11C – MEZZANINE PLAN – AREA C

- a) Reference *revised* drawing Sheet 4.11C, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
- i) The floor plan has been adjusted to show clerestory windows originally not visible on the floor plan.
- ii) Overall dimension has been added along the west wall as indicated.

29) SHEET 4.11D – MEZZANINE PLAN – AREA D

- a) Reference *revised* drawing Sheet 4.11D, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
- i) The floor plan has been adjusted to show clerestory windows originally on the floor plan.
- ii) Overall dimension has been added along the east and west sides of the mezzanine floor plan as indicated.

**MECHANICAL ITEMS:**

30) SHEET 8.51 – SCHEDULES

- a) ***Air Cooled Chiller Schedule*** - Add following note to CH-1:
- i) Chiller shall have an SCCR rating of 65kA and single point power connection.
- b) ***Fan Powered VAV Terminal Schedule*** - Add following note to all Fan Powered VAV Terminals:



- i) Provide with ECM motor capable of accepting 0-10V signal from the BAS contractor
- c) ***Relief/Intake Hood Schedule*** –
  - i) Modify Note 2 to read as follows: Motorized damper provided and controlled by the temperature controls contractor and installed by mechanical contractor.
  - ii) Remove note 2 from IH-G105 and add the following note: Provide motorized damper and interlock with furnace operation
  - iii) Remove note 2 from IH-G106A, IH-G106B, and IH-B106C and add the following note: Provide motorized damper and interlock with CO/NO2 detection system.

**ELECTRICAL ITEMS:**

31) SHEET 9.10 – SITE PLAN - ELECTRICAL

- a) Reference the clouded areas on *revised* drawing Sheet 9.10, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Added raceways for the electric utility primary cabling and telecom utility cabling.

32) SHEET 9.21 – FLOOR PLAN – AREA A – LIGHTING

- a) The luminaire types and locations at room A112 has been updated as indicated in the *revised* drawing Sheet 9.21, *revision* dated 7-26-2024, attached to the end of Addendum #2.

33) SHEET 9.22 – FLOOR PLAN – AREA A – POWER & SIGNAL

- a) Reference the clouded areas on *revised* drawing Sheet 9.22, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Added electrical and general notes. Added a general note at mechanical equipment in the utility yard.
  - ii) Revised fire alarm, intercom, and clock system devices in rooms A104, A106, A107, A112, A114, and A117.
  - iii) Omit power supply in room A107.

34) SHEET 9.23 – FLOOR PLAN – AREA B – LIGHTING

- a) Add luminaire in room B119 as indicated per *revised* drawing Sheet 9.23, *revision* dated 7-26-2024, attached to the end of Addendum #2.

35) SHEET 9.24 – FLOOR PLAN – AREA B – POWER & SIGNAL

- a) Reference the clouded area(s) on *revised* drawing Sheet 9.24 *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Added a general note.
  - ii) Revised fire alarm, intercom, and clock system devices in rooms B103, B104, B105, B106, B107, B109, B111, B113, B115, and B127.

36) SHEET 9.26 – FLOOR PLAN – AREA C – POWER & SIGNAL

- a) Reference the clouded area(s) on *revised* drawing Sheet 9.26 *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Added a general note.
  - ii) Revised fire alarm and intercom system devices in rooms B112 and C121.

37) SHEET 9.28 – FLOOR PLAN – AREA D – POWER & SIGNAL

- a) Reference the clouded area(s) on *revised* drawing Sheet 9.28 *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Added a general note.
  - ii) Revised fire alarm and intercom system devices in rooms C121.
  - iii) Add WAP's in rooms D128 – D130 and D136 – D138.

38) SHEET 9.32 – SECOND FLOOR – AREA A – POWER & SIGNAL

- a) The location of WAP in room A101 has been updated as indicated in the *revised* drawing Sheet 9.32, *revision* dated 7-26-2024, attached to the end of Addendum #2.

39) SHEET 9.34 – SECOND FLOOR PLAN – AREA B – POWER & SIGNAL

- a) Reference the clouded area(s) on *revised* drawing Sheet 9.34 *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Revised fire alarm and intercom system devices in Room B128.
  - ii) Revised projector in Room B120.

40) SHEET 9.40 – ENLARGED PLAN S – ELECTRICAL

- a) Reference the clouded area(s) on *revised* drawing Sheet 9.40 *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Electrical note #2 has been revised as indicated.
  - ii) Receptacles and circuiting have been revised at rooms A111 and A112.

41) SHEET 9.41 – ENLARGED PLAN S – ELECTRICAL

- a) Reference *revised* drawing Sheet 9.41, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Revised electrical note #1 and #10 – as indicated.
  - ii) Revised fire alarm and intercom system devices in rooms A124, A200, B200, and D200.

42) SHEET 9.50 – ELECTRICAL SYMBOLS AND ABBREVIATIONS

- a) Reference *revised* drawing Sheet 9.50, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Added electrical note #8.
  - ii) Revised power riser diagram – as indicated.

43) SHEET 9.51 – ELECTRICAL SCHEDULES

- a) Reference *revised* drawing Sheet 9.51 *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Added light lighting fixture schedule and numbers to the equipment schedule.

44) SHEET 9.54 – ELECTRICAL SCHEDULES

- a) Reference *revised* drawing Sheet 9.54 *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Gym sound reinforcement system functional block diagram: Revised mic/aux input locations as indicated.

45) SHEET 9.55 – ELECTRICAL DETAILS

- a) Reference *revised* drawing Sheet 9.55 *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Gym control panel “GCP” layout detail: Revised projection screen switch as indicated.

46) SHEET G9.10 – BUS GARAGE SITE PLAN – ELECTRICAL – ADD ALT #1

- a) Reference *revised* drawing Sheet G9.10, *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
  - i) Added electrical note #3.
  - ii) Changed site lighting unit type.
  - iii) Added raceway for the electric utility primary cabling.

47) SHEET G9.20 – BUS GARAGE SITE PLAN – ELECTRICAL – ADD ALT #1

- a) Reference the clouded area(s) on *revised* drawing Sheet G9.20 *revision* dated 7-26-2024, attached to the end of Addendum #2 for the following modifications:
- i) Added electrical notes #7 and #8.
  - ii) Revised lighting controls in room G106.
  - iii) Added notes and fire alarm system device in room G105.

GENERAL APPROVALS:

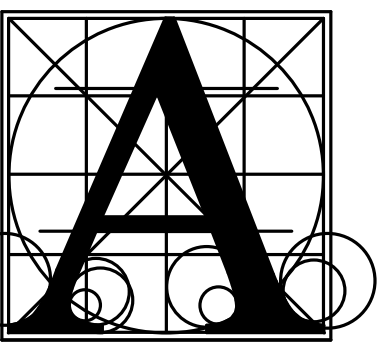
The following material or equipment furnished by the manufacturers listed, may be substituted as equivalent providing that each item, material, and piece of equipment conforms to the design and requirement of the specifications.

<u>SECTION</u>	<u>ITEM</u>	<u>MANUFACTURER</u>
034100	Precast Structural Concrete	Molin Concrete
034500	Precast Architectural Concrete	Molin Concrete
042000	Unit Masonry – Burnished CMU BURN - 1 Color BURN - 2 Color	Ultra by County Materials Corporation Moonbeam (63-214A) Black Granite (63-290-C)
047200	Cast Stone Masonry	Stoneworks Architectural Precast/Caststone
083613	Sectional Overhead Doors	PS Garage Doors, SD
087440	Hinges,  Operating Trim, Protective Trim, Stops and Holders	Don-Jo  Activar Don-Jo

END OF ADDENDUM No. 2

GENERAL NOTES - SITE PLAN

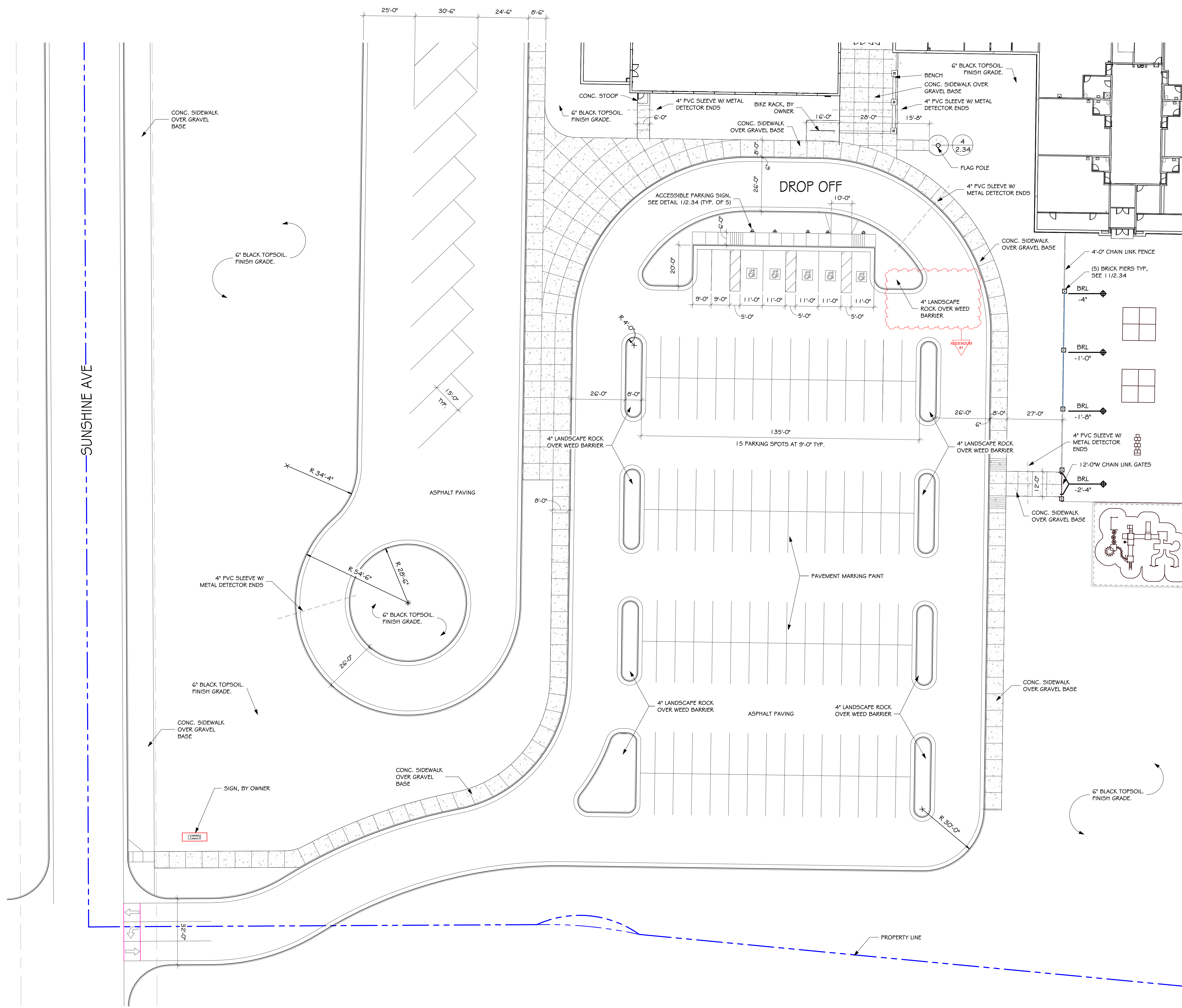
- A. CONTRACTOR SHALL PROVIDE 6" TOP SOIL FINISH GRADE AT ALL DISTURBED AREAS U.I.N.O.
- B. SEE MECHANICAL AND ELECTRICAL AND CIVIL FOR ADDITIONAL SITE ITEMS.
- C. SLOPE FINISH GRADE AWAY FROM THE BUILDING.



Architecture  
Incorporated

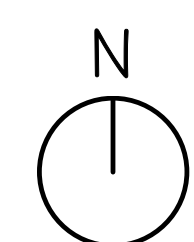
415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

508 7th Street, Suite 200  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158



ENLARGED SITE PLAN - SOUTH PARKING

SCALE: 1" = 20'-0"

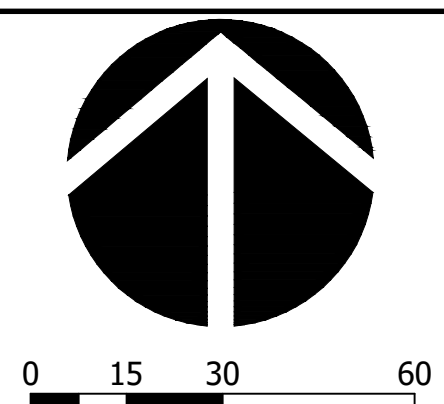
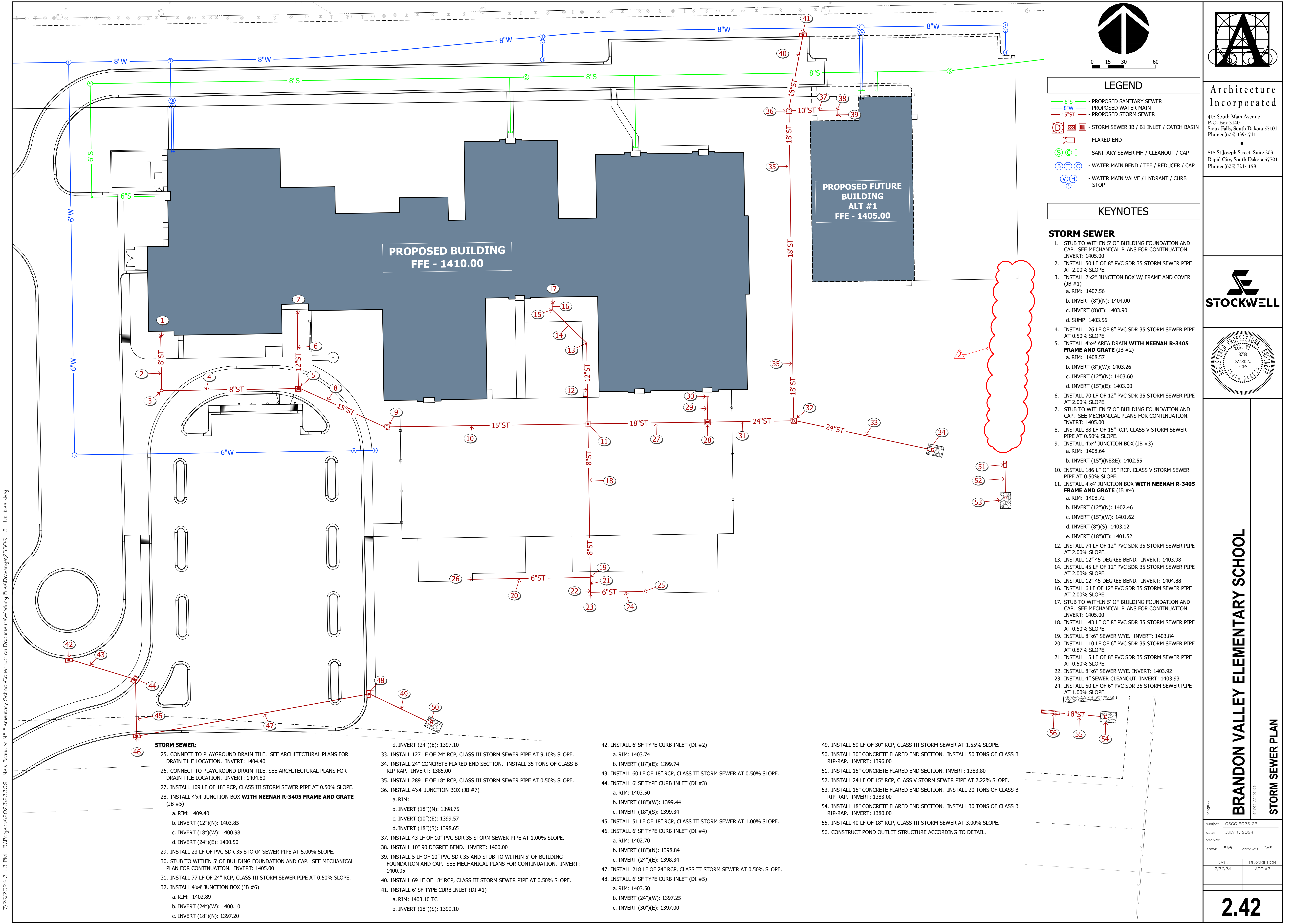


**BRANDON VALLEY ELEMENTARY SCHOOL**  
 ENLARGED SITE PLAN - SOUTH PARKING

Project	number	0306.3023.23
	date	JULY 01, 2024
	revision	
	drawn	ZJG checked SRJ
DATE	DESCRIPTION	
07-23-24	ADDENDUM # 1	

2.31

7/22/2024 4:45:30 PM



- LEGEND**
- 8"S - PROPOSED SANITARY SEWER
  - 8"W - PROPOSED WATER MAIN
  - 15"ST - PROPOSED STORM SEWER
  - (D) - STORM SEWER JB / B1 INLET / CATCH BASIN
  - FLARED END
  - (S) (C) - SANITARY SEWER MH / CLEANOUT / CAP
  - (B) (T) (C) - WATER MAIN BEND / TEE / REDUCER / CAP
  - (V) (H) - WATER MAIN VALVE / HYDRANT / CURB STOP

**KEYNOTES**

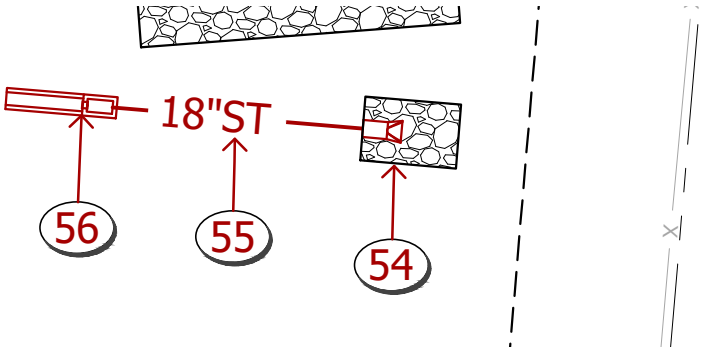
- STORM SEWER**
1. STUB TO WITHIN 5' OF BUILDING FOUNDATION AND CAP. SEE MECHANICAL PLANS FOR CONTINUATION. INVERT: 1405.00
  2. INSTALL 50 LF OF 8" PVC SDR 35 STORM SEWER PIPE AT 2.00% SLOPE.
  3. INSTALL 2'x2" JUNCTION BOX W/ FRAME AND COVER (JB #1)
    - a. RIM: 1407.56
    - b. INVERT (8")(N): 1404.00
    - c. INVERT (8")(E): 1403.90
    - d. SUMP: 1403.56
  4. INSTALL 126 LF OF 8" PVC SDR 35 STORM SEWER PIPE AT 0.50% SLOPE.
  5. INSTALL 4'x4' AREA DRAIN WITH NEENAH R-3405 FRAME AND GRATE (JB #2)
    - a. RIM: 1408.57
    - b. INVERT (8")(W): 1403.26
    - c. INVERT (12")(N): 1403.60
    - d. INVERT (15")(E): 1403.00
  6. INSTALL 70 LF OF 12" PVC SDR 35 STORM SEWER PIPE AT 2.00% SLOPE.
  7. STUB TO WITHIN 5' OF BUILDING FOUNDATION AND CAP. SEE MECHANICAL PLANS FOR CONTINUATION. INVERT: 1405.00
  8. INSTALL 88 LF OF 15" RCP, CLASS V STORM SEWER PIPE AT 0.50% SLOPE.
  9. INSTALL 4'x4' JUNCTION BOX (JB #3)
    - a. RIM: 1408.64
    - b. INVERT (15")(NE&E): 1402.55
  10. INSTALL 186 LF OF 15" RCP, CLASS V STORM SEWER PIPE AT 0.50% SLOPE.
  11. INSTALL 4'x4' JUNCTION BOX WITH NEENAH R-3405 FRAME AND GRATE (JB #4)
    - a. RIM: 1408.72
    - b. INVERT (12")(N): 1402.46
    - c. INVERT (15")(W): 1401.62
    - d. INVERT (8")(S): 1403.12
    - e. INVERT (18")(E): 1401.52
  12. INSTALL 74 LF OF 12" PVC SDR 35 STORM SEWER PIPE AT 2.00% SLOPE.
  13. INSTALL 12" 45 DEGREE BEND. INVERT: 1403.98
  14. INSTALL 45 LF OF 12" PVC SDR 35 STORM SEWER PIPE AT 2.00% SLOPE.
  15. INSTALL 12" 45 DEGREE BEND. INVERT: 1404.88
  16. INSTALL 6 LF OF 12" PVC SDR 35 STORM SEWER PIPE AT 2.00% SLOPE.
  17. STUB TO WITHIN 5' OF BUILDING FOUNDATION AND CAP. SEE MECHANICAL PLANS FOR CONTINUATION. INVERT: 1405.00
  18. INSTALL 143 LF OF 8" PVC SDR 35 STORM SEWER PIPE AT 0.50% SLOPE.
  19. INSTALL 8"x6" SEWER WYE. INVERT: 1403.84
  20. INSTALL 110 LF OF 6" PVC SDR 35 STORM SEWER PIPE AT 0.87% SLOPE.
  21. INSTALL 15 LF OF 8" PVC SDR 35 STORM SEWER PIPE AT 0.50% SLOPE.
  22. INSTALL 8"x6" SEWER WYE. INVERT: 1403.92
  23. INSTALL 4" SEWER CLEANOUT. INVERT: 1403.93
  24. INSTALL 50 LF OF 6" PVC SDR 35 STORM SEWER PIPE AT 1.00% SLOPE.

- STORM SEWER:**
25. CONNECT TO PLAYGROUND DRAIN TILE. SEE ARCHITECTURAL PLANS FOR DRAIN TILE LOCATION. INVERT: 1404.40
  26. CONNECT TO PLAYGROUND DRAIN TILE. SEE ARCHITECTURAL PLANS FOR DRAIN TILE LOCATION. INVERT: 1404.80
  27. INSTALL 109 LF OF 18" RCP, CLASS III STORM SEWER PIPE AT 0.50% SLOPE.
  28. INSTALL 4'x4' JUNCTION BOX WITH NEENAH R-3405 FRAME AND GRATE (JB #5)
    - a. RIM: 1409.40
    - b. INVERT (12")(N): 1403.85
    - c. INVERT (18")(W): 1400.98
    - d. INVERT (24")(E): 1400.50
  29. INSTALL 23 LF OF PVC SDR 35 STORM SEWER PIPE AT 5.00% SLOPE.
  30. STUB TO WITHIN 5' OF BUILDING FOUNDATION AND CAP. SEE MECHANICAL PLAN FOR CONTINUATION. INVERT: 1405.00
  31. INSTALL 77 LF OF 24" RCP, CLASS III STORM SEWER PIPE AT 0.50% SLOPE.
  32. INSTALL 4'x4' JUNCTION BOX (JB #6)
    - a. RIM: 1402.89
    - b. INVERT (24")(W): 1400.10
    - c. INVERT (18")(N): 1397.20

- d. INVERT (24")(E): 1397.10
33. INSTALL 127 LF OF 24" RCP, CLASS III STORM SEWER PIPE AT 9.10% SLOPE.
34. INSTALL 24" CONCRETE FLARED END SECTION. INSTALL 35 TONS OF CLASS B RIP-RAP. INVERT: 1385.00
35. INSTALL 289 LF OF 18" RCP, CLASS III STORM SEWER PIPE AT 0.50% SLOPE.
36. INSTALL 4'x4' JUNCTION BOX (JB #7)
  - a. RIM: 1403.50
  - b. INVERT (18")(N): 1398.75
  - c. INVERT (10")(E): 1399.57
  - d. INVERT (18")(S): 1398.65
37. INSTALL 43 LF OF 10" PVC SDR 35 STORM SEWER PIPE AT 1.00% SLOPE.
38. INSTALL 10" 90 DEGREE BEND. INVERT: 1400.00
39. INSTALL 5 LF OF 10" PVC SDR 35 AND STUB TO WITHIN 5' OF BUILDING FOUNDATION AND CAP. SEE MECHANICAL PLANS FOR CONTINUATION. INVERT: 1400.05
40. INSTALL 69 LF OF 18" RCP, CLASS III STORM SEWER PIPE AT 0.50% SLOPE.
41. INSTALL 6' SF TYPE CURB INLET (DI #1)
  - a. RIM: 1403.10 TC
  - b. INVERT (18")(S): 1399.10

42. INSTALL 6' SF TYPE CURB INLET (DI #2)
  - a. RIM: 1403.74
  - b. INVERT (18")(E): 1399.74
43. INSTALL 60 LF OF 18" RCP, CLASS III STORM SEWER AT 0.50% SLOPE.
44. INSTALL 6' SF TYPE CURB INLET (DI #3)
  - a. RIM: 1403.50
  - b. INVERT (18")(W): 1399.44
  - c. INVERT (18")(S): 1399.34
45. INSTALL 51 LF OF 18" RCP, CLASS III STORM SEWER AT 1.00% SLOPE.
46. INSTALL 6' SF TYPE CURB INLET (DI #4)
  - a. RIM: 1402.70
  - b. INVERT (18")(N): 1398.84
  - c. INVERT (24")(E): 1398.34
47. INSTALL 218 LF OF 24" RCP, CLASS III STORM SEWER AT 0.50% SLOPE.
48. INSTALL 6' SF TYPE CURB INLET (DI #5)
  - a. RIM: 1403.50
  - b. INVERT (24")(W): 1397.25
  - c. INVERT (30")(E): 1397.00

49. INSTALL 59 LF OF 30" RCP, CLASS III STORM SEWER AT 1.55% SLOPE.
50. INSTALL 30" CONCRETE FLARED END SECTION. INSTALL 50 TONS OF CLASS B RIP-RAP. INVERT: 1396.00
51. INSTALL 15" CONCRETE FLARED END SECTION. INVERT: 1383.80
52. INSTALL 24 LF OF 15" RCP, CLASS V STORM SEWER PIPE AT 2.22% SLOPE.
53. INSTALL 15" CONCRETE FLARED END SECTION. INSTALL 20 TONS OF CLASS B RIP-RAP. INVERT: 1383.00
54. INSTALL 18" CONCRETE FLARED END SECTION. INSTALL 30 TONS OF CLASS B RIP-RAP. INVERT: 1380.00
55. INSTALL 40 LF OF 18" RCP, CLASS III STORM SEWER AT 3.00% SLOPE.
56. CONSTRUCT POND OUTLET STRUCTURE ACCORDING TO DETAIL.



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**STOCKWELL**

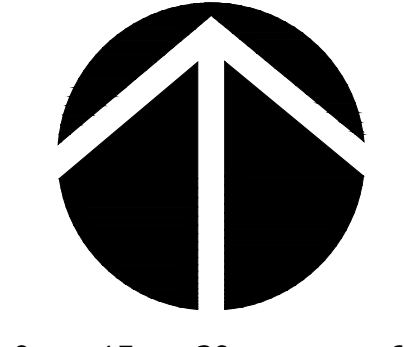
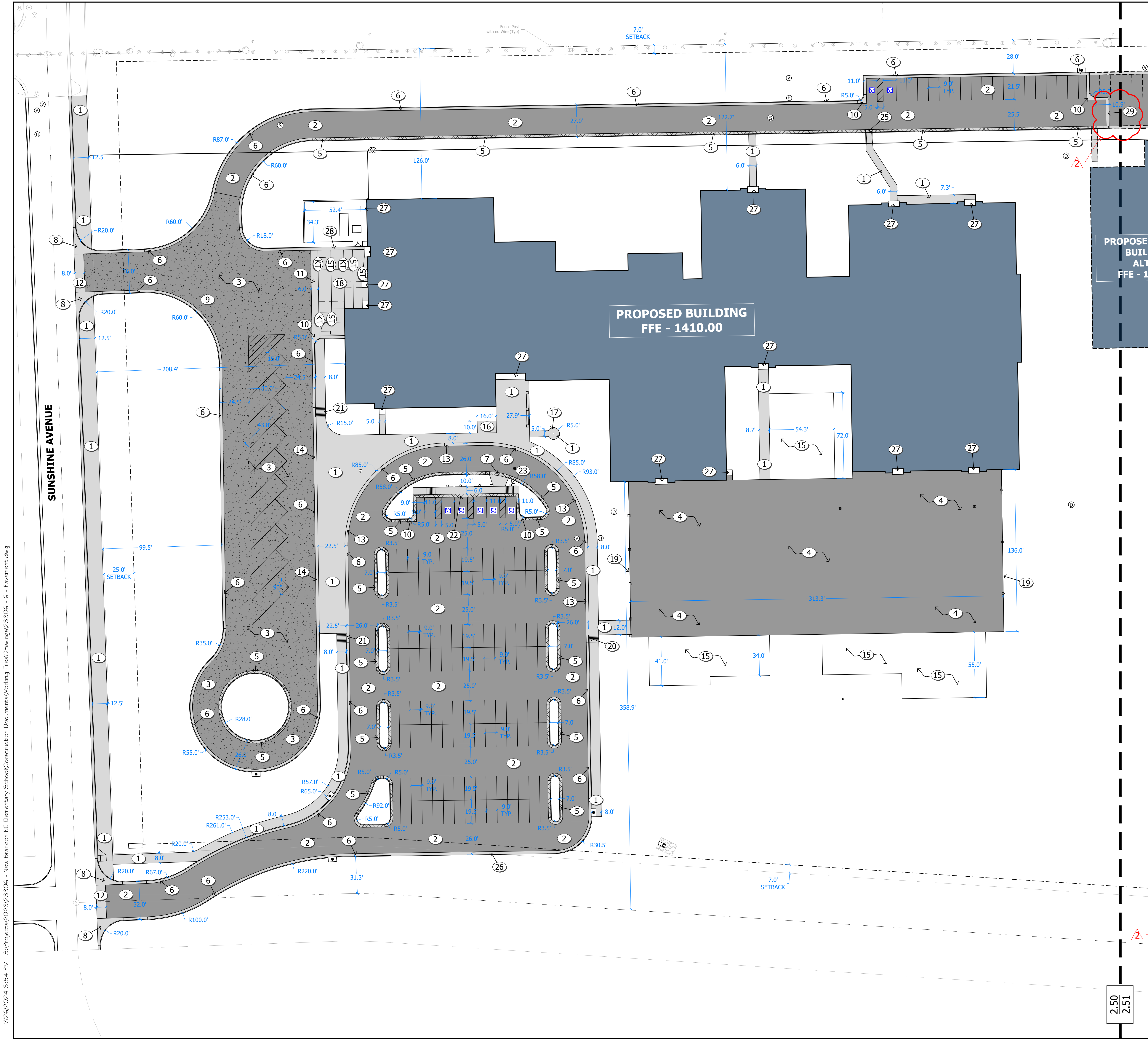
**BRANDON VALLEY ELEMENTARY SCHOOL**

STORM SEWER PLAN

Project	number	0306.3023.23
date	revision	JULY 1, 2024
drawn	checked	BAS GAR
DATE	DESCRIPTION	
7/26/24	ADD #2	

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**LEGEND**

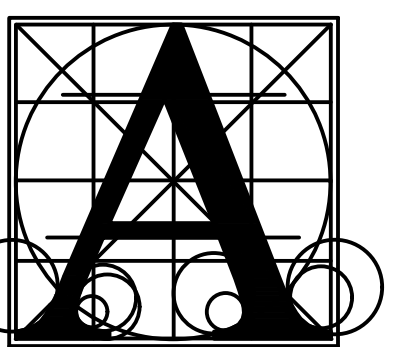
- CONCRETE SURFACING
- CONCRETE CURB & GUTTER SF 66 (INFLOW)
- CONCRETE CURB & GUTTER SF 66 (OUTFLOW)
- ASPHALT PAVEMENT (LIGHT DUTY)
- ASPHALT PAVEMENT (HEAVY DUTY)
- SAWED & TIED LONGITUDINAL JOINT
- KEYED & TIED CONSTRUCTION JOINT
- TRANSVERSE JOINT

**KEYNOTES**

1. INSTALL 4" NON-REINFORCED CONCRETE SIDEWALKS OVER 4" OF AGGREGATE BASE COURSE ON APPROVED SUBGRADE. SEE STRUCTURAL PLANS FOR STOOP LOCATIONS.
2. CONSTRUCT LIGHT DUTY ASPHALT PAVEMENT. ASPHALT PAVEMENT SECTION SHALL BE 4" OF ASPHALT SURFACING (TWO LIFTS) OVER 8" OF AGGREGATE BASE COURSE ON APPROVED SUBGRADE.
3. CONSTRUCT HEAVY DUTY ASPHALT PAVEMENT. ASPHALT PAVEMENT SECTION SHALL BE 5" OF ASPHALT SURFACING (TWO LIFTS) OVER 10" OF AGGREGATE BASE COURSE ON APPROVED SUBGRADE.
4. CONSTRUCT PLAYGROUND ASPHALT SURFACING. ASPHALT PAVEMENT SECTION SHALL BE 4" OF ASPHALT SURFACING (TWO LIFTS) OVER 6" OF AGGREGATE BASE COURSE ON APPROVED SUBGRADE. SEE ARCHITECTURAL PLANS FOR STRIPING.
5. INSTALL 2.5" WIDE SF66 TYPE CONCRETE CURB AND GUTTER (OUTFLOW). AGGREGATE BASE BELOW TO MATCH ADJACENT BASE SECTION.
6. INSTALL 2.5" WIDE SF66 TYPE CONCRETE CURB AND GUTTER (INFLOW). AGGREGATE BASE BELOW TO MATCH ADJACENT BASE SECTION.
7. PROVIDE 10" DROP CURB WITH 3" CURB TAPERS. CONSTRUCT PEDESTRIAN RAMP TO MEET ADA REQUIREMENTS.
8. CONSTRUCT 20' RADIUS 6" CONCRETE FILLET SECTION OVER 6" AGGREGATE BASE ON APPROVED SUBGRADE. SEE LOCATION OF DROP CURB FOR PROPER TAPER CONSTRUCTION.
9. CONSTRUCT 60' RADIUS 6" CONCRETE FILLET SECTION OVER 6" AGGREGATE BASE ON APPROVED SUBGRADE.
10. CONSTRUCT 5' RADIUS 6" CONCRETE FILLET SECTION OVER 6" AGGREGATE BASE ON APPROVED SUBGRADE.
11. CONSTRUCT 7" CONCRETE VALLEY GUTTER OVER 8" AGGREGATE BASE ON APPROVED SUBGRADE.
12. CONSTRUCT 8" CONCRETE VALLEY GUTTER OVER 6" AGGREGATE BASE ON APPROVED SUBGRADE.
13. PROVIDE 245.5' DROP CURB WITH 6" CURB TAPER. PROVIDE A FLOWLINE FOR NUISANCE WATER TO COLLECT.
14. PROVIDE 182' DROP CURB WITH 6" CURB TAPER ON THE SOUTH AND 8" CURB TAPER ON THE NORTH END. PROVIDE A FLOWLINE FOR NUISANCE WATER TO COLLECT.
15. INSTALL PLAY AREA SUB-SURFACING PAVEMENT, CONCRETE CURBING, AND DRAIN TILE. SEE ARCHITECTURAL PLANS FOR DETAILS. SEE GRADING PLAN FOR SURFACE ELEVATIONS.
16. CONSTRUCT 4" NON-REINFORCED CONCRETE SIDEWALK OVER 4" AGGREGATE BASE ON APPROVED SUBGRADE AROUND BIKE RACK. SEE ARCHITECTURAL PLANS FOR BIKE RACK DETAILS.
17. SEE ARCHITECTURAL PLANS AND SPECIFICATIONS FOR INSTALLATION OF STD. FLAGPOLE. SEE ELECTRICAL PLANS FOR LIGHTING.
18. CONSTRUCT 7" CONCRETE PAVEMENT OVER 8" AGGREGATE BASE COURSE ON APPROVED SUBGRADE.
19. PLAYGROUND PERIMETER FENCING, SEE ARCHITECTURAL PLANS.
20. PROVIDE 6" CURB TAPER.
21. PROVIDE 8" CURB TAPER.
22. PROVIDE 59" DROP CURB WITH 7" CURB TAPERS.
23. INSTALL ADA SIGN WITH VAN ACCESSIBLE PLAQUE ON POST PER DETAIL.
24. INSTALL ADA SIGN ON POST PER DETAIL.
25. PROVIDE 4" DROP CURB WITH 1" CURB TAPERS.
26. PROVIDE 131.5" DROP CURB WITH 7" CURB TAPERS.
27. CONCRETE STOOP SEE STRUCTURAL PLANS FOR DETAILS AND GRADING PLANS FOR ELEVATIONS.
28. PROVIDE 53" DROP CURB WITH 6" CURB TAPER IN FRONT OF MECHANICAL YARD.
29. PROVIDE 22" DROP CURB WITH 2.5" CURB TAPERS ON BOTH ENDS.

**GENERAL NOTE**

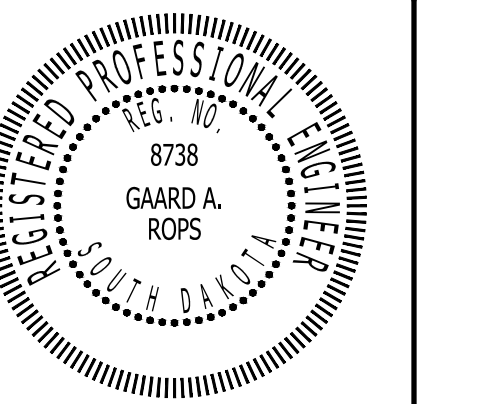
A. ALL STRIPING SHALL BE 4" WIDE AND YELLOW PAINT. ALL MATERIALS SHALL BE APPLIED AS PER MANUFACTURER'S RECOMMENDATIONS. THE PAINT SHALL MEET THE SDDOT STANDARD SPECIFICATIONS FOR PAVEMENT MARKING, SECTION 980 FOR TRAFFIC PAINT. NO GLASS BEADS WILL BE REQUIRED. ALL ADA STRIPING TO BE 4" BLUE PER DETAIL.



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**BRANDON VALLEY ELEMENTARY SCHOOL**

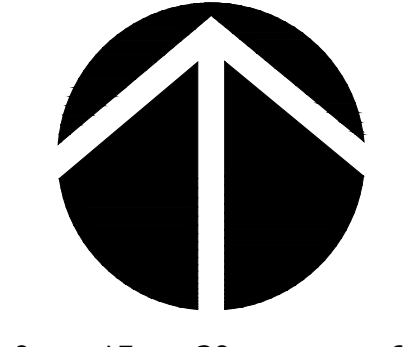
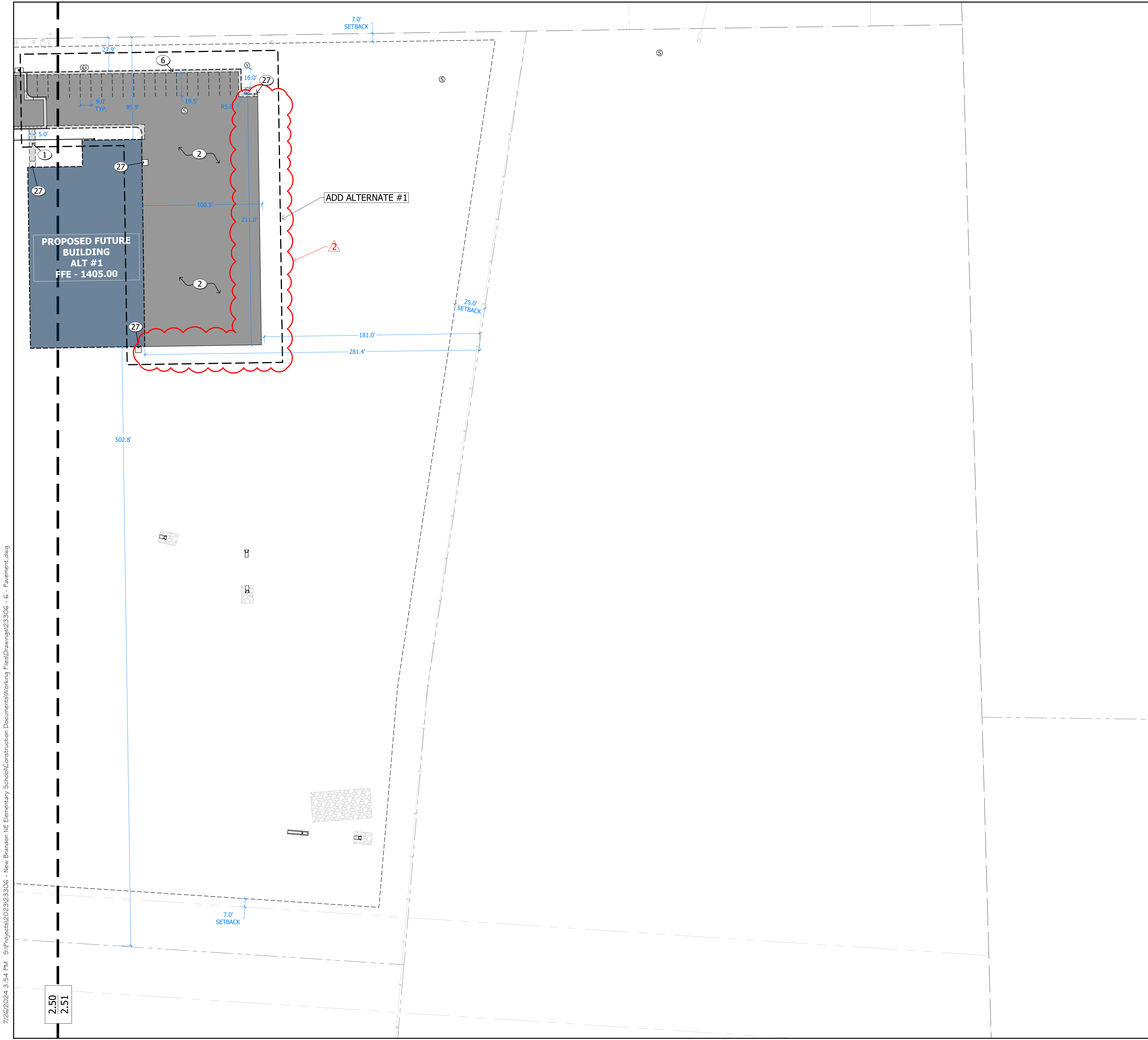
**PAVEMENT PLAN**

Project: **BRANDON VALLEY ELEMENTARY SCHOOL**  
number: 0306.3023.23  
date: JULY 1, 2024  
revision:  
drawn: BAS checked: GAR

DATE	DESCRIPTION
7/26/24	ADD #2

**2.50**

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**LEGEND**

- CONCRETE SURFACING
- CONCRETE CURB & GUTTER SF 66 (INFLOW)
- CONCRETE CURB & GUTTER SF 66 (OUTFLOW)
- ASPHALT PAVEMENT (LIGHT DUTY)
- ASPHALT PAVEMENT (HEAVY DUTY)
- SAWED & TIED LONGITUDINAL JOINT
- KEYED & TIED CONSTRUCTION JOINT
- TRANSVERSE JOINT

**KEYNOTES**

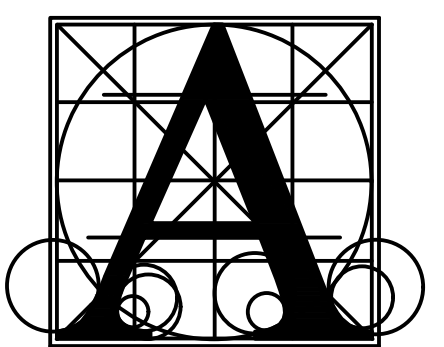
1. INSTALL 4" NON-REINFORCED CONCRETE SIDEWALKS OVER 4" OF AGGREGATE BASE COURSE ON APPROVED SUBGRADE. SEE STRUCTURAL PLANS FOR STOOP LOCATIONS.
2. CONSTRUCT LIGHT DUTY ASPHALT PAVEMENT. ASPHALT PAVEMENT SECTION SHALL BE 4" OF ASPHALT SURFACING (TWO LIFTS) OVER 8" OF AGGREGATE BASE COURSE ON APPROVED SUBGRADE.
3. CONSTRUCT HEAVY DUTY ASPHALT PAVEMENT. ASPHALT PAVEMENT SECTION SHALL BE 5" OF ASPHALT SURFACING (TWO LIFTS) OVER 10" OF AGGREGATE BASE COURSE ON APPROVED SUBGRADE.
4. CONSTRUCT PLAYGROUND ASPHALT SURFACING. ASPHALT PAVEMENT SECTION SHALL BE 4" OF ASPHALT SURFACING (TWO LIFTS) OVER 6" OF AGGREGATE BASE COURSE ON APPROVED SUBGRADE. SEE ARCHITECTURAL PLANS FOR STRIPING.
5. INSTALL 2.5' WIDE SF66 TYPE CONCRETE CURB AND GUTTER (OUTFLOW). AGGREGATE BASE BELOW TO MATCH ADJACENT BASE SECTION.
6. INSTALL 2.5' WIDE SF66 TYPE CONCRETE CURB AND GUTTER (INFLOW). AGGREGATE BASE BELOW TO MATCH ADJACENT BASE SECTION.
7. PROVIDE 10' DROP CURB WITH 3' CURB TAPERS. CONSTRUCT PEDESTRIAN RAMP TO MEET ADA REQUIREMENTS.
8. CONSTRUCT 20' RADIUS 6" CONCRETE FILLET SECTION OVER 6" AGGREGATE BASE ON APPROVED SUBGRADE. SEE LOCATION OF DROP CURB FOR PROPER TAPER CONSTRUCTION.
9. CONSTRUCT 60' RADIUS 6" CONCRETE FILLET SECTION OVER 6" AGGREGATE BASE ON APPROVED SUBGRADE.
10. CONSTRUCT 5' RADIUS 6" CONCRETE FILLET SECTION OVER 6" AGGREGATE BASE ON APPROVED SUBGRADE.
11. CONSTRUCT 7" CONCRETE VALLEY GUTTER OVER 8" AGGREGATE BASE ON APPROVED SUBGRADE.
12. CONSTRUCT 8" CONCRETE VALLEY GUTTER OVER 6" AGGREGATE BASE ON APPROVED SUBGRADE.
13. PROVIDE 245.5' DROP CURB WITH 6' CURB TAPER. PROVIDE A FLOWLINE FOR NUISANCE WATER TO COLLECT.
14. PROVIDE 182' DROP CURB WITH 6' CURB TAPER ON THE SOUTH AND 8' CURB TAPER ON THE NORTH END. PROVIDE A FLOWLINE FOR NUISANCE WATER TO COLLECT.
15. INSTALL PLAY AREA SUB-SURFACING PAVEMENT, CONCRETE CURBING, AND DRAIN TILE. SEE ARCHITECTURAL PLANS FOR DETAILS. SEE GRADING PLAN FOR SURFACE ELEVATIONS.
16. CONSTRUCT 4" NON-REINFORCED CONCRETE SIDEWALK OVER 4" AGGREGATE BASE ON APPROVED SUBGRADE AROUND BIKE RACK. SEE ARCHITECTURAL PLANS FOR BIKE RACK DETAILS.
17. SEE ARCHITECTURAL PLANS AND SPECIFICATIONS FOR INSTALLATION OF STD. FLAGPOLE. SEE ELECTRICAL PLANS FOR LIGHTING.
18. CONSTRUCT 7" CONCRETE PAVEMENT OVER 8" AGGREGATE BASE COURSE ON APPROVED SUBGRADE.
19. PLAYGROUND PERIMETER FENCING, SEE ARCHITECTURAL PLANS.
20. PROVIDE 6' CURB TAPER.
21. PROVIDE 8' CURB TAPER.
22. PROVIDE 59' DROP CURB WITH 7' CURB TAPERS.
23. INSTALL ADA SIGN WITH VAN ACCESSIBLE PLAQUE ON POST PER DETAIL.
24. INSTALL ADA SIGN ON POST PER DETAIL.
25. PROVIDE 4' DROP CURB WITH 1' CURB TAPERS.
26. PROVIDE 131.5' DROP CURB WITH 7' CURB TAPER.
27. PROVIDE 3' CURB TAPER.

**GENERAL NOTE**

- A. ALL STRIPING SHALL BE 4" WIDE AND YELLOW PAINT. ALL MATERIALS SHALL BE APPLIED AS PER MANUFACTURER'S RECOMMENDATIONS. THE PAINT SHALL MEET THE SDOT STANDARD SPECIFICATIONS FOR PAVEMENT MARKING, SECTION 980 FOR TRAFFIC PAINT. NO GLASS BEADS WILL BE REQUIRED. ALL ADA STRIPING TO BE 4" BLUE PER DETAIL.

**ADD ALTERNATE #1**

- A. CONTRACTOR TO INSTALL NEW CONCRETE CURB AND GUTTER AND ASPHALT PAVEMENT SECTION AND SIDEWALK WHERE SHOWN IF ADD ALTERNATE #1 IS ACCEPTED.
- B. IF ADD ALTERNATE IS NOT ACCEPTED, CONTRACTOR SHALL GRADE THE BUS GARAGE AND ASSOCIATED PARKING LOT AREAS TO FINISH GRADES, PLACE A MINIMUM OF 6" OF TOPSOIL OVER ALL DISTURBED AREAS. PREP TOPSOIL READY FOR SEEDING. SEEDING TO BE COMPLETED BY OWNER.



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**BRANDON VALLEY ELEMENTARY SCHOOL**

**PAVEMENT PLAN**

number	0306.3023.23
date	JULY 1, 2024
revision	
drawn	BAS checked GAR
DATE	DESCRIPTION
7/26/24	ADD #2

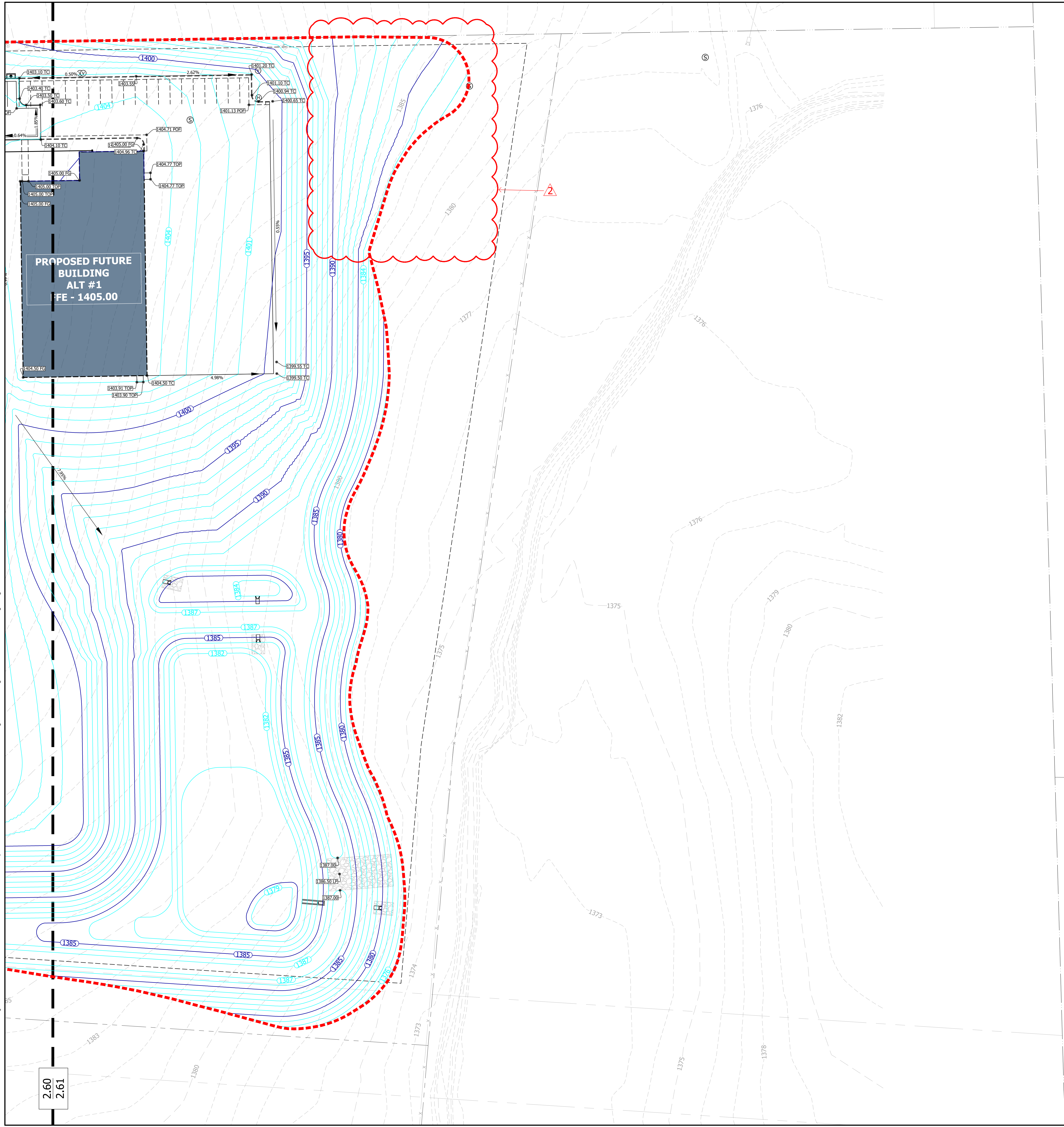
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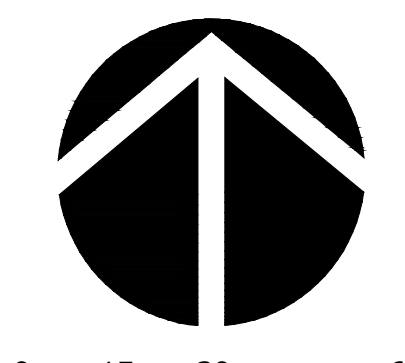
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2.61



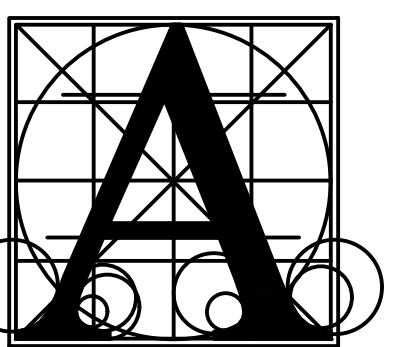
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### LEGEND

- - 1300 - - EXISTING CONTOURS
- - 1300 - - PROPOSED CONTOURS
- 1300 ○ - SPOT ELEVATIONS
- - - - GRADING LIMITS
- - ○ - ADA COMPLIANT TURNING SPACE

### ABBREVIATIONS

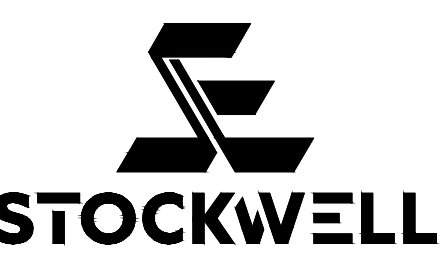
- TC - TOP OF CURB
- TT - TOP OF TAPER
- BT - BOTTOM OF TAPER
- HP - HIGH POINT
- LP - LOW POINT
- FG - FINISHED GRADE
- TOP - TOP OF PAVEMENT
- POF - POINT OF FILLET
- ME - MATCH EXISTING



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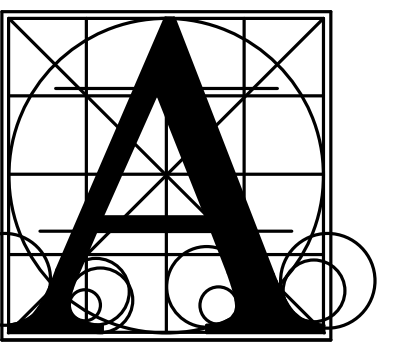
## BRANDON VALLEY ELEMENTARY SCHOOL

### GRADING PLAN

Project: \_\_\_\_\_  
 number: 0306.3023.23  
 date: JULY 1, 2024  
 revision: \_\_\_\_\_  
 drawn: BAS checked: GAR

DATE	DESCRIPTION
7/26/24	ADD #2

# 2.61



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STRUCTURAL ENGINEERING ASSOCIATES  
401 E. 8th St., Suite 201 - Sioux Falls, SD 57103-7053  
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BRANDON VALLEY ELEMENTARY SCHOOL  
FOOTING AND FOUNDATION PLAN - AREA A

Project	number	SEA Job. No. AI 230600
	date	07/01/2024
	revision	
	drawn	RDM checked MAS
	MARK DATE DESCRIPTION	
	AD 2 7/26/2024	ADDENDA 2

3.11

MARK	SIZE	REINFORCING	COMMENTS
F3	3'-0"x3'-0"x1'-0"	(5) #4 EW BOTTOM	
F4	4'-0"x4'-0"x1'-0"	(7) #4 EW BOTTOM	
F4x6.5	4'-0"x6'-6"x1'-0"	(6) #5 EW TOP AND BOTTOM	
F5	5'-0"x5'-0"x1'-4"	(8) #5 EW BOTTOM	
F6	6'-0"x6'-0"x1'-6"	(7) #6 EW BOTTOM	
F7	7'-0"x7'-0"x1'-6"	(8) #6 EW BOTTOM	
WF1	1'-4"x1'-0" CONT.	(2) #5 x CONT.	
WF2	2'-0"x1'-0" CONT.	(3) #5 x CONT.	
WF3	3'-0"x1'-0" CONT.	(4) #5 x CONT. #4 @ 9" oc TRANSVERSE	
WF4	4'-0"x1'-0" CONT.	(5) #5 x CONT. #5 @ 12" oc TRANSVERSE	
WF5	5'-0"x1'-4" CONT.	(6) #5 x CONT. #6 @ 12" oc TRANSVERSE	

TFE ON PLAN DENOTES TOP OF FOOTING ELEVATIONS.  
ALL EXTERIOR FOOTINGS SHALL BE AT TFE -0'-8" U.N.O.  
ALL INTERIOR FOOTINGS SHALL BE AT TFE -0'-8" U.N.O.  
NOTE: FOOTINGS NEED TO BE STEPPED DOWN AT LOCATIONS OF UNDER GROUND MECHANICAL PIPING RUNS. SEE PLAN AND COORDINATE WITH MECHANICAL CONTRACTOR. REFERENCE DETAILS 2 AND 3 ON 3.40.

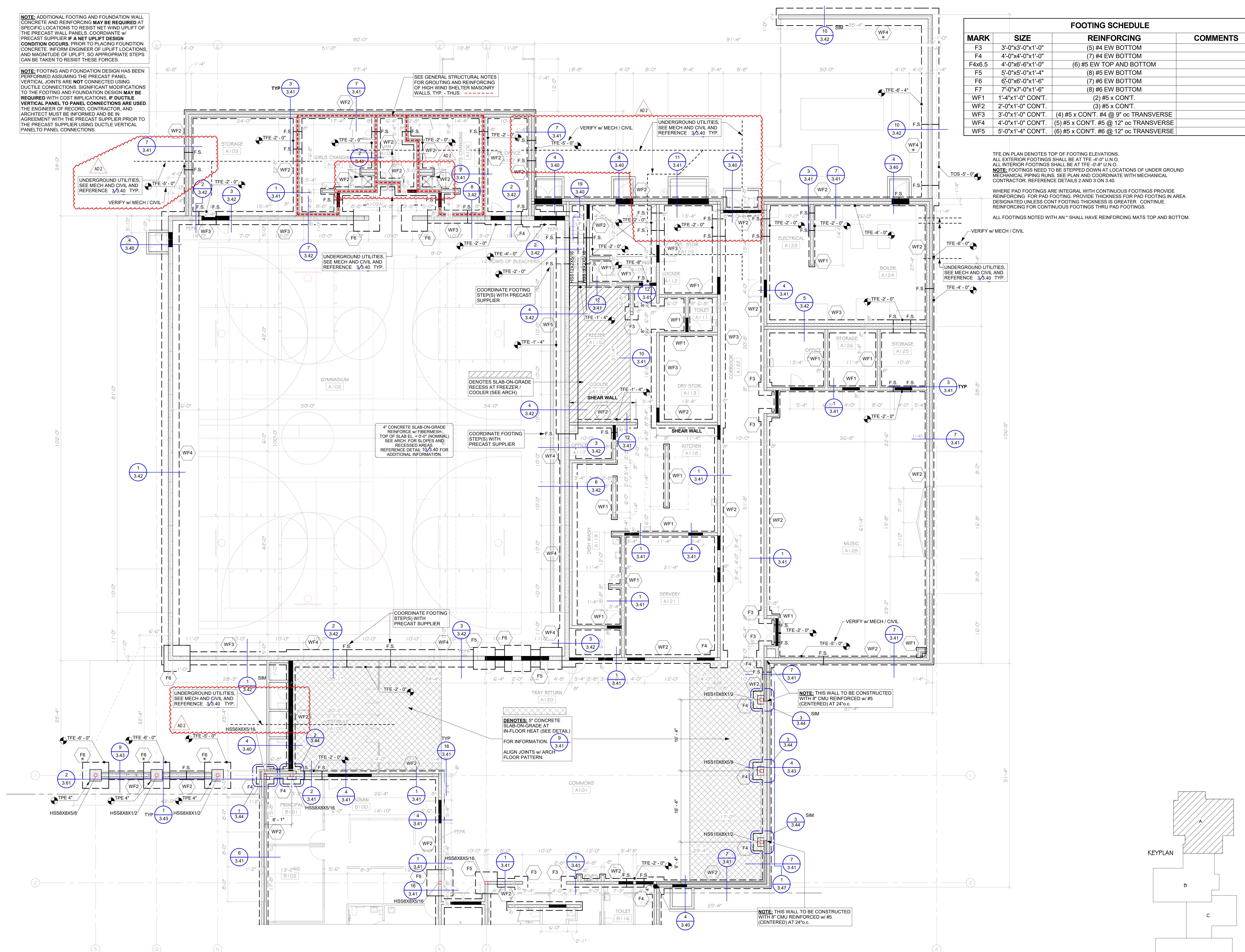
WHERE PAD FOOTINGS ARE INTEGRAL WITH CONTINUOUS FOOTINGS PROVIDE REINFORCING FOR PAD FOOTING. PROVIDE THICKNESS FOR PAD FOOTING IN AREA DESIGNATED UNLESS CONT FOOTING THICKNESS IS GREATER. CONTINUE REINFORCING FOR CONTINUOUS FOOTINGS THRU PAD FOOTINGS.

ALL FOOTINGS NOTED WITH AN \* SHALL HAVE REINFORCING MATS TOP AND BOTTOM.

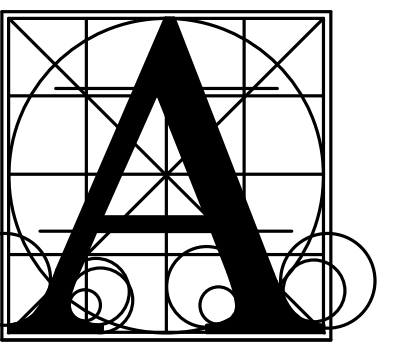
NOTE: ADDITIONAL FOOTING AND FOUNDATION WALL CONCRETE AND REINFORCING MAY BE REQUIRED AT SPECIFIC LOCATIONS TO RESIST NET WIND UPLIFT OF THE PRECAST WALL PANELS. COORDINATE WITH PRECAST SUPPLIER IF A NET UPLIFT DESIGN CONDITION OCCURS. PRIOR TO PLACING FOUNDATION CONCRETE, INFORM ENGINEER OF UPLIFT LOCATIONS, AND MAGNITUDE OF UPLIFT, SO APPROPRIATE STEPS CAN BE TAKEN TO RESIST THESE FORCES.

NOTE: FOOTING AND FOUNDATION DESIGN HAS BEEN PERFORMED ASSUMING THE PRECAST PANEL VERTICAL JOINTS ARE NOT CONNECTED USING DUCTILE CONNECTIONS. SIGNIFICANT MODIFICATIONS TO THE FOOTING AND FOUNDATION DESIGN MAY BE REQUIRED WITH COST IMPLICATIONS. IF DUCTILE VERTICAL PANEL TO PANEL CONNECTIONS ARE USED, THE ENGINEER OF RECORD, CONTRACTOR, AND ARCHITECT MUST BE INFORMED AND BE IN AGREEMENT WITH THE PRECAST SUPPLIER PRIOR TO THE PRECAST SUPPLIER USING DUCTILE VERTICAL PANEL TO PANEL CONNECTIONS.

SEE GENERAL STRUCTURAL NOTES FOR GROUTING AND REINFORCING OF HIGH WIND SHELTER MASONRY WALLS. TYP. - THUS:



7/25/2024 3:25:56 PM



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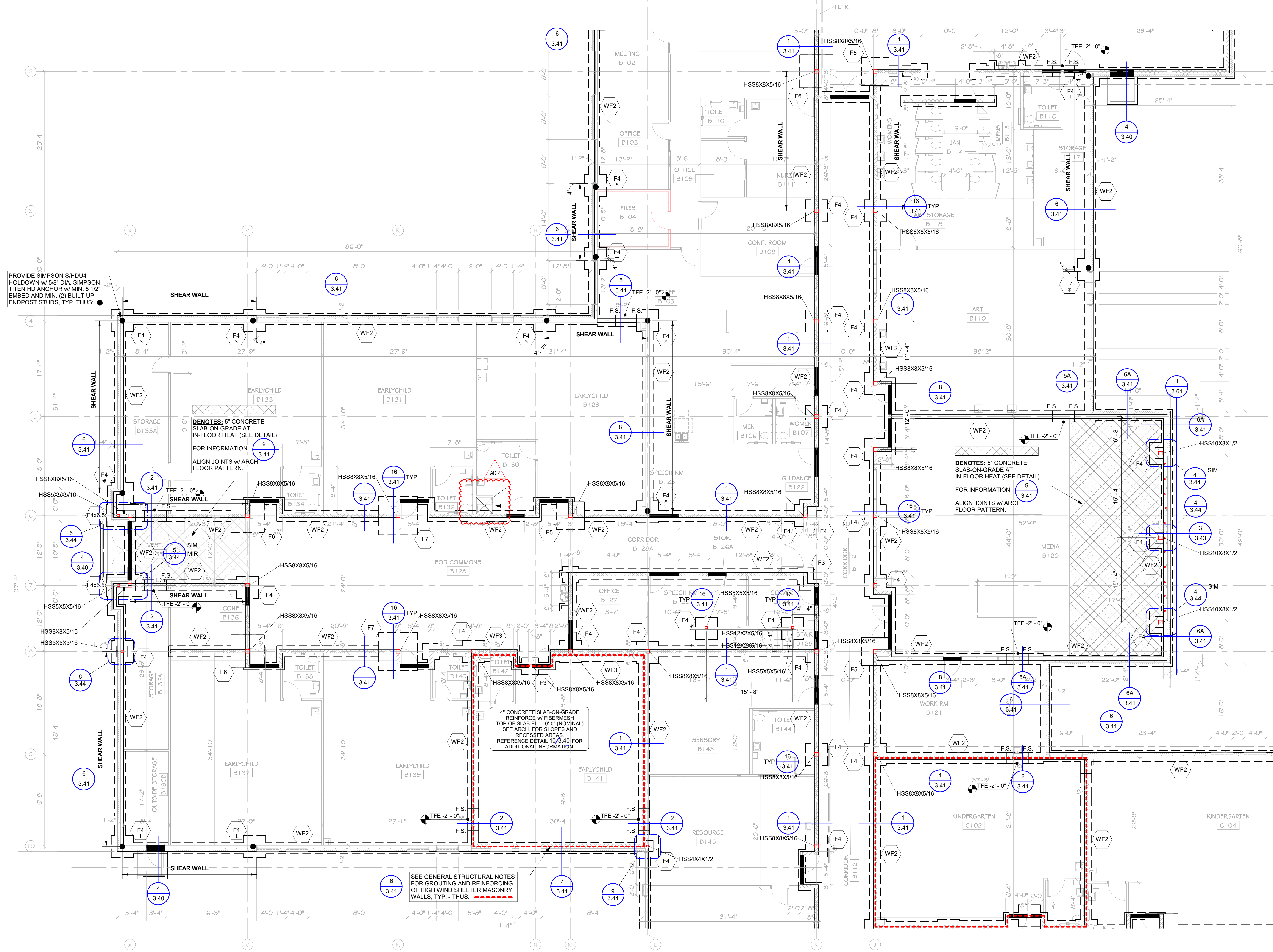
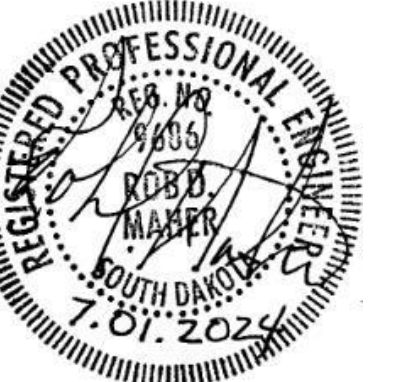
415 South Main Avenue  
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## STRUCTURAL ENGINEERING ASSOCIATES

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PROVIDE SIMPSON SHDU4 HOLD-DOWN W/ 5/8" DIA. SIMPSON TITEN HD ANCHOR W/ MIN. 5 1/2" EMBED AND MIN. (2) BUILT-UP ENDPOST STUDS, TYP. THUS.

DENOTES: 5" CONCRETE SLAB-ON-GRADE AT IN-FLOOR HEAT (SEE DETAIL) FOR INFORMATION. ALIGN JOINTS W/ ARCH FLOOR PATTERN.

4" CONCRETE SLAB-ON-GRADE REINFORCE W/ FIBERMESH TOP OF SLAB EL. = 9'-0" (NOMINAL) SEE ARCH. FOR SLOPES AND RECESSED AREAS. REFERENCE DETAIL 10/3.40 FOR ADDITIONAL INFORMATION.

SEE GENERAL STRUCTURAL NOTES FOR GROUTING AND REINFORCING OF HIGH WIND SHELTER MASONRY WALLS, TYP. - THUS.

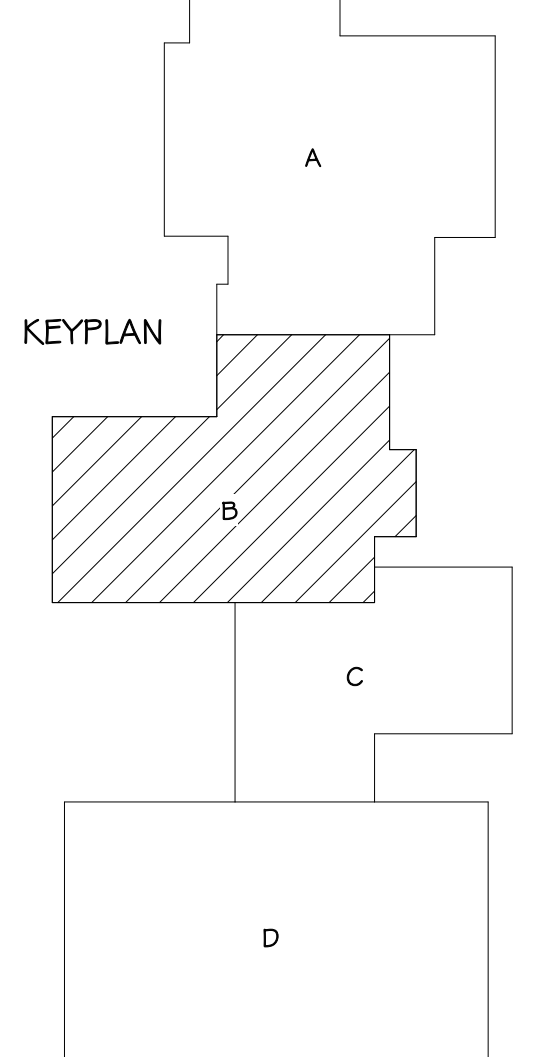
1 FOOTING AND FOUNDATION PLAN - AREA B  
1/8" = 1'-0"

MARK	SIZE	REINFORCING	COMMENTS
F3	3'-0"x3'-0"x1'-0"	(5) #4 EW BOTTOM	
F4	4'-0"x4'-0"x1'-0"	(7) #4 EW BOTTOM	
F4x6.5	4'-0"x6'-6"x1'-0"	(6) #5 EW TOP AND BOTTOM	
F5	5'-0"x5'-0"x1'-4"	(8) #5 EW BOTTOM	
F6	6'-0"x6'-0"x1'-6"	(7) #6 EW BOTTOM	
F7	7'-0"x7'-0"x1'-6"	(8) #6 EW BOTTOM	
WF1	1'-4"x1'-0" CONT.	(2) #5 x CONT.	
WF2	2'-0"x1'-0" CONT.	(3) #5 x CONT.	
WF3	3'-0"x1'-0" CONT.	(4) #5 x CONT. #4 @ 9" oc TRANSVERSE	
WF4	4'-0"x1'-0" CONT.	(5) #5 x CONT. #5 @ 12" oc TRANSVERSE	
WF5	5'-0"x1'-4" CONT.	(6) #5 x CONT. #6 @ 12" oc TRANSVERSE	

TFE ON PLAN DENOTES TOP OF FOOTING ELEVATIONS. ALL EXTERIOR FOOTINGS SHALL BE AT TFE -4'-0" U.N.O. ALL INTERIOR FOOTINGS SHALL BE AT TFE -0'-8" U.N.O. NOTE: FOOTINGS NEED TO BE STEPPED DOWN AT LOCATIONS OF UNDER GROUND MECHANICAL PIPING RUNS. SEE PLAN AND COORDINATE WITH MECHANICAL CONTRACTOR. REFERENCE DETAILS 2 AND 3 ON 3.40.

WHERE PAD FOOTINGS ARE INTEGRAL WITH CONTINUOUS FOOTINGS PROVIDE REINFORCING FOR PAD FOOTING. PROVIDE THICKNESS FOR PAD FOOTING IN AREA DESIGNATED UNLESS CONT FOOTING THICKNESS IS GREATER. CONTINUE REINFORCING FOR CONTINUOUS FOOTINGS THRU PAD FOOTINGS.

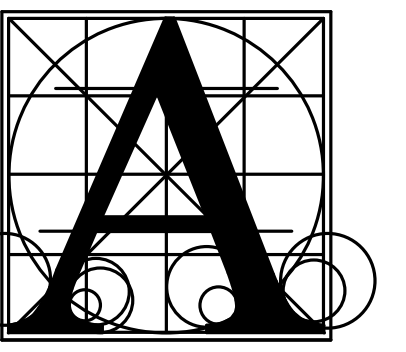
ALL FOOTINGS NOTED WITH AN \* SHALL HAVE REINFORCING MATS TOP AND BOTTOM.



Project	number	SEA Job. No. AI 230600
date	07/01/2024	
revision		
drawn	RDM	checked
		Checker
MARK	DATE	DESCRIPTION
AD 2	7/26/2024	ADDENDA 2

# BRANDON VALLEY ELEMENTARY SCHOOL

## FOOTING AND FOUNDATION PLAN - AREA B



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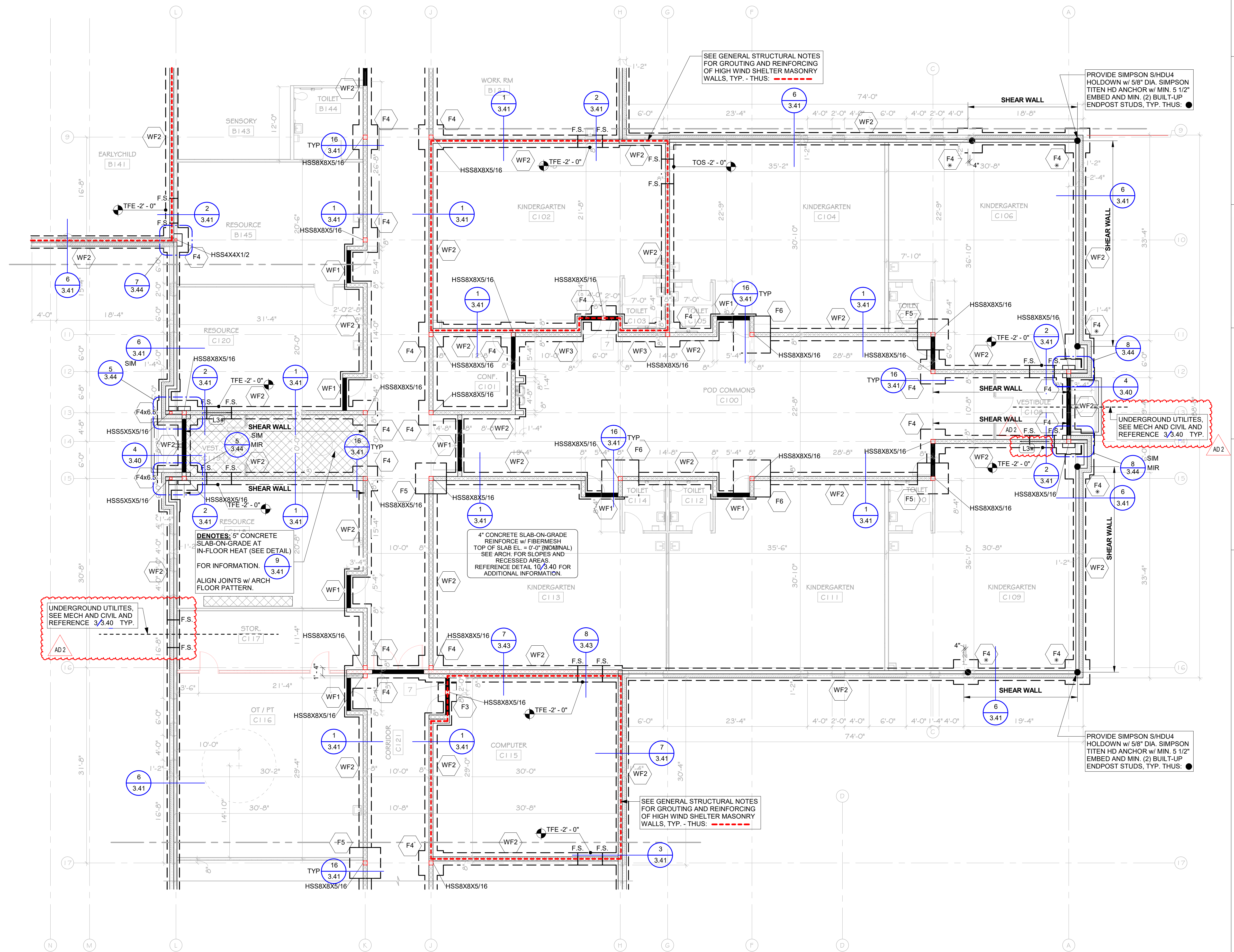
415 South Main Avenue  
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UNDERGROUND UTILITIES, SEE MECH AND CIVIL AND REFERENCE 3.9.40 TYP.

DENOTES: 5" CONCRETE SLAB-ON-GRADE AT IN-FLOOR HEAT (SEE DETAIL) FOR INFORMATION. ALIGN JOINTS w/ ARCH FLOOR PATTERN.

4" CONCRETE SLAB-ON-GRADE REINFORCE w/ FIBERMESH TOP OF SLAB EL. = 0'-0" (NORMAL) SEE ARCH. FOR SLOPES AND RECESSED AREAS. REFERENCE DETAIL 10.3.40 FOR ADDITIONAL INFORMATION.

UNDERGROUND UTILITIES, SEE MECH AND CIVIL AND REFERENCE 3.9.40 TYP.

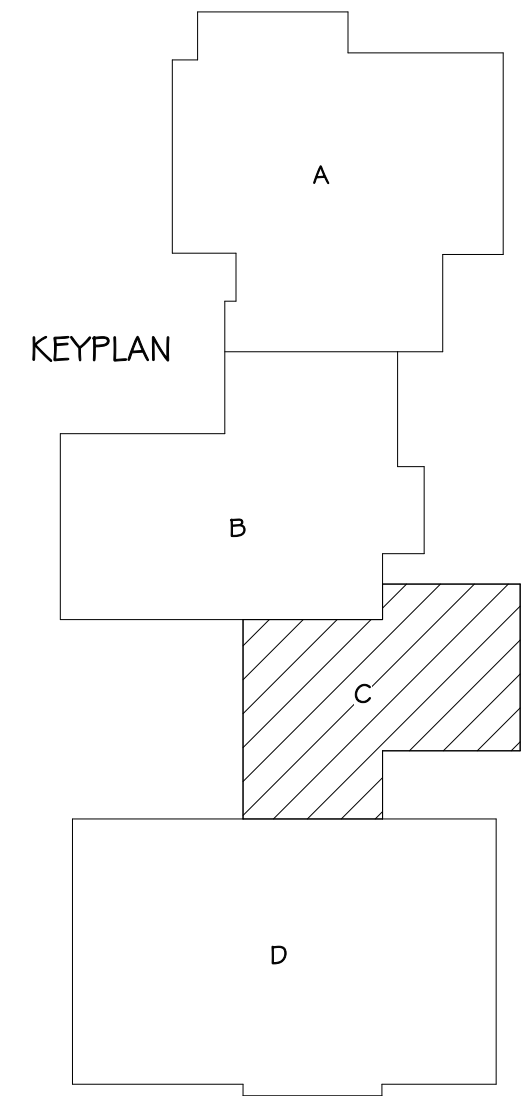
1 FOOTING AND FOUNDATION PLAN - AREA C  
1/8" = 1'-0"

MARK	SIZE	REINFORCING	COMMENTS
F3	3'-0"x3'-0"x1'-0"	(5) #4 EW BOTTOM	
F4	4'-0"x4'-0"x1'-0"	(7) #4 EW BOTTOM	
F4x6.5	4'-0"x6'-6"x1'-0"	(6) #5 EW TOP AND BOTTOM	
F5	5'-0"x5'-0"x1'-4"	(8) #5 EW BOTTOM	
F6	6'-0"x6'-0"x1'-6"	(7) #6 EW BOTTOM	
F7	7'-0"x7'-0"x1'-6"	(8) #6 EW BOTTOM	
WF1	1'-4"x1'-0" CONT.	(2) #5 x CONT.	
WF2	2'-0"x1'-0" CONT.	(3) #5 x CONT.	
WF3	3'-0"x1'-0" CONT.	(4) #5 x CONT. #4 @ 9" oc TRANSVERSE	
WF4	4'-0"x1'-0" CONT.	(5) #5 x CONT. #5 @ 12" oc TRANSVERSE	
WF5	5'-0"x1'-4" CONT.	(6) #5 x CONT. #6 @ 12" oc TRANSVERSE	

TFE ON PLAN DENOTES TOP OF FOOTING ELEVATIONS. ALL EXTERIOR FOOTINGS SHALL BE AT TFE -4'-0" U.N.O. ALL INTERIOR FOOTINGS SHALL BE AT TFE -0'-8" U.N.O. NOTE: FOOTINGS NEED TO BE STEPPED DOWN AT LOCATIONS OF UNDER GROUND MECHANICAL PIPING RUNS. SEE PLAN AND COORDINATE WITH MECHANICAL CONTRACTOR. REFERENCE DETAILS 2 AND 3 ON 3.40.

WHERE PAD FOOTINGS ARE INTEGRAL WITH CONTINUOUS FOOTINGS PROVIDE REINFORCING FOR PAD FOOTING. PROVIDE THICKNESS FOR PAD FOOTING IN AREA DESIGNATED UNLESS CONT FOOTING THICKNESS IS GREATER. CONTINUE REINFORCING FOR CONTINUOUS FOOTINGS THRU PAD FOOTINGS.

ALL FOOTINGS NOTED WITH AN \* SHALL HAVE REINFORCING MATS TOP AND BOTTOM.

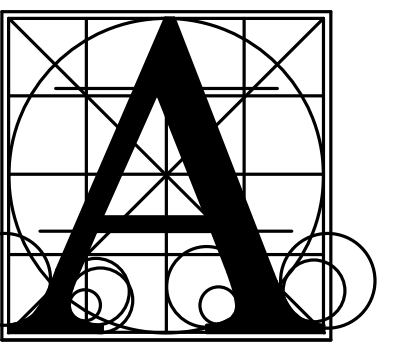


Project	number	SEA Job. No. AI 230600
	date	07/01/2024
	revision	
	drawn	RDM checked MAS
MARK DATE DESCRIPTION		
AD 2 7/26/2024		ADDENDA 2

# BRANDON VALLEY ELEMENTARY SCHOOL

## FOOTING AND FOUNDATION PLAN - AREA C

# 3.13



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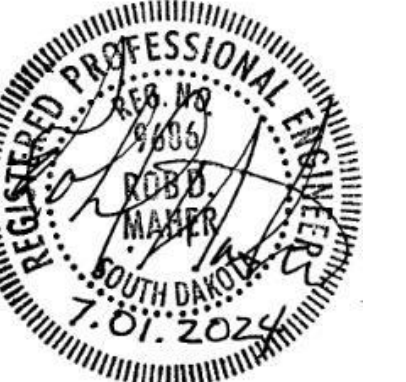
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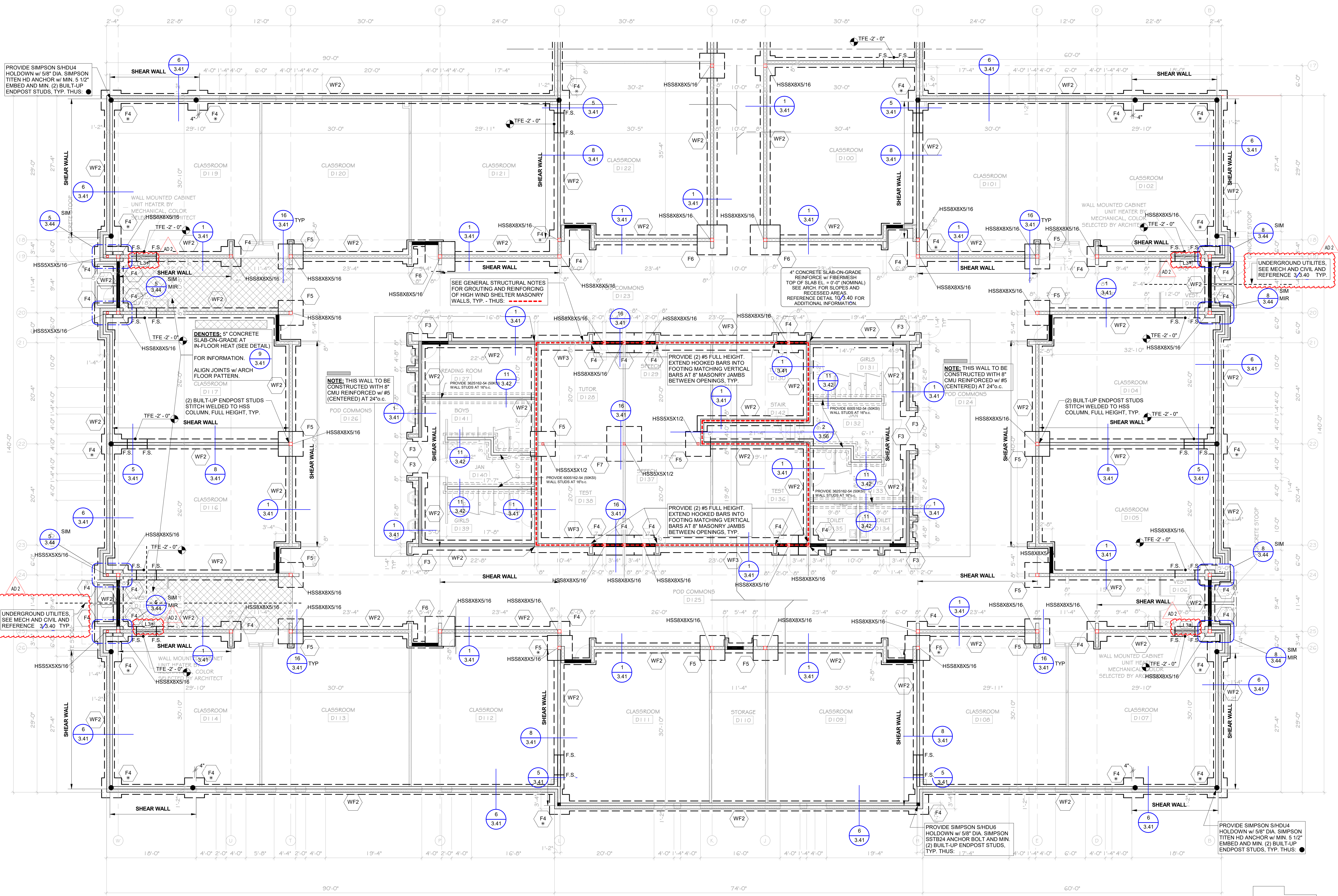


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# BRANDON VALLEY ELEMENTARY SCHOOL FOOTING AND FOUNDATION PLAN - AREA D



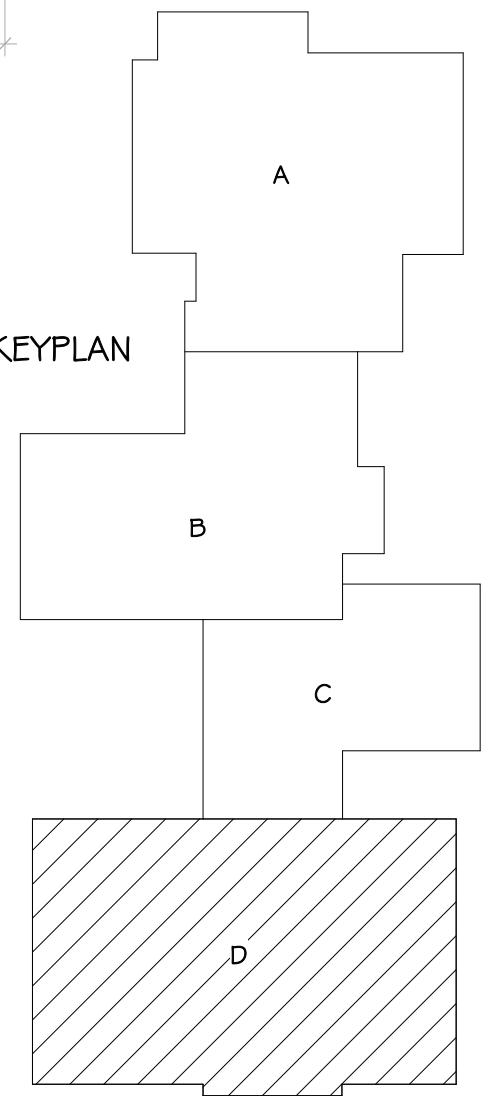
1 FOOTING AND FOUNDATION PLAN - AREA D  
1/8" = 1'-0"

MARK	SIZE	REINFORCING	COMMENTS
F3	3'-0"x3'-0"x1'-0"	(5) #4 EW BOTTOM	
F4	4'-0"x4'-0"x1'-0"	(7) #4 EW BOTTOM	
F4x6.5	4'-0"x6'-6"x1'-0"	(6) #5 EW TOP AND BOTTOM	
F5	5'-0"x5'-0"x1'-4"	(8) #5 EW BOTTOM	
F6	6'-0"x6'-0"x1'-6"	(7) #6 EW BOTTOM	
F7	7'-0"x7'-0"x1'-6"	(8) #6 EW BOTTOM	
WF1	1'-4"x1'-0" CONT.	(2) #5 X CONT.	
WF2	2'-0"x1'-0" CONT.	(3) #5 X CONT.	
WF3	3'-0"x1'-0" CONT.	(4) #5 X CONT. #4 @ 9" oc TRANSVERSE	
WF4	4'-0"x1'-0" CONT.	(5) #5 X CONT. #5 @ 12" oc TRANSVERSE	
WF5	5'-0"x1'-4" CONT.	(6) #5 X CONT. #6 @ 12" oc TRANSVERSE	

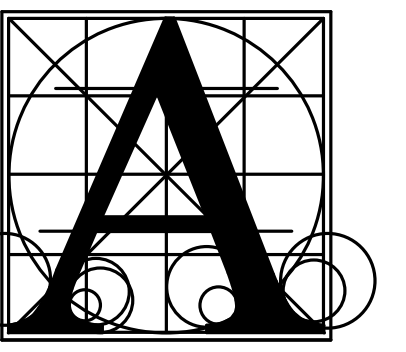
TFE ON PLAN DENOTES TOP OF FOOTING ELEVATIONS.  
ALL EXTERIOR FOOTINGS SHALL BE AT TFE -4'-0" U.N.O.  
ALL INTERIOR FOOTINGS SHALL BE AT TFE -0'-8" U.N.O.  
NOTE: FOOTINGS NEED TO BE STEPPED DOWN AT LOCATIONS OF UNDER GROUND MECHANICAL PIPING RUNS. SEE PLAN AND COORDINATE WITH MECHANICAL CONTRACTOR. REFERENCE DETAILS 2 AND 3 ON 340.

WHERE PAD FOOTINGS ARE INTEGRAL WITH CONTINUOUS FOOTINGS PROVIDE REINFORCING FOR PAD FOOTING. PROVIDE THICKNESS FOR PAD FOOTING IN AREA DESIGNATED UNLESS CONT FOOTING THICKNESS IS GREATER. CONTINUE REINFORCING FOR CONTINUOUS FOOTINGS THRU PAD FOOTINGS.

ALL FOOTINGS NOTED WITH AN \* SHALL HAVE REINFORCING MATS TOP AND BOTTOM.



number	SEA Job. No. AI 230600	
date	07/01/2024	
revision		
drawn	RDW	
checked	MAS	
MARK DATE DESCRIPTION		
AD 2	7/26/2024	ADDENDA 2



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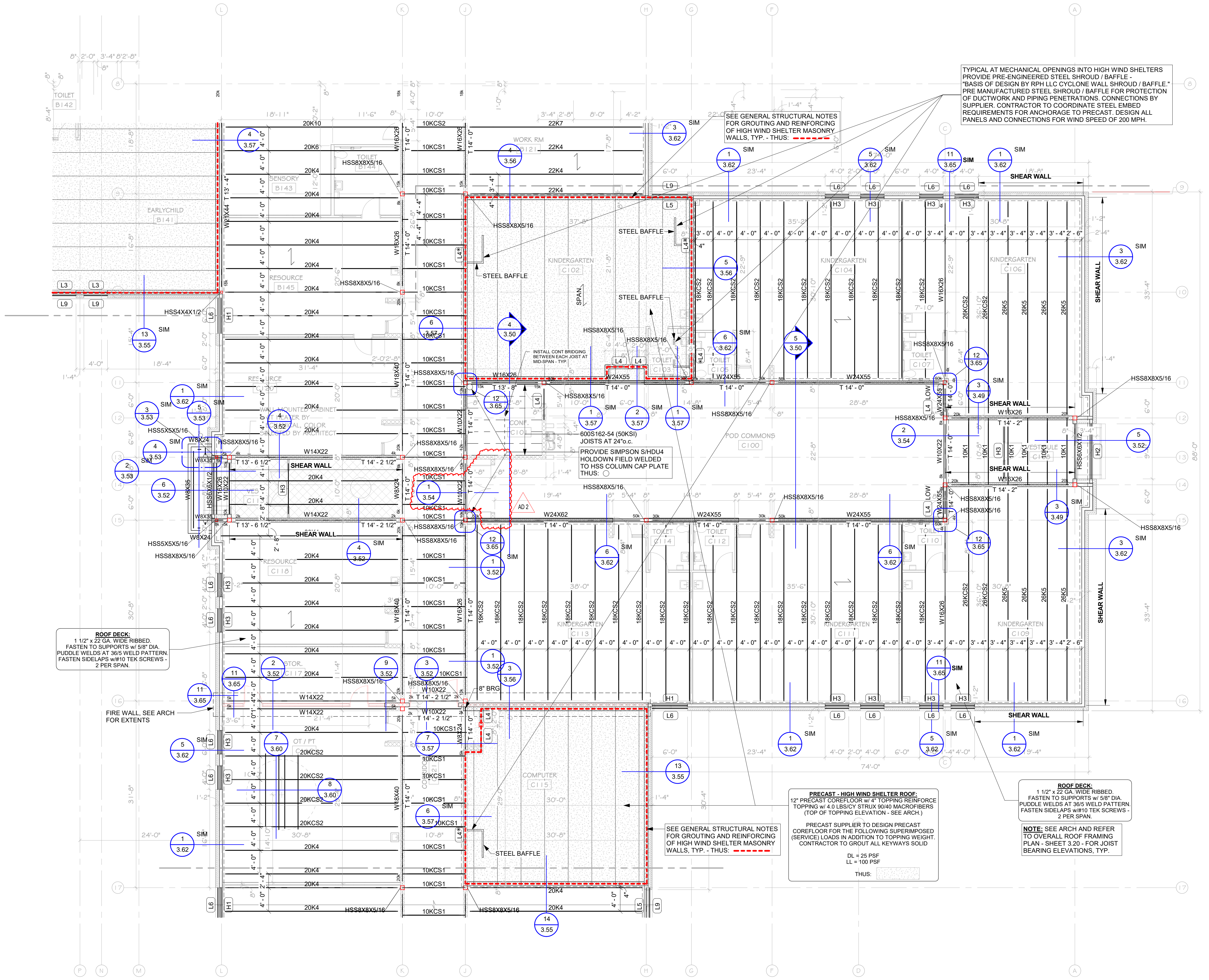
## STRUCTURAL ENGINEERING ASSOCIATES

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# BRANDON VALLEY ELEMENTARY SCHOOL

## ROOF FRAMING PLAN - AREA C



**ROOF DECK:**  
1 1/2" x 22 GA. WIDE RIBBED.  
FASTEN TO SUPPORTS w/ 5/8" DIA.  
PUDDLE WELDS AT 360° WELD PATTERN.  
FASTEN SIDELAPS w/ 1/2" TEK SCREWS -  
2 PER SPAN.

**ROOF DECK:**  
1 1/2" x 22 GA. WIDE RIBBED.  
FASTEN TO SUPPORTS w/ 5/8" DIA.  
PUDDLE WELDS AT 360° WELD PATTERN.  
FASTEN SIDELAPS w/ 1/2" TEK SCREWS -  
2 PER SPAN.

**PRECAST - HIGH WIND SHELTER ROOF:**  
12" PRECAST CONCRETE SLAB w/ 4" TOPPING REINFORCE  
TOPPING w/ 4.0 LBS/CY STRUX 90/40 MACROFIBERS  
(TOP OF TOPPING ELEVATION - SEE ARCH.)  
PRECAST SUPPLIER TO DESIGN PRECAST  
CORRELOR FOR THE FOLLOWING SUPERIMPOSED  
(SERVICE) LOADS IN ADDITION TO TOPPING WEIGHT.  
CONTRACTOR TO GROUT ALL KEYWAYS SOLID  
DL = 28 PSF  
LL = 100 PSF  
THUS: [Diagram showing precast slab and reinforcement]

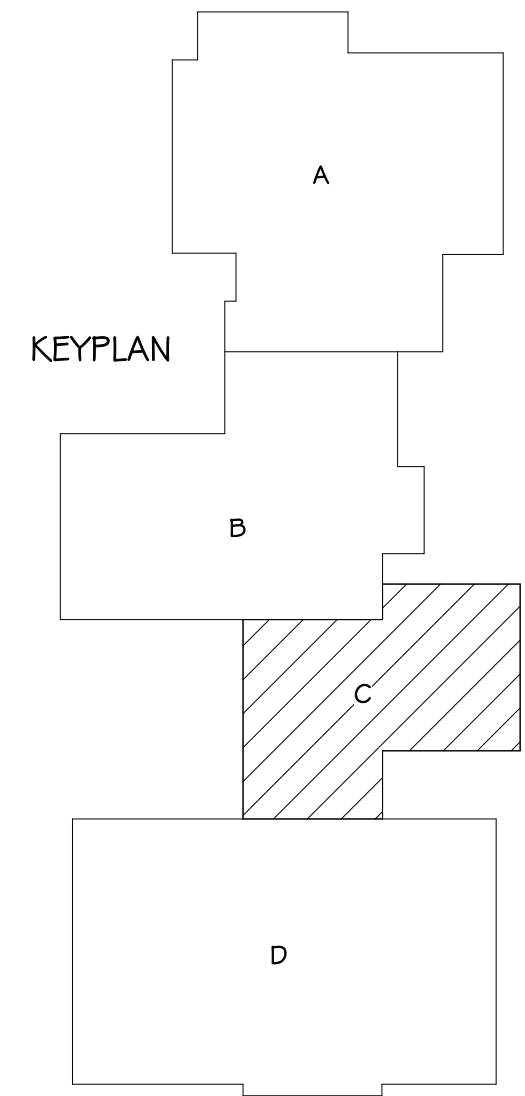
**ROOF DECK:**  
1 1/2" x 22 GA. WIDE RIBBED.  
FASTEN TO SUPPORTS w/ 5/8" DIA.  
PUDDLE WELDS AT 360° WELD PATTERN.  
FASTEN SIDELAPS w/ 1/2" TEK SCREWS -  
2 PER SPAN.  
**NOTE:** SEE ARCH AND REFER  
TO OVERALL ROOF FRAMING  
PLAN - SHEET 3.20 - FOR JOIST  
BEARING ELEVATIONS, TYP.

1 ROOF FRAMING PLAN - AREA C  
3.23 1/8" = 1'-0"

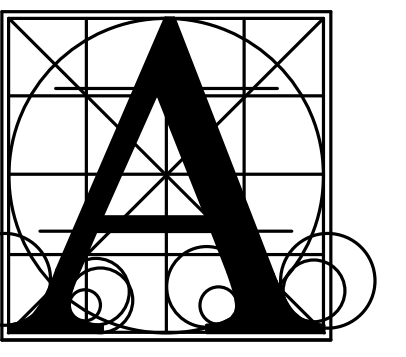
MARK	SIZE	BEARING EACH END (UNO)	NOTES
W1	W8X18	8" BRG.	
H1	(2)800S162-97 (50 KSI) BOX HEADER	(2) BRG STUDS & (3) BYPASS STUDS	
H2	(2)1000S162-97 (50 KSI) BOX HEADER	(2) BRG STUDS & (1) BYPASS STUD	
H3	(2)800S162-68 (50 KSI) BOX HEADER	(1) BRG STUDS & (1) BYPASS STUD	
H4	(2)600S162-54 (50 KSI) BOX HEADER	(1) BRG STUDS & (1) BYPASS STUD	
L1	L6X8X5/16 (LLH)	6" MIN BRG.	
L2	2L3-1/2X3-1/2X1/4	6" MIN BRG.	
L3	2L5X3-1/2X1/4 (LLBB)	6" MIN BRG.	
L4	W8X15	8" BRG.	
L5	W8X21	8" BRG.	
L6	L6X8X5/16	6" MIN BRG.	
L7	HSS8X8X3/8 w/ L8x8x1/2	SEE PLAN	
L8	W16X26	8" BRG.	
L9	L6X8X5/16	6" MIN BRG.	
L10	2L8X4X3/8LLBB	8" BRG.	

- LINTEL AND BEAM NOTES:**
- LINTELS WITH AN \* NEXT TO THEIR MARK IN PLAN, ARE LINTELS OVER MECHANICAL PENETRATIONS. ALL LOCATIONS MAY NOT BE NOTED ON STRUCTURAL PLANS. COORDINATE WITH MECHANICAL.
  - SEE DETAILS 14, 15 AND 16 ON 3.45 AND 1/3.46 FOR LINTEL AND BEAM BEARINGS.
  - ALL BEAMS USED AS LINTELS IN MASONRY WALLS SHALL HAVE A 5/16" LINTEL PLATE. SEE DETAIL 1/3.45 FOR LINTEL PLATE CONFIGURATIONS.
  - LOOSE EXTERIOR BRICK ANGLES ARE TO BEAR 6" MIN. UNO.

- LIGHT GAUGE STEEL HEADER NOTES:**
- ALL HEADERS TO BE UNPUNCHED MATERIAL.
  - WEB STIFFENERS REQUIRED IN ALL HEADER PIECES AT BEARING OF ALL STEEL STUD HEADERS. PROVIDE EACH END OF HEADER.
  - ALL INTERIOR LOAD BEARING STEEL STUDS SHALL BE 50 KSI 6"x16 GA CSJ AT 16" oc BY CLARKDIETRICH OR APPROVED EQUAL. PROVIDE (2) BEARING STUDS DIRECTLY BELOW EACH JOIST/BEAM BEARING. UNO
  - HEADERS WITH AN \* NEXT TO THEIR MARK IN PLAN, ARE LINTELS OVER MECHANICAL PENETRATIONS. COORDINATE WITH MECHANICAL.
  - SEE DETAILS 6 AND 10 ON 3.65 FOR TYPICAL HEADER CONSTRUCTION.
  - PROVIDE BEARING CONDITION LISTED IN SCHEDULE UNLESS NOTED OTHERWISE ON PLAN.



number	SEA Job. No. AI 230600
date	07/01/2024
revision	
drawn	RDM checked Checker
MARK DATE DESCRIPTION	
AD 2 7/26/2024	ADDENDA 2



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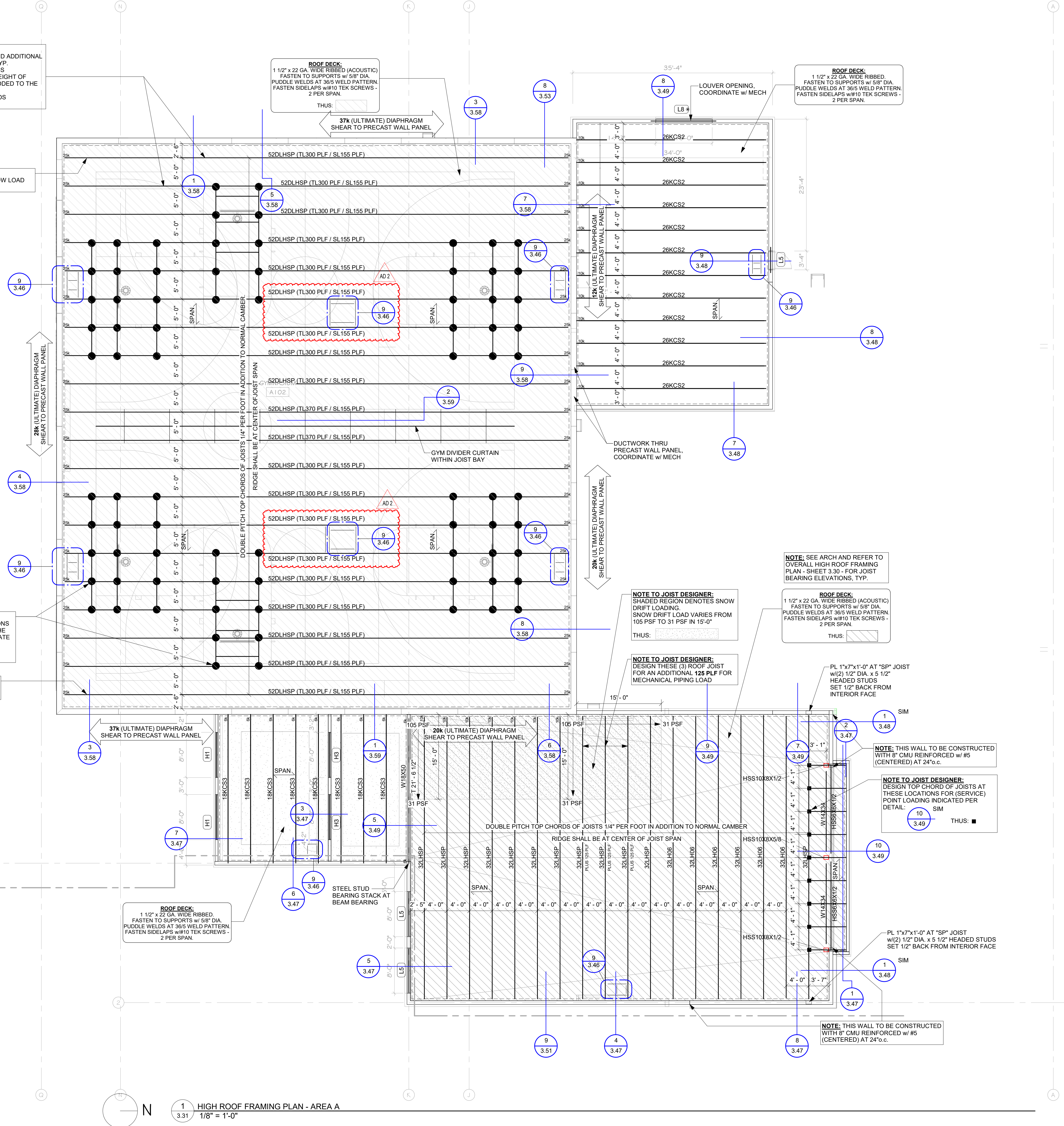


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HEADER AND LINTEL SCHEDULE			
MARK	SIZE	BEARING EACH END (UNO)	NOTES
	W8x18		
H1	(2)800S162-97 (50 KSI) BOX HEADER	(2) BRG STUDS & (3) BYPASS STUDS	
H2	(2)1000S162-97 (50 KSI) BOX HEADER	(2) BRG STUDS & (1) BYPASS STUD	
H3	(2)800S162-68 (50 KSI) BOX HEADER	(1) BRG STUDS & (1) BYPASS STUD	
H4	(2)600S162-54 (50 KSI) BOX HEADER	(1) BRG STUDS & (1) BYPASS STUD	
L1	L6X4X5/16 (LLH)	6" MIN BRG.	
L2	2L3-1/2X3-1/2X1/4	6" MIN BRG.	
L3	2L5X3-1/2X1/4 (LLBB)	6" MIN BRG.	
L4	W8x15	8" BRG.	
L5	W8x21	8" BRG.	
L6	L5X5X5/16	6" MIN BRG.	
L7	HSS8X8X3/8 w/ L8x8x1/2	SEE PLAN	
L8	W16x26	8" BRG.	
L9	L6X6X5/16	6" MIN BRG.	
L10	2L8X4X5/8LLBB	8" BRG.	

- LINTEL AND BEAM NOTES:**
1. LINTELS WITH AN \* NEXT TO THEIR MARK IN PLAN, ARE LINTELS OVER MECHANICAL PENETRATIONS. ALL LOCATIONS MAY NOT BE NOTED ON STRUCTURAL PLANS. COORDINATE WITH MECHANICAL.
  2. SEE DETAILS 14, 15 AND 16 ON 3.45 AND 1/3.46 FOR LINTEL AND BEAM BEARINGS.
  3. ALL BEAMS USED AS LINTELS IN MASONRY WALLS SHALL HAVE A 5/16" LINTEL PLATE. SEE DETAIL 13/3.45 FOR LINTEL PLATE CONFIGURATIONS.
  4. LOOSE EXTERIOR BRICK ANGLES ARE TO BEAR 6" MIN. UNO.
- LIGHT GAUGE STEEL HEADER NOTES:**
1. ALL HEADERS TO BE UNPUNCHED MATERIAL.
  2. WEB STIFFENERS REQUIRED IN ALL HEADER PIECES AT BEARING OF ALL STEEL STUD HEADERS. PROVIDE EACH END OF HEADER.
  3. ALL INTERIOR LOAD BEARING STEEL STUDS SHALL BE 50 KSI 6"x16 GA CSJ AT 16" oc BY CLARK/ETRI/CH OR APPROVED EQUAL. PROVIDE (2) BEARING STUDS DIRECTLY BELOW EACH JOIST BEAM BEARING. UNO
  4. HEADERS WITH AN \* NEXT TO THEIR MARK IN PLAN, ARE LINTELS OVER MECHANICAL PENETRATIONS. COORDINATE WITH MECHANICAL.
  5. SEE DETAILS 6 AND 10 ON 3.65 FOR TYPICAL HEADER CONSTRUCTION.
  6. PROVIDE BEARING CONDITION LISTED IN SCHEDULE UNLESS NOTED OTHERWISE ON PLAN.



**SP JOIST LOADING:**  
DESIGN FOR SERVICE LOADS INDICATED AND ADDITIONAL SERVICE LEVEL POINT LOADS INDICATED. TYP. TL-TOTAL LOAD (SERVICE LEVEL) IN POUNDS PER LINEAR FOOT. NOT INCLUDING SELF WEIGHT OF JOISTS. SELF WEIGHT OF JOIST MUST BE ADDED TO THE TOTAL LOAD IN FINAL DESIGN. SL-SNOW LOAD (SERVICE LEVEL) IN POUNDS PER LINEAR FOOT (TYPICAL)

**NOTE TO JOIST DESIGNER:**  
AT JOIST ADJACENT TO WALL PROVIDE SNOW LOAD DEFLECTION LIMIT OF SPAN/720

**LOADING FOR SP JOISTS**  
TOTAL LOAD (TL) 300 PLF NOT INCLUDING JOIST SELF WEIGHT SNOW LOAD (SL) 155 PLF PLUS ADDITIONAL LOADS AS NOTED MAX TOTAL LOAD DEFLECTION L/240 MAX SNOW LOAD DEFLECTION L/360 UNLESS NOTED OTHERWISE

**LOADING FOR SP JOISTS**  
TOTAL LOAD (TL) 300 PLF NOT INCLUDING JOIST SELF WEIGHT SNOW LOAD (SL) 155 PLF PLUS ADDITIONAL LOADS AS NOTED MAX TOTAL LOAD DEFLECTION L/240 MAX SNOW LOAD DEFLECTION L/360 UNLESS NOTED OTHERWISE

**MECHANICAL DUCTS PERPENDICULAR TO JOISTS BETWEEN JOIST WEBS:**  
-WEB MEMBERS SHALL ALIGN

**MECHANICAL DUCTS PARALLEL TO JOISTS BETWEEN JOISTS:**  
-JOISTS SUPPLIER TO PROVIDE HORIZONTAL BRIDGING ONLY AT THOSE LOCATIONS.

GENERAL CONTRACTOR TO COORDINATE EXACT SIZE AND LOCATIONS OF MECHANICAL DUCTS

**NOTE TO JOIST DESIGNER:**  
DESIGN BOTTOM CHORD OF JOISTS AT THESE LOCATIONS FOR 500 LBS (SERVICE) LIVE LOAD FOR SUPPORT OF THE BASKETBALL EQUIPMENT. CONTRACTOR TO COORDINATE EXACT LOCATIONS WITH THE EQUIPMENT SUPPLIER.

**NOTE TO JOIST DESIGNER:**  
AT JOIST ADJACENT TO WALL PROVIDE SNOW LOAD DEFLECTION LIMIT OF SPAN/720

**NOTE TO JOIST DESIGNER:**  
SHADED REGION DENOTES SNOW DRIFT LOADINGS. SNOW DRIFT LOAD VARIES FROM 105 PSF TO 31 PSF IN 15'-0" THUS: [diagram showing snow drift loading pattern]

**NOTE:** SEE ARCH AND REFER TO OVERALL HIGH ROOF FRAMING PLAN - SHEET 3.30, FOR JOIST BEARING ELEVATIONS, TYP.

**ROOF DECK:**  
1 1/2" x 22 GA. WIDE RIBBED (ACOUSTIC) FASTEN TO SUPPORTS w/ 5/8" DIA. PUDDLE WELDS AT 36" WELD PATTERN. FASTEN SIDELAPS w/ #10 TEK SCREWS - 2 PER SPAN. THUS: [diagram showing roof deck fastening]

**NOTE TO JOIST DESIGNER:**  
DESIGN THESE (3) ROOF JOIST FOR AN ADDITIONAL 125 PLF FOR MECHANICAL PIPING LOAD

PL 1"x7"x1'-0" AT "SP" JOIST FOR AN ADDITIONAL 125 PLF HEADED STUDS SET 1/2" BACK FROM INTERIOR FACE

**NOTE:** THIS WALL TO BE CONSTRUCTED WITH 8" CMU REINFORCED w/ #5 (CENTERED) AT 24" o.c.

**NOTE TO JOIST DESIGNER:**  
DESIGN TOP CHORD OF JOISTS AT THESE LOCATIONS FOR (SERVICE) POINT LOADING INDICATED PER DETAIL: [diagram showing point loading locations]

PL 1"x7"x1'-0" AT "SP" JOIST w/ (2) 1/2" DIA. x 5' 10" HEADED STUDS SET 1/2" BACK FROM INTERIOR FACE

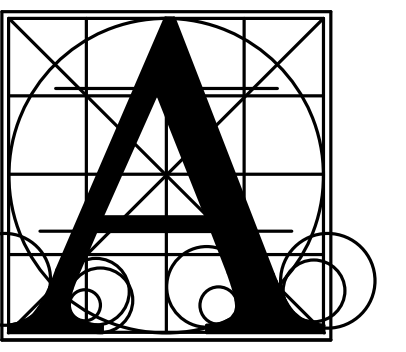
**NOTE:** THIS WALL TO BE CONSTRUCTED WITH 8" CMU REINFORCED w/ #5 (CENTERED) AT 24" o.c.

7/25/2024 3:26:16 PM

1 HIGH ROOF FRAMING PLAN - AREA A  
1/8" = 1'-0"

# BRANDON VALLEY ELEMENTARY SCHOOL HIGH ROOF FRAMING PLAN - AREA A

Project	SEA Job. No. AI 230600
number	07/01/2024
date	
revision	
drawn	RDM checked MAS
MARK DATE DESCRIPTION	
AD 2 7/26/2024	ADDENDA 2



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STRUCTURAL ENGINEERING ASSOCIATES  
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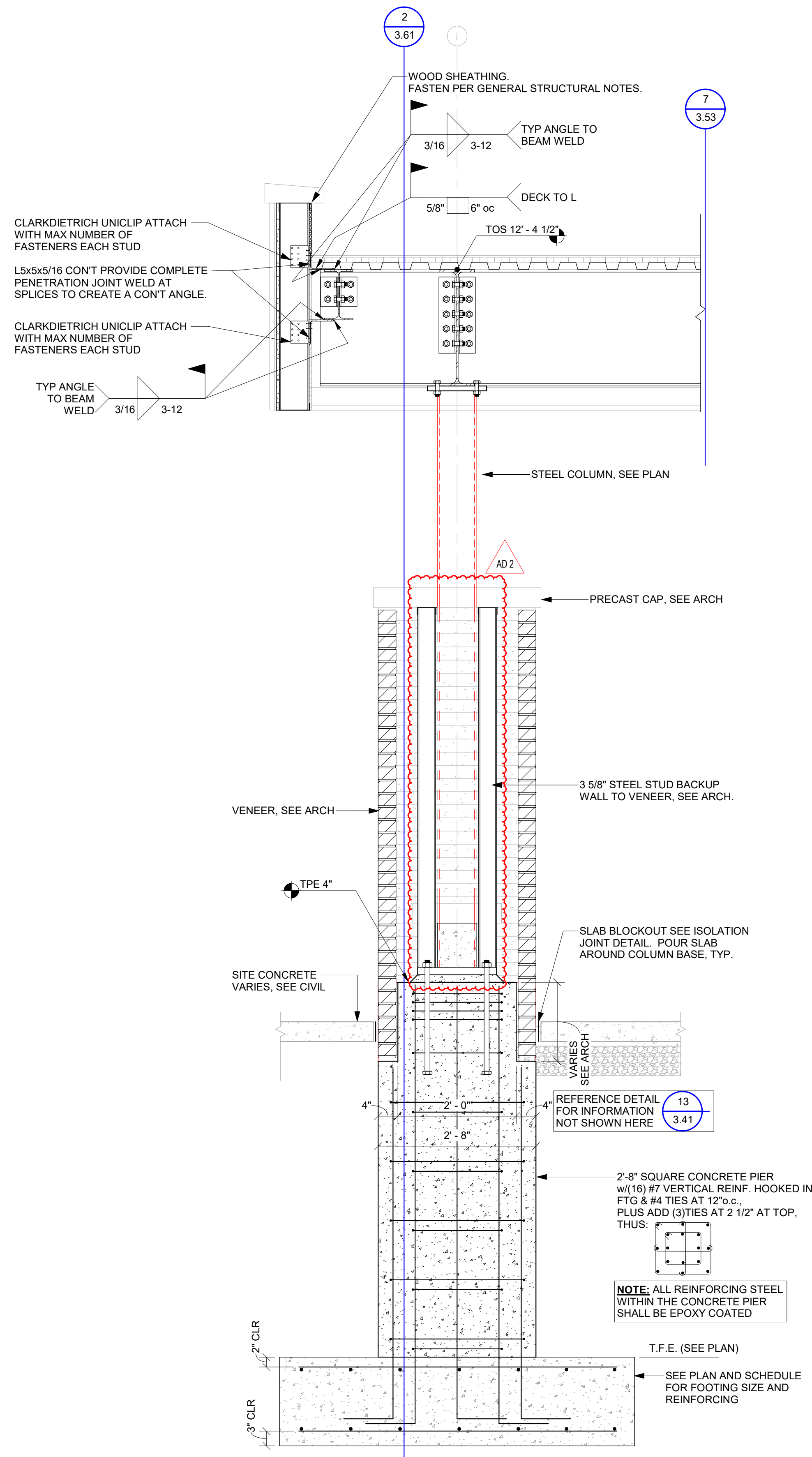


# BRANDON VALLEY ELEMENTARY SCHOOL

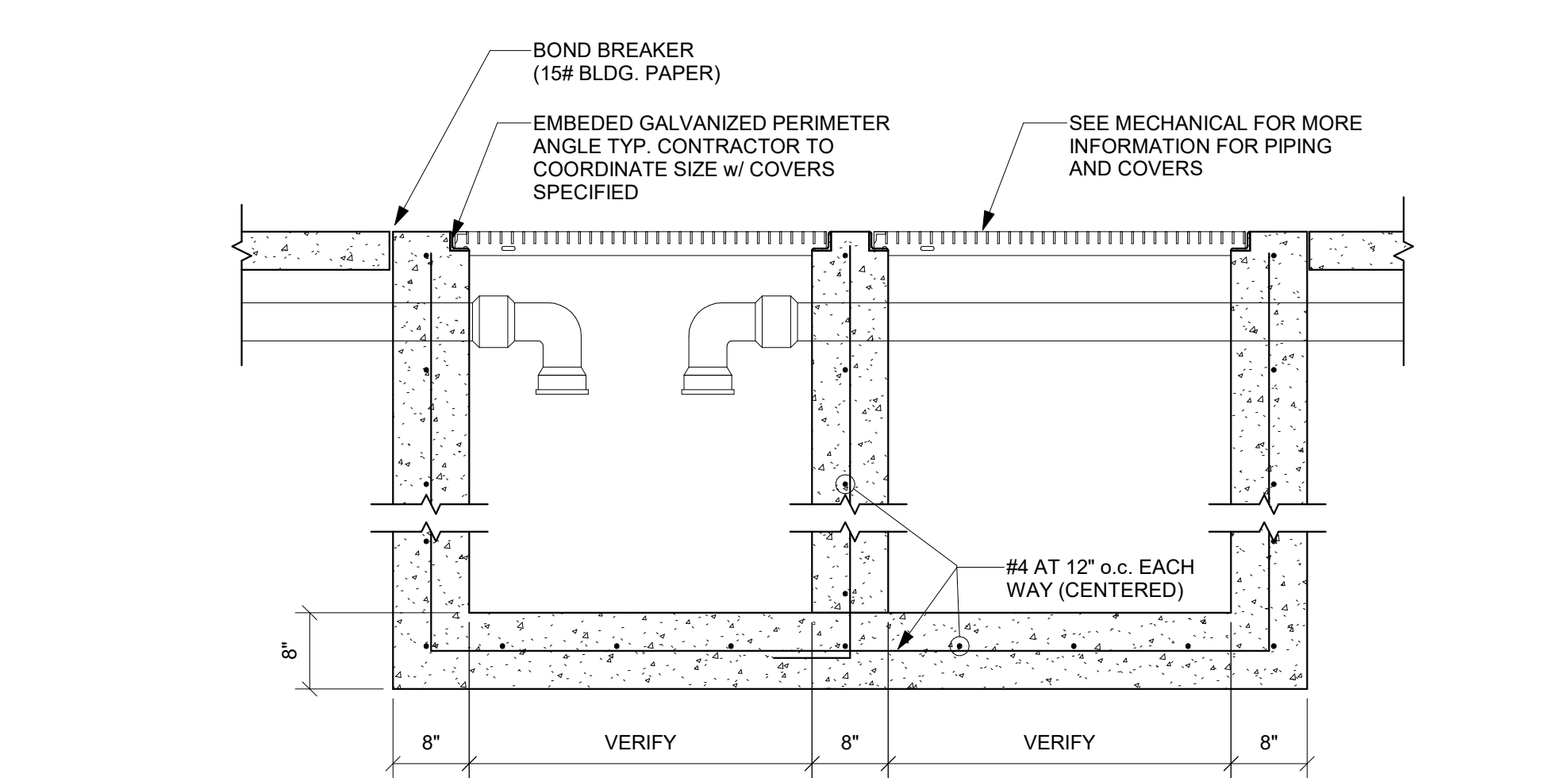
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Project	number	SEA Job. No. AI 230600
	date	07/01/2024
	revision	
	drawn	RDM checked Checker
	MARK DATE DESCRIPTION	
	AD 2 7/26/2024 ADDENDA 2	

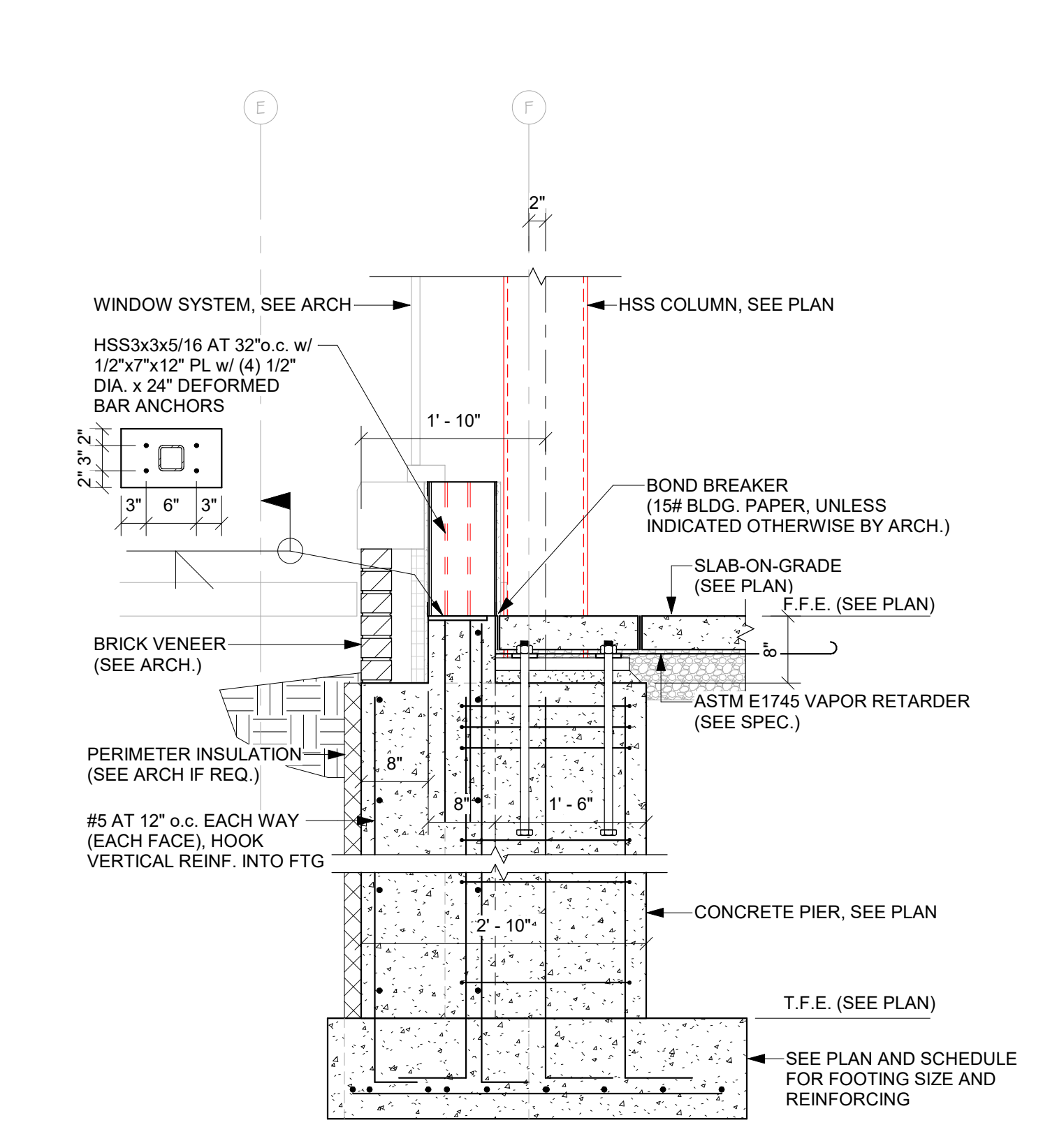
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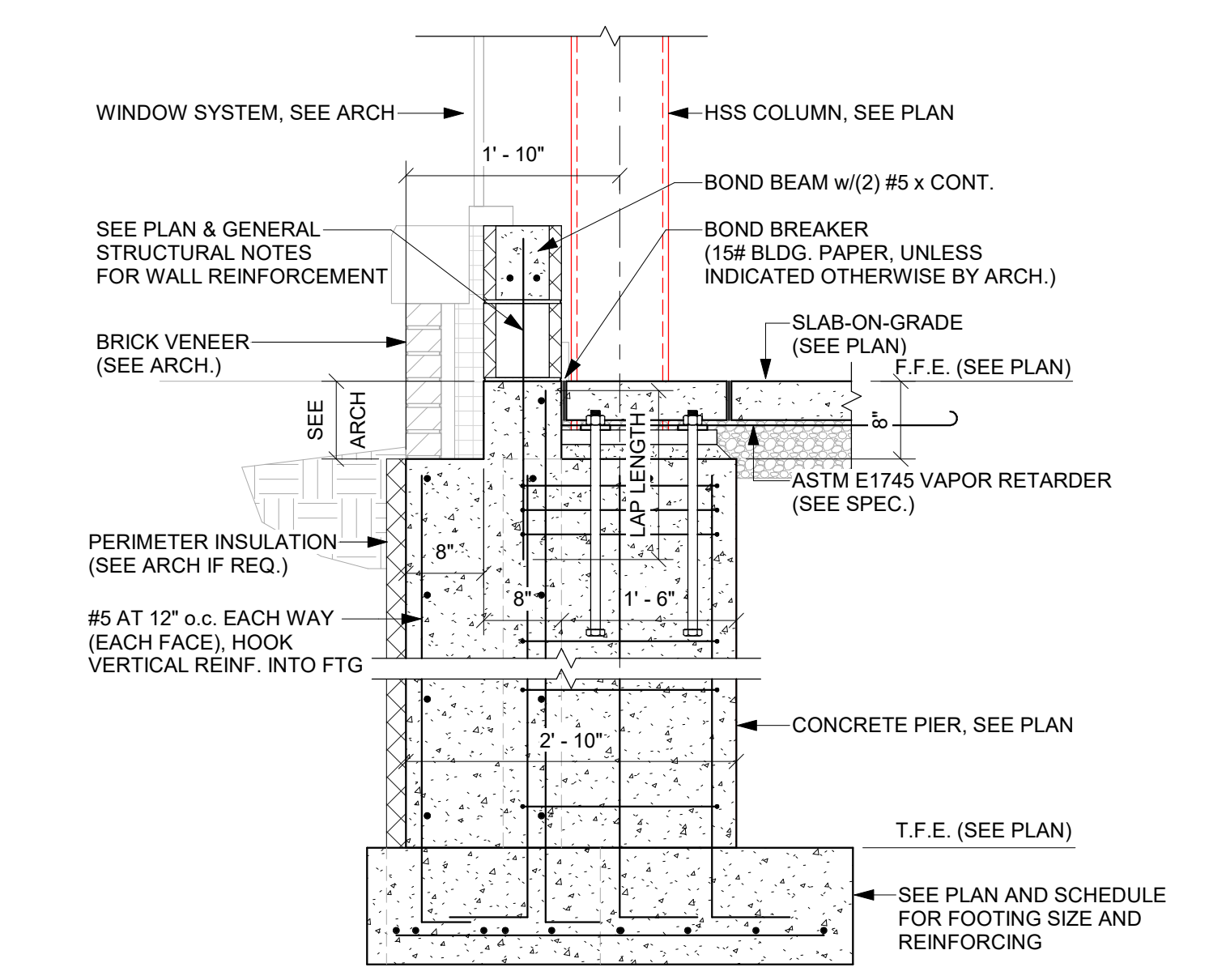
1 CANOPY PIER AND COLUMN FRAMING DETAIL  
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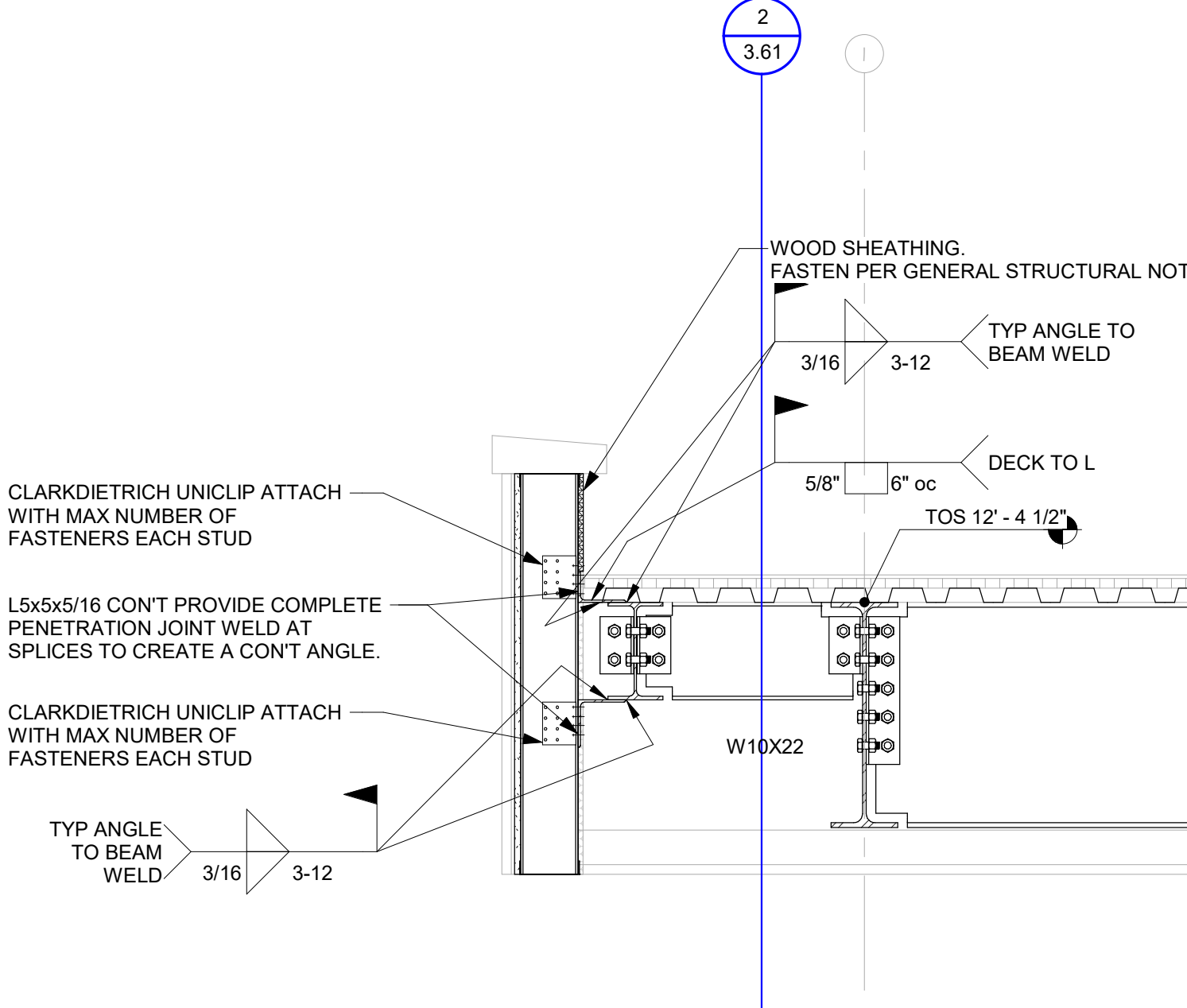
2 TYPICAL OIL SAND INTERCEPTOR DETAIL  
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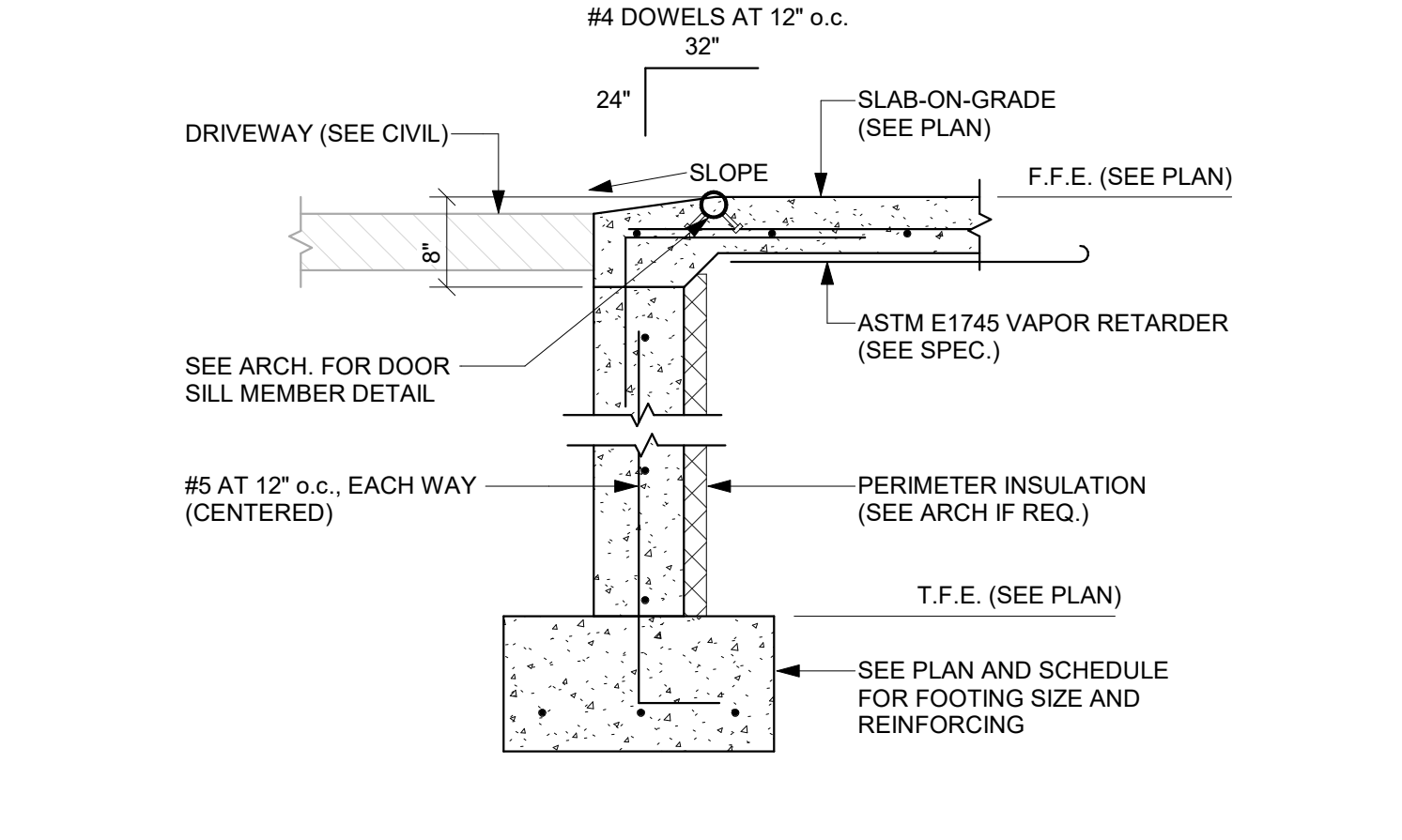
3 TYP COLUMN PIER DETAIL AT EXTERIOR  
3.43 NTS



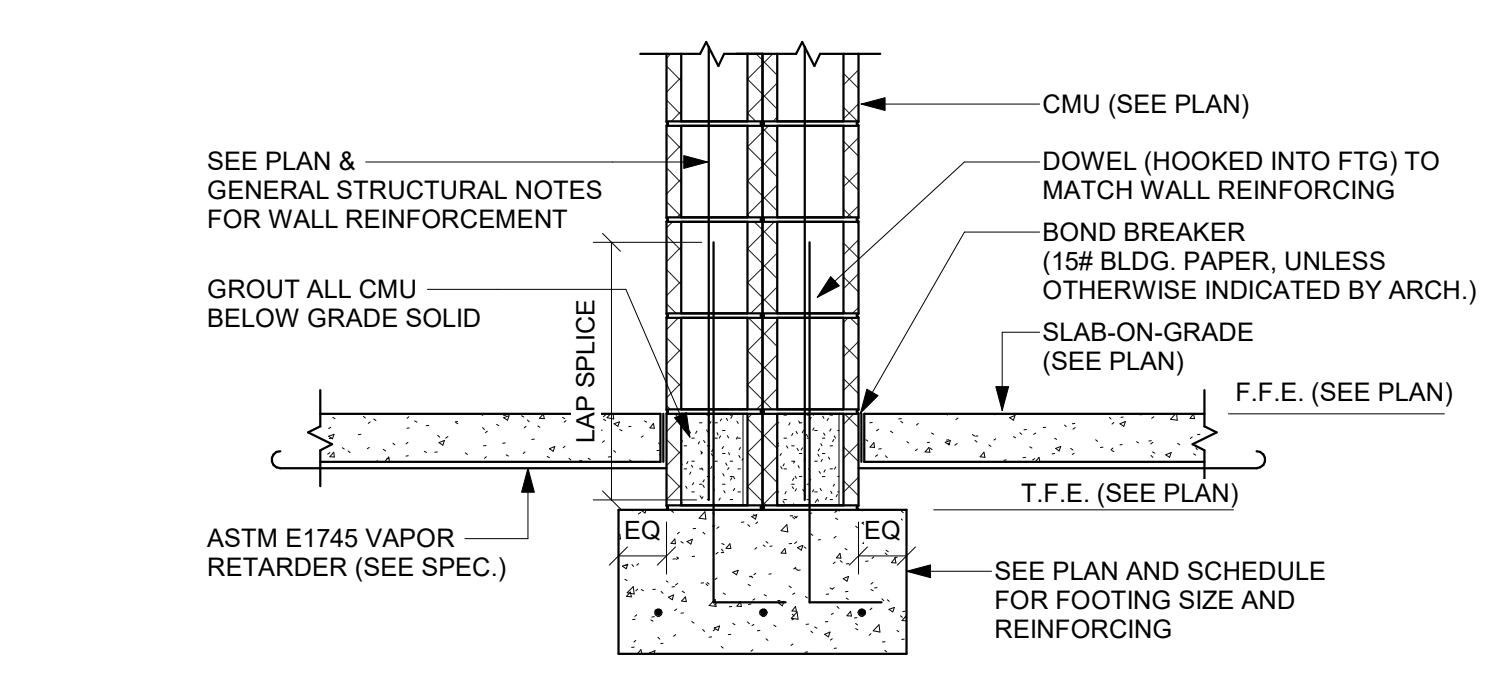
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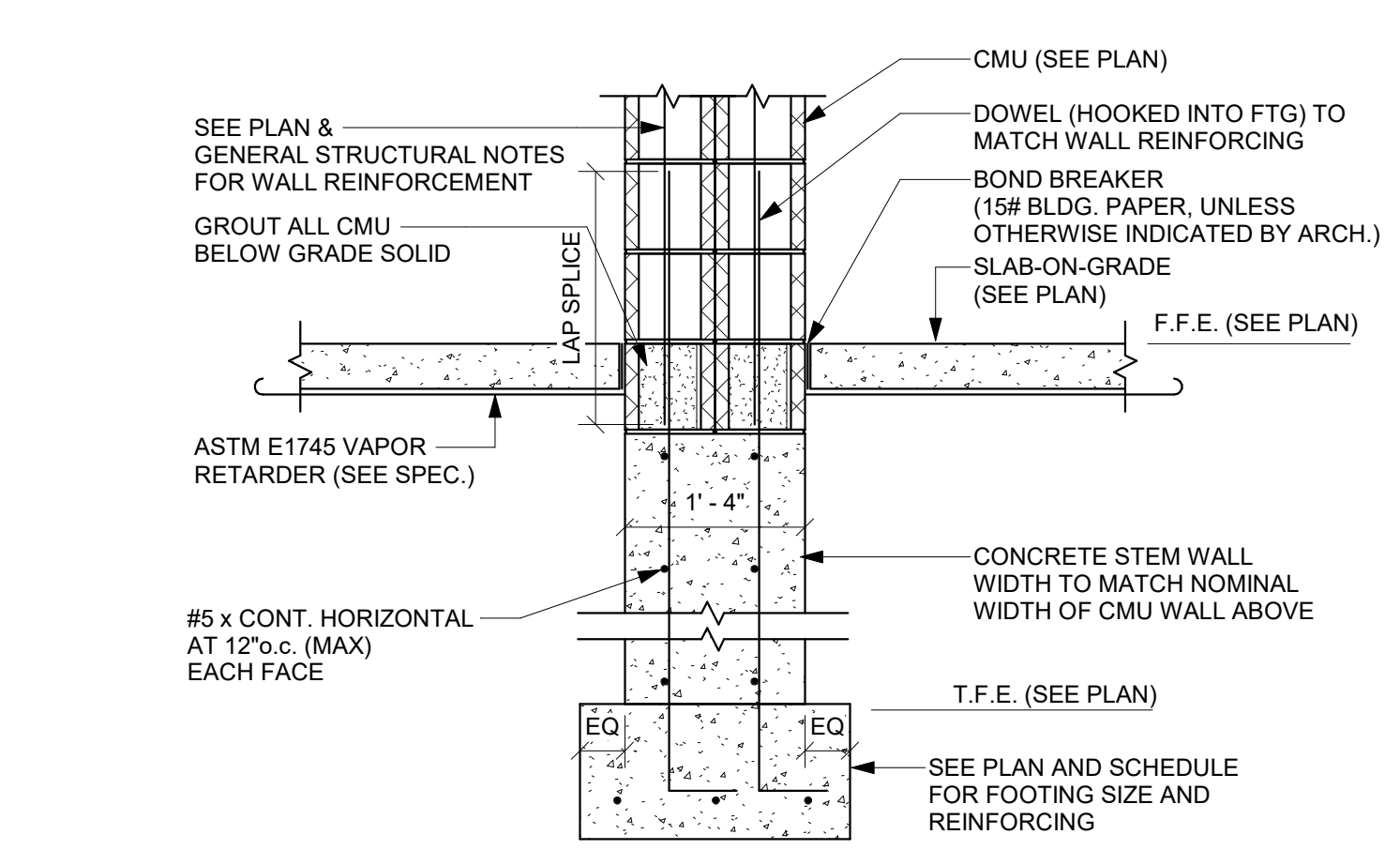
5 CANOPY FRAMING DETAIL  
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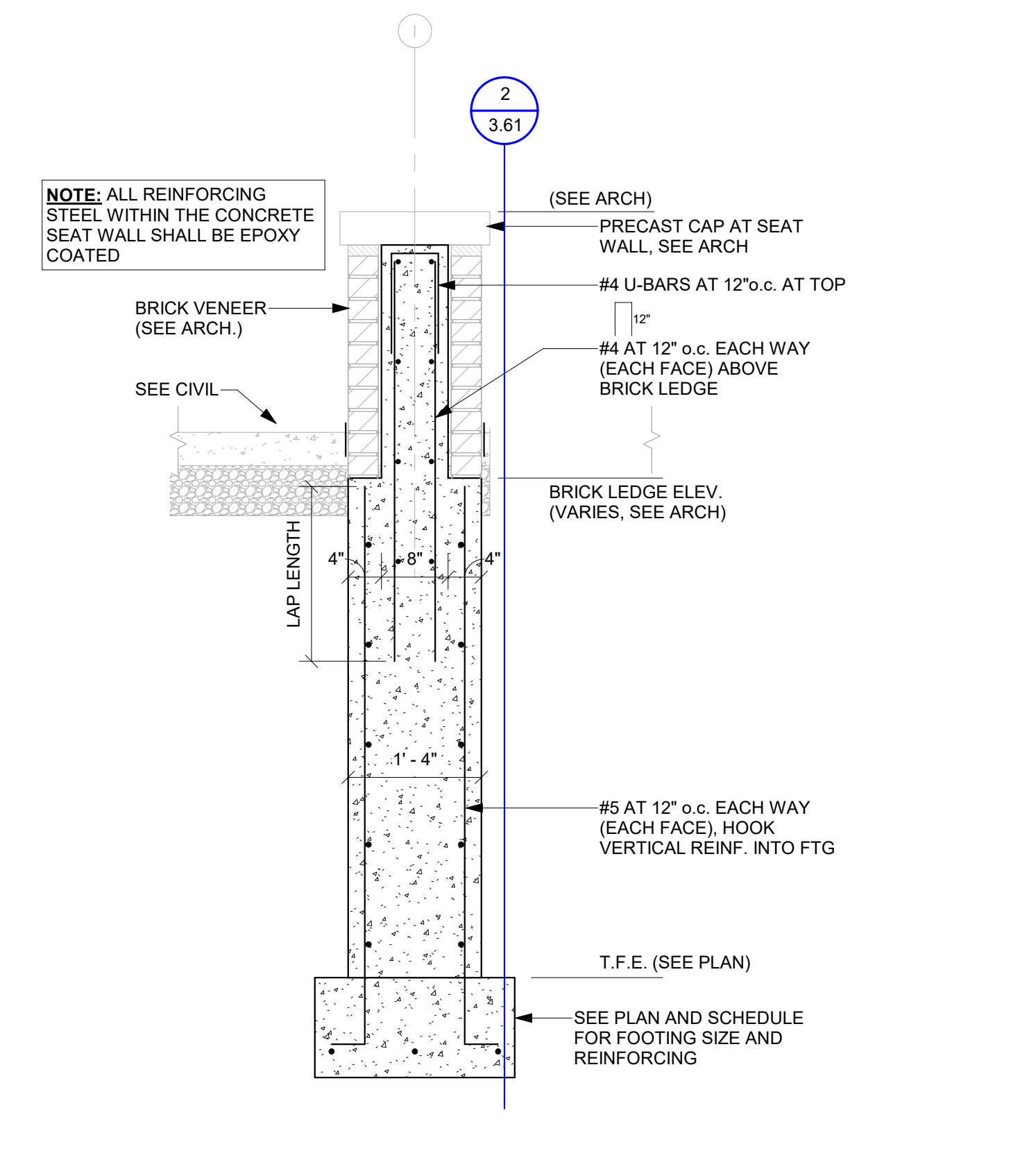
6 SLAB DETAIL AT OVERHEAD DOOR  
3.43 NTS



7 INTERIOR CMU FOUNDATION  
3.43 NTS



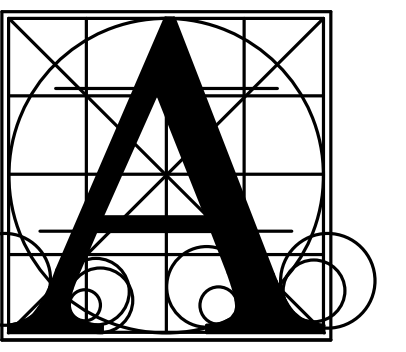
8 INTERIOR CMU FOUNDATION AT FOOTING STEP  
3.43 NTS



9 TYP SEAT WALL FOUNDATION  
3.43 NTS

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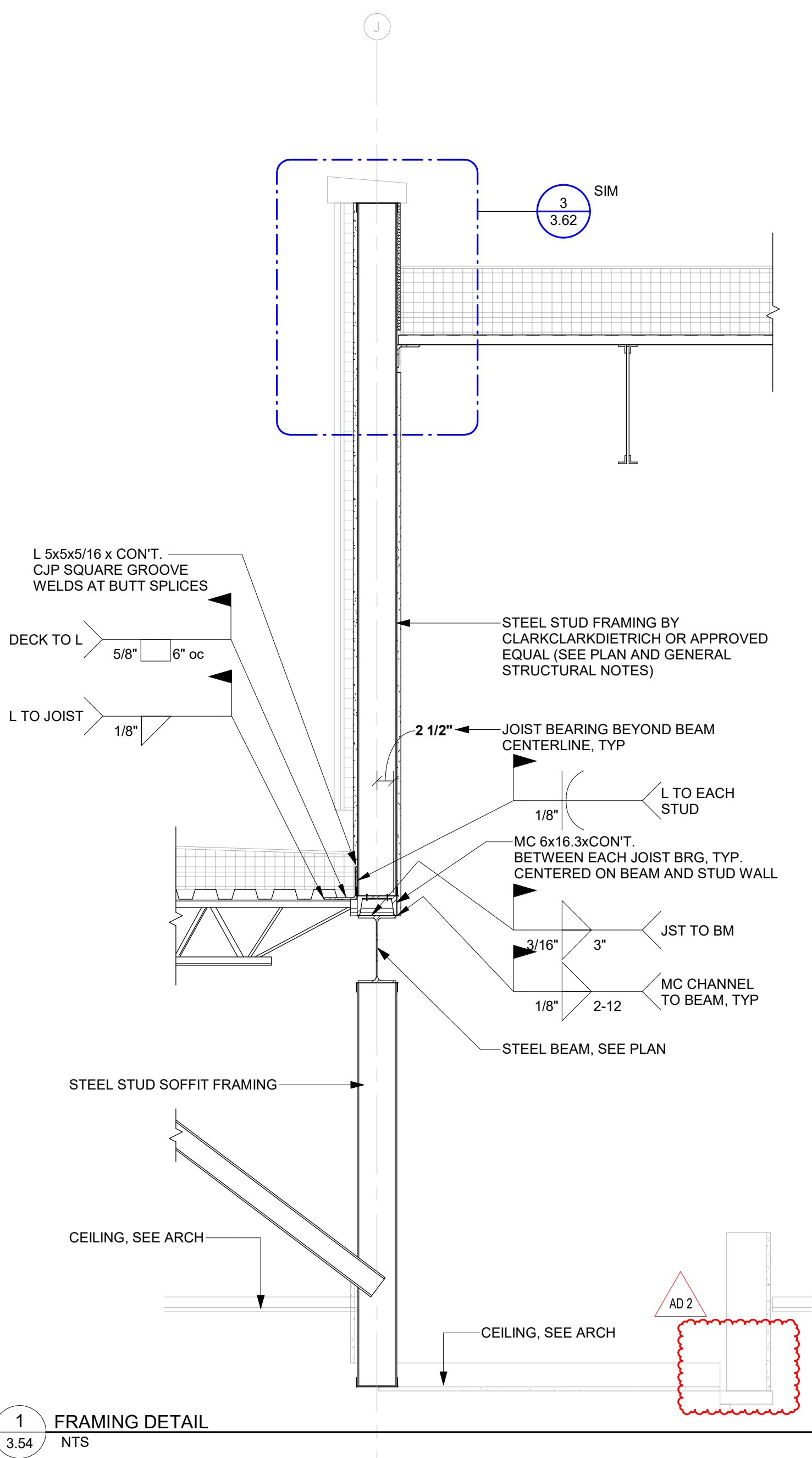
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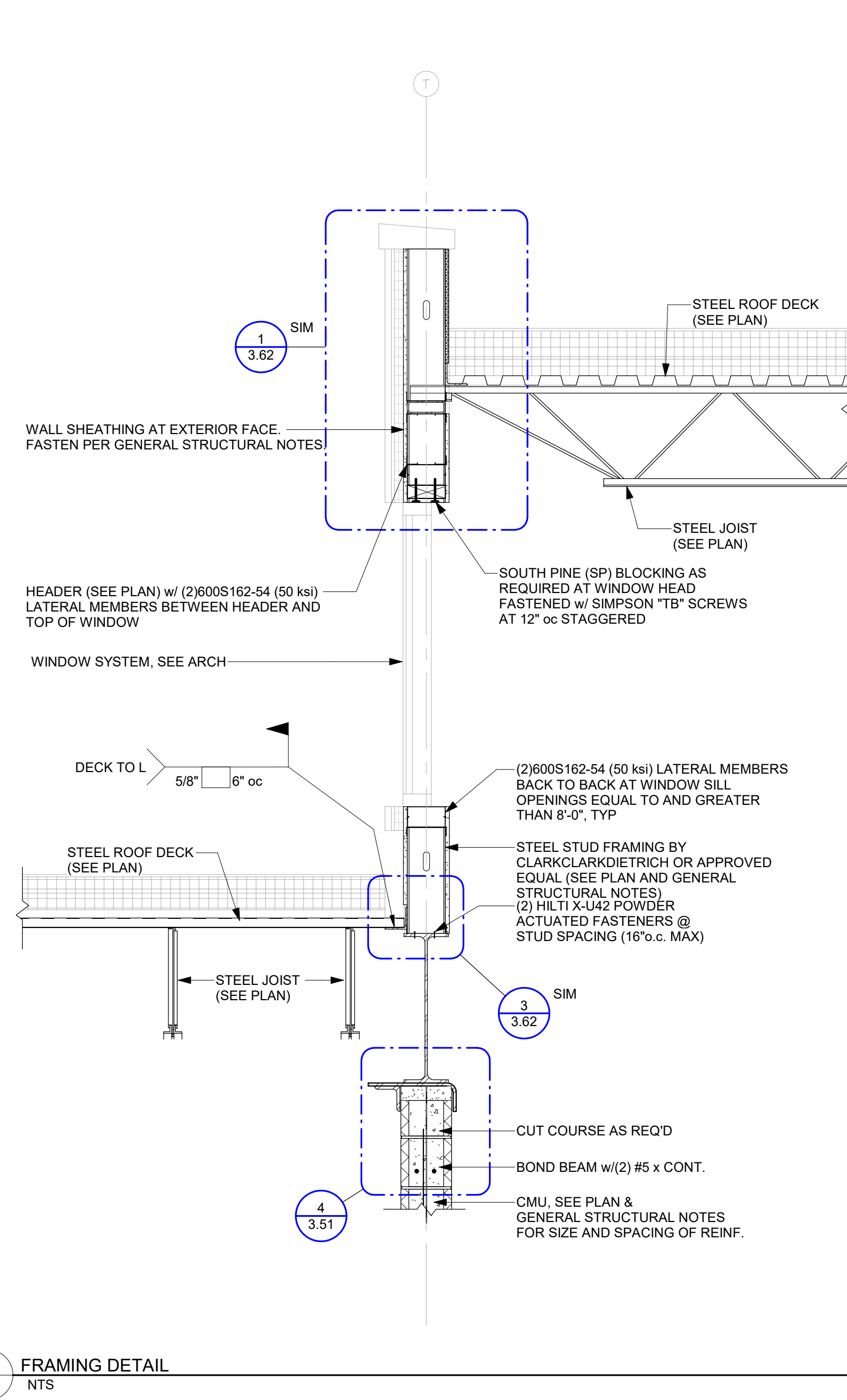
BRANDON VALLEY ELEMENTARY SCHOOL  
STRUCTURAL DETAILS

Project	number	SEA Job. No. AI 230600
	date	07/01/2024
	revision	
	drawn	RDM checked MAS
	MARK DATE DESCRIPTION	
	AD 2 7/26/2024	ADDENDA 2

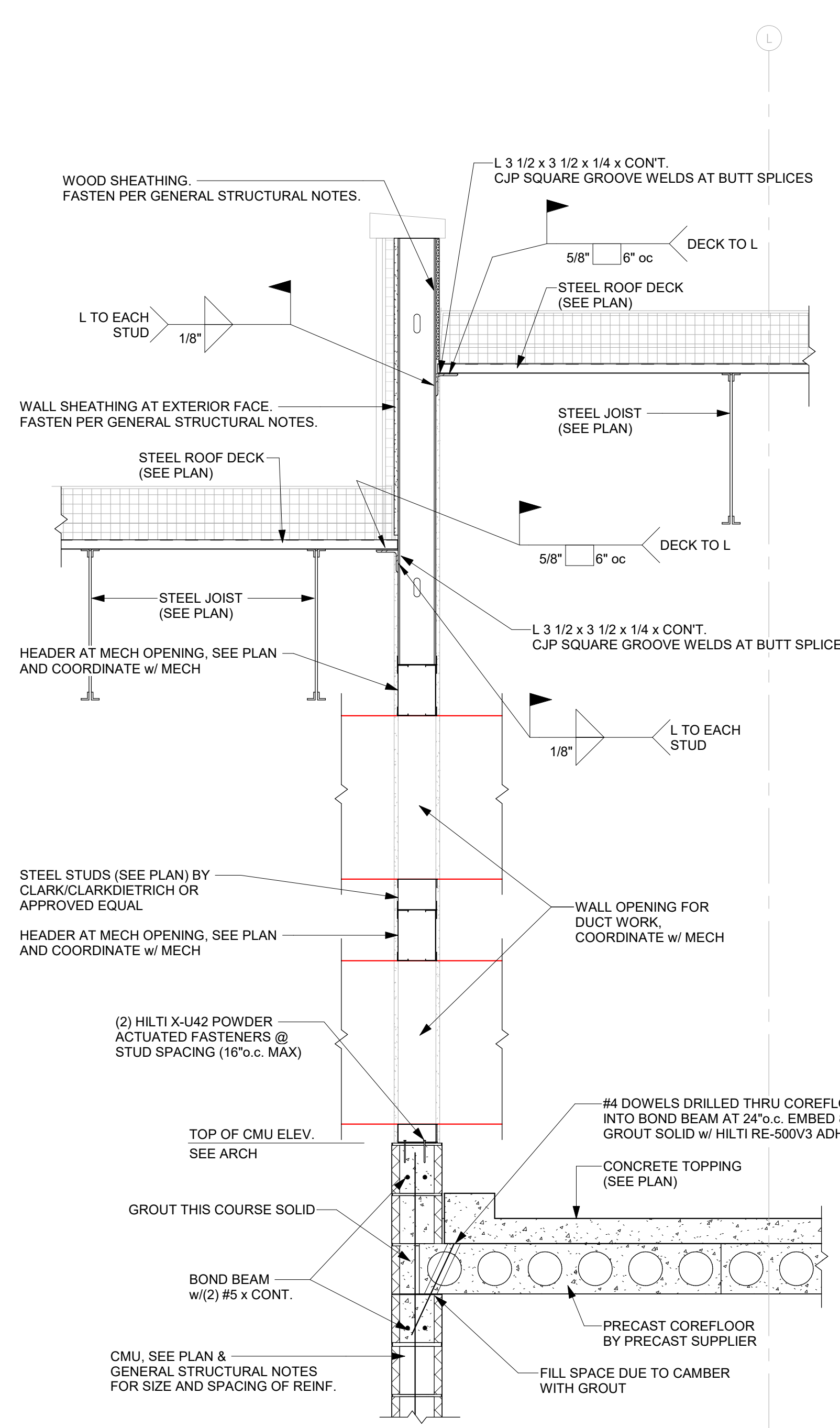
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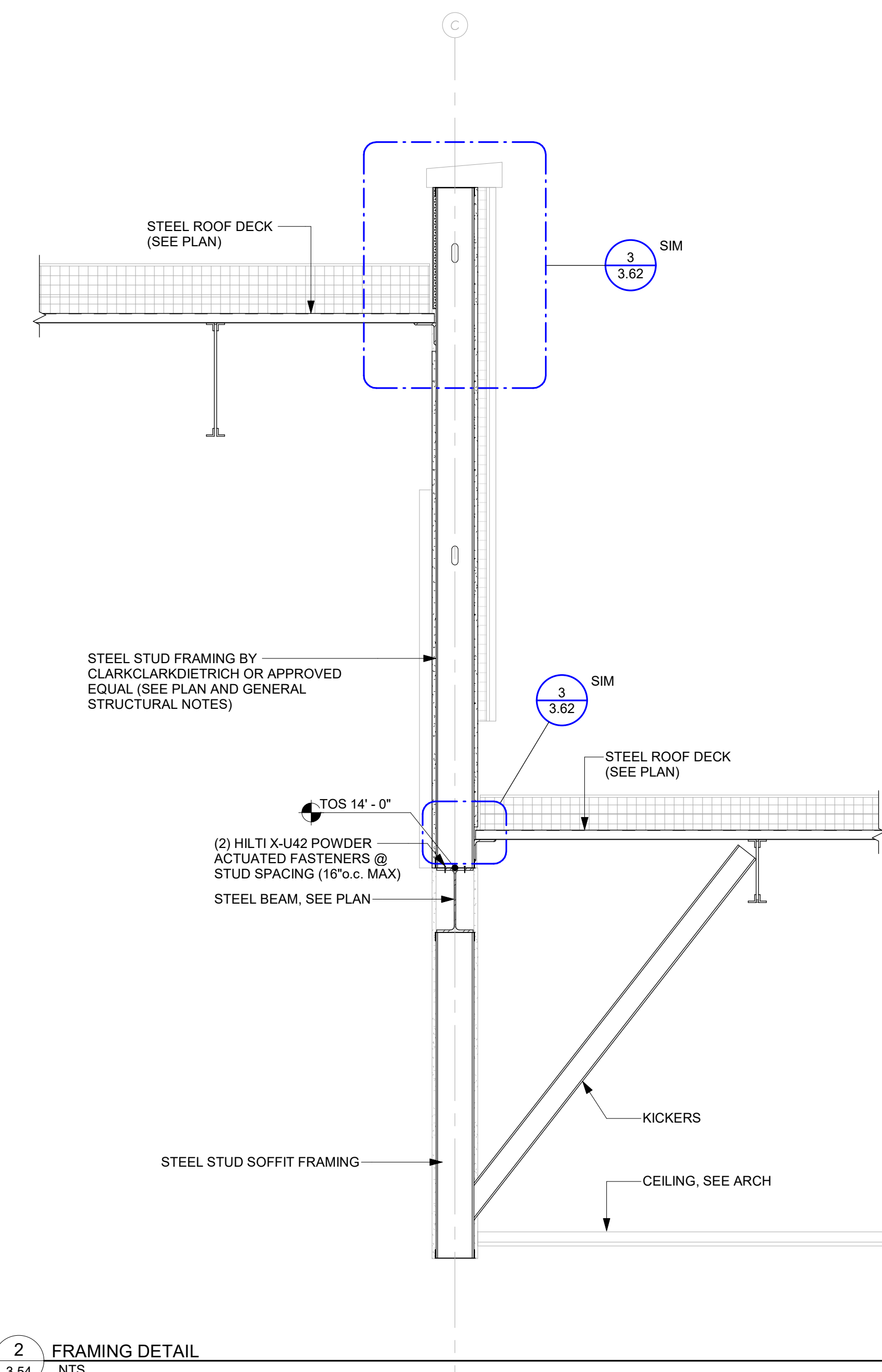
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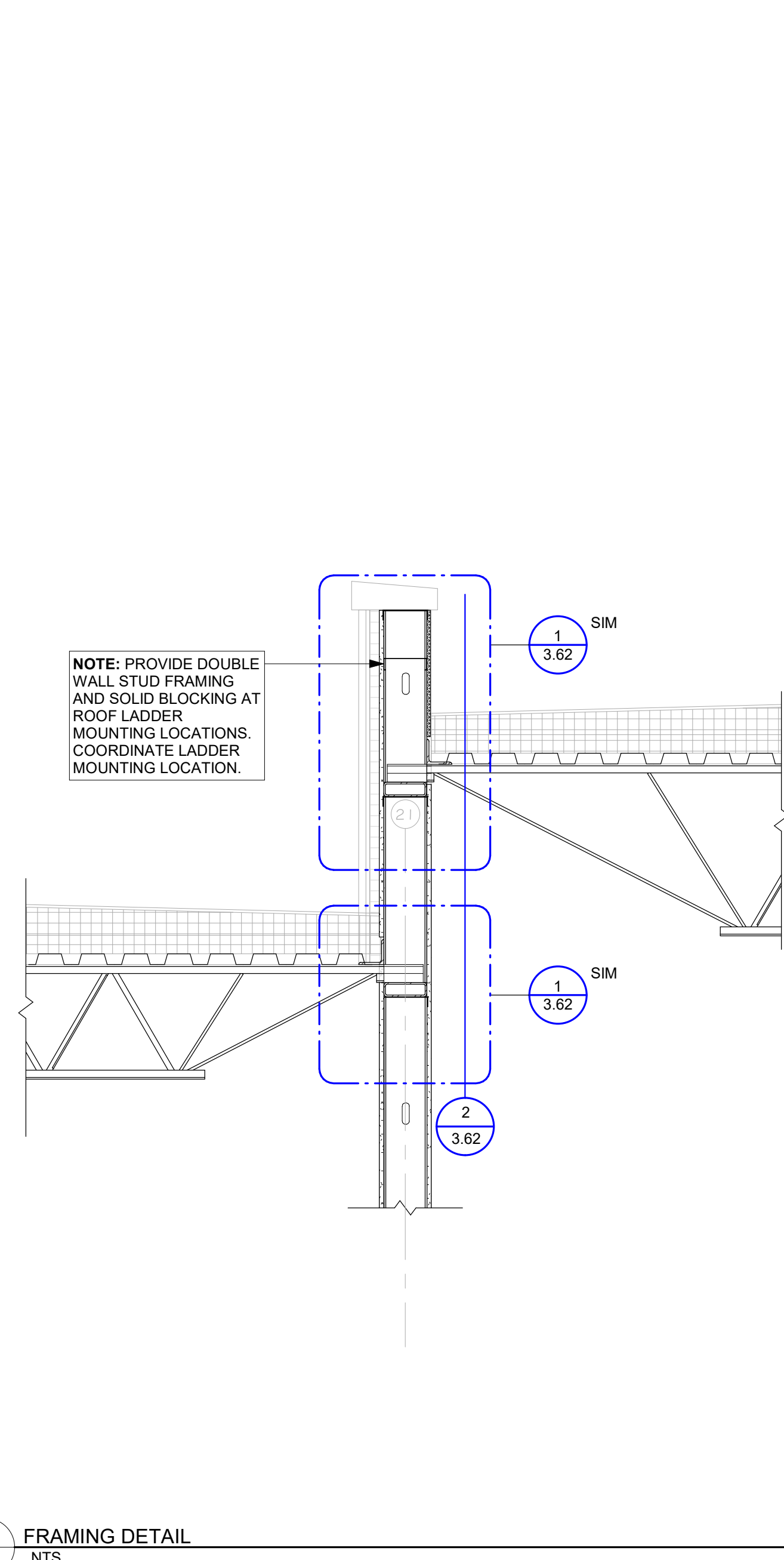
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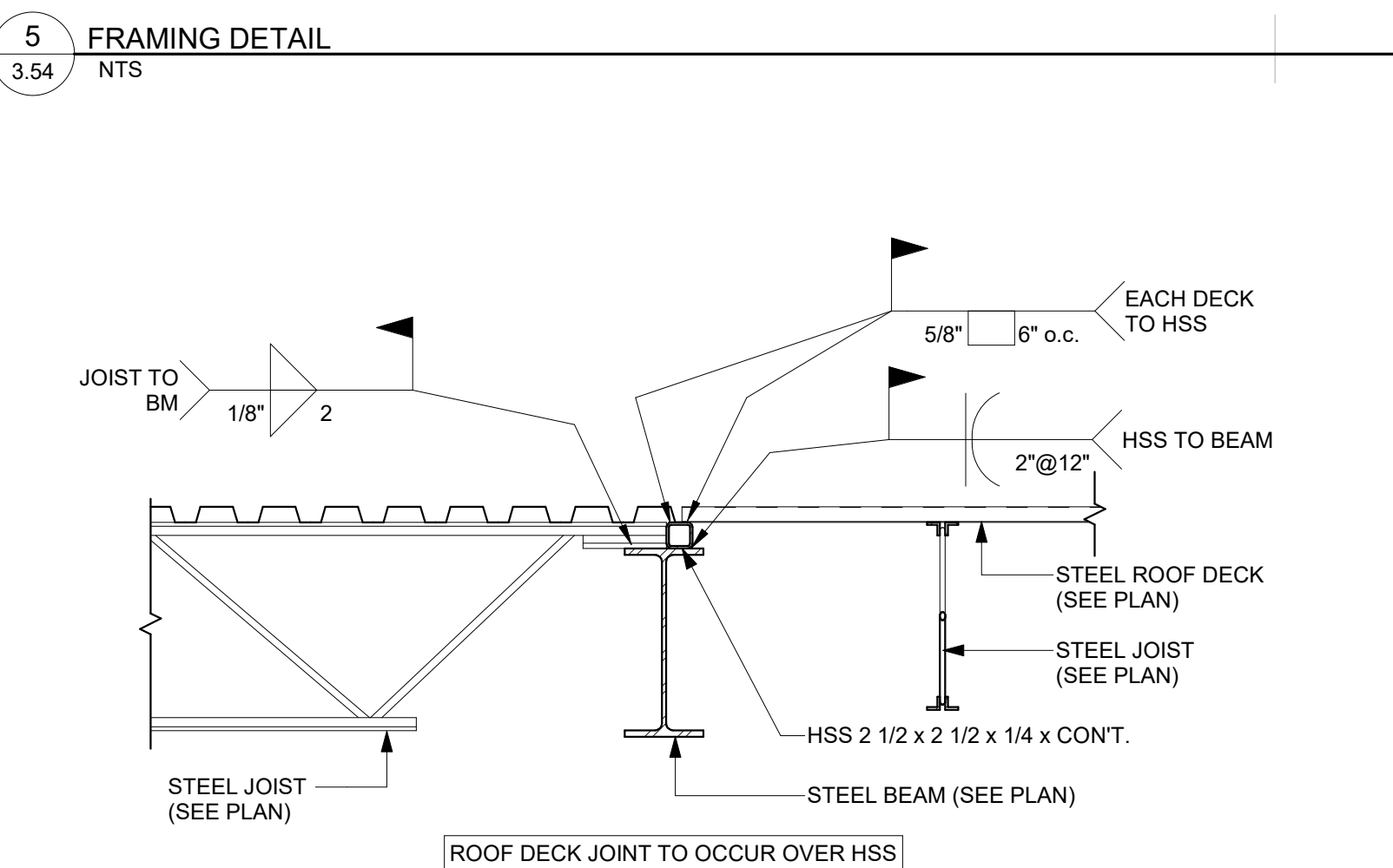
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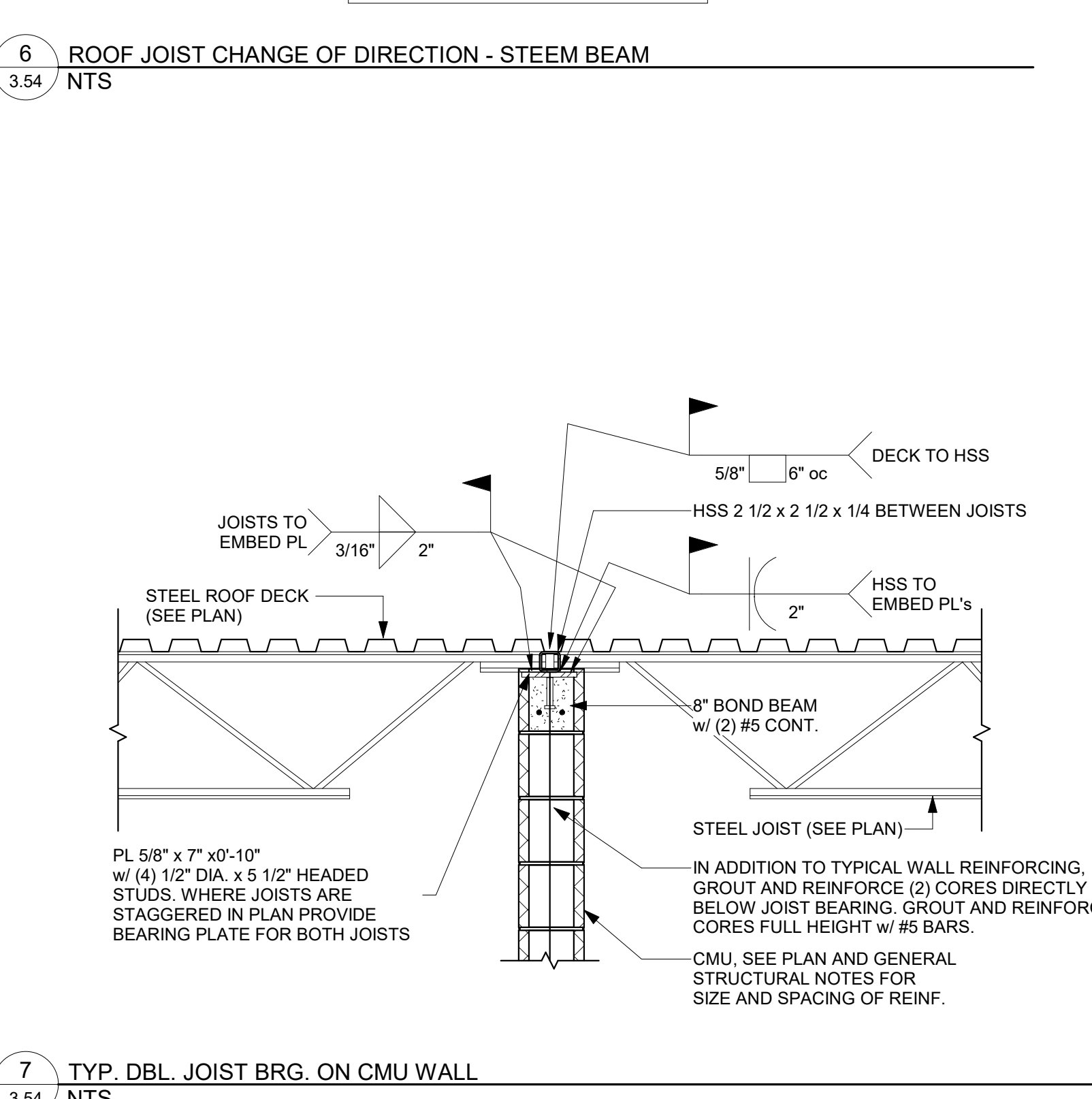
2 FRAMING DETAIL  
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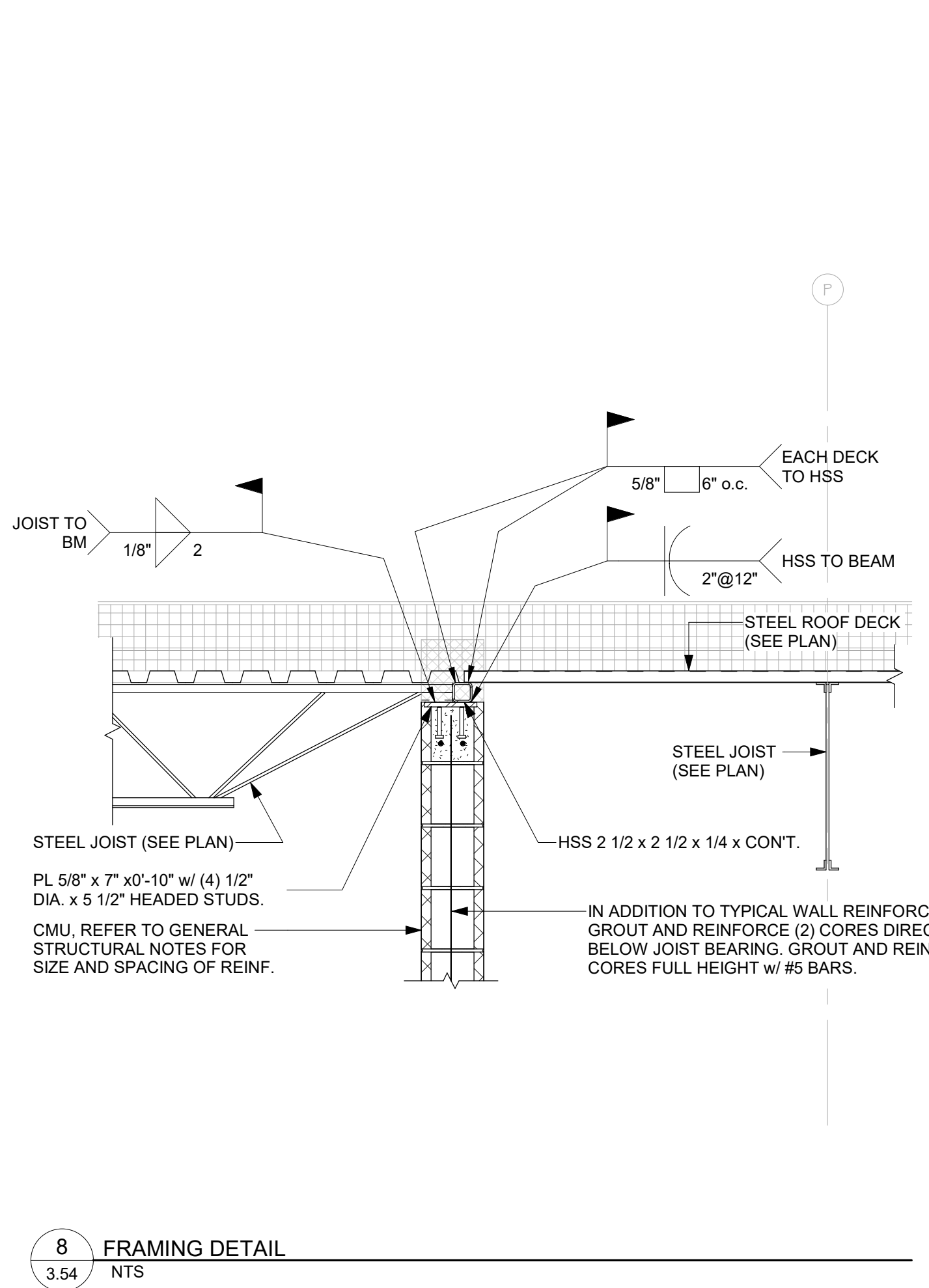
4 FRAMING DETAIL  
3.54 NTS



6 ROOF JOIST CHANGE OF DIRECTION - STEEM BEAM  
3.54 NTS



7 TYP. DBL. JOIST BRG. ON CMU WALL  
3.54 NTS

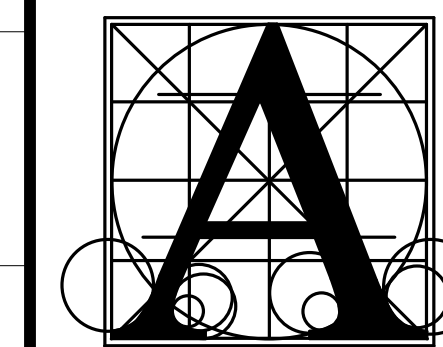


8 FRAMING DETAIL  
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GENERAL NOTES - FLOOR PLAN

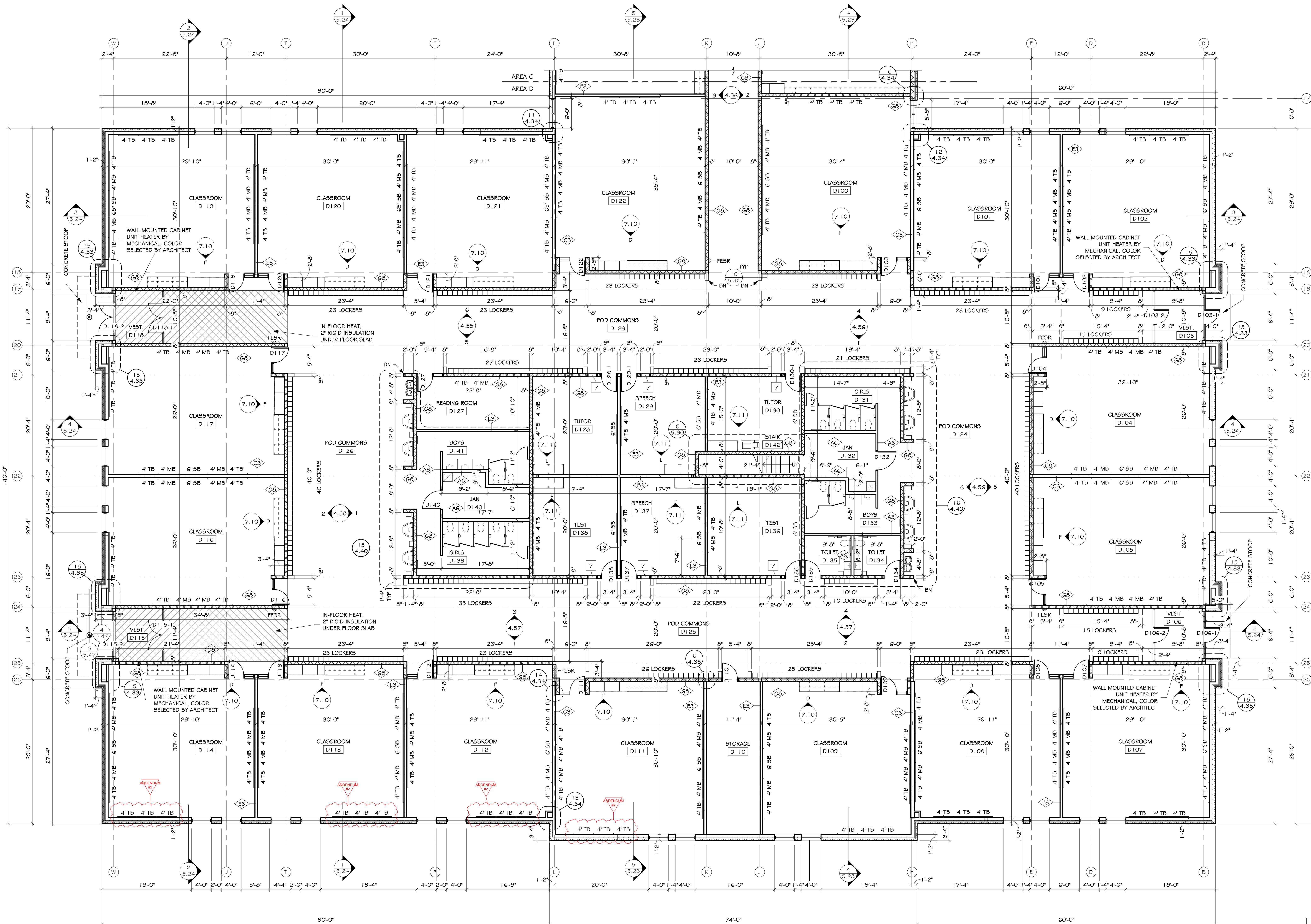
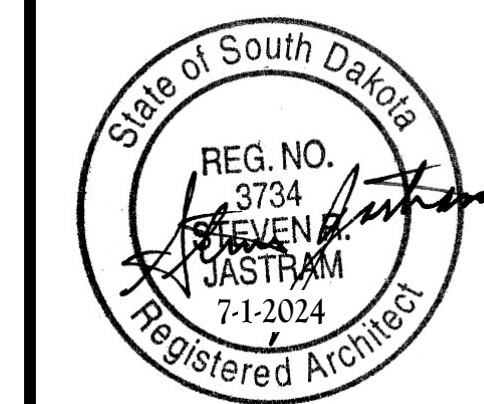
- A. GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE. REPORT DISCREPANCIES TO THE ARCHITECT.
- B. REFER TO SHEET 1.10 FOR WALL TYPES.
- C. BURNISHED BLOCK TO HAVE BULLNOSE AT LOCATIONS NOTED.



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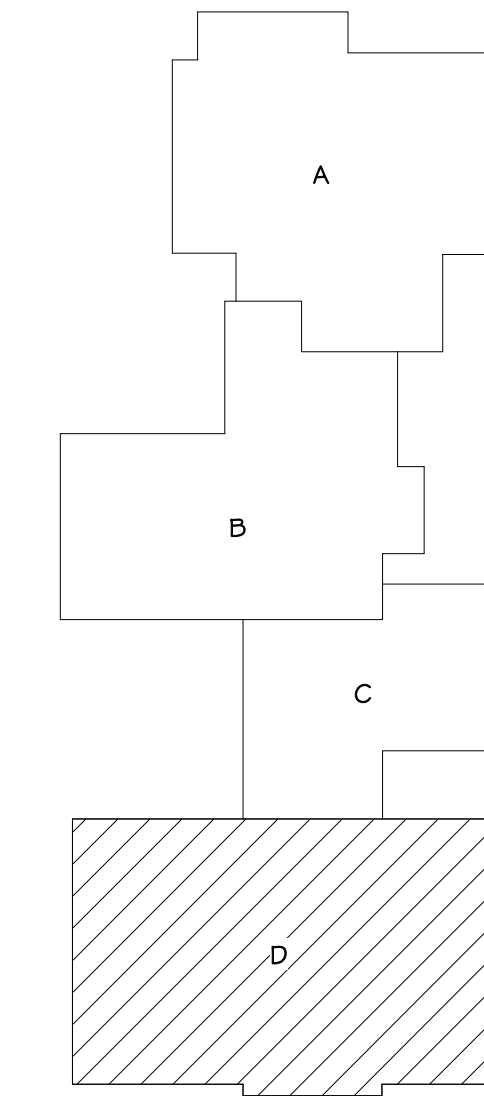
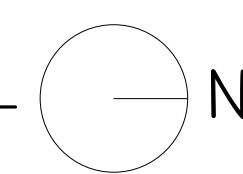
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FIRST FLOOR PLAN - AREA D

SCALE: 1/8" = 1'-0"



KEYPLAN

BRANDON VALLEY ELEMENTARY SCHOOL  
FLOOR PLAN - AREA D

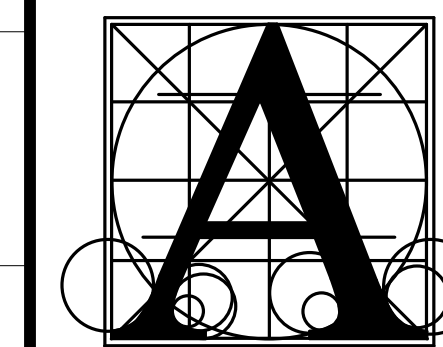
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	date	JULY 1, 2024
	revision	
	drawn	M5 checked SRJ

DATE	DESCRIPTION
7-26-2024	ADDENDUM #2

4.10D

GENERAL NOTES - FLOOR PLAN

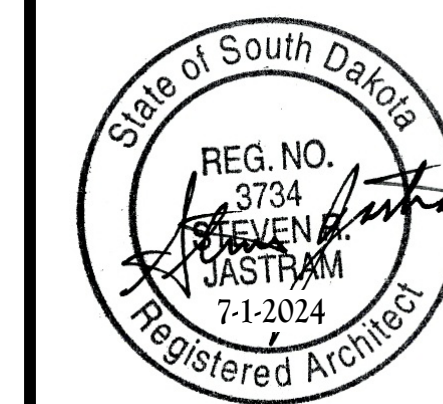
- A. GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE. REPORT DISCREPANCIES TO THE ARCHITECT.
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- C. BURNISHED BLOCK TO HAVE BULLNOSE AT LOCATIONS NOTED.



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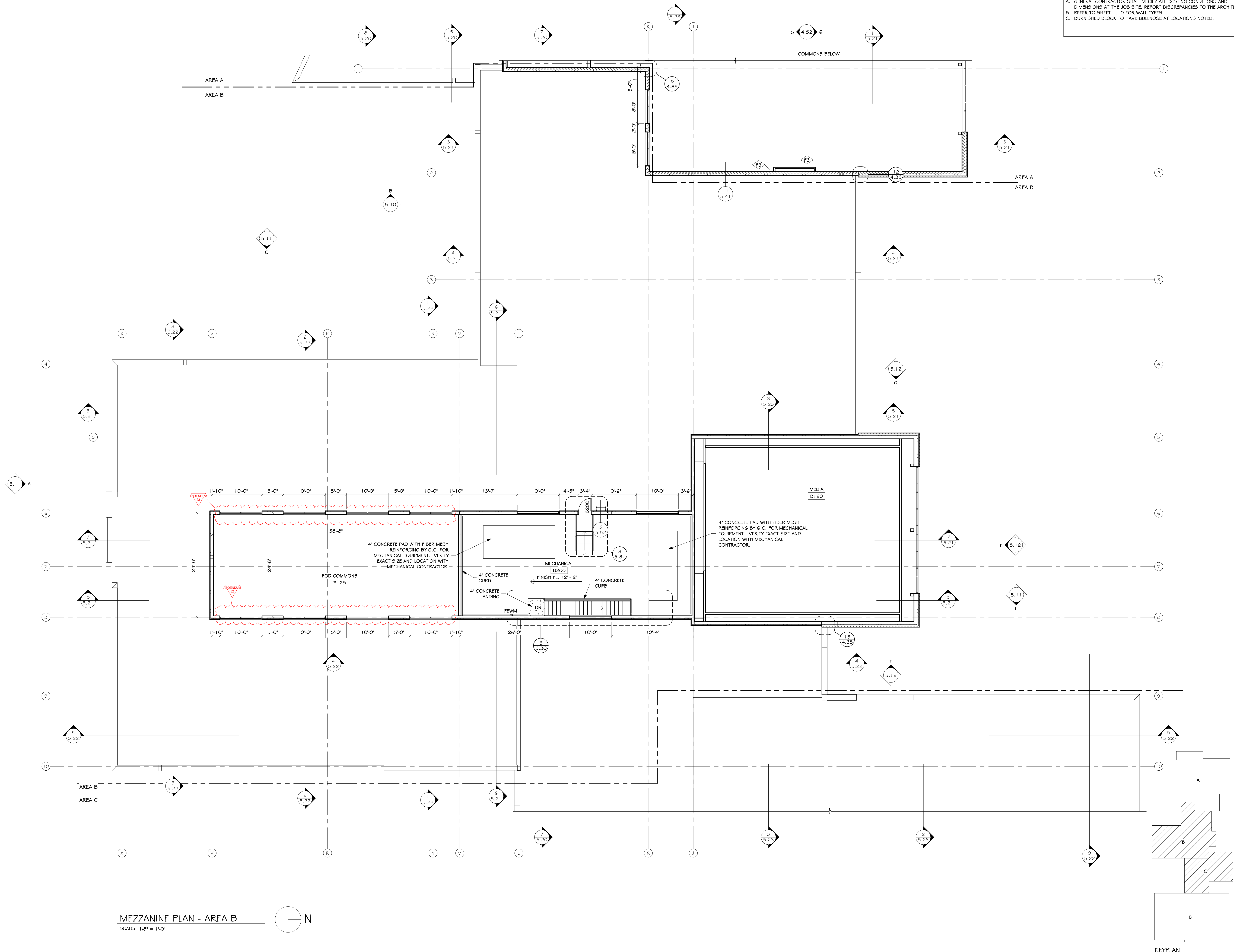


BRANDON VALLEY ELEMENTARY SCHOOL

MEZZANINE PLAN - AREA B

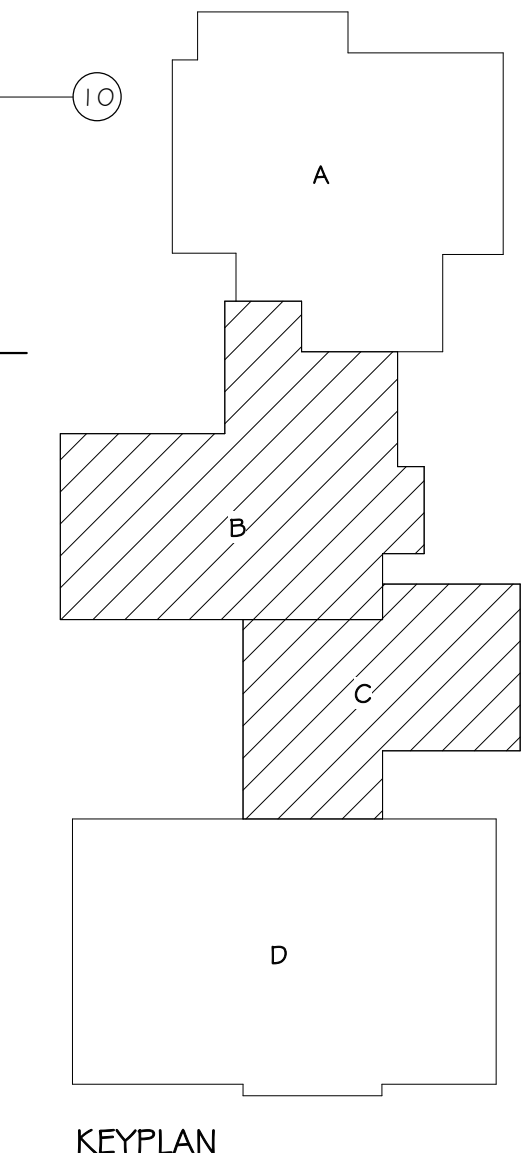
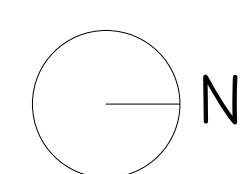
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DATE	DESCRIPTION	
7-26-2024	ADDENDUM #2	

4.11B

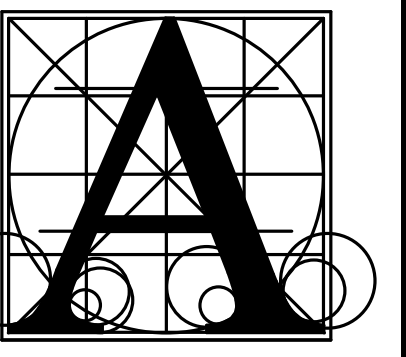


MEZZANINE PLAN - AREA B

SCALE: 1/8" = 1'-0"



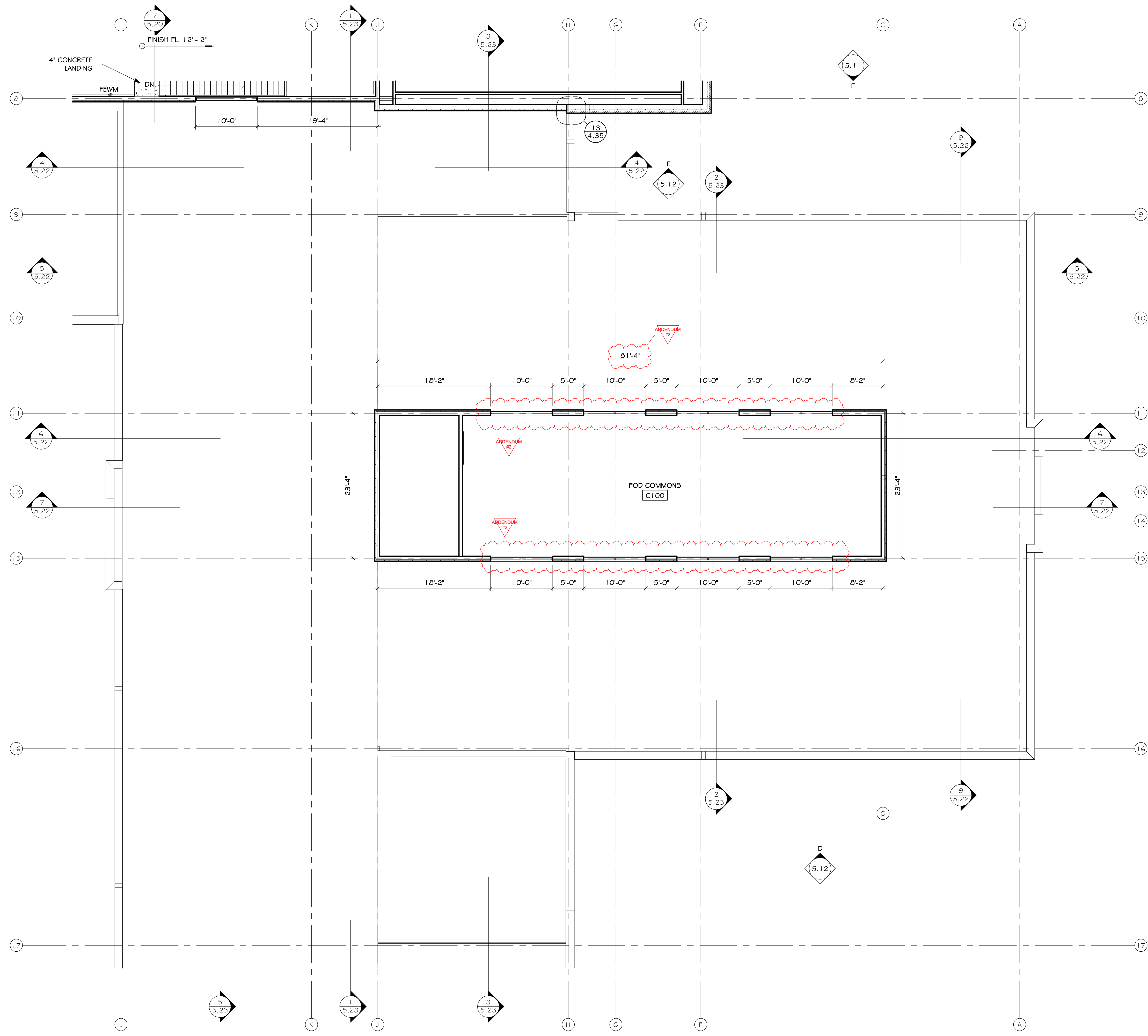
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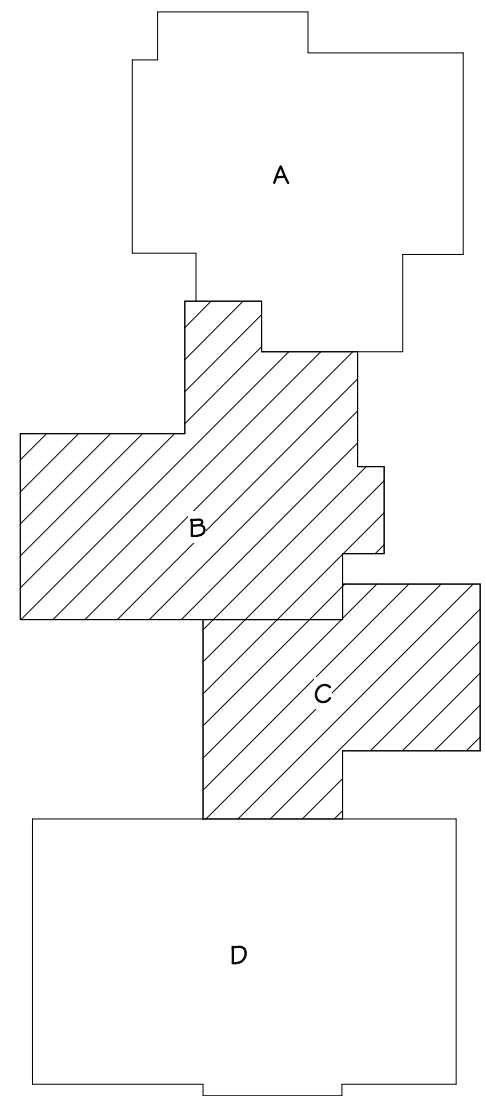
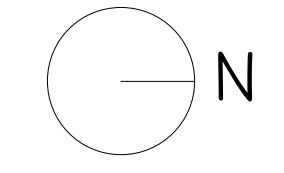
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MEZZANINE PLAN - AREA C

SCALE: 1/8" = 1'-0"



KEYPLAN

**BRANDON VALLEY ELEMENTARY SCHOOL**

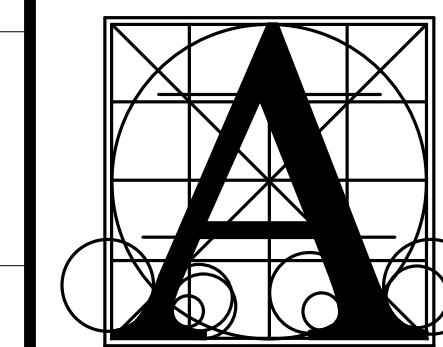
**MEZZANINE PLAN - AREA C**

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	date	JULY 1, 2024
	revision	
	drawn	M5 checked SRJ
DATE	DESCRIPTION	
7-26-2024	ADDENDUM #2	

**4.11C**

GENERAL NOTES - FLOOR PLAN

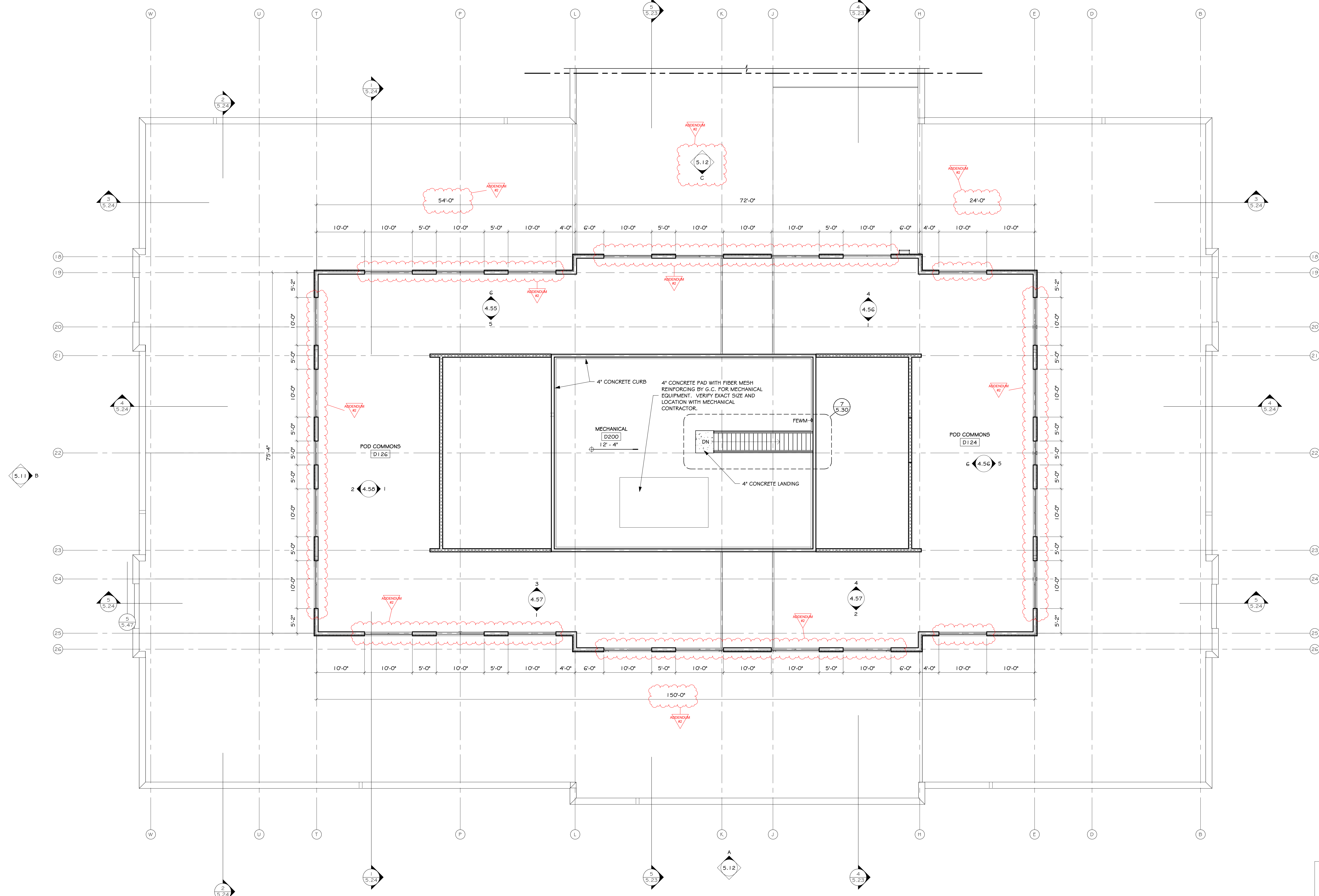
- A. GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE. REPORT DISCREPANCIES TO THE ARCHITECT.
- B. REFER TO SHEET 1.10 FOR WALL TYPES.
- C. BURNISHED BLOCK TO HAVE BULLNOSE AT LOCATIONS NOTED.



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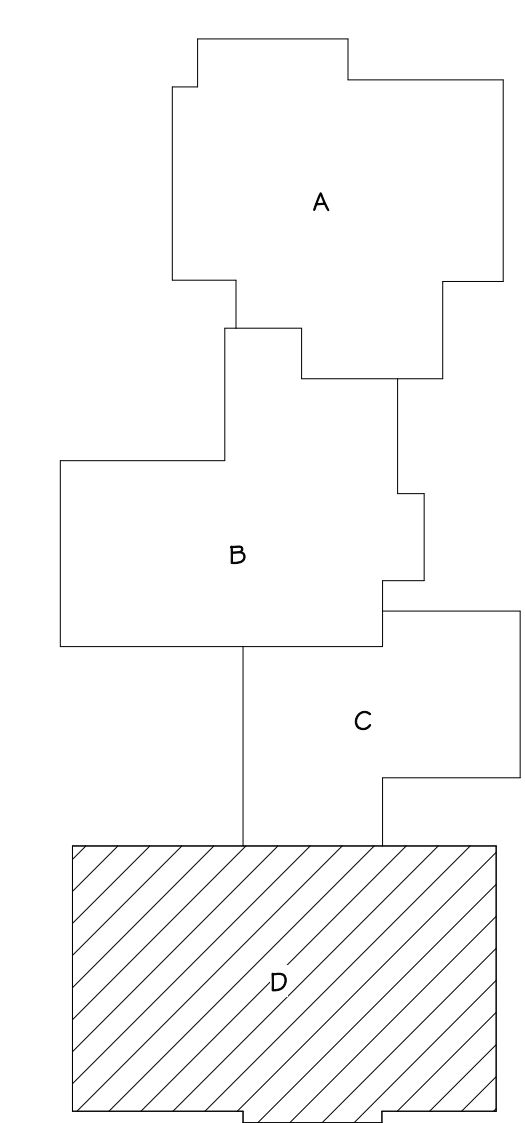
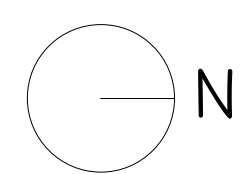
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MEZZANINE PLAN - AREA D

SCALE: 1/8" = 1'-0"



KEYPLAN

BRANDON VALLEY ELEMENTARY SCHOOL

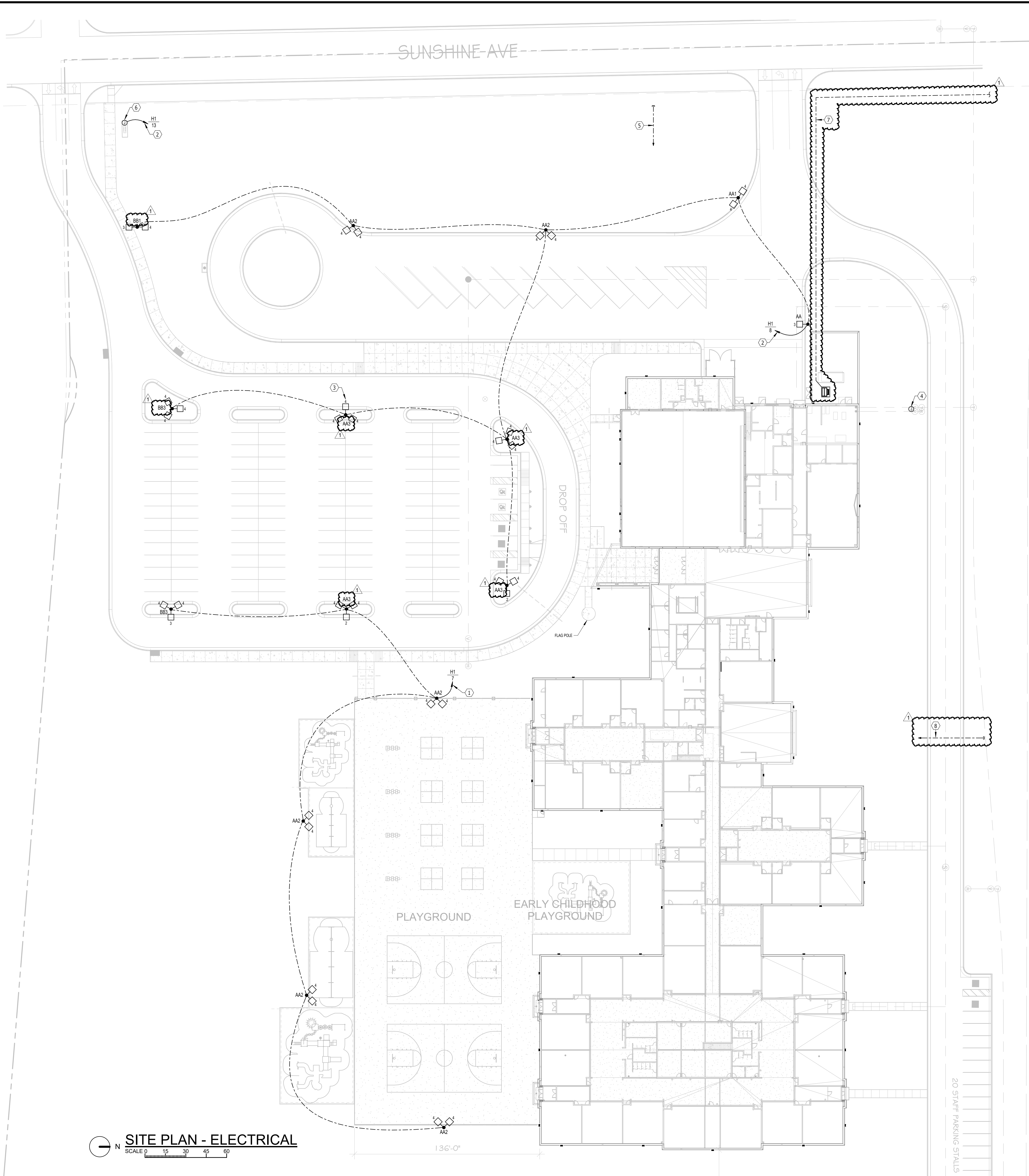
MEZZANINE PLAN - AREA D

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	date	JULY 1, 2024	
	revision		
drawn	Author	checked	Checker

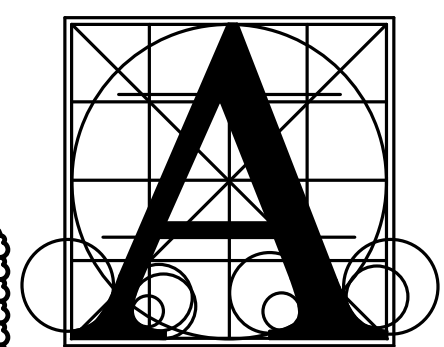
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7-26-2024	ADDENDUM #2

4.11D

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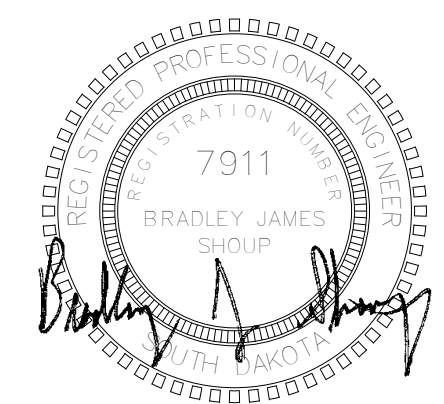


- ELECTRICAL NOTES**
- VIA EXTERIOR LIGHTING CONTACTOR "ELC2".
  - VIA EXTERIOR LIGHTING CONTACTOR "ELC1".
  - NUMBER INDICATES LUMINAIRE OPTICAL DISTRIBUTION TYPE, TYPICAL.
  - MONITOR POST INDICATOR VALVE WITH FIRE ALARM SYSTEM.
  - 3 EACH 3" CONDUIT TO TELECOM UTILITY DEMARC LOCATION IN SERVER B124.
  - COORDINATE CONNECTION REQUIREMENTS WITH SIGN OFFER.
  - 4" RACEWAY FOR ELECTRIC UTILITY PRIMARY CONDUCTORS. RACEWAY, SWEEPS, AND PULL STRING FURNISHED BY SIOUX VALLEY ENERGY. ELECTRICAL CONTRACTOR TO PICK UP AT SIOUX VALLEY ENERGY'S OFFICE IN BRANDON AND INSTALLED (MINIMUM OF 48" DEEP) BY THE ELECTRICAL CONTRACTOR.
  - 3 EACH 3" CONDUIT TO TELECOM UTILITY DEMARC LOCATION IN ROOM B124.
- GENERAL SHEET NOTES**
- UNLESS OTHERWISE NOTED, PROVIDE TALL POLE BASES FOR SITE LIGHTING UNITS.
  - COORDINATE ALL WORK WITH SITE CONSTRUCTION CONTRACTORS.

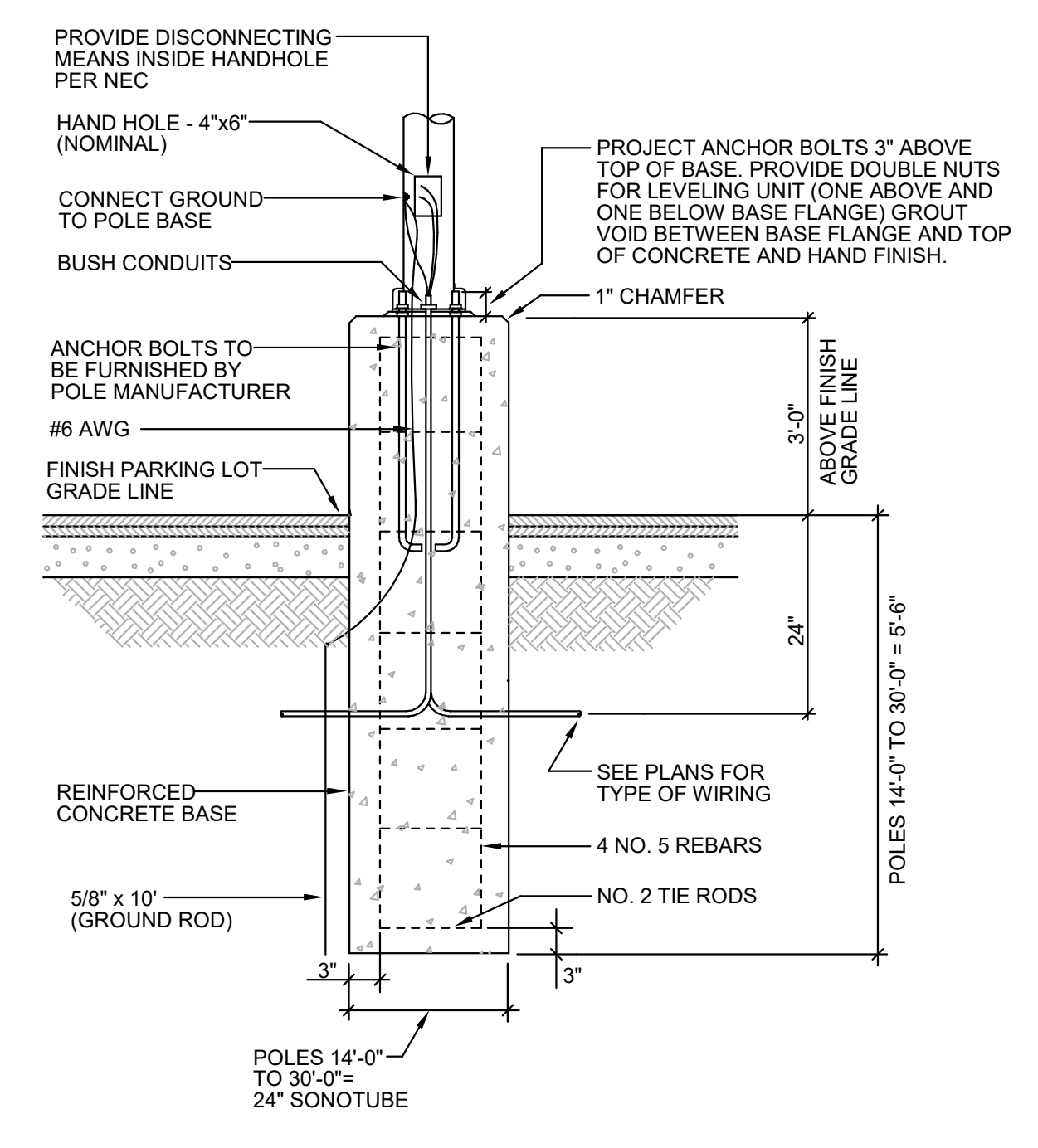


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 Sioux Falls, SD 57104  
 (605) 335-3720  
 Fax 335-6220  
 E-mail acei@aceinet.com  
 ACEI PROJ. #123026



**TALL POLE BASE DETAIL**  
 NO SCALE

**SITE PLAN - ELECTRICAL**  
 SCALE 0 15 30 45 60  
 136'-0"

**BRANDON VALLEY ELEMENTARY SCHOOL**  
 SITE PLAN - ELECTRICAL

Project number	0306.3023.23
date	JULY 1, 2024
revision	
drawn	KMT checked BJS
DATE	DESCRIPTION
7-26-24	Addendum #2

**9.10**

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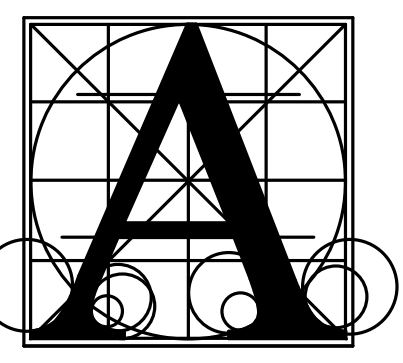


**ELECTRICAL NOTES**

- 1 VIA EXTERIOR LIGHTING CONTRACTOR "ELCT".
- 2 LIGHTING CONTROL RELAY FURNISHED BY BAS CONTRACTOR, INSTALLED BY EQ. CONTROL BY BAS CONTRACTOR, COORDINATE REQUIREMENTS.
- 3 MOUNT TO SIDE OF CANOPY AND AIM LUMINAIRE AT FLAG.

**GENERAL SHEET NOTES**

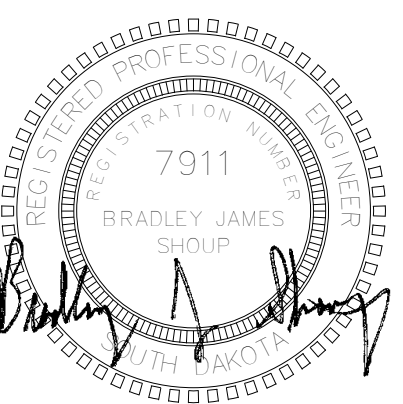
- A THE CEILING SPACE AVAILABLE REQUIRES EXTENSIVE COORDINATION WITH OTHER TRADES. THE CONTRACTOR SHALL PROVIDE ALL OFFSETS AND RELOCATE AS REQUIRED TO COORDINATE THE INSTALLATIO OF ALL MATERIALS AND EQUIPMENT WITH OTHER TRADES.



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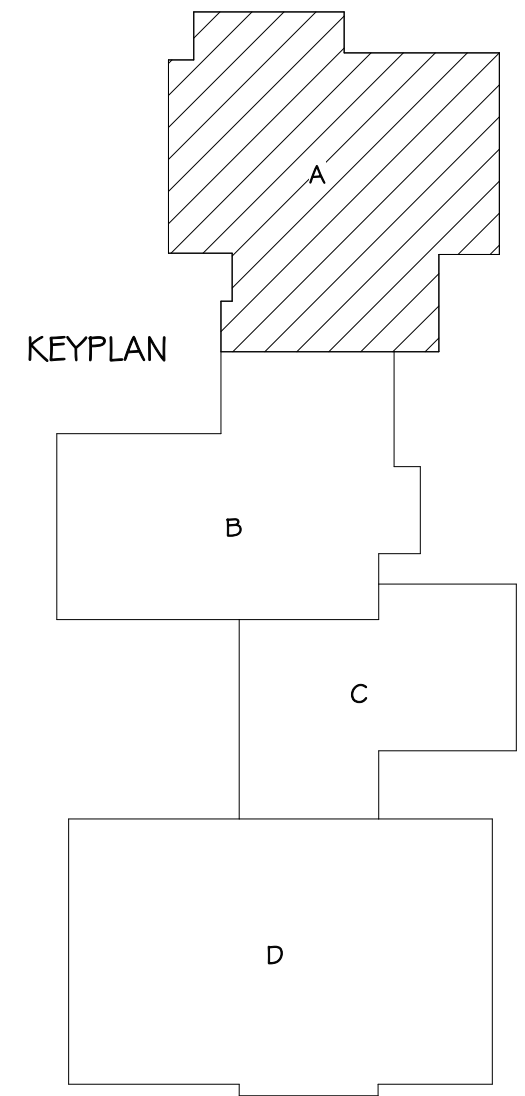
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E-mail acei@aceinet.com  
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**FLOOR PLAN - AREA A - LIGHTING**

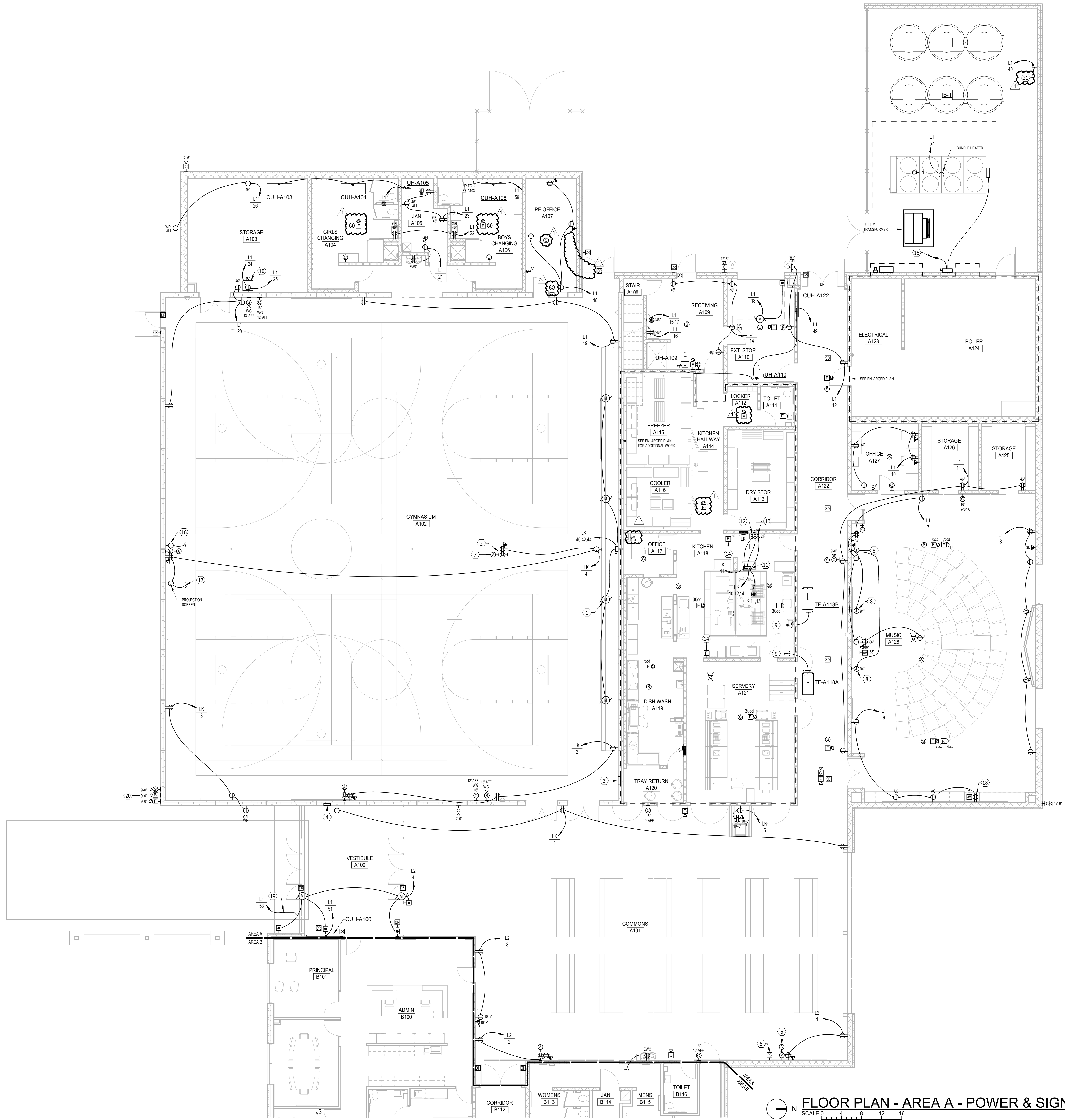
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**BRANDON VALLEY ELEMENTARY SCHOOL**  
FLOOR PLAN - AREA A - LIGHTING

Project	number	0306.3023.23
	date	JULY 1, 2024
	revision	
	drawn	KMT checked BJS
DATE	DESCRIPTION	
7-26-24	Addendum #2	

**9.21**

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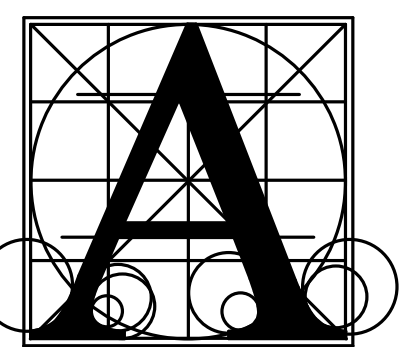


**ELECTRICAL NOTES**

- 1 COORDINATE CONNECTION REQUIREMENTS WITH BLEACHER EQUIPMENT SUPPLIER
- 2 LOCATE DEVICES IN FACE OF BOTTOM BLEACHER RISER. ALL CABLES FEEDING THE DEVICES SHALL BE SUPPORTED TO THE UNDERSIDE OF THE BLEACHERS IN A MANNER THAT PREVENTS CABLES FROM BEING PINCHED WHEN BLEACHERS ARE MOVED IN OR OUT.
- 3 GYM CONTROL PANEL "GCP". SEE DETAIL.
- 4 FIRE ALARM REMOTE ANNUNCIATOR.
- 5 COMMONS SOUND SYSTEM REMOTE VOLUME CONTROL.
- 6 COMMONS SOUND SYSTEM MIC/AUX OUTLET. TYPICAL IN THIS ROOM.
- 7 GYM SOUND SYSTEM MIC/AUX INPUT. TYPICAL.
- 8 SINGLE GANG OUTLET FOR OWNER PROVIDED SOUND SYSTEM CABLING.
- 9 CONNECT TO STARTER IN HOOD CONTROL PANEL.
- 10 GYM SOUND SYSTEM EQUIPMENT RACK "GSS". PROVIDE GROUNDING CONDUCTOR. SEE SPECIFICATIONS.
- 11 HOOD CONTROL PANEL. INTERLOCK FOR TF-A117A AND TF-A117B WITH FIRE ALARM SYSTEM FOR SHUTDOWN UPON ALARM.
- 12 SWITCH FOR CONTROL OF HOOD LIGHTS.
- 13 PILOT LIGHT SWITCHES FOR CONTROL HOOD FANS (WEST HOOD CONTROLLED SEPARATELY FROM EAST HOOD).
- 14 HOOD ANSUL SYSTEM PULL STATION.
- 15 TO UTILITY TRANSFORMER.
- 16 DOUBLE GANG AV BACKBOX TO JOIST SPACE IN THIS ROOM FOR FUTURE PROJECTOR CABLING.
- 17 TO SWITCH IN "GCP".
- 18 COORDINATE HEIGHT (TYPICALLY 48" AFF) AND LOCATION OF AV OUTLET AND FOURPLEX RECEPTACLE IN CABINET WITH THE OWNER. TYPICAL.
- 19 PROVIDE APPROXIMATELY 15' OF HEAT TRACE FOR ROOF DRAIN PIPING.
- 20 PAGING INTERCOM SYSTEM SPEAKER AND BELL. TYPICAL.
- 21 COORDINATE ICE INVENTORY METER CONNECTION REQUIREMENTS WITH METER SUPPLIER.

**GENERAL SHEET NOTES**

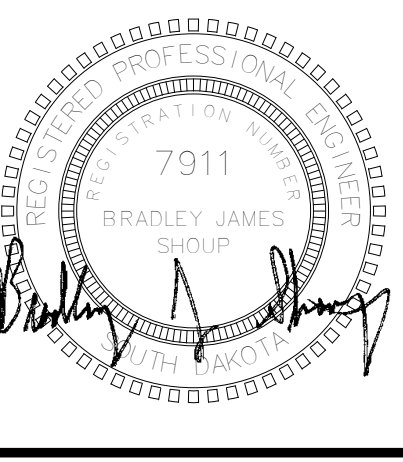
- A. THE CEILING SPACE AVAILABLE REQUIRES EXTENSIVE COORDINATION WITH OTHER TRADES. THE CONTRACTOR SHALL PROVIDE ALL OFFSETS AND RELOCATE AS REQUIRED TO COORDINATE THE INSTALLATION OF ALL MATERIALS AND EQUIPMENT WITH OTHER TRADES.
- B. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ROUGH-INS FOR ACCESS CONTROL SYSTEM DEVICES (CARD READER, DOOR RELEASE, DOOR POSITION, AND REQUEST TO EXIT). COORDINATE REQUIREMENTS WITH THE OWNER'S SECURITY SYSTEM SUPPLIER AND THE DOOR HARDWARE SUPPLIER.
- C. COORDINATE MOUNTING HEIGHTS OF CAMERAS WITH THE OWNER'S SECURITY SYSTEM SUPPLIER.



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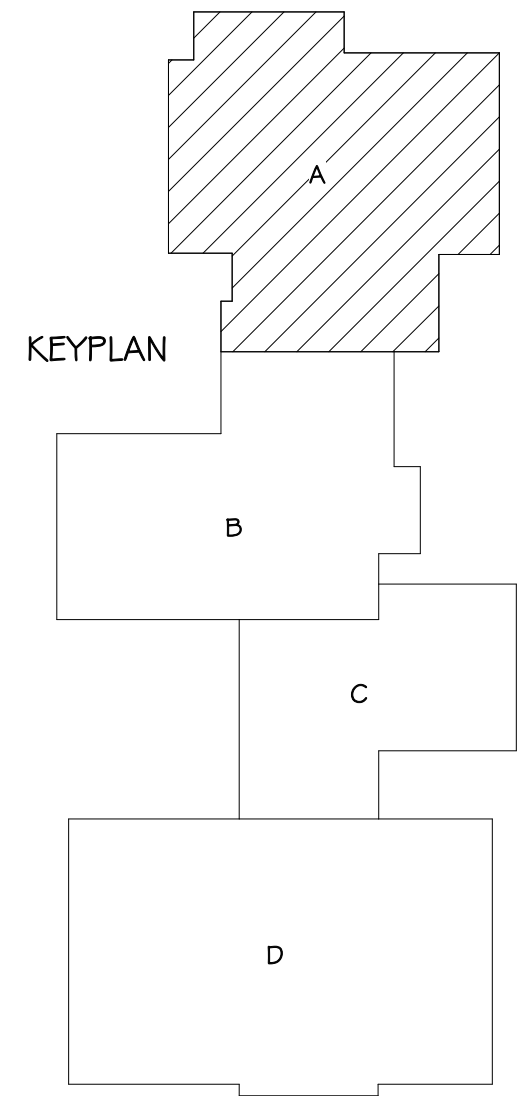
415 South Main Avenue  
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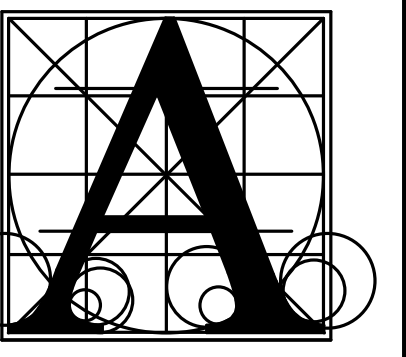
**FLOOR PLAN - AREA A - POWER & SIGNAL**  
SCALE 0 4 8 12 16

**BRANDON VALLEY ELEMENTARY SCHOOL**  
FLOOR PLAN - AREA A - POWER & SIGNAL

Project	number	0306.3023.23
	date	JULY 1, 2024
	revision	
	drawn	KMT checked BJS
DATE	DESCRIPTION	
7-26-24	Addendum #2	

**9.22**

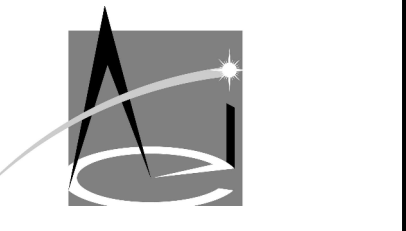
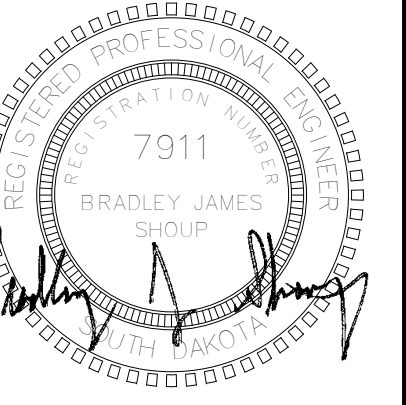




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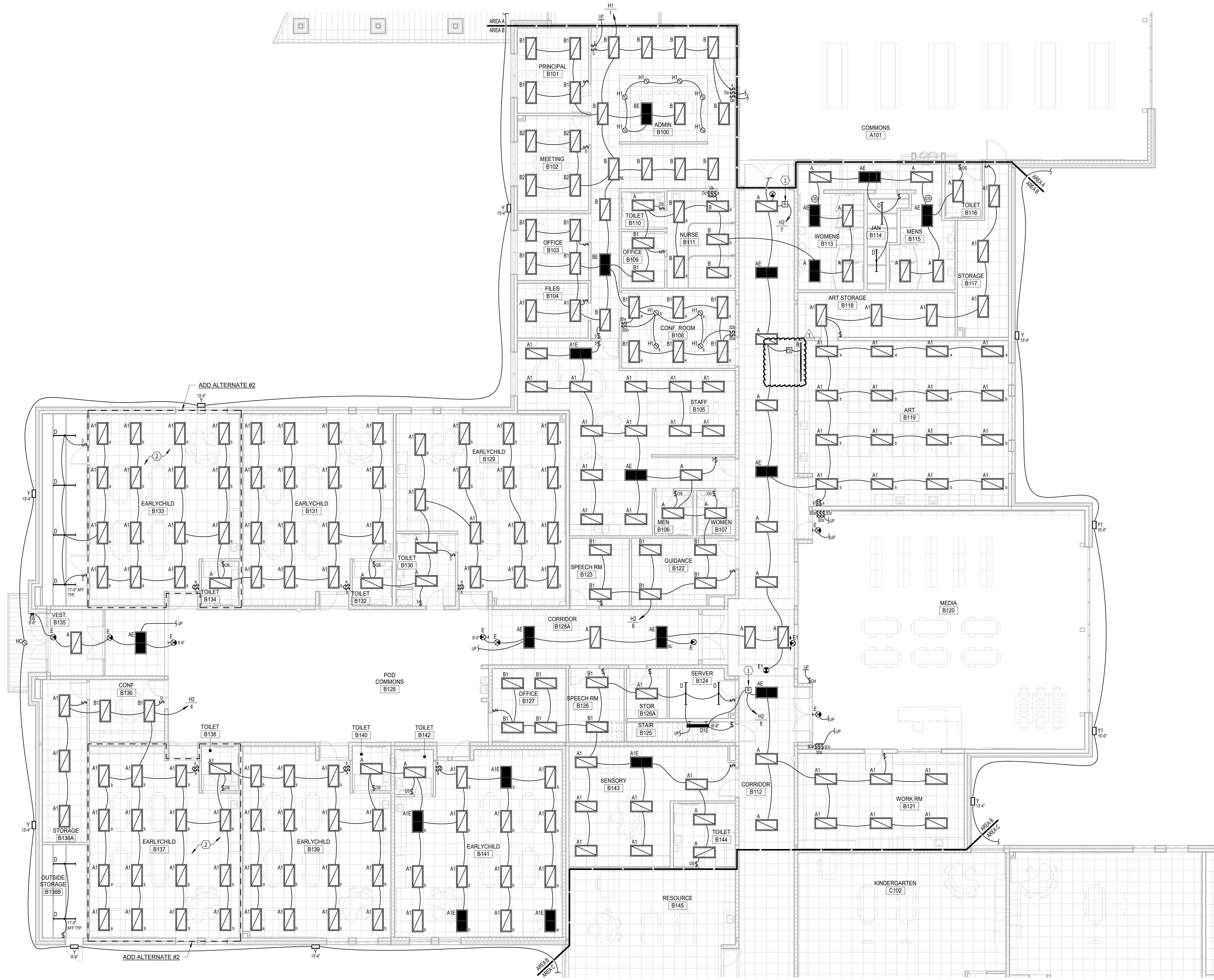
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ELECTRICAL NOTES

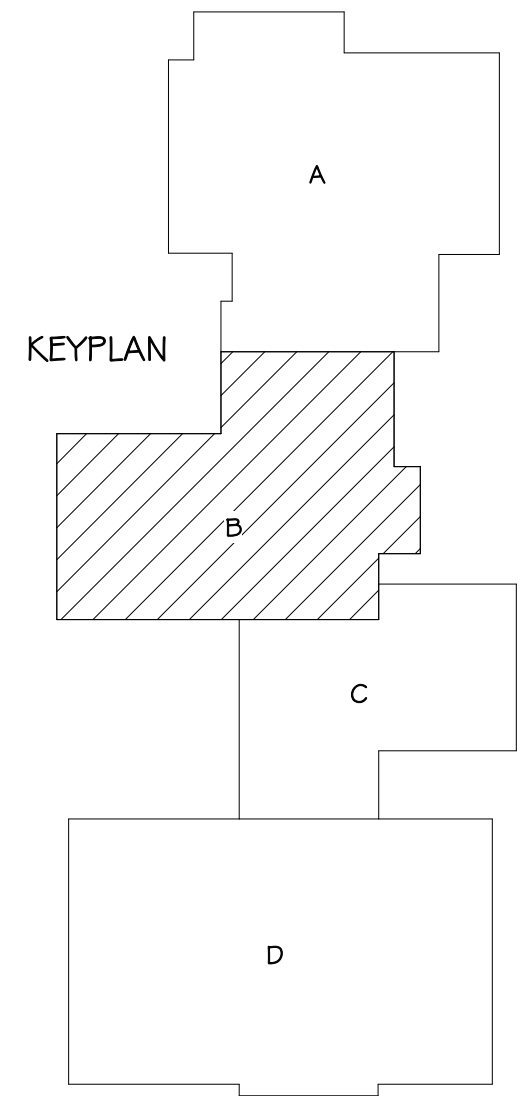
- LIGHTING CONTROL RELAY FURNISHED BY BAS CONTRACTOR, INSTALLED BY EC. CONTROL BY BAS CONTRACTOR. COORDINATE REQUIREMENTS.
- UNDER THE BASE BID PROVIDE SWITCHES AND TEMPORARILY INSTALL 4 TYPE "A" LUMINAIRES EVENLY SPACED. UNDER ALTERNATE #2 PROVIDE WORK AS SHOWN.

GENERAL SHEET NOTES

- THE CEILING SPACE AVAILABLE REQUIRES EXTENSIVE COORDINATION WITH OTHER TRADES. THE CONTRACTOR SHALL PROVIDE ALL OFFSETS AND RELOCATE AS REQUIRED TO COORDINATE THE INSTALLATION OF ALL MATERIALS AND EQUIPMENT WITH OTHER TRADES.



FLOOR PLAN - AREA B - LIGHTING  
SCALE 0 4 8 12 16



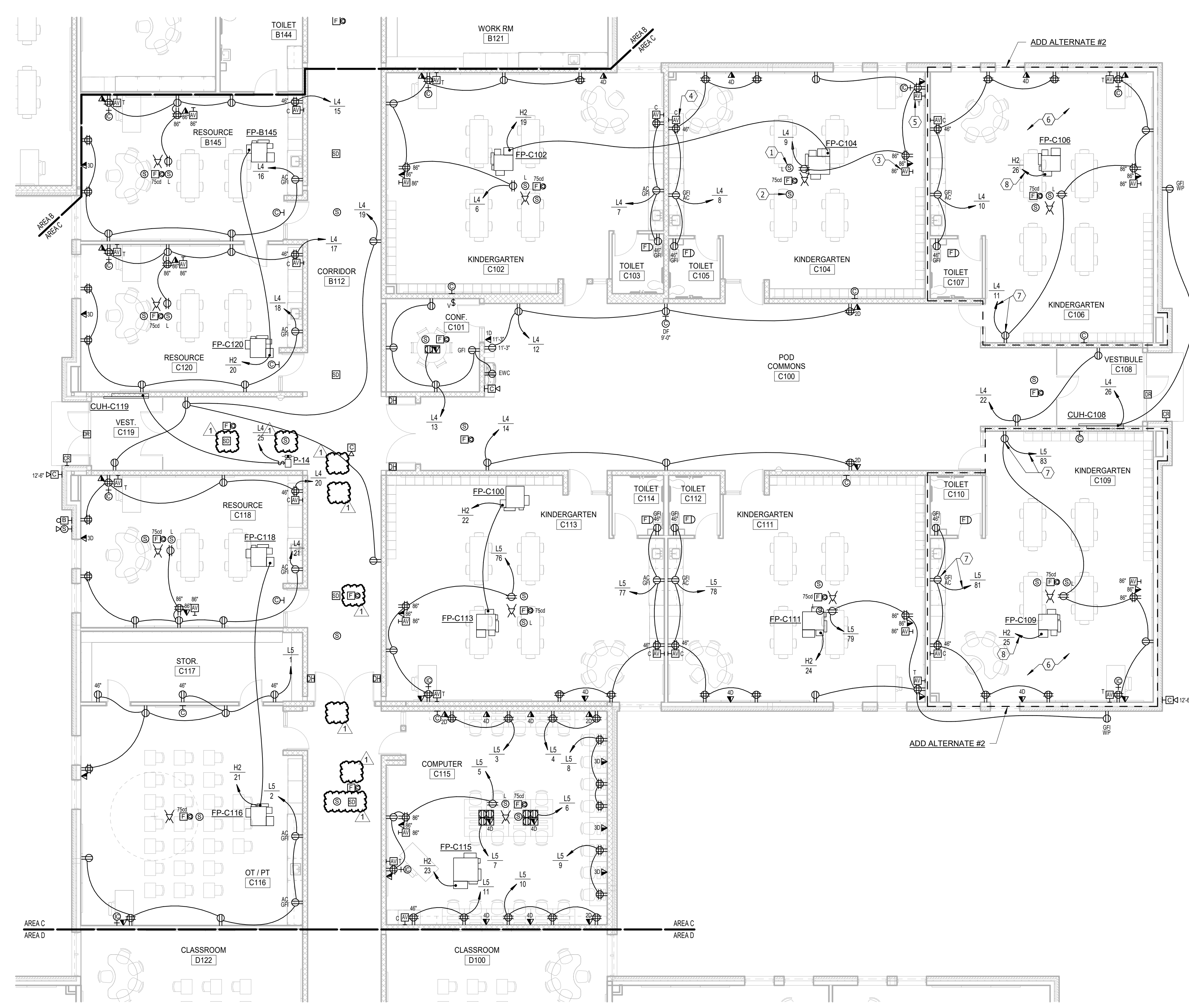
BRANDON VALLEY ELEMENTARY SCHOOL

FLOOR PLAN - AREA B - LIGHTING

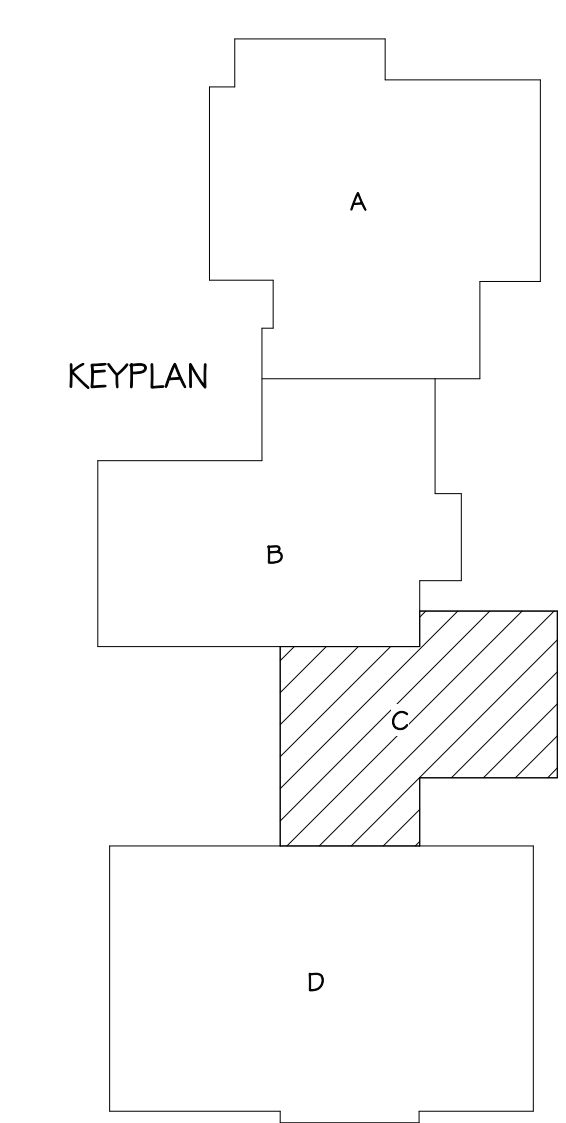
Project	number	0306.3023.23	
	date	JULY 1, 2024	
	revision		
drawn	KMT	checked	BJS
DATE	7-26-24	DESCRIPTION	Addendum #2

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N  
SCALE 0 4 8 12 16  
**FLOOR PLAN - AREA C - POWER & SIGNAL**

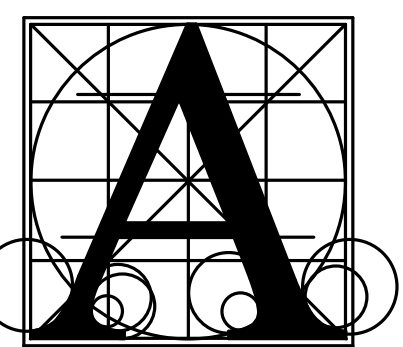


**ELECTRICAL NOTES**

1. A/V SOUND SYSTEM SPEAKER, TYPICAL. SEE DETAIL.
2. PAGING INTERCOM SPEAKER, TYPICAL.
3. A/V DEVICE (PROMETHEAN BOARD), TYPICAL. SEE DETAIL.
4. A/V DEVICE (CABINET) AT 46" AFF. TYPICAL. SEE DETAIL.
5. A/V DEVICE (TEACHER), TYPICAL. SEE DETAIL.
6. UNDER THE BASE BID, UNLESS NOTED OTHERWISE, PROVIDE ROUGH-INS ONLY FOR DEVICES IN THIS ROOM.
7. UNDER THE BASE BID, PROVIDE THIS DEVICE AND BRANCH CIRCUIT HOME RUN.
8. UNDER THE BASE BID, DELETE CONNECTION TO FAN POWERED VAV UNIT IN THIS ROOM.

**GENERAL SHEET NOTES**

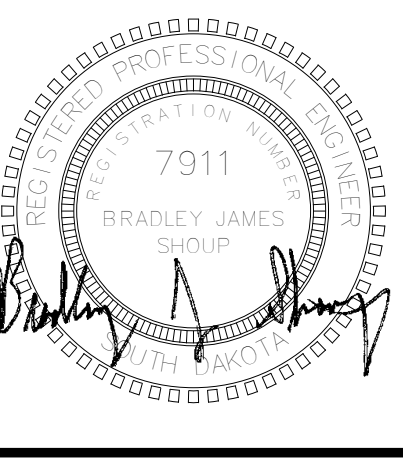
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- B. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ROUGH-INS FOR ACCESS CONTROL SYSTEM DEVICES (CARD READER, DOOR RELEASE, DOOR POSITION, AND REQUEST TO EXIT). COORDINATE REQUIREMENTS WITH THE OWNER'S SECURITY SYSTEM SUPPLIER AND THE DOOR HARDWARE SUPPLIER.
- C. COORDINATE MOUNTING HEIGHTS OF CAMERAS WITH THE OWNERS.



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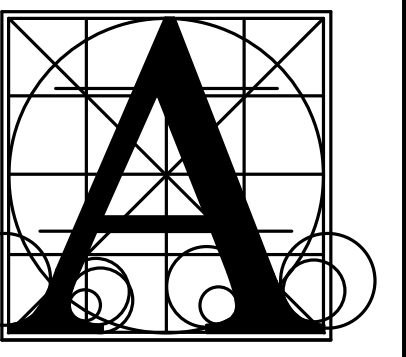
ACEI PROJ. #123026

**BRANDON VALLEY ELEMENTARY SCHOOL**

**FLOOR PLAN - AREA C - POWER & SIGNAL**

Project	number	0306.3023.23
	date	JULY 1, 2024
	revision	
	drawn	KMT checked BJ5
DATE	DESCRIPTION	
7-26-24	Addendum #2	

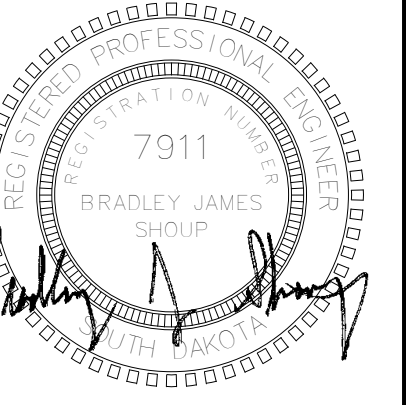
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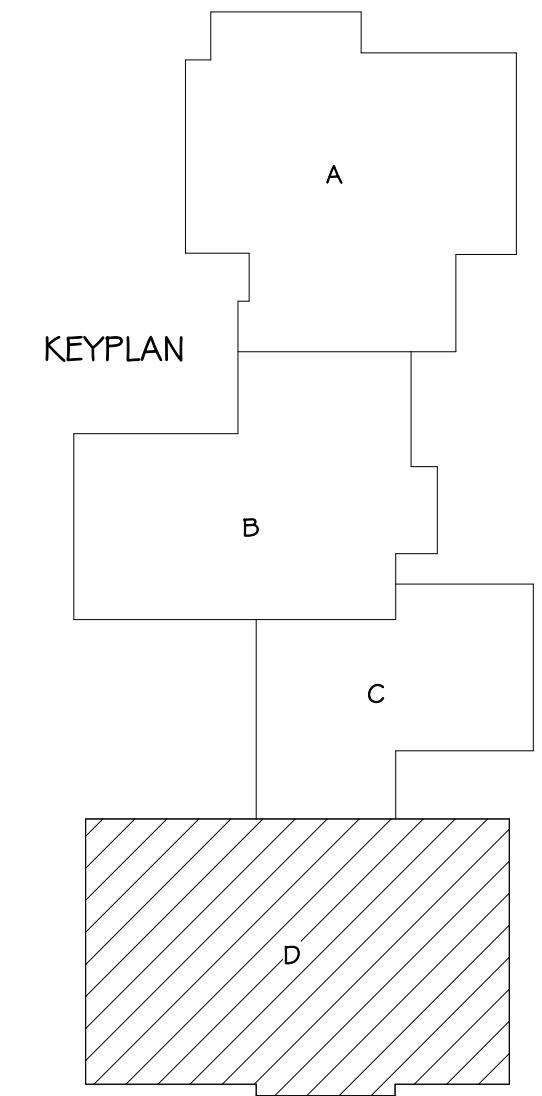
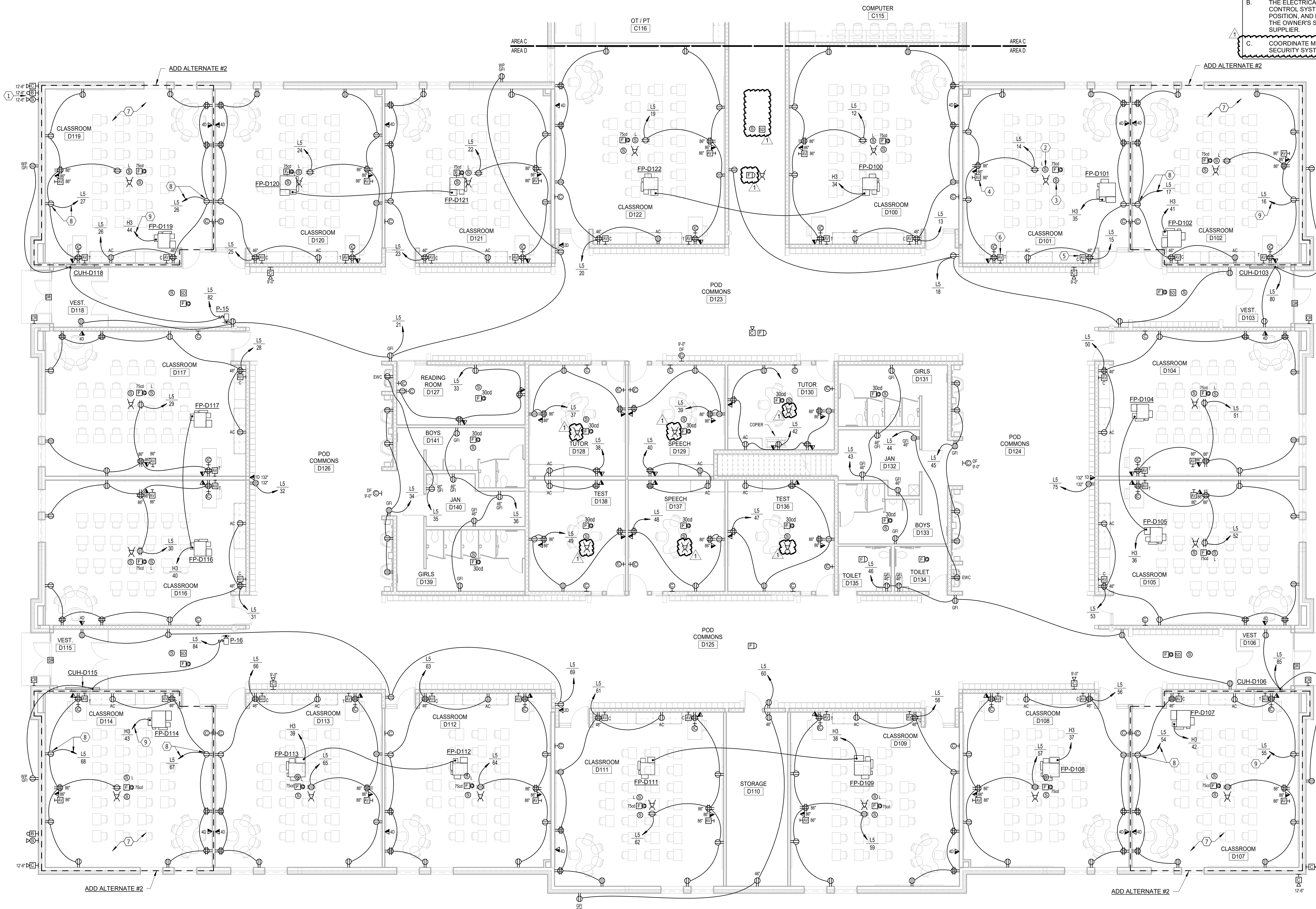
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**ELECTRICAL NOTES**

- 1 INTERCOM AND PROGRAM CLOCK SYSTEM SPEAKER AND BELL.
- 2 AV SOUND SYSTEM SPEAKER, TYPICAL. SEE DETAIL.
- 3 PAGING INTERCOM SPEAKER, TYPICAL.
- 4 AV DEVICE (PROMETHEAN BOARD), TYPICAL. SEE DETAIL.
- 5 AV DEVICE (CABINET) AT 46" AFF, TYPICAL. SEE DETAIL.
- 6 AV DEVICE (TEACHER), TYPICAL. SEE DETAIL.
- 7 UNDER THE BASE BID, UNLESS NOTED OTHERWISE, PROVIDE ROUGH-INS ONLY FOR DEVICES IN THIS ROOM.
- 8 UNDER THE BASE BID, PROVIDE THIS DEVICE AND BRANCH CIRCUIT HOME RUN.
- 9 UNDER THE BASE BID, DELETE CONNECTION TO FAN POWERED VAV UNIT IN THIS ROOM.

**GENERAL SHEET NOTES**

- A. THE CEILING SPACE AVAILABLE REQUIRES EXTENSIVE COORDINATION WITH OTHER TRADES. THE CONTRACTOR SHALL PROVIDE ALL OFFSETS AND RELOCATE AS REQUIRED TO COORDINATE THE INSTALLATION OF ALL MATERIALS AND EQUIPMENT WITH OTHER TRADES.
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- C. COORDINATE MOUNTING HEIGHTS OF CAMERAS WITH THE OWNER'S SECURITY SYSTEM SUPPLIER.



**FLOOR PLAN - AREA D - POWER & SIGNAL**  
SCALE 1/8" = 1'-0"

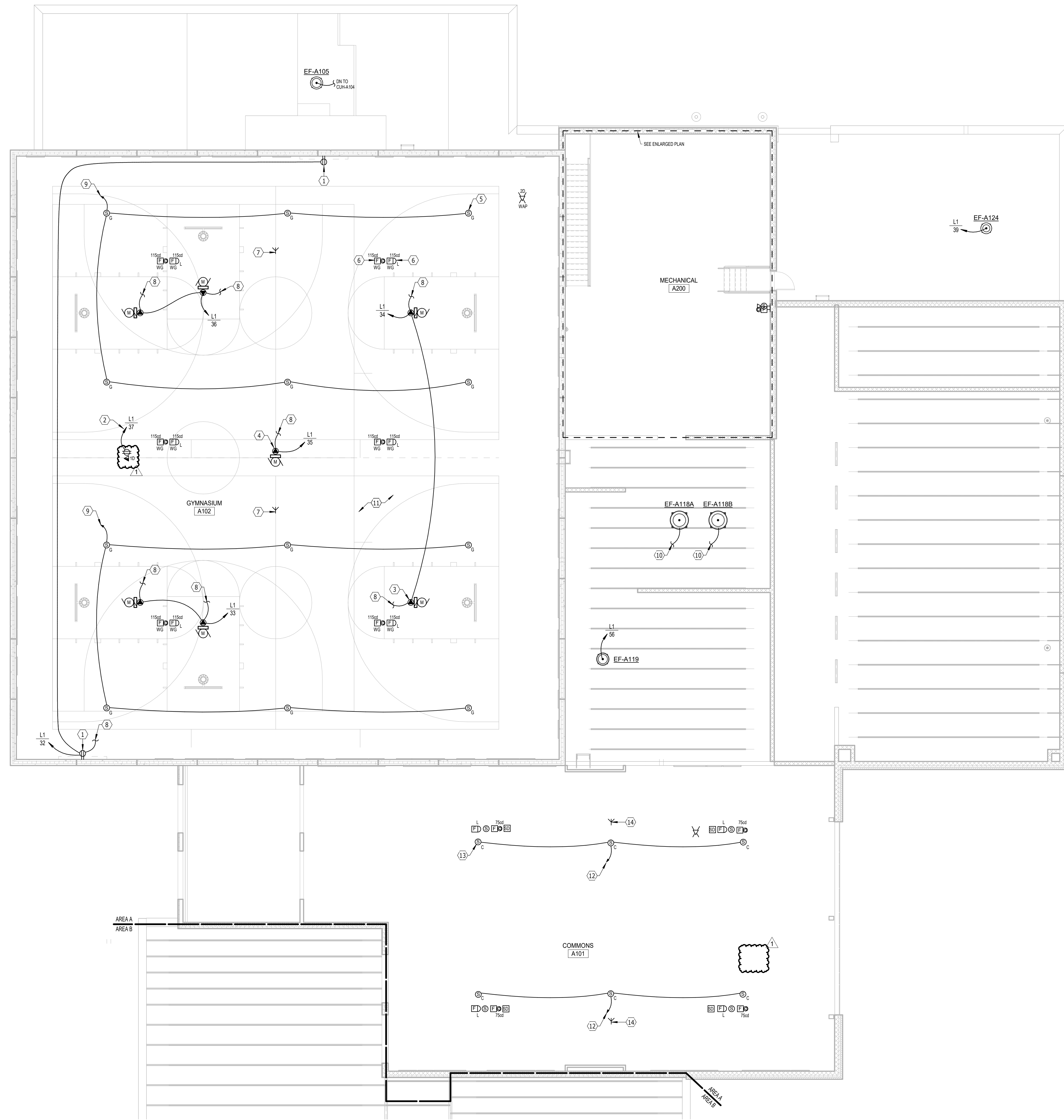
**BRANDON VALLEY ELEMENTARY SCHOOL**  
FLOOR PLAN - AREA D - POWER & SIGNAL

number	0306.3023.23
date	JULY 1, 2024
revision	
drawn	KMT checked BJ5
DATE	7-26-24
DESCRIPTION	Addendum #2

**9.28**

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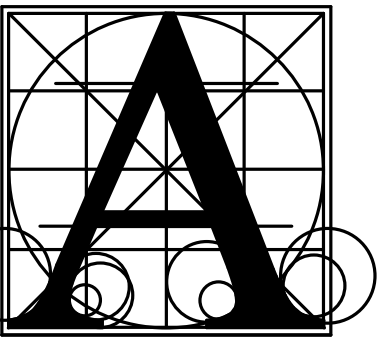

**SECOND FLOOR - AREA A - POWER & SIGNAL**  
 SCALE 0 4 8 12 16

**ELECTRICAL NOTES**

- 1 VERIFY EXACT LOCATION OF SCOREBOARD RECEPTACLE WITH THE OWNER.
- 2 COORDINATE LOCATION OF PROJECTOR WITH THE OWNER.
- 3 COORDINATE CONNECTION REQUIREMENTS WITH BACKBOARD EQUIPMENT SUPPLIER, TYPICAL.
- 4 COORDINATE CONNECTION REQUIREMENTS WITH DIVIDER CURTAIN SUPPLIER, TYPICAL.
- 5 GYM SOUND SYSTEM SPEAKER, TYPICAL. MOUNT BETWEEN JOISTS WITH UNISTRUT SO THAT BOTTOM OF SPEAKER IS LEVEL WITH BOTTOM OF JOISTS.
- 6 MOUNT TO BOTTOM OF JOIST, TYPICAL IN THIS ROOM.
- 7 GYM SOUND SYSTEM WIRELESS MICROPHONE ANTENNA.
- 8 TO SWITCH IN "GCP".
- 9 TO GYM SOUND RACK.
- 10 CONNECT TO STARTER IN HOOD CONTROL PANEL.
- 11 ALL 120V RECEPTACLE BRANCH CIRCUITS IN THIS ROOM SHALL BE #10 AWG THROUGHOUT.
- 12 TO COMMONS SOUND SYSTEM EQUIPMENT RACK.
- 13 COMMONS SOUND SYSTEM SPEAKER, TYPICAL.
- 14 COMMONS SOUND SYSTEM WIRELESS MICROPHONE ANTENNA.

**GENERAL SHEET NOTES**

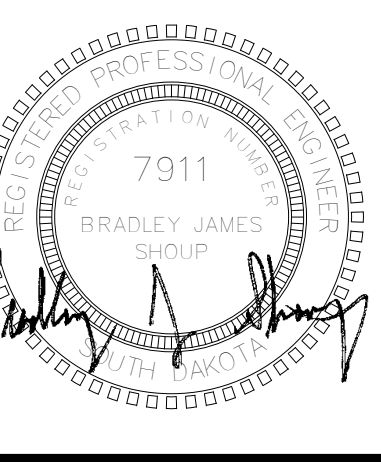
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- C. COORDINATE MOUNTING HEIGHTS OF CAMERAS WITH THE OWNER'S SECURITY SYSTEM SUPPLIER.



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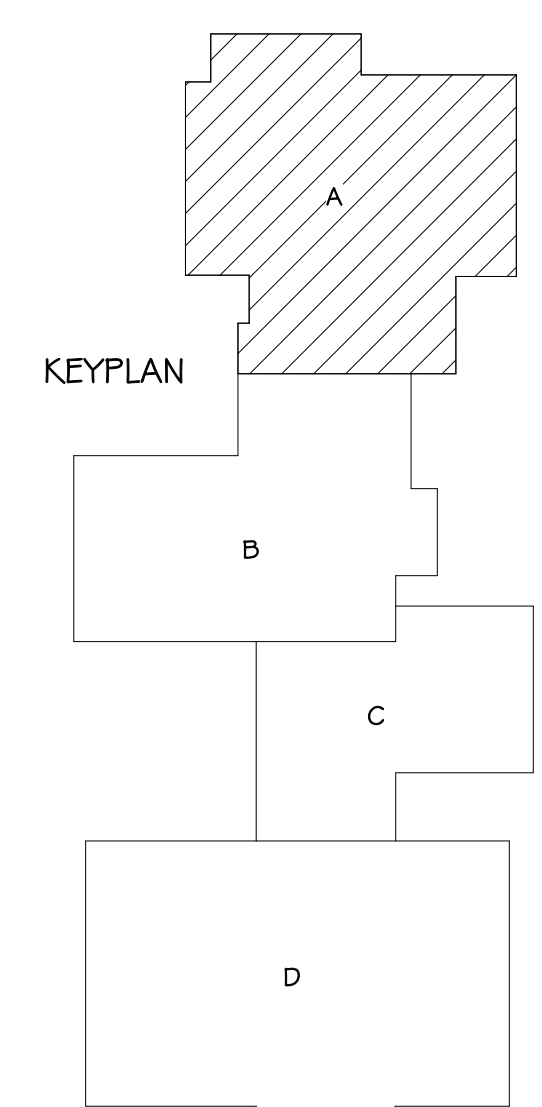


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**BRANDON VALLEY ELEMENTARY SCHOOL**

**SECOND FLOOR - AREA A - POWER & SIGNAL**

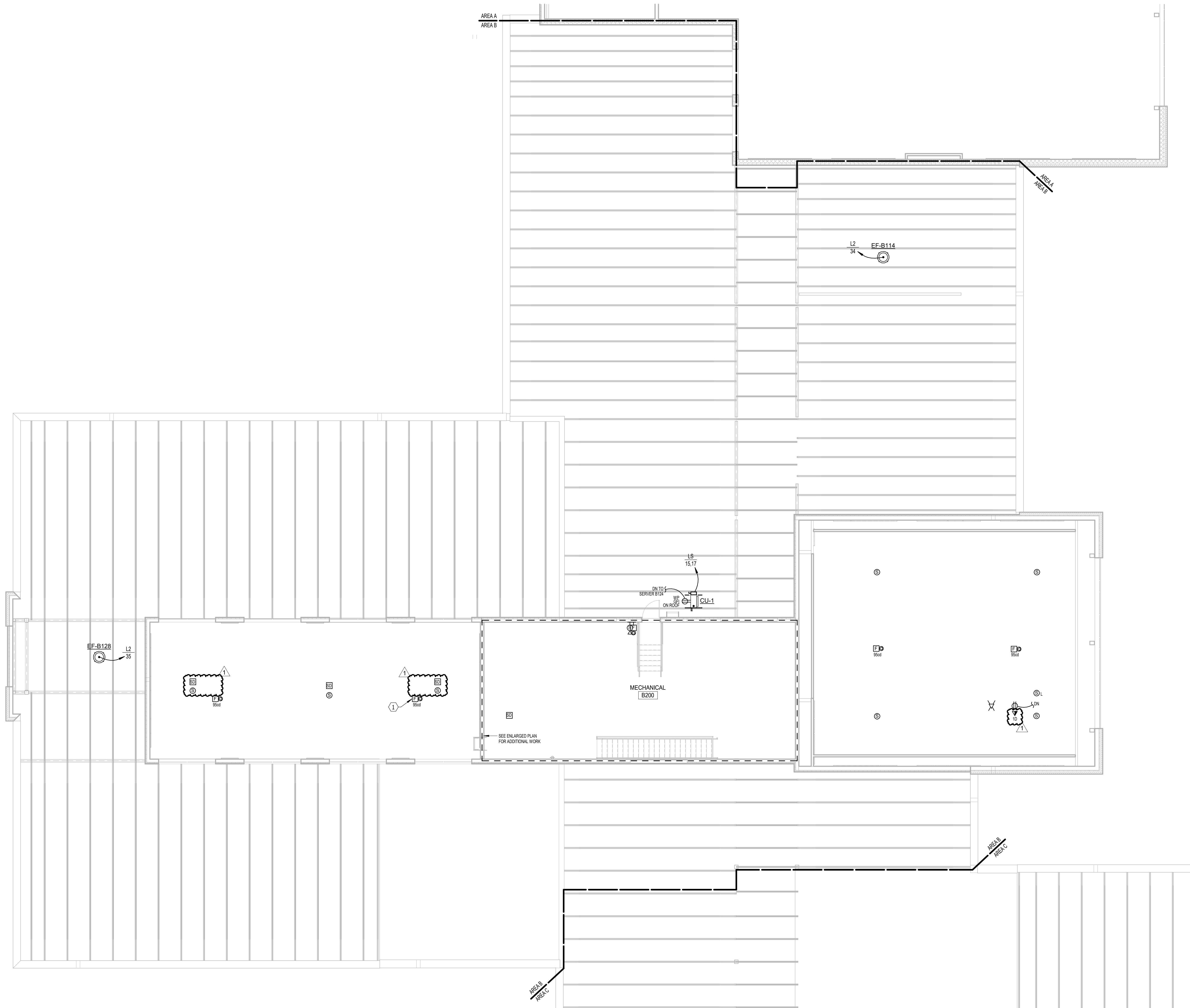


Project	number	0306.3023.23
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revision		
drawn	KMT	checked BJS

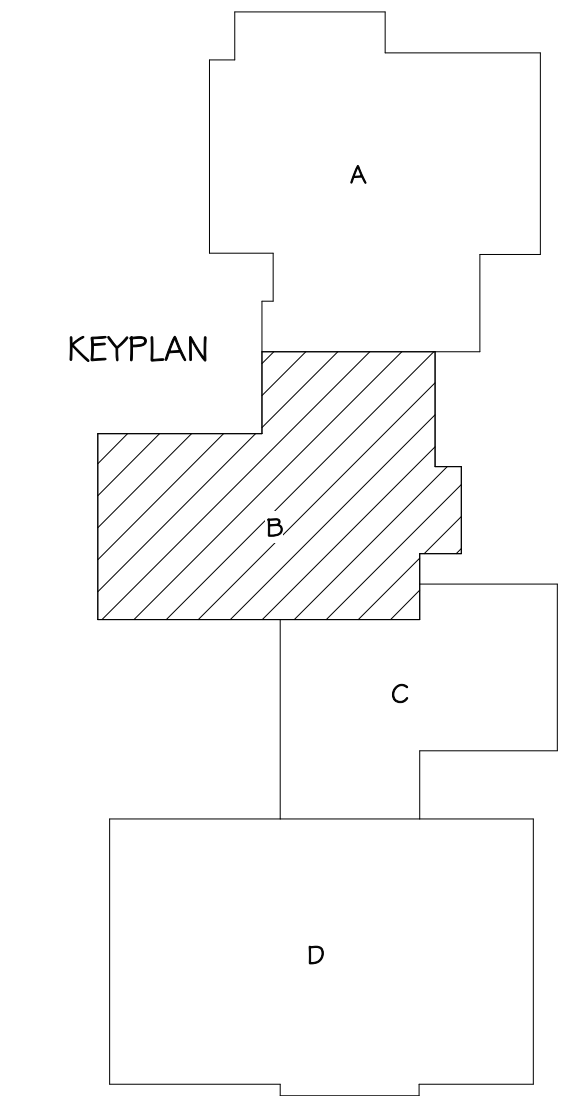
DATE	DESCRIPTION
7-26-24	Addendum #2

**9.32**

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**SECOND FLOOR - AREA B - POWER & SIGNAL**  
 SCALE 0 4 8 12 16

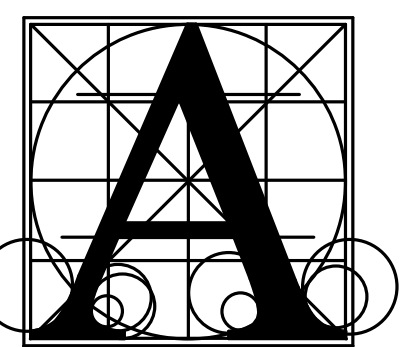


**ELECTRICAL NOTES**

- 1 MOUNT TO BOTTOM OF JOIST, TYPICAL IN THIS ROOM.

**GENERAL SHEET NOTES**

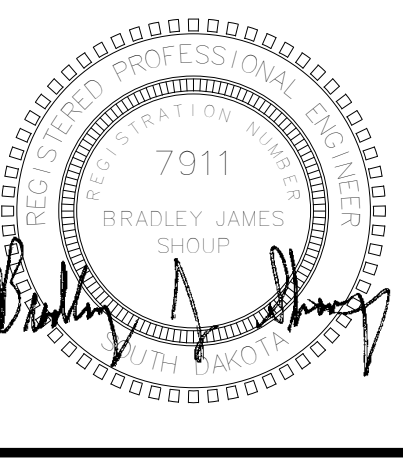
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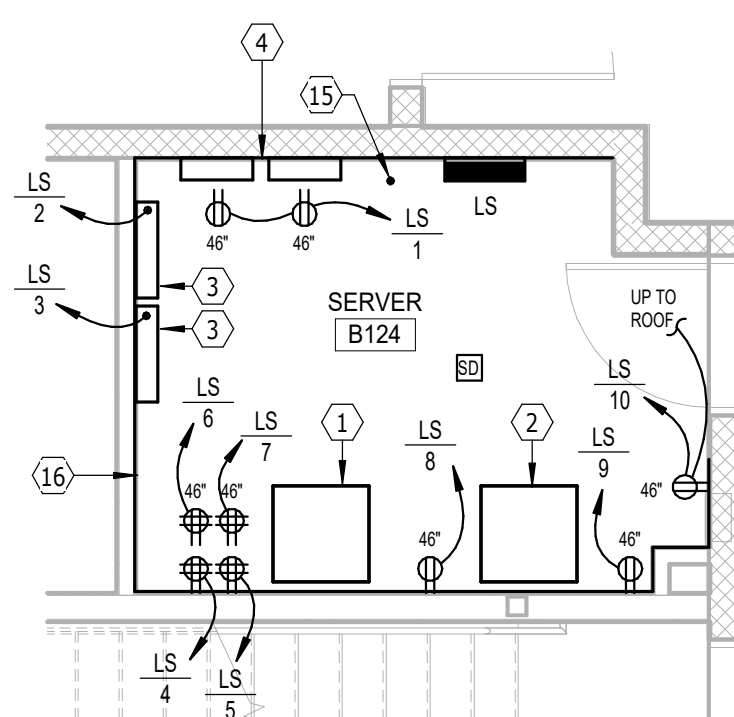
**BRANDON VALLEY ELEMENTARY SCHOOL**  
 sheet contents  
**SECOND FLOOR - AREA B - POWER & SIGNAL**

Project	number	0306.3023.23
	date	JULY 1, 2024
	revision	
	drawn	KMT checked BJS
DATE	DESCRIPTION	
7-26-24	Addendum #2	

**9.34**

**EQUIPMENT SCHEDULE**

ITEM	QTY	DESCRIPTION	VOLTS	PHASE	AMPS	NEMA PLUG CONFIGURATION	ELEC. ROUGH-IN HEIGHT (IN)	EQUIPMENT REMARKS
1	1	MILK COOLER	120	1	1.5	5-15	18	-
4	2	HOT FOOD SERVING COUNTER	120/208-230	1	22.0	14-30	* FLOOR	* TWO LOCATIONS, PROVIDE FLUSH FLOOR RECEPTACLE
6	2	CASH REGISTER STAND	120 + DATA	1	15	5-15	* FLOOR	* TWO LOCATIONS, PROVIDE FLUSH FLOOR RECEPTACLE AND DATA BOX
7	1	ROLL-IN REFRIGERATOR	120	1	6	5-15	18	-
10.A	2	MOBILE HEATED CABINET	120	1	16	5-20	* FLOOR	* TWO LOCATIONS, PROVIDE FLUSH FLOOR RECEPTACLE
10.B	(1)	(ALTERNATE LOCATION) MOBILE HEATED CABINET	120	1	16	5-20	60	-
12	1	DISPOSER	208	3	8.8	-	24	-
14	1	DISHWASHER MOTORS, CONTROLS AND TANK HEAT	480	3	27.9	-	18	INTERWIRE DISHWASHER TO LIMIT SWITCH ON CLEAN DISHTABLE
14.A	1	DISHWASHER INTERNAL BOOSTER HEATER	480	3	40.1	-	18	-
24	1	CAN OPENER	120	1	1.5	5-15	48	PROVIDE DUPLEX CONVENIENCE RECEPTACLE
26	1	WORK TABLE WITH SINK, FAUCET AND LEVER DRAIN	120	1	15	5-15	48	-
29	2	DOUBLE DECK CONVECTION OVEN	2@120	1	2@7.9	5-15	24, 48	TWO LOCATIONS - ROUGH-INS LISTED ARE FOR ONE DOUBLE DECK OVEN
30.A	1	CONVECTION STEAMER	120	1	4	5-15	48	-
32	2	TILTING SKILLET - ONE WITH DOUBLE PANTRY FAUCET	120	1	1.4	5-15	24	TWO LOCATIONS
33	(1/07)	(BY OTHERS) EXHAUST HOOD, FANS, MAKE-UP AIR AND FIRE SUPPRESSION SYSTEM	-	-	-	-	-	REVIEW REQUIREMENTS WITH MECHANICAL CONTRACTOR
35	1	WORK TABLE, WALL MOUNTED SHELF	2@120	1	2@15	5-15	2@48	PROVIDE TWO DUPLEX CONVENIENCE RECEPTACLES
36	1	MICROWAVE OVEN	120	1	13	5-15	48	-
37	1	REACH-IN REFRIGERATOR	120	1	4.2	5-15	60	-
38	1	REACH-IN FREEZER	120	1	7.2	5-15	60	-
39	1	WORK TABLE WITH WALL MOUNTED SHELF AND POT RACK	2@120	1	2@15	5-15	48	PROVIDE TWO DUPLEX CONVENIENCE RECEPTACLES
44	1	WALK-IN COOLER / FREEZER	-	-	-	-	-	-
44.A	1	WALK-IN COOLER DOOR PANEL AND 3 LIGHTS	120	1	20	-	-	* STUB DOWN FROM ABOVE TO JUNCTION BOX ON TOP OF WALK-IN
44.B	1	WALK-IN FREEZER DOOR PANEL AND 4 LIGHTS	120	1	20	-	-	* STUB DOWN FROM ABOVE TO JUNCTION BOX ON TOP OF WALK-IN
45.A	1	WALK-IN FREEZER CONDENSING UNIT	208-230	3	17.1	-	-	* VERIFY LOCATION ON ROOF ABOVE WALK-IN
45.B	1	WALK-IN FREEZER EVAPORATOR	208-230	1	14.3	-	-	* STUB DOWN FROM ABOVE TO EVAPORATOR INSIDE WALK-IN, WRAP HEAT TAPE ON DRAINLINE AS REQUIRED
45.C	1	WALK-IN FREEZER EVAPORATOR DRAINLINE	120	1	20	5-20	-	* PROVIDE RECEPTACLE NEAR EVAPORATOR FOR HEAT TAPE
46.A	1	WALK-IN COOLER CONDENSING UNIT	208-230	3	5.9	-	-	* VERIFY LOCATION ON ROOF ABOVE WALK-IN
46.B	1	WALK-IN COOLER EVAPORATOR	120	1	1.6	-	-	* STUB DOWN FROM ABOVE TO EVAPORATOR INSIDE WALK-IN
56	1	INDUCTION RANGE	120	-	15	-	48	-



**ENLARGED SERVER B124 - POWER & SIGNAL**  
SCALE 0 2 4 6 8

**PANELBOARD: LK**

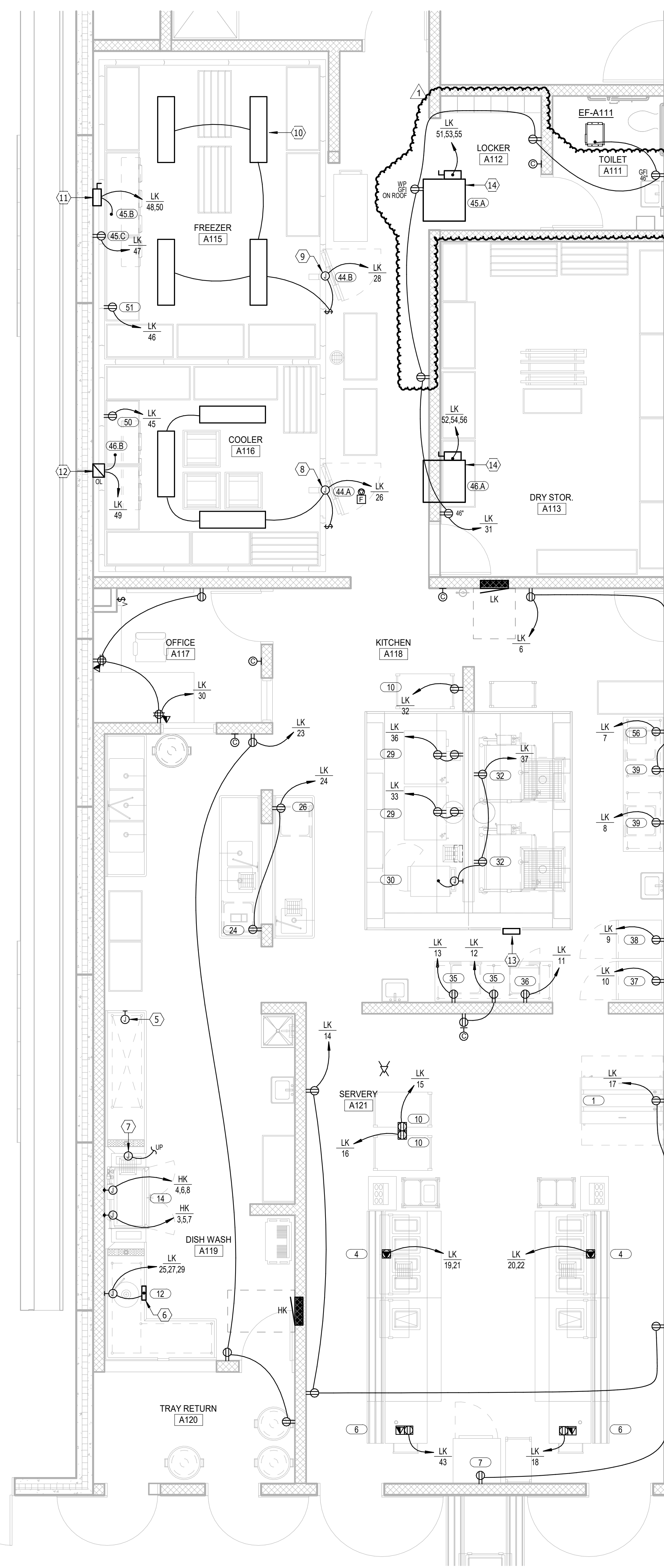
LOCATION: Space 108  
MOUNTING: RECESSED NEMA1  
MAIN DEVICE: 200 A MLO  
BUS AMPS: 200 AMPS

VOLTAGE: 208Y/120 V, 3 @ 4 W.  
A.I.C. RATING: 10,000 AMPS SYMMETRICAL  
SPECIAL:

LOAD DESCRIPTION	BKR	POLES	CKT	A	B	C	CKT	POLES	BKR	LOAD DESCRIPTION
RCPT COMMONS A101	20 A	1	1	0.5	0.7		2	1	20 A	RCPT GYMNASIUM A101
RCPT GYMNASIUM A101	20 A	1	3		0.5	1.1	4	1	20 A	RCPT GYMNASIUM A101
RCPT COMMONS A129	20 A	1	5			0.4	5	1	20 A	RCPT KITCHEN A118
RCPT INDUCTION RANGE	20 A	1	7	1.8	1.8		8	1	20 A	RCPT KITCHEN A118
RCPT REACH-IN FREEZER	20 A	1	9		0.9	0.5	10	1	20 A	RCPT REACH-IN REF
RCPT MICROWAVE OVEN	20 A	1	11			1.6	12	1	20 A	RCPT KITCHEN A118
RCPT KITCHEN A118	20 A	1	13	1.8	1.1		14	1	20 A	RCPT SERVERY A119
HEAT MOBILE HEATED CAB.	20 A	1	15		1.9	1.9	16	1	20 A	HEAT MOBILE HEATED CAB.
RCPT MILK COOLER & REF.	20 A	1	17			0.9	18	1	20 A	RCPT SERVERY A119
HEAT HOT FOOD COUNTER	30 A	2	19	2.3	2.3		20	2	30 A	HEAT HOT FOOD COUNTER
			21			2.3	22			
RCPT DISH WASH A117	20 A	1	23			0.5	24	1	20 A	RCPT CAN OPENER
KTCH DISPOSER	20 A	3	25	1.1	2.4		26	1	20 A	LITES COOLER A115
			27			1.1	28	1	20 A	LITES FREEZER A114
			29				30	1	20 A	RCPT OFFICE A116
MOTORS EF-A111	20 A	1	31	1.0	1.9		32	1	20 A	HEAT MOBILE HEATED CAB.
HEAT DBL CONV. OVEN	20 A	1	33			1.9	34	1	20 A	SHUNT-TRIP
SHUNT-TRIP			35				36	1	20 A	HEAT DBL CONV. OVEN
RCPT SKILLET & STEAMER	20 A	1	37	0.8			38	1		SHUNT TRIP
SHUNT-TRIP			39			0.6	40	3	20 A	MOTORS GYMNASIUM A101
LITES KITCHEN A118	20 A	1	41				42			
RCPT SERVERY A119	20 A	1	43	1.8	0.6		44			
RCPT COOLER A115	20 A	1	45			1.2	46	1	20 A	RCPT FREEZER A114
FREEZER HEAT TAPE	20 A	1	47				48	2	20 A	FREEZER EVAPORATOR
COOLER EVAPORATOR	20 A	1	49	0.2	1.5		50			
FREEZER CONDENSOR	20 A	3	51			2.1	52	3	20 A	COOLER CONDENSOR
			53				54			
			55	2.1	0.7		56			
Spare	20 A	1	57			0.0	58	1	20 A	Spare
Spare	20 A	1	59			0.0	60	1	20 A	Spare
Spare	20 A	1	61	0.0	0.0	0.0	62	1	20 A	Spare
Spare	20 A	1	63			0.0	64	1	20 A	Spare
Space			65				66			Space
Space			67				68	1		Space
Space			69				70	1		Space
Space			71				72	1		Space
<b>TOTAL LOAD:</b>				25 kVA	22 kVA		22 kVA			
<b>TOTAL AMPS:</b>				212 A	187 A		183 A			

LOAD CLASSIFICATION	CONNECTED	DEMAND	ESTIMATED	PANEL TOTALS
RCPT	31370 VA	65.94%	20685 VA	CONNECTED LOAD: 69784 VA ESTIMATED DEMAND: 60723 VA
MOTORS	13374 VA	100.00%	13374 VA	
LITES	6390 VA	125.00%	6738 VA	CONNECTED CURRENT: 194 A EST. DEMAND CURRENT: 169 A
KTCH	3170 VA	100.00%	3170 VA	
HEAT	18303 VA	100.00%	18303 VA	

NOTES:  
1. GFI CIRCUIT BREAKER.



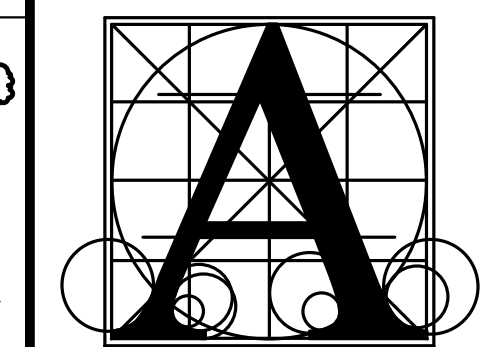
**ENLARGED KITCHEN - POWER & SIGNAL**  
SCALE 0 2 4 6 8

**ELECTRICAL NOTES**

- COMMUNICATIONS AND DATA PROCESSING EQUIPMENT (MDF) LOCATION BY OWNER.
- COMMUNICATIONS AND DATA PROCESSING EQUIPMENT (MDF) LOCATION BY OWNER.
- FIRE ALARM CONTROL PANELS.
- ACCESS CONTROL SYSTEM CONTROL PANELS AND POWER SUPPLIES, BY OWNER.
- INTERCONNECT TABLE LIMIT SWITCH TO DISHWASHER IN LIQUID TIGHT FLEXIBLE CONDUIT ROUTED TO UNDERSIDE OF CLEAN DISHTABLE.
- WATERTIGHT DISCONNECT/CONTROL PANEL FOR DISPOSER, FURNISHED BY FOOD SERVICE EQUIPMENT SUBCONTRACTOR, INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR.
- INTERLOCK DISHWASHER EXHAUST FAN ON ROOF WITH VENT FAN CONTROL ON DISHWASHER.
- CONNECT DOOR HEAT TAPE.
- CONNECT DOOR HEAT TAPE, PRESSURE RELIEF PORT AND FREEZER ALARM SYSTEM. REMOTE CONTACTS ON WALK-IN FREEZER ALARM SYSTEM TO BE MONITORED BY THE BAS.
- VAPORPROOF LED LIGHTS IN WALK-IN COOLER/FREEZER SHALL BE FURNISHED BY FOOD SERVICE EQUIPMENT SUBCONTRACTOR, INSTALLED AND CONNECTED BY ELECTRICAL SUBCONTRACTOR. ROUTE CONDUIT FOR CEILING LIGHT FIXTURES ABOVE WALK-IN COMPARTMENT AND SEAL ALL PENETRATIONS THROUGH PREFABRICATED PANELS.
- PROVIDE A NON-FUSED DISCONNECT SWITCH.
- PROVIDE A MANUAL MOTOR STARTER DISCONNECT SWITCH.
- MONITOR HOOD ANSUL SYSTEM WITH FIRE ALARM SYSTEM AND INTERLOCK WITH SHUNT TRIP CIRCUIT BREAKERS IN PANEL LK. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR.
- PROVIDE A NEMA 3R NON-FUSED DISCONNECT SWITCH. VERIFY CONDENSING UNIT LOCATION ON ROOF WITH SUPPLIER.
- GROUND BUS AND CONDUCTOR. SEE SPECIFICATIONS.
- TELECOM AND FIBER-OPTIC DEMARC LOCATION.

**GENERAL SHEET NOTES**

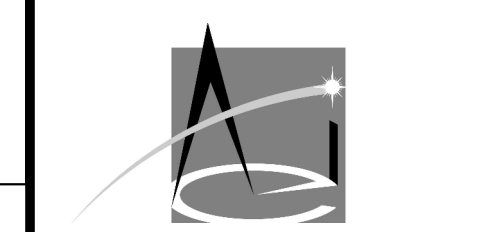
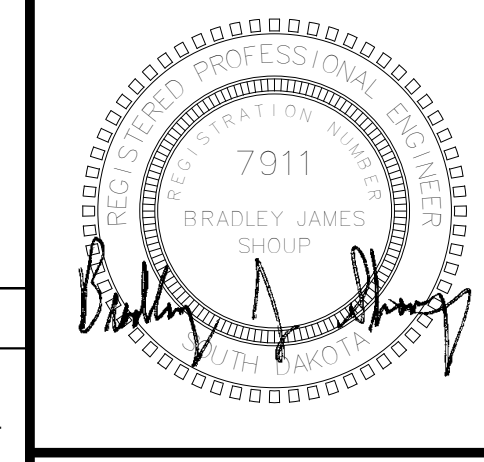
- RECEPTACLES IN THE KITCHEN, SERVERY, AND DISHWASH AREAS SHALL BE GFI OR GFI PROTECTED IN ACCORDANCE WITH THE NEC AND LOCAL CODE REQUIREMENTS. PROVIDE GFI RECEPTACLES OR DEAD FRONT GFI UNITS AT ACCESSIBLE LOCATIONS TO FEED RECEPTACLES THAT ARE NOT READILY ACCESSIBLE.
- ALL ROUGH-INS FOR FOOD SERVICE EQUIPMENT SHALL BE IN ACCORDANCE WITH APPROVED FOOD SERVICE EQUIPMENT ROUGH-IN SHOP DRAWINGS.
- ALL CONNECTIONS FOR FOOD SERVICE EQUIPMENT SHALL BE PROVIDED WITH LIQUID TIGHT FLEXIBLE CONDUIT.



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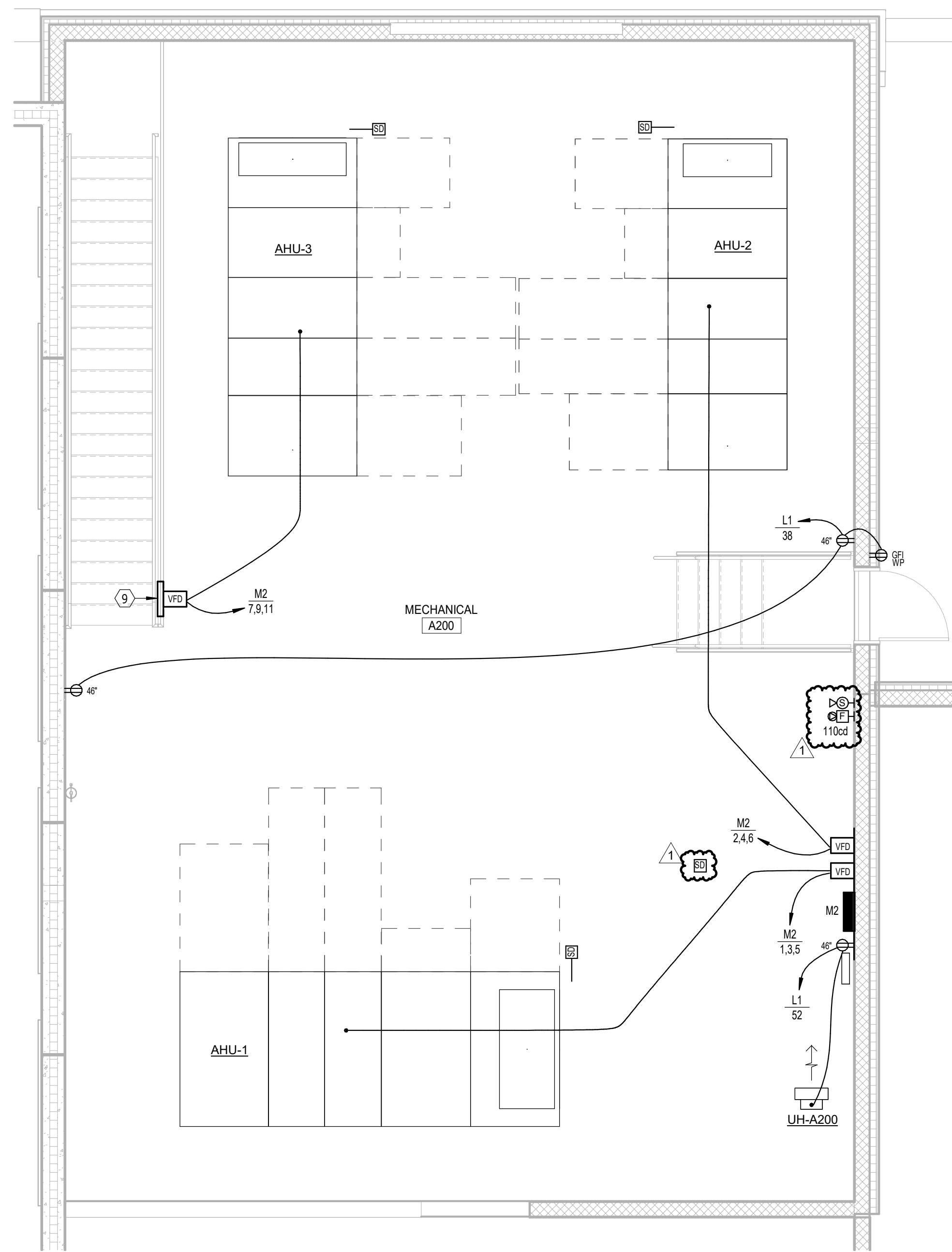


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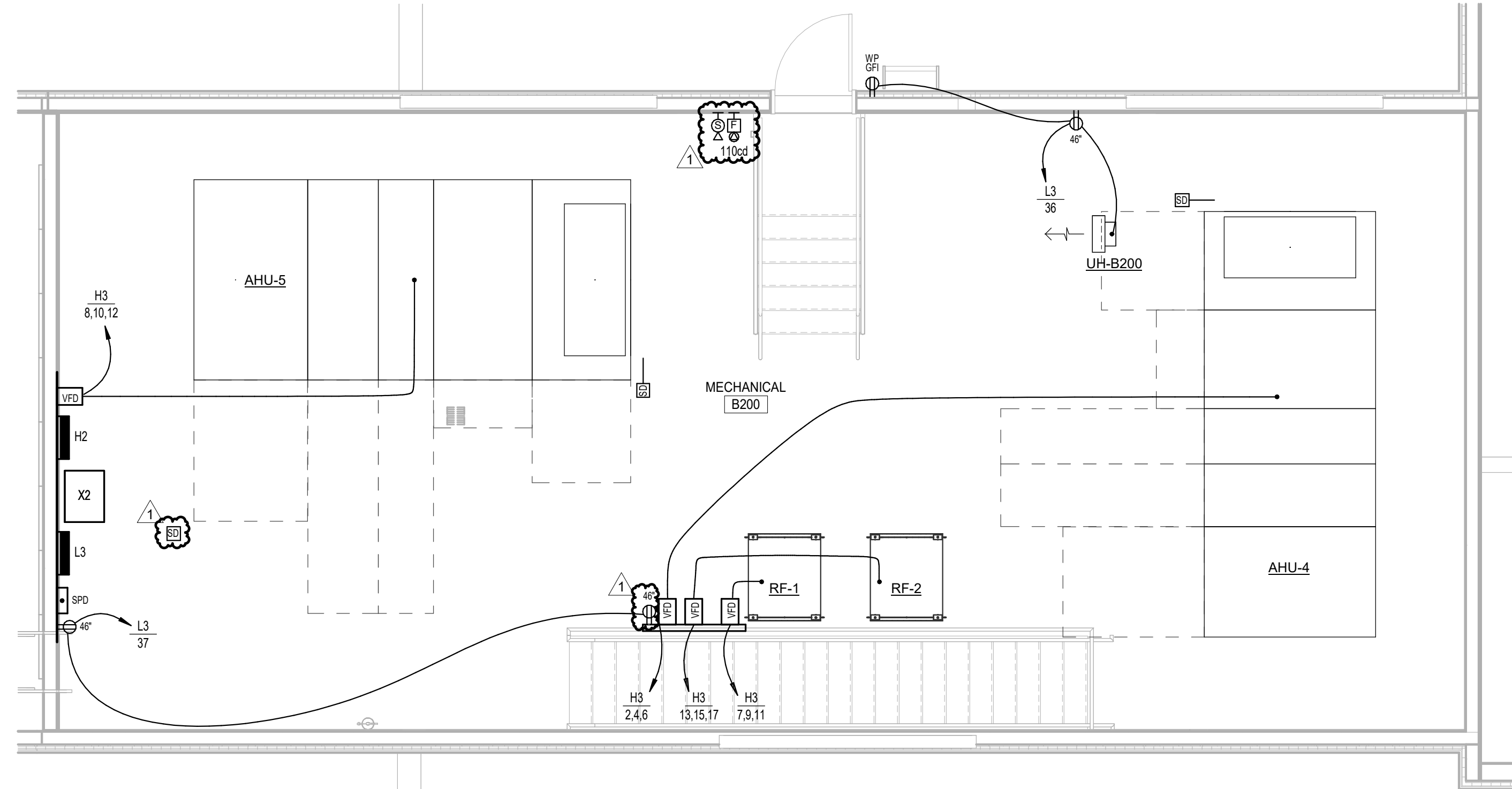
**BRANDON VALLEY ELEMENTARY SCHOOL**  
ENLARGED PLANS - ELECTRICAL

number	0306.3023.23
date	JULY 1, 2024
revision	
drawn	KMT checked BJS
DATE	DESCRIPTION
7-26-24	Addendum #2

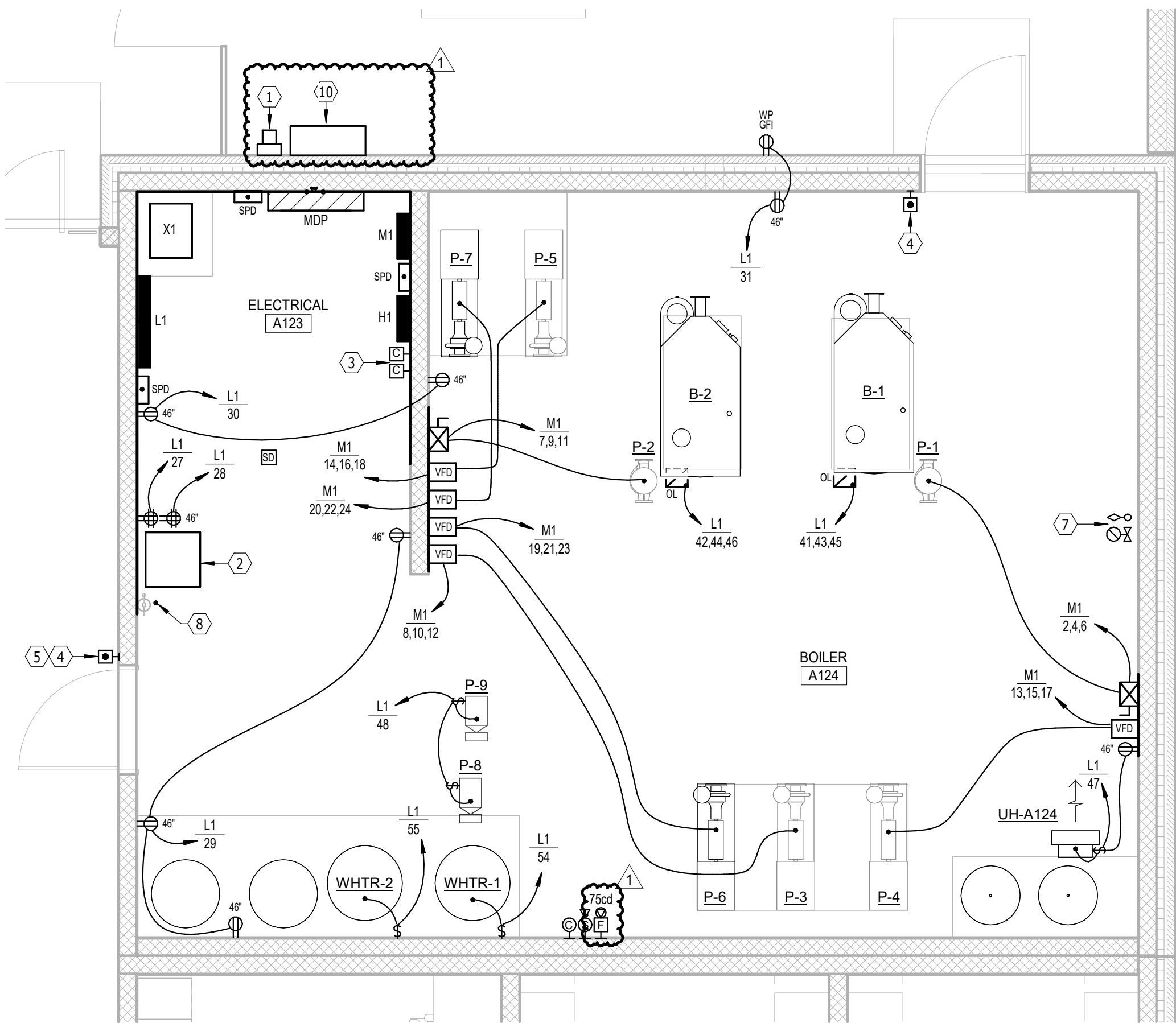
**9.40**



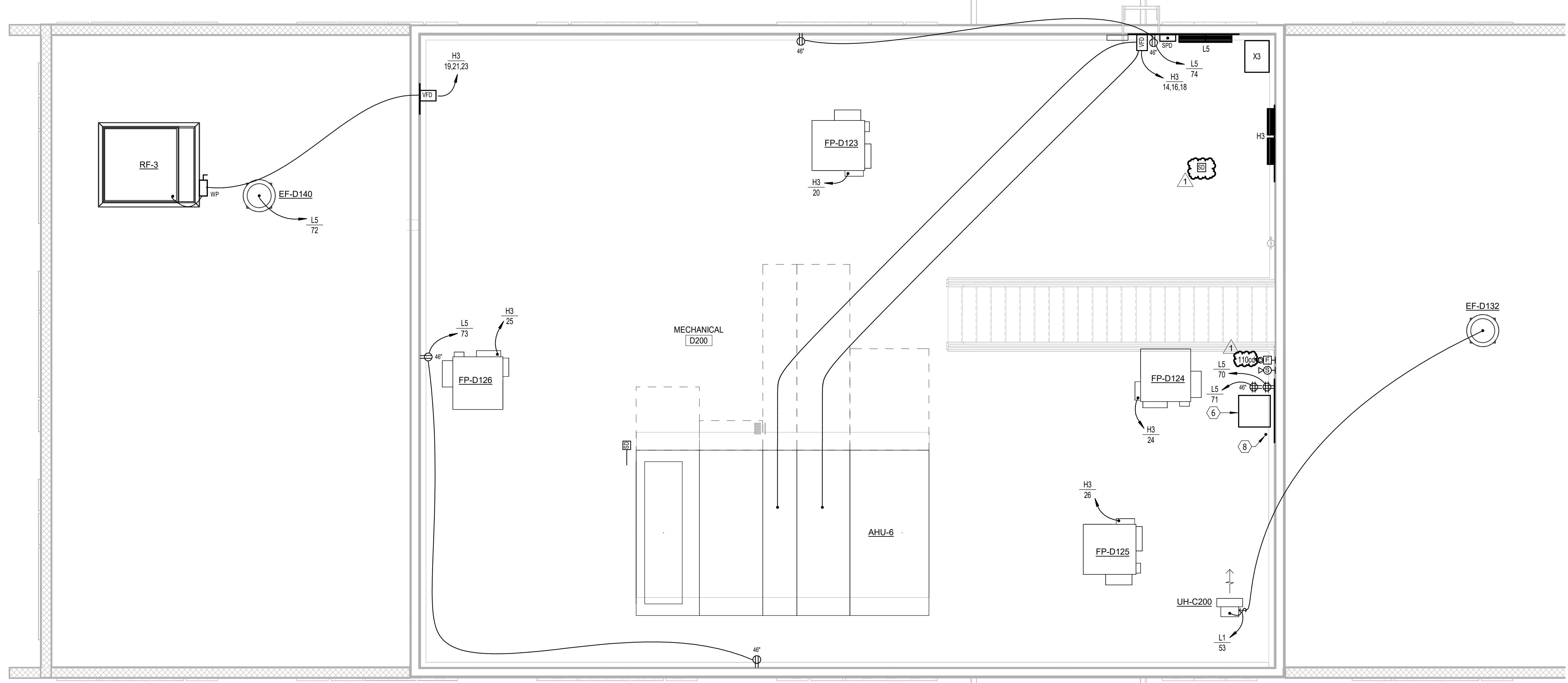
ENLARGED MECHANICAL A200 - POWER & SIGNAL  
SCALE 0 2 4 6 8



ENLARGED MECHANICAL B200 - POWER & SIGNAL  
SCALE 0 2 4 6 8



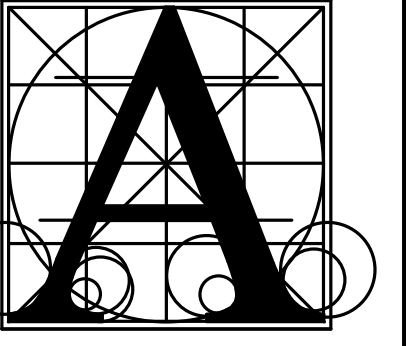
ENLARGED ELEC/MECH - POWER & SIGNAL  
SCALE 0 2 4 6 8



ENLARGED MECHANICAL D200 - POWER & SIGNAL  
SCALE 0 2 4 6 8

- ELECTRICAL NOTES**
- ELECTRIC UTILITY METER.
  - COMMUNICATIONS AND DATA-PROCESSING EQUIPMENT (CDF) LOCATION. PROVIDE A 6 STRAND MULTI-MODE FIBER-OPTIC CABLE (DATA) AND 1 EACH 25 PAIR CATEGORY 5E (VOICE) BACKBONE CABLES TO THE MDF.
  - EXTERIOR LIGHTING CONTROL CONTACTORS "ELC1" (5 POLES), AND "ELC2" (3 POLES), PROVIDE HOA'S CONTROL BY THE BUILDING AUTOMATION SYSTEM, COORDINATE COIL VOLTAGE.
  - BOILER EMERGENCY OFF MUSHROOM HEAD PUSHBUTTON SWITCH.
  - PROVIDE PROTECTIVE COVER SIMILAR TO ST1 13020CR.
  - COMMUNICATIONS AND DATA-PROCESSING EQUIPMENT (CDF) LOCATION. PROVIDE A 6 STRAND MULTI-MODE FIBER-OPTIC CABLE (DATA) AND 2 EACH 25 PAIR CATEGORY 5E (VOICE) BACKBONE CABLES TO THE MDF.
  - VERIFY QUANTITY OF FLOW AND TAMPER SWITCHES WITH FIRE SPRINKLER CONTRACTOR.
  - GROUND BUS AND CONDUCTOR, SEE SPECIFICATIONS.
  - PROVIDE UNISTRUT BACKBOARD ASSEMBLY AS REQUIRED FOR MOUNTING.
  - CT CABINET BY EC, CTS BY BAS CONTRACTOR.

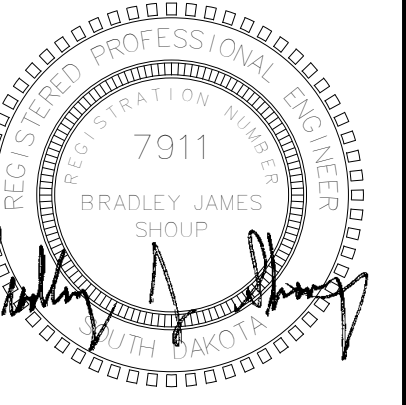
- GENERAL SHEET NOTES**
- A. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ROUGH-INS FOR ACCESS CONTROL SYSTEM DEVICES. DEVICES INCLUDE CARD READERS, DOOR STRIKES, ELECTRIC PANEL HARDWARE AND DOOR POSITION SWITCHES. COORDINATE REQUIREMENTS WITH THE OWNER'S SECURITY SYSTEM SUPPLIER AND THE DOOR HARDWARE SUPPLIER.



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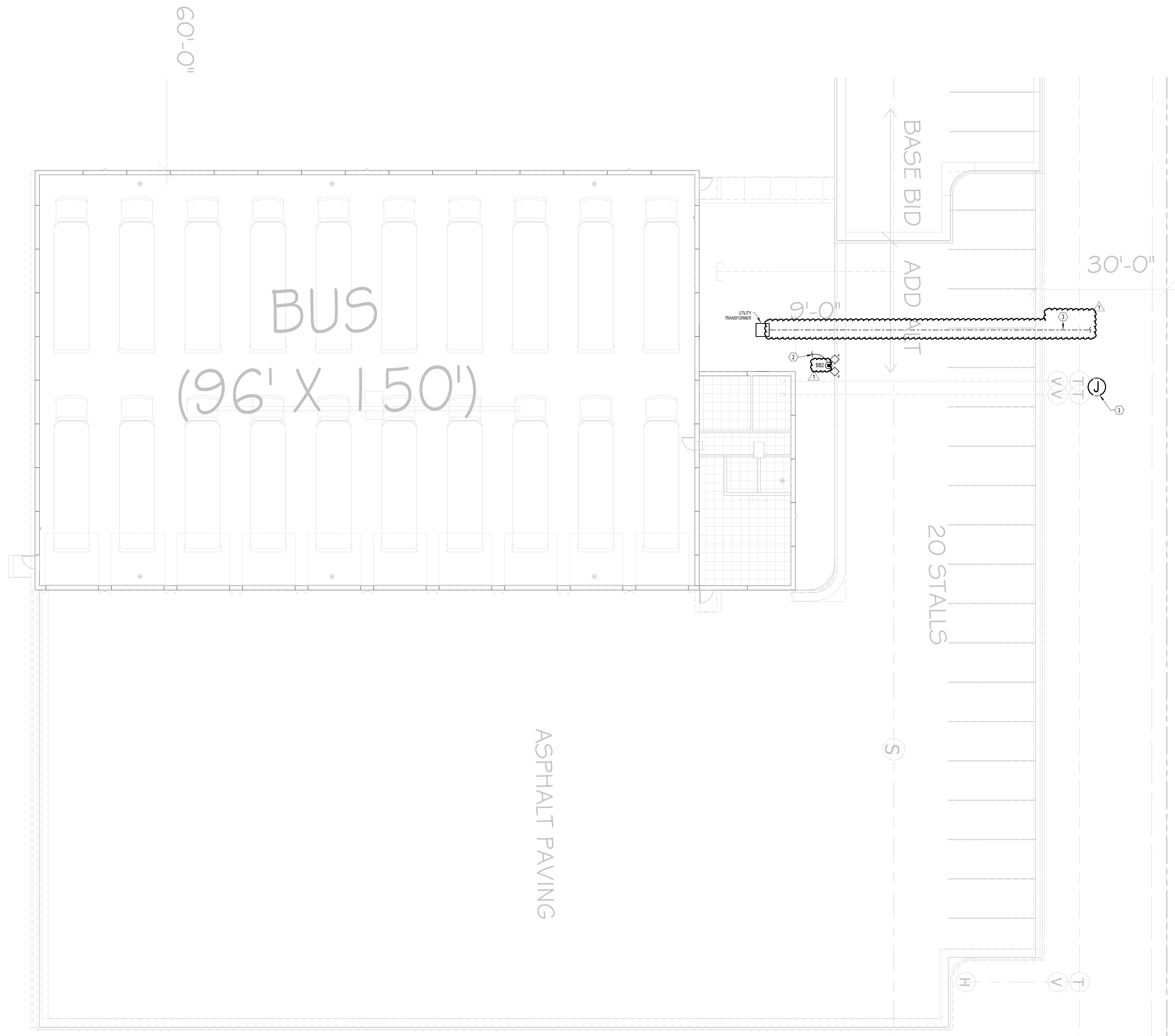
**BRANDON VALLEY ELEMENTARY SCHOOL**  
 ENLARGED PLANS - ELECTRICAL  
 sheet contents

Project	number	0306.3023.23	
	date	JULY 1, 2024	
	revision		
drawn	KMT	checked	BJ5
DATE	DESCRIPTION		
7-26-24	Addendum #2		

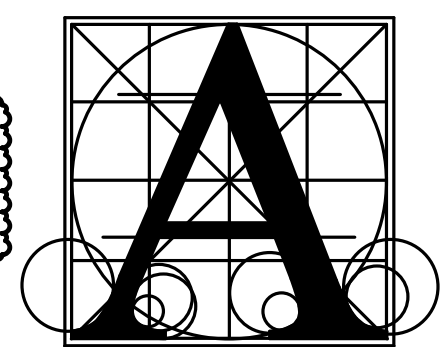
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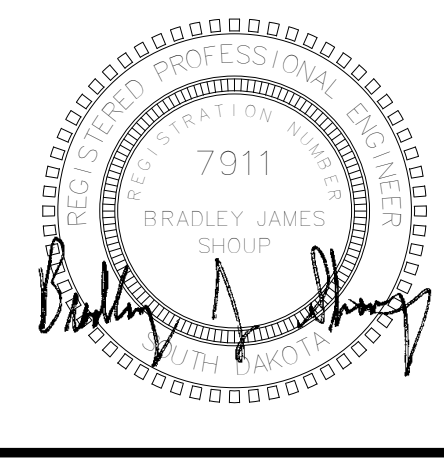


- ELECTRICAL NOTES**
1. MONITOR POST INDICATOR VALVE WITH FIRE ALARM SYSTEM.
  2. CONNECT TO BUILDING W/UTILITY MAINS.
  3. RACEWAY FOR ELECTRIC UTILITY PRIMARY CONDUCTORS: RACEWAY, SWEEPS, AND PULL STRING FURNISHED BY SIOUX VALLEY ENERGY (ELECTRICAL CONTRACTOR TO PICK UP AT SIOUX VALLEY ENERGY'S OFFICE IN BRANDON) AND INSTALLED (MINIMUM OF 48" DEEP) BY THE ELECTRICAL CONTRACTOR.
- GENERAL SHEET NOTES**
- A. COORDINATE ALL WORK WITH SITE CONSTRUCTION CONTRACTORS.



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**BRANDON VALLEY ELEMENTARY SCHOOL**  
**BUS GARAGE SITE PLAN - ELECTRICAL - ADD ALTERNATE #1**

Project  
 number 0306.3023.23  
 date JULY 1, 2024  
 revision  
 drawn KMT checked BUS

DATE	DESCRIPTION
7-26-24	Addendum #2

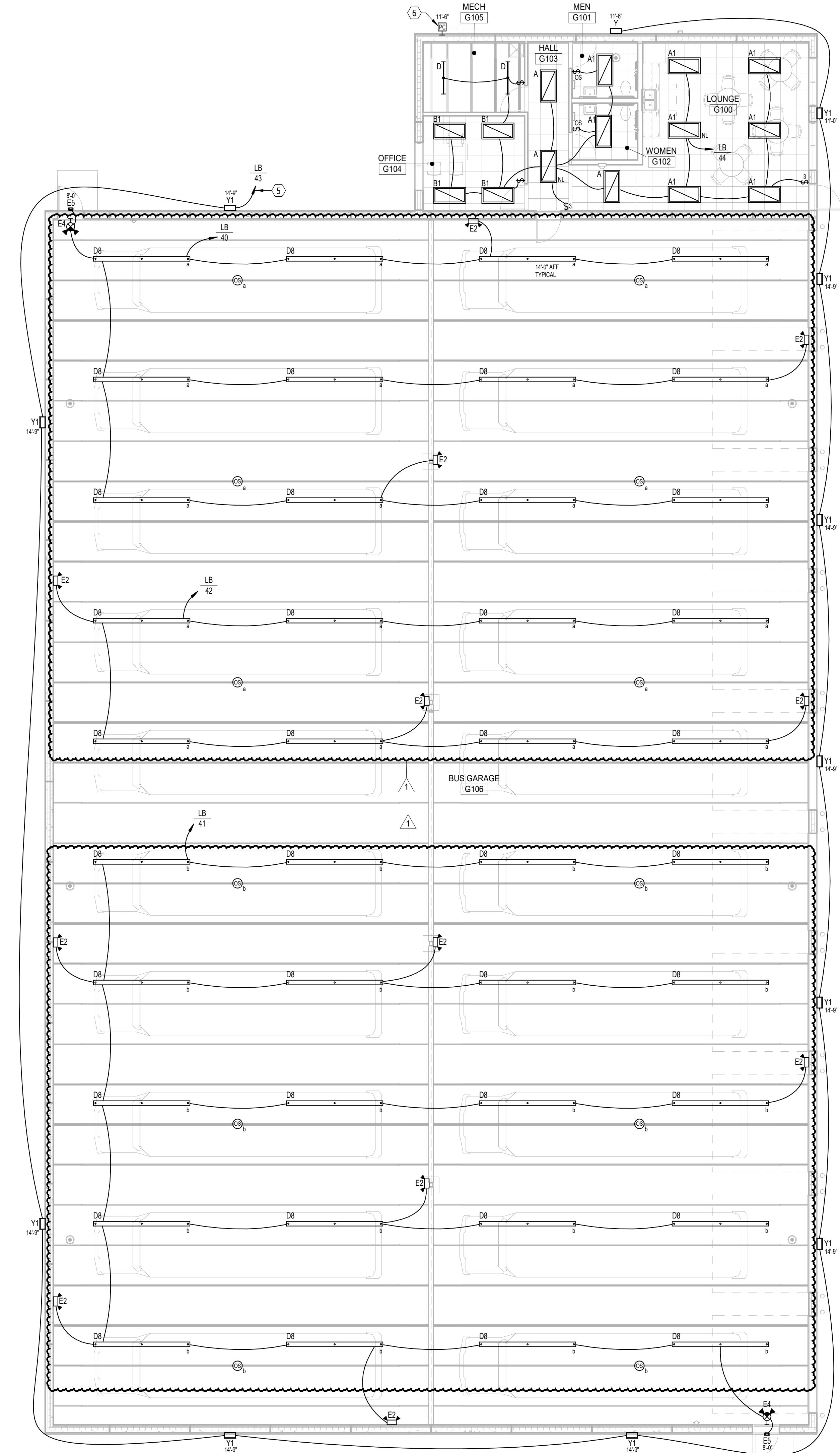
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**BUS GARAGE SITE PLAN - ELECTRICAL - ADD ALTERNATE #1**



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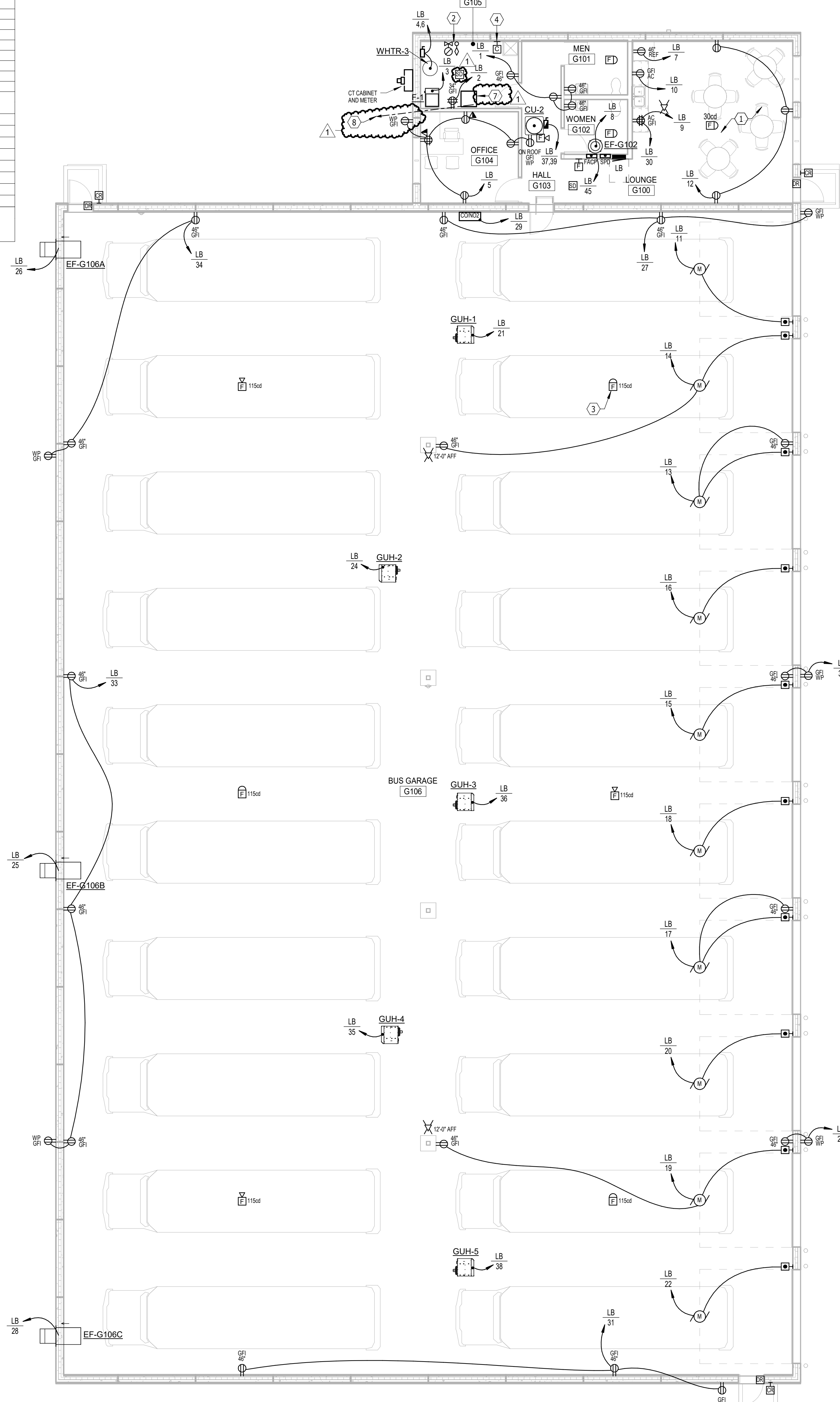
**BUS GARAGE - LIGHTING - ADD ALTERNATE #1**  
 SCALE 0 4 8 12 16

**PANELBOARD: LB**  
 LOCATION: LOUNGE G100  
 MOUNTING: RECESSED NEMA1  
 MAIN DEVICE: 300 A MAIN CB  
 BUS AMPS: 300 AMPS

VOLTAGE: 120/240 V, 1 ø 3 W.  
 A.I.C. RATING: 10,000 AMPS SYMMETRICAL  
 SPECIAL:

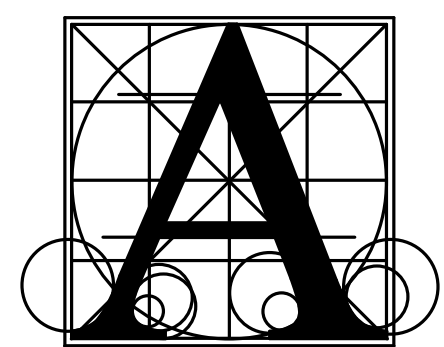
LOAD DESCRIPTION	BKR	POLES	CKT	A	B	CKT	POLES	BKR	LOAD DESCRIPTION		
RCPT MECH G105	20 A	1	1	0.7	0.4	2	1	20 A	RCPT MECH G105		
HEAT F-1	15 A	1	3		1.0	2.8	4	2	HEAT WHTR-3		
RCPT BUS GARAGE G106	20 A	1	5	1.2	2.8	0.8	0.1	8			
RCPT LOUNGE G100	20 A	1	7					15 A	EF-G102		
RCPT LOUNGE G100	20 A	1	9	0.4	1.2			10	1	20 A	RCPT BUS GARAGE G106
MOTORS BUS GARAGE G106	20 A	1	11			0.9	0.5	12	1	20 A	RCPT LOUNGE G100
MOTORS BUS GARAGE G106	20 A	1	13	1.0	1.2			14	1	20 A	MOTORS BUS GARAGE G106
MOTORS BUS GARAGE G106	20 A	1	15			0.9	0.9	16	1	20 A	MOTORS BUS GARAGE G106
MOTORS BUS GARAGE G106	20 A	1	17	1.0	0.9			18	1	20 A	MOTORS BUS GARAGE G106
MOTORS BUS GARAGE G106	20 A	1	19			1.2	0.9	20	1	20 A	MOTORS BUS GARAGE G106
MOTORS GUH-1	15 A	1	21	0.4	0.9			22	1	20 A	MOTORS BUS GARAGE G106
RCPT BUS GARAGE G106	20 A	1	23			0.4	0.4	24	1	15 A	MOTORS GUH-2
MOTORS EF-G106B	20 A	1	25	1.1	1.1			26	1	20 A	MOTORS EF-G106A
RCPT BUS GARAGE G106	20 A	1	27			0.5	1.1	28	1	20 A	MOTORS EF-G106C
CONO2 PANEL	20 A	1	29	0.0	0.4			30	1	20 A	RCPT LOUNGE G100
RCPT BUS GARAGE G106	20 A	1	31			0.5	0.4	32	1	20 A	RCPT BUS GARAGE G106
RCPT BUS GARAGE G106	20 A	1	33	0.7	0.5			34	1	20 A	RCPT BUS GARAGE G106
MOTORS GUH-4	15 A	1	35			0.4	0.4	36	1	15 A	MOTORS GUH-3
MOTORS CU-2	30 A	2	37	1.8	0.4			38	1	15 A	MOTORS GUH-5
			39			1.8	1.2	40	1	20 A	LITES BUS GARAGE G106
LITES BUS GARAGE G106	20 A	1	41	2.0	0.8			42	1	20 A	LITES BUS GARAGE G106
LITES EXTERIOR	20 A	1	43			1.2	0.6	44	1	20 A	LITES LOUNGE G100
FIRE ALARM CONTROL PANEL	20 A	1	45	0.5	0.0			46	1	20 A	Spare
Spare	20 A	1	47			0.0	0.0	48	1	20 A	Spare
Spare	20 A	1	49			0.0	0.0	50	1	20 A	Spare
Spare	20 A	1	51			0.0	0.0	52	2	30 A	SURGE PROTECTION
Spare	20 A	1	53			0.0	0.0	54	--	--	--
<b>TOTAL LOAD:</b>				21 kVA	18 kVA						
<b>TOTAL AMPS:</b>				171 A	150 A						
<b>LOAD CLASSIFICATION</b>		<b>CONNECTED</b>	<b>DEMAND</b>	<b>ESTIMATED</b>	<b>PANEL TOTALS</b>						
Lighting		0 VA	0.00%	0 VA	<b>CONNECTED LOAD:</b> 38452 VA						
RCPT		10024 VA	89.88%	10012 VA	<b>ESTIMATED DEMAND:</b> 39602 VA						
MOTORS		17358 VA	100.00%	17358 VA	<b>CONNECTED CURRENT:</b> 160 A						
LITES		5718 VA	125.00%	7147 VA	<b>EST. DEMAND CURRENT:</b> 166 A						
HEAT		6630 VA	100.00%	6630 VA							

**NOTES:**  
 1. GFI CIRCUIT BREAKER



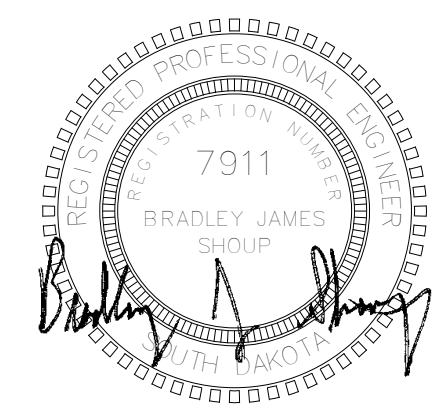
**BUS GARAGE - POWER & SIGNAL - ADD ALTERNATE #1**  
 SCALE 0 4 8 12 16

- ELECTRICAL NOTES**
- RECEPTACLES IN THIS ROOM SHALL BE GFI PROTECTED IN ACCORDANCE WITH THE NEC AND LOCAL CODE REQUIREMENTS. PROVIDE GFI RECEPTACLES OR GFI CIRCUIT BREAKERS FOR RECEPTACLES THAT ARE NOT READILY ACCESSIBLE OR AVAILABLE WITH GFI PROTECTION.
  - VERIFY QUANTITY OF FLOW AND TAMPER SWITCHES WITH FIRE SPRINKLER CONTRACTOR.
  - LOCATE FIRE ALARM NOTIFICATION DEVICE ON BOTTOM OF JOIST, TYPICAL.
  - EXTERIOR LIGHTING CONTROL CONTACTOR "ELCBB" (3 POLES), PROVIDE HOA CONTROL BY THE BUILDING AUTOMATION SYSTEM, COORDINATE COIL VOLTAGE.
  - VIA EXTERIOR LIGHTING CONTRACTOR "ELCBB".
  - TO CONTACTOR "ELCBB" FOR CONTROL.
  - WALL MOUNTED COMMUNICATIONS & DATA-PROCESSING EQUIPMENT RACK (IDP) PROVIDE GROUND BUS AND CONDUCTOR.
  - PROVIDE A 12 STRAND MULTI-MODE FIBER-OPTIC CABLE (IN A 3" CONDUIT) TO THE MECH IN THE SCHOOL.
- GENERAL SHEET NOTES**
- THE CEILING SPACE AVAILABLE REQUIRES EXTENSIVE COORDINATION WITH OTHER TRADES. THE CONTRACTOR SHALL PROVIDE ALL OFFSETS AND RELOCATE AS REQUIRED TO COORDINATE THE INSTALLATION OF ALL MATERIALS AND EQUIPMENT WITH OTHER TRADES.



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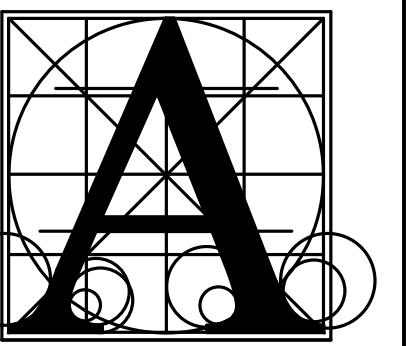


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**BRANDON VALLEY ELEMENTARY SCHOOL**  
 BUS GARAGE FLOOR PLAN - ELECTRICAL - ADD ALTERNATE #1

number	0306.3023.23
date	JULY 1, 2024
revision	
drawn	KMT checked BUS
DATE	7-26-24
DESCRIPTION	Addendum #2

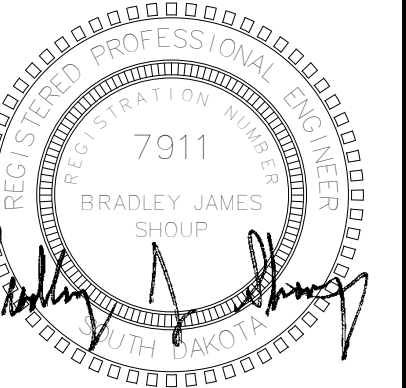
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**BRANDON VALLEY ELEMENTARY SCHOOL**  
ELECTRICAL SYMBOLS AND ABBREVIATIONS

Project number 0306.3023.23  
date JULY 1, 2024  
revision  
drawn KMT checked BUS

DATE 7-26-24 DESCRIPTION Addendum #2  
**9.50**

FEEDER SCHEDULE														
MARK (AMPS)	4-WIRE FEEDER				3-WIRE FEEDER			"K" RATED 4-WIRE FEEDER				MARK (AMPS)		
	SETS	PH	GND	C	SETS	PH	GND	C	SETS	PH	N		GND	C
15	1	14	14	0.75	1	14	14	0.75	1	14	12	14	0.75	15
20	1	12	12	0.75	1	12	12	0.75	1	12	10	12	0.75	20
25	1	10	10	0.75	1	10	10	0.75	1	10	8	10	0.75	25
30	1	10	10	0.75	1	10	10	0.75	1	10	8	10	0.75	30
35	1	8	10	0.75	1	8	10	0.75	1	8	8	10	0.75	35
40	1	8	10	0.75	1	8	10	0.75	1	8	4	10	1.00	40
45	1	6	10	1.00	1	6	10	1.00	1	6	4	10	1.00	45
50	1	6	10	1.00	1	6	10	1.00	1	6	3	10	1.00	50
60	1	6	10	1.00	1	6	10	0.75	1	6	3	10	1.00	60
70	1	4	8	1.25	1	4	8	1.00	1	4	1/0	8	1.25	70
80	1	4	8	1.25	1	4	8	1.00	1	4	1/0	8	1.25	80
90	1	3	8	1.25	1	3	8	1.25	1	3	2/0	8	1.25	90
100	1	3	8	1.25	1	3	8	1.25	1	3	2/0	8	1.50	100
110	1	2	6	1.25	1	2	6	1.25	1	2	3/0	6	1.50	110
125	1	1	6	1.50	1	1	6	1.25	1	1	4/0	6	2.00	125
150	1	1/0	6	2.00	1	1/0	6	1.50	1	1/0	3/0	6	2.00	150
175	1	2/0	6	2.00	1	2/0	6	2.00	1	2/0	3/0	6	2.00	175
200	1	3/0	6	2.00	1	3/0	6	2.00	1	3/0	5/0	6	2.50	200
225	1	4/0	4	2.50	1	4/0	4	2.00	1	4/0	2-3/0	4	2.50	225
250	1	250	4	2.50	1	250	4	2.50	1	250	2-4/0	4	2.50	250
300	1	350	4	3.00	1	350	4	2.50	1	350	2-3/0	4	3.00	300
350	1	500	3	3.00	1	500	3	3.00	1	500	2-4/0	3	3.50	350
400	2	3/0	3	2.00	2	3/0	3	2.00	2	3/0	5/0	3	2.50	400
450	2	4/0	2	2.50	2	4/0	2	2.00	2	4/0	2-3/0	2	2.50	450
500	2	250	2	2.50	2	250	2	2.50	2	250	2-4/0	2	2.50	500
600	2	350	1	3.00	2	350	1	2.50	2	350	2-3/0	1	3.00	600
700	2	500	1/0	3.00	2	500	1/0	3.00	2	500	2-4/0	1/0	3.50	700
800	3	300	1/0	2.50	3	300	1/0	2.50	3	300	2-4/0	1/0	3.00	800
900	3	350	2/0	3.00	3	350	2/0	2.50	3	350	2-3/0	2/0	3.00	900
1000	3	400	2/0	3.00	3	400	2/0	2.50	3	400	2-3/0	2/0	3.00	1000
1200	4	350	3/0	3.00	4	350	3/0	2.50	4	350	2-3/0	3/0	3.00	1200
1600	5	400	4/0	3.00	5	400	4/0	2.50	5	400	2-3/0	4/0	3.00	1600
2000	6	400	250	3.00	6	400	250	3.00	6	400	2-3/0	250	3.50	2000
2500	7	500	350	3.50	7	500	350	3.00	7	500	2-4/0	350	3.50	2500
3000	8	500	400	3.50	8	500	400	3.00	8	500	2-4/0	400	4.00	3000
4000	11	500	500	3.50	11	500	500	3.00	11	500	2-4/0	500	4.00	3000
5000	14	500	700	3.50	14	500	700	3.00	14	700	2-4/0	700	4.00	3000

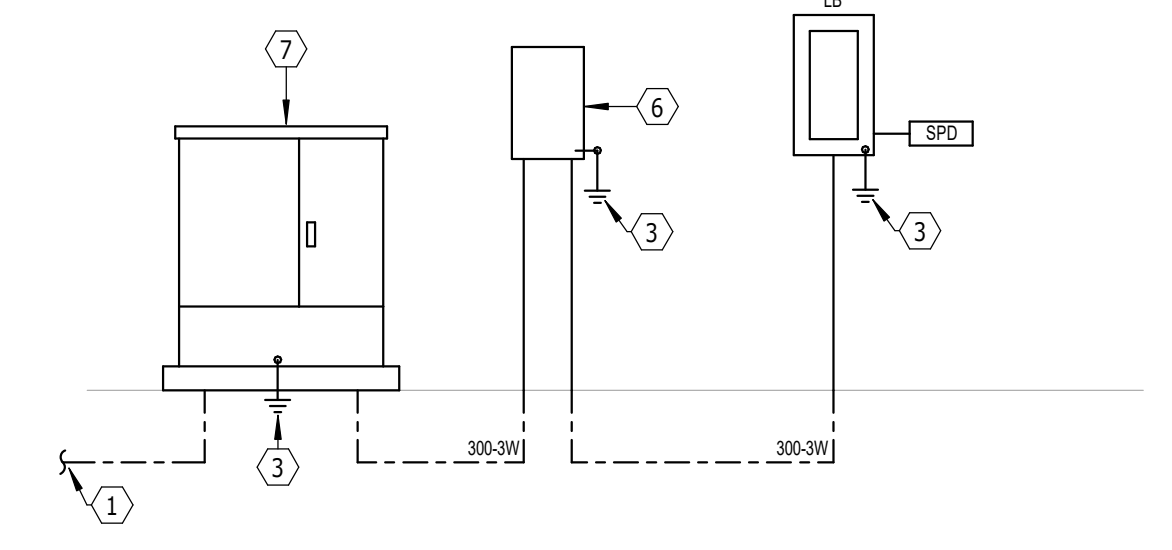
  

MOTOR & APPLIANCE FEEDER SCHEDULE (100 Amps & Less)												
MARK (AMPS)	MOTOR LOAD (HP)		4-WIRE FEEDER			3-WIRE FEEDER			MARK (AMPS)			
	480V	208V	PH	GND	C	PH	GND	C				
20	7.5 & LESS	3 & LESS	12	12	0.75	12	12	0.75	20			
25	10	--	10	10	0.75	10	10	0.75	25			
30	15	--	10	10	0.75	10	10	0.75	30			
35	--	5	8	10	0.75	8	10	0.75	35			
40	--	--	8	10	0.75	8	10	0.75	40			
45	--	--	6	10	1.00	6	10	0.75	45			
50	--	7.5	6	10	1.00	6	10	0.75	50			
60	20	10	6	10	1.00	6	10	0.75	60			
70	25	--	4	8	1.25	4	8	1.00	70			
80	30	--	4	8	1.25	4	8	1.00	80			
90	40	15	3	8	1.25	3	8	1.25	90			
100	50	20	3	8	1.25	3	8	1.25	100			

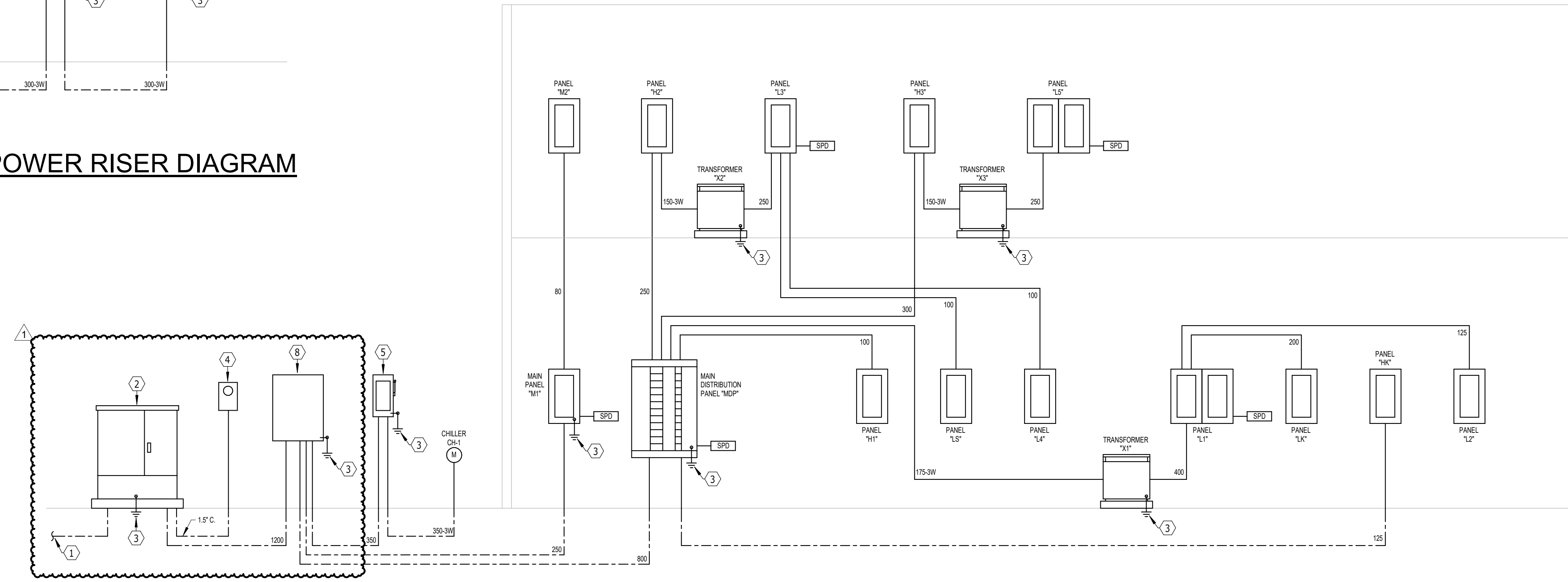
- NOTES:**
- FEEDERS SHALL BE 4-WIRE UNLESS DENOTED WITH:
    - "3W" WHICH SHALL BE 3-WIRE
    - "IG" WHICH SHALL BE 4-WIRE PLUS INSULATED GROUND AND EQUIPMENT GROUND.
    - "4C" WHICH SHALL BE 4-WIRE WITH OVERSIZED NEUTRAL.
  - SERVICE ENTRANCE CONDUCTORS SHALL NOT BE PROVIDED WITH GROUND CONDUCTOR.
  - ALL FEEDERS SHALL HAVE EQUIPMENT GROUND CONDUCTOR.
  - NEUTRAL SHALL BE SAME SIZE AS PHASE CONDUCTOR UNLESS OTHERWISE NOTED.
  - CONDUCTOR SIZES FOR FEEDERS OVER 40A ARE BASED ON TERMINATIONS TO EQUIPMENT LISTED FOR 75°C. INCREASE FEEDER SIZES AS REQUIRED FOR TERMINATIONS TO EQUIPMENT NOT LISTED FOR 75°C.
  - RACEWAY AND CONDUCTOR SIZING IS BASED ON THE USE OF THHN/THWN COPPER CONDUCTORS AND EMT CONDUIT. MODIFY RACEWAY AND CONDUCTOR SIZES AS REQUIRED FOR THE USE OF OTHER RACEWAY AND CONDUCTOR TYPES.
  - SEE SPECIFICATIONS FOR ALLOWABLE CONDUCTOR MATERIAL, INSULATION AND RACEWAY TYPES. WHERE ALUMINUM CONDUCTORS ARE ALLOWED THE AMPACITY RATING OF THE SERVICE OR FEEDER SHALL BE EQUAL TO OR GREATER THAN THE CALCULATED AMPACITY RATING OF THE COPPER CONDUCTORS SHOWN IN THIS SCHEDULE.
  - NOT ALL FEEDER SIZES SHOWN IN THIS SCHEDULE ARE USED IN THIS PROJECT.

**ELECTRICAL NOTES**

- PRIMARY CONDUCTORS BY UTILITY. COORDINATE RACEWAY REQUIREMENTS WITH UTILITY.
- TRANSFORMER BY UTILITY. PAD BY ELECTRICAL CONTRACTOR (EC).
- GROUND IN ACCORDANCE WITH THE NEC, LOCAL CODE REQUIREMENTS, AND SPECIFICATIONS.
- METER AND SOCKET PROVIDED BY UTILITY.
- MAIN DISCONNECT SWITCH "MDS-CH" NEMA 3R, 400A/3P. FUSE AT 400A.
- METER SOCKET AND METER FURNISHED BY UTILITY, INSTALLED BY EC.
- TRANSFORMER AND PAD BY UTILITY.
- 400 CT CABINET (EQUAL TO AMP RACT12-4L) BY EC. METERING BY BUILDING AUTOMATION SYSTEMS CONTRACTOR.



**BUS BARN POWER RISER DIAGRAM**  
NO SCALE



**POWER RISER DIAGRAM**  
NO SCALE

ELECTRICAL SYMBOL LEGEND					
HT AFF	SYMBOL	DESCRIPTION	HT AFF	SYMBOL	DESCRIPTION
AS NOTED	[Symbol]	SURFACE LIGHT (TYPE DENOTED)	AS NOTED	[Symbol]	MULTI-OUTLET ASSEMBLY (TYPE DENOTED)
AS NOTED	[Symbol]	RECESSED LIGHT (TYPE DENOTED)	AS NOTED	[Symbol]	CLOCK (TYPE DENOTED)
PER SCHED	[Symbol]	POLE MOUNTED LIGHT (TYPE DENOTED)	AS NOTED	[Symbol]	MOTOR (SEE SCHEDULE)
AS NOTED	[Symbol]	POLE MOUNTED FLOODLIGHT (TYPE DENOTED)	AS NOTED	[Symbol]	MANUAL MTR. STR. (NOVERLOADS)
AS NOTED	[Symbol]	SURFACE LIGHT (TYPE DENOTED)	AS NOTED	[Symbol]	MAG. MOTOR STARTER OR CONTACTOR
AS NOTED	[Symbol]	SUSPENDED OR PENDANT LIGHT (TYPE DENOTED)	AS NOTED	[Symbol]	COMB. MOTOR STARTER (NON-FUSED)
AS NOTED	[Symbol]	RECESSED LIGHT (TYPE DENOTED)	AS NOTED	[Symbol]	COMB. MOTOR STARTER (FUSED)
AS NOTED	[Symbol]	STRIP LIGHT (TYPE DENOTED)	AS NOTED	[Symbol]	SAFETY DISC. SW. (NON-FUSED)
AS NOTED	[Symbol]	TRACK AND TRACK LIGHT (TYPES DENOTED)	AS NOTED	[Symbol]	SAFETY DISC. SW. (FUSED)
AS NOTED	[Symbol]	EMERGENCY BATTERY LIGHT (TYPE DENOTED)	AS NOTED	[Symbol]	BUS DUCT WITH PLUG UN DISCONNECT (FUSED)
AS NOTED	[Symbol]	EXIT SIGN (TYPE DENOTED)	AS NOTED	[Symbol]	VARIABLE FREQUENCY DRIVE
AS NOTED	[Symbol]	LIGHT FIXTURE ON (EM) LIFE SAFETY BRANCH	AS NOTED	[Symbol]	RELAY
AS NOTED	[Symbol]	LIGHT FIXTURE ON (EM) CRITICAL BRANCH	AS NOTED	[Symbol]	OCCUPANCY SENSOR - TYPE DENOTED
AS NOTED	[Symbol]	LIGHT FIXTURE WITH EMERGENCY BALLAST	AS NOTED	[Symbol]	PHOTOCELL
AS NOTED	[Symbol]	LIGHT ON CORD REEL (TYPE DENOTED)	AS NOTED	[Symbol]	TIME CONTROL SWITCH (TIME SWITCH)
AS NOTED	[Symbol]	LIGHTING CHANNEL WIRE (TYPE DENOTED)	AS NOTED	[Symbol]	2 POLE SINGLE THROW SW.
46"	[Symbol]	SINGLE POLE SW.	46"	[Symbol]	HUMIDISTAT
46"	[Symbol]	2 POLE SINGLE THROW SW.	46"	[Symbol]	THERMOSTAT
46"	[Symbol]	3-WAY SW.	PER SCHED	[Symbol]	WALL HEATER (TYPE DENOTED)
46"	[Symbol]	4-WAY SW.	PER SCHED	[Symbol]	HAND OR HAND DRYER (TYPE DENOTED)
46"	[Symbol]	KEY SW.	PER SCHED	[Symbol]	SW. WIP/LOTT
46"	[Symbol]	SW. WIP/LOTT	46"	[Symbol]	TELEPHONE OUTLET (TYPE DENOTED)
46"	[Symbol]	DIMMER SWITCH	46"	[Symbol]	WALL TELEPHONE OUTLET (TYPE DENOTED)
46"	[Symbol]	OCCUPANCY SENSOR SWITCH	46"	[Symbol]	TELECOM OUTLET (TYPE DENOTED)
46"	[Symbol]	TIMER SWITCH	46"	[Symbol]	WIRELESS ACCESS POINT
46"	[Symbol]	MOTOR HORSEPOWER RATED SWITCH	46"	[Symbol]	INTERCOM OUTLET LOCATION
18"	[Symbol]	SINGLE RECEPT.	18"	[Symbol]	TELEVISION OUTLET
18"	[Symbol]	DUPLEX RECEPT. ISOLATED GROUND.	18"	[Symbol]	AV OUTLET. SEE SPECIFICATIONS.
18"	[Symbol]	FOURPLEX RECEPT. ISOLATED GROUND.	18"	[Symbol]	MULTIPLE SERVICE OUTLET (TYPE DENOTED)
18"	[Symbol]	USB DUPLEX RECEPT. SEE SPECS.	18"	[Symbol]	FLOOR BOX, TWO DEVICES (TYPE DENOTED)
18"	[Symbol]	SPLIT DUPLEX RECEPT.	18"	[Symbol]	FLOOR BOX, FOUR DEVICES (TYPE DENOTED)
18"	[Symbol]	DUPLEX RECEPT. ON EMERGENCY CIRCUIT	18"	[Symbol]	FOURPLEX RECEPT.
18"	[Symbol]	FOURPLEX RECEPT. ON EMERGENCY CIRCUIT	18"	[Symbol]	DICTATION OUTLET LOCATION
18"	[Symbol]	DUPLEX RECEPT. ISOLATED GROUND.	46"	[Symbol]	WALL DICTATION OUTLET LOCATION
46"	[Symbol]	FOURPLEX RECEPT. ISOLATED GROUND.	86"	[Symbol]	BELL
46"	[Symbol]	DEAD FRONT GFCI DEVICE	86"	[Symbol]	BULLZER
AS NOTED	[Symbol]	SPECIAL RECEPT. OR CONN. (SEE SCHEDULE)	86"	[Symbol]	CHIME
AS NOTED	[Symbol]	JUNCTION BOX	46"	[Symbol]	PUSH BUTTON
AS NOTED	[Symbol]	DUPLEX FLOOR RECEPT.	86"	[Symbol]	SPEAKER (WALL OR CEILING M.T.)
AS NOTED	[Symbol]	FOURPLEX FLOOR RECEPT.	86"	[Symbol]	HORN TYPE SPEAKER
AS NOTED	[Symbol]	DUPLEX CEILING RECEPT.	46"	[Symbol]	VOLUME CONTROL
AS NOTED	[Symbol]	FOURPLEX CEILING RECEPT.	18"	[Symbol]	MICROPHONE OUTLET
AS NOTED	[Symbol]	RECEPT ON CORD DROP (DUPLEX SHOWN)	18"	[Symbol]	AUXILIARY OUTLET
AS NOTED	[Symbol]	RECEPT ON CORD REEL (DUPLEX SHOWN)	18"	[Symbol]	ANTENNA

ELECTRICAL ABBREVIATIONS LIST			
1P	1 POLE (DP, 3P, 4P, ETC.)	DC	DRIP COORD.
A	AMPERE	DCP	DOMESTIC WATER CIRCULATING PUMP
AC	ACROSS COUNTER	DEF	DEPARTMENT
AD	ADDITIONAL	DET	DETAIL
ADG	ADDITIONAL GROUND (OR COUNTERTOP)	DA	DAMPER
ADU	ADDITIONAL UNIT	DISC	DISCONNECT
AF	ABOVE FRAME	DIST	DISTRIBUTION
AFB	ABOVE FINISHED FLOOR	DN	DOWN
AFG	ABOVE FINISHED GRADE	DS	SAFETY DISCONNECT SWITCH
AFI	ABOVE FINISHED INTERFLOOR	DN	DOWN
AH	AIR HANDLING UNIT	DWG	DRAWING
AL	ALUMINUM	EC	ELECTRICAL CONTRACTOR
ALN	ALTERNATE	ELEC	ELECTRIC
AMP	AMPERE	ELEV	ELEVATOR
AMP	AMPERE	EM	EMERGENCY
AMPL	AMPLIFIER	EMS	ENERGY MANAGEMENT SYSTEM
ANNUN	ANNUNCIATOR	EMT	ELECTRICAL METALLIC TUBING
APPROX	APPROXIMATELY	EP	ELECTRIC PNEUMATIC EQUIPMENT
ARCH	ARCHITECT, ARCHITECTURAL	EW	ELECTRIC WATER COOLER
ASB	ASBESTOS	KVA	KILOVOLT-AMPERE
AT	AIR TRIP	KVAR	KILOVOLT-AMPERE REACTIVE
ATS	AUTOMATIC TRANSFER SWITCH	KWH	KILOWATT HOUR
AUTO	AUTOMATIC	EXIST	EXISTING
AUX	AUXILIARY	EXP	EXPLOSION PROOF
AV	AUDIO VISUAL	FA	FIRE ALARM
AWG	AMERICAN WIRE GAUGE	FABP	FIRE ALARM BOOSTER POWER
BATT	BATTERY	FACP	FIRE ALARM CONTROL PANEL
BD	BOARD	FCU	FAN COIL UNIT
BLDG	BUILDING	FIX	FIXTURE
BMS	BUILDING MANAGEMENT SYSTEM	FUR	FLOOR
C	CIRCUIT	FLR	FLOURESCENT
CAB	CABINET	FUS	FUSE
CAT	CATALOG	FSD	FIBER SAFETY DISCONNECT SWITCH
CCV	CLOSED CIRCUIT TELEVISION	GA	GAUGE
CB	CIRCUIT BREAKER	GALV	GALVANIZED
CCVT	CLOSED CIRCUIT TELEVISION	GEN	GENERAL CONTRACTOR
CD	CEILING	GRN	GROUND FAULT CIRCUIT INTERRUPTER
CE	CONCRETE	GFI	GROUND FAULT CIRCUIT INTERRUPTER
COMP	COMPRESSOR	GFP	GROUND FAULT PROTECTOR
CON	CONNECTION	GND	GROUND
CONST	CONSTRUCTION	GRS	GALVANIZED RIGID STEEL CONDUIT
CONT	CONTINUATION OR CONTINUOUS	GY	GYPSUM BOARD
CONTR	CONTRACTOR	HDA	HANDS-OFF AUTOMATIC SWITCH
CONV	CONVERTOR	HT	HOT
CP	CIRCUITING PUMP	HTS	HIGH TEMPERATURE SWITCH
CR	CIRCUITING RAY TUBE	HTS	HIGH TEMPERATURE SWITCH
CT			

LIGHTING FIXTURE SCHEDULE						
Project Name: BRANDON ELEMENTARY SCHOOL, BRANDON SD			ACEI Project No: 123026			
TYPE	MFR.	NUMBER	LAMPS	VOLTS	DESCRIPTION	NOTES
A	COLUMBIA LITHONIA METALUX	CPK2X4-AL08-SWW7	LED4000K	120-277	LED, 2X4 RECESSED FLAT PANEL, BACKLIT, SELECTABLE LUMENS AND COLOR TEMP. SET TO 4300 LUMENS/400K.	
AE	COLUMBIA LITHONIA METALUX	CPK2X4-AL08-SWW7-IE10WCP	LED4000K	120-277	SAME AS TYPE "A" EXCEPT EMERGENCY BACKUP.	
AF	COLUMBIA LITHONIA METALUX	CPK2X4-AL08-SWW7-DGA24	LED4000K	120-277	SAME AS TYPE "A" EXCEPT FLANGE MOUNT.	
AFE	COLUMBIA LITHONIA METALUX	CPK2X4-AL08-SWW7-IE10WCP-DGA24	LED4000K	120-277	SAME AS TYPE "AF" EXCEPT EMERGENCY BACKUP.	
A1	COLUMBIA LITHONIA METALUX	CPK2X4-AL08-SWW7	LED4000K	120-277	SAME AS TYPE "A" EXCEPT APPROXIMATELY 4800 LUMENS.	
A1E	COLUMBIA LITHONIA METALUX	CPK2X4-AL08-SWW7-IE10WCP	LED4000K	120-277	SAME AS TYPE "A1" EXCEPT EMERGENCY BACKUP.	
A2	COLUMBIA LITHONIA METALUX	CPK2X4-AL08-SWW7	LED4000K	120-277	SAME AS TYPE "A" EXCEPT APPROXIMATELY 5400 LUMENS.	
A2E	COLUMBIA LITHONIA METALUX	CPK2X4-AL08-SWW7-IE10WCP	LED4000K	120-277	SAME AS TYPE "A2" EXCEPT EMERGENCY BACKUP.	
A3	COLUMBIA LITHONIA METALUX	CPK2X2-AL07-SWW7	LED4000K	120-277	LED, 2X2 RECESSED FLAT PANEL, DIFFUSE LENS, APPROXIMATELY 3800 LUMENS.	
A3E	COLUMBIA LITHONIA METALUX	CPK2X2-AL07-SWW7-IE10WCP	LED4000K	120-277	SAME AS TYPE "A3" EXCEPT EMERGENCY BACKUP.	
B	COLUMBIA LITHONIA DAY-BRITE	STAKS-2X4-AL08-SWW7	LED4000K	120-277	LED, 2X4 RECESSED ARCHITECTURAL, ROUND ACRYLIC DIFFUSER, FIELD SELECTABLE LUMENS AND COLOR TEMP., SET TO APPROXIMATELY 4300 LUMENS/4000K.	
BE	COLUMBIA LITHONIA DAY-BRITE	STAKS-2X4-AL08-SWW7-IE10WCP	LED4000K	120-277	SAME AS TYPE "B" EXCEPT EMERGENCY BACKUP.	
B1	COLUMBIA LITHONIA DAY-BRITE	STAKS-2X4-AL08-SWW7	LED4000K	120-277	SAME AS TYPE "B" EXCEPT APPROXIMATELY 4600 LUMENS.	
B1E	COLUMBIA LITHONIA DAY-BRITE	STAKS-2X4-AL08-SWW7-IE10WCP	LED4000K	120-277	SAME AS TYPE "B1" EXCEPT EMERGENCY BACKUP.	
B2	COLUMBIA LITHONIA DAY-BRITE	STAKS-2X4-AL08-SWW7	LED4000K	120-277	SAME AS TYPE "B" EXCEPT APPROXIMATELY 5300 LUMENS.	
B2E	COLUMBIA LITHONIA DAY-BRITE	STAKS-2X4-AL08-SWW7-IE10WCP	LED4000K	120-277	SAME AS TYPE "B2" EXCEPT EMERGENCY BACKUP.	
B3	COLUMBIA LITHONIA DAY-BRITE	STAK-2X4-7200LM-80CR1-40K-COL-MIN10-ZT-MVOLT	LED4000K	120-277	SAME AS TYPE "B" EXCEPT APPROXIMATELY 7200 LUMENS.	
B3E	COLUMBIA LITHONIA DAY-BRITE	STAK-2X4-7200LM-80CR1-40K-COL-MIN10-ZT-MVOLT-E10WCP	LED4000K	120-277	SAME AS TYPE "B3" EXCEPT EMERGENCY BACKUP.	
B4	COLUMBIA LITHONIA DAY-BRITE	STAKS-2X2-AL03-SWW7	LED4000K	120-277	LED, 2X2 RECESSED ARCHITECTURAL, ROUND ACRYLIC DIFFUSER, APPROXIMATELY 3800 LUMENS.	
B4E	COLUMBIA LITHONIA DAY-BRITE	STAKS-2X2-AL03-SWW7-IE10WCP	LED4000K	120-277	SAME AS TYPE "B4" EXCEPT EMERGENCY BACKUP.	
D	WILLIAMS LITHONIA DAY-BRITE	FSI-4-45L-840-LV-DIM-DACH100	LED4000K	120-277	LED, INDUSTRIAL FIXTURE, ADJUSTABLE CABLE HUNG, DIFFUSE LENS, APPROXIMATELY 5300 LUMENS.	1
DE	WILLIAMS LITHONIA DAY-BRITE	FSI-4-45L-840-LV-DIM-DACH100-EM-ED	LED4000K	120-277	SAME AS TYPE "D" EXCEPT EMERGENCY BACKUP.	1
D1	WILLIAMS LITHONIA DAY-BRITE	FSI-4-45L-840-LV-DIM-DACH100	LED4000K	120-277	SAME AS TYPE "D" EXCEPT WALL MOUNTED, NO REFLECTOR, AND 4500 LUMENS.	
D1E	WILLIAMS LITHONIA DAY-BRITE	FSI-4-45L-840-LV-DIM-EM-ED	LED4000K	120-277	SAME AS TYPE "D1" EXCEPT EMERGENCY BACKUP.	
D8	WILLIAMS LITHONIA DAY-BRITE	FSI-8-80L-840-LV-DIM-DACH100	LED4000K	120-277	SAME AS TYPE "D" EXCEPT 8' LENGTH AND APPROXIMATELY 8000 LUMENS.	1
E	SURE-LITES LITHONIA	SESRNE-I	INCLUDED	120-277	LED EXIT LIGHT, SINGLE STENCIL FACE, RED LETTERS, BLACK HOUSING WITH BRUSHED ALUMINUM FACE, SELF-TESTING/SELF-DIAGNOSTIC ELECTRONICS, DIRECTIONAL ARROWS AND MOUNTING AS INDICATED.	
E1	SURE-LITES LITHONIA	SESRNE-I	INCLUDED	120-277	SAME AS TYPE E EXCEPT DOUBLE FACE.	
E2	CURRENT LTG	CU2H-SD	INCLUDED	120-277	LED EMERGENCY LIGHTING UNIT, WHITE HOUSING, TWO ADJUSTABLE AIMING HEADS, SELF-TESTING/DIAGNOSTICS, 500 LUMENS (MIN. 50" C. SPACING WHEN MOUNTED AT 7.5 AFF. LED EXIT/EMERGENCY TANDUM UNIT, SINGLE BRUSHED ALUMINUM FACE, BLACK HOUSING, DIRECTIONAL ARROWS AND MOUNTING AS INDICATED, SELF-TESTING/DIAGNOSTICS, HIGH OUTPUT LAMPS (MIN. 60" C. SPACING WHEN MOUNTED AT 8AFF).	
E3	EMERG-LITE	BPR-624M-1R-2-LB-ADNA-BA	INCLUDED	120-277	SAME AS TYPE "E3" EXCEPT REMOTE CAPACITY.	2
E4	EMERG-LITE	BPR-624M-1R-2-LB-ADNA-BA	INCLUDED	120-277	SAME AS TYPE "E3" EXCEPT REMOTE CAPACITY.	2
E5	EMERG-LITE	BZ-LUX-DC	INCLUDED	DC	LED ARCHITECTURAL, LOW PROFILE, EXTERIOR WALL MOUNTED REMOTE LUMINAIRE, BRONZE FINISH, CONNECT TO INTERIOR EMERGENCY LUMINAIRE, MINIMUM OF 400 LUMENS.	
E6	EMERG-LITE	BZ-LUX-SD-CW	LED9000K	120-277	LED ARCHITECTURAL, LOW PROFILE, EXTERIOR WALL MOUNTED EMERGENCY LUMINAIRE, BRONZE FINISH, COLD WEATHER OPTION, MINIMUM OF 400 LUMENS.	

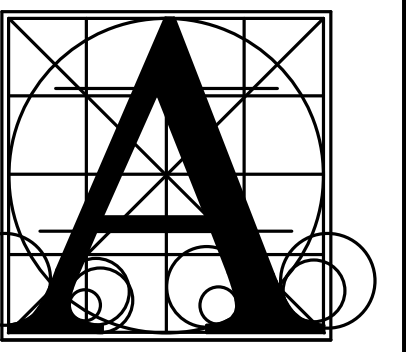
LIGHTING FIXTURE SCHEDULE						
Project Name: BRANDON ELEMENTARY SCHOOL, BRANDON SD			ACEI Project No: 123026			
TYPE	MFR.	NUMBER	LAMPS	VOLTS	DESCRIPTION	NOTES
H	LITHONIA	LDN4 AL02 SWW1 LOAR LSS WD MVOLT UG2	LED4000K	120-277	LED, 4" RECESSED ROUND DOWNLIGHT, WIDE DISTRIBUTION, APPROXIMATELY 1700 DELIVERED LUMENS, DAMP LOCATION LISTED.	
HE	LITHONIA	LDN4 AL02 SWW1 LOAR LSS WD MVOLT UG2 EL	LED4000K	120-277	SAME AS TYPE "H" EXCEPT EMERGENCY BACKUP.	
HC	GOTHAM	IV04S-D-1SLM-40K-80CR1-MMD-MIN10-MVOLT-ZT-ICAT-P-AR-LSS	LED4000K	120-277	LED, RECESSED LOW PROFILE ROUND DOWNLIGHT, AIR-TIGHT AND IC RATED, APPROXIMATELY 1500 LUMENS.	
H1	LITHONIA	LDN4 AL03 SWW1 LOAR LSS WD MVOLT UG2	LED4000K	120-277	SAME AS TYPE "H" EXCEPT APPROXIMATELY 2500 LUMENS.	
H1E	LITHONIA	LDN4 AL03 SWW1 LOAR LSS WD MVOLT UG2 EL	LED4000K	120-277	SAME AS TYPE "H1" EXCEPT EMERGENCY BACKUP.	
H2	LITHONIA	LDN4 AL04 SWW1 LOAR LSS WD MVOLT UG2 EL	LED4000K	120-277	SAME AS TYPE "H" EXCEPT APPROXIMATELY 3400 LUMENS.	
H2E	LITHONIA	LDN4 AL04 SWW1 LOAR LSS WD MVOLT UG2 EL	LED4000K	120-277	SAME AS TYPE "H2" EXCEPT APPROXIMATELY 3400 LUMENS.	
J8	LEDALITE PEERLESS	7726-LBAAV-XX-GDE-W-S 10CRML LLL MSLX 80CRI SBL 40K 1100LMF 700LMF MINI ZT 120 SCT F124A C210 SCEP	LED4000K	120-277	LED, SUSPENDED LINEAR DIRECT/INDIRECT, SCULPTED ENDCAPS, APPROXIMATELY 6700 LUMENS PER 4'.	3
J8E	LEDALITE PEERLESS	7726-LBAAV-XX-GDE-W-S 10CRML LLL MSLX 80CRI SBL 40K 1100LMF 700LMF MINI ZT 120 SCT F124A C210 SCEP	LED4000K	120-277	SAME AS TYPE "J8" EXCEPT EMERGENCY BACKUP (1400 LUMENS) WHERE SHOWN ON PLANS.	3.4
K8	LEDALITE PEERLESS	7705-LBBAV-XX-7D-W-S 10CRML LLL MSLX 80CRI SBL 40K 1700LMF 700LMF MINI ZT 120 SCT F124A C210 SCEP	LED4000K	120-277	LED, SUSPENDED LINEAR DIRECT/INDIRECT, SCULPTED ENDCAPS, APPROXIMATELY 6100 LUMENS PER 4'.	6
K8E	LEDALITE PEERLESS	7705-LBBAV-XX-7D-W-S 10CRML LLL MSLX 80CRI SBL 40K 1700LMF 700LMF MINI ZT 120 SCT F124A C210 SCEP	LED4000K	120-277	SAME AS TYPE "K8" EXCEPT EMERGENCY BACKUP (1400 LUMENS) WHERE SHOWN ON PLANS.	4.6
L	FOCAL POINT LIGHTFOILER LITHONIA	1101E1D09S25-11775H LDN6 AL02 SWW1 LOAR LSS WD MVOLT UG2	LED4000K	120-277	LED, 7" RECESSED ROUND DOWNLIGHT, WIDE DISTRIBUTION, UL WET LOCATION, LENSED.	
M	PRESCOLITE LITHONIA DAY-BRITE	FBX30LL40-LV-UNV-LF-AWG-FBX-2W-FBX-RRP10 CPHB 3000LM SEF GCL MD MVOLT G210 40K 80CRI WGX DWH	LED4000K	120-277	LED HIGH BAY, 0-10V DIMMING DOWN TO 1%.	
ME	DAY-BRITE LITHONIA	FBX30LL40-LV-EM-LED-LF-AWG-FBX-2W CPHB 3000LM SEF GCL MD MVOLT G210 40K 80CRI WGX DWH	LED4000K	120-277	SAME AS TYPE "M" EXCEPT EMERGENCY BACKUP (MINIMUM OF 3000 LUMENS).	
R	OMNI-LIGHT	GEN2-41-HO-CC TAPE WITH OHC-WCC-FRAL CHANNEL	LED4000K	120-277	LED TAPE LIGHTING WITH 1" X 5" ALUMINUM CHANNEL AND POWER SUPPLY AS REQUIRED. APPROX 360 LUMENS PER FOOT. PROVIDE CHANNEL ACROSS THE TOP OF TROPHY CASE.	
V	PACO LITHONIA	PUCSA-4F-60L-8-40-MV-W-ND-BABA-BAF-BLWPA-60L-PDSM-MVOLT-G210-LP840-TR5-BAA-PAF	LED4000K	120-277	LED, 8"X4" SURFACE MOUNT SEALED, VANDAL RESISTANT LUMINAIRE, APPROXIMATELY 6700 LUMENS.	
VE	PACO LITHONIA	PUCSA-4F-60L-8-40-MV-W-ND-BABA-BAF-EM10W BLWPA-60L-PDSM-MVOLT-G210-LP840-TR5-BAA-PAF-EZ10WCP	LED4000K	120-277	SAME AS TYPE "V" EXCEPT 10 WATT EMERGENCY BACKUP.	
Y	LITHONIA	DSXW1-LED-200-530-40K-T3M-MVOLT-DDBXD	LED4000K	120-277	LED, EXTERIOR WALL MOUNTED FIXTURE, DARK BRONZE FINISH, APPROXIMATELY 4300 LUMENS, TYPE 3 DISTRIBUTION.	
Y1	LITHONIA	DSXW1-LED-200-700-40K-T3M-MVOLT-DDBXD	LED4000K	120-277	SAME AS TYPE "Y" EXCEPT APPROXIMATELY 5400 LUMENS.	
Y2	LITHONIA	DSXW1-LED-200-1000-40K-T3M-MVOLT-DDBXD	LED4000K	120-277	SAME AS TYPE "Y" EXCEPT 7000 LUMENS AND TYPE 2 DISTRIBUTION.	
Z	NLS LIGHTING LITHONIA	NV-F1-3D-16L-45-40K-UNV-KM-RBZ-NA DSXF1 LED P2 40K NSP MVOLT THK DDBXD	LED4000K	120-277	LED, EXTERIOR BUILDING MOUNTED FLOOD LIGHT, DARK BRONZE FINISH, APPROXIMATELY 4500 LUMENS.	
AA	KIM LITHONIA NLS LIGHTING	RSX1-LED-P4-40K-RX-MVOLT-RPA-DDBXD and RSS-25-4-5B-DM19AS-VD-DDBXD POLE	LED4000K	120-277	LED, EXTERIOR SITE LIGHTING UNIT, 25' ROUND TAPERED STEEL POLE, VIBRATION DAMPENER, APPROXIMATELY 17,000 LUMENS.	5
AA1	KIM LITHONIA NLS LIGHTING	(2) RSX1 LED P4 40K RPA DDBXD and RSS 25-4-5B-DM28AS-VD-DDBXD POLE	LED4000K	120-277	SAME AS TYPE "AA" EXCEPT 2 LUMINAIRES AT 180 DEGREES AND APPROXIMATELY 14,000 LUMENS.	5
AA2	KIM LITHONIA NLS LIGHTING	(2) RSX1 LED P4 40K RPA DDBXD and RSS 25-4-5B-DM28AS-VD DDBXD	LED4000K	120-277	SAME AS TYPE "AA1" EXCEPT 2 LUMINAIRES AT 90 DEGREES.	5
AA3	KIM LITHONIA NLS LIGHTING	(3) RSX1 LED P4 40K RPA DDBXD and RSS 25-4-5B-DM32AS-VD DDBXD	LED4000K	120-277	SAME AS TYPE "AA1" EXCEPT 3 LUMINAIRES AT 90 DEGREES.	5
BB1	KIM LITHONIA NLS LIGHTING	(2) RSX1 LED P4 40K RPA DDBXD and RSS 22-4-5B-DM28AS-VD DDBXD	LED4000K	120-277	LED, EXT. SITE LIGHTING UNIT, 2 LUMINAIRES AT 180 DEGREES, 22' ROUND TAPERED STEEL POLE, VIBRATION DAMPENER, APPROXIMATELY 14,000 LUMENS.	5
BB2	KIM LITHONIA NLS LIGHTING	(2) RSX1 LED P4 40K RPA DDBXD and RSS 22-4-5B-DM28AS-VD DDBXD	LED4000K	120-277	SAME AS TYPE "BB1" EXCEPT 2 FIXTURES AT 90 DEGREES.	5
BB3	KIM LITHONIA NLS LIGHTING	(3) RSX1 LED P4 40K RPA DDBXD and RSS 22-4-5B-DM32AS-VD DDBXD	LED4000K	120-277	SAME AS TYPE "BB1" EXCEPT 3 LUMINAIRES AT 120 DEGREES.	5

**SPECIFIC NOTES:**  
1. PROVIDE CABLE LENGTHS AS REQUIRED FOR MOUNTING AT HEIGHTS INDICATED ON THE DRAWINGS.  
2. PROVIDE WIRE GUARD WHERE INDICATED ON THE LIGHTING PLANS.  
3. NUMBER ON PLANS INDICATES LENGTH. HANG APPROXIMATELY 18" BELOW CEILING.  
4. PROVIDE EMERGENCY BACKUP WHERE SHOWN ON THE PLANS.  
5. SEE SITE PLAN FOR OPTICAL DISTRIBUTION TYPES.  
6. NUMBER ON PLANS INDICATE LENGTH. HANG APPROXIMATELY 30" BELOW CEILING.  
7. PROVIDE ALL REQUIRED ENDCAPS, MOUNTING CLIPS, WIRING HARNESSES AND POWER SUPPLIES TO MEET THE APPLICATION SHOWN ON THE DRAWINGS. SEE ARCHITECTURAL DETAIL FOR ADDITIONAL INFORMATION.

**GENERAL NOTES:**  
A. EMERGENCY LUMINAIRES WITHIN STORM SHELTERS SHALL HAVE A BATTERY BACKUP TIME OF 2 HOURS IN LIEU OF 90 MINUTES. SEE SHEET 120 FOR STORM SHELTER AREAS.

- SPECIFIC NOTES:**
- PROVIDE A NEMA 3R FUSED DISCONNECT SWITCH (FUSE AT 400A). CONTROL BY MECHANICAL CONTRACTOR (MC).
  - PROVIDE CONNECTION TO VFD/DISCONNECT AND UNIT. VFD/DISCONNECT AND CONTROL BY MC.
  - INTERLOCK UNIT WITH FIRE ALARM SYSTEM FOR SHUTDOWN UPON ALARM.
  - PROVIDE A COMBINATION MAGNETIC STARTER/NON-FUSED DISCONNECT SWITCH WITH H.O.A., 2 N.O. AND 2 N.C. CONTACTS, AND PILOT LIGHTS. CONTROL BY MC.
  - PROVIDE UNSTRUT ASSEMBLY AS REQUIRED FOR MOUNTING OF BACKBOARD AND VFD OR STARTER.
  - PROVIDE A MANUAL MOTOR STARTER TOGGLE DISCONNECT SWITCH. CONTROL BY MC.
  - PROVIDE A MANUAL MOTOR STARTER WITH THERMAL OVERLOAD. CONTROL BY MC.
  - CONNECT SHUNT TRIP CIRCUIT BREAKER WITH MUSHROOM HEAD "BOLLER EMERGENCY OFF" PUSH-BUTTON SWITCHES TO ENTRIES TO ROOM.
  - CONNECT TO STARTER IN HOOD CONTROL PANEL AND PROVIDE PILOT LIGHT SWITCH FOR CONTROL. DISCONNECT SWITCH AT FAN BY MC.
  - PROVIDE A SINGLE POINT POWER CONNECTION, DISCONNECT AT FAN BY MECHANICAL CONTRACTOR. INTERLOCK FAN WITH DISHWASHER VENT FAN CONTROL.
  - CONNECT TO STARTER IN HOOD CONTROL PANEL AND PROVIDE PILOT LIGHT SWITCH FOR CONTROL. PROVIDE A NON-FUSED DISCONNECT SWITCH AT FAN.
  - PROVIDE CONNECTION TO VFD/DISCONNECT AND UNIT. CONTROL BY MC. PROVIDE A NEMA 3R NON-FUSED DISCONNECT SWITCH AT UNIT.
  - PROVIDE A MANUAL MOTOR STARTER TOGGLE SWITCH AND CONNECT TO CONDENSING UNIT.
  - PROVIDE A NEMA 3R FUSED DISCONNECT SWITCH. CONTROL BY MC.
  - PROVIDE A SINGLE POINT POWER CONNECTION, DISCONNECT AND CONTROL BY MC.
  - PROVIDE A NON-FUSED DISCONNECT SWITCH.
- GENERAL NOTES:**  
A. SEE KITCHEN PLAN AND FOOD SERVICE EQUIPMENT SCHEDULE FOR ADDITIONAL REQUIREMENTS.

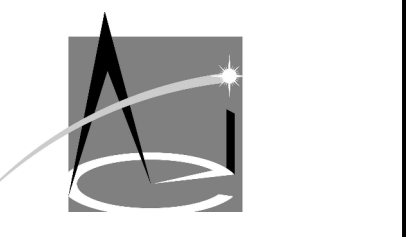
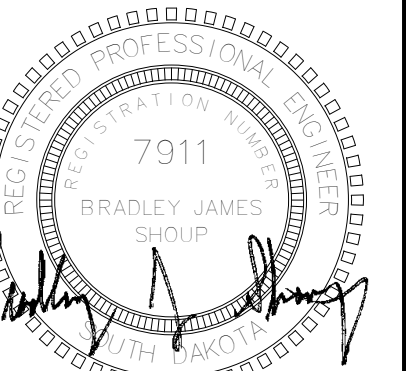
EQUIPMENT SCHEDULE FOR BRANDON ELEMENTARY, BRANDON, SD									
ACEI Project #: 123026									
NO.	DESCRIPTION	KW	HP	MCA	MCCP	VOLTS	PH	NOTES	
1	CHILLER CH-1	-	-	317	-	480	3	1	
2	AIR HANDLING UNIT AHU-1	-	10	-	363	480	3	2.3.5	
3	AHU-2	-	7.5	-	303	480	3	2.3.5	
4	AHU-3	-	7.5	-	303	480	3	2.3.5	
5	AHU-4	-	15	-	493	480	3	2.3.5	
6	AHU-5	-	20	-	603	480	3	2.3.5	
7	AHU-6	-	(2) 15	-	(2) 493	480	3	2.3.5	
8	PRIMARY HEATING PUMP P-1	-	2	-	-	480	3	4.5	
9	PRIMARY HEATING PUMP P-2	-	2	-	-	480	3	4.5	
10	SECONDARY HEATING PUMP P-3	-	10	-	-	480	3	2.5	
11	SECONDARY HEATING PUMP P-4	-	10	-	-	480	3	2.5	
12	PRIMARY CHILLED PUMP P-5	-	10	-	-	480	3	2.5	
13	SECONDARY CHILLED PUMP P-6	-	20	-	-	480	3	2.5	
14	ICE STORAGE PUMP P-7	-	20	-	-	480	3	2.5	
15	DOMESTIC REC-CIRC PUMP P-8	-	18	-	-	120	1	6	
16	RECIRC PUMP P-9	-	102	-	-	120	1	6	
17	INFLOOR PUMP P-10	3	-	-	-	120	1	6	
18	INFLOOR PUMP P-11	3	-	-	-	120	1	6	
19	INFLOOR PUMP P-12	3	-	-	-	120	1	6	
20	INFLOOR PUMP P-13	3	-	-	-	120	1	6	
21	INFLOOR PUMP P-14	3	-	-	-	120	1	6	
22	INFLOOR PUMP P-15	3	-	-	-	120	1	6	
23	INFLOOR PUMP P-16	3	-	-	-	120	1	6	
24	BOILER B-1	-	5.4	-	-	208	3	7.8	
25	BOILER B-2	-	5.4	-	-	208	3	7.8	
26	FAN POWER VAV FA-100	-	12	-	-	277	1	15	
27	FP-A101	-	1	-	-	277	1	15	
28	FP-B100	-	12	-	-	277	1	15	
29	FP-B101	-	12	-	-	277	1	15	
30	FP-B102	-	12	-	-	277	1	15	
31	FP-B103	-	12	-	-	277	1	15	
32	FP-B105	-	12	-	-	277	1	15	
33	FP-B109	-	12	-	-	277	1	15	
34	FP-B120	-	1	-	-	277	1	15	
35	FP-B121	-	12	-	-	277	1	15	
36	FP-B128	-	12	-	-	277	1	15	
37	FP-B129	-	12	-	-	277	1	15	
38	FP-B131	-	12	-	-	277	1	15	
39	FP-B133 (ALTERNATE)	-	12	-	-	277	1	15	
40	FP-B137 (ALTERNATE)	-	12	-	-	277	1	15	
41	FP-B139	-	12	-	-	277	1	15	
42	FP-B141	-	12	-	-	277	1	15	
43	FP-B145	-	12	-	-	277	1	15	
44	FP-C102	-	12	-	-	277	1	15	
45	FP-C102	-	12	-	-	277	1	15	
46	FP-C104	-	12	-	-	277	1	15	
47	FP-C108 (ALTERNATE)	-	12	-	-	277	1	15	
48	FP-C109 (ALTERNATE)	-	12	-	-	277	1	15	
49	FP-C111 (ALTERNATE)	-	12	-	-	277	1	15	



**Architecture Incorporated**

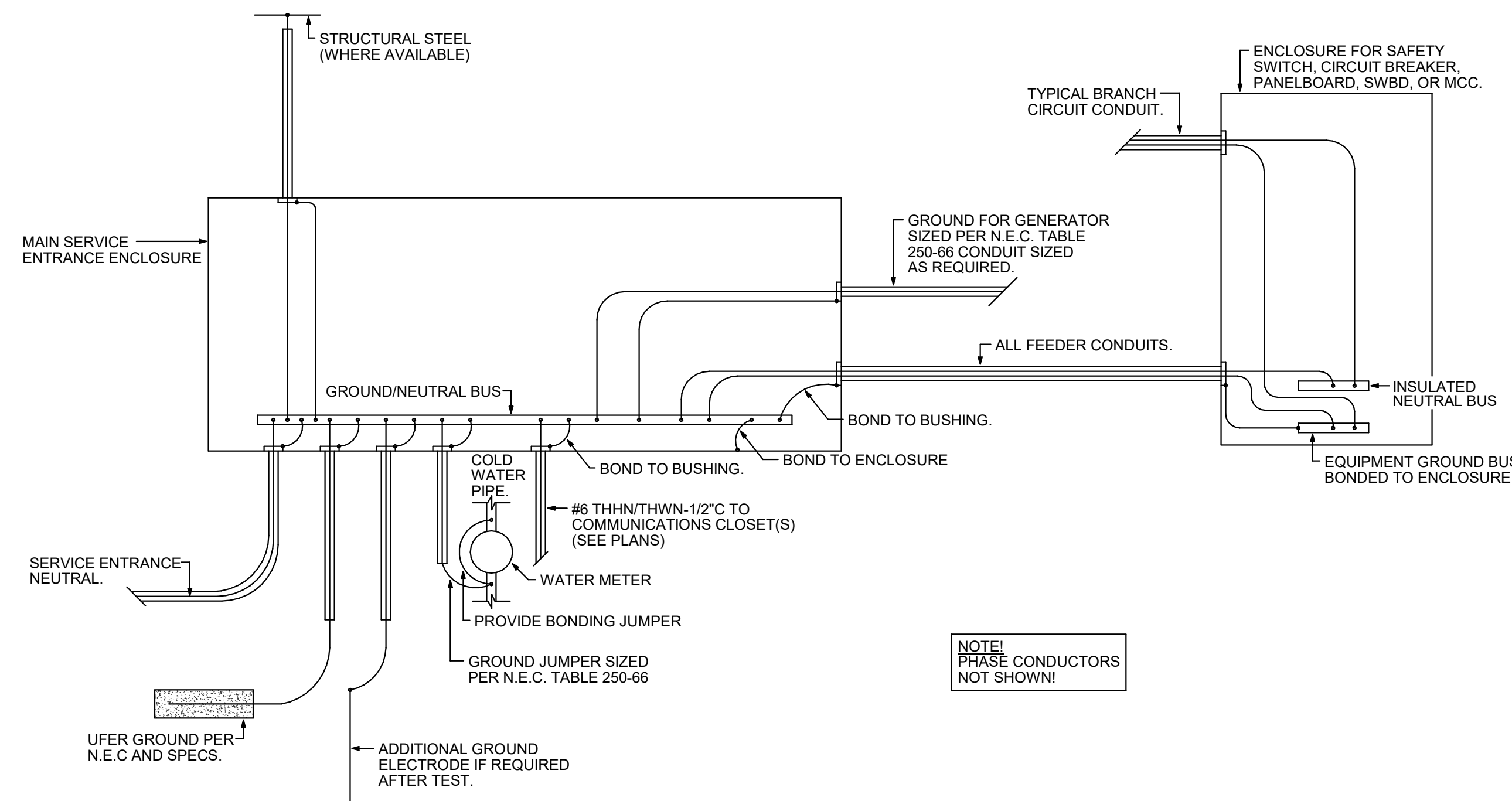
415 South Main Avenue  
P.O. Box 2140  
Sioux Falls, South Dakota 57101  
Phone: (605) 339-1711

815 St Joseph Street, Suite 203  
Rapid City, South Dakota 57701  
Phone: (605) 721-1158

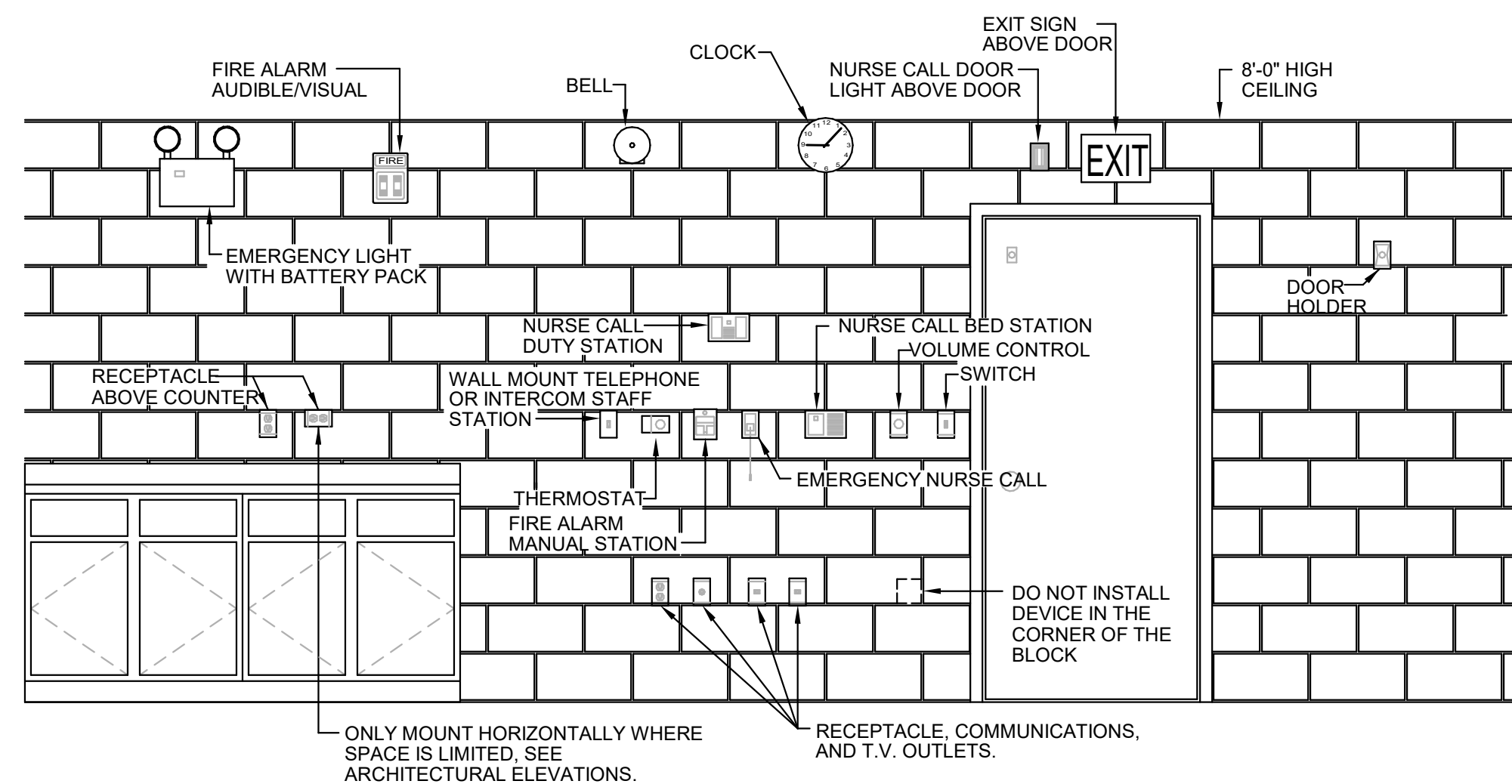


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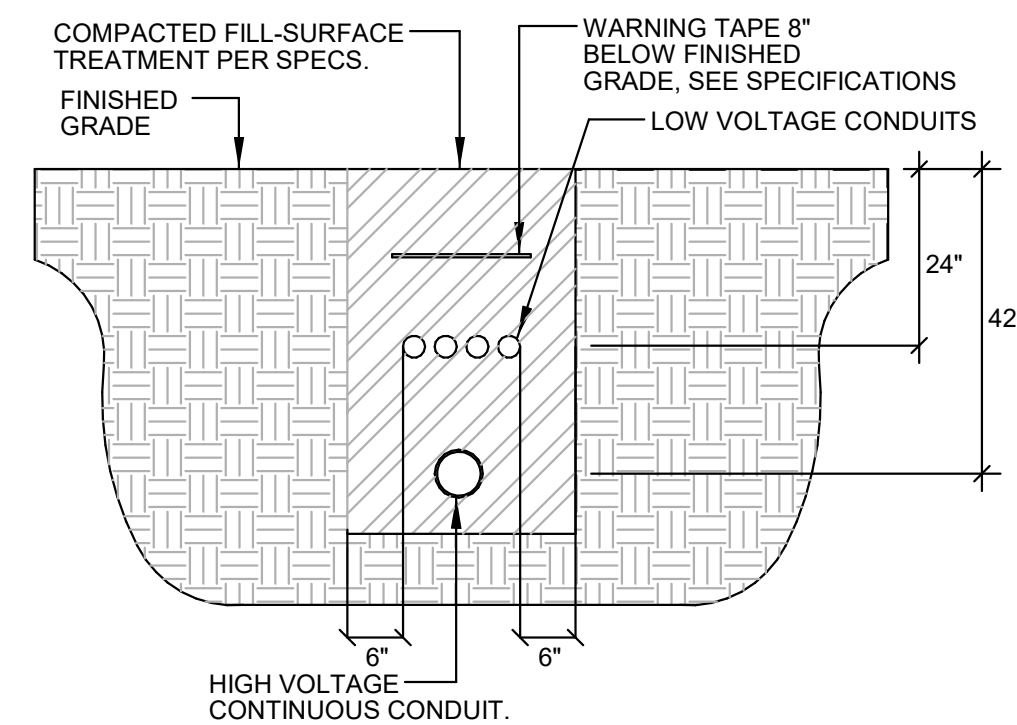
340 S. Phillips Ave.  
Sioux Falls, SD 57104  
(605) 335-3720  
Fax 335-6220  
E-mail acei@aceinet.com  
ACEI PROJ. #123026



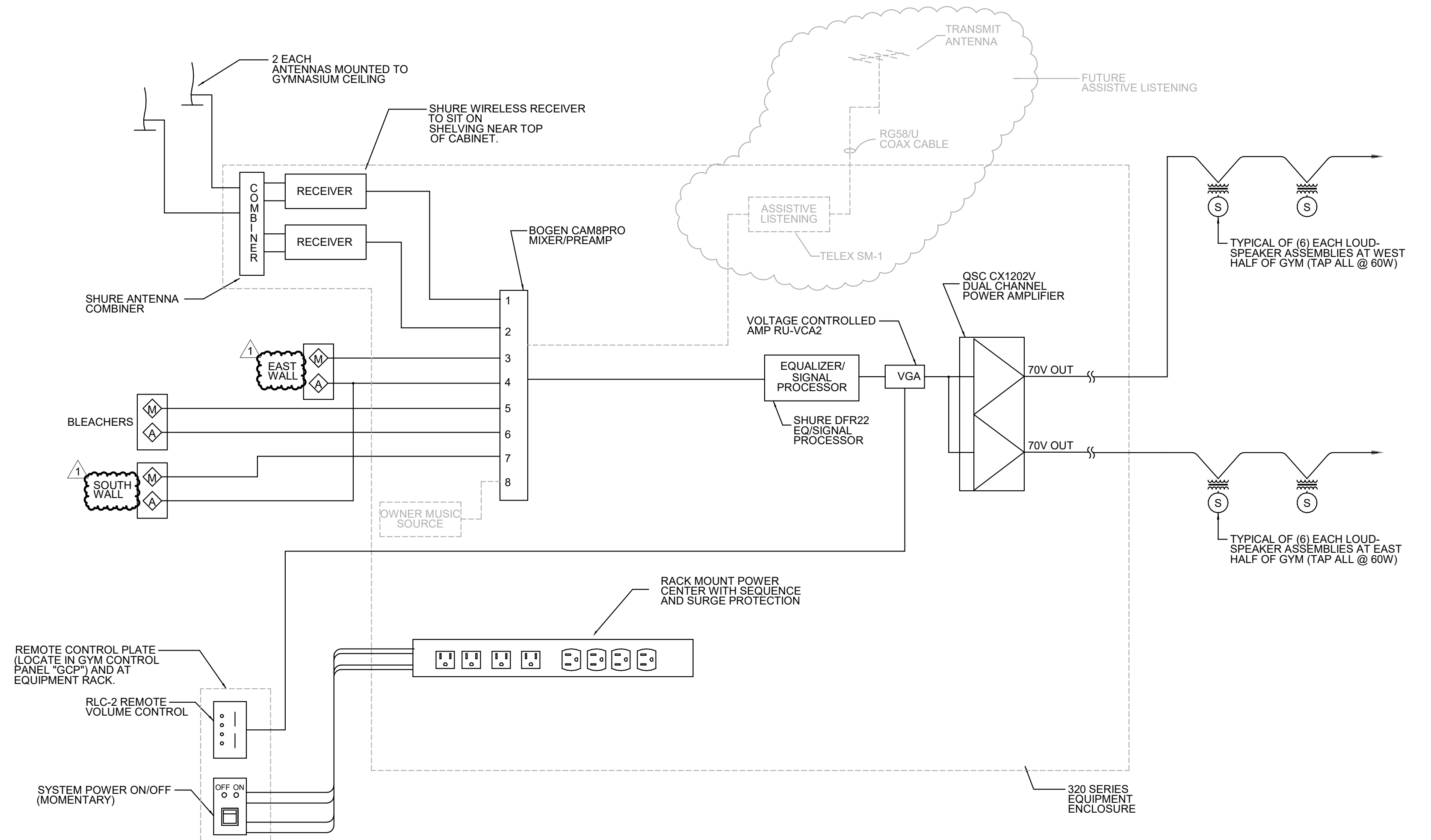
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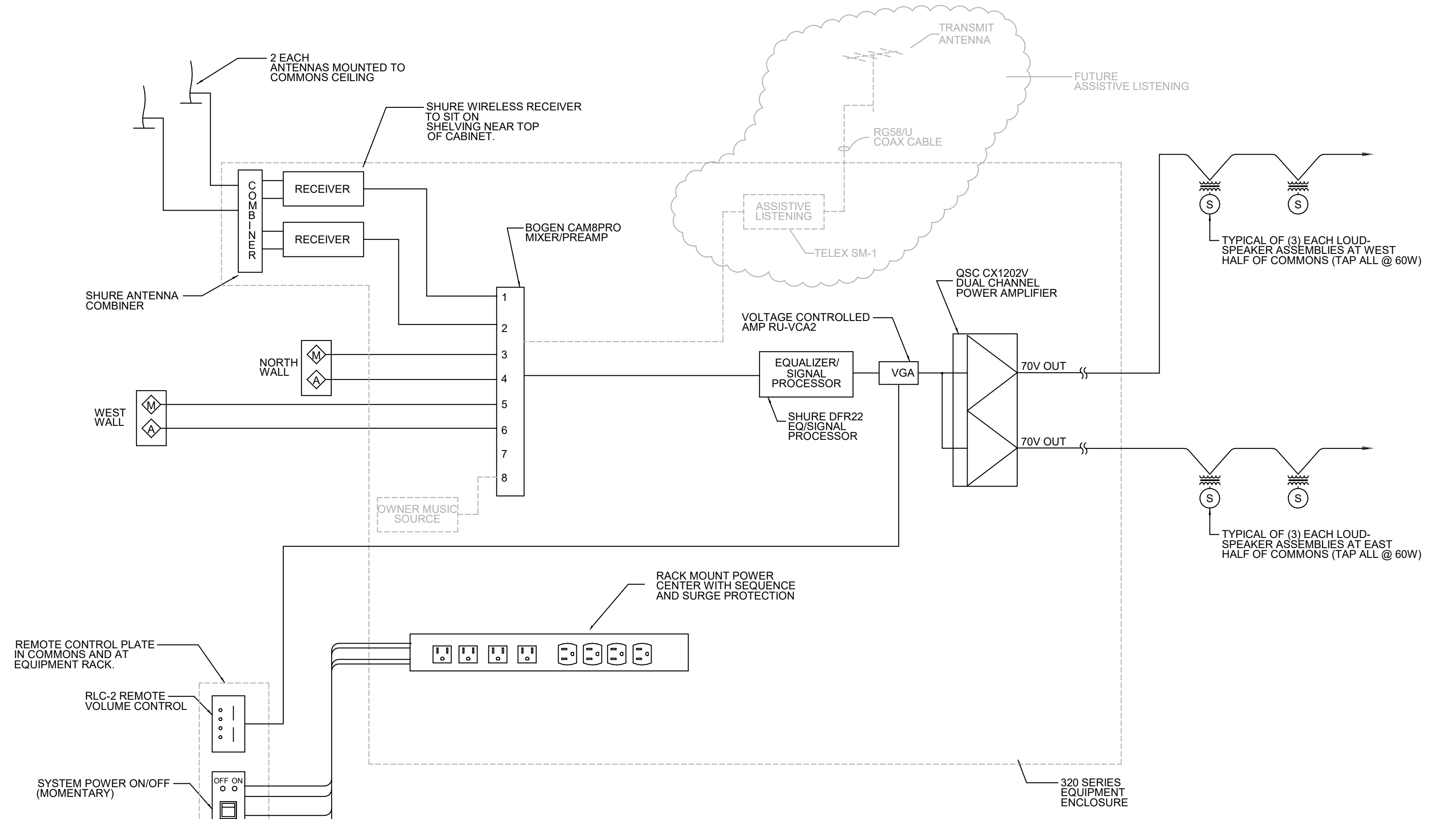
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**TYPICAL TRENCH DETAIL**  
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**GYM SOUND REINFORCEMENT SYSTEM FUNCTIONAL BLOCK DIAGRAM**  
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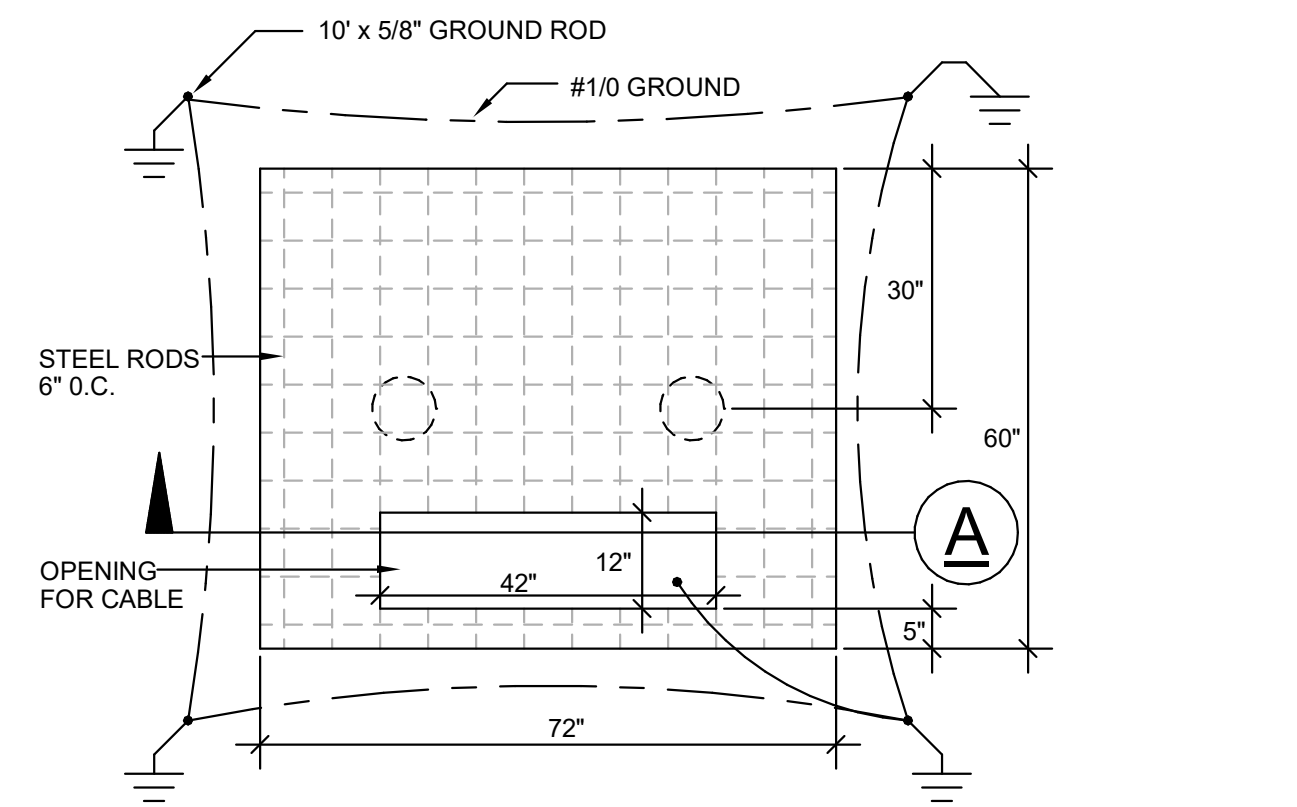
**COMMONS SOUND REINFORCEMENT SYSTEM FUNCTIONAL BLOCK DIAGRAM**  
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**BRANDON VALLEY ELEMENTARY SCHOOL**  
sheet contents

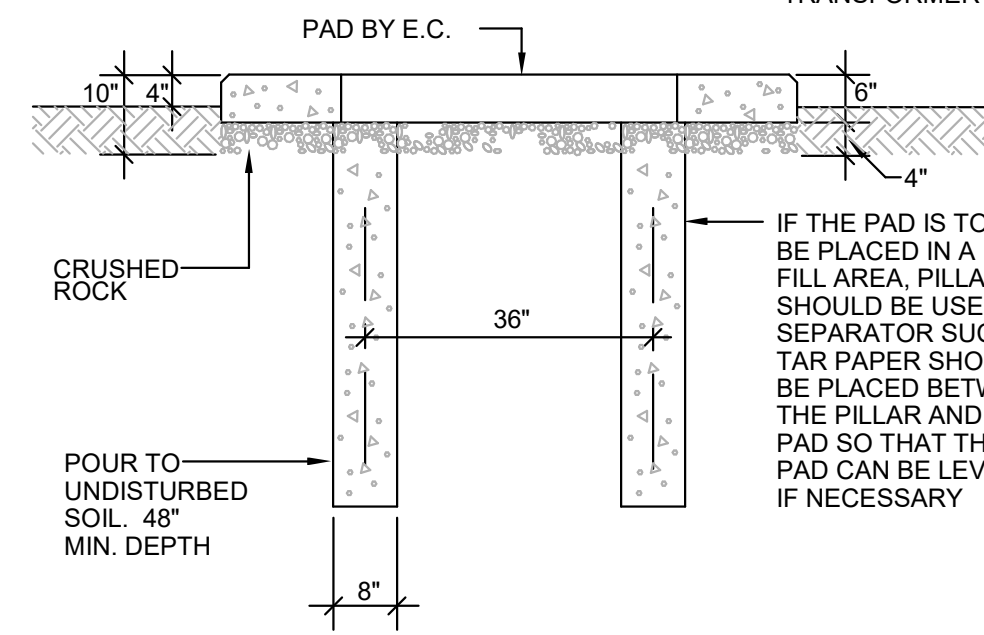
**ELECTRICAL DETAILS**

Project number 0306.3023.23  
date JULY 1, 2024  
revision  
drawn KMT checked BJS

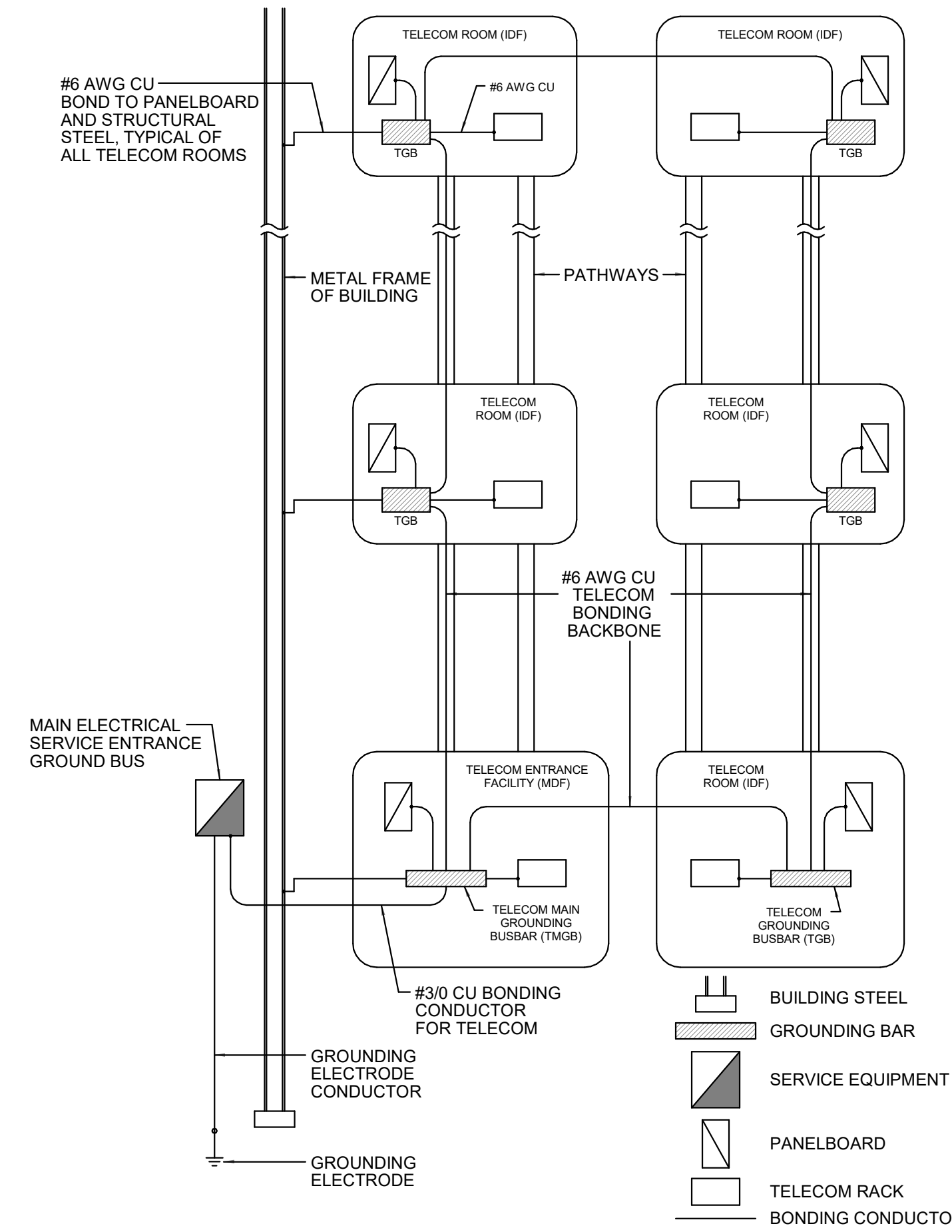
DATE DESCRIPTION  
7-26-24 Addendum #2



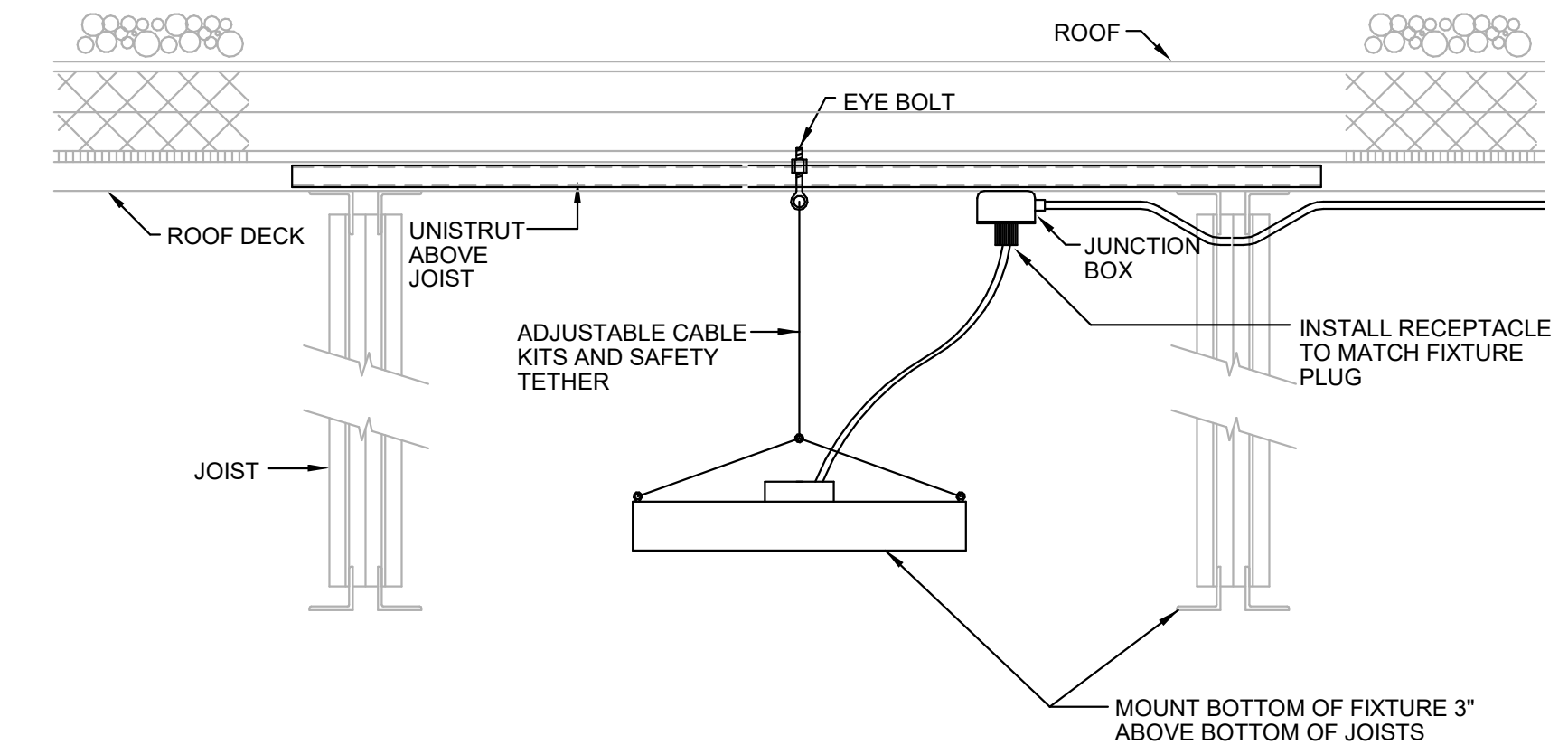
**PLAN VIEW**  
VERIFY ALL DIMENSIONS AND CONSTRUCTION REQUIREMENTS WITH POWER COMPANY BEFORE CONSTRUCTING TRANSFORMER PAD



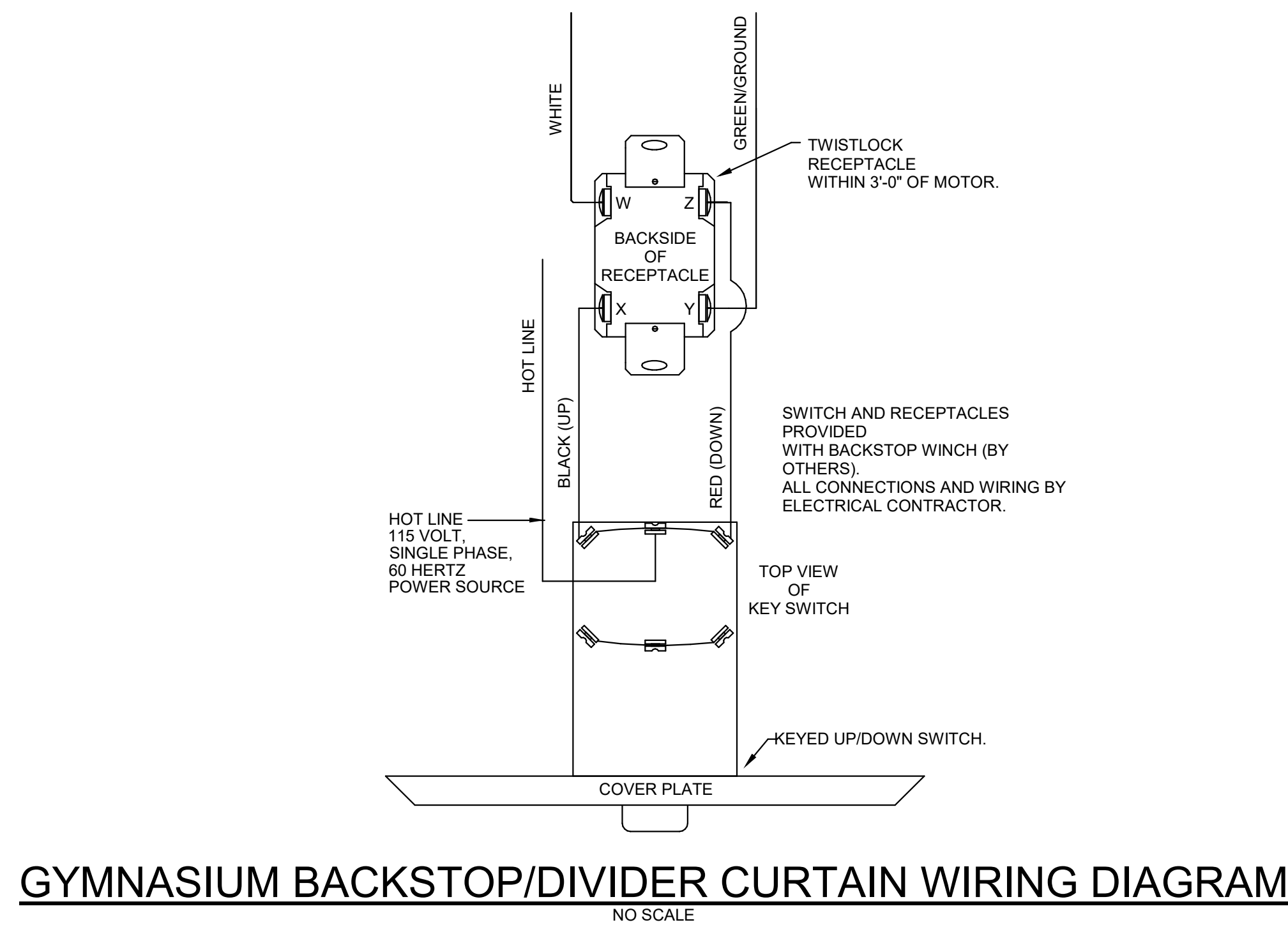
**SECTION VIEW**  
**TRANSFORMER PAD DETAIL**  
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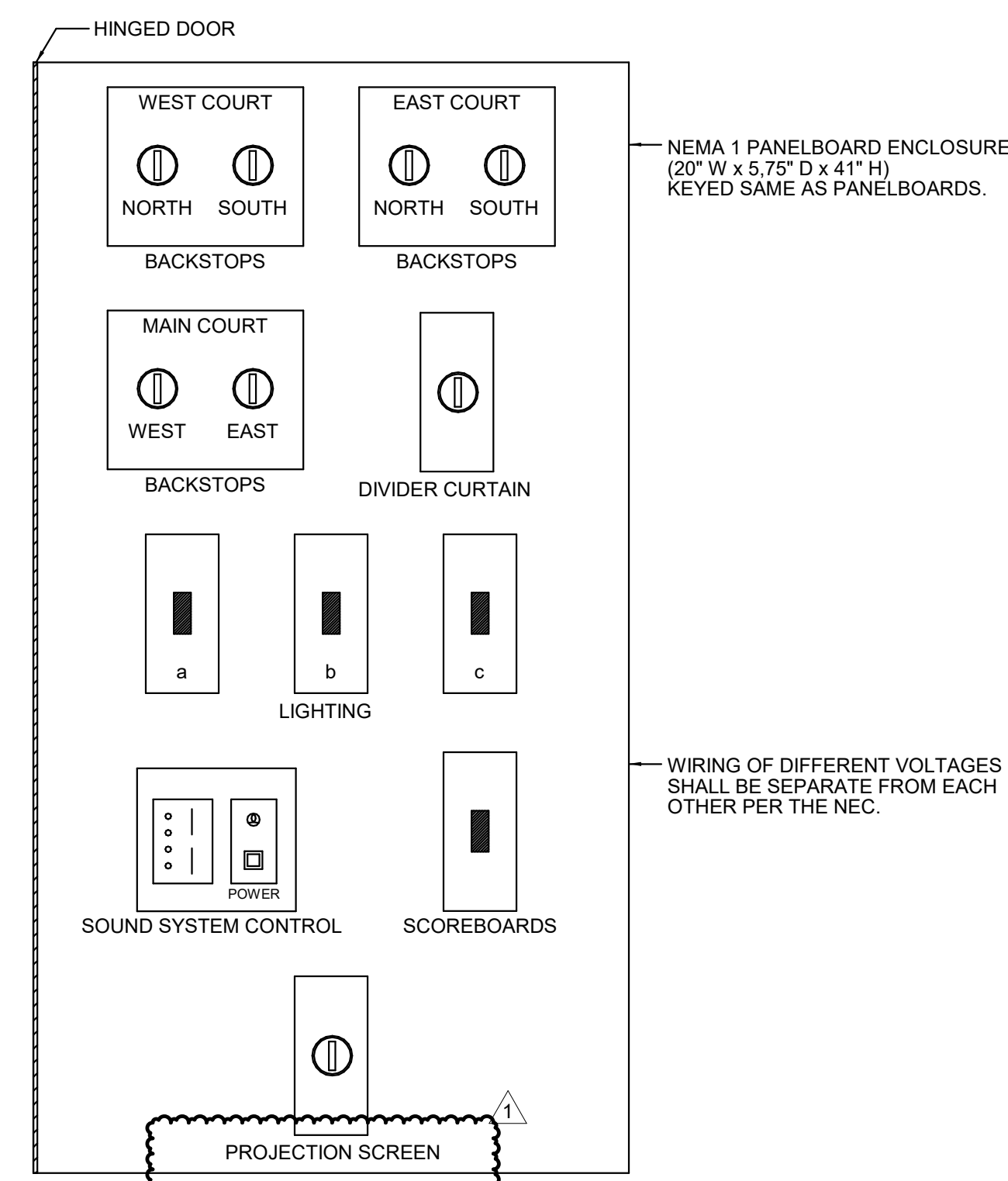
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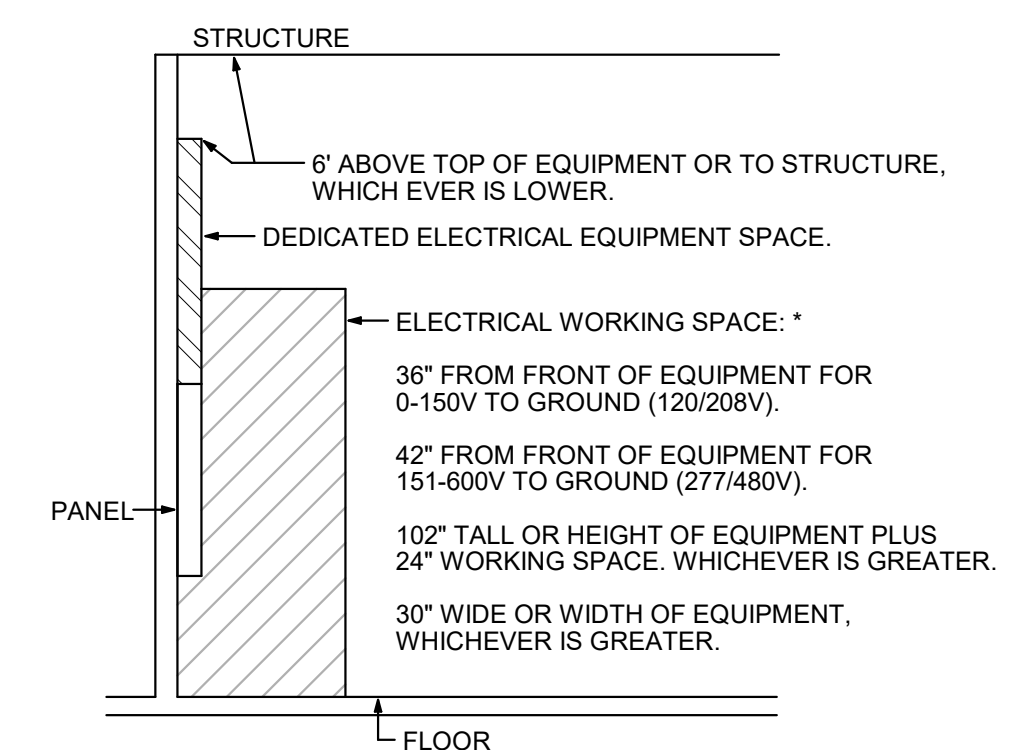
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**GYMNASIUM BACKSTOP/DIVIDER CURTAIN WIRING DIAGRAM**  
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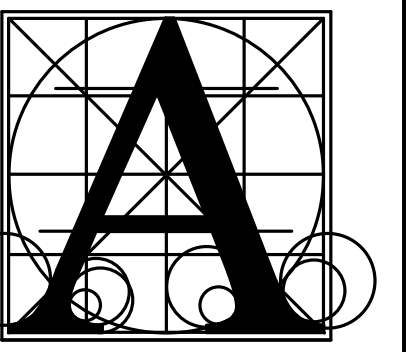


**GYM CONTROL PANEL "GCP" LAYOUT DETAIL**  
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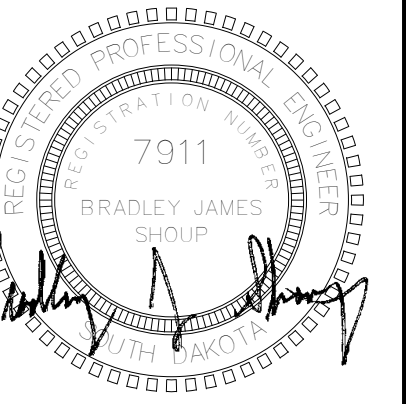
**ELECTRICAL WORKING SPACE**  
NO SCALE

\* VERIFY WITH LOCAL CODE REQUIREMENTS, SPECIFICATIONS, AND NATIONAL ELECTRICAL CODE.



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**BRANDON VALLEY ELEMENTARY SCHOOL**

**ELECTRICAL DETAILS**

number 0306.3023.23  
date JULY 1, 2024  
revision  
drawn KMT checked BJS

DATE 7-26-24 DESCRIPTION Addendum #2

**9.55**