

# PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT

100 IONA AVENUE  
PENNS GROVE, NEW JERSEY 08069

## FOR THE PAUL W. CARLETON ELEMENTARY SCHOOL 2025 PRE-K CLASSROOM ADDITION 251 EAST MAPLE AVENUE PENNS GROVE, NEW JERSEY 08069

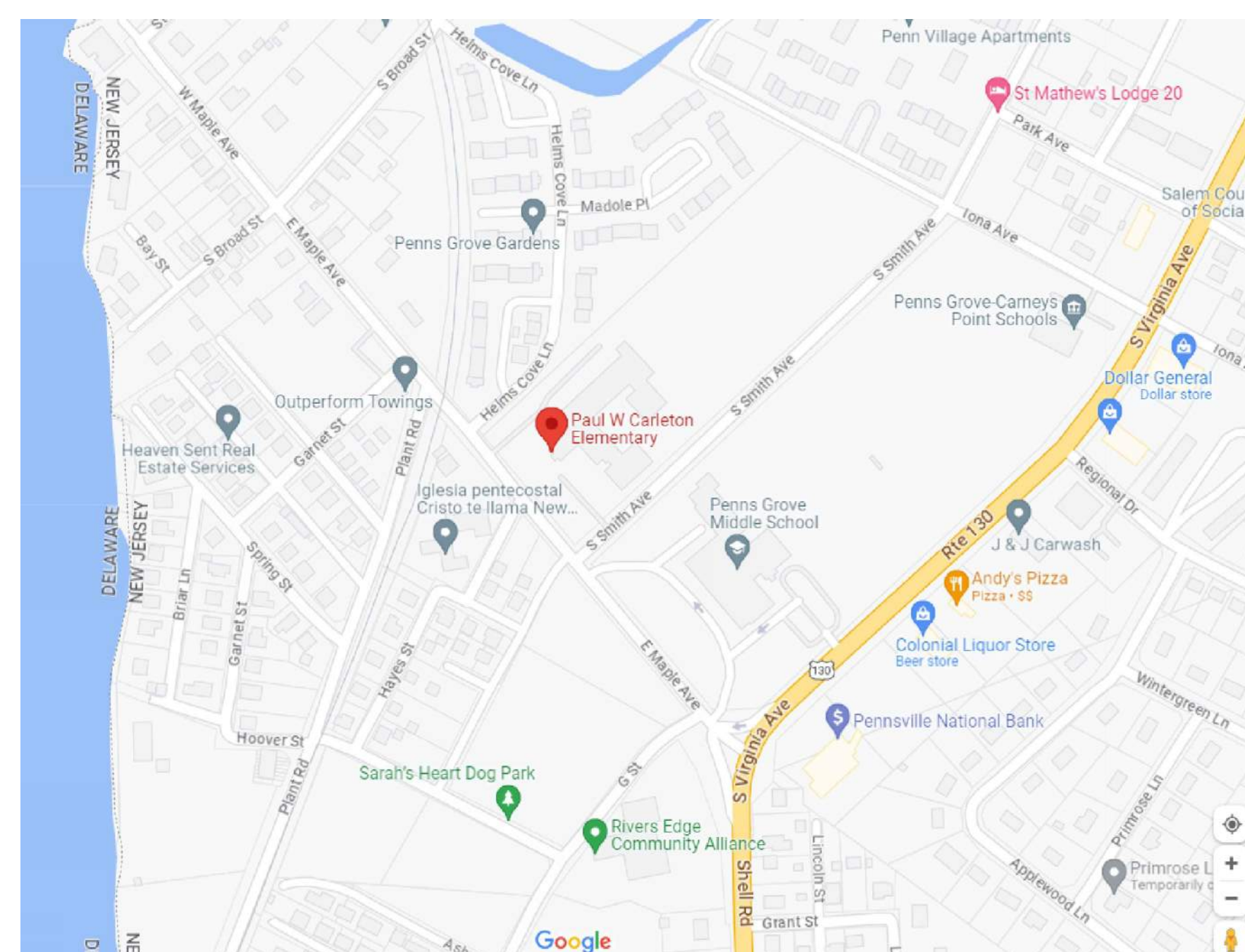
PROJECT NUMBER: 23-42  
CONSTRUCTION TYPE: 2B  
USE GROUP: E

### DESIGN CODES:

INTERNATIONAL BUILDING CODE/2021/ NJ EDITION  
INTERNATIONAL MECHANICAL CODE/2021  
INTERNATIONAL FUEL GAS CODE/2021  
NATIONAL STANDARD PLUMBING CODE/2021  
ASHRAE 90.1-2019 ENERGY STANDARD  
NATIONAL ELECTRICAL CODE (NFPA 70)/2020  
INTERNATIONAL FIRE CODE/2021  
ELEVATOR SUBCODE (NJAC 5:23-12):  
AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)  
BARRIER FREE SUBCODE: ICC/ANSI A117.1-2017  
N.J. REHAB CODE NJAC 5:23-6, NJUCC, SUBCHAPTER 6.  
NJ UCC BULLETIN 00-3: PUBLIC SCHOOLS-FACILITY PLANNING STANDARDS & UCC ENHANCEMENTS



**ELEVATION**



**LOCATION MAP**

### CONSTRUCTION MANAGER:

GRAYHAWK  
2000 MIDLANTIC DRIVE, SUITE 210, MOUNT LAUREL, N.J. 08054  
PHONE: 856-722-1800

### SITE ENGINEER:

ENVIRONMENTAL RESOLUTIONS, INC.  
815 EAST GATE DRIVE, SUITE 103, MOUNT LAUREL, N.J. 08054  
PHONE: 856-235-7170

### STRUCTURAL ENGINEER:

ORNDORF & ASSOCIATES, INC.  
8600 WEST CHESTER PIKE, SUITE 201, UPPER DARBY, PA 19082  
PHONE: 610-896-4500

### MECHANICAL, PLUMBING, ELECTRICAL ENGINEER:

MULHERN CONSULTING ENGINEERS  
321 SOUTH YORK ROAD, HATBORO, PA 19040  
PHONE: 215-293-9900



**GARRISON  
ARCHITECTS**

A Professional Corporation of Architects and Planners  
713 CREEK ROAD, BELLMAWR, NEW JERSEY 08031 (856) 396-6200

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23-42 PAUL W. CARLETON ELEMENTARY SCHOOL - 2025 PRE-K CLASSROOM ADDITION  
GARRISON ARCHITECTS EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY, WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF GARRISON ARCHITECTS. WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY, AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB, AND THIS OFFICE MUST BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.



**GENERAL CONSTRUCTION NOTES:**

1. BUILDING CODES: ALL WORK SHALL CONFORM TO FEDERAL, STATE AND LOCAL LAWS AS APPLICABLE TO THE PROJECT SITE. THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH ALL SUCH REGULATIONS.
2. DIMENSIONS: WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
3. DRAWINGS AND INSTRUCTIONS: ALL WORK SHALL BE PERFORMED BY THE GENERAL CONTRACTOR OR APPROVED SUBCONTRACTOR UNLESS OTHERWISE NOTED. ANY OMISSION, AMBIGUITY, DISCREPANCY OR CONFLICT IN THE BID DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION OR FIELD CHANGES AS MAY BE REQUIRED.
4. FIELD DIMENSIONS: THE GENERAL CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS AND ASSUME RESPONSIBILITY FOR THEIR ACCURACY. ANY DISCREPANCY SHALL BE PROMPTLY REPORTED TO THE ENGINEER.
5. SHOP DRAWINGS: THE CONTRACTOR SHALL SUBMIT WITH SUCH PROMPTNESS AS TO CAUSE NO DELAY, APPROPRIATE COPIES CHECKED AND APPROVED BY HIM. ALL SHOP DRAWINGS, SCHEDULES, AND SAMPLES REQUIRED FOR THE WORK, THE ARCHITECT OR ENGINEER SHALL CHECK AND APPROVE SUCH DOCUMENTS AND SAMPLES FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS AND INTENT OF THE WORK.
6. QUALITY: ALL WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE BEST TRADE PRACTICES AND STANDARDS, AND IN CONFORMANCE WITH ALL MANUFACTURER'S RECOMMENDATIONS.
7. SAFETY: PRECAUTIONS, ACCEPTABLE TO THE OWNER, ENGINEER, AND LOCAL AUTHORITY, SHALL BE EXERCISED TO PROTECT ADJACENT PROPERTY AND TENANTS FROM ACCIDENTS CONNECTED WITH THE WORK. O.S.H.A. STANDARDS SHALL BE STRICTLY OBSERVED.
8. MATERIALS AND ASSEMBLIES: ALL MATERIALS AND ASSEMBLIES SHALL MEET APPLICABLE STANDARDS AS PUBLISHED BY A.N.S.I., N.E.M.A. AND A.S.T.M. AND SHALL BE U.L. LISTED.
9. CONTRACTORS: ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
  - A. THE CONTRACTOR AND SUBCONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS NECESSARY TO COMPLETE THE WORK IN COMPLIANCE WITH THE CONTRACT FOR CONSTRUCTION AND APPLICABLE REGULATIONS.
  - B. THE CONTRACTOR SHALL BE RESPONSIBLE TO ASSIST ALL TRADES IN COORDINATION OF THE WORK AND COMPLIANCE WITH REQUIREMENTS.
10. PERMITS AND APPROVALS: ALL CONTRACTORS SHALL OBTAIN NECESSARY PERMITS, APPROVALS AND TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF ALL LOCAL PERMIT FEES.
11. ACCESS AND TRAFFIC: NO WORK OR DISTURBANCE SHALL BE PERFORMED BEYOND THE PROJECT LIMIT LINE PRIOR TO OBTAINING APPROPRIATE LOCAL AUTHORITY APPROVALS AND PERMITS. WORK SHALL NOT INTERRUPT, BLOCK OR INTERFERE WITH LOCAL VEHICULAR OR PEDESTRIAN TRAFFIC OR WITH THE USE OF EXISTING FACILITIES AT THE SITE.
12. MATERIALS: ALL MATERIALS AND ASSEMBLIES SHALL BE NEW. INSTALLATIONS MUST BEAR MANUFACTURER AND REQUIRED IDENTIFICATION MARKINGS. MATERIALS MUST CONFORM FULLY TO REQUIRED PERFORMANCE STANDARDS AND WARRANTY REQUIREMENTS. SUBSTITUTIONS REQUIRE WRITTEN APPROVAL FROM THE ENGINEER.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL DISTURBED AREAS TO EXISTING OR BETTER CONDITION. ALL DISTURBED AREAS NOT PAVED OR MULCHED SHALL BE SEEDED, UNLESS OTHERWISE NOTED ON THE PLANS.
14. ALL EXCESS MATERIAL TO BECOME PROPERTY OF CONTRACTOR, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. CONTRACTOR TO DISPOSE OF ALL EXCESS MATERIALS IN RESPONSIBLE MANNER.
15. SUBSURFACE UTILITIES SHOWN HERE ON ARE BASED ON BEST AVAILABLE INFORMATION AT THE TIME OF PLAN PREPARATION. NO SUBSURFACE UTILITIES WERE UNCOVERED OR EXPLORATORY TEST PITS PERFORMED TO VERIFY LOCATIONS.
16. CONTRACTOR IS RESPONSIBLE TO ACCURATELY DETERMINE LOCATIONS OF UNDERGROUND UTILITIES IN THE AREA OF WORK PRIOR TO BEGINNING CONSTRUCTION. ANY CONFLICTS SHALL BE BROUGHT TO ENGINEER'S ATTENTION IMMEDIATELY.
17. ALL CONSTRUCTION ACTIVITIES TO OCCUR OUTSIDE OF CONSTRUCTION FENCE SHOULD BE COMPLETED WHEN SCHOOL IS NOT IN SESSION AND/OR AT TIMES APPROVED BY THE DISTRICT.
18. NO RECYCLED CONCRETE SHALL BE UTILIZED ON THIS PROJECT.

**SPECIAL NOTES:**

1. CONTRACTORS AND SUBCONTRACTORS SHALL EMPLOY ALL PRECAUTIONS TO PROTECT AND PRESERVE PROPERTY AND INSURE PUBLIC SAFETY.
2. SUGGESTED PROCEDURES ARE SUGGESTIONS AND NOT BINDING TO THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR OWN WORKING PROCEDURES.
3. THE OWNER AND ITS REPRESENTATIVES SHALL BE HELD HARMLESS WITH REGARD TO ANY CLAIM DUE TO ANY CONTRACTOR NEGLIGENCE OR FAILURE TO ADHERE TO INSTRUCTIONS, BUILDING CODES, REGULATIONS, PERFORMANCE STANDARDS OR PROPER CONSTRUCTION PROCEDURES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO ADHERE TO ALL MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS AND TO COORDINATE INSTALLATION WITH ALL TRADES. HE SHALL ASSURE THAT ALL TRADES ARE THOROUGHLY FAMILIAR WITH CONDITIONS AND REQUIREMENTS OF THE WORK.
5. THE CONTRACTOR SHALL FULLY INFORM OWNERS OF ANY NECESSARY PROCEDURES FOR CARE, MAINTENANCE, OPERATIONS AND SAFETY PROCEDURES REQUIRED FOR EQUIPMENT OR ASSEMBLIES. HE SHALL PROVIDE NEATLY BOUND LITERATURE, SCHEDULE AND PROVIDE REQUIRED OR SUGGESTED INSTRUCTION; AND ALL WARRANTIES AS ARE REQUIRED OR PROVIDED.

**SAFETY:**

1. CONSTRUCTION SHALL NOT INTERFERE WITH ANY REQUIRED EGRESS, EITHER FOR THE PROJECT OR ADJACENT PROPERTY OR TENANTS. PUBLIC HALLS AND AVENUES, DOORS, YARDS, PASSAGES, EXITS AND AREAS OF REFUGE SHALL REMAIN ACCESSIBLE, UNOBSTRUCTED AND PROTECTED AT ALL TIMES.
2. EQUIPMENT AND MATERIALS SHALL BE STORED IN SUCH A MANNER AS TO NOT BLOCK EGRESS OR PASSAGE.
3. DUST AND NOISE SHALL BE MINIMIZED. DUST SHALL BE CONTAINED WITHIN THE CONSTRUCTION AREA AND PREVENTED FROM INFILTRATING PUBLIC AREAS.
4. CONSTRUCTION SHALL BE PERFORMED WITHIN NORMAL BUSINESS HOURS UNLESS OTHERWISE SPECIFICALLY ARRANGED AND APPROVED BY THE OWNER.
5. CONTRACTOR SHALL PROVIDE 6' HT CHAIN LINK TEMPORARY FENCE AROUND ALL PROPOSED IMPROVEMENTS FOR THE DURATION OF THE PROJECT.
6. CONTRACTOR SHALL PROVIDE A LOCKABLE PORTAJOHNS FOR ALL EMPLOYEES AND SUBCONTRACTORS.

**MANUFACTURER'S PRODUCTS:**

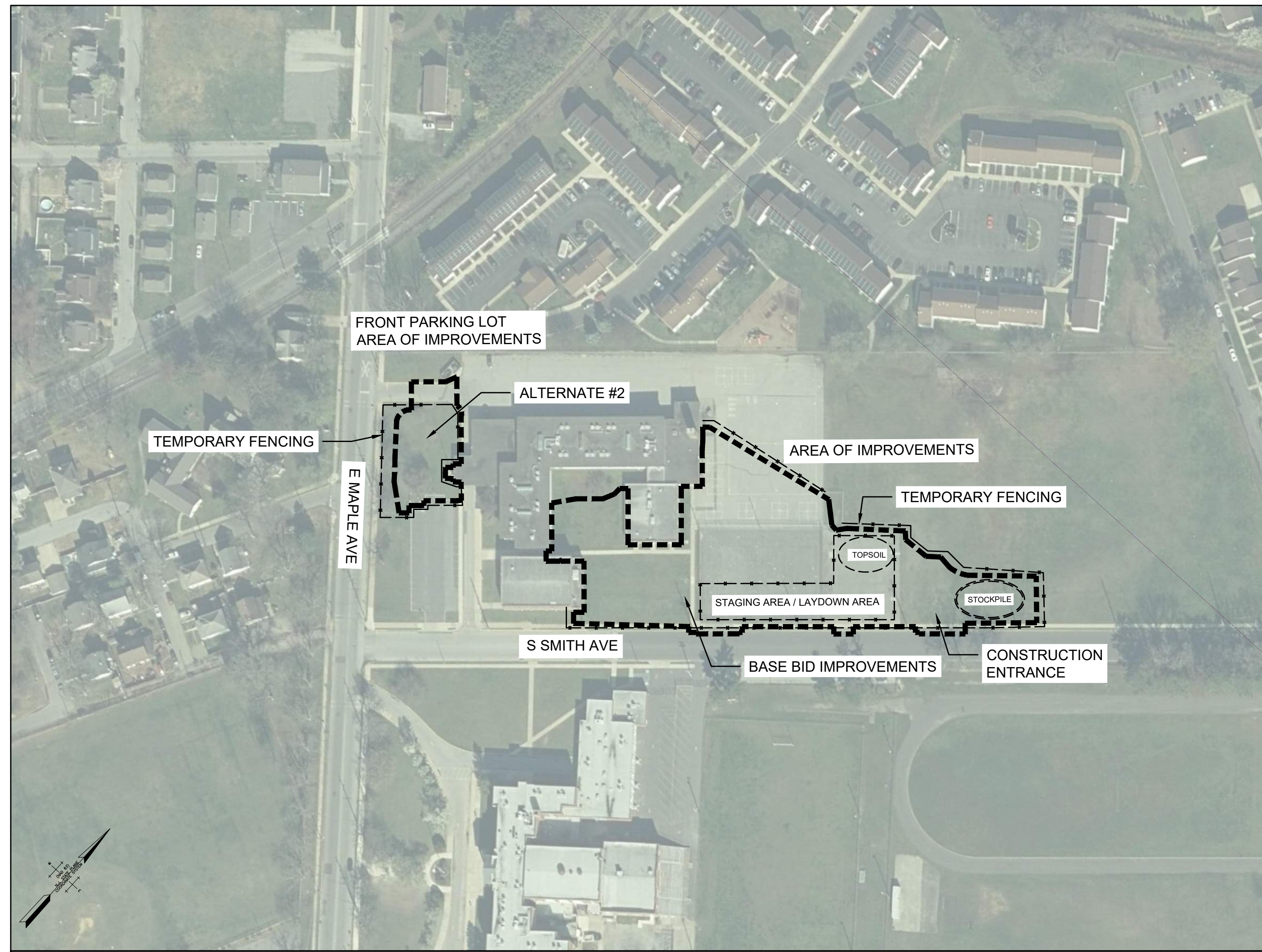
1. THE CONTRACTOR SHALL OBSERVE ALL GUIDELINES, INSTRUCTIONS AND PROCEDURES AND INCLUDE ACCOMPANYING PRODUCTS AS ARE RECOMMENDED BY THE MANUFACTURER AND SUPPLIER OF PRODUCTS AND ASSEMBLIES UTILIZED OR INSTALLED IN THE WORK.
2. THE CONTRACTOR SHALL BE FULLY FAMILIAR WITH MANUFACTURER'S RECOMMENDATIONS AND TAKE ALL NECESSARY MEASURES TO INSURE PROPER INSTALLATION OF PRODUCTS, MATERIALS AND ASSEMBLIES.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICT OR APPARENT CONFLICT IN DOCUMENTS WITH PRODUCT UTILIZATION OR WITH OTHER PRODUCTS AND ASSEMBLIES CALLED FOR IN THE WORK.

**GENERAL LAYDOWN AND TEMPORARY FENCING PLANS NOTES:**

1. ANTICIPATED LAYDOWN AREAS AND WILL BE DISCUSSED AND LOCATED PRIOR TO THE START OF CONSTRUCTION.
2. CONTRACTOR WILL BE REQUIRED TO INSTALL TEMPORARY FENCING AROUND ALL SITE IMPROVEMENTS WHEN PERFORMED. CONTRACTOR IS REQUIRED TO DETERMINE OVERALL AMOUNT OF TEMPORARY FENCE REQUIRED.
3. FENCE SHALL BE SECURELY CLOSED OFF AND BE REQUIRED TO BE LOCKED AT THE END OF EACH DAY.
4. CONTRACTOR WILL BE REQUIRED TO COORDINATE AND MOVE FENCING DEPENDING UPON SITE OPERATION THROUGHOUT THE CONSTRUCTION PERIOD.
5. FOR SITE IMPROVEMENTS AND PARKING AREA, FENCE IS REQUIRED TO BE INSTALLED IN THE GROUND, WHERE FENCING IS TO BE MOVED FOR CONSTRUCTION ACTIVITIES FENCE CAN BE INSTALLED ON STANDS WITH WEIGHTS.
6. THE CONTRACTOR SHALL BE REQUIRED TO RESTORE ALL AREAS DAMAGED DUE TO CONSTRUCTION ACTIVITIES.
7. THE CONTRACTOR IS REQUIRED TO SECURE DOORS EXITING INTO CONSTRUCTION AREA.
8. PROVIDE TEMPORARY CONSTRUCTION FENCING TO COMPLETELY ENCOMPASS AREAS THAT WOULD BE DISTURBED DURING CONSTRUCTION, INCLUDING AREAS WHERE MATERIAL WILL BE STORED. THE FENCING MUST COMPLETELY SURROUND ALL CONSTRUCTION AREAS AND MATERIAL STORAGE AREAS.
9. PROVIDE, "NO TRESPASSING" SIGNS ON ALL CONSTRUCTION FENCING AT INTERVALS OF 40 FEET ON CENTER OR CLOSER.

**SURVEY NOTES:**

- 1) DATUMS:  
VERTICAL DATUM IS NAVD 1988 (GEOID128). PER GPS OBSERVATIONS UTILIZING KEYSTONE KEYNET VRS NETWORK.  
HORIZONTAL DATUM IS NAD83 (2011).
- 2) BEING KNOWN AND DESIGNATED AS BLOCK 141, LOT 2 AS SHOWN ON SHEET 27 OF THE OFFICIAL TAX MAP OF THE BOROUGH OF PENNS GROVE, SALEM COUNTY, NJ AND DATED OCTOBER 1988.
- 3) CONTOURS SHOWN HEREON ARE AT 1' INTERVALS AND REFERENCE THE NJ 2015 LIAR PROJECT DATA PREPARED BY THE SANBORN MAP COMPANY, INC. AND WERE VERIFIED IN THE FIELD BY ENVIRONMENTAL RESOLUTIONS, INC. ON OR ABOUT JANUARY 2024.
- 4) THE CONDITIONS SHOWN ON THIS PLAN ARE BASED ON THE FIELD WORK PERFORMED BY ERI IN 2023.
- 5) OBSERVABLE UTILITIES HAVE BEEN DEPICTED HEREON. A SUBSURFACE INVESTIGATION OF THE SITE HAS BEEN CONDUCTED BY TAYLOR WISEMAN & TAYLOR AND CONDITIONS SHOWN REFLECT UTILITY LOCATIONS THEY HAVE PROVIDED. UNDERGROUND UTILITIES ARE NOT NECESSARILY COMPLETE AND MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION AND/OR GROUND DISTURBANCE.
- 6) THIS PLAN HAS BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY RESTRICTIONS AND EASEMENTS THAT A TITLE REPORT MAY DISCLOSE.
- 7) THE SITE IS LOCATED PRIMARILY IN ZONE X (AREA OF MINIMAL FLOOD HAZARD) AND ZONE AE (SPECIAL FLOOD HAZARD AREAS) PER FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 3403300501C EFFECTIVE DATE 6/16/2016.



**AERIAL LOCATION MAP**  
PAUL W. CARLETON ELEMENTARY SCHOOL  
SCALE: 1"=100'

THE CONTRACTOR WILL DESIGNATE AN INDIVIDUAL RESPONSIBLE FOR CONSTRUCTION SITE SAFETY DURING THE COURSE OF CONSTRUCTION IN ACCORDANCE WITH NJAC 5:23-2.21 (b) OF THE NEW JERSEY UNIFORM CONSTRUCTION CODE GFR 1926.92 (f) (OSHA COMPETENT PERSON)

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING STRUCTURES AND UTILITIES, WHICH HE DEEMS NECESSARY, BOTH ABOVE AND BELOW THE GROUND SURFACE BEFORE EQUIPMENT ENTERS THE CONSTRUCTION SITE.

FINAL INQUIRIES TO "U.G. UTILITIES MARK-OUT" TELEPHONE NUMBER: 1-800-272-1000 AND TO "FIBER OPTIC MARK-OUT" TELEPHONE NUMBER: 1-800-272-1000 SHALL BE MADE BY THE CONTRACTOR WITHIN SEVEN (7) DAYS OF ENTERING THE SITE. THE CONTRACTOR SHALL COORDINATE AND VERIFY THE METHOD OF UTILITY LOCATION WITH THE APPROPRIATE UTILITY COMPANIES.

UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE, AND BASED ON EXISTING INFORMATION RECEIVED FROM UTILITY COMPANIES.



APPROXIMATE LOCATION OF UNDERGROUND UTILITIES HAVE BEEN SHOWN ON THE PLANS. THE CONTRACTOR IS TO FAMILIARIZE HIMSELF WITH AND VERIFY CONDITIONS AT THE SITE. THE CONTRACTOR SHALL MAKE DILIGENT INQUIRY AT THE OFFICE OF UTILITY COMPANIES, MUNICIPAL AUTHORITIES AND OTHER OPERATORS OF UNDERGROUND SYSTEMS TO DETERMINE THE EXACT LOCATION OF UTILITY STRUCTURES. PURSUANT TO P.L. 1994 CHAPTER 118 "UNDERGROUND FACILITY PROTECTION ACT", THE CONTRACTOR SHALL, AS A MINIMUM, CONTACT THE NEW JERSEY ONE - CALL SYSTEM AT 811 OR 1-800-272-1000 AT LEAST 3 DAYS PRIOR TO COMMENCING WORK, TO NOTIFY THIS AGENCY OF THIS PROJECT AND TO COORDINATE LOCATION OF UNDERGROUND FACILITIES IN THE VICINITY OF THIS PROJECT.

**SCHEDULE OF SHEETS**

CSN-1	SITE IMPROVEMENT NOTES & KEY PLAN
C-1	DEMOLITION PLAN
C-2	SITE PLAN
C-3	FRONT PARKING LOT DEMOLITION, SITE, & GRADING PLAN (ALT.)
C-4	GRADING PLAN
C-5	GRADING PLAN ENLARGEMENTS
C-6	UTILITY PLAN
C-7	SOIL EROSION & SEDIMENT CONTROL PLAN
C-8	SOIL EROSION & SEDIMENT CONTROL PLAN
CD-1	CONSTRUCTION DETAILS
CD-2	CONSTRUCTION DETAILS
CD-3	CONSTRUCTION DETAILS
CD-4	CONSTRUCTION DETAILS

**UTILITY CONTACT INFORMATION**

<b>WATER SERVICE:</b> NEW JERSEY AMERICAN WATER 204 CARRIAGE LANE DELRAN, NEW JERSEY 08075 CONTACT: VITO SQUADRITO (856) 255-2049	<b>GAS SERVICE:</b> SOUTH JERSEY GAS COMPANY 1 SOUTH JERSEY PLAZA FOLSOM, NEW JERSEY 08037 (856) 881-7000
<b>CABLE SERVICE:</b> COMCAST CORPORATION 1250 HADDONFIELD-BERLIN ROAD CHERRY HILL, NEW JERSEY 08034 CONTACT: CARMINE POLO IV (856) 669-0122	<b>SEWER SERVICE:</b> PENNS GROVE SEWERAGE AUTHORITY 81 BEACH AVENUE PENNS GROVE, NEW JERSEY 08069 (856) 299-3103
<b>ELECTRIC SERVICE:</b> ATLANTIC CITY ELECTRIC 51 HARDING HIGHWAY MAYS LANDING, NEW JERSEY 08330 CONTACT: SUSAN COAN (609) 625-5847	<b>PUBLIC WORKS:</b> CARNEYS POINT TOWNSHIP PUBLIC WORKS DEPARTMENT 344 PENNS GROVE AUBURN ROAD CARNEYS POINT, NEW JERSEY 08069 CONTACT: JOSEPH V. SANTOGROSSI JR. (856) 299-7082

**LEGEND OF SYMBOLS AND ABBREVIATIONS**

—E—	ELECTRIC LINE	□	CONCRETE/MARBLE MONUMENT	—=—	DOUBLE SIDED SIGN
—FO—	FIBER OPTIC LINE	○	REBAR	—S—	SIGN
—E.O.P—	EDGE OF PAVEMENT	○	IRON PIN W/CAP	—C—	SANITARY CLEANOUT
—95—	CONTOUR LINE MAJOR	△	P.K. NAIL/CONTROL POINT	—V—	SANITARY VENT
—94—	CONTOUR LINE MINOR	□	1" INLET	—E—	ELECTRIC BOX
—G—	GUIDE RAIL	□	2" INLET	—G—	GAS VALVE
HC	HANDICAP DESIGNATION	□	2" INLET	—M—	MAILBOX
TW	TOP OF WALL	○	SANITARY MANHOLE	—C—	CURB STOP
BW	BOTTOM OF WALL	○	STORM MANHOLE	—F—	FIBER OPTIC BOX
K	TOP OF CURB GRADE	○	UTILITY POLE	—T—	TV BOX
G	GUTTER GRADE	○	WATER VALVE	—B—	TELEPHONE BOX
99.95	SPOT GRADE	○	FIRE HYDRANT	—D—	DENOTES BRICK
IRR VALVE	IRRIGATION VALVE BOX	○	LIGHT POLE	—C—	DENOTES CONCRETE
○	WATER METER	○	FLAG POLE	—S—	DENOTES STONE
○	CONCRETE STOP	○	ASPHALT CORE SAMPLE	—N—	DENOTES NUMBER OF STALLS
○	BOLLARD WITH SIGN	○	BOLLARD	—F—	DENOTES FLUSH CURB

*R.H.C.*  
11/11/2024  
**RAKESH R. DARJI**  
N.J. PROFESSIONAL ENGINEER  
No. 24GE04289100

**ENVIRONMENTAL RESOLUTIONS, INC.**  
Engineers • Planners • Scientists • Surveyors  
815 East Gate Drive - Suite 103  
Mount Laurel, New Jersey 08054-3415  
Tel. 856-235-7170 Fax 856-273-9239  
CERTIFICATE OF AUTHORIZATION NUMBER: 24GE04289100

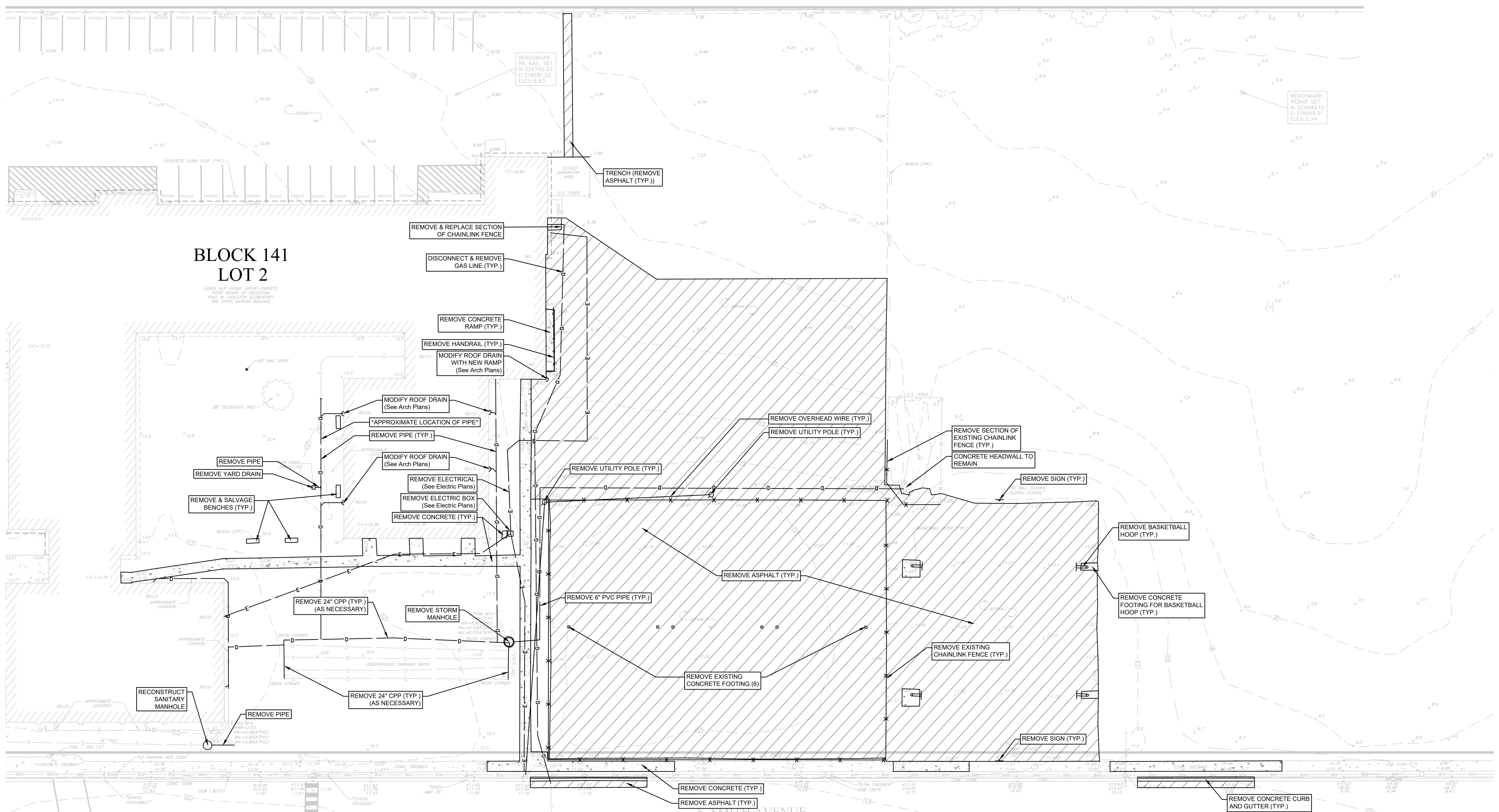
ISSUED FOR BID 11/11/24

PLAN NAME: <b>SITE IMPROVEMENT NOTES &amp; KEY PLAN</b>	NO. / REVISION AND DATE
PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT 100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069 <b>PAUL W. CARLETON ELEMENTARY SCHOOL</b> 2025 PRE-K CLASSROOM ADDITION 251 E MAPLE AVE TOWNSHIP OF PENNS GROVE SALEM COUNTY, NEW JERSEY 08069 BLOCK 83, LOT 1	SHEET NUMBER: <b>CSN-1</b>
PROJECT #: 31705-04   DRAWN: YP   DESIGNED: NJW   DATE: 11/11/24	FILE: 00-TITLE SHEET   SCALE: NOTED



# BLOCK 141 LOT 2

LANDS N/F PENNS GROVE-CARNEYS  
POINT BOARD OF EDUCATION  
PAUL W. CARLETON ELEMENTARY  
TWO STORY MIDDLE BUILDING



DEMO PLAN

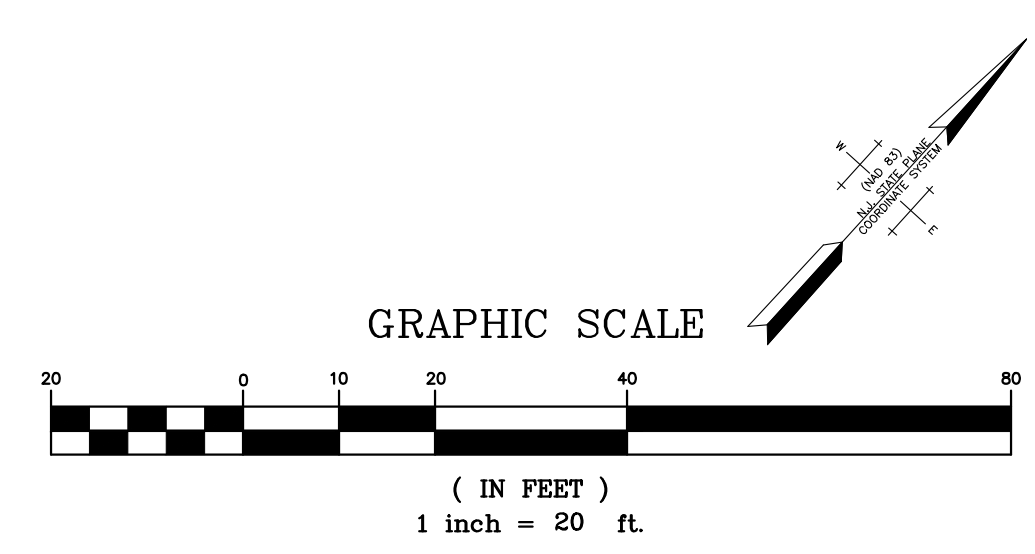
SCALE: 1"=20'

**DEMO NOTES:**

- REFER TO ELECTRICAL PLANS FOR REROUTING AND DISCONNECTION OF EXISTING ELECTRICAL LINE.
- PRIOR TO DEMOLITION, ENGINEER, OWNER'S REP AND CONTRACTOR SHALL WALK THE SITE TO CONFIRM LIMITS OF CONSTRUCTION AREA, STAGING, AND LAYDOWN AREA.
- CONTRACTOR SHALL FILL (WITH SUITABLE MATERIAL) AND COMPACT ALL SUBSURFACE EXCAVATIONS FOLLOWING REMOVALS OF ANY FOOTINGS/STRUCTURES/PIPE ETC.
- CONTRACTOR TO VERIFY LOCATION AND DEPTHS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- TEMPORARY 6" CHAIN-LINK FENCING SHALL BE PROVIDED AROUND AREAS OF IMPROVEMENTS.
- BENCHES TO BE SALVAGED AND REINSTALLED AT DIRECTION OF OWNER.
- SIGNS TO BE SALVAGED AND REINSTALLED AT DIRECTION OF OWNER.
- ALL ASPHALT SHALL BE SAWCUT AT LOCATIONS WHERE ASPHALT SHALL REMAIN.
- CONCRETE SIDEWALK TO BE REMOVED SHALL BE SAWCUT AT LOCATIONS WHERE SIDEWALK IS TO REMAIN.
- CONTRACTOR SHALL PROTECT BUILDING, DOORS, AND WINDOWS DURING DEMOLITION AND CONSTRUCTION. ANY DAMAGE TO THE BUILDING DUE TO CONSTRUCTION ACTIVITIES SHALL BE

**REPLACED BY THE CONTRACTOR AT THEIR EXPENSE.**

- CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
- CONTRACTOR TO PROVIDE PORTA-JOHN'S FOR THEMSELVES AND THEIR SUBCONSULTANTS.
- GAS SERVICE REPLACEMENT TO BE COORDINATED WITH LOCAL SERVICE PROVIDER.
- STORM, ELECTRICAL, AND GAS REPLACEMENT AND RESTORATION ACTIVITIES SHOULD BE PERFORMED PRIOR TO ANY BUILDING FOOTING AND EXCAVATION. THE DISCONNECTION AND RECONNECTION OF UTILITIES SHOULD NOT DISRUPT SCHOOLS DAILY ACTIVITIES AND ROUTINGS.



*RAC*  
**RAKESH R. DARJI**  
 N.J. PROFESSIONAL ENGINEER  
 No. 24GE04289100

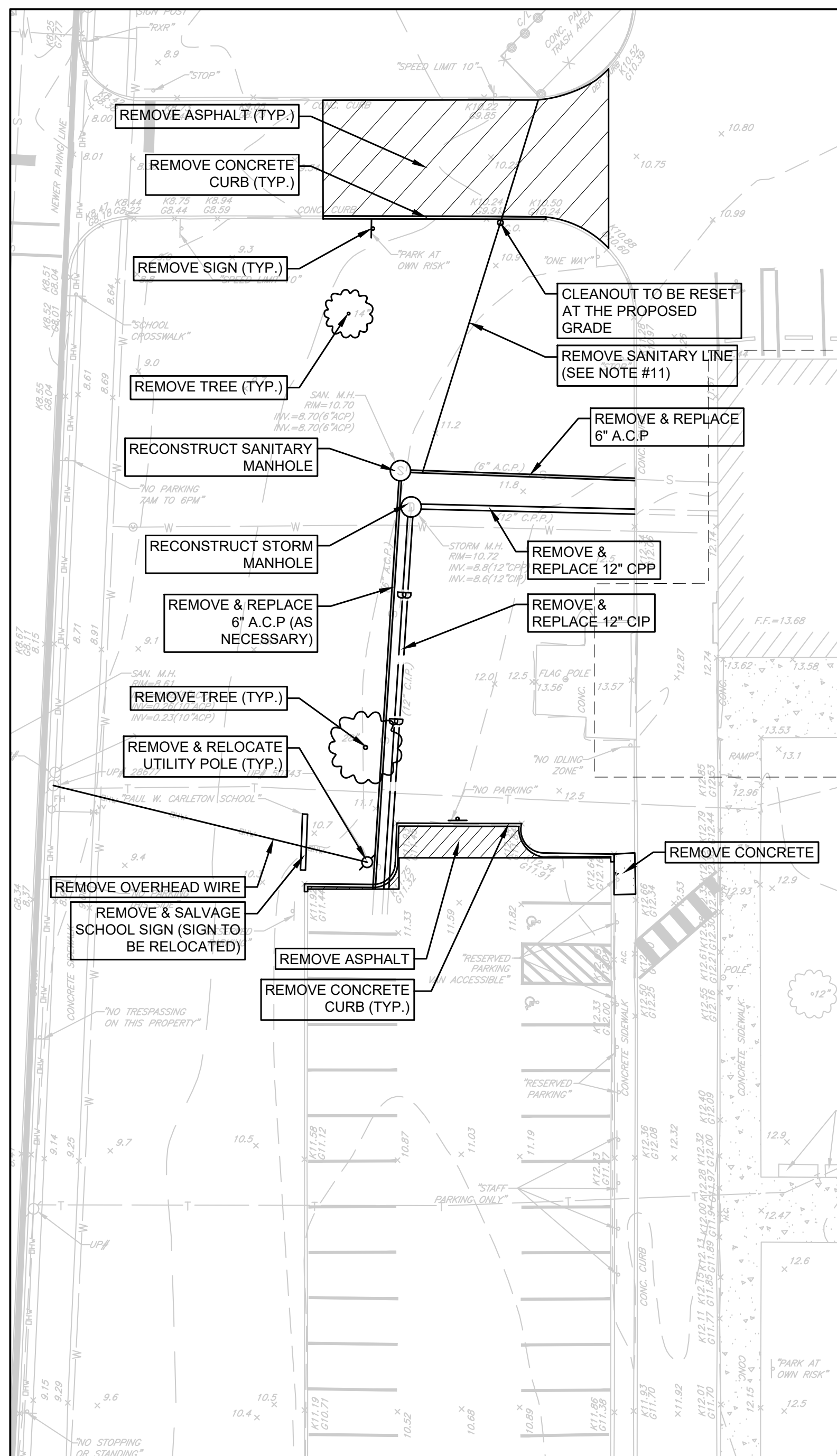
**ENVIRONMENTAL RESOLUTIONS, INC.**  
 Engineers • Planners • Scientists • Surveyors  
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 Tel. 856-235-7170 Fax 856-273-9239  
 CERTIFICATE OF AUTHORIZATION  
 NUMBER: 24GA27974500

PLAN NAME: <b>DEMO PLAN</b>	NO. / REVISION AND DATE
PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT 100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069 <b>PAUL W. CARLETON ELEMENTARY SCHOOL</b> 2025 PRE-K CLASSROOM ADDITION 251 E MAPLE AVE TOWNSHIP OF PENNS GROVE SALEM COUNTY, NEW JERSEY 08069 BLOCK 83, LOT 1	SHEET NUMBER: <b>C-1</b>
PROJECT #: 31705-04   DRAWN: YP   DESIGNED: NJW   DATE: 11/11/24 FILE: 01-DEMO & SITE   SCALE: 1"=20'	



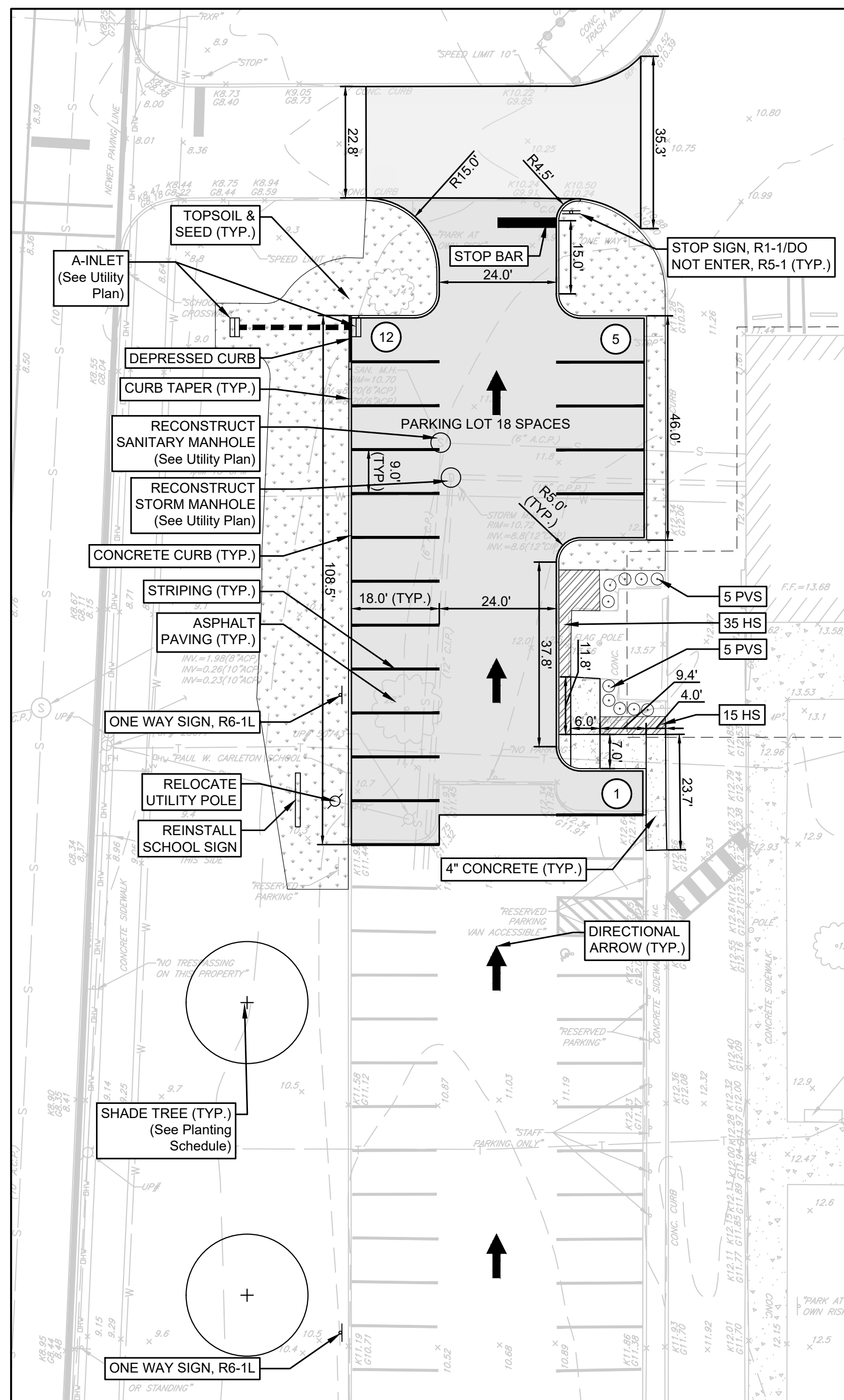






FRONT PARKING LOT DEMO PLAN (ALT.) SCALE: 1"=20'

- DEMO NOTES:**
- PRIOR TO DEMOLITION, ENGINEER AND CONTRACTOR SHALL WALK THE SITE TO CONFIRM LIMITS OF DEMOLITION.
  - CONTRACTOR TO VERIFY LOCATION AND DEPTHS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
  - TEMPORARY 6" CHAIN-LINK FENCING SHALL BE PROVIDED AROUND AREAS OF IMPROVEMENTS.
  - SIGNS TO BE SALVAGED AND REINSTALLED AT DIRECTION OF OWNER.
  - ALL ASPHALT SHALL BE SAWCUT AT LOCATIONS WHERE ASPHALT SHALL REMAIN.
  - CONCRETE SIDEWALK TO BE REMOVED SHALL BE SAWCUT AT LOCATIONS WHERE SIDEWALK IS TO REMAIN.
  - CONTRACTOR SHALL PROTECT BUILDING, DOORS, AND WINDOWS DURING DEMOLITION AND CONSTRUCTION. ANY DAMAGE TO THE BUILDING DUE TO CONSTRUCTION ACTIVITIES SHALL BE REPLACED BY THE CONTRACTOR AT THEIR EXPENSE.
  - CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
  - CONTRACTOR TO PROVIDE PORTA-JOHN'S FOR THEMSELVES AND THEIR SUBCONSULTANTS.
  - CONTRACTOR TO COORDINATE POLE RELOCATION WITH LOCAL ELECTRIC SERVICE PROVIDER.
  - EXISTING SANITARY LINE TO BE INVESTIGATED PRIOR TO REMOVAL TO DETERMINE OPERATION. TO BE COORDINATED WITH DISTRICT REPRESENTATIVE.

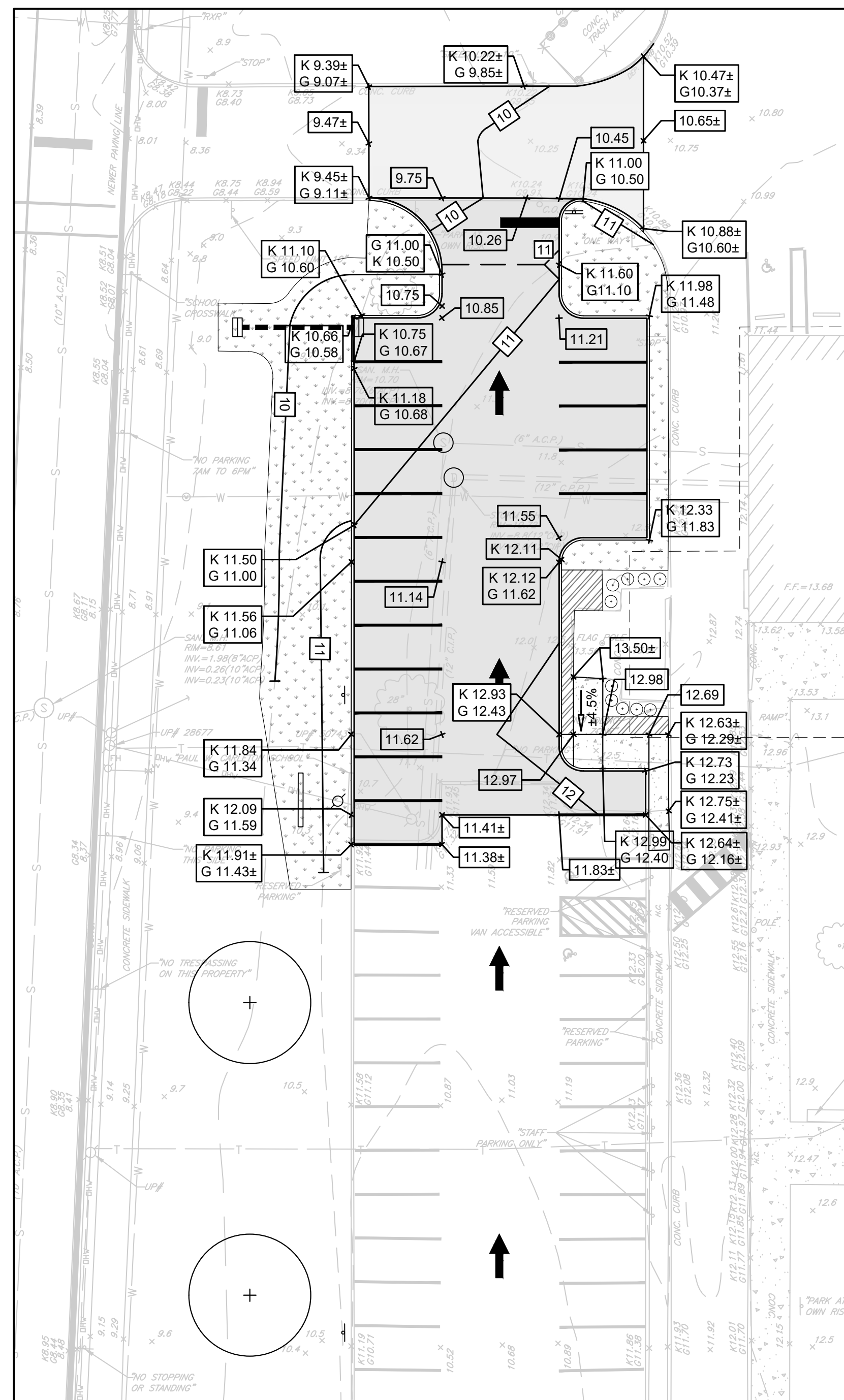


FRONT PARKING LOT SITE PLAN (ALT.) SCALE: 1"=20'

- SITE NOTES:**
- ALL EXISTING SIGNS TO BE REMOVED SHALL BE SALVAGED AND REINSTALLED PER PLAN.
  - THIS WORK TO BE PERFORMED DURING SUMMER MONTHS.
  - ALL AREAS BEYOND SIDEWALKS AND PAVEMENT SHALL BE RESTORED AND REGRADED UP TO 3' BEYOND EDGE OF PAVEMENT WITH TOPSOIL & SEED UNLESS OTHERWISE INDICATED.
  - ALL LOCATIONS WITH SLOPE GREATER THAN 6:1 SHALL RECEIVE SOIL EROSION FABRIC.
  - TOPSOIL & SEED IMPLIES CONTRACTOR SHALL IMPORT 4" OF NEW TOPSOIL.
  - ALL AREAS BEYOND SIDEWALKS SHALL BE RESTORED AND REGRADED MIN. 3' BEYOND EDGE OF PAVEMENT WITH TOPSOIL & SEED UNLESS OTHERWISE INDICATED.
  - FINAL LOCATION OF NEW TREES WILL BE DETERMINED IN THE FIELD.
  - CONTRACTOR SHALL PROVIDE GATOR BAGS FOR ANY TREES INSTALLED.
  - UTILITY POLE TO BE RELOCATED PER PLANS.
  - LANDSCAPE BED SHALL INCLUDE 3" MULCH AND 6" OF NEW TOPSOIL.

- STRIPING NOTES:**
- ALL STRIPING TO BE EPOXY RESIN.
  - PARKING SPACES SHALL BE 4" WHITE.
  - GORE STRIPING SHALL BE 6" WHITE.
  - ACCESSIBLE PARKING SPACES SHALL BE BLUE.
  - DIRECTIONAL ARROWS AND STOP BARS SHALL BE WHITE.

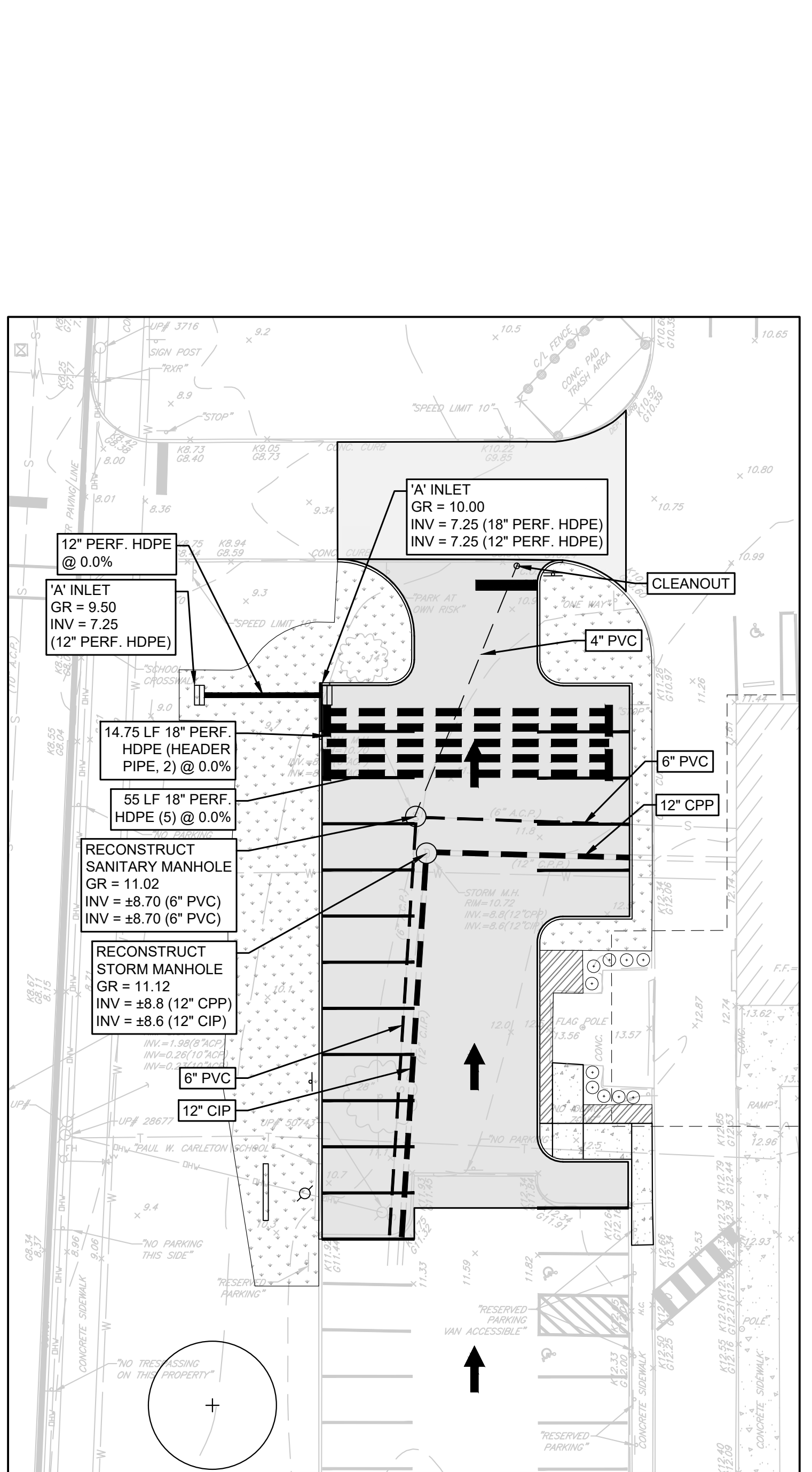
Plant Schedule					
Key	QTY.	Scientific Name	Common Name	Size	Container/Comments
<b>Shade Trees</b>					
AR	2	Acer rubrum 'October Glory'	October Glory Red Maple	2.5" - 3" cal.	Limbed to 6'-7'
<b>SUBTOTAL:</b>	<b>2</b>				
<b>Perennials &amp; Grasses</b>					
HS	50	Hemerocallis 'Stella De Oro'	Daylily		4" Pot
PVS	10	Panicum virgatum 'Shenandoah'	Shenandoah Switchgrass		#1 cont.
<b>SUBTOTAL:</b>	<b>60</b>				



FRONT PARKING LOT GRADING & UTILITY PLAN (ALT.)

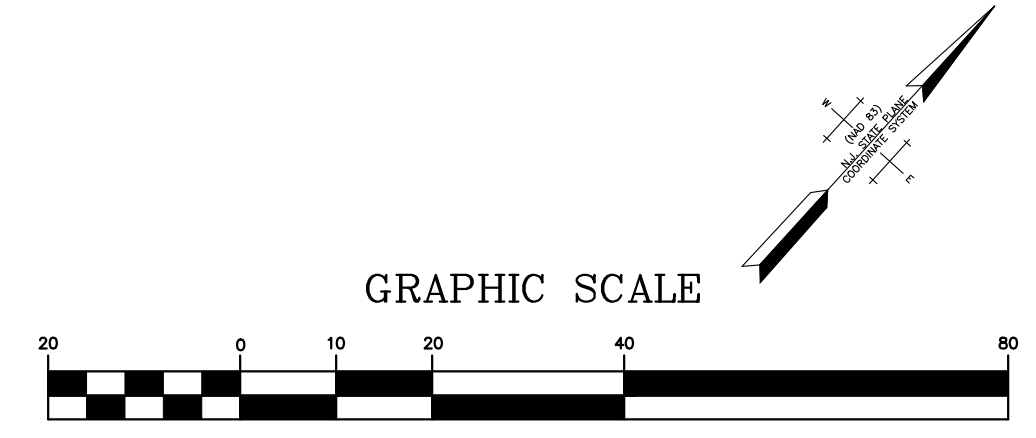
- GRADING & UNDERDRAIN NOTES:**
- SITE GRADING IS APPROXIMATE. CONTRACTOR TO VERIFY ALL EXISTING GRADES PRIOR TO CONSTRUCTION.
  - RUNNING SLOPES FOR PATHS, SIDEWALKS ARE NOT TO EXCEED 5%, AND ARE DESIGNED FOR NOT GREATER THAN 4.5% SLOPE. CROSS SLOPES ARE NOT TO EXCEED 2%. CROSS SLOPES WERE DESIGNED TO 1.5% OR LESS.
  - CONTRACTOR REQUIRED TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING AND TO ALL STORM INLETS.
  - WHERE NO GRADING MODIFICATIONS ARE ILLUSTRATED CONTRACTOR IS TO MAINTAIN AND RESTORE EXISTING ELEVATIONS, WHERE POSSIBLE.
  - GRADING OF ASPHALT AREAS SHALL NOT BE LESS THAN 0.5%.
  - TOPSOIL TO BE INSTALLED TO TOP OF ALL CONCRETE CURB AND STABILIZED.
  - WATER SERVICE TO BE ADJUSTED TO ACCOMMODATE SUBSURFACE SYSTEM.
  - SUBSURFACE SYSTEM IN ALTERNATE ORIENTATIONS, FINAL ORIENTATION TO BE DETERMINE BASED ON WATER OR SANITARY CONFLICTS.

- PAVEMENT LEGEND:**
- PARKING LOT - DRIVE
    - 1.5" SURFACE COURSE
    - 4.5" BASE COURSE
    - 6" DGA
  - PARKING LOT SPACES
    - 1.5" SURFACE COURSE
    - 2.5" BASE COURSE
    - 6" DGA



FRONT PARKING LOT UTILITY PLAN (ALT.) SCALE: 1"=20'

- UTILITY NOTES:**
- ALL EXISTING UTILITIES TO BE MAINTAINED AND RESTORED TO ORIGINAL OR BETTER.
  - ALL NEW UTILITIES TO BE INSTALLED TO DEPTHS AND LOCATIONS SHOWN ON THIS PLAN.
  - ALL UTILITIES TO BE INSTALLED TO DEPTHS AND LOCATIONS SHOWN ON THIS PLAN.
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ISSUED FOR BID 11/11/24

PROJECT # 31705-04 | DRAWN: YP | DESIGNED: NJW | DATE: 11/11/24  
 FILE: 01-DEMO & SITE | SCALE: 1"=20'

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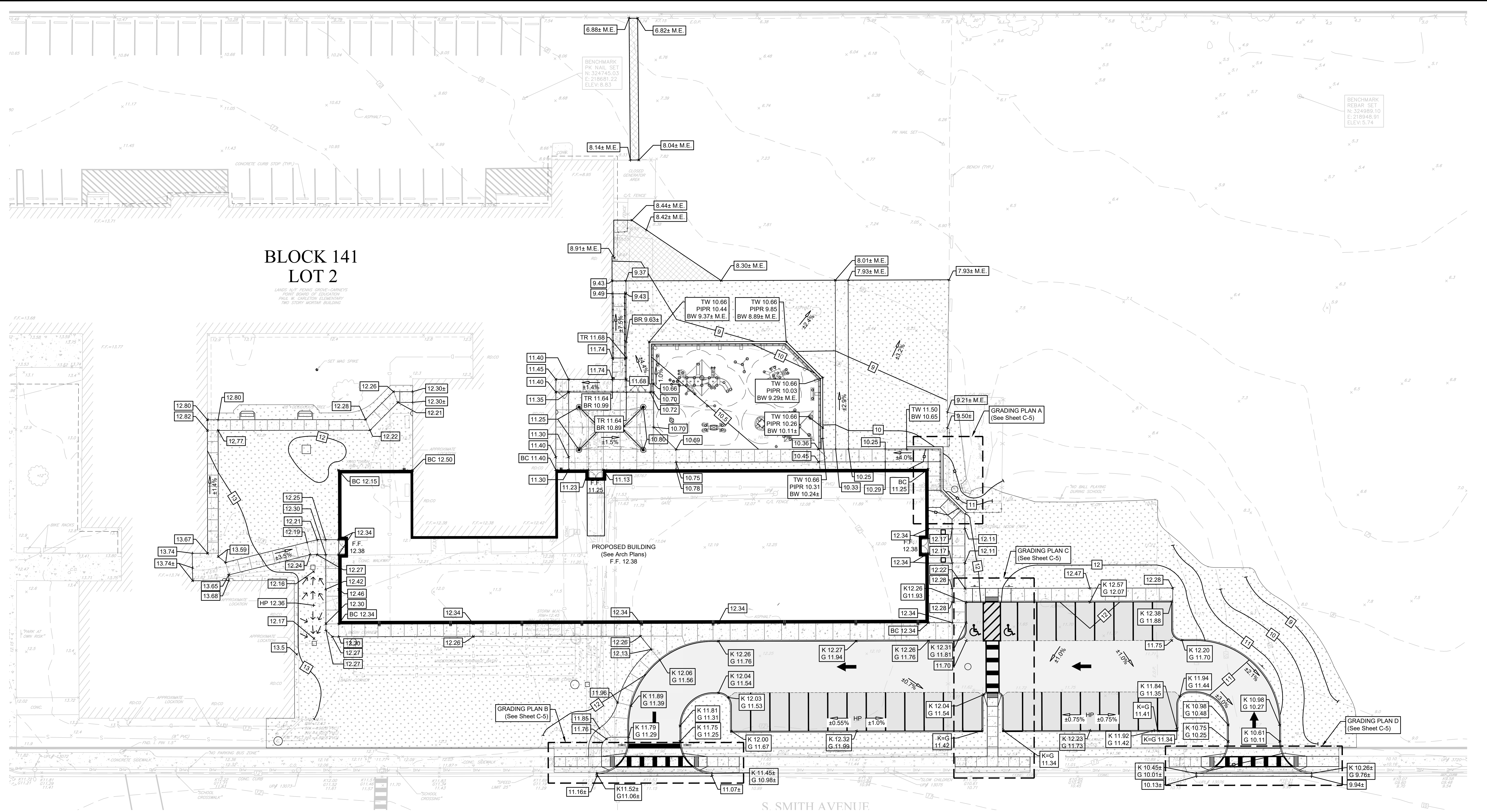
**ENVIRONMENTAL RESOLUTIONS, INC.**  
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PLAN NAME: **FRONT PARKING LOT DEMO, SITE, GRADING & UTILITY PLAN (ALT.)**

PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT  
 100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
 2025 PRE-K CLASSROOM ADDITION  
 251 E MAPLE AVE  
 TOWNSHIP OF PENNS GROVE  
 SALEM COUNTY, NEW JERSEY 08069  
 BLOCK 83, LOT 1

SHEET NUMBER: **C-3**



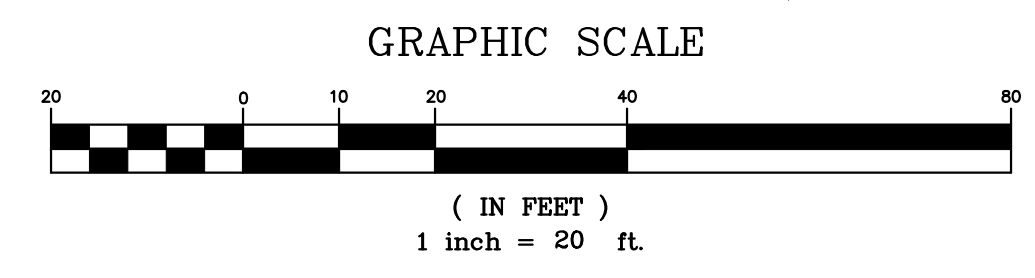


**GRADING PLAN**

**GRADING NOTES:**

- SEE SHEET C-6 FOR UTILITY INFORMATION.
- SITE GRADING IS APPROXIMATE. CONTRACTOR TO VERIFY ALL EXISTING GRADES PRIOR TO CONSTRUCTION.
- RUNNING SLOPES FOR PATHS, SIDEWALKS ARE NOT TO EXCEED 5%, AND ARE DESIGNED FOR NOT GREATER THAN 4.5% SLOPE. CROSS SLOPES ARE NOT TO EXCEED 2%. CROSS SLOPES WERE DESIGNED TO 1.5% OR LESS.
- RAMP LANDING SHALL NOT HAVE SLOPES GREATER THAN 2% IN ANY DIRECTION.
- LANDINGS AT DOORS SHALL BE MINIMUM OF 6" AND NOT TO HAVE SLOPES IN EXCESS OF 2% IN ANY DIRECTION.
- CONTRACTOR REQUIRED TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING AND TO ALL STORM INLETS.
- WHERE NO GRADING MODIFICATIONS ARE ILLUSTRATED CONTRACTOR IS TO MAINTAIN AND RESTORE EXISTING ELEVATIONS, WHERE POSSIBLE.
- GRADING OF ASPHALT AREAS SHALL NOT BE LESS THAN 0.5%.
- TOPSOIL TO BE INSTALLED TO TOP OF ALL CONCRETE CURB AND STABILIZED.
- SUBGRADE FOR UNDERDRAIN SHALL SLOPE DOWN AT PROPOSED SLOPE TO ENSURE DRAINAGE.
- UNDERDRAINS SHALL BE INSTALLED WITH A MINIMUM 1% SLOPE. TRANSPORTS PIPES SHALL BE INSTALLED WITH SLOPE AS SHOWN ON THE PLANS.
- FINISHED GRADE OF UNDERDRAIN STONE SHALL BE SET BELOW FINISHED GRADE ELEVATIONS ILLUSTRATED ON THE PLANS TO THE DEPTH REQUIRED FOR POURED IN PLACE RUBBER SURFACING AND ADDITIONAL STONE TO BE INSTALLED.

- LAYOUT OF UNDERDRAIN SYSTEM TO BE ADJUSTED BASED ON FINAL FOOTING LOCATIONS.
- CONTRACTOR TO PROVIDE ALL NECESSARY MATERIALS TO TIE FLAT DRAINS INTO TRANSPORT PIPES AND EXISTING PIPES.
- SUBGRADE TO BE GRADED TOWARDS TRANSPORT PIPES. DRAINAGE STONE TO BE GRADED TO MATCH SURFACE DRAINAGE SHOWN ON GRADING PLAN.
- STORM, ELECTRICAL, AND GAS REPLACEMENT AND RESTORATION ACTIVITIES SHOULD BE PERFORMED PRIOR TO ANY BUILDING FOOTING AND EXCAVATION. THE DISCONNECTION AND RECONNECTION OF UTILITIES SHOULD NOT DISRUPT SCHOOLS DAILY ACTIVITIES AND ROUTINGS.
- CURB LINE VARIES BETWEEN 4" AND 6" REVEAL.



SCALE: 1"=20'

ISSUED FOR BID 11/11/24

	PLAN NAME: <b>GRADING PLAN</b>	NO. / REVISION AND DATE  
	PROJECT # 31705-04   DRAWN: YP   DESIGNED: NJW   DATE: 11/11/24 FILE: 02-GRADE & UTILITIES   SCALE: 1"=20'	
PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT 100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069 <b>PAUL W. CARLETON ELEMENTARY SCHOOL</b> 2025 PRE-K CLASSROOM ADDITION 251 E MAPLE AVE TOWNSHIP OF PENNS GROVE SALEM COUNTY, NEW JERSEY 08069 BLOCK 83, LOT 1		
RAKESH R. DARJI N.J. PROFESSIONAL ENGINEER No. 24GE04289100		

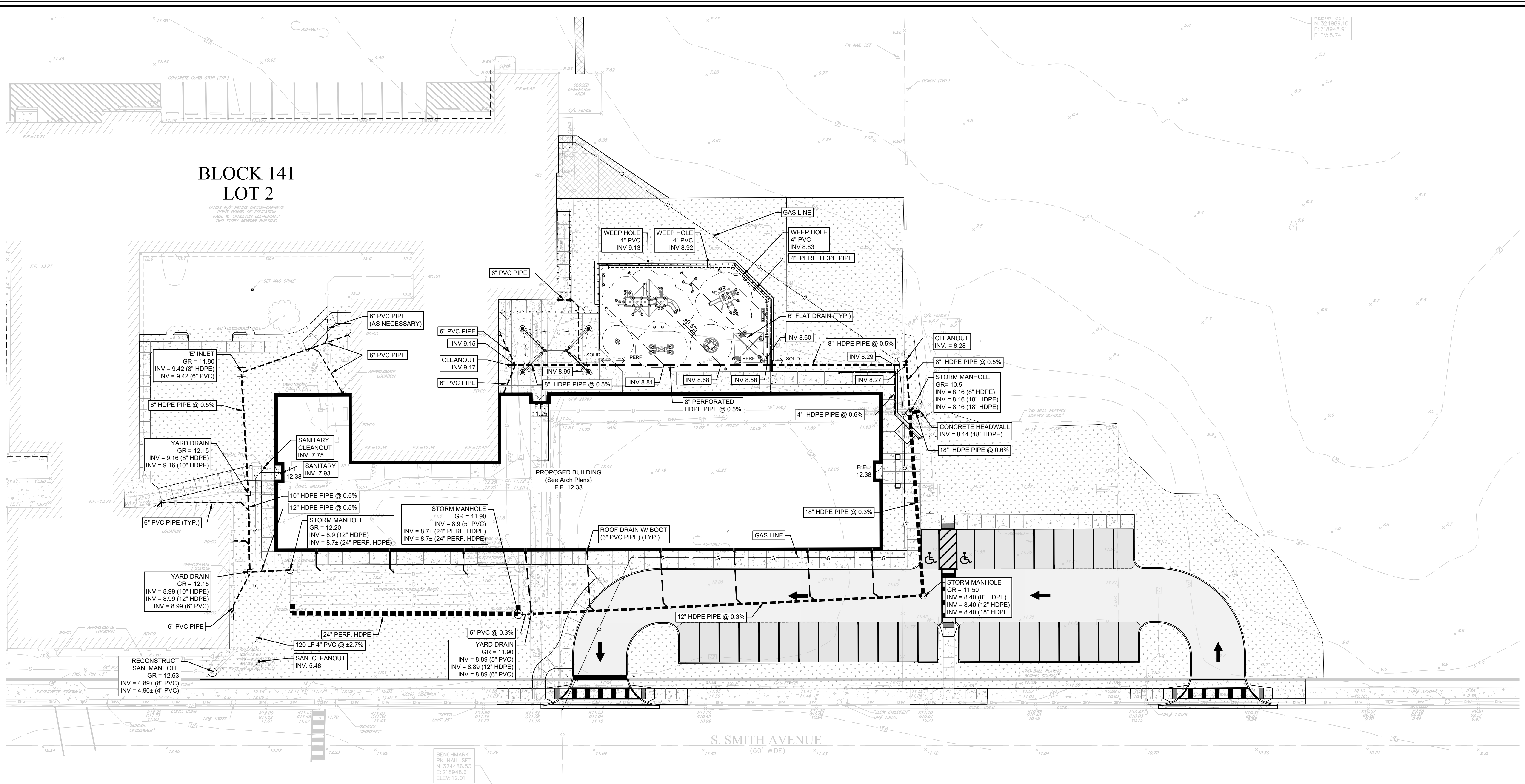






# BLOCK 141 LOT 2

LANDS N/F PENNS GROVE-CARNEYS  
POINT BOARD OF EDUCATION  
PAUL W. CARLETON ELEMENTARY  
TWO STORY MORTAR BUILDING



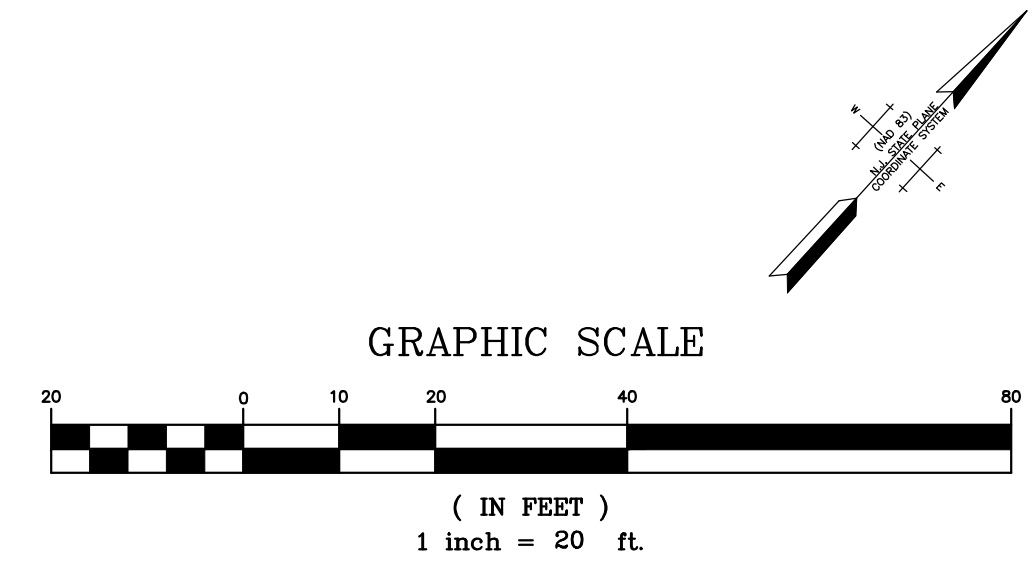
## UTILITY PLAN

### UTILITY & UNDERDRAIN NOTES:

- SEE ARCH PLANS FOR DOWNSPOUT LOCATIONS.
- SEE PLUMBING PLANS FOR INTERIOR BUILDING PLUMBING.
- GAS LINE RELOCATION TO BE COORDINATED WITH LOCAL SERVICE PROVIDER.
- STORM, ELECTRICAL, AND GAS REPLACEMENT AND RESTORATION ACTIVITIES SHOULD BE PERFORMED PRIOR TO ANY BUILDING FOOTING AND EXCAVATION. THE DISCONNECTION AND RECONNECTION OF UTILITIES SHOULD NOT DISRUPT SCHOOLS DAILY ACTIVITIES AND ROUTINGS.
- CONCRETE HEADWALL TO STAY IN PLACE. CONTRACTOR TO CONTR HOLE IN HEADWALL TO ACCOMMODATE NEW PIPE AS PER PLANS.
- SUBGRADE FOR UNDERDRAIN SHALL SLOPE DOWN AT PROPOSED SLOPE TO ENSURE DRAINAGE.
- UNDERDRAINS SHALL BE INSTALLED WITH A MINIMUM 1% SLOPE. TRANSPORTS PIPES SHALL BE INSTALLED WITH SLOPE AS SHOWN ON THE PLANS.
- FINISHED GRADE OF UNDERDRAIN STONE SHALL BE SET BELOW FINISHED GRADE ELEVATIONS ILLUSTRATED ON THE PLANS TO THE DEPTH REQUIRED FOR POURED IN PLACE RUBBER SURFACING AND ADDITIONAL STONE TO BE INSTALLED.
- LAYOUT OF UNDERDRAIN SYSTEM TO BE ADJUSTED BASED ON FINAL FOOTING LOCATIONS.
- CONTRACTOR TO PROVIDE ALL NECESSARY MATERIALS TO TIE FLAT DRAINS INTO TRANSPORT PIPES AND EXISTING PIPES.
- SUBGRADE TO BE GRADED TOWARDS TRANSPORT PIPES. DRAINAGE STONE TO BE GRADED TO MATCH SURFACE DRAINAGE SHOWN ON GRADING PLAN.
- ROOF DRAINS W/ BOOTS TO BE COORDINATED WITH ROOFING CONTRACTOR. REFERENCE ARCHITECTS PLANS FOR DOWNSPOUT BOOTS AND CONNECTIONS.
- SUBGRADE OF PLAYGROUND AREA TO BE SLOPED TOWARDS 8" PERFORATED PIPE. DRAINAGE STONE BED TO VARY IN OVERALL THICKNESS.
- SUBSURFACE STORAGE SYSTEM TO BE KEPT IN PLACE. ONE STORAGE CHAMBER TO BE RELOCATED AS NECESSARY. CONTRACTOR TO RECONSTRUCT ONE CHAMBER AS CURRENTLY INSTALLED. REFER TO DETAILS FOR RECONSTRUCTION AND BIDDING PURPOSES.

SCALE: 1"=20'

ISSUED FOR BID 11/11/24



*RAD*  
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N.J. PROFESSIONAL ENGINEER  
No. 24GE04289100

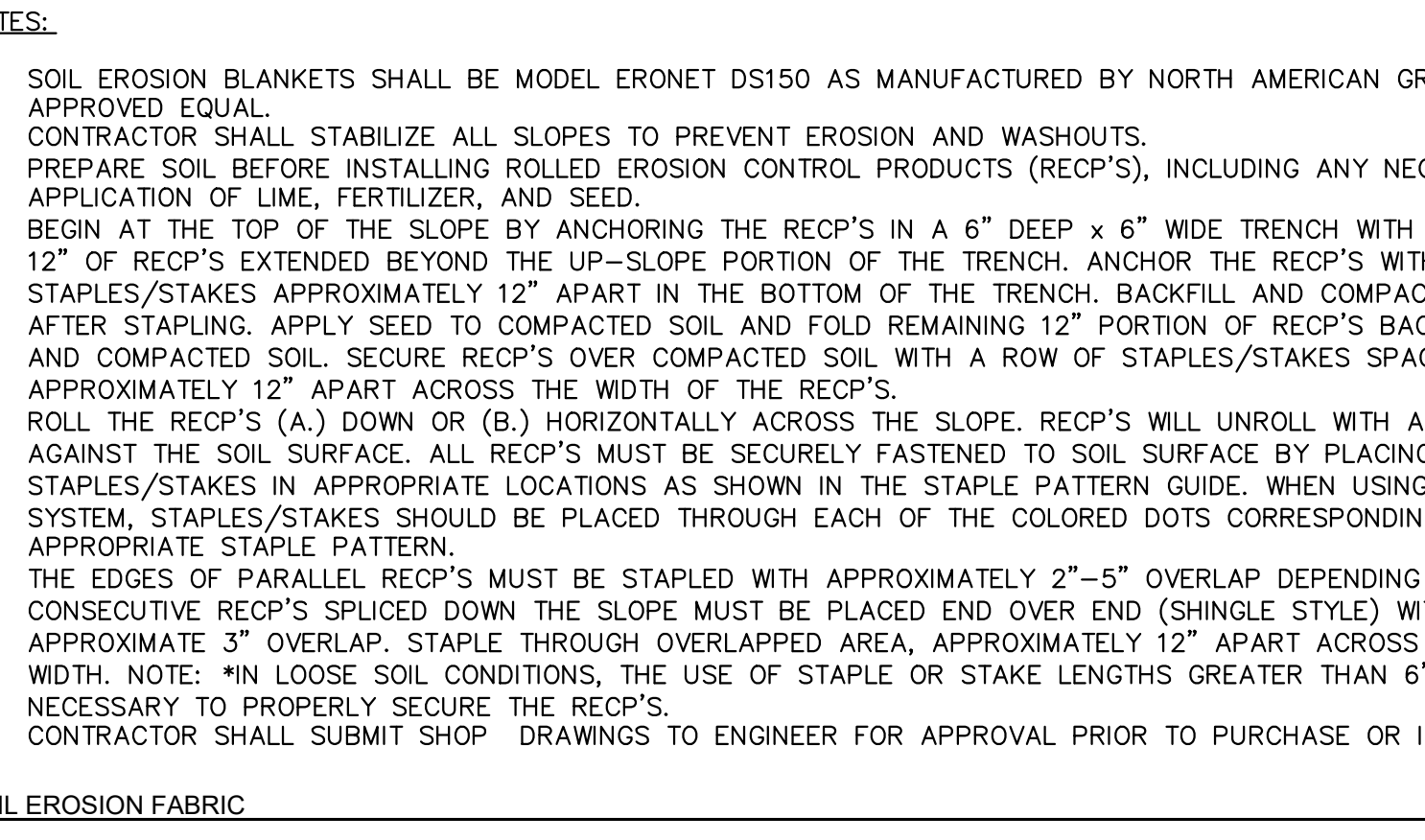
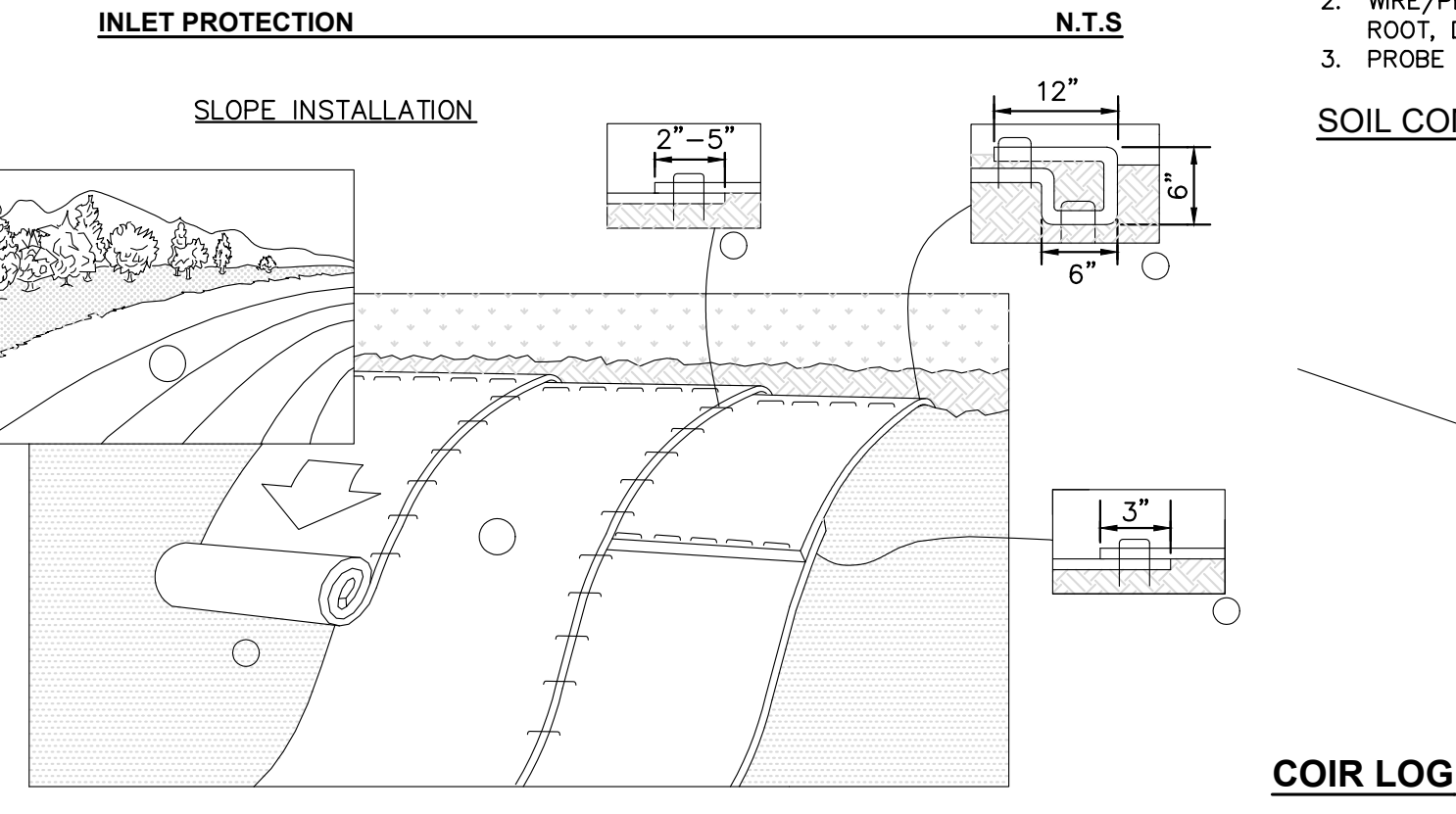
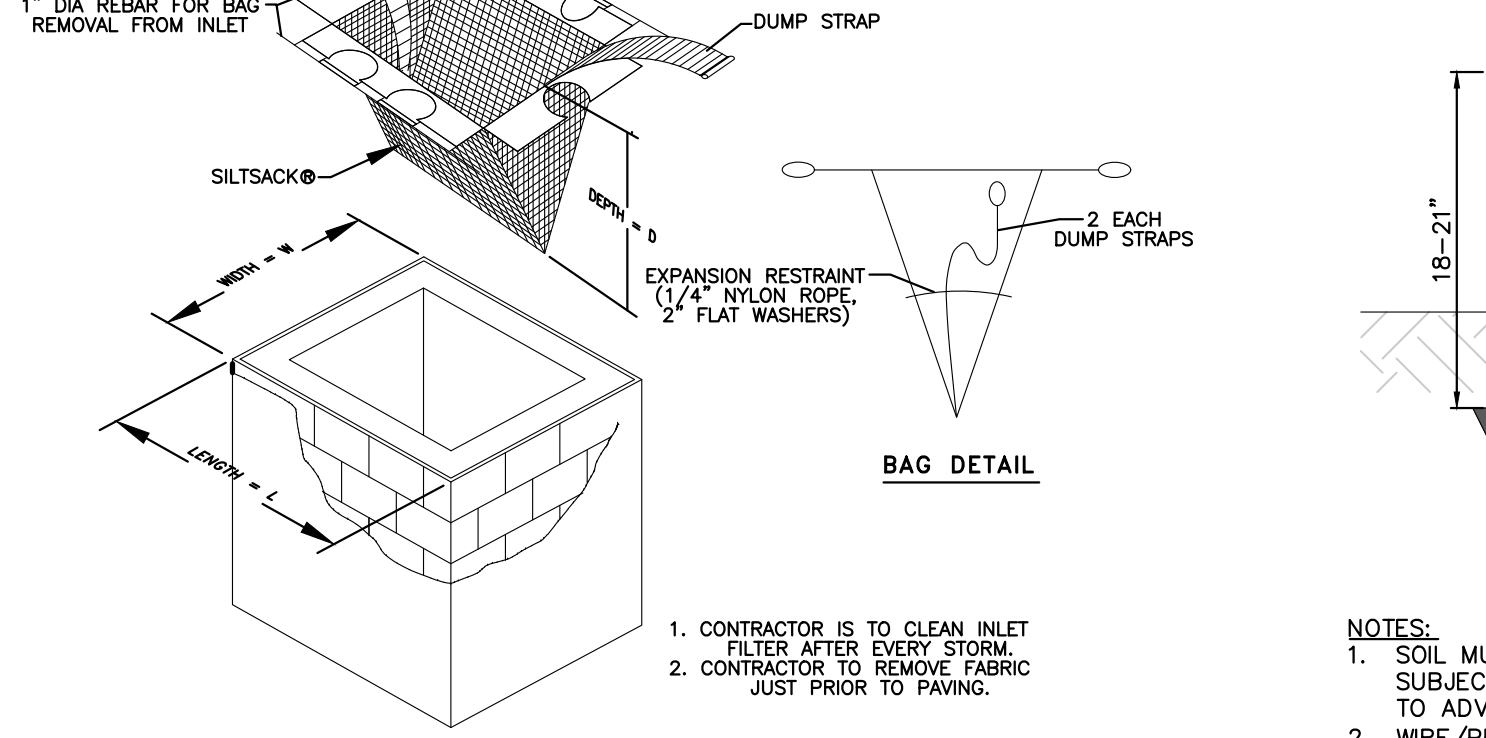
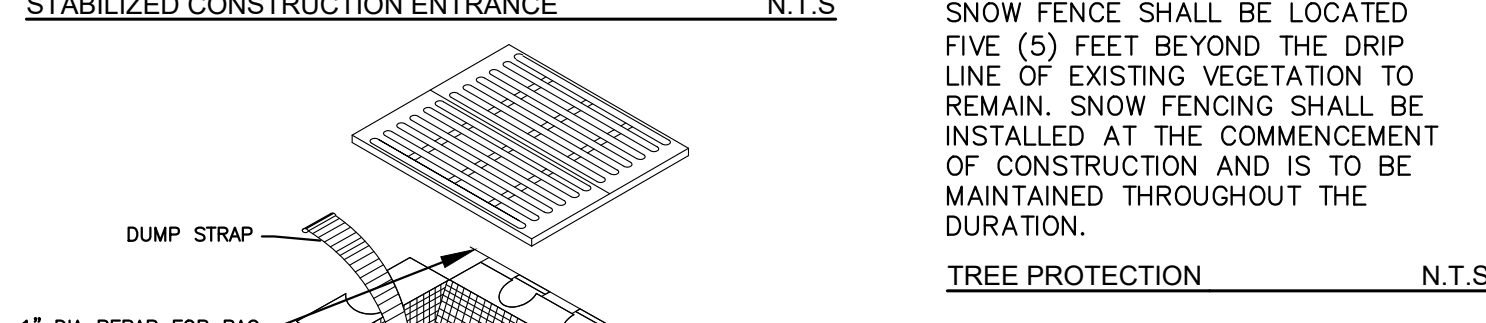
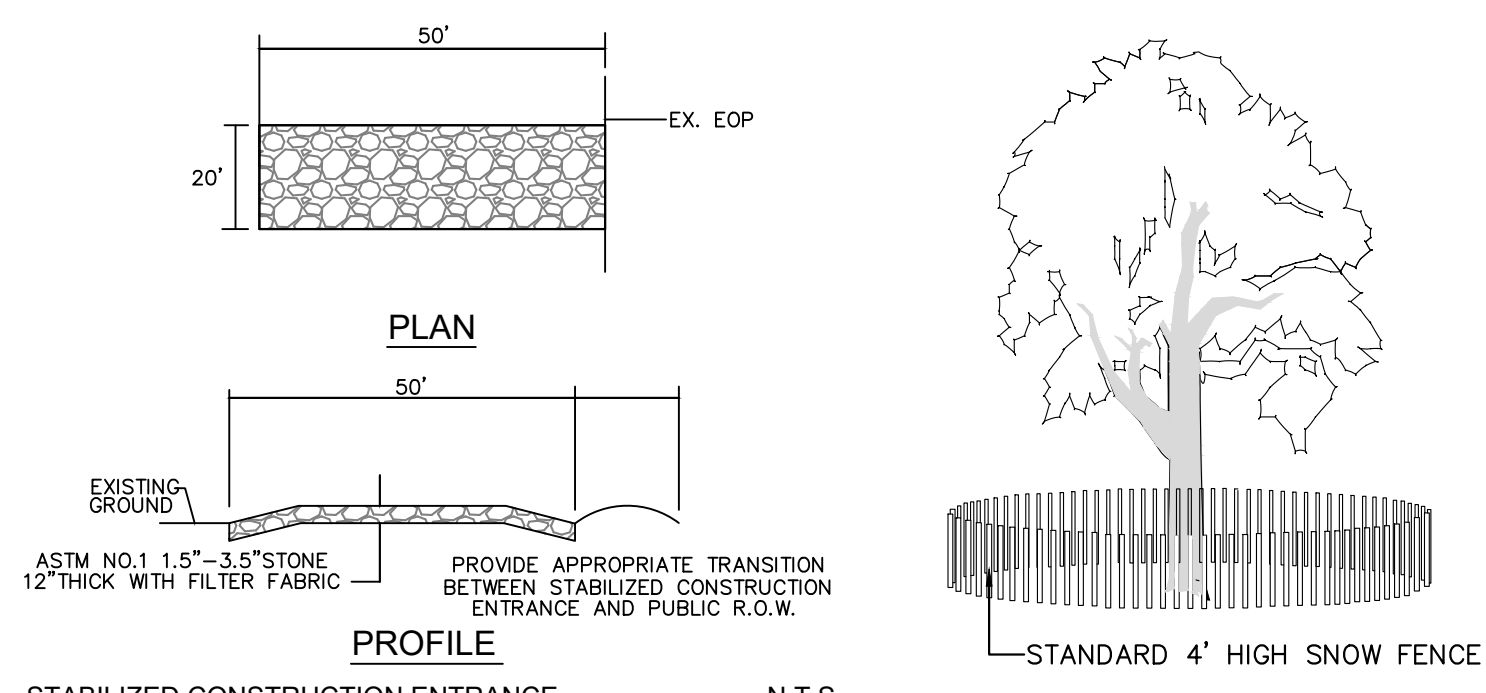
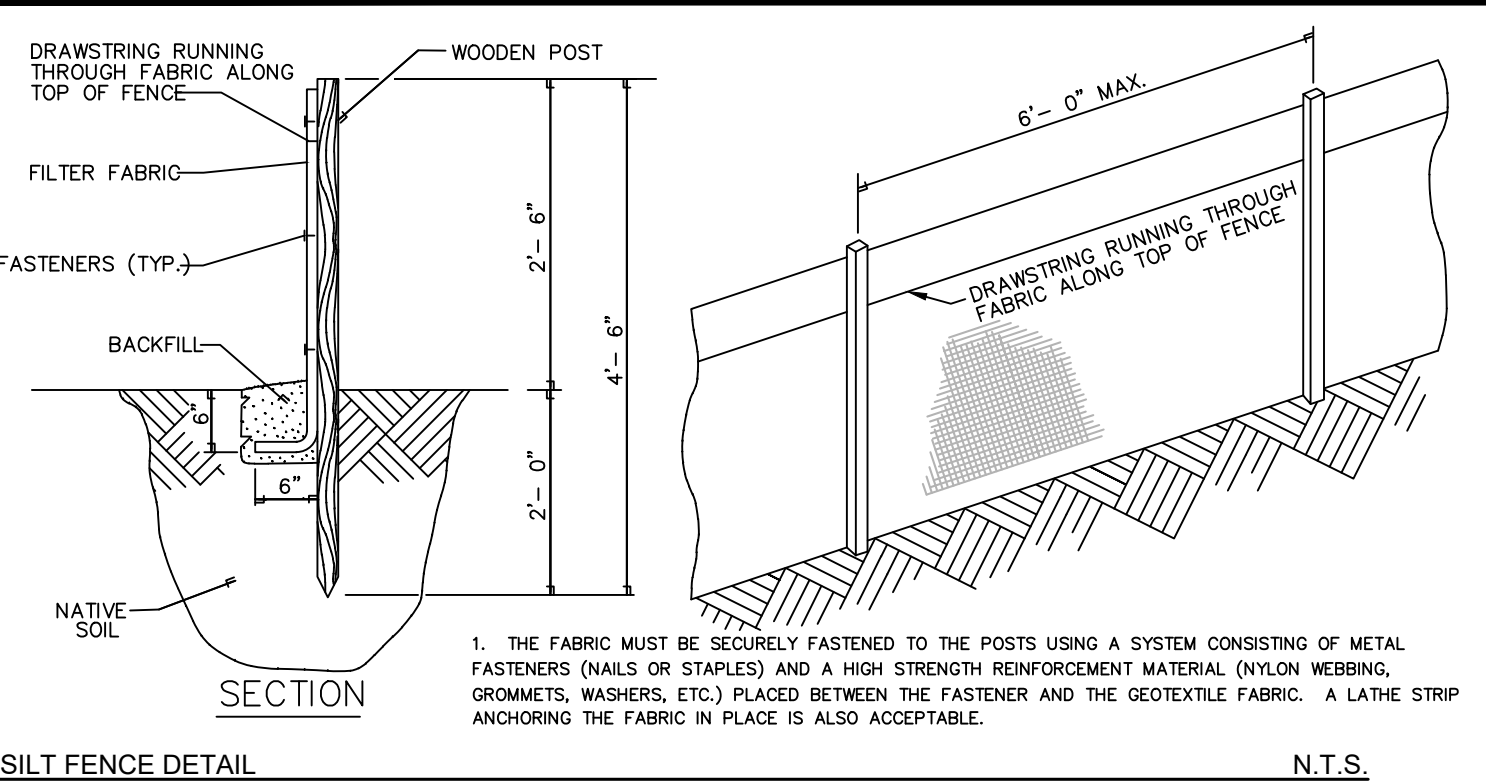
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NUMBER: 24GE04289100

PLAN NAME: <b>UTILITY PLAN</b>	NO.   REVISION AND DATE
PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT 100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069 <b>PAUL W. CARLETON ELEMENTARY SCHOOL</b> 2025 PRE-K CLASSROOM ADDITION 251 E MAPLE AVE TOWNSHIP OF PENNS GROVE SALEM COUNTY, NEW JERSEY 08069 BLOCK 83, LOT 1	
PROJECT # 31705-04   DRAWN: YP   DESIGNED: NJW   DATE: 11/11/24	SHEET NUMBER: <b>C-6</b>
FILE: 02-GRADE & UTILITIES	SCALE: 1"=20'

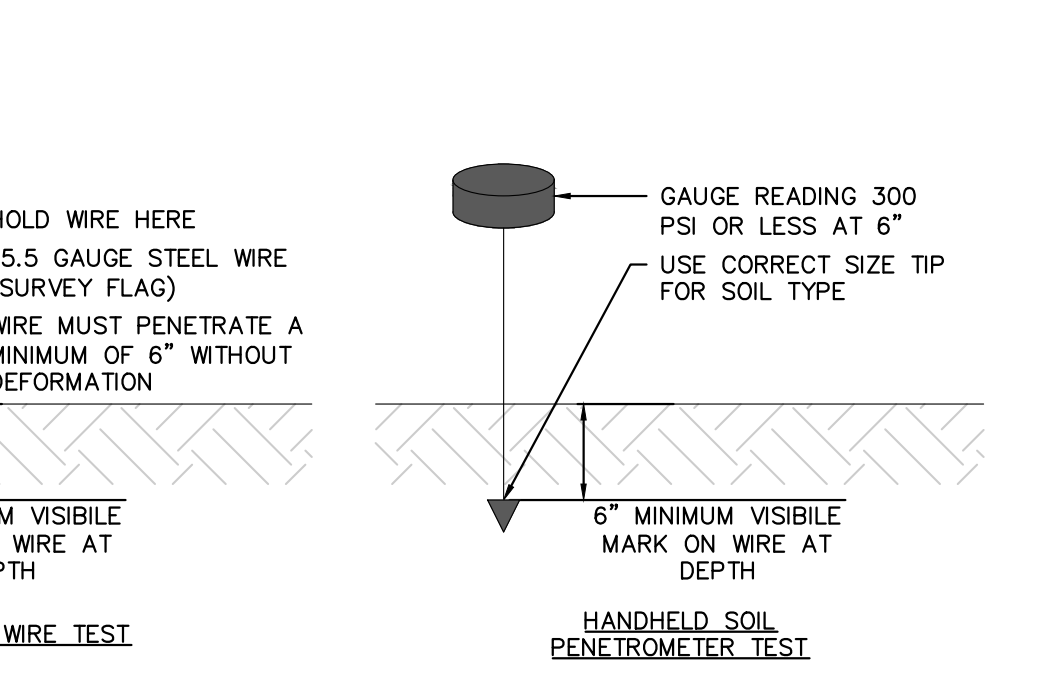
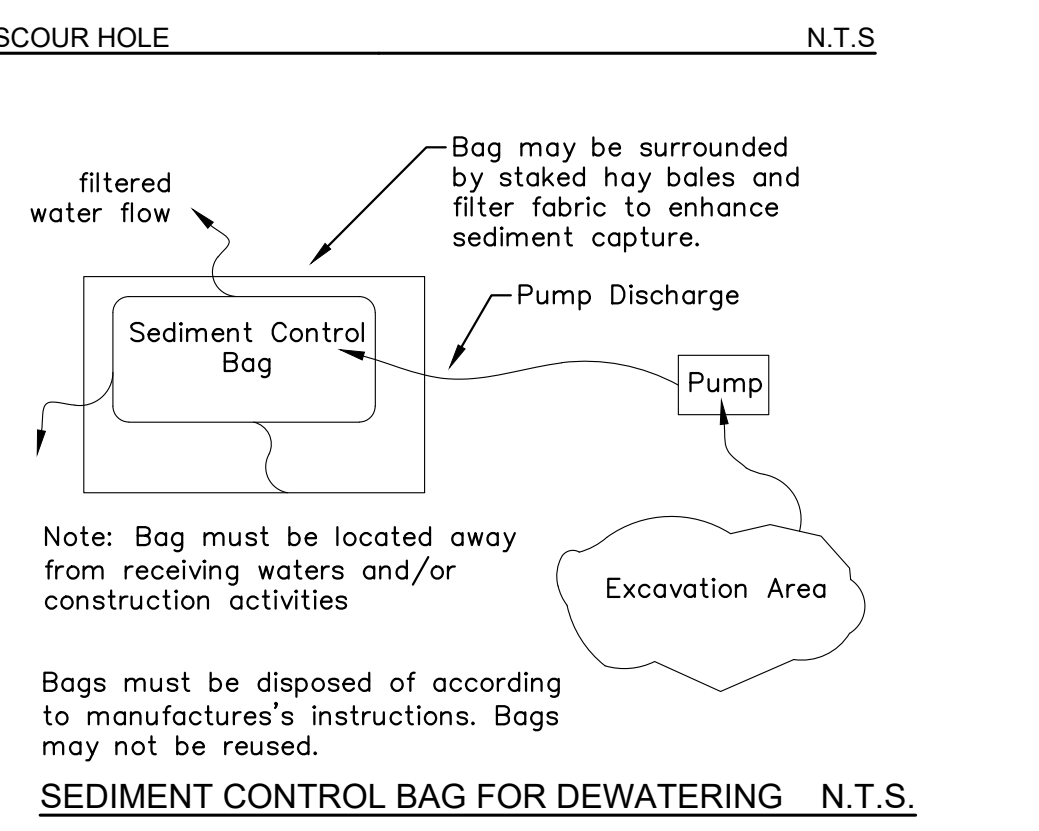
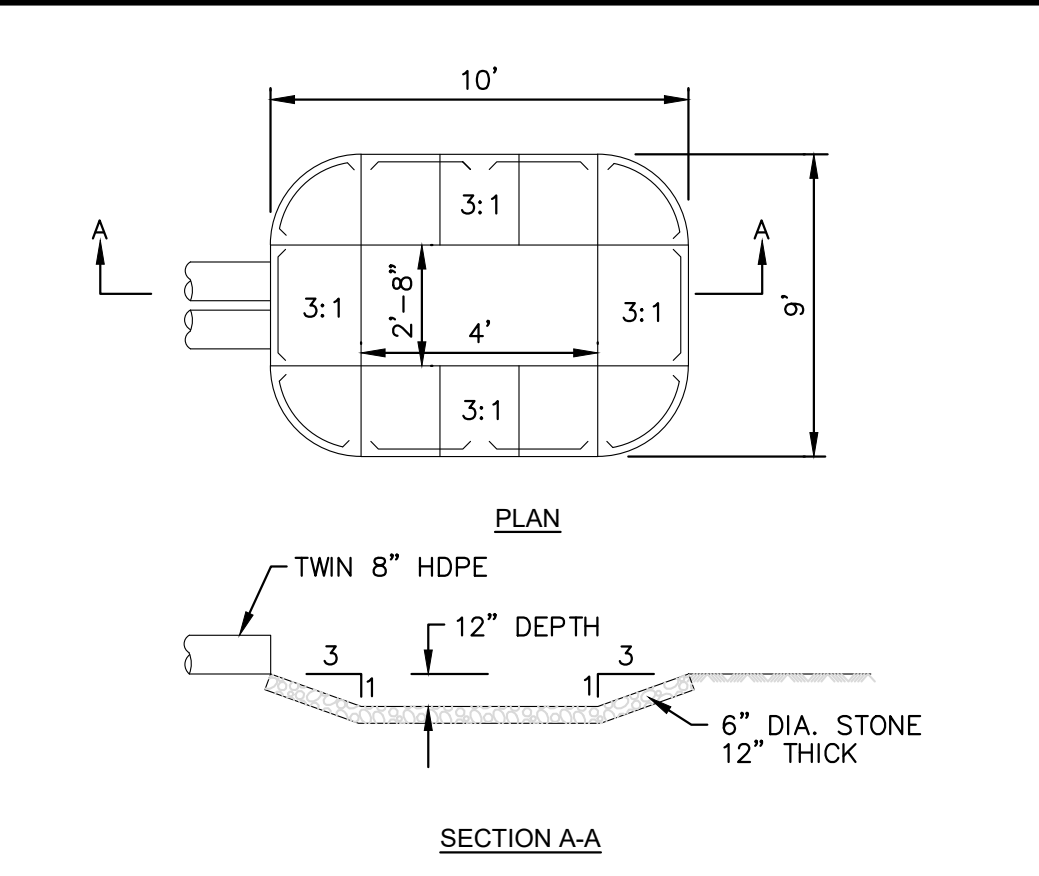




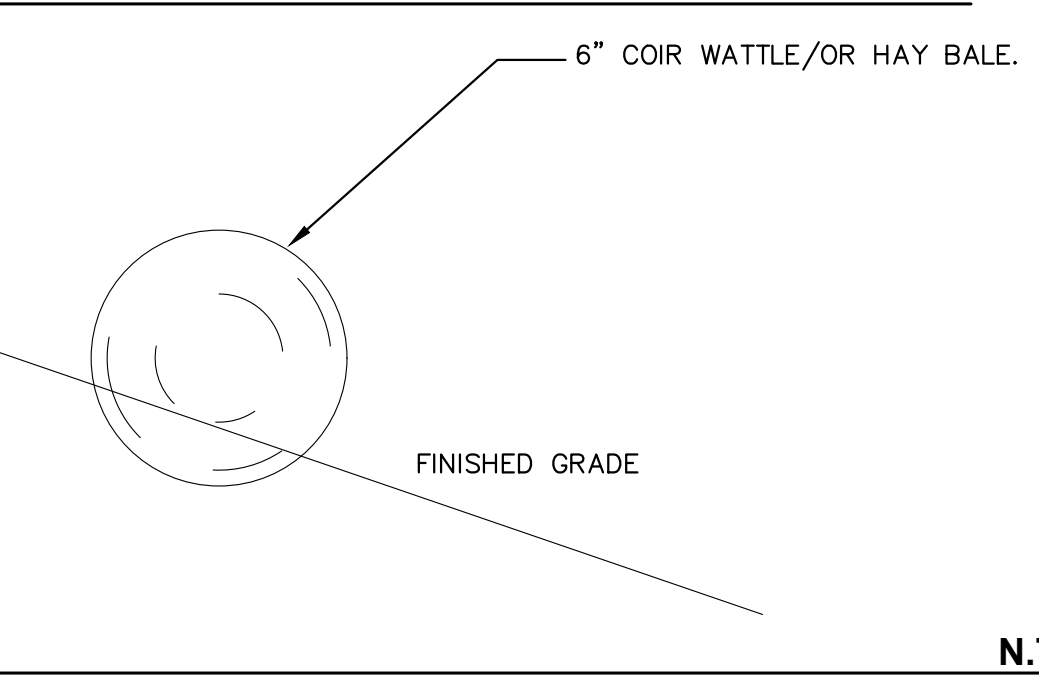




SOIL EROSION FABRIC N.T.S.



NOTES:  
 1. SOIL MUST BE MOIST BUT NOT SATURATED. DO NOT TEST WHEN SOIL IS EXCESSIVELY DRY OR SUBJECT TO FREEZING TEMPERATURES. SLOW, STEADY DOWNWARD PRESSURE SHALL BE USED TO ADVANCE THE WIRE.  
 2. WIRE/PENETROMETER MAY BE RE-INSERTED IF AN OBSTRUCTION IS ENCOUNTERED (I.E. ROCK, ROOT, DEBRIS).  
 3. PROBE MUST PENETRATE A 6\"/>



NOTES:  
 1. SOIL EROSION BLANKETS SHALL BE MODEL ERONET DS150 AS MANUFACTURED BY NORTH AMERICAN GREEN OR APPROVED EQUAL.  
 2. CONTRACTOR SHALL STABILIZE ALL SLOPES TO PREVENT EROSION AND WASHOUTS.  
 3. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.  
 4. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6\"/>

SOIL DISTURBANCE GUIDELINES:  
 THE PROPERTY IS LOCATED IN A FORMATION WHICH MAY CONTAIN ACID PRODUCING SOILS. THE FOLLOWING PROCEDURES SHALL BE FOLLOWED TO MINIMIZE THE POTENTIAL IMPACT IF ACID PRODUCING SOILS ARE UNCOVERED.  
 1. THE GUIDELINES IN THE SOIL EROSION AND SEDIMENT CONTROL NOTES ARE TO BE FOLLOWED.  
 2. MINIMIZE THE TIME DISTURBED SOILS ARE EXPOSED TO THE AIR.  
 3. STABILIZE AREAS WHICH ARE NOT CURRENTLY UNDER CONSTRUCTION WITH MULCH OR TEMPORARY SEEDING.  
 IF ACID PRODUCING SOILS ARE UNCOVERED DURING CONSTRUCTION, FOLLOW THE PROCEDURES BELOW:  
 A. STOCKPILE ACID PRODUCING SOILS SEPARATELY FROM REGULAR SOIL.  
 B. IF THE ACID PRODUCING SOILS WILL BE EXPOSED FOR MORE THAN 8 HOURS, COVER THEM WITH CRUSHED LIMESTONE AT A RATE OF 1.375 POUNDS PER 1,000 SQUARE FEET AND A 1 FOOT THICK LAYER OF COMPACTED TOPSOIL.  
 C. EQUIPMENT USED FOR EXCAVATION OR BACKFILLING IN ACID PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH DAY'S OPERATION IN SUCH A WAY THAT WILL NOT CAUSE THE SPREADING OF ACID PRODUCING SOIL DEPOSITS ONTO UNCONTAMINATED SOIL OR INTO THE WATERCOURSE.  
 D. ACID PRODUCING SOILS SHALL BE DISPOSED OF PROPERLY AND SHALL NOT BE MIXED INTO OR SPREAD OVER NONACID PRODUCING SOILS; AND  
 E. ANY ACID PRODUCING SOILS REMAINING AFTER CONSTRUCTION SHALL BE COVERED WITH LIME AND A LAYER OF NONACID PRODUCING SOIL SUFFICIENT TO FACILITATE THE GROWTH OF VEGETATION.  
 F. EVERY EFFORT SHOULD BE MADE TO MINIMIZE THE SPREADING OR MIXING OF ACID PRODUCING SOIL DEPOSITS (INCLUDING SOIL CONTAMINATED WITH SUCH DEPOSITS) ONTO OR INTO SOIL FREE OF SUCH DEPOSITS (ON OR OFF THE CONSTRUCTION SITE). NO CONSTRUCTION SHOULD TAKE PLACE DURING RAINSTORMS OR WHILE THE GROUND IS SATURATED. IF SUCH CONSTRUCTION IS LIKELY TO SMEAR OR SPREAD ACID PRODUCING SOIL DEPOSITS OVER UNCONTAMINATED SOIL OR INTO WATERWAYS, IF ACID PRODUCING SOIL DEPOSITS MUST BE STOCKPILED ON TOP OF SOIL HERETOFORE FREE OF SUCH DEPOSITS, THE AREA USED FOR STOCKPILING SHOULD BE MINIMIZED. EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE APPLIED WHERE ACID PRODUCING SOIL DEPOSITS ARE EXPOSED OR STOCKPILED, TO PREVENT OR REDUCE THE MOVEMENT OF ACID PRODUCING MATERIAL INTO WATERCOURSES OR ONTO CONTAMINATED SOIL.  
 G. EXCAVATED MATERIAL SHOULD BE RETURNED TO TRENCHES OR PITS IN THE ORDER OF ITS REMOVAL, I.E. LOWER MATERIAL FIRST, FOLLOWED BY UPPER MATERIAL. (HOWEVER, IF ACID PRODUCING SOIL DEPOSITS ARE FOUND ONLY IN THE UPPER MATERIAL, THEN THE UPPER MATERIAL SHOULD BE RETURNED FIRST. THIS EXCEPTION ALSO APPLIES TO THE FOLLOWING SENTENCES). WHERE ACID PRODUCING SOIL DEPOSITS ARE STOCKPILED ON SOIL HERETOFORE UNCONTAMINATED WITH SUCH DEPOSITS, THE TOP TWO INCHES OF SUCH SOIL SHOULD BE SCRAPED OFF AND BURIED ALONG WITH THE "LOWER MATERIAL." THE SURPLUS MATERIAL RESULTING DUE TO PERMANENT GRADE REDUCTION, PLACEMENT OF PIPES OR OTHER STRUCTURES, AND SOIL SCRAPED FROM AREAS UNDER TEMPORARY STOCKPILES OF ACID PRODUCING SOIL DEPOSITS, SHOULD BE REPLACED. IF NECESSARY, ADDITIONAL QUANTITIES OF TOPSOIL SHOULD BE IMPORTED SO AS TO ENSURE AT LEAST ONE (1) FOOT DEEP COVER OF SOIL, FREE OF ACID PRODUCING SOIL DEPOSITS. RESTRICTIONS ESTABLISHED IN THE RULES CONCERNING THE AMOUNT OF NET FILL THAT MAY BE PLACED IN FLOOD HAZARD AREAS MUST ALSO BE COMPLIED WITH.  
 H. TEMPORARY VEGETATIVE COVER SHOULD NOT BE USED FOR STABILIZATION OF ACID PRODUCING SOIL DEPOSITS UNLESS THE LIMBS AND TOPSOIL APPLICATION REQUIREMENTS OF ITEM C. AND THE SOIL PH REQUIREMENTS OF ITEM I ARE FIRST MET. OTHERWISE, TEMPORARY STABILIZATION OF ACID PRODUCING SOIL DEPOSITS SHOULD BE ACCOMPLISHED WITH "MULCH ONLY." IN ACCORDANCE WITH THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY" NO MORE THAN EIGHT HOURS SHOULD ELAPSE BEFORE THE APPLICATION OF MULCH. (MULCHING FOR TEMPORARY STABILIZATION IS NOT A SUBSTITUTE FOR THE LIMESTONE AND TOPSOIL APPLICATION REQUIREMENTS OF ITEMS B AND D. MULCH SHOULD NOT BE DIRECTLY APPLIED TO THE EXPOSED SURFACE OF ACID PRODUCING SOIL DEPOSITS, BUT RATHER TO THE TOPSOIL APPLIED TO COVER SUCH DEPOSITS.)  
 I. PERMANENT VEGETATION SHOULD BE ESTABLISHED AS SOON AS POSSIBLE TAKING INTO ACCOUNT THE SIX WEEKS THAT MAY BE NEEDED FOR THE "INCUBATION TEST" DISCUSSED BELOW. REVEGETATION MUST BE PERFORMED UNDER THE DIRECTION OF A SOILS SPECIALIST OR AGRONOMIST, WHO BY TRAINING OR EXPERIENCE IS FAMILIAR WITH THE PROBLEMS OF VEGETATING ACID PRODUCING SOIL DEPOSITS. THE SOILS SPECIALIST OR AGRONOMIST SHOULD PERFORM PH TESTS ON THE SURFACE LAYER OF SOIL WHERE THE VEGETATION WILL ROOT (ALLOWING FOR ROOT EXPANSION DUE TO PLANT GROWTH). IF THE PH IS BELOW 4.0, THE SOILS SPECIALIST OR AGRONOMIST SHOULD ALSO PERFORM INCUBATION LIME REQUIREMENT TESTS (SOIL SAMPLE ALLOWED TO OXIDIZE FOR SIX (6) WEEKS) TO DETERMINE LIME APPLICATION RATES. THE PH OF THE SURFACE LAYER OF SOIL MUST BE RAISED TO AT LEAST 5.0 BEFORE SEEDING OR PLANTING. SEEDING SHOULD ALWAYS BE ACCOMPANIED BY MULCHING.

- SOIL EROSION AND SEDIMENT CONTROL NOTES:  
 1. ALL APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN PLACE PRIOR TO ANY GRADING OPERATION AND/OR INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES.  
 2. SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THE PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.  
 3. ALL APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR THE AREA IS STABILIZED.  
 4. ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN SIXTY (60) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND FERTILIZATION IN ACCORDANCE WITH THE STANDARDS. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE STANDARDS.  
 5. ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH IN ACCORDANCE WITH THE STANDARDS IMMEDIATELY FOLLOWING ROUGH GRADING.  
 6. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.  
 7. ALL SOIL EROSION AND SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.  
 8. SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN FIFTY (50) FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES SHOULD BE PROTECTED BY A HAY BALE BARRIER OR SEDIMENT FENCE. PROPOSED LOCATIONS MUST BE DELINEATED ON THE PLANS.  
 9. A CRUSHED STONE TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS EXISTS. THE RIP PAD MUST BE 100 FEET IN LENGTH AND THE STONE MUST BE 1.5\"/>

30. THE STORMWATER POLLUTION PREVENTION PLAN AND THE SPILL RESPONSE PLAN SHALL BE AVAILABLE ON SITE FOR REVIEW BY THE SCD INSPECTOR AND/OR THE NJDEP INSPECTOR.  
 31. THE SCD INSPECTOR OR NJDEP INSPECTOR MAY REQUIRE ADDITIONAL MEASURES FOR STORMWATER POLLUTION PREVENTION TO BE INSTALLED.  
 32. INSPECTIONS OF ALL STORMWATER POLLUTION PREVENTION PLAN MEASURES WILL BE CONDUCTED AND DOCUMENTED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.  
 33. WASTE COLLECTION CONTAINERS WILL NOT BE PERMITTED TO OVERFLOW.  
 34. ANY SPILLS OF HAZARDOUS OR SANITARY WASTES WILL BE CLEANED UP IMMEDIATELY, AND IN ACCORDANCE WITH THE SPILL RESPONSE PLAN. SPILL KITS MUST BE AVAILABLE ON SITE OR ADJACENT TO THE SITE.  
 35. ANY HAZARDOUS SUBSTANCE RELEASES IN EXCESS OF REPORTABLE QUANTITIES (RQ) ESTABLISHED UNDER 40 C.F.R. 110.117 AND 302 THAT OCCUR WITHIN A 24 HOUR PERIOD MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER (800 424-8802).  
 36. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.  
 37. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.  
 38. ANY SILT FENCE BARRIER AND HAY BALES SHALL BE CONSTRUCTED AS NOTED ON THE DETAIL AND PLACED AS SHOWN ON THE PLAN. BALES SHALL BE REPLACED UPON SATURATION WITH SALT.  
 39. SEQUENCE OF CONSTRUCTION: THE FOLLOWING SCHEDULE SHALL BE ADHERED TO. IF NECESSARY, TO MODIFY THE TIME SEQUENCE, THE SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED AND SUPPLIED WITH THE MODIFIED TIME SCHEDULE.  
 A. PHASE I  
 1. INSTALL SILT FENCE  
 2. EXCAVATE AND GRADE THE SITE TO CONTAIN ALL SURFACE WATER FLOWS THEREON.  
 3. STABILIZE ALL EXPOSED SOIL NOT SUBJECT TO TRAFFIC.  
 4. DEMOLISH AND REMOVE ALL PAVEMENTS, CURBING, AND SITE FEATURES AS NECESSARY.  
 B. PHASE II  
 1. BRING SUBGRADE TO GRADE.  
 2. INSTALL UNDERDRAIN SYSTEM & DRAINAGE.  
 3. INSTALL UTILITIES.  
 C. PHASE III  
 1. CONSTRUCT BUILDING, CURBING, RAMP, SIDEWALKS, PAVEMENT, FENCING, INSTALL PLAY EQUIPMENT AND SURFACING.  
 2. FILL LOOSEN SUBGRADE 6\"/>

40. TEMPORARY SEEDING SHALL CONSIST OF SPRING OATS APPLIED AT A RATE OF 2.0 LBS. PER 1,000 SQ. FT. TEMPORARY SEEDING SHALL BE MULCHED AND MAINTAINED UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH PERMANENT SEEDING.  
 41. PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL - OPTIMUM SEEDING DATES ARE BETWEEN MARCH 1 AND MAY 1 OR BETWEEN OCTOBER 1 AND DECEMBER 1:  
 KENTUCKY 31 TALL FESCUE 1.5 LBS./1,000 SQ. FT.  
 CREEPING RED FESCUE 1.0 LBS./1,000 SQ. FT.  
 CHEWING RED FESCUE 0.8 LBS./1,000 SQ. FT.  
 PERENNIAL RYEGRASS 0.8 LBS./1,000 SQ. FT.  
 THIS IS EQUAL TO 4.1 POUNDS PER 1,000 SQ. FT., OR EQUIVALENT TO 178 POUNDS PER ACRE.  
 IF HYDROSEEDING WILL BE THE METHOD OF APPLICATION, THE SEED RATE SHOULD BE INCREASED BY 25%. HYDROSEEDING AREAS MUST STILL RECEIVE STRAW MULCH AND TACKIFIER.  
 42. PERMANENT SEEDING TO BE APPLIED BY RAKING OR DRILLING INTO THE SOILS AT A RATE OF 150 LBS./ACRE. SLOPED AREAS TO BE COVERED WITH MULCH AS INDICATED IN NOTE 32.  
 43. FERTILIZER FOR THE ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER SHALL BE 10-10-10 APPLIED AT A RATE OF 14 LBS./1,000 SQ. FT. OR AS DETERMINED BY SOILS TESTING. LIMESTONE FOR TEMPORARY SEEDING SHALL BE APPLIED AT A RATE OF 135 LBS./1,000 SQ. FT.  
 44. THE DISTRICT SHALL BE REPRESENTED AT THE PROJECT PRE-CONSTRUCTION MEETING WITH THE TOWNSHIP ENGINEER, CONTRACTORS AND UTILITY REPRESENTATIVES. IF THE TOWNSHIP ENGINEER DOES NOT SCHEDULE A PRE-CONSTRUCTION MEETING, IT IS THE RESPONSIBILITY OF THE APPLICANT TO SCHEDULE ONE.  
 45. FAILURE OF THE FOREMENTIONED PLAN SHALL NOT RELIEVE THE APPLICANT OF ANY OF ITS RESPONSIBILITIES RELEVANT TO THE APPROPRIATE STATUTES. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE DISTRICT IN THE EVENT OF ANY UNFORESEEN PROBLEMS DURING CONSTRUCTION.  
 46. IF SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY OR PERMANENT SEEDING, EXPOSED AREAS SHALL BE STABILIZED WITH MULCH. MULCH IS TO CONSIST OF SALT HAY OR SMALL GRAIN STRAW APPLIED AT A RATE OF 70 TO 90 LBS. PER 1,000 SQ. FT. MULCH SHALL BE SECURED BY APPROVED METHODS (LIQUID MULCH BINDER, CRIMPING, PEG AND TWINE).  
 47. IN AREAS WITHOUT DOWNSLOPE SEDIMENT CONTROLS, SLOPES EXCEEDING 15 PERCENT GRADIENT SHALL BE PROTECTED WITHIN 48 HOURS OF SOIL EXPOSURE BY SPECIAL TREATMENT, SUCH AS WATER DIVERSION BERMS, SODDING OR DEPARTMENT-APPROVED MULCH NETTING, IN ACCORDANCE WITH THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL."  
 48. TOPSOIL SHALL BE APPLIED IN A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 4\"/>

- DUST CONTROL:  
 DUST CONTROL SHALL BE IN ACCORDANCE WITH PAGE 4.10.1 OF THE NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL. THE FOLLOWING METHODS SHALL BE USED FOR CONTROLLING DUST:  
 1. APPLICATION OF MULCH AND/OR VEGETATIVE COVER AS SPECIFIED IN "SEEDING, LIMING, FERTILIZING AND MULCHING RATES" ON THIS PLAN.  
 2. TILLAGE TO ROUGHEN THE SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. PROCEED FROM THE WINDWARD SIDE OF THE SITE WITH CHISEL TOOTH PLOWS, 12 INCHES APART, OR SPRING TOOTH HARROWS.  
 3. SPRINKLING OF SITE UNTIL SURFACE IS WET. SPRINKLING SHOULD BE DONE PERIODICALLY THROUGHOUT THE CONSTRUCTION PERIOD AS REQUIRED TO CONTROL DUST.  
 SOIL COMPACTION TESTING REQUIREMENTS  
 1. SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.  
 2. AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE GRAPHICALLY DENOTED ON THE CERTIFIED SOIL EROSION CONTROL PLAN - THIS WILL BE ACCESS ENTRANCE & TOPSOIL STORAGE AREAS.  
 3. COMPACTION TESTING LOCATIONS ARE DENOTED ON THE PLAN. A COPY OF THE PLAN OR PORTION OF THE PLAN SHALL BE USED TO MARK LOCATIONS OF TESTS, AND ATTACHED TO THE COMPACTION REMEDIATION FORM, AVAILABLE FROM THE LOCAL SOIL CONSERVATION DISTRICT. THIS FORM MUST BE FILLED OUT AND SUBMITTED PRIOR TO RECEIVING A CERTIFICATE OF COMPLIANCE FROM THE DISTRICT.  
 4. IN THE EVENT THAT TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM THRESHOLDS INDICATED FOR THE SIMPLIFIED TESTING METHODS (SEE DETAILS BELOW), THE CONTRACTOR/OWNER SHALL HAVE THE OPTION TO PERFORM EITHER (1) COMPACTION MITIGATION OVER THE ENTIRE MITIGATION AREA DENOTED ON THE PLAN (EXCLUDING EXEMPT AREAS), OR (2) PERFORM ADDITIONAL, MORE DETAILED TESTING TO ESTABLISH THE LIMITS OF EXCESSIVE COMPACTION WHEREUPON ONLY THE EXCESSIVELY COMPACTED AREAS WOULD REQUIRE COMPACTION MITIGATION. ADDITIONAL DETAILED TESTING SHALL BE PERFORMED BY A TRAINED, LICENSED PROFESSIONAL.  
 COMPACTION TESTING METHODS  
 A. PROBING WIRE TEST (SEE DETAIL)  
 B. HAND-HELD PENETROMETER TEST (SEE DETAIL)  
 C. TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)  
 D. NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED) NOTE: ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED SUBJECT TO DISTRICT APPROVAL.  
 SOIL COMPACTION TESTING IS NOT REQUIRED IF WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE (6\"/>

RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE (6\"/>

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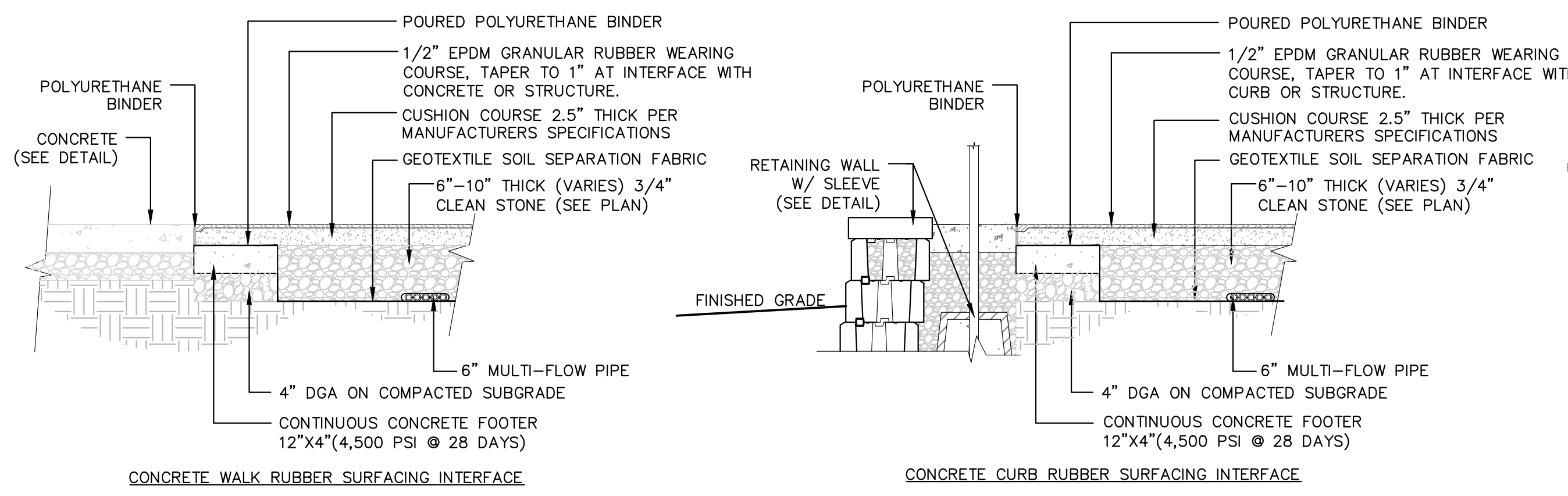
PLAN NAME: <b>SOIL EROSION AND SEDIMENT CONTROL PLAN</b>	NO. REVISION AND DATE
PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT 100 KONA AVENUE, PENNS GROVE, NEW JERSEY 08069 <b>PAUL W. CARLETON ELEMENTARY SCHOOL</b> 2025 PRE-K CLASSROOM ADDITION	
251 E MAPLE AVE TOWNSHIP OF PENNS GROVE SALEM COUNTY, NEW JERSEY 08069 BLOCK 83, LOT 1	SHEET NUMBER: <b>C-8</b>
PROJECT NO. 31705-04   DRAWN: YP   DESIGNED: NJW   DATE: 11/11/24	FILE: 03-SCS   SCALE: NOTED

**ENVIRONMENTAL RESOLUTIONS, INC.**  
 Engineers • Planners • Scientists • Surveyors  
 815 East Gate Drive - Suite 103  
 Mount Laurel, New Jersey 08054-3415  
 Tel. 856-235-7170 Fax 856-273-9239  
 CERTIFICATE OF AUTHORIZATION NUMBER: 24G042914500  
 RAKESH R. DARJI  
 N.J. PROFESSIONAL ENGINEER  
 No. 24G042914500





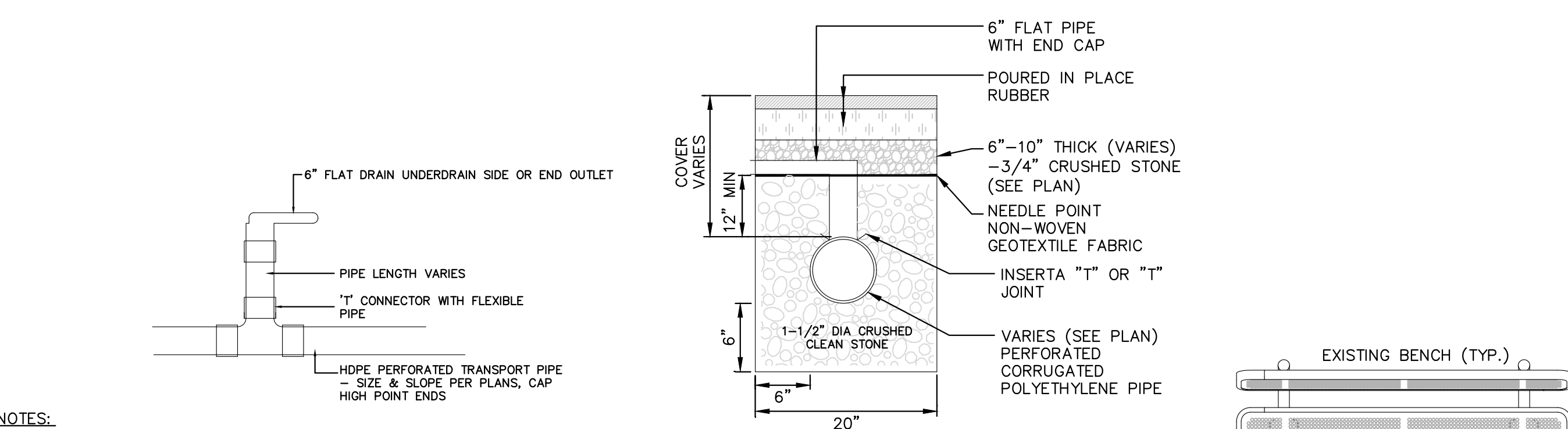




- POURED IN PLACE RUBBER SURFACING MATERIALS TO BE PURCHASE AND INSTALL BY CONTRACTOR. MATERIAL SHALL BE MANUFACTURED BY SAFETY TURF OR APPROVED EQUAL. CONTRACTOR TO PROVIDE ALL ADDITIONAL MATERIAL NECESSARY FOR INSTALLATION PURPOSES.
- SURFACING COLORS TO BE DETERMINED BY OWNER FROM MANUFACTURER'S FULL RANGE OF COLORS.
- CONTRACTOR TO PROVIDE NON-WOVEN GEOTEXTILE FABRIC AND IT SHALL BE MODEL #0601T AS MANUFACTURED BY ADS PIPE OR APPROVED EQUAL. PH: 800.821.6710, 4640 TRUEMAN BOULEVARD, HILLIARD, OH 43026
- CONTRACTOR TO PROVIDE 3/4" CLEAN STONE PER MANUFACTURER, AND SHALL INSTALL IT BASED ON MANUFACTURER'S SPECIFICATIONS. SHOULD THE CONTRACTOR REQUEST A SUBSTITUTE MATERIAL; AT THE CONTRACTORS EXPENSE THE MATERIAL MUST BE SUBMITTED TO THE APPROPRIATE TESTING AGENCY TO ENSURE THAT THE POURED IN PLACED MATERIAL AND THE ALTERNATE STONE BASED MATERIALS WILL MEET THE IMPACT ATTENUATION FROM THE CRITICAL FALL HEIGHTS NECESSARY TO PROVIDE PROPER SAFETY PER CPSC STANDARDS.
- FINAL LAYOUT SHALL BE VERIFIED IN FIELD BY OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.
- CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASE OR INSTALLATION.

**POURED IN PLACE RUBBER SURFACING**

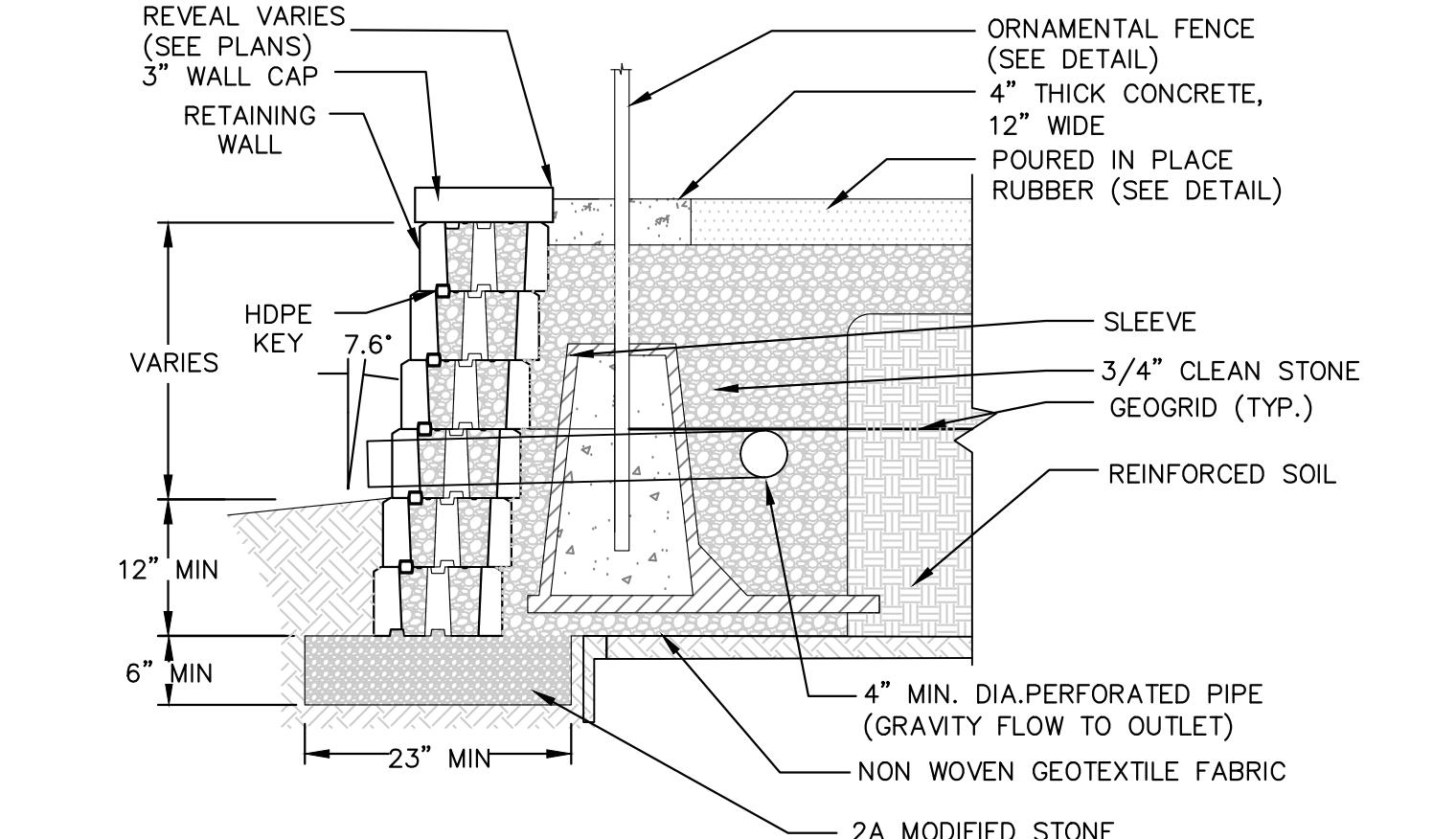
N.T.S.



- NOTES:**
- PERFORATED, OR NON-PERFORATED CORRUGATED POLYETHYLENE PIPE SHALL BE AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC. (A.D.S.), COLUMBUS OHIO OR APPROVED EQUIVALENT BY DESIGN ENGINEER.
  - INSTALL UNDERDRAIN SYSTEM PER MANUFACTURER'S SPECIFICATIONS.
  - UNDER DRAIN SYSTEM SHALL BE 6" MULTI-FLOW AND INCLUDE ALL NECESSARY COMPONENTS AND ACCESSORIES FOR A FULLY FUNCTIONING UNDERDRAIN SYSTEM. UNDERDRAIN PIPES & NECESSARY CONNECTORS SHALL BE AS MANUFACTURED BY MULTI-FLOW SYSTEM, INC. OR APPROVED EQUAL.
  - PIPE SPACING AND LAYOUT PER THE PLAN.
  - INSTALL UNDERDRAIN SYSTEM PER MANUFACTURER'S SPECIFICATIONS.
  - VERY COURSE SAND SHALL PER MANUFACTURER'S SPECIFICATIONS.
  - SUBBASE SLOPE SHALL MATCH SURFACE SLOPE PRIOR TO INSTALLATION OF UNDERDRAIN.
  - 4" HDPE CORRUGATED TRANSPORT PIPE AND "T" CONNECTORS SHALL BE AS MANUFACTURED BY ADS PIPE OR APPROVED EQUAL.
  - TRANSPORT PIPE AND "T" CONNECTORS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL CONNECTIONS SHALL BE SECURELY FASTENED.
  - ALL AGGREGATE FILTER MATERIAL SHALL BE CLEAN, CRUSHED STONE (NONDETERIORATING) 1" - 1.5" DIA., FREE OF "FINES". AGGREGATE SHALL BE REVIEWED AND APPROVED BY DESIGN ENGINEER PRIOR TO START OF CONSTRUCTION.
  - IMMEDIATELY UPON COMPLETION OF INSTALLATION, STABILIZE FINISHED SURFACE BY SEEDING, SODDING OR MULCHING TO PROHIBIT SOIL EROSION.
  - MINIMUM COVER TO TOP OF PIPE SHALL BE 1'-0".
  - CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVALS PRIOR TO PURCHASE OR INSTALLATION.

**PLAYGROUND TRANSPORT PIPE AND UNDERDRAIN SECTION**

N.T.S.



- NOTES:**
- SLEEVE SHALL BE MODEL SLEEVE-IT, AS MANUFACTURED BY STRATA SYSTEMS, INC. OR APPROVED EQUAL. 1-800-680-7750
  - RETAINING WALL BLOCK SHALL BE SEMMA, AS MANUFACTURED BY TECO-BLOC OR APPROVED EQUAL.
  - WALL CAP SHALL BE ARCHITECTURAL CAP UNIT, AS MANUFACTURED BY TECO-BLOC OR APPROVED EQUAL.
  - COLOR TO BE DETERMINED.
  - RETAINING WALL SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
  - THE CONTRACTOR SHALL SUPPLY SHOP DRAWINGS PRIOR TO PURCHASE AND INSTALLATION.

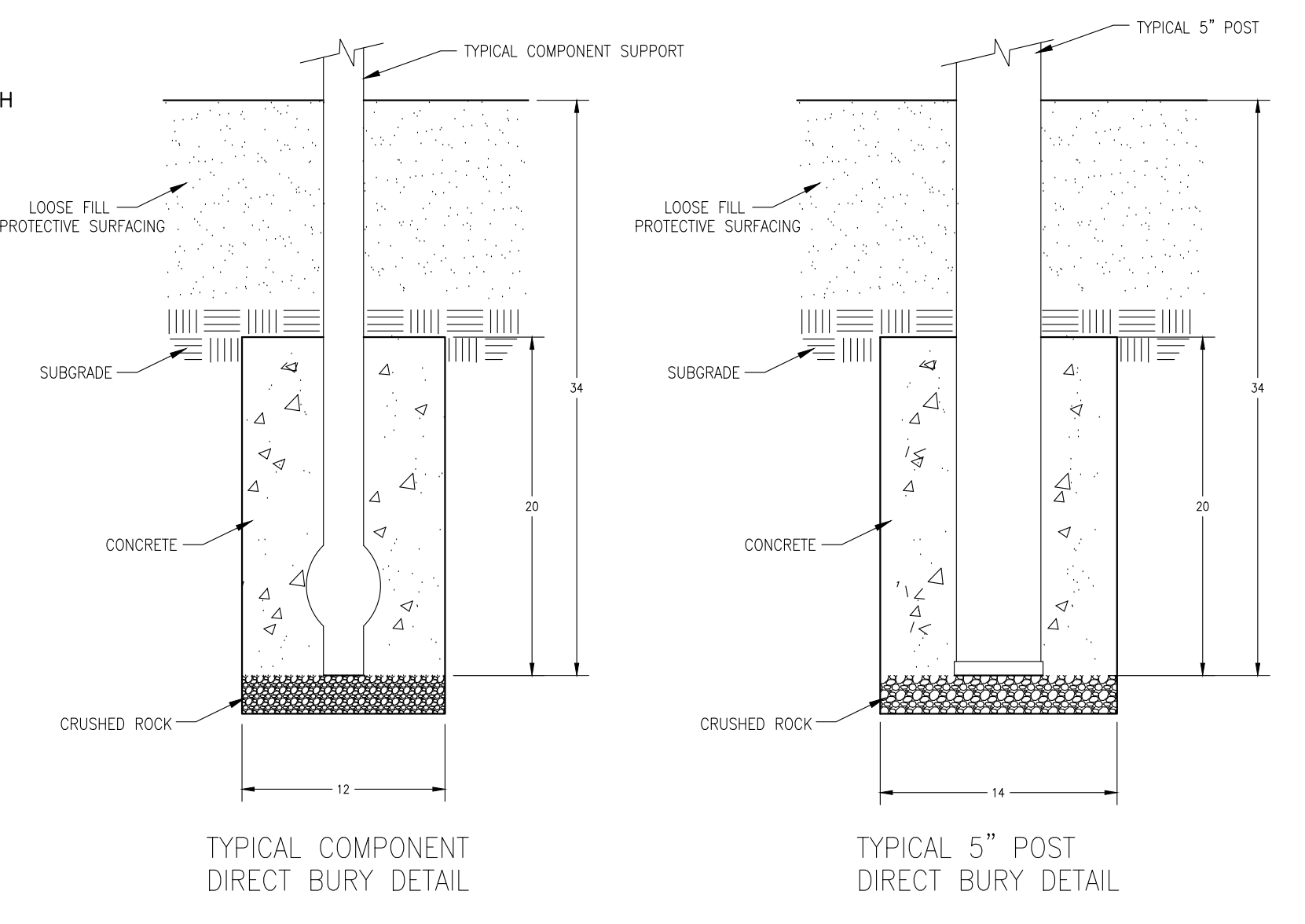
**PLAYGROUND RETAINING WALL**

N.T.S.



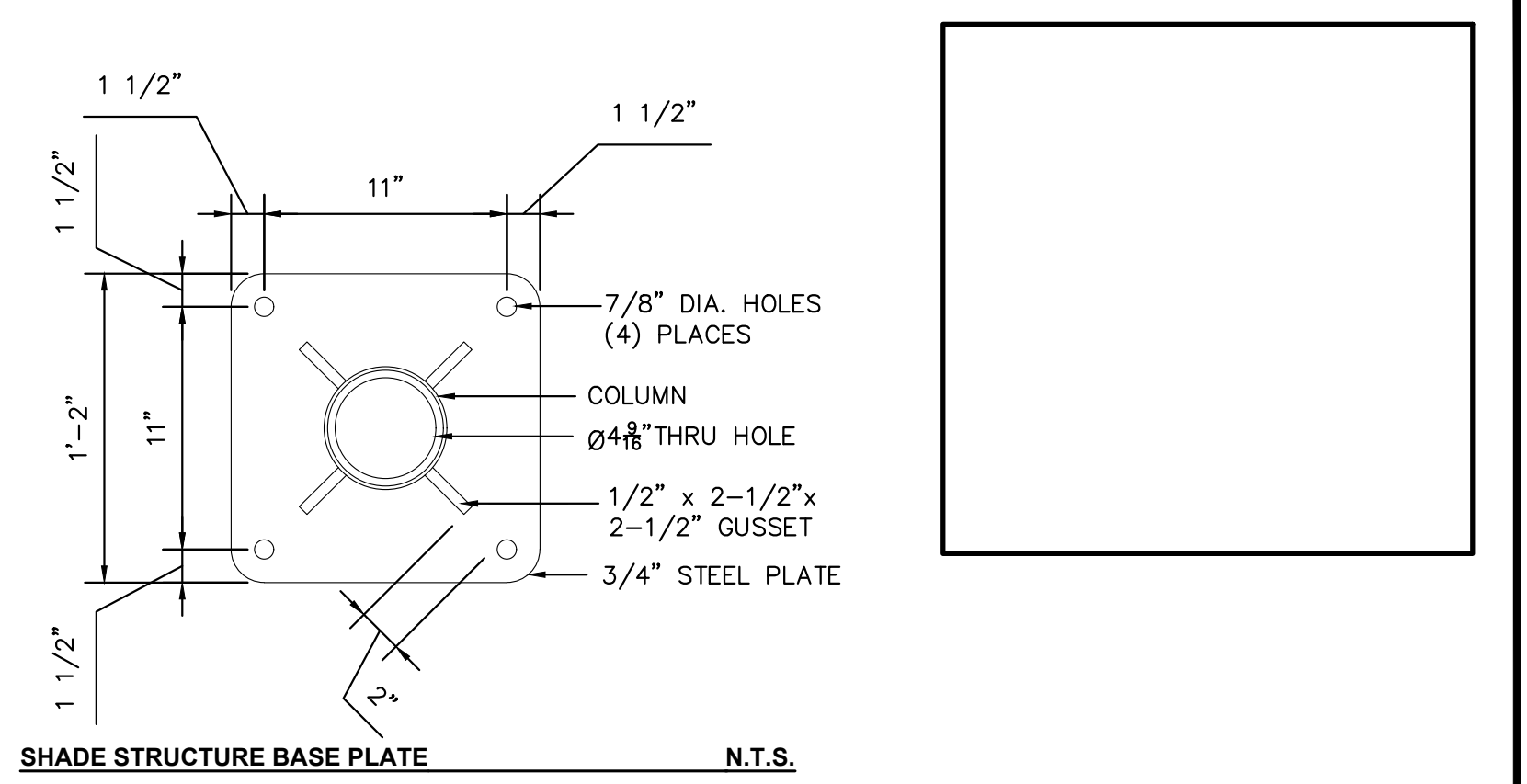
**PLAYGROUND BENCH**

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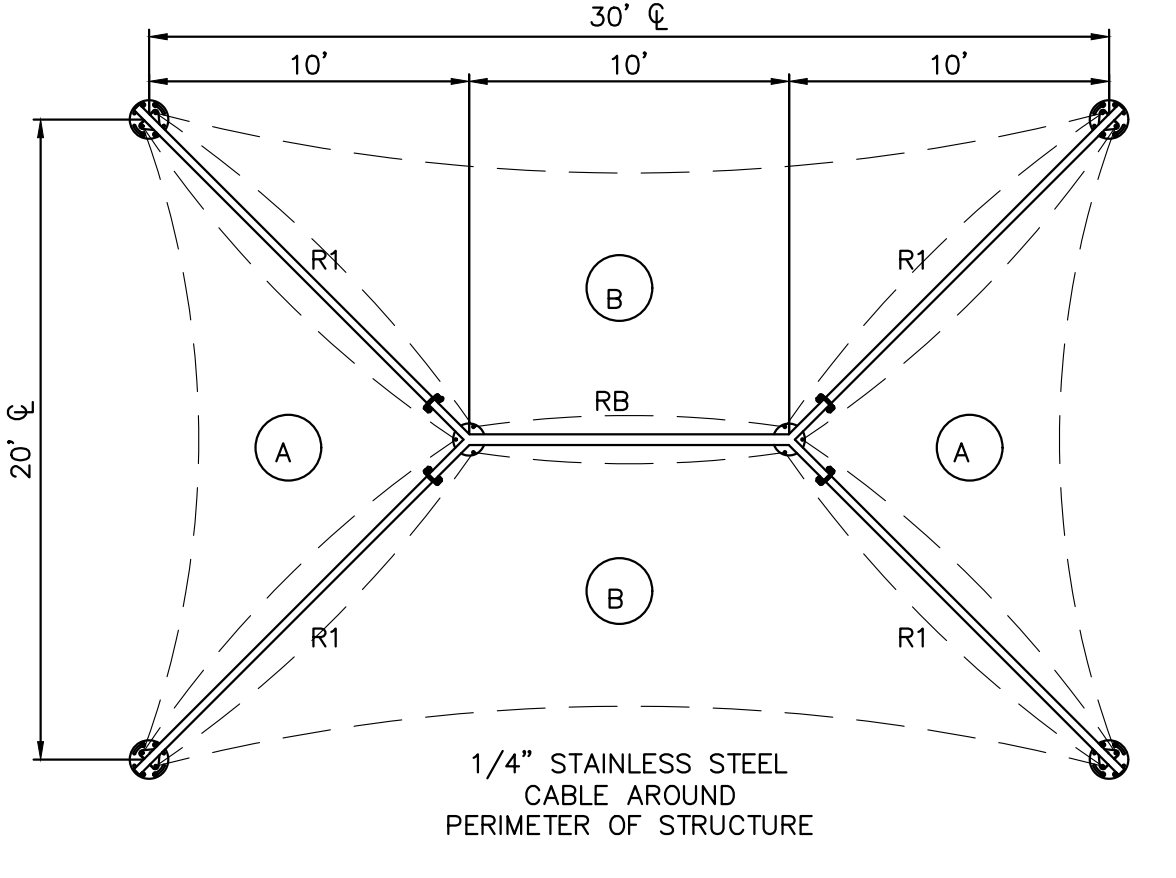
- NOTES:**
- PLAY EQUIPMENT TO BE SUPPLIED BY OWNER. EQUIPMENT IS MANUFACTURED BY LANDSCAPE STRUCTURES, SEE EQUIPMENT MODEL INFORMATION ON SHEET DS-1. TO OBTAIN EQUIPMENT SPECIFIC INFORMATION CONTACT, GENERAL RECREATION, INC. AT 800.726.4793.
  - THESE ARE THE MANUFACTURERS STANDARD PLAY EQUIPMENT & ELEMENTS FOOTING DETAILS AND ARE FOR GUIDANCE FOR BIDDING PURPOSES ONLY.
  - CONTRACTOR IS RESPONSIBLE FOR DESIGNING AND OBTAINING ANY AND ALL NECESSARY APPROVALS FOR THE FOOTING DESIGN FOR THE PLAYGROUND EQUIPMENT & ELEMENTS, PRIOR TO INSTALLATION. CONTRACTOR SHALL SUBMIT THE FOOTING DESIGN TO THE LOCAL CONSTRUCTION CODE OFFICE FOR APPROVAL, IF NECESSARY, PRIOR TO INSTALLATION.
  - UPON COMPLETION, ALL EQUIPMENT SHALL COMPLY WITH ALL APPLICABLE STATE, FEDERAL, AND INTERNATIONAL SAFETY CODES, AND AS REQUIRED BY THE MANUFACTURER.
  - THE PLAY EQUIPMENT SHALL BE LOCATED AS SHOWN ON THE DRAWINGS AND INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, BY A CONTRACTOR CERTIFIED BY THE MANUFACTURER.

**FOOTINGS FOR PLAY EQUIPMENT**

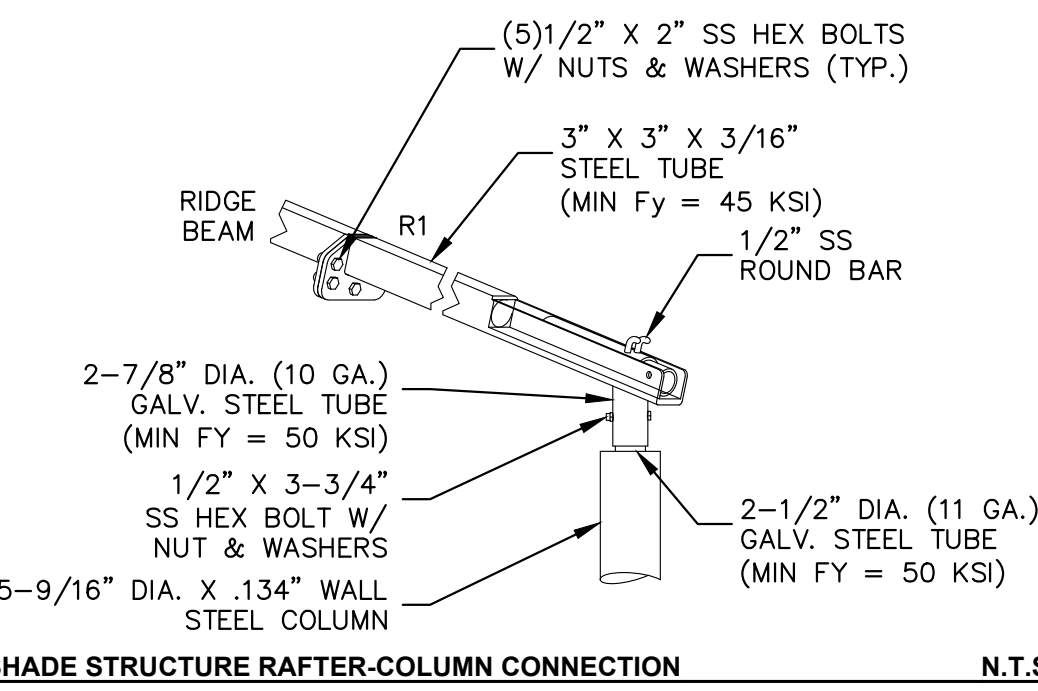
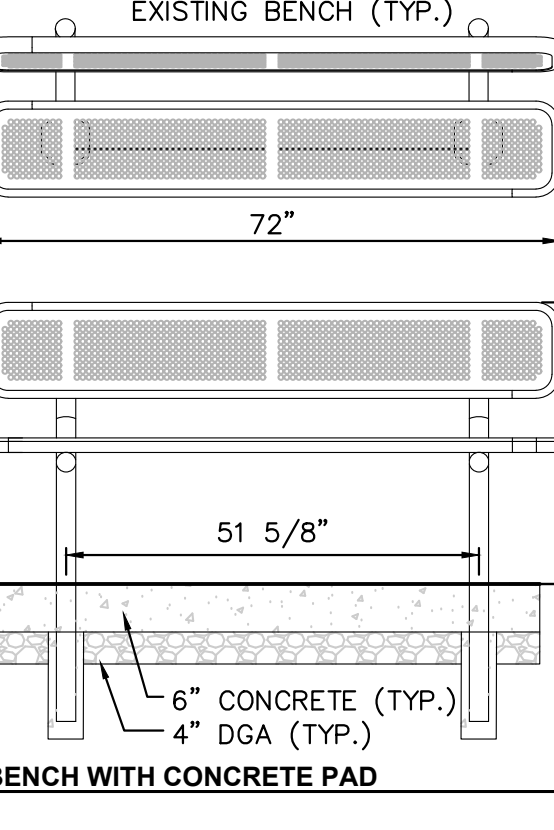


**FOOTING SCHEDULE**

LOCATION	NUMBER OF FOOTINGS
CARLETON	72

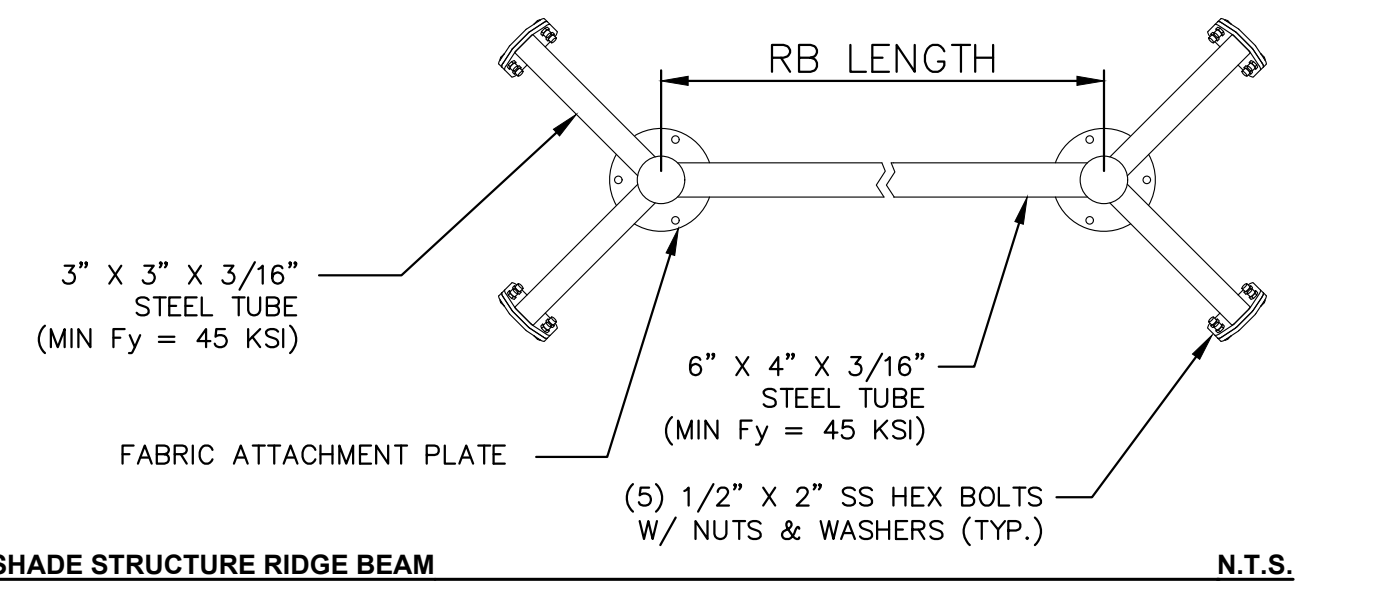


- NOTES:**
- BENCH SHALL BE SALVAGED AND REINSTALL PER PLANS.
  - BENCH IS TO BE SURFACE MOUNTED PER MANUFACTURER'S INSTRUCTIONS.
  - CONTRACTOR SHALL SUPPLY SHOP DRAWINGS PRIOR TO CONSTRUCTION.



**SHADE STRUCTURE RAFTER-COLUMN CONNECTION**

N.T.S.



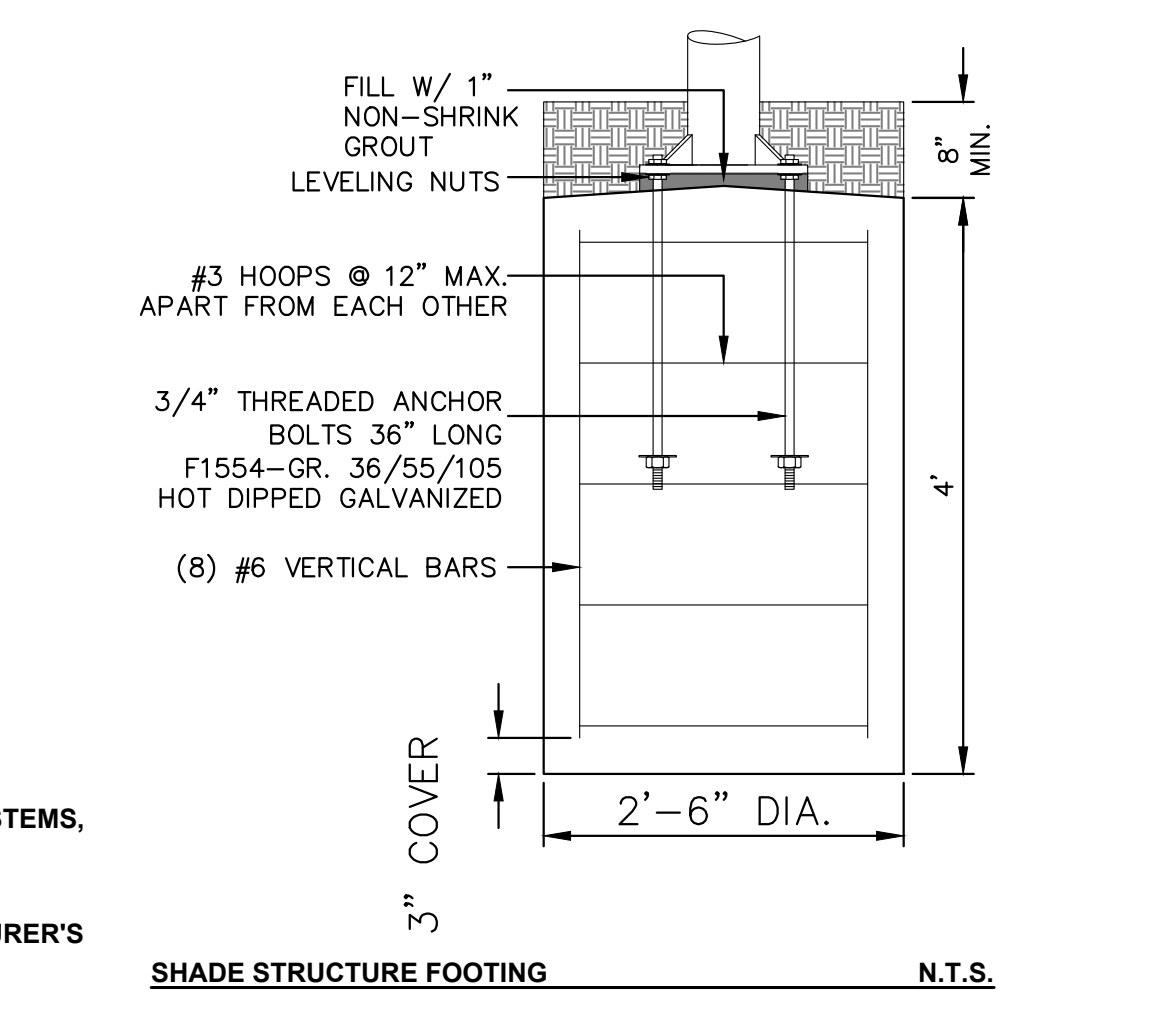
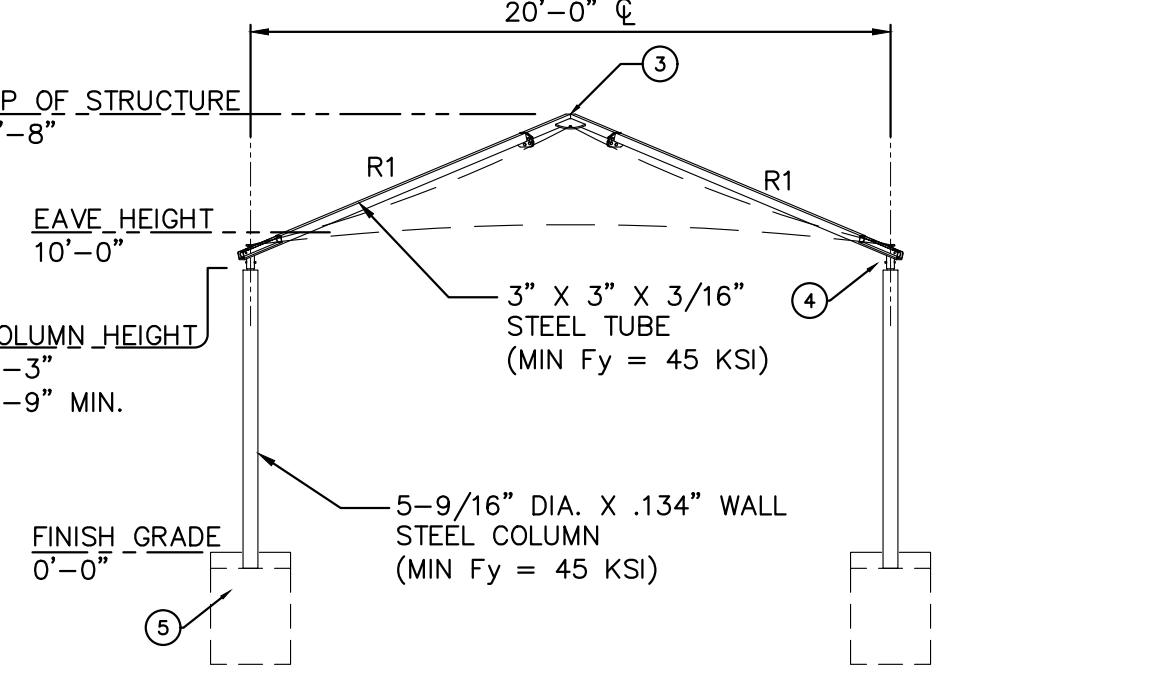
**SHADE STRUCTURE RIDGE BEAM**

N.T.S.

**SHADE STRUCTURE NOTES:**

- SHADE STRUCTURE TO BE RECTANGULAR SHADE STRUCTURE MODEL #MPR203010PM, AS MANUFACTURED BY SHADE SYSTEMS, INC. OR APPROVED EQUAL.
- THESE ARE THE MANUFACTURERS STANDARD SHADE STRUCTURE DETAILS AND ARE FOR BIDDING PURPOSES ONLY.
- SHADE STRUCTURE SHALL BE LOCATED AS SHOWN ON THE SITE PLANS AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- ALL FASTENERS SHALL BE STAINLESS STEEL.
- CONCRETE FOR FOOTING SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
- UNLESS OTHERWISE SHOWN, CONCRETE COVER SHALL BE 3" MIN.
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

**SHADE STRUCTURE**



**SHADE STRUCTURE FOOTING**

N.T.S.

ISSUED FOR BID 11/11/24

**Rakesh H. Darji**  
 N.J. PROFESSIONAL ENGINEER  
 No. 24GE04289100

**ENVIRONMENTAL RESOLUTIONS, INC.**  
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 Tel. 856-235-7170 Fax 856-273-9239  
 CERTIFICATE OF AUTHORIZATION  
 NUMBER: 24GE04289100

PLAN NAME:  
**CONSTRUCTION DETAILS**

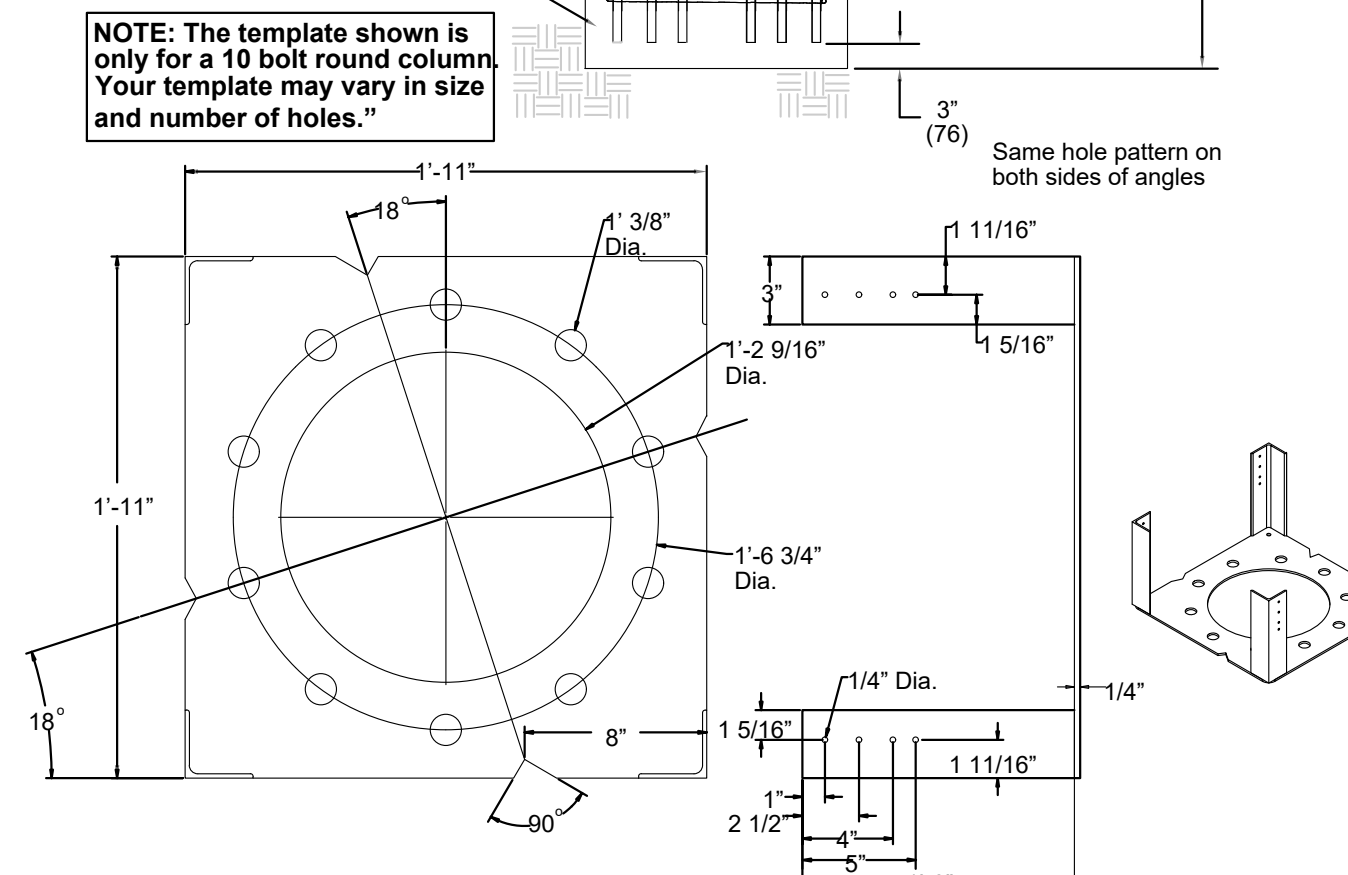
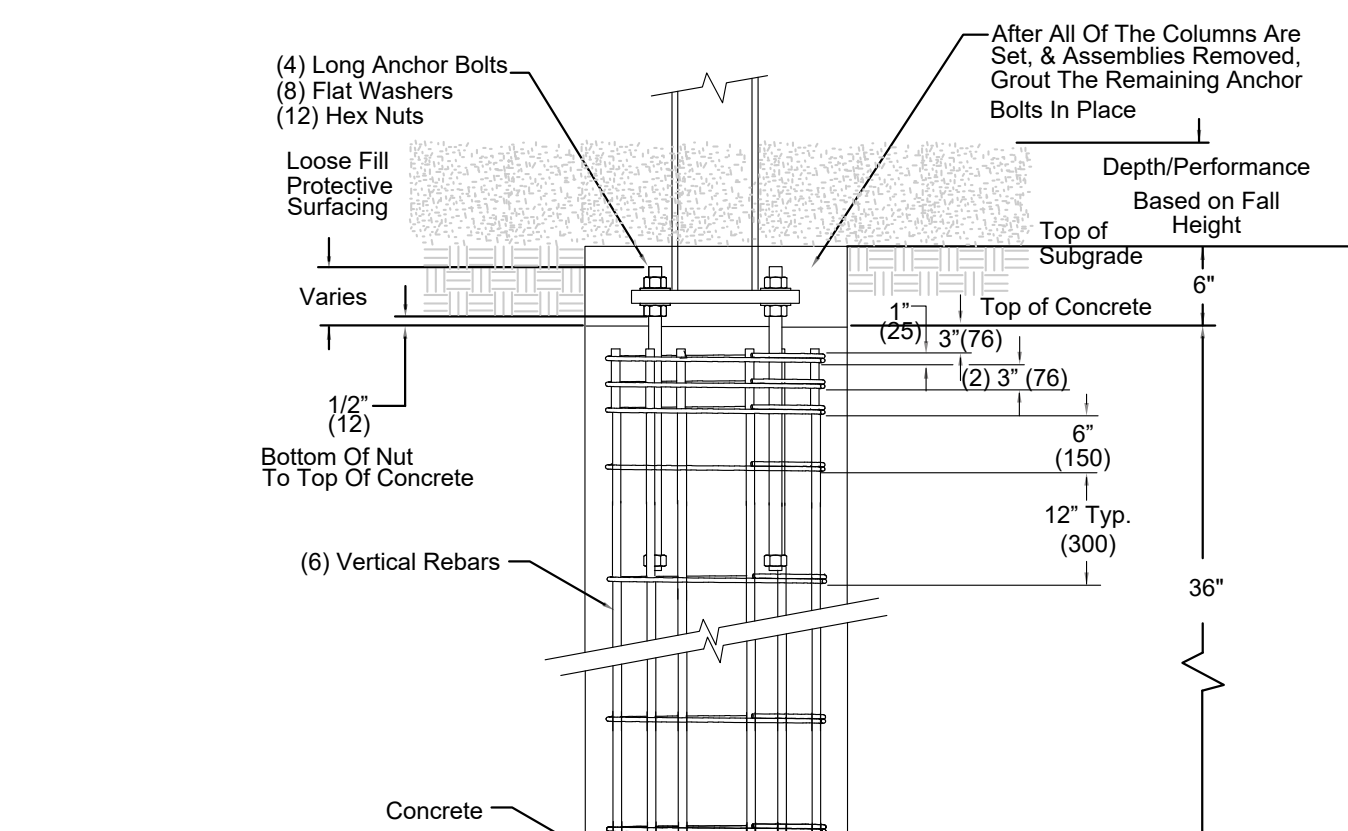
PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT  
 100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
 2025 PRE-K CLASSROOM ADDITION  
 251 E MAPLE AVE  
 TOWNSHIP OF PENNS GROVE  
 SALEM COUNTY, NEW JERSEY 08069  
 BLOCK 83, LOT 1

PROJECT #: 31705-04 | DRAWN: YP | DESIGNED: NJW | DATE: 11/11/24  
 FILE: 03-CONSTRUCTION DETAILS | SCALE: NOTED

NO. REVISION AND DATE

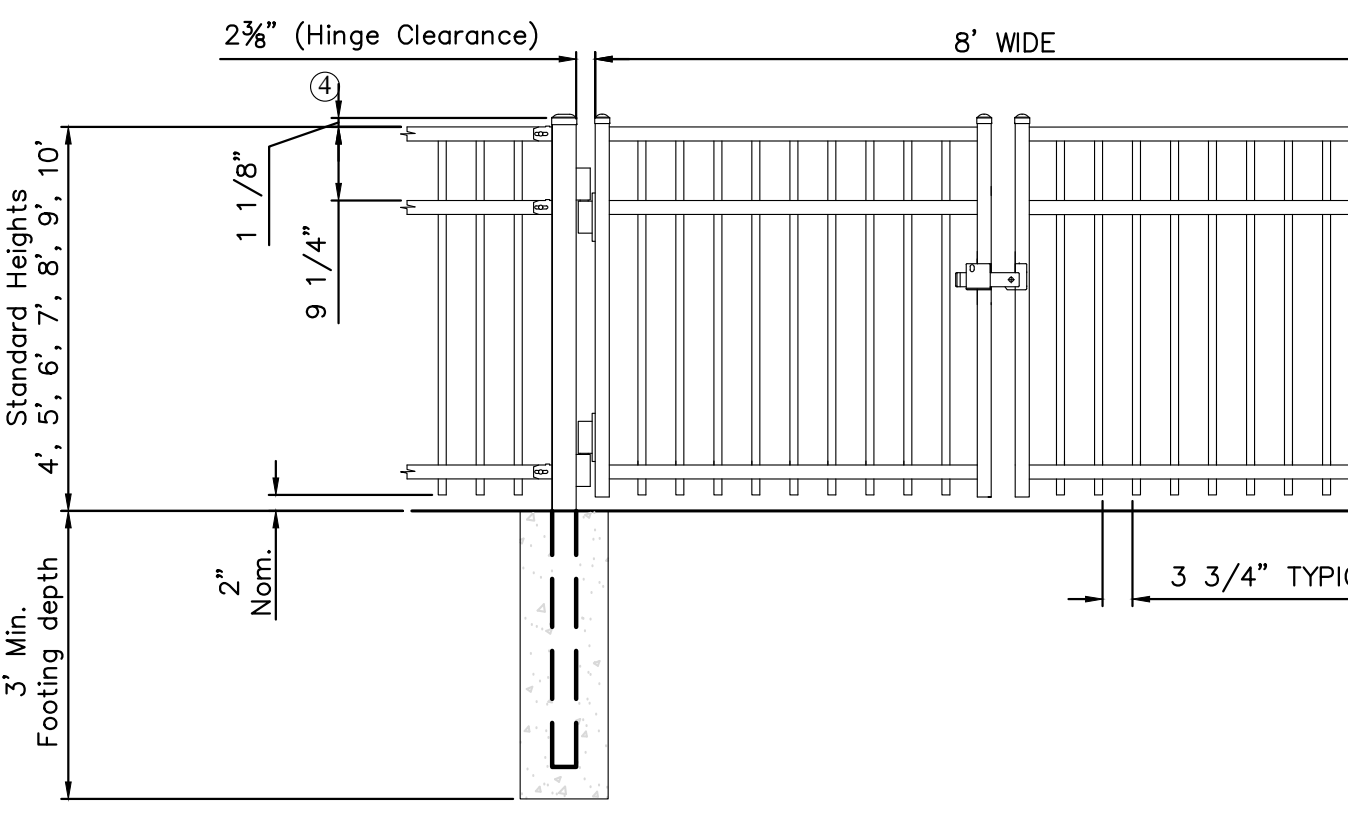
SHEET NUMBER:  
**CD-2**





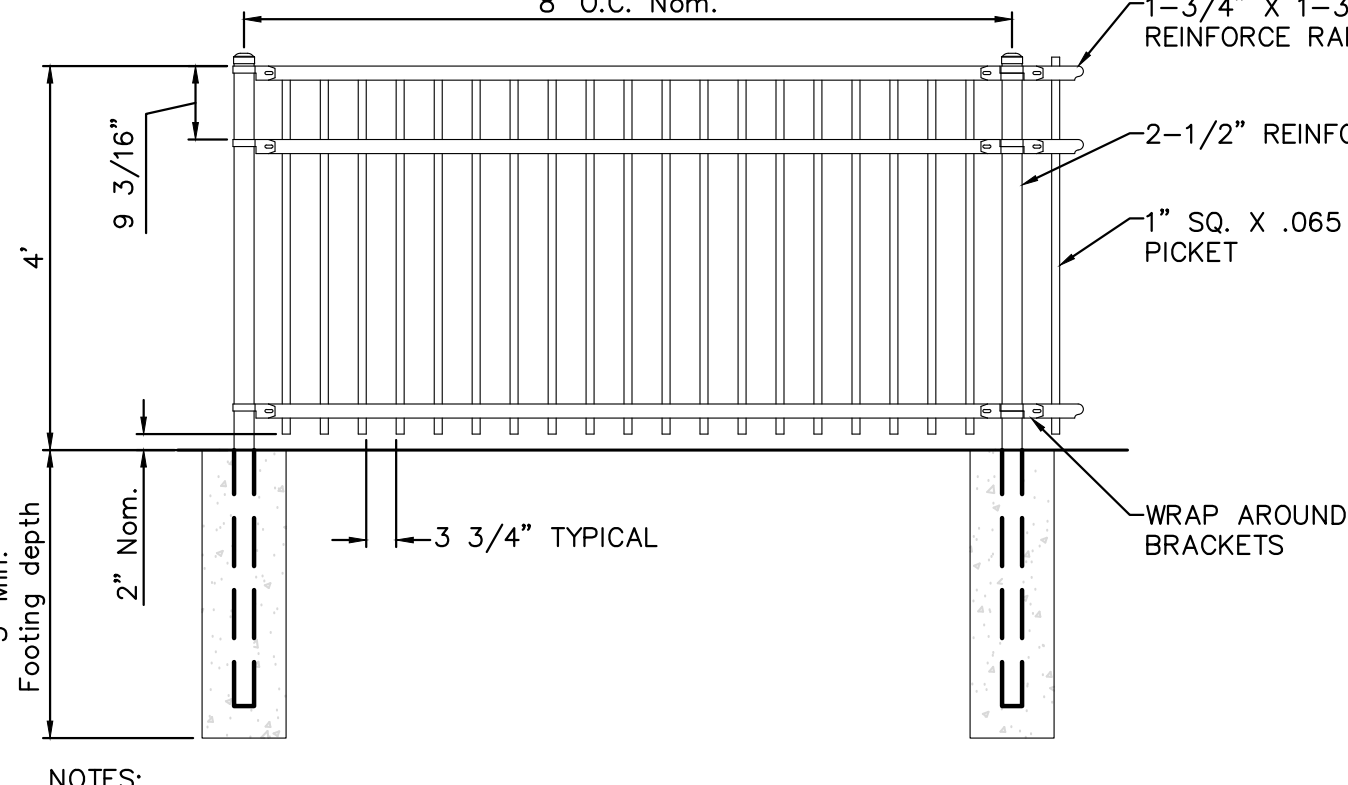
NOTES:  
1. CONTRACTOR TO PROVIDE SIGNED AND SEALED DRAWINGS FOR FOOTINGS AND PERMITTING.

**PLAYGROUND SHADE STRUCTURE COLUMN FOUNDATION** N.T.S.



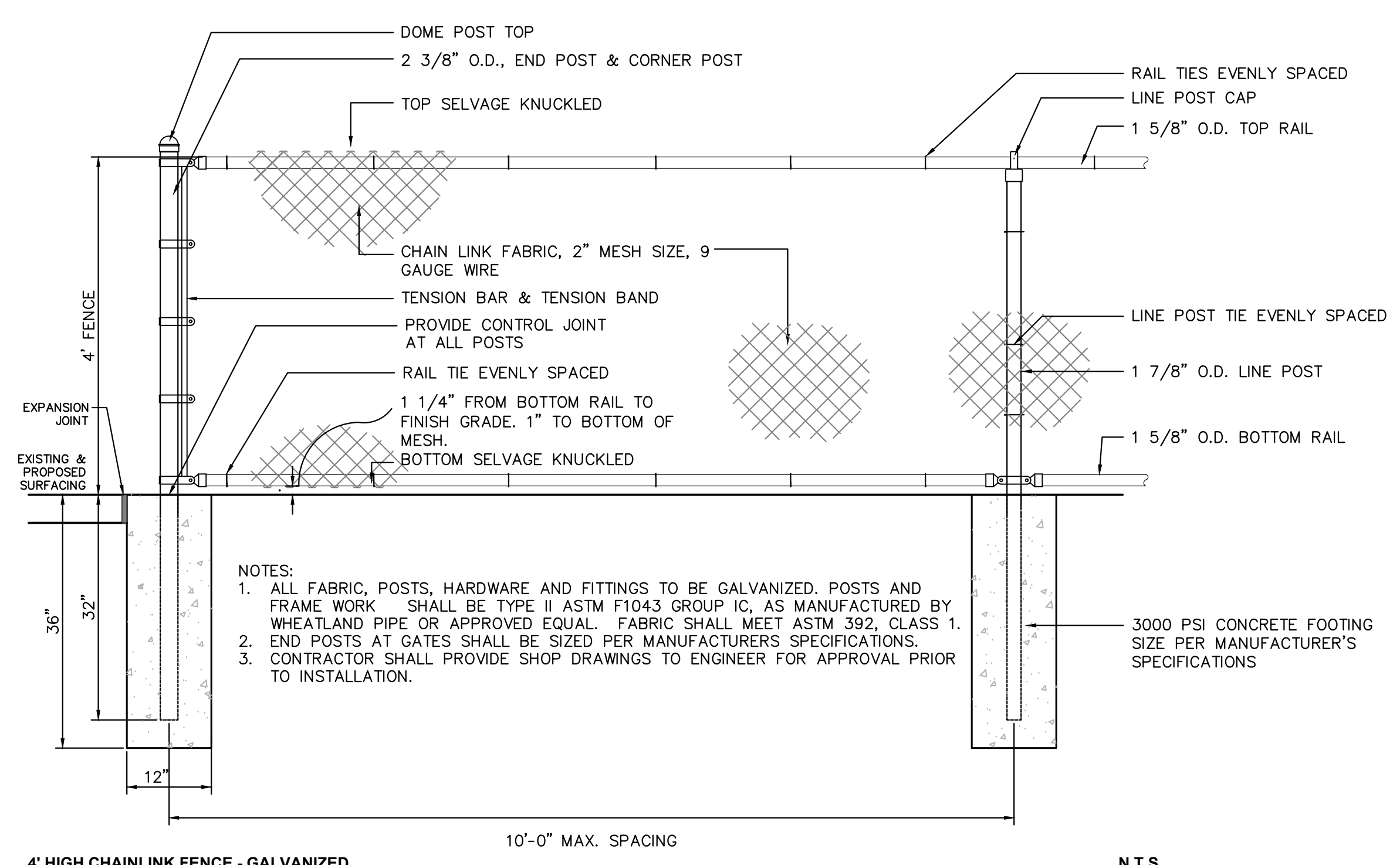
NOTES:  
1. 8' WIDE ALUMINUM DOUBLE GATE SHALL BE ECHLEON II MAJESTIC FENCE WITH 3 RAILS, AS MANUFACTURED BY AMERISTAR FENCE OR APPROVED EQUAL.  
2. FENCE POST SHALL BE LOCATED 4.75" FROM EDGE OF CONCRETE SIDEWALK.  
3. MINIMUM BOLT EMBEDMENT SHALL BE 3.5".  
4. FENCE SHALL BE POWDER COATED BLACK.  
5. FENCE SHALL BE INSTALL AS PER MANUFACTURERS SPECIFICATIONS.  
6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION.

**8' WIDE ORNAMENTAL MAINTENANCE GATE** N.T.S.

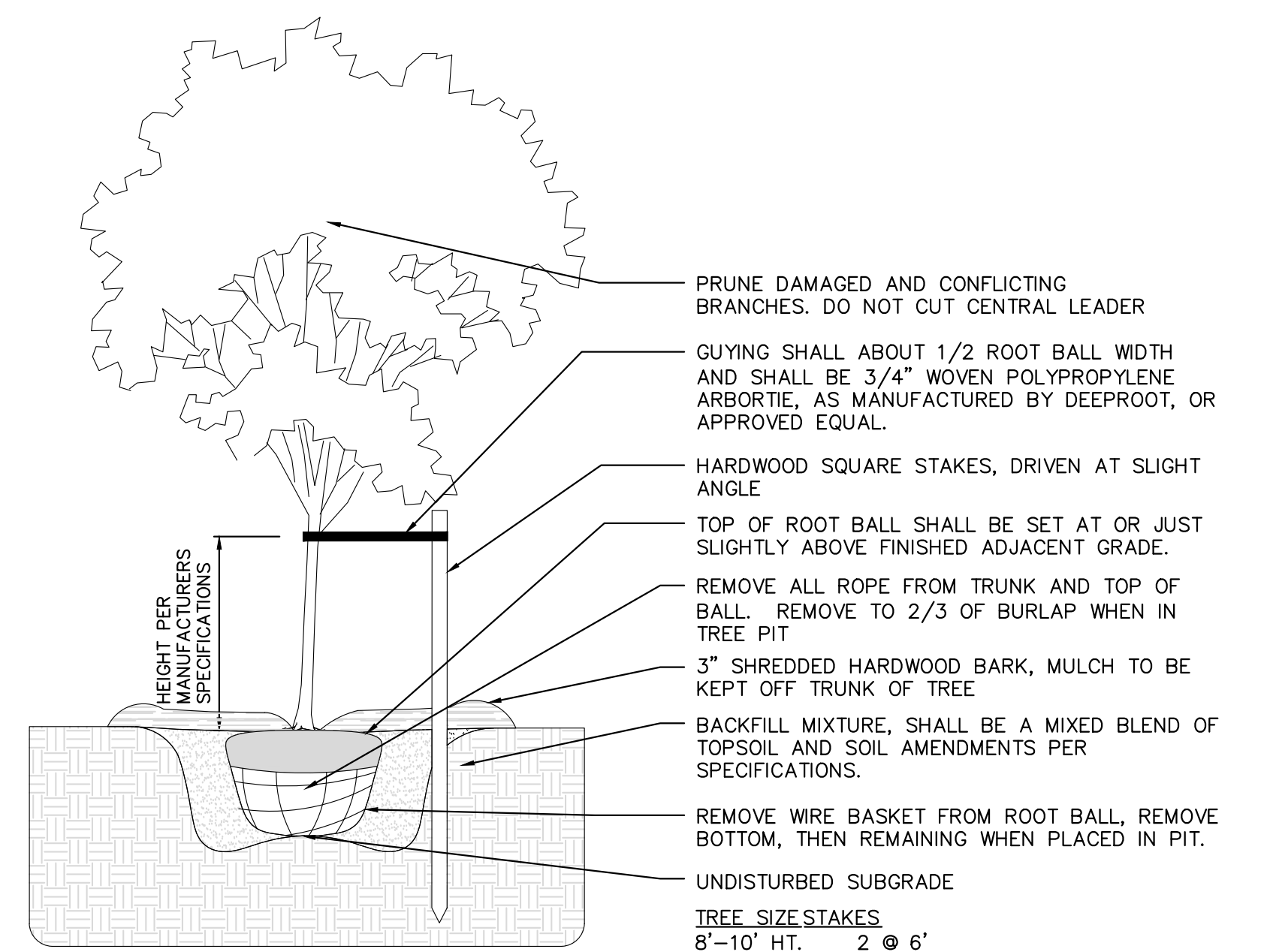


NOTES:  
1. 48" ALUMINUM FENCE SHALL BE ECHLEON II MAJESTIC FENCE WITH 3 RAILS, AS MANUFACTURED BY AMERISTAR FENCE OR APPROVED EQUAL.  
2. FENCE POST SHALL BE LOCATED 4.75" FROM EDGE OF CONCRETE SIDEWALK.  
3. MINIMUM BOLT EMBEDMENT SHALL BE 3.5".  
4. FENCE SHALL BE POWDER COATED BLACK.  
5. FENCE SHALL BE INSTALL AS PER MANUFACTURERS SPECIFICATIONS.  
6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION.

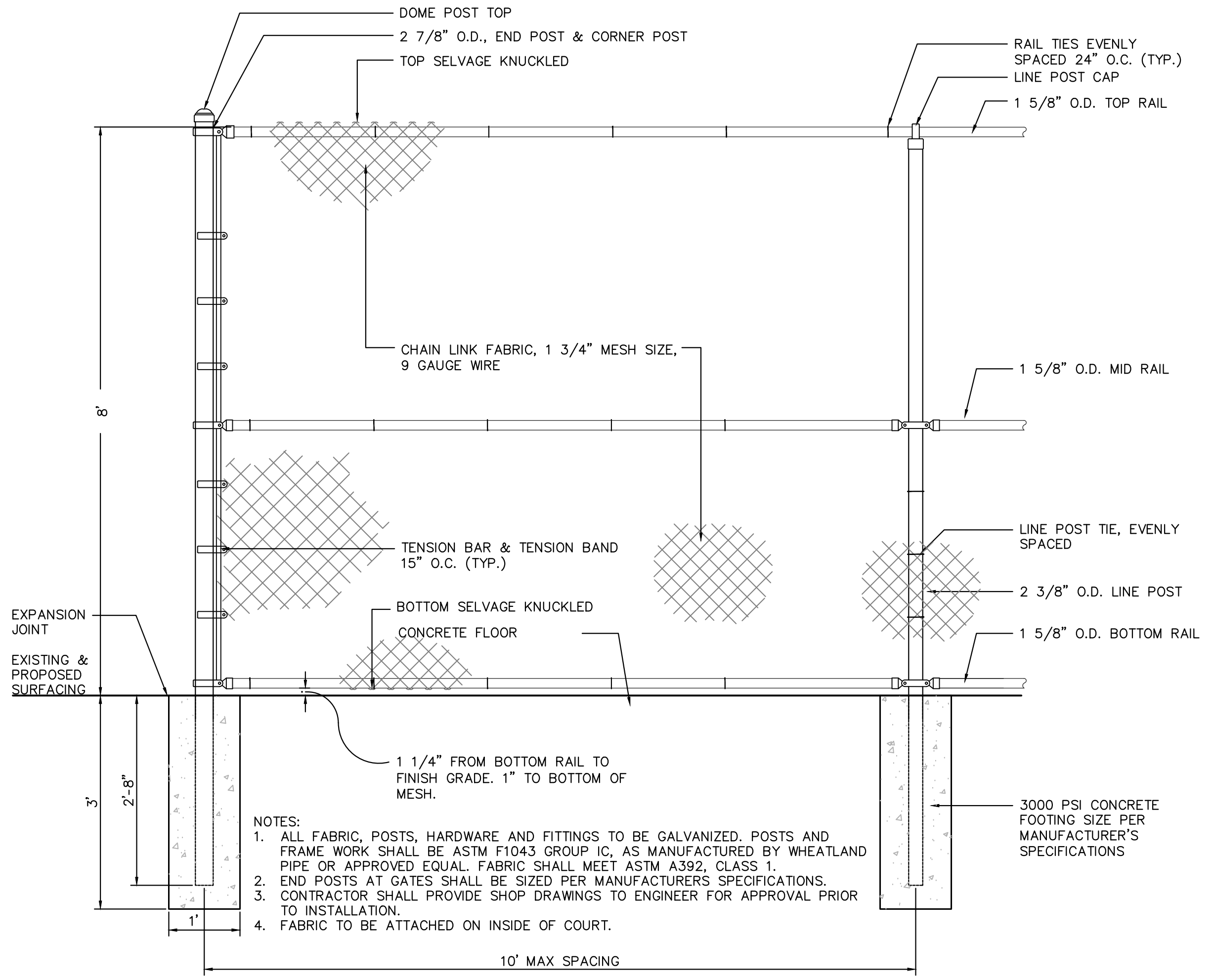
**4' HIGH ORNAMENTAL FENCE** N.T.S.



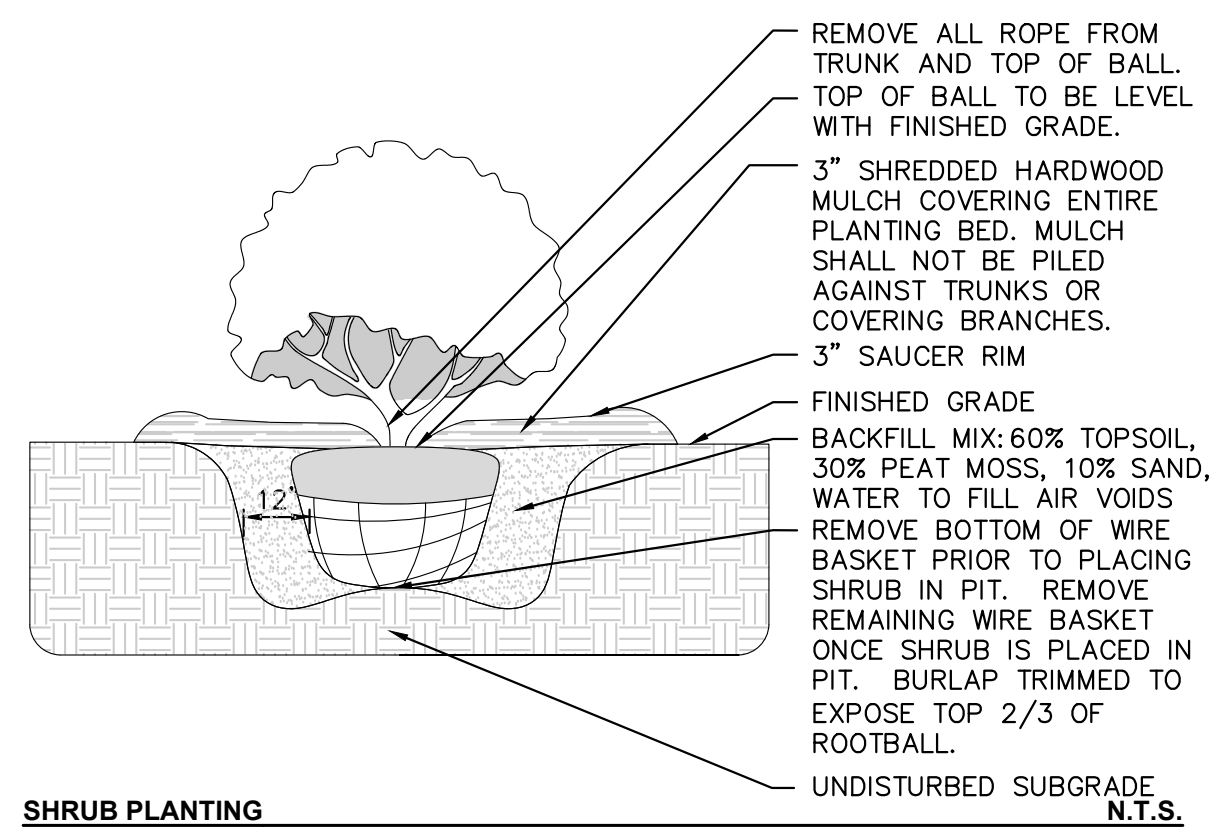
**4' HIGH CHAINLINK FENCE - GALVANIZED** N.T.S.



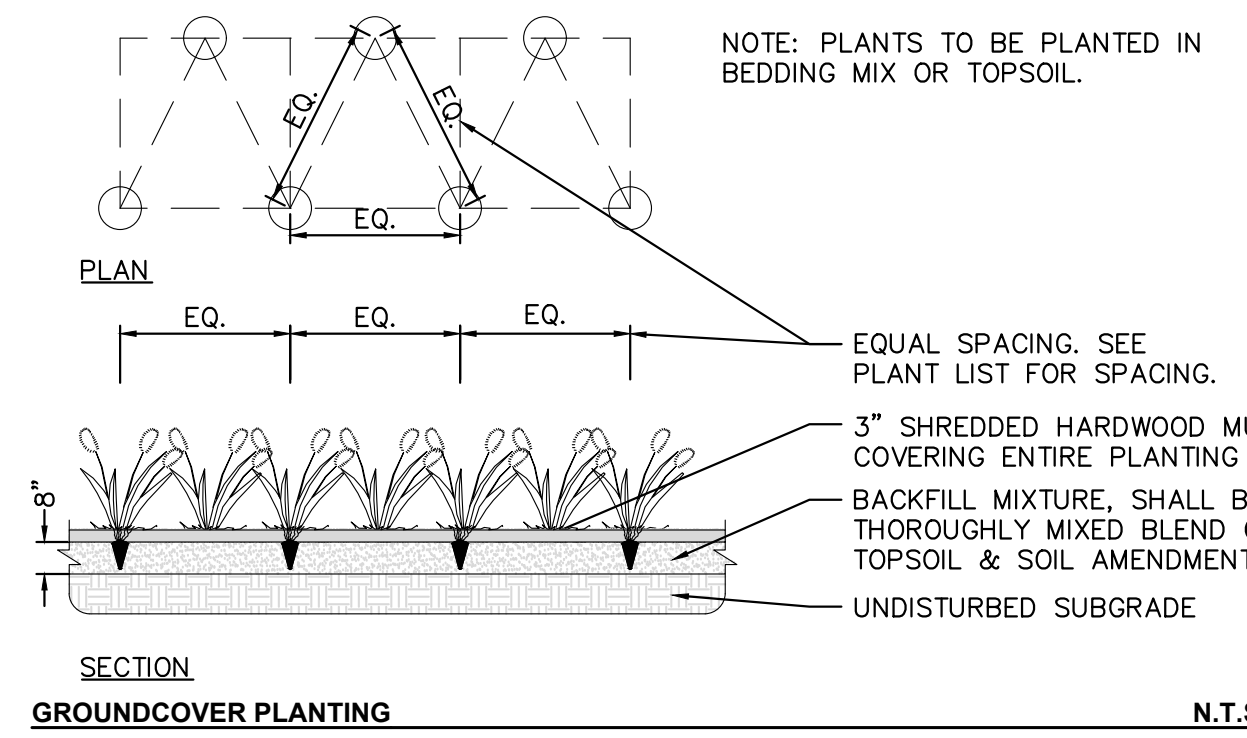
NOTE: GUYS FOR MULTI-STEM TREES TO BE ATTACHED ON THE LARGEST BRANCHES OF TREE.  
**DECIDUOUS TREE PLANTING** N.T.S.



**8' HIGH CHAINLINK FENCE - GALVANIZED** N.T.S.



**SHRUB PLANTING** N.T.S.



**GROUNDCOVER PLANTING** N.T.S.

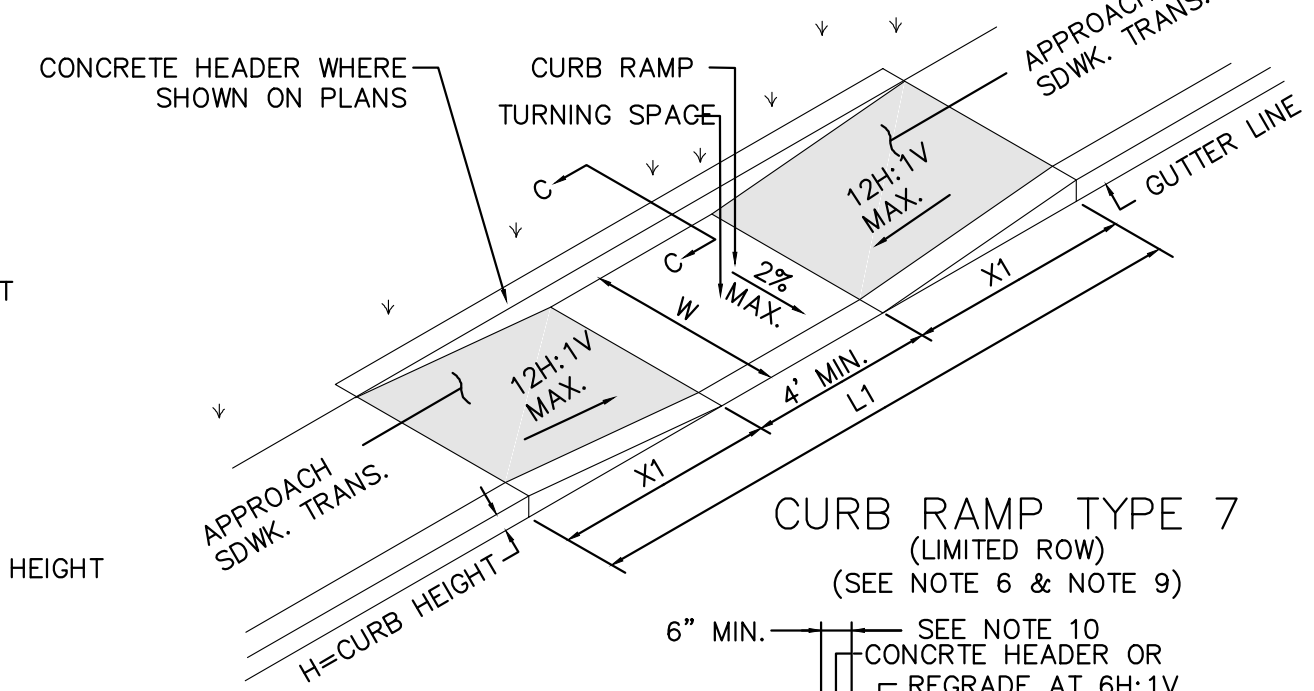
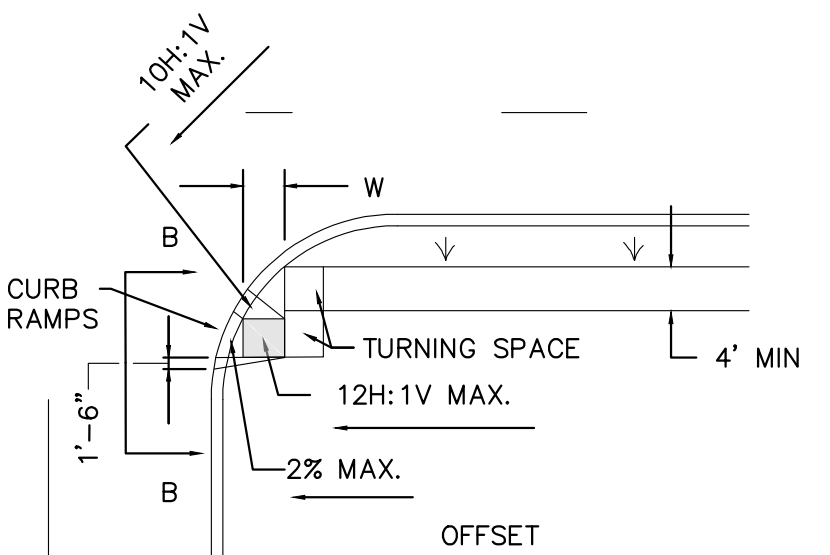
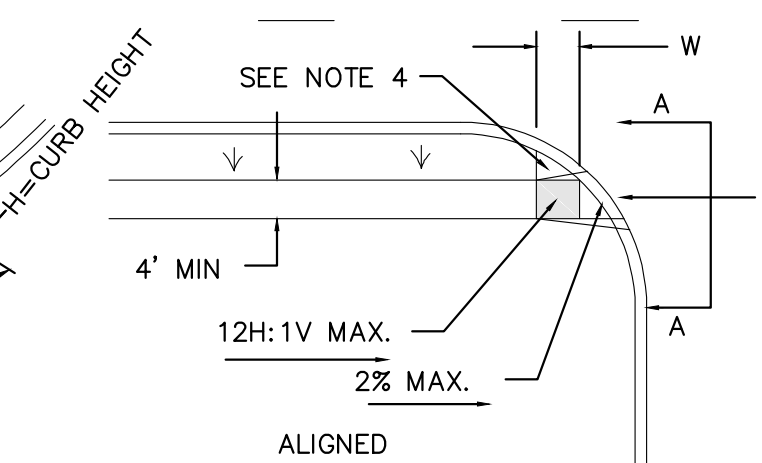
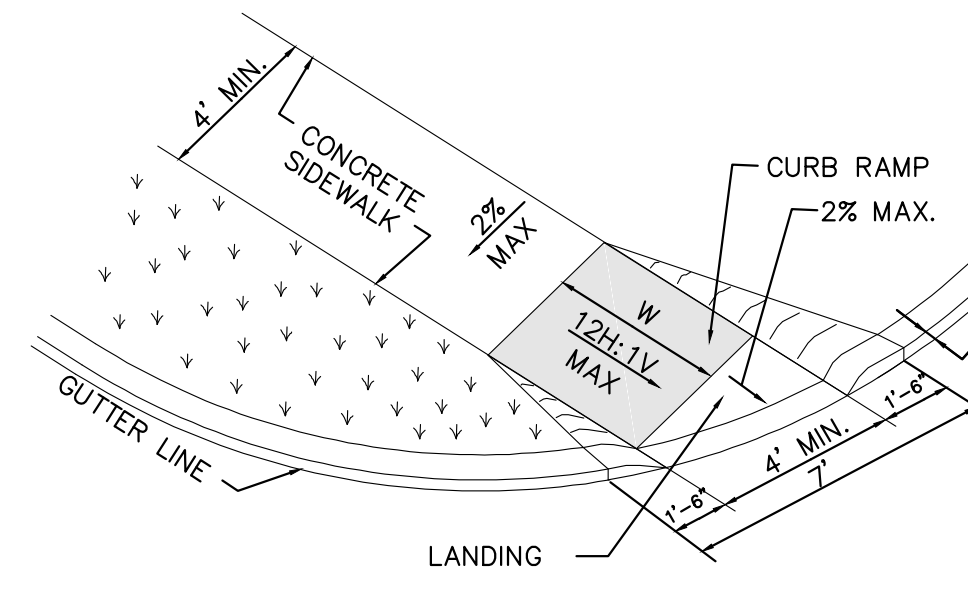
ISSUED FOR BID 11/11/24

**RAKESH R. DARJI**  
N.J. PROFESSIONAL ENGINEER  
No. 24GE04289100

**ENVIRONMENTAL RESOLUTIONS, INC.**  
Engineers • Planners • Scientists • Surveyors  
815 East Gate Drive - Suite 103  
Mount Laurel, New Jersey 08054-3415  
Tel. 856-235-7170 Fax 856-273-9239

PLAN NAME: <b>CONSTRUCTION DETAILS</b>	NO. REVISION AND DATE
PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT 100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069 <b>PAUL W. CARLETON ELEMENTARY SCHOOL</b> 2025 PRE-K CLASSROOM ADDITION 251 E MAPLE AVE TOWNSHIP OF PENNS GROVE SALEM COUNTY, NEW JERSEY 08069 BLOCK 83, LOT 1	SHEET NUMBER: <b>CD-3</b>
PROJECT #: 31705-04   DRAWN: YP   DESIGNED: NJW   DATE: 11/11/24	FILE: 03-CONSTRUCTION DETAILS   SCALE: N.T.S.

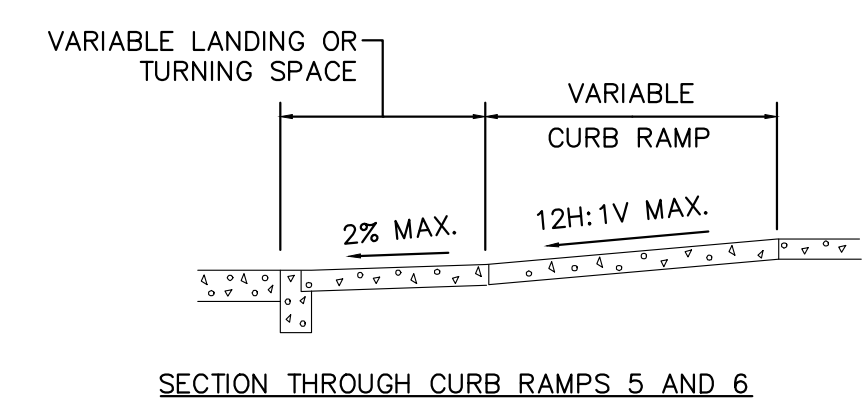




- NOTE:**
- KEEP TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP CLEAR OF OBSTRUCTIONS THAT PROTRUDE ABOVE THE SURFACE.
  - CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT THE ENTIRE WIDTH OF THE RAMP (4 FEET MIN.) AT ALL CURB RAMPS.
  - FOR CURB RAMP TYPES 5 AND 6, IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.
  - SIDEWALK AND CURB RAMP WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR CONCRETE SIDEWALK OF THE APPROPRIATE ADJACENT THICKNESS.
  - CURB AND HEADER WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR VERTICAL CURB OR SLOPING CURB OF THE APPROPRIATE ADJACENT SIZE AND KIND.
  - WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF SIDEWALK IS 6 FEET OR LESS, USE CURB RAMP TYPE 7, INSTEAD OF CURB RAMP TYPE 1 THROUGH 4.
  - CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED. SEE PLANS.
  - THE 12H:1V MAX SLOPE IS THE RUNNING SLOPE FOR TYPE 3 AND 4 CURB RAMPS, BUT ONLY THE 12H:1V SLOPE MEASURED AS X2 IS THE RUNNING SLOPE FOR TYPE 3 AND 4 CURB RAMPS. ENSURE THE RUNNING SLOPE OF CURB RAMPS DOES NOT REQUIRE ITS LENGTH TO EXCEED 15 FEET. THE RUNNING SLOPE MAY EXCEED THE 12H:1V MAX SLOPE SO AS TO NOT EXCEED THE 15 FEET MAXIMUM LENGTH.
  - CURB RAMP TYPE 1 THROUGH 7 ARE NORMALLY PLACED ON THE RADIUS RETURN AT THE INTERSECTION AND ON A TANGENT SECTION AS DRAWN.
  - MAXIMUM CURB RAMP LENGTH FOR ALL WORK OUT SIDE OF R.O.W. SHALL BE 6'.

**CURB RAMP TYPE 5**

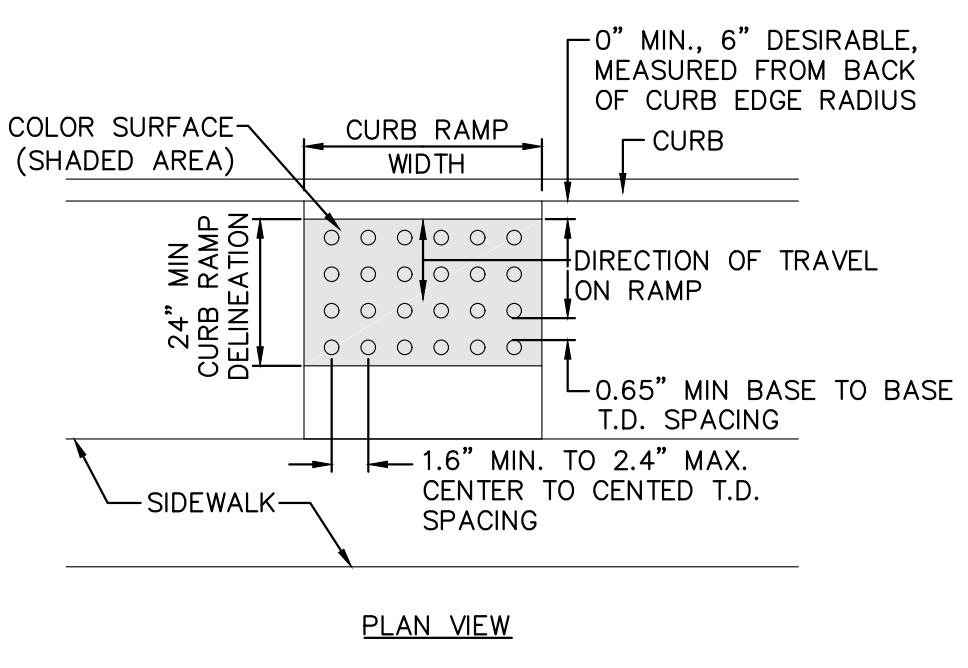
**CURB RAMP TYPE 7**



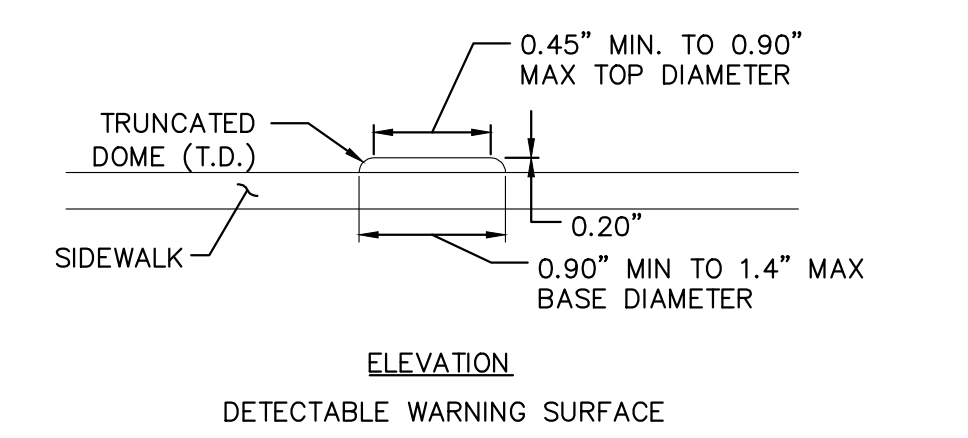
CURB RAMP TYPE 2, 5 OR 6			
H INCHES	W FEET	X1 FEET	L1 FEET
3	3	3	11
4	4	4	13
5	5	5	15
6	6	6	17
7	7	7	19
8	8	8	21
9	9	9	23

**CURB RAMP**

**N.T.S.**



- NOTE:**
- KEEP TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP CLEAR OF OBSTRUCTIONS THAT PROTRUDE ABOVE THE SURFACE.
  - CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED. SEE PLANS.
  - FOR NARROW ISLAND WIDTH, SEE PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS DETAIL.
  - FOR MEDIAN AND LARGE ISLAND WIDTH, SEE CURB RAMP 1 ON CD-606-1.
  - CONSTRUCT CURB RAMP TYPES 1, 2, 3, 4, & 7 PERPENDICULAR TO CURBLINE, AS SHOWN.
  - IF A CURB RAMP IS REQUIRED, THE LOCATION OF THE DETECTABLE WARNING SURFACE MUST BE AT THE BOTTOM OF THE RAMP AND WITHIN THE REQUIRED DISTANCE FROM THE RAIL.
  - A STANDARD DETECTABLE WARNING SURFACE (DWS) IS NOT AVAILABLE TO FIT THIS APPLICATION, AND THEREFORE ONE WILL NEED TO BE CUSTOMIZE. THE DWS SHOULD COVER THE ENTIRE WIDTH OF THE RAMP. THE ROWS OF DOMES ON THE DWS SHOULD FOLLOW THE DIRECTION OF TRAVEL OF THE RAMP, SO PEDESTRIAN WHO USE MOBILE DEVICES CAN TRACK BETWEEN THE DOMES.
  - DETECTABLE WARNING SURFACE TO NOT BE CUT, ORDER PROPER SIZE.



**DETECTABLE WARNING SURFACE**

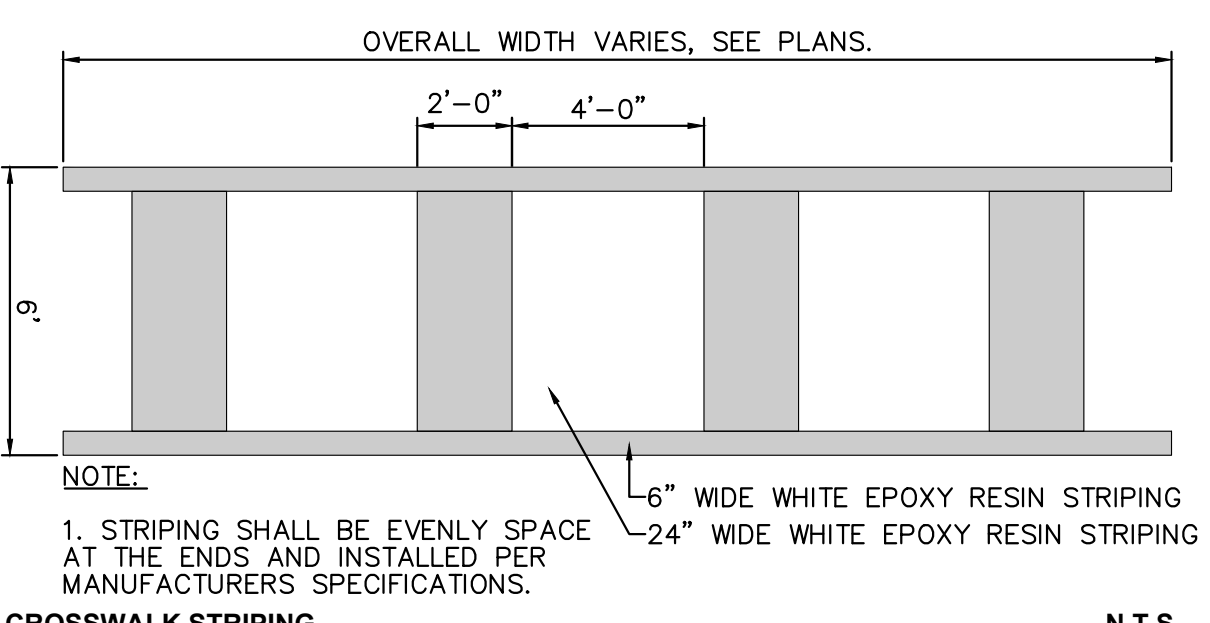
**N.T.S.**



**NOTE:**  
STOP BAR SHALL BE EPOXY RESIN, COLOR WHITE.

**STOP BAR STRIPING**

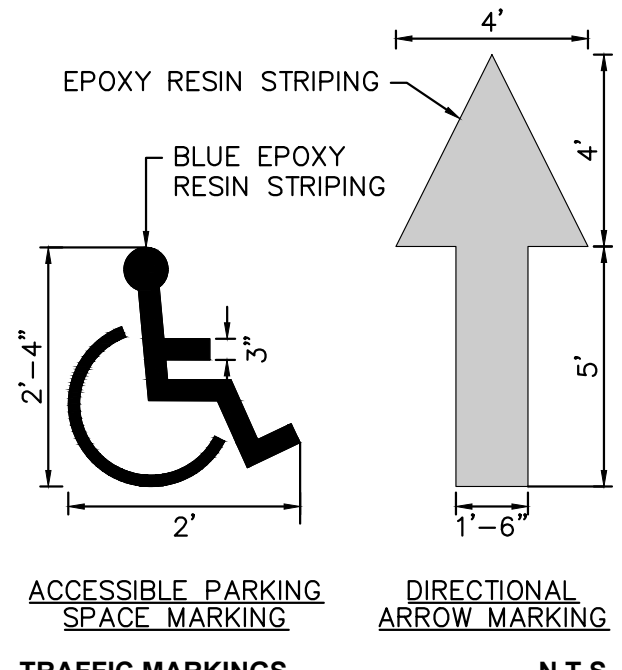
**N.T.S.**



- NOTE:**
- STRIPING SHALL BE EVENLY SPACE AT THE ENDS AND INSTALLED PER MANUFACTURERS SPECIFICATIONS.

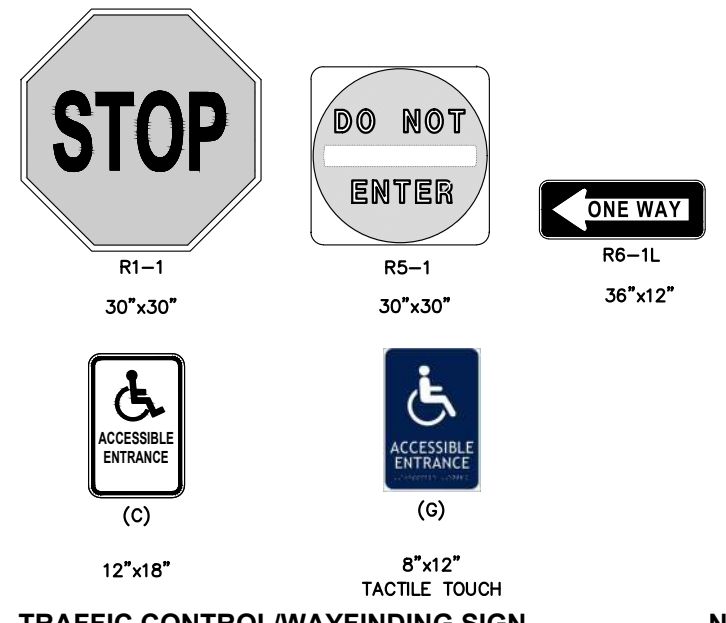
**CROSSWALK STRIPING**

**N.T.S.**



**TRAFFIC MARKINGS**

**N.T.S.**



**TRAFFIC CONTROL/WAYFINDING SIGN**

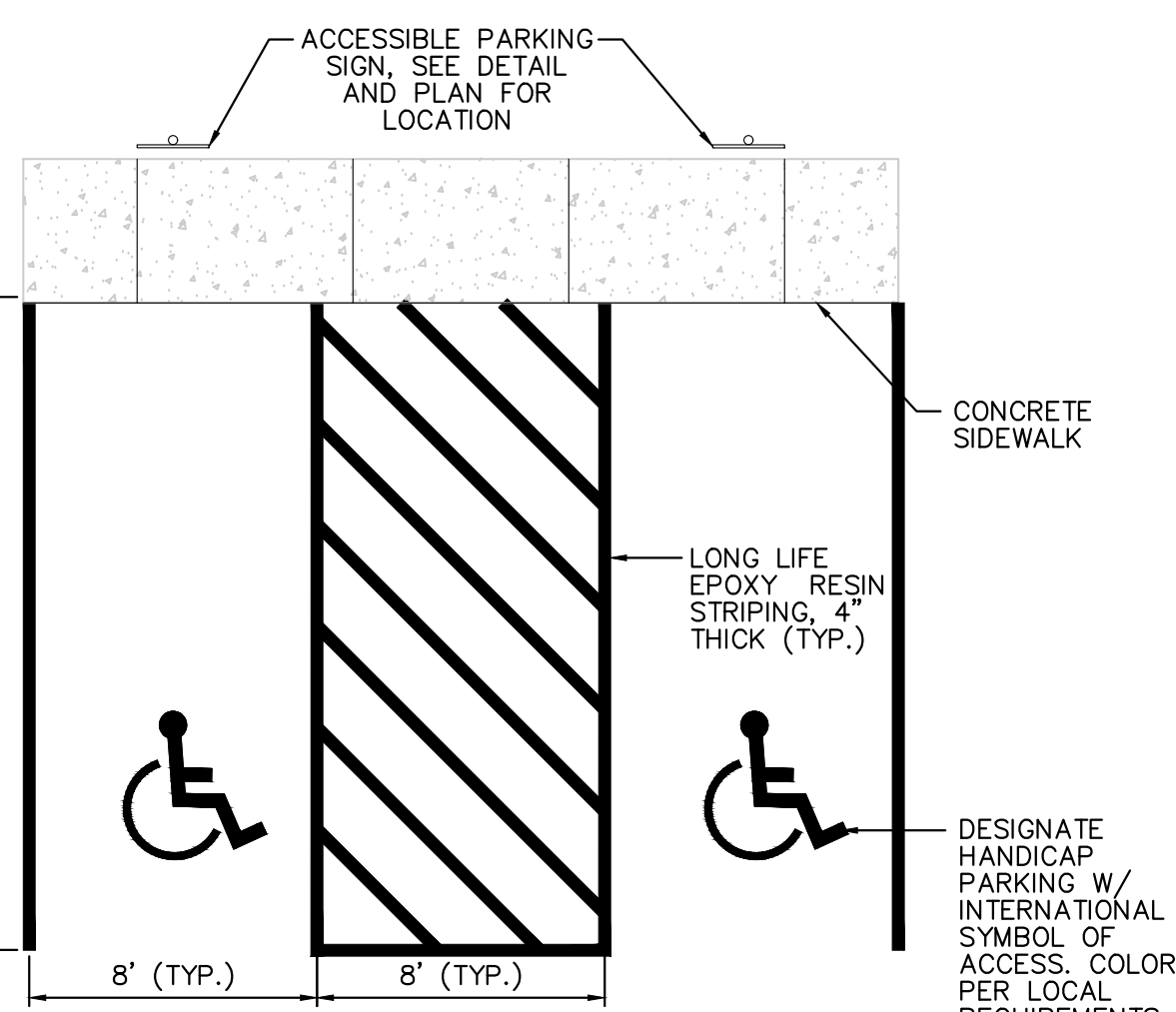
**N.T.S.**

- NOTE:**
- FINAL LOCATIONS TO BE DETERMINED IN THE FIELD. CONTRACTOR SHALL ALSO BE REQUIRED TO CREATE CUSTOM SIGNS TO MATCH EXISTING CUSTOM PARKING SIGNS. CONTRACTOR TO COORDINATE WITH DISTRICT OR REPRESENTATIVE.
  - NOT ALL SIGNS WILL BE USED. FINAL DIRECTIONAL SIGNS TO BE DETERMINED. ALL COLORS SHALL MATCH THROUGH SIGNS.
  - SIGNS A-G SHALL BE BLUE WITH WHITE TEXT, BORDER, AND SYMBOLS.
  - \* DIRECTION OF ARROW TO BE DETERMINED.
  - ON SIGN R2-1, SPEED TO BE DETERMINED.

- 6" DIA. SCHEDULE 40 STL. PIPE AS PROVIDED BY IDEAL SHIELD OR APPROVED EQUAL.
- BOLLARD COVER SHALL BE 1/4"-6" SLEEVE AS MANUFACTURED BY IDEAL SHIELD OR APPROVED EQUAL.
- IDEAL SHIELD 2525 CLARK STREET, DETROIT, MI 48209 PH: 313-842-7290
- PIPE SHALL BE GALVANIZED, AND PAINTED YELLOW IF SHIELD IS NOT SPECIFIED.
- BOLLARD AND COVERS SHALL BE INSTALL PER MANUFACTURERS SPECIFICATIONS.
- CONTRACTOR SHALL SUBMIT SHOP DRAWING TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASE AND INSTALLATION.

**ACCESSIBLE PARKING SIGN**

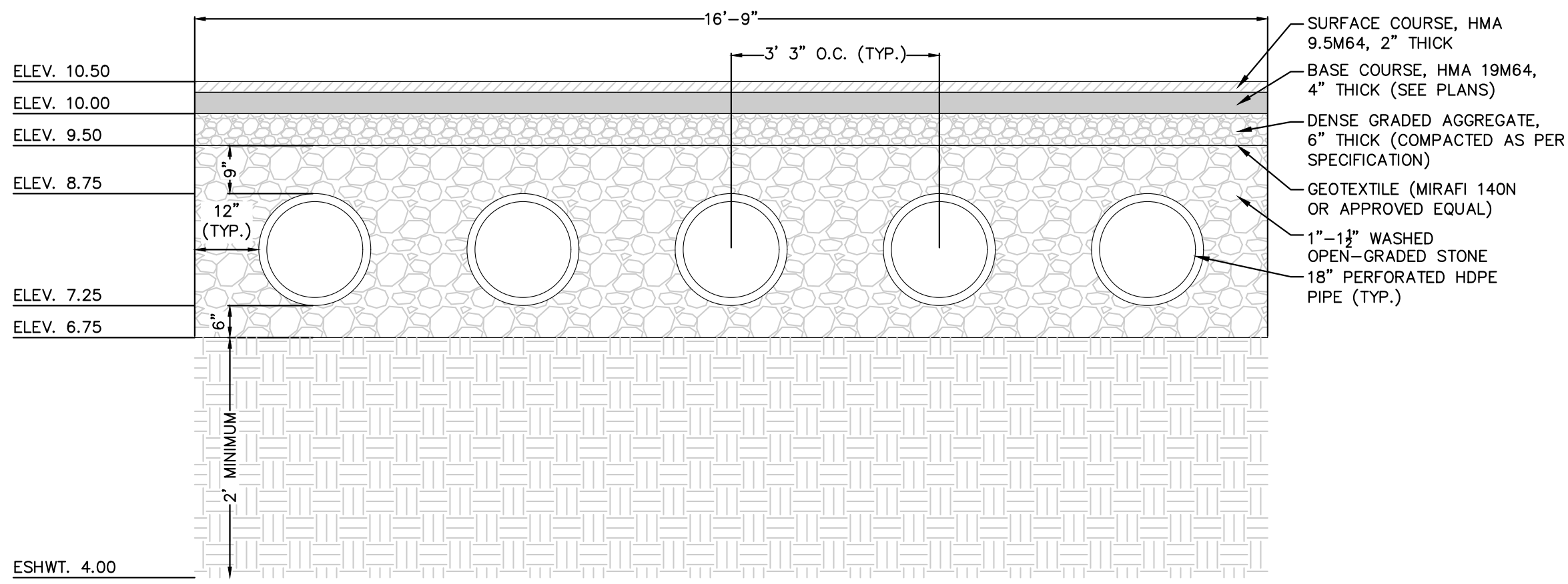
**N.T.S.**



- NOTE:**
- SEE PLANS FOR ACCESSIBLE PARKING SPACE LOCATIONS AND LAYOUT.
  - STRIPING SHALL BE LONG LIFE EPOXY RESIN WITH A BLUE COLOR.
  - SLOPE IN ALL DIRECTIONS SHALL NOT EXCEED 2%, SEE GRADING PLANS.

**ACCESSIBLE PARKING SPACE**

**N.T.S.**



- NOTE:**
- ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
  - MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
  - FOR MORE DETAILED INFORMATION SEE ADS TECHNICAL NOTE 2.120, "STORM WATER DETENTION/RETENTION SYSTEM DESIGN".
  - FOLLOW OVERALL DESIGN OF THIS DETAIL FOR THE EXISTING SUBSURFACE CHAMBER SYSTEM FOR RECONSTRUCTION, UTILIZING 24" PERFORATED HDPE PIPES.

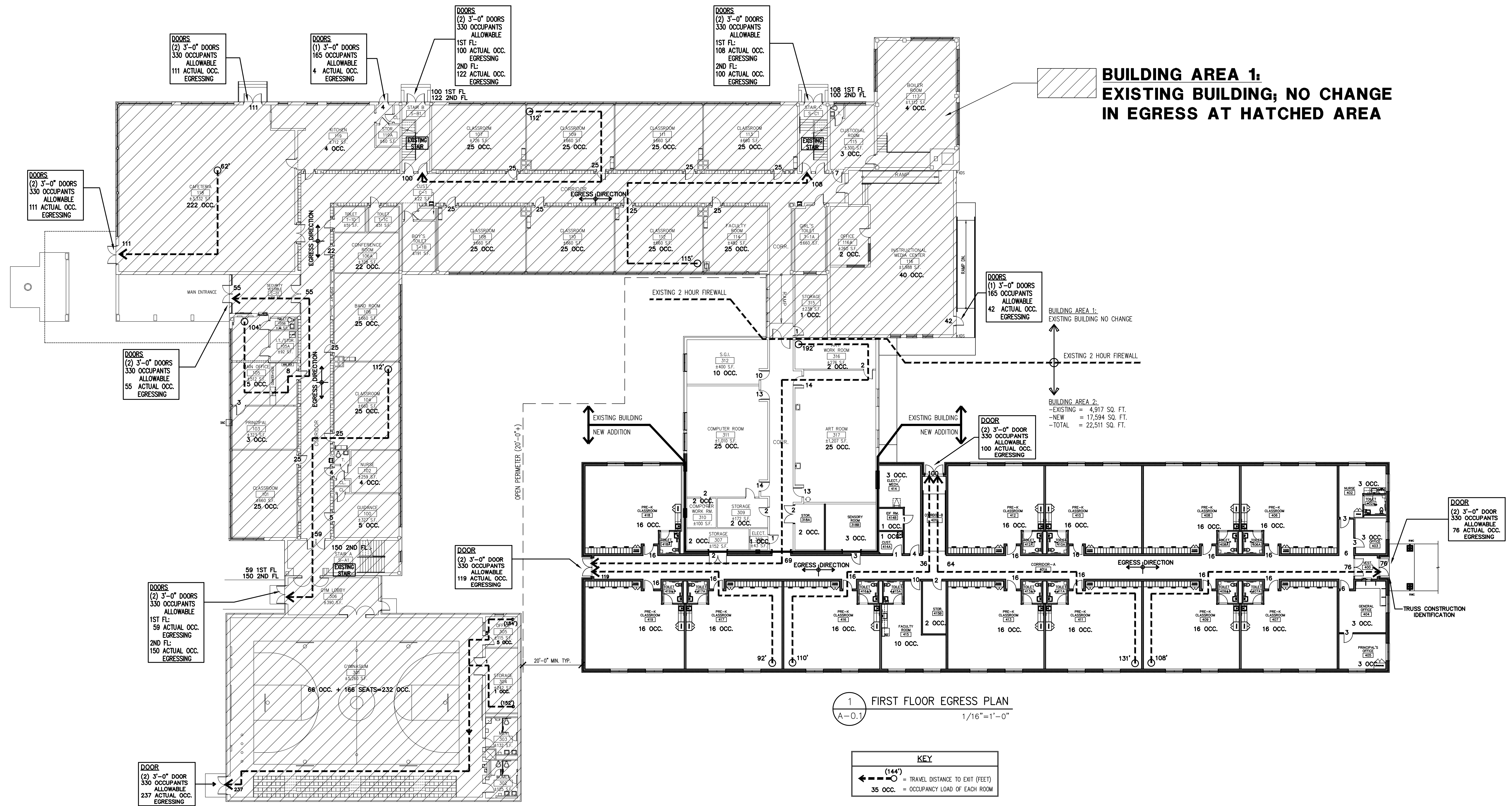
**UNDERGROUND SYSTEM**

**N.T.S.**

ISSUED FOR BID 11/11/24

<p><b>ENVIRONMENTAL RESOLUTIONS, INC.</b> 815 East Gate Drive - Suite 103 Mount Laurel, New Jersey 08054-3415 Tel. 856-235-7170 Fax 856-273-9239</p>	<p>PLAN NAME: <b>CONSTRUCTION DETAILS</b></p>	<p>NO. REVISION AND DATE</p>
	<p>PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT 100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069 <b>PAUL W. CARLETON ELEMENTARY SCHOOL</b> 2025 PRE-K CLASSROOM ADDITION 251 E MAPLE AVE TOWNSHIP OF PENNS GROVE SALEM COUNTY, NEW JERSEY 08069 BLOCK 83, LOT 1</p>	<p>SHEET NUMBER: <b>CD-4</b></p>
<p><b>RAKESH R. DARJI</b> N.J. PROFESSIONAL ENGINEER No. 24GE04289100</p>	<p>PROJECT # 31705-04   DRAWN: YP   DESIGNED: NJW   DATE: 11/11/24 FILE: 03-CONSTRUCTION DETAILS   SCALE: N.T.S.</p>	





**BUILDING AREA 1:  
EXISTING BUILDING; NO CHANGE  
IN EGRESS AT HATCHED AREA**

**BUILDING AREA 2:  
-EXISTING = 4,917 SQ. FT.  
-NEW = 17,594 SQ. FT.  
-TOTAL = 22,511 SQ. FT.**

**1 FIRST FLOOR EGRESS PLAN**  
A-0.1 1/16"=1'-0"

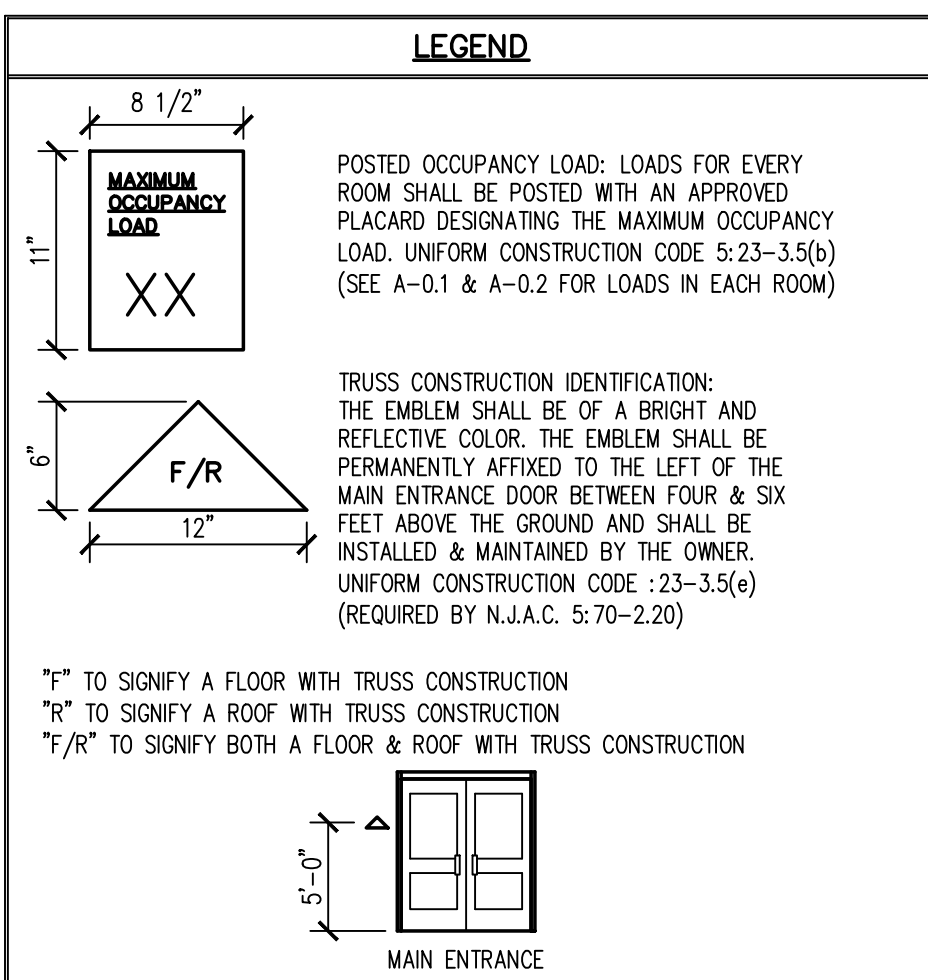
**KEY**  
---(144')---> = TRAVEL DISTANCE TO EXIT (FEET)  
---○--- = OCCUPANCY LOAD OF EACH ROOM

DESIGN CODES		
INTERNATIONAL BUILDING CODE/2021/ NEW JERSEY EDITION		
INTERNATIONAL MECHANICAL CODE/2021		
INTERNATIONAL FUEL GAS CODE/2021		
NATIONAL STANDARD PLUMBING CODE/2021		
ASHRAE 90.1-2019 ENERGY STANDARD		
NATIONAL ELECTRICAL CODE (NFPA 70)/2020		
INTERNATIONAL FIRE CODE/2021		
ELEVATOR SUBCODE: (N.A.C. 5:23-12)		
AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)		
BARRIER FREE SUBCODE/ICC/ANSI A117.1-2017		
N.J. REHAUD CODE N.J.A.C. 5:23-6; N.J.A.C. SUBCHAPTER 6		
N.J. UCC BULLETIN 00-3; PUBLIC SCHOOLS-FACILITY PLANNING STANDARDS & UCC ENHANCEMENTS		
INTERNATIONAL BUILDING CODE 2021, NEW JERSEY EDITION-TABLE 601 FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS		
CONSTRUCTION TYPE: 2B	USE GROUP: E	
BUILDING ELEMENT:	HOURS:	
PRIMARY STRUCTURAL FRAME	0	
BEARING WALLS (EXTERIOR)	0	
BEARING WALLS (INTERIOR)	0	
NONBEARING WALLS & PARTITIONS (EXTERIOR)	0	
NONBEARING WALLS & PARTITIONS (INTERIOR)	0	
FLOOR CONSTRUCTION & ASSOCIATED SECONDARY MEMBERS	0	
ROOF CONSTRUCTION & ASSOCIATED SECONDARY MEMBERS	0	
EXIT ACCESS CORRIDOR (WITHOUT AUTOMATIC SPRINKLER SYSTEM)	1	

NEW 1 STORY BUILDING - 2B CONSTRUCTION TYPE USE GROUP E - WITHOUT AUTOMATIC SPRINKLER SYSTEM	
INTERNATIONAL BUILDING CODE 2021, NEW JERSEY EDITION:	
TABLE 504.3:	ALLOWABLE BUILDING HEIGHT IN FEET ABOVE GRADE PLANE: 55'-0"
TABLE 504.4:	ALLOWABLE NUMBER OF STORES ABOVE GRADE PLANE: 2
TABLE 506.2:	ALLOWABLE AREA FACTOR IN SQUARE FEET: 14,500
EXISTING BUILDING AREA 1 (NO CHANGE)	
EXISTING BUILDING AREA:	31,800 SQ.FT.
FIRST FLOOR:	16,600 SQ.FT.
SECOND FLOOR:	15,200 SQ.FT.
TOTAL AREA:	48,200 SQ.FT.

BUILDING AREA 2 (BUILDING AREA & VOLUME)	
FLOOR AREA:	4,917 SQ.FT.
EXISTING FLOOR AREA:	17,594 SQ. FT.
NEW FLOOR AREA:	12,594 SQ. FT.
TOTAL FLOOR AREA:	22,511 SQ.FT.
ALLOWABLE AREA	14,500 SQ. FT.
TABLE 506.2:	FRONTAGE INCREASE:
	9,904 SQ. FT.
TOTAL ALLOWABLE:	24,404 SQ. FT.
	22,511 SQ.FT. < 24,404...O.K.
FRONTAGE INCREASE CALCULATIONS:	
TOTAL PERIMETER:	762'
OPEN PERIMETER:	725'
F = 723	
P = 762	
W = (L1 X W1) + (L2 X W2) / F	
W = (20x48) + (30x675) / 723	
W = 29.33	
H = [F/P - 0.25] W/30	
H = [(723/762) - 0.25] 29.33/30	
H = .883	
ALLOWABLE AREA = 14,500 + (14,500 X .883)	
	14,500 + 3,804 = 24,404 SQ. FT.
ACTUAL BUILDING HEIGHT:	ONE STORY 16'-0" < 55'-0"...O.K.
BUILDING AREA - 2 VOLUME:	300,300 CU.FT.
THE NEW ADDITION WITH EXISTING BUILDING AREA SHALL BE SEPARATED FROM THE EXISTING SCHOOL BUILDING WITH AN EXISTING 2 HOUR FIREWALL PER IBC SECTION 706 AND IS CONSIDERED A SEPARATE BUILDING.	

MEANS OF EGRESS/OCCUPANT LOAD (IBC 2021, NEW JERSEY EDITION, CHAPTER 10 & NJDOE 6:22)	
EXIT ACCESS TRAVEL DISTANCE (TABLE 1017.2)	
200 FT. MAXIMUM (WITHOUT AUTOMATIC SPRINKLER SYSTEM)	
MEANS OF EGRESS SIZING (SECTION 1005):	
DOORS/RAMP/CORRIDORS (1005.3.2) = 0.20 in. PER OCC.	
SINGLE 36" DOOR = 165 OCCUPANTS	
SINGLE 42" DOOR = 195 OCCUPANTS	
SINGLE 48" DOOR = 225 OCCUPANTS	
DOUBLE 36" DOORS = 330 OCCUPANTS	



**GARRISON ARCHITECTS**  
713 CREEK ROAD, BELLMAWR, NEW JERSEY 08011 (609) 396-0200

**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069

**PAUL W. CARLETON ELEMENTARY SCHOOL**  
2025 PRE-K CLASSROOM ADDITION

261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08069

**REVISIONS**

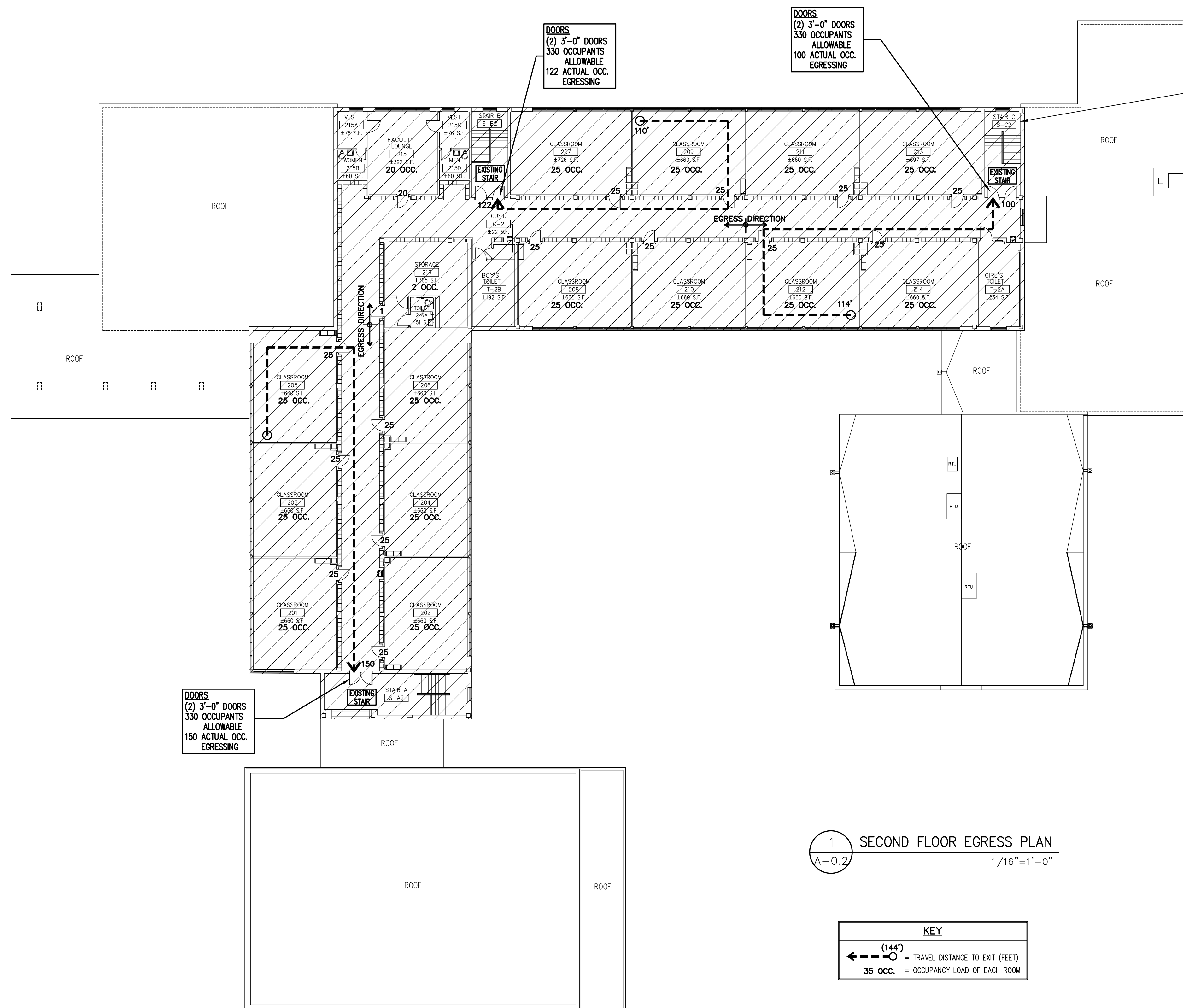
a. \_\_\_\_\_  
b. \_\_\_\_\_  
c. \_\_\_\_\_

Project No. 23-42  
Date: 11-11-24  
Scale: N.T.S.

**FIRST FLOOR EGRESS PLAN**

**A-0.1**





**REVISIONS**

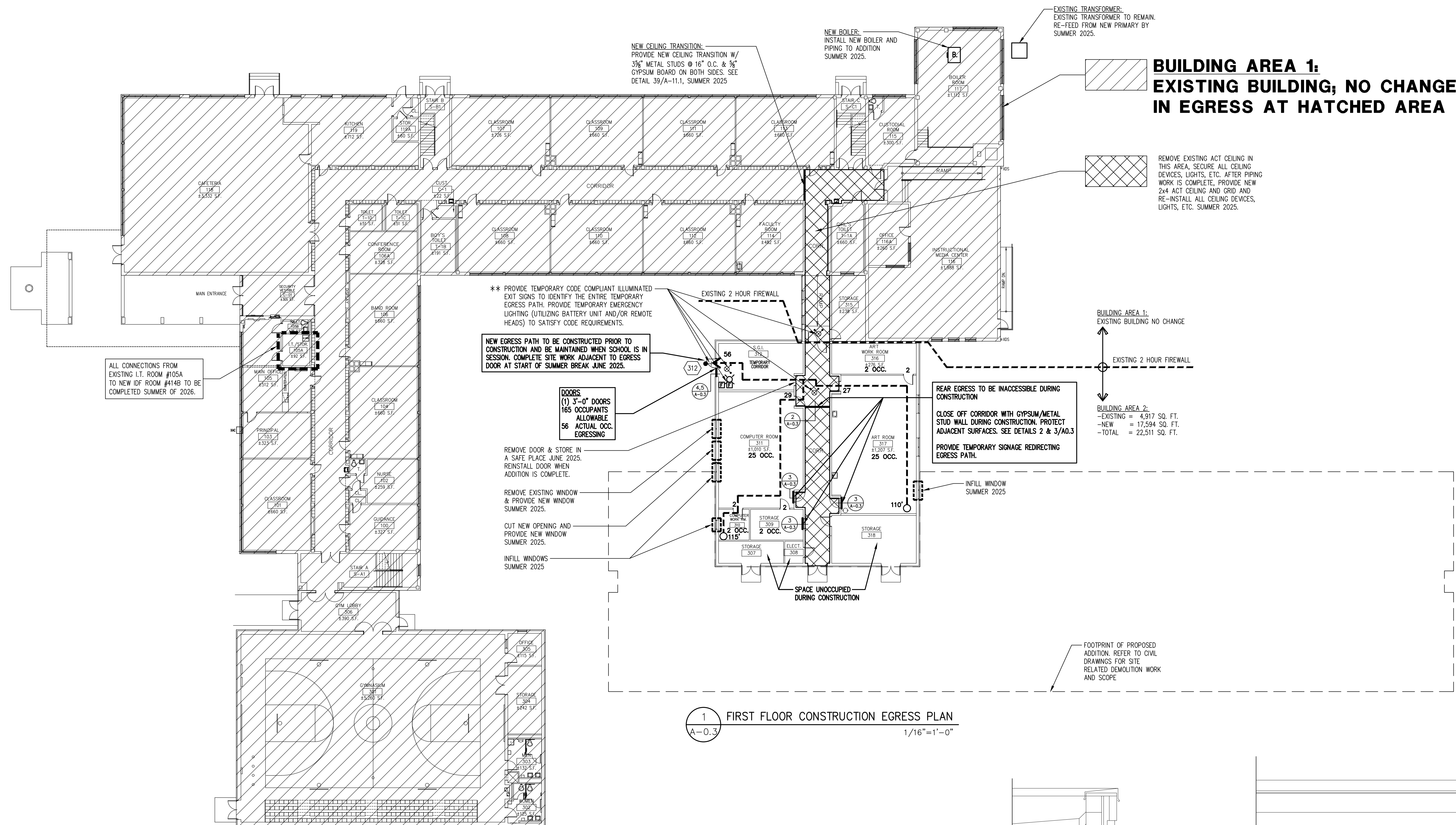
a.	
b.	
c.	

Project No. 23-42  
Date: 11-11-24  
Scale: N.T.S.

**SECOND FLOOR EGRESS PLAN**  
**A-0.2**

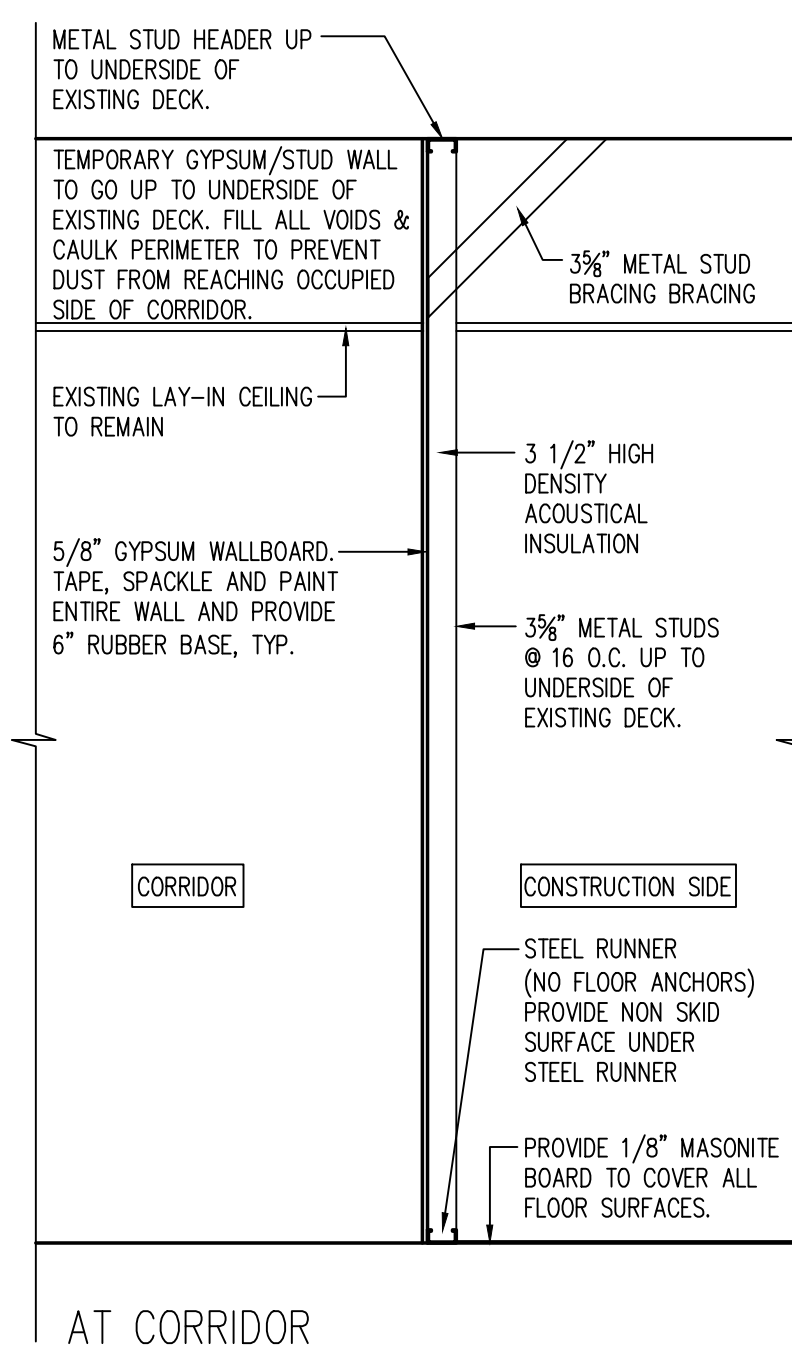
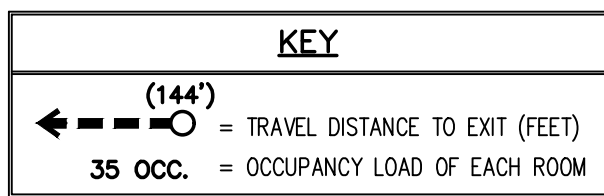
THIS DRAWING IS THE PROPERTY OF GARRISON ARCHITECTS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. NO PART OF THIS DRAWING IS TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION AND CONSENT OF GARRISON ARCHITECTS. GARRISON ARCHITECTS SHALL BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DRAWING. GARRISON ARCHITECTS SHALL NOT BE RESPONSIBLE FOR ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.



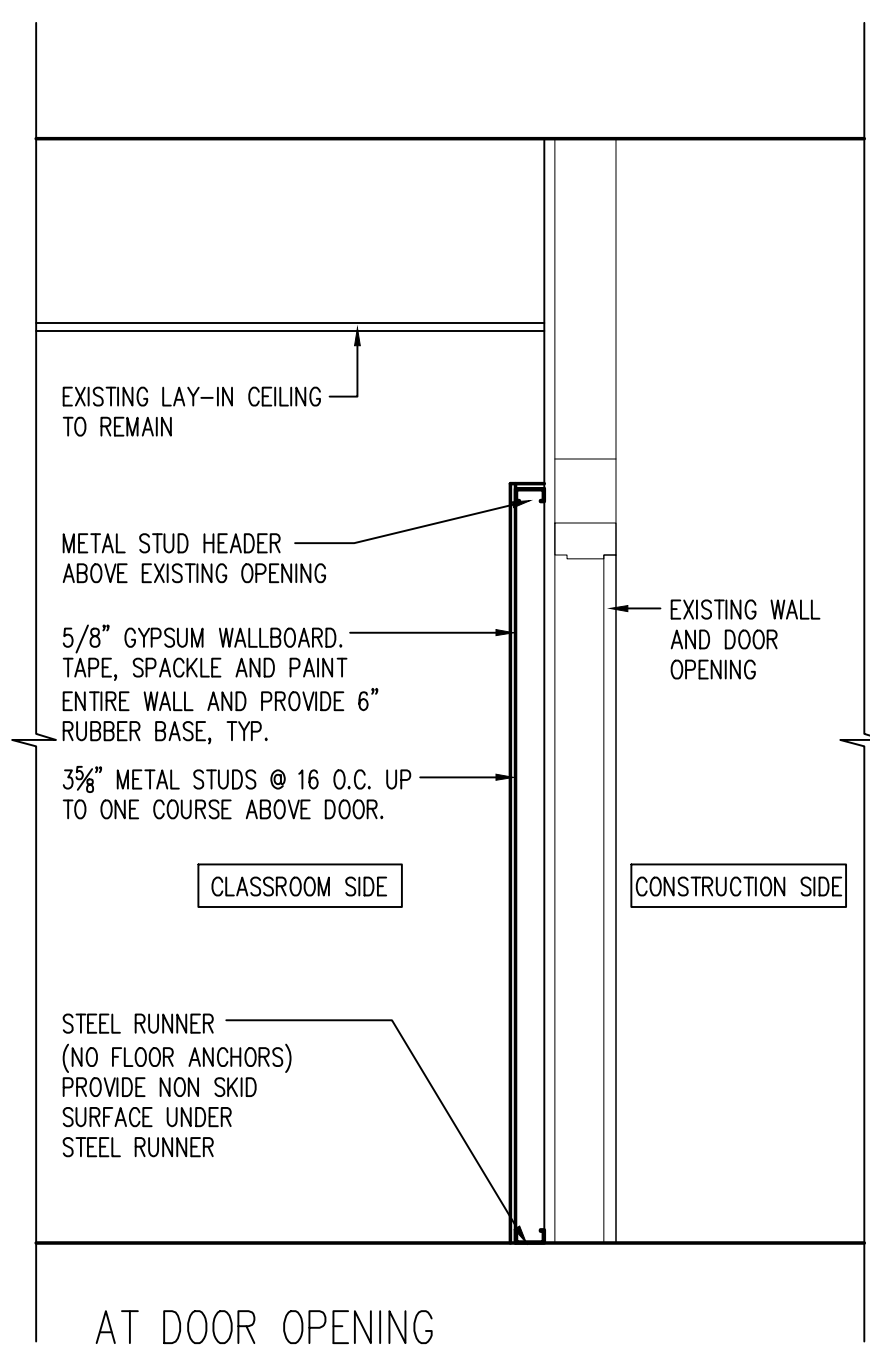


1 FIRST FLOOR CONSTRUCTION EGRESS PLAN  
A-0.3 1/16"=1'-0"

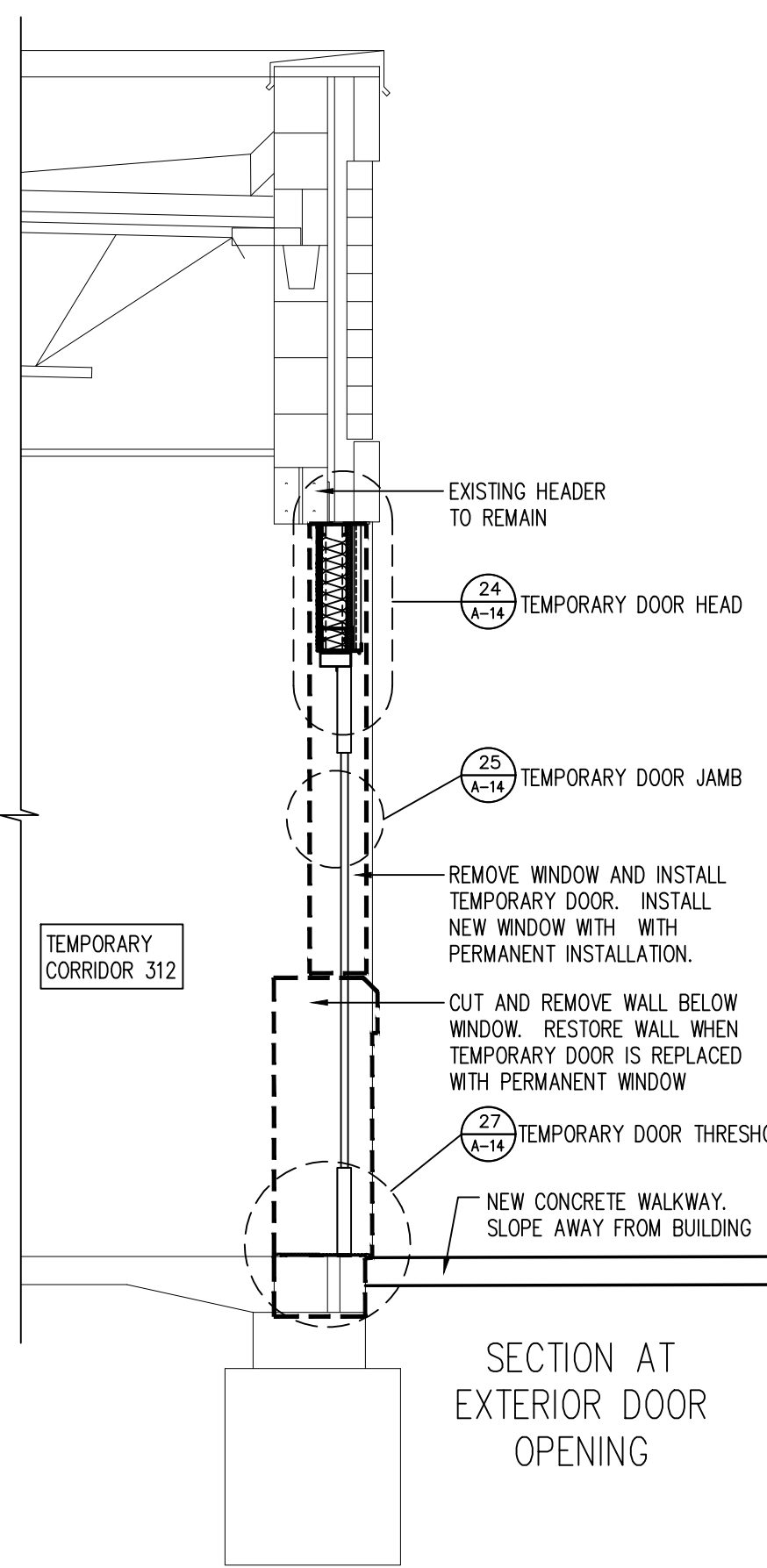
- \*\*SYMBOLS:**
- FIRE ALARM MANUAL PULL STATION [F] METAL, NON-CODED, DOUBLE ACTION TYPE, FLUSH MOUNTED, ADDRESSABLE TYPE. PROVIDE STOPPER II PROTECTIVE GUARD
  - FIRE ALARM AUDIO/VISUAL WALL MOUNTED SPEAKER/STROBE, ADA COMPLIANT TYPE PROVIDING ADA COMPLIANT COVERAGE, WITH SYNCHRONIZED TYPE STROBE, SEMI-FLUSH MOUNTED
  - REMOTE EMERGENCY LIGHTING HEAD, WALL MOUNTED, TYPE ("REM") UNLESS INDICATED OTHERWISE) AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE
  - COMBINATION EXIT/EMERGENCY UNIT, TYPE ("EX/EM") UNLESS INDICATED OTHERWISE) AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE, WITH INTEGRAL BATTERY BACKUP



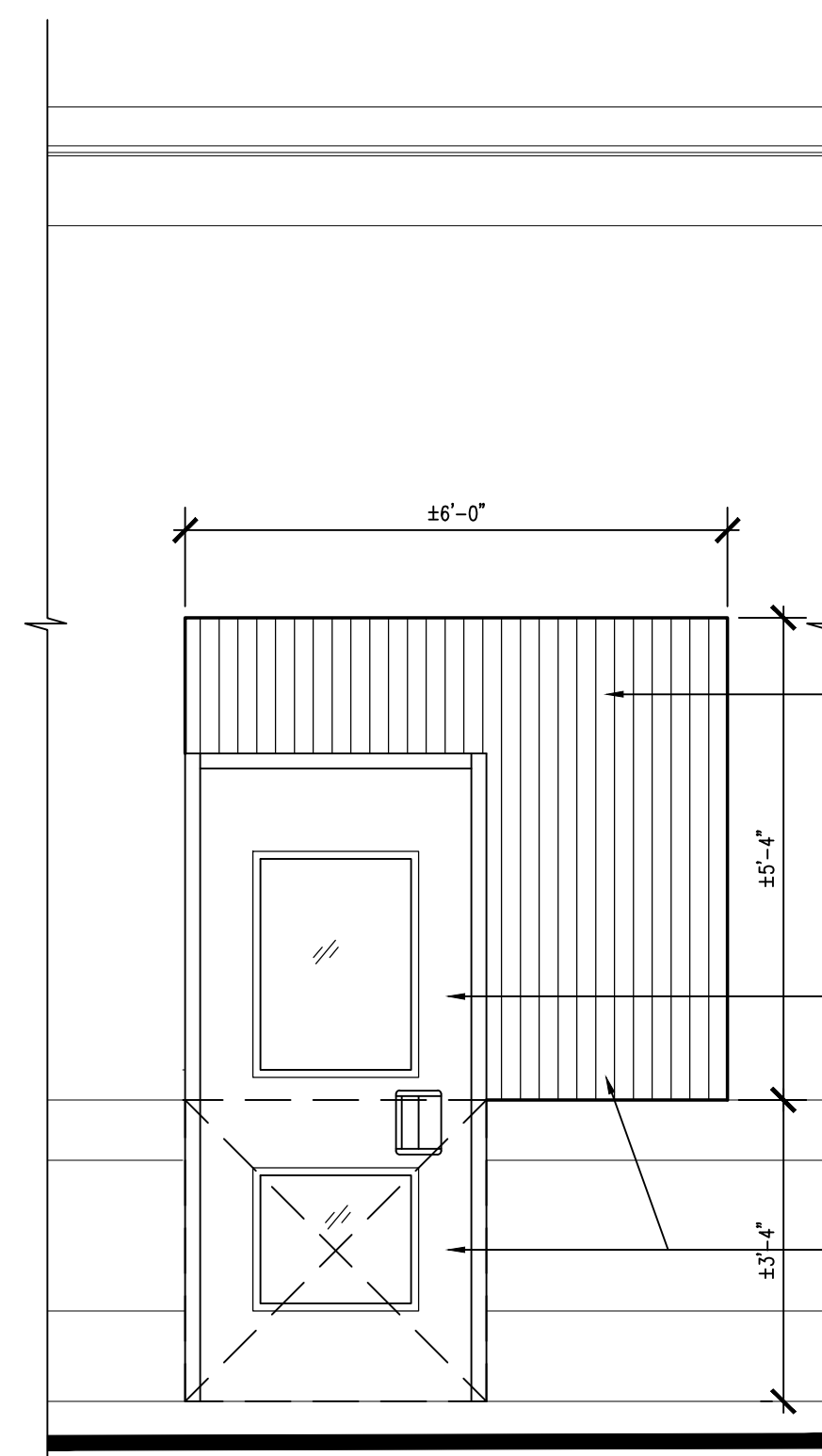
2 SECTION AT CORRIDOR  
A-0.3 1/2"=1'-0"



3 SECTION AT DOOR  
A-0.3 1/2"=1'-0"



4 SECTION AT TEMPORARY DOOR  
A-0.3 1/2"=1'-0"



5 ELEVATION AT TEMPORARY DOOR  
A-0.3 1/2"=1'-0"

- TEMPORARY WALL INFILL: 3-5/8" METAL STUD WALL WITH 3-5/8" BATT INSULATION WITH 3/8" GWB ON INTERIOR FACE AND 3/8" DENSGLASS SHEATHING ON EXTERIOR SIDE. PROVIDE ALUMINUM SILING ON EXTERIOR FACE. (SEE DETAILS 24, 25, 26 & 27 ON SHEET A-14)
- TEMPORARY EGRESS DOOR: REMOVE WINDOW. PROVIDE NEW TEMPORARY DOOR AND WALL INFILL. WHEN ADDITION IS FINISH REMOVE DOOR, INFILL WALL TO MATCH ADJACENT WALLS AND INSTALL NEW WINDOW.
- REMOVE EXISTING WINDOW SYSTEM & TURN OVER TO OWNER. SAW CUT OPENING FROM SILL DOWN TO FLOOR FOR NEW DOOR & FRAME. INFILL REMAINDER OF OPENING WITH NEW WALL SYSTEM.

**REVISIONS**

a.	
b.	
c.	

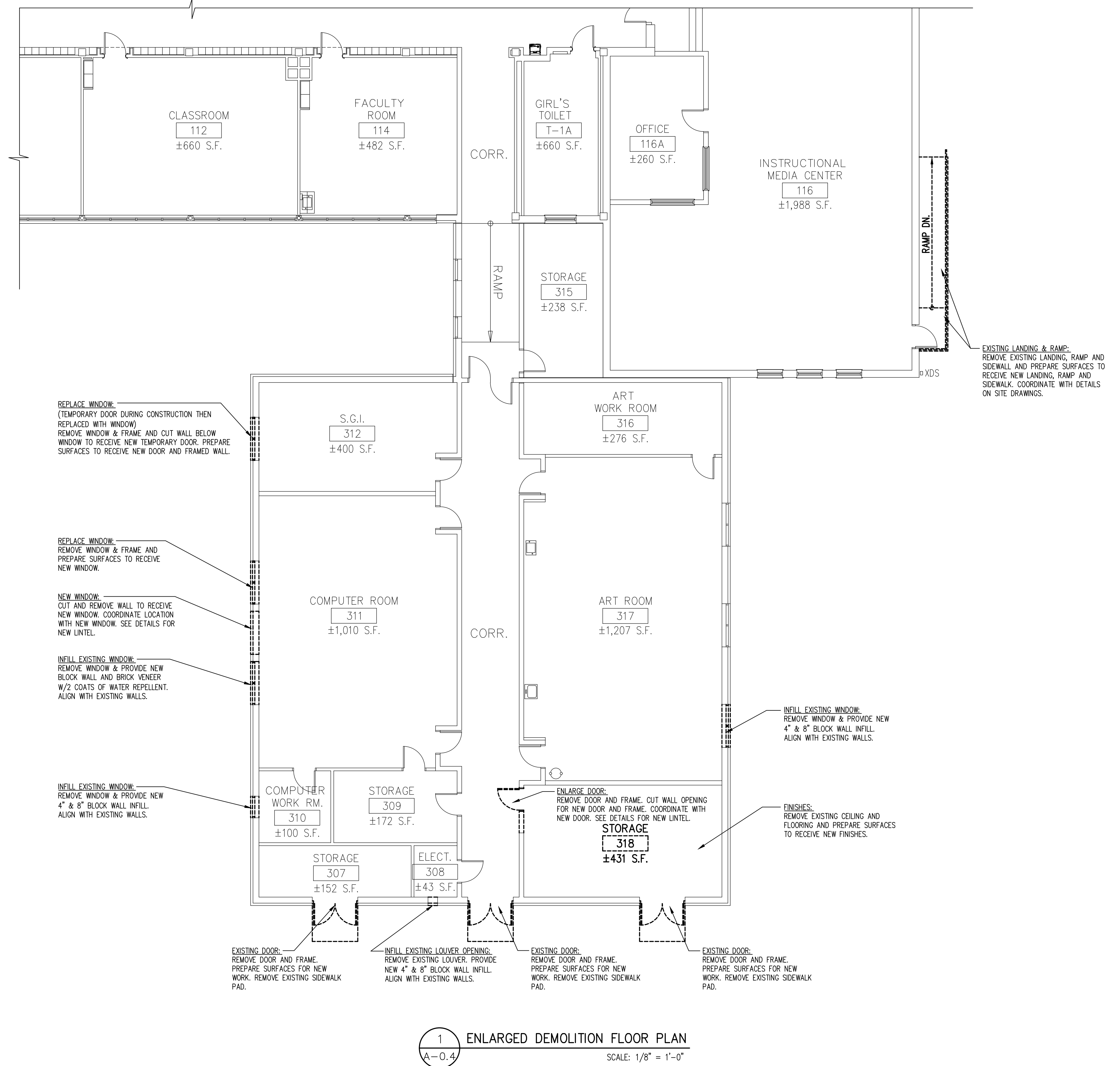
Project No. 23-42  
Date: 11-11-24  
Scale: N.T.S.

**CONSTRUCTION EGRESS & PHASING PLANS**

**A-0.3**

GARRISON ARCHITECTS ASSUMES NO LIABILITY FOR CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE AND FEDERAL AUTHORITIES.





1 ENLARGED DEMOLITION FLOOR PLAN  
A-0.4 SCALE: 1/8" = 1'-0"

**SAFETY:**  
THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AND ENFORCE ALL SAFETY ON-SITE AND CONFORM WITH ALL OSHA REGULATIONS, CODES AND STANDARDS.  
THE OWNER, ARCHITECT AND/OR CONSTRUCTION MANAGER HAVE NO RESPONSIBILITY TO PROVIDE FOR THE SAFETY OR PROTECTION OF THE TRADES. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC EMERGENCY ACTION SAFETY PLAN AND REVIEW THIS WITH ALL ON-SITE PERSONNEL.  
THE CONTRACTOR SHALL CONDUCT PERIODIC (AS NEEDED, AT LEAST ONCE A WEEK) SITE SAFETY INSPECTIONS AND ISSUE A REPORT ON THE CONDITIONS. THE CONTRACTOR SHALL MAINTAIN A FIRST AID KIT ON-SITE.

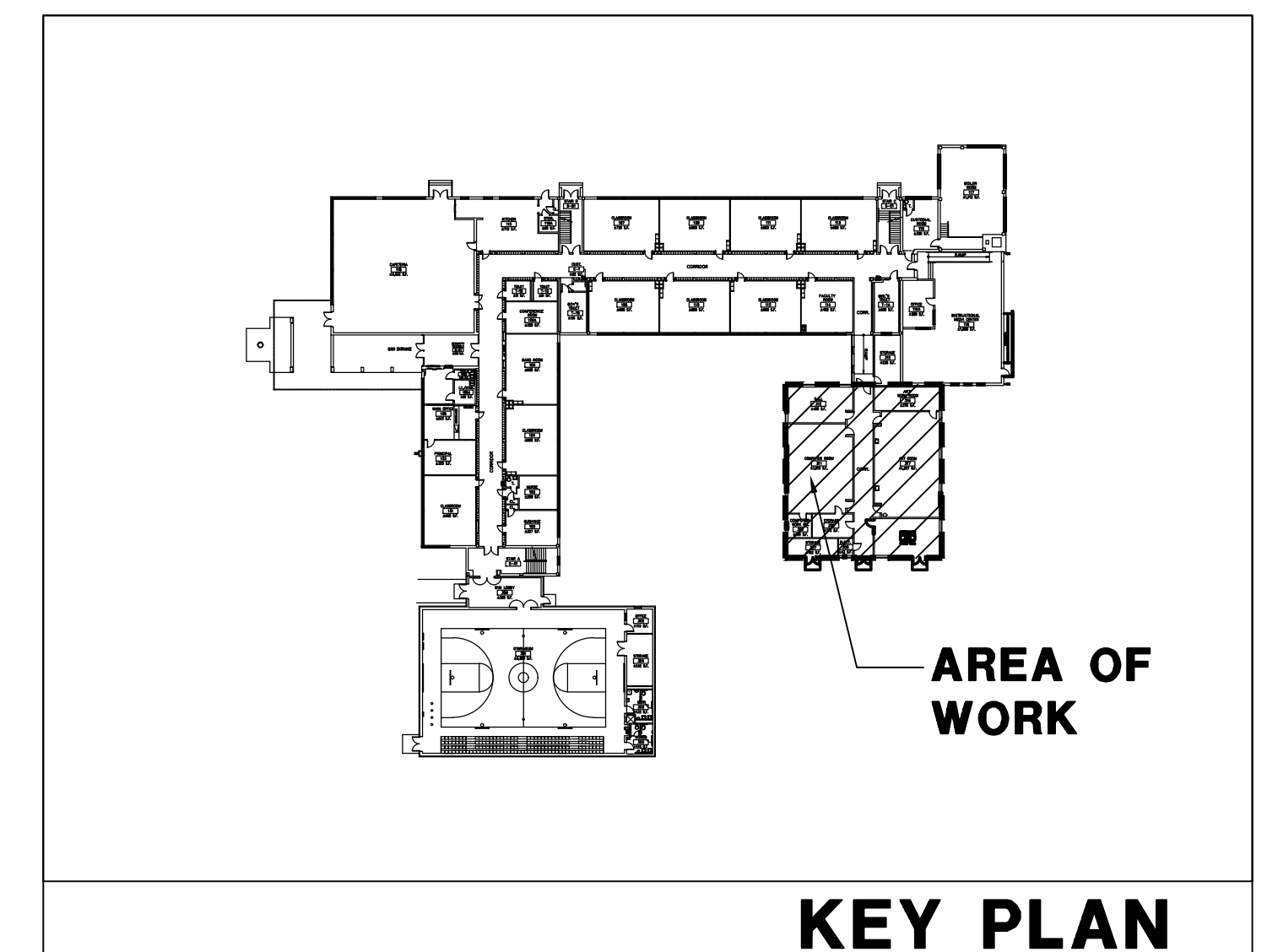
SEE MECHANICAL, PLUMBING & ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION NOTES & DETAILS.

**NOTE:**  
AFTER THE REMOVAL OF ANY WALL MOUNTED ITEMS IN A RENOVATED SPACE, IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO FILL ANY VOIDS OR HOLES IN THE WALLS TO A SMOOTH & LEVEL FINISH w/MATERIALS TO MATCH ADJACENT. IF ADJACENT AREA IS MASONRY, SCORE PATCHED AREA TO MATCH EXISTING COURSEING. SEE ROOM FINISH SCHEDULE FOR FINISHES.

**NOTE:**  
WHEN THE REMOVAL OF ANY HVAC, PLUMBING AND/OR ELECTRICAL EQUIPMENT OCCURS IN AN EXISTING MASONRY WALL, INTERIOR OR EXTERIOR, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO INFILL OPENING WITH MATERIALS THAT MATCH ADJACENT OPENINGS. (COORDINATE ALL OPENINGS w/HVAC DRAWINGS PRIOR TO INFILL.)

**NOTE:**  
DURING CONSTRUCTION/RENOVATION, IF ADDITIONAL MATERIALS ARE DETECTED AND ASSUMED TO BE ACM, PCB OR LEAD AND HAVE NOT BEEN PREVIOUSLY IDENTIFIED IN SPECIFICATION SECTION 17000, THE CONTRACTOR SHALL NOTIFY THE OWNER TO HAVE THE OWNER'S ASBESTOS CONSULTANT TEST AND VERIFY THE EXTENT OF THE HAZARDOUS MATERIAL. ANY HAZARDOUS MATERIALS DISCOVERED NOT PREVIOUSLY IDENTIFIED IN SPECIFICATION SECTION 17000, SHALL BE REMOVED BY THE ASBESTOS ABATEMENT CONTRACTOR.

- GENERAL NOTES:**
- ALL DIMENSIONS OR SCALES SHOWN AS PLUS OR MINUS (±) ARE FOR INFORMATIONAL PURPOSES AND SHALL NOT BE TAKEN AS EXACT. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND OPENINGS.
  - THE OWNER AND ARCHITECT ASSUME NO RESPONSIBILITY FOR THE EXISTING ACTUAL CONDITIONS THAT THE CONTRACTOR MAY ENCOUNTER DURING THE COURSE OF THE WORK.
  - EXISTING FLOOR/FLOOR FINISH, WALLS, CEILING & LIGHTING TO REMAIN. PROTECT DURING RENOVATIONS / CONSTRUCTION.
  - PATCH HOLES IN WALLS CEILING & ROOF WITH MATERIALS TO MATCH ADJACENT SURFACES.
  - ALL ELECTRICAL WORK BY LICENSED ELECTRICAL CONTRACTOR AND TO COMPLY WITH THE LATEST NEC ELECTRICAL CODE.
  - ELECTRICAL CONTRACTOR TO DISCONNECT, CAP AND REMOVE OR RELOCATE LIGHT FIXTURES, EMERGENCY POWER SHUT OFFS, ELECTRICAL PANELS, ETC. AND ALL RELATED APPURTENANCES IN A CODE APPROVED MANNER. RELOCATE & RECONNECT ELECTRICAL ITEMS PER OWNER'S DIRECTION. THE RELOCATION TO INCLUDE ANY RE-WIRING, POWER AND/OR SWITCHES.
  - EXISTING CEILING SYSTEM TO REMAIN. WHERE WORK IS TO BE DONE ABOVE EXISTING LAY-IN CEILING SYSTEM, IT IS THE SOLE RESPONSIBILITY OF THAT DESIGNATED CONTRACTOR TO REMOVE AND/OR CUT NECESSARY CEILING TILES AND GRID REQUIRED FOR INSTALLATION. THEN PATCH GRID AND REINSTALL CEILING TILES AFTER INSTALLATION. RESTORE ROOM TO PREVIOUS CONDITION PRIOR TO RENOVATION.
  - DURING CONSTRUCTION, CLEAN AND PROTECT WORK IN PROGRESS. PROMPTLY REMOVE ANY DEBRIS FROM THE SITE. NO TRASH ACCUMULATION IS PERMITTED. TRANSPORT AND LEGALLY DISPOSE OF MATERIAL OFF SITE.
  - COORDINATE WITH OWNER ALL DEMOLITION WORK PRIOR TO CONSTRUCTION TO DETERMINE WHICH ITEMS TO SALVAGE AND TO GIVE TO OWNER.



ISSUED FOR BID: 11/11/2024

**REVISIONS**

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c.	

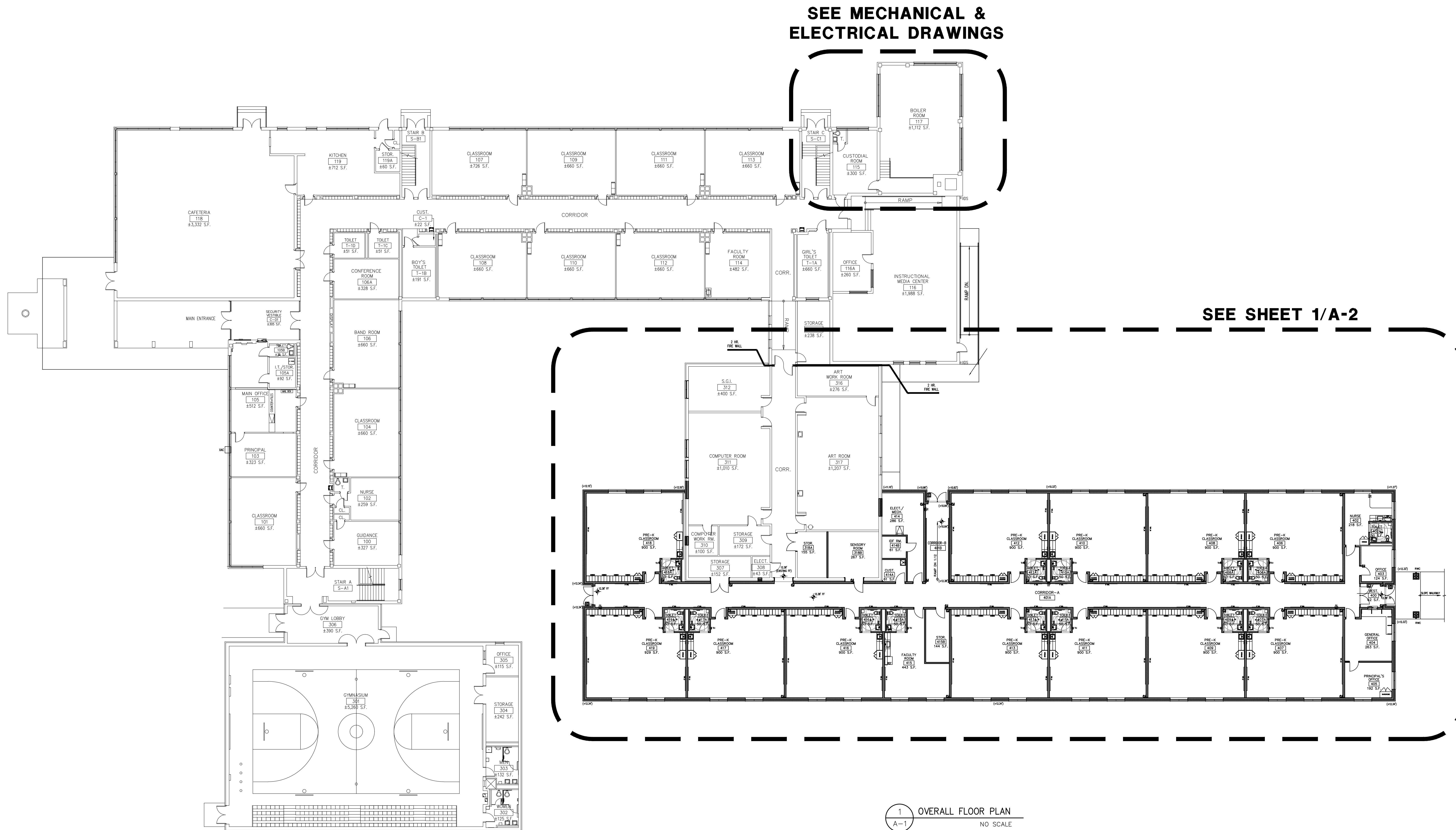
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Date: 11-11-24  
Scale: AS NOTED

**DEMOLITION PLAN**  
SUMMER 2025

**A-0.4**

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SEE MECHANICAL & ELECTRICAL DRAWINGS

SEE SHEET 1/A-2

1 OVERALL FLOOR PLAN  
A-1 NO SCALE

**REVISIONS**

a.	
b.	
c.	

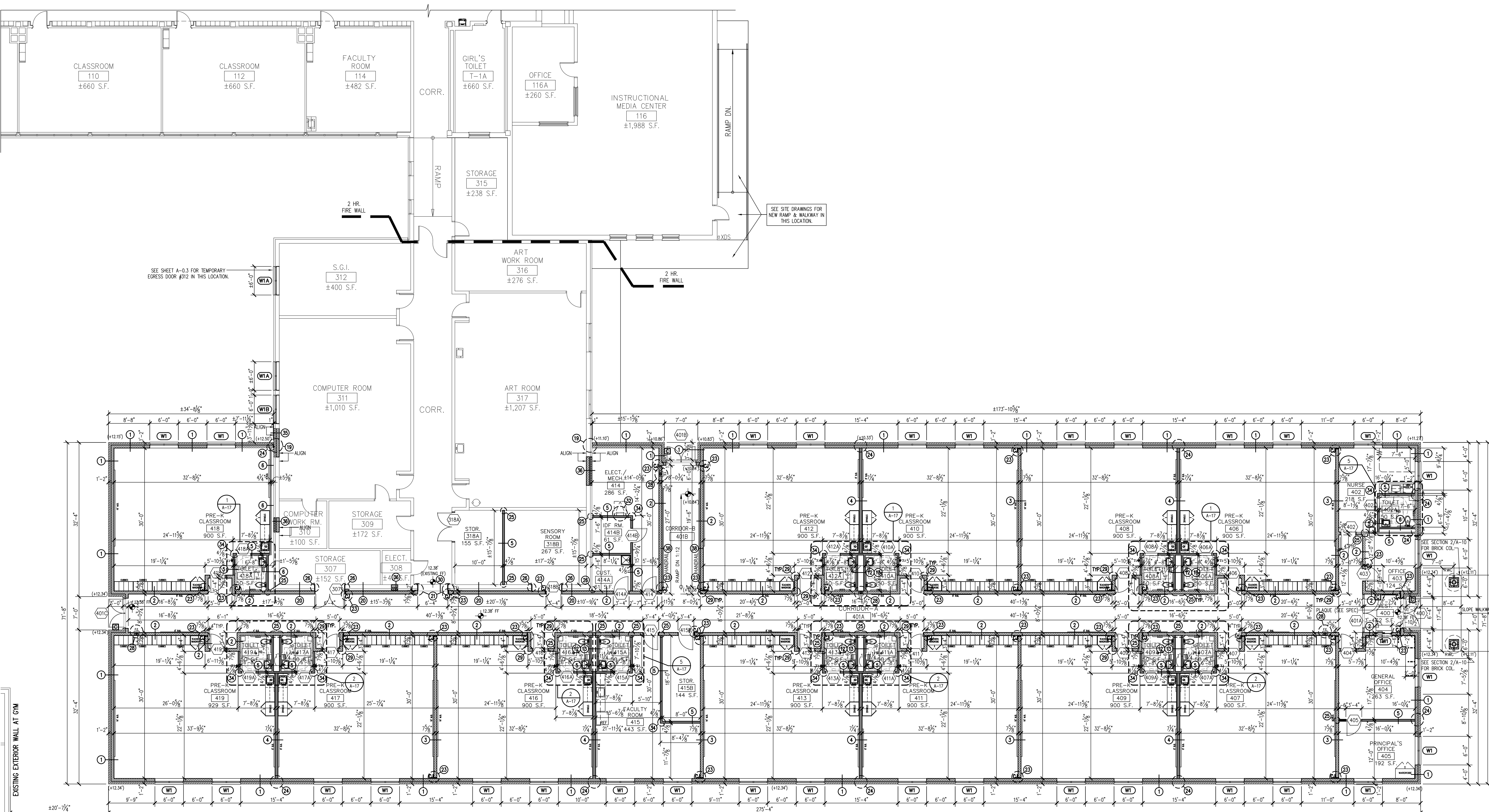
Project No. 23-42  
Date: 11-11-24  
Scale: N.T.S.

**OVERALL FLOOR PLAN**

**A-1**

THIS DRAWING IS THE PROPERTY OF GARRISON ARCHITECTS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. NO PART OF THIS DRAWING IS TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF GARRISON ARCHITECTS. GARRISON ARCHITECTS SHALL BE RESPONSIBLE FOR ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.



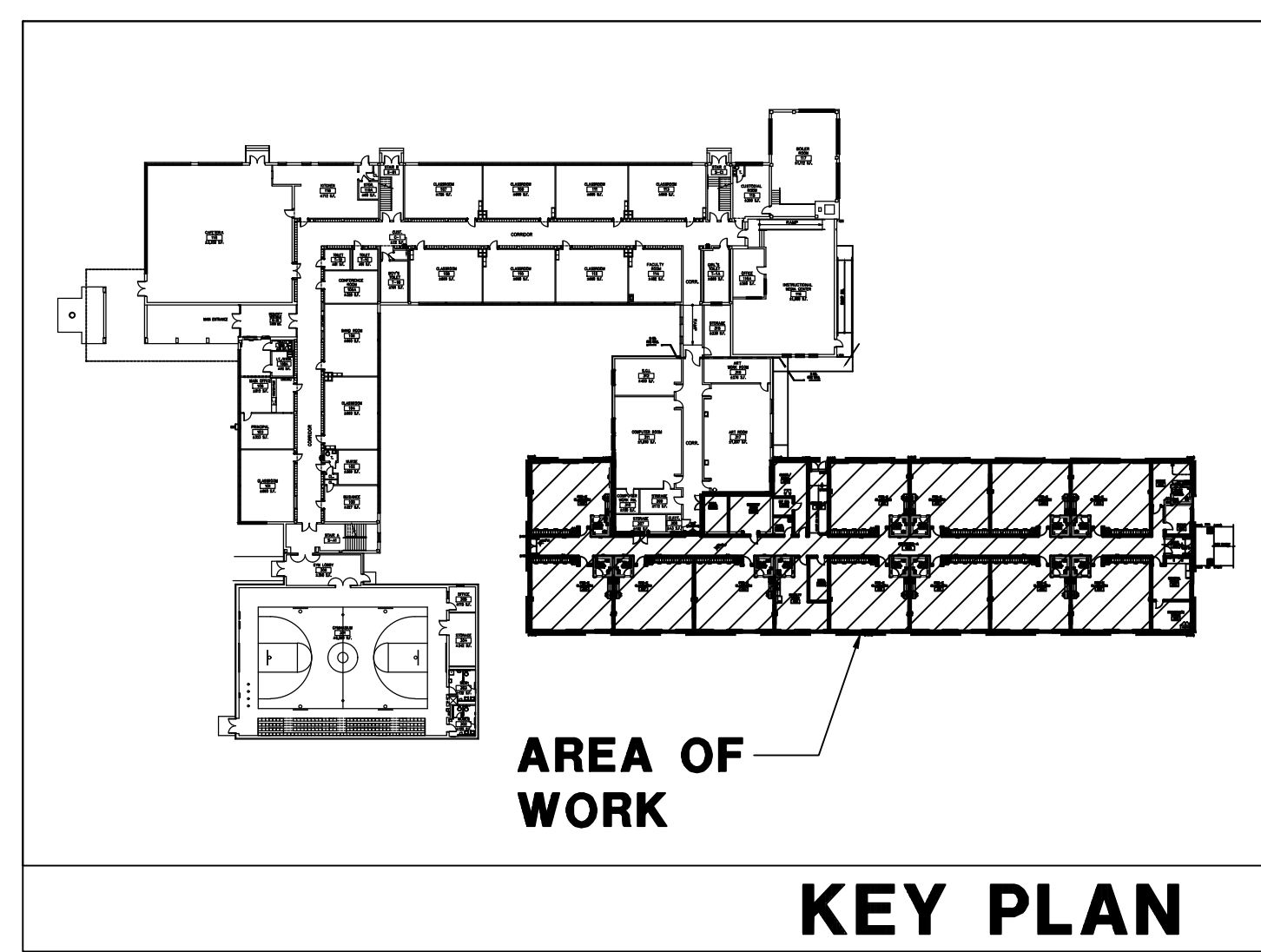


1 ENLARGED PROPOSED FLOOR PLAN  
 A-2 SCALE: 1/8" = 1'-0"

**NEW WORK FLOOR PLAN LEGEND**

- METAL STUD PARTITION
- MASONRY WALL & PARTITION
- BRICK VENEER
- ⊕ FOR WALL TYPES SEE DWGS. A-11 & A-11.1
- ⊕ FOR DOOR TYPES & DETAILS SEE DWGS. A-13 & A-14
- ⊕ FOR EXTERIOR WINDOW TYPES & DETAILS SEE DWG. A-15
- ⊕ FOR TRANSACTION WINDOW TYPES & DETAILS SEE DWG. A-15.1
- ⊕ DESIGNATES DOORS WITH CARD READER ACCESS. (SEE ELECT. DWGS. & HARDWARE SCHED.)
- F.E. FIRE EXTINGUISHER (SEE 28/A-11)
- C.J. INTERIOR CONTROL JOINT LOCATIONS (SEE 23/A-11)  
 \* SEE ELEVATIONS FOR EXTERIOR CONTROL JOINT LOCATIONS

FOR BUILDING SECTIONS, WALL SECTIONS & DETAILS SEE SHEETS A-7 THRU A-10.1



**REVISIONS**

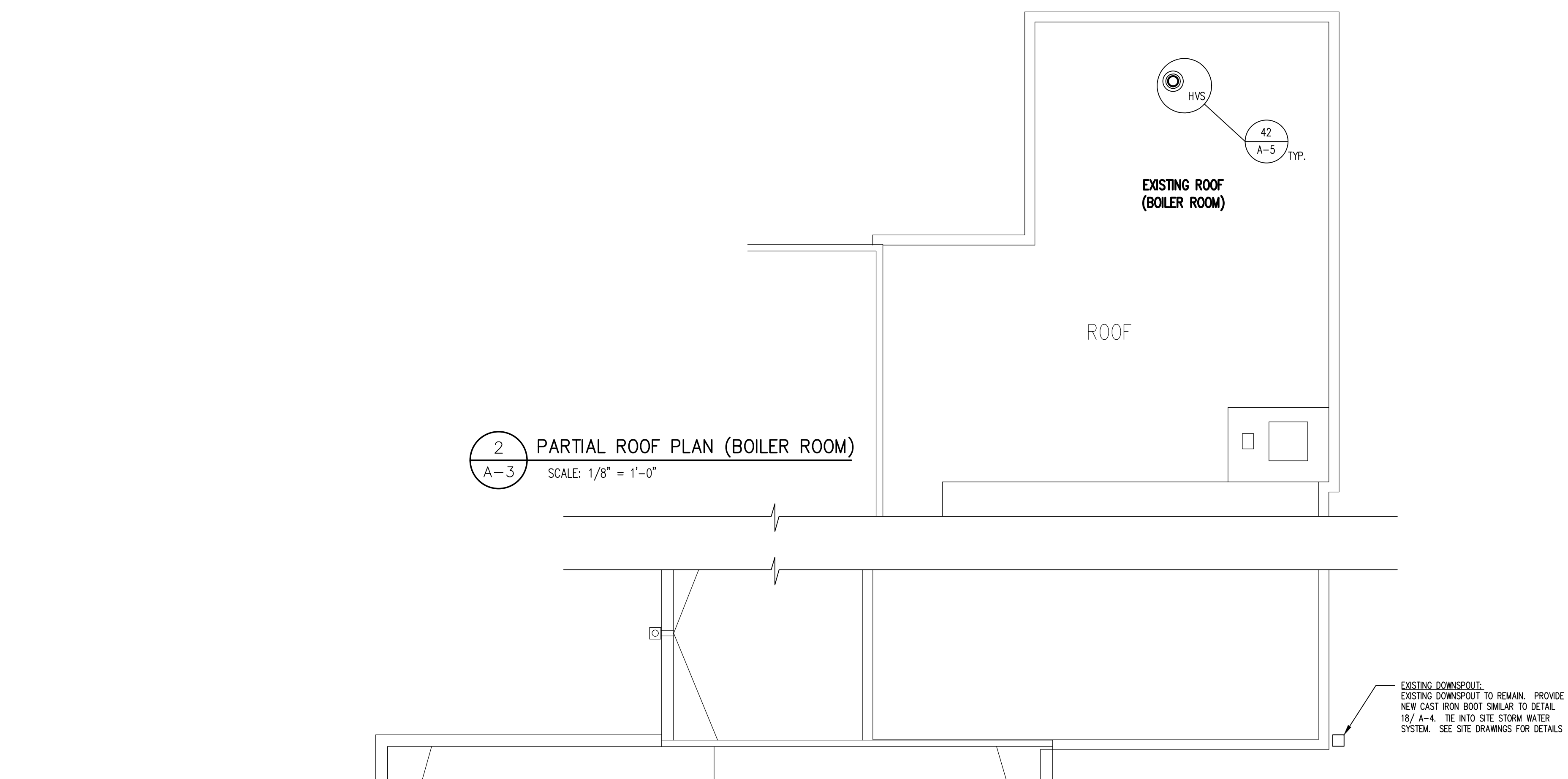
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Project No. 23-42  
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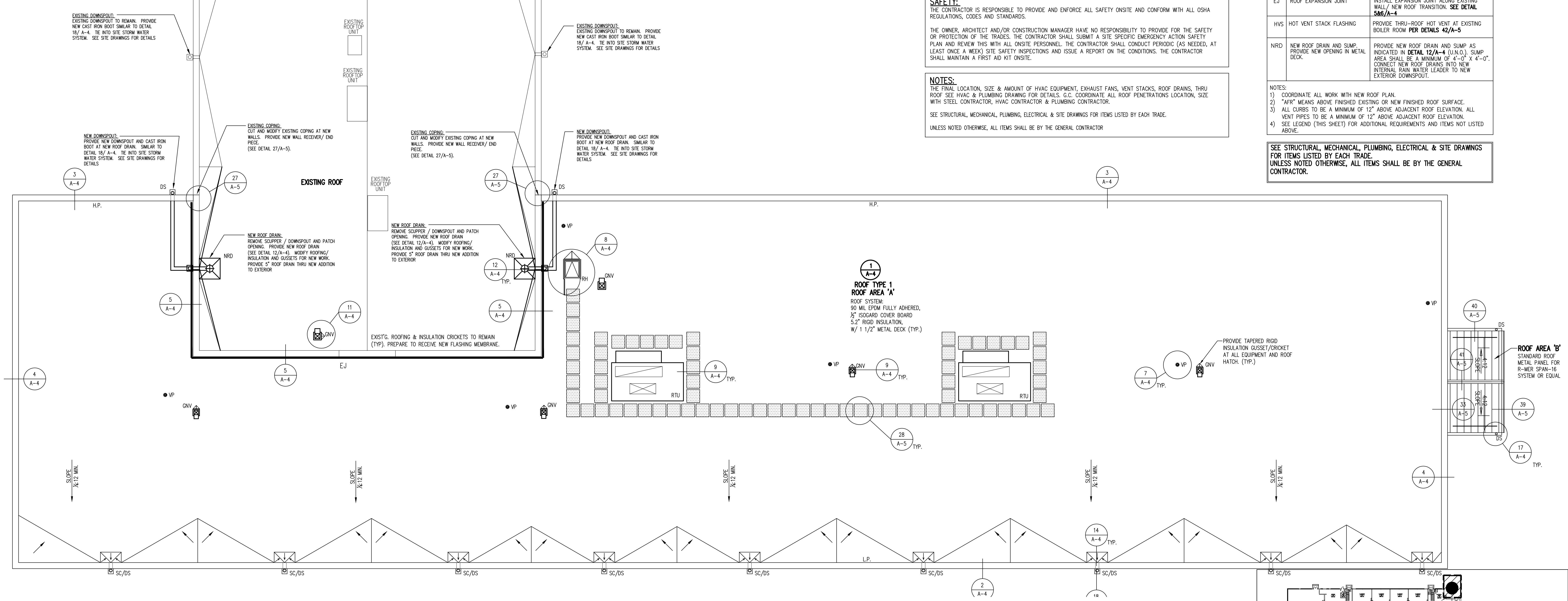
ENLARGED PROPOSED PLAN

**A-2**



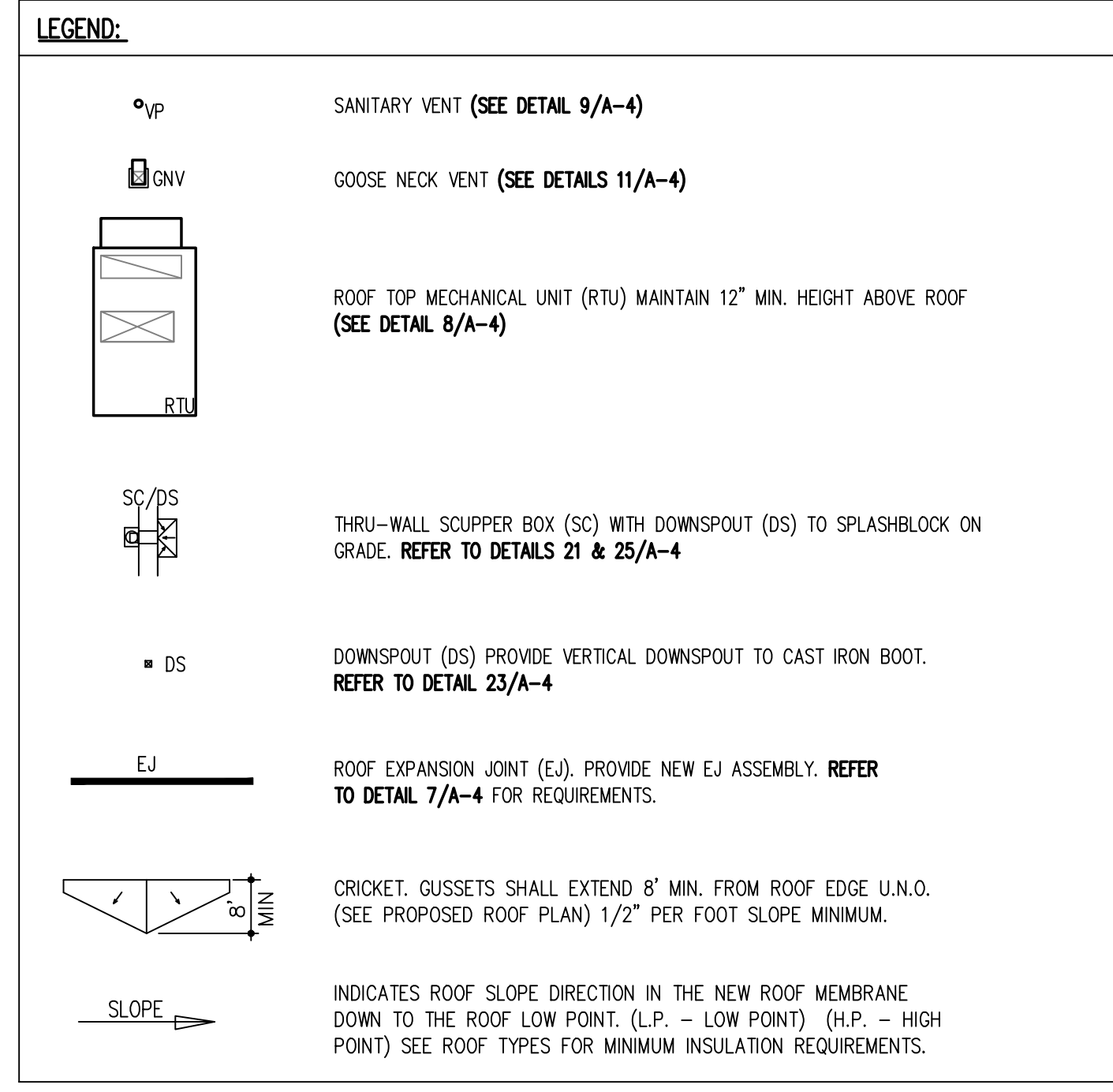


2 PARTIAL ROOF PLAN (BOILER ROOM)  
A-3 SCALE: 1/8" = 1'-0"



1 PARTIAL ROOF PLAN  
A-3 SCALE: 1/8" = 1'-0"

ROOF AREA	ROOF SYSTEM	COVERBOARD	INSULATION (POLYISOCYANURATE)	ATTACHMENT	ROOF DECK	AREA
A	NEW 90 MIL NON-REINFORCED EPDM MEMBRANE FULLY ADHERED	1/2"	(2) LAYER 2.6" UNIFORM THICKNESS	SEE SPECS	SLOPED METAL DECK	17,662± SF
B	METAL PANEL: R-MER SPAN-16 SYSTEM OR EQUAL			SEE SPECS	SLOPED METAL DECK	210± SF



**SAFETY:**  
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**NOTES:**  
THE FINAL LOCATION, SIZE & AMOUNT OF HVAC EQUIPMENT, EXHAUST FANS, VENT STACKS, ROOF DRAINS, THRU ROOF SEE HVAC & PLUMBING DRAWING FOR DETAILS. C.C. COORDINATE ALL ROOF PENETRATIONS LOCATION, SIZE WITH STEEL CONTRACTOR, HVAC CONTRACTOR & PLUMBING CONTRACTOR.

SEE STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL & SITE DRAWINGS FOR ITEMS LISTED BY EACH TRADE.

UNLESS NOTED OTHERWISE, ALL ITEMS SHALL BE BY THE GENERAL CONTRACTOR

**ROOF SCOPING NOTES:**  
ROOF DETAILS AS SHOWN ARE DIAGRAMATIC AND SHOW INTENT. CONTRACTOR MUST FIELD VERIFY DIMENSIONS AND CONDITIONS PRIOR TO SUBMITTING SHOP DRAWINGS.

**ROOF 'A' AREAS (NEW CONSTRUCTION):**  
INSTALL MECHANICALLY FASTENED MINIMUM 5.2", R-30 POLYISOCYANURATE INSULATION WHICH CONSISTS OF TWO 2.6" LAYERS WITH 1/2" GYPSUM BOARD, PRIME OVERLAYMENT, RIGID INSULATION SHALL STAGGER JOINTS WITH RECOVERY BOARD JOINTS.

THE NEW ROOF SYSTEM WILL CONSIST OF 90 MIL NON-REINF. EPDM MEMBRANE FULLY ADHERED TO SUBSTRATE.

ALL METAL COPING CORNERS & JOINTS SHALL BE FABRICATED & WELDED IN FACTORY. ALL METAL WORK AND ROOFING WORK IS TO BE COVERED UNDER THE ROOF MANUFACTURER'S 30 YEAR WARRANTY.

ALL HVAC EQUIPMENT CURB HEIGHT SHALL BE MINIMUM 12" ABOVE FINISH ROOF. ALL VENT STACKS SHALL EXTEND MINIMUM 12" ABOVE FINISH ROOF.

PROVIDE 1/2" PER FOOT SLOPE GUSSETS/CRICKETS TO DIVERT WATER AROUND ALL ROOF PENETRATIONS / OBSTRUCTIONS & PROVIDE ROOF POSITIVE DRAIN.

CONTRACTOR SHOULD CLEAN UP ALL DERBIES OVER NEW ROOF & SURROUNDING AREA AS SPECIFICATIONS INDICATED.

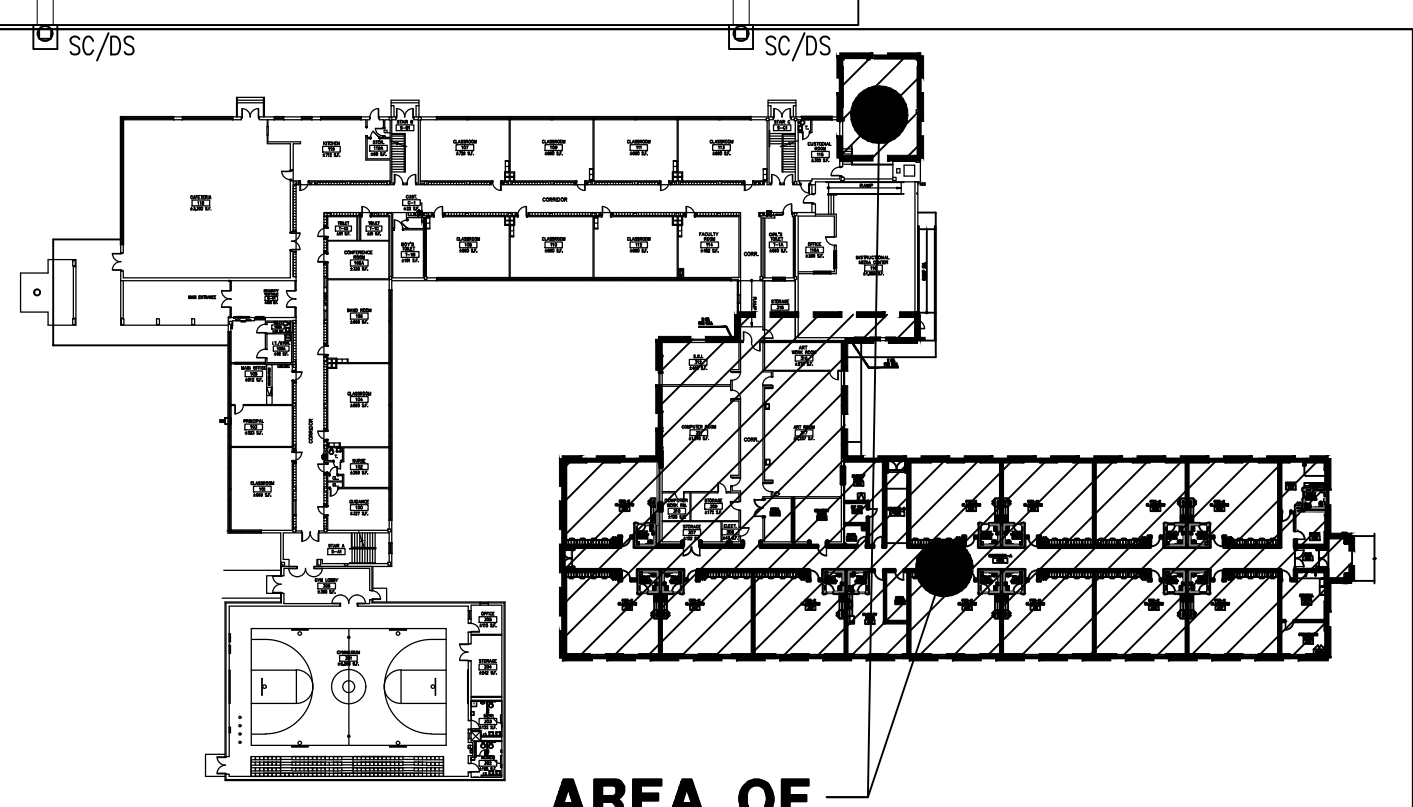
**LIST OF ROOF EQUIPMENT & TASK:**  
PROVIDE SCOPE OF WORK AS INDICATED BELOW AT ALL AREAS NOTED ON PLANS

SYMBOL	DESCRIPTION:	REMARKS:
SC	THRU-WALL SCUPPER AND DOWNSPOUT TO UNDERGROUND PIPING	PROVIDE THRU-WALL SLEEVE, SCUPPER BOX, DOWNSPOUT AND ALL ASSOCIATED FLASHINGS AT ALL SCUPPER LOCATIONS PER DETAILS 18&21/A-4
DS	DOWNSPOUT TO CAST IRON BOOT & UNDERGROUND STORMWATER PIPING	PROVIDE DOWNSPOUT TO CAST IRON BOOT. SEE DETAILS 23&25/A-4
RTU	MECHANICAL ROOFTOP UNIT ON ENCLOSED ROOF CURB.	INSTALL ROOF TOP UNIT ON PRE-MANUFACTURED ROOF CURB. UNIT TO BE 12" MINIMUM ABOVE ADJACENT ROOF SURFACE. SEE DETAIL 8/A-4
GNV	ROOF MOUNTED GOOSENECK EXHAUST FAN VENT	INSTALL GOOSENECK VENT ON PRE-MANUFACTURED ROOF CURB. UNIT TO BE 12" MINIMUM ABOVE ADJACENT ROOF SURFACE. SEE DETAILS 11/A-4
VP	SANITARY VENT PIPE	PROVIDE WATERTIGHT BOOT AT SANITARY VENT PIPE. SEE DETAILS 9/A-4
EJ	ROOF EXPANSION JOINT	INSTALL EXPANSION JOINT ALONG EXISTING WALL / NEW ROOF TRANSITION. SEE DETAIL 5&6/A-4
HVS	HOT VENT STACK FLASHING	PROVIDE THRU-ROOF HOT VENT AT EXISTING BOILER ROOM PER DETAILS 42/A-5
NRD	NEW ROOF DRAIN AND SUMP. PROVIDE NEW OPENING IN METAL DECK.	PROVIDE NEW ROOF DRAIN AND SUMP AS INDICATED IN DETAIL 12/A-4 (U.N.O.). SUMP AREA SHALL BE A MINIMUM OF 4'-0" X 4'-0". CONNECT NEW ROOF DRAINS INTO NEW INTERNAL RAIN WATER LEADER TO NEW EXTERIOR DOWNSPOUT.

**NOTES:**  
1) COORDINATE ALL WORK WITH NEW ROOF PLAN.  
2) "AFR" MEANS ABOVE FINISHED EXISTING OR NEW FINISHED ROOF SURFACE.  
3) ALL CURBS TO BE A MINIMUM OF 12" ABOVE ADJACENT ROOF ELEVATION. ALL VENT PIPES TO BE A MINIMUM OF 12" ABOVE ADJACENT ROOF ELEVATION.  
4) SEE LEGEND (THIS SHEET) FOR ADDITIONAL REQUIREMENTS AND ITEMS NOT LISTED ABOVE.

**SEE STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL & SITE DRAWINGS FOR ITEMS LISTED BY EACH TRADE. UNLESS NOTED OTHERWISE, ALL ITEMS SHALL BE BY THE GENERAL CONTRACTOR.**

SEE STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL & SITE DRAWINGS FOR ITEMS LISTED BY EACH TRADE. UNLESS NOTED OTHERWISE, ALL ITEMS SHALL BE BY THE GENERAL CONTRACTOR.



AREA OF WORK  
**KEY PLAN**

**GARRISON ARCHITECTS**  
713 CREEK ROAD, BELLMAWR, NEW JERSEY 08011 (609) 398-6200

**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
2025 EAST CLASSROOM ADDITION  
261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08069

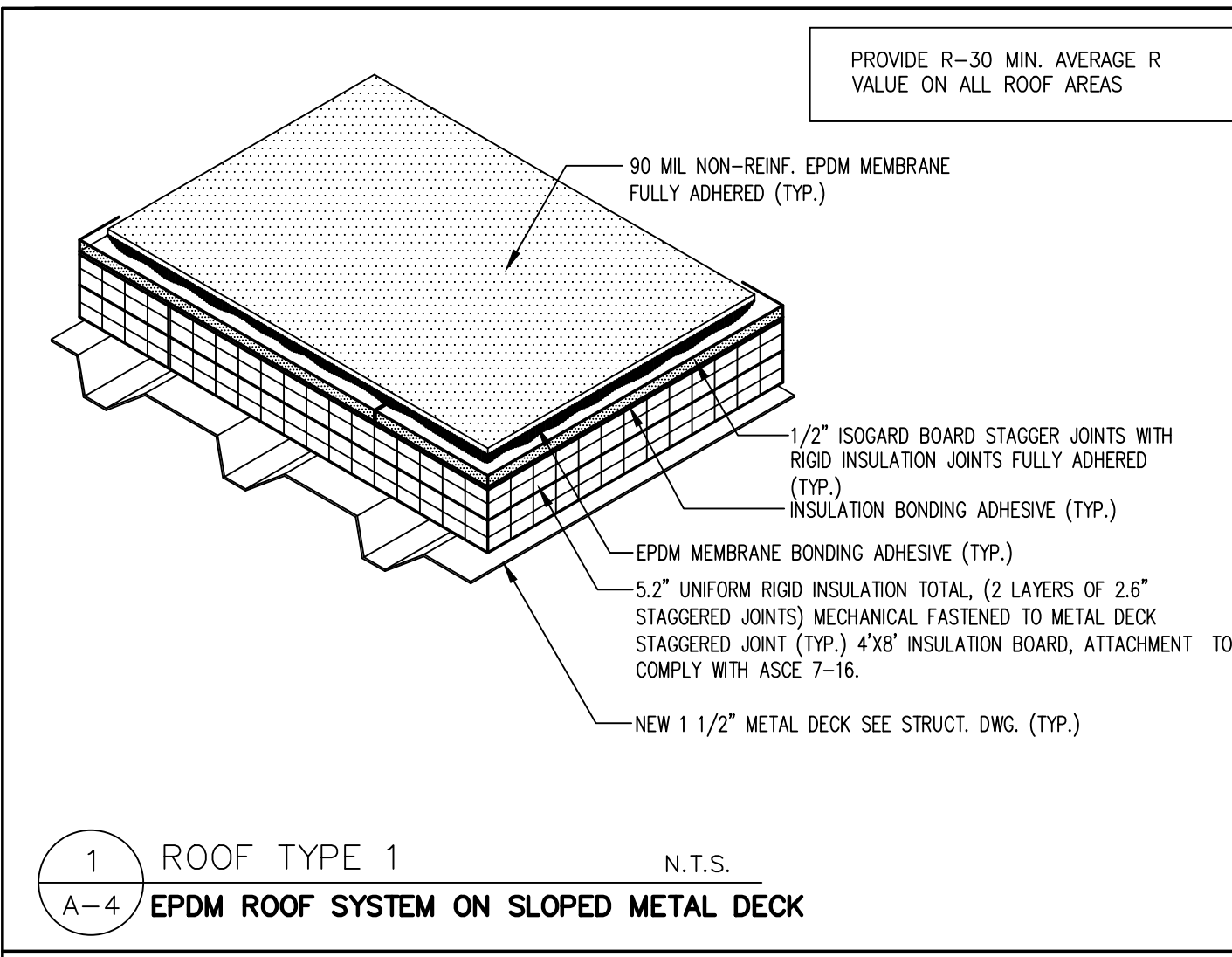
**REVISIONS**

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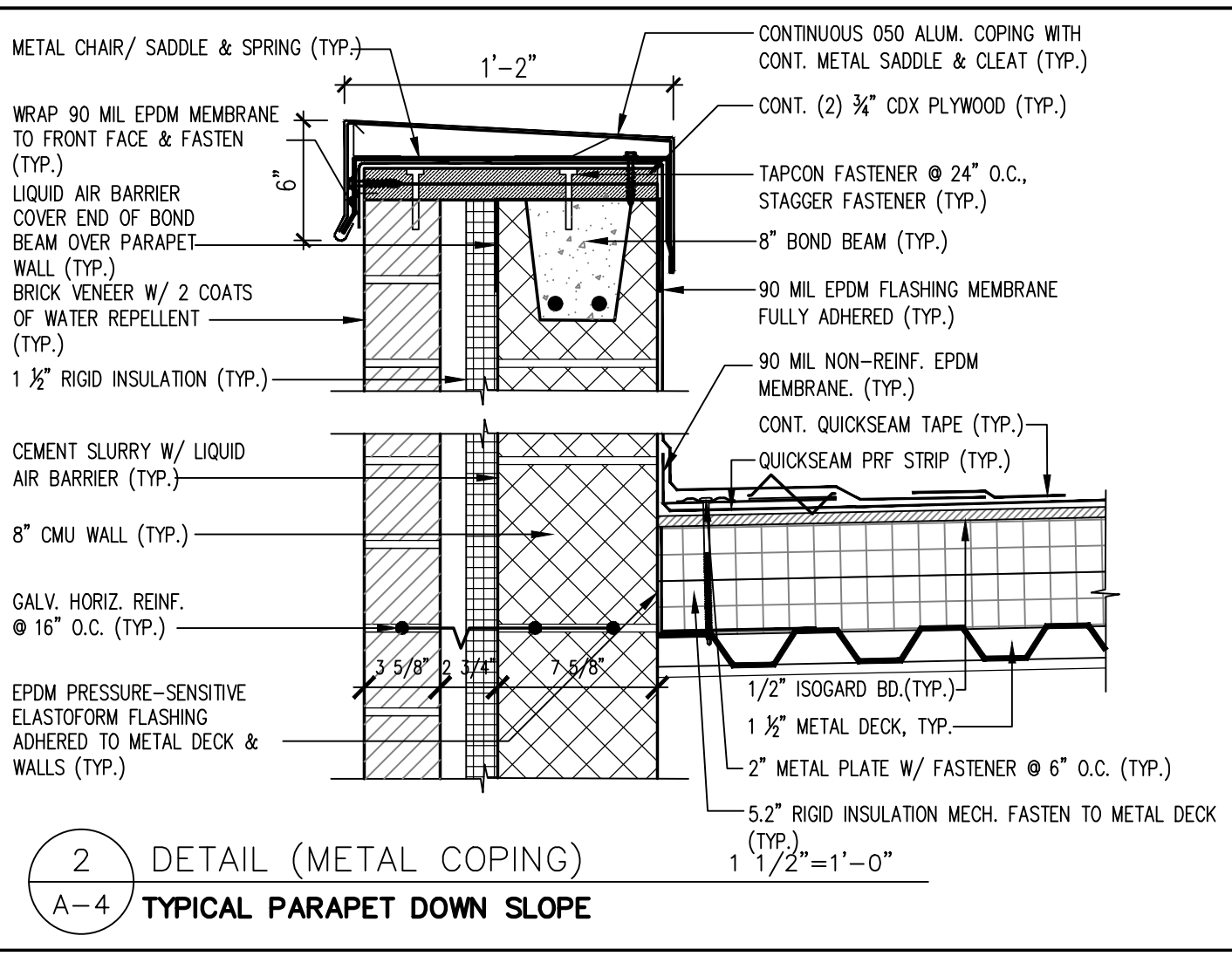
Project No. 23-42  
Date: 11-11-24  
Scale: 1/8"=1'-0"  
**ROOF PLAN AND NOTES**  
**A-3**

ISSUED FOR BID: 11/11/2024

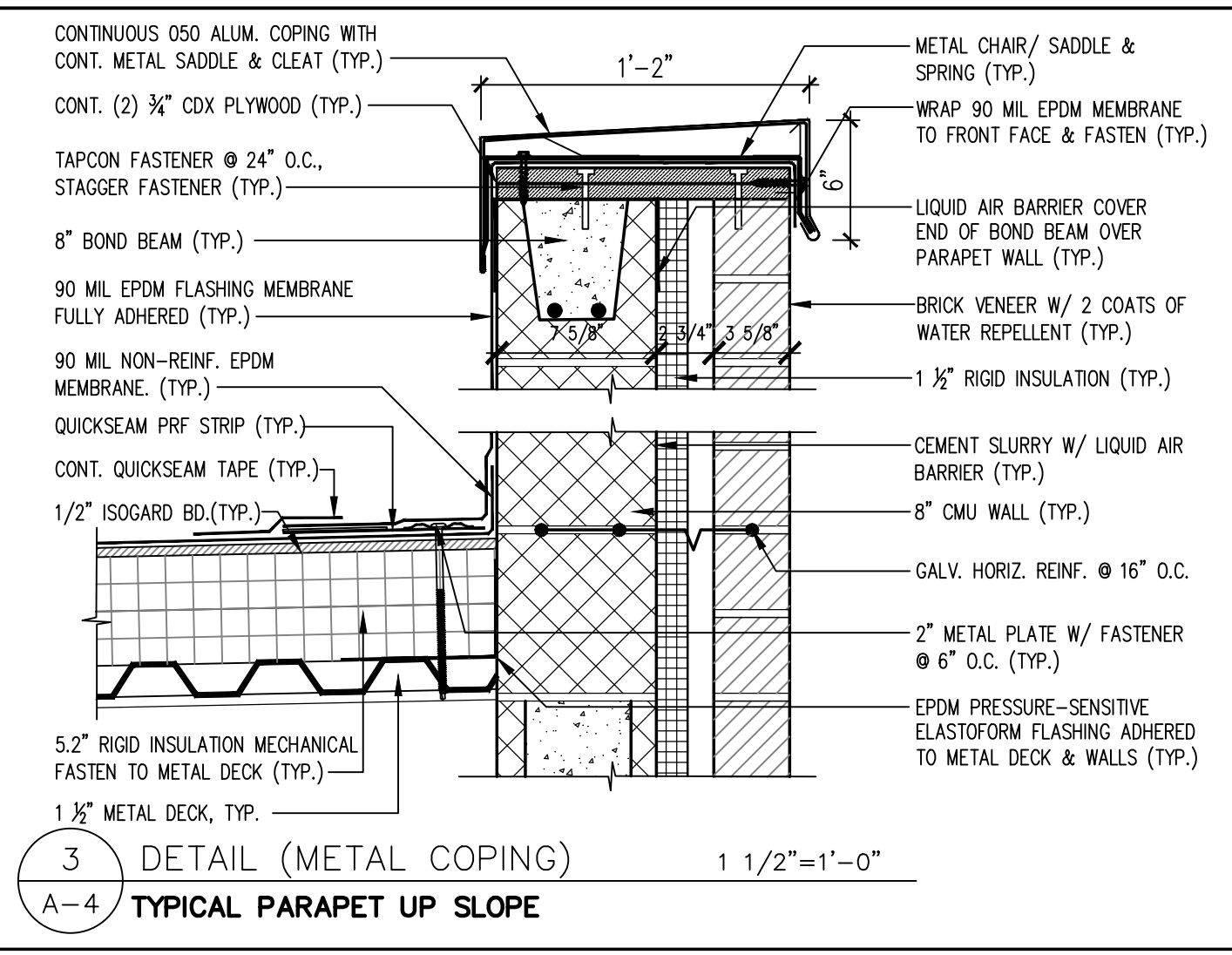




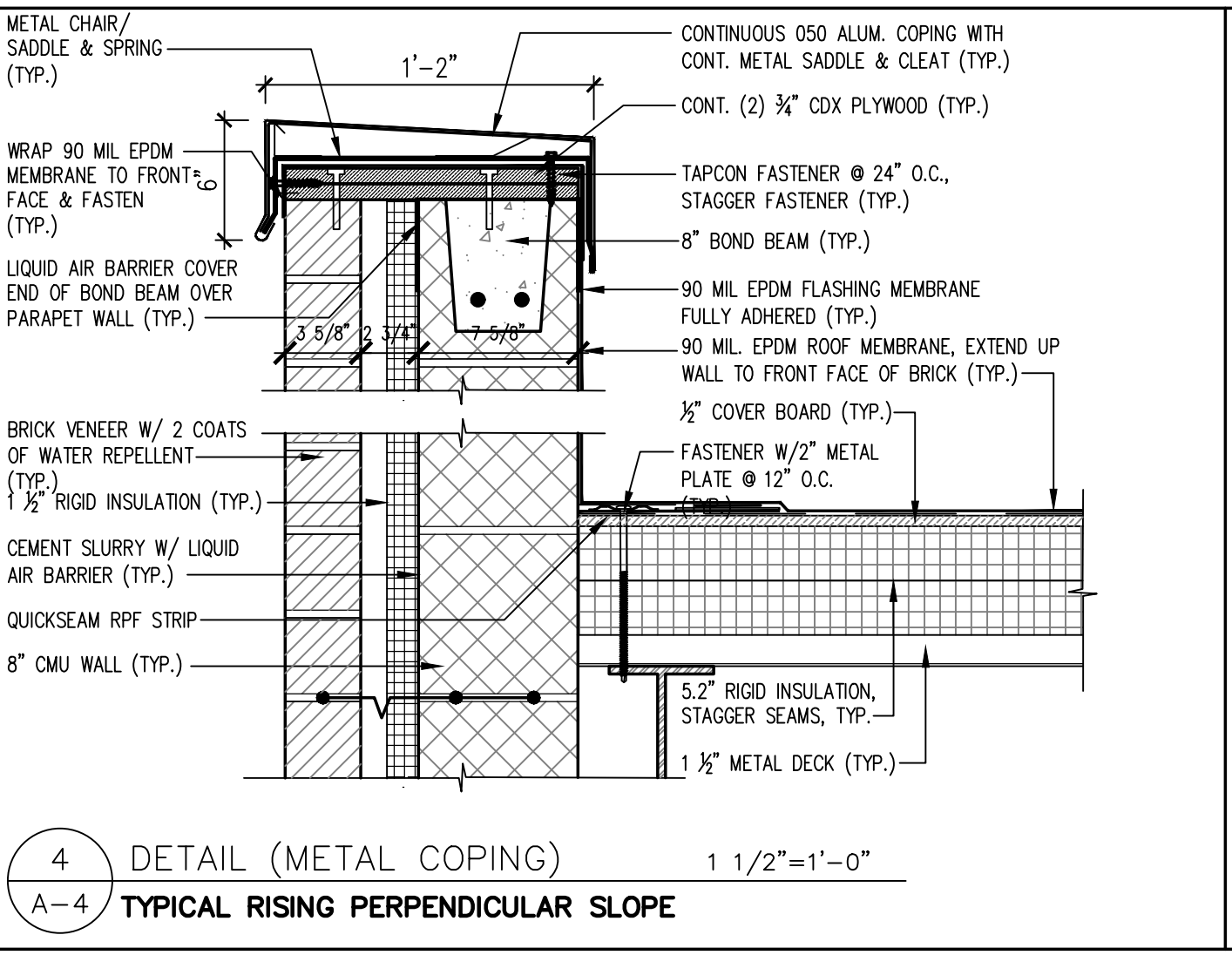
1 ROOF TYPE 1 N.T.S.  
A-4 EPDM ROOF SYSTEM ON SLOPED METAL DECK



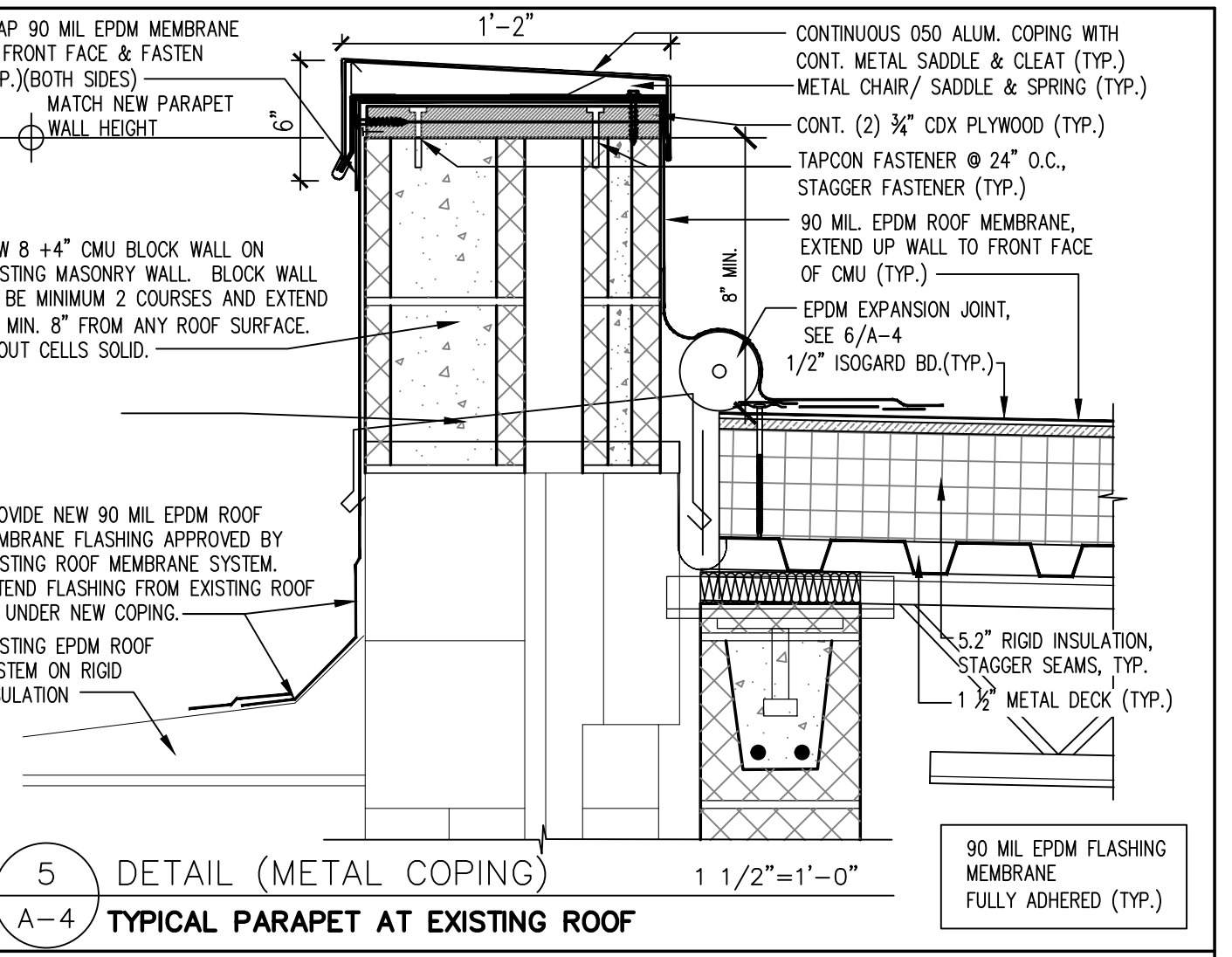
2 DETAIL (METAL COPING)  
A-4 TYPICAL PARAPET DOWN SLOPE



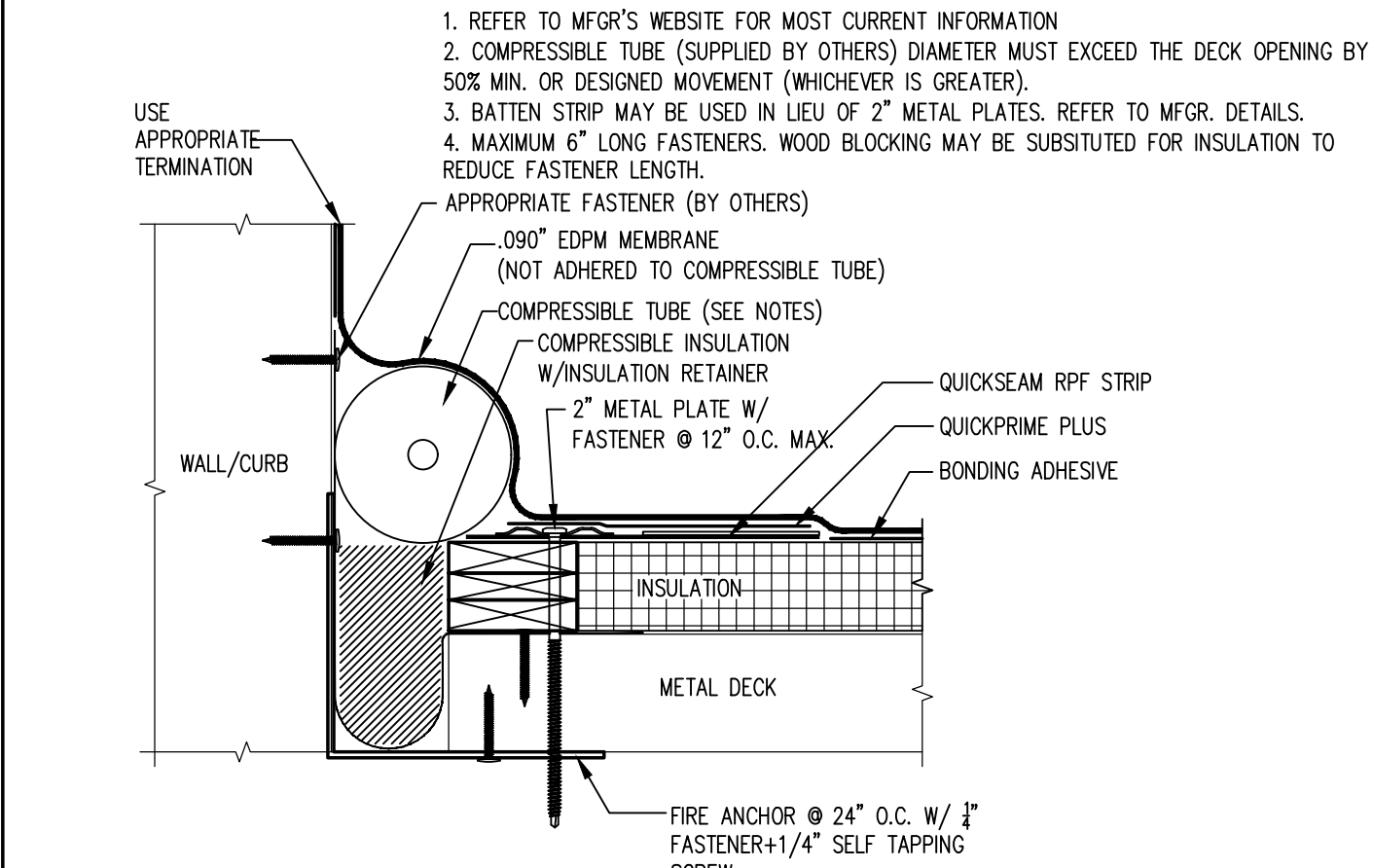
3 DETAIL (METAL COPING)  
A-4 TYPICAL PARAPET UP SLOPE



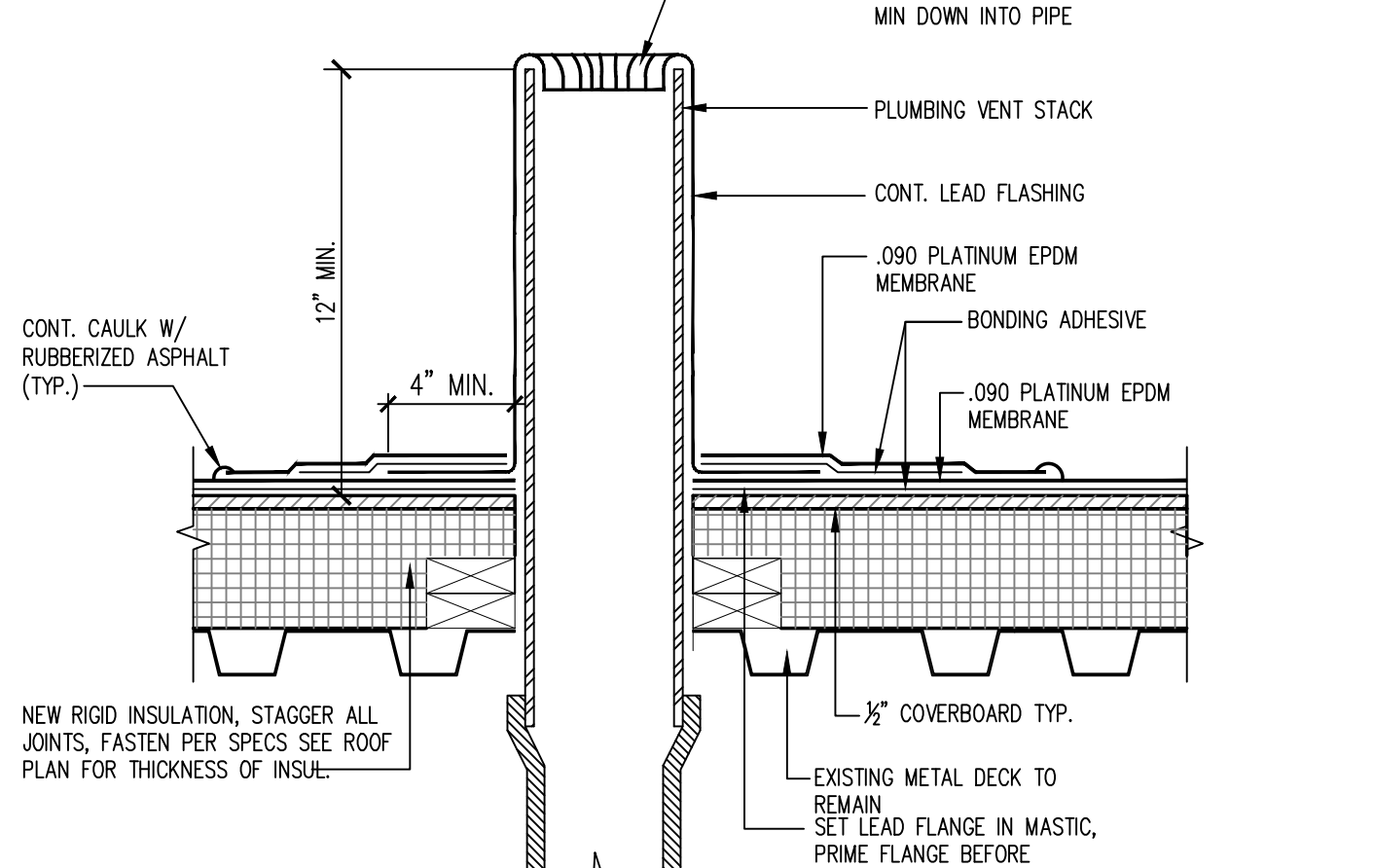
4 DETAIL (METAL COPING)  
A-4 TYPICAL RISING PERPENDICULAR SLOPE



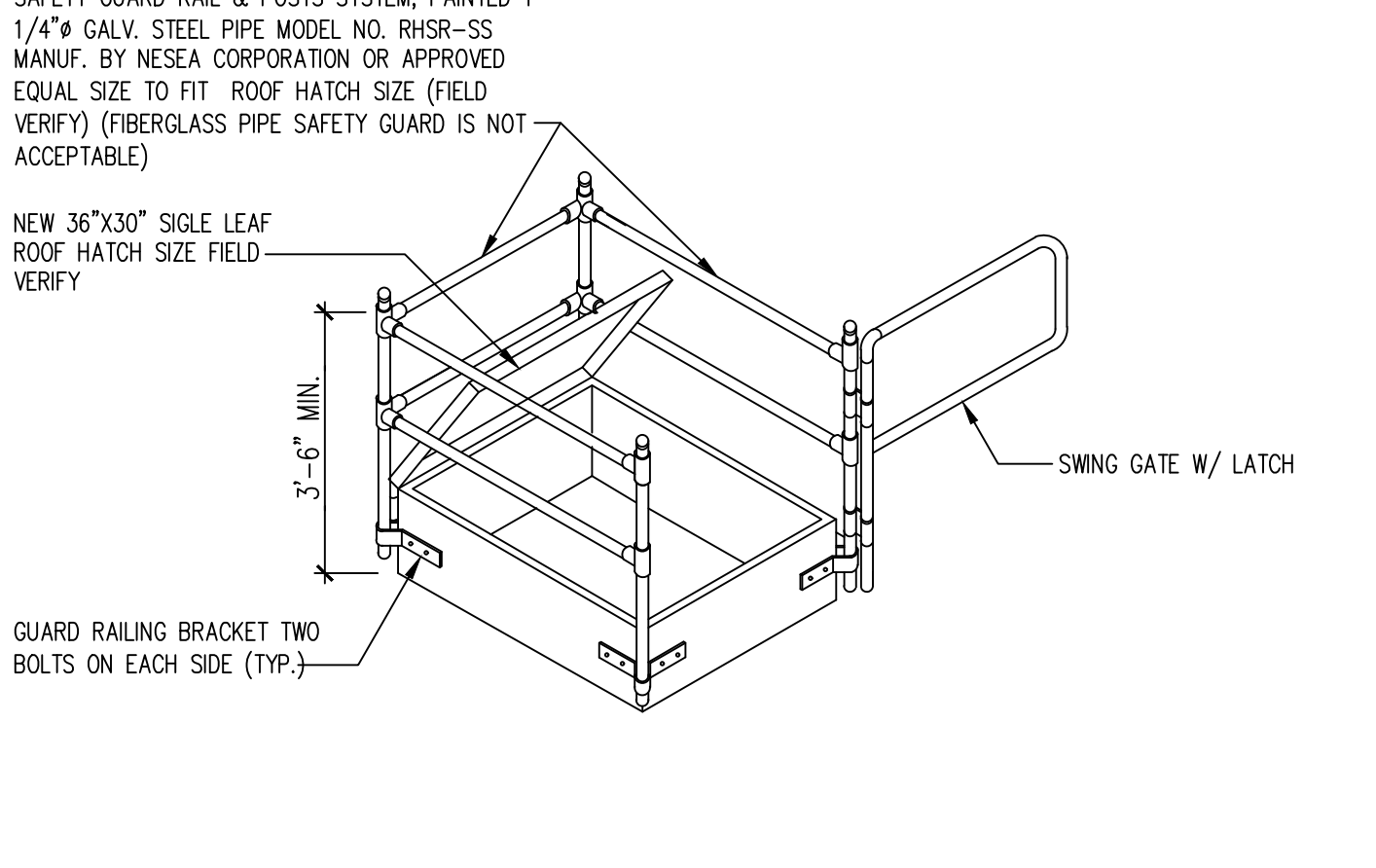
5 DETAIL (METAL COPING)  
A-4 TYPICAL PARAPET AT EXISTING ROOF



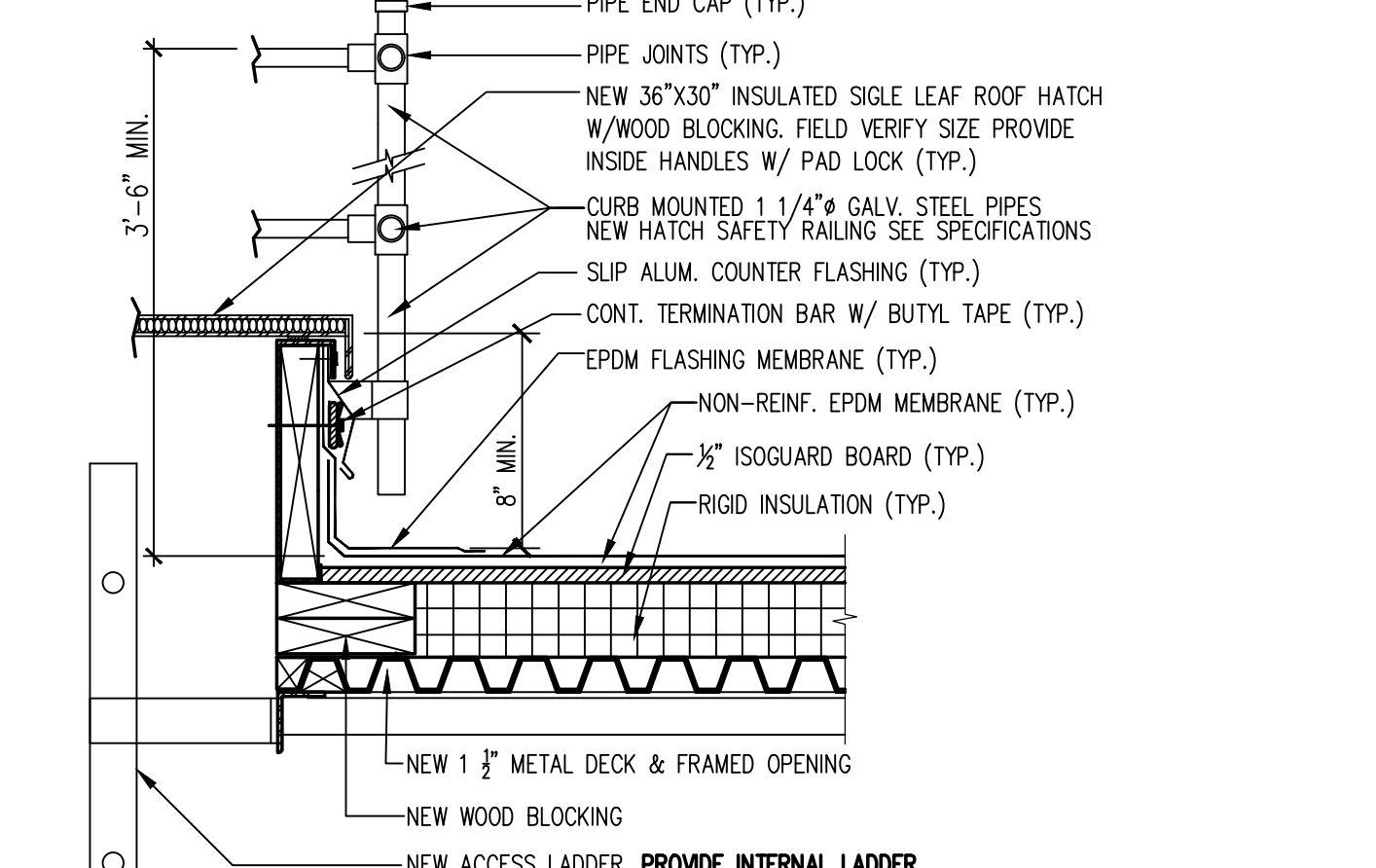
6 EXPANSION JOINT  
A-4 ROOF TO WALL



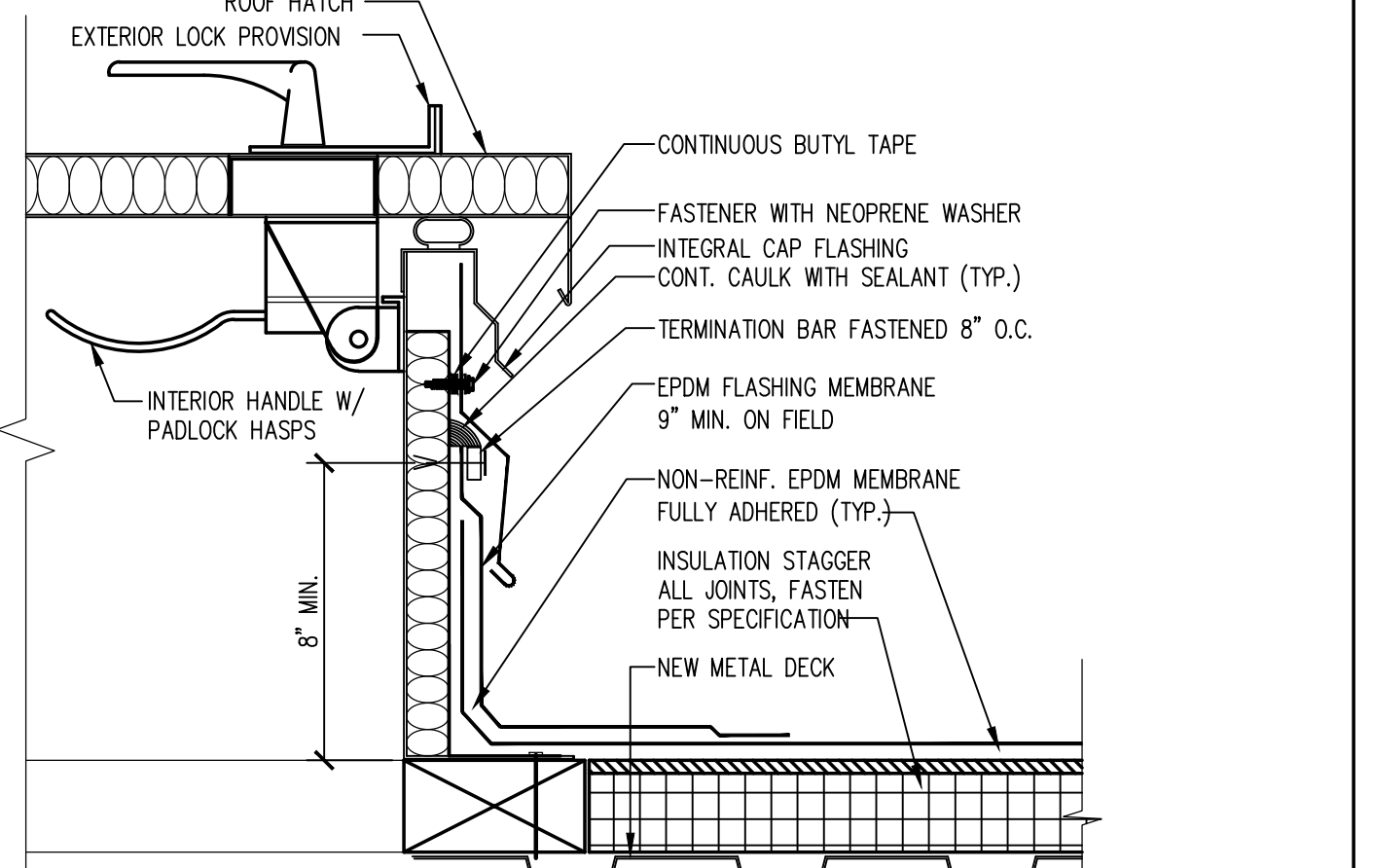
7 PLUMBING VENT  
A-4 AT NEW EPDM ROOF



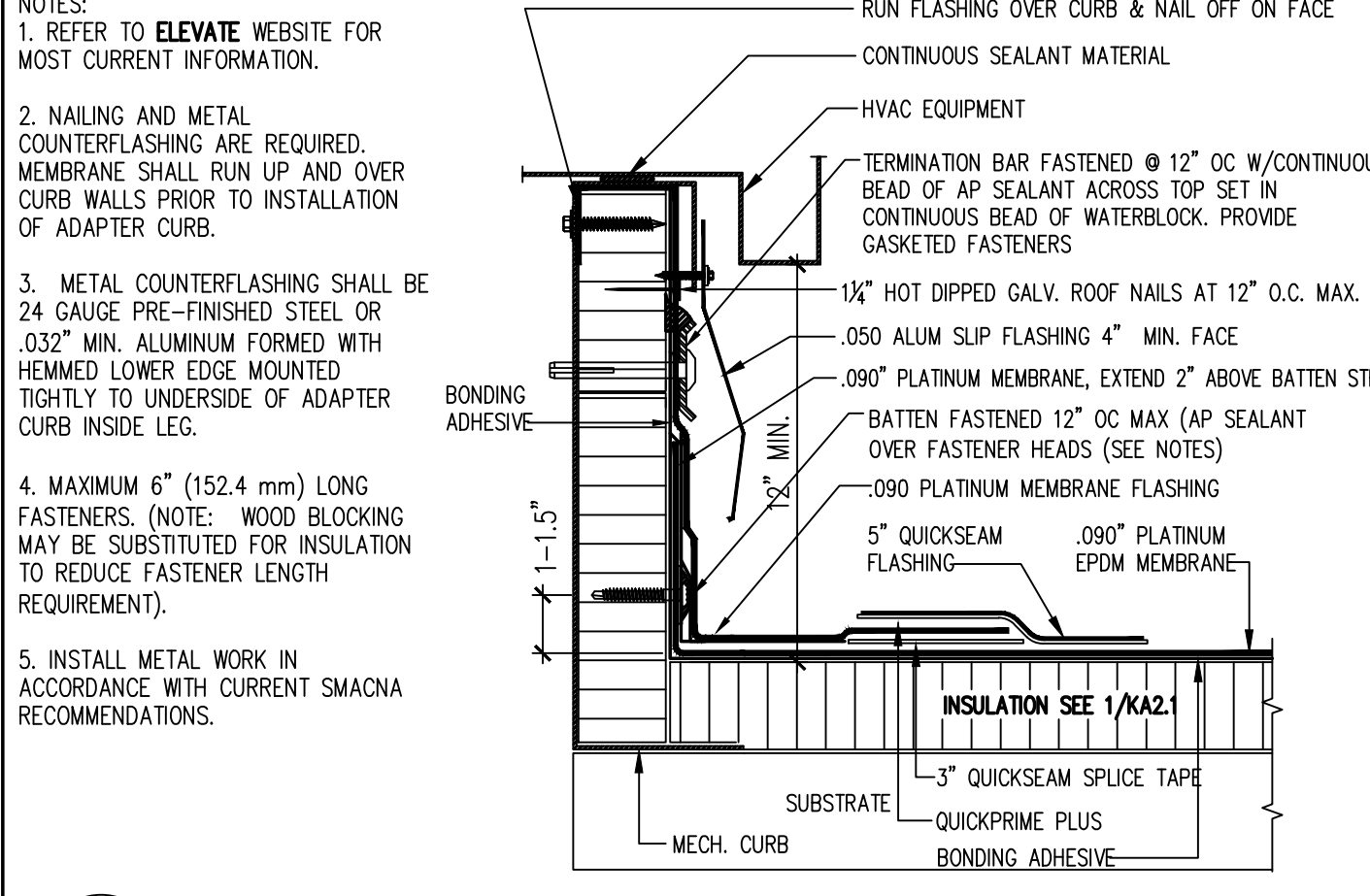
8 ROOF HATCH & SAFETY GUARD  
A-4 N.T.S.



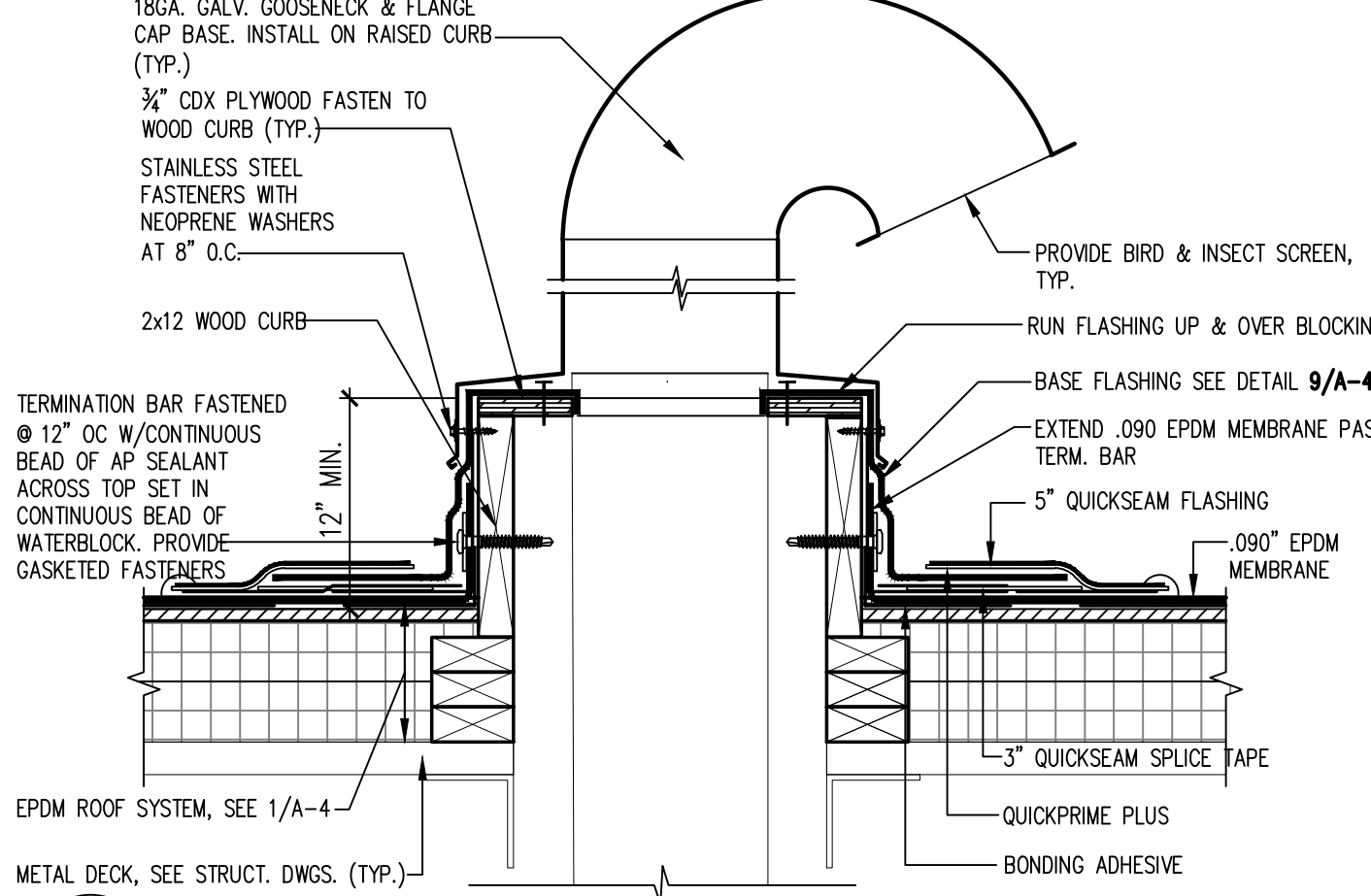
9 RTU CURB FLASHING  
A-4 N.T.S.



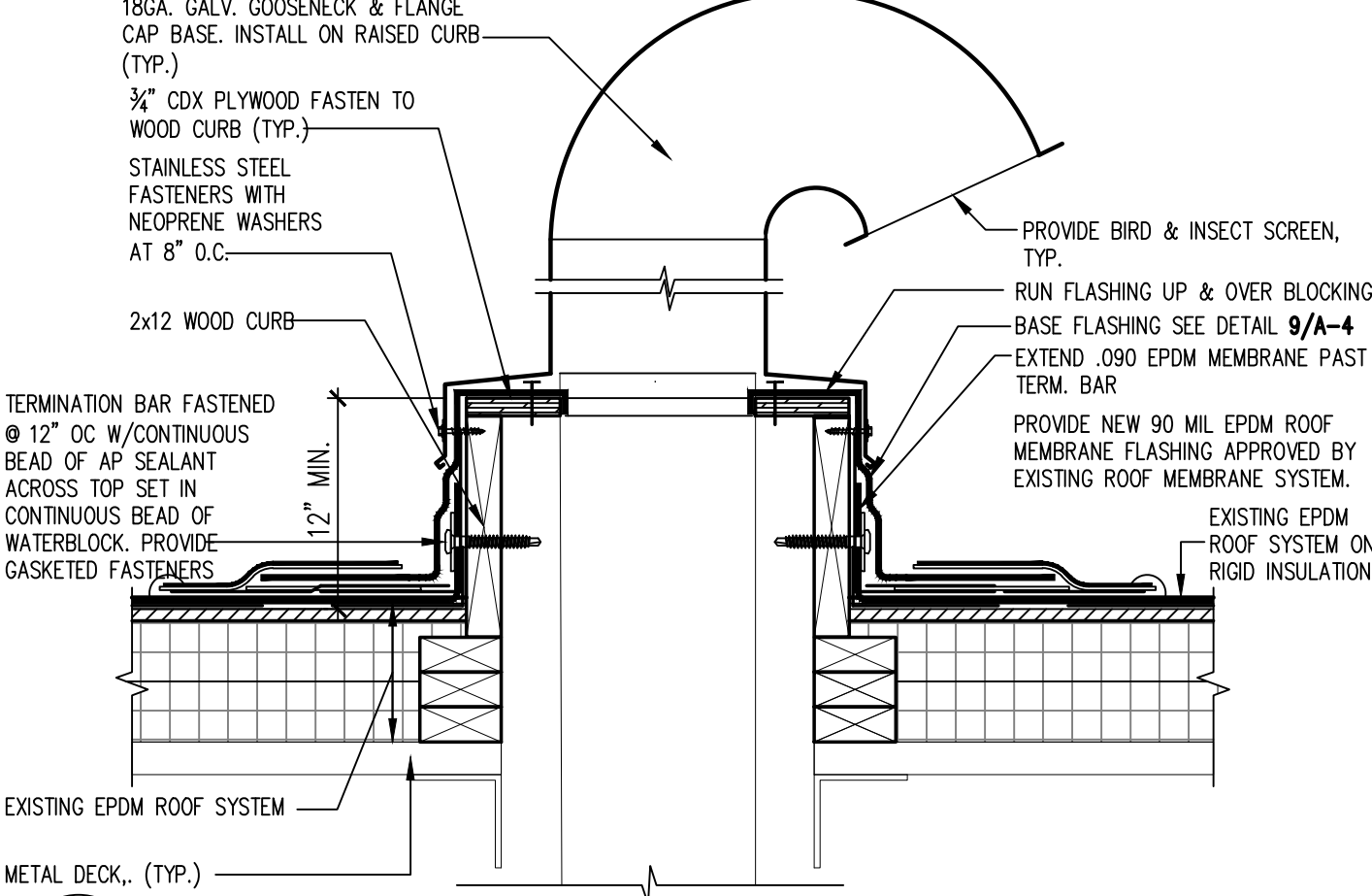
10 GOOSENECK CURB  
A-4 AT NEW EPDM ROOF



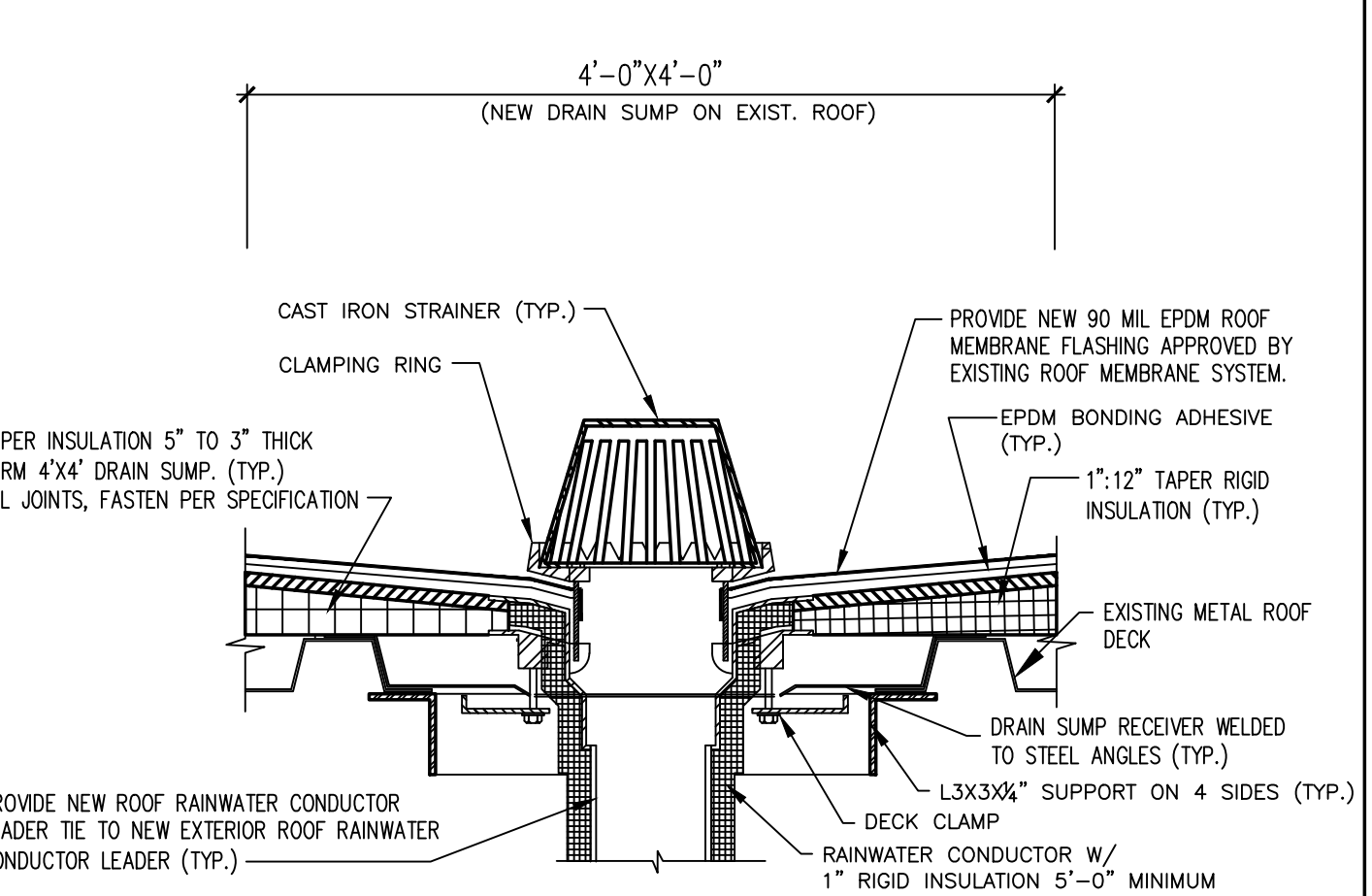
11 GOOSENECK CURB  
A-4 AT EXISTING EPDM ROOF



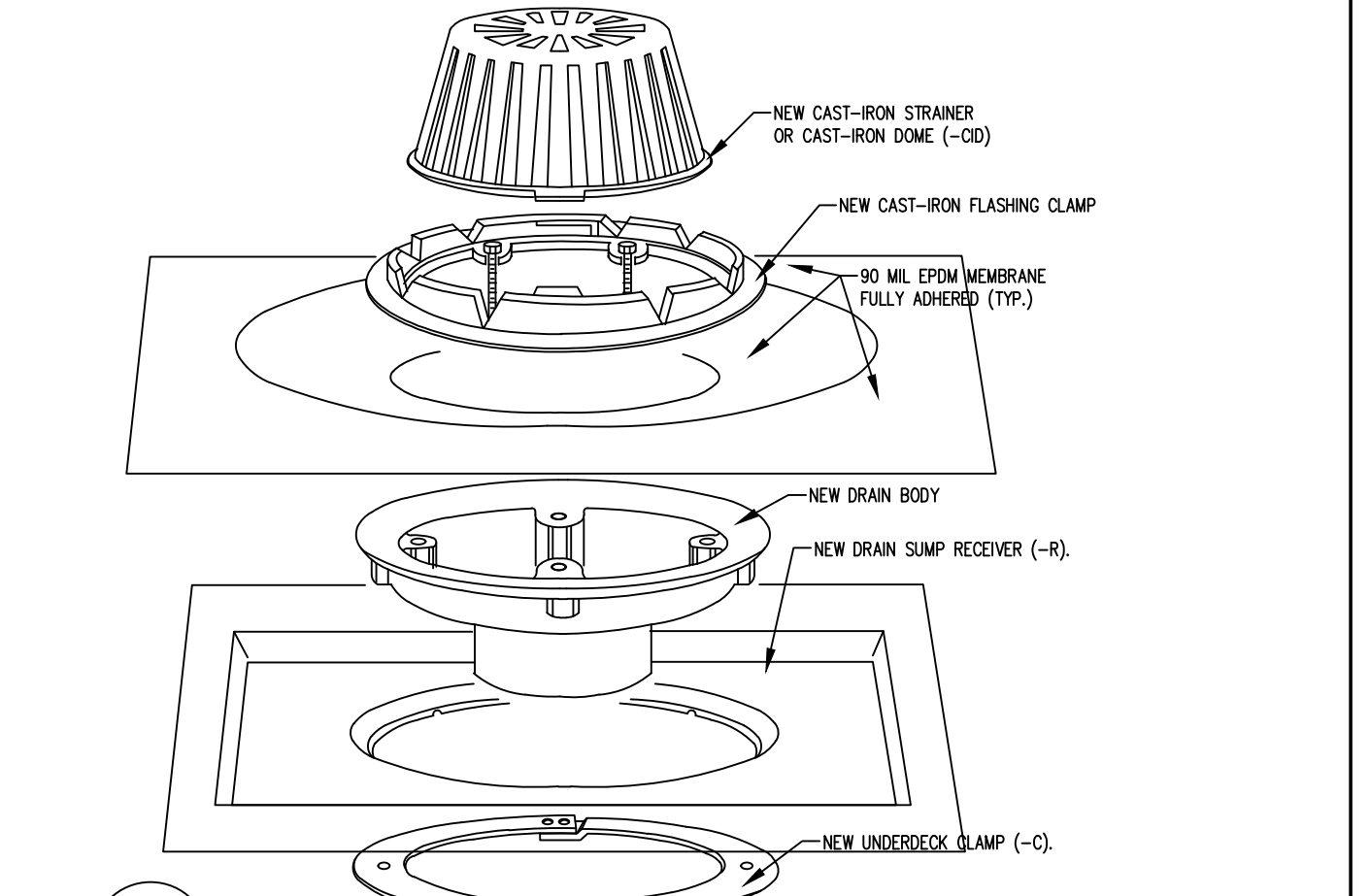
12 DETAIL  
A-4 ROOF DRAIN



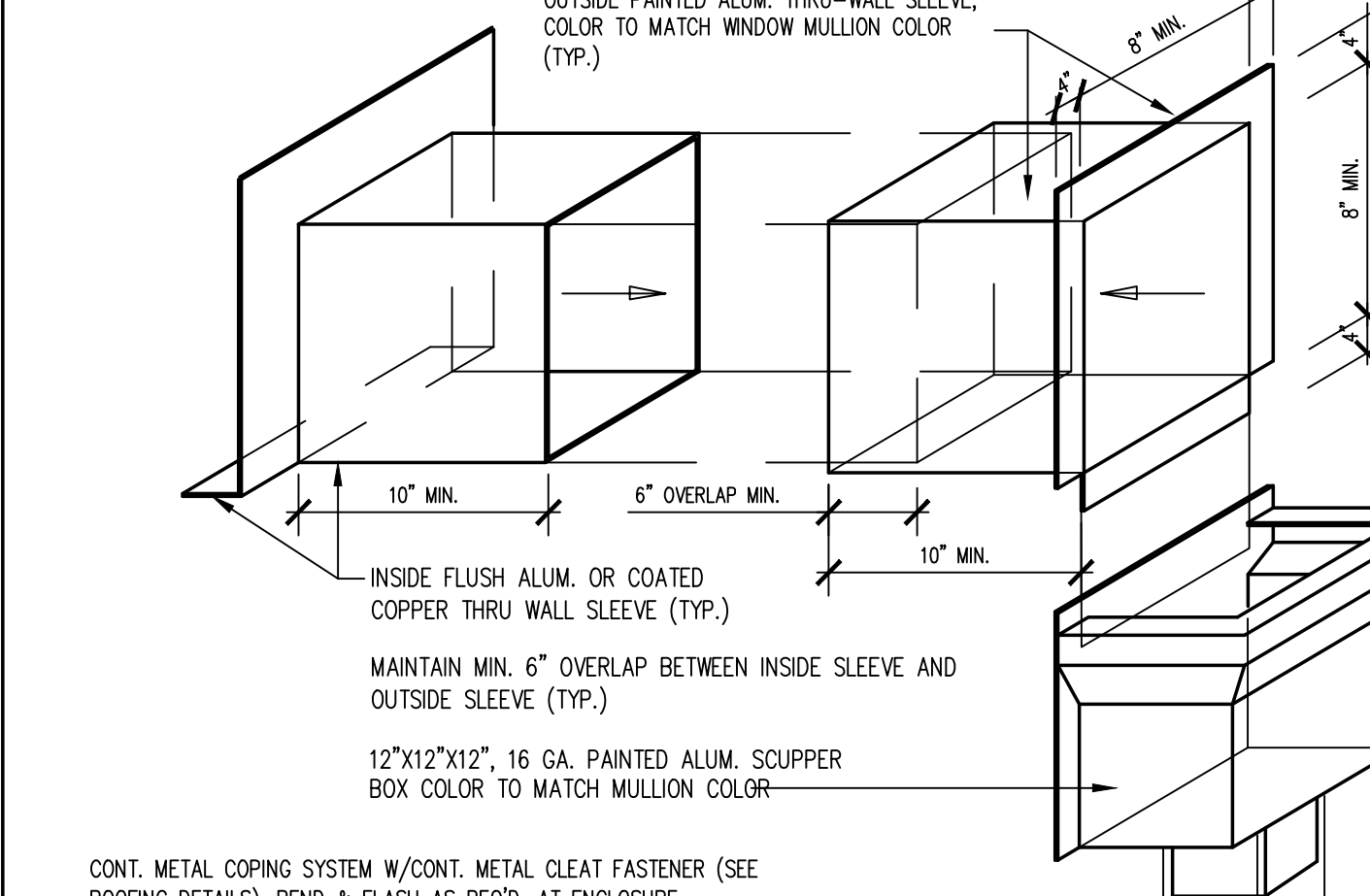
13 DETAIL  
A-4 NEW INTERIOR ROOF DRAIN ASSEMBLY



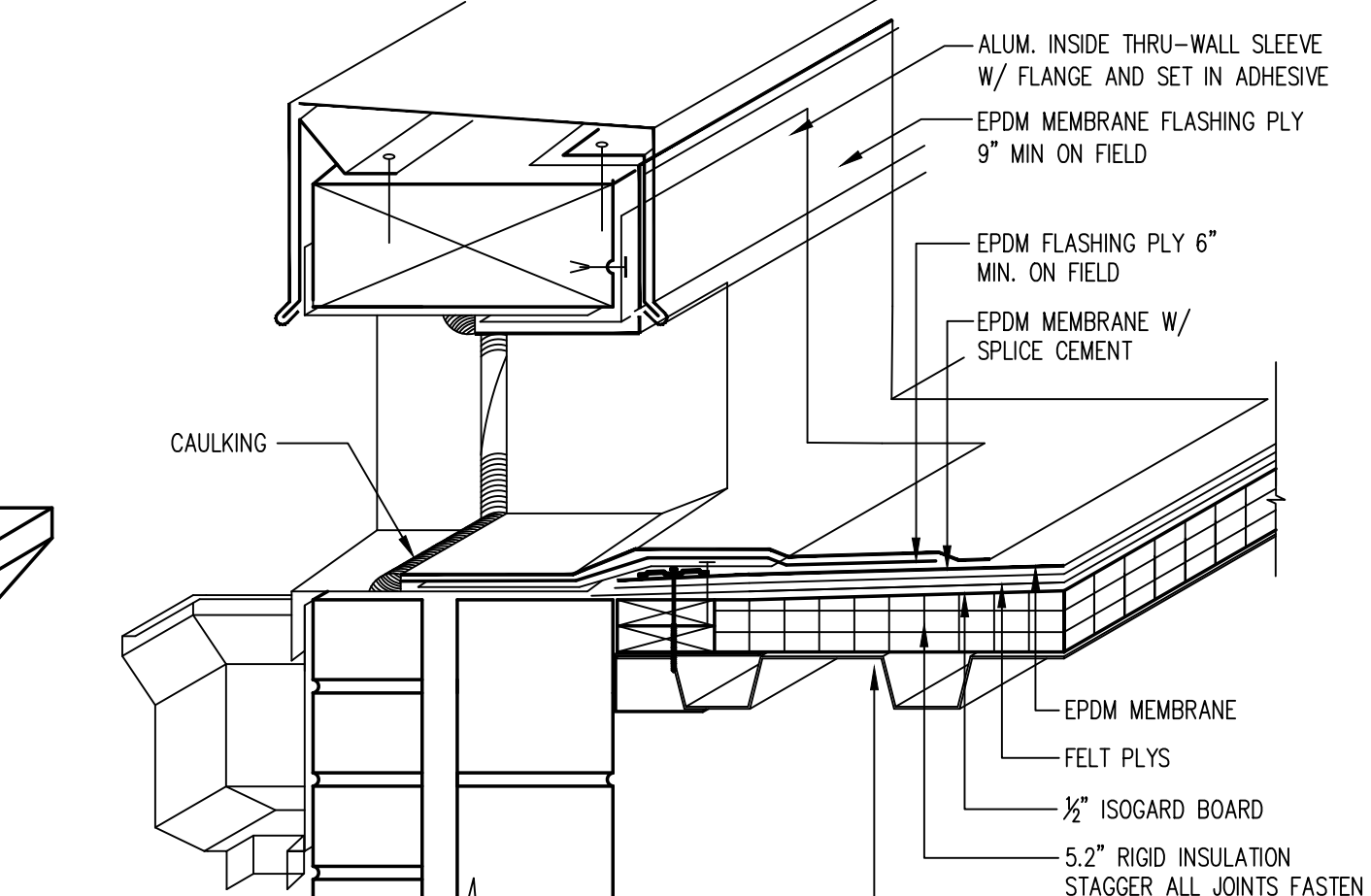
14 SCUPPER W/DOWNSPOUT  
A-4



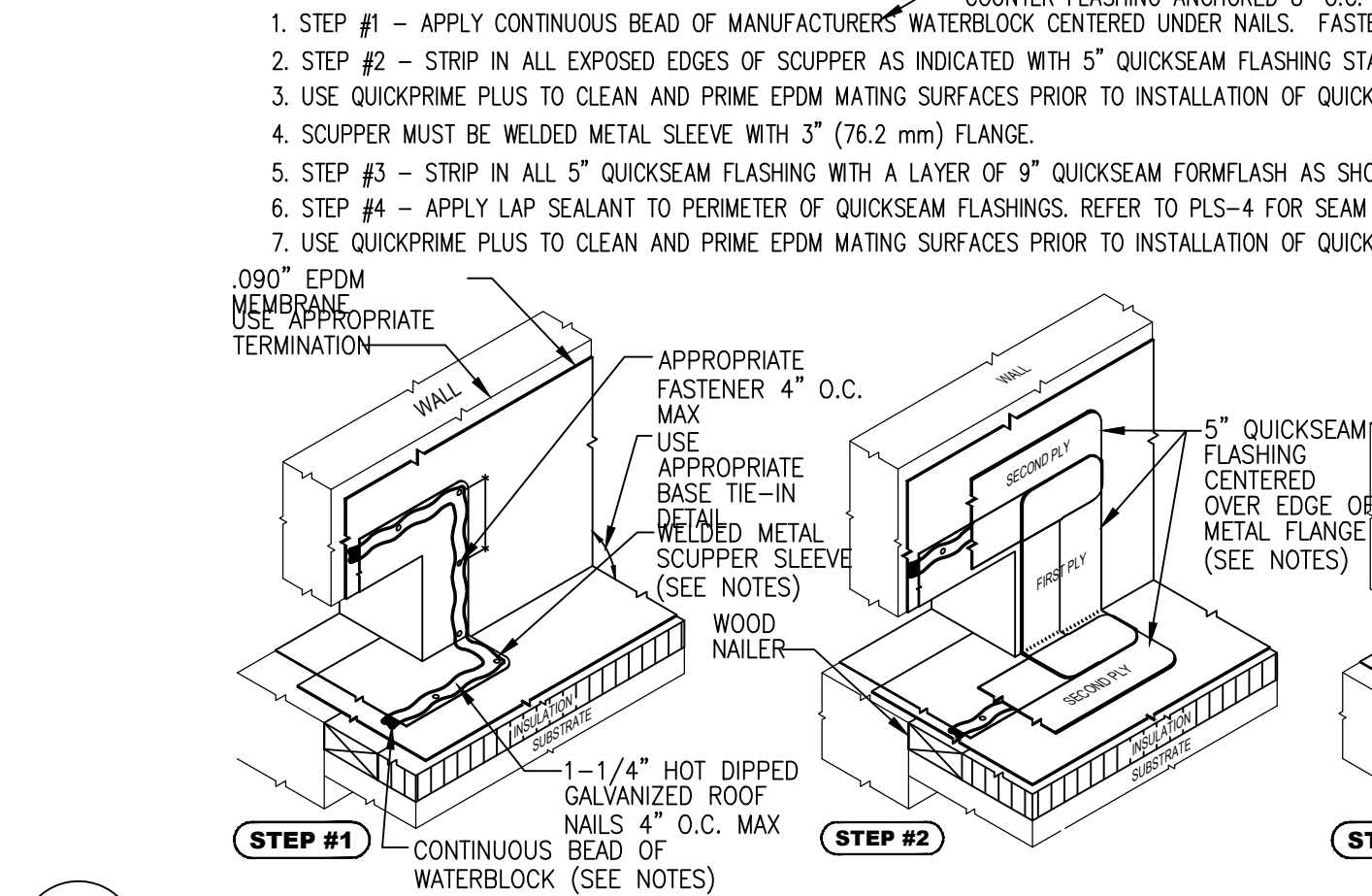
15 THRU-WALL SCUPPER FLASHING  
A-4 (REFER TO PLAN FOR LOCATIONS)



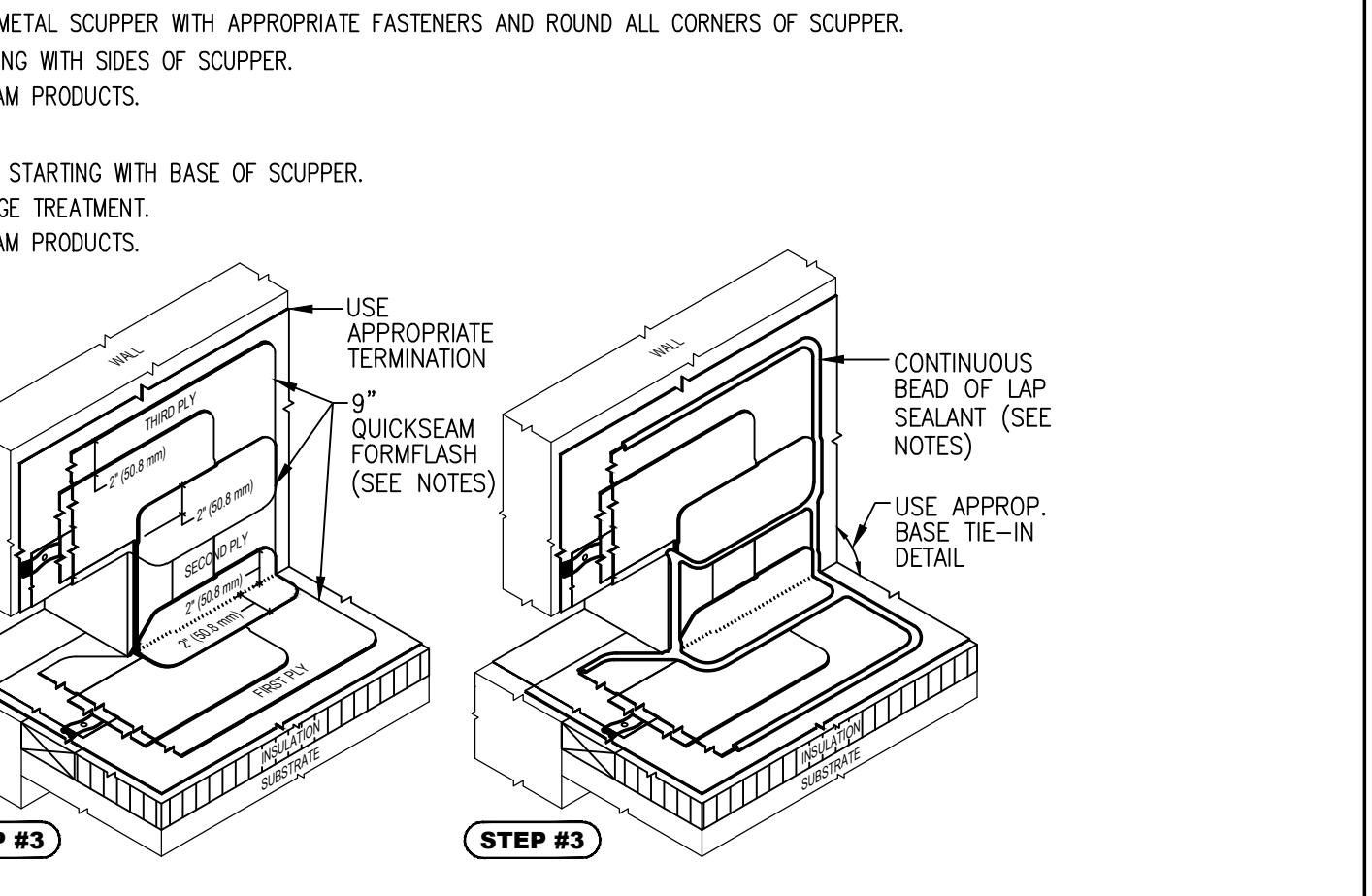
16 DOWNSPOUT BRACKET  
A-4 N.T.S.



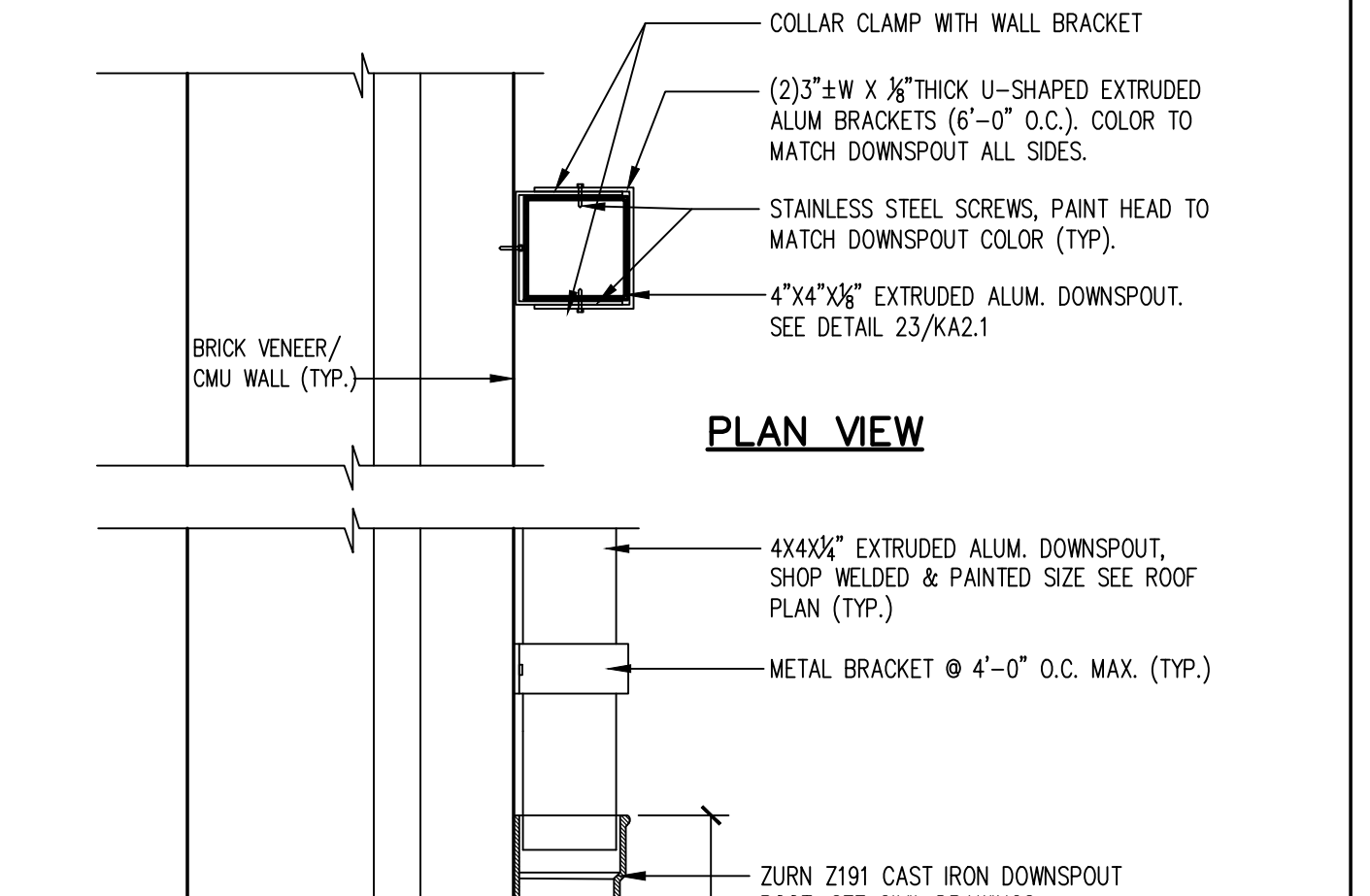
17 DETAIL  
A-4 NO SCALE



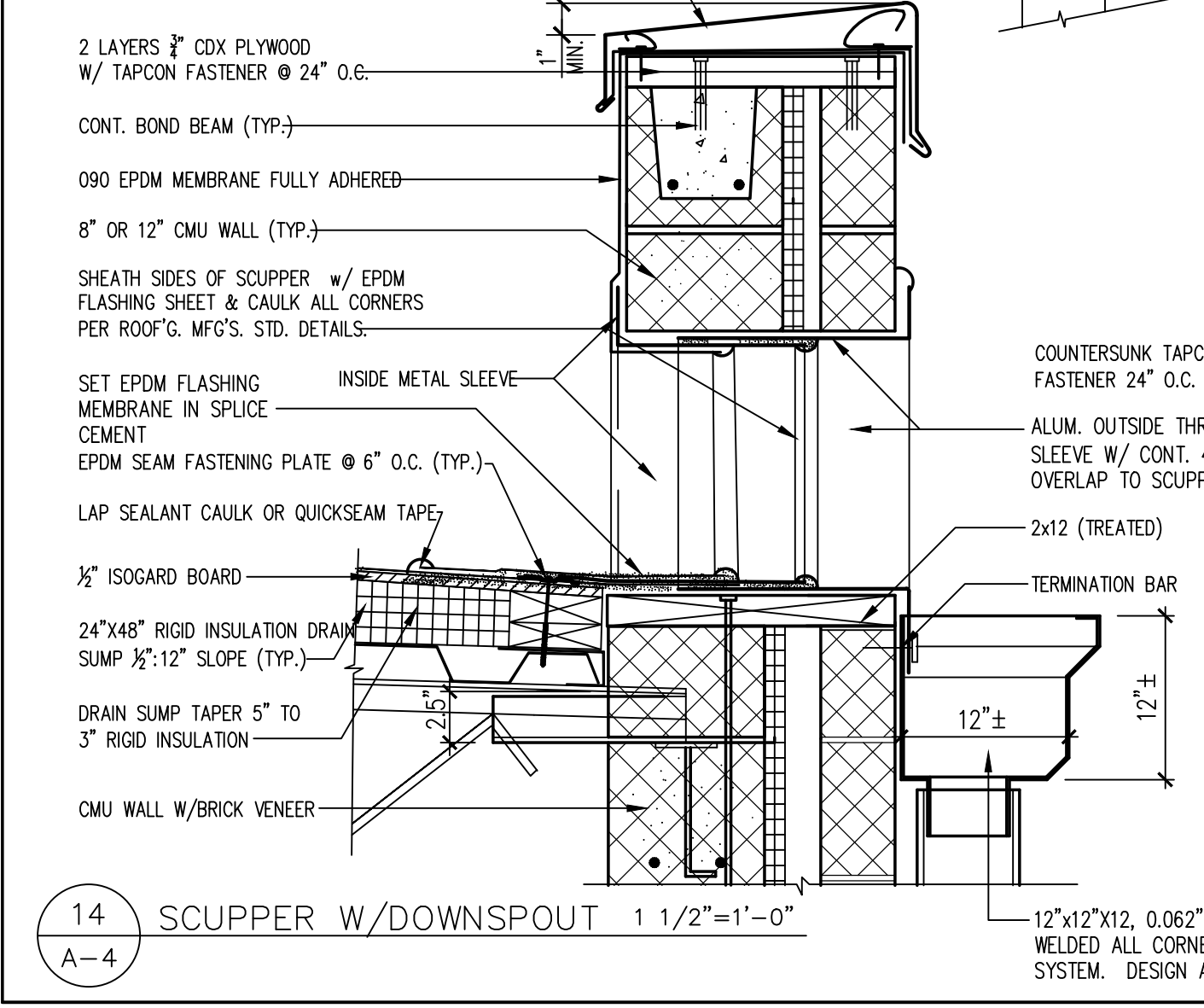
18 DOWNSPOUT TIE TO CAST IRON DRAIN BOOT  
A-4 N.T.S.



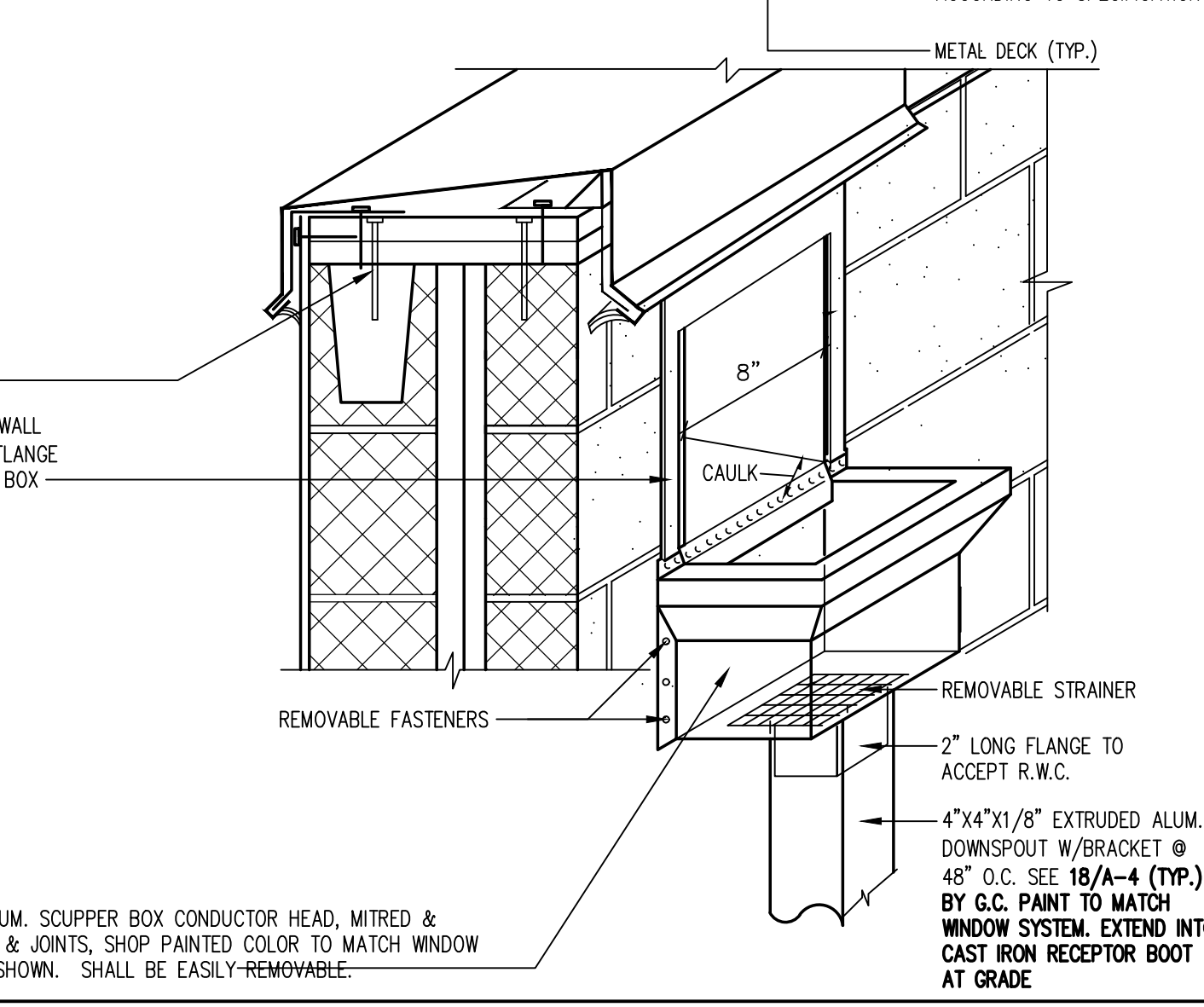
19 DETAIL  
A-4 NO SCALE



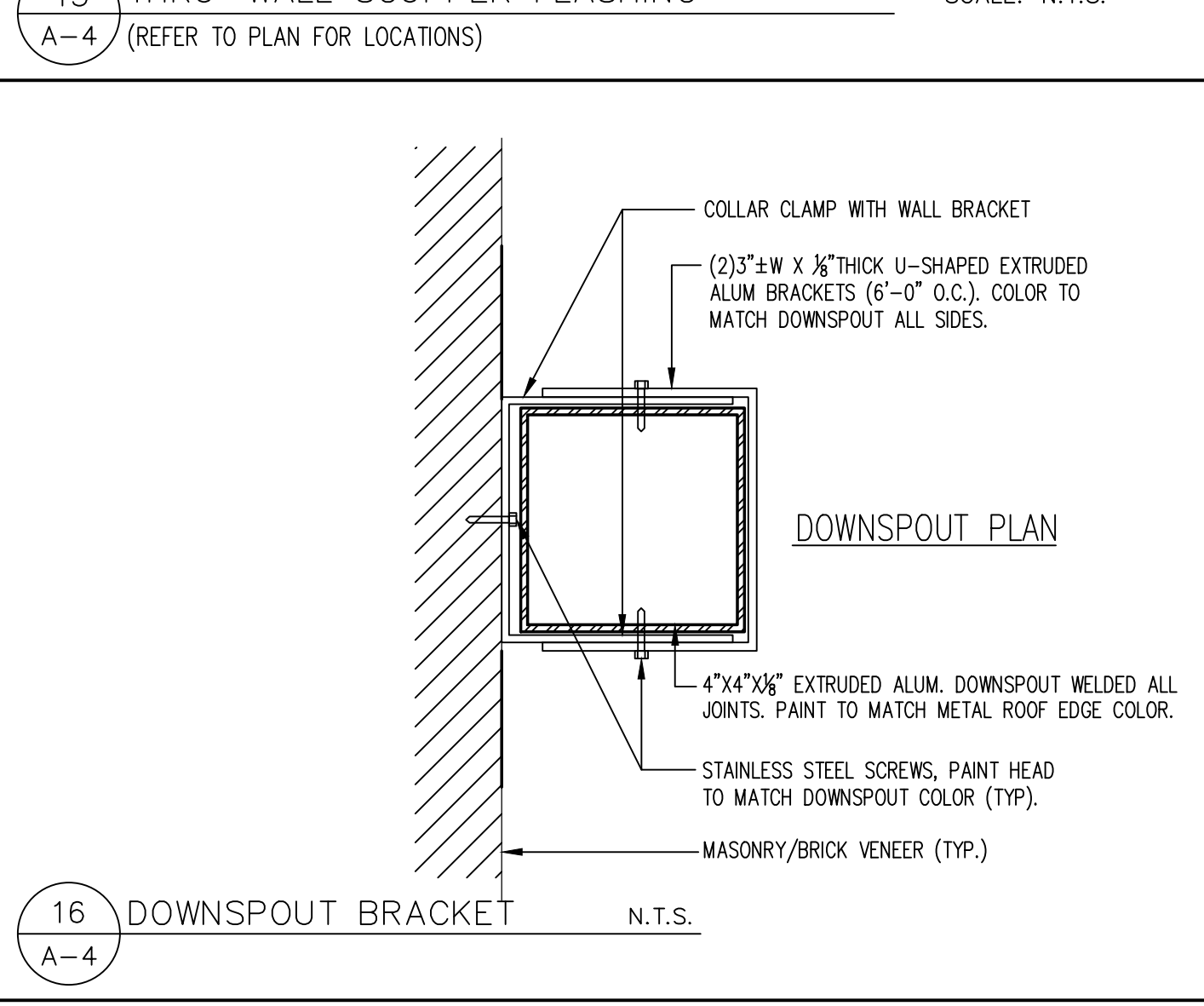
20 DETAIL  
A-4 NO SCALE



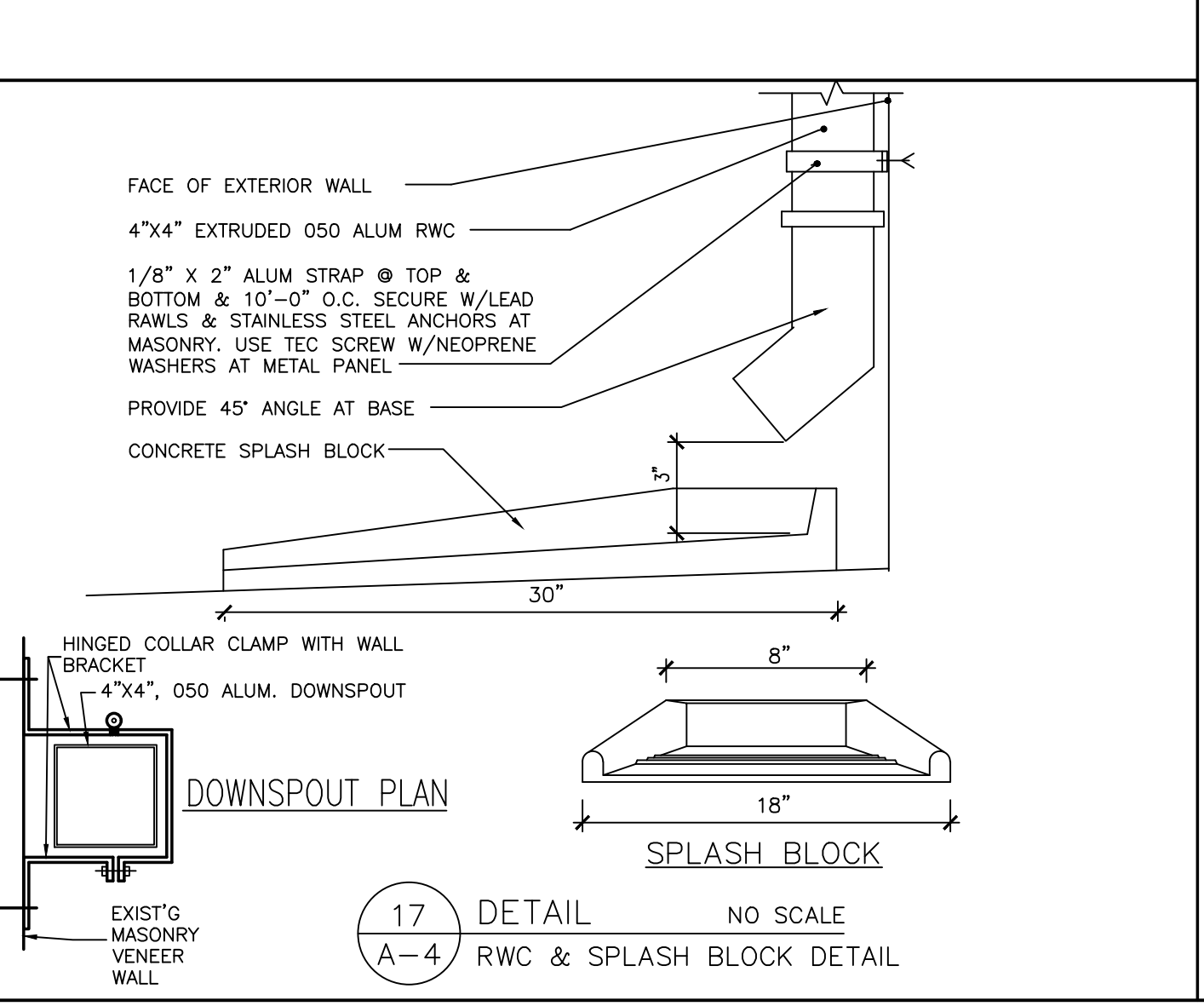
21 SCUPPER W/DOWNSPOUT  
A-4



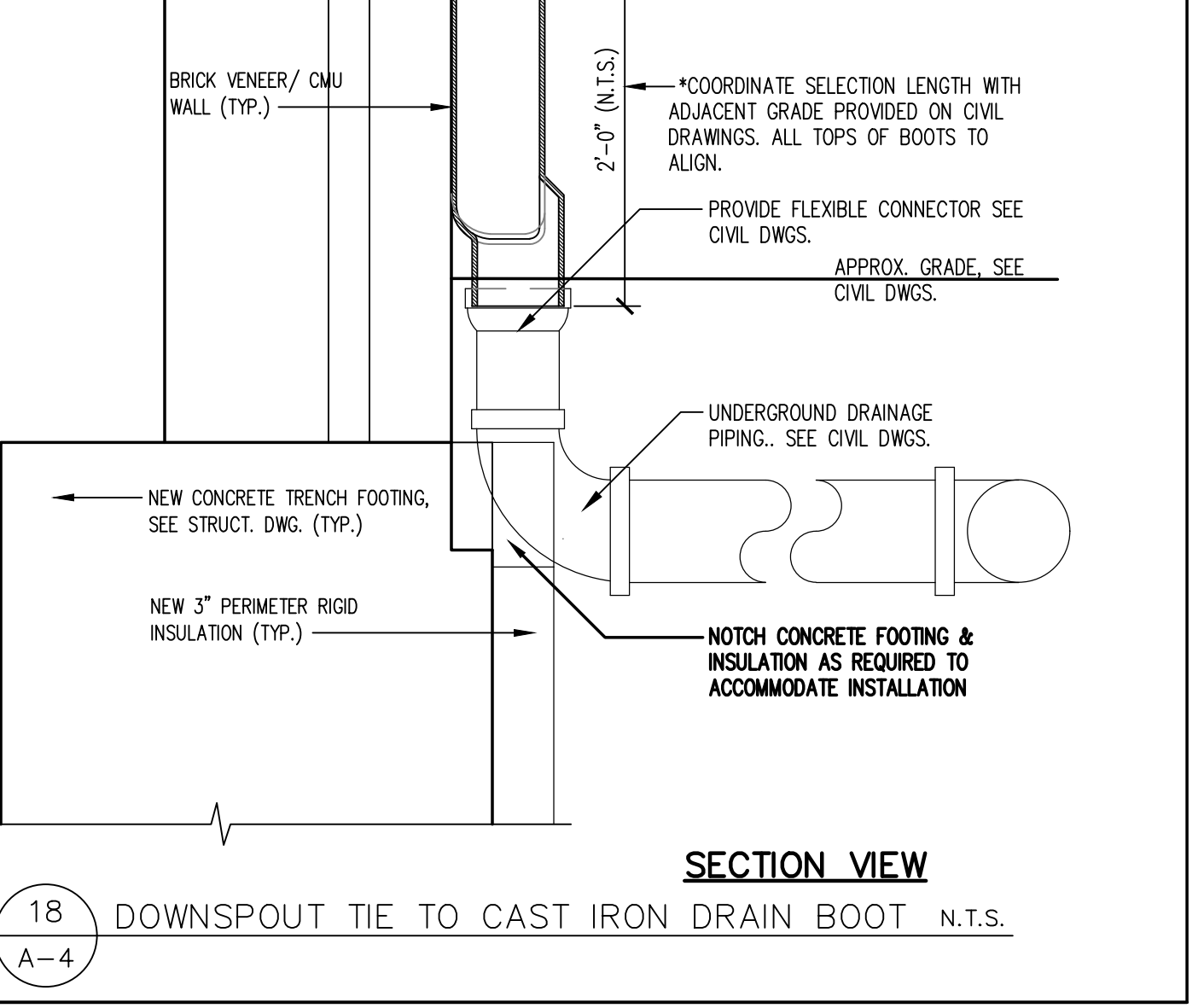
22 DOWNSPOUT BRACKET  
A-4 N.T.S.



23 DETAIL  
A-4 NO SCALE



24 DETAIL  
A-4 NO SCALE



25 DETAIL  
A-4 NO SCALE

**GARRISON ARCHITECTS**  
713 CREEK ROAD, BELLMAWR, NEW JERSEY 08001 (609) 398-6200

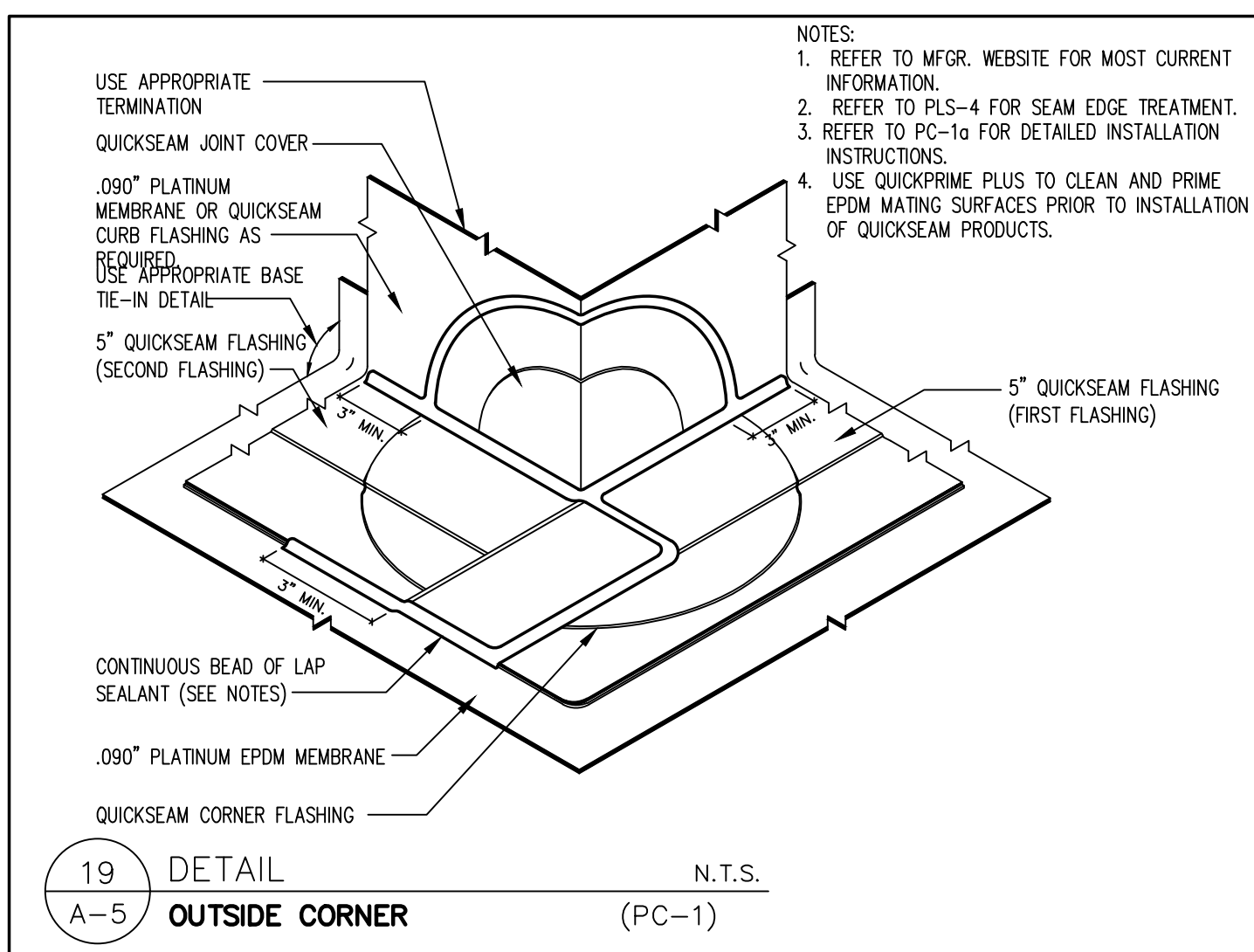
**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08069

**REVISIONS**  
a.  
b.  
c.

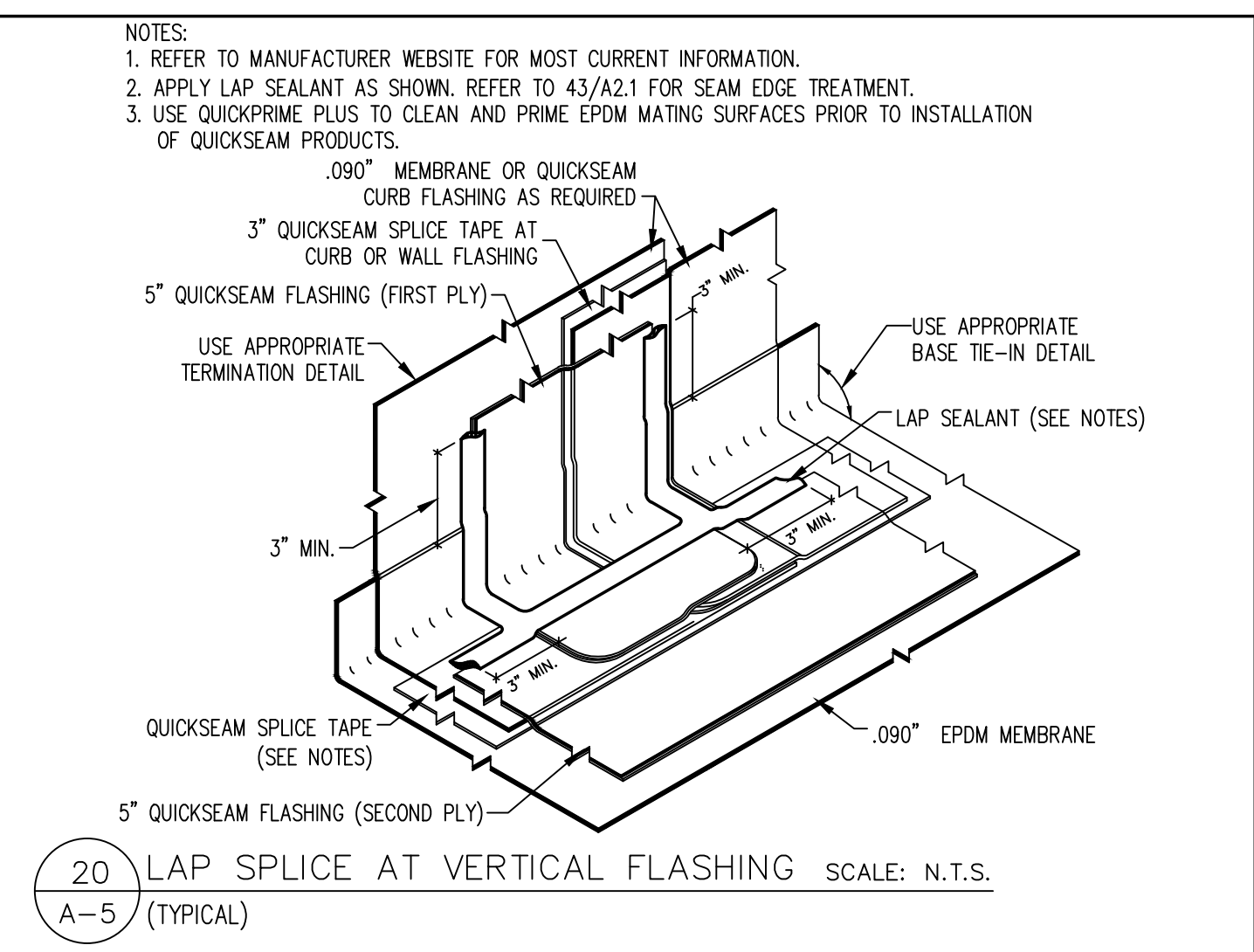
Project No. 23-42  
Date: 11-11-24  
Scale: N.T.S.  
**ROOF DETAIL I**

**A-4**

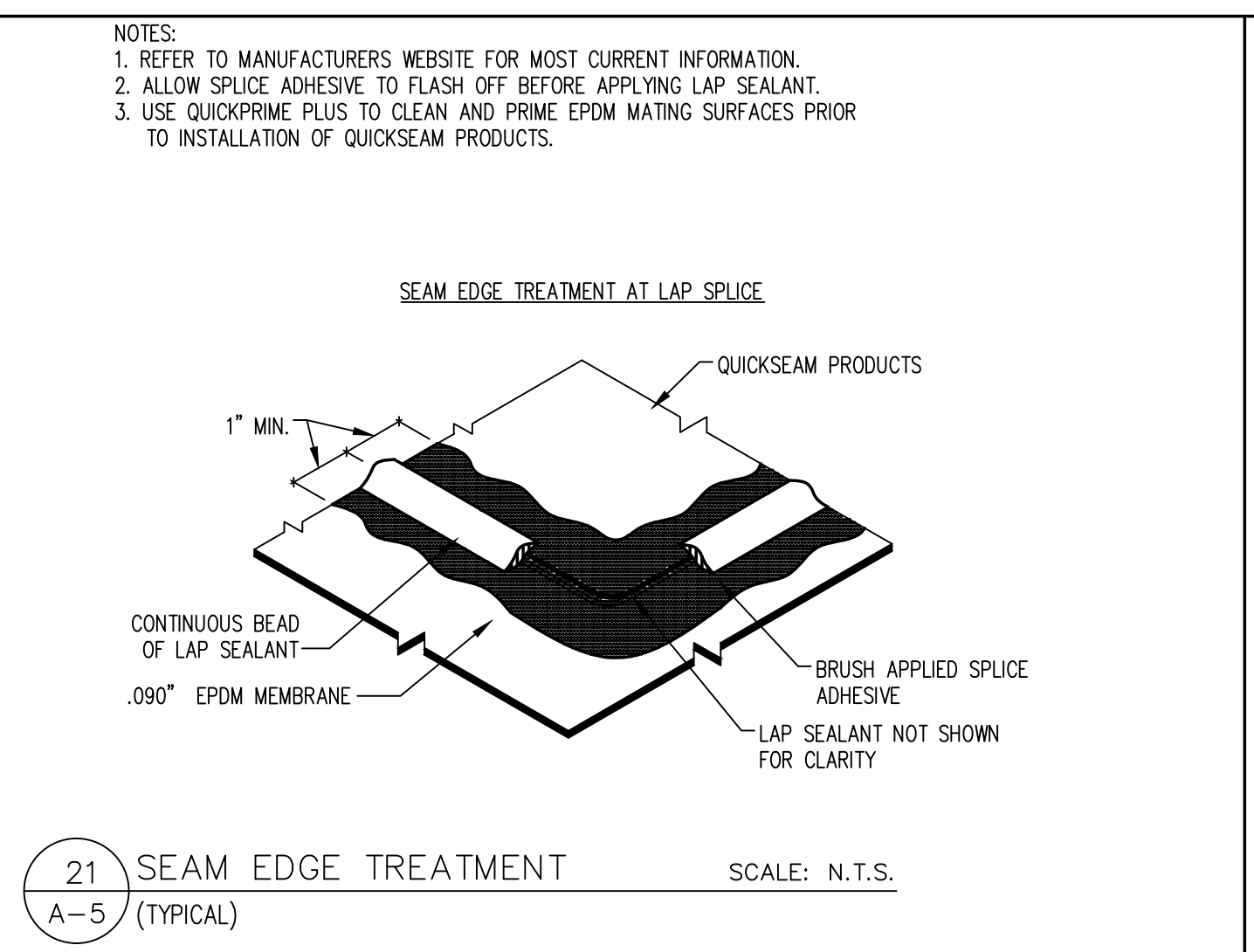




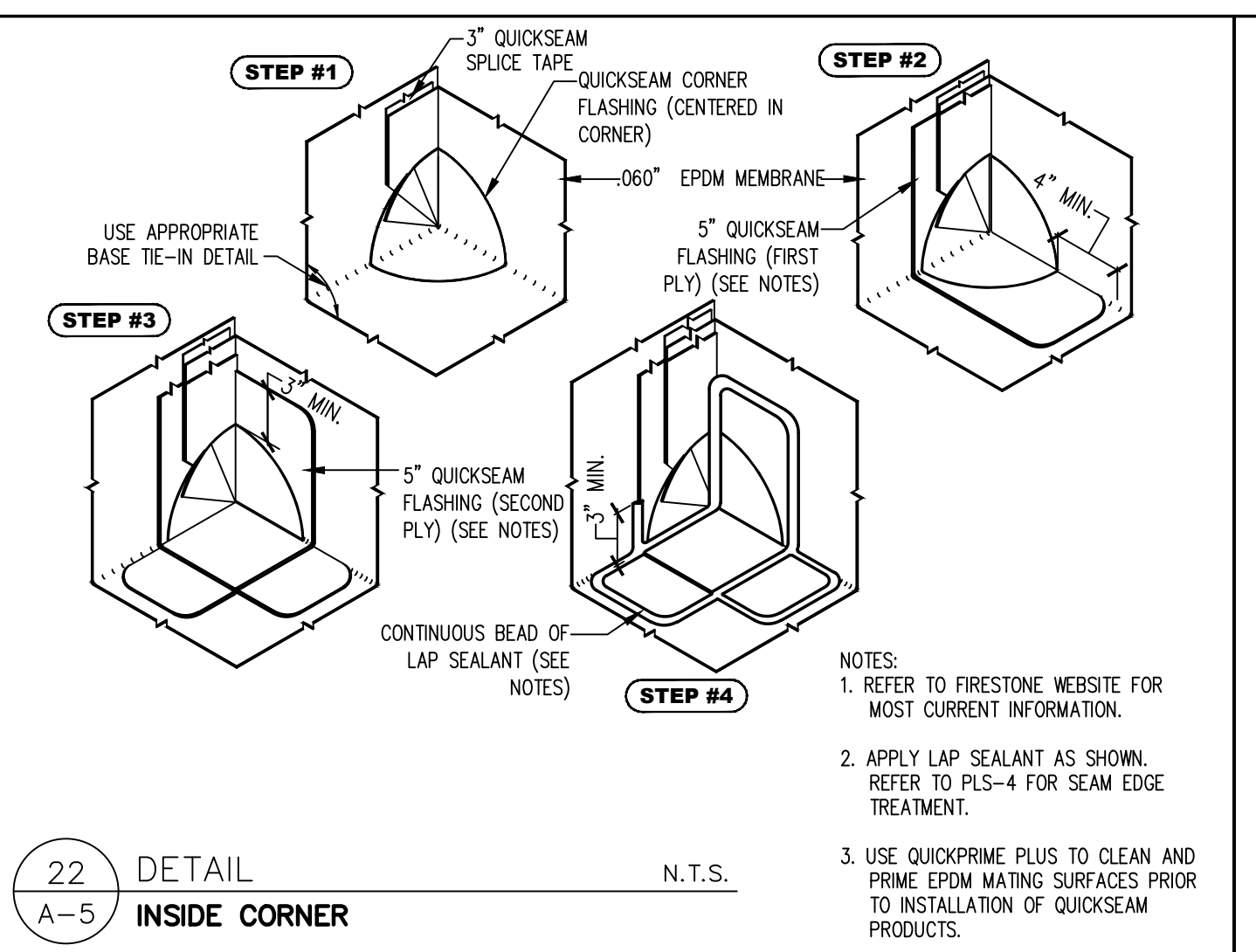
19 DETAIL N.T.S. OUTSIDE CORNER (PC-1)



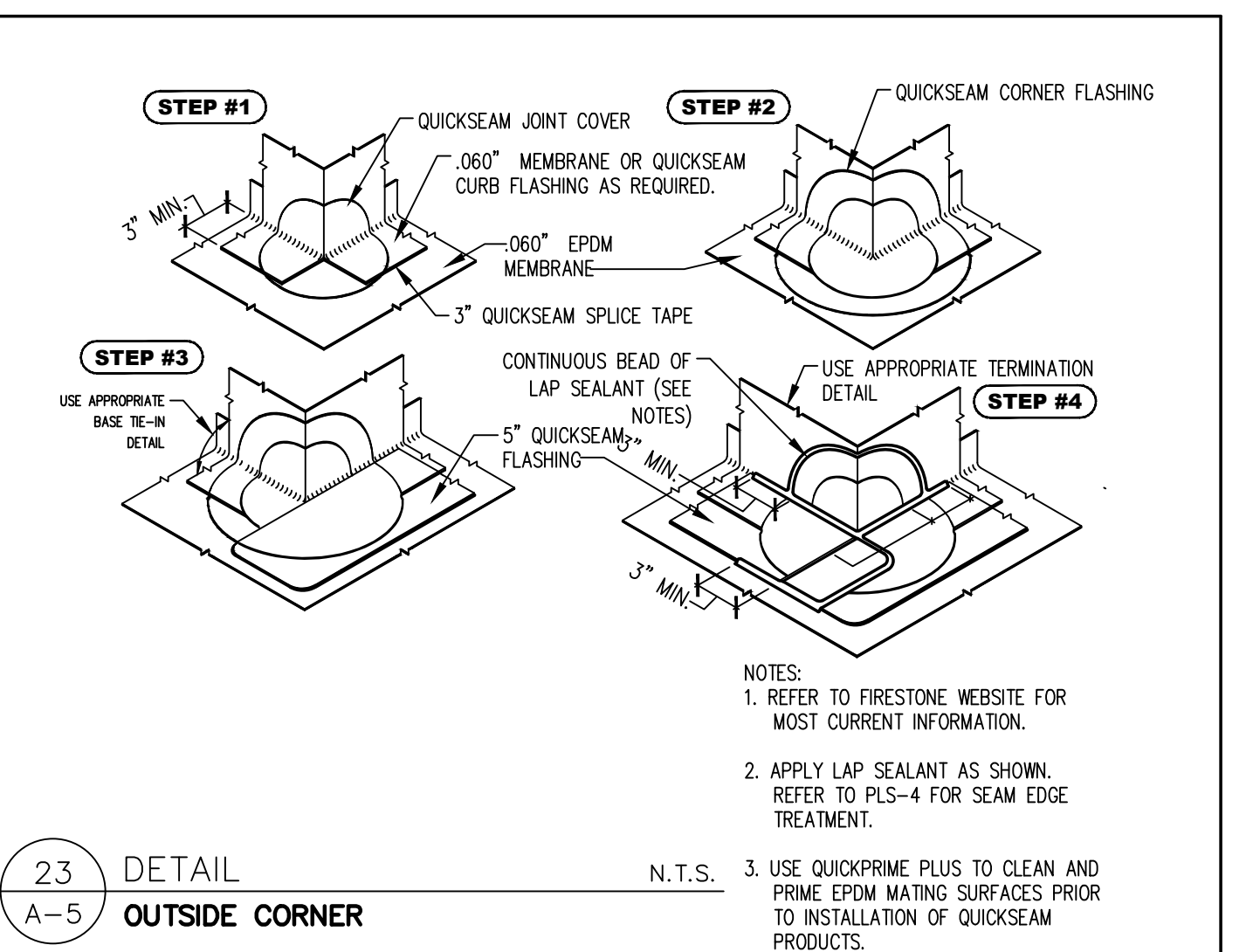
20 LAP SPLICE AT VERTICAL FLASHING SCALE: N.T.S. (TYPICAL)



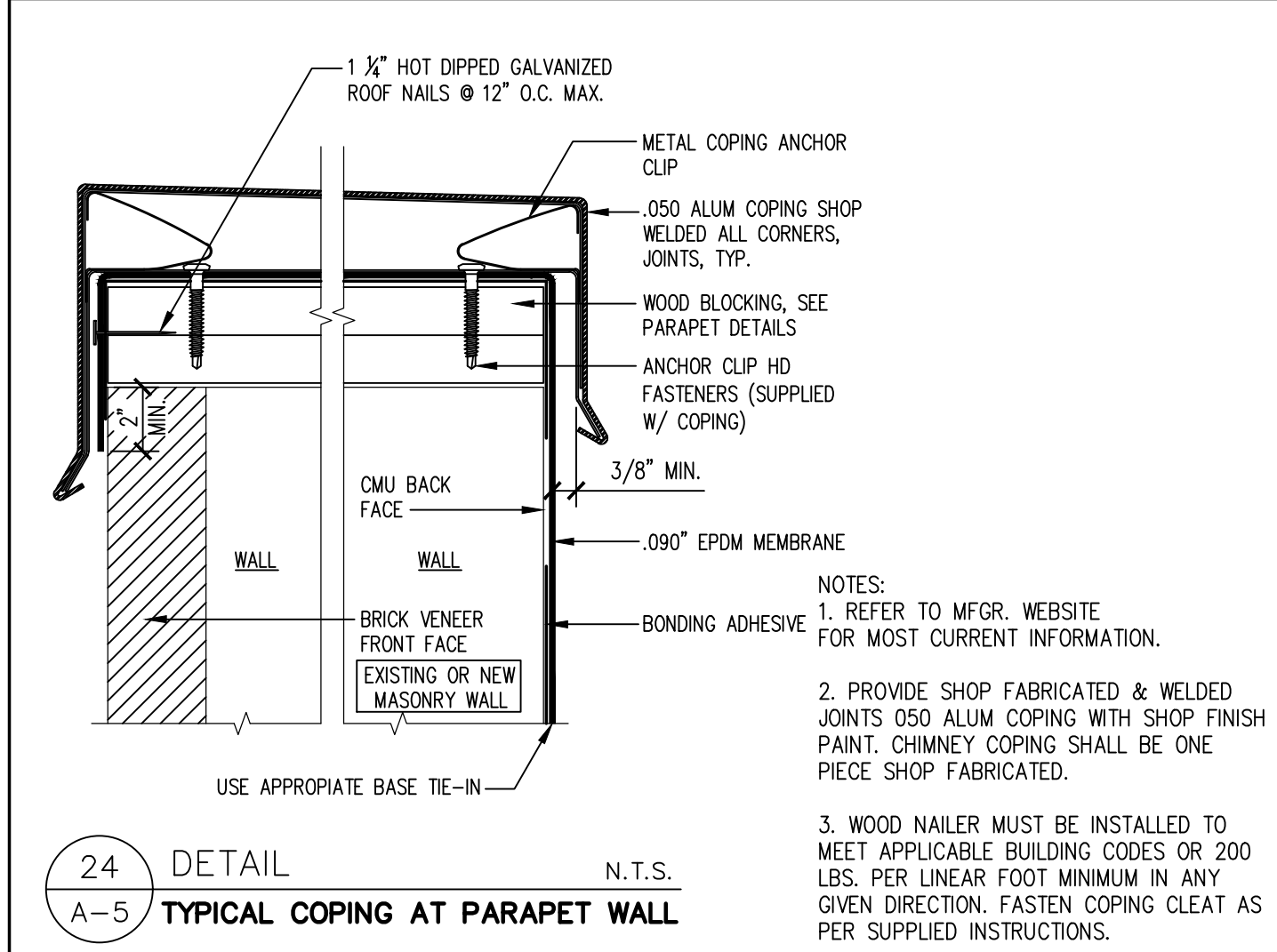
21 SEAM EDGE TREATMENT SCALE: N.T.S. (TYPICAL)



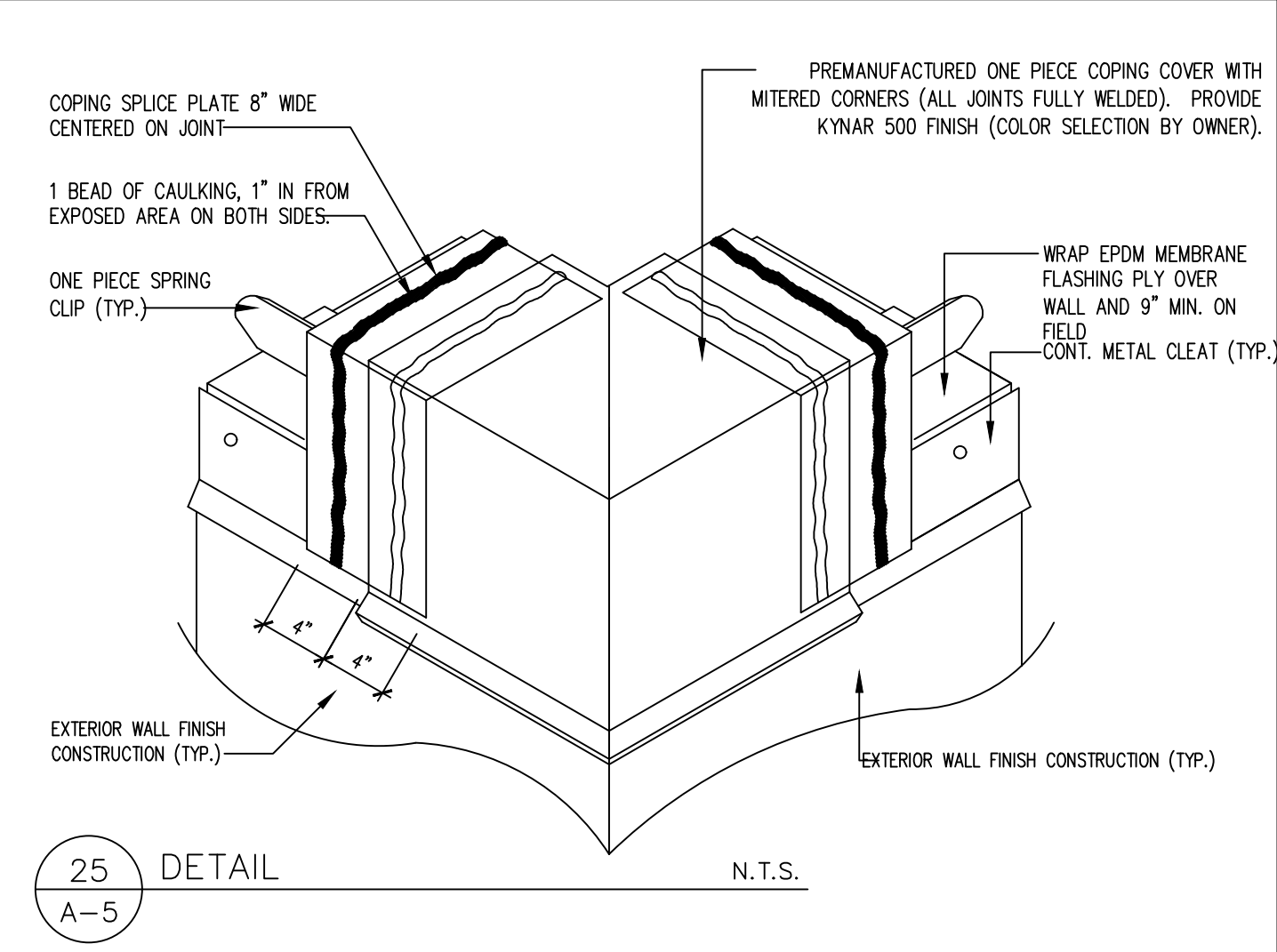
22 DETAIL N.T.S. INSIDE CORNER



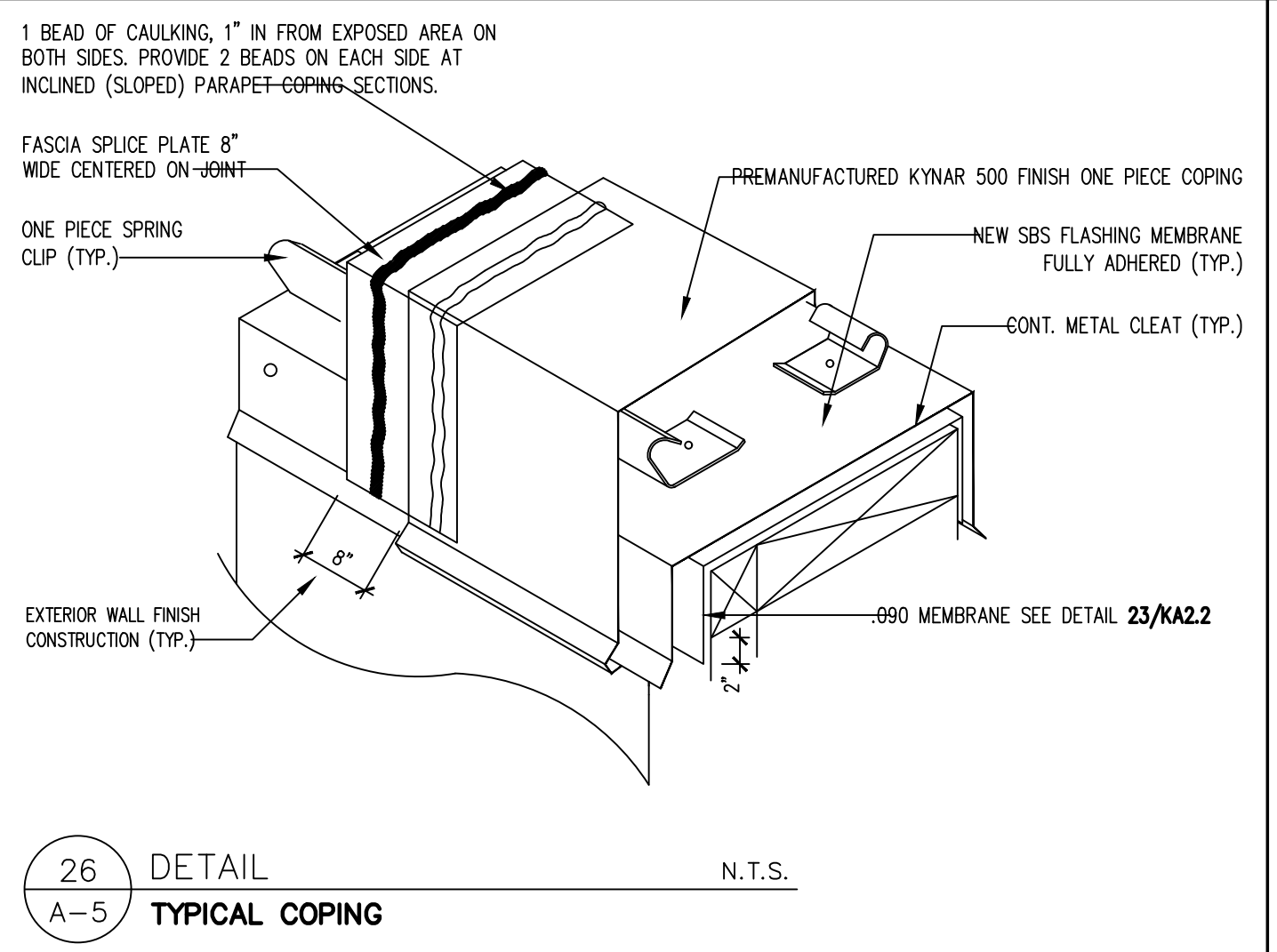
23 DETAIL N.T.S. OUTSIDE CORNER



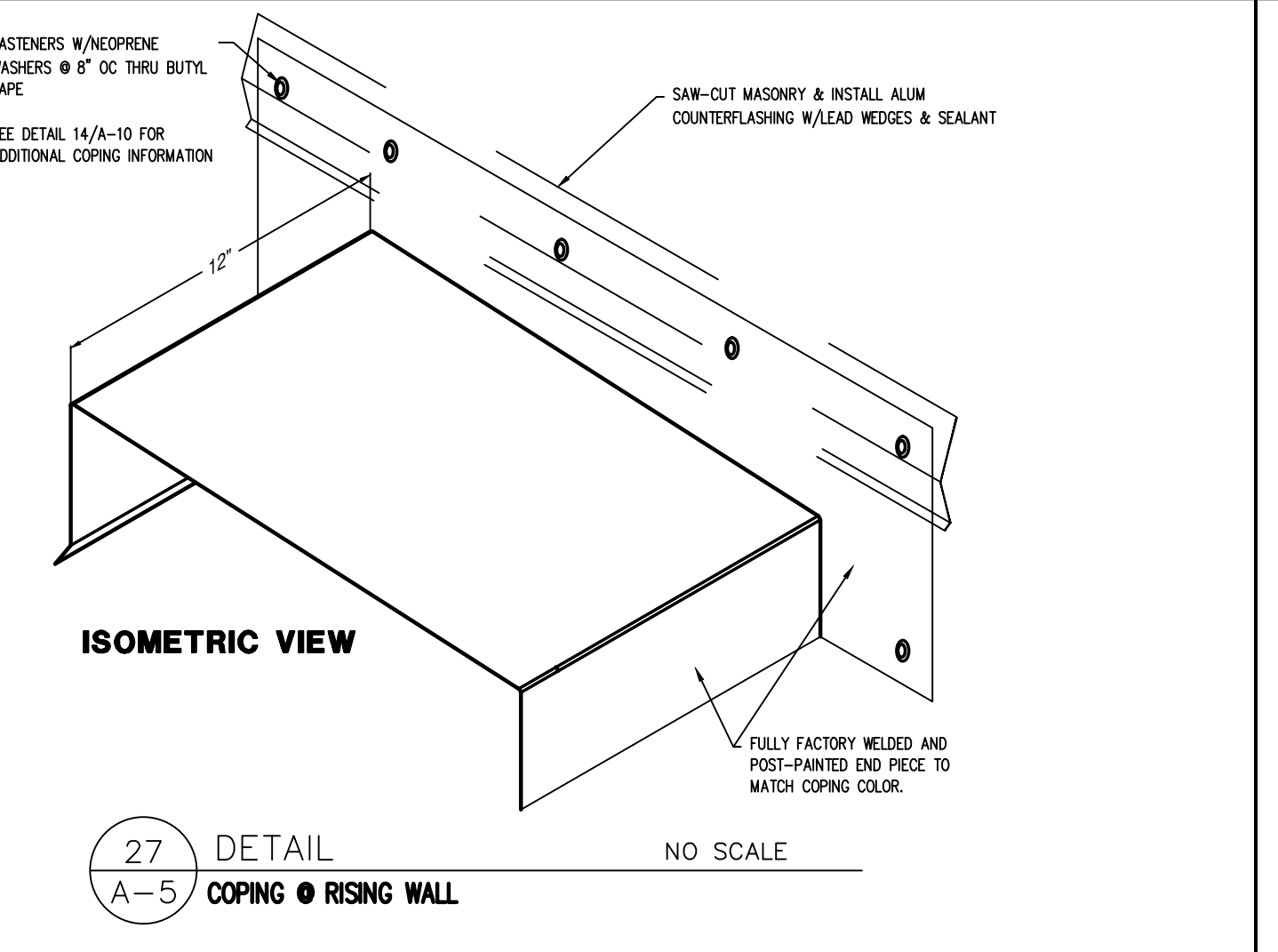
24 DETAIL N.T.S. TYPICAL COPING AT PARAPET WALL



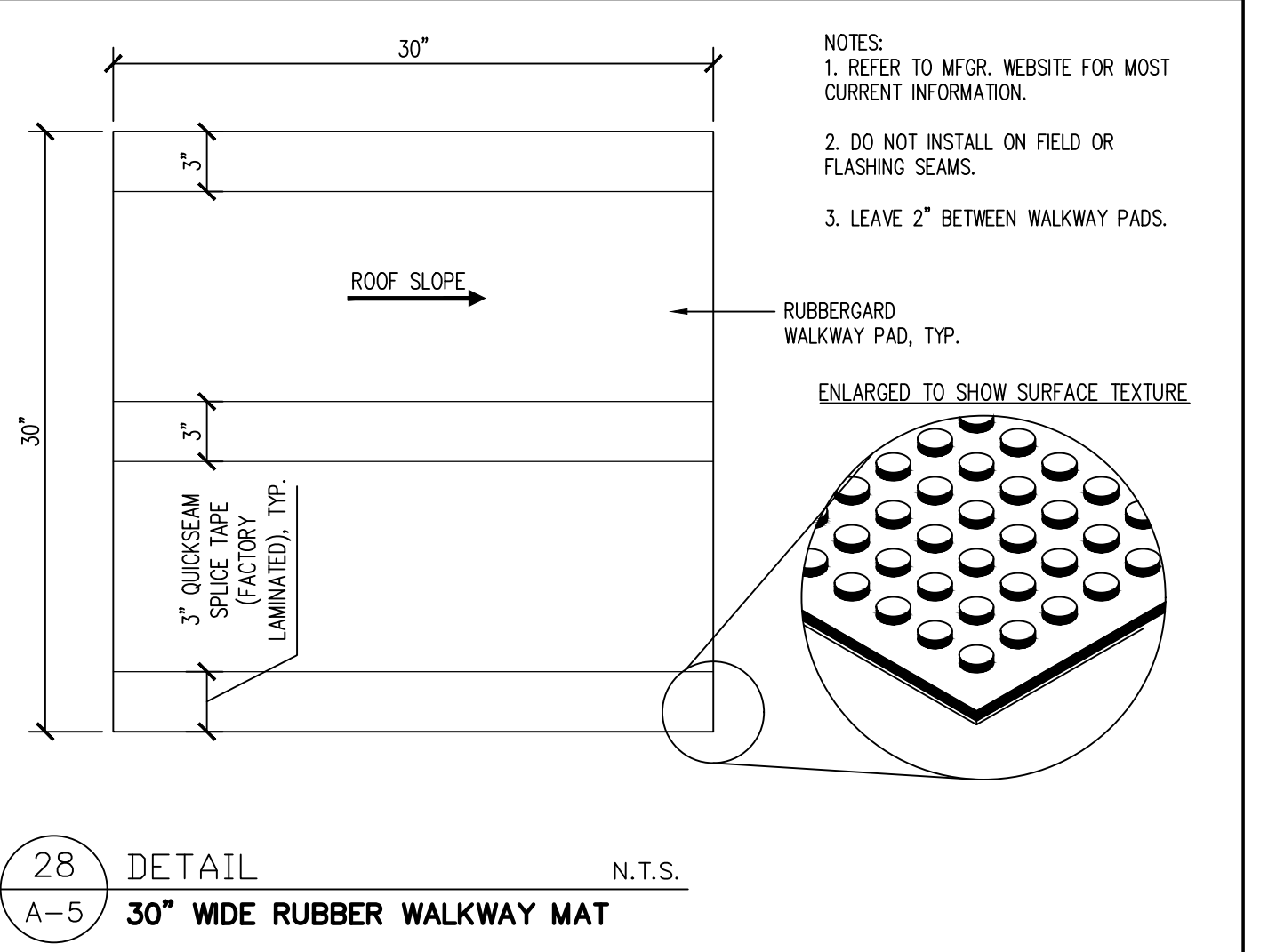
25 DETAIL N.T.S. TYPICAL COPING



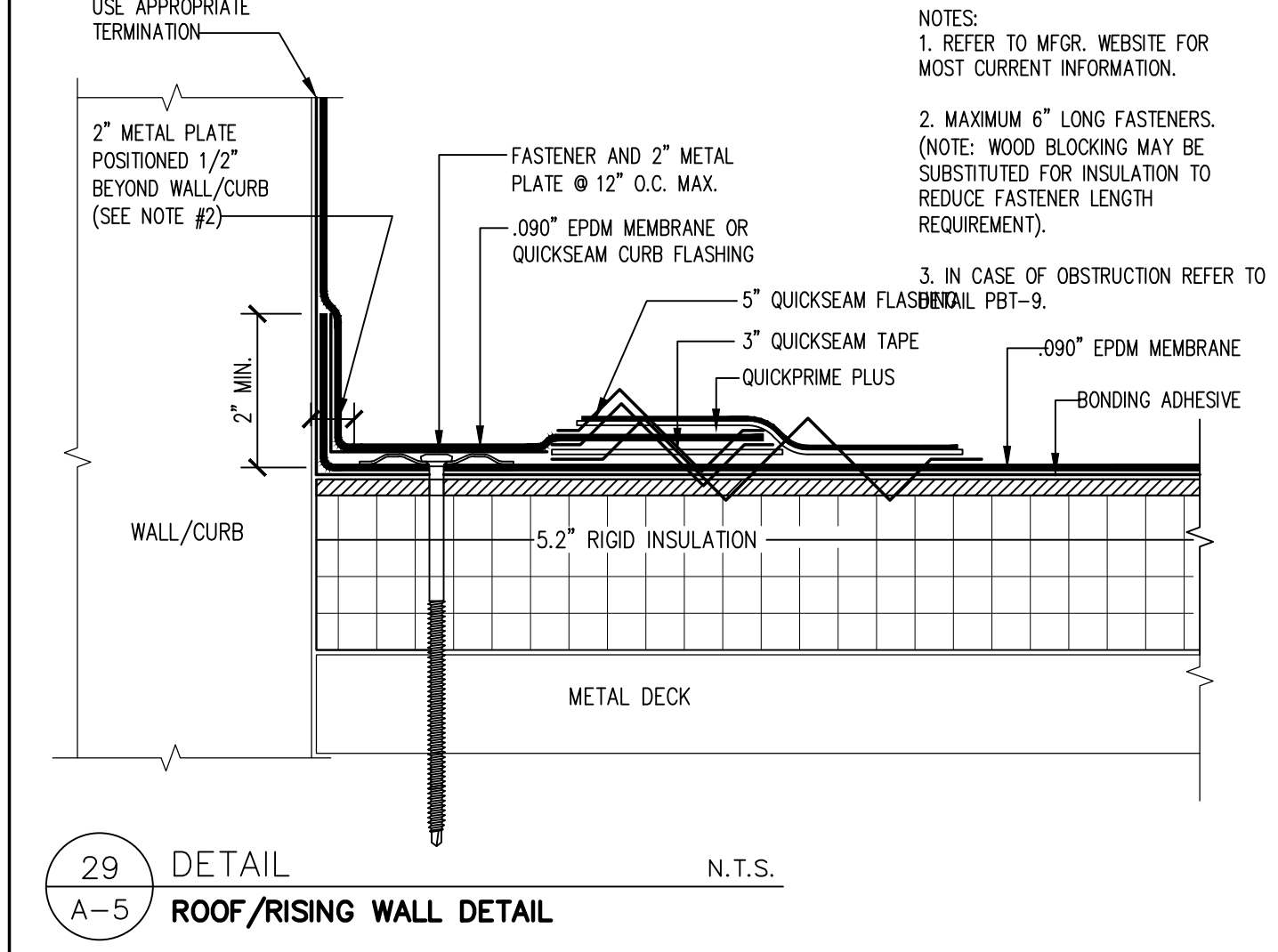
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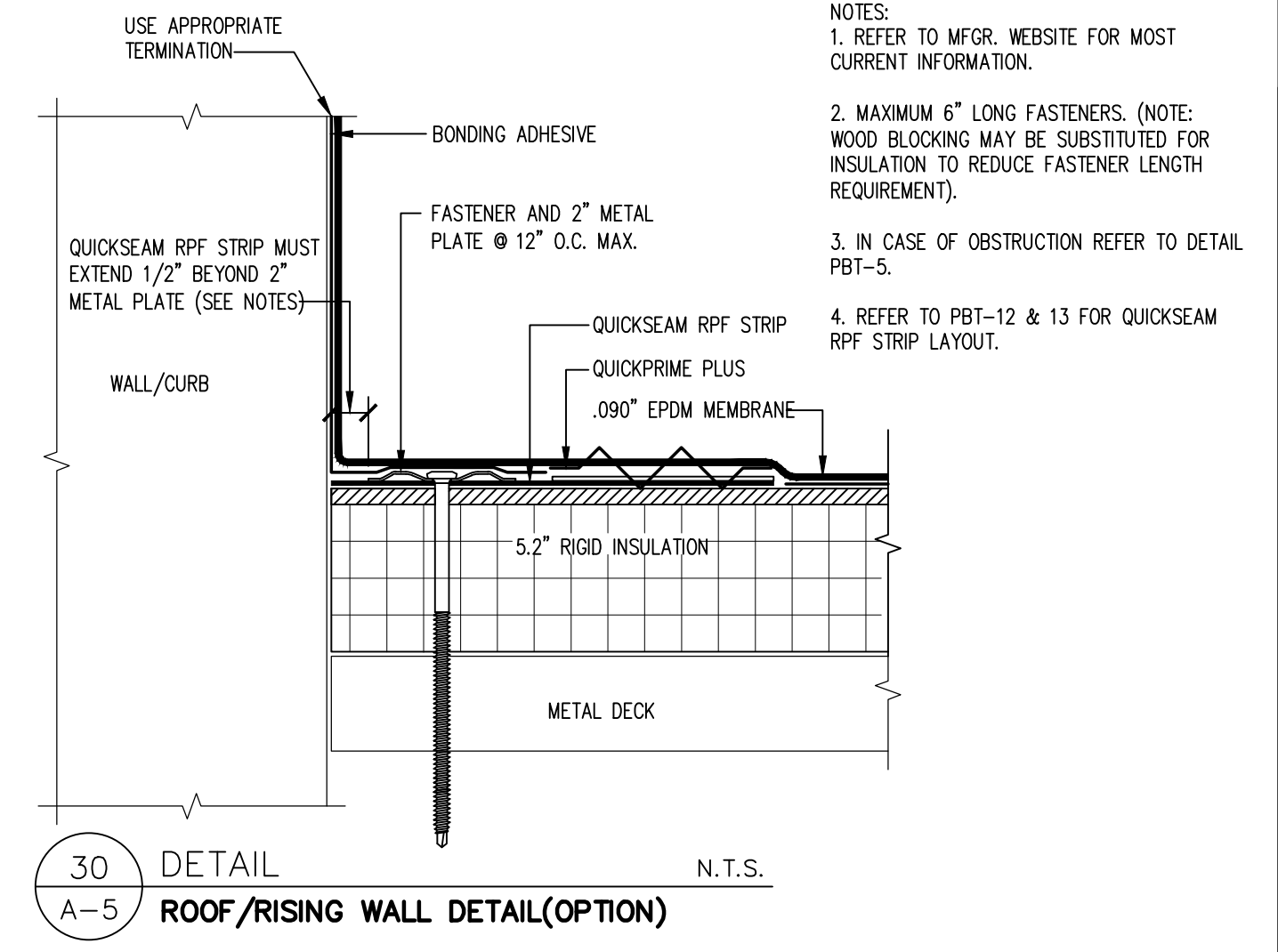
27 DETAIL NO SCALE COPING @ RISING WALL



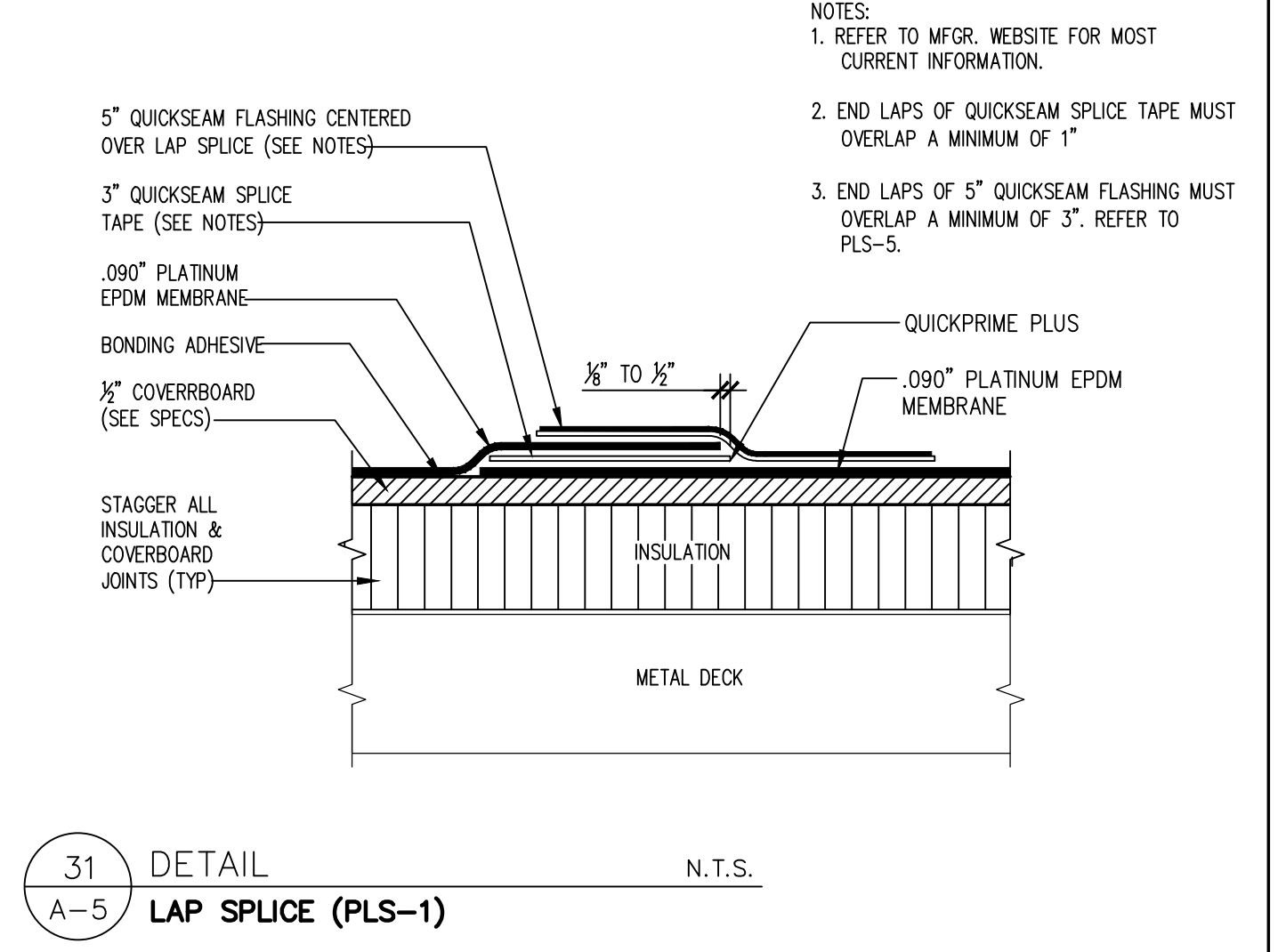
28 DETAIL N.T.S. 30\"/>



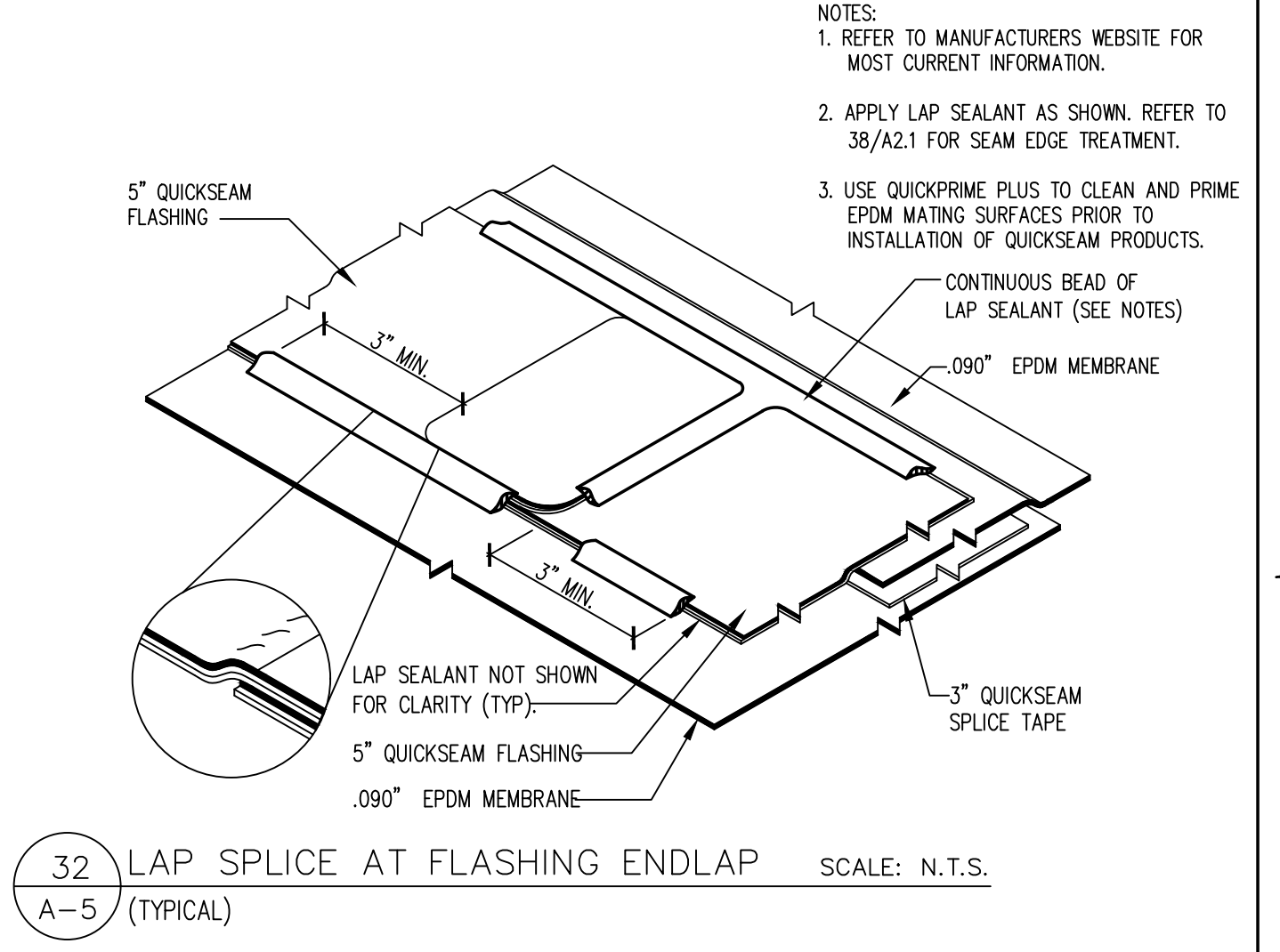
29 DETAIL N.T.S. ROOF/RISING WALL DETAIL



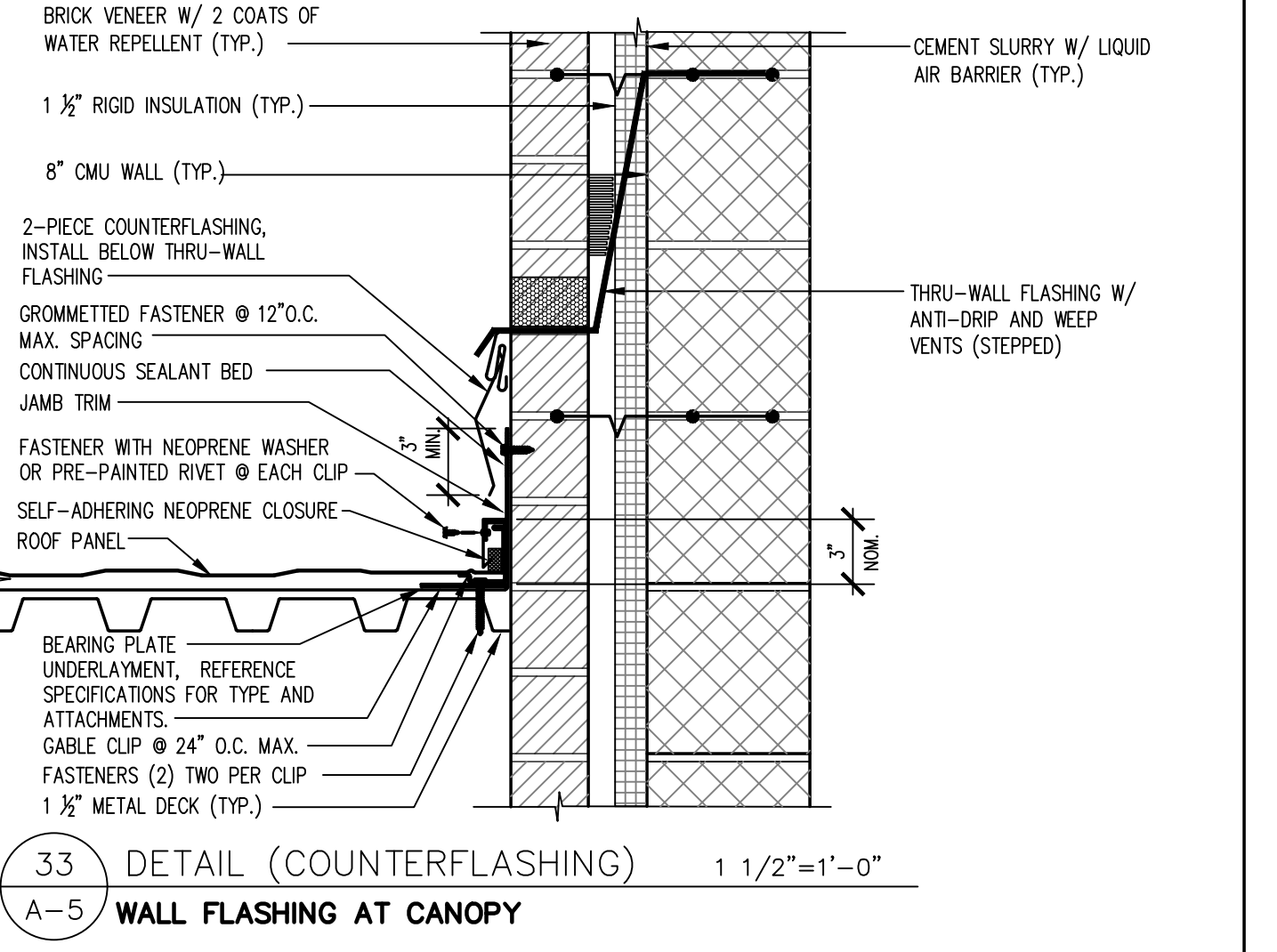
30 DETAIL N.T.S. ROOF/RISING WALL DETAIL(OPTION)



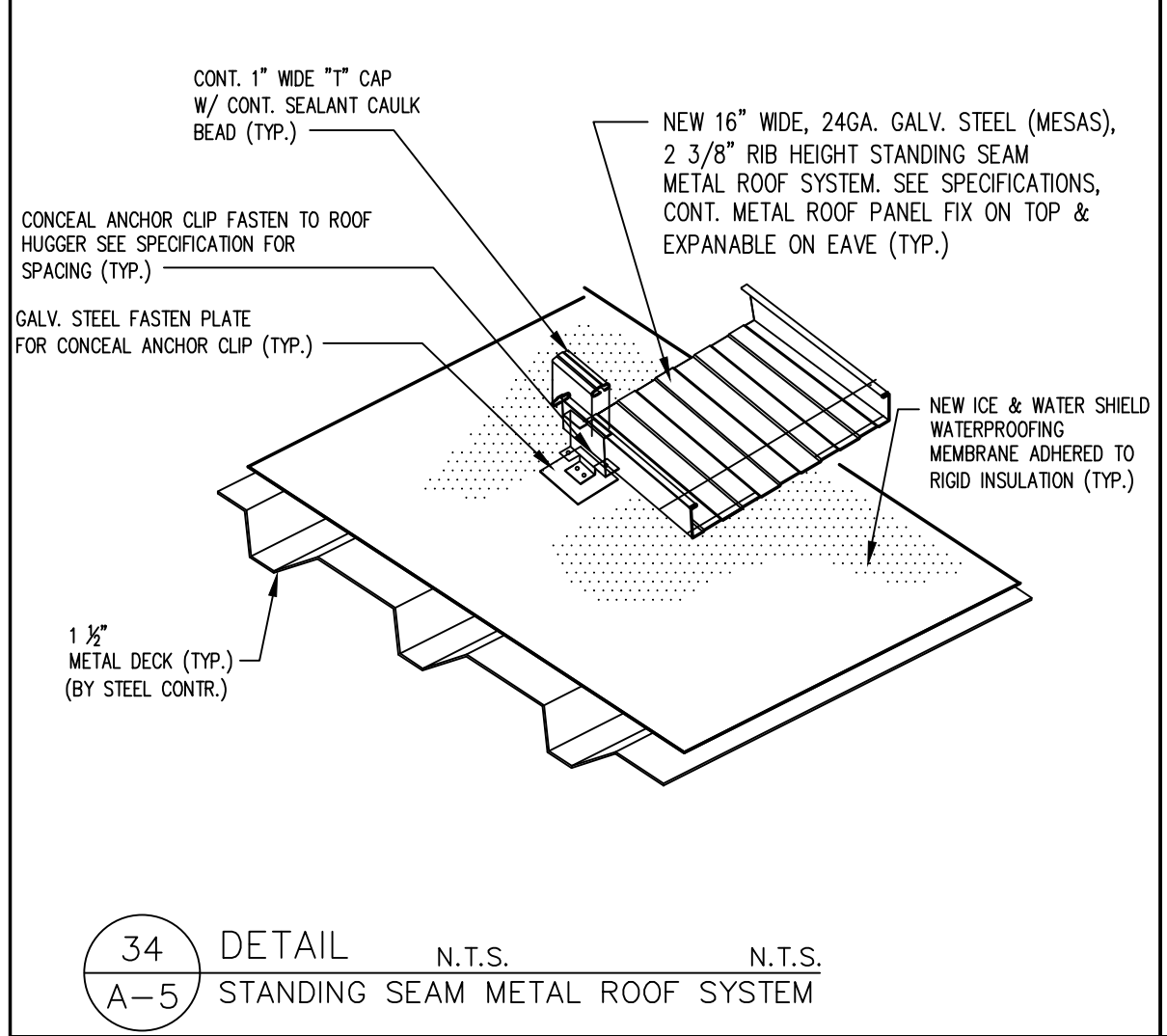
31 DETAIL N.T.S. LAP SPLICE (PLS-1)



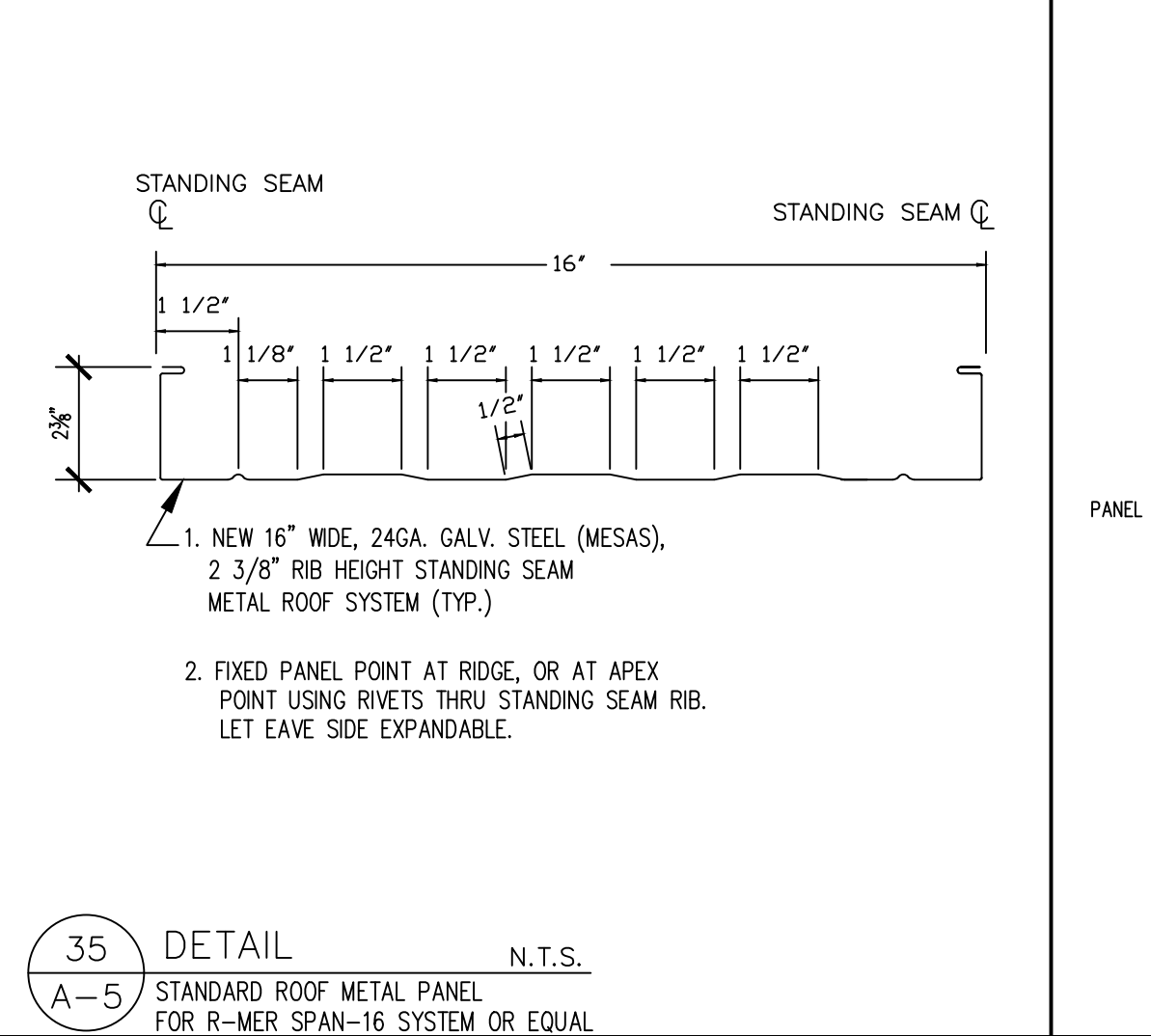
32 DETAIL N.T.S. LAP SPLICE AT FLASHING ENDLAP (TYPICAL)



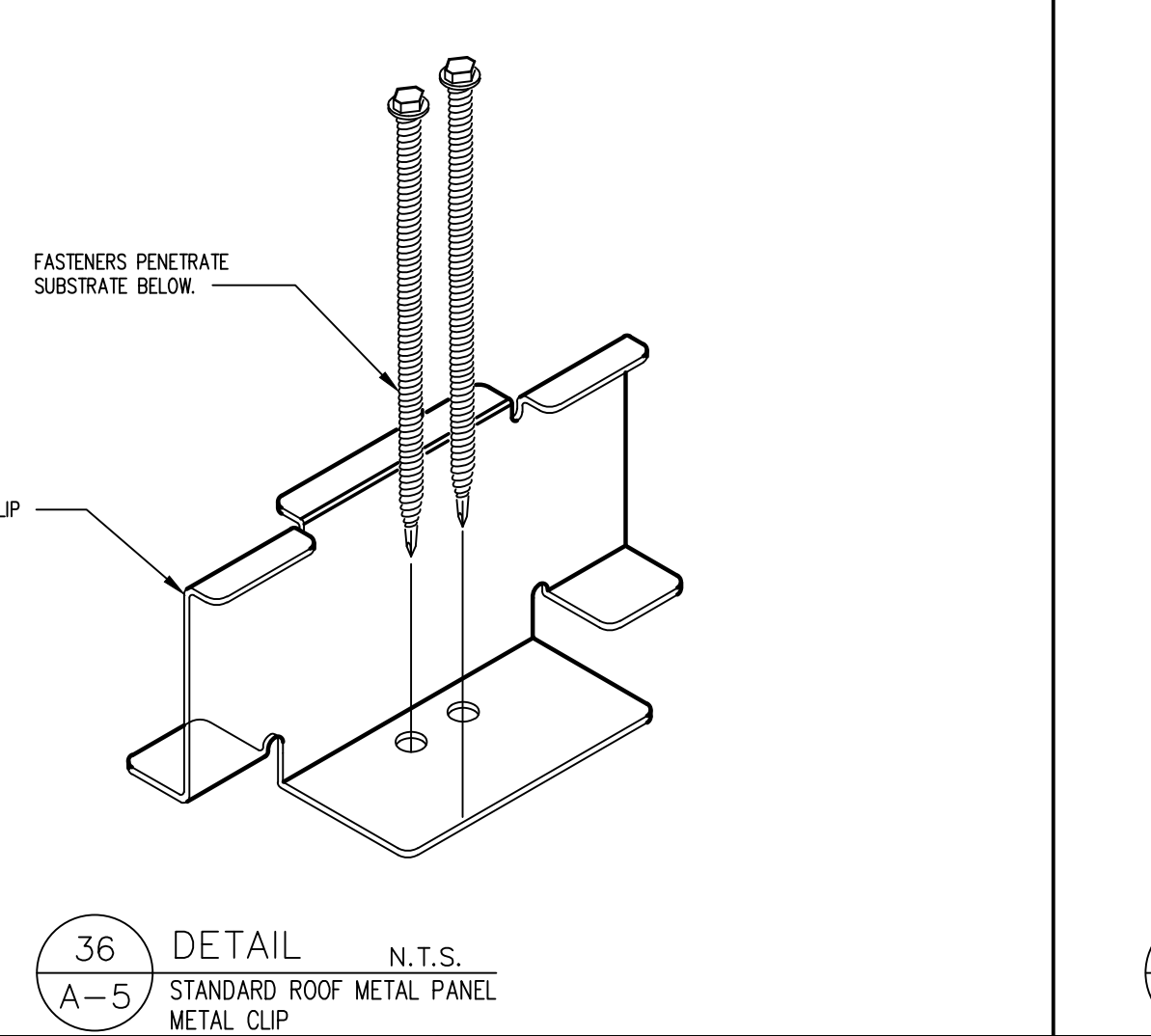
33 DETAIL (COUNTERFLASHING) 1 1/2\"/>



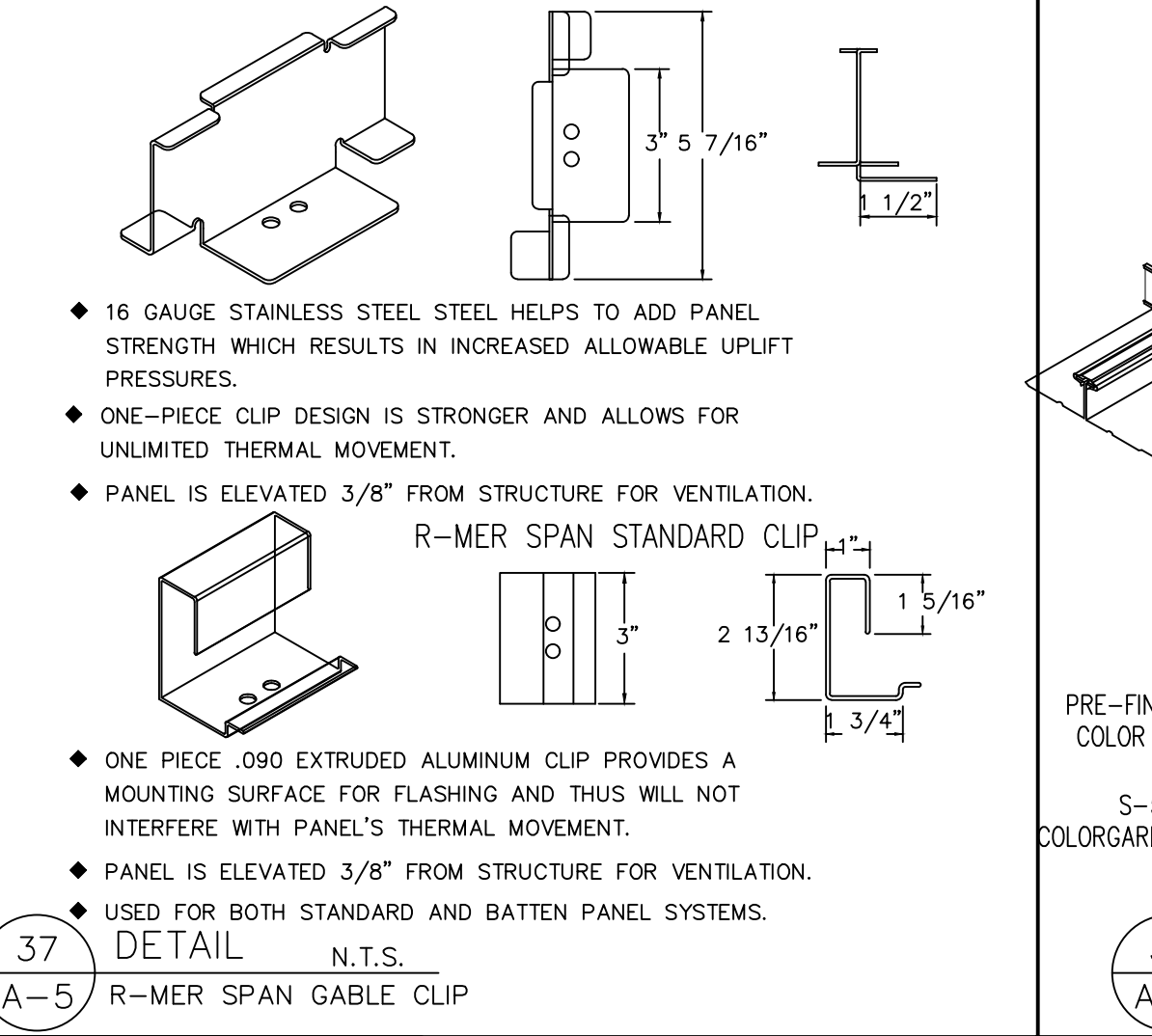
34 DETAIL N.T.S. STANDING SEAM METAL ROOF SYSTEM



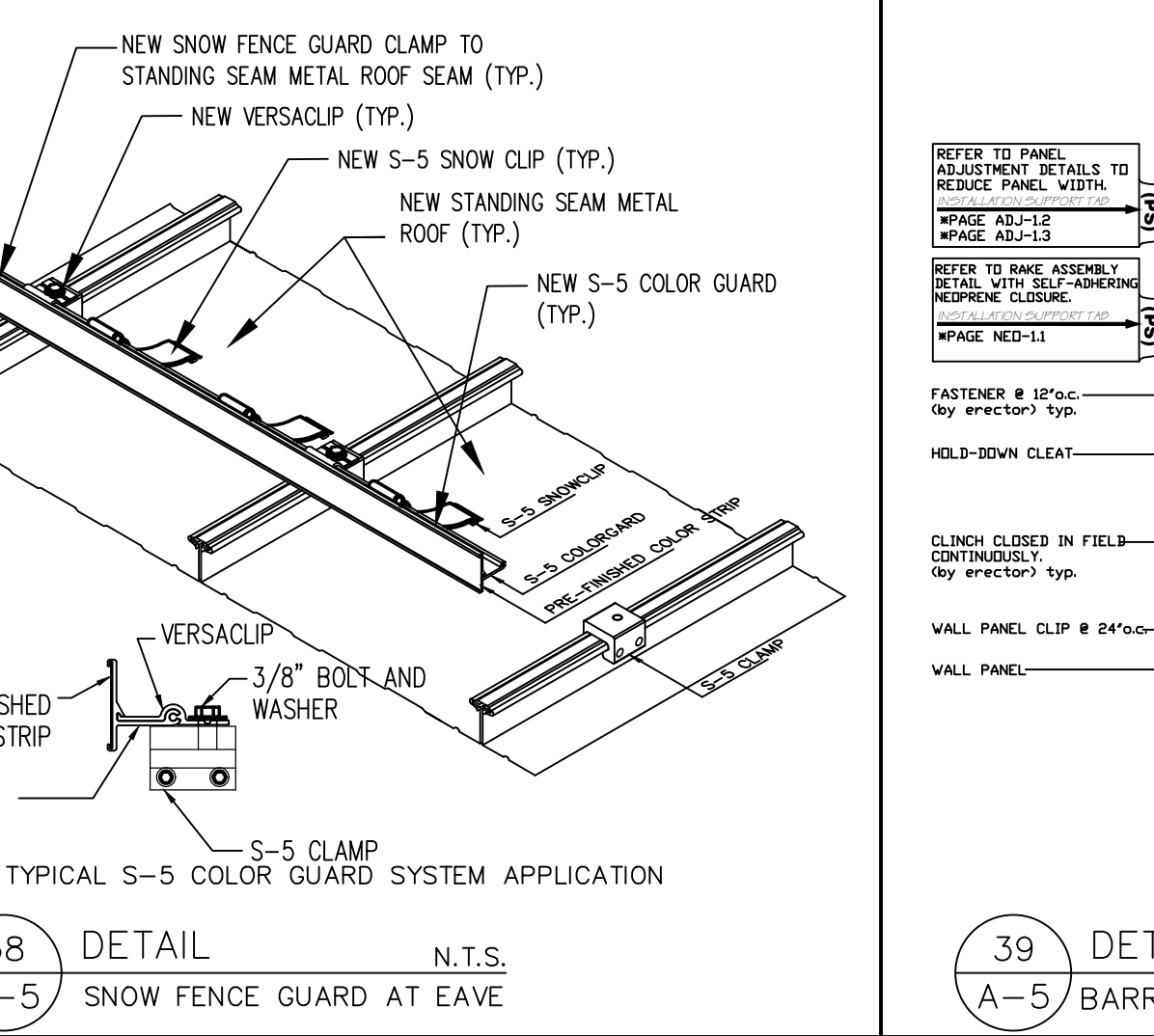
35 DETAIL N.T.S. STANDARD ROOF METAL PANEL



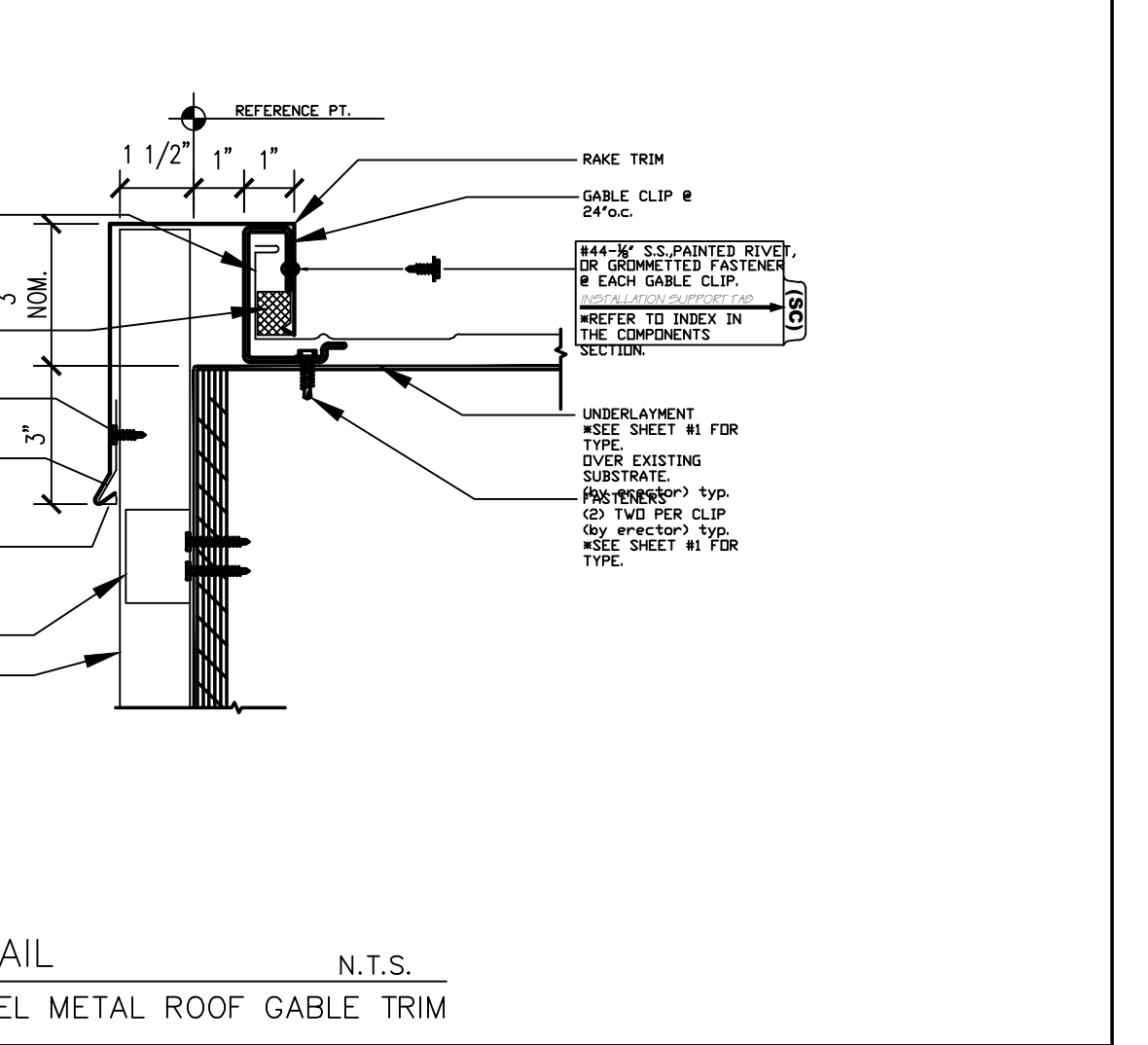
36 DETAIL N.T.S. STANDARD ROOF METAL PANEL



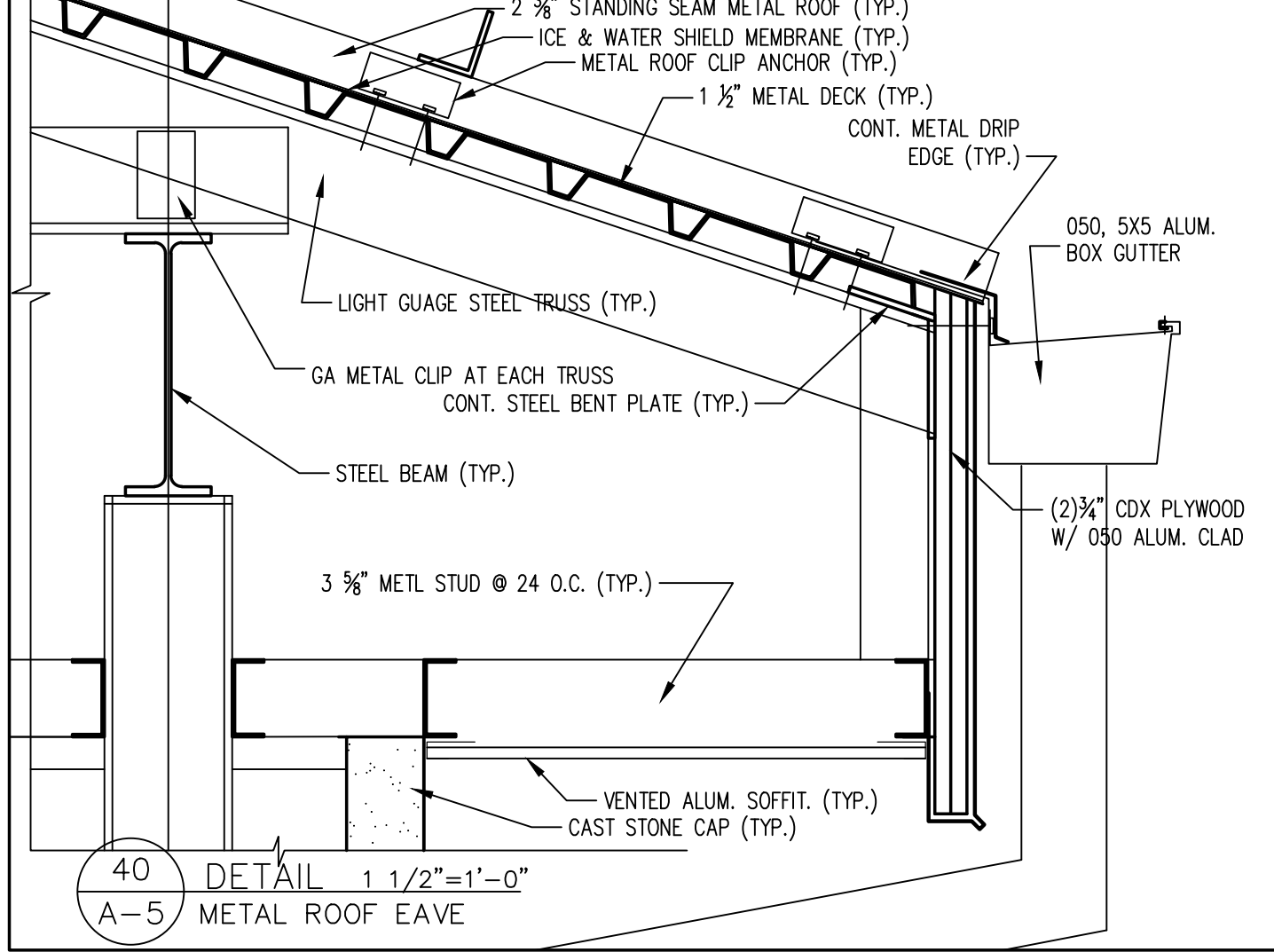
37 DETAIL N.T.S. R-MER SPAN STANDARD CLIP



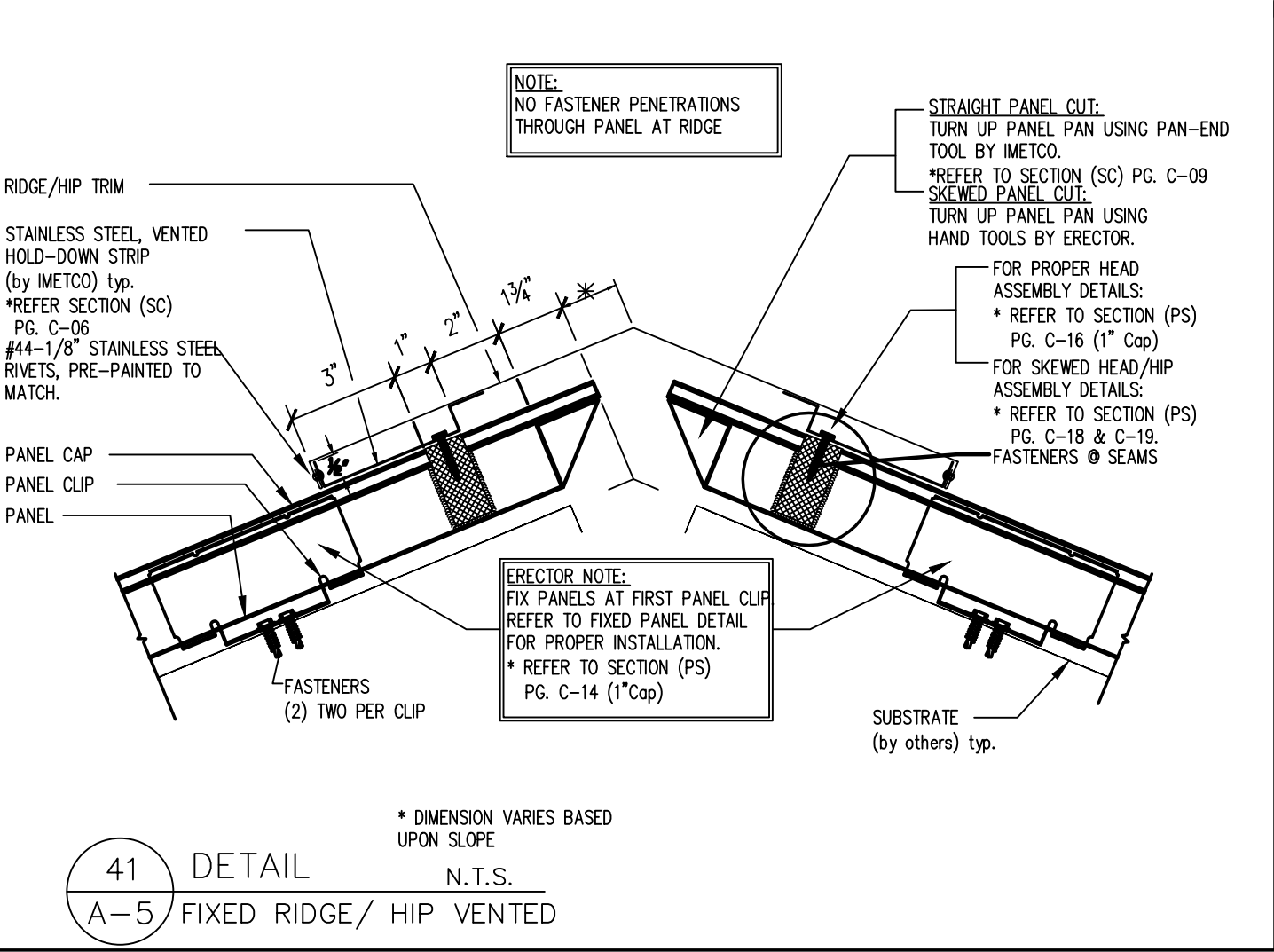
38 DETAIL N.T.S. SNOW FENCE GUARD AT EAVE



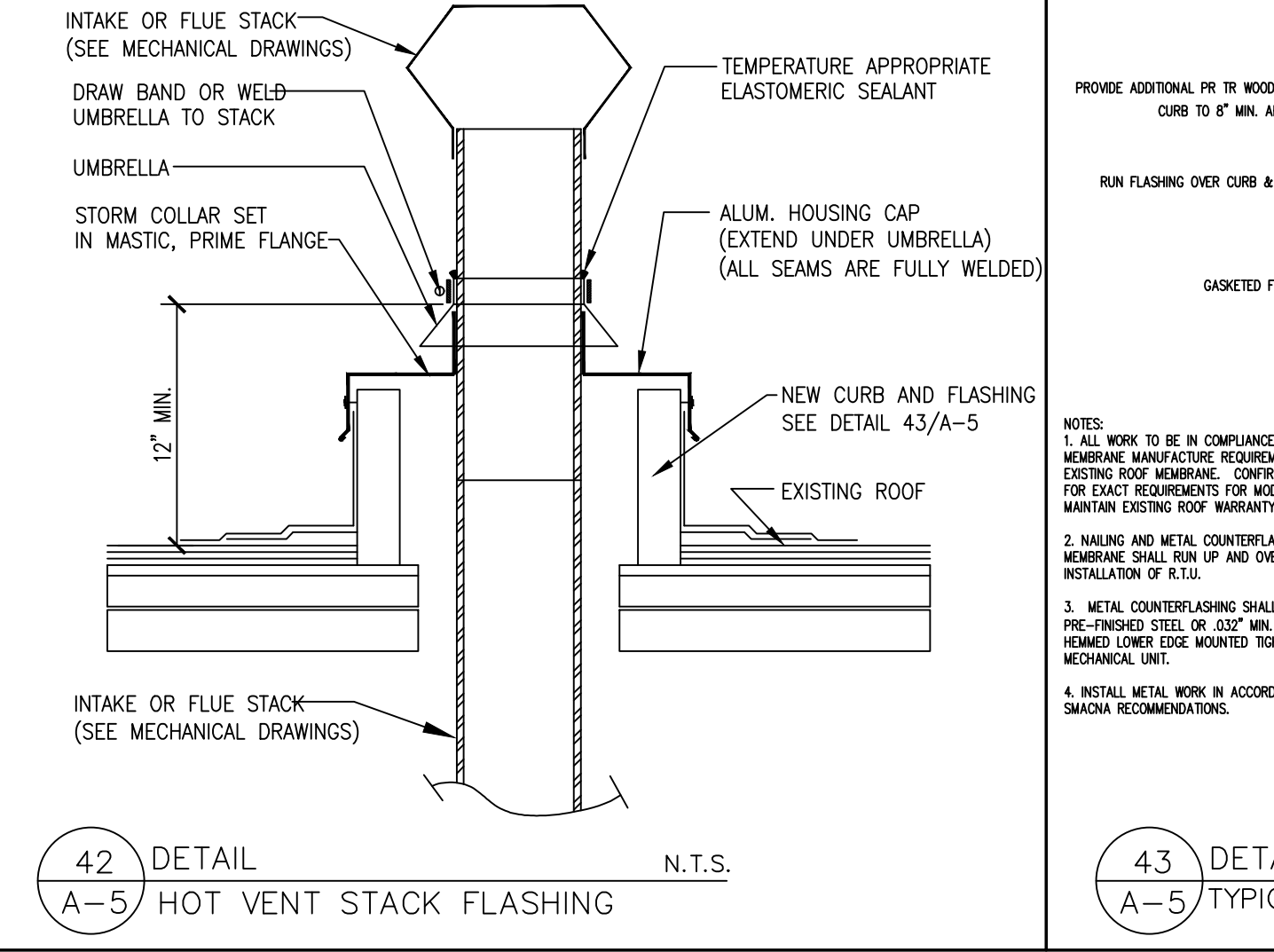
39 DETAIL N.T.S. BARREL METAL ROOF GABLE TRIM



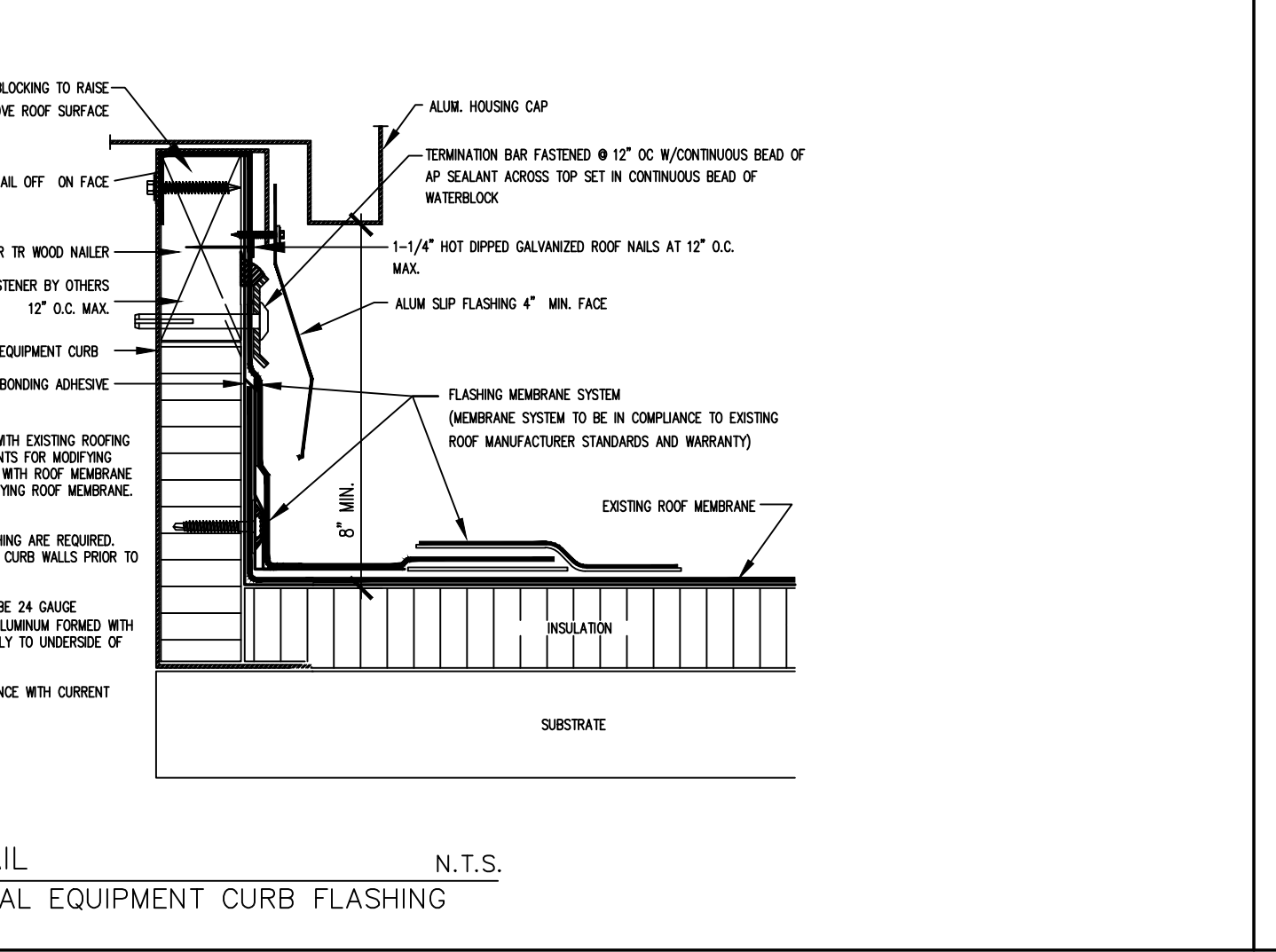
40 DETAIL 1 1/2\"/>



41 DETAIL N.T.S. FIXED RIDGE/ HIP VENTED



42 DETAIL N.T.S. HOT VENT STACK FLASHING



43 DETAIL N.T.S. TYPICAL EQUIPMENT CURB FLASHING

**SAFETY:**

THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AND ENFORCE ALL SAFETY ONSITE AND CONFORM WITH ALL OSHA REGULATIONS, CODES AND STANDARDS. THE OWNER, ARCHITECT AND/OR CONSTRUCTION MANAGER HAVE NO RESPONSIBILITY TO PROVIDE FOR THE SAFETY OR PROTECTION OF THE TRADES. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC EMERGENCY ACTION SAFETY PLAN AND REVIEW THIS WITH ALL ONSITE PERSONNEL. THE CONTRACTOR SHALL CONDUCT PERIODIC (AS NEEDED, AT LEAST ONCE A WEEK) SITE SAFETY INSPECTIONS AND ISSUE A REPORT ON THE CONDITIONS. THE CONTRACTOR SHALL MAINTAIN A FIRST AID KIT ONSITE.

**ALL ROOF RELATED WORK SHALL COMPLY WITH O.S.H.A. SAFETY CODE, IBC 2021 NJ EDITION CODE, & ANY LOCAL SAFETY CODE.**

**GARRISON ARCHITECTS**

**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**

**PAUL W. CARLETON ELEMENTARY SCHOOL**

**2025 PRE-LEK CLASSROOM ADDITION**

261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08069

713 CREEK ROAD, BELLMAWR, NEW JERSEY 08001 (609) 398-0200

**REVISIONS**

a. \_\_\_\_\_

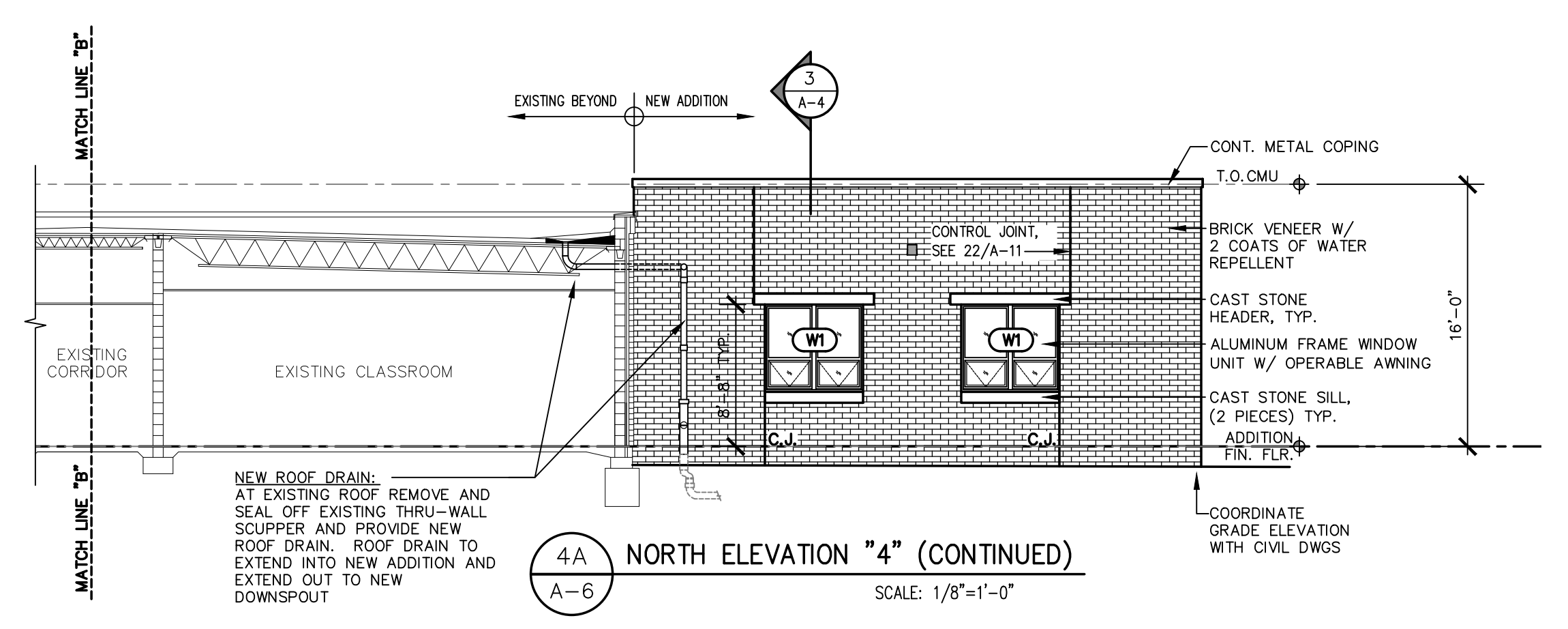
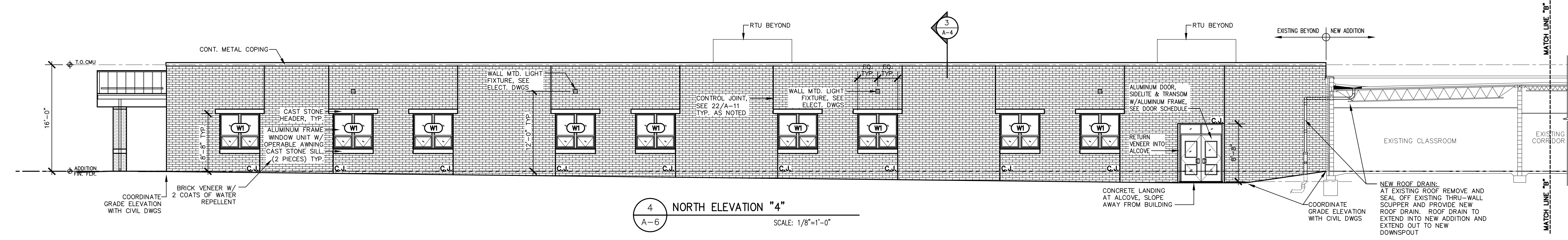
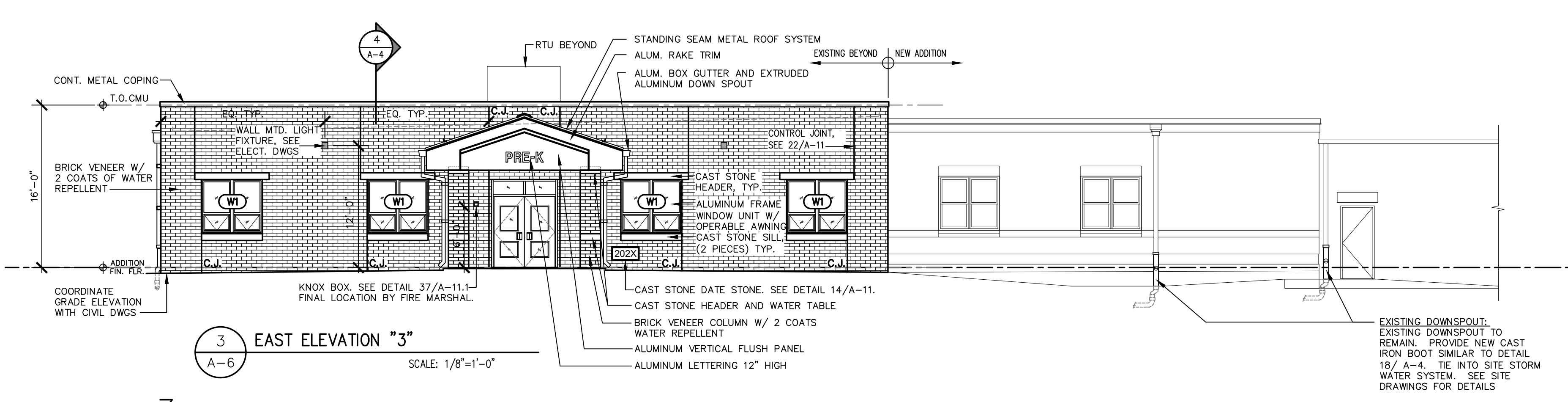
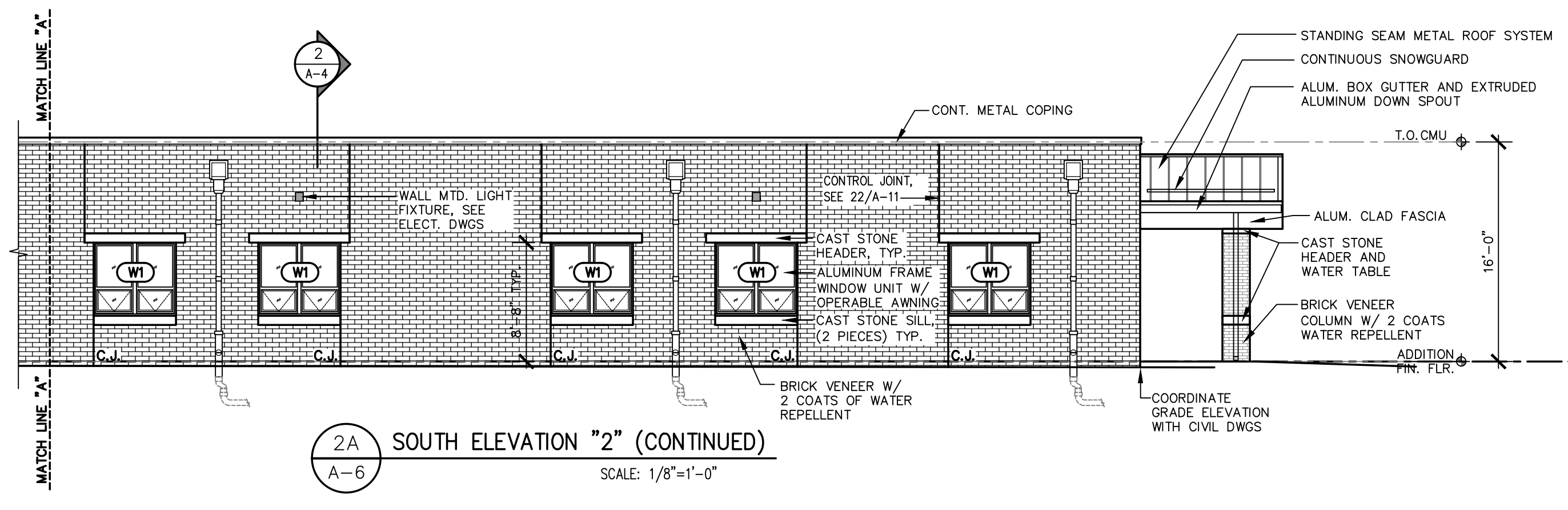
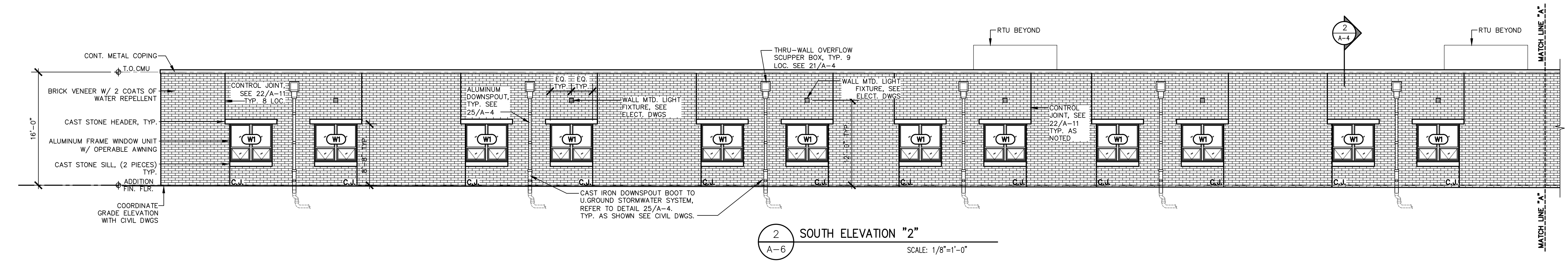
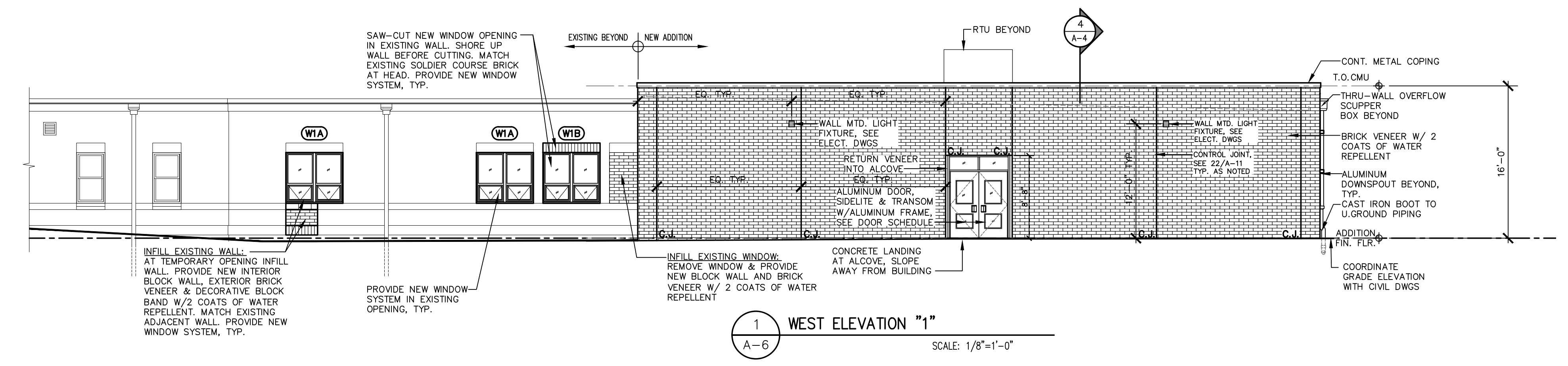
b. \_\_\_\_\_

c. \_\_\_\_\_

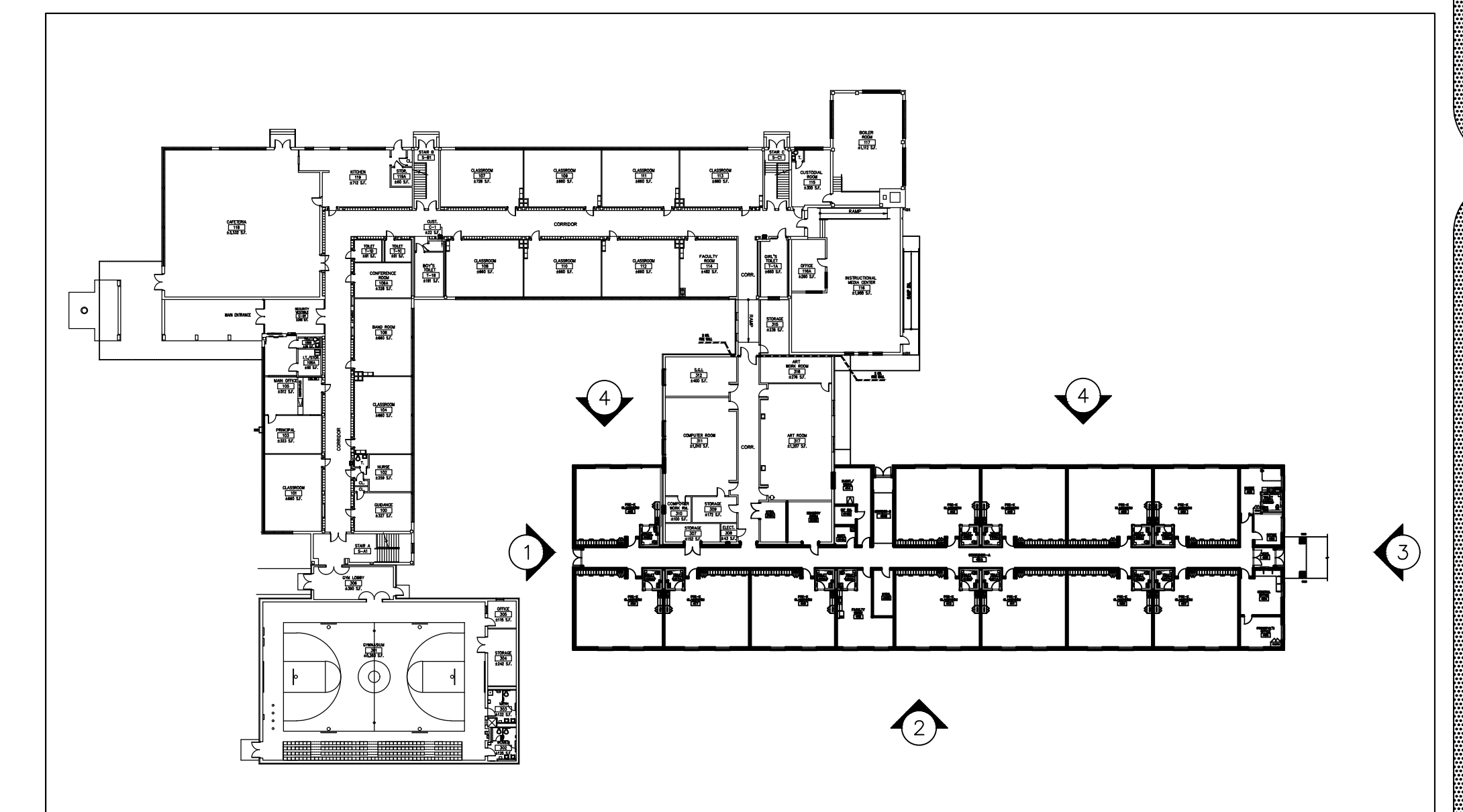
Project No. 23-42  
Date: 11-11-24  
Scale: N.T.S.  
**ROOF DETAIL II**

**A-5**



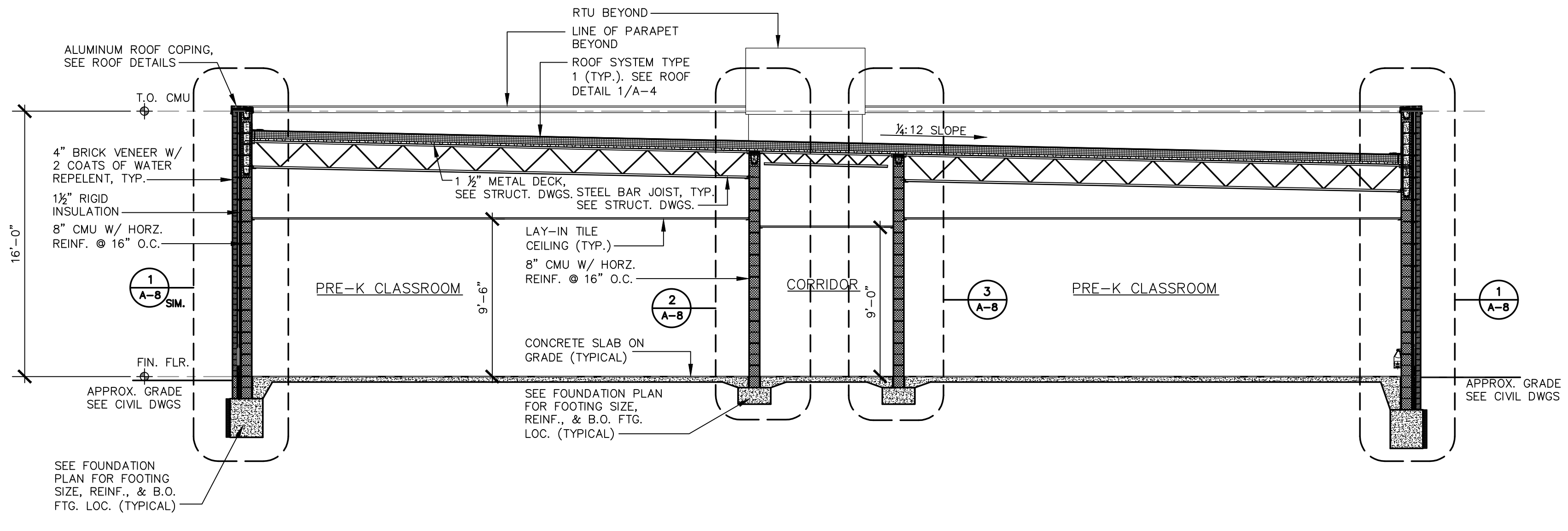


- GENERAL NOTES:**
- SEE SITE DRAWINGS AND STRUCTURAL DRAWINGS FOR GRADING, DOWNSPOUT CONNECTION, CHAIN LINK FENCE & CONCRETE PADS WHERE APPLICABLE.
  - SEE MECHANICAL DRAWINGS FOR SIZE & LOCATION OF MECHANICAL EQUIPMENT, LOUVERS, POWER ATTIC VENTS, ROOF TOP UNITS & DUCTS.
  - SEE SPECIFICATIONS FOR DETAILS ON MATERIALS AND MANUFACTURERS.
  - SEE STRUCTURAL DRAWINGS FOR FOUNDATION & FOOTING DETAILS.
  - SEE DOOR & WINDOW SCHEDULES FOR DOOR & WINDOW SIZES & DETAILS.
  - SEE FLOOR PLANS, STRUCTURAL DRAWINGS & DETAILS FOR CONTROL JOINTS.
  - SEE ROOF PLAN & ROOF DETAILS FOR NEW ROOF/METAL COPING.
  - GUARDRAILS AND HANDRAILS SUPPLIED BY STEEL CONTRACTOR AND INSTALLED BY GENERAL CONTRACTOR. (IF APPLICABLE)
  - ALL EXTERIOR JOINTS BETWEEN CAST STONE, CONCRETE, BRICK, STEEL, WINDOW, DOOR, METAL PANEL, SHALL HAVE SILICONE SEALANT W/ BACKER ROD. SEE SPECIFICATION :07901
  - SEE PLUMBING DRAWINGS & ROOF PLAN FOR SIZE & LOCATION OF PLUMBING VENT STACKS, DOWN SPOUTS & GUTTERS.
  - SEE MECHANICAL, PLUMBING & ELECTRICAL DRAWINGS FOR ADDITIONAL FIXTURES, EQUIPMENT, LIGHTING, ETC. ON ELEVATIONS, TYP.
  - ALL CAST IRON DRAIN BOOTS SHALL BE PRIMED & FINISH PAINTED PRIOR TO DELIVERY TO JOBSITE PER PAINT SPECIFICATION SECTION 09900, TYPICAL. DRAIN BOOT MUST BE FLUSH & PLUMB, TYPICAL.

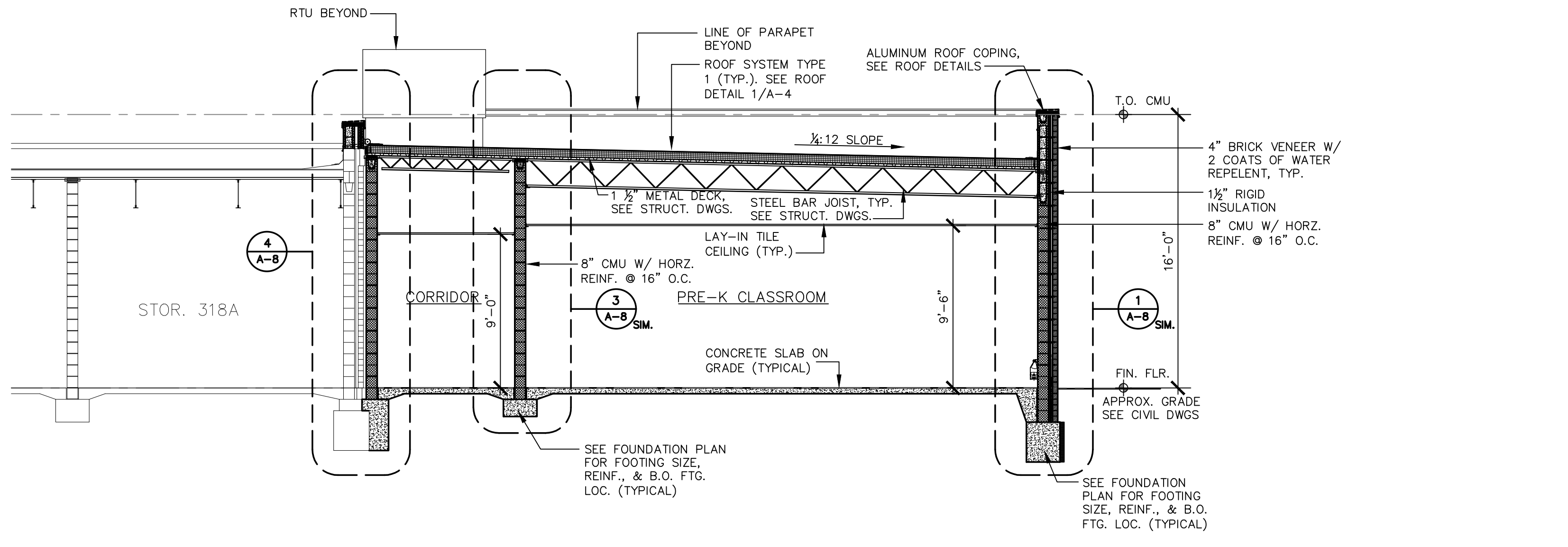


**KEY PLAN**

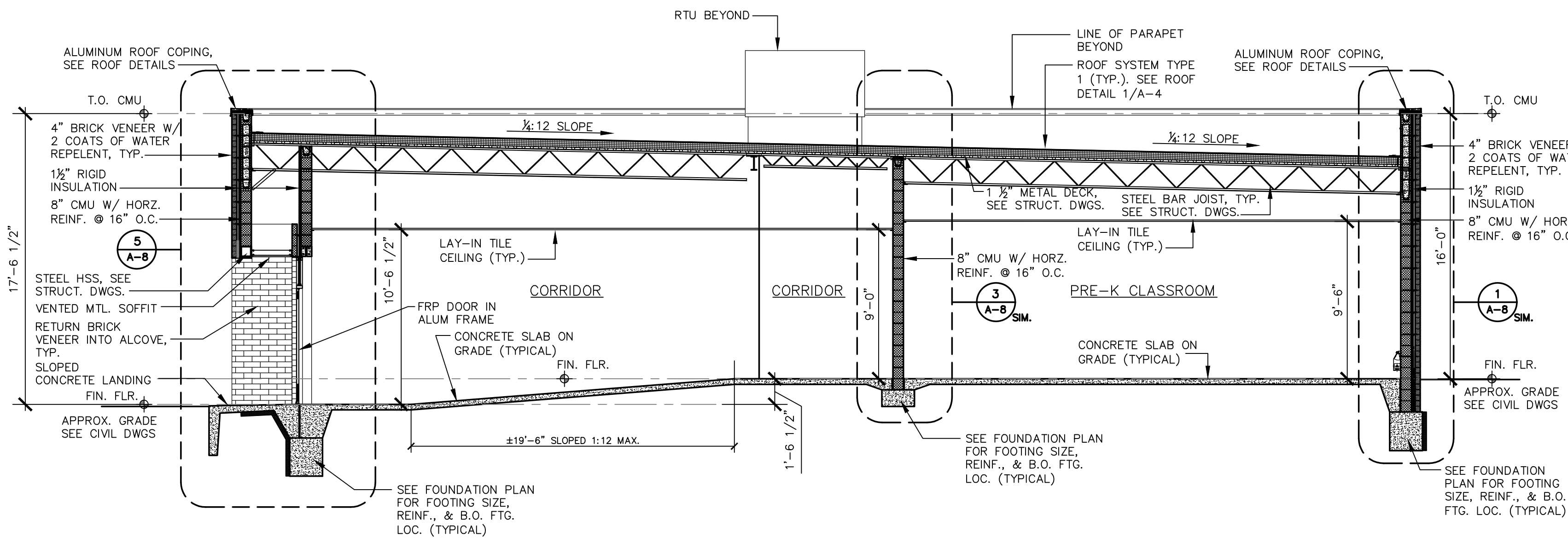




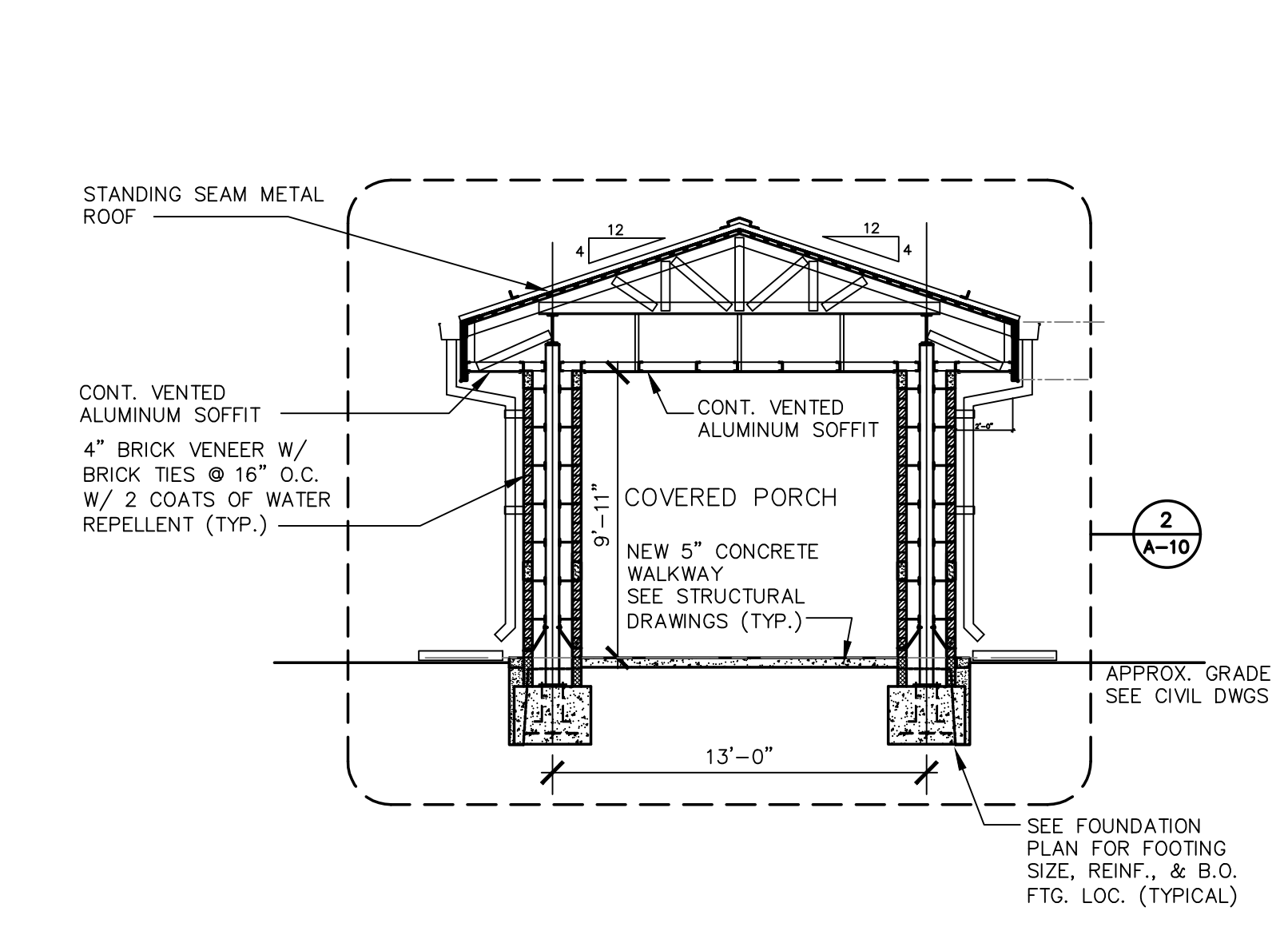
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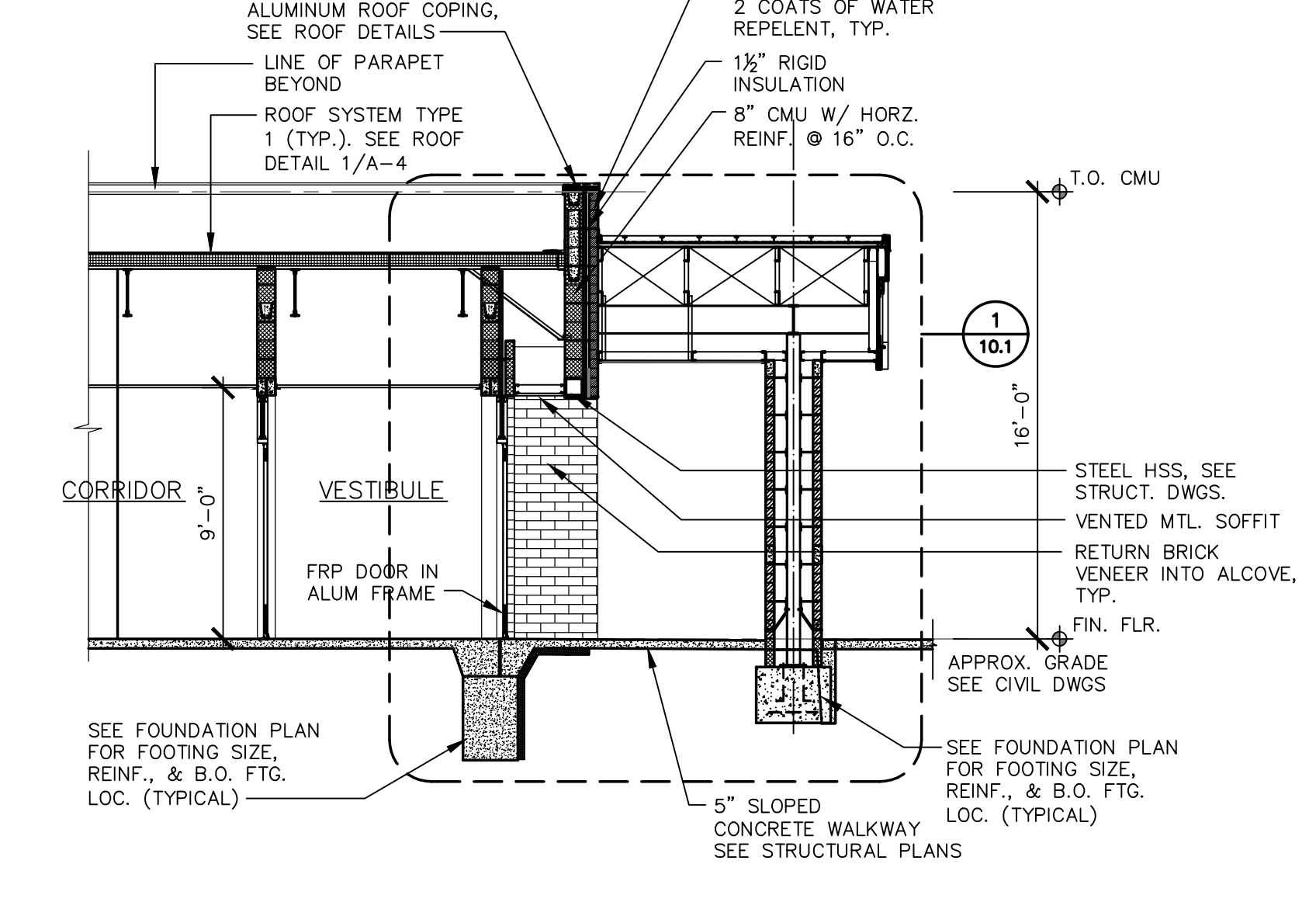
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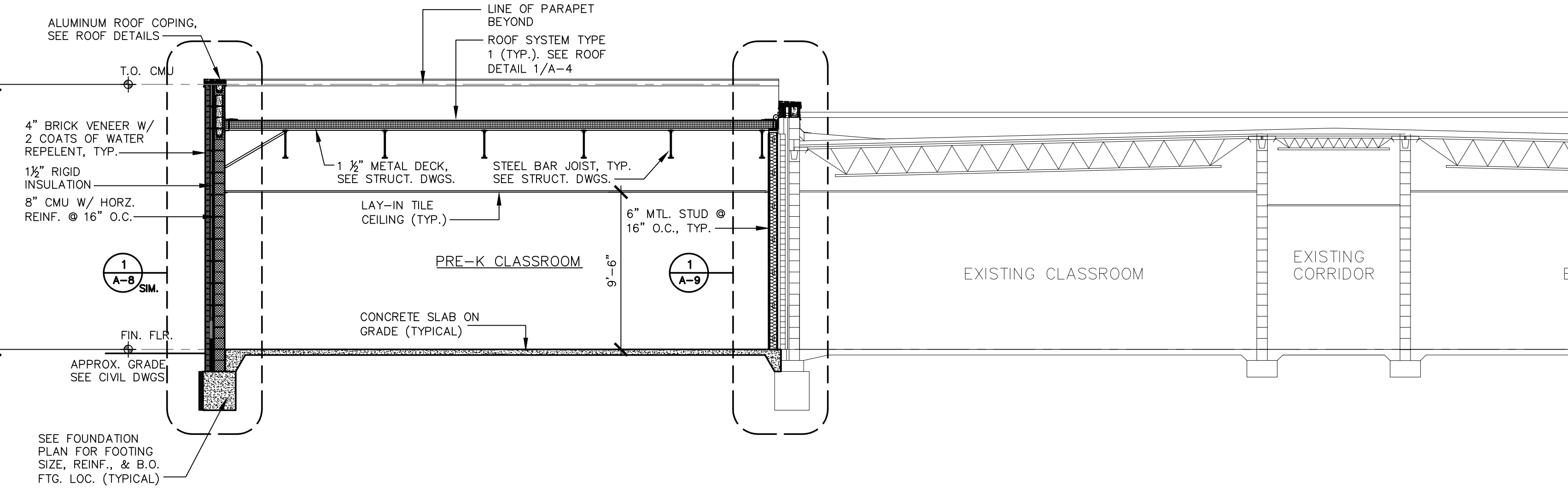
3 BUILDING SECTION (C-C)  
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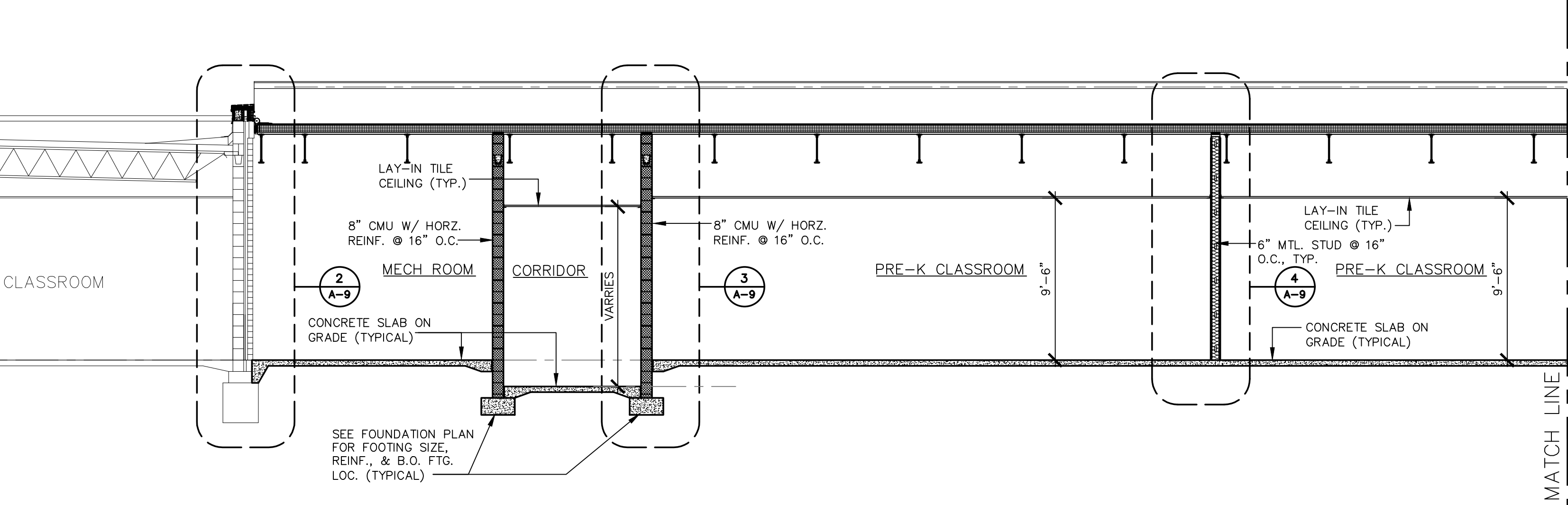
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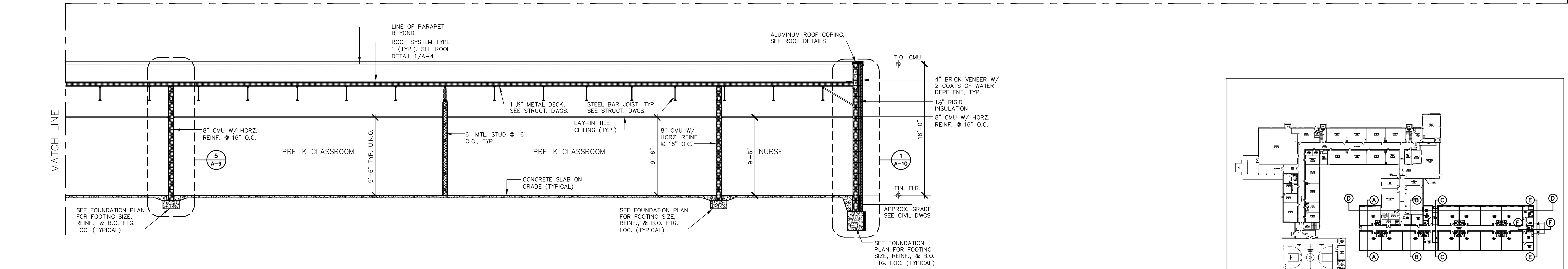
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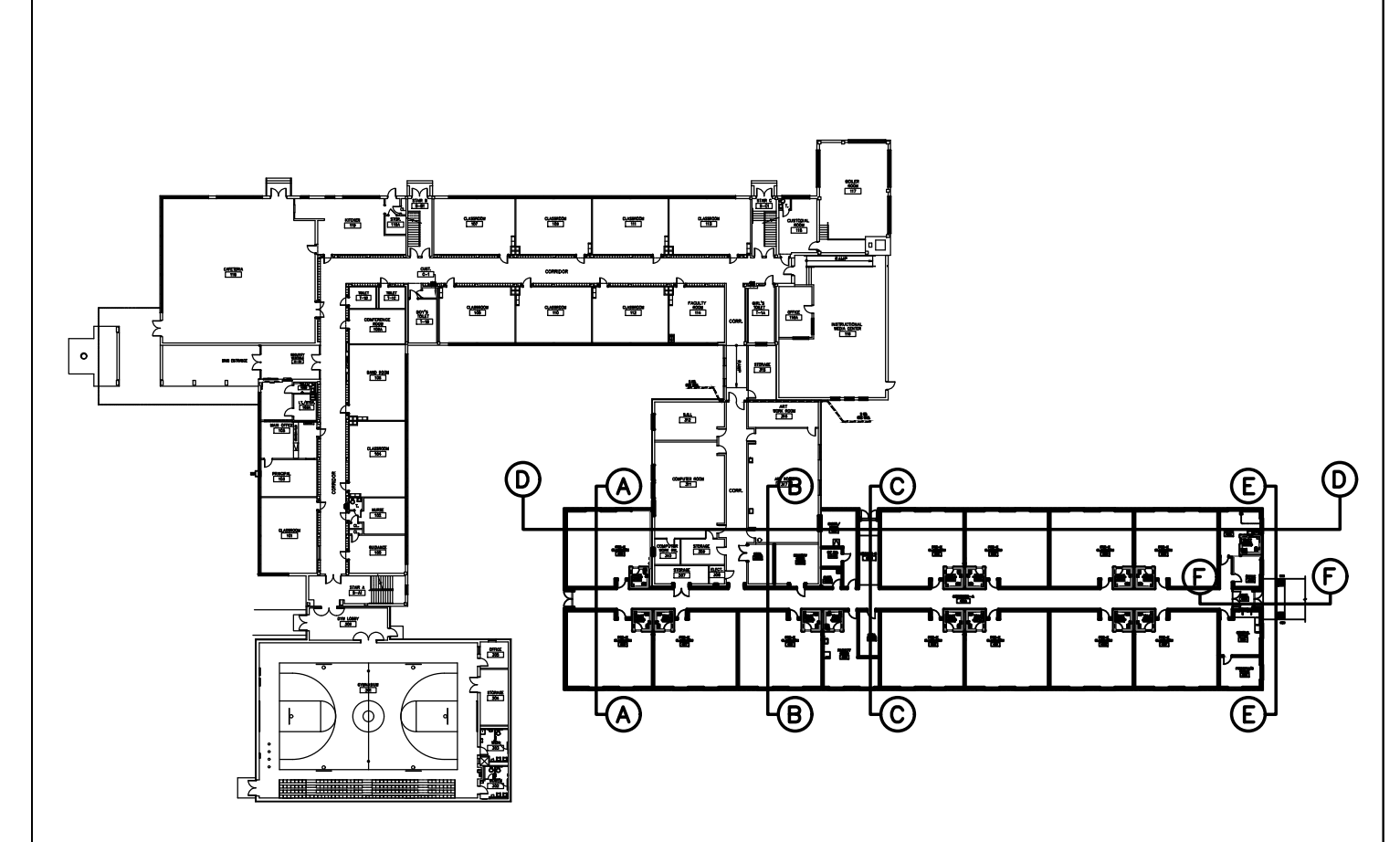
6 BUILDING SECTION (D-D)  
SCALE: 3/16"=1'-0"



7 BUILDING SECTION (E-E)  
SCALE: 3/16"=1'-0"



8 BUILDING SECTION (D-D)  
SCALE: 3/16"=1'-0"



KEY PLAN

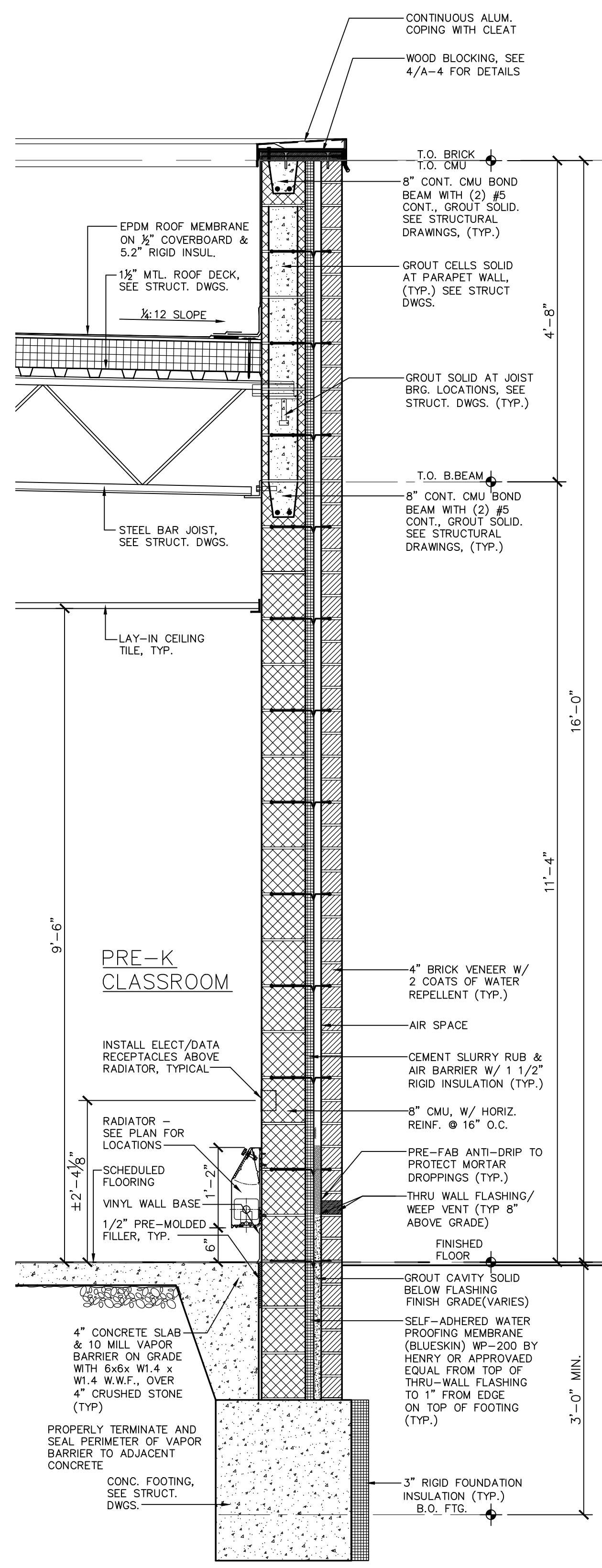
REVISIONS

a.	
b.	
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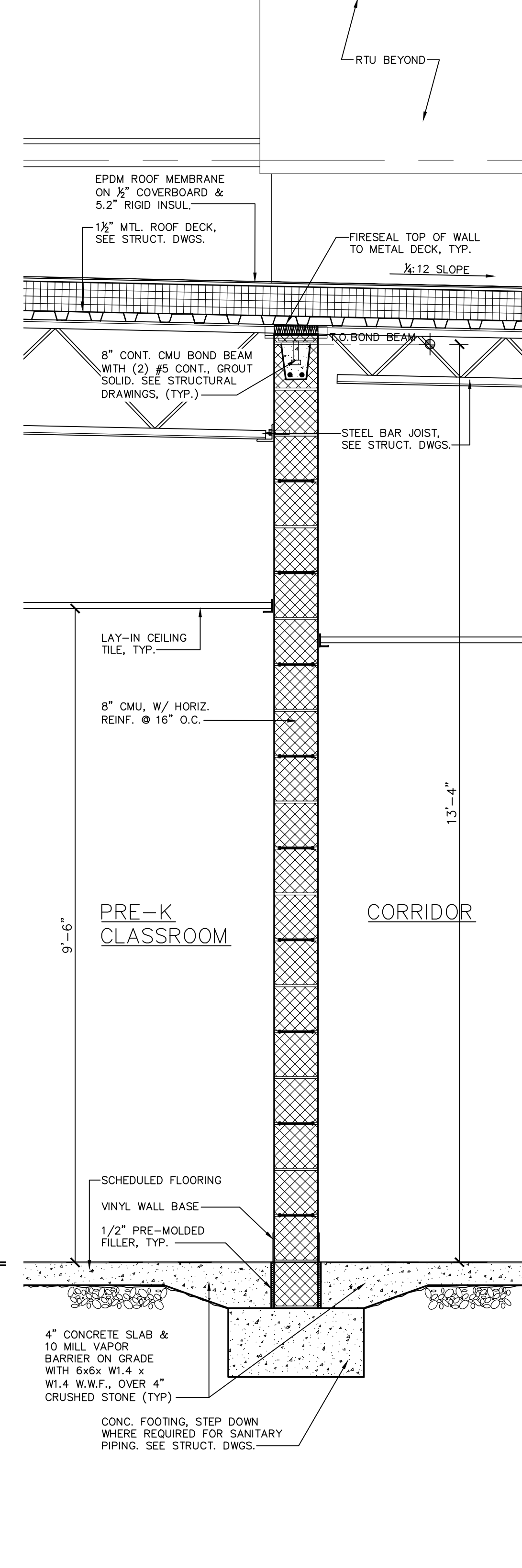
Project No. 23-42  
Date: 11-11-24  
Scale: AS NOTED

BUILDING SECTIONS

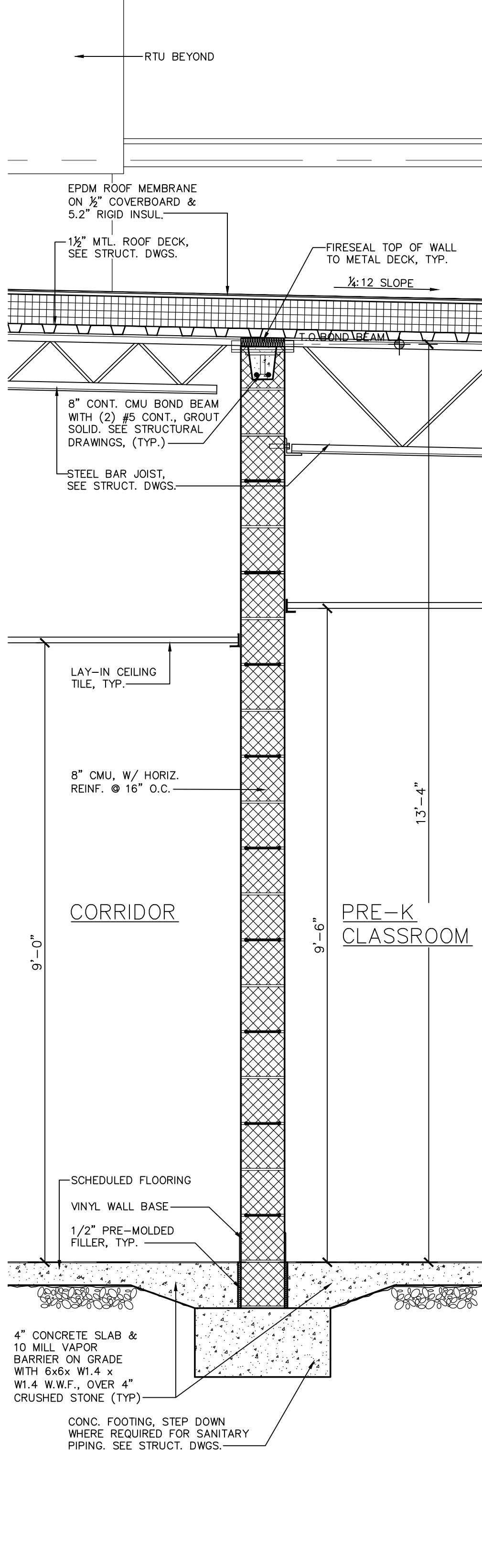




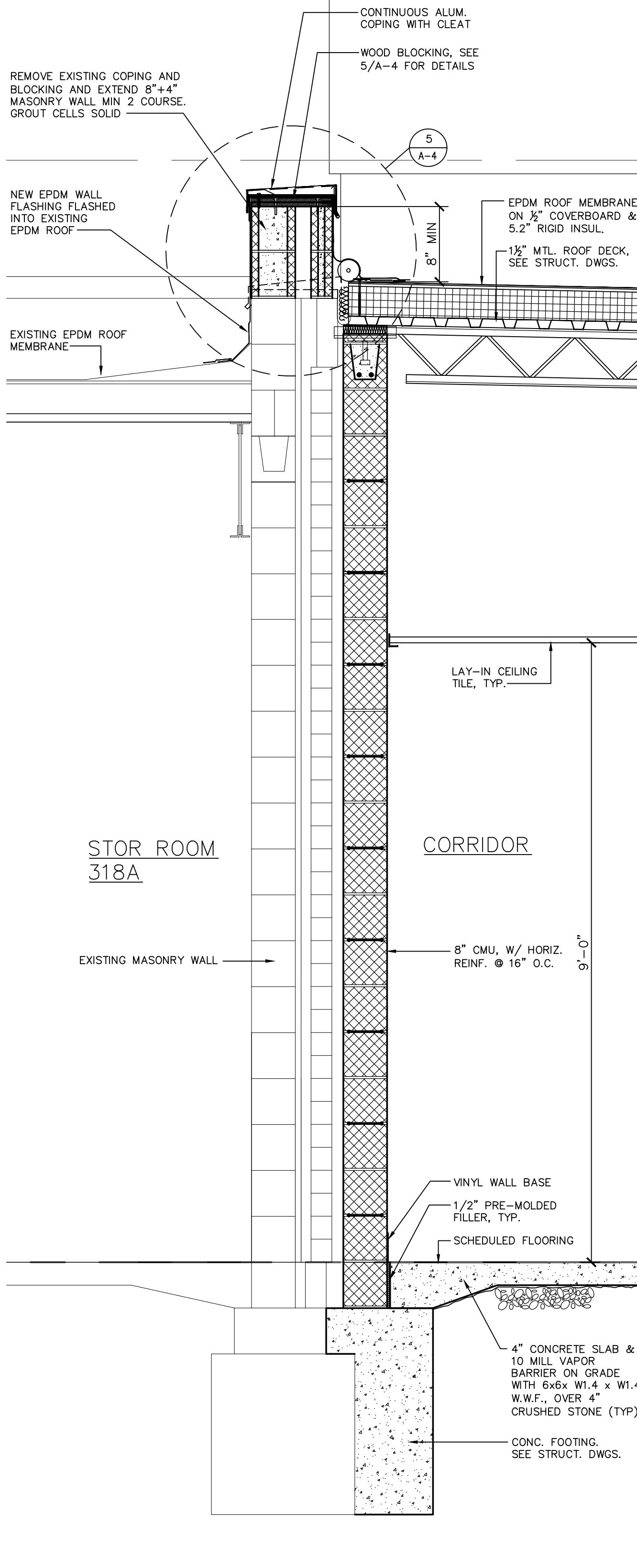
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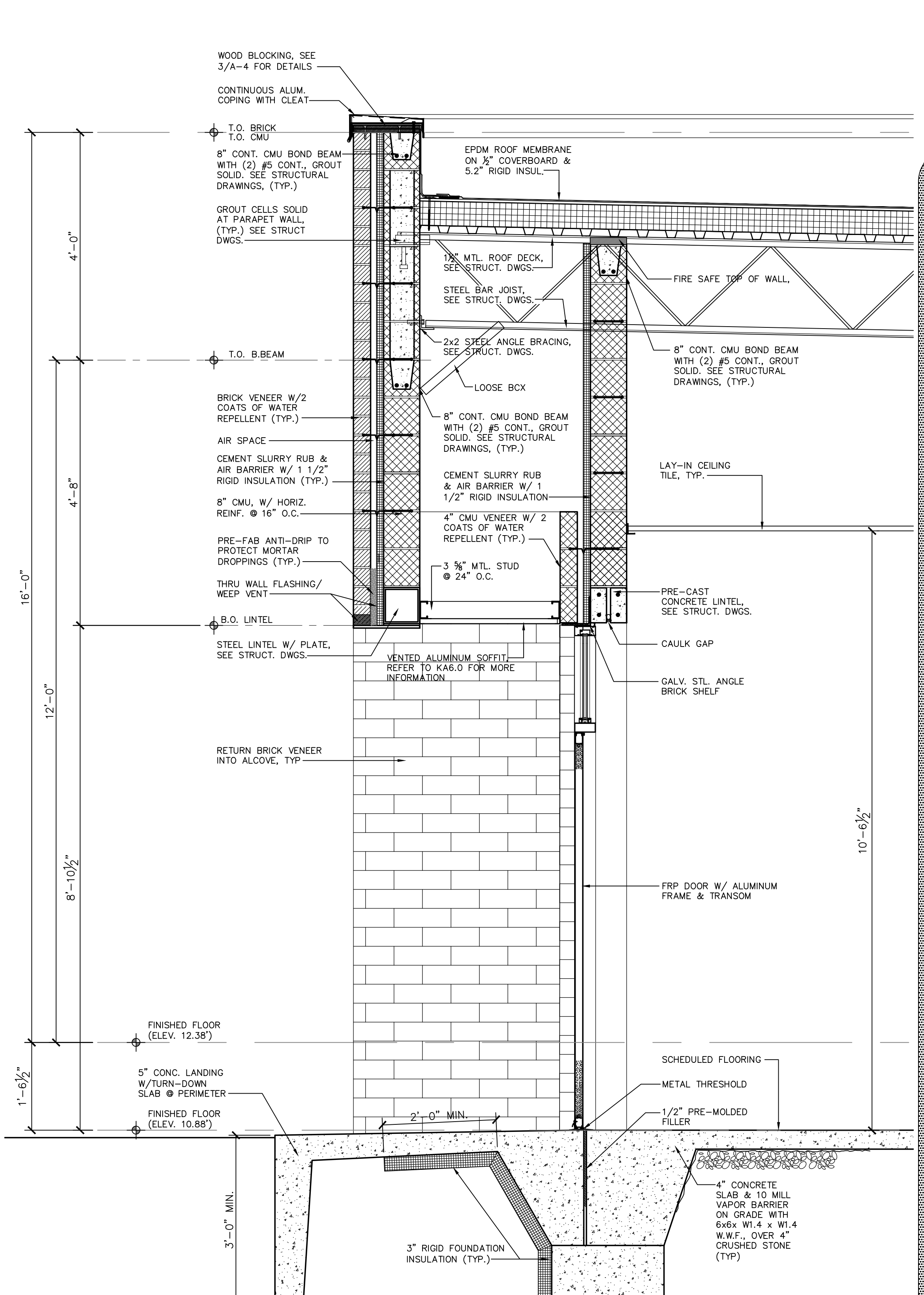
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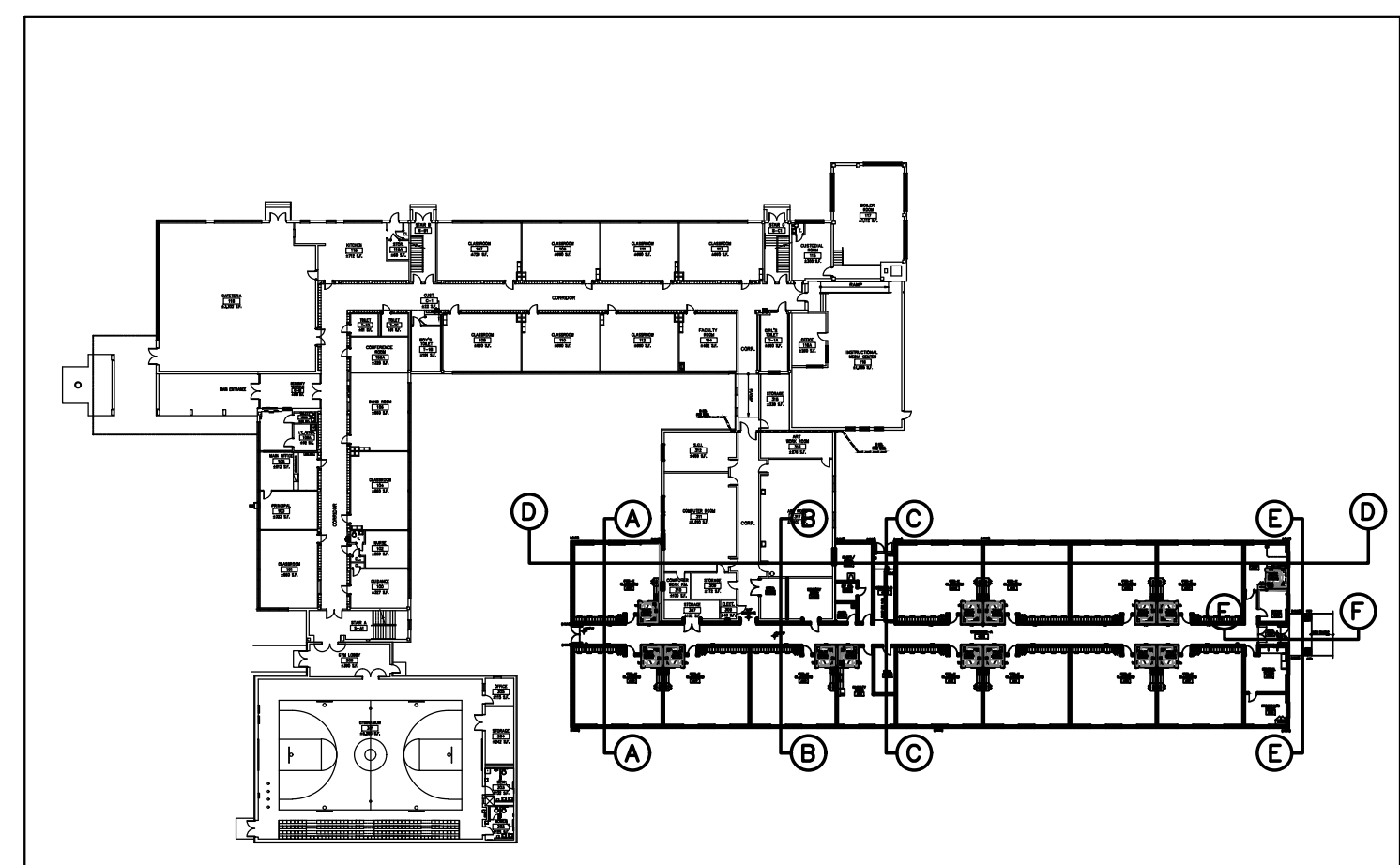
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4 WALL SECTION  
A-B SCALE: 3/4"=1'-0"

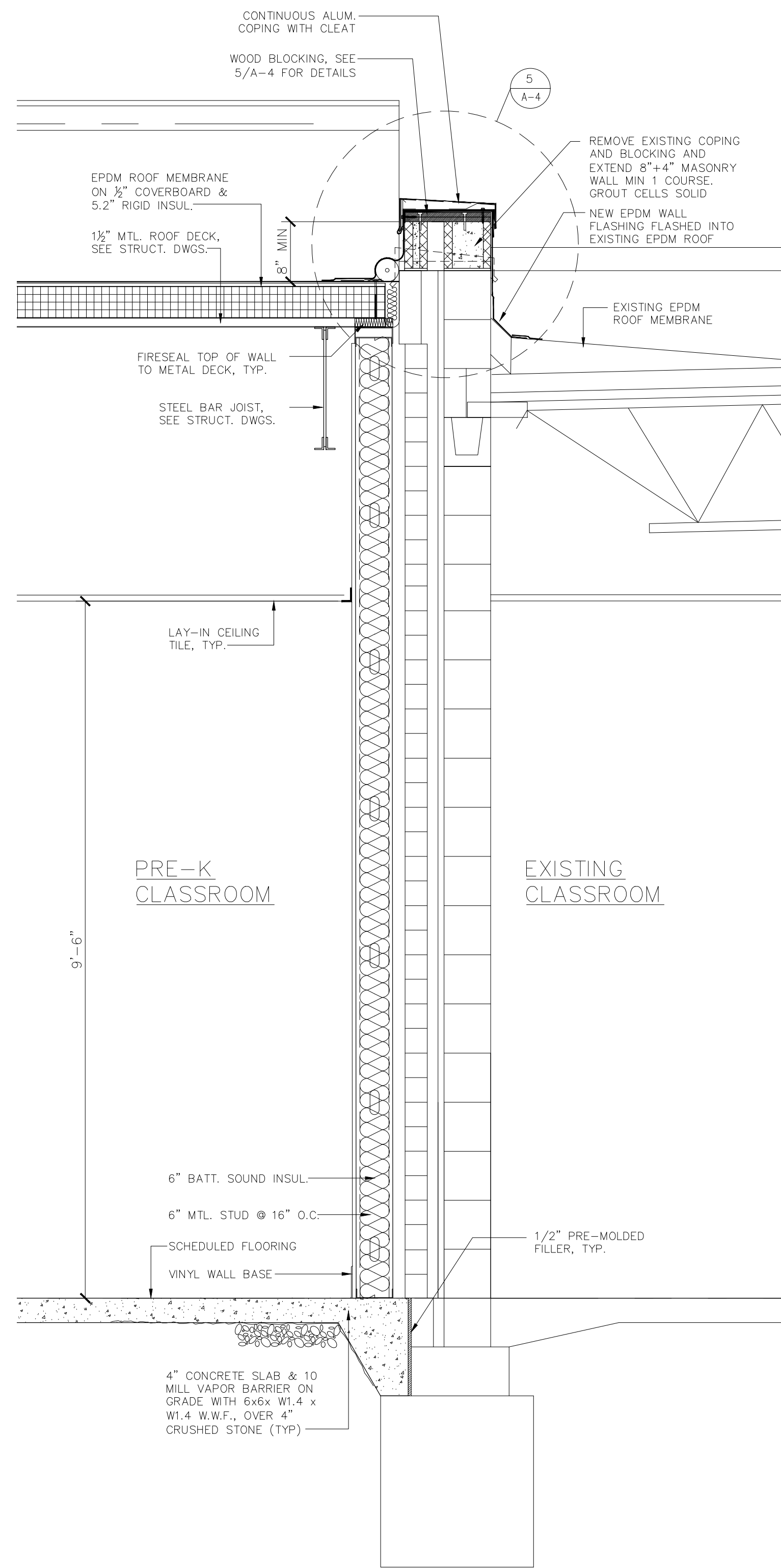


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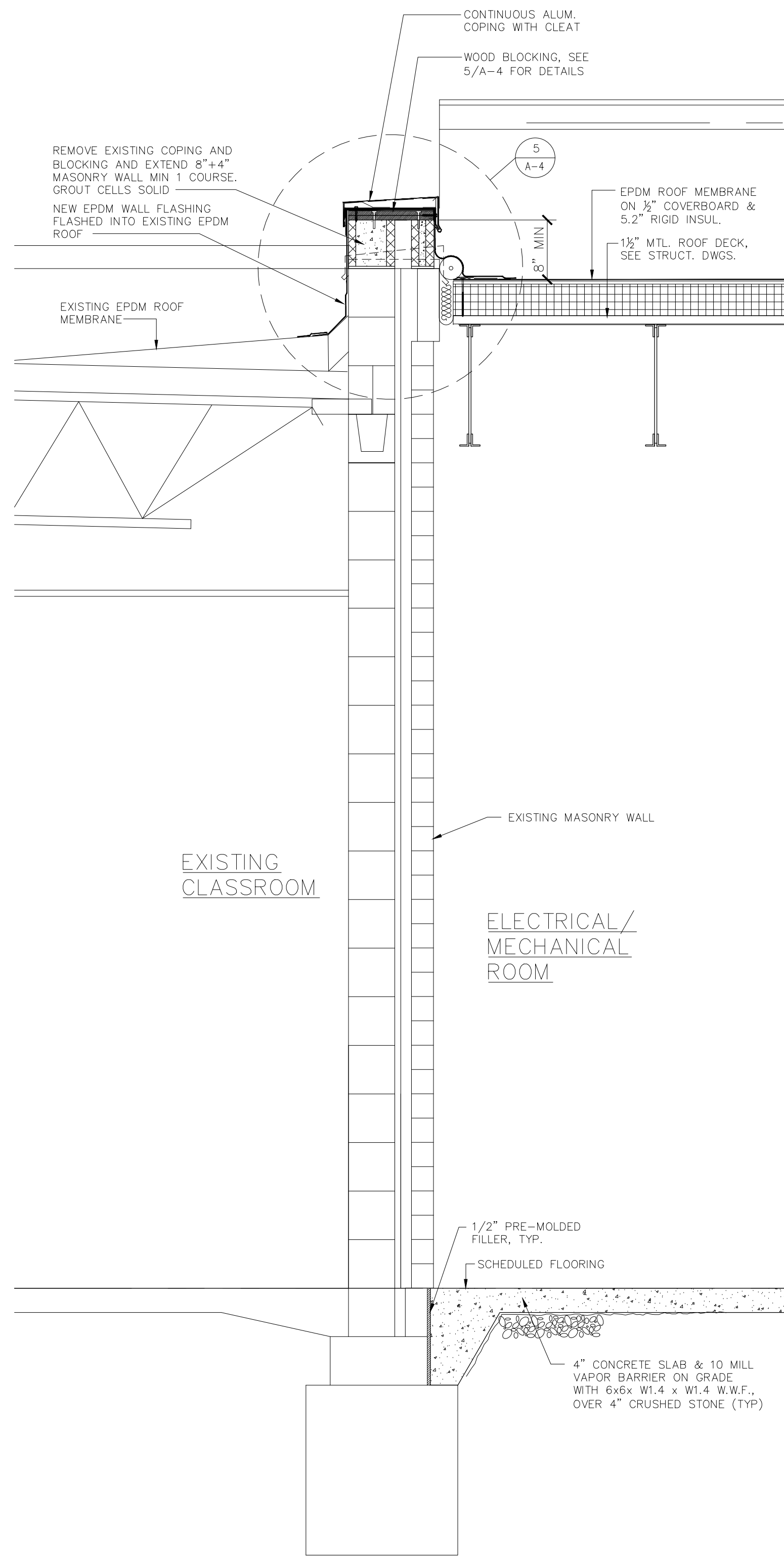


KEY PLAN

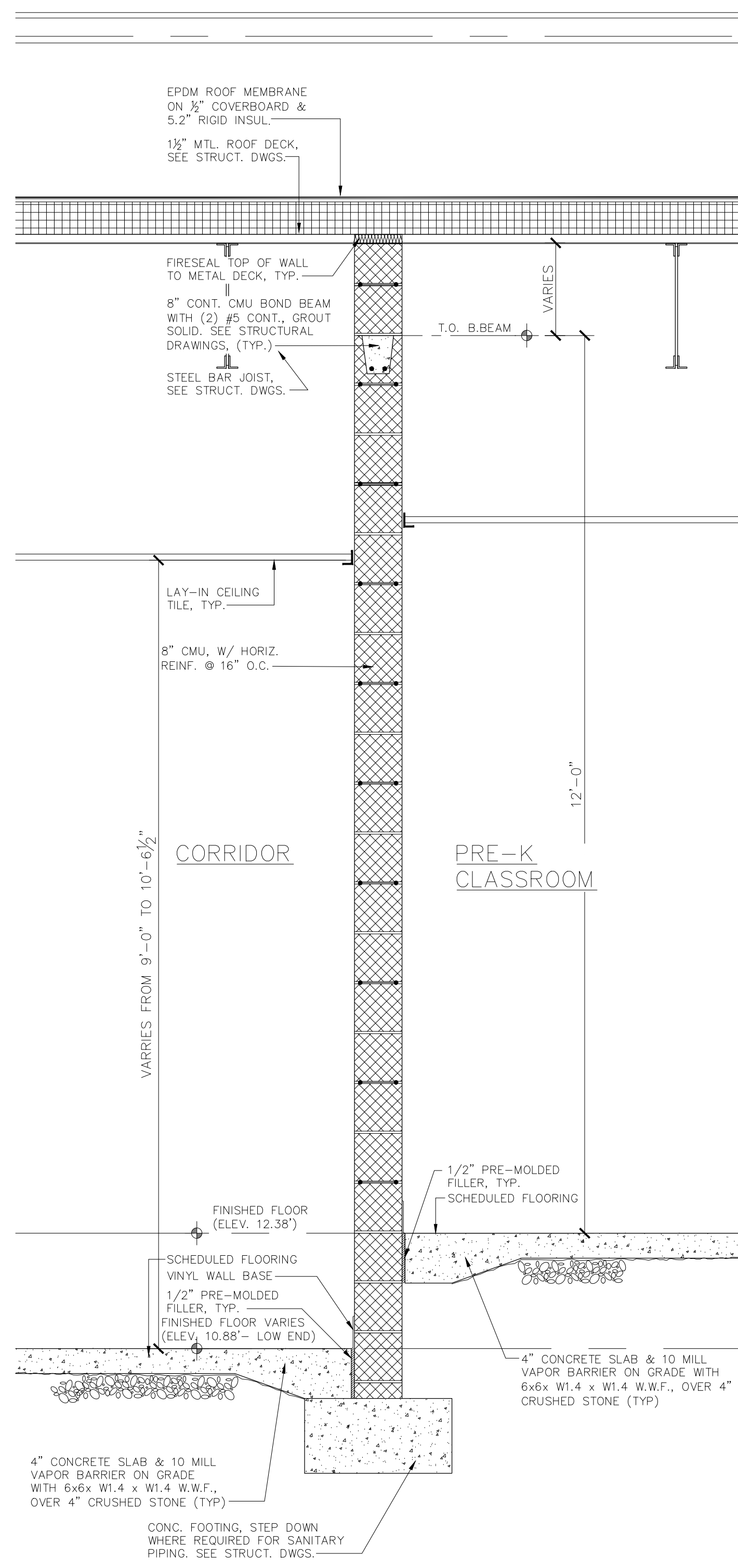




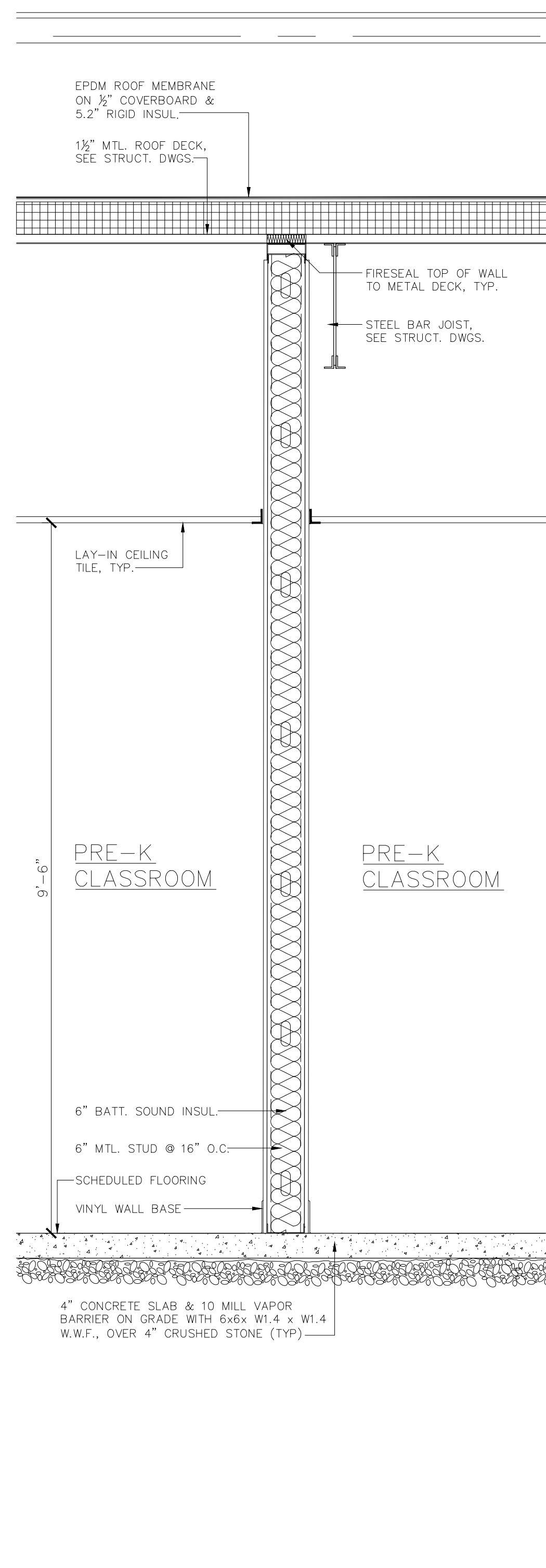
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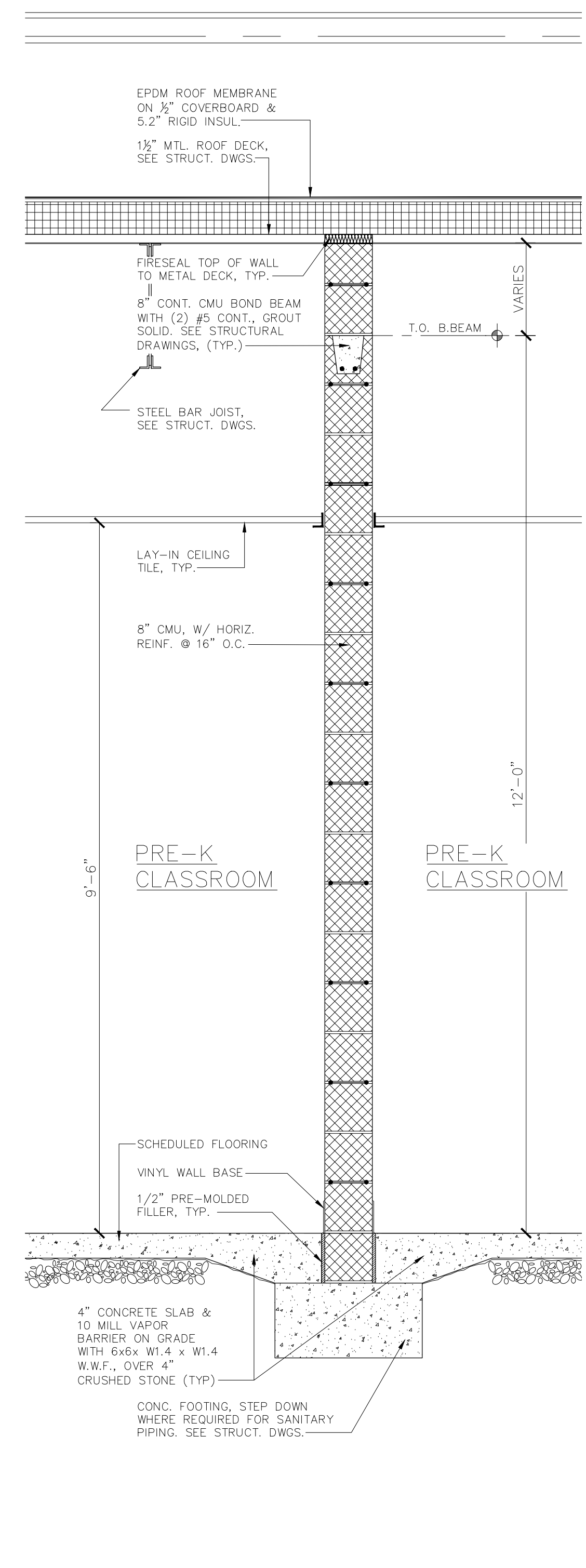
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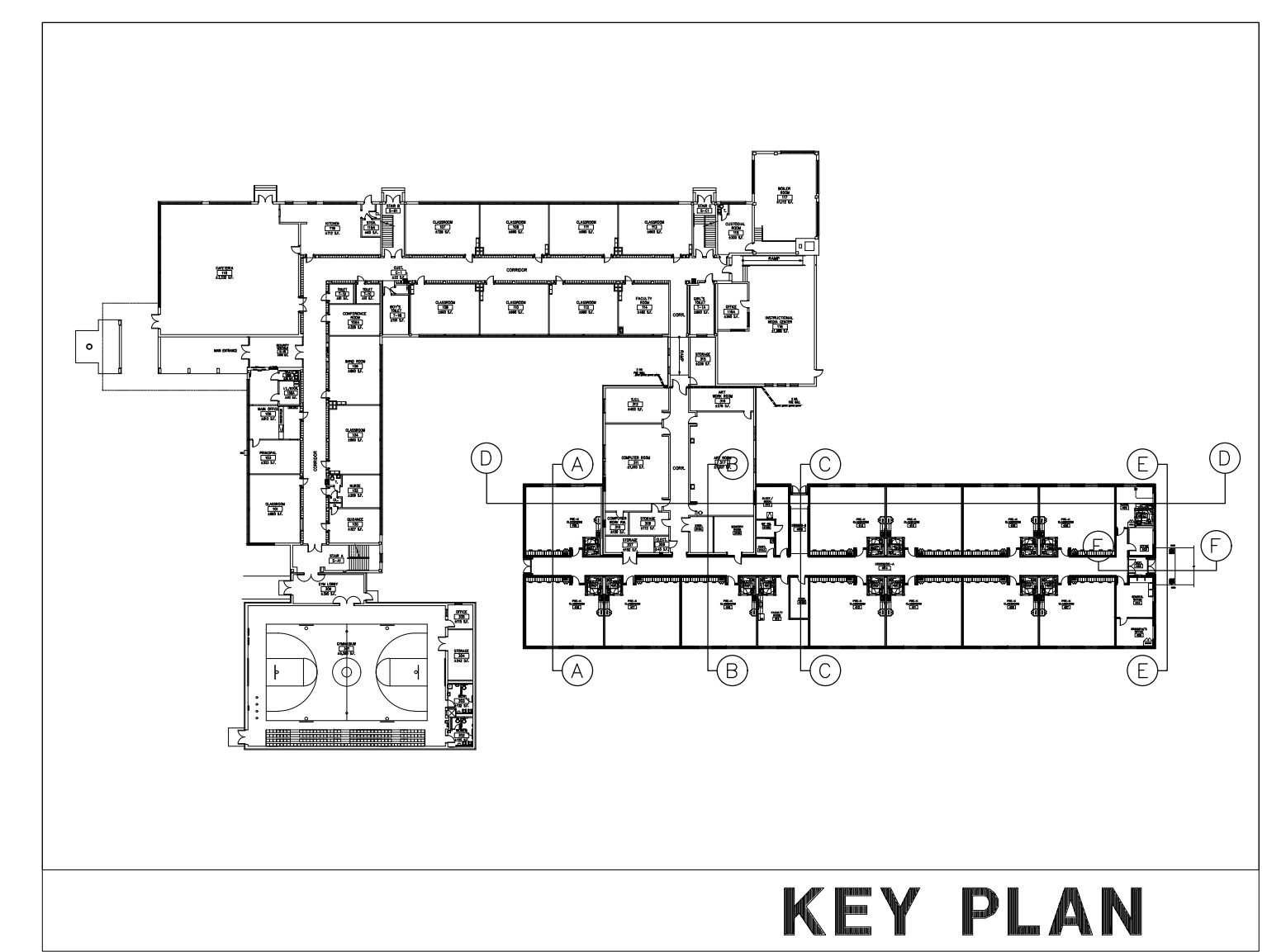
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4 WALL SECTION  
SCALE: 3/4"=1'-0"



5 WALL SECTION  
SCALE: 3/4"=1'-0"



KEY PLAN

REVISIONS	
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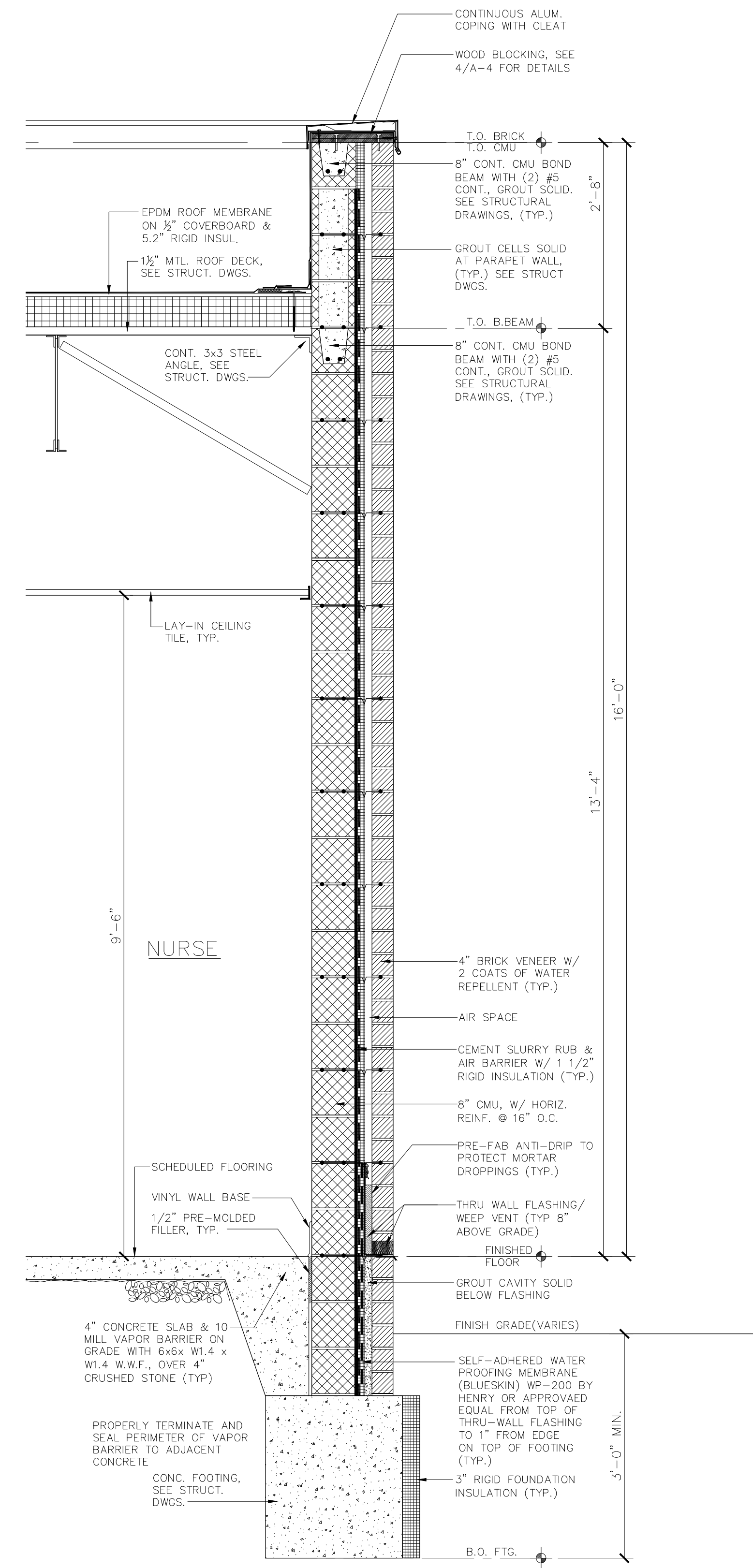
Project No. 23-42  
Date: 11-11-24  
Scale: AS NOTED

WALL SECTIONS

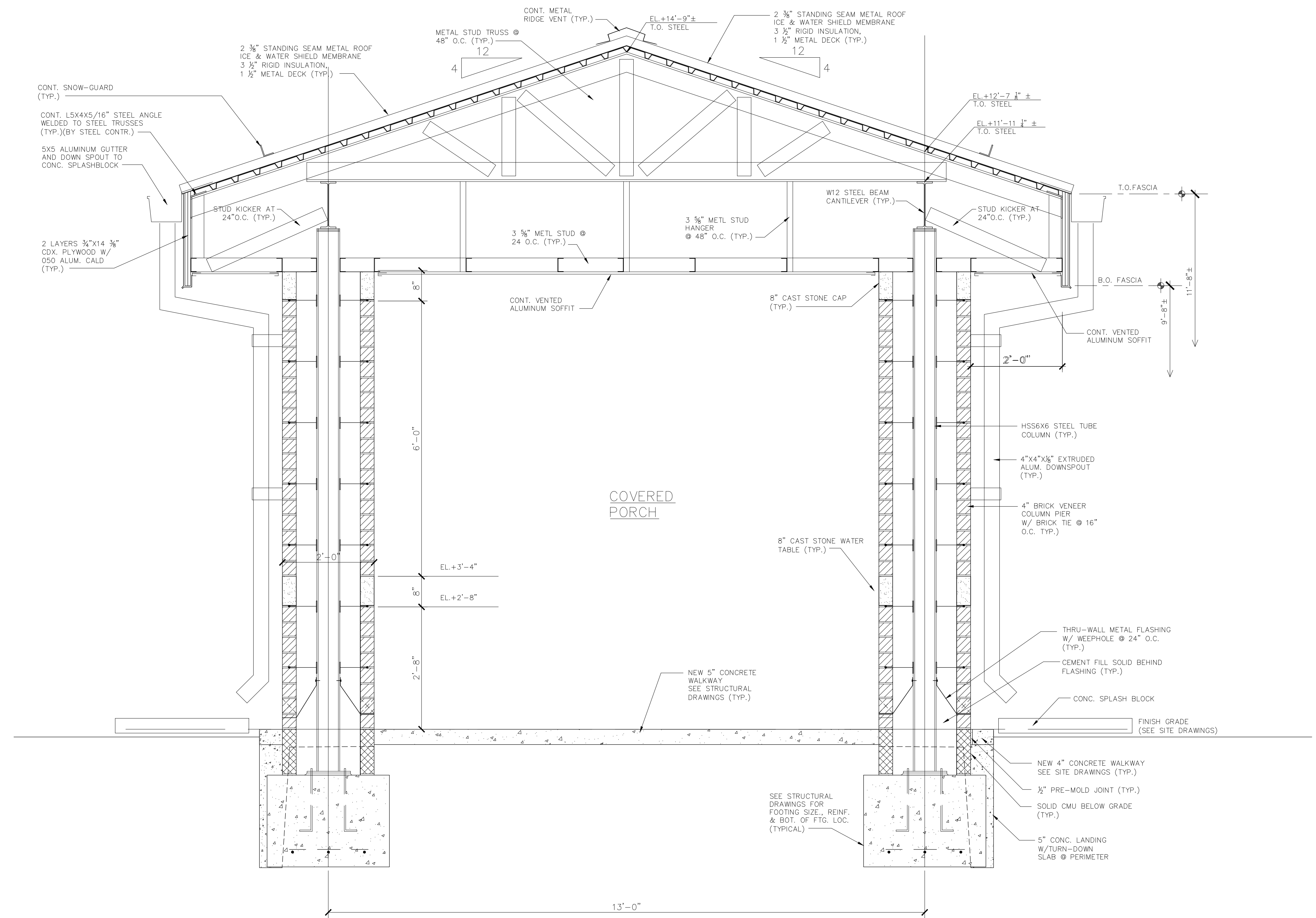
A-9

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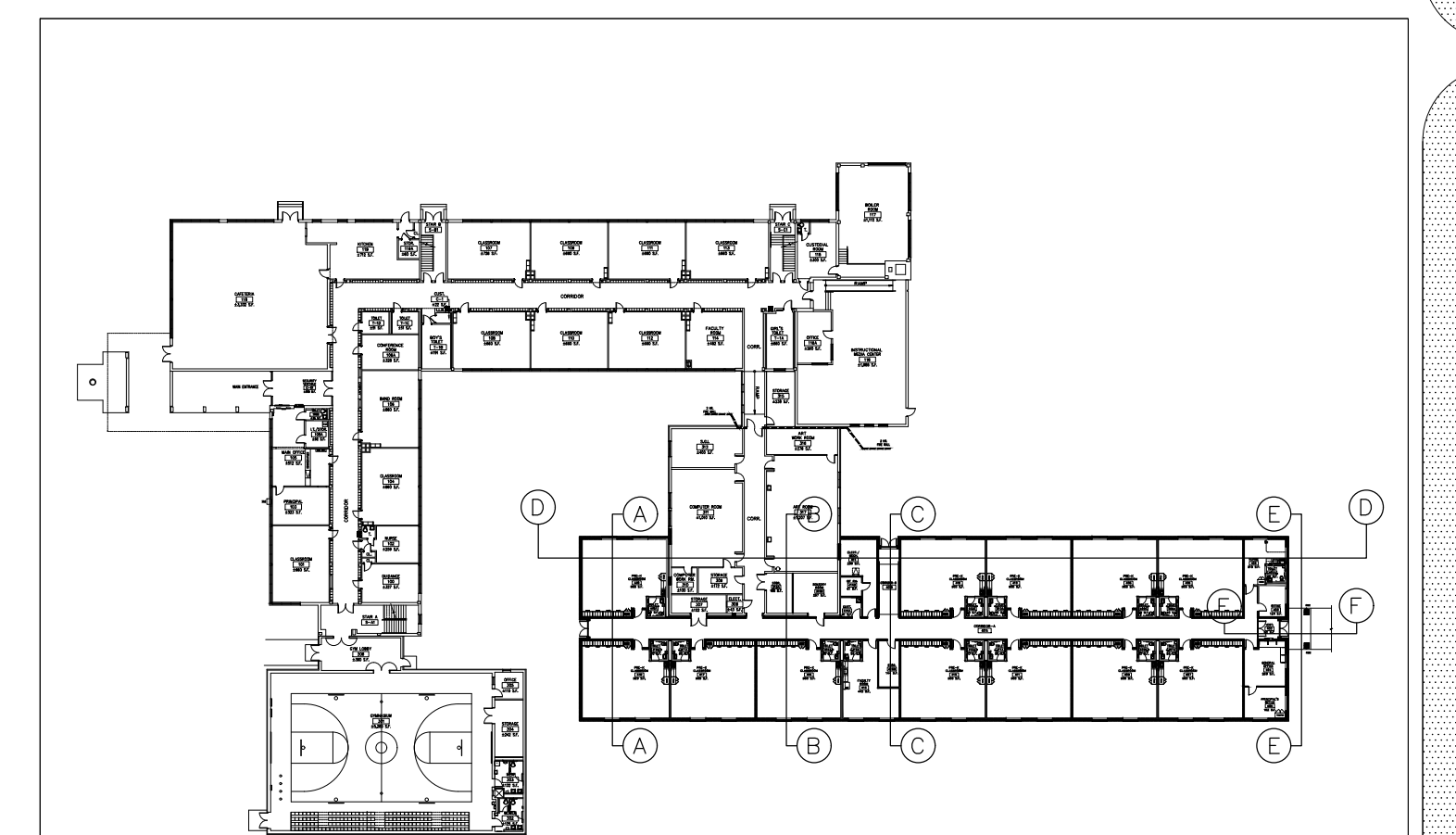




1 WALL SECTION  
SCALE: 3/4"=1'-0"



2 WALL SECTION  
SCALE: 3/4"=1'-0"



KEY PLAN

REVISIONS	
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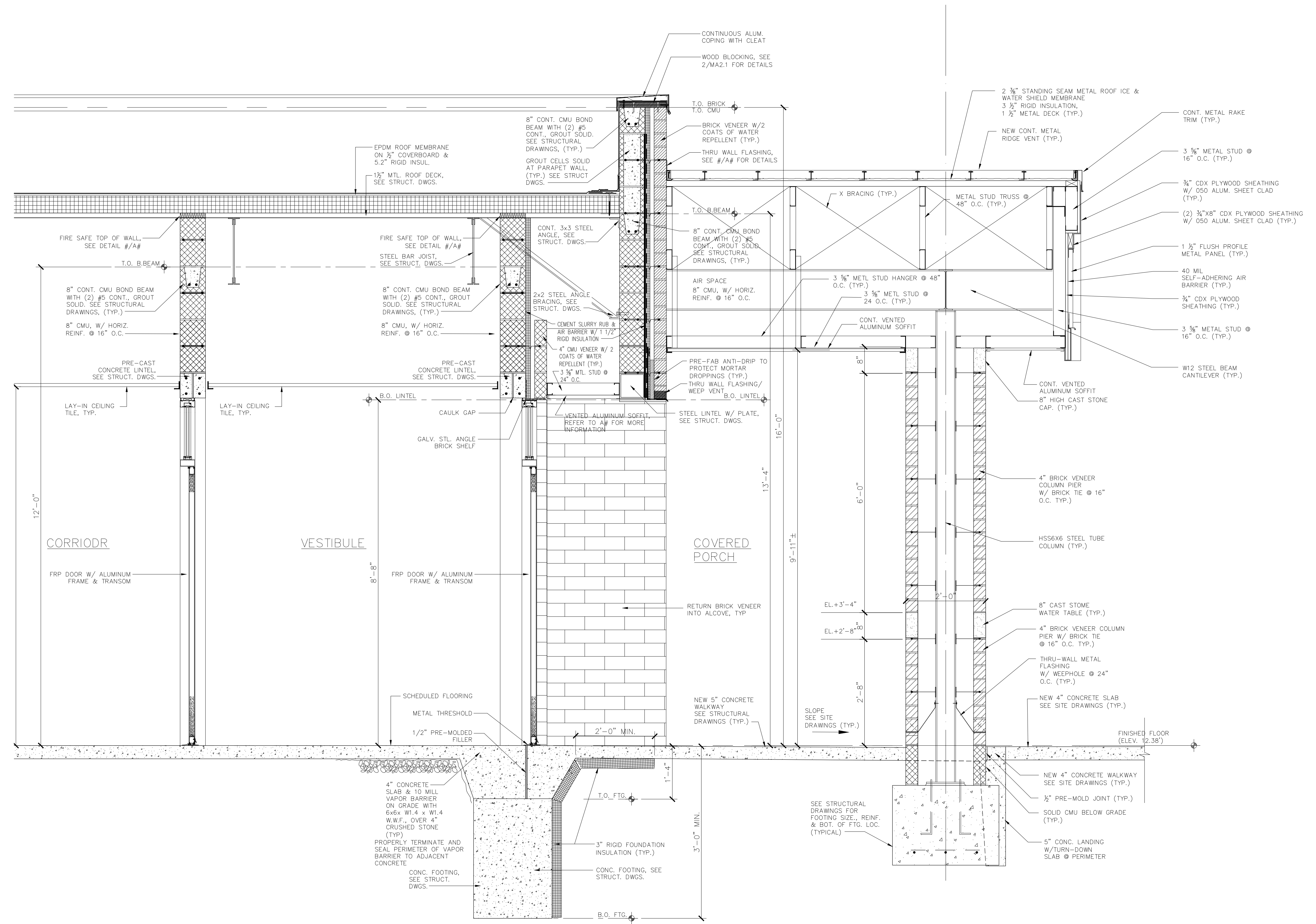
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Scale: AS NOTED

SECTIONS

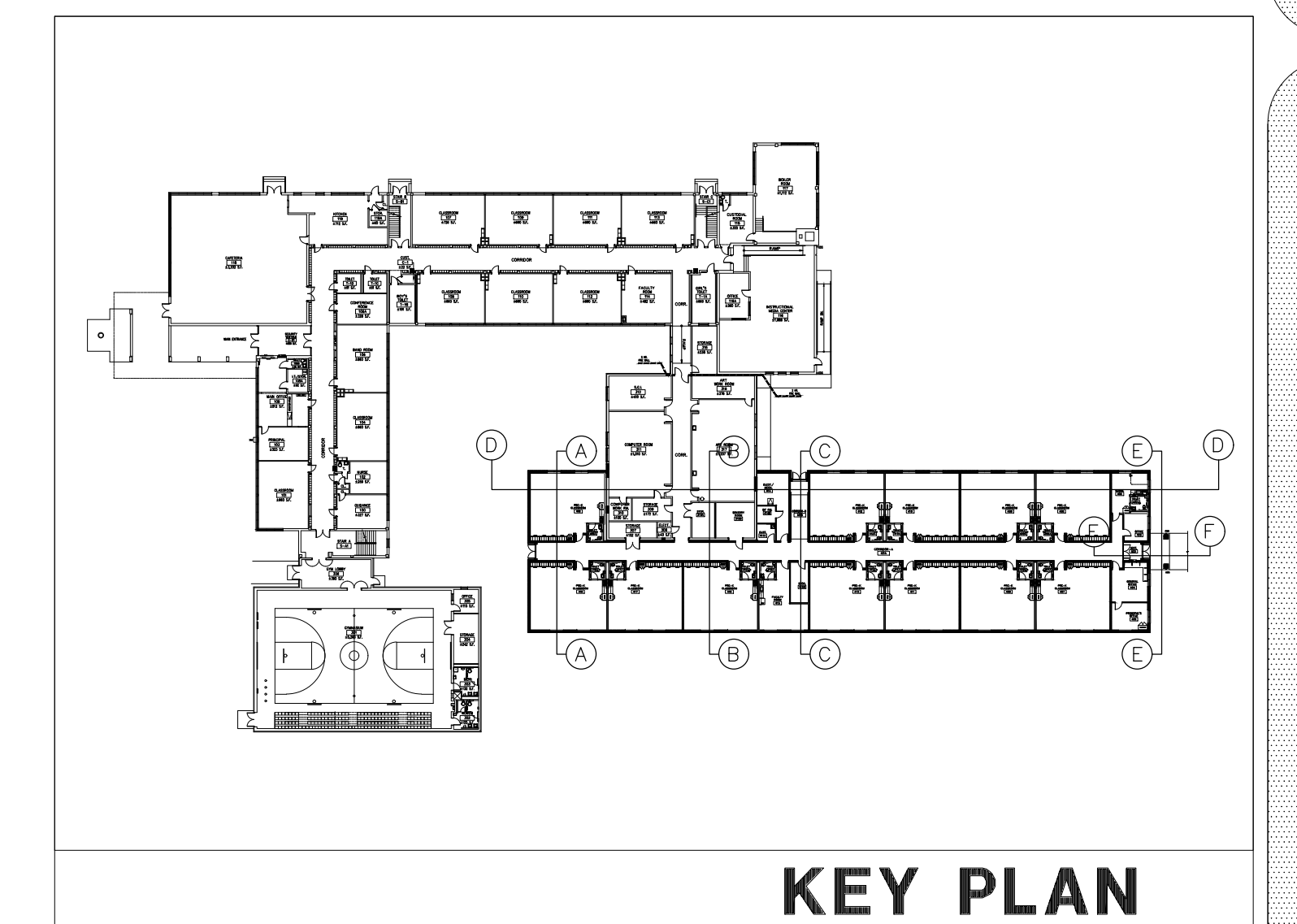
**A-10**

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1 WALL SECTION  
A-10.1 SCALE: 3/4"=1'-0"



KEY PLAN

REVISIONS

a.	
b.	
c.	

Project No. 23-42  
Date: 11-11-24  
Scale: 3/8"=1'-0"

SECTIONS

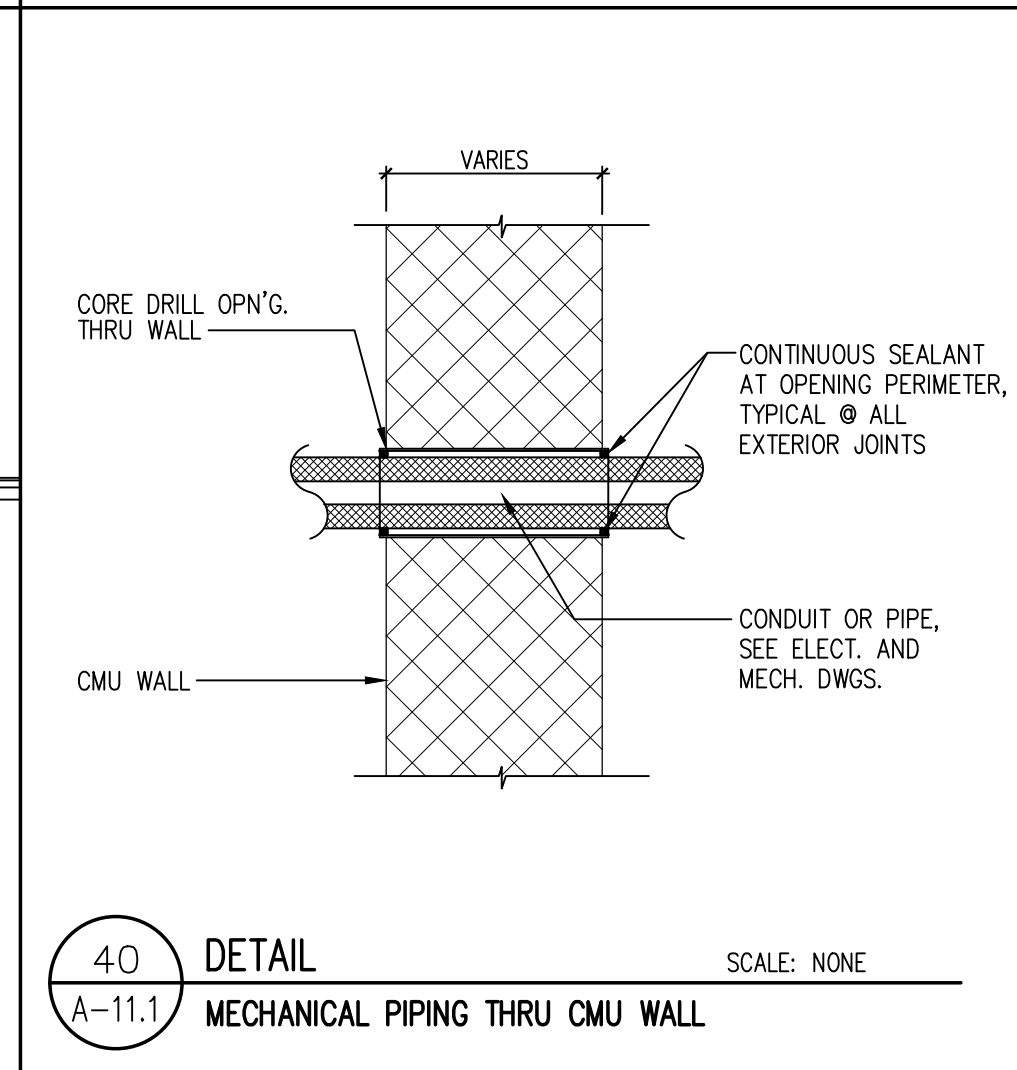
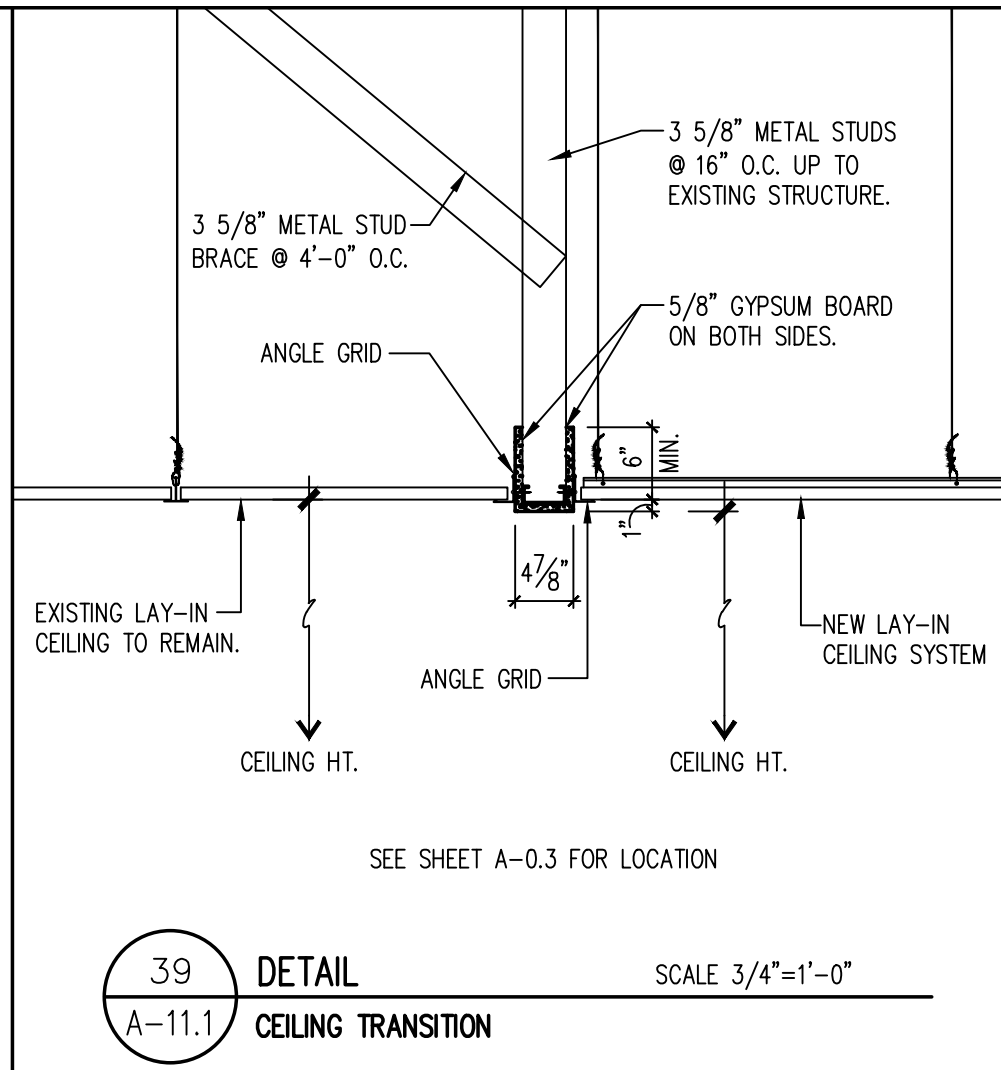
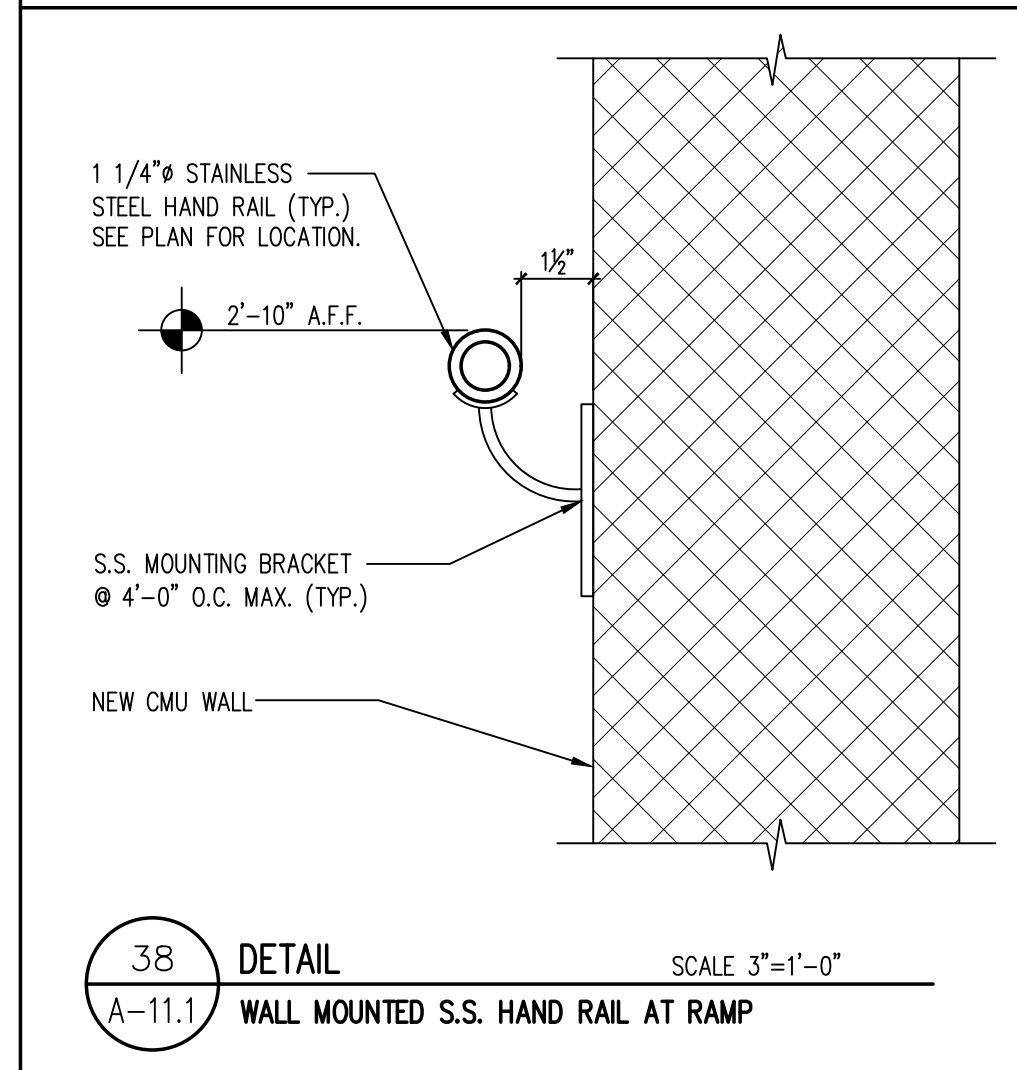
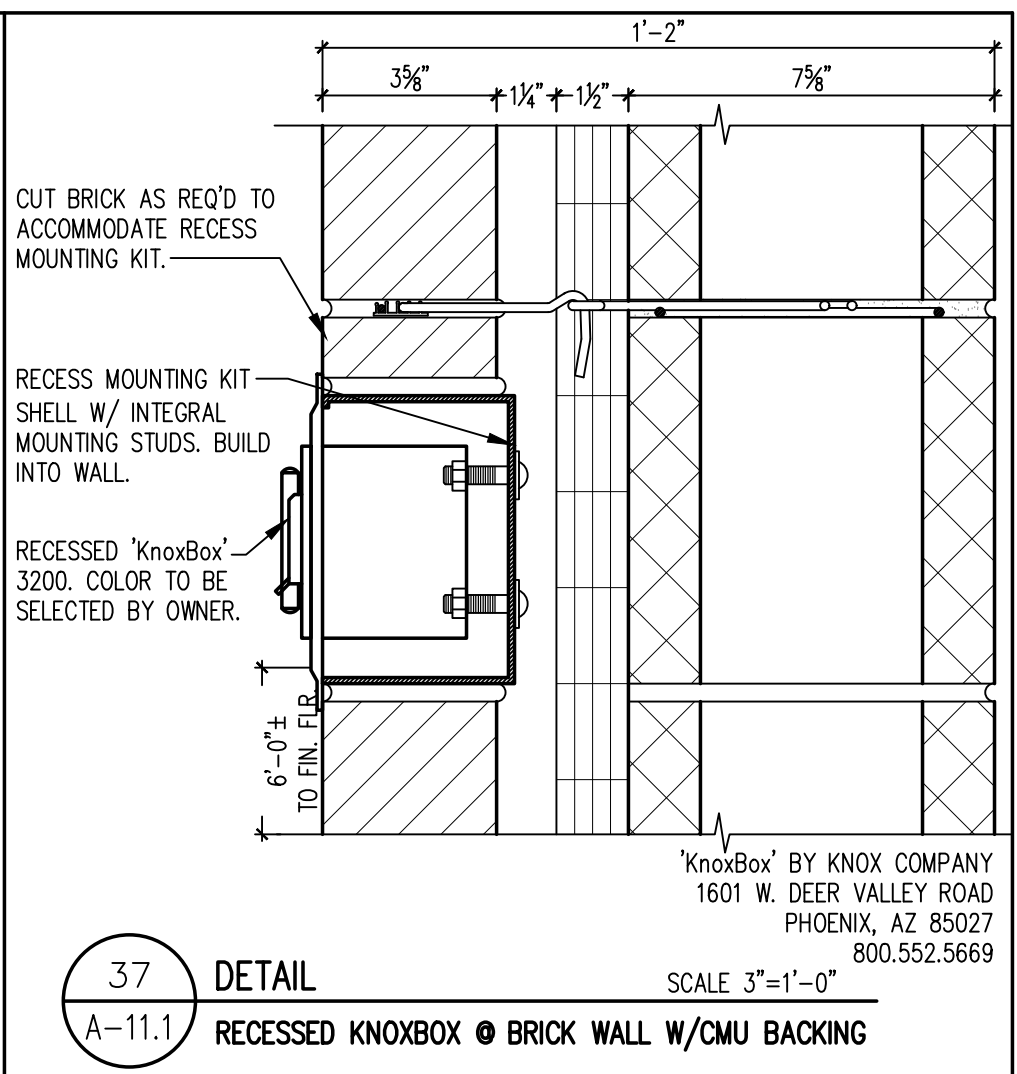
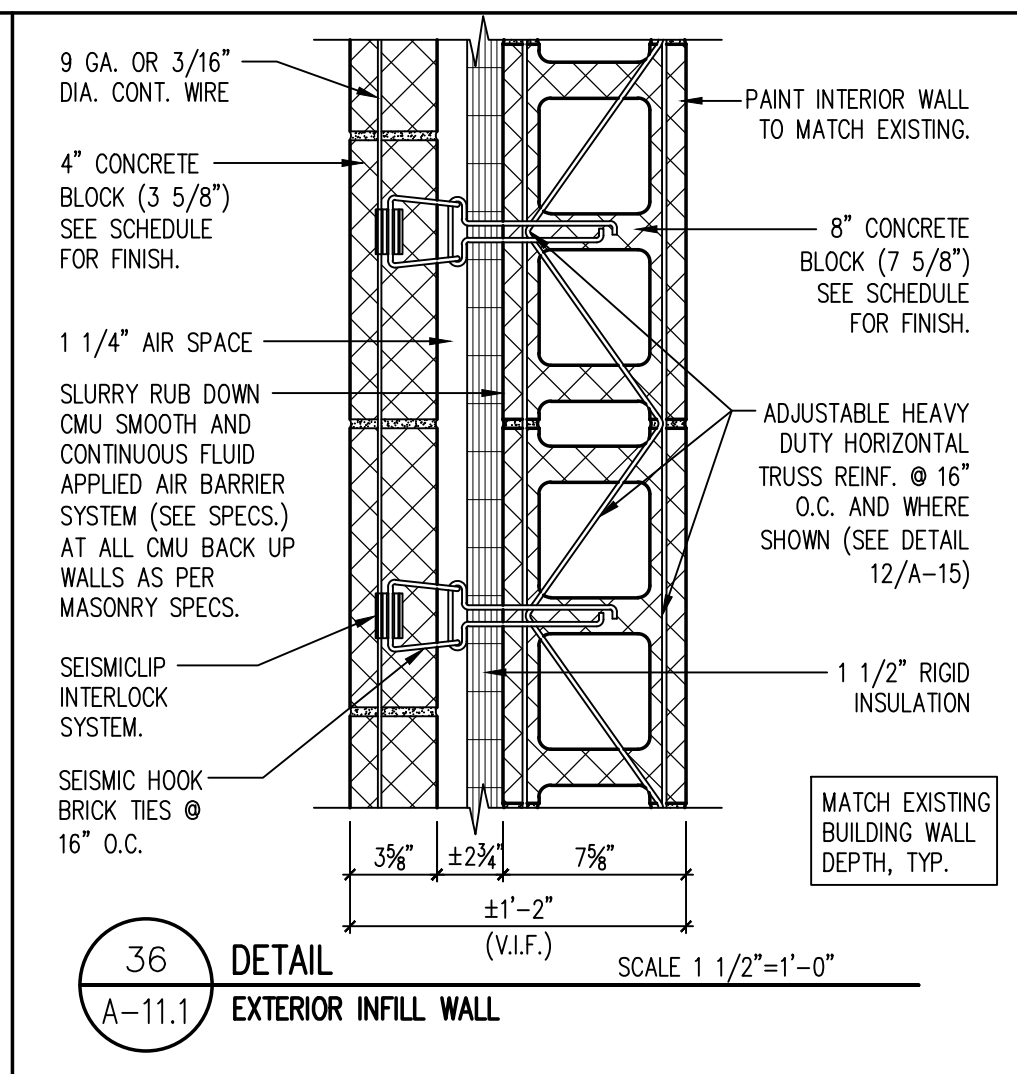
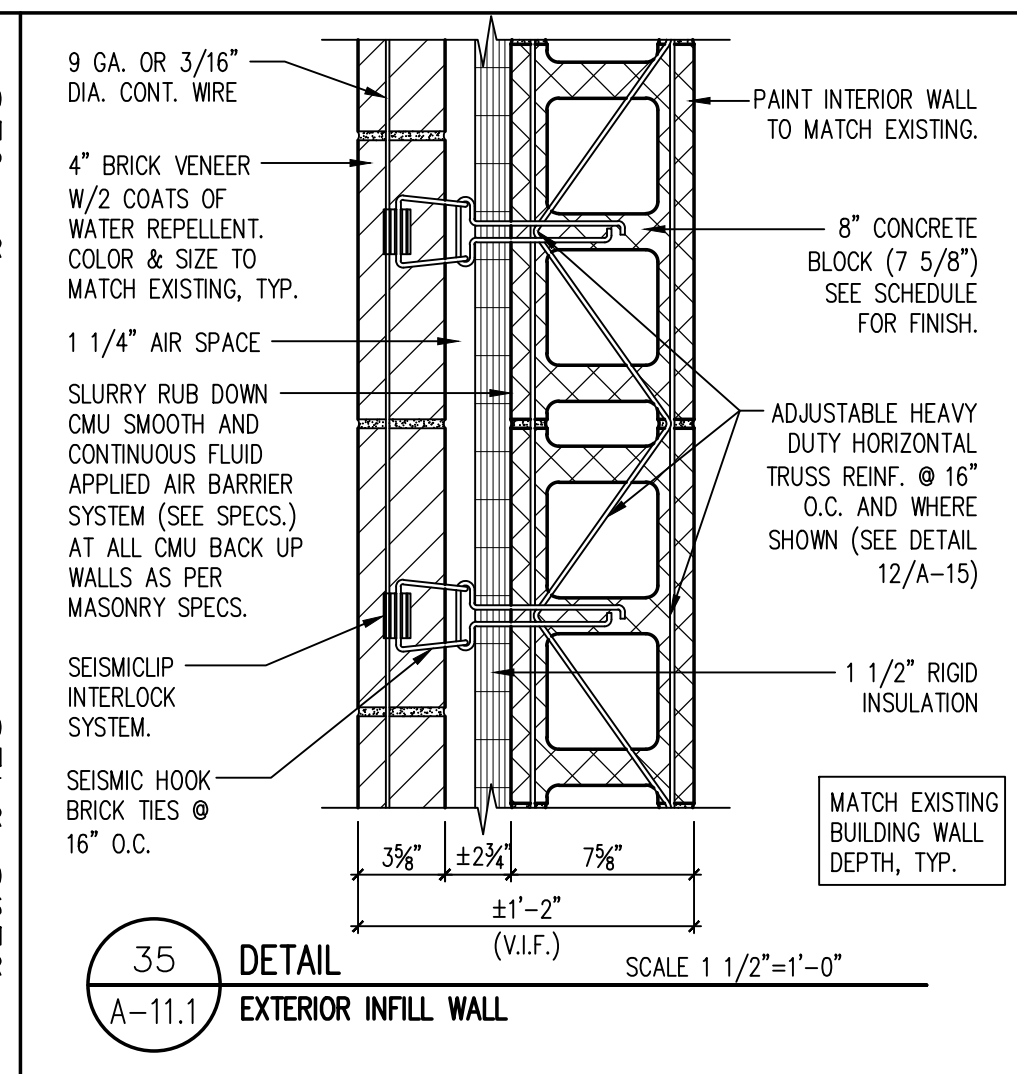
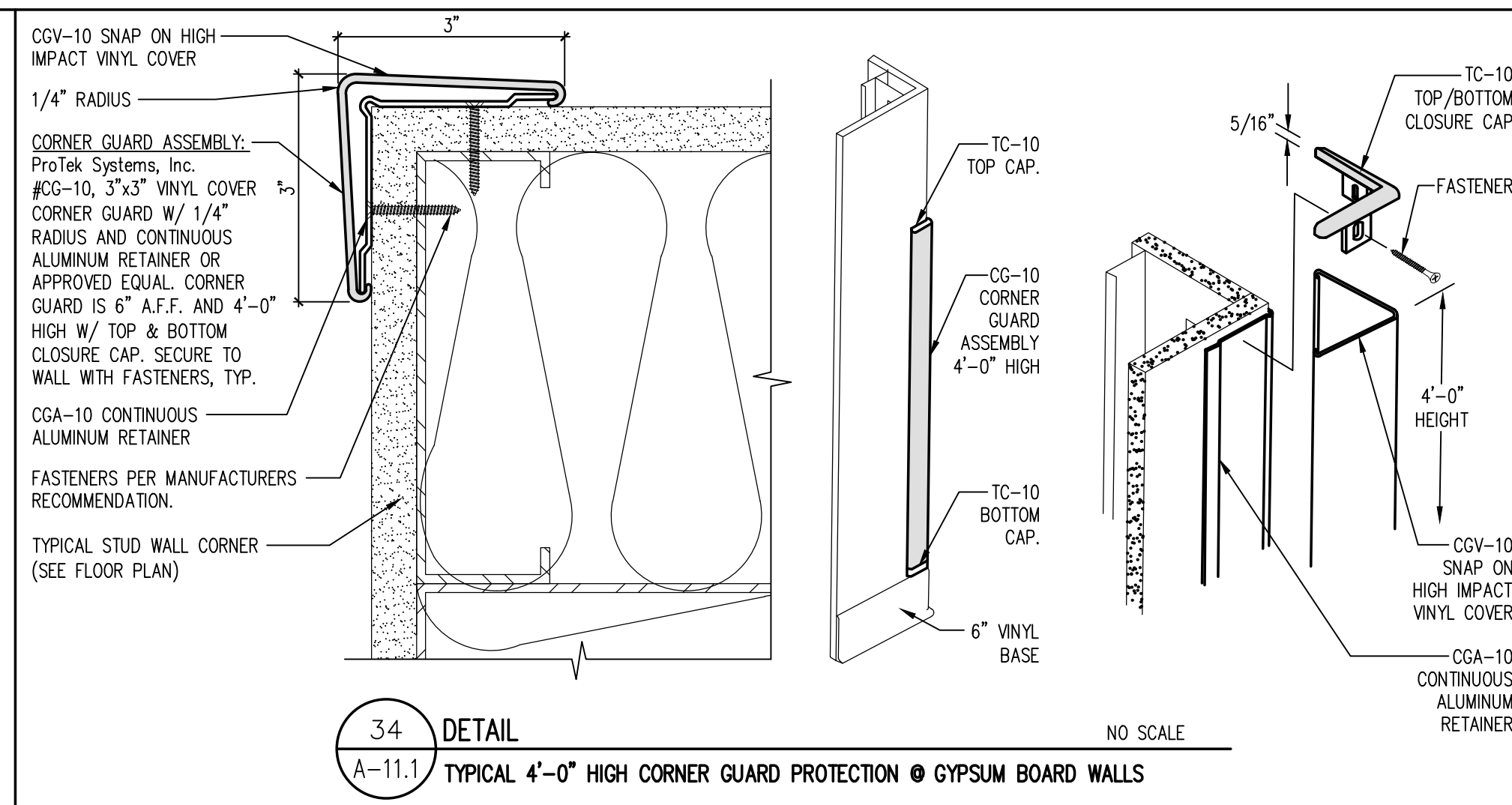
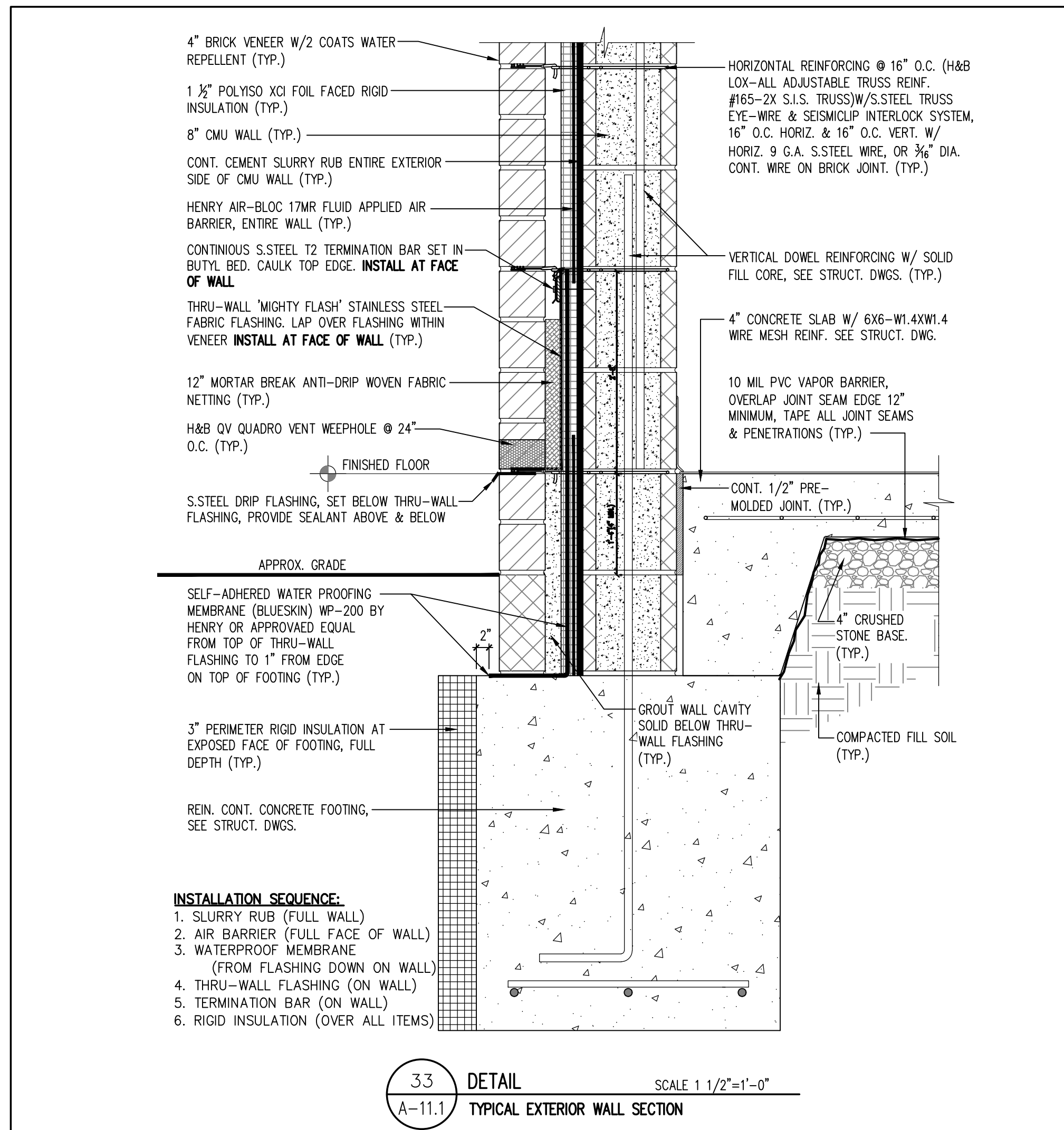
**A-10.1**

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**3.41 DETAIL**  
NO SCALE  
A-11.1 GYPSUM STUD PARTITION TABLE

INTERIOR NON-BEARING GYPSUM STUD PARTITION HEIGHT LIMITATION & GAUGE TABLE			
1 3/4" STUD 16" O.C.	2 1/2" STUD 16" O.C.	3 5/8" STUD 16" O.C.	6" STUD 16" O.C.
	18 GA. UP TO 12'-6"	18 GA. UP TO 16'-6"	16 GA. UP TO 22'-0"
	20 GA. UP TO 8'-10"	20 GA. UP TO 15'-0"	

SEE STRUCTURAL DRAWINGS FOR OTHER FRAMING GAUGE & SIZE

**REVISIONS**

a.	
b.	
c.	

Project No. 23-42  
Date: 11-11-24  
Scale: N.T.S.

**WALL TYPES & TYPICAL DETAILS II**

**A-11.1**



ROOM AND FINISH SCHEDULE									
ROOM NO.	ROOM NAME	PROPOSED FLOOR	PROPOSED BASE	PROPOSED WALLS	FIRE RATING (HOUR)	PROPOSED CEILING	PROP. CEILING HEIGHT	CEILING TILE TYPE	REMARKS
-	300 WING CORRIDOR	-	-	-	-	-	-	-	D
307	STORAGE	-	-	-	-	-	-	-	D
311	COMPUTER ROOM	-	-	*PAINTED CMU	-	-	-	-	D
312	SG	-	-	*PAINTED CMU	-	-	-	-	D
317	ART ROOM	-	-	*PAINTED CMU	-	-	-	-	D
318A	STORAGE	-	-	-	-	-	-	-	D
318B	SENSORY ROOM	VCT	*VINYL	*PAINTED DRYWALL/CMU	0	2"x4" LAY-IN TILE	49'-0"	A	PNTD. NEW WALL. PROVIDE VINYL BASE TO MATCH ADJACENT AT NEW WALL
400	VESTIBULE	WALK-OFF CARPET	VINYL	PAINTED CMU	1	2"x4" LAY-IN TILE	9'-0"	A	
401A	CORRIDOR	VCT	VINYL	PAINTED CMU	1	2"x4" LAY-IN TILE	9'-0"	A	REFER TO NOTE #4
401B	CORRIDOR	VCT	VINYL	PAINTED CMU	1	2"x4" LAY-IN TILE	9'-0"	A	REFER TO NOTE #4
402	NURSE	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
402A	NURSE'S TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.
403	OFFICE - 1	CARPET	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-0"	A	
404	GENERAL OFFICE	CARPET	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-0"	A	
405	PRINCIPAL'S OFFICE	CARPET	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-0"	A	
406	PRE-KINDERGARTEN CLASSROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
406A	PRE-KINDERGARTEN TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.
407	PRE-KINDERGARTEN CLASSROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
407A	PRE-KINDERGARTEN TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.
408	PRE-KINDERGARTEN CLASSROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
408A	PRE-KINDERGARTEN TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.
409	PRE-KINDERGARTEN CLASSROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
409A	PRE-KINDERGARTEN TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.
410	PRE-KINDERGARTEN CLASSROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
410A	PRE-KINDERGARTEN TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.
411	PRE-KINDERGARTEN CLASSROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
411A	PRE-KINDERGARTEN TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.
412	PRE-KINDERGARTEN CLASSROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
412A	PRE-KINDERGARTEN TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.
413	PRE-KINDERGARTEN CLASSROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
413A	PRE-KINDERGARTEN TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.
414	ELECTRICAL/MECHANICAL	VCT	VINYL	EXPOSED BRICK/PAINTED CMU	0	OPEN	FULL HT.	C	
414A	DUST/OJAL	EPOXY	EPOXY	EXPOSED BRICK/PAINTED CMU	0	2"x4" LAY-IN TILE	9'-0"	A	SEE DETAIL 1/A-12. FRP PANELS AT MOP SINK, SEE DETAIL 3/A-17.
414B	BF ROOM	VCT	VINYL	EXPOSED BRICK/PAINTED CMU	0	2"x4" LAY-IN TILE	9'-0"	A	
415	FACULTY ROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
415A	FACULTY ROOM TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	9'-6"	A	SEE DETAIL 1/A-12.
415B	STORAGE	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
416	PRE-KINDERGARTEN CLASSROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
416A	PRE-KINDERGARTEN TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.
417	PRE-KINDERGARTEN CLASSROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
417A	PRE-KINDERGARTEN TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.
418	PRE-KINDERGARTEN CLASSROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
418A	PRE-KINDERGARTEN TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.
419	PRE-KINDERGARTEN CLASSROOM	VCT	VINYL	PAINTED CMU/GYPSUM	0	2"x4" LAY-IN TILE	9'-6"	A	
419A	PRE-KINDERGARTEN TOILET	EPOXY	EPOXY	CERAMIC TILE	0	2"x4" LAY-IN TILE	8'-0"	A	SEE DETAIL 1/A-12.

**DEMOLITION WORK:**  
SEE DEMO PLANS, NOTES, AND SPECIFICATION FOR DEMO WORK (TYP.)

**CEILING WORK:**  
SEE CEILING PLANS, NOTES, AND SPECIFICATION FOR CEILING WORK & CEILING HEIGHT (TYP.)

**H.V.A.C. WORK:**  
SEE MECHANICAL & PLUMBING DRAWINGS, MECH./PLUMB DEMO PLANS, NOTES, SPECIFICATIONS FOR H.V.A.C. & PLUMBING DEMOLITION AND NEW WORKS (TYP.)

**ELECTRICAL WORK:**  
SEE ELECTRICAL DRAWINGS, NOTES, SPECIFICATIONS FOR ELECTRICAL WORKS (TYP.)

**FIRE PROTECTION:**  
SEE FIRE PROTECTION DWGS FOR SPRINKLERED AREAS (TYP.)

IF SURFACE HAS NO WORK LISTED IN THIS SCHEDULE BUT CUT, MODIFIED BY OTHER PRIME CONTRACTORS TO PERFORM THEIR WORK, IT IS THE RESPONSIBILITY OF EACH OF THOSE PRIME CONTRACTOR TO PATCH, REPAIR, PAINT THE SURFACE TO ITS ORIGINAL CONDITION.

- CEILING FINISH TYPES**
- Ⓐ 2"x4" LAY-IN TILE (SEE SPECIFICATIONS)
  - Ⓑ VENTED VINYL SOFFIT (SEE SPECIFICATIONS)
  - Ⓒ EXPOSED CEILING STRUCTURE, STEEL JOIST, DECK, DUCT, PIPE CONDUIT...E.T.C., PAINTED
  - Ⓓ EXISTING LAY-IN CEILING SYSTEM & LIGHTING TO REMAIN, WHERE ANY WORK IS TO BE DONE ABOVE EXISTING LAY-IN CEILING SYSTEM, IT IS THE SOLE RESPONSIBILITY OF THAT DESIGNATED CONTRACTOR TO REMOVE/MODIFY & REPLACE THE EXISTING CEILING SYSTEM FOR THE INSTALLATION OF NEW WORK. AFTER COMPLETION OF NEW WORK ABOVE CEILING, THE CONTRACTOR SHALL REPLACE ANY CEILING COMPONENTS THAT ARE DAMAGED DURING REMOVAL/REINSTALLATION WITH NEW TO MATCH.

**REMARKS**

- WITH HOLD DOWN CLIPS WITHIN 12"-0" FROM EXTERIOR DOORS

**EXISTING CONSTRUCTION NOTES**

PROTECT ALL EXISTING CONSTRUCTION FROM DAMAGE DURING CONSTRUCTION, REPAIR DAMAGES INCURRED. IF SURFACE HAS NO WORK LISTED IN THIS SCHEDULE BUT CUT, MODIFIED BY OTHER PRIME CONTRACTORS TO PERFORM THEIR WORK, IT IS THE RESPONSIBILITY OF EACH OF THOSE PRIME CONTRACTORS TO PATCH, REPAIR, PAINT THE SURFACE TO ITS ORIGINAL CONDITION.

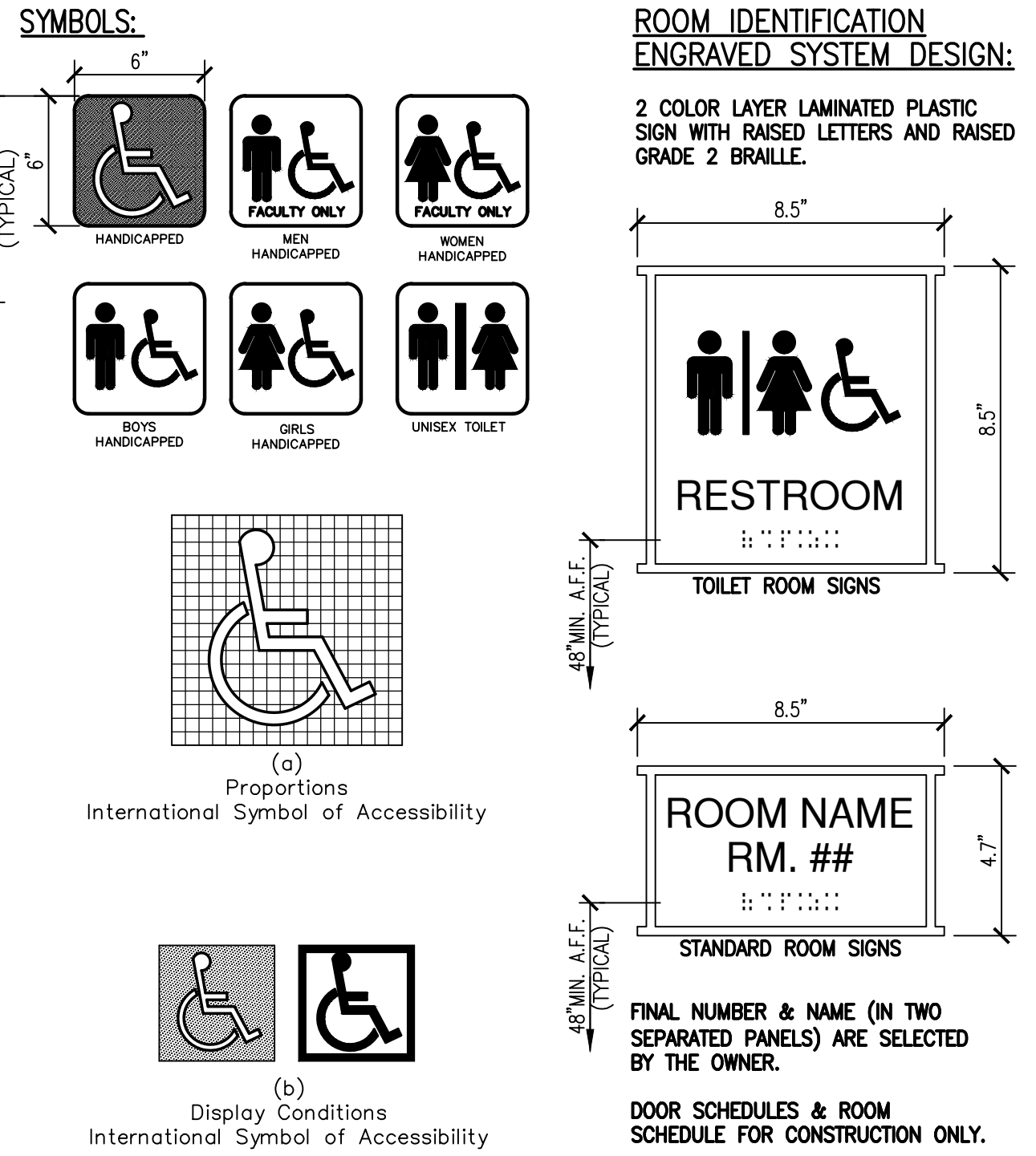
**ALL NEW INTERIOR DOORS RECEIVE NEW SIGNAGE (TYP.) NOT REQUIRED AT DOORS TO EXTERIOR**

**SIGNAGE:** ALL SIGNAGE SHALL COMPLY WITH CABO/ANSI 117.1. ALL INTERIOR DOORS ARE TO RECEIVE SIGNAGE INSTALL PERMANENT SIGNS ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR AT MAX. 60" ABOVE FLOOR TO CENTER LINE OF SIGN, OVERHEAD SIGN SHALL BE INSTALLED AT 80" MIN. HEIGHT ABOVE FLOOR. SEE FIG. 0 & FIG. 8.

LETTERS AND NUMBERS SHALL HAVE WIDTH TO HEIGHT RATIO BETWEEN 3:5 AND 1:1.

ALL LETTERS AND NUMBERS SHALL BE GRADE 2 BRAILLE, PROVIDE INTERNATIONAL SYMBOL FOR ACCESSIBILITY.

Raised and Braille Characters and Pictorial Symbol Signs (Pictograms). Letters and numerals shall be raised 1/32 in. upper case, sans serif or simple serif type and shall be accompanied with Grade 2 Braille. Raised characters shall be at least 5/8 in. (16 mm) high, but no higher than 2 in. (50 mm). Pictograms shall be accompanied by the equivalent verbal description placed directly below the pictogram. The border dimension of the pictogram shall be 6 in. (152 mm) minimum in height.

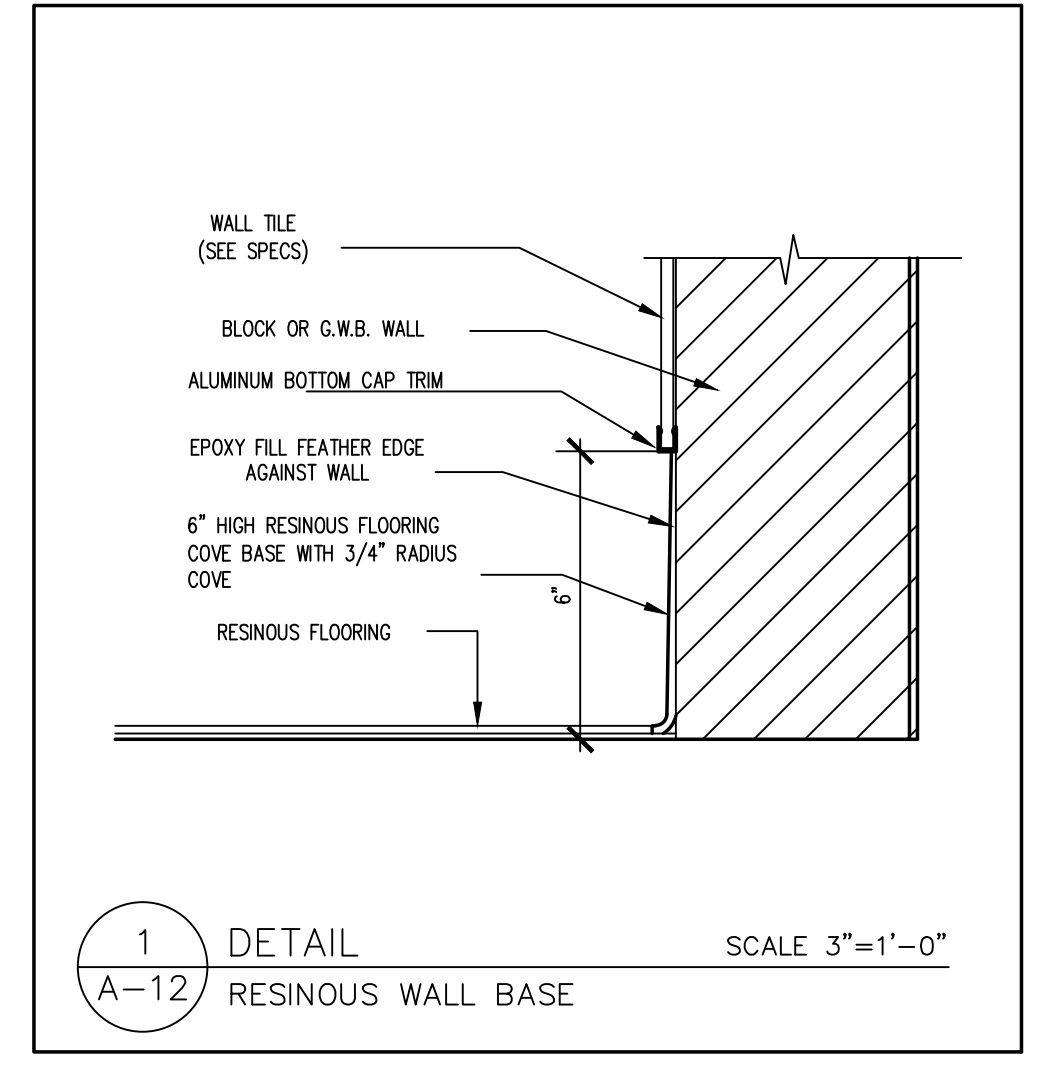
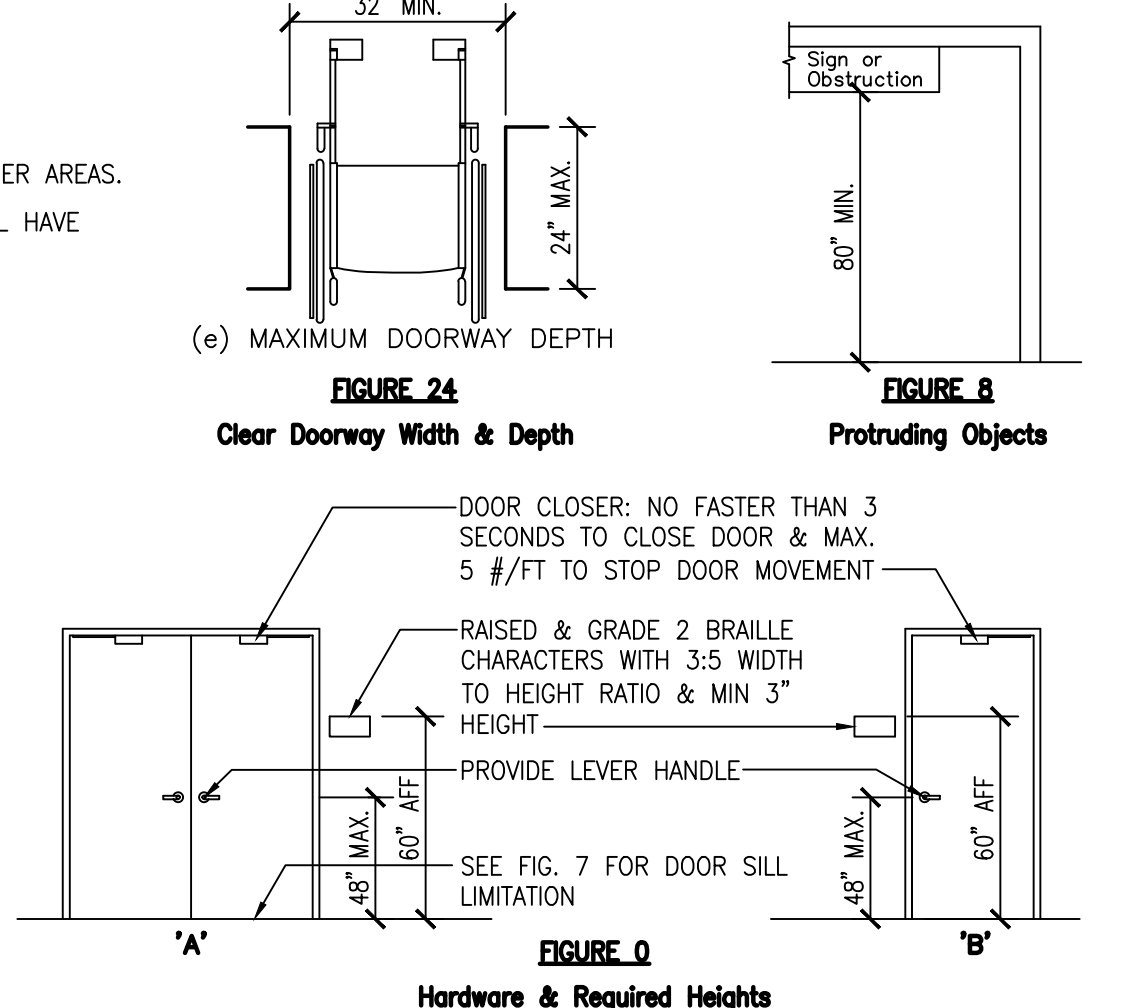
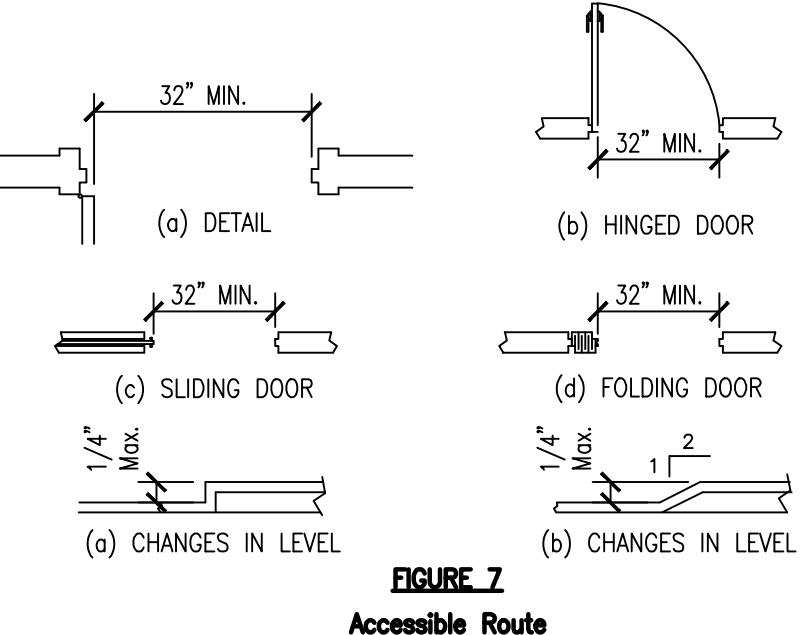


**ENTRANCE DOORS & OTHER DOORS IN SPACE**

PROVIDE ENTRANCE DOOR AS 'A' AND 'B' FIG. 0. FROM ALL CORR. & LOBBIES

PROVIDE OTHER DOORS IN SPACE AS 'A' AND 'B', FIG. 0. FROM ROOMS TO OTHER AREAS.

INDICATE ADDITIONAL ITEMS, IF APPLICABLE TO THOSE DOORS. ALL DOORS SHALL HAVE CLEAR WIDTH AS SHOWN ON FIG. 24 & SILL HEIGHT LIMIT AS FIG. 7 SHOWN. DOOR HARDWARE SHALL BE NOTED ON FIG. 0.



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100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08069

**REVISIONS**

a. \_\_\_\_\_  
b. \_\_\_\_\_  
c. \_\_\_\_\_

Project No. 23-42  
Date: 11-11-24  
Scale: AS NOTED

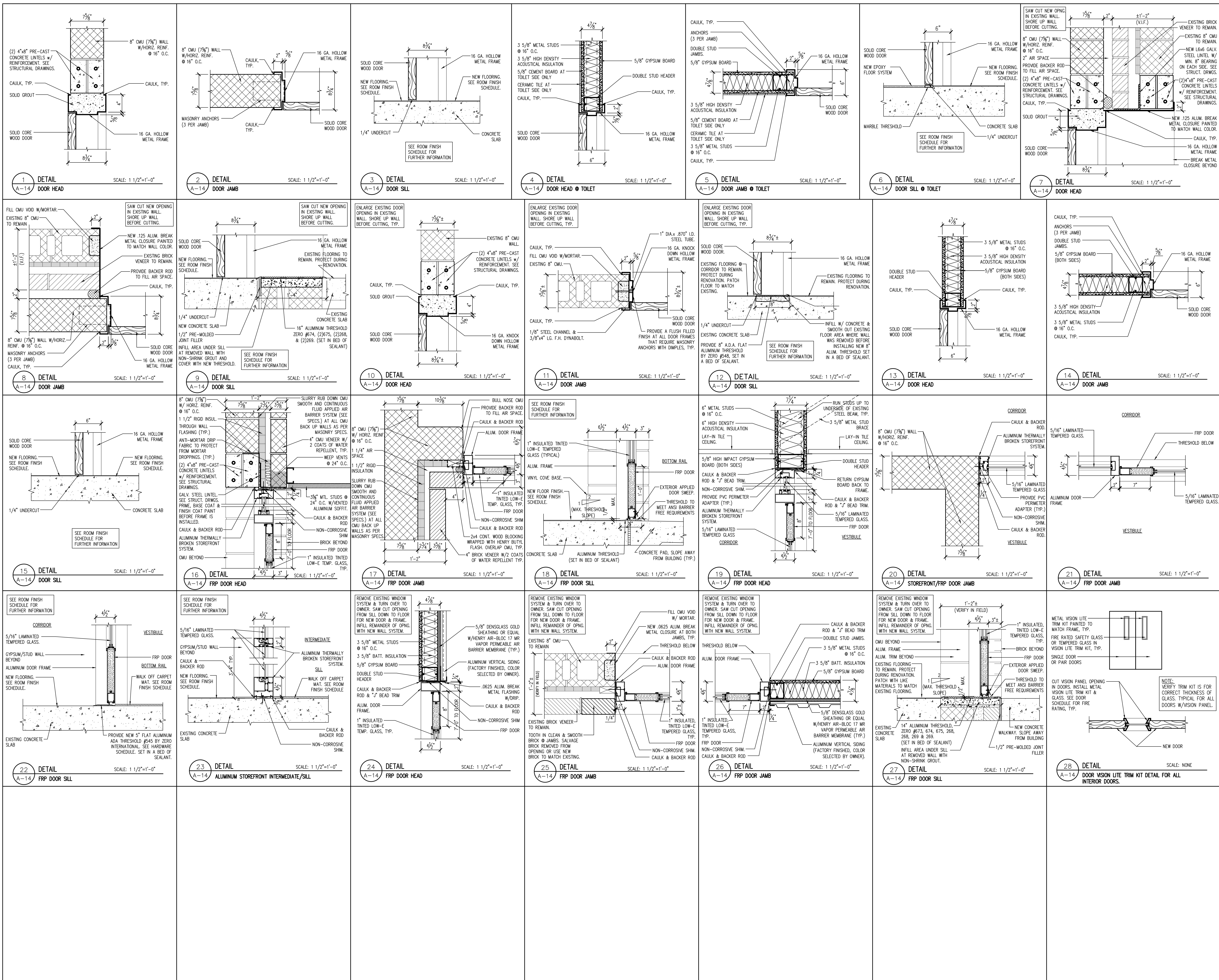
**ROOM FINISH SCHEDULE**

**A-12**









**REVISIONS**

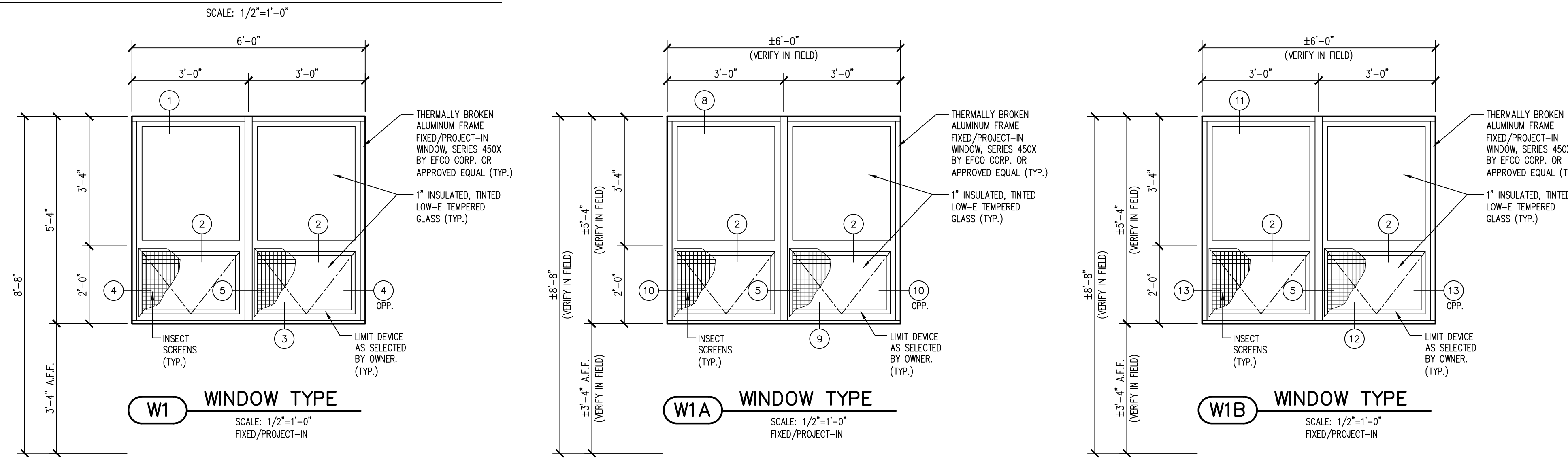
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Project No. 23-42  
 Date: 11-11-24  
 Scale: AS NOTED

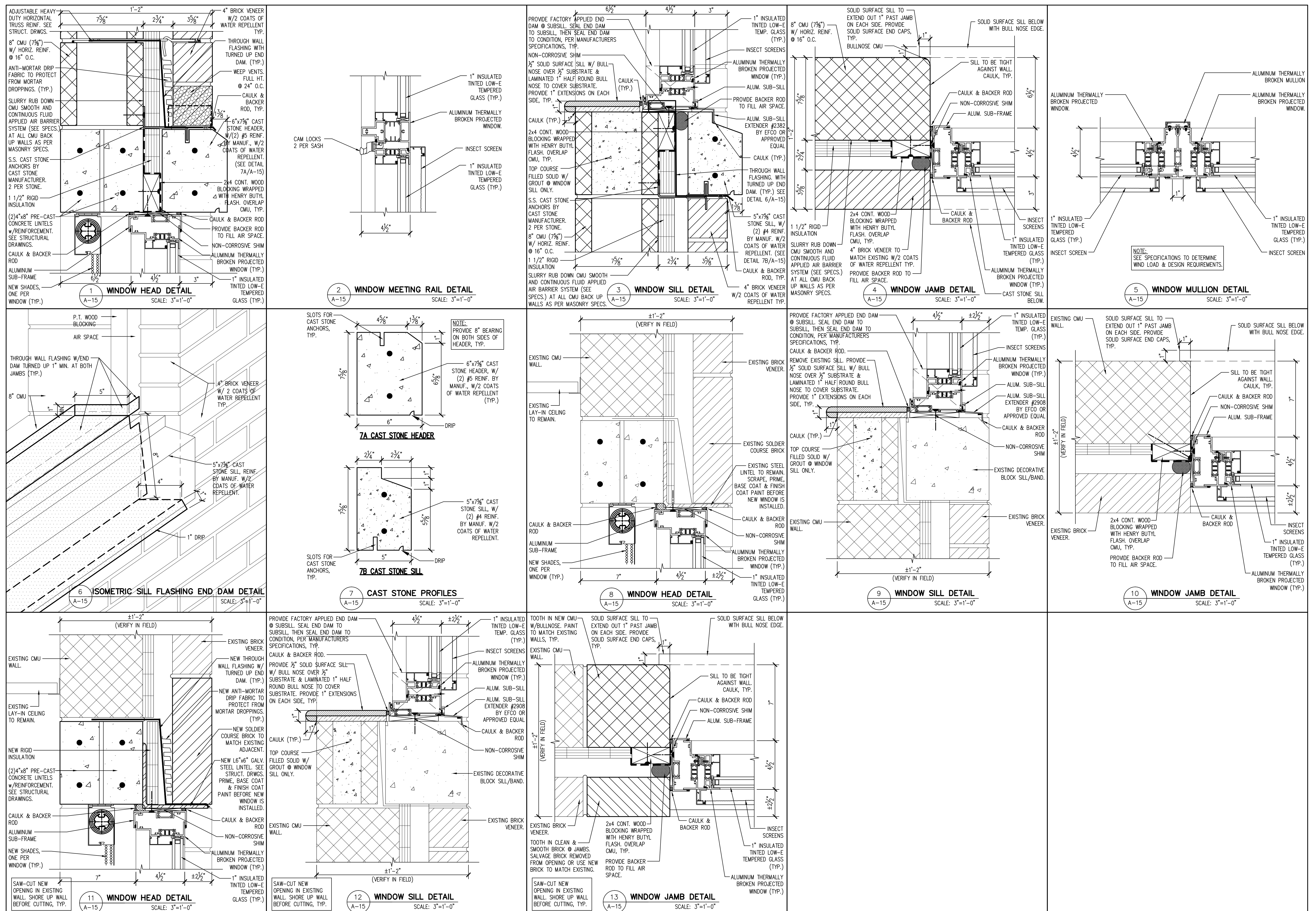
**DOOR AND FRAME DETAILS**



# EXTERIOR WINDOW TYPES:



- GENERAL NOTES:**
- WINDOWS SHALL BE DESIGNED TO MEET IBC 2021 CODE REQUIREMENTS FOR WIND LOADS. SEE SPECIFICATIONS. CONTRACTOR TO SUBMIT SIGNED & SEALED, BY S.U.I. P.E., SHOP DRAWINGS, CALCULATIONS & FASTENING PATTERNS, TYPICAL.
  - CONTRACTOR SHALL VISIT THE SITE AND BUILDING TO DETERMINE ACTUAL FIELD CONDITIONS AND QUANTITIES OF MATERIALS. NO COMPENSATION WILL BE ALLOWED FOR FAILURE TO DETERMINE ACTUAL FIELD CONDITIONS.
  - WHEN ALUMINUM SYSTEMS ARE IN DIRECT CONTACT WITH PRESSURE TREATED WOOD:
    - USE NON-CORROSIVE SHIMS BETWEEN THE ALUMINUM SYSTEM & THE TREATED WOOD.
    - USE ONLY STAINLESS STEEL FASTENERS, SEE SPECS.
    - DO NOT USE CA OR OIL TREATED LUMBER FOR WOOD BLOCKING.
  - ALL CAULKING SHOULD BE SILICONE SEALANT. (SEE SPECIFICATIONS)
  - ALL TOILET ROOMS, LOCKER ROOMS OR PRIVATE AREAS SHALL HAVE OBTURED GLAZING IN WINDOWS THAT FACE THE EXTERIOR, TYPICAL.
  - PROVIDE NEW INTERIOR WINDOW SHADES AT ALL WINDOW OPENINGS, TYPICAL. (SEE SPECIFICATIONS)
  - CAULK ALL JOINTS BETWEEN CAST STONE & CAST STONE AND BETWEEN CAST STONE & BRICK VENEER WITH SILICONE SEALANT, TYPICAL. (NO MORTAR JOINTS)
  - PROVIDE NINE (9) INCH HIGH AND (0.5) INCH STROKE WIDTH WHITE REFLECTIVE VINYL WINDOW SIGNAGE ON ONE WINDOW PER SPACE INDICATING THE ROOM NUMBER. PLACE SIGNAGE AT THE TOP RIGHT SIDE OF EACH WINDOW.
  - ALL EXPOSED STEEL LINTELS, BEAMS, ETC. SHALL BE PRIMED & PAINTED PER SPECIFICATIONS BEFORE THE NEW WINDOW IS INSTALLED, TYPICAL.



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**REVISIONS**

a. \_\_\_\_\_  
b. \_\_\_\_\_  
c. \_\_\_\_\_

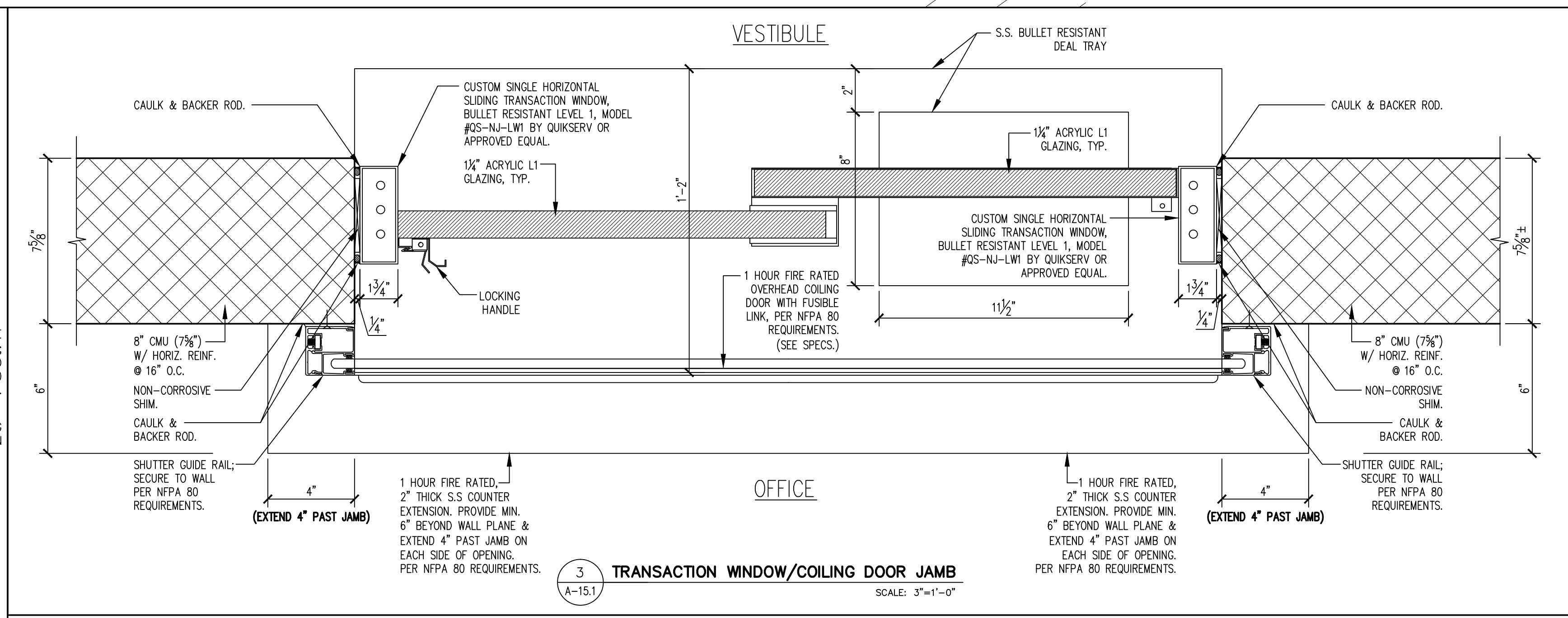
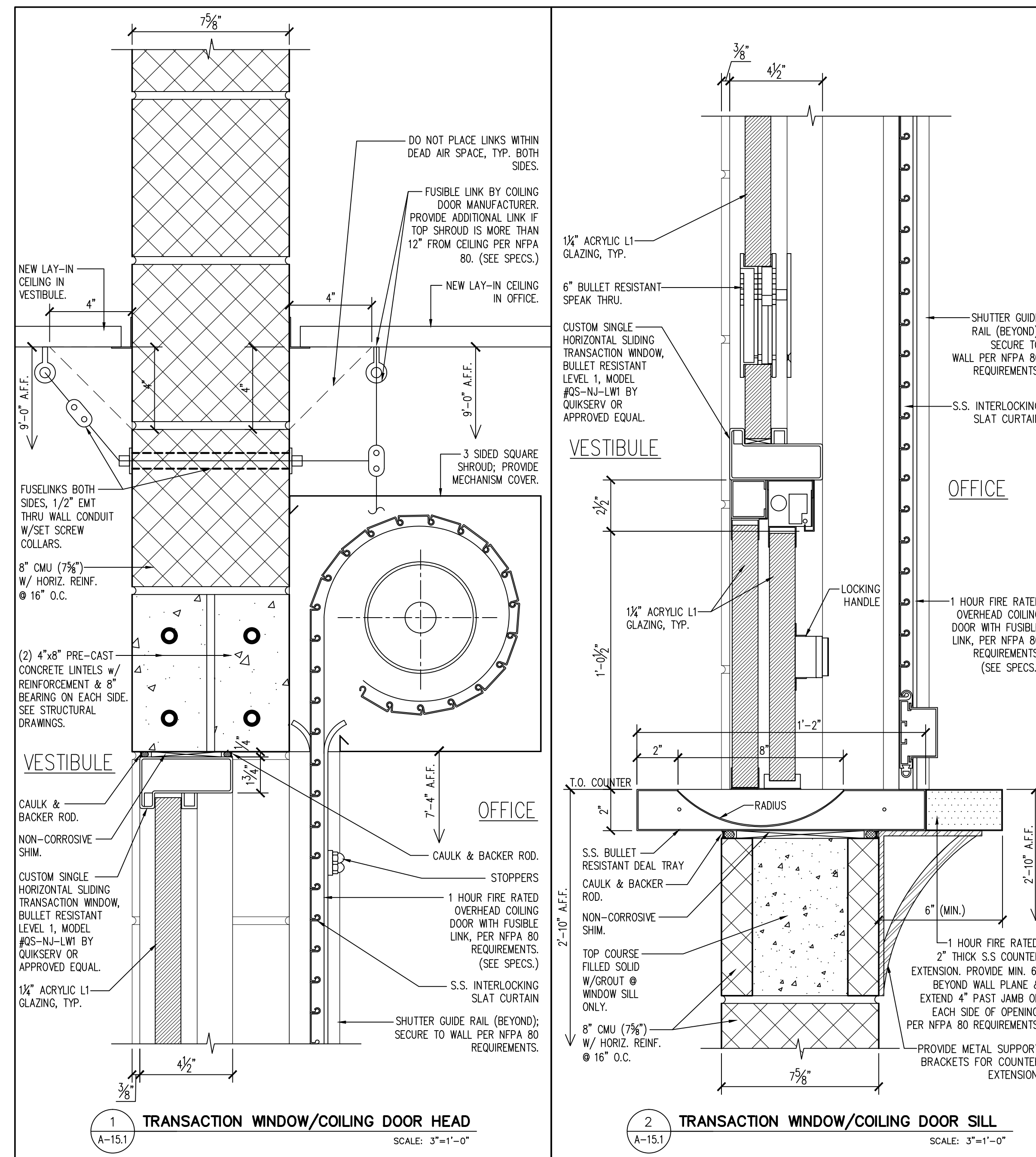
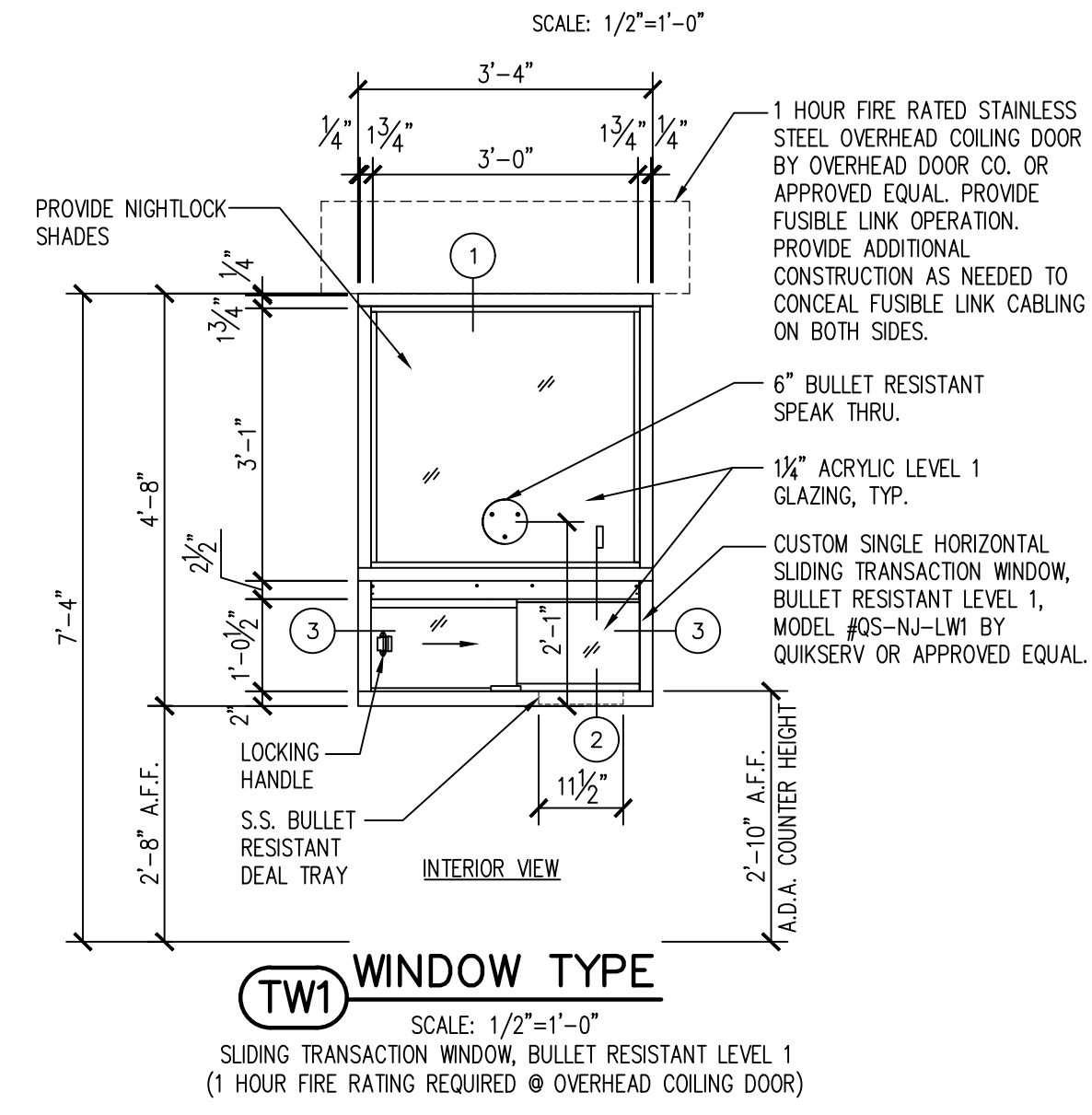
Project No. 23-42  
Date: 11-11-24  
Scale: AS NOTED

**EXTERIOR WINDOW TYPES & DETAILS**

**A-15**



# TRANSACTION WINDOW TYPES:



UNLESS OTHERWISE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION, FUSIBLE LINKS SHALL BE INSTALLED ON BOTH SIDES OF THE WALL AND INTERCONNECTED SO THAT THE OPERATION OF ANY SINGLE FUSIBLE LINK CAUSES THE SHUTTER TO CLOSE. WHERE MULTIPLE FUSIBLE LINKS ARE USED, ONE FUSIBLE LINK SHALL BE LOCATED NEAR THE TOP OF THE OPENING, AND ADDITIONAL LINKS SHALL BE LOCATED AT OR NEAR THE CEILING ON EACH SIDE OF THE WALL. FUSIBLE LINKS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 80.

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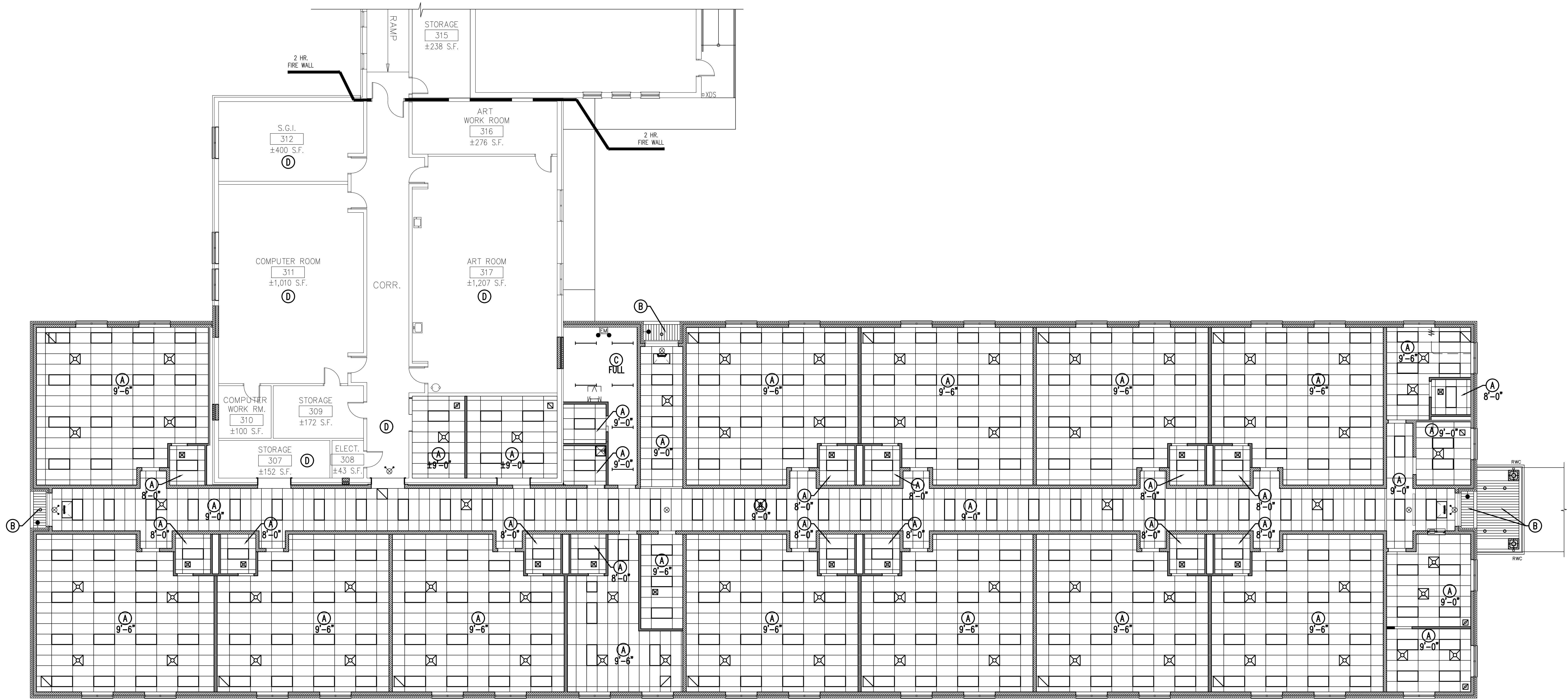
**REVISIONS**

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Project No. 23-42  
Date: 11-11-24  
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**TRANSACTION WINDOW TYPES & DETAILS**  
**A-15.1**





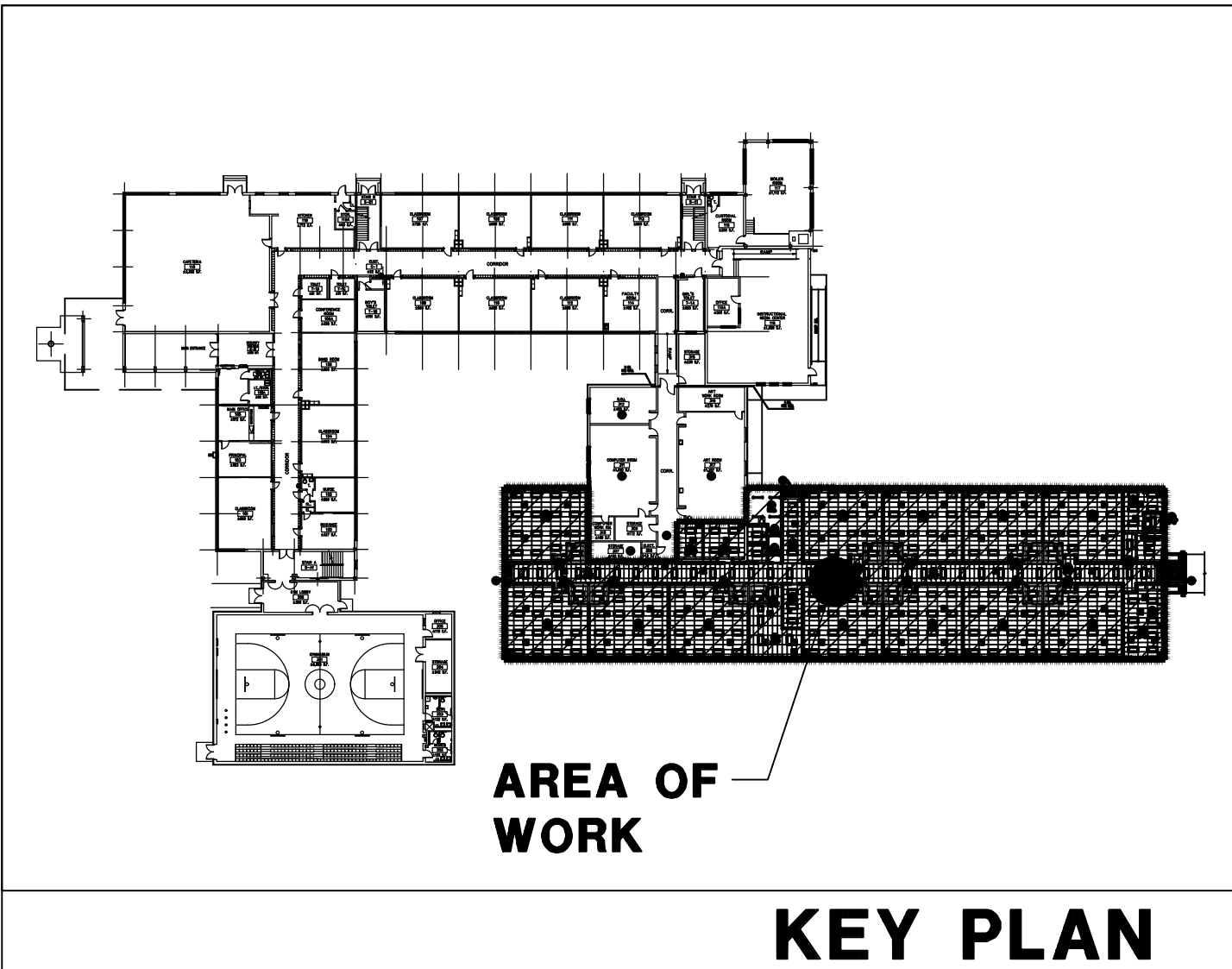
1 PROPOSED REFLECTED CEILING PLAN  
A-16 SCALE: 1/8" = 1'-0"

CEILING FINISH TYPES	
(A)	2'x4' LAY-IN TILE (SEE SPECIFICATIONS)
(B)	VENTED VINYL SOFFIT (SEE SPECIFICATIONS)
(C)	EXPOSED CEILING STRUCTURE, STEEL JOIST, DECK, DUCT, PIPE CONDUIT...ETC...PAINTED
(D)	EXISTING LAY-IN CEILING SYSTEM & LIGHTING TO REMAIN. WHERE ANY WORK IS TO BE DONE ABOVE EXISTING LAY-IN CEILING SYSTEM, IT IS THE SOLE RESPONSIBILITY OF THAT DESIGNATED CONTRACTOR TO REMOVE/MODIFY & REPLACE THE EXISTING CEILING SYSTEM FOR THE INSTALLATION OF NEW WORK. AFTER COMPLETION OF NEW WORK ABOVE CEILING, THE CONTRACTOR SHALL REPLACE ANY CEILING COMPONENTS THAT ARE DAMAGED DURING REMOVAL/REINSTALLATION WITH NEW TO MATCH.

CEILING LEGEND	
	2'x2' RECESSED LIGHT FIXTURE
	2'x4' RECESSED LIGHT FIXTURE
	RECESSED CABINET UNIT HEATER, SEE MECH. DWGS.
	SUPPLY AIR REGISTER
	RETURN AIR GRILLE
	EXHAUST FAN GRILLE

**GENERAL NOTES**

1. REFER TO MECHANICAL & ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. NOT ALL CEILING MOUNTED LIGHT FIXTURES AND AIR DEVICES MAY BE SHOWN AND WHAT IS SHOWN IS FOR BASIC INTENT. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING COMPREHENSIVE COORDINATION DRAWINGS, VERIFYING AVAILABLE AREA AND ABOVE CEILING CLEARANCE. DRAWINGS SHALL INCORPORATE THE WORK OF ALL APPLICABLE TRADES AND ALL CEILING MOUNTED EQUIPMENT, INCLUDING ALL POTENTIAL CONFLICTS (EXISTING PIPE, DUCT, ETC.).



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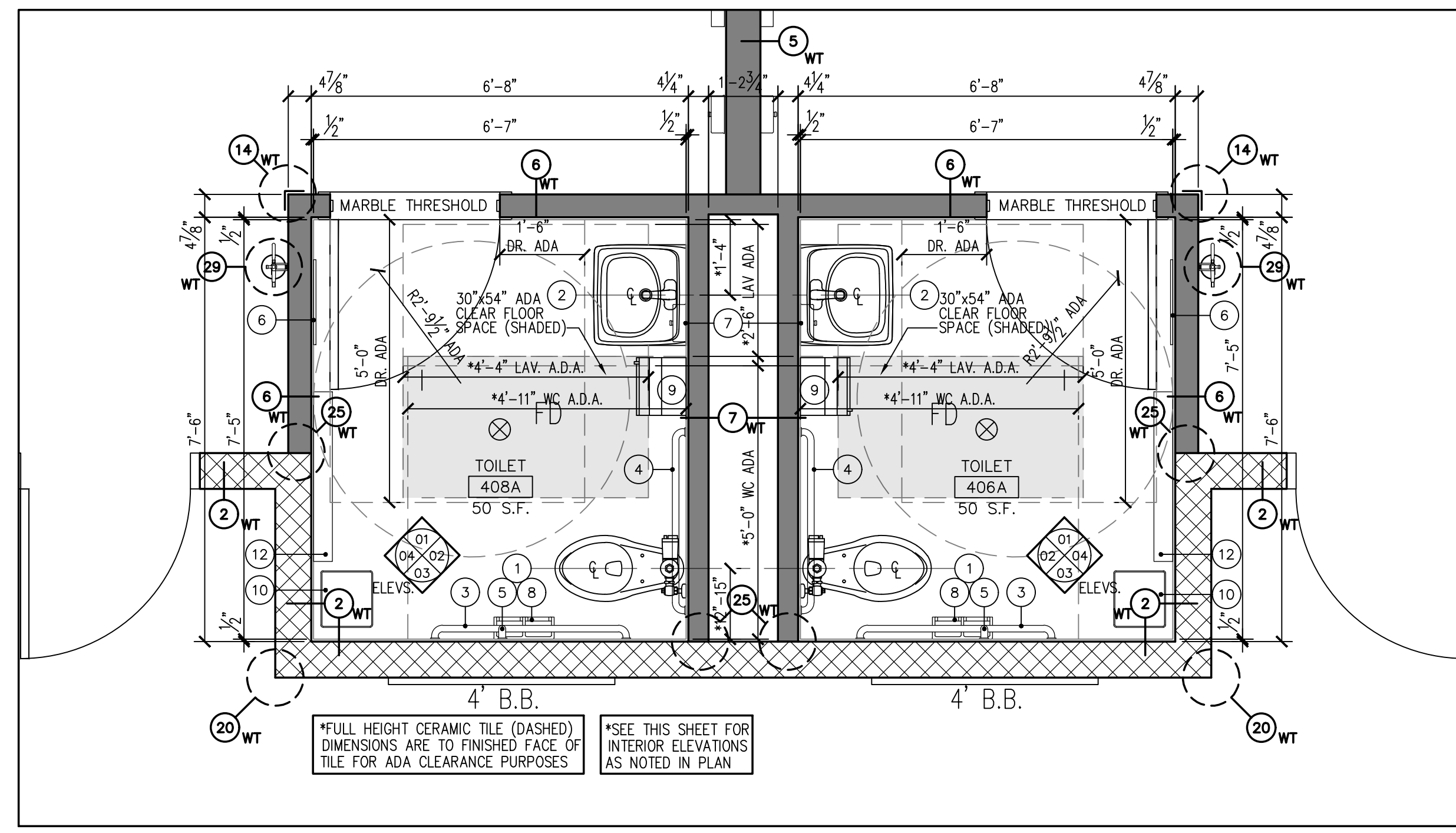
**REVISIONS**

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Date: 11-11-24  
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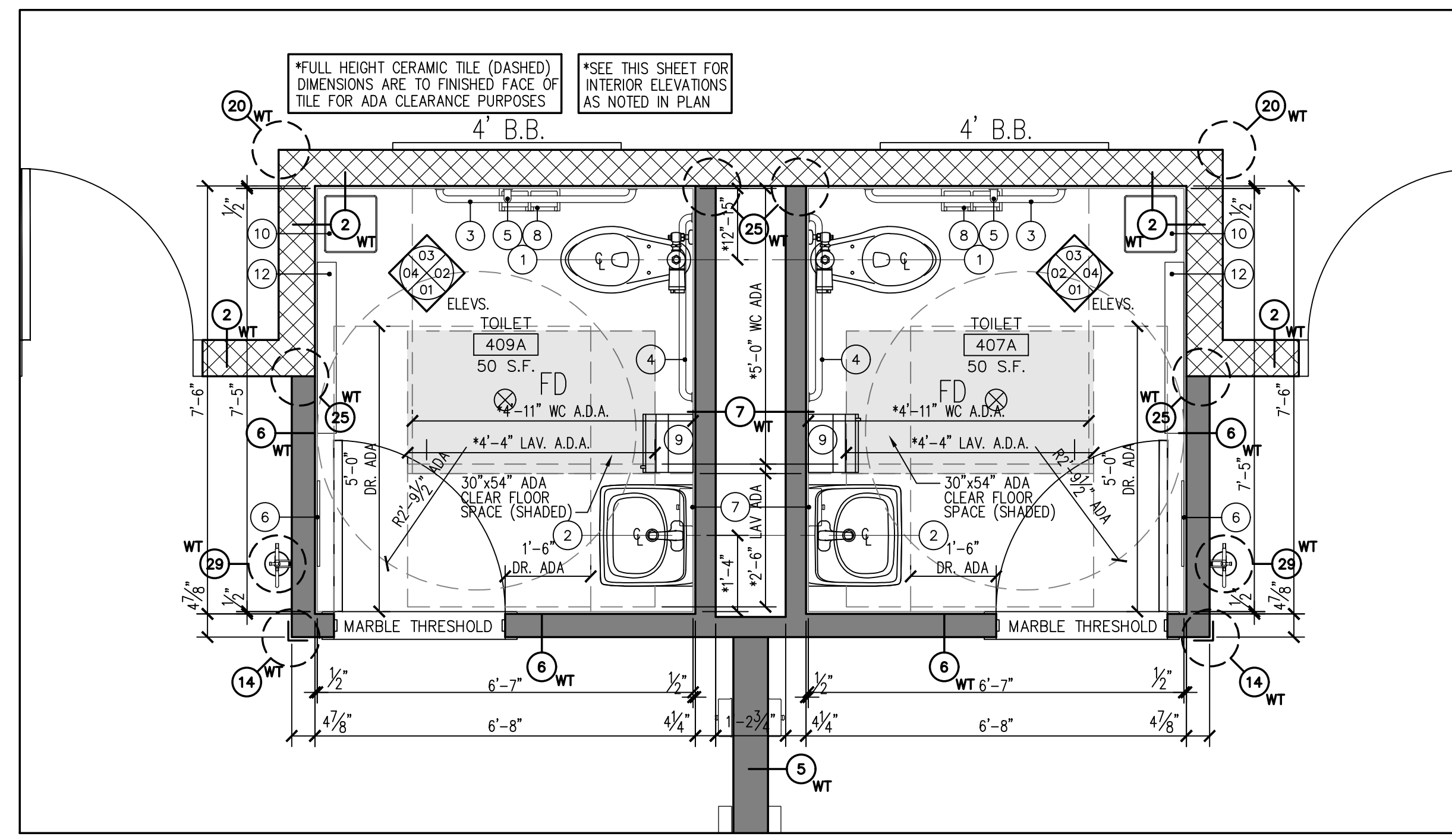
THIS DRAWING IS THE PROPERTY OF GARRISON ARCHITECTS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF GARRISON ARCHITECTS. ANY UNAUTHORIZED USE OF THIS DRAWING IS PROHIBITED. ANY UNAUTHORIZED USE OF THIS DRAWING IS PROHIBITED. ANY UNAUTHORIZED USE OF THIS DRAWING IS PROHIBITED. ANY UNAUTHORIZED USE OF THIS DRAWING IS PROHIBITED.





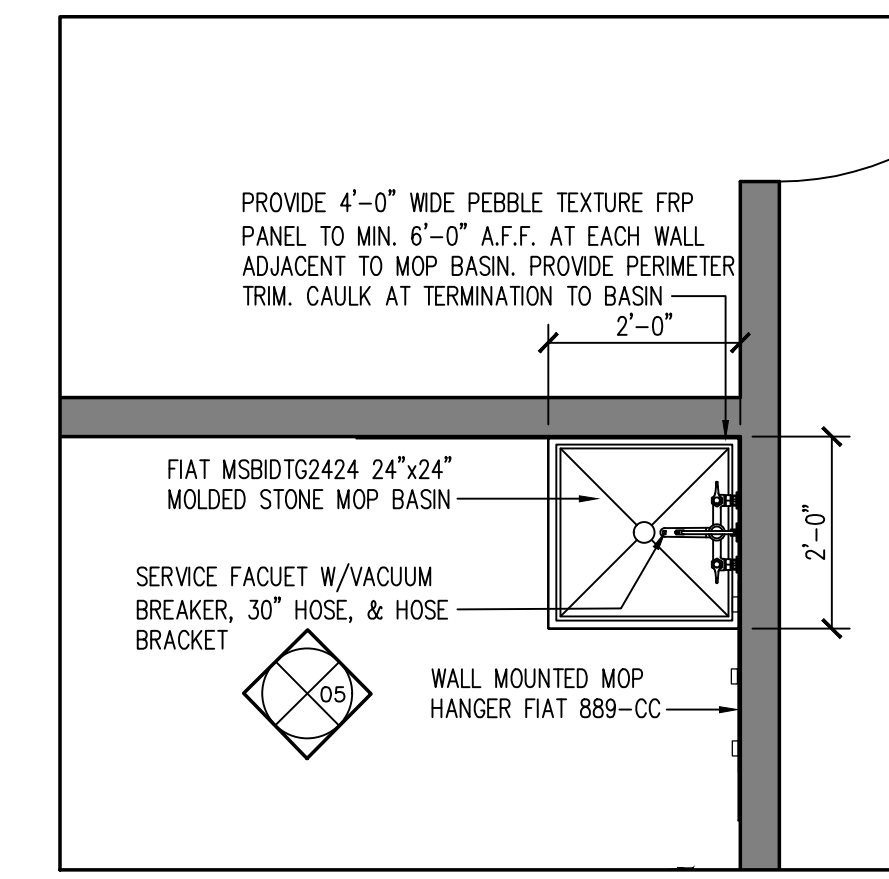
1 PROPOSED ENLARGED TOILET PLAN

A-17 SCALE: 1/2" = 1'-0"  
ROOMS PK-406A & PK-408A SHOWN. SAME AS ROOMS: PK-410A AND PK-412A PK-418A



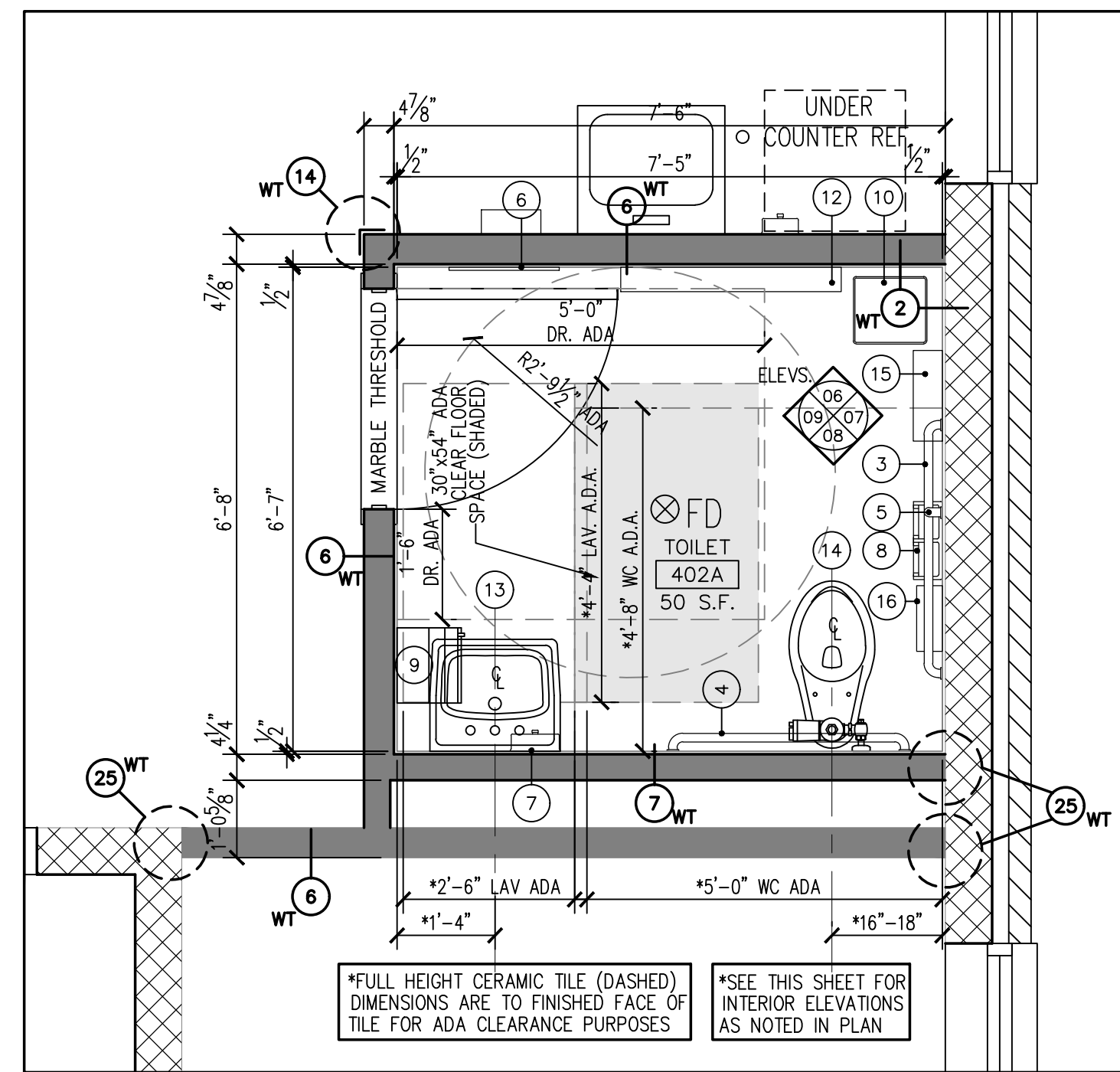
2 PROPOSED ENLARGED TOILET PLAN

A-17 SCALE: 1/2" = 1'-0"  
ROOMS PK-407A & PK-409A SHOWN. SAME AS ROOMS: PK-411A AND PK-413A PK-416A AND PK-417A PK-419A



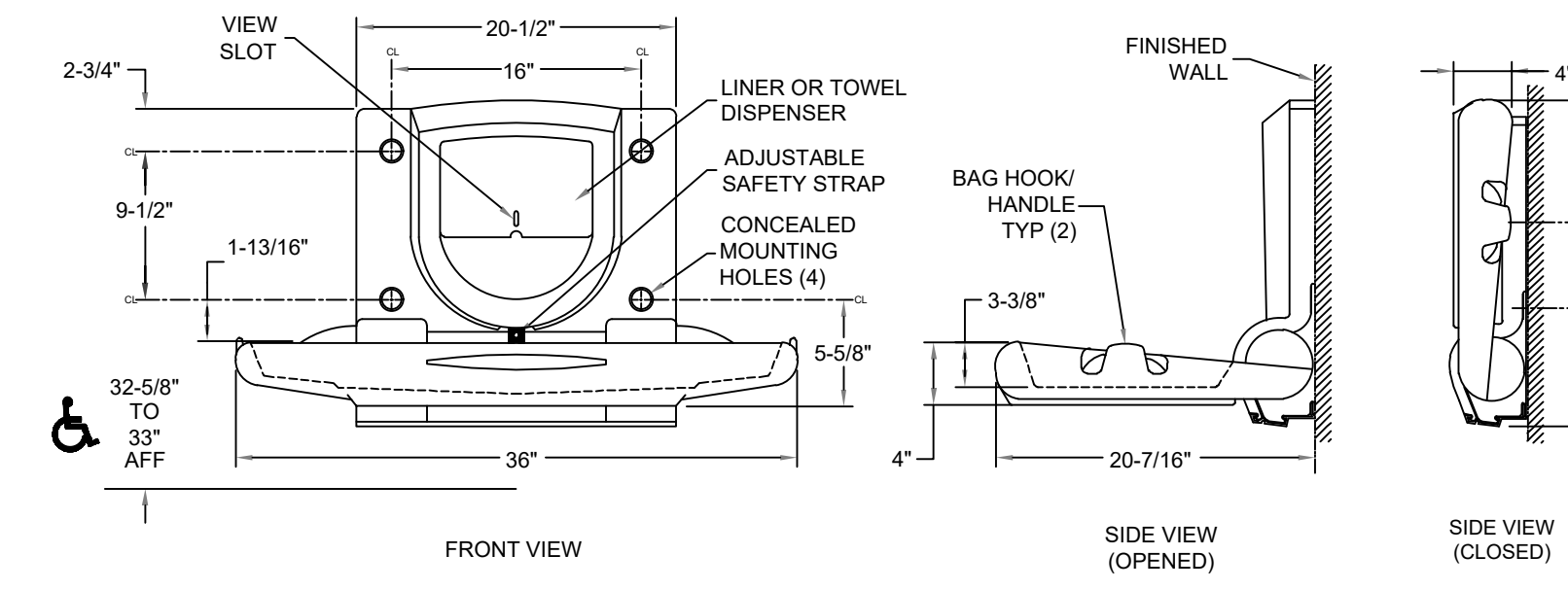
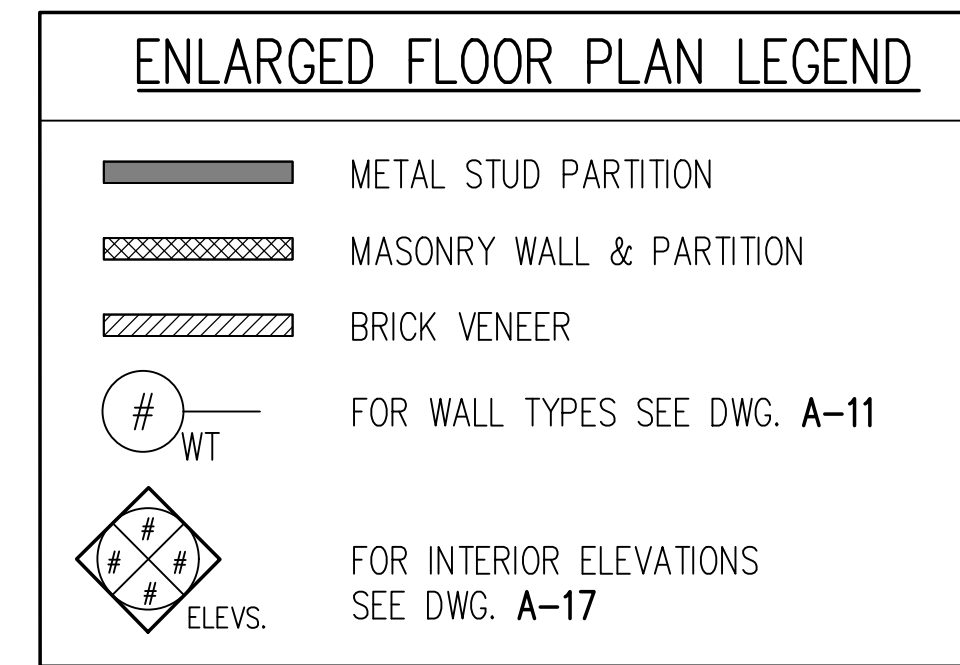
3 PROPOSED MOP BASIN PLAN

A-17 SCALE: 1/2" = 1'-0"



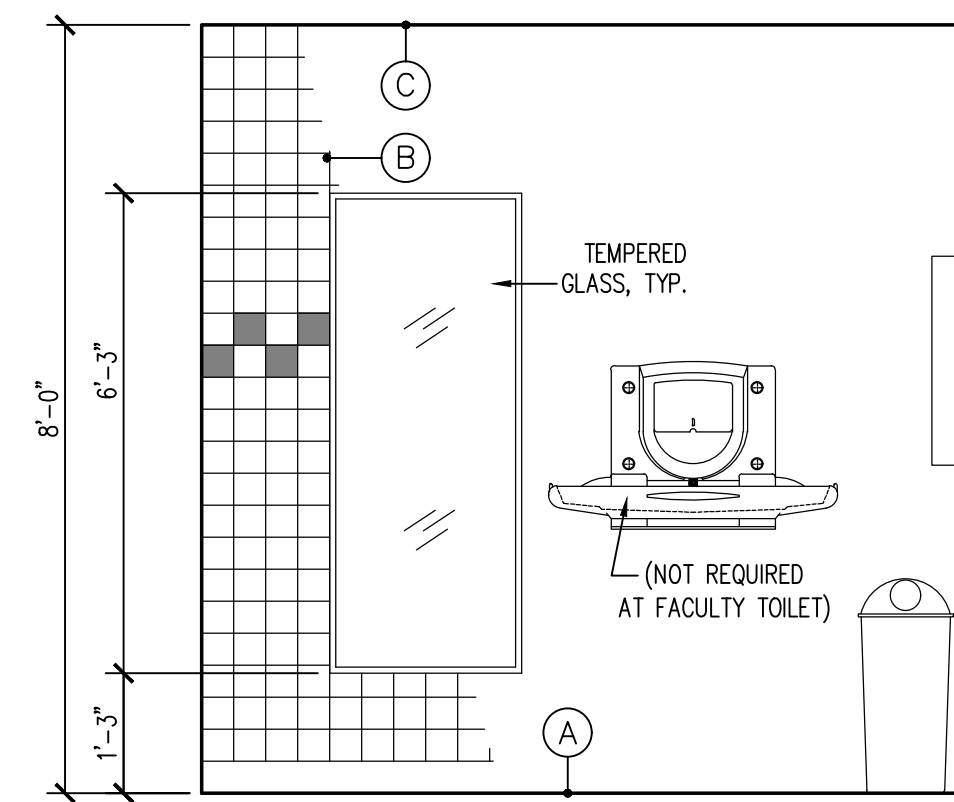
5 PROPOSED ENLARGED TOILET PLAN

A-17 SCALE: 1/2" = 1'-0"  
ROOM NURSE'S TOILET 402A SHOWN. SAME AS ROOM: 415A (ROTATED & OPP. HAND) (NO BABY CHANGING STATION REQUIRED IN 415A)



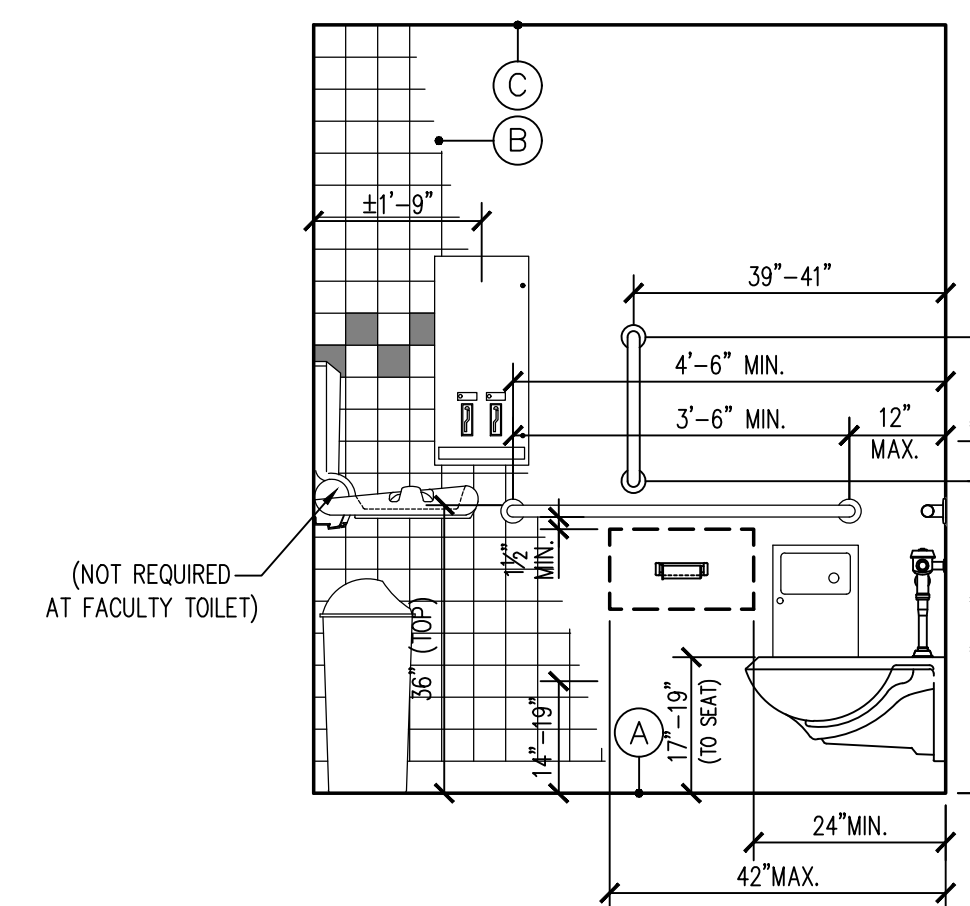
4 CHANGING STATION DETAIL

A-17 SCALE: 1" = 1'-0"



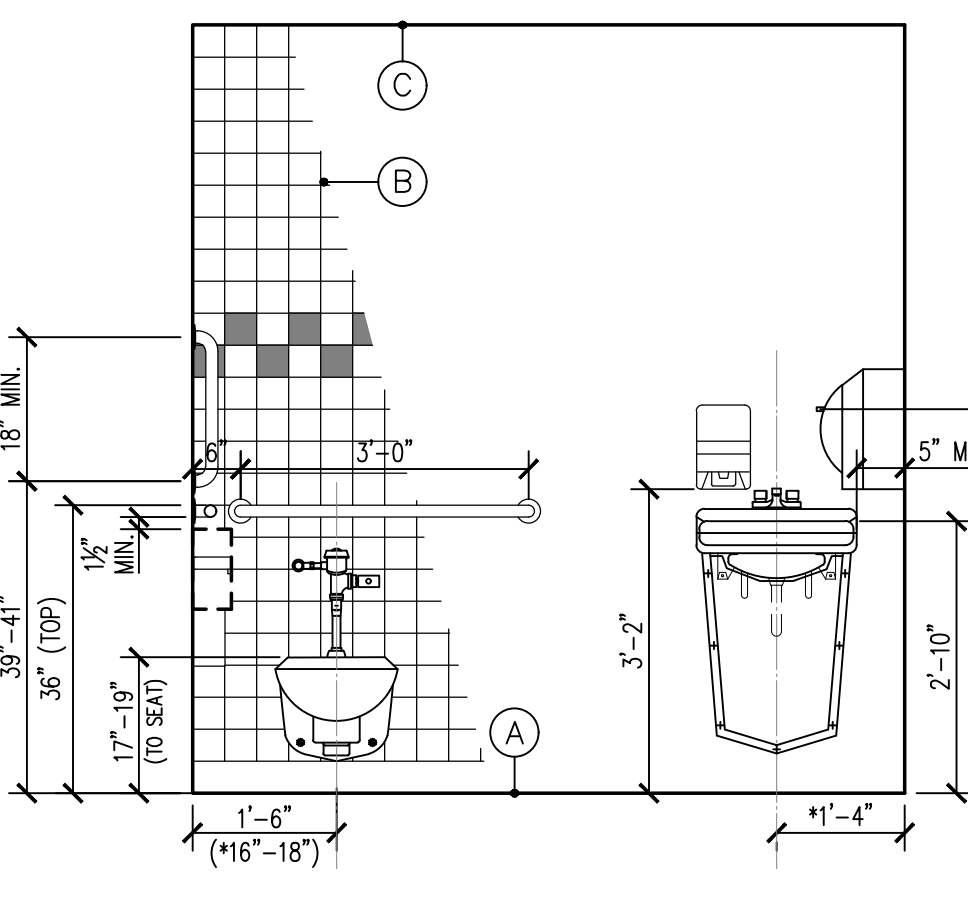
ELEV. '06'

SCALE: 1/2" = 1'-0"



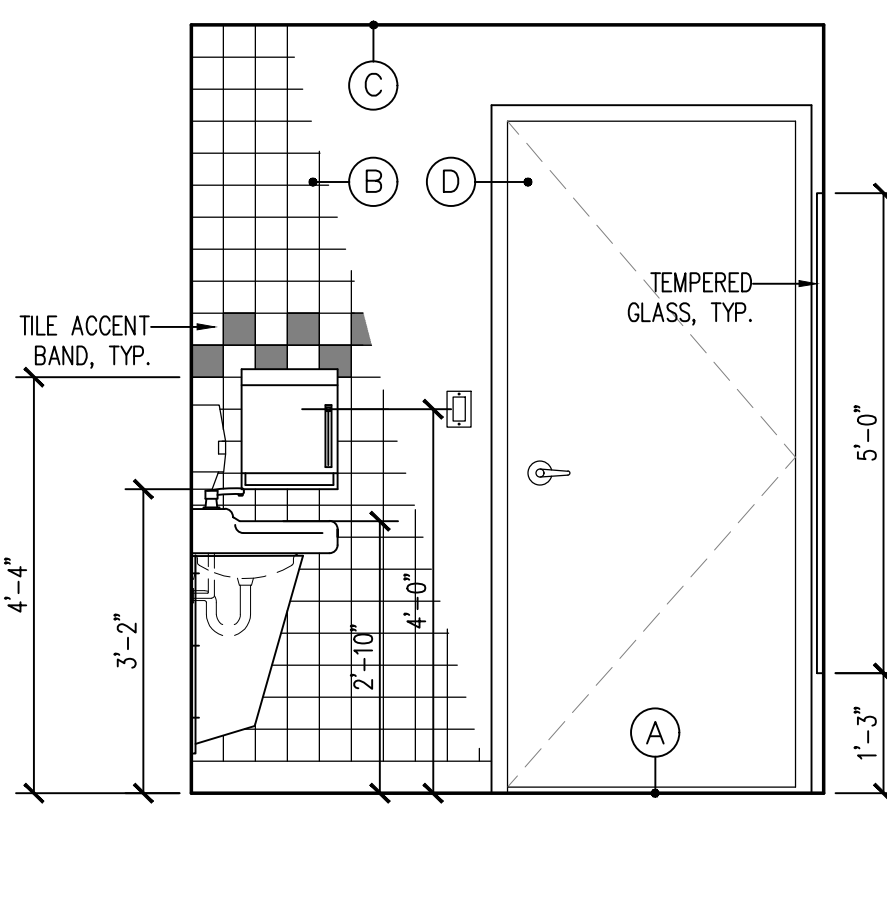
ELEV. '07'

SCALE: 1/2" = 1'-0"



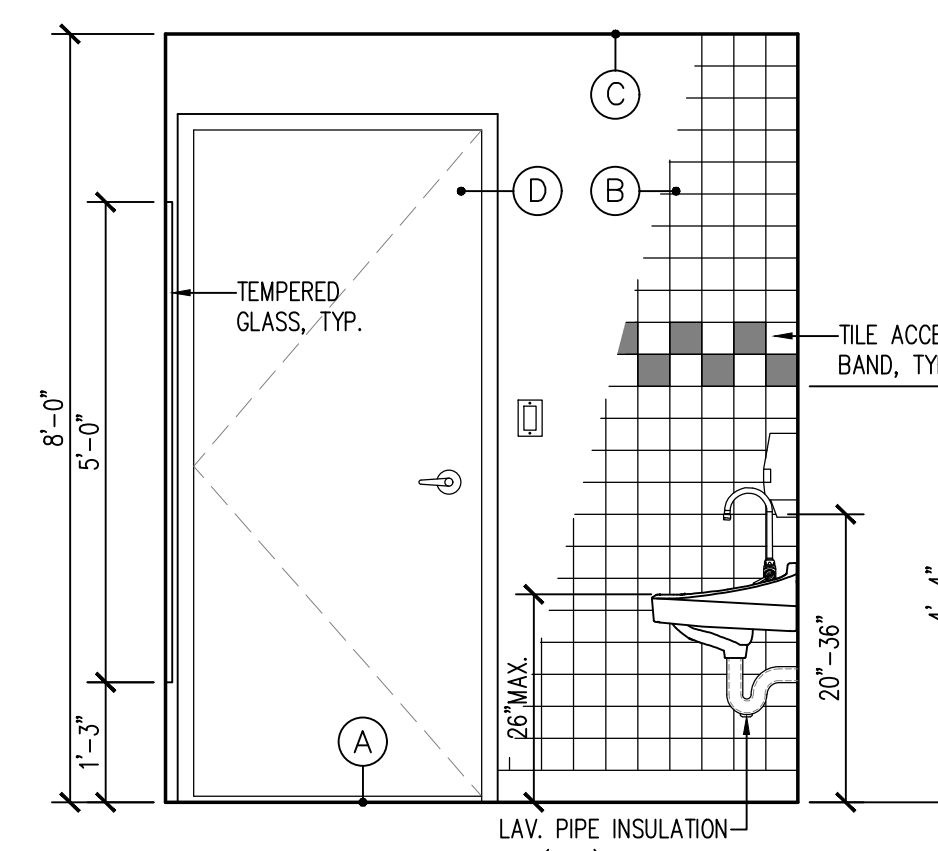
ELEV. '08'

SCALE: 1/2" = 1'-0"



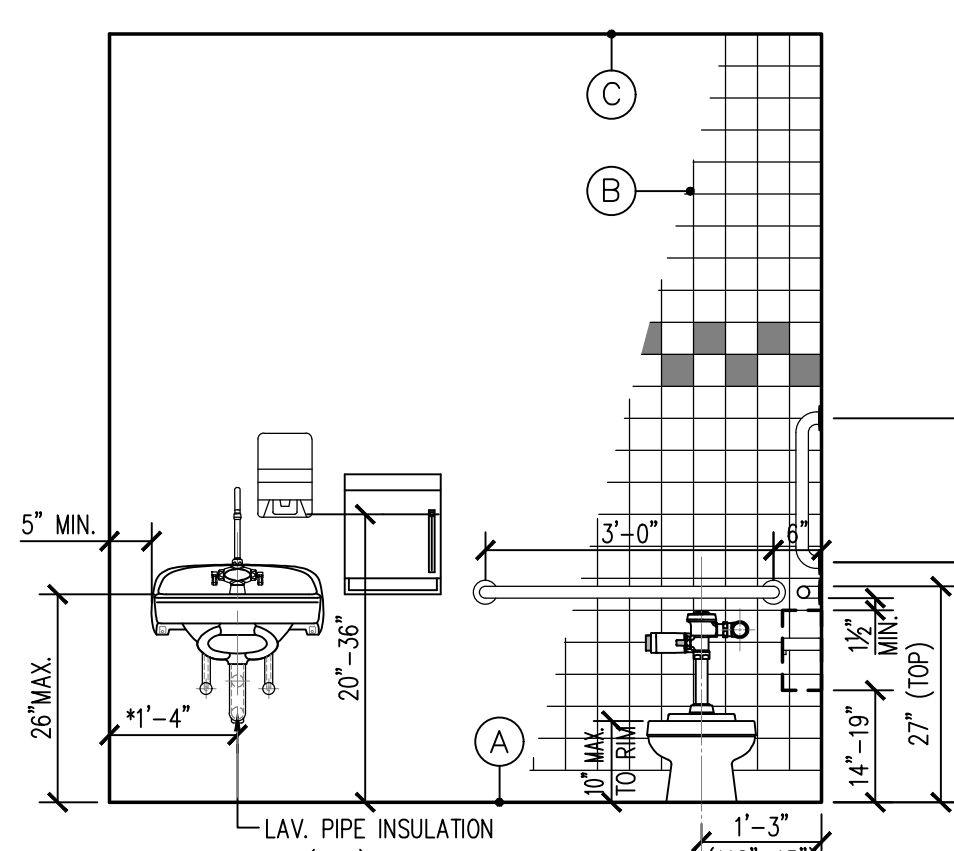
ELEV. '09'

SCALE: 1/2" = 1'-0"



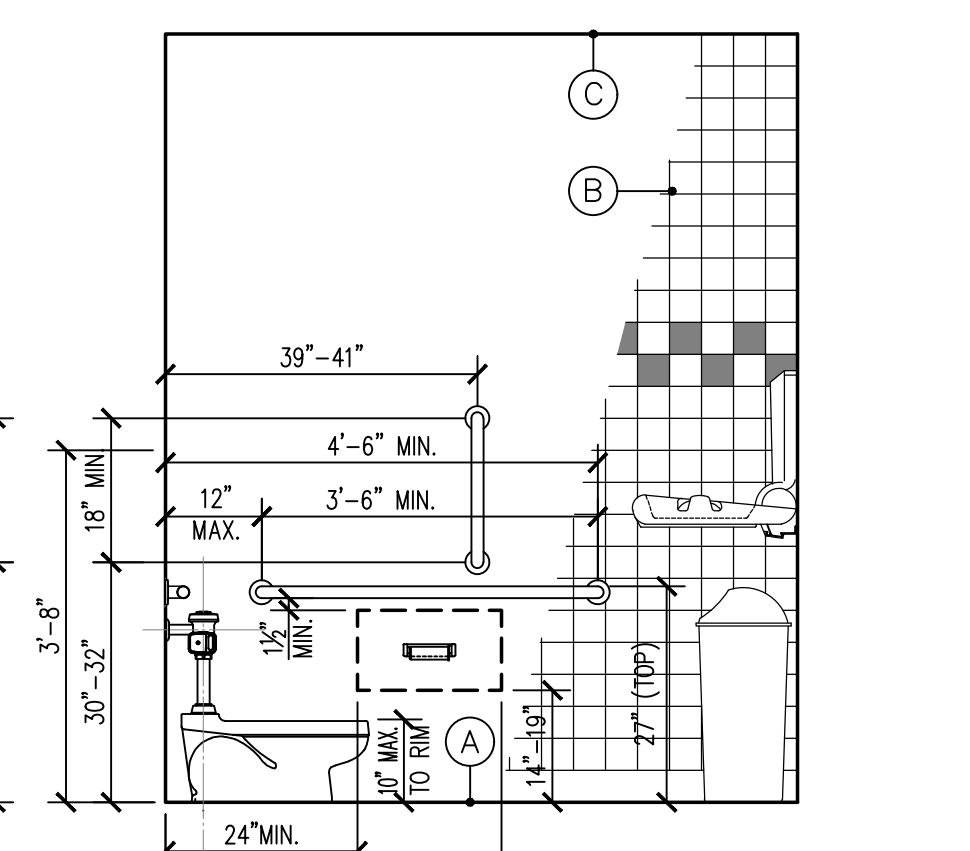
ELEV. '01'

SCALE: 1/2" = 1'-0"



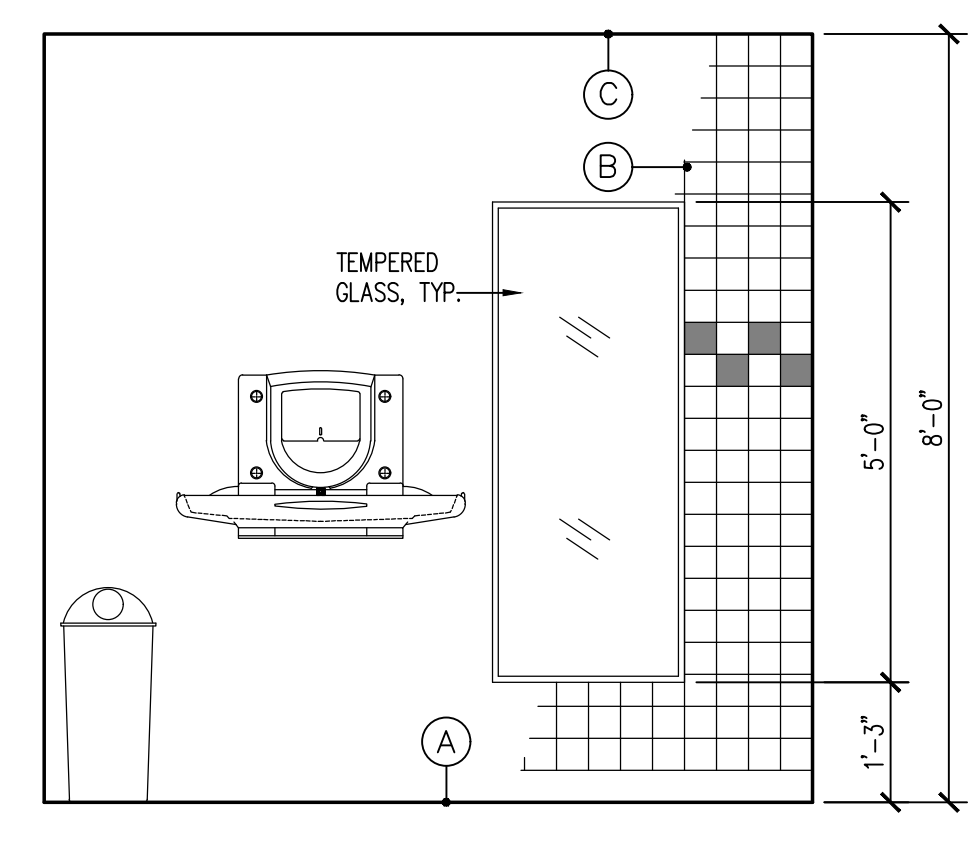
ELEV. '02'

SCALE: 1/2" = 1'-0"



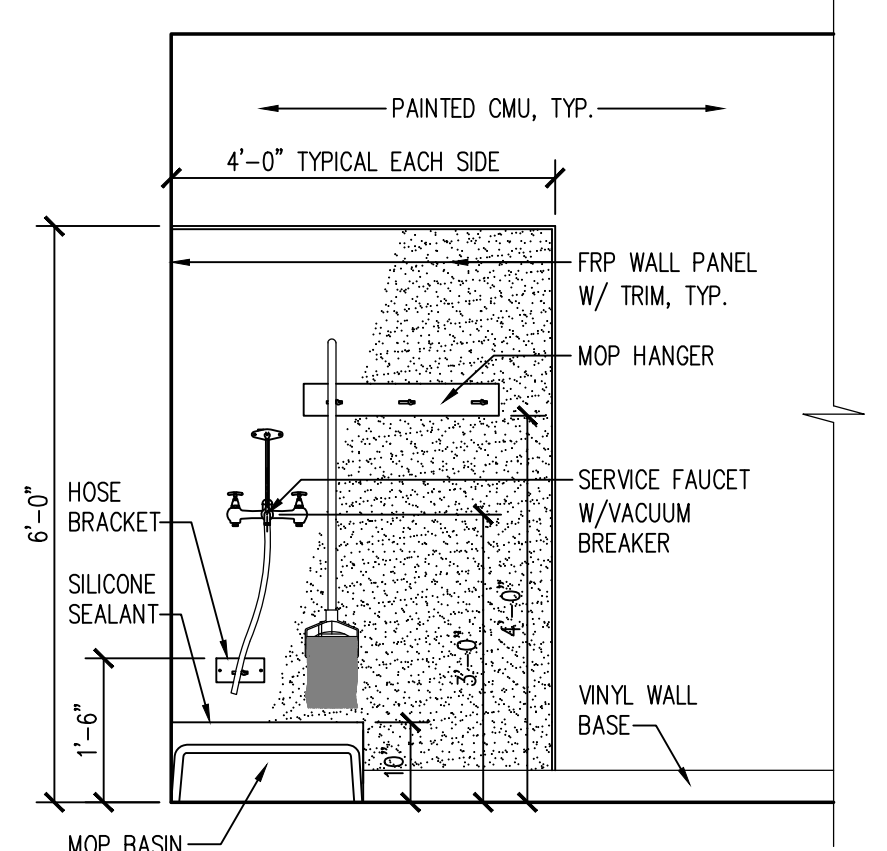
ELEV. '03'

SCALE: 1/2" = 1'-0"



ELEV. '04'

SCALE: 1/2" = 1'-0"



ELEV. '05'

SCALE: 1/2" = 1'-0"

ACCESSORY LIST (ENLARGED PLAN): # BY GENERAL CONTRACTOR (UNLESS OTHERWISE NOTED)

1. ELONGATED FLUSH VALVE FLOOR MOUNTED YOUTH TOILET. A.S. 2282001.02 (BABY DEVORO) BY PLUMBING CONTRACTOR.
2. WALL HUNG LAVATORY W/ACCESSIBLE LEVER HANDLE FAUCET & INSULATED PIPES. BY PLUMBING CONTRACTOR.
3. STAINLESS STEEL HORIZONTAL GRAB BAR 42"x1 1/2" DIA. W/SATIN FINISH. BROBRICK 'B-6806X42' OR EQUAL.
4. STAINLESS STEEL HORIZONTAL GRAB BAR 36"x1 1/2" DIA. W/SATIN FINISH. BROBRICK 'B-6806X36' OR EQUAL.
5. STAINLESS STEEL VERTICAL GRAB BAR. 18"x1 1/2" DIA. W/SATIN FINISH. BROBRICK 'B-6806X18' OR EQUAL.
6. 24"x60" TEMPERED MIRROR W/STAINLESS STEEL FRAME. BROBRICK 'B-165 2460' OR EQUAL.
7. SURFACE MOUNTED SOAP DISPENSER. SUPPLIED AND INSTALLED OWNER
8. TOILET TISSUE DISPENSER. SUPPLIED AND INSTALLED BY OWNER
9. PAPER TOWEL DISPENSER. SUPPLIED AND INSTALLED BY OWNER
10. WASTE RECEPTACLE. SUPPLIED AND INSTALLED BY OWNER
11. MOP SERVICE SINK. BY PLUMBING CONTRACTOR.
12. BABY CHANGING STATION. ASI MODEL #9012 OR EQUAL. SEE 4/KA.O FOR DETAILS
13. WALL HUNG LAVATORY W/ACCESSIBLE LEVER HANDLE. PROVIDE LAV. SHIELD TRUEBRO, INC. MODEL#2018-AS-L1 OR EQUAL BY PLUMBING CONTRACTOR.
14. ELONGATED FLUSH VALVE HUNG TOILET. BY PLUMBING CONTRACTOR.
15. SURFACE MOUNTED NAPKIN/TAMPON VENDOR. SUPPLIED AND INSTALLED BY OWNER
16. SURFACE MOUNTED SANITARY NAPKIN DISPOSAL. SUPPLIED AND INSTALLED BY OWNER

MATERIALS LIST (ELEVATIONS): # BY GENERAL CONTRACTOR (UNLESS OTHERWISE NOTED)

- A. EPOXY FLOOR AND COVE BASE (SEE SPECS)
- B. FULL HEIGHT CERAMIC WALL TILE W/ACCENT STRIPES (SEE SPECS)
- C. LAY-IN CEILING TILE (SEE SPECS)
- D. NEW SOLID CORE WOOD DOOR IN HOLLOW METAL FRAME (SEE SPECS & DOOR SCHEDULE)

SHEET NOTES:

1. G.C. TO VERIFY ALL DIMENSIONS W/MANUFACTURER
2. ALL PLUMBING FIXTURES SUPPLIED & INSTALLED BY PLUMBING CONTRACTOR.
3. ALL PLUMBING FIXTURES TO MEET CABO/ANSI BARRIER FREE CODE.
4. ALL TOILET ROOMS AND JANITORS CLOSET TO HAVE FLOOR DRAIN.
5. ALL TOILET ROOM WALLS TO HAVE CERAMIC TILE W/ACCENT STRIPE. COLOR SELECTIONS BY OWNER. (SEE SPECS)
6. ALL PLANS, DETAILS, SECTIONS, SCHEDULES & ELEVATIONS SHOWN ON THIS DRAWING ARE TO BE COMPLETED BY THE GENERAL CONTRACTOR UNLESS NOTED OTHERWISE. IF NOTED IT IS INDICATED BY OTHER TRADES, WORK IS TO BE COMPLETED BY THAT DESIGNATED TRADE.
7. PROVIDE 3/4" FIRE TREATED PLYWOOD BLOCKING IN METAL STUD WALLS AT ALL ACCESSORY ATTACHMENT LOCATIONS. COORDINATE SIZE AND LOCATION WITH ACCESSORIES MANUFACTURERS CUT SHEETS/ SHOP DRAWINGS. INCLUDES ALL OWNER PROVIDED/ INSTALLED ACCESSORIES.

REVISIONS	
a.	
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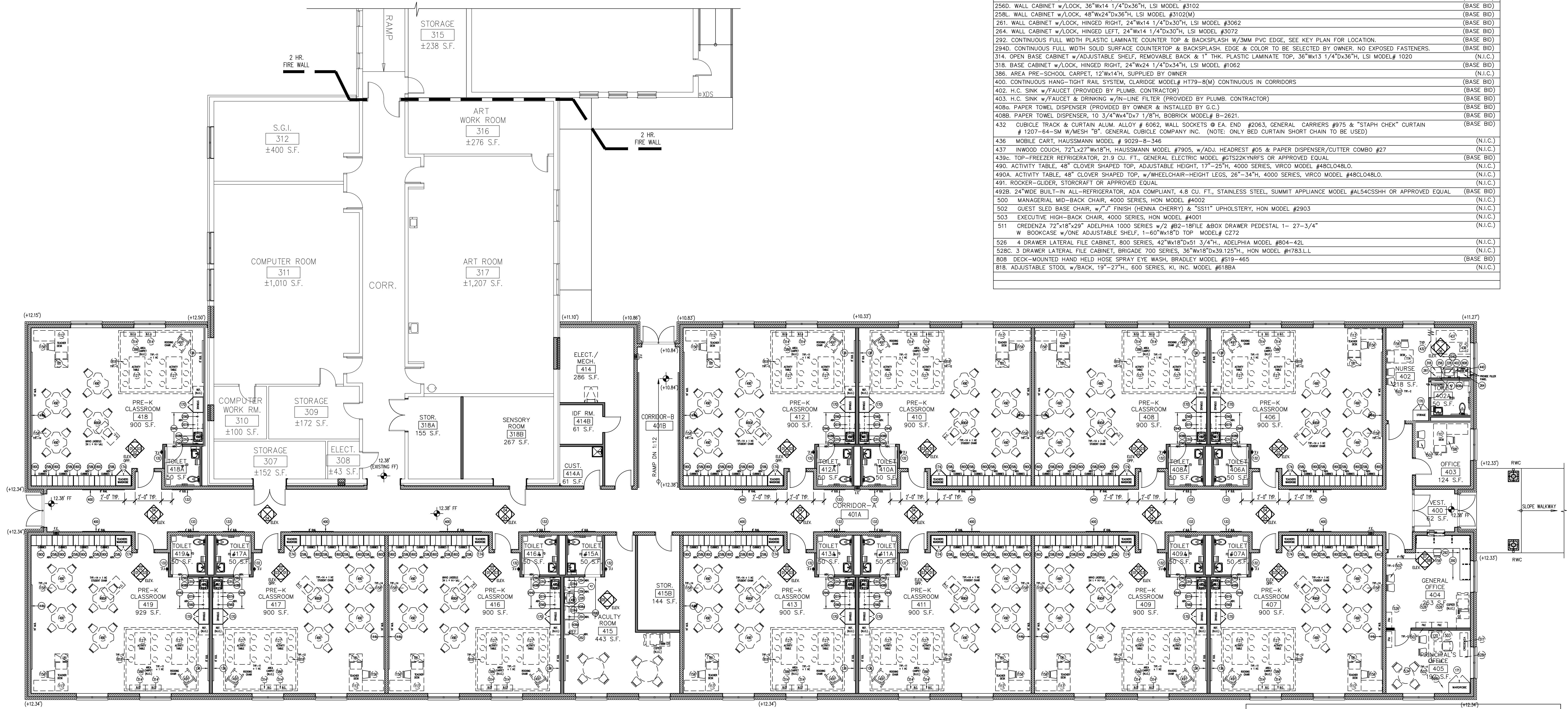
Project No. 23-42  
Date: 11-11-24  
Scale: AS NOTED

ENLARGED TOILETS



BUILT-IN CASEWORK IS INCLUDED IN BASE BID. LOOSE FURNITURE IS NOT IN CONTRACT. (N.I.C.)

GARRISON EQUIPMENT LIST	
ITEM #	DESCRIPTION & MODEL NO.
112	TEACHER'S DESK w/RIGHT SIDE PEDESTAL & CRT RUNOFF UNIT w/LOCK, 66"Wx30"Dx29"H, SERIES 1000, ADELPHIA MODELS #SP66 w/48"Wx24"Dx26"H, CR48-6 RUNOFF UNIT (N.I.C.)
113	TEACHER'S DESK w/LEFT SIDE PEDESTAL & CRT RUNOFF UNIT w/LOCK, 66"Wx30"Dx29"H, SERIES 1000, ADELPHIA MODELS #SP66 w/48"Wx24"Dx26"H, CR48-6 RUNOFF UNIT (N.I.C.)
114	TEACHER'S DESK w/RIGHT SIDE PEDESTAL w/LOCK, 60"Wx30"Dx29"H, SERIES 1000, ADELPHIA MODEL #SP60 (N.I.C.)
120	DOUBLE PEDESTAL DESK w/LOCK, 36"Wx72"x29"H, ADELPHIA 1000 SERIES MODEL #DP72E (N.I.C.)
127	ACTIVITY TABLE w/WHEELCHAIR-HEIGHT LEGS, 72"Wx36"Dx22"-30"H, 4000 SERIES, VIRCO MODEL #483672 (N.I.C.)
132	FIRE EXTINGUISHER, 16"Hx4"DIA, 5 LB 2A-10:B.C. WITH METAL STRAPPING MOUNTS SEE SPEC. 10522. (BASE BID)
133	ALUMINUM FRAMED, FABRIC/ROCK BULLETIN BOARD, 4'-0"x4'-0", 800 SERIES, CLARIDGE MODEL #844F (BASE BID)
136	ALUMINUM FRAMED, FABRIC/ROCK BULLETIN BOARD, 4'-0"x8'-0", 800 SERIES, CLARIDGE, MODEL #858F (BASE BID)
144a	WHITE BOARD w/SERIES 1 MAP RAIL, #51H FLAG HOLDER, CHALKTRAY & HOOKS, 16'-0"x4'-0", CLARIDGE MODEL# LCS24 & MODEL# 51M HOOKS (BASE BID)
156	TEACHER'S CHAIR, 17-3/4"-22-3/4", VIRCO MODEL #4301 (N.I.C.)
158	POSTURE CHAIR, STYLE 1000, ADJUSTABLE 12 1/2"H-16 1/2"H., CDF SCHOOL FURNITURE MODEL #1000 (N.I.C.)
170	TALL STORAGE, 36"Wx24 1/4"Dx84"H, LSI MODEL# 5062 (BASE BID)
171	TALL STORAGE (TO BE SECURED TO WALL), 48"Wx24 1/4"Dx84"H, LSI MODEL# 5063 (BASE BID)
174	TEACHER WARDROBE w/2 FILES, 36"Wx24 1/4"Dx84"H, LSI MODEL# 5262 (BASE BID)
180C	CUBBY STORAGE, 48"Wx24"Dx48"H, LSI MODEL #5607(M), (MODIFIED TO 24" DEEP) (4 STUDENTS) (BASE BID)
181	FILE CABINET, 2 DRAWER 29"Hx18"Wx28"D w/LOCK, ADELPHIA #412L (N.I.C.)
207A	BASE CABINET w/LOCK, 36"Wx24 1/4"Dx26"H, LSI MODEL# 1002 (BASE BID)
224A	BASE CABINET w/LOCK, 30"Wx24"Dx34"H, LSI MODEL #1102 (BASE BID)
228	WHEELCHAIR ACCESSIBLE VANITY CABINET, 36"Wx24 1/4"Dx34"H, LSI MODEL #1136 (BASE BID)
231G	WHEELCHAIR ACCESSIBLE SINK BASE CABINET - SIDE APPROACH, 36"Wx24 1/4"Dx26"H, LSI MODEL #1132(M)-MODIFIED TO 26"H. (BASE BID)
252	WALL CABINET w/LOCK, 36"Wx14 1/4"Dx18"H, LSI MODEL #3002 (BASE BID)
254	WALL CABINET w/LOCK, 30"Wx14 1/4"Dx30"H, LSI MODEL #3052 (BASE BID)
256	WALL CABINET w/LOCK, 36"Wx14 1/4"Dx30"H, LSI MODEL #3052 (BASE BID)
256D	WALL CABINET w/LOCK, 36"Wx14 1/4"Dx36"H, LSI MODEL #3102 (BASE BID)
258L	WALL CABINET w/LOCK, 48"Wx24"Dx36"H, LSI MODEL #3102(M) (BASE BID)
281	WALL CABINET w/LOCK, HINGED RIGHT, 24"Wx14 1/4"Dx30"H, LSI MODEL #3062 (BASE BID)
284	WALL CABINET w/LOCK, HINGED LEFT, 24"Wx14 1/4"Dx30"H, LSI MODEL #3072 (BASE BID)
292	CONTINUOUS FULL WIDTH PLASTIC LAMINATE COUNTER TOP & BACKSPLASH w/3MM PVC EDGE, SEE KEY PLAN FOR LOCATION. (BASE BID)
294D	CONTINUOUS FULL WIDTH SOLID SURFACE COUNTERTOP & BACKSPLASH, EDGE & COLOR TO BE SELECTED BY OWNER, NO EXPOSED FASTENERS. (BASE BID)
314	OPEN BASE CABINET w/ADJUSTABLE SHELF, REMOVABLE BACK & 1" THK. PLASTIC LAMINATE TOP, 36"Wx13 1/4"Dx36"H, LSI MODEL# 1020 (N.I.C.)
318	BASE CABINET w/LOCK, HINGED RIGHT, 24"Wx14 1/4"Dx34"H, LSI MODEL #1062 (BASE BID)
386	AREA PRE-SCHOOL CARPET, 12"Wx14"H, SUPPLIED BY OWNER (N.I.C.)
400	CONTINUOUS HANG-TIGHT RAIL SYSTEM, CLARIDGE MODEL# HT79-B(M) CONTINUOUS IN CORRIDORS (BASE BID)
402	H.C. SINK w/FAUCET (PROVIDED BY PLUMB. CONTRACTOR) (BASE BID)
403	H.C. SINK w/FAUCET & DRINKING w/IN-LINE FILTER (PROVIDED BY PLUMB. CONTRACTOR) (BASE BID)
408a	PAPER TOWEL DISPENSER (PROVIDED BY OWNER & INSTALLED BY G.C.) (BASE BID)
408B	PAPER TOWEL DISPENSER, 10 3/4"Wx4"Dx7 1/8"H, BOBRICK MODEL# B-2621. (BASE BID)
432	CUBICLE TRACK & CURTAIN ALUM. ALLOY # 6062, WALL SOCKETS @ EA END #2063, GENERAL CARRIERS #975 & "STAPH CHEK" CURTAIN # 1207-64-SM w/MESH "B", GENERAL CUBICLE COMPANY INC. (NOTE: ONLY BED CURTAIN SHORT CHAIN TO BE USED) (BASE BID)
436	MOBILE CART, HAUSSMANN MODEL # 9029-B-346 (N.I.C.)
437	INWOOD COUCH, 72"Lx27"Wx18"H, HAUSSMANN MODEL #7905, w/ADJ. HEADREST #05 & PAPER DISPENSER/CUTTER COMBO #27 (N.I.C.)
439b	TOP-FREEZER REFRIGERATOR, 21.9 CU. FT., GENERAL ELECTRIC MODEL #GT522KXNRF5 OR APPROVED EQUAL (BASE BID)
490	ACTIVITY TABLE, 48" CLOVER SHAPED TOP, ADJUSTABLE HEIGHT, 17"-25"H, 4000 SERIES, VIRCO MODEL #48CLO48L0. (N.I.C.)
490A	ACTIVITY TABLE, 48" CLOVER SHAPED TOP, w/WHEELCHAIR-HEIGHT LEGS, 26"-34"H, 4000 SERIES, VIRCO MODEL #48CLO48L0. (N.I.C.)
491	ROCKER-GLIDER, STORCRAFT OR APPROVED EQUAL (N.I.C.)
492B	24"WIDE BUILT-IN ALL-REFRIGERATOR, ADA COMPLIANT, 4.8 CU. FT., STAINLESS STEEL, SUMMIT APPLIANCE MODEL #AL54CS5HH OR APPROVED EQUAL (BASE BID)
500	MANAGERIAL MID-BACK CHAIR, 4000 SERIES, HON MODEL #4002 (N.I.C.)
502	GUEST SLED BASE CHAIR, w/"J" FINISH (HENNA CHERRY) & "SS11" UPHOLSTERY, HON MODEL #2903 (N.I.C.)
503	EXECUTIVE HIGH-BACK CHAIR, 4000 SERIES, HON MODEL #4001 (N.I.C.)
511	CREDENZA 72"x18"x29" ADELPHIA 1000 SERIES w/2 #02-18BLE & BOX DRAWER PEDESTAL 1- 27-3/4" w/ BOOKCASE w/ONE ADJUSTABLE SHELF, 1-60"Wx18"D TOP, MODEL# 2272 (N.I.C.)
526	4 DRAWER LATERAL FILE CABINET, 800 SERIES, 42"Wx18"Dx51 3/4"H, ADELPHIA MODEL #804-42L (N.I.C.)
528c	3 DRAWER LATERAL FILE CABINET, BRIGADE 700 SERIES, 36"Wx18"Dx39.125"H, HON MODEL #H783.LL (N.I.C.)
808	DECK-MOUNTED HAND HELD HOSE SPRAY EYE WASH, BRADLEY MODEL #S19-465 (BASE BID)
818	ADJUSTABLE STOOL w/BACK, 19"-27"H., 600 SERIES, KI, INC. MODEL #618BA (N.I.C.)

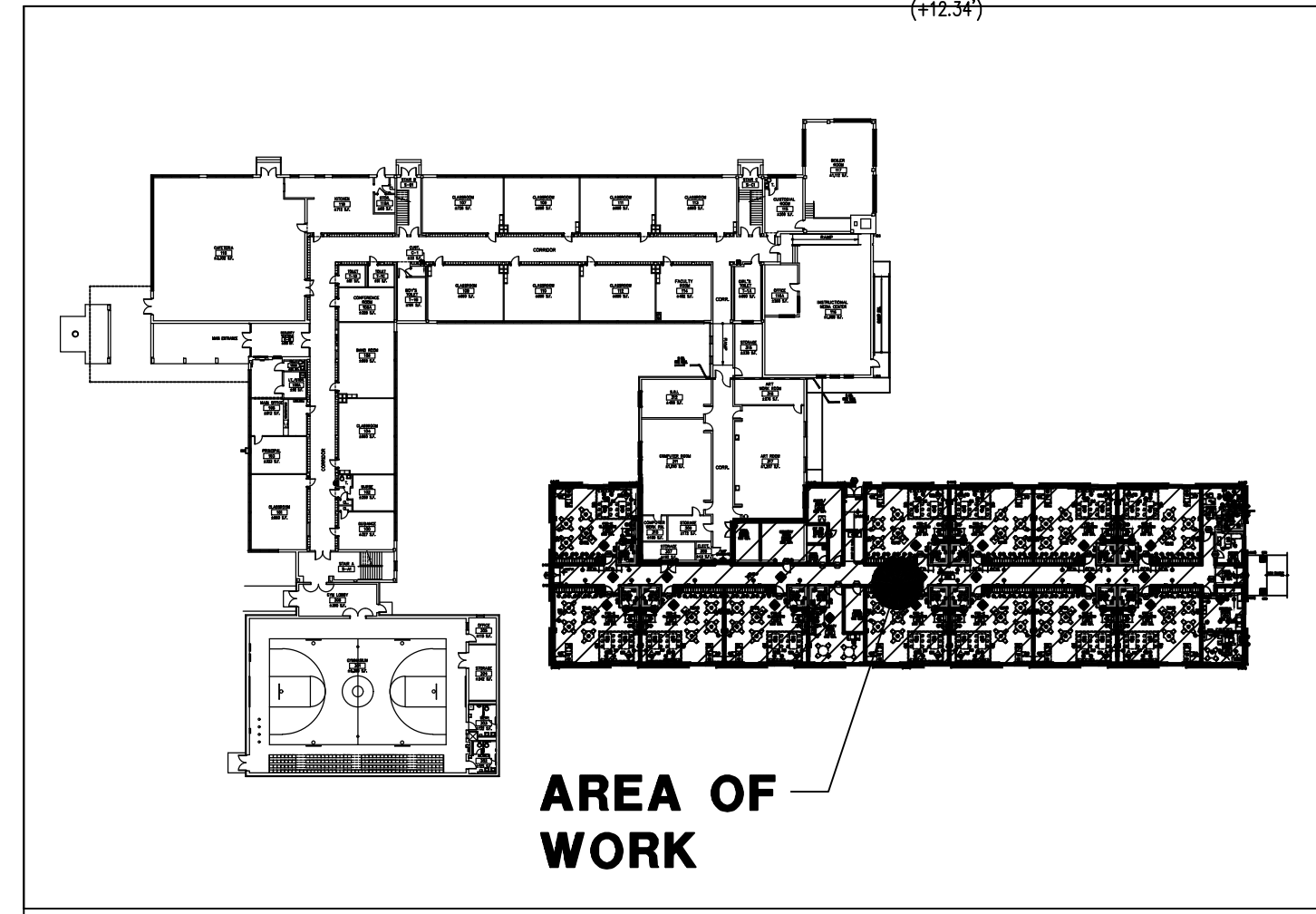


1 OVERALL PROPOSED FURNITURE PLAN  
A-18 SCALE: 1/8" = 1'-0"

ALL FURNITURE SHOWN DOTTED IS IN.I.C. AND IS SHOWN FOR REFERENCE PURPOSES ONLY UNLESS NOTED OTHERWISE. BUILT-IN FURNITURE IS UNDER BASE-BID. LOOSE FURNITURE IS IN.I.C. NOT IN CONTRACT. SEE FURNITURE ON SHEETS A-18 THRU A-22 FOR ITEMS "IN CONTRACT" & "NOT IN CONTRACT".

UNLESS NOTED OTHERWISE IN FURNITURE/EQUIPMENT LIST AS IN.I.C., ALL ITEMS ARE IN BASE BID INCLUDING PLUMBING, HVAC & ELECTRICAL.

REFER TO SHEET A-20 FOR INTERIOR ELEVATIONS



AREA OF WORK  
KEY PLAN

ISSUED FOR BID: 11/11/2024

**GARRISON ARCHITECTS**  
713 CREEK ROAD, BELLMAWR, NEW JERSEY 08011 (609) 396-0200

**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08069  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08069

REVISIONS  
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b.  
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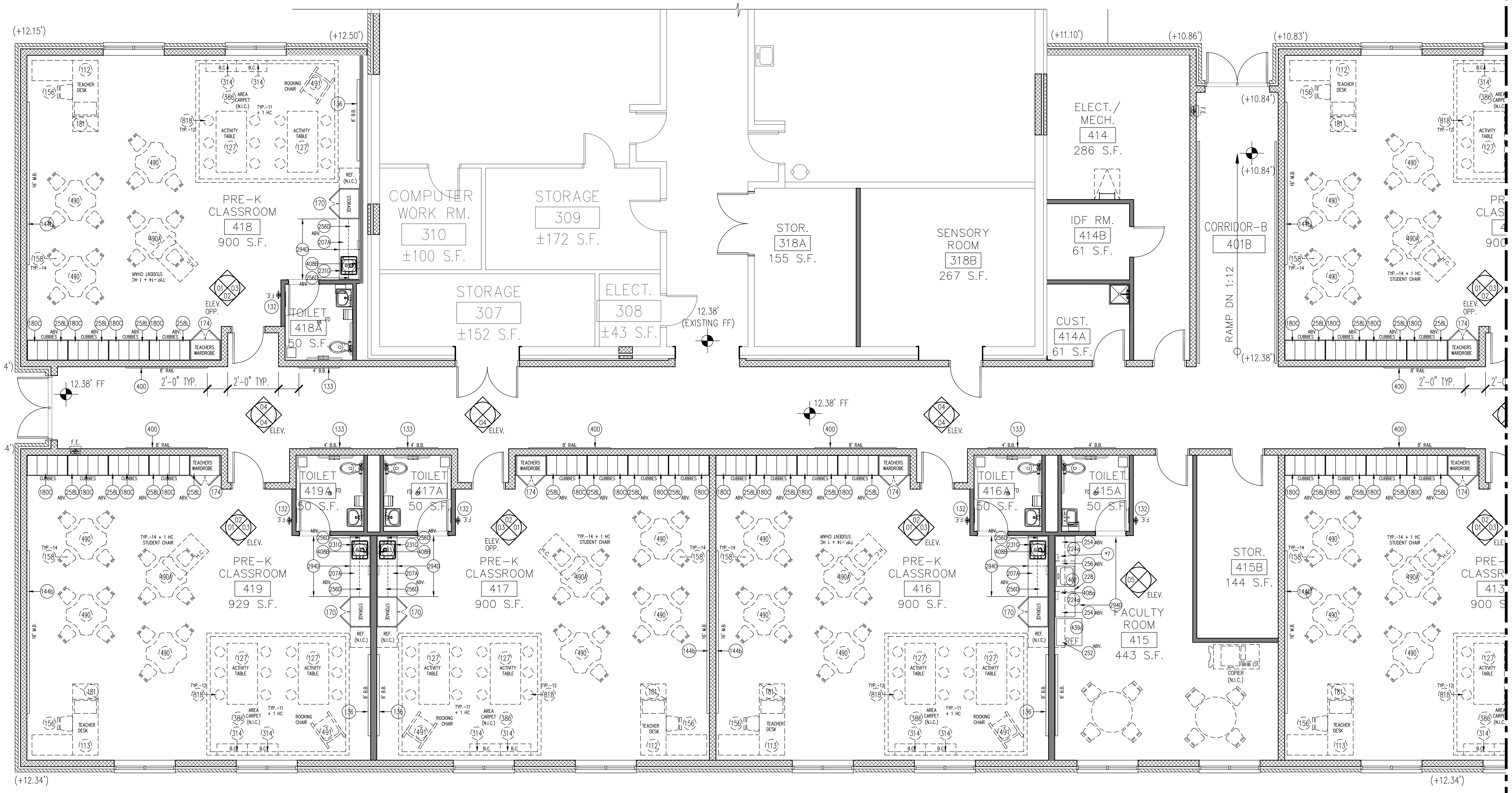
Project No. 23-42  
Date: 11-11-24  
Scale: 1/8"=1'-0"

OVERALL PROPOSED FURNITURE PLAN

**A-18**

GARRISON ARCHITECTS ASSUMES NO LIABILITY FOR THE ACCURACY OF THE INFORMATION AND CONDITIONS SHOWN ON THESE DRAWINGS. GARRISON ARCHITECTS ASSUMES NO LIABILITY FOR THE ACCURACY OF THE INFORMATION AND CONDITIONS SHOWN ON THESE DRAWINGS. GARRISON ARCHITECTS ASSUMES NO LIABILITY FOR THE ACCURACY OF THE INFORMATION AND CONDITIONS SHOWN ON THESE DRAWINGS. GARRISON ARCHITECTS ASSUMES NO LIABILITY FOR THE ACCURACY OF THE INFORMATION AND CONDITIONS SHOWN ON THESE DRAWINGS. GARRISON ARCHITECTS ASSUMES NO LIABILITY FOR THE ACCURACY OF THE INFORMATION AND CONDITIONS SHOWN ON THESE DRAWINGS.



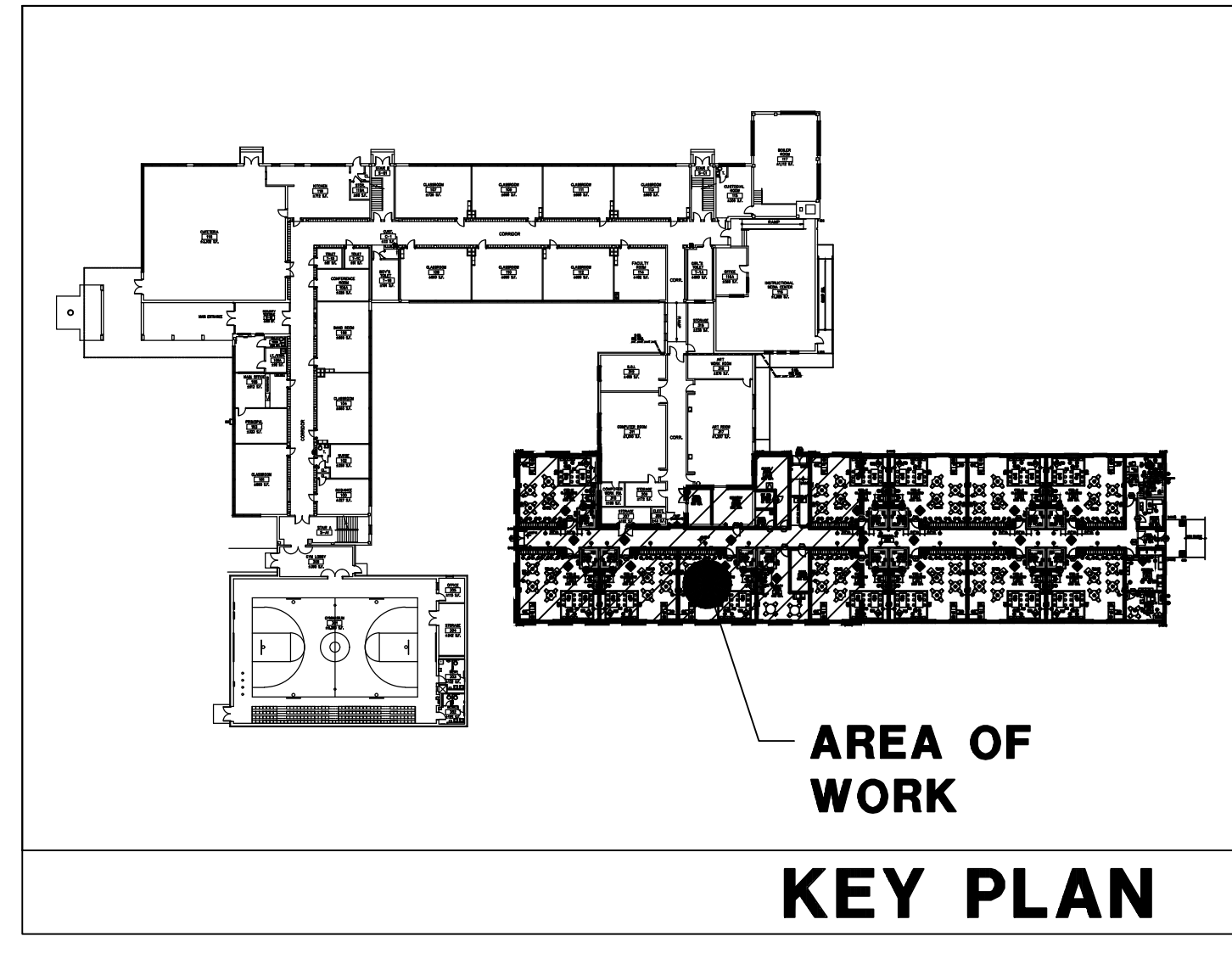


1 ENLARGED PROPOSED FURNITURE PLAN  
A-19 SCALE: 1/4" = 1'-0"

ALL FURNITURE SHOWN DOTTED IS IN.I.C.J AND IS SHOWN FOR REFERENCE PURPOSES ONLY UNLESS NOTED OTHERWISE. BUILT-IN FURNITURE IS UNDER BASE-BID. LOOSE FURNITURE IS IN.I.C.J. NOT IN CONTRACT. SEE FURNITURE ON SHEETS A-18 THRU A-22 FOR ITEMS "IN CONTRACT" & "NOT IN CONTRACT".

UNLESS NOTED OTHERWISE IN FURNITURE/EQUIPMENT LIST AS IN.I.C.J., ALL ITEMS ARE IN BASE BID INCLUDING PLUMBING, HVAC & ELECTRICAL.

- REFER TO SHEET A-20 FOR INTERIOR ELEVATIONS



REVISIONS

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Project No. 23-42  
Date: 11-11-24  
Scale: 1/4"=1'-0"

PARTIAL ENLARGED FURNITURE PLAN

GARRISON ARCHITECTS ASSUMES NO LIABILITY FOR THE ACCURACY OF THE INFORMATION AND CONDITIONS SHOWN ON THESE DRAWINGS. SHIP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.















## GENERAL NOTES

1. THE NOTES OF THESE DRAWINGS ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES. THE INTENT OF THE SPECIFICATIONS IS TO OUTLINE OR INDICATE ITEMS OF WORK WHICH CANNOT READILY BE SHOWN ON THE CONTRACT DRAWINGS AND FURTHER TO INDICATE THE TYPES AND QUALITIES OF MATERIALS AND WORKMANSHIP. SHOULD THE SPECIFICATIONS AND DRAWINGS DISAGREE IN THEMSELVES, OR WITH EACH OTHER, WRITTEN CLARIFICATIONS SHOULD BE REQUESTED OF THE ARCHITECT/ENGINEER BY THE CONTRACTOR. INCONSISTENCIES BETWEEN THE DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK. IN THE ABSENCE OF SAME, PROPOSALS SHALL BE BASED ON THE MOST EXPENSIVE COMBINATION OF QUALITY AND QUANTITY OF WORK INDICATED ON EITHER THE DRAWINGS OR SPECIFICATIONS. SEE SPECIFICATION SECTION 01000 PARAGRAPH 3, a & b.

2. IF DURING THE PROGRESS OF THE WORK THE CONTRACTOR MAY DISCOVER ANY ERROR, INCONSISTENCY OR OMISSION IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL AT ONCE SO REPORT TO THE ARCHITECT/ENGINEER. EXTRAS WILL NOT BE ALLOWED FOR CORRECTION OF PROBLEMS THAT COULD HAVE BEEN AVOIDED BY CAREFUL REVIEW AND THE MINOR ADJUSTMENT OF SIZE AND/OR LOCATION OF VARIOUS ITEMS FOR PROPER FIT. THIS CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF HIS WORK WITH THE OTHER CONTRACTORS.

3. ANY ITEM NOT SPECIFICALLY LISTED OR SHOWN ON THE CONTRACT DOCUMENTS BUT IS INCIDENTAL TO THE COMPLETION OF THE PROJECT OR PACKAGE WILL BE CONSIDERED AS PART OF THE CONTRACT SCOPE OF WORK.

4. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND THE ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.

5. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS, FALSEWORK, FORMWORK, AND STAGING. PROVIDE ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT. IN THE EVENT THAT THE CONTRACTOR DETERMINES THAT SHEETING OR SHORING IS REQUIRED, THE CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER FOR DESIGN AND DOCUMENTATION OF ALL SHEETING, SHORING AND TEMPORARY BRACING REQUIRED FOR THE WORK. IF NOT IN THE ORIGINAL CONTRACT BRACING, REVIEW OF ANY ENGINEERED SHEETING, SHORING AND TEMPORARY BRACING REQUIRED WILL BE CONSIDERED ADDITIONAL SCOPE OF WORK AND WILL BE CONSIDERED ADDITIONAL SERVICES.

6. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ALLOWABLE CONSTRUCTION LOADS.

7. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.

8. ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

9. SHOULD THE CONTRACTOR SEEK APPROVAL OF A PRODUCT OTHER THAN THE BRAND OR BRANDS NAMED IN THESE SPECIFICATIONS, SEE SPECIFICATION SECTION 01000 PARAGRAPH 18 AND SPECIFICATION SECTION 01300 PARAGRAPH 2.1.

10. MANUFACTURERS' STANDARD DATA AND CATALOG CUT SHEETS WILL NOT BE CONSIDERED SUFFICIENT IN THEMSELVES. SEE SPECIFICATION SECTION 01300 SUBMITTALS FOR PROPER SHOP DRAWING REQUIREMENTS.

11. SUBMIT SHOP DRAWINGS IN THE FORM ELECTRONIC PDF FILES IN NO CASE SHALL REPRODUCTION OF THE CONTRACT DOCUMENTS BE USED AS A SHOP DRAWING. AS A MINIMUM, SUBMIT THE FOLLOWING ITEMS FOR REVIEW:

- CONCRETE MIX DESIGNS
- REINFORCING STEEL SHOP DRAWINGS
- STRUCTURAL STEEL SHOP DRAWINGS
- STEEL JOIST SHOP DRAWINGS
- METAL DECK SHOP DRAWINGS
- MASONRY REINFORCING ACCESSORIES
- COLD-FORMED METAL STUD TRUSS SHOP DRAWINGS (SIGNED AND SEALED)

12. IF DRAWINGS INDICATE REQUIREMENT(S) FOR SIGNED AND SEALED SHOP DRAWINGS AND SIGNED AND SEALED CALCULATIONS, THEY SHALL BE PROVIDED WITH THE 1ST SUBMISSION TO ENGINEER OF RECORD, OR THEY RISK BEING REJECTED.

13. SUBMIT SHOP DRAWINGS 12 BUSINESS DAYS (MINIMUM) PRIOR TO DATE THAT RETURNED SHOP DRAWINGS ARE REQUIRED. SHOP DRAWINGS SHALL HAVE THE CONTRACTOR'S STAMP OF APPROVAL PRIOR TO REVIEW BY ENGINEER OF RECORD. THE CONTRACTOR REVIEW/APPROVAL STAMP PROVIDES CERTIFICATION TO THE ENGINEER OF RECORD THAT THE CONTRACTOR HAS VERIFIED ALL FIELD MEASUREMENTS, CONSTRUCTION CRITERIA, MATERIALS AND SIMILAR DATA AND HAS REVIEWED EACH DRAWING FOR COMPLETENESS, COORDINATION AND COMPLIANCE WITH THE CONTRACT DOCUMENTS.

14. COSTS OF INVESTIGATION AND/OR REDESIGN DUE TO CONTRACTOR ERRORS WILL BE AT THE CONTRACTOR'S EXPENSE.

15. THE ENGINEER HAS NO ONGOING PRESENCE ON THE SITE, NO CONTROL OF ACTIVITIES ON THE SITE, NO SUPERVISORY ROLE AND NO FIELD RESPONSIBILITY FOR SITE SAFETY. THE CONTRACTOR IS RESPONSIBLE FOR SUPERVISION OF THE WORK INCLUDING PERSONNEL PROTECTION IN ACCORDANCE WITH OSHA AND OTHER APPLICABLE REGULATIONS AND PUBLIC PROTECTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE JURISDICTION IN WHICH THE PROJECT IS BEING CONSTRUCTED.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL CONDITIONS AND MATERIALS WITHIN THE PROPOSED CONSTRUCTION AREA. THE CONTRACTOR SHALL HAVE THE SOLE RESPONSIBILITY FOR ANY DAMAGE OR INJURIES BY OR DURING THE EXECUTION OF THE WORK.

17. CONTRACTOR SHALL VERIFY DIMENSIONS AND FIELD CONDITIONS PRIOR TO STARTING WORK. THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR PROMPTLY OF ANY DEVIATION FROM THE PLAN, UNEXPECTED CONDITIONS, OR INCIDENTS INVOLVING INJURY, COLLAPSE, PROPERTY DAMAGE OR VIOLATIONS ISSUED BY GOVERNMENT ENTITIES.

18. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS IN THE FIELD AND INVESTIGATE ALL EXISTING CONDITIONS IN THE FIELD PRIOR TO FABRICATING/POURING ANY CONSTRUCTION MATERIALS.

**\*\*\* THE ARCHITECT/ENGINEER OF RECORD IS NOT AND SHALL NOT BE HELD LIABLE FOR SITE SAFETY ISSUES \*\*\***

## FOUNDATION NOTES

1. A GEOTECHNICAL EXPLORATION REPORT DATED OCTOBER 30, 2024 CONTAINING SUBSURFACE DATA AND FOUNDATION/EARTHWORK RECOMMENDATIONS HAS BEEN PREPARED BY DIONEO ENGINEERING, JOB NUMBER 157-101. ALL RECOMMENDATIONS CONTAINED IN THE REPORT ARE TO BE CONSIDERED PART OF THE CONTRACT DOCUMENTS.

2. BEARING CAPACITY: 2000 psf

3. FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE NATURAL SOILS AND/OR NEW COMPACTED STRUCTURAL FILL.

4. ALL ORGANIC MATERIALS, EXCESSIVELY SOFT OR LOOSE SOILS, TREES, ASPHALT, CONCRETE, DEBRIS AND OTHER DELETERIOUS MATERIALS SHOULD BE REMOVED WITHIN AND AT LEAST 5 FEET BEYOND THE BUILDING LIMIT. SEE SPECIFICATION SECTION 02110 PARAGRAPH 2.3.

5. PROOF ROLL ALL SUBGRADES, UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER. UNSUITABLE AREAS SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. NO FILL FOR BUILDING SUPPORT SHALL BE PLACED UNTIL SUBGRADES AND FILL MATERIAL HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.

6. AREAS REQUIRING UNDERCUT AND FILL MATERIAL DUE TO THE PRESENCE OF UNSUITABLE MATERIAL SHALL BE BACKFILLED TO THE DESIGN FOOTING SUBGRADE WITH NEW COMPACTED STRUCTURAL FILL.

7. COMPACTED STRUCTURAL FILL FOR BUILDING SUPPORT UTILIZING MATERIAL APPROVED FOR USE BY THE GEOTECHNICAL ENGINEER. ON-SITE GRANULAR SOILS INCLUDING GW, GP, GM, SW, SP AND SM CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). FURTHERMORE, THE MATERIAL TO BE UTILIZED AS STRUCTURAL FILL SHOULD HAVE A PLASTICITY INDEX (PI) HIGHER THAN 2 SUBJECT TO FINAL APPROVAL BY GEOTECHNICAL ENGINEER.

8. MATERIAL TRANSPORTED FROM OFF-SITE SHALL MEET THE REQUIREMENTS OF GEOTECHNICAL REPORT.

9. SLABS ON GRADE MAY BE SUPPORTED ON FIRM SUITABLE NATURAL SOILS, OR ON COMPACTED STRUCTURAL FILL FOLLOWING STRIPING OF TOPSOIL, VEGETATION, ASPHALT AND ANY SOFT OR DISTURBED SOILS WITHIN THE BUILDING AREA. A FOUR INCH WASHED GRADE OR CRUSHED STONE LAYER CORRESPONDING TO AASHTO TYPE NO. 57 AGGREGATE SHOULD BE USED BENEATH ALL FLOOR SLABS ON GRADE.

10. COMPACTED STRUCTURAL FILL BENEATH ALL FOUNDATIONS, SLABS ON GRADE AND ADJACENT TO FOUNDATION WALLS SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS AND BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR TEST. SEE SPECIFICATION SECTION 02111, PARAGRAPH 3.4.

11. THE EXCAVATION FOR PLACEMENT OF COMPACTED STRUCTURAL FILL SHOULD EXTEND BEYOND THE EDGE OF FOOTINGS A MINIMUM DISTANCE EQUAL TO THE DEPTH OF FILL.

12. EXTEND BOTTOM OF EXTERIOR FOOTINGS AT LEAST 3 FEET BELOW THE EXTERIOR FINISH GRADE FOR PROTECTION AGAINST FROST.

13. ALL SUBGRADES AND UNDERCUTS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. AT THE BACK OF ALL APPROVED FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHOULD BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND. FOUNDATION EXCAVATIONS SHOULD BE PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. SLOPE FOOTING EXCAVATIONS AS REQUIRED FOR STABILITY AND SAFETY OR PROVIDE SHEETING OR SHORING IN ACCORDANCE WITH OSHA REQUIREMENTS. IN THE EVENT THAT THE CONTRACTOR DETERMINES THAT SHEETING OR SHORING IS REQUIRED FOR EXCAVATION, THE CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER FOR DESIGN AND DOCUMENTATION OF ALL SHEETING AND SHORING REQUIRED FOR THE WORK. SEE SPECIFICATION SECTION 02215.

## JOIST NOTES (05210)

1. STEEL JOISTS SHALL BE DESIGNED, FABRICATED AND ERECTED TO THE REQUIREMENTS OF THE SPECIFICATIONS OF THE STEEL JOIST INSTITUTE FOR SERIES K JOISTS, SERIES LH JOISTS AND SERIES DLH JOISTS, SERIES G JOIST GRIDERS AND SPECIFICATION SECTION 05210.

2. MANUFACTURER SHALL BE A MEMBER OF THE STEEL JOIST INSTITUTE. ALL BRIDGING TO BE IN ACCORDANCE WITH SJI STANDARDS AND OSHA REQUIREMENTS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

3. JOIST BRIDGING SHALL CONFORM TO SJI SPECIFICATIONS. PROVIDE CROSS BRIDGING AT ALL BEAMS AND END BAYS. FIELD WELD BRIDGING AT ENDS AND INTERSECTION. ALL JOIST FORTY (40) FEET AND LONGER REQUIRE A ROW OF BOLTED CROSS BRIDGING TO BE IN PLACE BEFORE SLACKENING OF HOISTING LINES.

4. ALL BRIDGING AND BRIDGING ANCHORS SHALL BE COMPLETELY INSTALLED BEFORE CONSTRUCTION LOADS ARE PLACED ON THE JOIST. ALL ROOF JOIST BRIDGING SHALL BE FIELD WELDED. BRIDGING SHALL SUPPORT THE TOP CHORDS AGAINST LATERAL MOVEMENT DURING THE CONSTRUCTION PERIOD AND SHALL HOLD THE STEEL JOIST IN APPROXIMATE POSITIONS AS SHOWN ON THE PLANS. BRIDGING SHALL BE MINIMUM L1x1x1/8.

5. JOISTS ARE TO BE CONNECTED TO STEEL BEAMS AND BEARING PLATES BY FIELD WELDING. TO EXTEND, CONNECT AND WELD BOTTOM CHORDS OF JOISTS AT ALL COLUMNS AND WHERE NOTED ON DRAWINGS. DESIGN BOTTOM CHORD OF EACH JOIST ORDER FOR A COMPRESSIVE LOAD OF KIPS.

6. ALL JOISTS SHALL HAVE A SHOP COAT OF RUST INHIBITIVE NON-ALUMINUM PAINT.

7. ALL K SERIES AND KCS SERIES SHALL HAVE APPROXIMATE CAMBERS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SJI GUIDELINES. APPROXIMATE CAMBER SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.

8. ROOF JOISTS TO BE DESIGNED FOR A NET UPLIFT OF 10 PSF.

## EXISTING CONDITIONS

EXISTING CONDITIONS INDICATED ARE OBTAINED FROM AVAILABLE SOURCES (EXISTING DRAWINGS, FIELD SURVEYS, ETC.) AND ARE NOT GUARANTEED TO BE TRUE AND EXACT. CONTRACTOR(S) SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

## CONCRETE NOTES (03300)

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318 (LATEST EDITION).

2. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE:

- FOUNDATIONS: 4000 PSI
- SLABS ON GRADE: 4000 PSI
- SLABS ON DECK: 4000 PSI, NW & LW AS INDICATED.

ALL CONCRETE SUBJECT TO FREEZE/THAW CYCLE SHALL BE AIR-ENTRAINED.

3. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.

4. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60 DEFORMED BARS AND SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315, LATEST EDITION. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185 AND BE PROVIDED IN FLAT SHEETS.

5. COMPLETE SHOP DRAWINGS AND SCHEDULES OF ALL REINFORCING STEEL SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR REVIEW. REFER TO SPECIFICATION SECTION 01300.

6. REINFORCEMENT SHALL BE CONTINUOUS AROUND CORNERS AND AT INTERSECTIONS. PROVIDE CLASS "A" TENSION LAP SPICES FOR ALL HORIZONTAL WALL REINFORCING UNLESS OTHERWISE SHOWN ON PLAN. PROVIDE CLASS "B" TENSION LAP SPICES FOR ALL HORIZONTAL GRADE BEAM REINFORCING.

7. CLEARANCES FOR REINFORCEMENT:

- CONCRETE PLACED DIRECTLY ON EARTH, FOOTINGS: 3"
- SLABS, FROM TOP UNLESS OTHERWISE NOTED: 1"
- FORMED SURFACES EXPOSED TO WEATHER OR EARTH: #5 BAR OR SMALLER; 1 1/2" #6 BAR OR LARGER; 2"

8. FOR ALL OPENINGS IN CONCRETE WALLS AND SLABS, PROVIDE SUPPLEMENTAL REINFORCING AROUND OPENING AS SHOWN ON THE CONTRACT DOCUMENTS.

9. CONTROL JOINTS IN SLABS ON GRADE: SEE SPECIFICATION SECTION 03300.

- CONTROL JOINTS SHALL BE LOCATED AS SHOWN ON SLAB ON GRADE PLAN.
- CONTROL JOINTS SHALL BE SAW CUT (1/3 THE SLAB DEPTH) AND FILLED WITH JOINT SEALER. CUT JOINTS AS SOON AS POSSIBLE WITHOUT FRAYING THE CONCRETE SURFACE.
- CONTROL JOINTS SHALL INCLUDE A 1"x2" SHEAR KEY AT MID-HEIGHT OF SLAB.
- CONTROL JOINTS IN WALLS SHALL NOT EXCEED 40'-0" O.C. NOR 15'-0" FROM ANY CORNER.

CONTROL JOINTS SHALL BE LOCATED BY CONTRACTOR IN ACCORDANCE WITH ACI CRITERIA. MAXIMUM SPACINGS AS PER TYPICAL SLAB ON GRADE DETAILS AND TYPICAL CONTROL JOINT LOCATION DETAILS (U.N.O.). MINIMUM CONTROL JOINT DEPTHS ARE INDICATED ON TYPICAL CONTROL JOINT DETAILS. CONTROL JOINTS WHICH ARE NOT PROMPTLY OR PROPERLY CUT AND ARE NOT FUNCTIONING SHALL BE RECUT BY THE CONCRETE CONTRACTOR. RECTS OF JOINTS WHICH WERE NOT PROMPTLY OR PROPERLY CUT SHALL BE 3" DEEP MINIMUM.

10. THE FINISH TOLERANCE OF ALL SLABS SHALL BE IN ACCORDANCE WITH ACI 302 AND THAT SPECIFIED ON THE CONTRACT DOCUMENTS. SEE SPECIFICATION SECTION 03300 FOR FINISHING.

11. COLUMN ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 GR. 36 UNLESS NOTED OTHERWISE.

12. LAP ALL BARS A MINIMUM OF 40 DIAMETERS. LAP ALL WWF A MINIMUM OF 6 INCHES.

13. UNLESS OTHERWISE APPROVED ALL REINFORCEMENT SHALL BE BLOCKED INTO POSITION WITH PRECAST CONCRETE BLOCKS HAVING A MINIMUM COMPRESSIVE STRENGTH EQUAL TO THAT OF THE SLAB OR FOUNDATION SYSTEM.

14. SEE THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF DEPRESSIONED SLAB AREAS, DRAINS, AND DIMENSIONS.

15. PROVIDE GALVANIZED STEEL SLEEVES WHERE PIPES PASS THROUGH EXTERIOR CONCRETE WALLS, BEAMS OR SLABS. PROVIDE PVC SLEEVES WHERE PIPES PASS THROUGH INTERIOR CONCRETE WALLS, BEAM OR SLABS (UNLESS NOTED OTHERWISE).

16. DO NOT PLACE UNDERGROUND UTILITIES OR PIPES BELOW FOOTINGS. IF ANY SUCH CONDITIONS OCCUR, NOTIFY THE ENGINEER IMMEDIATELY AND DROP THE BOTTOM OF FOOTING ELEVATION IN ACCORDANCE WITH THE TYPICAL STEP FOOTING AT PIPE CROSSING DETAIL IN ORDER TO CLEAR THE PIPE.

17. PROVIDE REBAR DOWELS FROM THE FOUNDATIONS TO MATCH VERTICAL REINFORCING SIZE AND SPACING. DOWELS SHALL HAVE STANDARD 90 DEGREE HOOKS AND LAP WITH THE FIRST LIFT OF REINFORCING. STANDARD LAP LENGTH OF GRADE 60 MASONRY REINFORCING BARS SHALL BE 48 BAR DIAMETERS.

18. BOTTOM OF NEW FOOTINGS ADJACENT TO EXISTING FOUNDATIONS SHALL BE AT THE SAME ELEVATION AS THE EXISTING FOUNDATION UNLESS A 2:1 MAXIMUM SLOPE (HORIZONTAL TO VERTICAL) IS MAINTAINED BETWEEN BOTTOM OF FOOTINGS.

## DELEGATED DESIGN

1. STRUCTURAL DELEGATED DESIGN AND SUBSEQUENT DEFERRED SUBMITTALS ARE FOR ELEMENTS, PARTS, OR PORTIONS OF THE OVERALL STRUCTURAL SYSTEM THAT ARE CRITICAL TO THE PERFORMANCE OF THE OVERALL STRUCTURAL SYSTEM.

2. STRUCTURAL DELEGATED DESIGN ITEMS REQUIRING DEFERRED SUBMITTALS INCLUDE, BUT ARE NOT LIMITED TO:

- STRUCTURAL STEEL CONNECTION, INCLUDING BEAMS, BRACES, MOMENT CONNECTIONS, PLATES, ETC. (SEE STEEL NOTES FOR ADDITIONAL INFORMATION).
- METAL OPEN WEB JOIST & GRIDERS, BRIDGING, CONNECTIONS, AND RELATED COMPONENTS
- COLD-FORMED METAL FRAMING, UNLESS SPECIFICALLY DESIGNED AND DETAILED IN THE STRUCTURAL DRAWINGS (SEE COLD-FORMED STEEL NOTES FOR ADDITIONAL INFORMATION).
- PRE-CAST CONCRETE ELEMENTS AND THEIR CONNECTIONS.
- CASTELLATED OR CELLULAR BEAMS.

3. DESIGN CRITERIA FOR DELEGATED DESIGN HAS BEEN PROVIDED IN THE STRUCTURAL NOTES, PLANS, AND DETAILS.

4. STRUCTURAL DEFERRED SUBMITTALS ARE COMPLETE PACKAGES FOR EACH DELEGATED DESIGN. DEFERRED SUBMITTALS SHALL BE SUBMITTED FOR REVIEW BY ARCHITECT AND ENGINEER OF RECORD AND ARE TO INCLUDE, AT MINIMUM:

- PLAN DRAWINGS SHOWING THE DELEGATED DESIGN AND IT'S ASSOCIATION/LOCATION IN THE OVERALL STRUCTURE
- SECTIONS AND DETAILS DEPICTING ANY AND ALL CONNECTION TO THE MAIN STRUCTURE.
- CALCULATIONS FOR DELEGATED DESIGN ITEMS AND THEIR CONNECTIONS, AS WELL AS ANY AND ALL DESIGN ASSUMPTIONS. ADDITIONAL LOADS IMPOSED BY CONNECTIONS OF DELEGATED DESIGN ITEM TO MAIN STRUCTURE SHALL BE INCLUDED FOR ENGINEER OF RECORD TO REVIEW. IF PERFORMANCE CRITERIA IS STIPULATED IN STRUCTURAL DRAWINGS (SUCH AS VIBRATION PERFORMANCE, DEFLECTION CRITERIA ABOVE CODE REQUIREMENTS, ETC.) THEN THE CALCULATIONS PROVIDED MUST INCLUDE PROOF OF CONFORMANCE TO GIVEN CRITERIA
- ALL DRAWINGS AND CALCULATIONS SHALL BEAR THE STAMP AND SIGNATURE OF THE DESIGN PROFESSIONAL RESPONSIBLE FOR THESE DESIGN WHO IS LICENSED IN THE PROJECT JURISDICTION

5. NOTE THAT IF ANY PARTS LISTED IN NOTE 2 ARE MISSING THE DEFERRED SUBMITTAL WILL BE SUBJECT TO REJECTION UNTIL ALL REQUIRED ELEMENTS ARE PROVIDED.

6. ENGINEER OF RECORD WILL REVIEW STRUCTURAL DEFERRED SUBMITTALS TO VERIFY DESIGN CRITERIA IS COMPLIANT WITH THE APPROVED CONSTRUCTION DOCUMENTS.

7. STRUCTURAL DELEGATED DESIGN COMPONENTS SHALL NOT BE INSTALLED UNTIL APPROVED BY THE BUILDING OFFICIAL.

## MASONRY NOTES (04810)

1. ALL MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530.1 SPECIFICATION FOR MASONRY STRUCTURES (LATEST EDITION).

2. ALL CONCRETE MASONRY UNITS SHALL BE ASTM C90, GRADE N, TYPE 1 STANDARD WEIGHT BLOCKS INCLUDING STRECHERS AND CORNER BLOCKS. SPECIFIED COMPRESSIVE STRENGTH OF MASONRY,  $f_m$ , SHALL BE A MINIMUM OF 2500 PSI, AS DETERMINED BY THE UNIT STRENGTH METHOD OR BY PRISM TESTS.

3. MORTAR SHALL CONFORM TO ASTM SPECIFICATION C270, TYPE S. OWNER'S TESTING AGENCY SHALL VERIFY STRENGTH FROM FIELD-OBTAINED TEST CUBES.

4. WHERE INDICATED, GROUT COURSE SOLID WITH A HIGH-SLUMP MIX IN ACCORDANCE WITH ASTM SPECIFICATION C476 HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI. OWNER'S TESTING AGENCY SHALL VERIFY STRENGTH FROM FIELD-OBTAINED TEST CUBES. THE USE OF WATER REDUCING ADJUTIVES IN GROUT IS NOT ALLOWED.

5. PROVIDE VERTICAL REINFORCING IN GROUTED CELLS AS INDICATED. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60. VERTICAL REINFORCING SHALL BE LAPPED 48 BAR DIAMETERS.

6. HORIZONTAL WALL REINFORCING SHALL BE DUR-O-WAL TRUSS DESIGN WITH #3 SIDE ROOS AND #3 CROSS TIES. REINFORCING SHALL BE PLACED IN MASONRY WALLS AT 16" O.C., MAXIMUM. SPACE HORIZONTAL JOINT REINFORCEMENT AT 8" ON CENTER IN ALL PARAPETS. USE SHOP FABRICATED SPECIAL PIECES AT ALL CORNERS AND TEES. SEE SPECIFICATION FOR FINISH REQUIREMENT APPLIED TO INTERIOR AND EXTERIOR WALL CONSTRUCTION.

7. CMU PLACED BELOW GRADE SHALL BE GROUTED SOLID.

8. CONCRETE MASONRY UNITS SHALL BE LAID IN RUNNING BOND UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS. BOND CORNERS AND INTERSECTIONS OF LOAD BEARING WALLS. ALL EXTERNAL CORNERS SHALL BE BULL NOSE BLOCKS.

9. ALL LOAD BEARING CMU WALLS SHALL CONTAIN JOINTS WHICH ARE FULLY BEDDED.

10. FILL ALL BOND BEAMS WITH 3000 PSI CONCRETE USING #1 MAXIMUM AGGREGATE SIZE.

11. PROVIDE TEMPORARY BRACING OF MASONRY WALLS TO WITHSTAND LATERAL LOADS DURING CONSTRUCTION.

12. MASONRY WALLS WHICH SUPPORT LINTELS FOR DOORS, WINDOWS, DUCT OPENINGS 3FT OR LARGER (NOT INCLUDING STEEL JOISTS OR BEAMS BEARING) SHALL HAVE MINIMUM 16" WIDE CELLS GROUTED SOLID FULL HEIGHT UNDER BEARING WITH 1-#5 BAR MINIMUM VERTICAL AND DOWEL TO MATCH.

13. FOR MULTITYPE MASONRY, PROVIDE ADJUSTABLE (2-PIECE) TYPE WITH SINGLE PAIR OF SIDE ROOS AND CROSS TIES SPACED NOT MORE THAN 16 INCHES O.C. AND WITH SEPARATE ADJUSTABLE VENER TIES ENGAGING THE CROSS TIES. CROSS TIES ARE EITHER U-SHAPED WITH EYES OR RECTANGULAR. SPACE SIDE ROOS FOR EMBEDMENT WITHIN EACH FACE SHELL OF BACKUP WYTHE AND SIZE ADJUSTABLE TIES TO EXTEND AT LEAST HALFWAY THROUGH OUTER WYTHE BUT WITH AT LEAST 1/2 INCH COVER ON OUTSIDE FACE. SEE SPECIFICATION FOR FINISH REQUIREMENT.

REINFORCEMENT SHALL INCLUDE A MINIMUM OF ONE #3x9 STAINLESS STEEL ROD IN THE VENEER CONNECTED TO ADJUSTABLE TIES. NOTE HEAVIER VENEERS MAY REQUIRE A SECOND ROD. DESIGN SHALL BE BASED ON HOKHMAN AND HANRAHD, INC. 270-2K S.I.S. UNDER SEMI-SLIP INTERLOCK SYSTEM. COORDINATE REINFORCEMENT REQUIREMENTS, JOINT LOCATION OF CMU BACKUP, AND NON-STANDARD CMU VENEER WITH RELATED SECTIONS AND DETAILS AND THE ARCHITECTURAL DRAWINGS.

14. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINTS.

15. LOCATION OF LINTELS AT MASONRY OPENINGS SHALL BE COORDINATED WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS.

16. UNLESS OTHERWISE NOTED, PROVIDE THE FOLLOWING LINTELS FOR EACH 4 INCH THICKNESS OF MASONRY WALL WITH 8 INCHES OF BEARING AT EACH END. FOR UNEQUAL LEG ANGLES, ORIENT THE LONG LEGS VERTICAL; GALVANIZE ALL LINTELS EXPOSED TO THE WEATHER.

OPENINGS UP TO 4'----- 1 1/2 #3x9/8  
OPENINGS 4' TO 6'----- 1 1/2 #3x9/8  
OPENINGS 6' TO 8'----- 1 1/2 #3x9/8

17. PROVIDE REBAR DOWELS FROM THE FOUNDATIONS TO MATCH VERTICAL REINFORCING SIZE AND SPACING. DOWELS SHALL HAVE STANDARD 90 DEGREE HOOKS AND LAP WITH THE FIRST LIFT OF REINFORCING. STANDARD LAP LENGTH OF GRADE 60 MASONRY REINFORCING BARS SHALL BE 48 BAR DIAMETERS.

18. PROVIDE STEEL JOIST AND BEAM BEARING PLATES AND OTHER ACCESSORIES AS INDICATED. PROVIDE 2 COURSES OF SOLIDLY GROUTED CMU BELOW ALL BEAM BEARINGS OVER A WIDTH OF 1'-4" CENTERED ON THE WALL OR BEARING POINT UNLESS OVER A BOND BEAM. SEE TYPICAL BEAM BEARING DETAIL FOR ADDITIONAL INFORMATION. PROVIDE PIERS PER PLAN AND PIER SCHEDULE.

19. BREAKAWAY FIRE ANCHORS SHALL BE ROLLED STRIP ZINC ALLOY IN 1/2" THICK BY HECKMANN BUILDING PRODUCTS INC.; ANCHORS SHALL BE SUPPLIED AND INSTALLED BY THE GENERAL CONTRACTOR. GENERAL CONTRACTOR SHALL VERIFY ACTUAL SIZES, SHAPES AND NUMBER OF ANCHORS REQUIRED.

## LIGHT GAGE STEEL TRUSS NOTES

1. DESIGN, MANUFACTURE AND SUPPLY LIGHT GAGE STEEL TRUSSES AS SHOWN ON DRAWINGS AND AS SPECIFIED. ROOF TRUSSES ARE TO BE DESIGNED FOR THE TRUSS FABRICATOR BY A PROFESSIONAL ENGINEER. SIGNED AND SEALED CALCULATIONS, TRUSS DESIGN AND PLACEMENT DRAWINGS ARE TO BE SUBMITTED FOR REVIEW AND APPROVAL IN ACCORDANCE WITH SPECIFICATION SECTION 01300 SUBMITTALS. TRUSS FABRICATOR TO PROVIDE PREFABRICATED HANGERS AS REQUIRED.

2. TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE LATEST EDITION OF THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATIONS AND DESIGN MANUAL.

3. TRUSSES SHALL BE HANDLED DURING MANUFACTURING, DELIVERY, AND BY THE CONTRACTOR AT THE JOB SITE SO AS NOT TO BE SUBJECTED TO EXCESSIVE BENDING.

4. TRUSSES SHALL BE UNLOADED IN A MANNER SO AS TO MINIMIZE LATERAL STRAIN. TRUSSES SHALL BE PROTECTED FROM DAMAGE THAT MIGHT RESULT FROM ON-SITE ACTIVITIES AND ENVIRONMENTAL CONDITIONS. PREVENT TOPPLING WHEN BANDING IS REMOVED.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE HANDLING, ERECTION, AND TEMPORARY BRACING OF THE TRUSSES IN A GOOD WORKMANLIKE MANNER. AND IN ACCORDANCE W/ RECOGNIZED INDUSTRY STANDARDS.

6. TRUSSES SHALL BE SUFFICIENTLY BRACED DURING ERECTION TO PREVENT TOPPLING OR DOMING. CONCENTRATED LOADS SHALL NOT BE PLACED ON TOP OF TRUSSES UNTIL ALL SPECIFIED BRACING HAS BEEN INSTALLED AND DECKING IS PERMANENTLY FASTENED IN PLACE. SPECIFICALLY AVOID STACKING FULL BUNDLES OF PLYWOOD OR OTHER CONCENTRATED LOADS ON TOP OF TRUSSES.

7. TRUSSES SHALL BE PERMANENTLY BRACED IN A MANNER CONSISTENT WITH GOOD BUILDING PRACTICES AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONSTRUCTION DESIGN DOCUMENTS. TRUSSES SHALL FURTHERMORE BE ANCHORED OR RESTRAINED TO PREVENT OUT-OF-PLANE MOVEMENT SO TO KEEP ALL TRUSS MEMBERS FROM SIMULTANEOUSLY BUCKLING TOGETHER IN THE SAME DIRECTION. SUCH PERMANENT LATERAL BRACING SHALL BE ACCOMPLISHED BY: (A) ANCHORAGE TO SOLID END WALLS; (B) PERMANENT DIAGONAL BRACING IN THE PLANE OF THE WEB MEMBERS; OR (C) OTHER SUITABLE MEANS.

8. CUTTING AND ALTERING OF TRUSSES IS NOT PERMITTED. IF ANY TRUSS SHOULD BECOME BROKEN, DAMAGED, OR ALTERED, WRITTEN CONCORDANCE AND APPROVAL BY A LICENSED DESIGN PROFESSIONAL IS REQUIRED.

9. CONTRACTOR SHALL FURNISH MATERIALS USED IN TEMPORARY AND PERMANENT BRACING.

## COLD-FORMED STEEL NOTES

1. ALL COLD FORMED STEEL FRAMING INDICATED ON THE DESIGN DOCUMENTS IS FOR BID PURPOSES ONLY. THE STUD FRAMING SUBCONTRACTOR SHALL RETAIN THE SERVICES OF A LICENSED PROFESSIONAL ENGINEER TO DESIGN ALL COLD FORMED FRAMING IN ACCORDANCE WITH THE INDICATED DESIGN LOADS AND CRITERIA.

THE ENGINEER SHALL PROVIDE SIGNED AND SEALED CALCULATIONS AND SHOP DRAWINGS. THE STUD FRAMING SUBCONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS MEETING THE PROJECT SPECIFICATIONS AND THE REQUIREMENTS OF THE DESIGN DOCUMENTS.

2. SHOP DRAWINGS SHALL ILLUSTRATE THE DESIGN OF THE STEEL STUD WALL FRAMING AND SHOW ALL STEEL STUD WALL FRAMING CONNECTIONS, SHEATHING ATTACHMENTS, STIFFENERS, ALL WALL OPENINGS, BUILT-UP HEADERS AND POST LOCATIONS, AS WELL AS ALL PERMANENT AND TEMPORARY WALL BRACING AND THEIR LOCATIONS.

3. MANUAL CALCULATIONS SHALL BE PERFORMED AND SUBMITTED TO AUGMENT AND VERIFY ANY COMPUTER GENERATED CALCULATIONS. ONE MANUAL CALCULATION FOR EACH TYPE OF COMPUTER GENERATED CALCULATION WILL BE REQUIRED. SUBMITTALS SHALL BE REJECTED IF MANUAL CALCULATIONS ARE NOT SUBMITTED AND SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER.

4. ALL LIGHT GAGE MEMBERS, GALVANIZED STUDS, JOISTS, AND ACCESSORIES SHALL BE DESIGNED AND FORMED IN ACCORDANCE WITH AISI, "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION.

5. THE EXTENT OF THE WORK FOR THE METAL STUD WALL SYSTEM IS DETAILED ON THE ARCHITECTURAL DRAWINGS. THESE NOTES SHALL BE WORKED IN CONJUNCTION WITH THOSE DRAWINGS AND THE SPECIFICATIONS. INCONSISTENCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

6. ALL STUDS, JOISTS AND ACCESSORIES SHALL BE OF THE TYPE, SIZE, STEEL THICKNESS AND SPACING SHOWN ON THE PLANS, AS MANUFACTURED BY DETROICH. EQUIVALENT PRODUCTS BY OTHER MANUFACTURERS MAY BE SUBSTITUTED WITH ENGINEER'S PRIOR APPROVAL. SUBSTITUTIONS MUST MEET OR EXCEED DIRECT PROPERTIES. PRODUCTS FAILING TO MEET THESE MINIMUM PROPERTIES WILL BE REJECTED.

7. STUDS, TRACK AND BRACING SHALL BE MANUFACTURED PER ASTM SPECIFICATION C-955.

8. ALL GALVANIZED STUDS, JOISTS AND ACCESSORIES 12, 14 AND 16 GAGE SHALL BE FORMED FROM STEEL THAT CONFORMS TO THE REQUIREMENTS OF ASTM A446, GRADE D, WITH A MINIMUM SPECIFIED YIELD STRENGTH OF 50,000 P.S.I.

9. ALL GALVANIZED STUDS, JOISTS AND ACCESSORIES, 18 GAGE OR LIGHTER, SHALL BE FORMED FROM STEEL THAT CONFORMS TO THE REQUIREMENTS OF ASTM A446, GRADE A, WITH A MINIMUM SPECIFIED YIELD STRENGTH OF 33,000 PSI.

10. ALL MEMBERS AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A GALVANIZED COATING MEETING THE REQUIREMENTS OF ASTM A653 WITH A G-60 COATING. EXTERIOR WALL STUDS SHALL HAVE A G-90 COATING.

11. PROVIDE CHANNEL SHAPED STUDS, RUNNERS, TRACKS, BLOCKING, CLIP ANGLES, SHIMS, REINFORCEMENTS, FASTENERS AND OTHER ACCESSORIES RECOMMENDED BY THE MANUFACTURER FOR A COMPLETE FABRICATING SYSTEM.

12. FRAME ALL OPENINGS LARGER THAN 2FT WITH A MINIMUM OF DOUBLE STUDS EACH SIDE OR AS SHOWN ON THE DESIGN DRAWINGS.

13. TRACK SHALL BE ATTACHED TO FOUNDATIONS, WOOD PLATES AND OTHER STRUCTURAL COMPONENTS AS SHOWN ON DRAWINGS. SECURELY ANCHOR STUDS IN TRACK TO FLOOR CONSTRUCTION AND OVERHEAD STRUCTURE. PROVIDE SLIP JOINTS WHERE NON-BEARING VERTICAL STUDS MEET FLOOR OR OVERHEAD FLOOR OR ROOF STRUCTURAL MEMBER. ALLOW 1" (MINIMUM) OF VERTICAL DEFLECTION AT SLIP JOINTS.

14. ALL COLD FORM TO COLD FORM STEEL CONNECTIONS SHALL BE MADE WITH NO. 10 TENS/3 SCREWS OF APPROPRIATE LENGTH UNLESS OTHERWISE SHOWN ON THE PLANS. PENETRATION OF JOINED MATERIAL SHALL NOT BE LESS THAN 3 EXPOSED THROUS.

15. ATTACH SHEATHING AND GYPSUM WALLBOARD TO



PIER SCHEDULE				
MARK	PIER SIZE	REINFORCING		REMARK
		VERTICAL	TIES	
P1 NOT USED	16"x16"	4#7	#4 @ 12"	CONC.
P2	8"x16"	2#5	3/8" @ 8"	CMU
P3	8"x16"	2#4	3/8" @ 8"	CMU

FOOTING SCHEDULE		
2000 PSF SOIL BEARING		
MARK	SIZE	REINFORCING
F24.12	2'-0" x 1'-0" CONT.	3/4" CONT. L.W.B. #4 @ 48" O.C. S.W.B.
F24.28	2'-0" x 2'-4" CONT.	3/4" CONT. L.W.B. #4 @ 48" O.C. S.W.B.
F24.36±	2'-0" x 3'-0±" CONT.	2#5 CONT. L.W.T.&B. #4 STIRRUPS @ 12" O.C.
F4.0	4'-0" x 4'-0" x 2'-4"	4#6 E.W.T.&B.

STRUCTURAL DESIGN CRITERIA - IBC2021 N.J.										
ROOF SNOW LOAD CRITERIA			WIND LOAD CRITERIA (3sec. gust)			SEISMIC LOAD CRITERIA				
FACTOR	IBC SECTION	VALUE	FACTOR	IBC SECTION	VALUE	FACTOR	IBC SECTION	VALUE		
Pg-ground snow	1608.2 IBC	25 PSF	V	1609.3 IBC	124 MPH	Occupancy Category	1604.5 IBC	III		
Pf	7.3 ASCE 7	19.25 PSF	EXPOSURE	1609.4 IBC	B	Ss	1613.2.1 IBC	0.176g		
Ce-exposure	7.3.1 ASCE 7	1.0	MWFRS	27.2.1 ASCE 7	SEE BELOW	Si	1613.2.1 IBC	0.047g		
I-importance	7.3.3 ASCE 7	1.1	Load Direction	Pressure @ MID HEIGHT	Pressure @ Roof	Ses	1613.5.4 IBC	0.188		
Ct-thermal	7.3.2 ASCE 7	1.0		Wall	Roof	Wall	Roof	1613.5.4 IBC	0.075	
Min. Roof Live Load	1607.3 IBC	22 PSF	Windward	14.53	N/A	14.53	-28.83	Soil Site Class	1613.5.2 IBC	D
Live Load Reduction (if Used)	1607.11.1 IBC	Not Used	Leeward	14.53	N/A	14.53	-28.83	Seismic Design Category	1613.5.6 IBC	B
NOTE: USE 30 PSF AS DESIGN LIVE LOAD			FOR COMPONENTS AND CLADDING USE IBC 2021 N.J. EDITION SECTION 1609.1 FOR WIND DESIGN CRITERIA			R	12.2.1 ASCE 7	3.5		
						I - Importance Factor	11.5.1 ASCE 7	1.25		

ARCHITECTURAL COMPONENTS SHALL BE SEISMICALLY DESIGNED AND SUPPORTED IN ACCORDANCE WITH IBC 2021 NJ EDITION

SHEAR WALL SCHEDULE	
MARK	REINFORCING
SW1 (8" CMU) SEE PLAN FOR LENGTH	#4@48" O.C. FULL HEIGHT IN GROUTED CELLS (2)#4 AT EACH END (P3) UNO

LINTEL SCHEDULE	
MARK	SIZE (8" BRG EACH END MIN. TYP.)
L1	(2) 4x8 W/ (1) #5 T & B (1) 6x8 CAST STONE LINTEL W/ (1) #5 T. & B. & ARCHITECTURAL FINISH HSS8x8x5/16 + 3/8" x 1'-1" BOT. PLATE H.D. GALV'D.
L1A	+GALV. L2x24 x2" AT 8" WELDED TO TOP OF BEAM
L1B	(2) 4x8 W/ (1) #5 T & B +1.6x6@ GALV.
L1C	W8x18 + 1/2" x 1'-1" BOT. PLATE W/ M.S. ANCHORS B.S. @ 16"
L2	(2) 4x8 W/ (1) #5 T & B

FOR ALL MISCELLANEOUS HVAC DUCT OPENINGS NOT INDICATED STRUCTURAL DWGS USE LINTEL : L2 FOR 8" CMU WALL  
SEE MASONRY NOTE #16 FOR OTHERS  
G.C./ELECT. CONTR./MECH. CONTR. TO COORD.  
ALL WALL PENETRATIONS' REQUIREMENTS

HILTI ANCHORAGE SYSTEM	
ANCHORS IN CMU AND CONCRETE WALLS	
WALL TYPE	ANCHOR TYPE
CONCRETE	1/2"x 6" EMBED. MIN. HILTI KWIK BOLT II EXPANSION ANCHORS WITH NUT & WASHER
HOLLOW CMU	1/2"x 4" EMBED. MIN. HILTI HIT HY270 WITH HIT-V ANCHOR ROD, NUT & WASHER- SCREEN TUBE 3 3/8" (UNO)
GROUTED CMU	1/2"x 6" EMBED. MIN. HILTI HIT HY270 WITH HAS THREADED ROD, NUT & WASHER

NOTE:  
ALL CONTRACTOR EMPLOYEES WHO WILL BE RESPONSIBLE FOR DRILLING AND INSTALLING POST INSTALLED ANCHORS SHALL BE CERTIFIED BY HILTI CORPORATION THAT THEY HAVE COMPLETED AN ON SITE ANCHOR INSTALLATION SEMINAR. THIS IS A FREE SERVICE PROVIDED BY HILTI CORPORATION.  
CONTRACTOR SHALL HAVE HILTI REPRESENTATIVE PERFORMED LOAD TEST OF AT LEAST 10% OF ANCHORS THAT SUPPORTING BRICK VENEER.

DESIGN LOAD SCHEDULE			
LOADS SHOWN IN PSF			
COMPONENT	LOCATION	1st Floor	Typical Roof
		ROOFING MAT. (EPDM, INSULATION)	
DECKING (FORM, COMPOSITE, ROOF)			2
STEEL BEAMS, JOISTS			7
MECH., ELEC., PLUMBING			8
CEILING MAT. (DRYWALL, TILE GRID)			3
MISCELLANEOUS			2
4" in. CONCRETE SLAB ON GRADE		50	
FUTURE SOLAR PANEL SYSTEM			10
TOTAL DEAD LOAD		50	35
LIVE LOAD		100	30
TOTAL LOAD		150	65

IBC 2021 NJ EDITION



PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT  
100 DONA AVENUE, PENNS GROVE, NEW JERSEY 08060  
PAUL W. CARLETON ELEMENTARY SCHOOL  
2025 PRE-K CLASSROOM ADDITION  
251 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08060

REVISIONS
a.
b.
c.

Project No. 23-42  
Date: 11-11-24  
Scale:

SCHEDULES

S-0.1

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340.1024

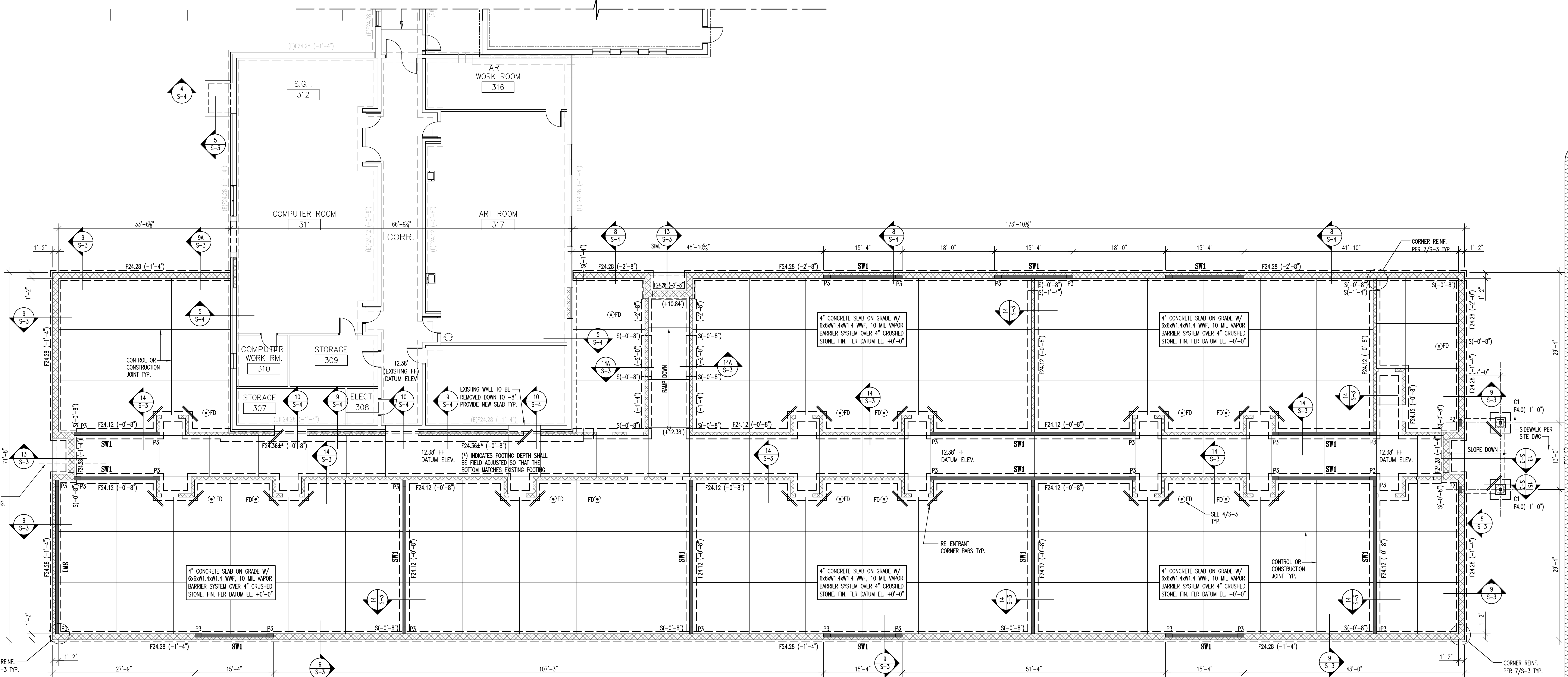
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N.J.CERT. OF AUTH. #24627960500

KEVIN R. ORNDORF

ISSUED FOR BID: 11-11-24

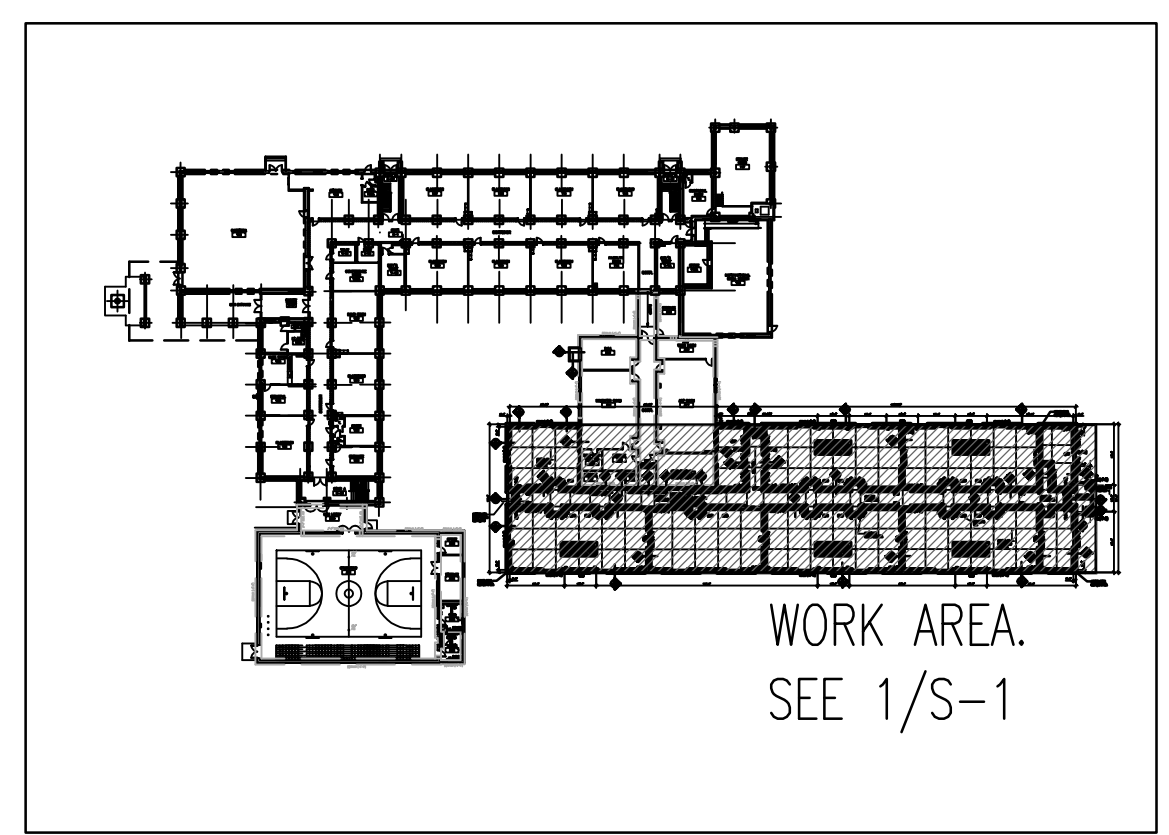
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**1** PARTIAL FOUNDATION PLAN  
S-1  
1/8" = 1'-0"

- FOUNDATION NOTES**
- FIRST FLOOR REFERENCE DATUM IS ELEVATION 0'-0"
  - DATUM ELEVATION 0'-0" IS EQUIVALENT TO SITE ELEVATION 12.38' = EXISTING BUILDING FINISHED FLOOR ELEVATION (SEE SITE PLAN).  
(-#-#) INDICATES TOP OF FOOTING  
(-#-#) INDICATES TOP OF PIER
  - FOUNDATION MEMBERS ARE DESIGNATED AS FOLLOWS:  
F## FOOTING MARK (SEE SCHEDULE)  
S## FOOTING STEP (SEE TYP DETAILS)
  - COORDINATE WITH ARCH, MECH, ELEC, AND PLUMBING DRAWINGS FOR FLOOR SLOPES, DRAINS, OPENINGS, DEPRESSIONS, ETC., NOT SHOWN ON THIS PLAN.
  - REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT INDICATED.
  - REFER TO TYPICAL DETAILS ON DRAWING S-3 AND S-4.
  - ALL WALL FOOTINGS SHALL BE INSTALLED CENTERED ON FOUNDATION WALL U.N.O.



**KEY PLAN**

**REVISIONS**

a.	
b.	
c.	

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VOID UNLESS GREEN OR EMBOSSED PROFESSIONAL SEAL IS AFFIXED

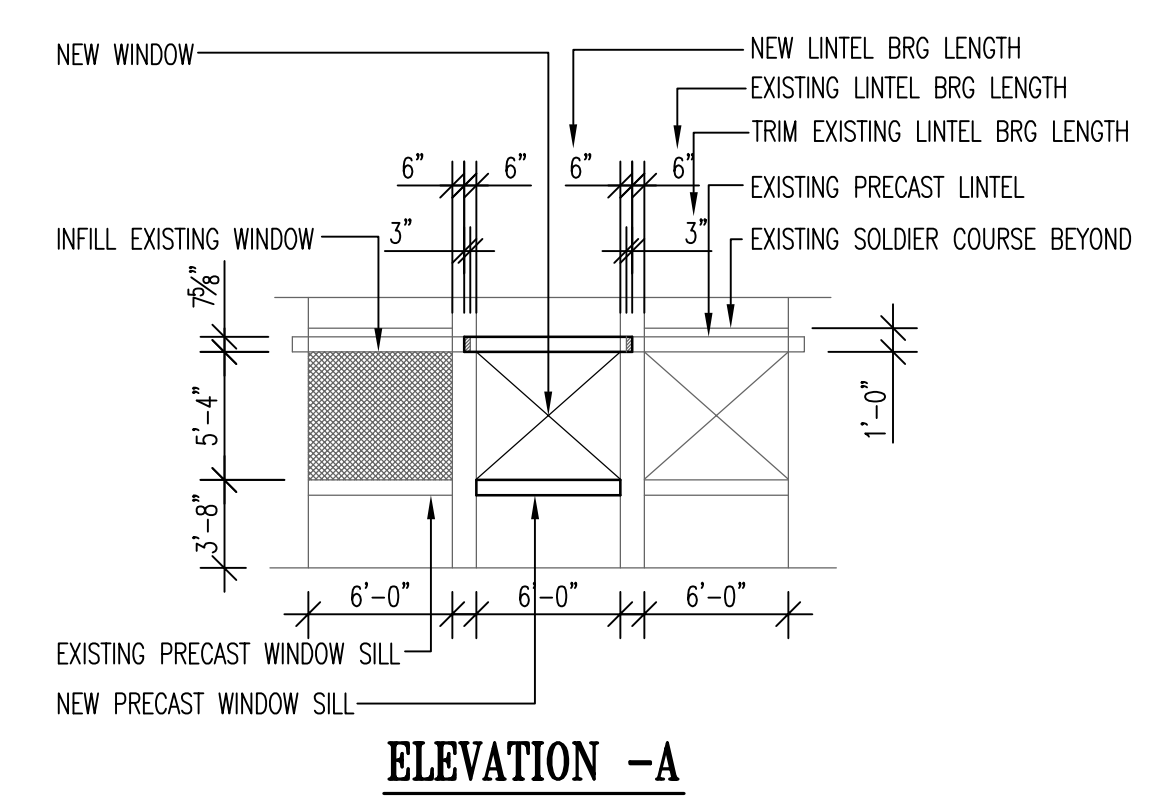
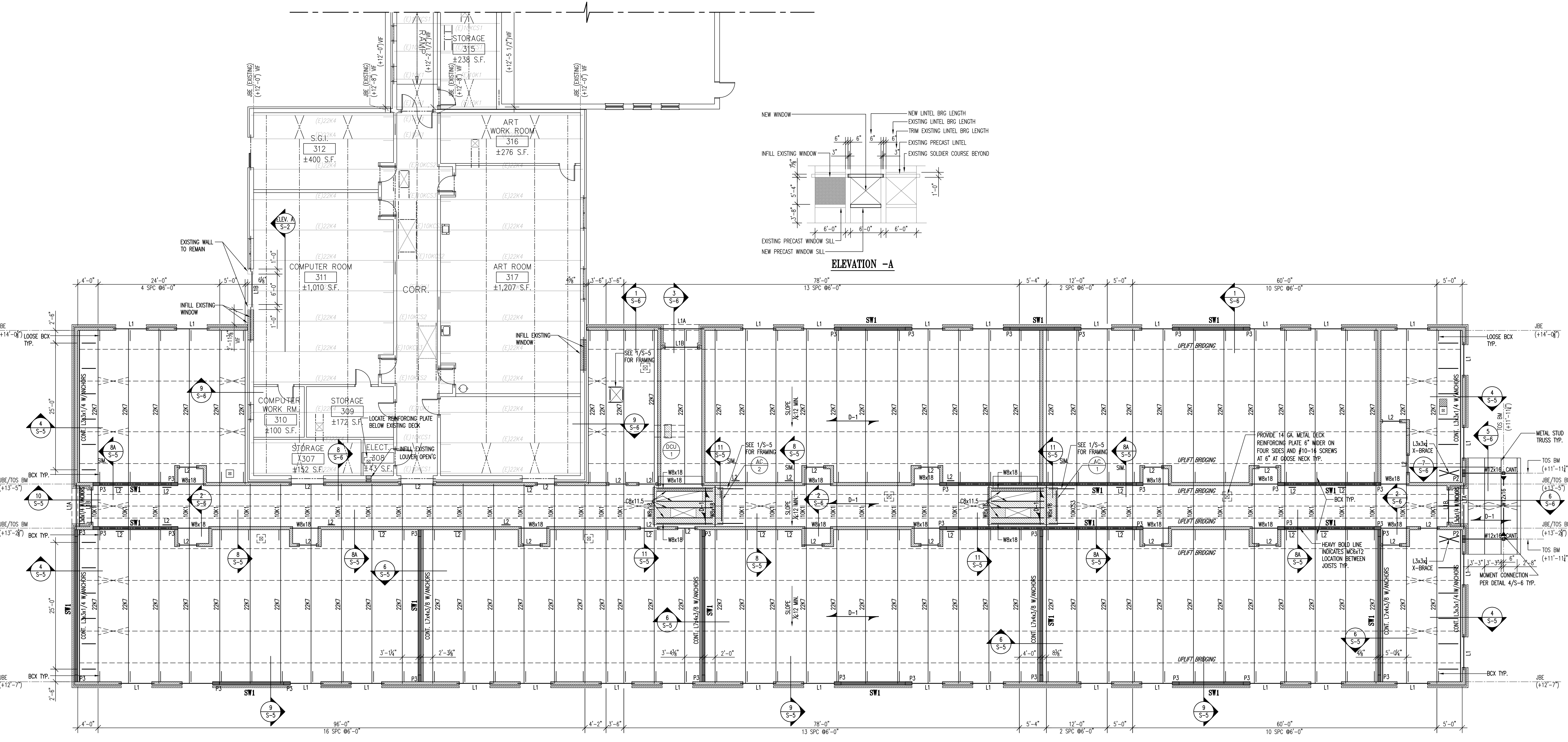
KEVIN R. ORNDORF

Project No. 23-42  
Date: 11-11-24  
Scale:

**FOUNDATION PLAN**  
**S-1**

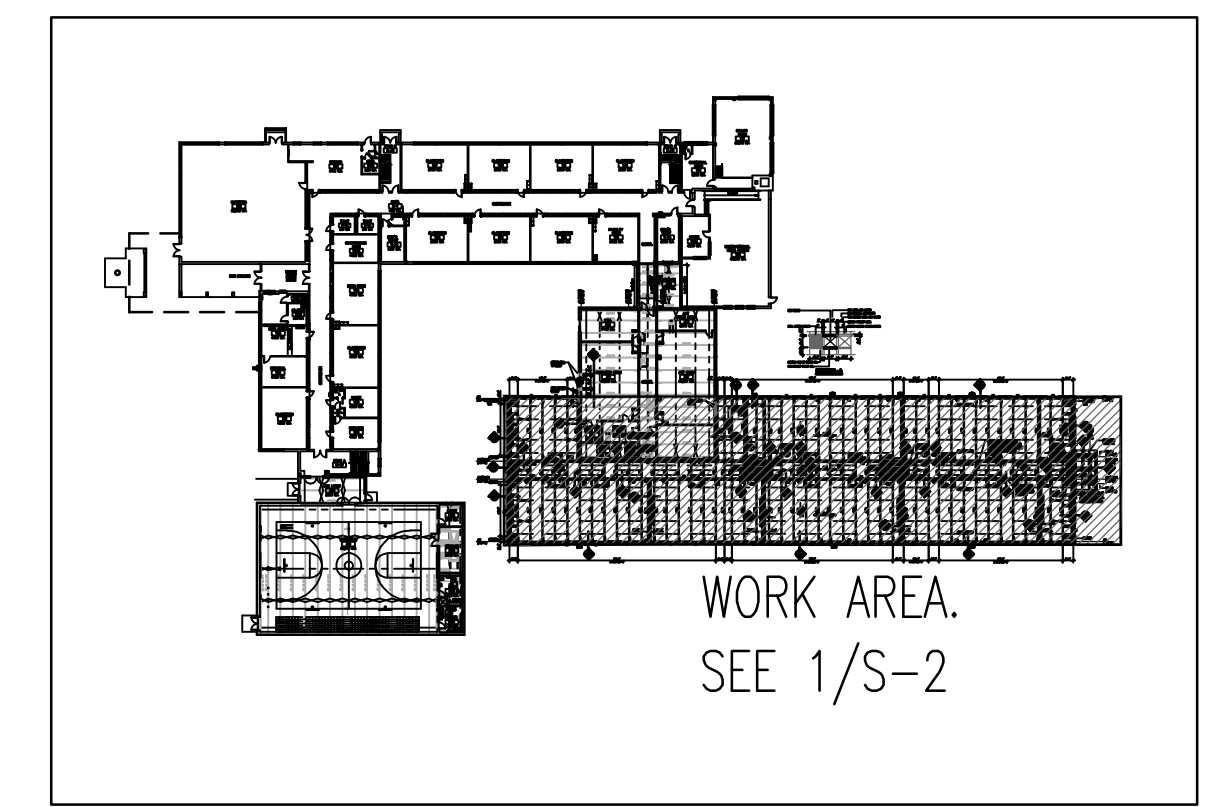


CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB, AND THIS OFFICE SHALL BE RESPONSIBLE FOR ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.



**1 ROOF FRAMING PLAN**  
S-2  
1/8" = 1'-0"

- ROOF FRAMING PLAN NOTES**
- TOP OF STEEL BEAM /JOIST BRG ELEVATION (+/-) AS NOTED ON PLAN IS REFERENCED FROM DATUM ELEV. +0'-0", DATUM ELEV. +0'-0" IS EQUIVALENT TO SITE ELEVATION 12.38' = EXISTING BUILDING FINISHED FLOOR ELEVATION. (SEE SITE DRAWING).
  - D-1 INDICATES 1 1/2" (TYPE 1.5 B), 22 GA. GALV'D ROOF DECK BY VULCRUF OR APPROVED EQUAL.
  - ROOF JOISTS SHALL BE EQUALLY SPACED AT 6'-0" O.C. MAX., UNO.
  - REFER TO TYPICAL DETAILS ON DRAWING S-5 AND S-6.
  - FOR GENERAL NOTES REFER TO S-0.
  - REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT INDICATED.
  - PROVIDE LINTELS ACCORDING TO GENERAL NOTES AND LINTEL SCHEDULE.



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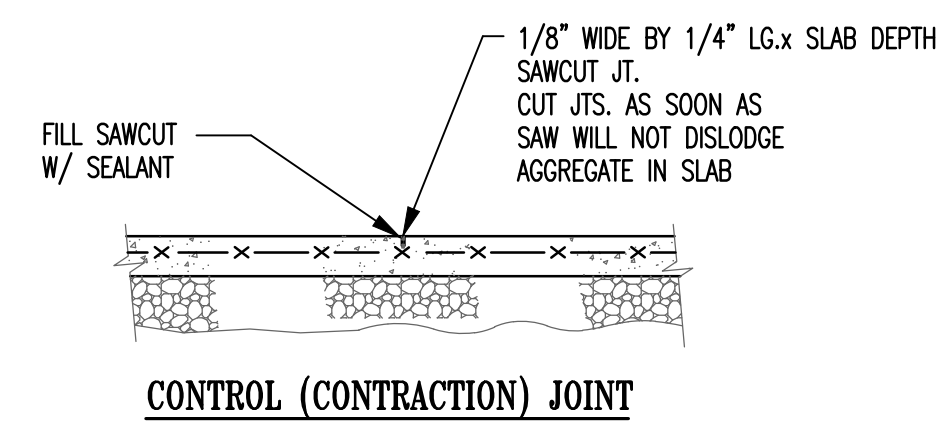
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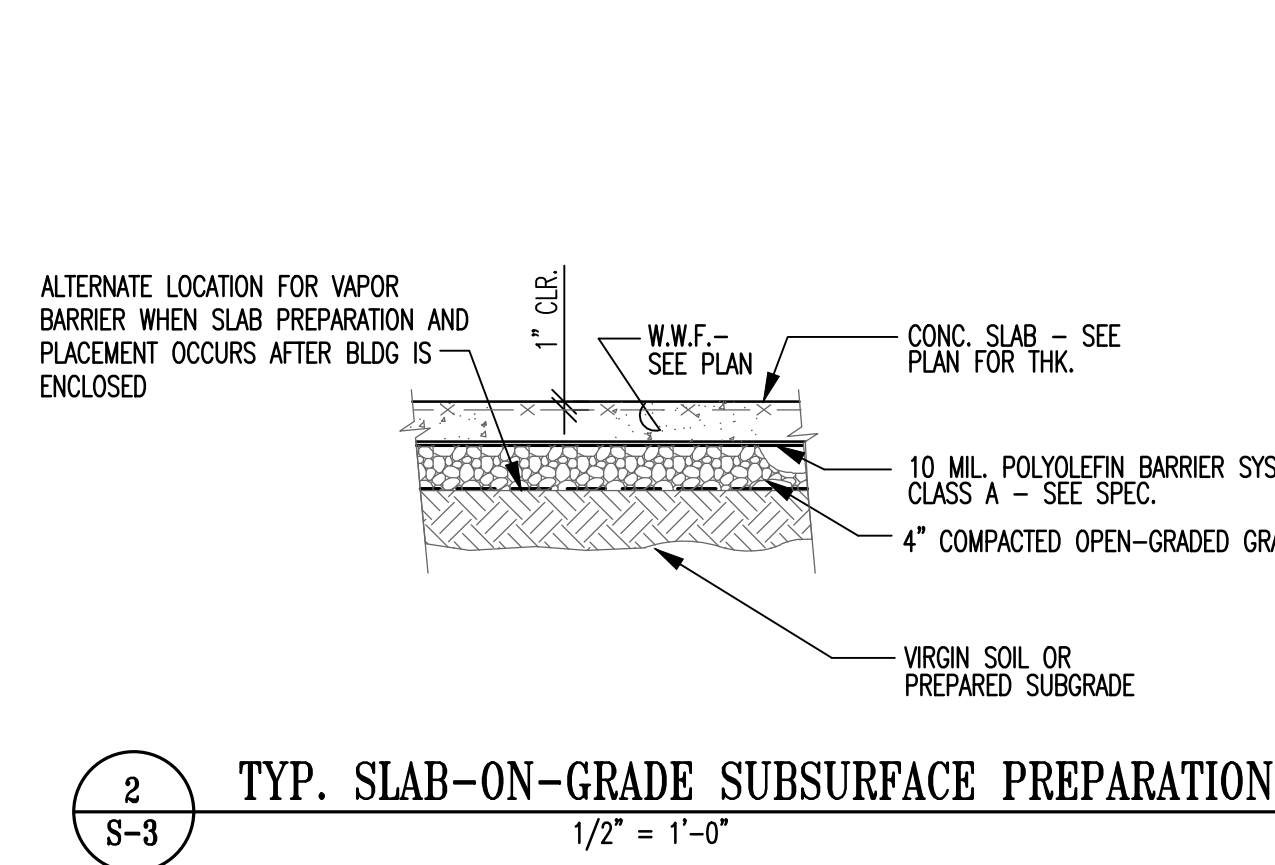
a.	
b.	
c.	

Project No. 23-42  
Date: 11-11-24  
Scale:  
**ROOF FRAMING PLAN**  
**S-2**

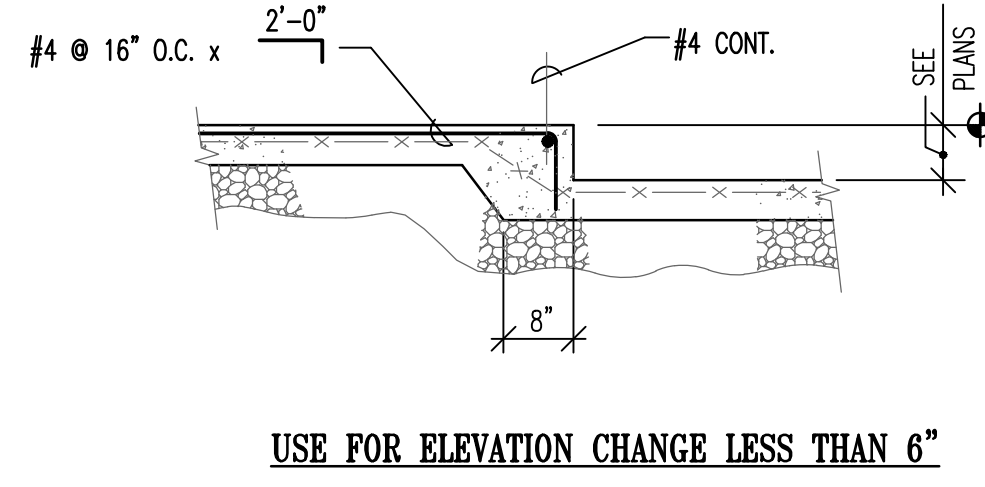




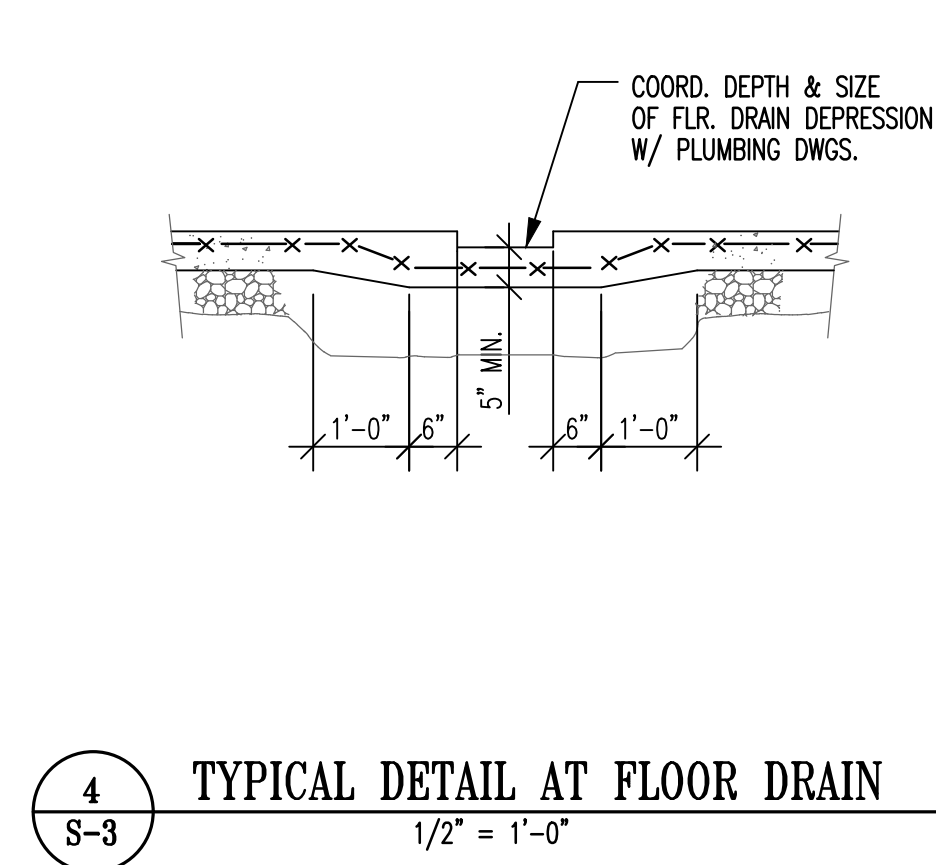
**1** TYP. SLAB-ON-GRADE JOINT DETAILS  
1/2" = 1'-0"



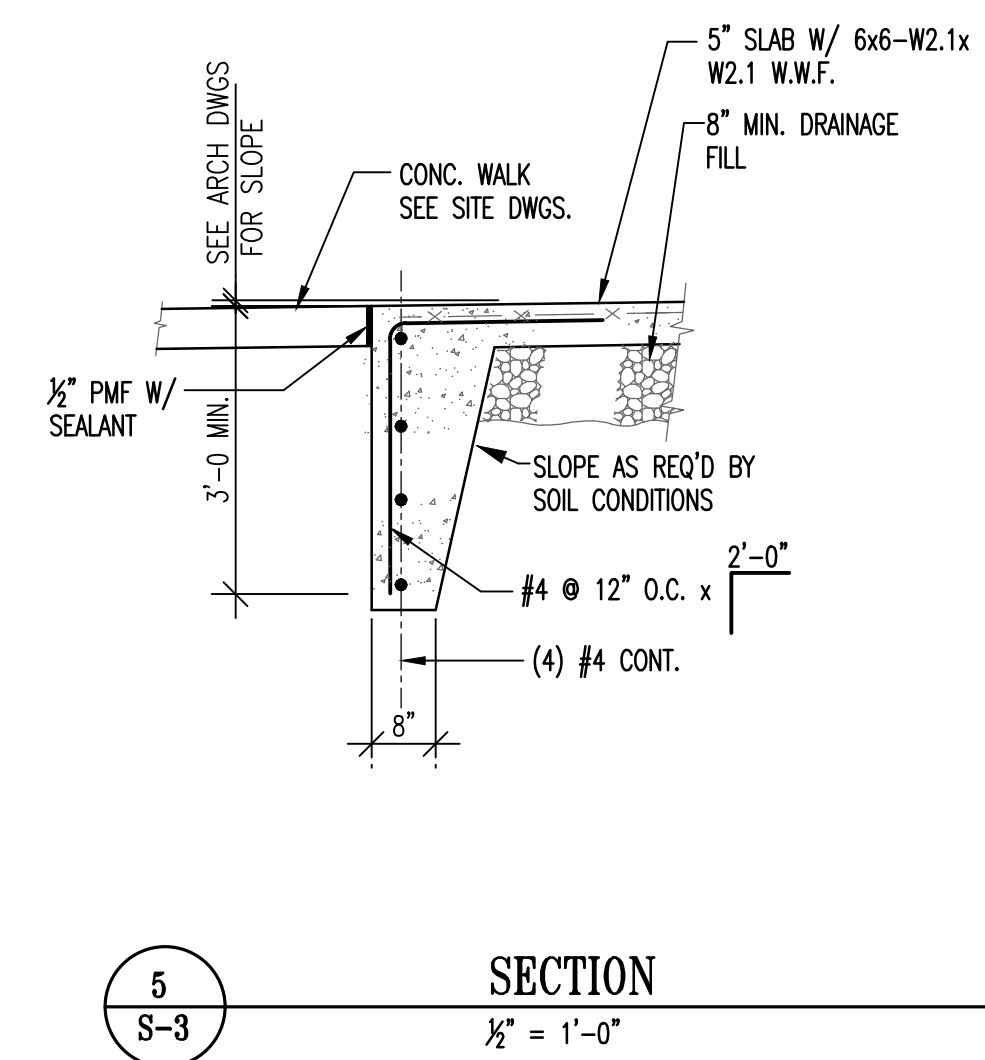
**2** TYP. SLAB-ON-GRADE SUBSURFACE PREPARATION  
1/2" = 1'-0"



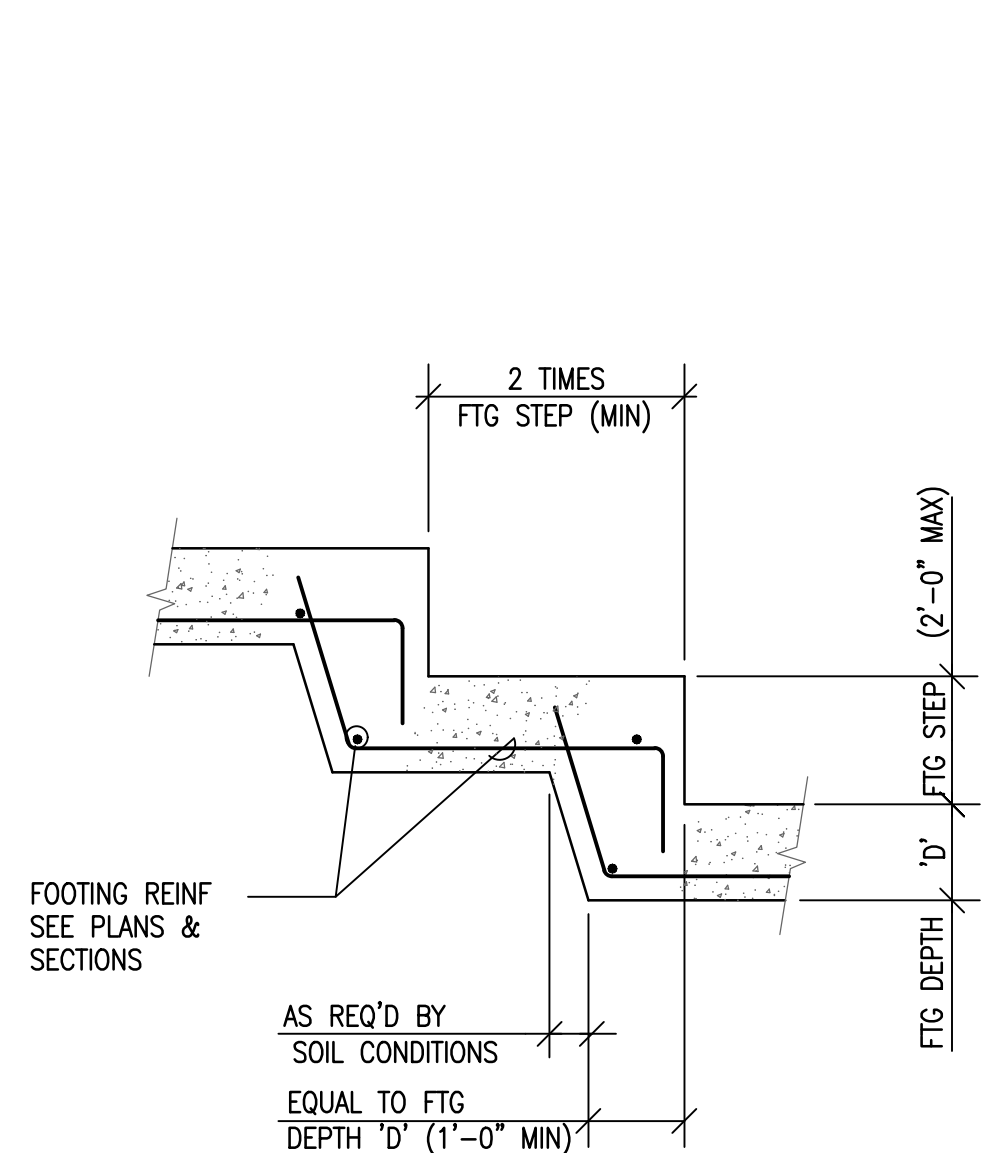
**3** TYPICAL SLAB ELEVATION CHANGE DETAILS  
1/2" = 1'-0"



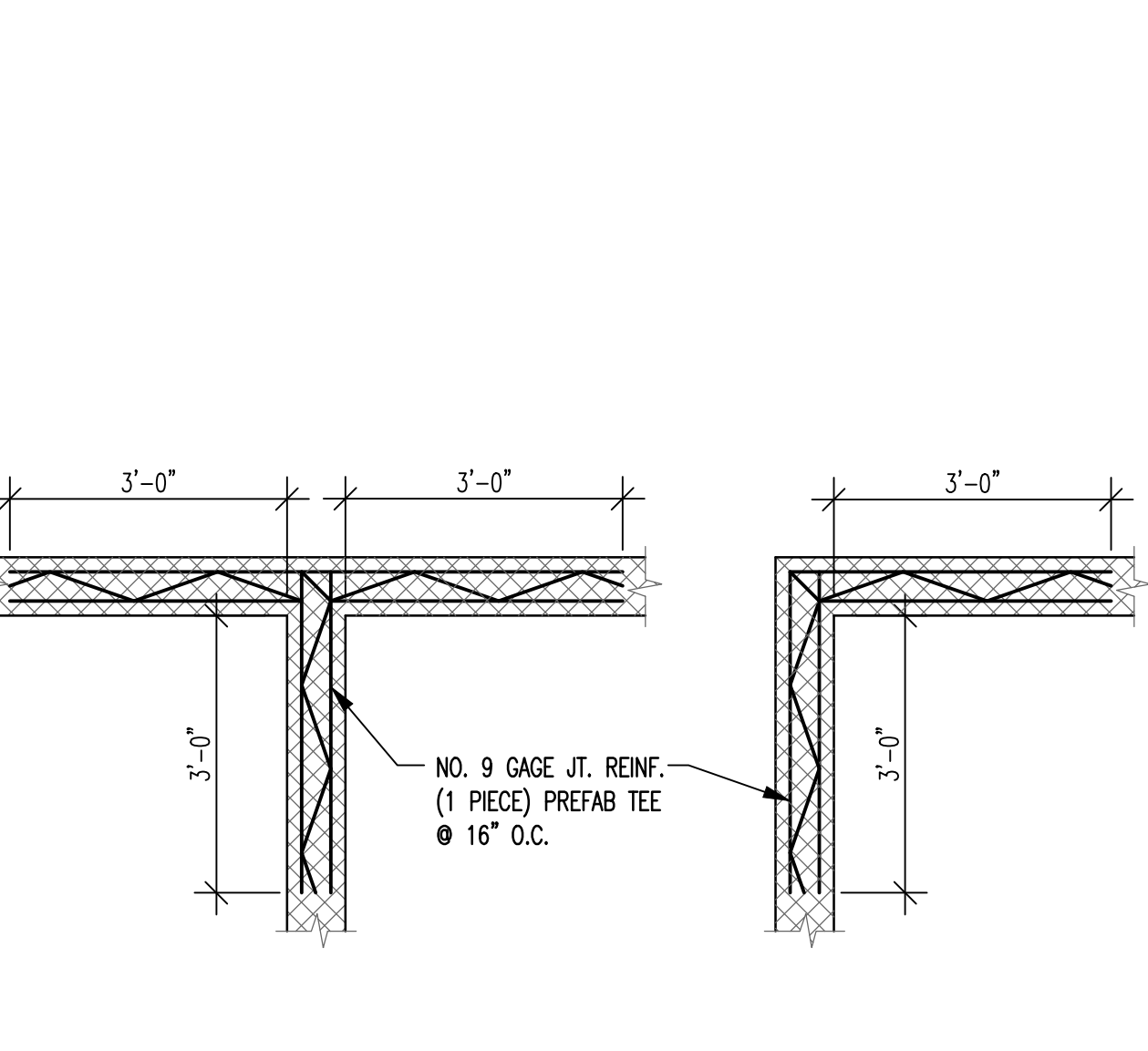
**4** TYPICAL DETAIL AT FLOOR DRAIN  
1/2" = 1'-0"



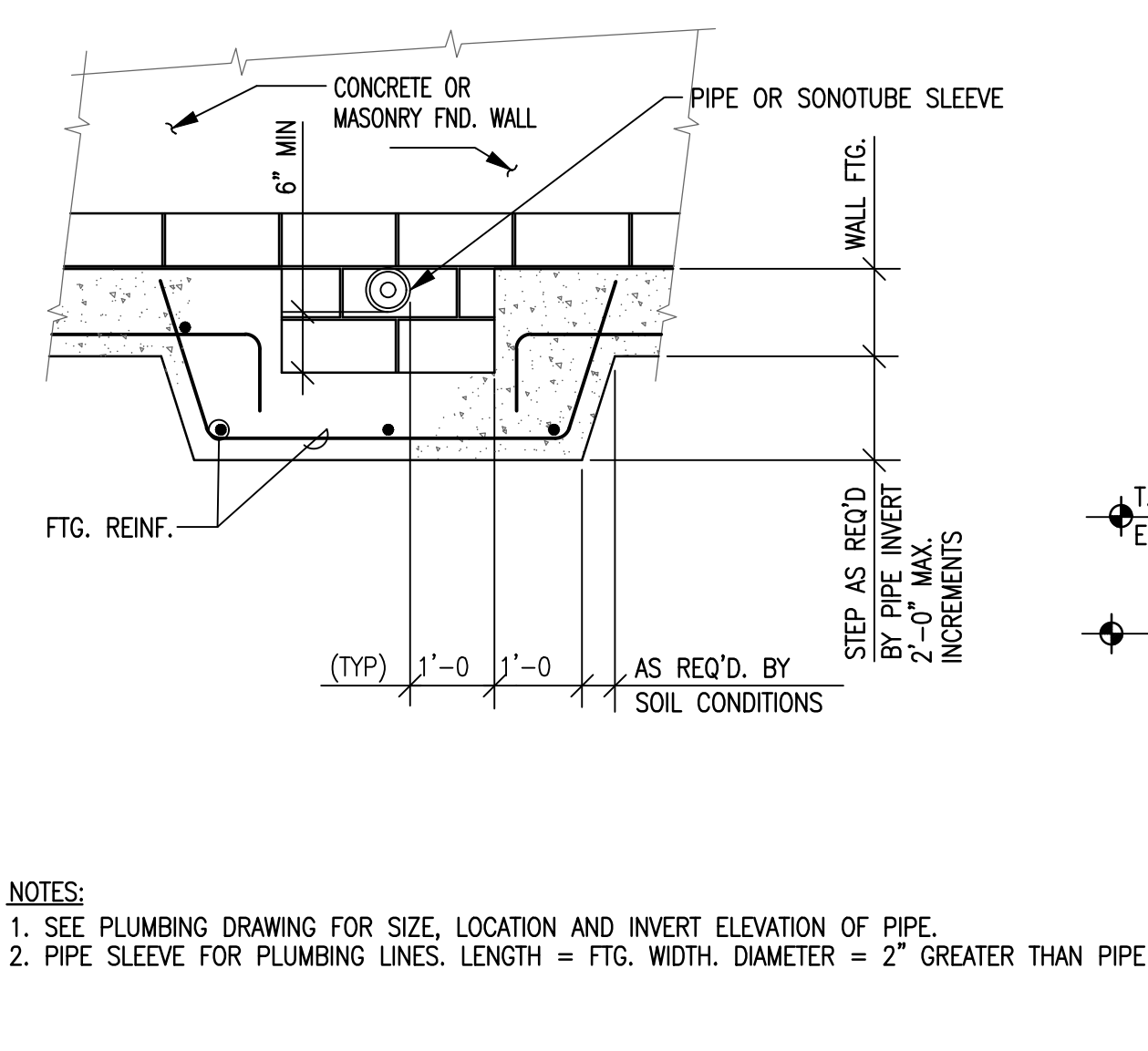
**5** SECTION  
1/2" = 1'-0"



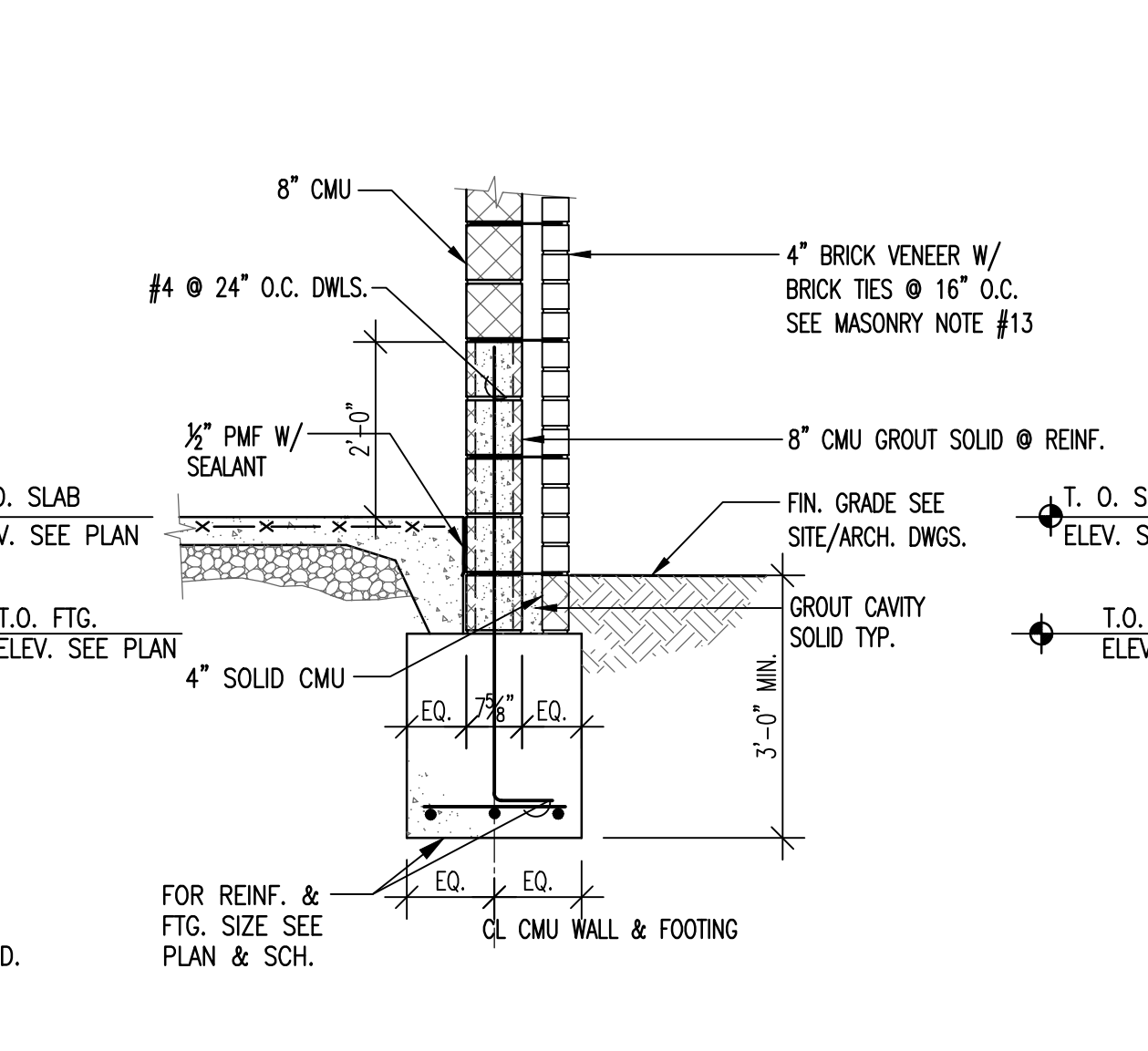
**6** FOOTING STEP DETAIL  
1/2" = 1'-0"



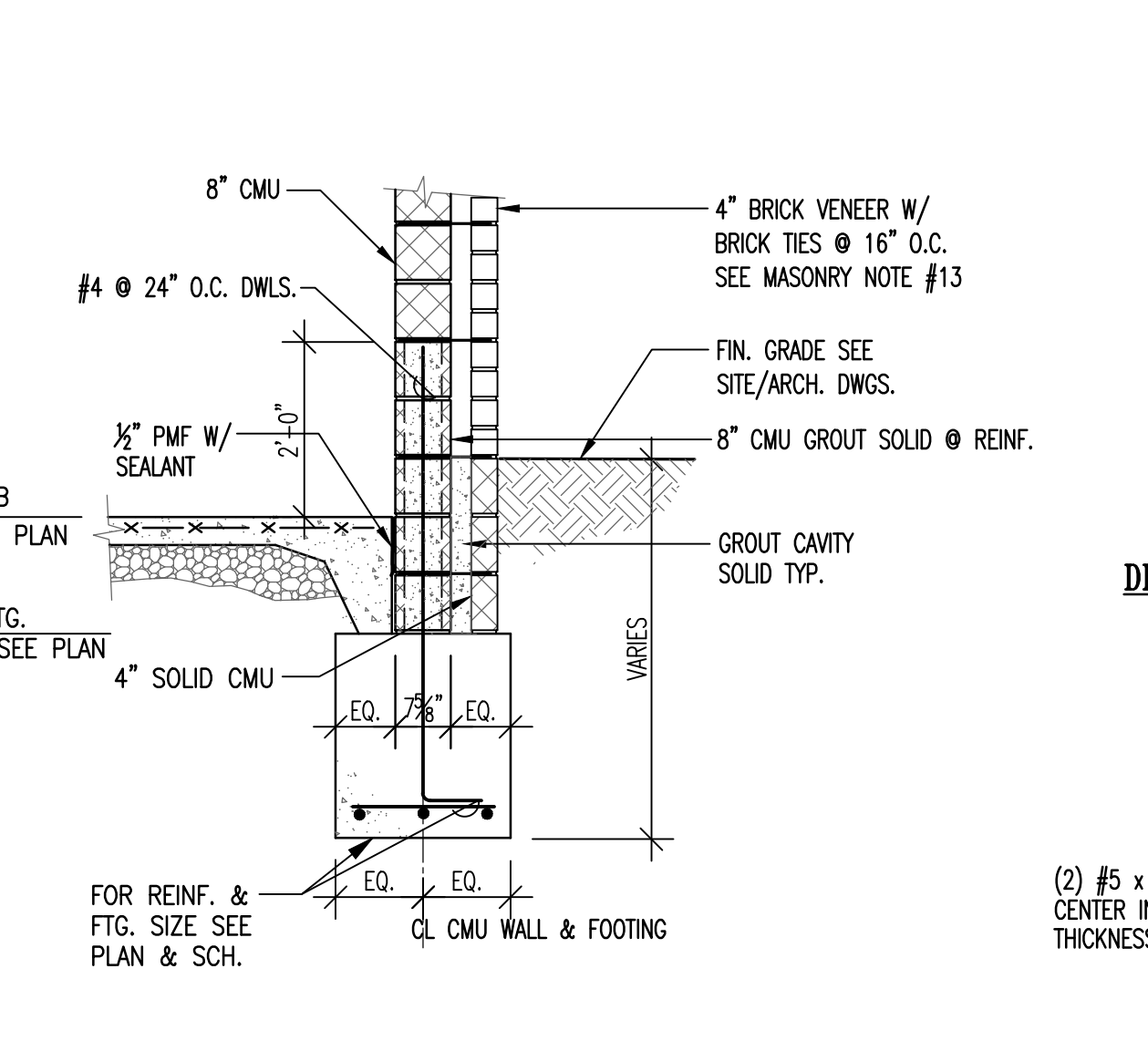
**7** DETAIL AT MASONRY CORNERS  
SCALE: 1/2" = 1'-0"



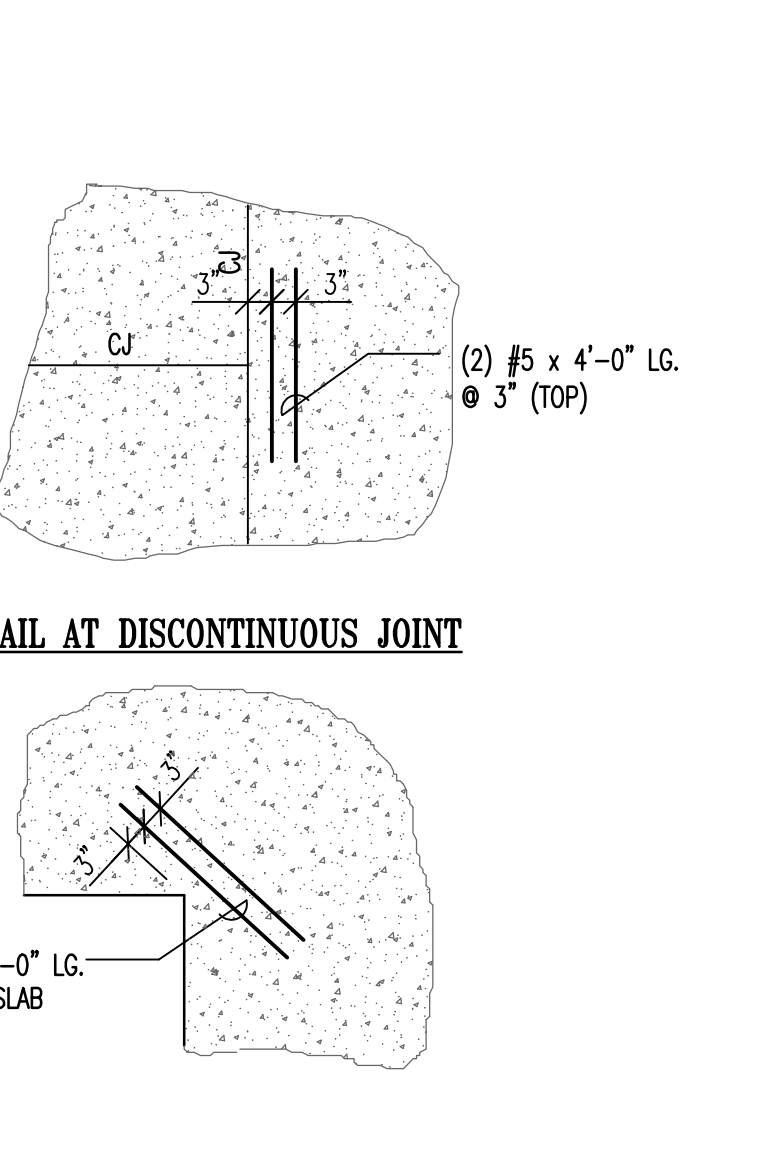
**8** TYPICAL STEP FOOTING AT PIPE CROSSING  
1/2" = 1'-0"



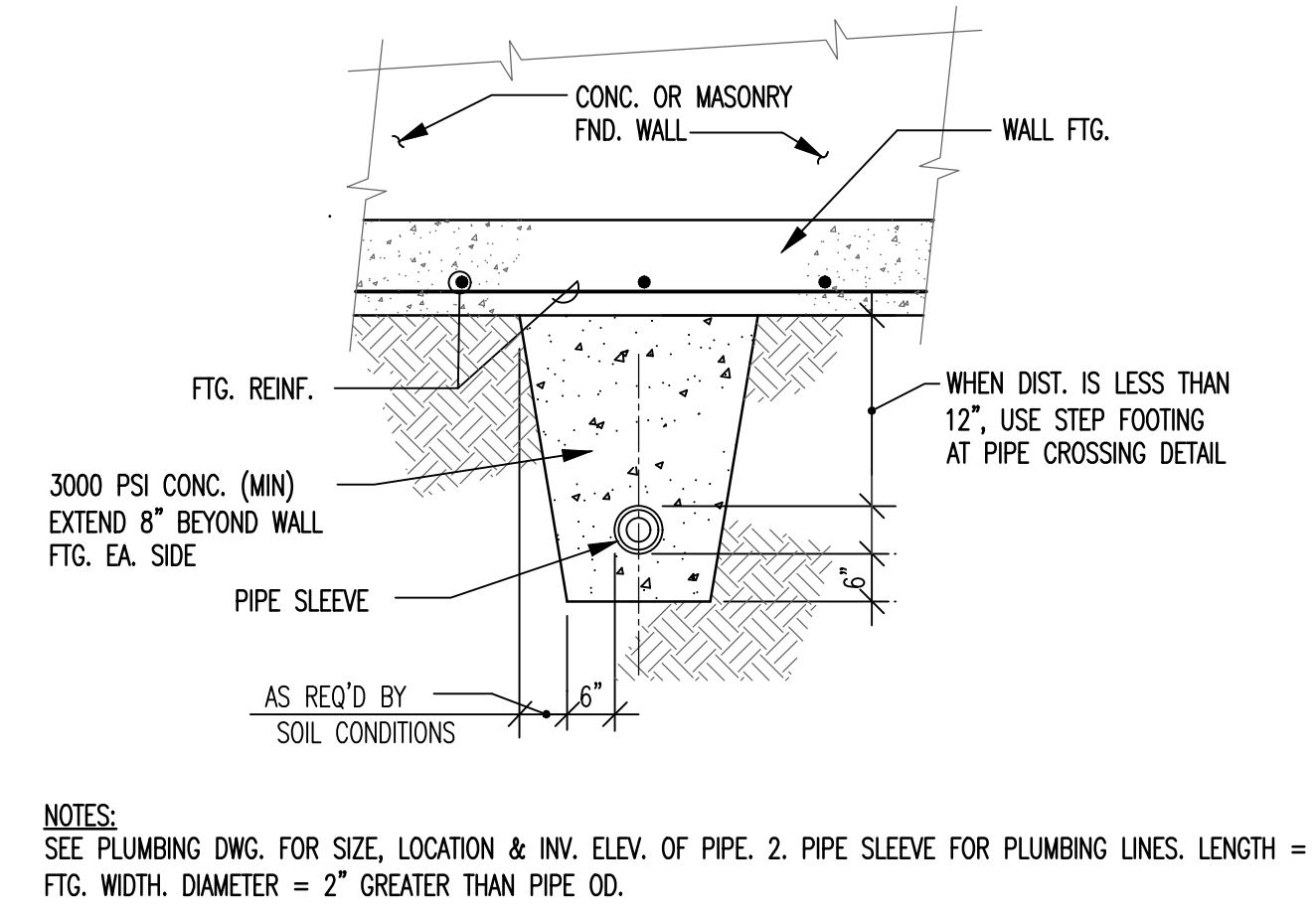
**9** SECTION  
1/2" = 1'-0"



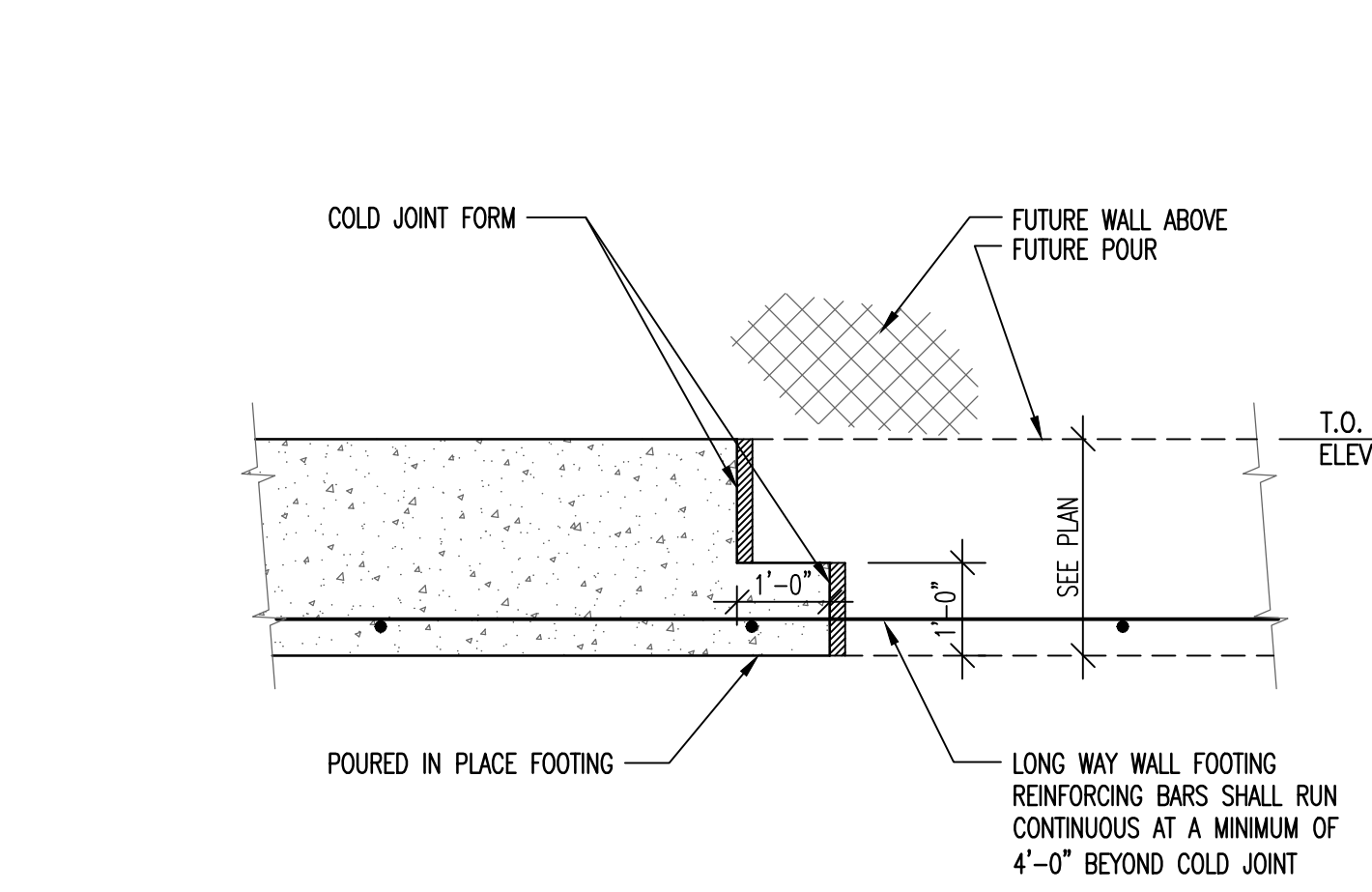
**9A** SECTION  
1/2" = 1'-0"



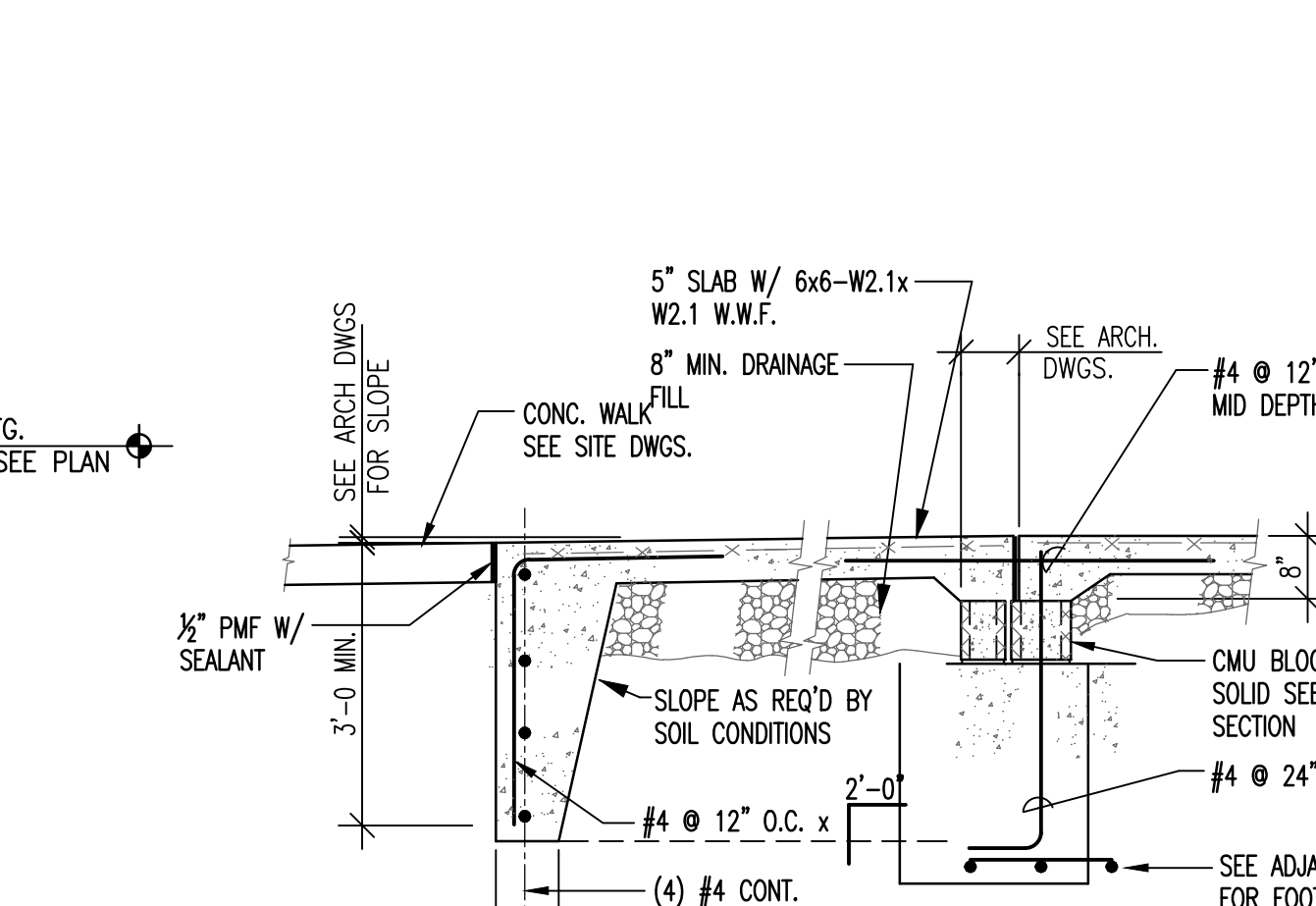
**10** RE-ENTRANT CORNER  
1/2" = 1'-0"



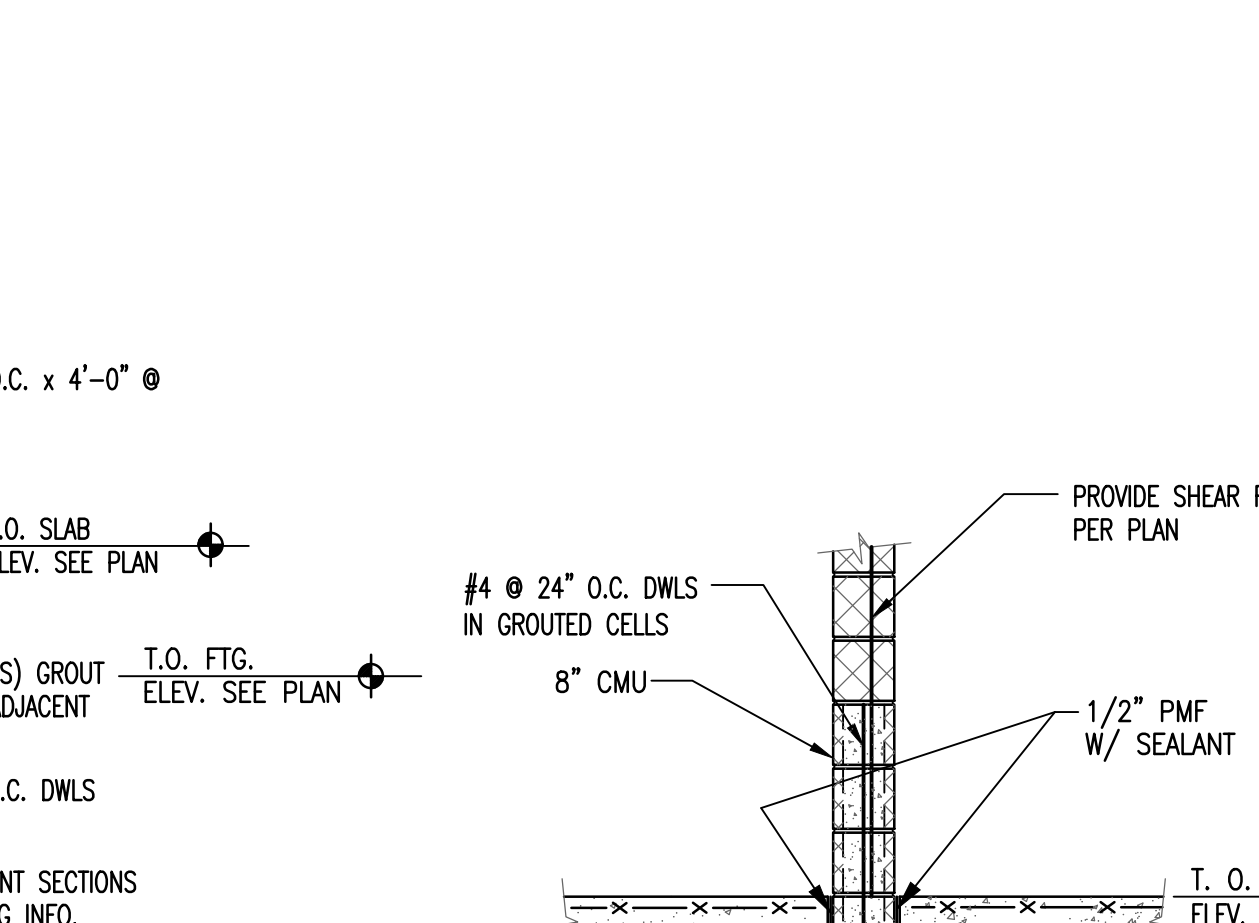
**11** TYPICAL PIPE CROSSING BELOW WALL FOOTING  
1/2" = 1'-0"



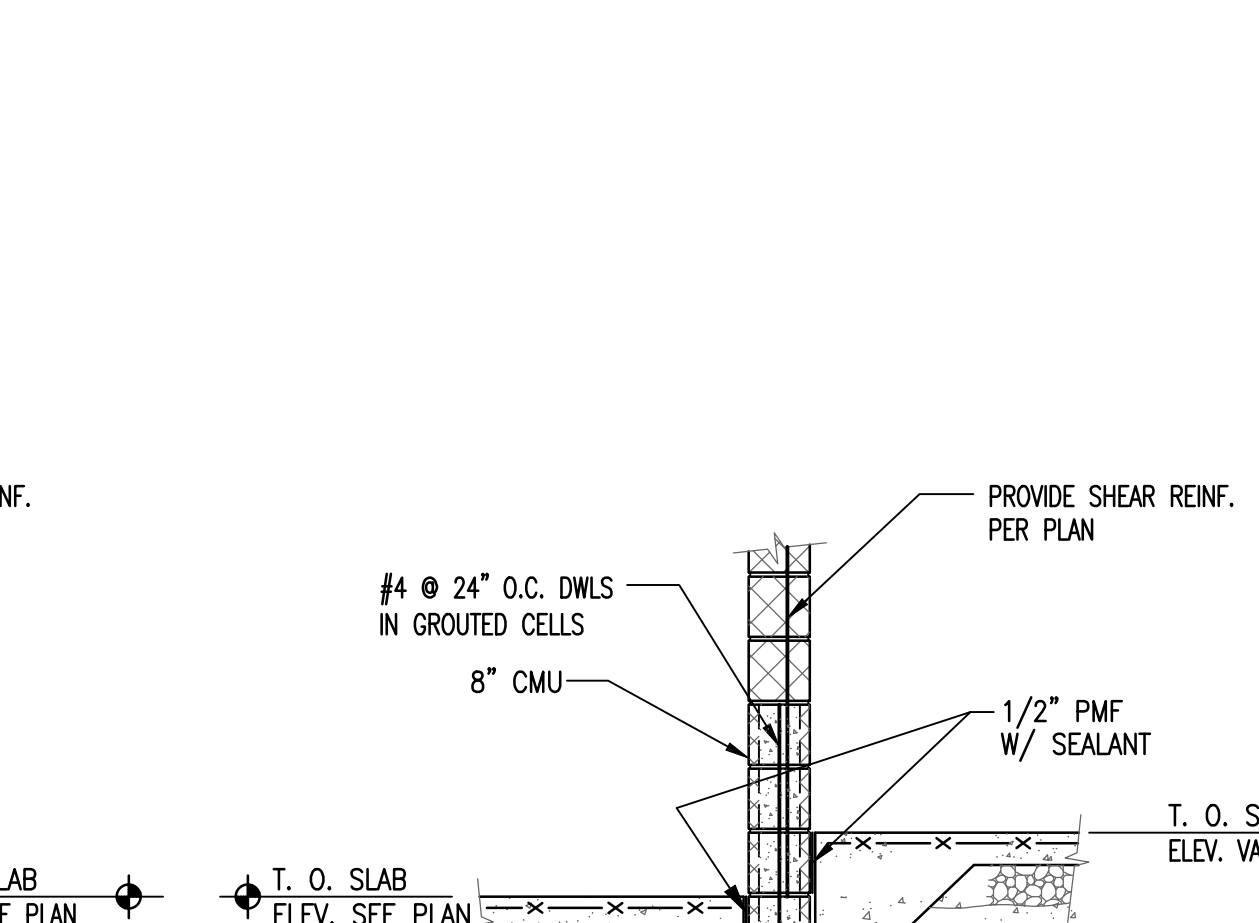
**12** CONTINUOUS FOOTING COLD JOINT DETAIL  
1/2" = 1'-0"



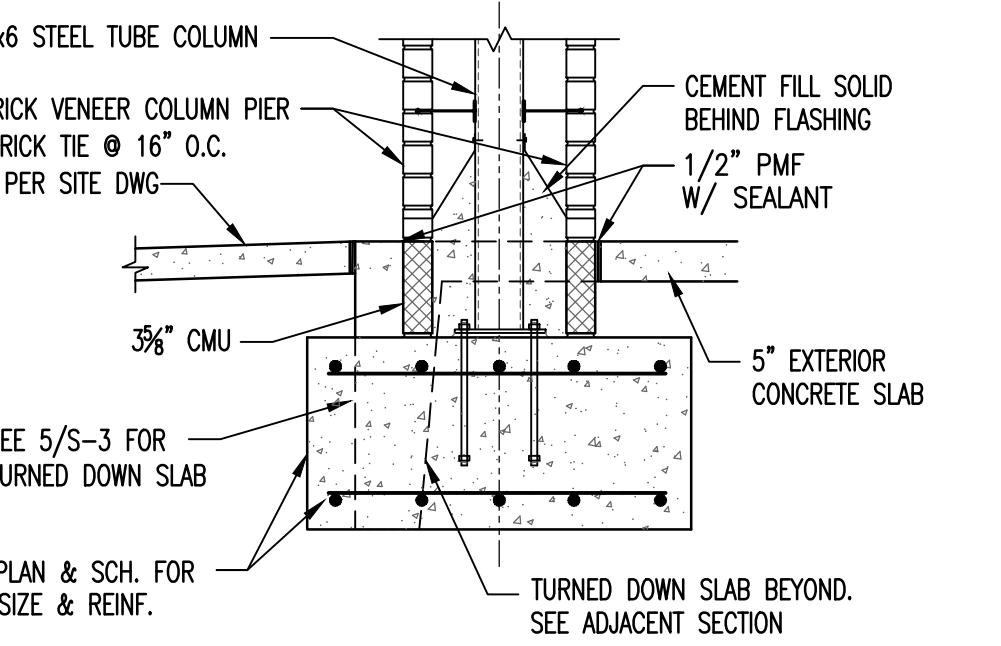
**13** SECTION  
1/2" = 1'-0"



**14** SECTION  
1/2" = 1'-0"



**14A** SECTION  
1/2" = 1'-0"



**15** SECTION  
1/2" = 1'-0"

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	340.1024	KEVIN R. ORNDORF	FOUNDATION SECTIONS AND DETAILS <b>S-3</b>

ISSUED FOR BID: 11-11-24

**GARRISON ARCHITECTS**  
713 CREEK ROAD, BELLMAWR, NEW JERSEY 08011 (609) 396-6200

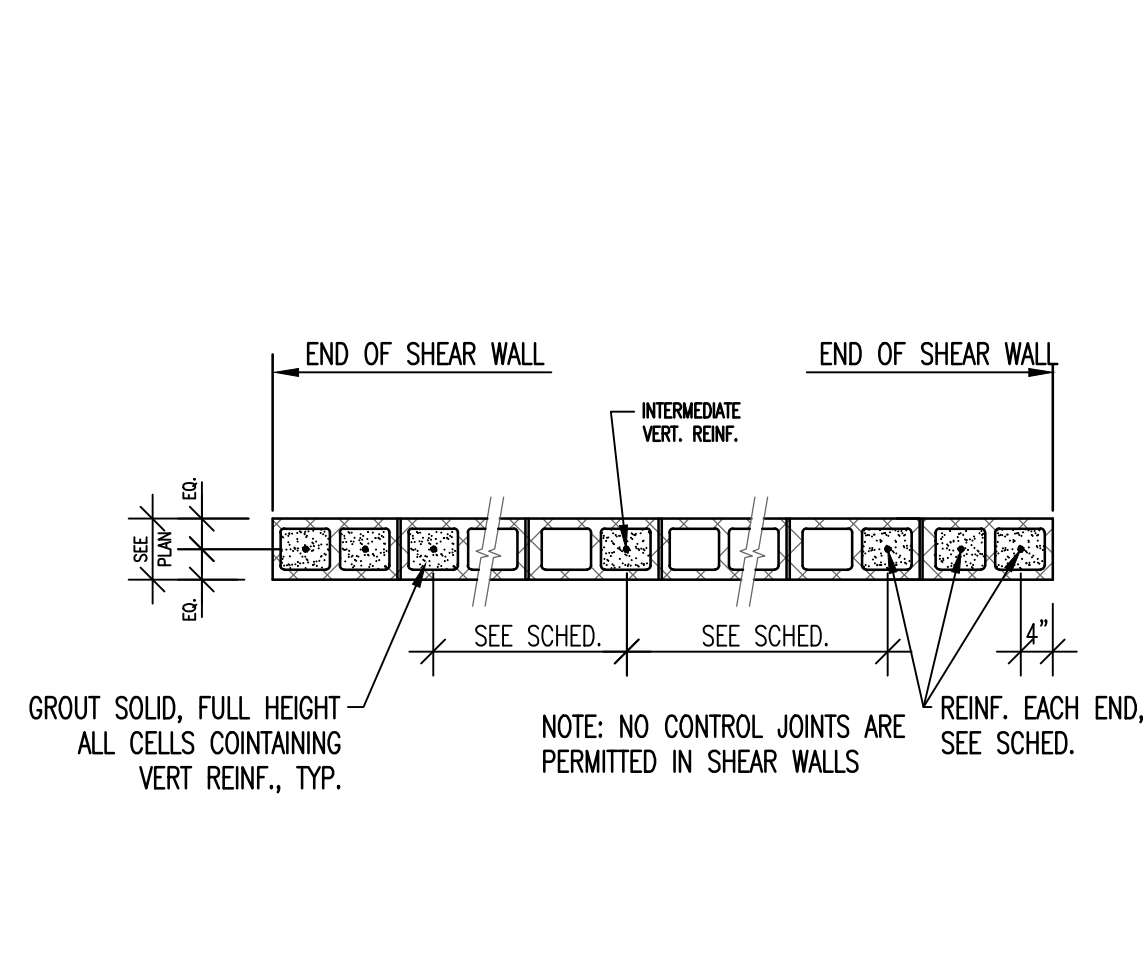
**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
100 DONA AVENUE, PENNS GROVE, NEW JERSEY 08060  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08060

REVISIONS
a.
b.
c.

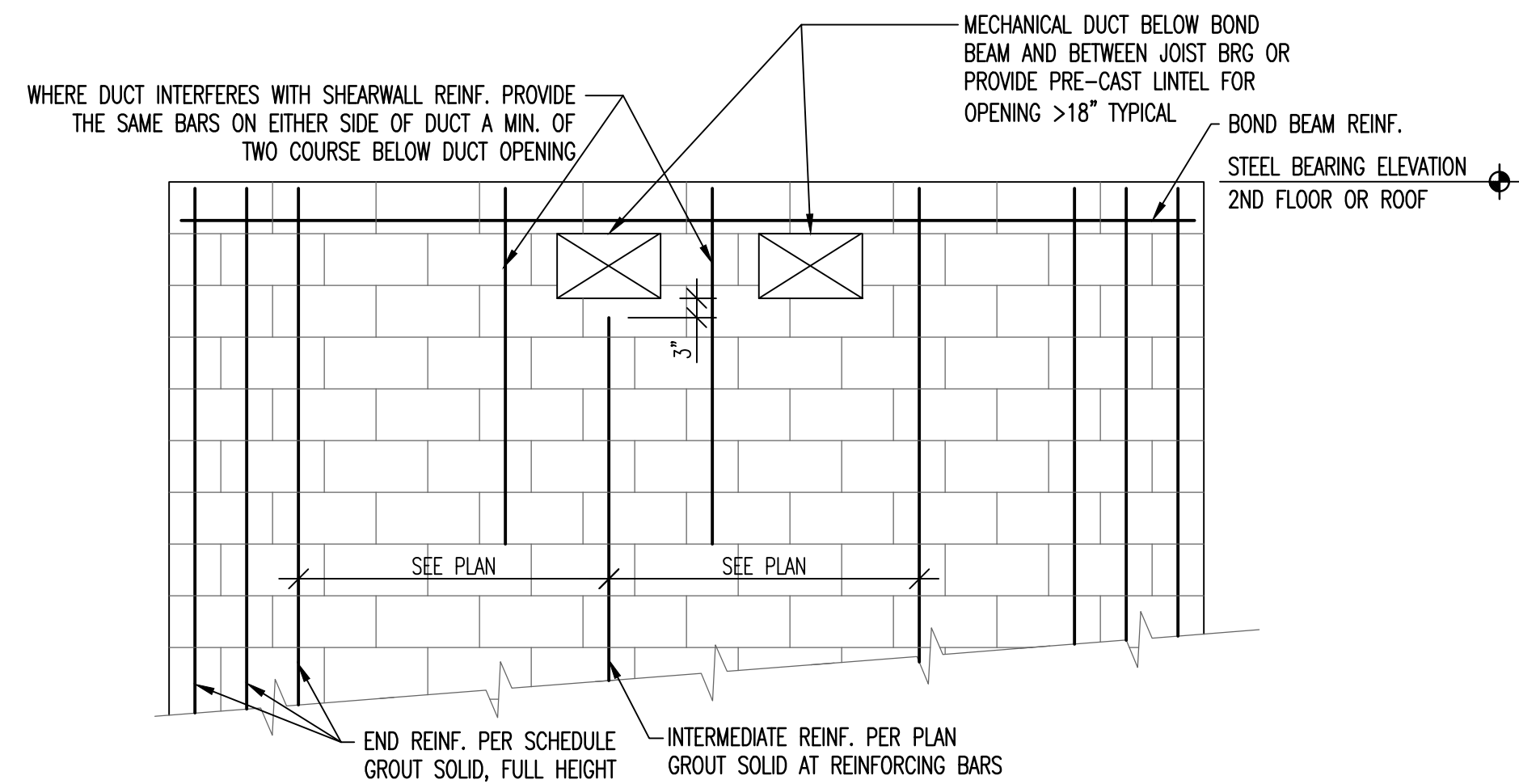
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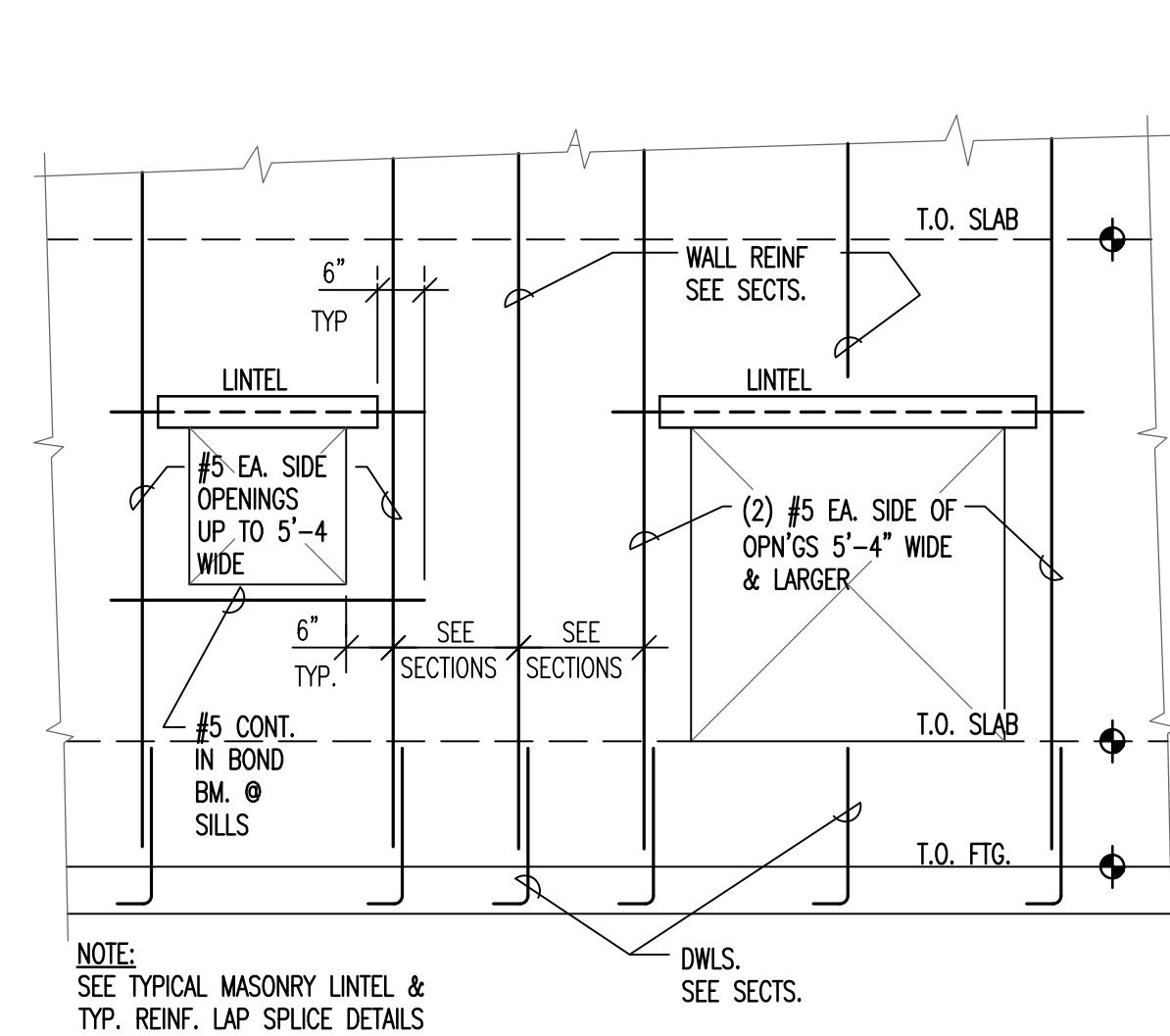




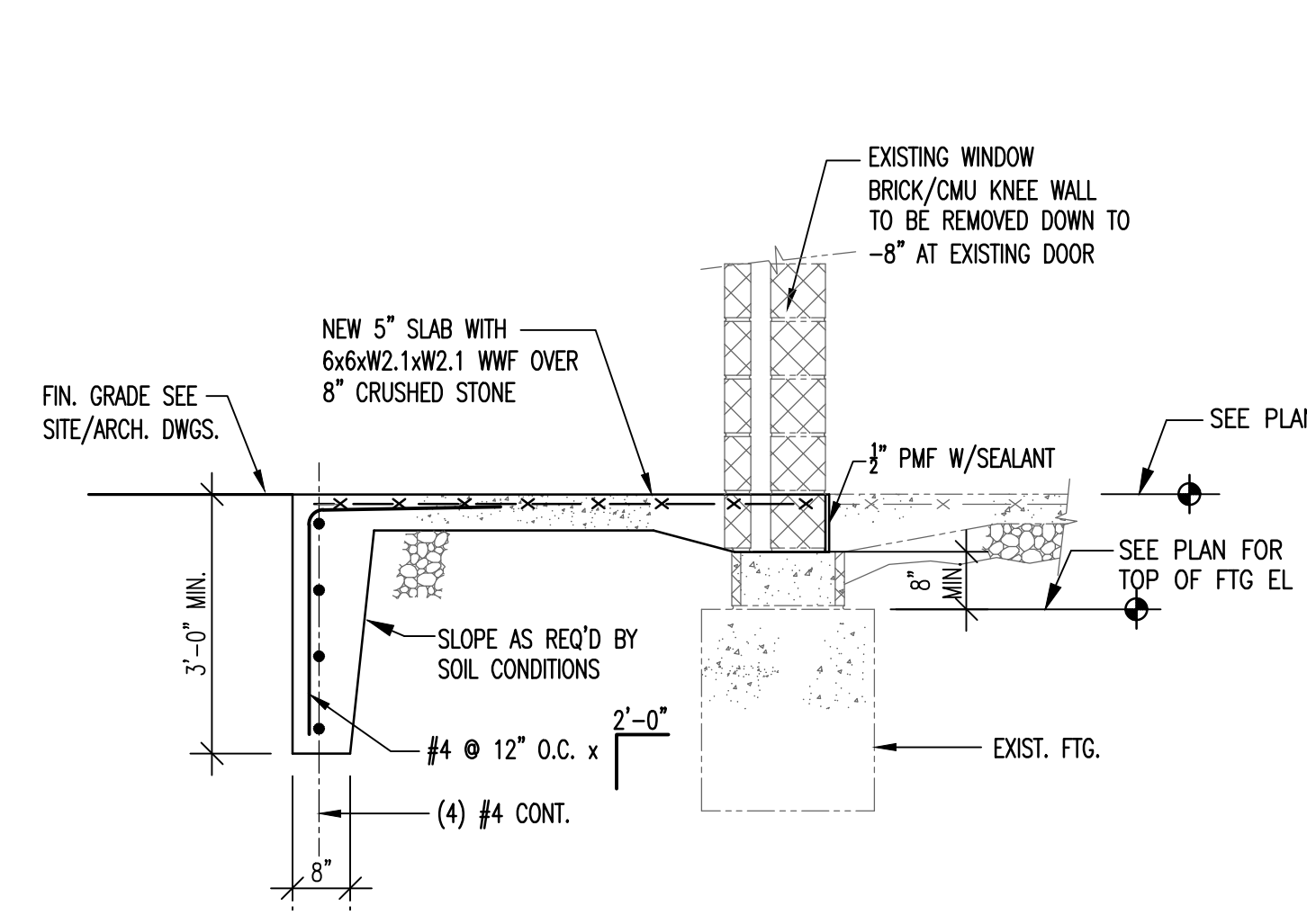
1 SHEARWALL DETAIL  
1/2" = 1'-0"



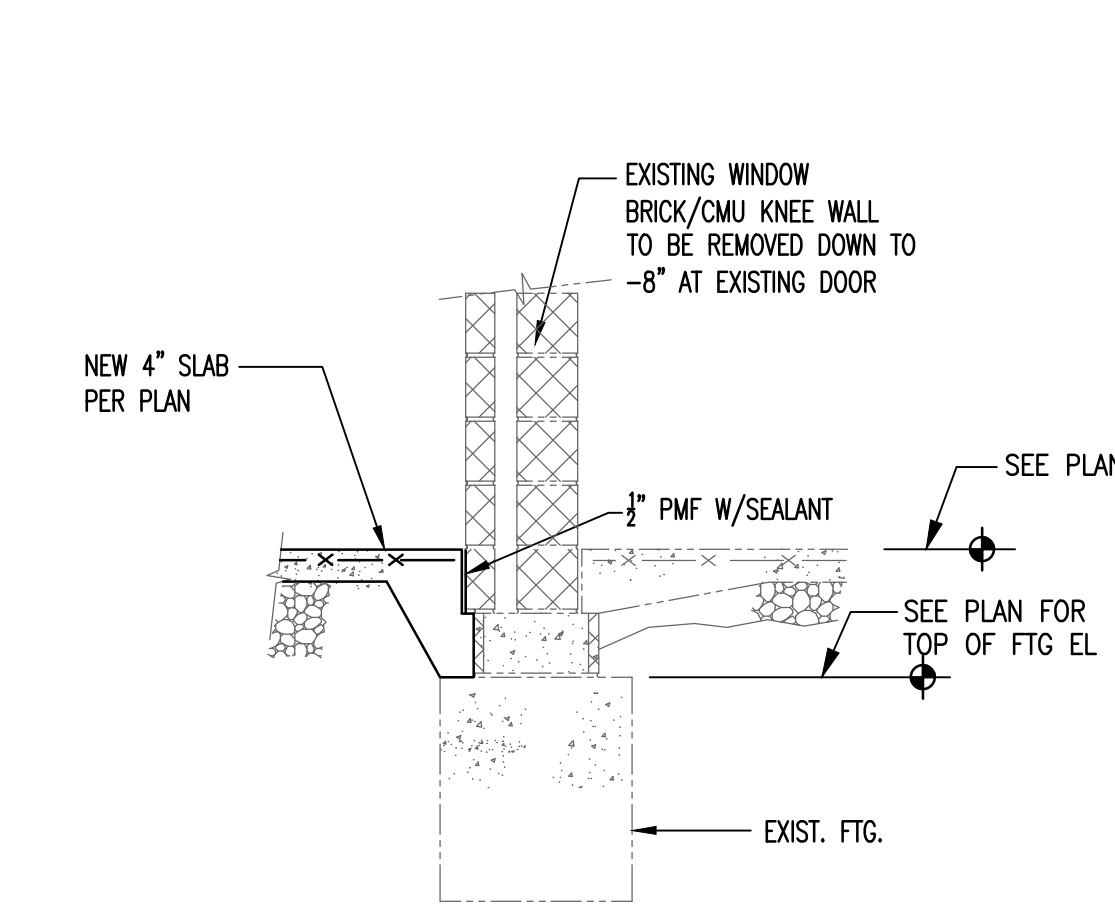
2 SHEARWALL REINF. ELEVATION  
1/2" = 1'-0"



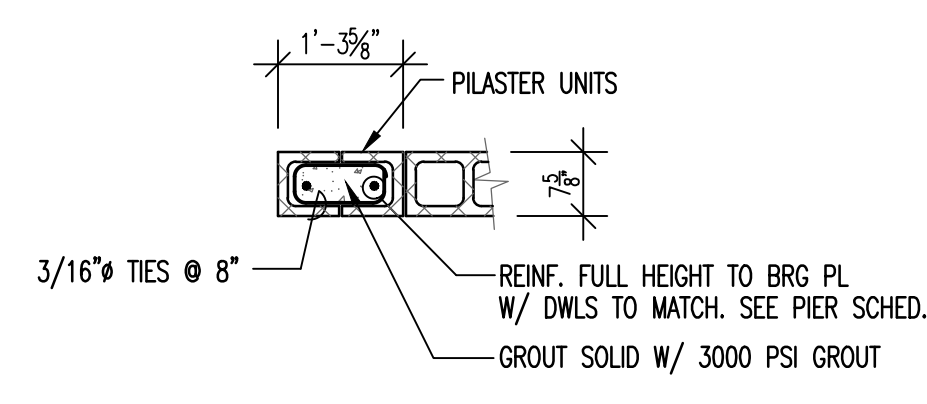
3 REINFORCING AT MASONRY WALL OPENINGS  
1/2" = 1'-0"



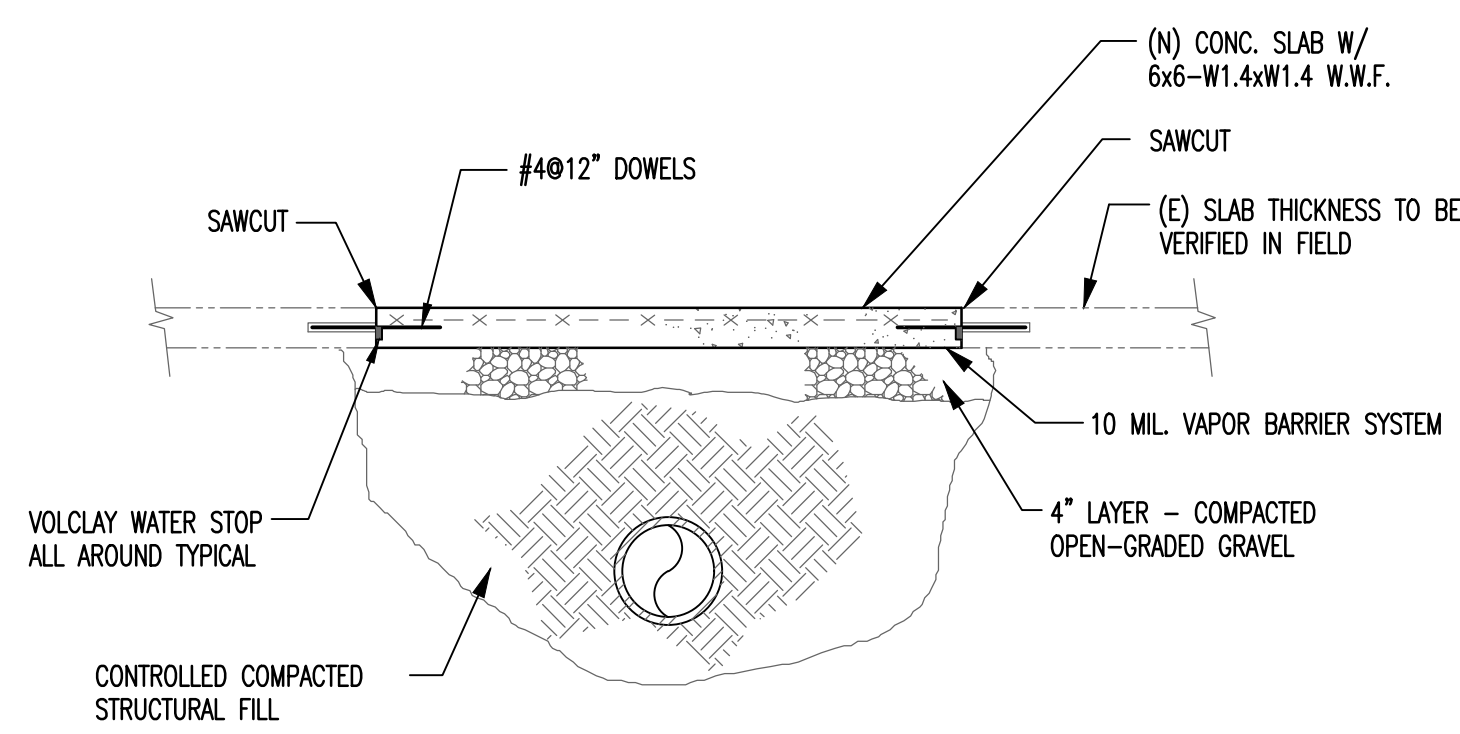
4 SECTION  
1/2" = 1'-0"



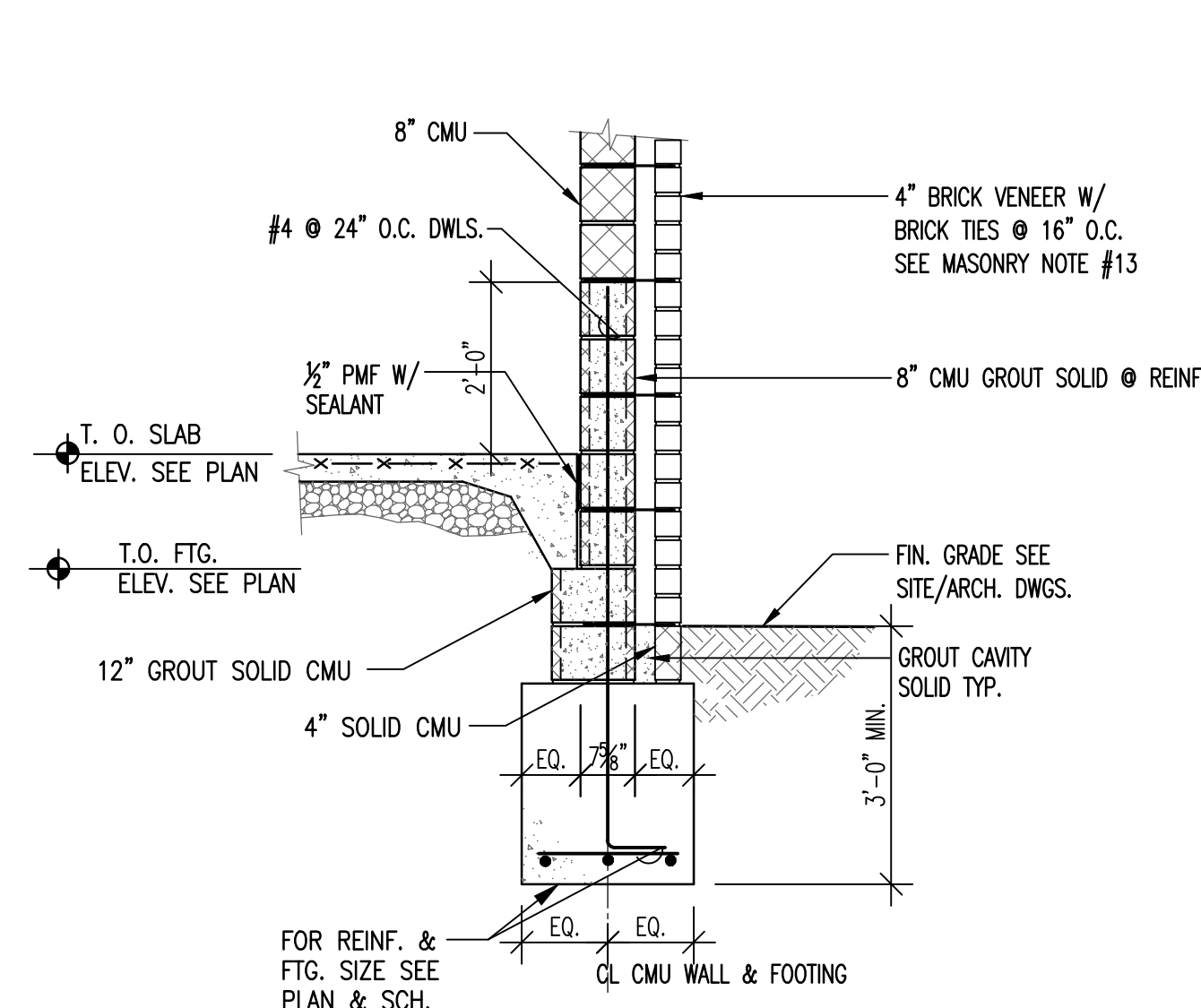
5 SECTION  
1/2" = 1'-0"



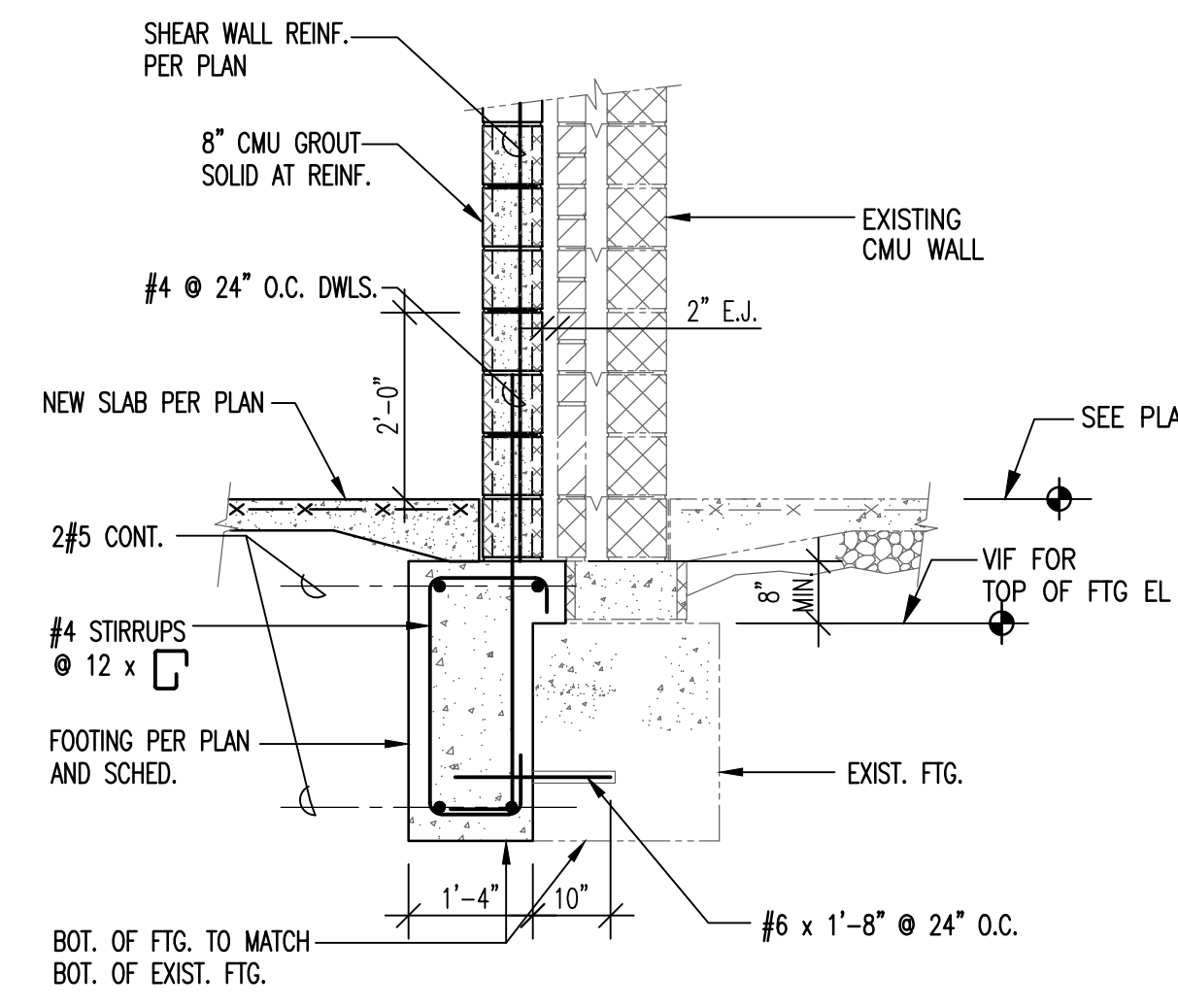
6 PIER PLAN  
N.T.S.



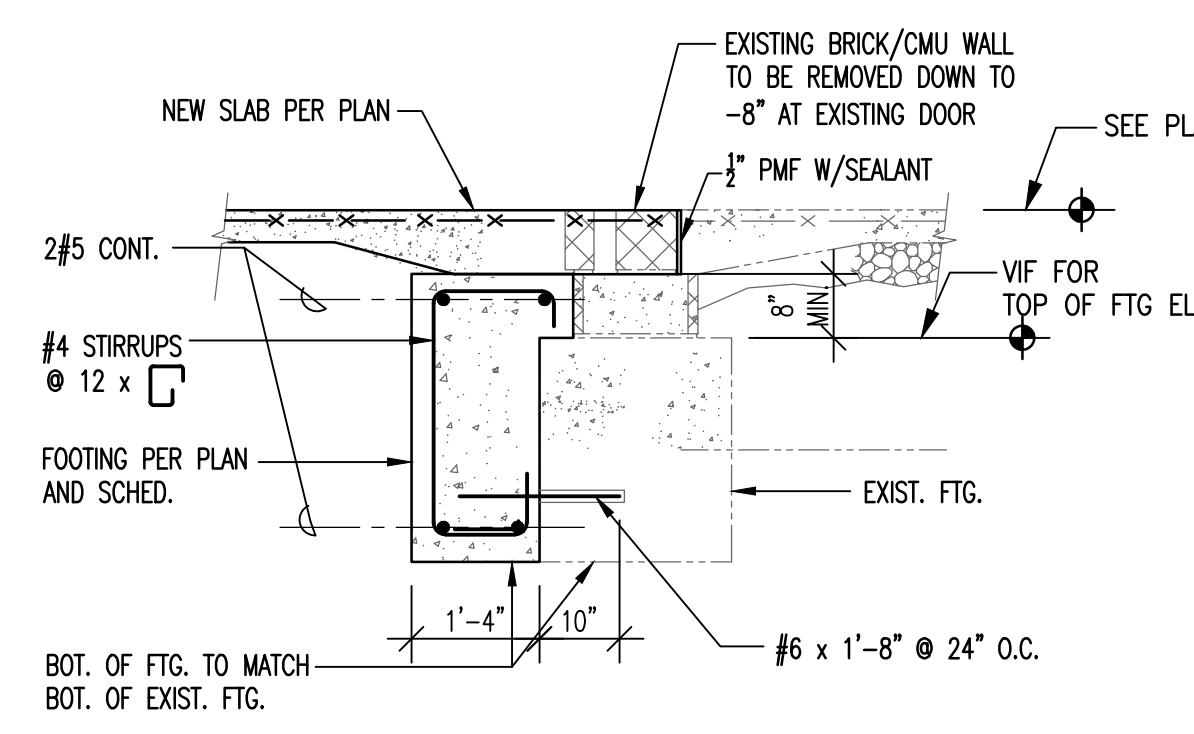
7 TYPICAL SLAB REPLACEMENT DETAIL AT UTILITY TRENCH  
1/2" = 1'-0"



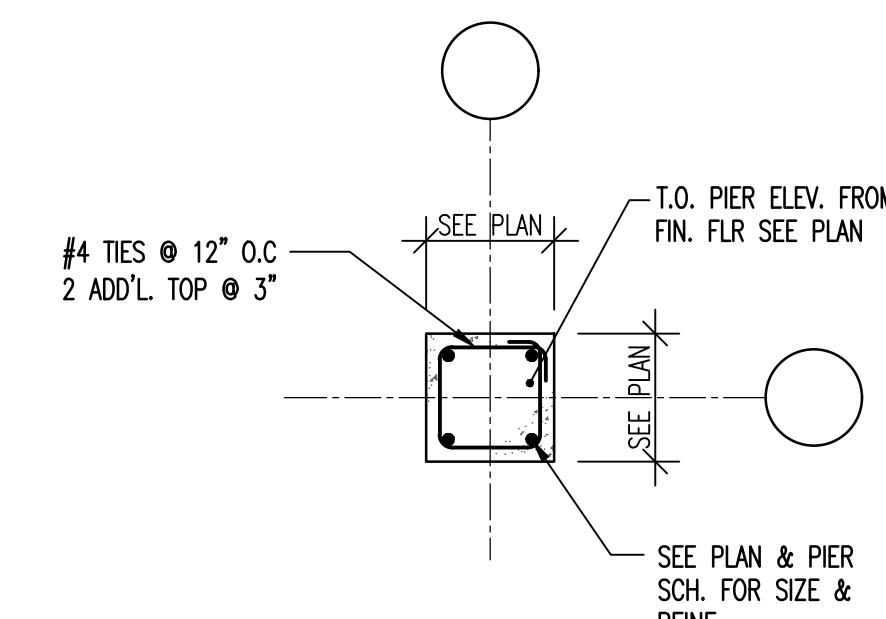
8 SECTION  
1/2" = 1'-0"



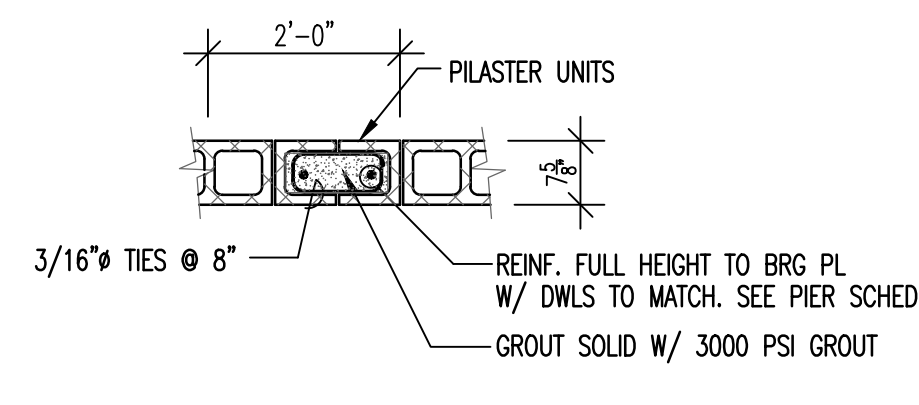
9 SECTION  
1/2" = 1'-0"



10 SECTION  
1/2" = 1'-0"



11 PIER PLAN  
N.T.S.



P2

REVISIONS	
a.	
b.	
c.	

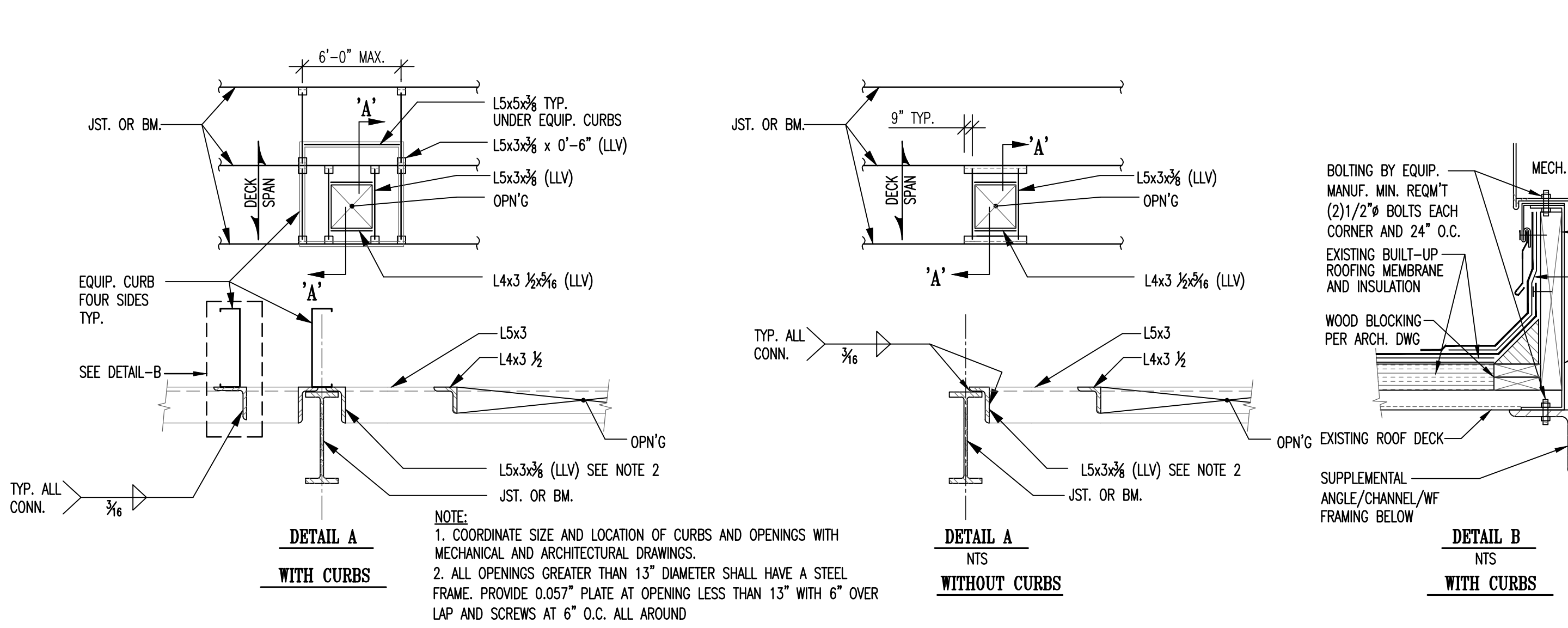
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	340.1024	KEVIN R. ORNDORF

Project No. 23-42  
Date: 11-11-24  
Scale:

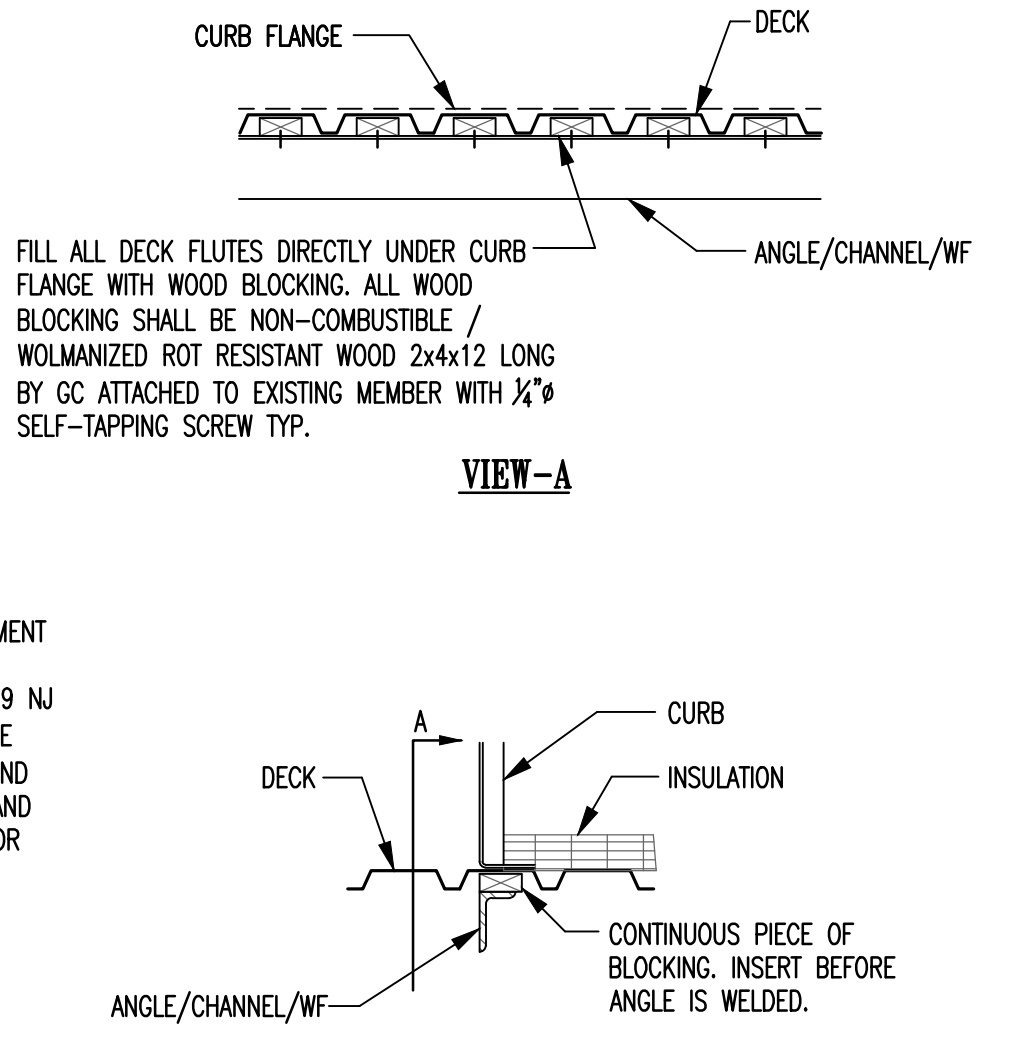
**FOUNDATION SECTIONS AND DETAILS**  
**S-4**





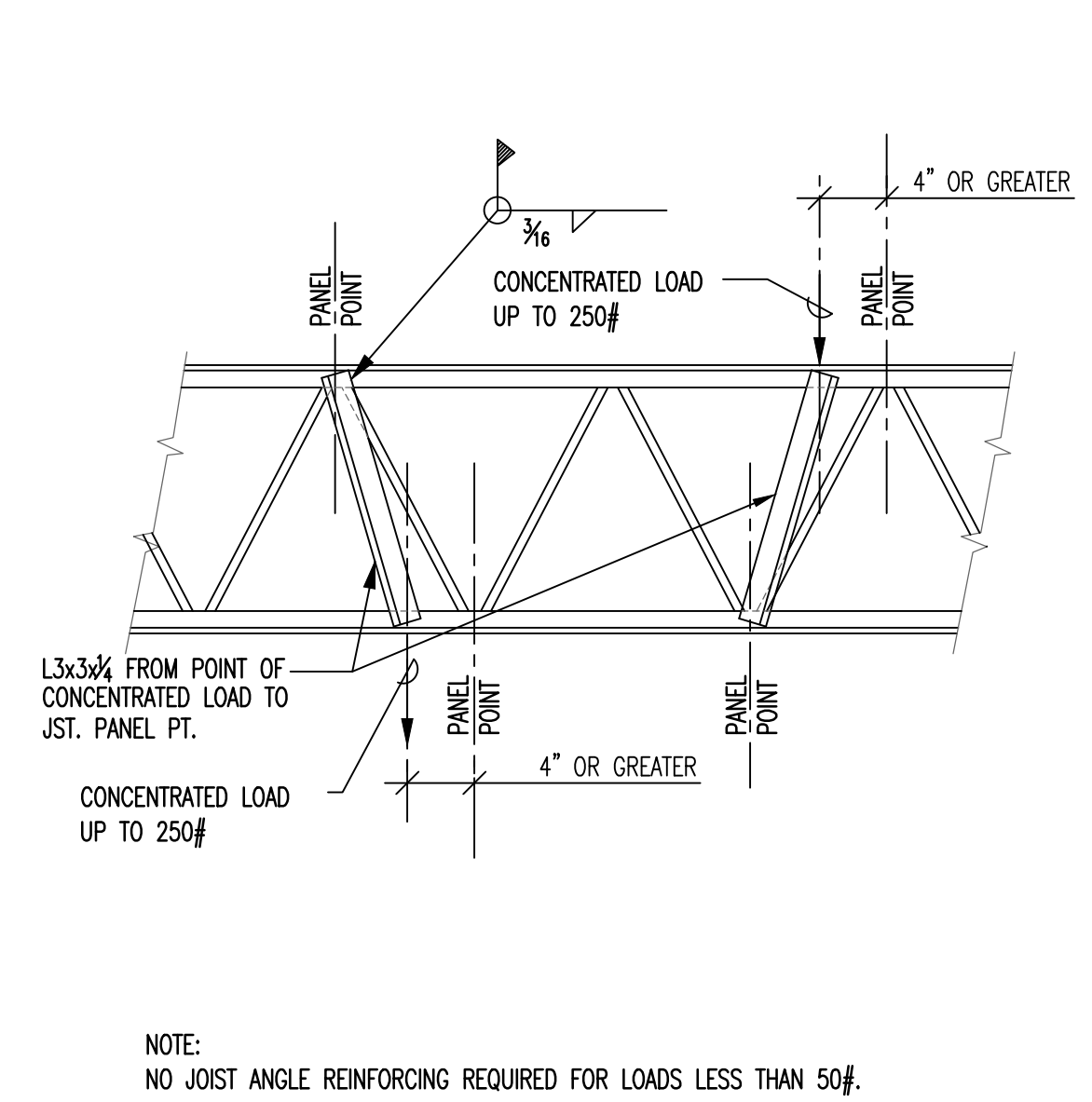
TYPICAL FRAMING AT ROOF EQUIPMENT OPENINGS

1 S-5



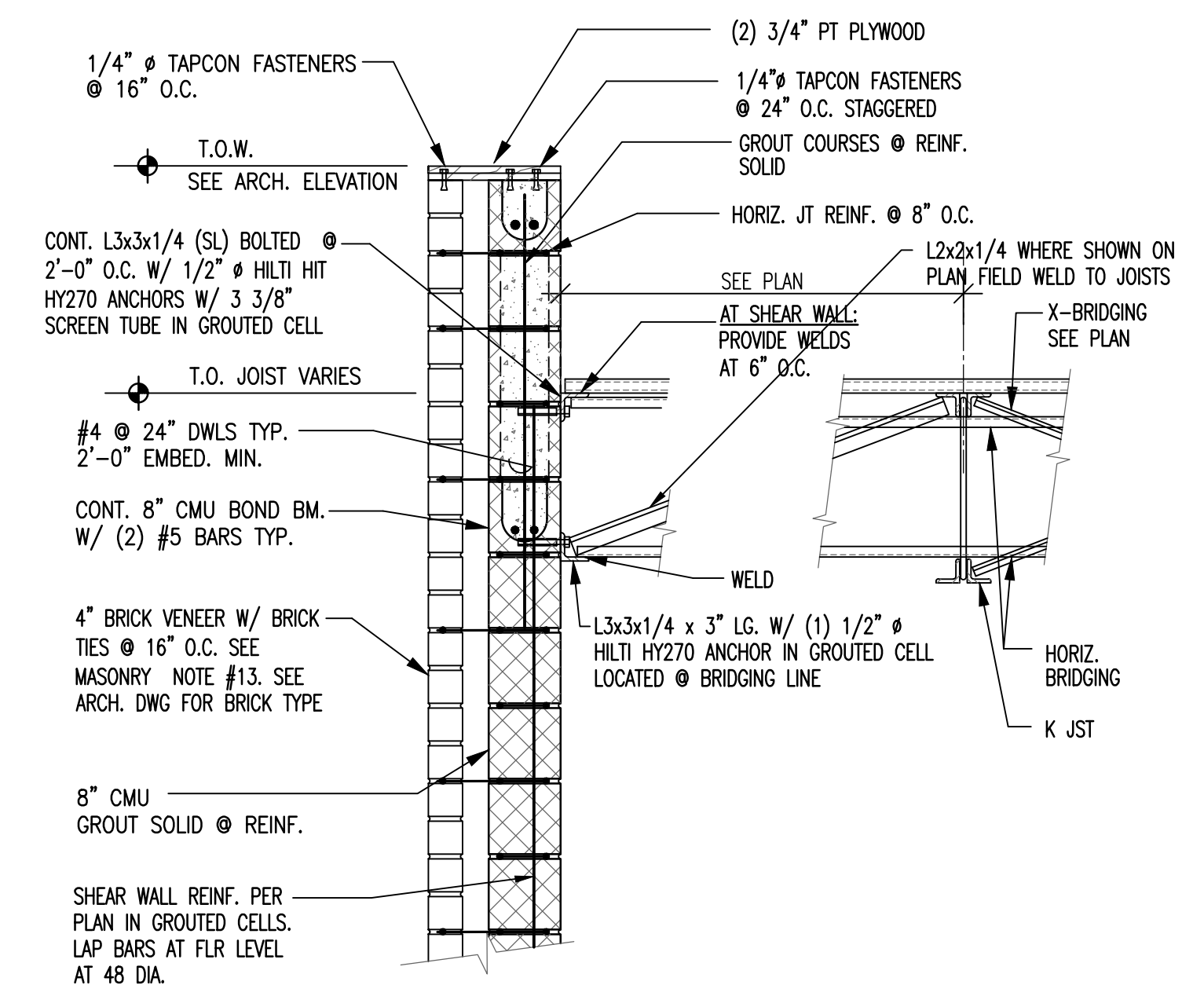
SECTION @ CURB SUPPORT ANGLE

2 S-5



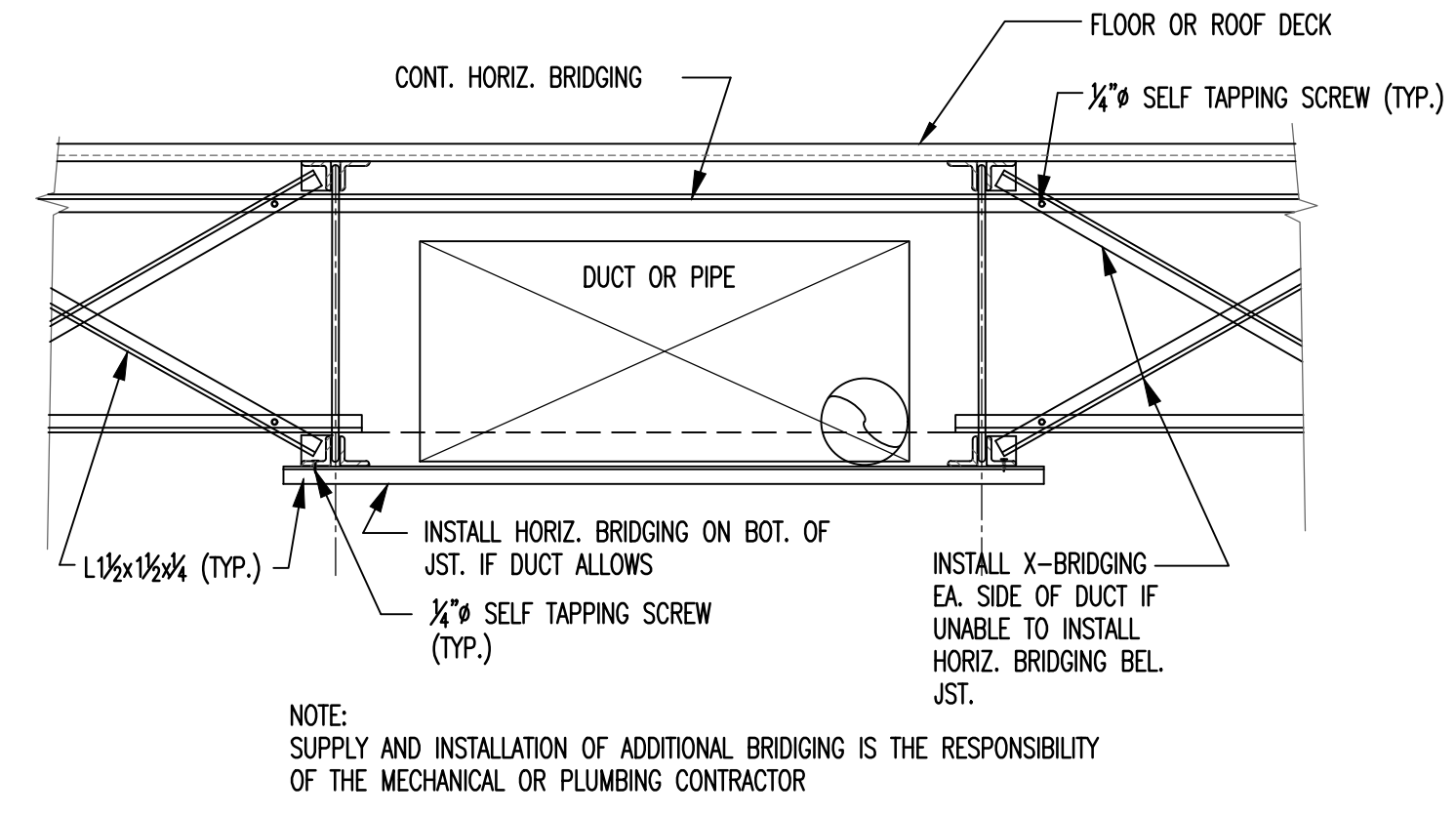
POINT LOAD JOIST REINFORCING

3 S-5



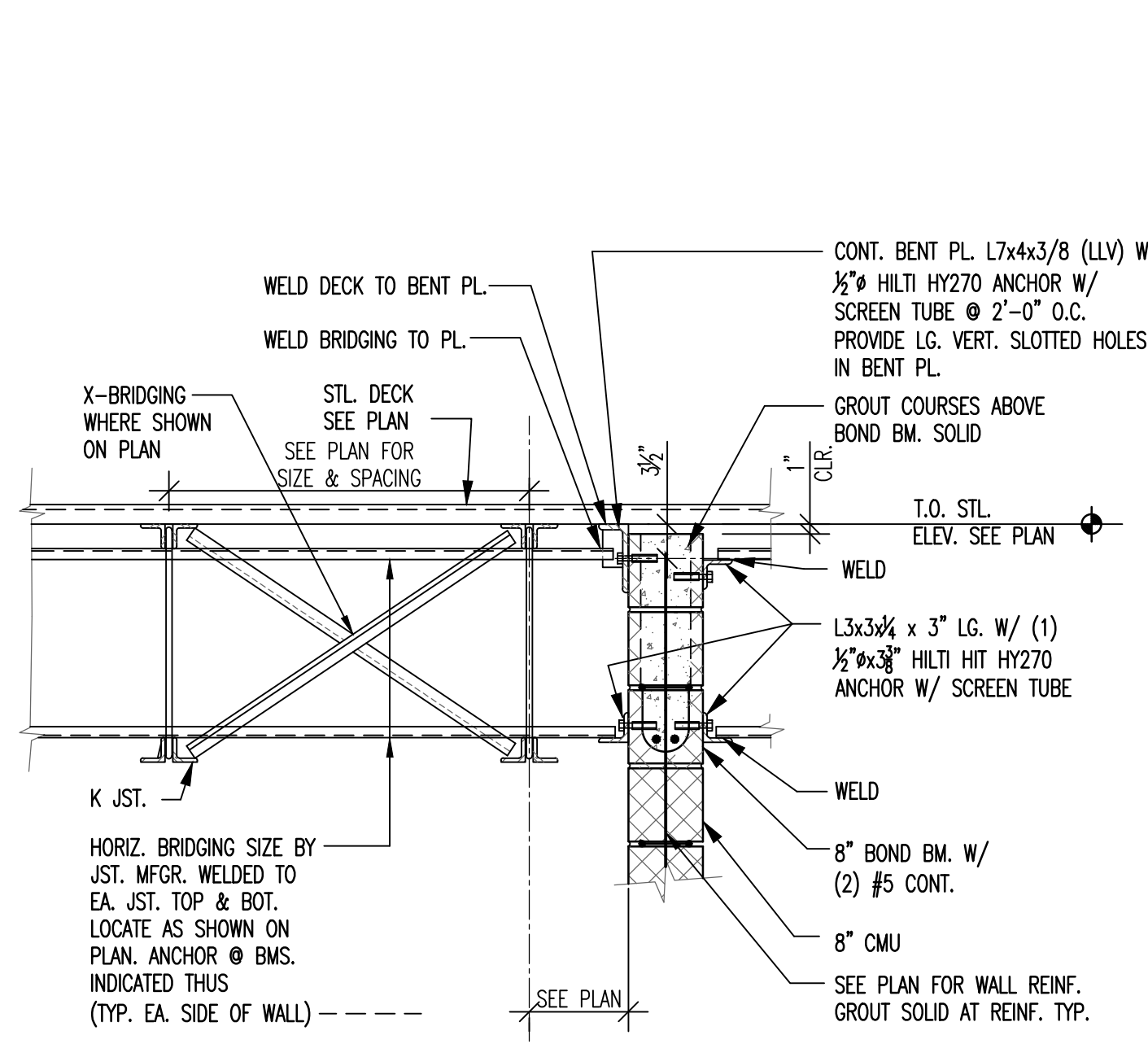
TYPICAL DETAIL JOIST BRIDGING ANCHORAGE TO WALL - K-SERIES

4 S-5



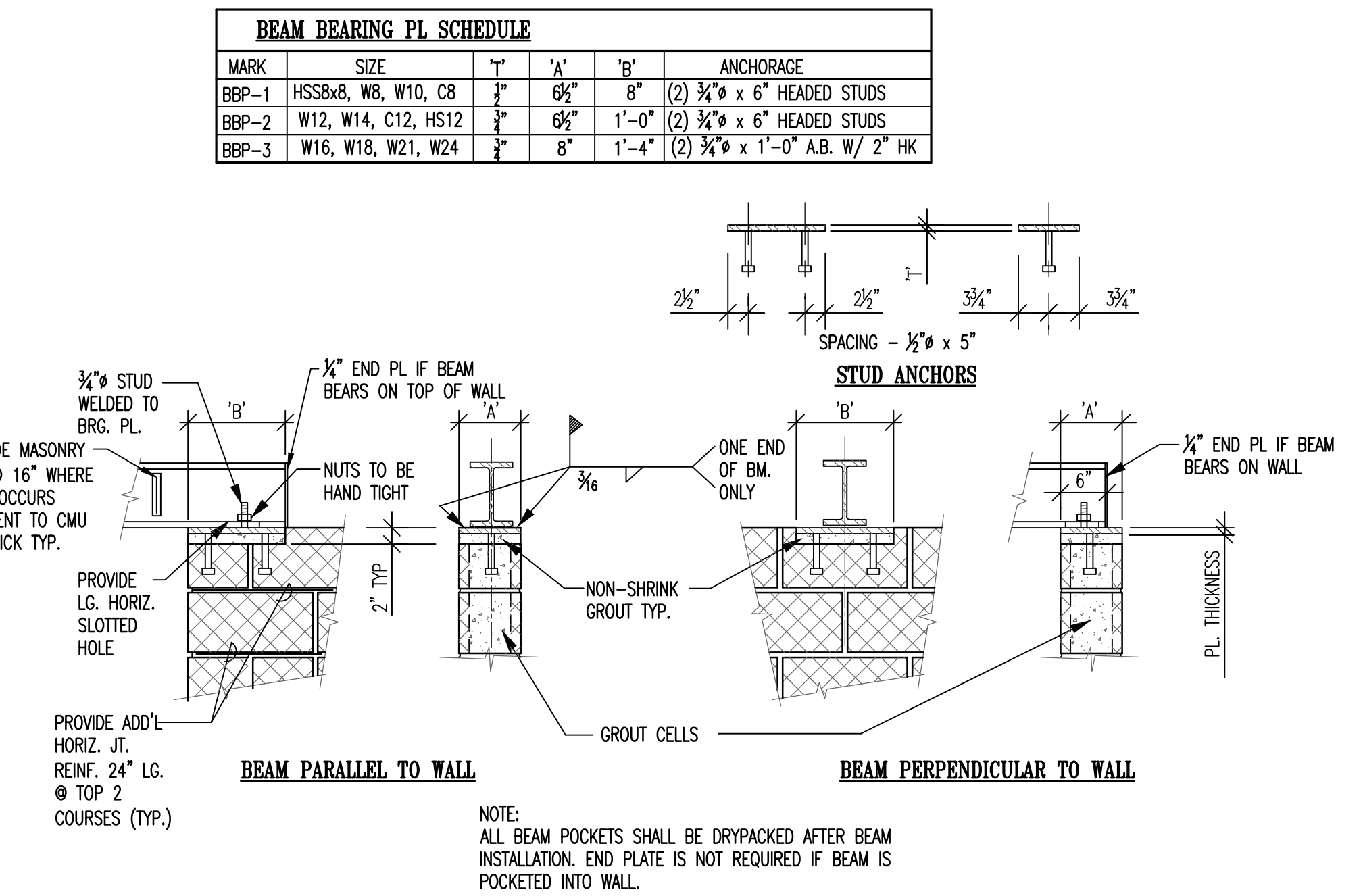
TYPICAL DETAIL AT DUCT INTERFERENCE WITH HORIZONTAL BRIDGING

5 S-5



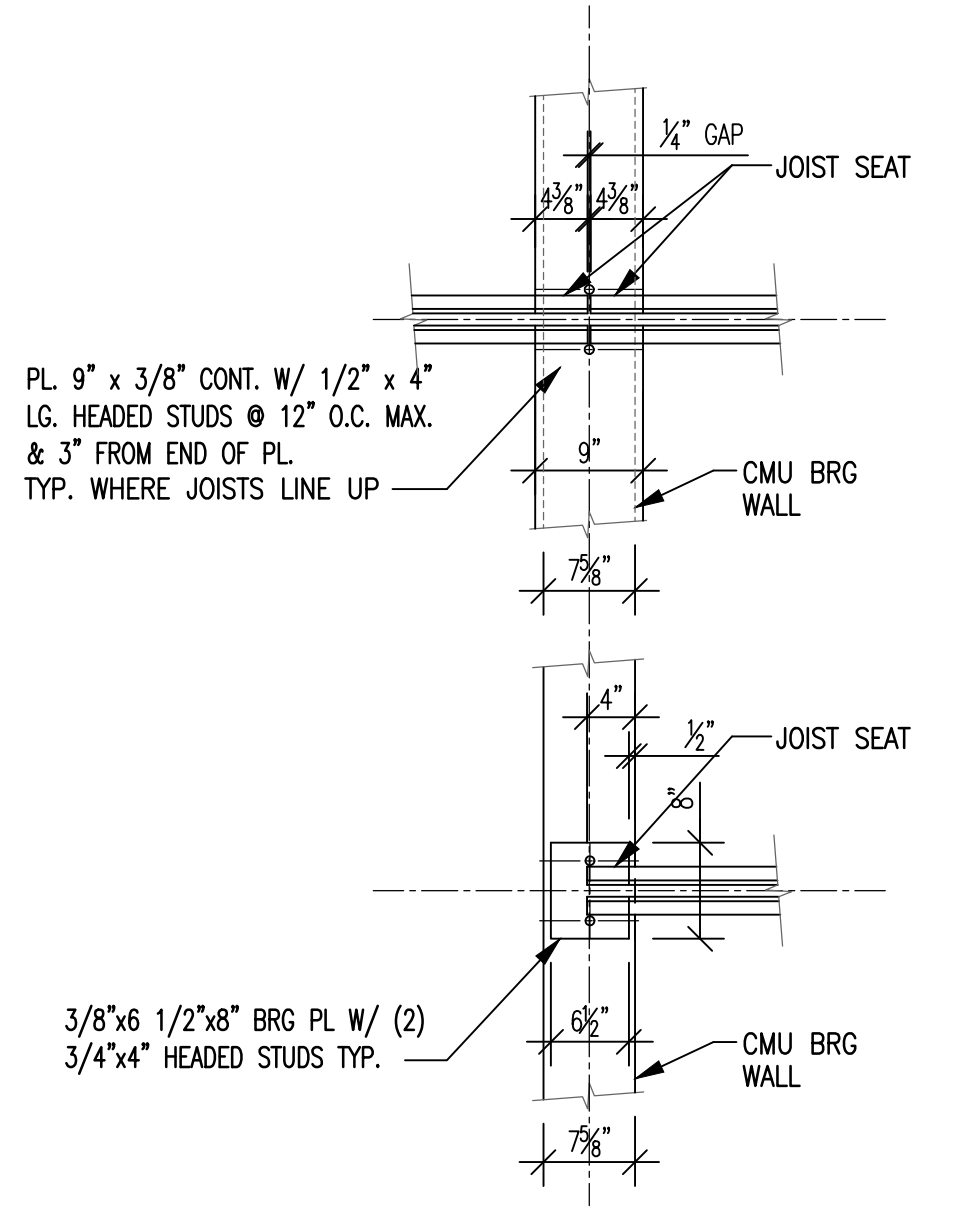
K-JOIST PARALLEL TO WALL

6 S-5



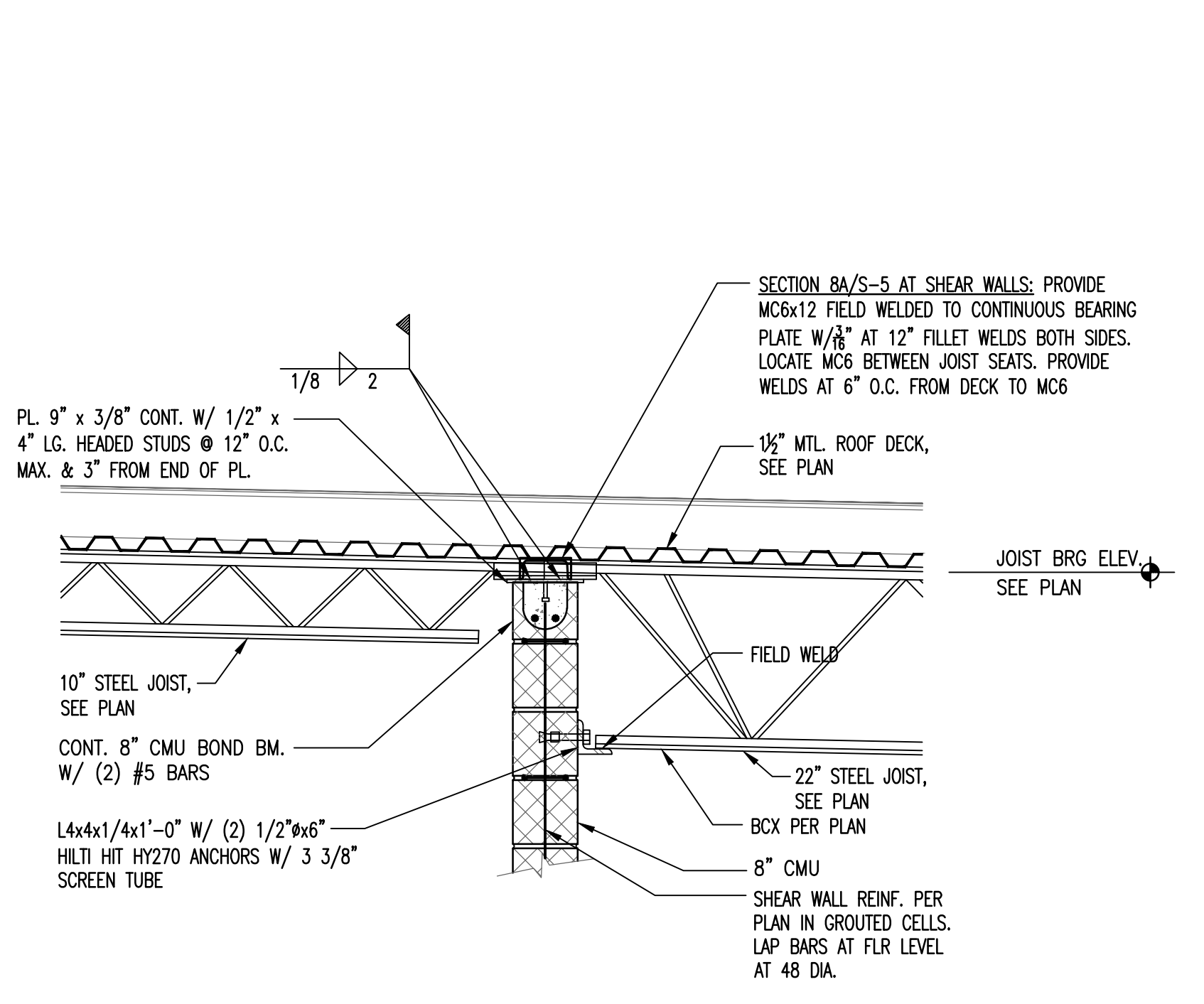
STEEL BEAM CMU WALL BEARING DETAILS

6A S-5



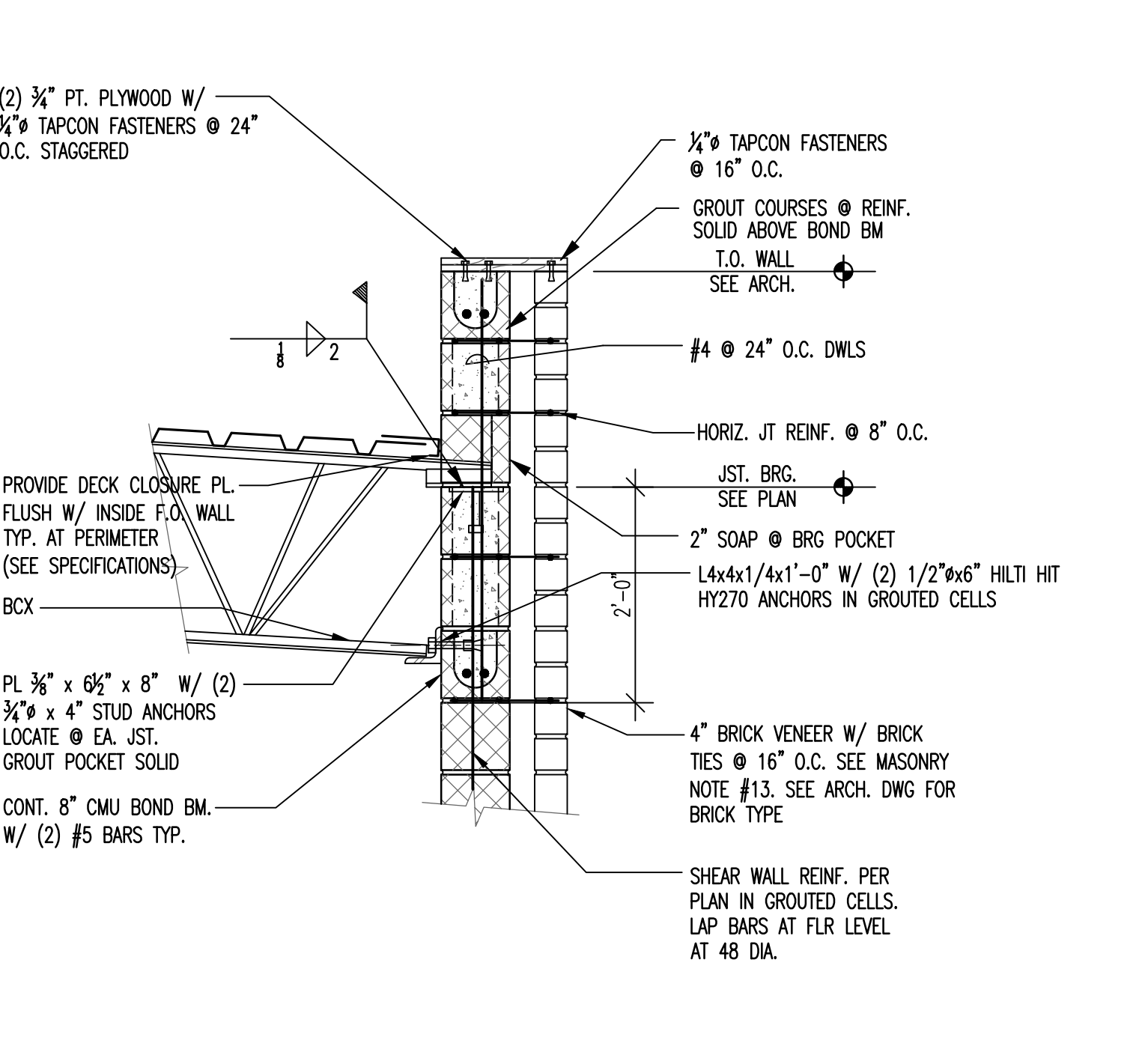
JOIST BEARING PLATE PLAN

7 S-5



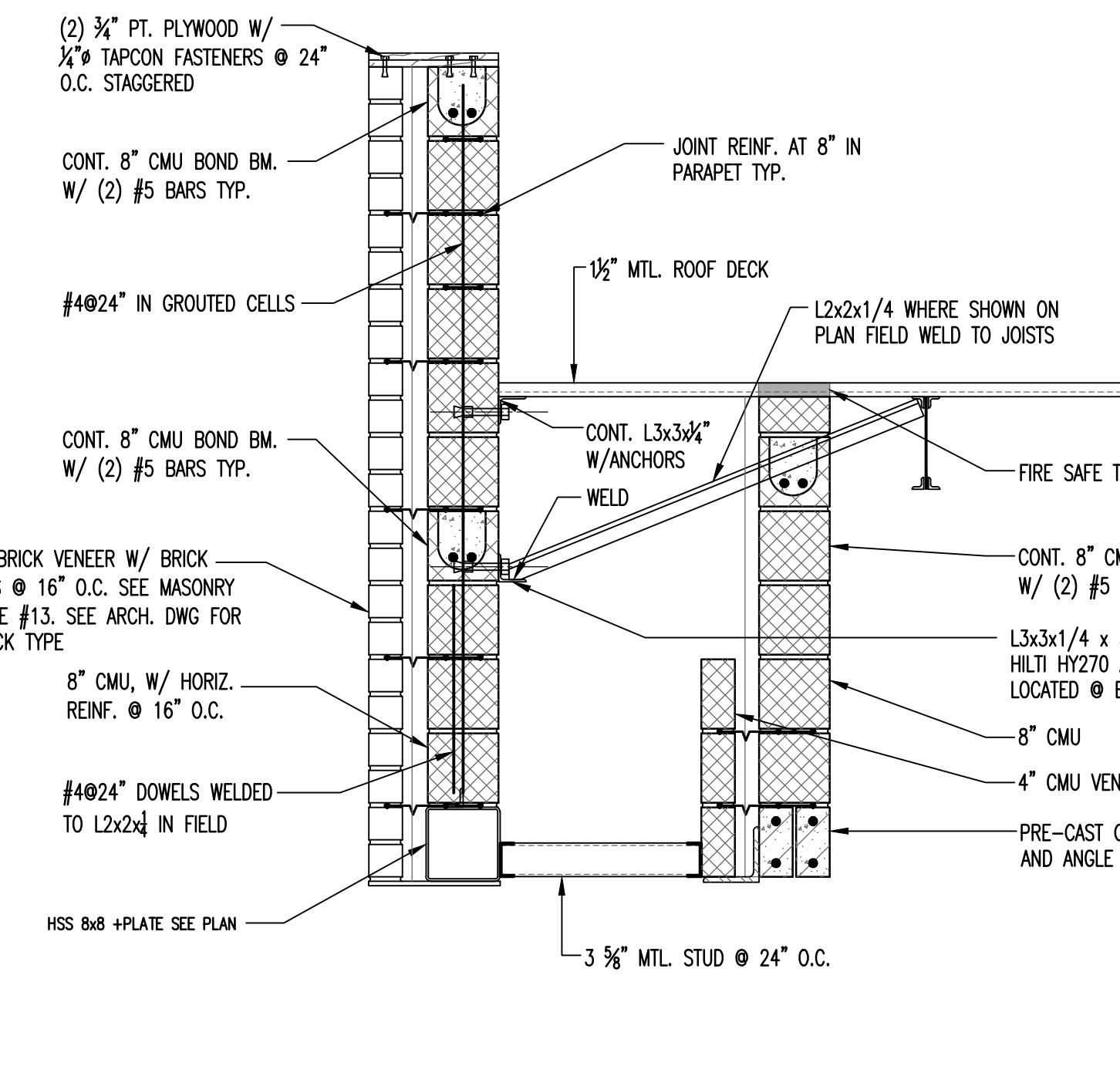
SECTION 8 & 8A

8 S-5



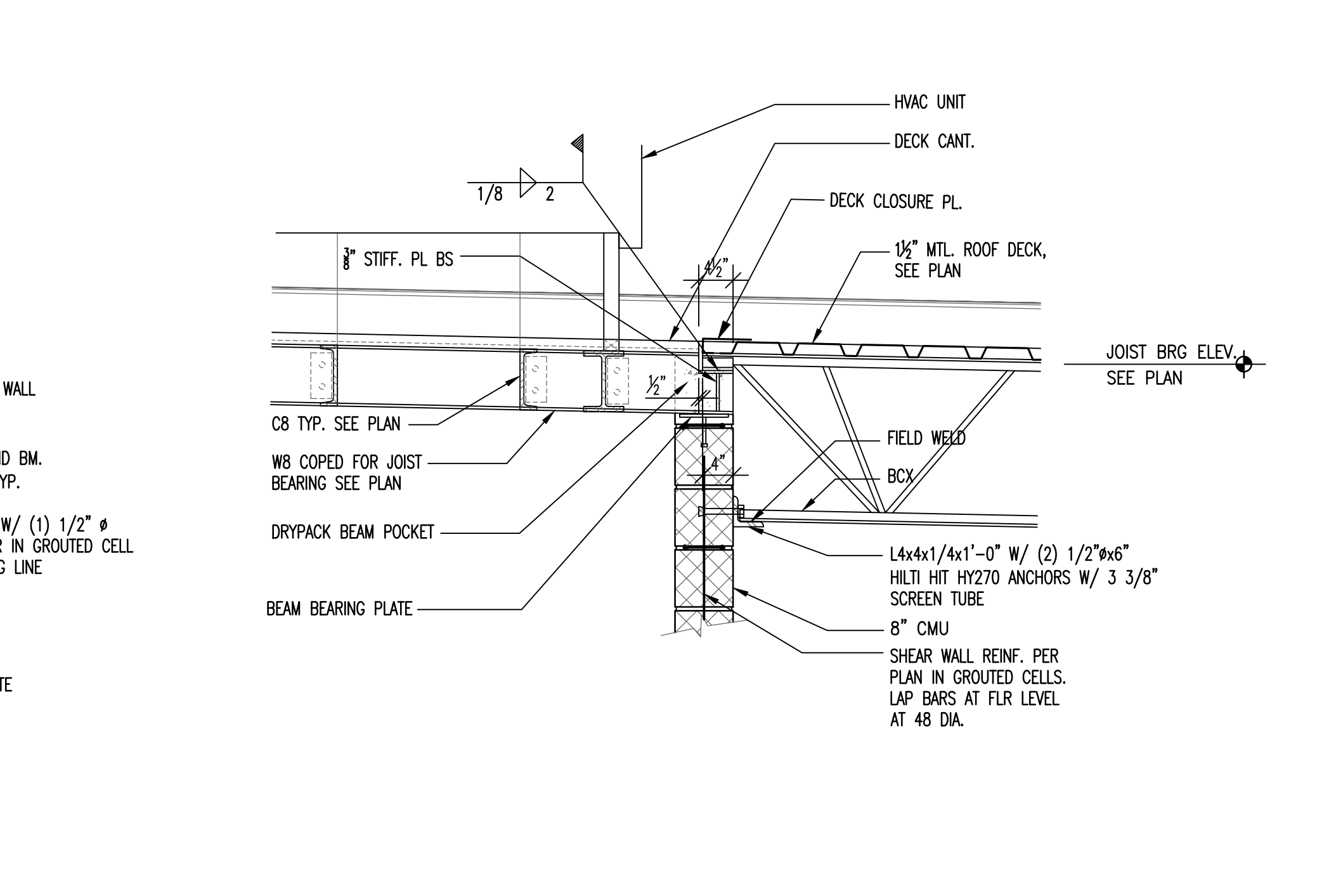
SECTION 9

9 S-5



SECTION 10

10 S-5



SECTION 11

11 S-5

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N.J.P.E. # 0E36372  
 N.A.CERT. OF AUTH. #246427960500  
 KEVIN R. ORNDORF

Project No. 23-42  
 Date: 11-11-24  
 Scale:  
**FRAMING SECTIONS & DETAILS**  
**S-5**

**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
 100 DONA AVENUE, PENNS GROVE, NEW JERSEY 08060  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
 261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08060

**GARRISON ARCHITECTS**  
 713 CREEK ROAD, BELLMAWR, NEW JERSEY 08011 (609) 398-0200

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB, AND THIS OFFICE MUST BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN IN THESE DRAWINGS. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.

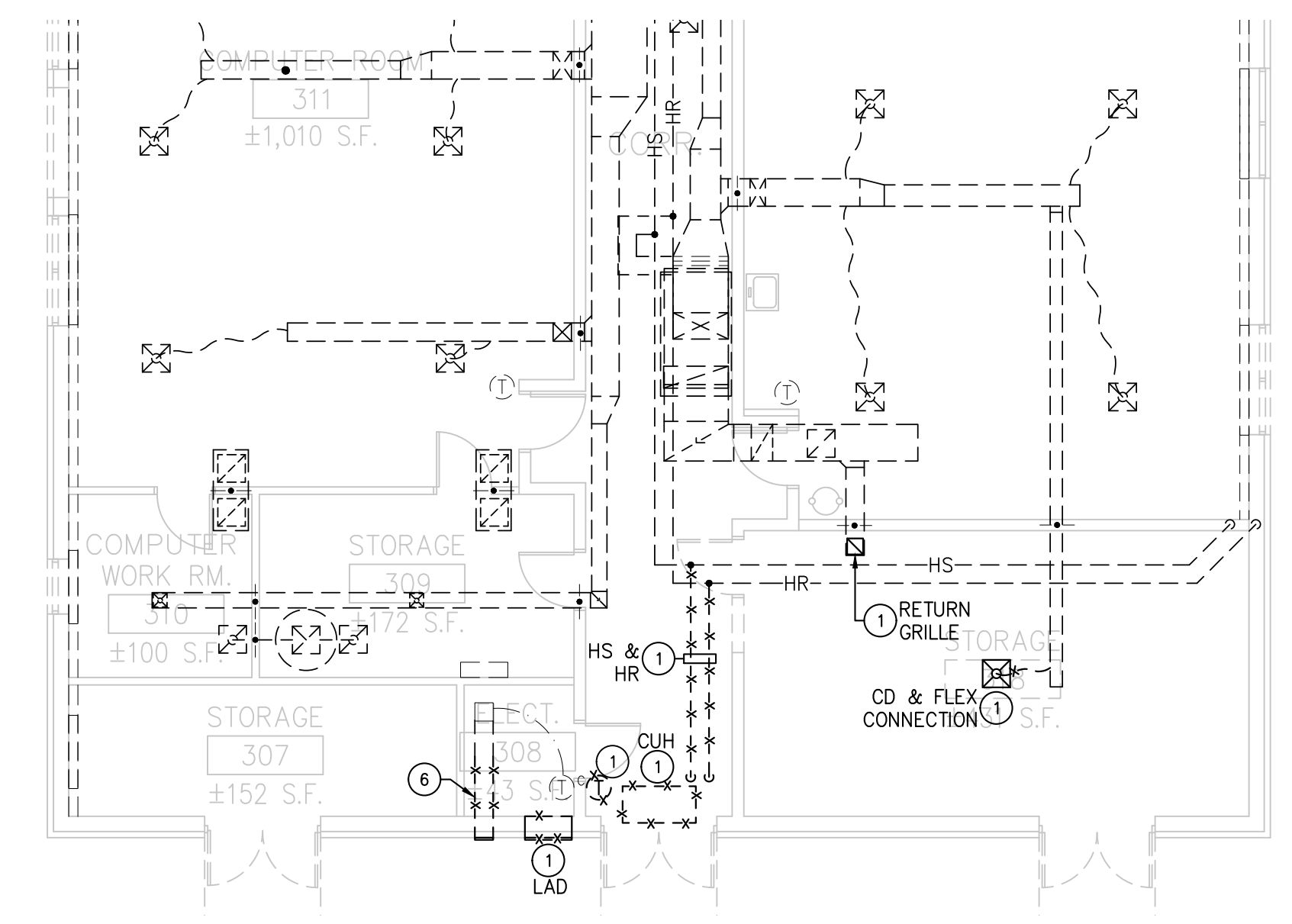






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ALL WORK NEW U.N.O.  
ALL WORK BASE BID U.N.O.

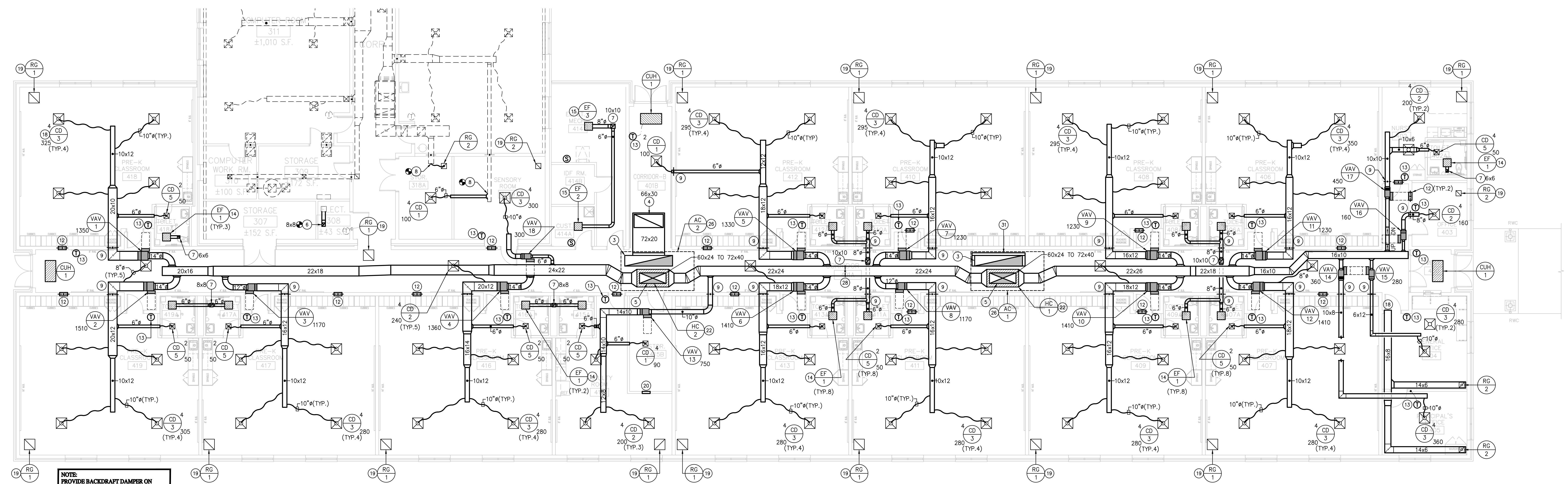


**1 MECHANICAL DEMOLITION FIRST FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

**NOTE:**  
ALL EXISTING EQUIPMENT, DUCT, PIPING  
& APPURTENANCES ARE EXISTING TO  
REMAIN UNLESS NOTED OTHERWISE.

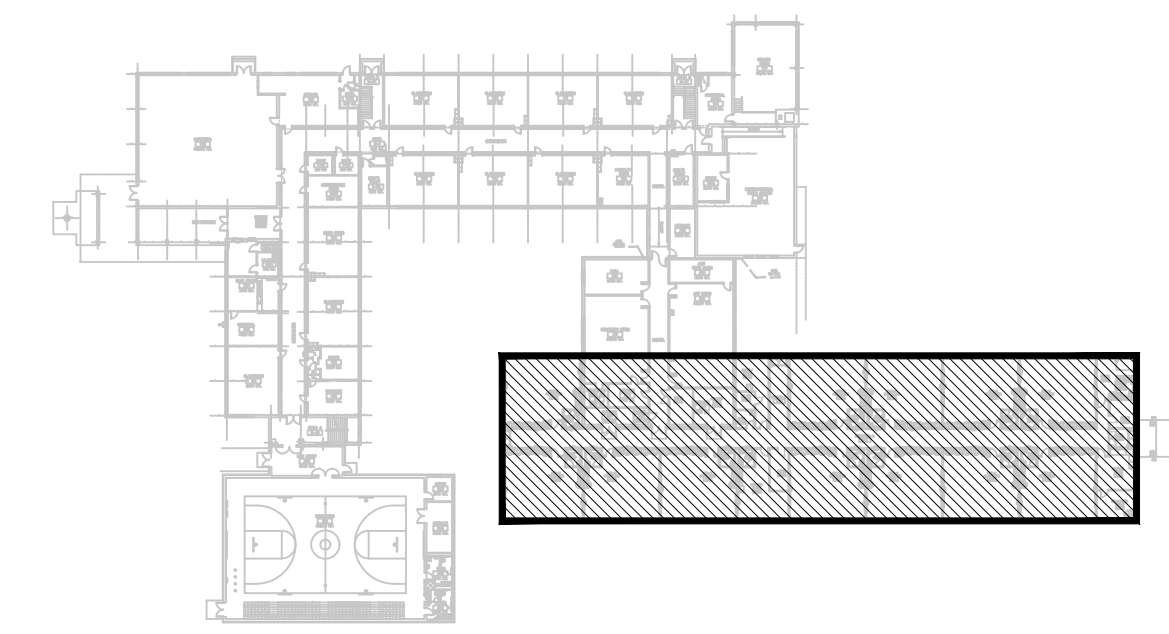
**MECHANICAL NOTES**

- EXISTING TO BE REMOVED (ITEM AS INDICATED). REMOVE ALL SUPPORTS, APPURTENANCES, PIPE AND CONTROLS. REMOVE ALL PIPE TO POINT OF CONNECTION TO MAIN AND CAP MAIN OR TO BEHIND FINISHED SURFACES. PATCH AND RESTORE ALL EXISTING SURFACES TO MATCH EXISTING. VERIFY ALL CONDITIONS IN FIELD. ITEM AS INDICATED.
- RETURN AIR DUCT UP THRU ROOF TO UNIT ON ROOF. DUCT FULL SIZE OF UNIT OPENING. PROVIDE 6" FLEXIBLE CONNECTION.
- PROVIDE 5' OF RETURN AIR DUCT ACOUSTICALLY LINED WITH OPENING ON TOP OF DUCT, SIZE AS INDICATED. OPENING SHALL HAVE SCREEN, DIRECTLY ABOVE OPENING, PROVIDE 1" THICK, 5# DENSITY ACOUSTICAL INSULATION. EXTEND 12" BEYOND OPENING ON ALL SIDES.
- SUPPLY AIR DUCT UP THRU ROOF TO UNIT ON ROOF WITH 6" FLEXIBLE CONNECTION. DUCT FULL SIZE OF UNIT OPENING.
- REMOVE EXISTING DUCT AND WALL CAP W/ ASSOCIATED EXISTING EXHAUST FAN. PATCH WALL TO MATCH EXISTING. PROVIDE NEW DUCT CONNECTED TO EXISTING FAN DISCHARGE AND ROUTE UP THRU EXISTING ROOF TO NEW GOOSENECK. PROVIDE NEW BACKDRAFT DAMPER IN DUCT. DUCT SIZE AS INDICATED. EXISTING FAN CONTROLS TO REMAIN.
- DUCT UP THRU ROOF TO GOOSENECK ON ROOF. SIZE AS INDICATED.
- CONNECT NEW DUCT TO EXISTING DUCT. REPAIR INSULATION. VERIFY EXACT LOCATION IN FIELD.
- DUCT THRU WALL. VERIFY EXACT LOCATION OF PENETRATION IN FIELD. PROVIDE FIRE DAMPER. SEE STRUCTURAL DRAWINGS FOR LINTEL REQUIREMENTS.
- OPENING IN WALL ABOVE CEILING MINIMUM SIZE 2 SQ.FT. USE TWO 16"x8" OPENINGS UNLESS OTHERWISE INDICATED. SEE STRUCTURAL DRAWINGS FOR LINTEL REQUIREMENTS.
- NEW THERMOSTAT. VERIFY EXACT LOCATION IN FIELD. NOTE - DO NOT LOCATE BY HEAT GENERATING SOURCE, IE, COMPUTER MONITOR, ETC.
- NEW CEILING EXHAUST FAN INTERLOCK WITH LIGHT SWITCH.
- NEW CEILING EXHAUST FAN. INTERLOCK WITH 0-2 HOUR TIMER.
- DUCT OPEN TO RETURN AIR PLENUM ABOVE CEILING.
- PROVIDE ACOUSTICALLY LINED CANOPY ON TOP OF RETURN AIR GRILLE. SAME SIZE AS GRILLE (PRICE MODEL RAC) WITH ONE SIDE OPEN FACING WALL. ON WALL DIRECTLY OPPOSITE OPENING, PROVIDE 1" THICK ACOUSTICAL INSULATION 12" LARGER THAN OPENING. NOTE - OPENING MAXIMUM 18" FROM WALL.
- PROVIDE 1 SQ.FT. OPENING IN WALL ABOVE CEILING FOR TRANSFER AIR.
- VERTICAL DUCT MOUNTED HEATING COIL.
- NEW PACKAGED ROOFTOP UNIT. SEE SCHEDULE AND SPECIFICATIONS. VERIFY EXACT LOCATION WITH STRUCTURAL PLANS.
- PROVIDE LOW LEAKAGE AUTOMATIC DAMPER FOR BACKUP. NORMALLY CLOSED. SEE SPECIFICATION SECTION 15530.
- PROVIDE ACOUSTICALLY LINED RETURN DUCT. PROVIDE ACOUSTICALLY LINED ELBOW WITH ACOUSTICALLY LINED DUCT. PROVIDE TRANSITION TO 120"x24" FROM UNIT OPENING SIZE PRIOR TO ELBOW. PROVIDE OPENING AFTER ELBOW FULL SIZE OF DUCT WITH WIRE MESH SCREEN AND ACOUSTICAL INSULATION ON WALL AND ROOF DECK DIRECTLY OPPOSITE AND ABOVE OPENING, 1" THICK 5# DENSITY.



**2 MECHANICAL NEW WORK FIRST FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

**NOTE:**  
PROVIDES BACKDRAFT DAMPER ON  
DISCHARGE OF ALL EXHAUST FANS.



KEYPLAN

**REVISIONS**

a.	
b.	
c.	

Project No. 23-42  
Date:  
Scale: AS NOTED  
**MECHANICAL  
NEW WORK  
FLOOR PLAN**

**M1.1**

ISSUED FOR BID: 11/11/2024

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**MULHERN**  
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Hatboro, Pennsylvania 19040  
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Fax: (215) 293-9214

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ALL WORK BASE BID U.N.O.

**GARRISON**  
ARCHITECTS  
A Professional Corporation of Architects and Planners  
715 CHEEK ROAD, BELLMAWR, NEW JERSEY 08051 (856) 396-0200

**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
100 IOWA AVENUE PENNS GROVE, NEW JERSEY 08060  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
2025 PRE-K CLASSROOM ADDITION  
261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08066

REVISIONS

a.  
b.  
c.

Project No. 23-42  
Date:

Scale: AS NOTED

**MECHANICAL  
NEW WORK  
PIPING  
FLOOR PLAN  
M1.2**

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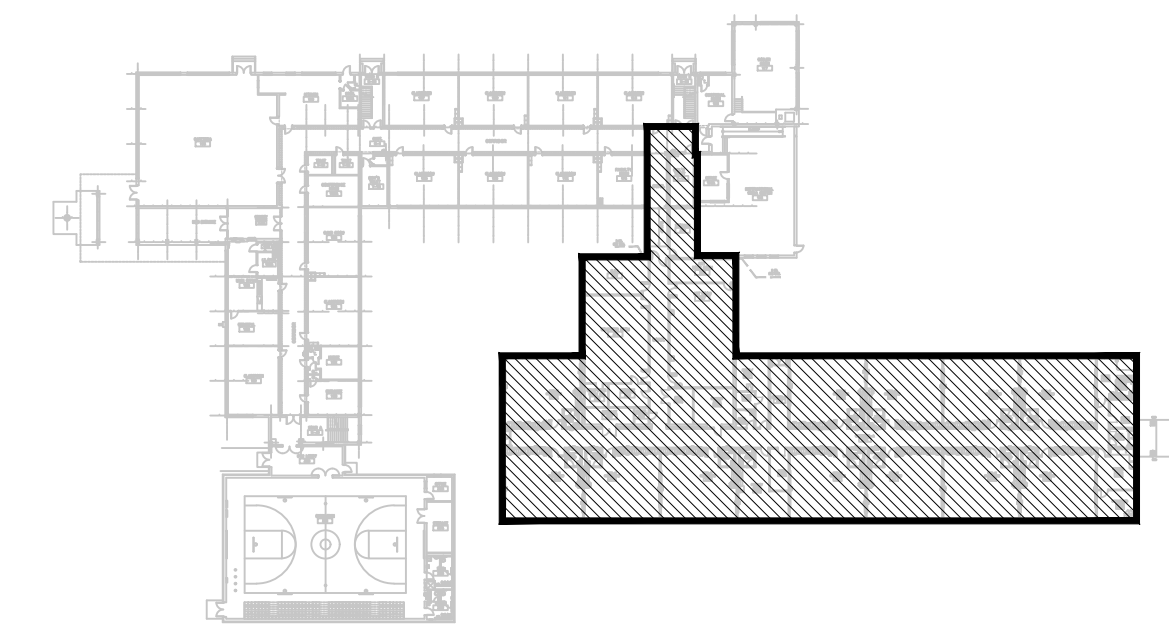
- MECHANICAL NOTES**
- NEW FIN TUBE RADIATION. PROVIDE NEW 2-WAY CONTROL VALVE.
  - NEW PIPE THRU WALL. FIRE SAFE PENETRATION PER CODE.
  - NEW THERMOSTAT. VERIFY EXACT LOCATION IN FIELD. NOTE - DO NOT LOCATE BY HEAT GENERATING SOURCE, IE, COMPUTER MONITOR, ETC.
  - NEW HOT WATER HEATING PIPE ABOVE CEILING. VERIFY EXACT ROUTE IN FIELD.
  - NEW HOT WATER PIPE DOWN IN STUD WALL. ROUTE THRU WALL TO RADIATION.
  - CONTROL VALVE IN RADIATION ENCLOSURE. INCREASE ENCLOSURE SIZE AND PROVIDE ACCESS.
  - HOT WATER PIPES DOWN IN FINISHED SHEET METAL ENCLOSURE. PAINT COLOR SELECTED.
  - NEW PIPE ABOVE EXISTING CEILING. VERIFY EXACT LOCATION AND ROUTE IN FIELD.
  - REFRIGERANT PIPE DOWN THRU ROOF IN PREFABRICATED ROOF BOX. REFER TO ARCHITECTURAL DETAILS.
  - WALL MOUNTED DUCTLESS SPLIT INDOOR UNIT. VERIFY LOCATION AND MOUNTING HEIGHT WITH FINAL IDF ROOM LAYOUT.
  - 3/4" DIA. CONDENSATE LINE FROM DUCTLESS SPLIT UNIT THRU WALL. DISCHARGE AT MOP RECEPTOR. KEEP PIPE TIGHT TO WALL.

**NOTE:**  
ALL PIPE RUNOUTS TO VAV BOXES &  
RADIATION SHALL BE 3/4" PIPE UNLESS  
NOTED OTHERWISE.

INDICATES FLOW RATE (TYP.)

OFFSET TO AVOID BULL  
HEAD TEE (TYPICAL)

**1 MECHANICAL NEW WORK PIPING FLOOR PLAN**  
SCALE: 1/8" = 1'-0"



KEY PLAN

ISSUED FOR BID: 11/11/2024

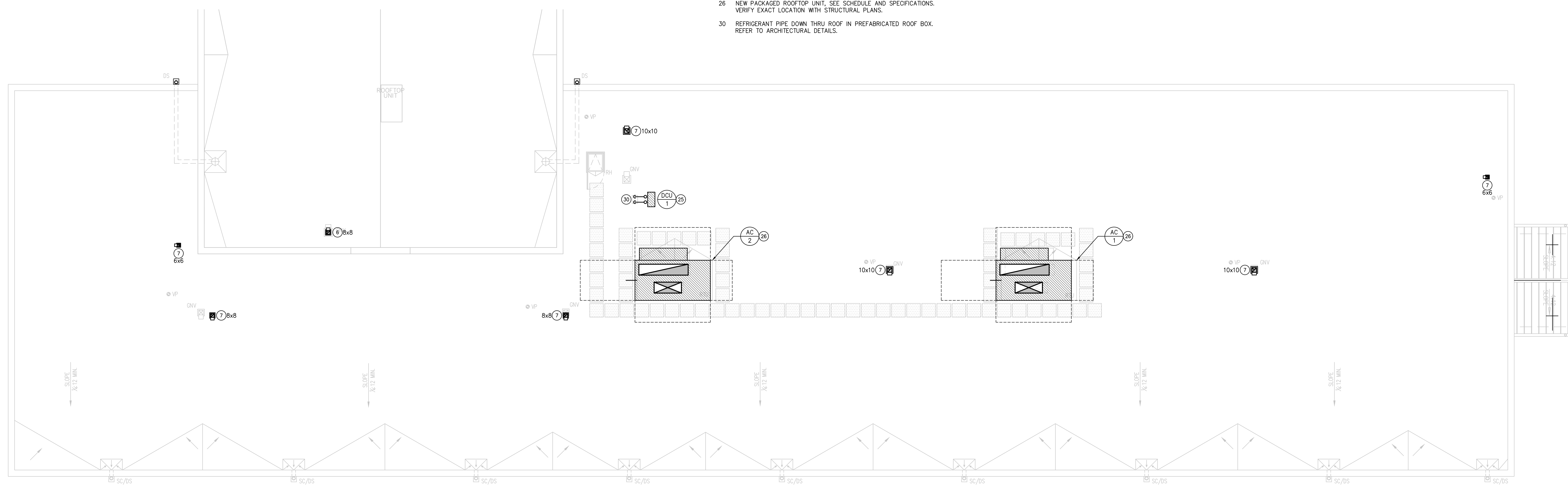


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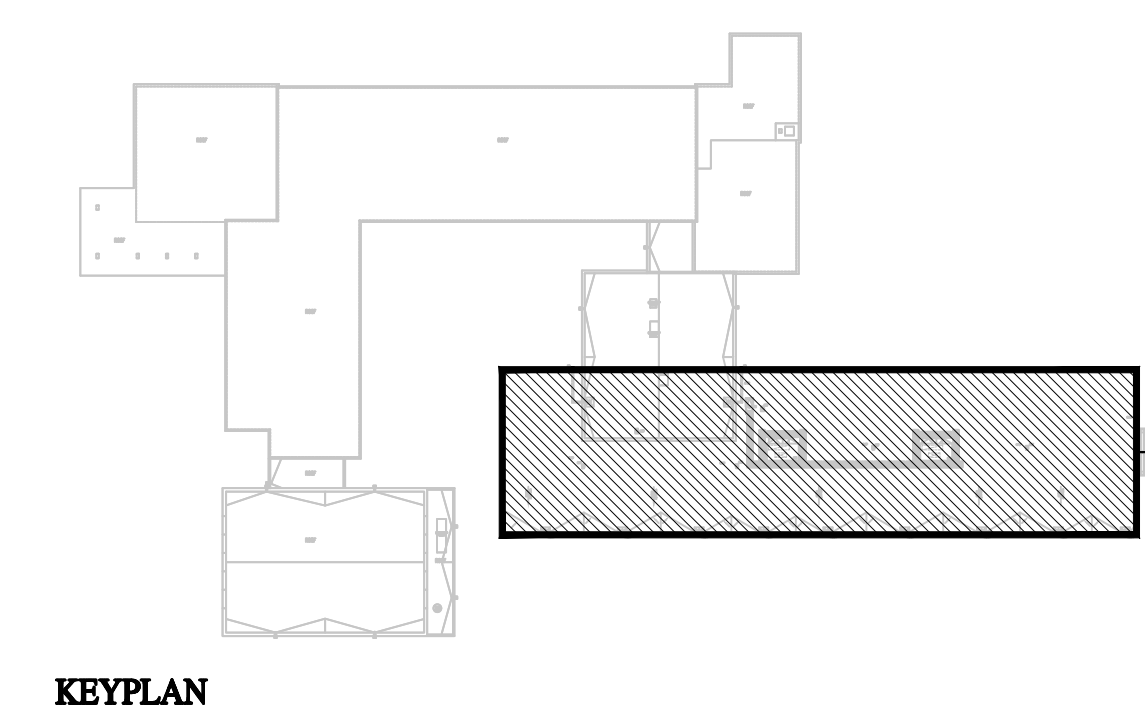
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 ALL WORK BASE BID U.N.O.

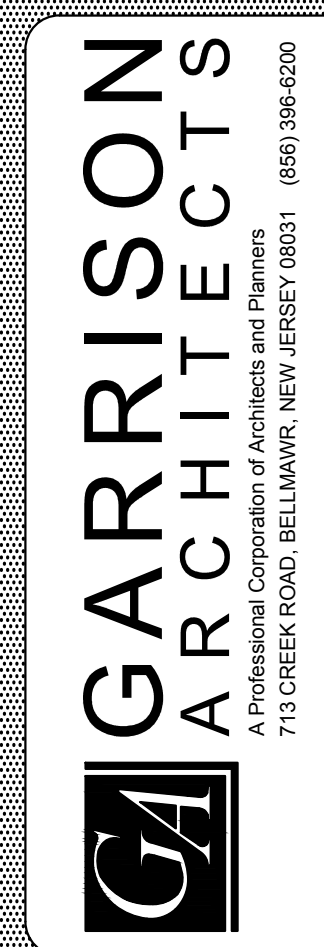
- MECHANICAL NOTES
- 7 DUCT UP THRU ROOF TO GOOSENECK ON ROOF. SIZE AS INDICATED.
  - 25 CONDENSING UNIT ON ROOF. CONNECT REFRIGERANT PIPE PER MANUFACTURER REQUIREMENTS. MAINTAIN MANUFACTURER REQUIRED CLEARANCES.
  - 26 NEW PACKAGED ROOFTOP UNIT, SEE SCHEDULE AND SPECIFICATIONS. VERIFY EXACT LOCATION WITH STRUCTURAL PLANS.
  - 30 REFRIGERANT PIPE DOWN THRU ROOF IN PREFABRICATED ROOF BOX. REFER TO ARCHITECTURAL DETAILS.



**1 MECHANICAL NEW WORK ROOF PLAN**  
 SCALE: 1/8" = 1'-0"



KEYPLAN



**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
 100 IONA AVENUE PENNS GROVE, NEW JERSEY 08068  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
 261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08068

REVISIONS

- a.
- b.
- c.

Project No. 23-42

Date:

Scale: AS NOTED

**MECHANICAL  
 NEW WORK  
 ROOF PLAN**

**M2.1**

ISSUED FOR BID: 11/11/2024

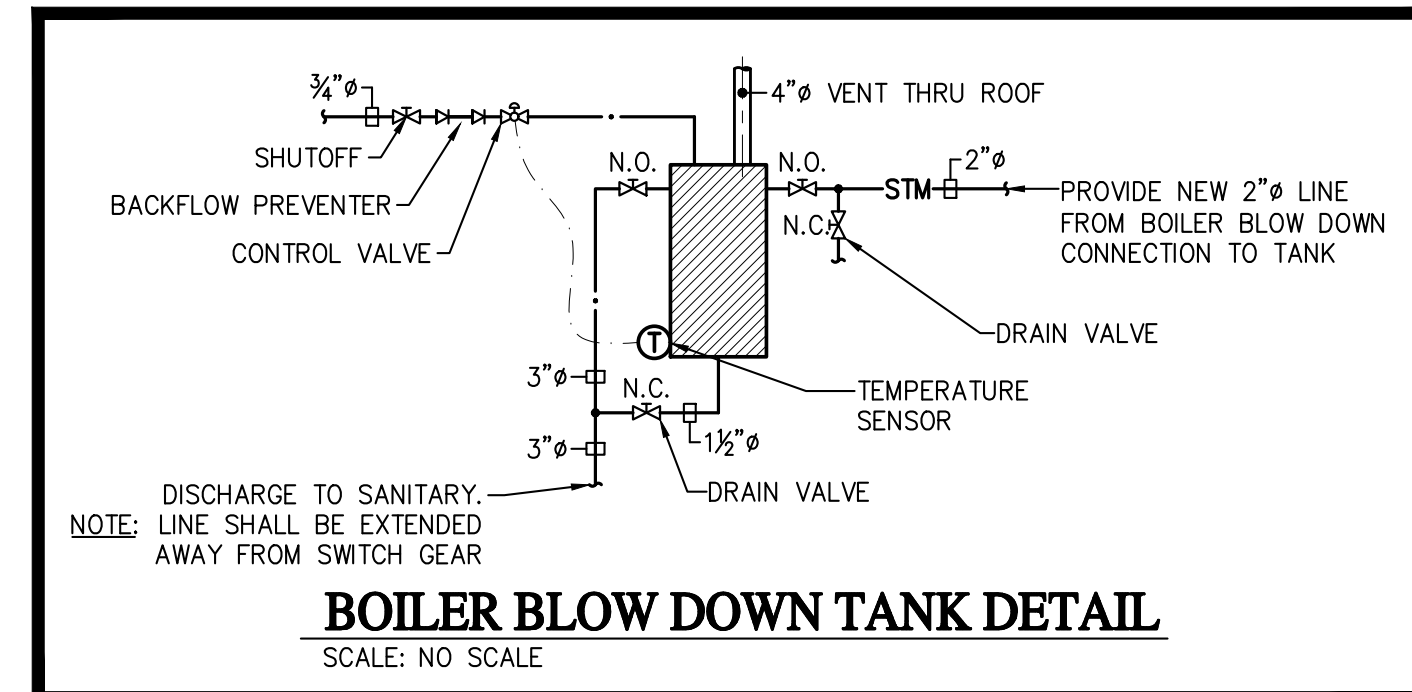
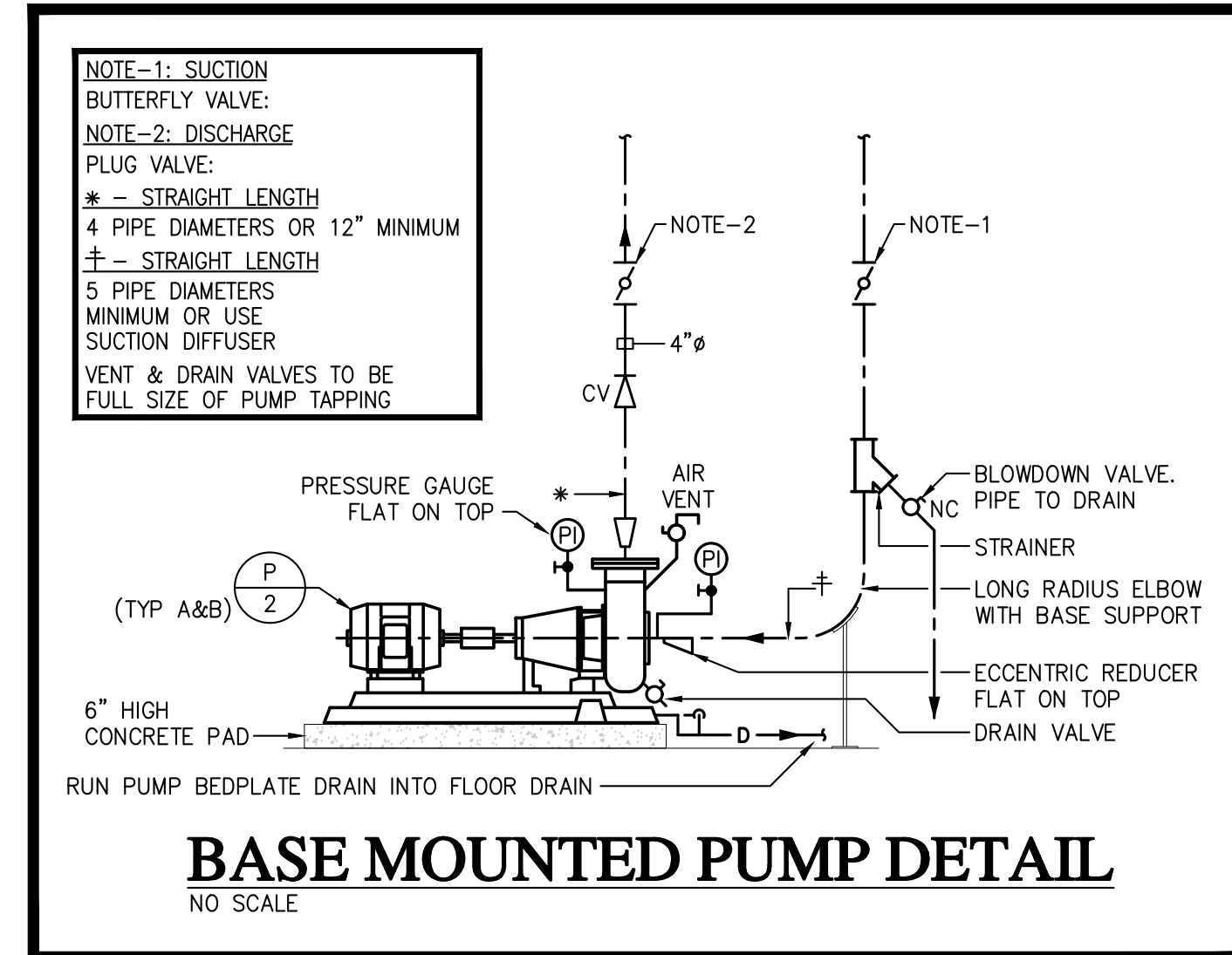
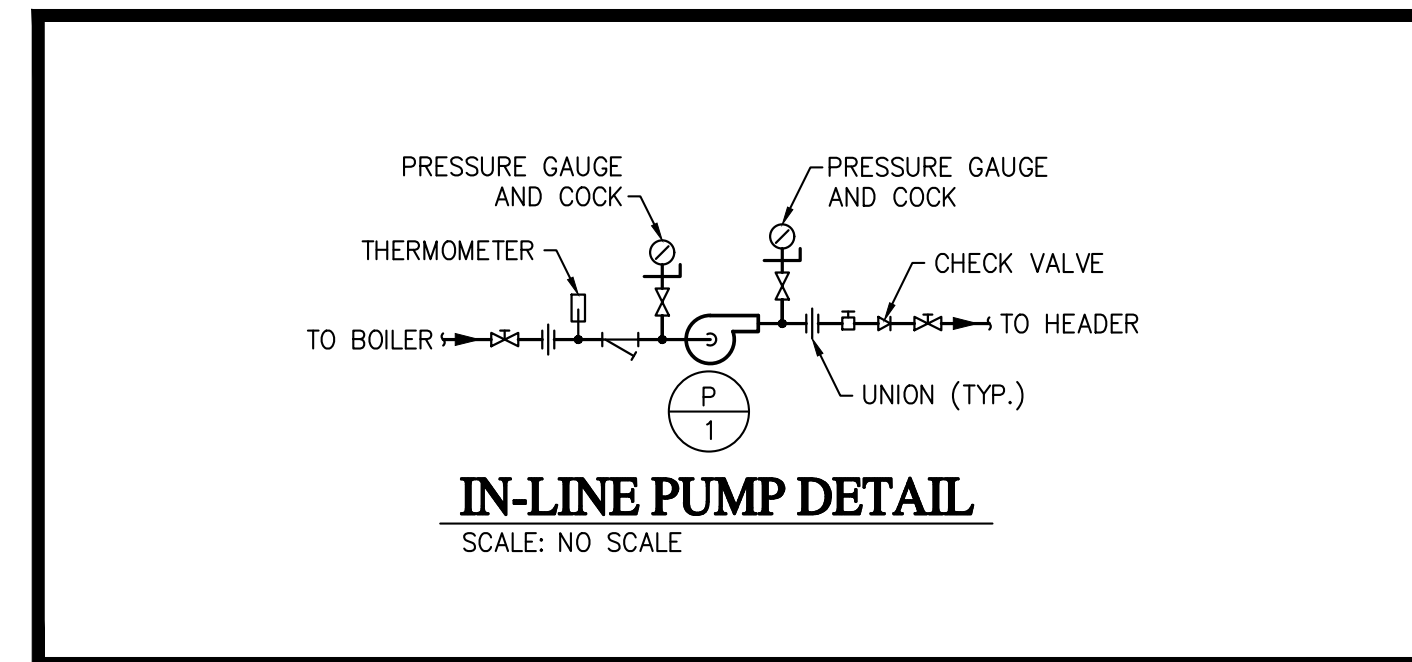
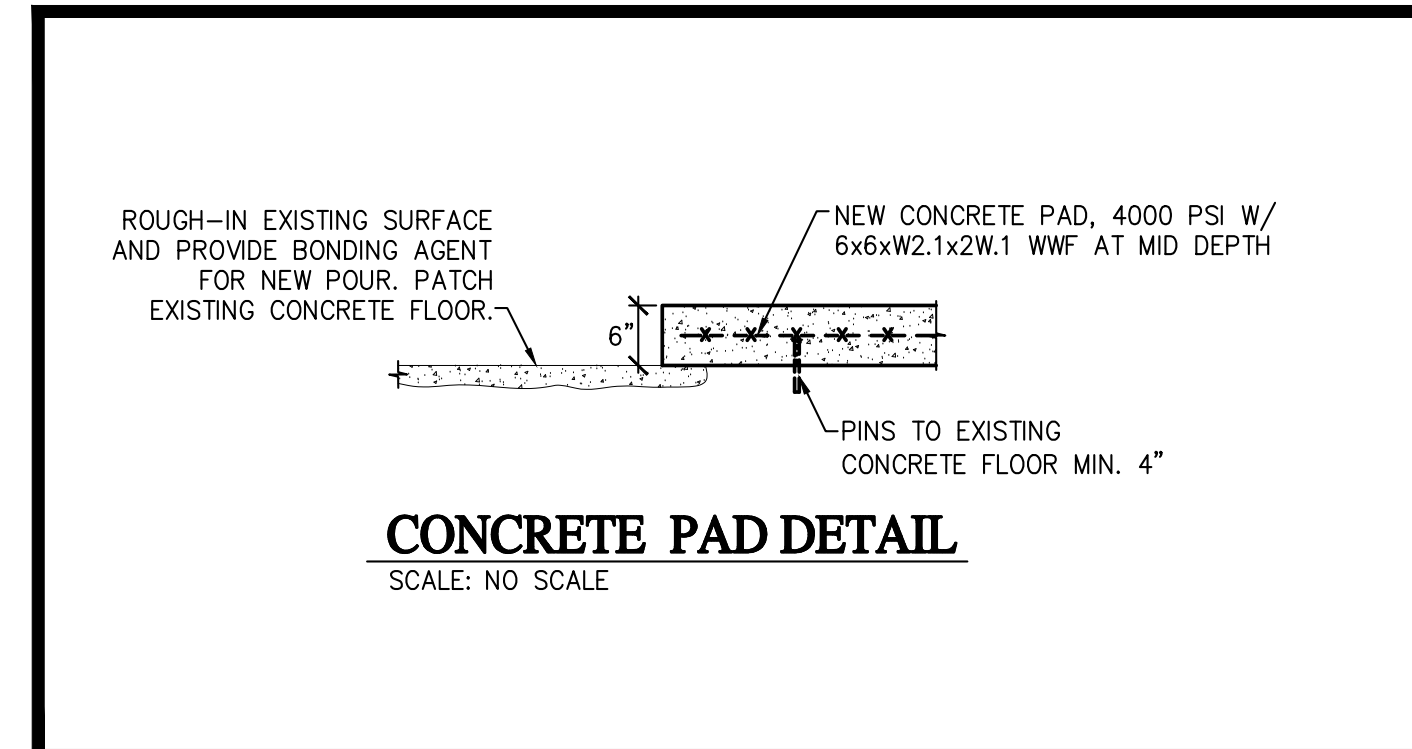
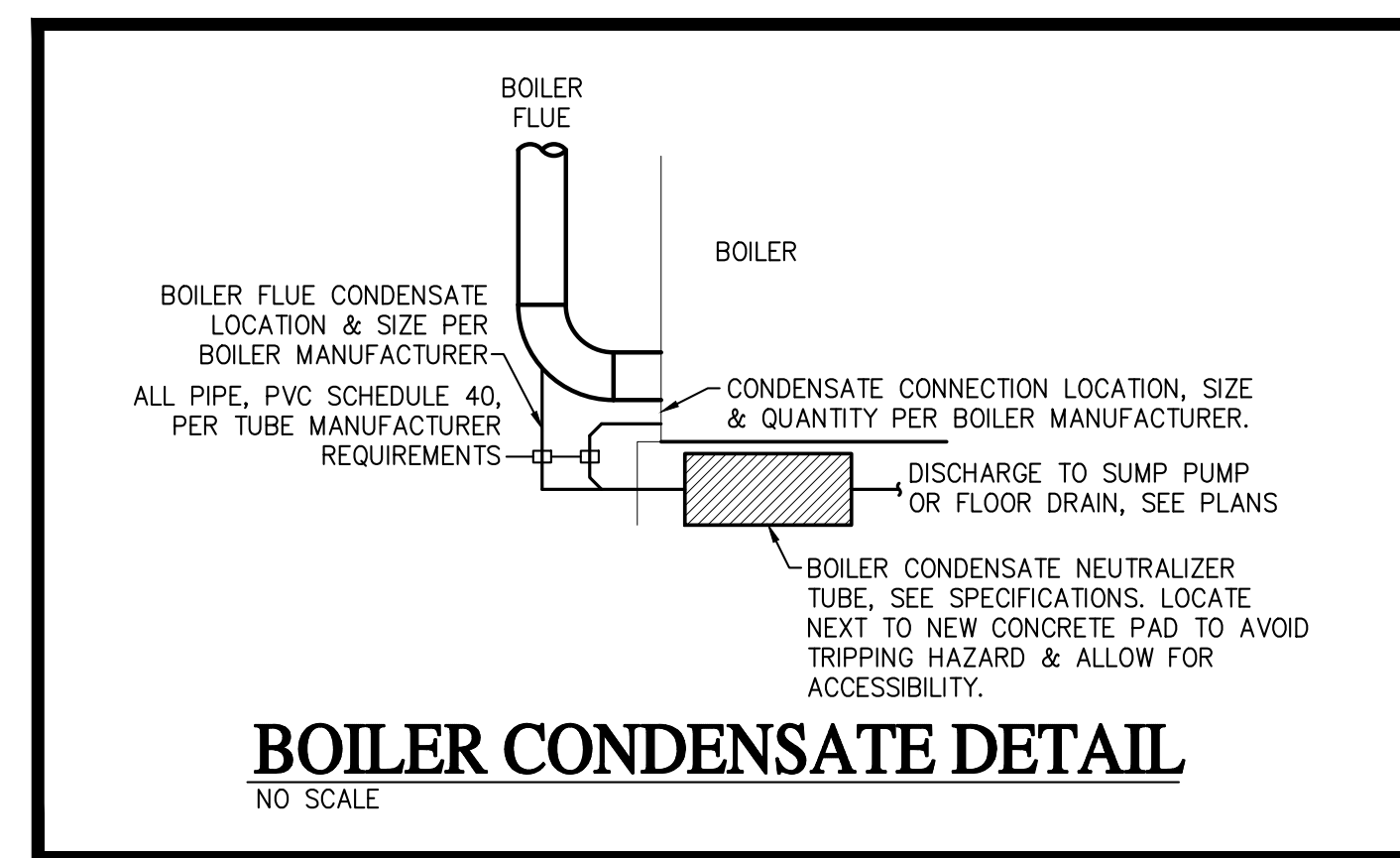
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ALL WORK BASE BID U.N.O.



**PUMP SCHEDULE** SYMBOL: P

NO.	GPM	HEAD F.T. OF H2O	H.P.	RPM	MAX TEMP.	SEAL	REMARKS
1	100	20	1.5	1839	200	MECH	ARMSTRONG MODEL 4380 0205H-001.5 IN-LINE CENTRIFUGAL W/ BUILT-IN VFD FOR SPEED CONTROL
2A	100	85	5	2990	200	MECH	ARMSTRONG MODEL 4280 0106-005.0 BASE MOUNTED PUMPS W/ BUILT-IN VFD FOR SPEED CONTROL
2B	100	85	5	2990	200	MECH	ARMSTRONG MODEL 4280 0106-005.0 BASE MOUNTED PUMPS W/ BUILT-IN VFD FOR SPEED CONTROL

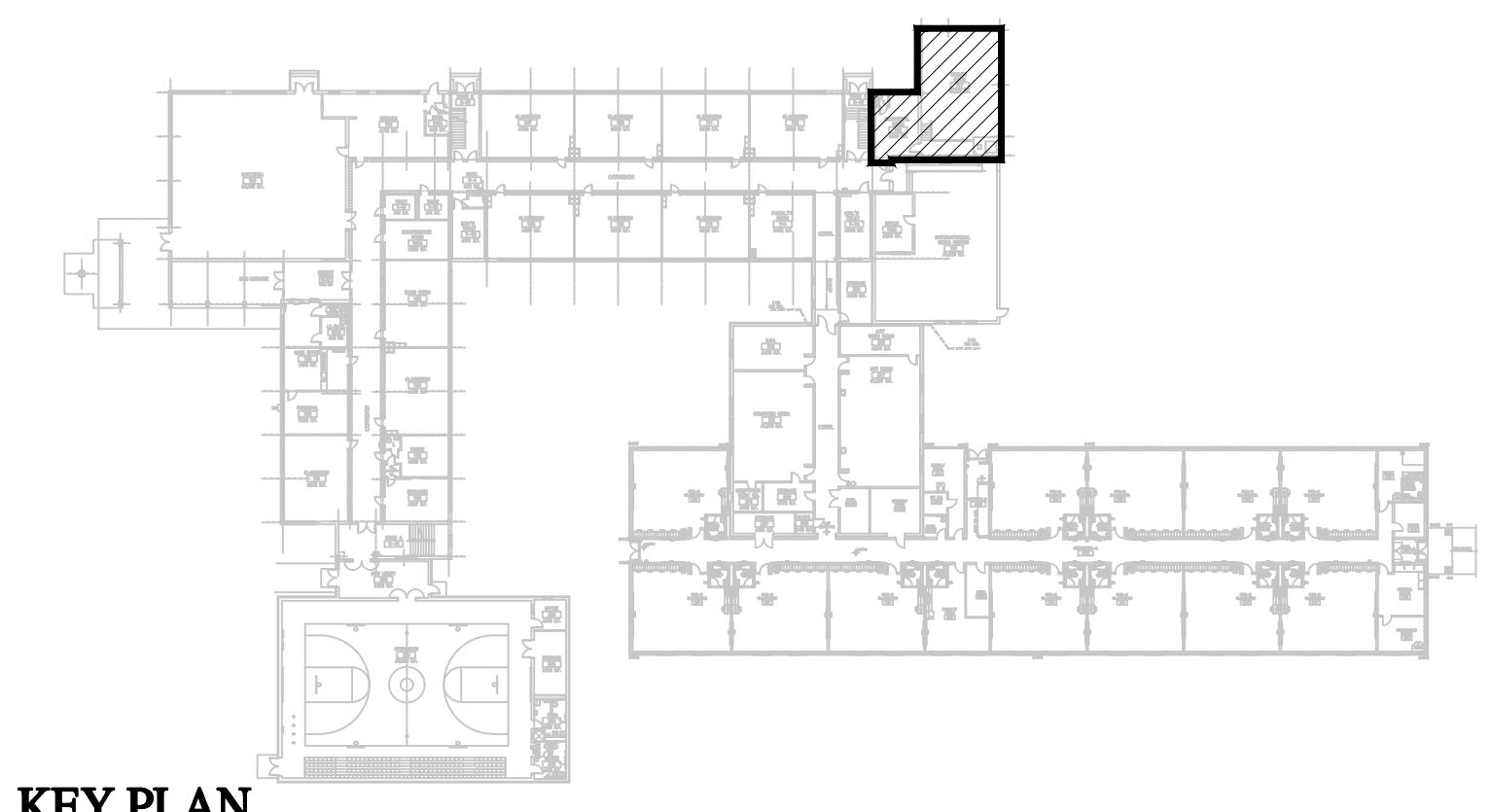
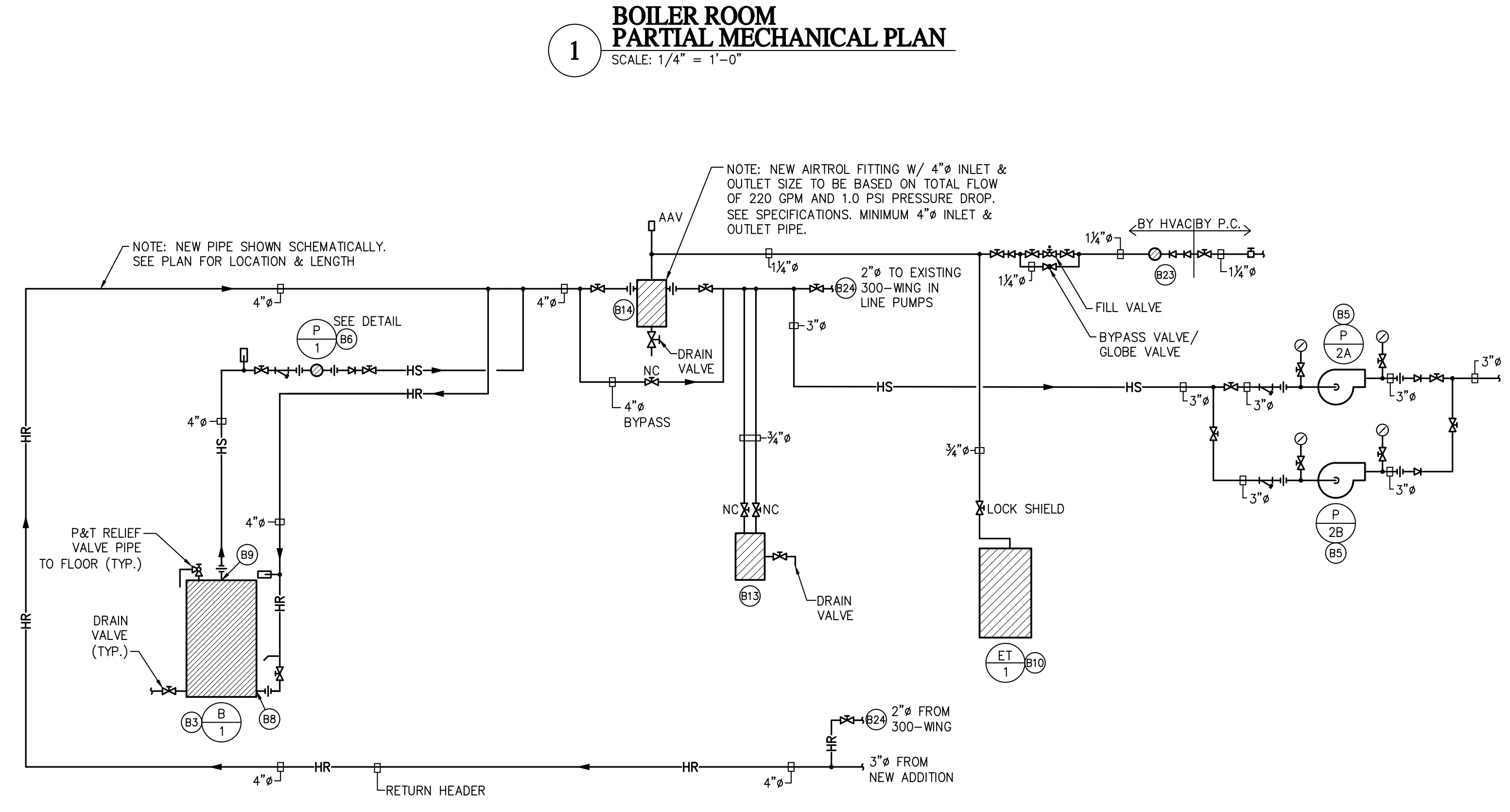
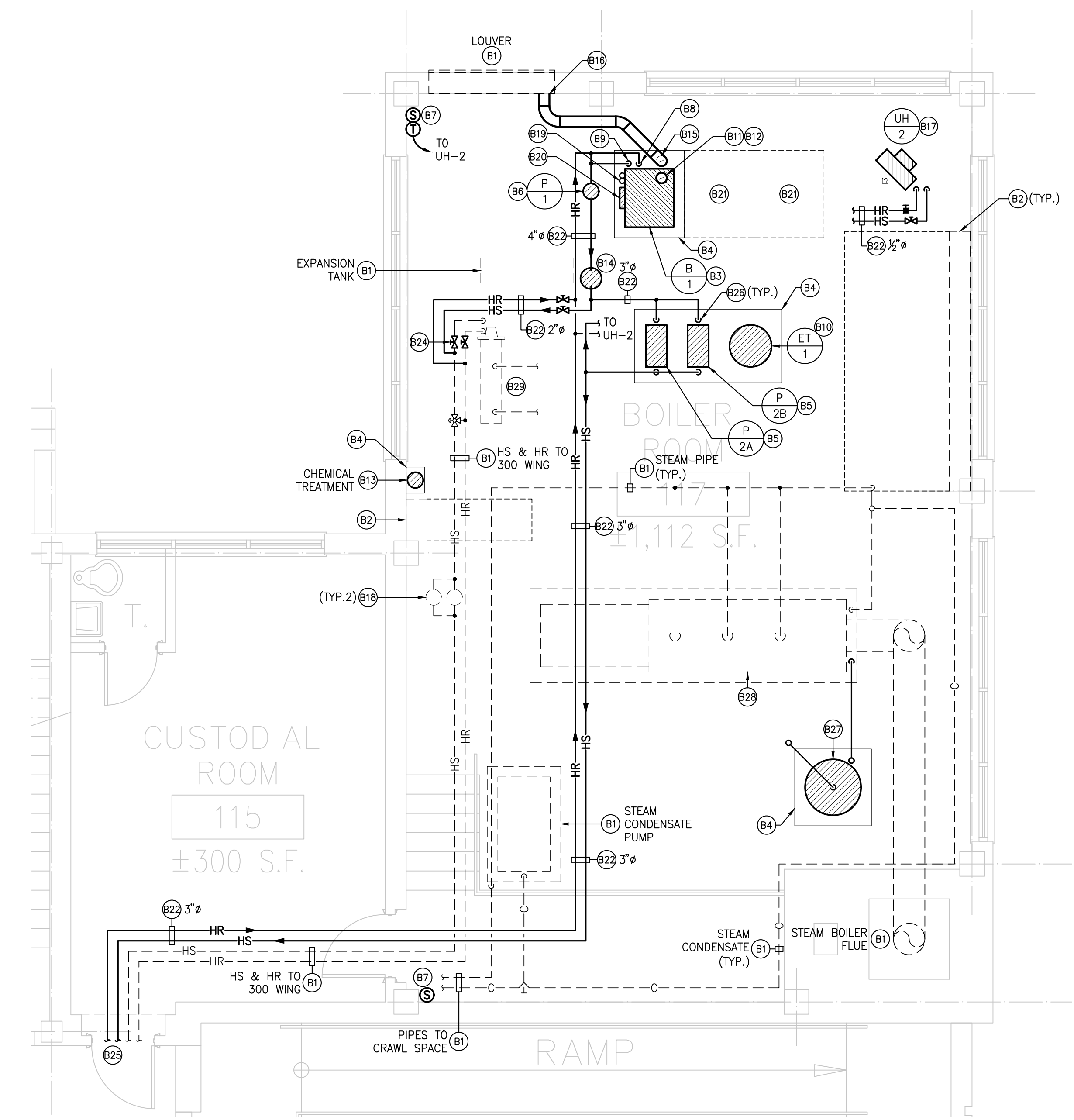
**BOILER SCHEDULE** SYMBOL: B

NO.	CU.FT INPUT	NET OUTPUT MBH	WORKING PRESS.	FLUE SIZE	INTAKE SIZE	REMARKS
1	1000	960	30	6"φ	6"φ	AERCO BMK-1000

**EXPANSION TANK SCHEDULE** SYMBOL: ET

NO.	LOCATION	SERVICE	SIZE GAL.	HEIGHT	DIA.	REMARKS
1	BOILER ROOM	HOT WATER HEAT	106	66"	24"	ARMSTRONG A400-L VERTICAL, BLADDER TYPE

- BOILER NOTES**
- B1 EXISTING ITEM TO REMAIN. ITEM AS INDICATED. PROTECT DURING CONSTRUCTION.
  - B2 MAINTAIN ALL REQUIRED CLEARANCES FROM EXISTING ELECTRICAL PANEL. VERIFY EXACT LOCATION IN FIELD.
  - B3 NEW BOILER ON 6" CONCRETE PAD.
  - B4 CONCRETE PAD FOR NEW EQUIPMENT. SEE ARCHITECTURAL PLANS.
  - B5 PROVIDE BASE MOUNTED SECONDARY PUMPS ON 6" CONCRETE PAD. PROVIDE INTEGRAL VFD.
  - B6 IN-LINE PRIMARY CIRCULATION PUMP. PROVIDE INTEGRAL VFD FOR BALANCING.
  - B7 BOILER SHUTOFF SWITCH. PROVIDE (2) SWITCHES.
  - B8 HOT WATER RETURN DOWN TO BOILER RETURN CONNECTION WITH SHUT OFF VALVE.
  - B9 HOT WATER SUPPLY FROM BOILER.
  - B10 EXPANSION TANK ON CONCRETE PAD. REMOVE ALL UNNECESSARY LABELING. INSULATE AND PAINT. VERIFY EXACT LOCATION.
  - B11 CONNECT NEW FLUE TO BOILER PER BOILER MANUFACTURER REQUIREMENTS.
  - B12 NEW 6" DIA. BOILER FLUE UP THRU EXISTING ROOF. VERIFY EXACT PENETRATION LOCATION.
  - B13 REMOVE EXISTING CHEMICAL BATCH FEEDER AND PROVIDE NEW CHEMICAL BATCH FEEDER ON NEW 6" CONCRETE PAD. CONNECT TO NEW AND EXISTING HOT WATER HEATING SYSTEMS. MODIFY EXISTING PIPING FOR CONNECTIONS.
  - B14 AIR SEPARATOR.
  - B15 CONNECT COMBUSTION AIR INTAKE TO BOILER PER BOILER MANUFACTURER REQUIREMENTS.
  - B16 CONNECT NEW 6" DIA. COMBUSTION AIR INTAKE TO EXISTING LOUVER. REMOVE DAMPERS FOR NEW CONNECTION. VERIFY EXACT POINT OF CONNECTION.
  - B17 NEW UNIT HEATER. VERIFY EXACT LOCATION.
  - B18 EXISTING CIRCULATING PUMP TO REMAIN. VERIFY FLOW RATE PRIOR TO DOING ANY WORK (PRE-DEMOLITION BALANCE REPORT). PROVIDE NEW CONTROLS.
  - B19 NEW GAS VENTS CONNECT TO BOILER AND EXTEND THRU WALL AS HIGH AS POSSIBLE AND TURN DOWN WITH INSERT SCREEN.
  - B20 PROVIDE BOILER CONDENSATE DRAIN PIPE PER BOILER MANUFACTURER'S REQUIREMENTS. PROVIDE NEUTRALIZER KIT (PER SPECIFICATION SECTION 15630) AND ALL PIPE. EXACT LOCATION TO BE VERIFIED IN FIELD WITH DRAIN. ALL PIPE SHALL BE LOCATED TO AVOID TRIPPING HAZARD AND NOT TO LIMIT SERVICE ACCESS TO BOILER. ROUTE PIPE TO AVOID TRIPPING HAZARD.
  - B21 SPACE RESERVED FOR FUTURE BOILERS.
  - B22 NEW EXPOSED HOT WATER HEATING PIPE. VERIFY EXACT ROUTE IN FIELD.
  - B23 PROVIDE NEW WATER MAKEUP SYSTEM WITH NEW BACKFLOW PREVENTER AND ADDITIONAL CHECK VALVE AND SHUTOFF VALVES. PROVIDE NEW WATER METER. EXTEND INDIRECT WASTE TO FLOOR.
  - B24 PROVIDE NEW SHUTOFF VALVES AT EXISTING HEAT EXCHANGER FOR HOT WATER HEATING PIPING THRU WALL TO SYSTEM. SEE 1/8" PLANS FOR CONTINUATION.
  - B25 HOT WATER HEATING PIPING THRU WALL TO SYSTEM, SEE 1/8" PLANS FOR CONTINUATION.
  - B26 PIPE DOWN TO PUMP WITH VALVES, STRAINERS AND APPURTENANCES. SEE DETAIL.
  - B27 PROVIDE NEW STEAM BOILER BLOWDOWN TANK ON NEW 6" CONCRETE PAD. PROVIDE NEW 2" DIA. STEAM PIPE FROM EXISTING STEAM BOILER BLOW OFF CONNECTION (VERIFY EXACT CONNECTION LOCATION) TO NEW TANK. PROVIDE NEW 4" DIA. VENT UP THRU ROOF FROM TANK (OFFSET TO AVOID EXISTING ELECTRICAL WIRING). CONNECT NEW 3" DIA. DISCHARGE LINE TO EXISTING SANITARY PIPING. PROVIDE NEW 3/4" DIA. DOMESTIC COLD WATER CONNECTION TO TANK WITH SHUTOFF, BACKFLOW PREVENTER AND CONTROL VALVE. COORDINATE ALL WORK WITH OTHER TRADES. SEE DETAIL.
  - B28 EXISTING STEAM BOILER TO REMAIN. INTEGRATE CONTROLS TO NEW CONTROL SYSTEM.
  - B29 EXISTING STEAM TO HOT WATER HEAT EXCHANGER TO REMAIN. PROVIDE NEW CONTROLS.



**GARRISON ARCHITECTS**  
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**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
100 LONA AVENUE PENNS GROVE, NEW JERSEY 08068  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08068

**REVISIONS**

a.	
b.	
c.	

Project No. 23-42  
Date: \_\_\_\_\_  
Scale: AS NOTED  
**MECHANICAL BOILER ROOM SCHEDULES, PLANS, DETAILS & NOTES**  
**M3.1**

ISSUED FOR BID: 11/11/2024

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ALL NOTES ON PLANS MAY NOT BE ON THIS SHEET  
FOR ALL NOTES REFER TO NOTES ON M4.1

PRIOR TO BIDDING, MECHANICAL CONTRACTOR  
TO VISIT SITE PER SPECIFICATION 15010  
ALL WORK NEW U.N.O.  
ALL WORK BASE BID U.N.O.

HOT WATER HEAT VARIABLE VOLUME AIR DEVICE SCHEDULE											DEMAND CONTROL VENT. SEE ATC SPEC			
NO.	CFM @ MAX S.F.	MAX. INLET S.P.	MAX. N.C. LEVEL	MINIMUM CFM HTG.	MINIMUM CFM COOL'G	HTG CAPY MBH	GPM	CARRIER MODEL NUMBER	INLET SIZE (IN)	LOCATION	AC UNIT PROVIDING O.A. (ID#)	O.A. REQUIRED (CFM)	% O.A. OF MAX FLOW	CO2 SET POINT (PPM)
VAV-1	1350	2.0	20	540	210	26.7	2.7	35E-14	14"	PRE-K CLASSROOM 418	AC-2	350	26%	1100
VAV-2	1510	2.0	20	610	230	30.6	3.1	35E-14	14"	PRE-K CLASSROOM 419	AC-2	380	25%	1100
VAV-3	1170	2.0	20	470	180	22.2	2.2	35E-12	12"	PRE-K CLASSROOM 417	AC-2	350	30%	1100
VAV-4	1360	2.0	20	550	210	26.3	2.6	35E-14	14"	PRE-K CLASSROOM 416	AC-2	380	28%	1100
VAV-5	1350	2.0	20	540	210	24.8	2.5	35E-14	14"	PRE-K CLASSROOM 412	AC-2	365	27%	1100
VAV-6	1410	2.0	20	570	220	26.7	2.7	35E-14	14"	PRE-K CLASSROOM 413	AC-2	380	27%	1100
VAV-7	1230	2.0	20	500	190	22.8	2.3	35E-14	14"	PRE-K CLASSROOM 414	AC-1	350	28%	1100
VAV-8	1170	2.0	20	470	180	22.2	2.2	35E-12	12"	PRE-K CLASSROOM 411	AC-1	350	30%	1100
VAV-9	1230	2.0	20	500	190	22.8	2.3	35E-14	14"	PRE-K CLASSROOM 408	AC-1	350	28%	1100
VAV-10	1410	2.0	20	570	220	26.7	2.7	35E-14	14"	PRE-K CLASSROOM 409	AC-1	380	27%	1100
VAV-11	1230	2.0	20	500	190	22.8	2.3	35E-14	14"	PRE-K CLASSROOM 406	AC-1	350	28%	1100
VAV-12	1410	2.0	20	570	220	26.7	2.7	35E-14	14"	PRE-K CLASSROOM 407	AC-1	380	27%	1100
VAV-13	750	2.0	20	300	120	15.5	1.5	35E-10	10"	FACULTY ROOM 415	AC-2	80	11%	1100
VAV-14	360	2.0	20	150	54	11.1	1.1	35E-08	8"	PRINCIPAL OFFICE 405	AC-1	20	6%	1100
VAV-15	280	2.0	20	120	42	7.2	0.7	35E-06	6"	GENERAL OFFICE 404	AC-1	35	13%	1100
VAV-16	160	2.0	20	64	24	5.1	0.5	35E-06	5"	OFFICE 403	AC-1	15	9%	1100
VAV-17	450	2.0	20	180	68	12.6	1.3	35E-08	8"	NURSE 402	AC-1	30	7%	1100
VAV-18	300	2.0	20	120	45	3.9	0.4	35E-06	6"	SENSORY ROOM 318b	AC-2	90	30%	1100

NOTES:  
1: HEATING CAPACITY BASED ON 180F EWT, 150F LWT, 5" MAX COIL PD  
2: MAINTAIN STRAIGHT RUN OF DUCT ON INLET & DISCHARGE PER MANUFACTURER.

PACKAGED AIR CONDITIONING UNIT SCHEDULE											SYMBOL
NO.	COOL CAPY. MBH	HEAT CAPY. MBH	CFM	ESP.	H.P.	O.A. CFM (MIN.)	REMARKS				AC
1	360	SEE HC-1	12,000	1.5	10	3600	CARRIER MODEL 50K3AF30	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z			
2	360	SEE HC-2	12,000	1.5	10	3600	CARRIER MODEL 50K3AF30	A B C D E F G H I J K L M N O P Q R S T U V W X Y Z			

**REMARKS NOTES**  
 (A) ROOF CURB (NOTE: CONTINUE ROOF DECK UNDER UNIT, SEE SPECS). CURB BY EQUIPMENT MANUFACTURER DESIGN IN ACCORDANCE WITH IBC LATEST EDITION NEW JERSEY EDITION'S WIND & SEISMIC REQUIREMENTS.  
 (B) HINGED COMPRESSOR, EVAPORATOR, FILTER AND CONTROL PANEL ACCESS.  
 (C) SMOKE DETECTOR (FURNISHED BY ELECTRICAL CONTRACTOR & INSTALLED BY CONTRACTOR).  
 (D) BAS DDC INTERFACE PER SPECIFICATIONS (NOTE: UNIT TO HAVE FACTORY INSTALLED DDC CONTROLLER).  
 (E) UNIT TO HAVE DEMAND VENTILATION CONTROL (DVC). CO2 OUTDOOR SET POINT IS 400 PPM. MINIMUM VENTILATION AS INDICATED ON SCHEDULE.  
 (F) FULLY MODULATING DIGITAL SCROLL COMPRESSORS.  
 (G) VARIABLE AIR VOLUME UNITS WITH DUCT STATIC SENSOR, SUPPLY FAN, VFD, FULL ECONOMIZER STEP CONTROLLED, UNITS RATED AT 92 DEGREES F D.B., 76 DEGREES F W.B. SUMMER & 10 DEGREES F WINTER OUTSIDE DESIGN CONDITIONS. PROVIDE FOR ALL UNITS ENTHALPY ECONOMIZER WITH RELIEF FILTERS.  
 (H) HIGH STATIC OPTION - VERTICAL MODELS WITH VFD CONTROLLER.  
 (I) VAV-RTU OPEN CONTROLLER.  
 (J) PROVIDE BI-POLAR IONIZATION.  
 (K) NON-FUSED DISCONNECT.  
 (L) ACCUSTICAL INSULATION IN CURB (SEE SPECIFICATION).  
 (M) HAIL GUARDS.  
 (N) MERV-13 FILTERS.  
 (O) REFRIGERANT LEAK DETECTION AND MITIGATION PER UNIT MANUFACTURER.

HOT WATER HEATING COIL SCHEDULE											SYMBOL
NO.	CFM	FACE AREA SQ. FT.	NO. ROWS	FINS/INCH	AIR TEMP IN	AIR TEMP OUT	WATER TEMP ENT. L/VG	P.D. WATER FT.	GPM	AIR P.D. IN.	REMARKS
1	12,000	20	2	14	49.0	95	180/140	5" MAX	28.0	.25	AC-1 DUCT MOUNTED
2	12,000	20	2	14	49.0	95	180/140	5" MAX	28.0	.25	AC-2 DUCT MOUNTED

SUPPLY/EXHAUST FAN SCHEDULE											SYMBOL
NO.	CFM	S.P.	RPM	H.P.	TYPE	REMARKS					
1	100	0.25	896	36.6 WATTS	CEILING MOUNTED CENTRIFUGAL	COOK MODEL GC-148 INTERLOCK W/ ASSOCIATED ROOM LIGHTSWITCH					
2	75	0.25	763	30.4 WATTS	CEILING MOUNTED CENTRIFUGAL	COOK MODEL GC-148 INTERLOCK W/ 0-2 HOUR TIMER SWITCH					
3	150	0.25	1099	50.4 WATTS	CEILING MOUNTED CENTRIFUGAL	COOK MODEL GC-168 INTERLOCK W/ 0-2 HOUR TIMER SWITCH					

PROVIDE PRE-WIRED SPEED CONTROLLER FOR ALL FANS.  
PROVIDE BACKDRAFT DAMPERS ON DISCHARGE OF ALL FANS.

PERIMETER RADIATION SCHEDULE											SYMBOL
NO.	TYPE	TUBES HIGH	TUBE SIZE	FINS FOOT	HT. (MIN.)	FINS	HEATING CAPY. @180F AVG. TEMP. BTU/LF	REMARKS			
1	COPPER TUBE ALUM. FIN	1	1/4"	50	14"	4 1/2 x 4 1/2	1230	STERLING MODEL JVB-S (C145)			

NOTES  
ENCLOSURES SHALL BE CONTINUOUS WALL TO WALL WITH END CAPS, DAMPERS, SPLICE PLATES & COLUMN ENCLOSURES.  
XX-INDICATES ACTIVE LENGTH OF ELEMENT  
R-INDICATES RADIATION TYPE  
R-INDICATES RETURN IN ENCLOSURE  
MOUNT ALL RADIATION 4" ABOVE FLOOR (MIN.)

CABINET UNIT HEATER & UNIT HEATER SCHEDULE											SYMBOL
NO.	MBH	GPM	P.D. FT. WATER	ENTER AIR TEMP.	ENTER WATER TEMP.	CFM	FINAL AIR TEMP.	FAN H.P.	REMARKS		
1	46.3	4	1.0	60	180	430	120	1/10	STERLING MODEL RC-1200-06 CEILING RECESSED, BOTTOM INLET/OUTLET 2-ROW HEATING COIL		
2	52.3	5.3	0.23	60	180	1100	105	1/20	STERLING HS-72B HEATER HORIZONTAL UNIT HEATER		

DUCTLESS SPLIT SYSTEM SCHEDULE											SYMBOL
NO.	COOLING CAPY. BTU	HEATING CAPY. BTU	INDOOR UNIT CARRIER MODEL	CFM @ HIGH	TYPE	REMARKS					
1	24,000	24,000	45MH4024XA3	815	WALL MOUNTED	DCU-1; 2 TON CARRIER MODEL 37MARA024AA3					

PROVIDE REFRIGERANT PIPE PER MANUFACTURERS REQUIREMENTS.  
LOCK OUT HEATING MODE. UNIT SHALL ONLY OPERATE IN COOLING MODE.  
INTERFACE W/ CENTRAL CONTROL SYSTEM FOR SCHEDULING.  
PROVIDE LOW-AMBIENT COOLING OPERATION FOR ALL WALL MOUNTED UNITS.  
MAINTAIN MANUFACTURER'S REQUIRED CLEARANCES FOR ALL INDOOR AND OUTDOOR UNITS.

AIR DEVICE SCHEDULE										
NO.	CD	LID	SR SG	RR RG	ER EG	LAD LBD	WMS	REMARKS		
1	6" (A)			24x24						
2	6" (A)			12x12						
3	10" (A)									
4	12" (A)									
5	12x12									

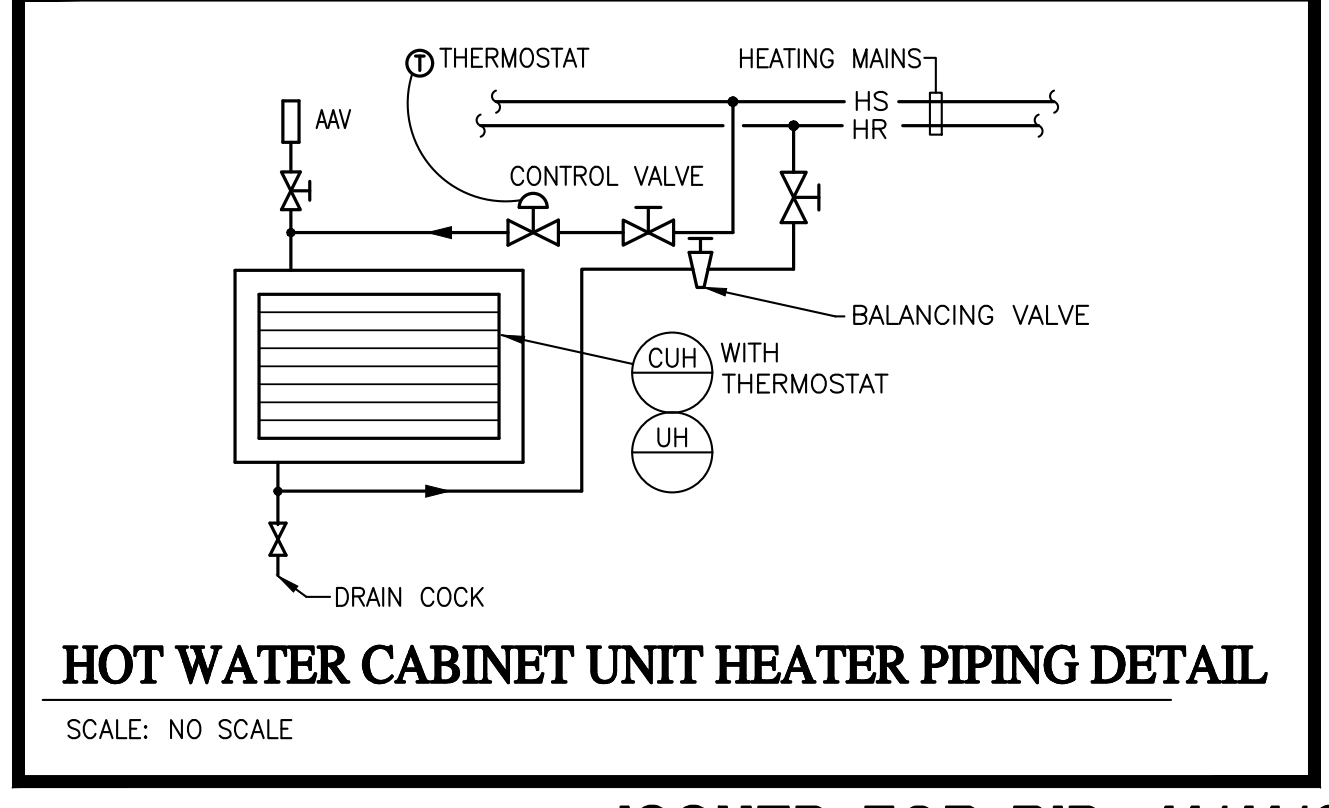
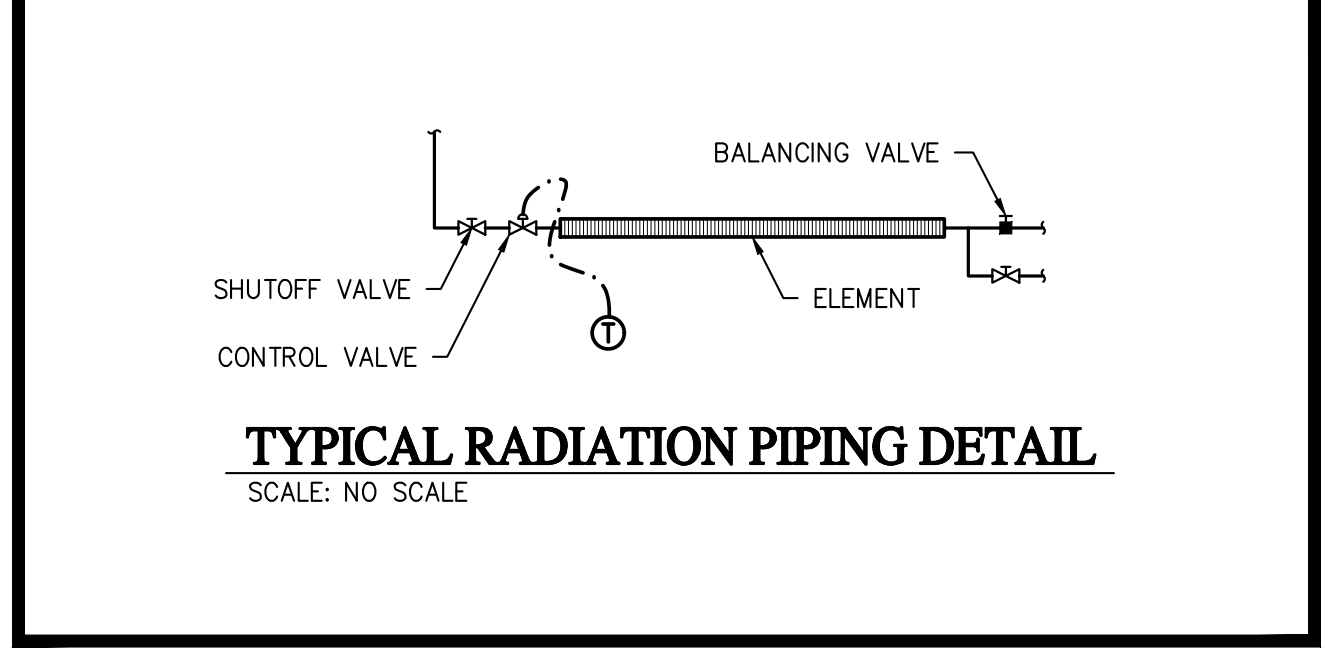
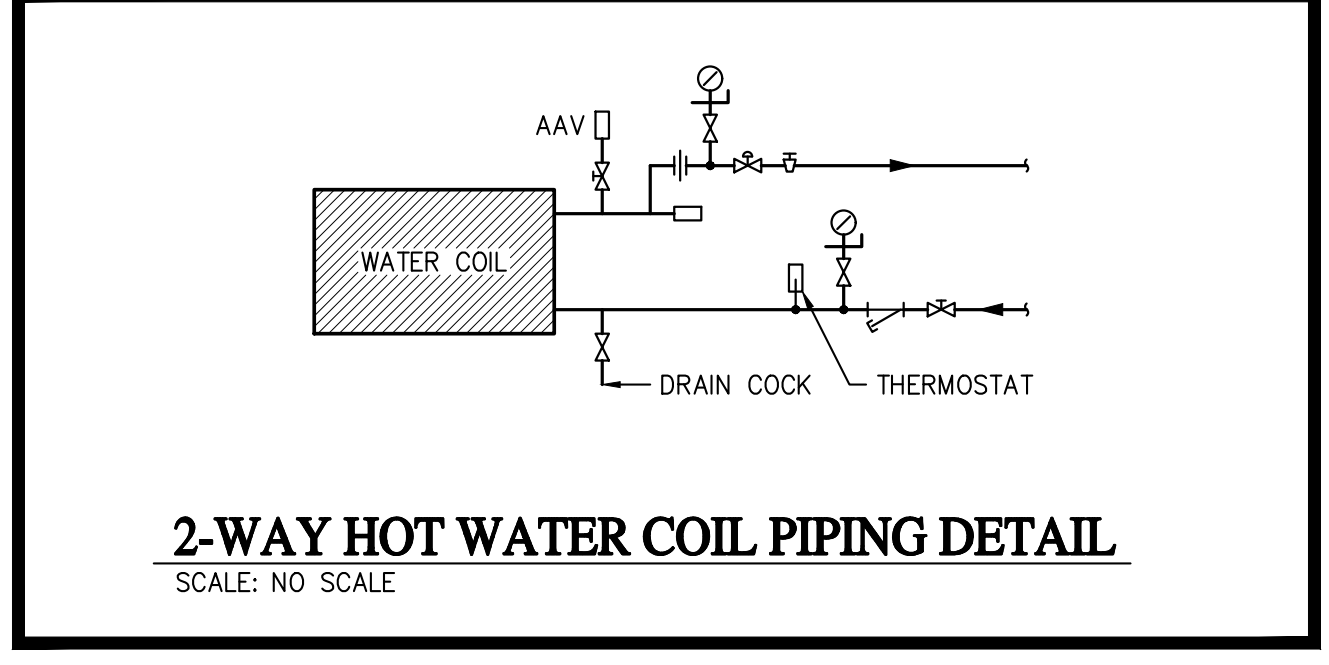
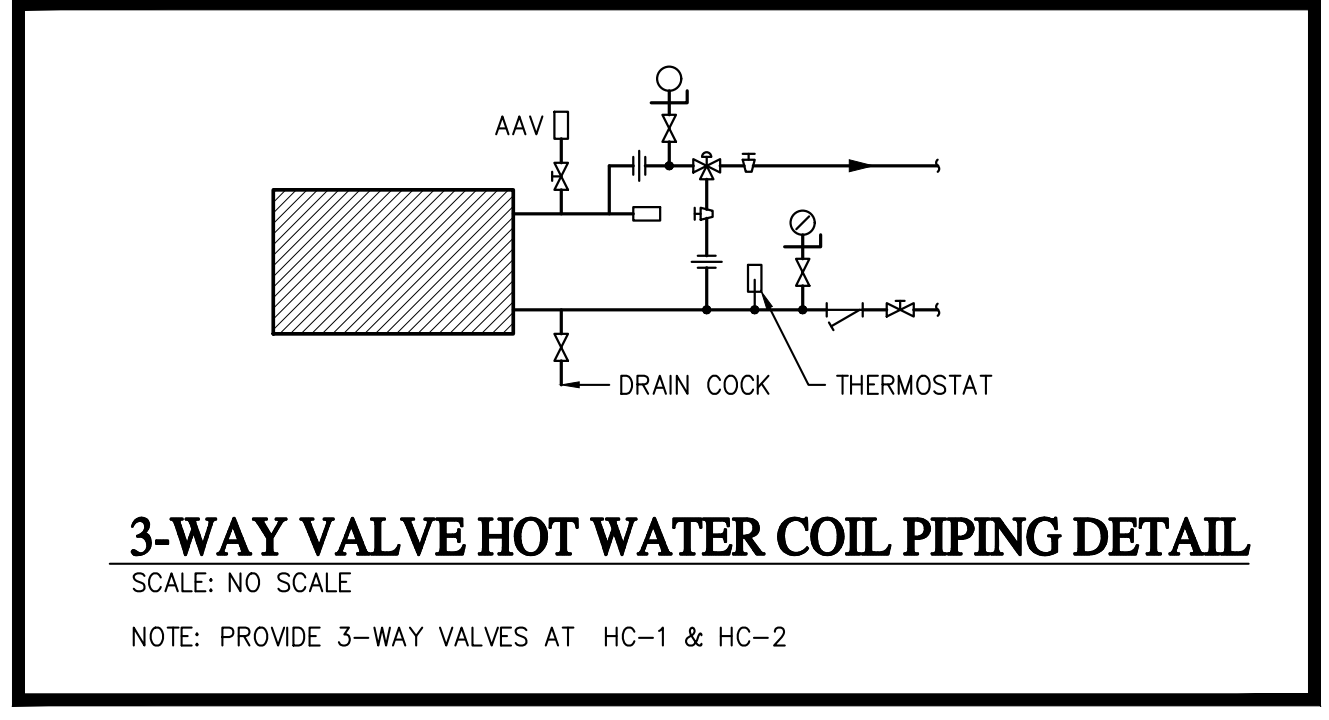
CD - INDICATES NUMBER OF BLOWS  
X - INDICATES DUCT CONNECTION SIZE  
XXX - INDICATES AMOUNT OF CFM  
(A) KRUGER MODEL 1450 DIFFUSER OR EQUAL

FLEXIBLE DUCT SIZING SCHEDULE										
SIZE	MAXIMUM CFM		REMARKS							
	HIGH PRESSURE	LOW PRESSURE								
6"	160	110								
8"	320	240								
10"	610	420								
12"	1000	700								
14"	1500	N/A								

FLEX DUCT TO BE PULLED TIGHT AND BANDED, WITH A MAXIMUM OF ONE 90° ELBOW, AND A MAXIMUM OF 10'-0" IN LENGTH

- MECHANICAL NOTES
- EXISTING TO BE REMOVED (ITEM AS INDICATED). REMOVE ALL SUPPORTS, APPURTENANCES, PIPE AND CONTROLS. REMOVE ALL PIPE TO POINT OF CONNECTION TO MAIN AND CAP MAIN OR TO BEHIND FINISHED SURFACES. PATCH AND RESTORE ALL EXISTING SURFACES TO MATCH EXISTING. VERIFY ALL CONDITIONS IN FIELD. ITEM AS INDICATED.
  - NOT USED.
  - RETURN AIR DUCT UP THRU ROOF TO UNIT ON ROOF. DUCT FULL SIZE OF UNIT OPENING. PROVIDE 6" FLEXIBLE CONNECTION.
  - PROVIDE 5' OF RETURN AIR DUCT ACOUSTICALLY LINED WITH OPENING ON TOP OF DUCT, SIZE AS INDICATED. OPENING SHALL HAVE SCREEN. DIRECTLY ABOVE OPENING, PROVIDE 1" THICK, 6# DENSITY ACOUSTICAL INSULATION. EXTEND 12" BEYOND OPENING ON ALL SIDES.
  - SUPPLY AIR DUCT UP THRU ROOF TO UNIT ON ROOF WITH 6" FLEXIBLE CONNECTION. DUCT FULL SIZE OF UNIT OPENING.
  - REMOVE EXISTING DUCT AND WALL CAP W/ ASSOCIATED EXISTING EXHAUST FAN. PATCH WALL TO MATCH EXISTING. PROVIDE NEW DUCT CONNECTED TO EXISTING FAN DISCHARGE AND ROUTE UP THRU EXISTING ROOF TO NEW GOOSENECK. PROVIDE NEW BACKDRAFT DAMPER IN DUCT. DUCT SIZE AS INDICATED. EXISTING FAN CONTROLS TO REMAIN.
  - DUCT UP THRU ROOF TO GOOSENECK ON ROOF. SIZE AS INDICATED.
  - CONNECT NEW DUCT TO EXISTING DUCT. REPAIR INSULATION. VERIFY EXACT LOCATION IN FIELD.
  - DUCT THRU WALL. VERIFY EXACT LOCATION OF PENETRATION IN FIELD. PROVIDE FIRE DAMPER. SEE STRUCTURAL DRAWINGS FOR LINTEL REQUIREMENTS.
  - NEW FIN TUBE RADIATION. PROVIDE NEW 2-WAY CONTROL VALVE.
  - NEW PIPE THRU WALL. FIRE SAFE PENETRATION PER CODE.
  - OPENING IN WALL ABOVE CEILING MINIMUM SIZE 2 SQ.FT. USE TWO 16"X8" OPENINGS UNLESS OTHERWISE INDICATED. SEE STRUCTURAL DRAWINGS FOR LINTEL REQUIREMENTS.
  - NEW THERMOSTAT. VERIFY EXACT LOCATION IN FIELD. NOTE - DO NOT LOCATE BY HEAT GENERATING SOURCE, I.E. COMPUTER MONITOR, ETC.
  - NEW CEILING EXHAUST FAN INTERLOCK WITH LIGHT SWITCH.
  - NEW CEILING EXHAUST FAN. INTERLOCK WITH 0-2 HOUR TIMER.
  - NEW HOT WATER HEATING PIPE ABOVE CEILING. VERIFY EXACT ROUTE IN FIELD.
  - NEW HOT WATER PIPE DOWN IN STUD WALL. ROUTE THRU WALL TO RADIATION.
  - DUCT OPEN TO RETURN AIR PLENUM ABOVE CEILING.
  - PROVIDE ACOUSTICALLY LINED CANOPY ON TOP OF RETURN AIR GRILLE. SAME SIZE AS GRILLE (PRICE MODEL RAC) WITH ONE SIDE OPEN FACING WALL. ON WALL DIRECTLY OPPOSITE OPENING, PROVIDE 1" THICK ACOUSTICAL INSULATION 12" LARGER THAN OPENING. NOTE - OPENING MAXIMUM 18" FROM WALL.
  - PROVIDE 1 SQ.FT. OPENING IN WALL ABOVE CEILING FOR TRANSFER AIR.
  - CONTROL VALVE IN RADIATION ENCLOSURE. INCREASE ENCLOSURE SIZE AND PROVIDE ACCESS.
  - VERTICAL DUCT MOUNTED HEATING COIL.
  - NOT USED.
  - HOT WATER PIPES DOWN IN FINISHED SHEET METAL ENCLOSURE. PAINT COLOR SELECTED.
  - CONDENSING UNIT ON ROOF. CONNECT REFRIGERANT PIPE PER MANUFACTURER REQUIREMENTS. MAINTAIN MANUFACTURER REQUIRED CLEARANCES.
  - NEW PACKAGED ROOFTOP UNIT, SEE SCHEDULE AND SPECIFICATIONS. VERIFY EXACT LOCATION WITH STRUCTURAL PLANS.
  - NOT USED.
  - PROVIDE LOW LEAKAGE AUTOMATIC DAMPER FOR BACKUP NORMALLY CLOSED. SEE SPECIFICATION SECTION 15930.
  - NEW PIPE ABOVE EXISTING CEILING. VERIFY EXACT LOCATION AND ROUTE IN FIELD.
  - REFRIGERANT PIPE DOWN THRU ROOF IN PREFABRICATED ROOF BOX. REFER TO ARCHITECTURAL DETAILS.
  - PROVIDE ACOUSTICALLY LINED RETURN DUCT. PROVIDE ACOUSTICALLY LINED ELBOW WITH ACOUSTICALLY LINED DUCT. PROVIDE TRANSITION TO 120"x24" FROM UNIT OPENING SIZE PRIOR TO ELBOW. PROVIDE OPENING AFTER ELBOW FULL SIZE OF DUCT WITH WIRE MESH SCREEN AND ACOUSTICAL INSULATION ON WALL AND ROOF DECK DIRECTLY OPPOSITE AND ABOVE OPENING, 1" THICK 3# DENSITY.
  - WALL MOUNTED DUCTLESS SPLIT INDOOR UNIT. VERIFY LOCATION AND MOUNTING HEIGHT WITH FINAL IDF ROOM LAYOUT.
  - 3/4" DIA. CONDENSATE LINE FROM DUCTLESS SPLIT UNIT THRU WALL. DISCHARGE AT MOP RECEPTOR. KEEP PIPE TIGHT TO WALL.

MECHANICAL LEGEND		
A/L	ACOUSTICALLY LINED	—C— CONDENSATE PIPE
AP	ACCESS PANEL	—HWS— HOT WATER HEATING SUPPLY (SYSTEM)
ACD	ACCESS DOOR	—HWR— HOT WATER HEATING RETURN (SYSTEM)
ADR	AUTOMATIC DAMPER	—CHWR— CHILLED WATER RETURN (SYSTEM)
BDD	BACK DRAFT DAMPER	—CHWS— CHILLED WATER SUPPLY (SYSTEM)
BTJ	BETWEEN THE JOISTS	—CWR— CONDENSER WATER RETURN
CS	CHILLED WATER SUPPLY	—CWS— CONDENSER WATER SUPPLY
CR	CHILLED WATER RETURN	—R— REFRIGERANT PIPE
CDU	CEILING DIFFUSER	—R— GATE VALVE
CU	CONDENSING UNIT	—R— CHECK VALVE
DBR	DOWN BLOW REGISTER	—R— RELIEF VALVE
DL	DOOR LOUVER	—R— CONTROL VALVE
DN	DOWN	—R— AUTOMATIC THREE-WAY VALVE
DX	DIRECT EXPANSION COIL	—R— GLOBE VALVE
EG	EXISTING	—R— PRESSURE REDUCING VALVE
EF	EXHAUST FAN	—R— AUTOMATIC TWO-WAY VALVE
EG	EXHAUST GRILLE	—R— PLUG OR BALL VALVE
ER	EXHAUST REGISTER	—R— BALANCING VALVE
FDR	FIRE DAMPER	—R— STRAINER
FBVAV	FAN POWERED VAV UNIT	—R— UNION
GV	GATE VALVE	—R— HUMIDISTAT
HR	HOT WATER HEATING RETURN	—R— SWITCH
HS	HOT WATER HEATING SUPPLY	—R— HEATING THERMOSTAT
LAD	LOUVER/AUTO DAMPER	—R— HEATING & COOLING THERMOSTAT
LBD	LOUVER/BACKDRAFT DAMPER	—R— COOLING THERMOSTAT
LID	LINEAR DIFFUSER	—R— THERMOMETER
LMD	LOUVER/MANUAL DAMPER	—R— PRESSURE GAUGE W/GAUGE COCK
LVR	LOUVER	—R— AUTOMATIC AIR VENT
MUA	MAKEUP AIR UNIT	—R— FLEXIBLE CONNECTION
MVD	MANUAL VOLUME DAMPER	—R— NEW CONNECTION TO EXISTING
OAI	OUTSIDE AIR INTAKE	—R— POINT OF DEMOLITION
RG	RETURN GRILLE	—R— DUCT REDUCER
RR	RETURN REGISTER	
SG	SUPPLY GRILLE	
SF	SUPPLY FAN	
SR	SUPPLY REGISTER	
SDR/FDR	SMOKE/FIRE DAMPER	
TF	TRANSFER FAN	
TWJ	THROUGH WEB OF JOIST	
TYP	TYPICAL (OF QUANTITY)	
UNO	UNLESS NOTED OTHERWISE	
VAV	VARIABLE AIR VOLUME TERMINAL UNIT	
VVT	VARIABLE AIR VOLUME TEMPERATURE UNIT	
WMS	WIRE MESH SCREEN	



REVISIONS	
A.	
B.	
C.	

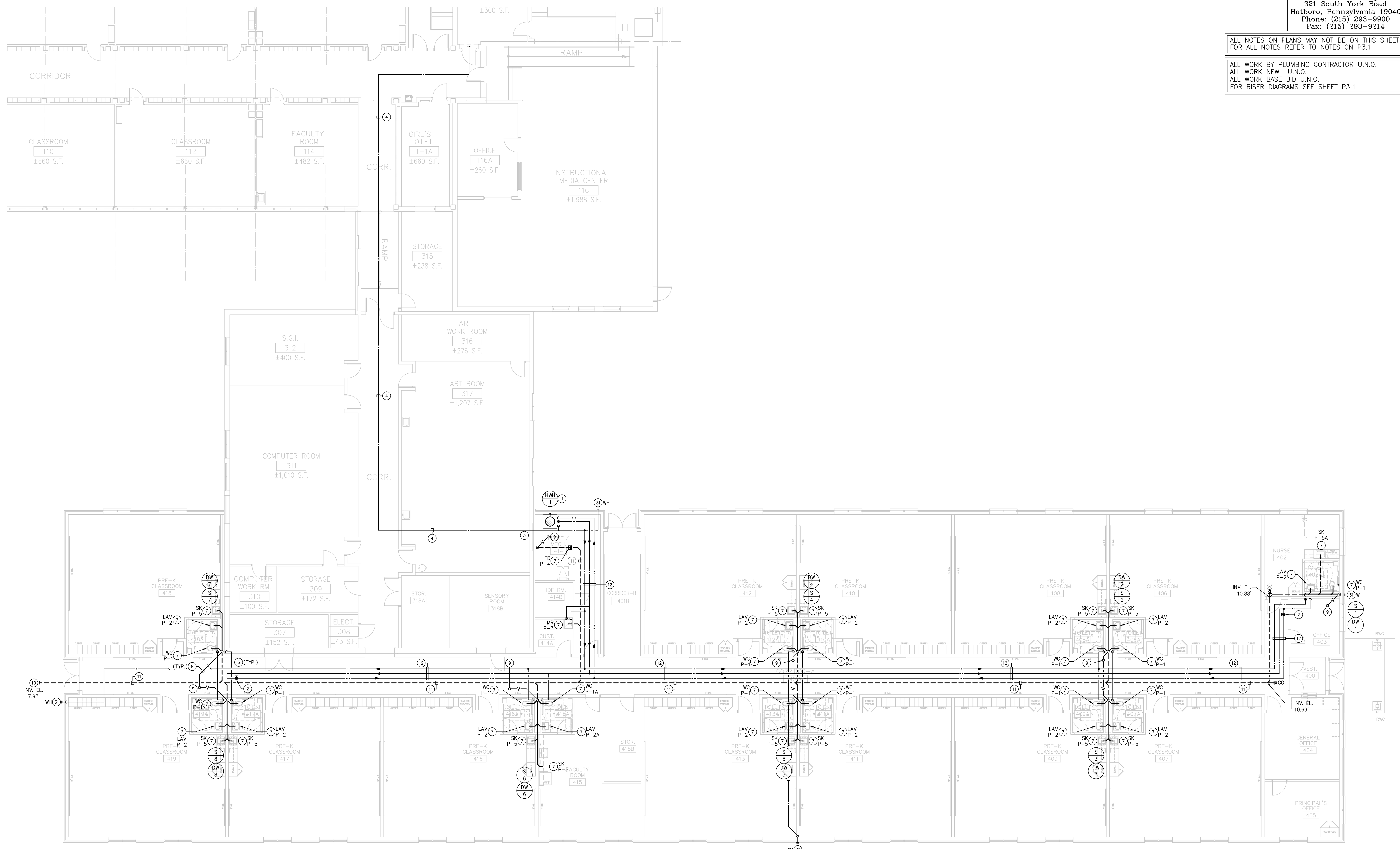
Project No. 23-42  
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MECHANICAL SCHEDULES NOTES & DETAILS  
**M4.1**



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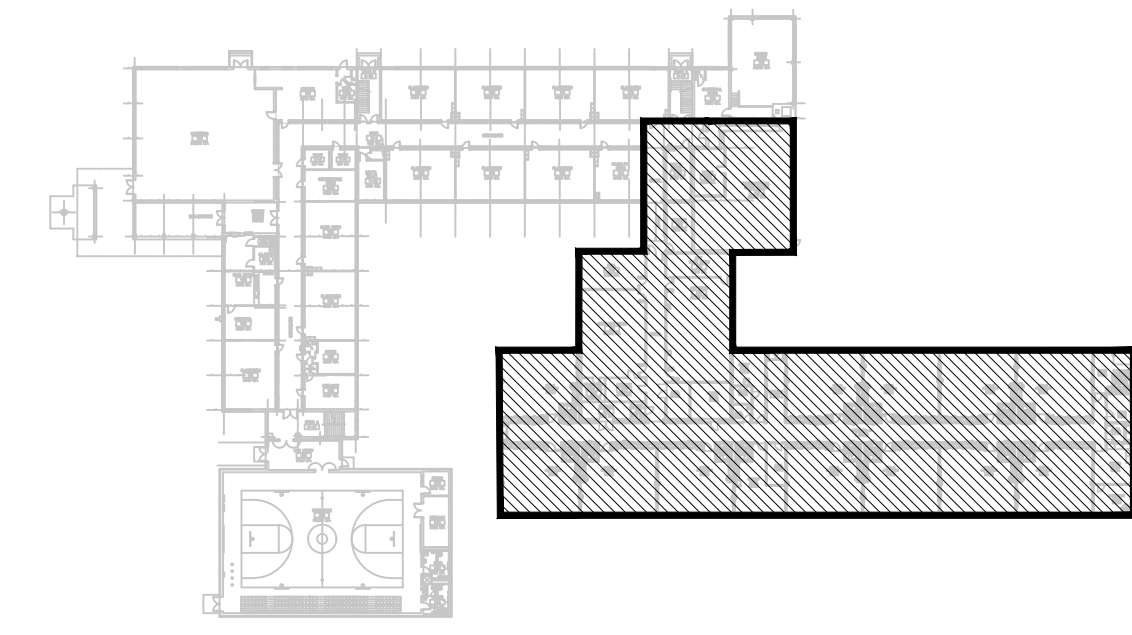
ALL NOTES ON PLANS MAY NOT BE ON THIS SHEET  
FOR ALL NOTES REFER TO NOTES ON P.3.1

ALL WORK BY PLUMBING CONTRACTOR U.N.O.  
ALL WORK NEW U.N.O.  
ALL WORK BASE BID U.N.O.  
FOR RISER DIAGRAMS SEE SHEET P.3.1



**1 PLUMBING NEW WORK FIRST FLOOR PLAN**  
SCALE: 1/8" = 1'-0"  
F.F. ELEVATION = 12.38

- PLUMBING NOTES**
- 1 NEW HOT WATER HEATER ON NEW CONCRETE PAD.
  - 2 PROVIDE BALANCING VALVE AND THERMOMETER.
  - 3 NEW DOMESTIC WATER PIPE THRU WALL. FIRE SAFE PENETRATION PER CODE.
  - 4 NEW DOMESTIC WATER PIPE ABOVE EXISTING CEILING. VERIFY EXACT ROUTE WITH EXISTING CONDITIONS.
  - 7 NEW PLUMBING FIXTURE, TYPE AS INDICATED.
  - 8 NEW VENT ABOVE CEILING.
  - 9 NEW VENT UP THRU ROOF. SIZE AS INDICATED.
  - 10 SANITARY LINE TO 5'-0" OUTSIDE OF BUILDING FOR CONTINUATION OF SANITARY REFER TO SITE PLAN. VERIFY INVERT ELEVATION AND PROVIDE 2-WAY CLEANOUT.
  - 11 NEW SANITARY LINE BELOW SLAB.
  - 12 NEW DOMESTIC WATER PIPE ABOVE CEILING.
  - 31 3/4" DIAMETER DOWN TO WALL HYDRANT (FURR IN) WITH SHUTOFF.



KEYPLAN  
ISSUED FOR BID: 11/11/2024

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**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
100 IONA AVENUE PENNS GROVE, NEW JERSEY 08065  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
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a.  
b.  
c.

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PLUMBING FLOOR PLAN

**P1.1**

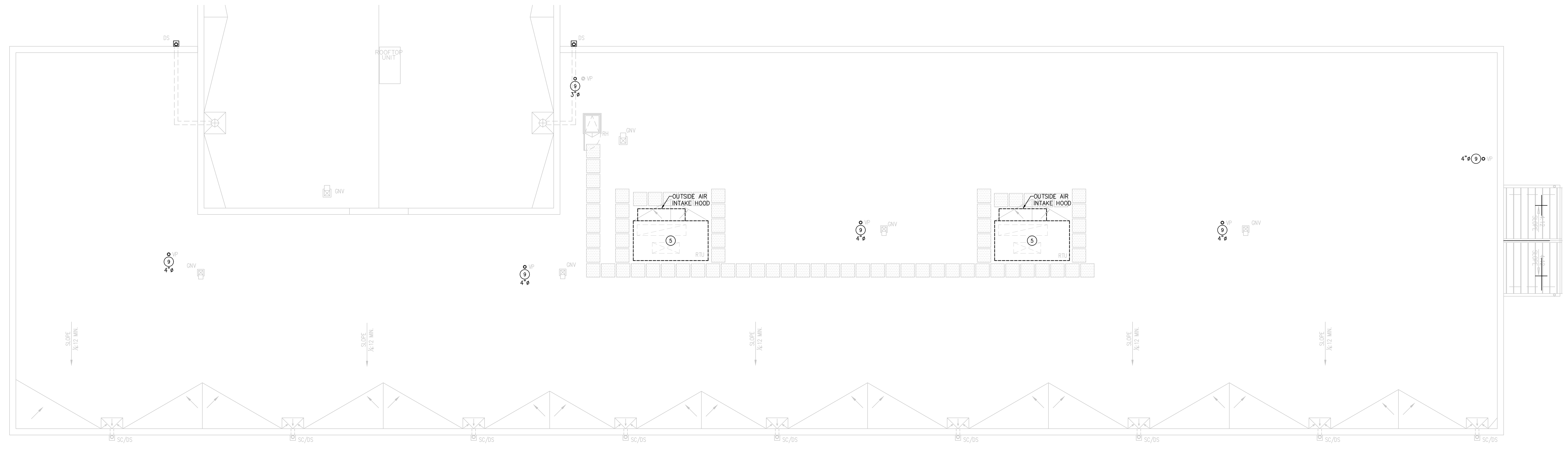
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**MULHERN**  
 and ASSOCIATES, Incorporated  
 321 South York Road  
 Hatboro, Pennsylvania 19040  
 Phone: (215) 293-9900  
 Fax: (215) 293-9214

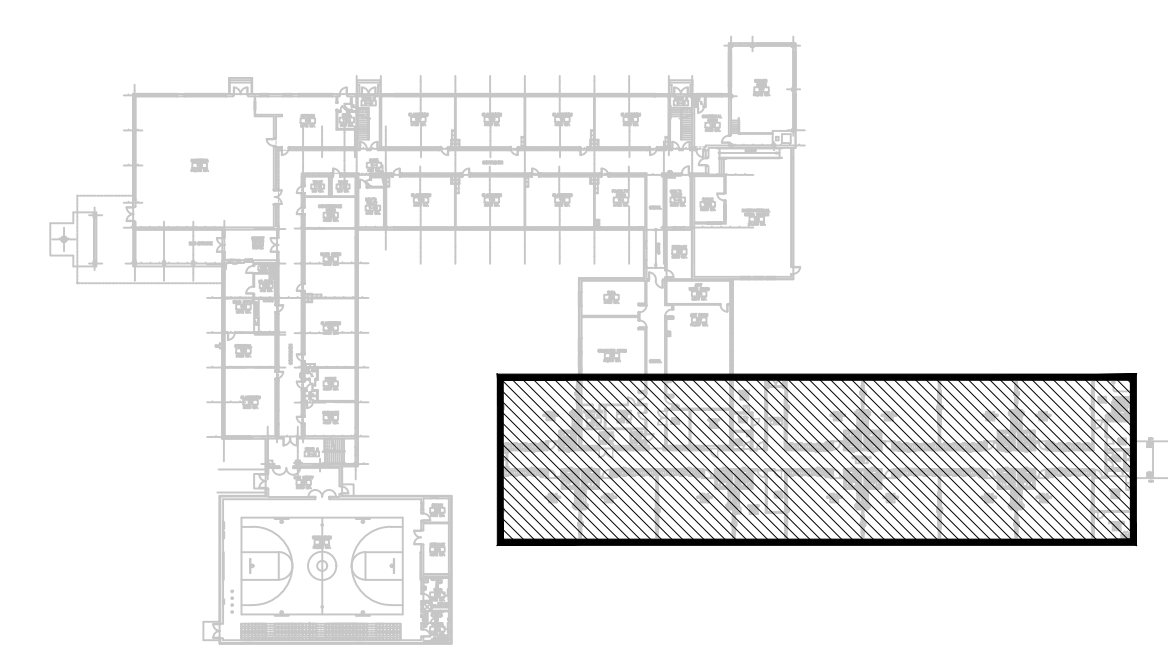
ALL NOTES ON PLANS MAY NOT BE ON THIS SHEET  
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ALL WORK BY PLUMBING CONTRACTOR U.N.O.  
 ALL WORK NEW U.N.O.  
 ALL WORK BASE BID U.N.O.  
 FOR RISER DIAGRAMS SEE SHEET P3.1



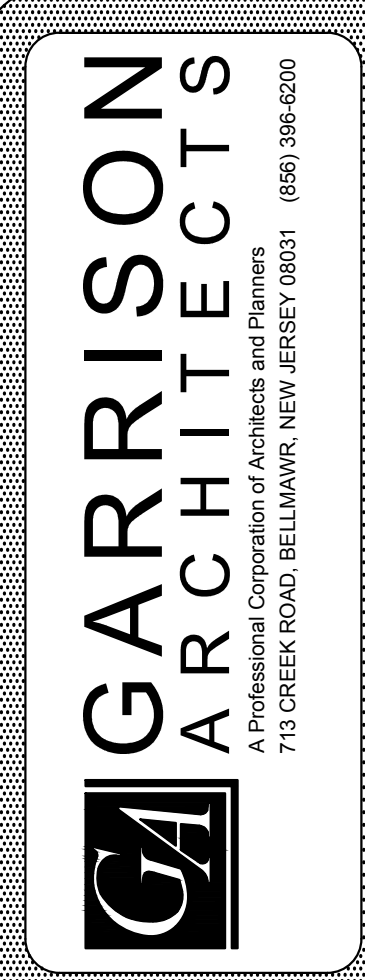
**1 PLUMBING NEW WORK ROOF PLAN**  
 SCALE: 1/8" = 1'-0"

- PLUMBING NOTES
- 5 ROOFTOP AIR CONDITIONING UNIT. REFER TO MECHANICAL PLANS. MAINTAIN MINIMUM 10' FROM PLUMBING VENTS TO UNIT OUTSIDE AIR INTAKE.
  - 9 NEW VENT UP THRU ROOF. SIZE AS INDICATED.



KEYPLAN

ISSUED FOR BID: 11/11/2024



**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
 100 IONA AVENUE PENNS GROVE, NEW JERSEY 08068  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
 261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08068

REVISIONS	
a.	
b.	
c.	

Project No. 23-42  
 Date:  
 Scale: AS NOTED

**PLUMBING ROOF PLAN**

**P1.2**

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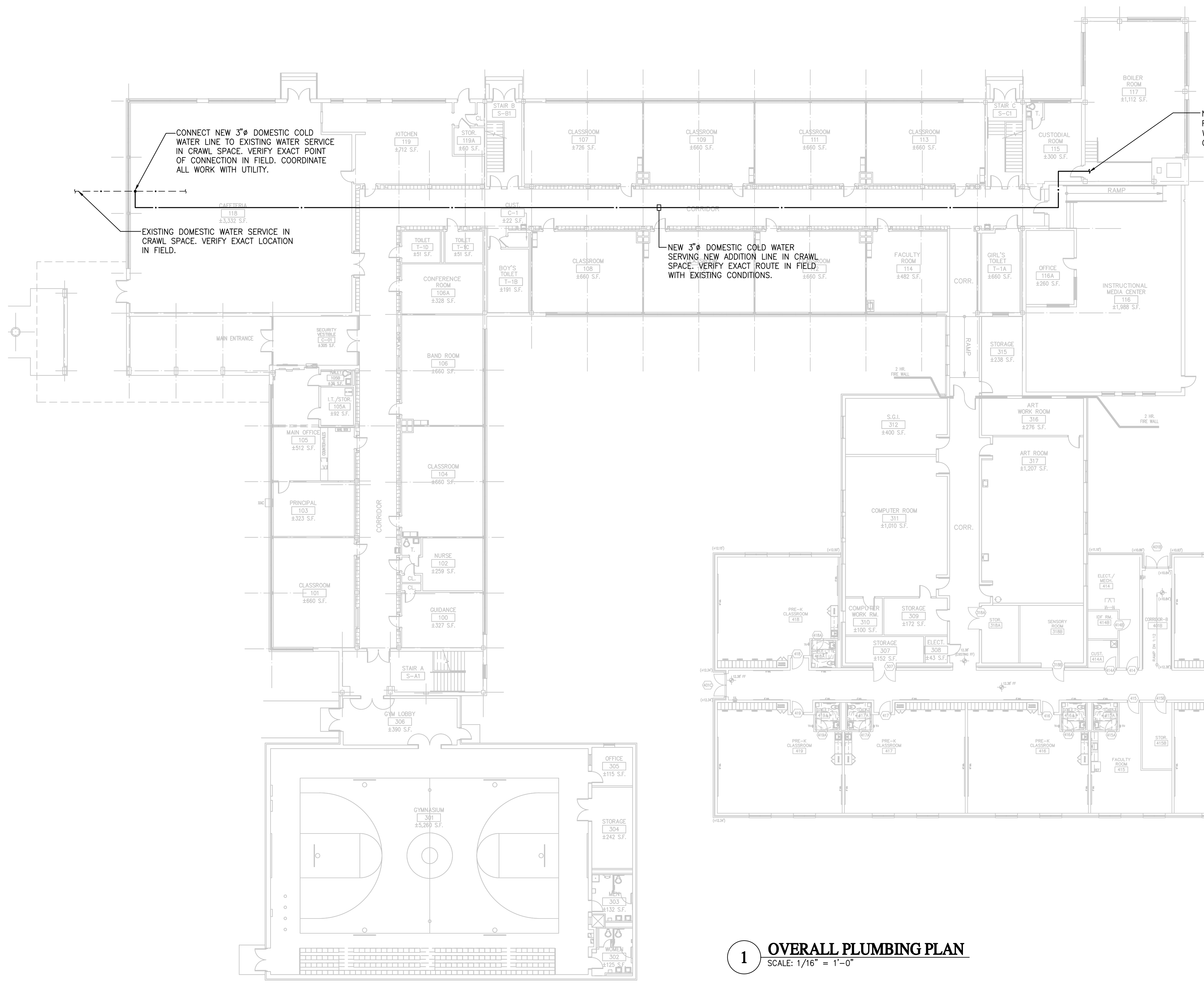


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Hatboro, Pennsylvania 19040  
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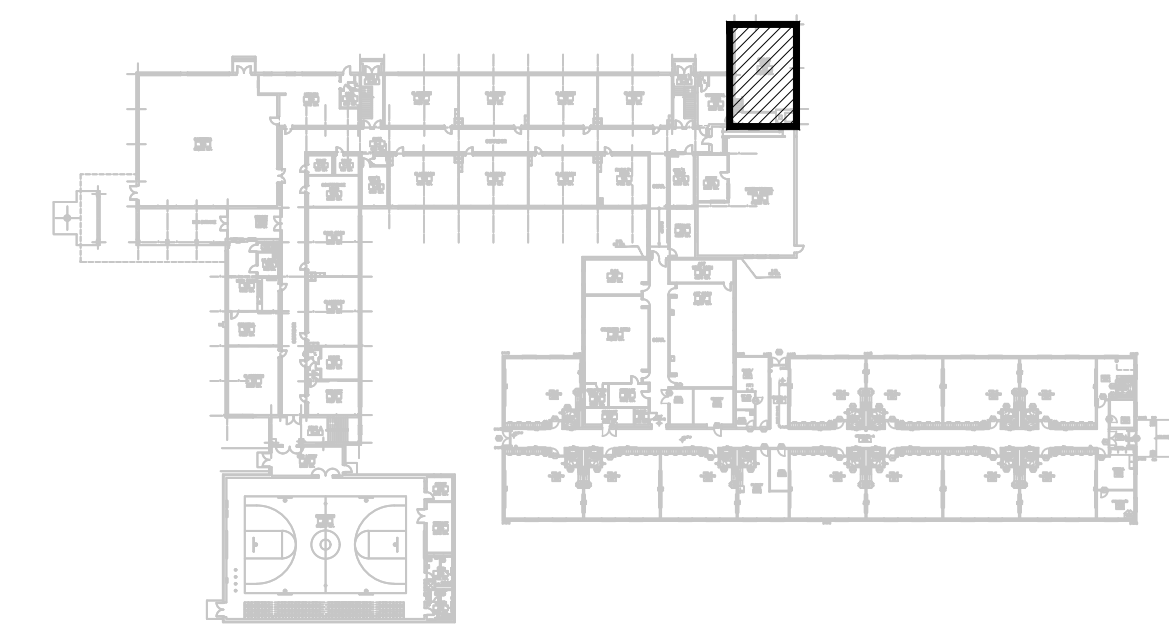
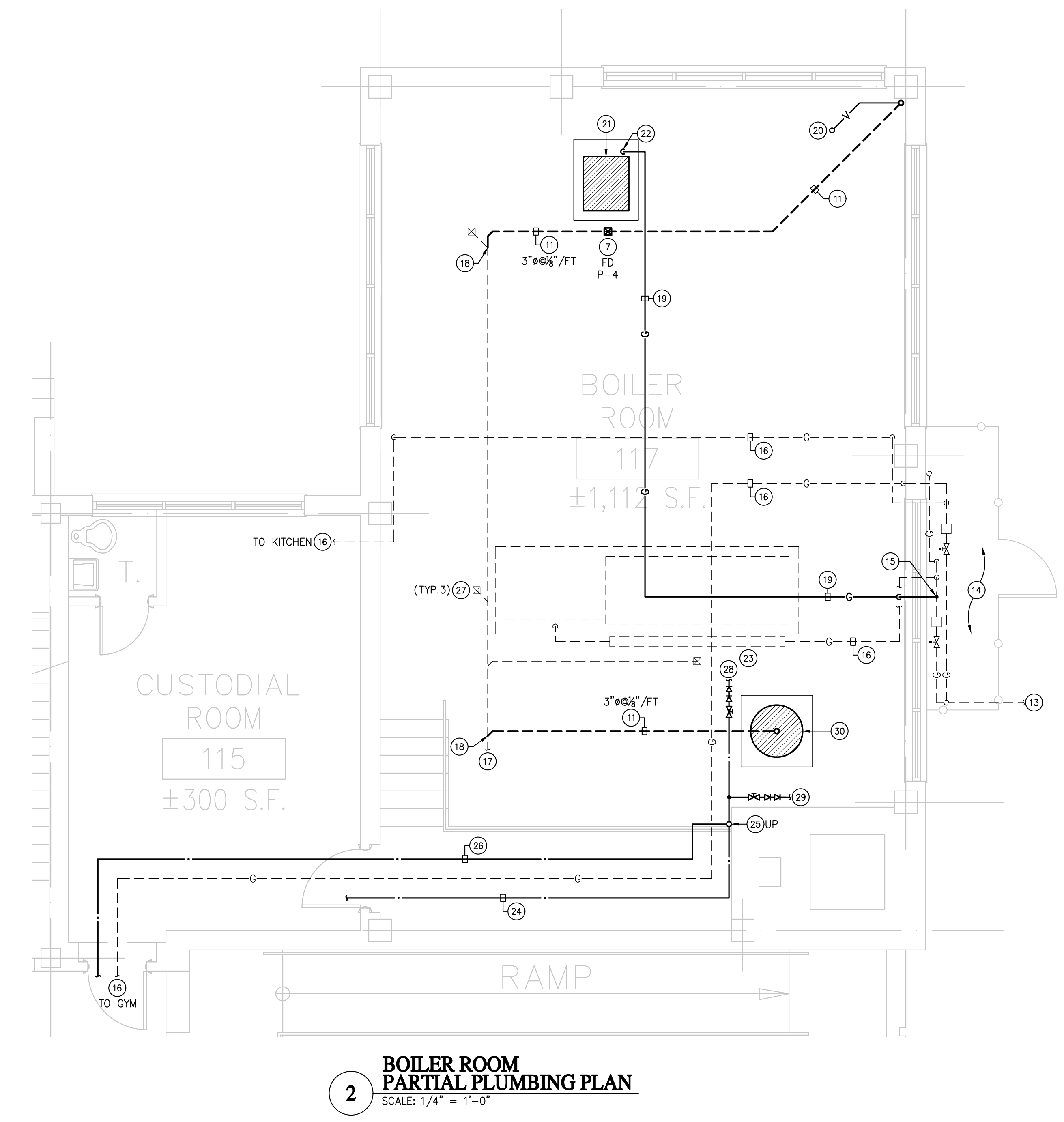
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FOR ALL NOTES REFER TO NOTES ON P3.1

ALL WORK BY PLUMBING CONTRACTOR U.N.O.  
ALL WORK NEW U.N.O.  
ALL WORK BASE BID U.N.O.  
FOR RISER DIAGRAMS SEE SHEET P3.1

- PLUMBING NOTES
- 11 NEW SANITARY LINE BELOW SLAB.
  - 13 EXISTING GAS SERVICE TO REMAIN.
  - 14 EXISTING GAS METER BANK TO REMAIN. PROTECT DURING CONSTRUCTION.
  - 15 CONNECT NEW GAS LINE TO EXISTING GAS HEADER. COORDINATE ALL WORK WITH UTILITY COMPANY.
  - 16 EXISTING GAS PIPE TO REMAIN. PROTECT DURING CONSTRUCTION.
  - 17 EXISTING SANITARY PIPE TO REMAIN. VERIFY EXACT LOCATION AND INVERT IN FIELD.
  - 18 CONNECT NEW SANITARY PIPE TO EXISTING SANITARY PIPE. VERIFY EXACT DEPTH AND LOCATION IN FIELD.
  - 19 NEW GAS PIPE EXPOSED IN SPACE. VERIFY EXACT ROUTE IN FIELD.
  - 20 NEW VENT PIPE UP THRU EXISTING ROOF. VERIFY EXACT ROUTE.
  - 21 NEW BOILER. REFER TO MECHANICAL PLANS.
  - 22 CONNECT NEW GAS PIPE TO NEW BOILER WITH 6" DIRT LEG, GAS COCK, GAS REGULATOR AND SHUTOFF. CONNECT PER BOILER MANUFACTURER REQUIREMENTS.
  - 23 EXISTING GAS TRIN FOR ASSOCIATED EXISTING STEAM BOILER TO REMAIN. PROTECT DURING CONSTRUCTION.
  - 24 NEW 3" DIA. DOMESTIC COLD WATER PIPE FROM CRAWL SPACE BELOW EXISTING WALKWAY.
  - 25 NEW DOMESTIC COLD WATER PIPE UP TO CEILING. VERIFY EXACT LOCATION IN FIELD.
  - 26 NEW EXPOSED DOMESTIC WATER PIPE. VERIFY EXACT ROUTE IN FIELD.
  - 27 EXISTING FLOOR DRAIN TO REMAIN.
  - 28 PROVIDE 1-1/4" DIA. DOMESTIC COLD WATER LINE TO BOILER WITH BACKFLOW PREVENTER. COORDINATE WITH OTHER TRADES.
  - 29 PROVIDE 3/4" DIA. DOMESTIC COLD WATER LINE TO STEAM BOILER BLOWDOWN TANK WITH BACKFLOW PREVENTER. COORDINATE WITH OTHER TRADES.
  - 30 NEW STEAM BOILER BLOWDOWN TANK ON 6" CONCRETE PAD. CONNECT NEW 3" DIA. SANITARY LINE TO TANK. COORDINATE WORK WITH OTHER TRADES.



**1 OVERALL PLUMBING PLAN**  
SCALE: 1/16" = 1'-0"



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100 IONA AVENUE PENNS GROVE, NEW JERSEY 08060  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08068

REVISIONS

a.	
b.	
c.	

Project No. 23-42  
Date: \_\_\_\_\_  
Scale: AS NOTED

EXISTING BUILDING PLUMBING PLANS  
**P2.1**

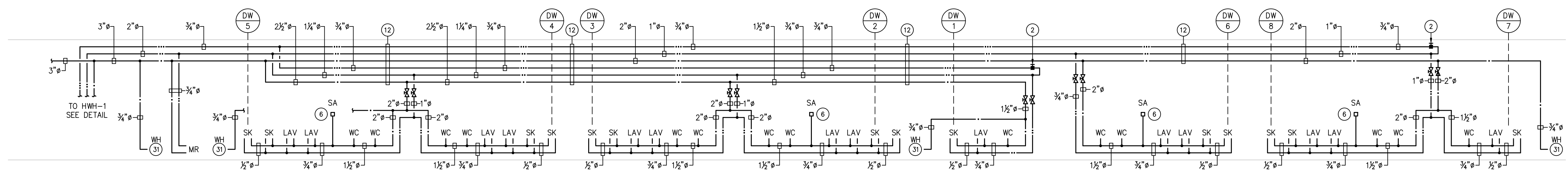
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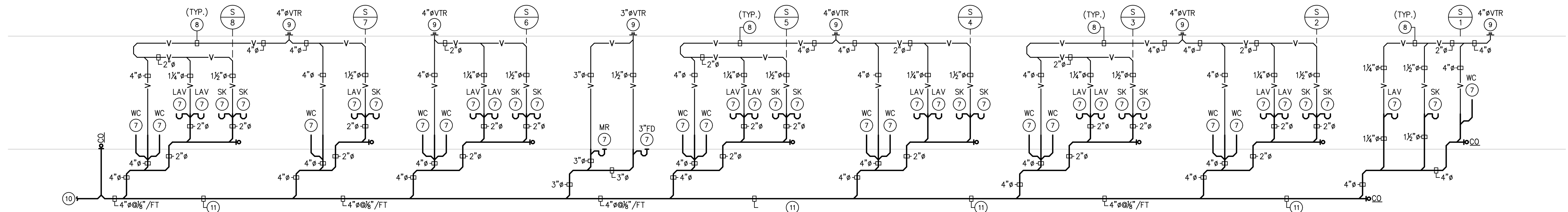


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ALL WORK BY PLUMBING CONTRACTOR U.N.O.  
ALL WORK NEW U.N.O.  
ALL WORK BASE BID U.N.O.  
FOR RISER DIAGRAMS SEE SHEET P.3.1



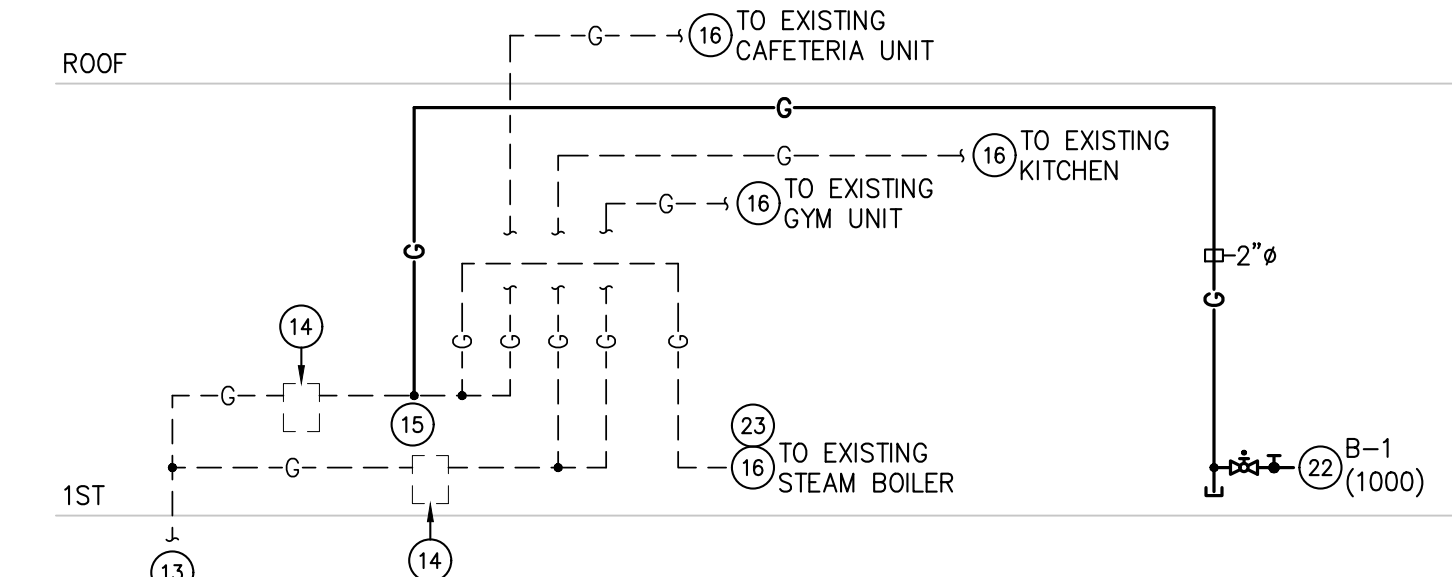
**DOMESTIC WATER PIPING DIAGRAM**  
SCALE: NO SCALE



**SANITARY RISER DIAGRAM**  
SCALE: NO SCALE

NOTE:  
ALTERNATE METHODS OF VENTING AND BACK  
VENTING MAY BE USED AS LOCALLY APPROVED.  
(NO AIR ADMISSION VALVES.)

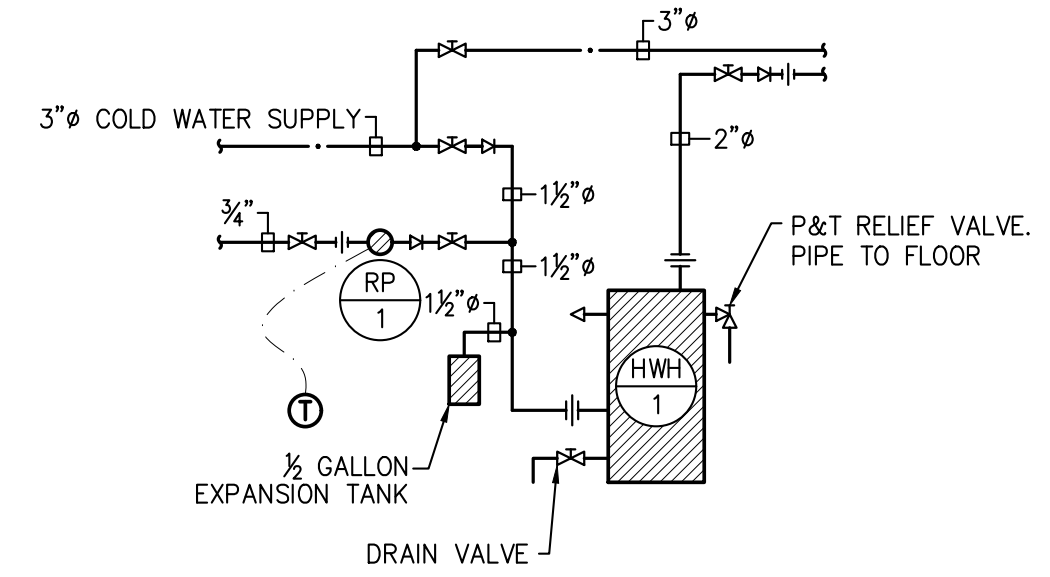
PLUMBING LEGEND			
3CS	(3) COMPARTMENT SINK	—A—	COMPRESSED AIR
ADD	ACCESS DOOR	—C—	COLD WATER
AD	AREA DRAIN	—D—	DOMESTIC HOT WATER
BT	BATHTUB	—DH—	DOMESTIC HOT WATER RETURN
CQ	CLEANOUT	—S—	SANITARY SEWER
DC	DENTAL CHAIR	—S—	STORM WATER
DN	DOWN	—V—	VENT PIPING
DF	DRINKING FOUNTAIN	—F—	FIRE PROTECTION PIPE
DSW	DISHWASHER	—VAC—	VACUUM PIPE
DSHR	DISHWASHER	—DCA—	DENTAL COMPRESSED AIR
EWC	ELECTRIC WATER COOLER	—AR—	ACID RESISTANT PIPE
FH	FUME HOOD	—ARV—	ACID RESISTANT VENT
FPS	FOOD PREP SINK	—S—	SPRINKLER HEAD
FS	FLOOR SINK	—C—	CLEANOUT
GS	GREASE INTERCEPTOR	—F—	FLOOR DRAIN
HOLS	HANDICAPPED LAB STATION/SINK	—G—	GATE VALVE
HD	HUB DRAIN	—C—	CHECK VALVE
HS	HAND SINK	—R—	RELIEF VALVE
HTUB	HYDRO THERAPY TUB	—T—	THERMOMETER
HWS	HAIR WASH SINK	—P—	PRESSURE REDUCING VALVE
INV.EL.	INVERT ELEVATION	—A—	AUTOMATIC THREE-WAY VALVE
IS	INSTRUCTORS TABLE/SINK	—A—	AUTOMATIC TWO-WAY VALVE
LAV	LAVATORY	—G—	GAS COCK
LS	LAB STATION/SINK	—S—	STRAINER
LS	LAB STATION/SINK	—S—	SIAMSE CONNECTION
MR	MOP RECEPTOR	—U—	UNION
MR	MOP RECEPTOR	—T—	THERMOMETER
MH	MANHOLE	—P—	PRESSURE GAUGE W/GAUGE COCK
MV	MIXING VALVE	—WH(HB)—	WALL HYDRANT (HOSE BIBB)
OI	OIL INTERCEPTOR	—V—	VENT
PEDSK	PEDICURE SINK	—V—	VENT TO ROOF
PS	PREP ROOM SINK	—WC—	WATER CLOSET
RWC	RAINWATER CONDUCTOR	—WS—	WASH STATION
SHWR	SHOWER	—S—	SANITARY SEWER
SI	SAND INTERCEPTOR	—S—	SANITARY SEWER
STK	STACK	—S—	SANITARY SEWER
SS	SERVICE SINK	—S—	SANITARY SEWER
UNO	UNLESS NOTED OTHERWISE	—S—	SANITARY SEWER
UR	URINAL	—S—	SANITARY SEWER
V	VENT	—S—	SANITARY SEWER
VTR	VENT TO ROOF	—S—	SANITARY SEWER
WC	WATER CLOSET	—S—	SANITARY SEWER
WS	WASH STATION	—S—	SANITARY SEWER



**GAS PIPING DETAIL**  
SCALE: NO SCALE

GAS PIPING BASED ON INITIAL PRESSURE OF LESS THAN 2 PSI, WITH 0.5" W.C. PRESSURE DROP, AND TOTAL DEVELOPED LENGTH OF 70 FT. GAS PIPING SIZES BASED UPON TABLE 402.4(2) INTERNATIONAL FUEL GAS CODE.

ALL GAS PRESSURE REGULATORS PER SOUTH JERSEY GAS REQUIREMENTS.



**DOMESTIC HOT WATER HEATER PIPING DETAIL**  
SCALE: NO SCALE

HWH 1 ELECTRIC DOMESTIC HOT WATER HEATER, 50 GALLON STORAGE CAPACITY, 5 KW W/ P&T RELIEF VALVE, VACUUM BREAKER, & 1/2 GALLON EXPANSION TANK BRADFORD WHITE MODEL L35503-3.

RP 1 IN LINE REDUCING PUMP BAG 1/2 HP (SEE SPECIFICATIONS) WITH TIMER AND ADJUST

NOTE: REFER TO SPECIFICATIONS FOR FIXTURE DESCRIPTION.

FIXTURE TYPE	ABBREV	FIXTURE UNIT VALUE	CONNECTION SIZES				REMARKS
			(TRAP) SAN	VENT	HW	CW	
WATER CLOSET	WC	6	4	2	—	1 1/4	FLUSH VALVE
LAVATORY	LAV	1	1 1/4	1 1/4	1/2	1/2	
SINK	SK	2	1 1/2	1 1/2	1/2	1/2	
FLOOR DRAIN	FD	4	3	1 1/2	—	—	DEEP SEAL TRAP W/ QUAD SEAL
MOP RECEPTOR	MR	3	3	3	3/4	3/4	

**PLUMBING NOTES**

- NEW HOT WATER HEATER ON NEW CONCRETE PAD.
- PROVIDE BALANCING VALVE AND THERMOMETER.
- NEW DOMESTIC WATER PIPE THRU WALL. FIRE SAFE PENETRATION PER CODE.
- NEW DOMESTIC WATER PIPE ABOVE EXISTING CEILING. VERIFY EXACT ROUTE WITH EXISTING CONDITIONS.
- ROOFTOP AIR CONDITIONING UNIT. REFER TO MECHANICAL PLANS. MAINTAIN MINIMUM 10' FROM PLUMBING VENTS TO UNIT OUTSIDE AIR INTAKE.
- NEW SHOCK ABSORBER IN CHASE. LOCATE ABOVE CEILING WITH ACCESS PANEL TO ALLOW FOR ACCESS AND REPLACEMENT.
- NEW PLUMBING FIXTURE, TYPE AS INDICATED.
- NEW VENT ABOVE CEILING.
- NEW VENT UP THRU ROOF. SIZE AS INDICATED.
- SANITARY LINE TO 5'-0" OUTSIDE OF BUILDING FOR CONTINUATION OF SANITARY REFER TO SITE PLAN. VERIFY INVERT ELEVATION AND PROVIDE 2-WAY CLEANOUT.
- NEW SANITARY LINE BELOW SLAB.
- NEW DOMESTIC WATER PIPE ABOVE CEILING.
- EXISTING GAS SERVICE TO REMAIN.
- EXISTING GAS METER BANK TO REMAIN. PROTECT DURING CONSTRUCTION.
- CONNECT NEW GAS LINE TO EXISTING GAS HEADER. COORDINATE ALL WORK WITH UTILITY COMPANY.
- EXISTING GAS PIPE TO REMAIN. PROTECT DURING CONSTRUCTION.
- EXISTING SANITARY PIPE TO REMAIN. VERIFY EXACT LOCATION AND INVERT IN FIELD.
- CONNECT NEW SANITARY PIPE TO EXISTING SANITARY PIPE. VERIFY EXACT DEPTH AND LOCATION IN FIELD.
- NEW GAS PIPE EXPOSED IN SPACE. VERIFY EXACT ROUTE IN FIELD.
- NEW VENT PIPE UP THRU EXISTING ROOF. VERIFY EXACT ROUTE.
- NEW BOILER. REFER TO MECHANICAL PLANS.
- CONNECT NEW GAS PIPE TO NEW BOILER WITH 6" DIRT LEG, GAS COCK, GAS REGULATOR AND SHUTOFF. CONNECT PER BOILER MANUFACTURER REQUIREMENTS.
- EXISTING GAS TRAP FOR ASSOCIATED EXISTING STEAM BOILER TO REMAIN. PROTECT DURING CONSTRUCTION.
- NEW 3" DIA. DOMESTIC COLD WATER PIPE FROM CRANL SPACE BELOW EXISTING WALKWAY.
- NEW DOMESTIC COLD WATER PIPE UP TO CEILING. VERIFY EXACT LOCATION IN FIELD.
- NEW EXPOSED DOMESTIC WATER PIPE. VERIFY EXACT ROUTE IN FIELD.
- EXISTING FLOOR DRAIN TO REMAIN.
- PROVIDE 1-1/4" DIA. DOMESTIC COLD WATER LINE TO BOILER WITH BACKFLOW PREVENTER. COORDINATE WITH OTHER TRADES.
- PROVIDE 3/4" DIA. DOMESTIC COLD WATER LINE TO STEAM BOILER BLOWDOWN TANK WITH BACKFLOW PREVENTER. COORDINATE WITH OTHER TRADES.
- NEW STEAM BOILER BLOWDOWN TANK ON 6" CONCRETE PAD. CONNECT NEW 3" DIA. SANITARY LINE TO TANK. COORDINATE WORK WITH OTHER TRADES.
- 3/4" DIAMETER DOWN TO WALL HYDRANT (FURR IN) WITH SHUTOFF.

**REVISIONS**

a.	
b.	
c.	

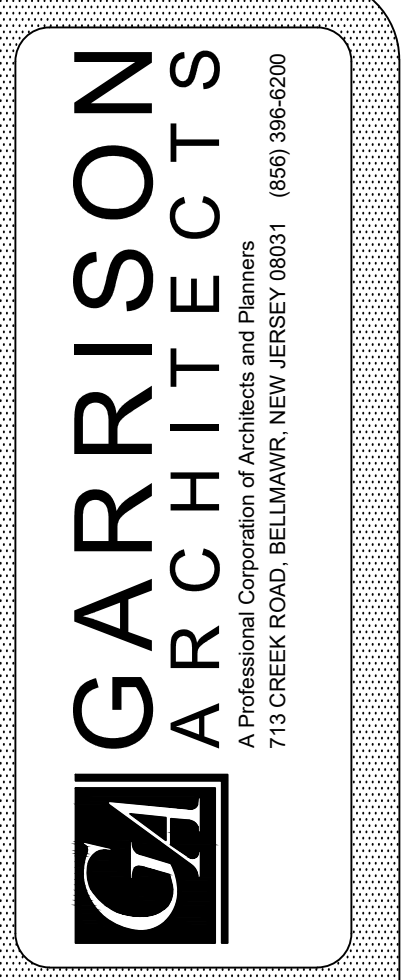
Project No. 23-42  
Date:  
Scale: AS NOTED

**PLUMBING LEGEND, RISERS & NOTES**



BLOCK 141  
 LOT 1  
 N/F PENNS GROVE APARTMENTS LLC  
 D.B. 295, PG. 174

BLOCK 141  
 LOT 2  
 LANDS N/F PENNS GROVE-CARNEYS  
 PLANT BOARD OF EDUCATION  
 PAUL W. CARLETON ELEMENTARY  
 TWO STORY MORTAR BUILDING



PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT  
 100 IONA AVENUE PENNS GROVE NEW JERSEY 08060  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
 251 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08060

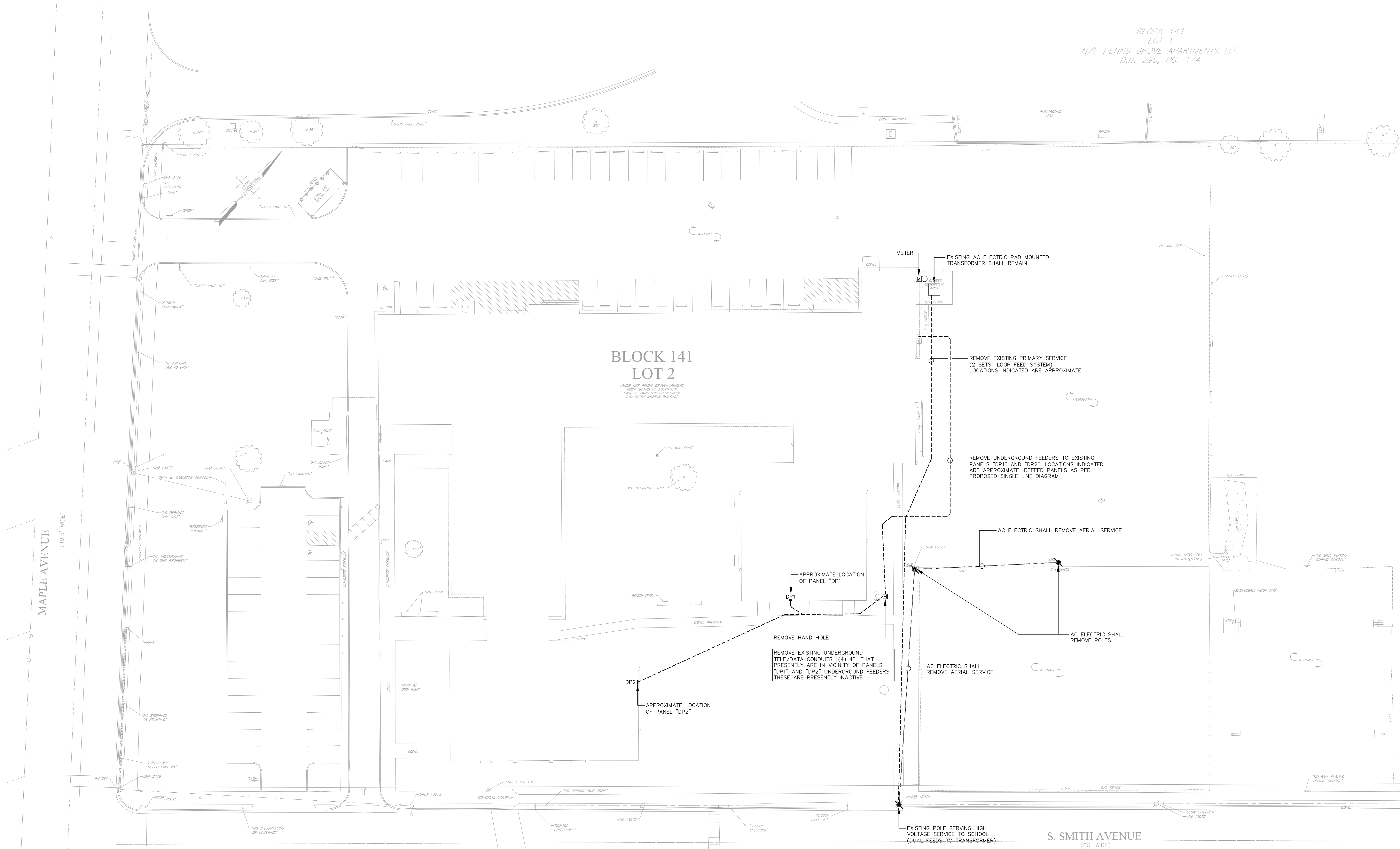
REVISIONS	

Project No. 23-42  
 Date: 11/11/24  
 Scale: AS NOTED

**EXISTING ELECTRICAL SITE PLAN**  
**E1**

MCE #E7364  
**MULHERN Consulting Engineers and ASSOCIATES, Incorporated**  
 321 South York Road  
 Hatboro, Pennsylvania 19040  
 Phone: (215) 293-9900  
 www.MulhernEngineers.com

ISSUED FOR BID: 11/11/2024



**1**  
**E1** EXISTING ELECTRICAL SITE PLAN  
 GRAPHIC SCALE (FEET)

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LOT 1  
N/F PENNS GROVE APARTMENTS LLC  
D.B. 295, PG. 174

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715 CREEK ROAD, BELLMAWR, NEW JERSEY 08011 (856) 396-0200

**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08060  
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REVISIONS

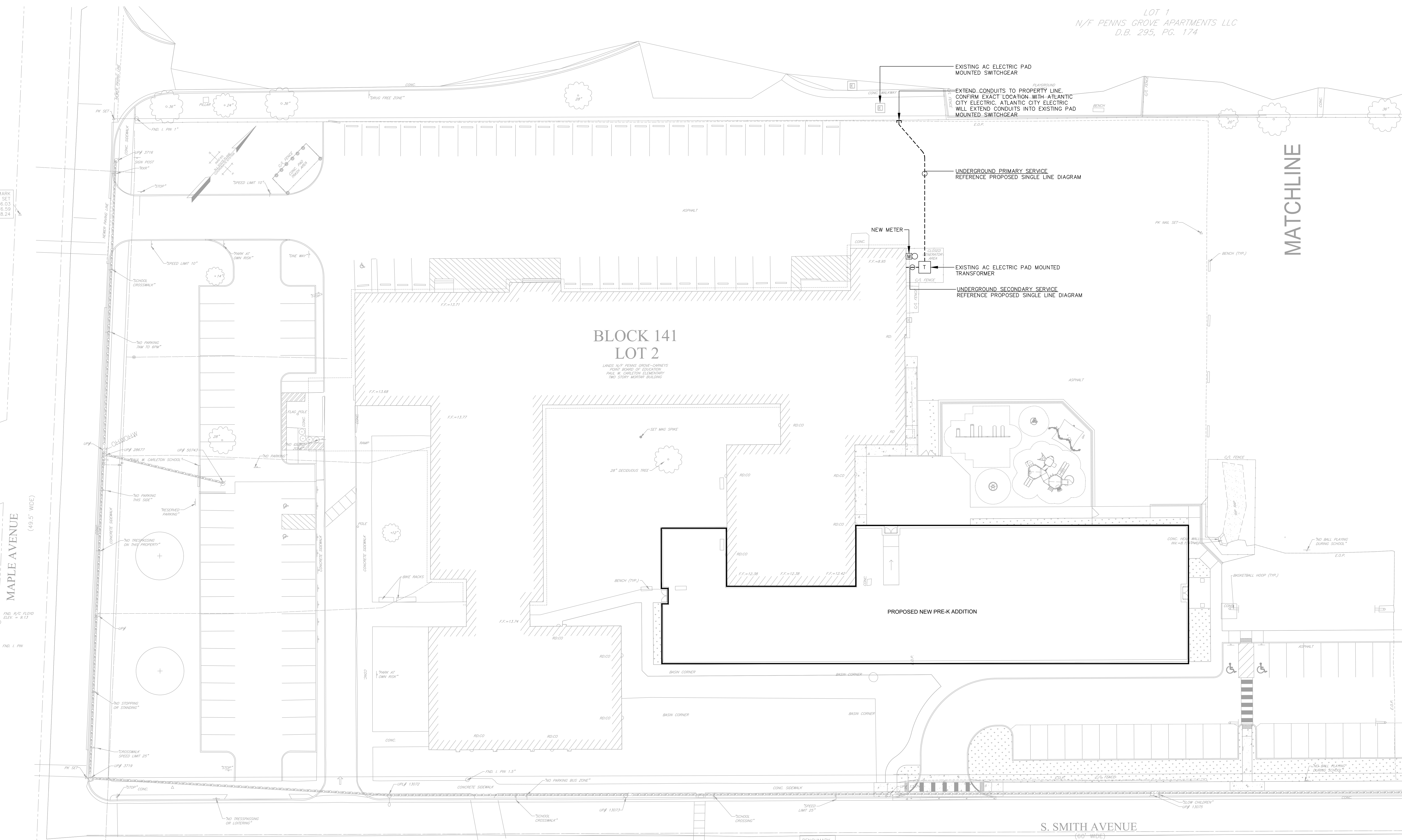
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1.  
2.

Project No. 23-42  
Date: 11/11/24  
Scale: AS NOTED

**PROPOSED ELECTRICAL SITE PLAN**  
**E2**

MATCHLINE

S. SMITH AVENUE  
(60'-WIDE)



**1** PROPOSED ELECTRICAL SITE PLAN  
**E2**



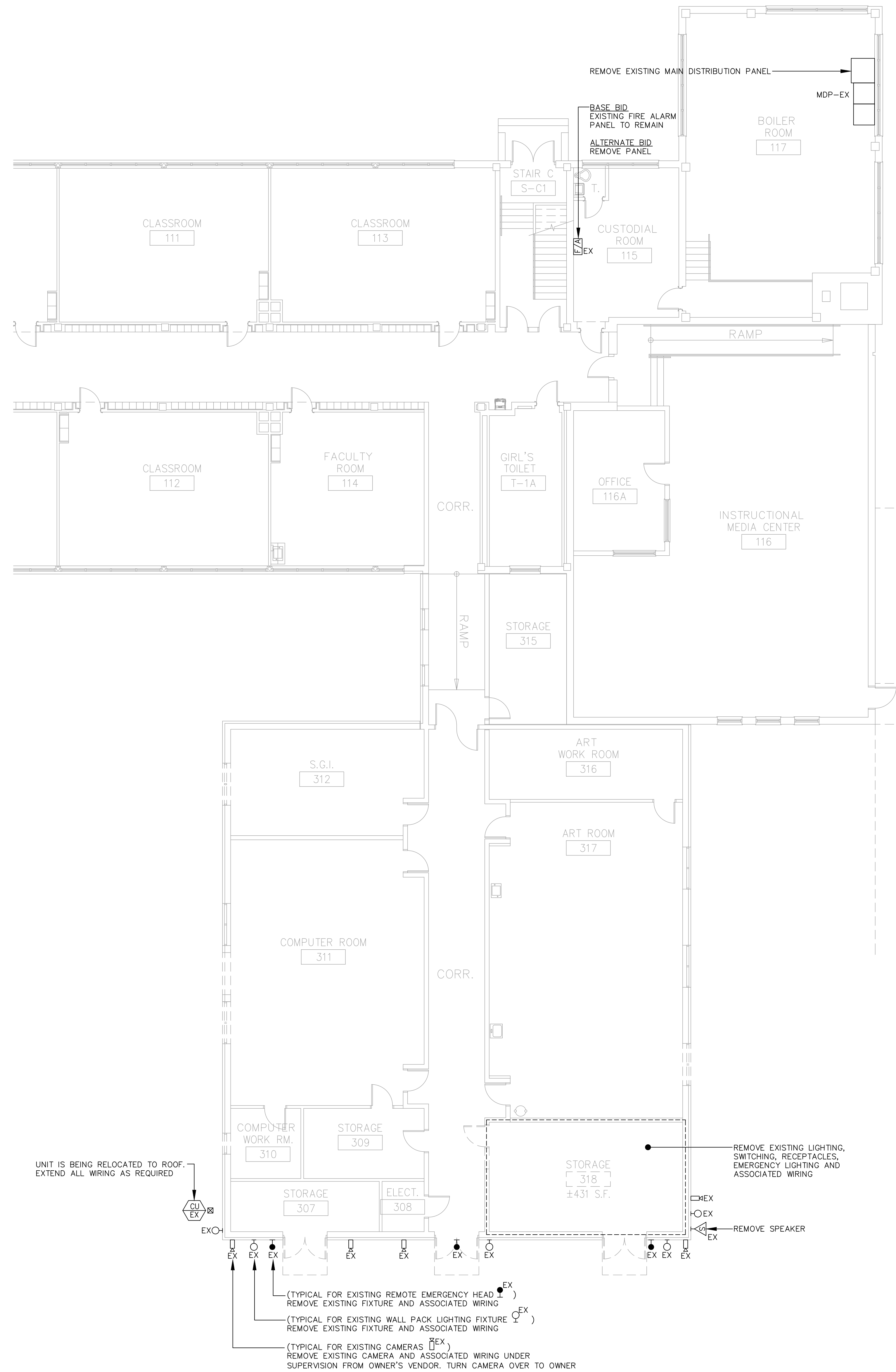
BENCHMARK  
PK MAIL SET  
N: 324486.53  
E: 218948.63  
ELEV: 12.01'

MCE #E7364  
**MULHERN Consulting Engineers and ASSOCIATES, Incorporated**  
321 South York Road  
Hatboro, Pennsylvania 19040  
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1 PARTIAL PRE-K ADDITION DEMOLITION PLAN  
 E3

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 715 CREEK ROAD, BELLMAWR, NEW JERSEY 08011  
 (856) 396-0200

**PENNS GROVE - CARNEYS POINT REGIONAL SCHOOL DISTRICT**  
 100 IONA AVENUE, PENNS GROVE, NEW JERSEY 08060  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
 261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08060

**REVISIONS**

Q.	
P.	
R.	

Project No. 23-42  
 Date: 11/11/24  
 Scale: AS NOTED

**PARTIAL ELECTRICAL DEMOLITION PLAN**  
**E3**

MCE #E7.364  
**MULHERN Consulting Engineers and ASSOCIATES, Incorporated**  
 321 South York Road  
 Hatboro, Pennsylvania 19040  
 Phone: (215) 293-9900  
 www.MulhernEngineers.com

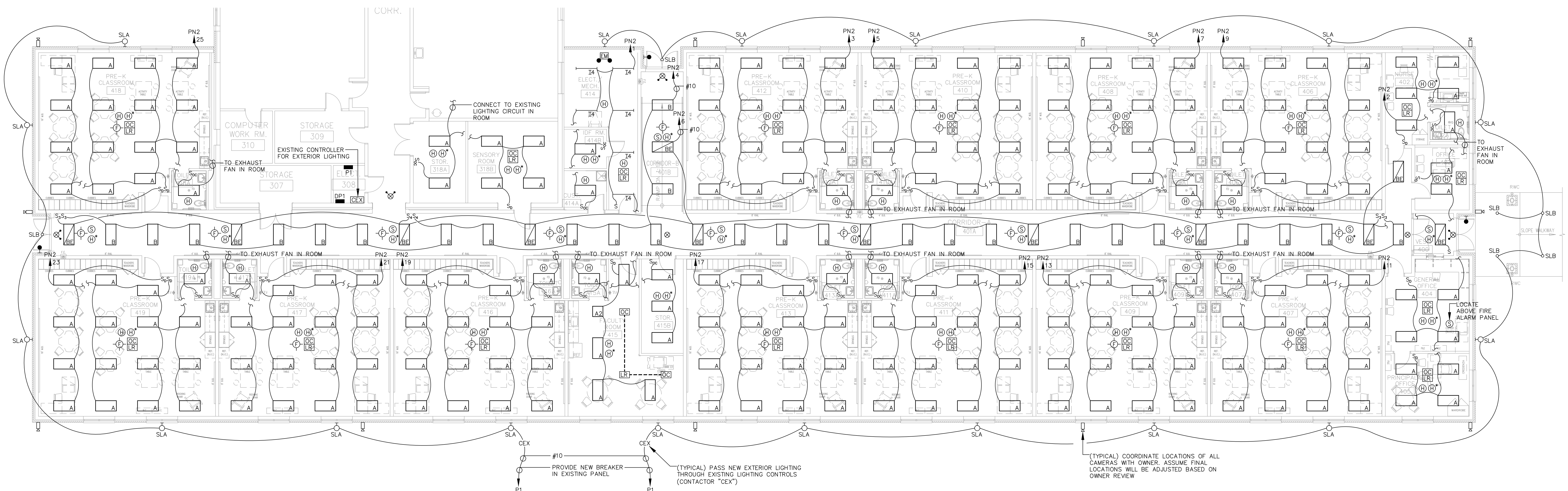
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LIGHTING FIXTURE SCHEDULE					
TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	LAMPS	REMARKS
A	2' X 4' RECESSED UNIVERSAL PANEL	RAB	EZPANFA 2X4/D10	3114048W, 80+ CRI (NOM), 3642/4609/5365LM, 3.500K 3745/4845/5630LM, 4.000K 3600/4578/5311LM, 5.000K LED	FROSTED LENS, 0-10V DIMMABLE, DLC AND DAMP LOCATION LISTING, SELECTABLE COLOR TEMPERATURE AND LIGHTING OUTPUT (SET FOR 48W, 5.365LM, 3.500K)
A2	2' X 2' RECESSED UNIVERSAL PANEL	RAB	EZPANFA 2X2/D10	2831142W, 80+ CRI (NOM), 3140/3618/4425LM, 3.500K 3276/3610/4802LM, 4.000K 3117/3600/4435LM, 5.000K LED	FROSTED LENS, 0-10V DIMMABLE, DLC AND DAMP LOCATION LISTING, SELECTABLE COLOR TEMPERATURE AND LIGHTING OUTPUT (SET FOR 42W, 4.425LM, 3.500K)
B	2' X 4' RECESSED UNIVERSAL PANEL	RAB	EZPANFA 2X4/D10	3114048W, 80+ CRI (NOM), 3642/4609/5365LM, 3.500K 3745/4845/5630LM, 4.000K 3600/4578/5311LM, 5.000K LED	FROSTED LENS, 0-10V DIMMABLE, DLC AND DAMP LOCATION LISTING, SELECTABLE COLOR TEMPERATURE AND LIGHTING OUTPUT (SET FOR 48W, 5.365LM, 3.500K)
BE	2' X 4' RECESSED UNIVERSAL PANEL WITH INTEGRAL EMERGENCY DRIVER AND FIELD INSTALLED REMOTE TEST SWITCH	RAB	EZPANFA 2X4/D10/E2	3114048W, 80+ CRI (NOM), 3642/4609/5365LM, 3.500K 3745/4845/5630LM, 4.000K 3600/4578/5311LM, 5.000K LED	FROSTED LENS, 0-10V DIMMABLE, DLC AND DAMP LOCATION LISTING, SELECTABLE COLOR TEMPERATURE AND LIGHTING OUTPUT (SET FOR 48W, 5.365LM, 3.500K). LOCATE TEST SWITCH ADJACENT TO FIXTURE IN CEILING, RECESSED IN TILE
H	4 FOOT LED STRIPLIGHT	COLUMBIA	LCL-4-35K-ML-E-U	42 WATTS, 5359 LUMENS	WHERE REQUIRED, COORDINATE WITH MECHANICAL SYSTEMS
EM	EMERGENCY BATTERY UNIT WITH NO REMOTE HEAD CAPABILITY	EMERGI-LITE	DLM-2	(2) 0V, 5.4W	CONNECT TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHING
EXIT	EXIT SIGN, RED LETTERS ON WHITE FACE AND HOUSING	EMERGI-LITE	W PREM SNX R	INTEGRAL DIFFUSED LED	INTEGRAL NiCd BATTERY BACKUP, THERMOPLASTIC HOUSING, CONNECT TO NEARBY LIGHTING CIRCUIT, UNIVERSAL MOUNTING (COORDINATE MOUNTING WITH ARCHITECT), QUANTITY OF FACES AS APPLICABLE, PROVIDE DIRECTIONAL ARROWS WHERE APPLICABLE, CONNECT TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHING
EMEX	COMBINATION EXIT AND EMERGENCY LIGHT WITH REMOTE CAPABILITY, RED LETTERS	EMERGI-LITE	ELXN400R-2LED-R	(2) MR16 6V-5.4W LAMPS	CONNECT TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHING
REM	REMOTE EMERGENCY BATTERY HEAD (2) HEADS, WEATHERPROOF	EMERGI-LITE	PROVIDE WITH EMEX		CONNECT TO NEAREST EMEX
SLA	WALL MOUNTED LED	LITHONIA	TWX2 LED ALO 40K MVOLT DDBTXD	100W, 4000 DEG K, 6850 LUMENS	CONFIRM COLOR WITH ARCHITECT
SLB	4" RECESSED EXTERIOR LED DOWNLIGHT	USAI	B4RD 12G1 40KS 50 S FINISH NCSM UNV D&E	12 WATTS, 1015 LUMENS, 4000 DEG K	UL LISTED FOR WET LOCATION, HOUSING TO SUIT CEILING CONSTRUCTION, VERIFY CEILING THICKNESS BEFORE ORDERING HOUSING, COORDINATE FINISH WITH ARCHITECT

- NOTES:
- 1) PROVIDE ALL LUMINAIRES AS UNIVERSAL 120 V AND 277 V OPERATION, UNLESS INDICATED OTHERWISE.
  - 2) VERIFY ALL DEPTHS OF RECESSED LUMINAIRES PRIOR TO ORDERING, COORDINATE WITH CEILING DEPTHS.
  - 3) WHERE LUMINAIRES ARE SPECIFIED OR OTHERWISE FURNISHED WITH TAMPER RESISTANT HARDWARE, SEE SPECIFICATIONS.
  - 4) FOR ALL LUMINAIRES SHOWN ON THIS SCHEDULE WITH 0-10 V DIMMABLE DRIVERS/BALLASTS (WHEREVER 0-10 V DIMMING IS INDICATED IN THE DESCRIPTION, LAMPS, OR REMARKS ABOVE OR WHERE A CATALOG NUMBER IS USED ABOVE WHICH DENOTES 0-10 V DIMMABLE DRIVERS/BALLASTS IN MANUFACTURER'S DATA), PROVIDE BOTH POWER WIRING AND 0-10 V CONTROL WIRING TO ALL LUMINAIRES. RUN CONTROL WIRING FROM ALL LIGHTS WITH 0-10 V DIMMABLE DRIVERS/BALLASTS TO THE RESPECTIVE DIMMER OR SWITCH CONTROLLING THE LIGHTING. WHERE DIMMERS ARE SHOWN ON THE DRAWINGS (INCLUDING COMBINATION SENSORS/DIMMERS), INTERCONNECT CONTROL WIRING WITH DIMMERS AS PER MANUFACTURER. WHERE DIMMERS ARE NOT SHOWN ON THE DRAWINGS, INSTALL CONTROL WIRING TO THE SWITCH (NON-DIMMED) LOCATION AND SAFELY INSULATE AND CAP OFF CONTROL WIRING (TO FACILITATE FUTURE REPLACEMENT OF NON-DIMMED SWITCH WITH DIMMER). FOR ALL DIMMABLE LIGHTING, SEE ELECTRICAL SYMBOL LIST AND FULLY COORDINATE DIMMER COMPATIBILITY IN DETAIL WITH EACH LUMINAIRE AND EACH DIMMER MANUFACTURER (INCLUDE COSTS IN BID TO USE DIFFERENT TYPES OF DIMMER SWITCHES AS APPLICABLE FOR EACH DIFFERENT LUMINAIRE TYPE CONTROLLED).
  - 5) FOR ALL LUMINAIRES SHOWN ON THIS SCHEDULE WITH SELECTABLE COLOR TEMPERATURE AND/OR LIGHTING OUTPUT, INITIALLY SET LIGHTS AS SHOWN ON THE SCHEDULE. INCLUDE COSTS IN BID TO ADJUST AND RE-SET SELECTABLE SETTINGS TO THE SATISFACTION OF THE OWNER TWO (2) TIMES WHICH MAY BE EITHER DURING CONSTRUCTION OR DURING THE PROJECT GUARANTEE/WARRANTY PERIOD.
  - 6) FOR ALL LUMINAIRES SHOWN ON THIS SCHEDULE WITH DLC LISTING, PROVIDE ONLY LUMINAIRES QUALIFIED AND LISTED IN THE DESIGN LIGHTS CONSORTIUM (DLC) QUALIFIED PRODUCTS LISTING (QPL) AVAILABLE AT THE DLC WEBSITE (SEE BELOW). SUBMIT INFORMATION SHOWING LISTING IN THE DLC QPL AS PART OF SHOP DRAWINGS FOR REVIEW. [HTTP://WWW.DESIGNLIGHTS.ORG/SEARCH](http://www.designlights.org/search)
  - 7) MANUFACTURERS SHOWN ABOVE INDICATE THE BASIS OF DESIGN. OTHER MANUFACTURERS (INCLUDING, BUT NOT LIMITED, TO THOSE SHOWN IN THE LIGHTING SPECIFICATIONS) SHALL BE CONSIDERED.
  - 8) ALL FINISH COLORS ARE SELECTED BY THE ARCHITECT/OWNER. VERIFY AND COORDINATE ANY FINISH COLORS SHOWN ABOVE SPECIFICALLY IN DETAIL WITH THE ARCHITECT/OWNER BEFORE RELEASING LIGHTS.
  - 9) SUBMIT SAMPLES OF LUMINAIRES AND DETAILED COMPUTER-GENERATED ILLUMINATION FOOT-CANDLE CALCULATIONS IF REQUESTED BY THE OWNER OR OTHERWISE SPECIFIED.
  - 10)



**1**  
**E4** PRE-K ADDITION LIGHTING PLAN

GRAPHIC SCALE (FEET)

**GARRISON ARCHITECTS**  
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**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
205 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08053

REVISIONS

A.	
B.	
C.	

Project No. 23-42  
Date: 11/11/24  
Scale: AS NOTED

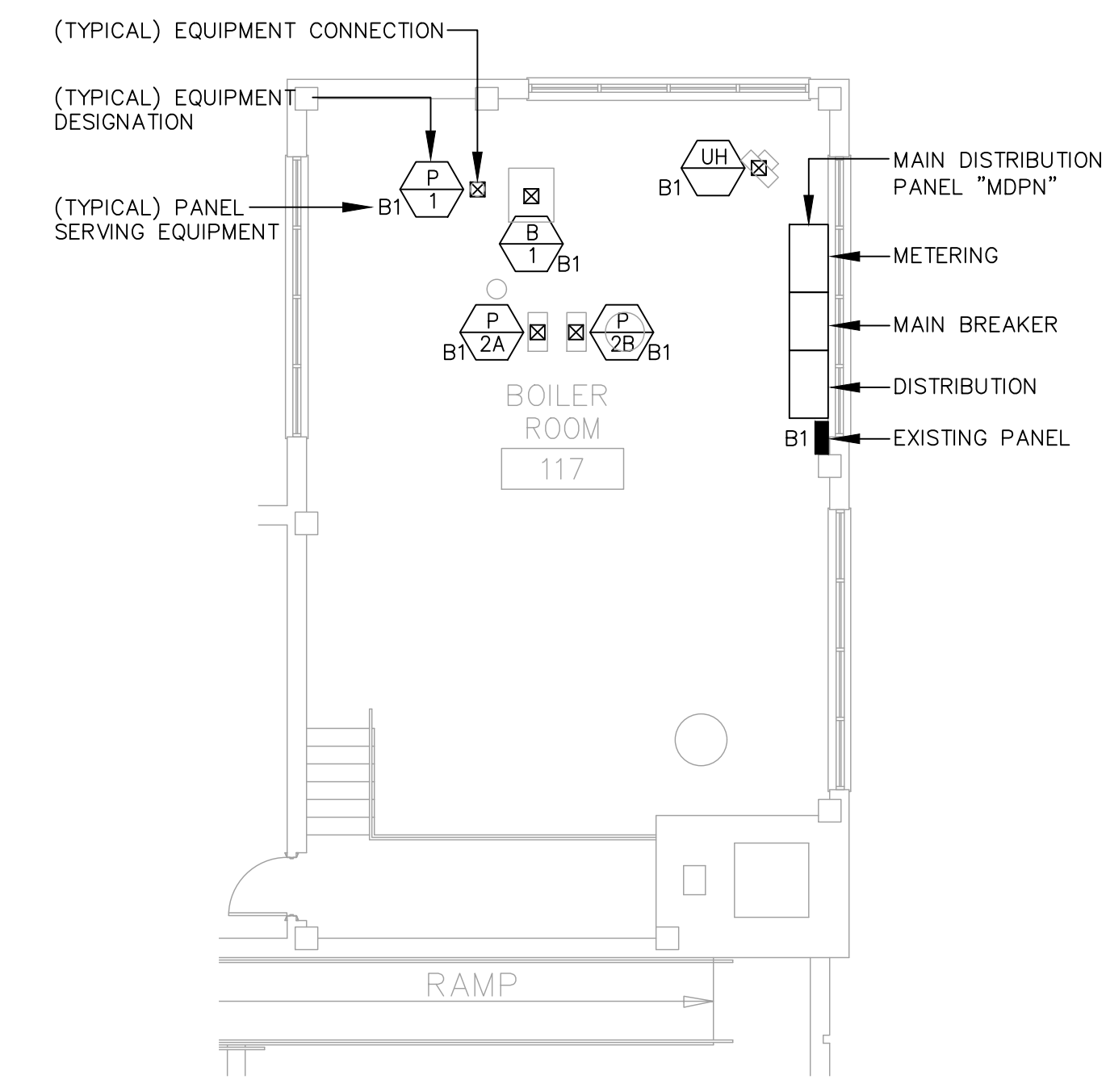
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**PRE-K ADDITION LIGHTING PLAN**  
**E4**

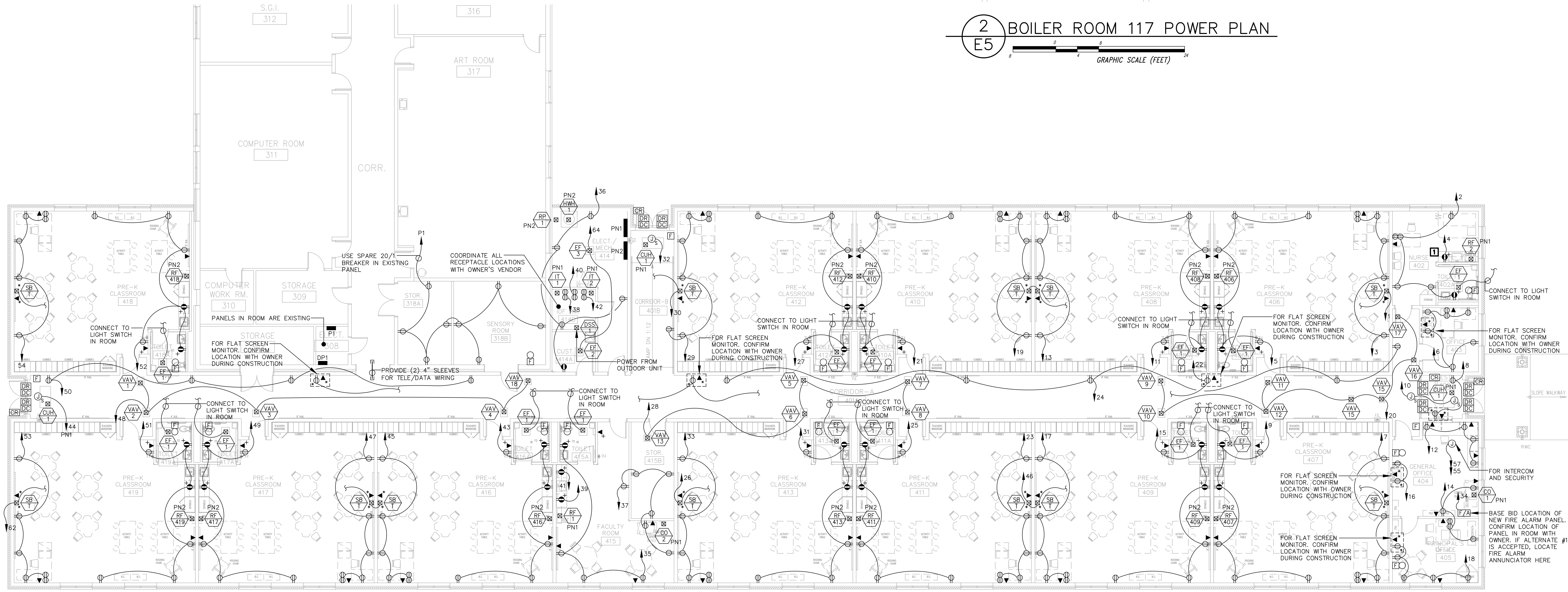
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**2** BOILER ROOM 117 POWER PLAN  
E5  
GRAPHIC SCALE (FEET)



**1** PRE-K ADDITION POWER PLAN  
E5  
GRAPHIC SCALE (FEET)

CIRCUIT ALL HOME RUNS TO NEW PANEL "PN1", UNLESS NOTED OTHERWISE

**HOSPITAL GRADE WIRING AND RECEPTACLES**

FOR ALL RECEPTACLES AT ANY LOCATION IN PATIENT CARE AND/OR TREATMENT AREAS (EXAM ROOMS, ETC.), PROVIDE RECEPTACLES AS HOSPITAL GRADE (IN ADDITION TO REQUIREMENTS ABOVE) AND PROVIDE WIRING FEEDING THE RECEPTACLES COMPLYING WITH N.E.C. ARTICLE 517.13.

PANEL "PN4"  
277/480V-3PH-200AMP  
FED FROM PANEL "MDP"  
CIRCUIT #1,3,5

"AC #5"  
480V-3PH  
FED FROM PANEL "LG2"  
CIRCUIT #31, 33, 35

SAMPLE PANEL ENGRAVED LABEL

SAMPLE MECHANICAL UNIT ENGRAVED LABEL

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100 OMA AVENUE, PENNS GROVE, NEW JERSEY 08053  
**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
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REVISIONS

Q.	
P.	
R.	

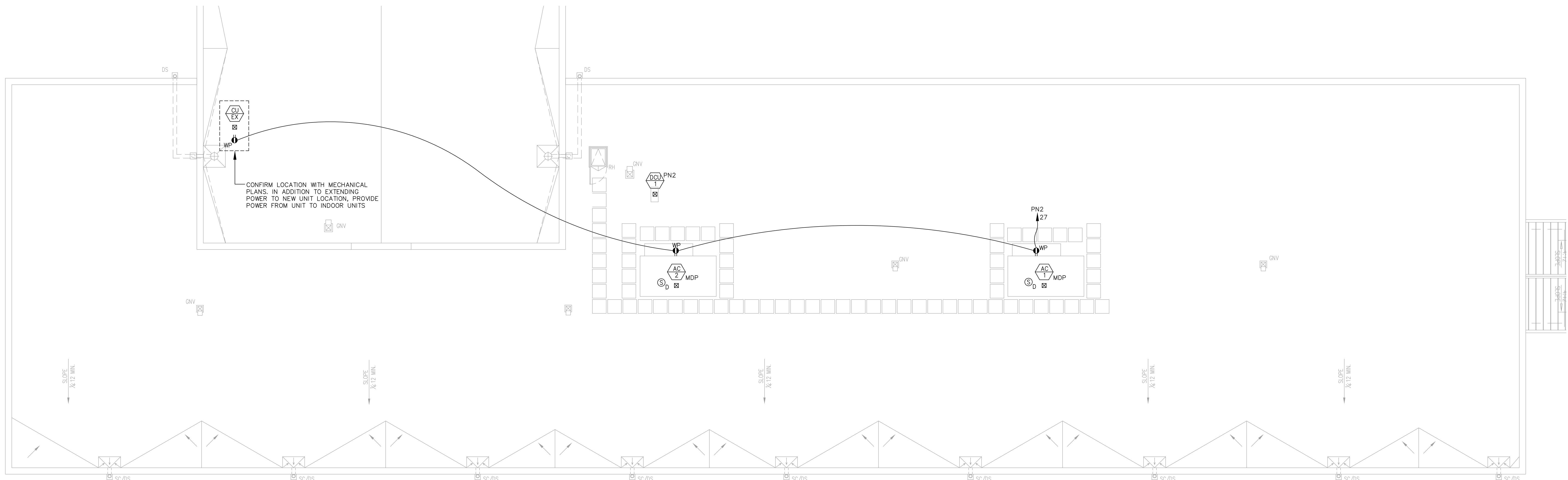
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**PRE-K ADDITION POWER PLAN**

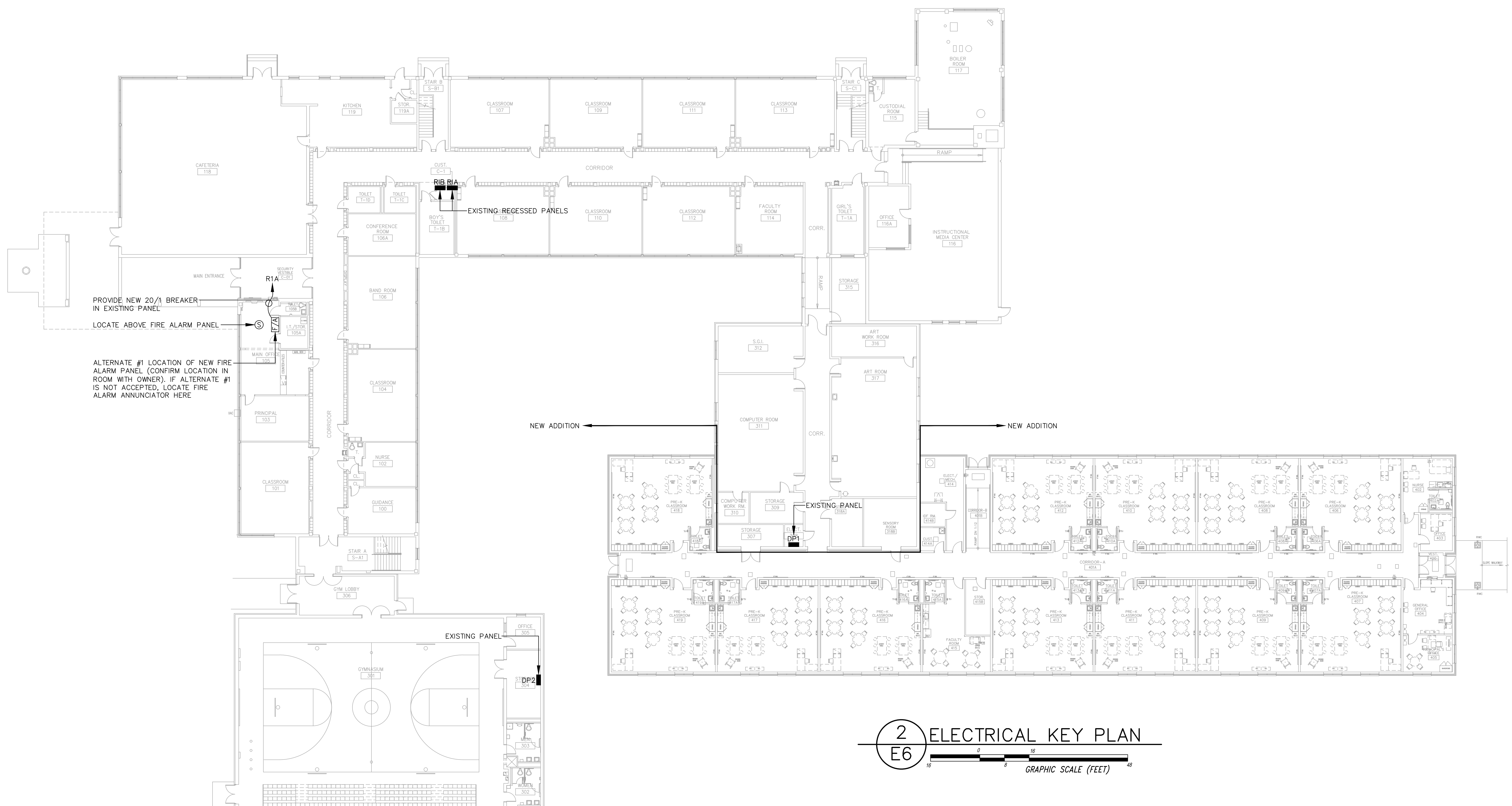
**E5**

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**1 PARTIAL ROOF ELECTRICAL PLAN**  
**E6**  
 GRAPHIC SCALE (FEET)



**2 ELECTRICAL KEY PLAN**  
**E6**  
 GRAPHIC SCALE (FEET)

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**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
 261 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08069

REVISIONS


Project No. 23-42  
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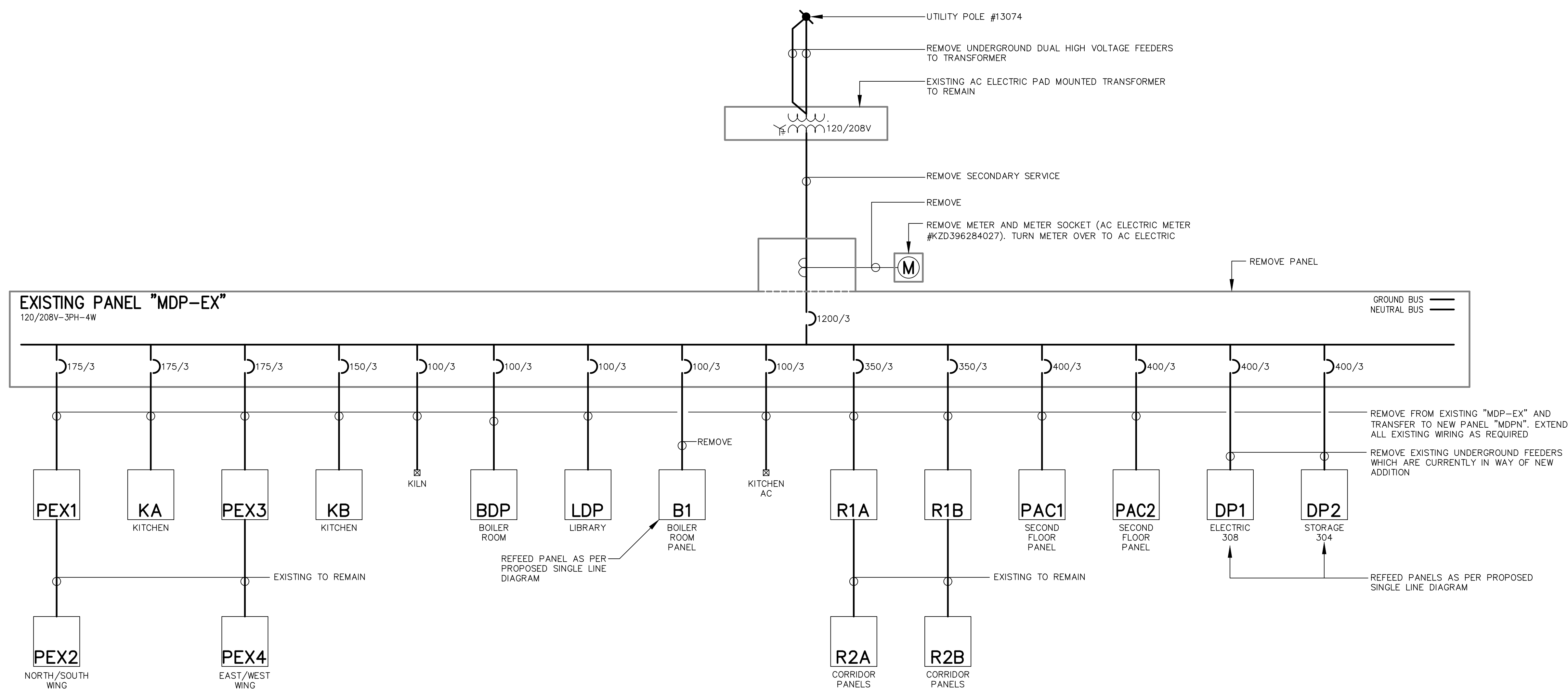
**ROOF & KEY ELECTRICAL PLAN**  
**E6**

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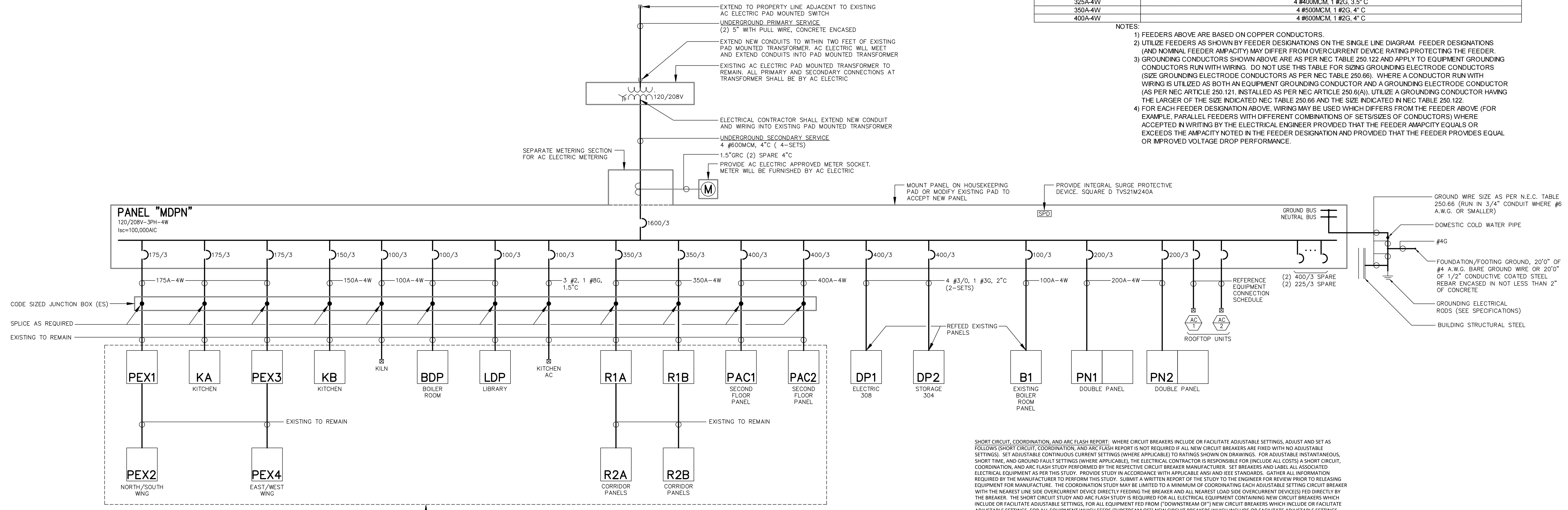


**1**  
E7  
**EXISTING SINGLE LINE DIAGRAM**  
SCALE: N.T.S.

1. MAXIMUM DEMAND PER AC ELECTRIC: 160KW (444 AMPS)
2. AC ELECTRIC SERVICE REQUEST NUMBER: 06575006
3. AC ELECTRIC WORK ORDER NUMBER: 19607033
4. SINGLE LINE DEVELOPED BY VISUAL INSPECTION AND MAY NOT BE EXACT. CONFIRM ALL EXISTING BREAKER SIZES PRIOR TO ORDERING NEW BREAKERS

FEEDER DESIGNATION (4-WIRE)	FEEDER (FOUR-WIRE)
100A-4W	4 #2, 1 #BG, 1.5" C
125A-4W	4 #1, 1 #BG, 2" C
150A-4W	4 #1/0, 1 #BG, 2" C
175A-4W	4 #2/0, 1 #BG, 2" C
200A-4W	4 #3/0, 1 #BG, 2.5" C
225A-4W	4 #4/0, 1 #4G, 2.5" C
250A-4W	4 #250MCM, 1 #4G, 3" C
275A-4W	4 #300MCM, 1 #4G, 3" C
300A-4W	4 #350MCM, 1 #4G, 3.5" C
325A-4W	4 #400MCM, 1 #2G, 3.5" C
350A-4W	4 #500MCM, 1 #2G, 4" C
400A-4W	4 #600MCM, 1 #2G, 4" C

- NOTES:
- 1) FEEDERS ABOVE ARE BASED ON COPPER CONDUCTORS.
  - 2) UTILIZE FEEDERS AS SHOWN BY FEEDER DESIGNATIONS ON THE SINGLE LINE DIAGRAM. FEEDER DESIGNATIONS (AND NOMINAL FEEDER AMPACITY) MAY DIFFER FROM OVERCURRENT DEVICE RATING PROTECTING THE FEEDER.
  - 3) GROUNDING CONDUCTORS SHOWN ABOVE ARE AS PER NEC TABLE 250.122 AND APPLY TO EQUIPMENT GROUNDING CONDUCTORS RUN WITH WIRING. DO NOT USE THIS TABLE FOR SIZING GROUNDING ELECTRODE CONDUCTORS (SIZE GROUNDING ELECTRODE CONDUCTORS AS PER NEC TABLE 250.66). WHERE A CONDUCTOR RUN WITH WIRING IS UTILIZED AS BOTH AN EQUIPMENT GROUNDING CONDUCTOR AND A GROUNDING ELECTRODE CONDUCTOR (AS PER NEC ARTICLE 250.121, INSTALLED AS PER NEC ARTICLE 250.6(A)), UTILIZE A GROUNDING CONDUCTOR HAVING THE LARGER OF THE SIZE INDICATED NEC TABLE 250.66 AND THE SIZE INDICATED IN NEC TABLE 250.122.
  - 4) FOR EACH FEEDER DESIGNATION ABOVE, WIRING MAY BE USED WHICH DIFFERS FROM THE FEEDER ABOVE (FOR EXAMPLE, PARALLEL FEEDERS WITH DIFFERENT COMBINATIONS OF SETS/SIZES OF CONDUCTORS) WHERE ACCEPTED IN WRITING BY THE ELECTRICAL ENGINEER PROVIDED THAT THE FEEDER AMPACITY EQUALS OR EXCEEDS THE AMPACITY NOTED IN THE FEEDER DESIGNATION AND PROVIDED THAT THE FEEDER PROVIDES EQUAL OR IMPROVED VOLTAGE DROP PERFORMANCE.



**2**  
E7  
**PROPOSED SINGLE LINE DIAGRAM**  
SCALE: N.T.S.

ALL WORK INDICATED IN PROPOSED SINGLE LINE DIAGRAM IS NEW, UNLESS NOTED OTHERWISE.

SHORT CIRCUIT, COORDINATION, AND ARC FLASH REPORT: WHERE CIRCUIT BREAKERS INCLUDE OR FACILITATE ADJUSTABLE SETTINGS, ADJUST AND SET AS FOLLOWS (SHORT CIRCUIT, COORDINATION, AND ARC FLASH REPORT IS NOT REQUIRED IF ALL NEW CIRCUIT BREAKERS ARE FIXED WITH NO ADJUSTABLE SETTINGS). SET ADJUSTABLE CONTINUOUS CURRENT SETTINGS (WHERE APPLICABLE) TO RATINGS SHOWN ON DRAWINGS. FOR ADJUSTABLE INSTANTANEOUS, SHORT TIME, AND GROUND FAULT SETTINGS (WHERE APPLICABLE), THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR (INCLUDE ALL COSTS) A SHORT CIRCUIT, COORDINATION, AND ARC FLASH STUDY PERFORMED BY THE RESPECTIVE CIRCUIT BREAKER MANUFACTURER. SET BREAKERS AND LABEL ALL ASSOCIATED ELECTRICAL EQUIPMENT PER THIS STUDY. PROVIDE STUDY IN ACCORDANCE WITH APPLICABLE ANSI AND IEEE STANDARDS. GATHER ALL INFORMATION REQUIRED BY THE MANUFACTURER TO PERFORM THIS STUDY. SUBMIT A WRITTEN REPORT OF THE STUDY TO THE ENGINEER FOR REVIEW PRIOR TO RELEASING EQUIPMENT FOR MANUFACTURE. THE COORDINATION STUDY MAY BE LIMITED TO A MINIMUM OF COORDINATING EACH ADJUSTABLE SETTING CIRCUIT BREAKER WITH THE NEAREST LINE SIDE OVERCURRENT DEVICE DIRECTLY FEEDING THE BREAKER AND ALL NEAREST LOAD SIDE OVERCURRENT DEVICES FED DIRECTLY BY THE BREAKER. THE SHORT CIRCUIT STUDY AND ARC FLASH STUDY IS REQUIRED FOR ALL ELECTRICAL EQUIPMENT CONTAINING NEW CIRCUIT BREAKERS WHICH INCLUDE OR FACILITATE ADJUSTABLE SETTINGS. FOR ALL EQUIPMENT FED FROM ("DOWNSTREAM OF") NEW CIRCUIT BREAKERS WHICH INCLUDE OR FACILITATE ADJUSTABLE SETTINGS, FOR ALL EQUIPMENT WHICH FEEDS ("UPSTREAM OF") NEW CIRCUIT BREAKERS WHICH INCLUDE OR FACILITATE ADJUSTABLE SETTINGS, BACK TO ALL UTILITY AND/OR GENERATOR SOURCE(S) (EXCEPT THAT OTHER UNRELATED EQUIPMENT WHICH BRANCHES OFF OF "UPSTREAM" EQUIPMENT IS NOT REQUIRED TO BE INCLUDED IN THE STUDY, UNLESS SPECIFICALLY INDICATED OTHERWISE), AND AS OTHERWISE REQUIRED TO COMPLETE THE COORDINATION STUDY AND CONFIRM PROPER SETTINGS. SETTING ADJUSTABLE CIRCUIT BREAKER SETTINGS TO THE MINIMUM OR FACTORY ("DEFAULT") SETTINGS (E.G. AS SHIPPED FROM THE FACTORY) IS NOT ACCEPTABLE. WHERE THE SHORT CIRCUIT, COORDINATION, AND ARC FLASH REPORT IS NOT SUBMITTED BY THE CONTRACTOR OR WHERE DEVICES ARE NOT SET ACCORDINGLY (FOR EXAMPLE, INCLUDING WHERE DEVICES ARE SET TO THE MINIMUM OR FACTORY DEFAULT SETTINGS) THE ELECTRICAL CONTRACTOR MAY BE HELD LIABLE FOR NUISANCE TRIPPING WHICH MAY OCCUR.

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**PAUL W. CARLETON ELEMENTARY SCHOOL**  
**2025 PRE-K CLASSROOM ADDITION**  
 251 EAST MAPLE AVENUE, PENNS GROVE, NEW JERSEY 08060

**REVISIONS**

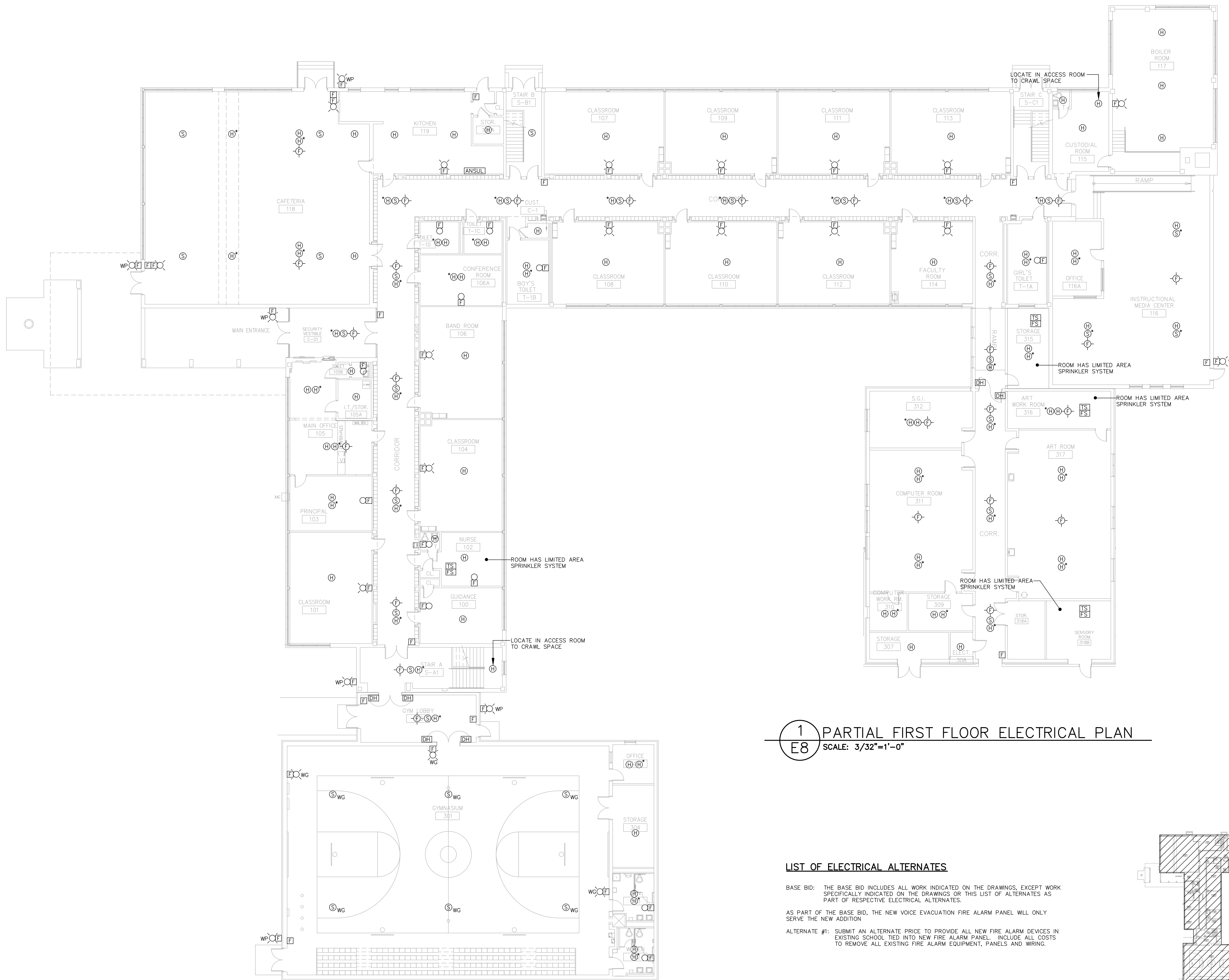
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**SINGLE LINE DIAGRAM**  
**E7**

ISSUED FOR BID: 11/11/2024

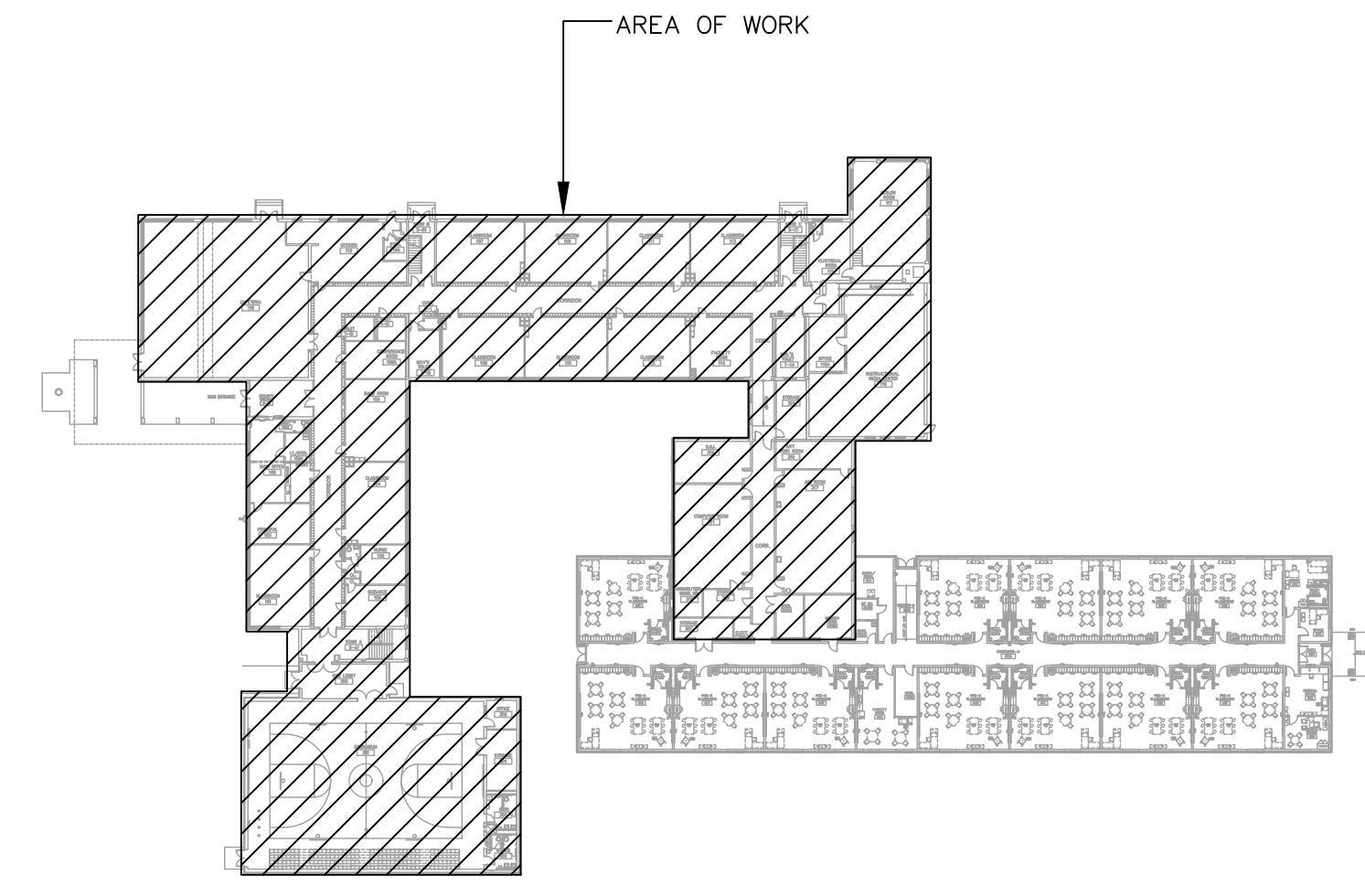




**1** PARTIAL FIRST FLOOR ELECTRICAL PLAN  
**E8** SCALE: 3/32"=1'-0"

**LIST OF ELECTRICAL ALTERNATES**

- BASE BID:** THE BASE BID INCLUDES ALL WORK INDICATED ON THE DRAWINGS, EXCEPT WORK SPECIFICALLY INDICATED ON THE DRAWINGS OR THIS LIST OF ALTERNATES AS PART OF RESPECTIVE ELECTRICAL ALTERNATES.
- AS PART OF THE BASE BID,** THE NEW VOICE EVACUATION FIRE ALARM PANEL WILL ONLY SERVE THE NEW ADDITION
- ALTERNATE #1:** SUBMIT AN ALTERNATE PRICE TO PROVIDE ALL NEW FIRE ALARM DEVICES IN EXISTING SCHOOL TIED INTO NEW FIRE ALARM PANEL. INCLUDE ALL COSTS TO REMOVE ALL EXISTING FIRE ALARM EQUIPMENT, PANELS AND WRING.



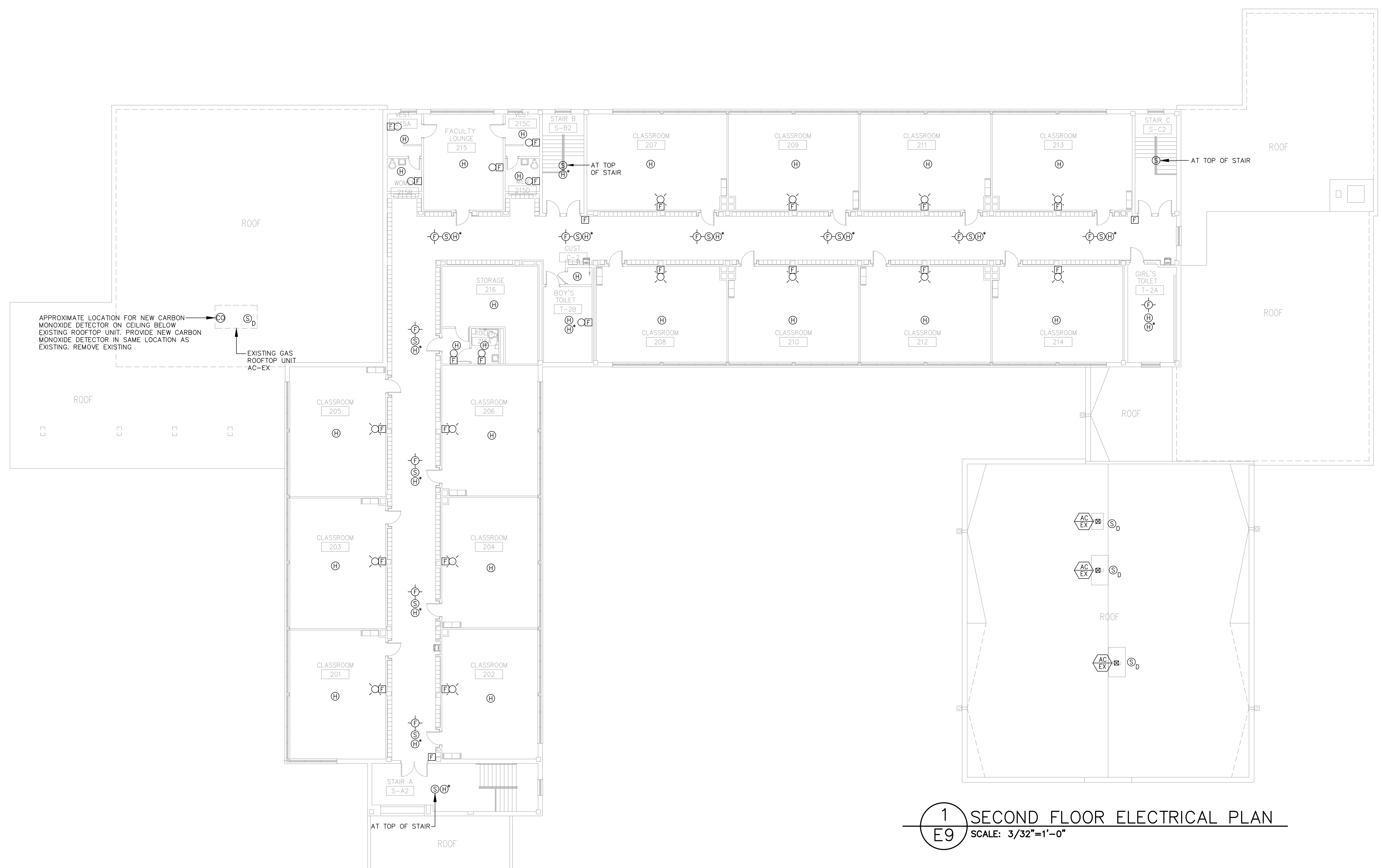
FIRST FLOOR KEY PLAN - N.T.S.

REVISIONS	

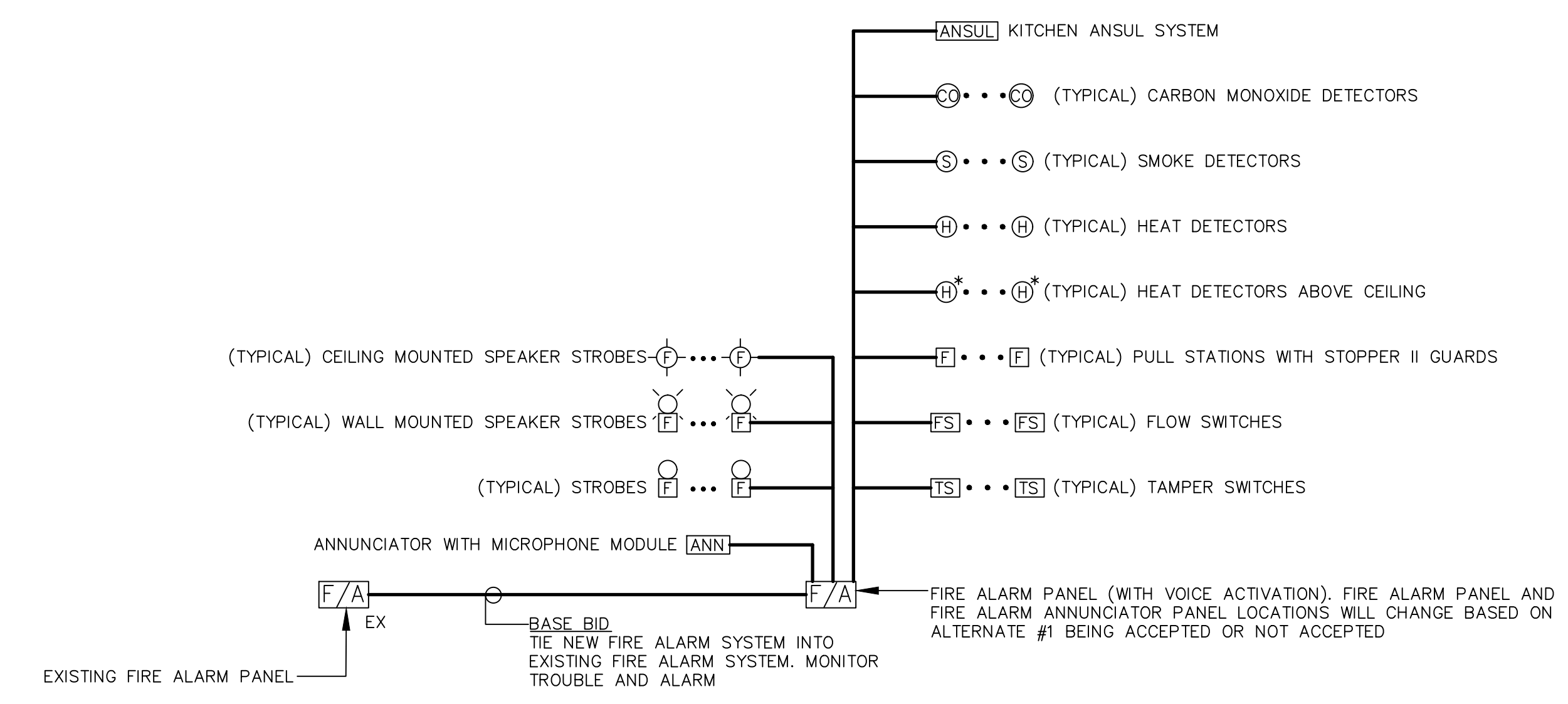
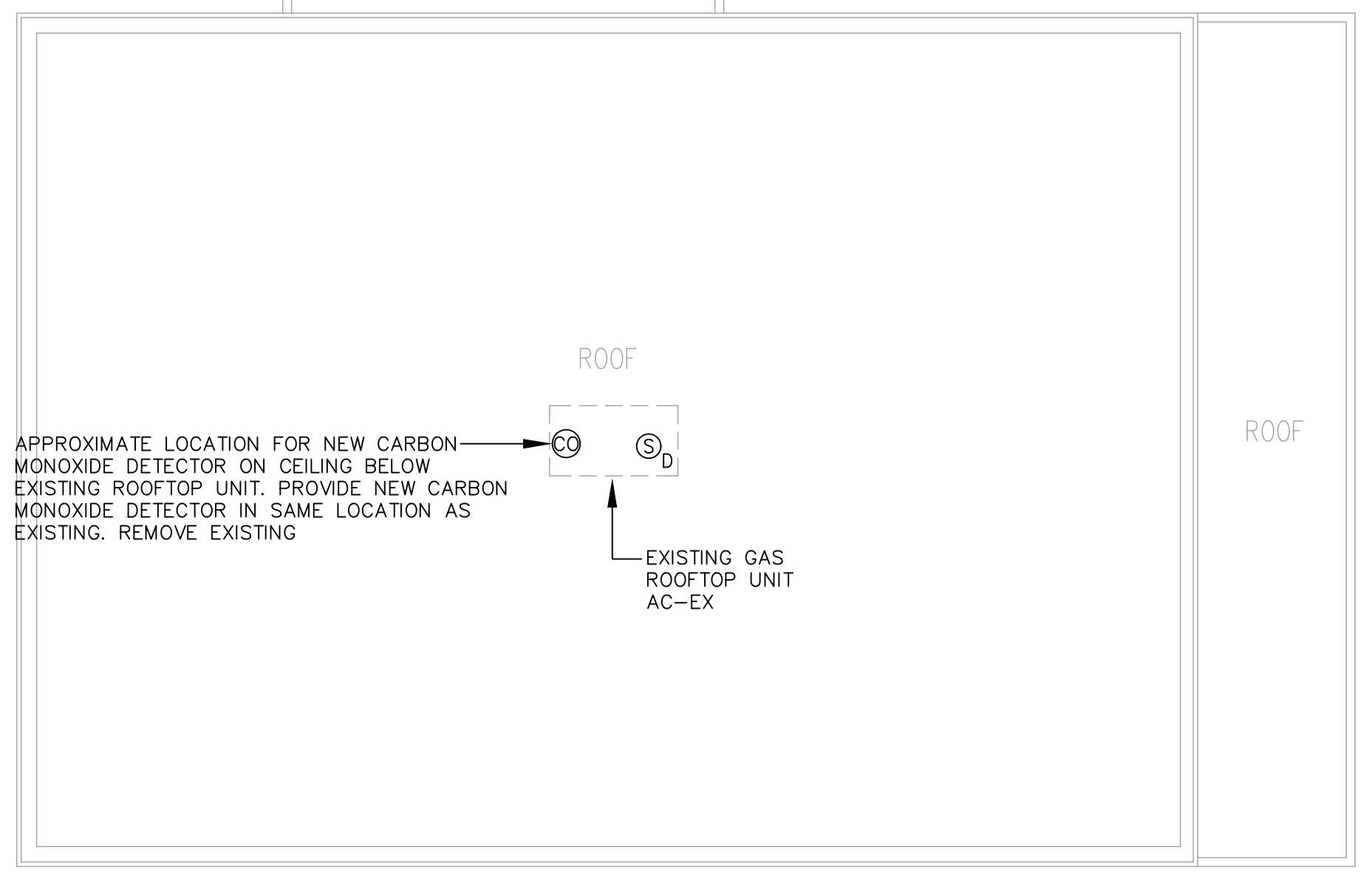
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**1 SECOND FLOOR ELECTRICAL PLAN**  
SCALE: 3/32"=1'-0"



**2 FIRE ALARM RISER DIAGRAM**  
SCALE: N.T.S.

- REFERENCE DRAWINGS FOR DEVICE QUANTITIES
- INCLUDE COSTS FOR INSTALLATION DRAWINGS SIGNED AND SEALED BY NJ PROFESSIONAL ENGINEER. PROVIDE ALL REQUIRED BATTERY CALCULATIONS AND VOLTAGE DROP CALCULATIONS

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**ELECTRICAL SYMBOL LIST**

<p>S S<sub>3</sub> 20 A, 277/120 V SWITCH, SINGLE POLE (S), THREE-WAY (S-3), AND FOUR-WAY (S-4), RESPECTIVELY, SPECIFICATION GRADE, FLUSH MOUNTED, FINISH AND COVER PLATE AS PER ARCHITECT</p> <p>0-10 V, 50 mA, 8 A, 120/277 V, LIGHT EMITTING DIODE (LED) DRIVER OR FLUORESCENT ELECTRONIC BALLAST DIMMER SWITCH (S-D), SINGLE POLE, ROCKER SWITCH WITH SLIDE DIMMING CONTROL, FULLY RATED, SPECIFICATION GRADE, FLUSH MOUNTED, LOW PROFILE, FINISH AND COVER PLATE AS PER ARCHITECT, OF A TYPE COMPATIBLE WITH THREE-WAY OPERATION VIA REMOTE STANDARD THREE-WAY SWITCHES; LUTRON #D5VT-**-** (OR EQUIVALENT BY HUBBELL OR LEVITON); SEE LIGHTING FIXTURE SCHEDULE AND FULLY COORDINATE DIMMER COMPATIBILITY IN DETAIL WITH EACH LIGHTING FIXTURE AND EACH DIMMER MANUFACTURER (INCLUDE COSTS IN BID TO USE DIFFERENT TYPES OF DIMMER SWITCHES AS APPLICABLE FOR EACH DIFFERENT LIGHTING FIXTURE TYPE CONTROLLED); WHERE CIRCUIT LOAD EXCEEDS 8 A UTILIZE #D5VTV-**-** (OR EQUIVALENT) DIMMER WITH #PP-DV (OR EQUIVALENT) POWER PACK(S) AS APPLICABLE TO FACILITATE LOAD</p> <p>OCCUPANCY/VACANCY SENSOR LIGHTING CONTROL WITH INTEGRAL PUSH BUTTON (S-OC), FLUSH MOUNTED ON WALL (ON FLUSH MOUNTED OUTLET BOX), SELF-CONTAINED "STAND-ALONE" TYPE (SINGLE SENSOR FOR LOCAL LIGHTING CONTROL OF A SINGLE CIRCUIT ONLY), MULTI-TECHNOLOGY PASSIVE INFRARED (PIR) AND ULTRASONIC TYPE WITH INTEGRAL SWITCHING RELAY, RATED MINIMUM 500 W, 1,200 VA FOR 120 V OPERATION AND RATED MINIMUM 2,700 VA FOR 277 V OPERATION, SINGLE POLE, NOMINAL 93 m<sup>2</sup> (1,000 SQ FT) COVERAGE, MEETING NEMA WD7 STANDARD, INTEGRAL SELECTABLE AMBIENT LIGHT LEVEL SENSOR, SELECTABLE AUTOMATIC (OCCUPANCY SENSOR WITH "OVERRIDE-TO-OFF" PUSH BUTTON) OR MANUAL (VACANCY SENSOR WITH "MANUAL-ON" PUSH BUTTON) MODES, SPECIFICATION GRADE, WHITE FINISH, COOPER/GREENGATE #ONW-D-1001-MV-+ (OR EQUIVALENT BY HUBBELL, LEVITON, OR LUTRON)</p> <p>LIGHTING CONTROL RELAY MODULE [LR], INTERCONNECT (UTILIZING LOW VOLTAGE CONTROL WIRING) WITH OCCUPANCY SENSORS AS SHOWN ON THE DRAWINGS, RATED 1,800 VA FOR 120 V OPERATION AND RATED 4,800 VA FOR 277 V OPERATION, SINGLE POLE, SPECIFICATION GRADE; PROVIDE A MINIMUM OF ONE (1) RELAY PER CIRCUIT CONTROLLED [FULLY COORDINATE BETWEEN MODULE AND SENSORS AS PER MANUFACTURER], MULTI-TECHNOLOGY PASSIVE INFRARED (PIR) AND ULTRASONIC TYPE, ACCORDINGLY TO FACILITATE THE SWITCHING CONTROL SHOWN ON DRAWINGS IN CONJUNCTION WITH THE QUANTITY OF LIGHTING SENSORS INVOLVED, INTERCONNECT AUXILIARY CONTACTS FOR SIMULTANEOUS CONTROL; WHERE WALL SWITCHES (SINGLE POLE, THREE-WAY, OR FOUR-WAY) ARE INDICATED ALONG WITH OCCUPANCY SENSOR ON THE DRAWINGS, ARRANGE AND INTERCONNECT SWITCHES (AS RECOMMENDED BY OCCUPANCY SENSOR MANUFACTURER) TO OPERATE AS MANUAL "OVERRIDE-TO-OFF" UNLESS SPECIFICALLY INDICATED OTHERWISE</p> <p>OCCUPANCY SENSOR LIGHTING CONTROL [OC], FLUSH MOUNTED IN CEILING, FOR COMMON CONTROL OF LIGHTING (MULTIPLE SENSORS FOR LIGHTING CONTROL IN CONJUNCTION WITH REMOTE LIGHTING MODULE(S), FULLY COORDINATE BETWEEN MODULE AND SENSORS AS PER MANUFACTURER), MULTI-TECHNOLOGY PASSIVE INFRARED (PIR) AND ULTRASONIC TYPE, 360 DEGREE NOMINAL 186 m<sup>2</sup> (2,000 SQ FT) COVERAGE, MEETING NEMA WD7 STANDARD, INTEGRAL SELECTABLE AMBIENT LIGHT LEVEL SENSOR, SPECIFICATION GRADE, WHITE FINISH; PROVIDE LOW VOLTAGE CONTROL WIRING BETWEEN SENSOR AND CONTROL RELAY</p> <p>○ LIGHTING FIXTURE, TYPE AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE</p> <p>□ 2 X 4 LIGHTING FIXTURE, TYPE AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE</p> <p>▤ 2 X 4 LIGHTING FIXTURE WITH EMERGENCY DRIVER, TYPE AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE</p> <p>□ 2 X 2 LIGHTING FIXTURE, TYPE AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE</p> <p>▤ 2 X 2 LIGHTING FIXTURE WITH EMERGENCY DRIVER, TYPE AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE</p> <p>○ WALL MOUNTED LIGHTING FIXTURE, TYPE AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE</p> <p>▭ LINEAR/RECTANGULAR LIGHTING FIXTURE, TYPE AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE</p> <p>▭ "STRIP" OR "INDUSTRIAL" LIGHTING FIXTURE, TYPE AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE</p> <p>EM EMERGENCY LIGHTING BATTERY UNIT, TYPE ("EM" UNLESS INDICATED OTHERWISE) AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE</p> <p>COMBINATION EXIT/EMERGENCY UNIT, TYPE ("EX/EM" UNLESS INDICATED OTHERWISE) AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE, WITH INTEGRAL BATTERY BACKUP</p> <p>EXIT SIGN, TYPE ("EXIT" UNLESS INDICATED OTHERWISE) AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE</p> <p>REMO EMERGENCY LIGHTING HEAD, WALL MOUNTED, TYPE ("REM" UNLESS INDICATED OTHERWISE) AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE</p> <p>20 A, 120 V DUPLEX RECEPTACLE (NEMA 5-20R), SPECIFICATION GRADE, TAMPER RESISTANT, FLUSH MOUNTED, FINISH AND COVER PLATE AS PER OWNER, (+) INDICATES ABOVE COUNTER MOUNTING HEIGHT, (*) INDICATES MOUNTED HIGH ON WALL AT DISPLAY/SCREEN OR ABOVE BOARD</p> <p>20 A, 120 V DUPLEX GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TYPE/PROTECTED RECEPTACLE (NEMA 5-20R), SPECIFICATION GRADE, TAMPER RESISTANT, FLUSH MOUNTED, FINISH AND COVER PLATE AS PER ARCHITECT, (+) INDICATES ABOVE COUNTER MOUNTING HEIGHT (WP) INDICATES WEATHER-RESISTANT TYPE RECEPTACLE MOUNTED IN WEATHERPROOF OUTLET BOX WITH SINGLE SPRING-LATCHED WEATHERPROOF-WHILE-IN-USE COVER; FEED-THROUGH PROTECTION OF STANDARD TYPE RECEPTACLES FROM OTHER GFCI RECEPTACLES IS NOT ACCEPTABLE; PROTECTION OF STANDARD TYPE RECEPTACLES IN READILY ACCESSIBLE LOCATIONS FROM GFCI CIRCUIT BREAKERS IS NOT ACCEPTABLE (SEE BELOW FOR INACCESSIBLE RECEPTACLES); FOR INACCESSIBLE RECEPTACLES (LOCATIONS WHICH ARE NOT READILY ACCESSIBLE AS PER THE NEC, FOR EXAMPLE, WHERE LOCATED BEHIND EQUIPMENT, APPLIANCES, OR OBSTACLES) THE USE OF GFCI TYPE RECEPTACLES IS PROHIBITED AND PROTECTION OF STANDARD TYPE RECEPTACLES FROM GFCI CIRCUIT BREAKER MUST BE USED (IDENTIFY RECEPTACLES AS PROTECTED AS PER THE NEC)</p> <p>20 A, 120 V DUPLEX ISOLATED GROUND TYPE RECEPTACLE (NEMA 5-20R) WITH INTEGRAL SURGE SUPPRESSION (RATED 210 J MINIMUM) AND SURGE SUPPRESSION INDICATING LIGHT, SPECIFICATION GRADE, TAMPER RESISTANT, FLUSH MOUNTED, ORANGE COLOR, WITH COVER PLATE WITH THE WORDING "ISOLATED GROUND" AND AS PER ARCHITECT, (+) INDICATES ABOVE COUNTER MOUNTING HEIGHT, (*) INDICATES MOUNTED HIGH ON WALL AT DISPLAY/SCREEN; PROVIDE WIRING WITH A SEPARATE INSULATED, ISOLATED GROUNDING CONDUCTOR (RUN DIRECT FROM THE GROUNDING TERMINAL OF RECEPTACLE(S) ON THE CIRCUIT TO THE GROUND BUS IN THE RESPECTIVE PANEL, WITHOUT CONNECTING OR BONDING TO THE RACEWAY AND/OR ANY OTHER GROUNDING CONDUCTOR, INCLUDING ISOLATED GROUNDING CONDUCTORS OF OTHER CIRCUITS) IN ADDITION TO EQUIPMENT GROUNDING CONDUCTOR (GROUND RACEWAYS AND OUTLET BOXES WITH EQUIPMENT GROUNDING CONDUCTOR)</p> <p>QUADRUPLX ("DOUBLE DUPLEX", "QUAD") RECEPTACLE, WITH RECEPTACLE TYPE AS INDICATED</p> <p>EQUIPMENT CONNECTION [X], REFER TO THE EQUIPMENT SCHEDULE AND THE EQUIPMENT NOTES FOR INFORMATION</p> <p>EQUIPMENT DESIGNATION (HEXAGON), FOR REFERENCE TO THE EQUIPMENT SCHEDULE</p> <p>ENCLOSED CIRCUIT BREAKER (ECB), WITH TRIP RATING AND POLES AS INDICATED, IN NEMA-1 ENCLOSURE, (WP) INDICATES NEMA-3R ENCLOSURE</p> <p>ELECTRICAL PANEL, REFER TO THE SINGLE LINE DIAGRAM AND RESPECTIVE PANEL SCHEDULE</p> <p>ELECTRICAL JUNCTION BOX (J-BOX), AS INDICATED ON THE DRAWINGS, WHERE JUNCTION BOX SERVES EQUIPMENT, PROVIDE COMPLETE CONNECTION TO EQUIPMENT</p> <p>INDICATES HOME RUN OF WIRING TO PANEL AND CIRCUIT INDICATED</p> <p>INDICATES PASS CIRCUIT THROUGH EXISTING CONTACTOR (-CEX-)</p> <p>TELEPHONE/DATA OUTLET, FLUSH MOUNTED, PROVIDE SUITABLE OUTLET BOX (OF TYPE ACCEPTABLE TO THE OWNER, INCLUDE COSTS IN BID FOR 2-GANG OUTLET) IN WALL AND 27 mm (1") CONDUIT (WITH PULL WIRE) RUN FROM OUTLET STUBBED AND CAPPED INTO NEARBY ACCESSIBLE CEILING SPACE, (+) INDICATES ABOVE COUNTER MOUNTING HEIGHT OR WALL MOUNTED TELEPHONE MOUNTING HEIGHT (COORDINATE WITH ARCHITECT/OWNER DURING CONSTRUCTION), (*) INDICATES MOUNTED HIGH ON WALL AT DISPLAY/SCREEN OR ABOVE BOARD</p> <p>FIRE ALARM CONTROL PANELS [F/A], ADDRESSABLE ANALOG TYPE, WITH VOICE EVACUATION AND FIREFIGHTER'S COMMUNICATIONS, WITH INTEGRAL BATTERY BACKUP, WITH MINIMUM 750 POINT ADDRESSES, WITH INTEGRAL 80-CHARACTER (MINIMUM) KEYBOARD DISPLAY UNIT; PROVIDE A TELEPHONE/DATA OUTLET (AS INDICATED ELSEWHERE ON THE ELECTRICAL SYMBOL LIST) MOUNTED ADJACENT TO CONTROL PANELS AND PROVIDE 27 mm (1") CONDUIT (WITH PULL WIRE) RUN FROM TELEPHONE/DATA OUTLET RUN TO THE MAIN TELEPHONE BACKBOARD;</p> <p>FIRE ALARM REMOTE ANNUNCIATOR PANEL [ANN], 80-CHARACTER (MINIMUM) ALPHANUMERIC TYPE, EXACT MATCHING FIRE ALARM CONTROL PANEL, WITH MICROPHONE MODULE FOR PAGING, FLUSH MOUNTED, RED OR BEIGE FINISH AS PER OWNER</p> <p>FIRE ALARM AUDIO/VISUAL WALL MOUNTED SPEAKER/STROBE, ADA COMPLIANT TYPE PROVIDING ADA COMPLIANT COVERAGE, WITH SYNCHRONIZED TYPE STROBE, SEMI-FLUSH MOUNTED</p> <p>FIRE ALARM AUDIO/VISUAL CEILING MOUNTED SPEAKER/STROBE, ADA COMPLIANT TYPE PROVIDING ADA COMPLIANT COVERAGE, WITH SYNCHRONIZED TYPE STROBE, SEMI-FLUSH MOUNTED</p> <p>FIRE ALARM VISUAL ONLY STROBE, ADA COMPLIANT TYPE PROVIDING ADA COMPLIANT COVERAGE, SYNCHRONIZED TYPE, FLUSH MOUNTED</p> <p>FIRE ALARM MANUAL PULL STATION [F], METAL, NON-CODED, DOUBLE ACTION TYPE, FLUSH MOUNTED, ADDRESSABLE TYPE, PROVIDE STOPPER II PROTECTIVE GUARD</p> <p>FIRE ALARM SMOKE DETECTOR (S), ADDRESSABLE ANALOG PHOTOELECTRIC TYPE, WITH SUITABLE BASE</p> <p>FIRE ALARM CARBON MONOXIDE (CO) DETECTOR, ADDRESSABLE TYPE, WITH SUITABLE BASE</p> <p>FIRE ALARM HEAT DETECTOR (H), ADDRESSABLE ANALOG TYPE, 57 DEGREES C (135 DEGREES F) FIXED AND RATE-OF-RISE (ROR) OPERATION (UNLESS INDICATED OTHERWISE), WITH SUITABLE BASE; FOR HIGH AMBIENT TEMPERATURE LOCATIONS (NORMALLY EXCEEDING 38 DEGREES C (100 DEGREES F) SUCH AS UNCONDITIONED ATTICS AND SIMILAR UNINSULATED SPACES) UTILIZE HIGH TEMPERATURE DETECTORS AS RECOMMENDED BY THE MANUFACTURER FOR THE APPLICATION (FIXED TEMPERATURE DETECTORS WITHOUT ROR MAY BE USED); (*) INDICATES MOUNT ABOVE DROP CEILING (WHERE ABOVE-CEILING DETECTOR IS SHOWN IN CONJUNCTION WITH DETECTOR BELOW THE CEILING, MOUNT ABOVE-CEILING DETECTOR AS CLOSE AS PRACTICAL TO DIRECTLY ABOVE THE BELOW-CEILING DETECTOR [FOR DROP CEILINGS, MOUNT ABOVE THE CEILING TILE CONTAINING THE BELOW-CEILING DETECTOR])</p> <p>FIRE ALARM DUCT TYPE SMOKE DETECTOR (ADDRESSABLE ANALOG PHOTOELECTRIC TYPE) AND HVAC EQUIPMENT SHUTDOWN INTERFACE (SDI, IN DUCT HOUSING WITH SAMPLING TUBES TO SIFT DUCTWORK (COORDINATE REQUIREMENTS WITH MC); PROVIDE SHUTDOWN INTERFACE INCLUDING SUITABLE ADDRESSABLE SUPERVISED OUTPUT RELAY MODULE EITHER INTEGRAL TO OR FIELD INSTALLED DIRECTLY ADJACENT TO DUCT HOUSING; PROVIDE SUITABLE REMOTE TEST, RESET, AND ALARM INDICATING STATION WALL MOUNTED AT A LOCATION (ACCEPTABLE TO OWNER) IN CORRIDOR OR COMMON USE SPACE NEAR THE DETECTOR (LABEL WITH ENGRAVED LAMINATED PLASTIC NAMEPLATE IDENTIFYING HVAC UNITS) SERVED, SEE SPECIFICATIONS); EC SHALL FURNISH COMPLETE DUCT DETECTOR AND WIRE TO FIRE ALARM SYSTEM, WHERE EITHER THE HVAC EQUIPMENT AND/OR ANY ASSOCIATED DUCTWORK ARE NEW OR MODIFIED, MC SHALL INSTALL DETECTOR ON DUCTWORK AND MC/ATC CONTRACTOR SHALL PROVIDE ALL HVAC SHUTDOWN INTERFACE WIRING FROM RELAY TO HVAC EQUIPMENT, WHERE BOTH THE HVAC EQUIPMENT AND ALL ASSOCIATED DUCTWORK ARE EXISTING TO REMAIN, EC SHALL INSTALL DETECTOR ON DUCTWORK (AS DIRECTED BY AND UNDER THE SUPERVISION OF THE MC AND MECHANICAL ENGINEER) AND PROVIDE ALL HVAC SHUTDOWN INTERFACE WIRING FROM RELAY TO HVAC EQUIPMENT (MAKING FINAL CONNECTIONS AT HVAC EQUIPMENT AS DIRECTED BY AND UNDER THE SUPERVISION OF THE MC/ATC CONTRACTOR AND MECHANICAL ENGINEER)</p> <p>SPRINKLER SYSTEM FLOW SWITCH CONNECTION [FS], FURNISHED AND INSTALLED ON PIPING AS PART OF PIPING INSTALLATION AND WIRING TO FIRE ALARM SYSTEM (VIA LOCAL ADDRESSABLE IDENTIFICATION MODULE)</p> <p>SPRINKLER SYSTEM TAMPER SWITCH CONNECTION [TS], FURNISHED AND INSTALLED ON PIPING AS PART OF PIPING INSTALLATION AND WIRING TO FIRE ALARM SYSTEM (VIA LOCAL ADDRESSABLE IDENTIFICATION MODULE)</p> <p>FIRE ALARM MAGNETIC DOOR HOLDER [DH], RECESSED MOUNTED, INTERCONNECT WITH FIRE ALARM SYSTEM, COORDINATE INSTALLATION AT DOOR WITH GENERAL CONSTRUCTION INSTALLATION</p> <p>CARD READER OUTLET [CR], EC SHALL PROVIDE SUITABLE OUTLET BOX (OF A TYPE ACCEPTABLE TO THE OWNER) IN WALL AND 21 mm (3/4") CONDUIT (WITH PULL WIRE) RUN FROM OUTLET TO SECURITY ACCESS SYSTEM DOOR JUNCTION BOX (OR SECURITY CONTROL PANEL WHERE SECURITY ACCESS SYSTEM DOOR JUNCTION BOX IS NOT SHOWN AT THE DOOR); CARD READER, WIRING, AND ALL FINAL CONNECTIONS SHALL BE BY THE OWNER'S SECURITY VENDOR</p> <p>SECURITY ACCESS SYSTEM DOOR JUNCTION BOXES (J-S), LOCATE ON SECURE SIDE OF DOOR, EC SHALL PROVIDE TWO (2) SUITABLE OUTLET BOXES (ONE FOR 120 V POWER AND ONE FOR LOW VOLTAGE CONTROLS, OF TYPES ACCEPTABLE TO THE OWNER) AND 27 mm (1") CONDUIT RUN FROM LOW VOLTAGE JUNCTION BOX STUBBED AND CAPPED INTO ACCESSIBLE CEILING SPACE; ALL SECURITY SYSTEM AND LOW VOLTAGE POWER WIRING AND FINAL CONNECTIONS (INCLUDING LOW VOLTAGE POWER SUPPLY) SHALL BE BY THE OWNER'S SECURITY VENDOR; EC SHALL PROVIDE 120 V POWER (TO POWER SUPPLY PRIMARY) WIRING TO POWER JUNCTION BOX AS SHOWN ON THE DRAWINGS/SPECIFICATIONS</p> <p>DOOR MONITORING CONTACT CONNECTION [DC], EC SHALL PROVIDE 21 mm (3/4") CONDUIT (WITH PULL WIRE) RUN FROM LATCH TO SECURITY ACCESS SYSTEM DOOR JUNCTION BOX; DOOR CONTACT (CONCEALED IN DOOR FRAME), WIRING, AND ALL FINAL CONNECTIONS SHALL BE BY THE OWNER'S SECURITY VENDOR</p> <p>DOOR RELEASE LATCH (OR MAGNETIC LOCK) CONNECTION [DR], LATCH FURNISH INTEGRAL TO DOOR FRAME, PROVIDE 21 mm (3/4") CONDUIT (WITH PULL WIRE) RUN FROM LATCH TO SECURITY ACCESS SYSTEM DOOR JUNCTION BOX; WIRING AND ALL FINAL CONNECTIONS SHALL BE BY THE OWNER'S SECURITY VENDOR</p> <p>CLOSED CIRCUIT TELEVISION (CCTV) SYSTEM SECURITY MONITORING CAMERA OUTLET, EC SHALL PROVIDE SUITABLE OUTLET BOX (OF A TYPE ACCEPTABLE TO THE OWNER) IN WALL AND 21 mm (3/4") CONDUIT (WITH PULL WIRE) RUN FROM OUTLET TO CCTV HEAD END EQUIPMENT; CAMERA, WIRING, AND ALL FINAL CONNECTIONS SHALL BE BY THE OWNER'S SECURITY VENDOR</p>	<p><b>ELECTRICAL NOTES</b></p> <ol style="list-style-type: none"> <li>PERFORM ALL WORK IN STRICT ACCORDANCE WITH THE LATEST ADOPTED EDITIONS OF THE NATIONAL ELECTRICAL CODE (NEC), OSHA REQUIREMENTS, ALL FEDERAL, STATE, AND LOCAL CODES AND ALL OWNER REQUIREMENTS.</li> <li>INCLUDE ALL TEMPORARY POWER AND LIGHTING, PERMIT, LICENSE, AND INSPECTION COSTS IN BID.</li> <li>VERIFY EXACT LOCATIONS AND MOUNTING OF ALL LUMINAIRES, SWITCHES, RECEPTABLES, OUTLETS, FIRE ALARM, AND OTHER EQUIPMENT WITH ARCHITECTURAL DRAWINGS AND IN THE FIELD PRIOR TO ROUGH IN.</li> <li>VERIFY ELECTRICAL RATINGS, CONNECTION REQUIREMENTS, AND EXACT LOCATIONS OF ALL MECHANICAL AND OTHER UTILIZATION EQUIPMENT (WHERE APPLICABLE) IN FIELD PRIOR TO PURCHASING ASSOCIATED ELECTRICAL EQUIPMENT. PROVIDE A COMPLETE AND WORKING INSTALLATION.</li> <li>THE TERM "PROVIDE" MEANS, "FURNISHED AND INSTALLED BY THE CONTRACTOR", AND THE TERMS "ELECTRICAL CONTRACTOR" AND "EC" MEAN "CONTRACTOR", UNLESS INDICATED OTHERWISE. ALL WORK INDICATED ON THE ELECTRICAL DRAWINGS AND ELECTRICAL SPECIFICATIONS IS BY THE EC (UNLESS INDICATED OTHERWISE) AND IS NEW (UNLESS INDICATED OTHERWISE).</li> <li>COORDINATE ALL REQUIRED SHUTDOWNS WITH THE OWNER (AND UTILITY COMPANY WHERE APPLICABLE) A MINIMUM OF FOURTEEN (14) DAYS IN ADVANCE. INCLUDE ALL COSTS IN BID (DIFFERENTIAL, SHIFT, OVERTIME, PRIME, SUPPLEMENTAL, ETC.) TO PERFORM ALL SHUTDOWNS (INCLUDING SHUTDOWNS FOR AREAS WHICH MAY BE OCCUPIED DURING CONSTRUCTION) AFTER THE OWNER'S NORMAL BUSINESS OR WORKING HOURS (INCLUDE COSTS FOR ANY DAYS OF THE WEEK, WEEKENDS, AND HOLIDAYS) AS COORDINATED IN DETAIL WITH THE OWNER. NO EXTRA CLAIMS OR COMPENSATION WILL BE GRANTED FOR COSTS ASSOCIATED WITH PERFORMING SHUTDOWNS UNDER ANY CIRCUMSTANCE.</li> <li>PROVIDE MOUNTING HEIGHTS OF EQUIPMENT AS PER ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND STANDARDS, INCLUDING ALL APPLICABLE DISABLED (HANDICAPPED) ACCESS CODES AND THE AMERICANS WITH DISABILITIES ACT (ADA). CONTACT ANY AND ALL AUTHORITIES HAVING JURISDICTION TO VERIFY REQUIRED MOUNTING HEIGHTS.</li> <li>VERIFY ALL UTILITY (ELECTRIC, TELEPHONE, DATA, CABLE TELEVISION, ETC. WHERE APPLICABLE) REQUIREMENTS IN WRITING WITH EACH UTILITY COMPANY AND OBTAIN ACCEPTANCE FROM ALL UTILITIES (INCLUDING SUBMITTING ANY REQUIRED SERVICE APPLICATIONS AND SHOP DRAWINGS ON SERVICE-RELATED EQUIPMENT TO UTILITIES) PRIOR TO ROUGH-IN OR PURCHASING ANY SERVICE-RELATED EQUIPMENT. THE CONTRACTOR IS SOLELY RESPONSIBLE TO FULLY COORDINATE AND VERIFY SERVICE REQUIREMENTS WITH UTILITY COMPANIES (INCLUDE ALL COSTS IN BID). NO EXTRA CLAIMS OR COMPENSATION WILL BE GRANTED UNDER ANY CIRCUMSTANCE ASSOCIATED WITH FAILURE TO FULLY COORDINATE WITH OR OBTAIN FULL ACCEPTANCE FROM UTILITY COMPANIES.</li> <li>PERFORM ALL WORK IN PHASES AND SEQUENCES AS DIRECTED BY THE ARCHITECT. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. FULLY COORDINATE PHASES/SEQUENCES IN DETAIL WITH ALL CONTRACTORS/TRADES, THE ARCHITECT, AND THE OWNER PRIOR TO PERFORMING WORK AND INCLUDE ALL COSTS IN BID.</li> <li>COMPLETELY DISCONNECT AND REMOVE ALL EXISTING WIRING AND ELECTRICAL EQUIPMENT IN AREAS BEING RENOVATED, IN AREAS OF GENERAL DEMOLITION, INTERFERING WITH NEW CONSTRUCTION BY ANY CONTRACTOR/TRADE (INCLUDING, BUT NOT LIMITED TO, GENERAL CONSTRUCTION, MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, ETC.), AND SERVING EQUIPMENT AND APPARATUS REMOVED AS PART OF THIS PROJECT (BY ANY CONTRACTOR/TRADE), UNLESS INDICATED OTHERWISE. REFER TO ARCHITECTURAL DRAWINGS FOR THE GENERAL SCOPE OF RENOVATIONS AND AREAS OF GENERAL DEMOLITION. REFER TO AND CAREFULLY EXAMINE DRAWINGS AND SPECIFICATIONS OF ALL TRADES TO IDENTIFY AREAS OF INTERFERENCE WITH NEW CONSTRUCTION AND EQUIPMENT/APPARATUS REMOVALS. BASE PRICING ON THE ASSUMPTION THAT ELECTRICAL REMOVALS ARE NECESSARY IN ALL AREAS OF DEMOLITION (GENERAL DEMOLITION OF ANY SYSTEMS IN THE BUILDING [SPECIFICALLY INCLUDING DUCTWORK, PIPING, AND WIRING SYSTEMS OF ANY KIND]) AND ALL AREAS OF PROPOSED NEW WORK (BY ANY TRADE), UNLESS ACTUALLY VERIFIED OTHERWISE BY THE CONTRACTOR. INCLUDE ALL COSTS IN BID.</li> <li>WHERE EXISTING WIRING TO BE REMOVED (AS INDICATED ABOVE) OR OTHERWISE AFFECTED BY CONSTRUCTION (BY ANY CONTRACTOR/TRADE, INCLUDING GENERAL CONSTRUCTION, MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, ETC.) FEEDS LOADS WHICH REMAIN OR FEEDS LOADS IN ADJACENT OR OTHER AREAS NOT WITHIN THE SCOPE OF WORK, THE WIRING SHALL REMAIN. RELOCATE, EXTEND, AND/OR RE-FEED THE EXISTING WIRING TO MAINTAIN SERVICE, UNLESS INDICATED OTHERWISE. BASE PRICING ON THE ASSUMPTION THAT RELOCATING, EXTENDING, AND RE-FEEDING IS NECESSARY IN ALL AREAS OF DEMOLITION AND ALL AREAS OF PROPOSED NEW WORK (BY ANY TRADE), UNLESS ACTUALLY VERIFIED OTHERWISE BY THE CONTRACTOR. INCLUDE ALL COSTS IN BID.</li> <li>WHERE RE-FEEDING EXISTING ELECTRICAL CIRCUITS AND LOADS, VERIFY ALL REQUIREMENTS IN THE FIELD AND INCLUDE ALL COSTS IN BID. VERIFY EXACT CONDUCTOR SIZES AND AMPACITY, EXISTING CIRCUIT BREAKER AND/OR FUSE AMPS, LOAD NAMEPLATE RATINGS, CONDUIT SIZES, ETC.. FOR EQUIPMENT TO BE RE-FEED, PROVIDE ALL NEW WIRING DIRECTLY TO THE EQUIPMENT. DO NOT REUSE EXISTING WIRING TO RE-FEED EQUIPMENT, UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS.</li> <li>INFORMATION REGARDING EXISTING CONDITIONS AND EQUIPMENT AND ALL INFORMATION REGARDING REMOVALS (INCLUDING INFORMATION REGARDING THE SCOPE OF REMOVALS ON ARCHITECTURAL DRAWINGS) INDICATES GENERAL CONDITIONS AND ARE A GUIDE TO PRICING ONLY. PRIOR TO SUBMITTING BID, VISIT THE PROJECT SITE AND VERIFY ALL EXISTING CONDITIONS AND EQUIPMENT, RATINGS AND REQUIREMENTS, AND ALL TIE-INS TO EXISTING EQUIPMENT AND WIRING IN DETAIL. INCLUDE ALL COSTS IN BID. NO EXTRA CLAIMS OR COMPENSATION WILL BE GRANTED FOR NOT FIRST VERIFYING ALL CONDITIONS.</li> <li>FOR ALL NEW CIRCUIT BREAKERS IN EXISTING BRANCH AND DISTRIBUTION PANELS, PROVIDE CIRCUIT BREAKERS MATCHING AND COMPATIBLE WITH EXISTING CIRCUIT BREAKERS. PROVIDE WITH SHORT CIRCUIT INTERRUPTING RATING EQUAL TO EXCEEDING THE HIGHEST RATED EXISTING BRANCH CIRCUIT BREAKER IN THE PANEL. CIRCUIT BREAKER TYPES INDICATED ON THE DRAWINGS (WHERE APPLICABLE) ARE GUIDES TO PRICING ONLY. VERIFY EXACT TYPE AND ALL REQUIREMENTS IN FIELD PRIOR TO RELEASING EQUIPMENT.</li> <li>FOR ALL WIRING AND WORK INDICATED, INCLUDING ALL SYSTEMS (POWER, LIGHTING, FIRE ALARM, CONTROL, SIGNAL, SOUND, TELECOMMUNICATIONS, DATA, AND ALL OTHER SYSTEMS, WHERE APPLICABLE), PROVIDE ALL NEW CONDUITS, RACEWAYS, OUTLETS, AND CONDUCTORS, INCLUDE ALL COSTS IN BID. WHERE EXISTING CONDUITS AND RACEWAYS ARE DETERMINED BY THE ENGINEER TO BE IN ADEQUATE CONDITION, AND WHERE SPECIFICALLY ACCEPTABLE TO THE OWNER, ARCHITECT, AND ENGINEER, EXISTING CONDUITS AND RACEWAYS MAY BE REUSED. PROVIDE A SEPARATE GROUNDING CONDUCTOR, IN ADDITION TO ALL OTHER GROUNDING CONDUCTORS SPECIFIED, AND BOND TO ALL RACEWAYS, CONDUITS, BOXES, AND OUTLETS WHERE RACEWAYS ARE REUSED. DO NOT DEPEND ON EXISTING CONDUITS/RACEWAYS FOR GROUNDING PATHS. REUSE EXISTING CONDUCTORS ONLY WHERE SPECIFICALLY INDICATED ON THE DRAWINGS.</li> <li>PROVIDE ENGRAVED LAMINATED PLASTIC NAMEPLATES FOR ALL ELECTRICAL EQUIPMENT (INCLUDING, BUT NOT LIMITED TO, SAFETY SWITCHES, ENCLOSED CIRCUIT BREAKERS, BRANCH PANELS, DISTRIBUTION PANELS/SWITCHBOARDS, POWER OUTLETS, THERMAL OVERLOAD SWITCHES, FIRE ALARM DEVICES, SWITCHES AND RECEPTABLES SERVING EQUIPMENT, ETC., WHERE APPLICABLE), REFER TO SPECIFICATIONS FOR INFORMATION. PROVIDE ENGRAVED PLASTIC NAMEPLATES FOR ALL CONVENIENCE RECEPTABLES.</li> <li>WHERE ADDING NEW FIRE ALARM SIGNALING OR INITIATING DEVICES TO AN EXISTING FIRE ALARM SYSTEM, COMPLETELY TEST AND CERTIFY THE ENTIRE FIRE ALARM SYSTEM THROUGHOUT THE ENTIRE BUILDING TO DEMONSTRATE CAPABILITY AND COMPLIANCE WITH REQUIREMENTS (INCLUDING ALL CODE AND MUNICIPAL REQUIREMENTS). TEST MINIMUM OF TWO (2) TIMES, ONCE PRIOR TO PERFORMING ANY WORK (TO CONFIRM EXISTING SYSTEM CONDITION AND IDENTIFY ANY EXISTING SYSTEM ISSUES) AND UPON COMPLETION OF RESPECTIVE FIRE ALARM WORK (FOR FINAL ACCEPTANCE). WHERE ANY DISCREPANCIES OR MALFUNCTIONS ARE FOUND WITH EXISTING SYSTEM PORTIONS WHICH ARE NOT MODIFIED OR ADDED TO AS PART OF THIS PROJECT, NOTIFY THE OWNER.</li> <li>PROVIDE ALL NEW FIRE ALARM VISUAL SIGNALING DEVICES (VISUAL ONLY STROBES AND STROBE PORTIONS OF COMBINATION HORN/STROBES) AS SYNCHRONIZED. PROVIDE ALL VISUAL SIGNALING DEVICES LOCATED IN THE SAME ROOM OR OTHERWISE WITHIN SIGHT SYNCHRONIZED TOGETHER (I.E. CONTROLLED BY A COMMON SYNCHRONIZING MODULE). PROVIDE ALL DEVICES OF TYPES FACILITATING SYNCHRONIZING AND PROVIDE ALL SIGNALING CIRCUITS INCLUDING SYNCHRONIZING CONTROLLERS. EXISTING VISUAL SIGNALING DEVICES ARE NOT REQUIRED TO SYNCHRONIZE WITH NEW DEVICES (UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS).</li> <li>FURNISH AND INSTALL ALL ELECTRICAL DEVICES, EQUIPMENT, AND WIRING AT MILLWORK (CABINETS, DESKS, CREDENZAS, AND OTHER SIMILAR FURNITURE) AS APPLICABLE. REFER TO ARCHITECTURAL, MILLWORK, AND FURNITURE DRAWINGS FOR ADDITIONAL INFORMATION (INCLUDING INFORMATION ON WIRING AND ELECTRICAL EQUIPMENT). PROVIDE EQUIPMENT AND WIRING, REGARDLESS OF WHETHER SHOWN ON ELECTRICAL DRAWINGS OR NOT.</li> <li>COMPLETELY SEAL AND FIRE STOP ALL PENETRATIONS OF ALL FIRE AND/OR SMOKE RATED WALLS, FLOORS, CEILINGS, AND ANY OTHER CONSTRUCTION (INCLUDING ALL WALLS REQUIRED TO BE RATED BY CODE) TO A RATING MATCHING OR EXCEEDING THE FIRE RATING OF THE CONSTRUCTION. COMPLETELY SEAL AND WEATHERPROOF ALL PENETRATIONS OF EXTERIOR, AT OR BELOW GRADE, AND WET LOCATION WALLS AND FLOORS AND ROOF PENETRATIONS. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR INFORMATION ON FIRE RATINGS OF BUILDING CONSTRUCTION AND INCLUDE ALL COSTS IN BID. COMPLY WITH AND INSTALL FIRE STOPPING IN ACCORDANCE WITH ALL APPLICABLE FIRE RATING CODES AND STANDARDS (INCLUDING THE NEC, NFPA, IBC, AND THE UL "FIRE RESISTANCE DIRECTORY").</li> <li>PROVIDE 120 V POWER TO ALL SECURITY AND DOOR HARDWARE. COORDINATE ALL REQUIREMENTS WITH ARCHITECTURAL DOCUMENTS, THE OWNER, AND SECURITY SUPPLIER. OBTAIN POWER FROM A SUITABLE NEARBY BRANCH CIRCUIT.</li> <li>WHERE EXISTING CEILINGS ARE REMOVED AND REINSTALLED (EITHER PARTLY OR ENTIRELY), REMOVE ALL EXISTING ELECTRICAL EQUIPMENT (INCLUDING LIGHTING FIXTURES, FIRE ALARM DEVICES [INCLUDING, BUT NOT LIMITED TO, SMOKE AND HEAT DETECTORS, SIGNALING DEVICES, INDICATORS, ETC.], SECURITY/CCTV CAMERAS, MOTION DETECTORS, SPEAKERS, AND ALL OTHER ELECTRICAL DEVICES, EQUIPMENT, AND APPARATUS) FROM THE CEILING GRID AND CEILING TILES. LEAVE IN PLACE AT THE CEILING AND SUPPORT (IN A CODE COMPLIANT MANNER ACCEPTABLE TO LOCAL CODE OFFICIAL) TO FACILITATE CEILING REMOVAL. ONCE CEILING IS REINSTALLED, PERMANENTLY REINSTALL ALL ELECTRICAL EQUIPMENT IN THE CEILING. WHERE NEW EQUIPMENT IS SHOWN ON THE DRAWINGS, COMPLETELY DISCONNECT AND REMOVE EXISTING EQUIPMENT (BEING REPLACED) AND ALL ASSOCIATED WIRING AND PROVIDE ALL NEW EQUIPMENT AND ASSOCIATED WIRING AS SHOWN ON THE DRAWINGS. CEILINGS MAY BE LEFT OPEN FOR A LONG PERIOD OF TIME (I.E. THERE MAY BE SEVERAL MONTHS OR MORE BETWEEN THE TIME OF REMOVAL AND THE TIME OF REINSTALLING CEILINGS). WHEN CEILINGS ARE NOT IN PLACE, MAINTAIN (AS OPERATIONAL) ALL FIRE ALARM DEVICES AND EQUIPMENT AND NORMAL AND EMERGENCY LIGHTING (TEMPORARILY INSTALL FIRE ALARM DEVICES, SUPPORTED FROM STRUCTURE AND PROVIDE TEMPORARY LIGHTING OR TEMPORARILY SUPPORT EXISTING LIGHTING FROM STRUCTURE AS APPLICABLE). WHEN CEILINGS ARE NOT IN PLACE, SAFELY SECURE EVERYTHING WHICH IS EXPOSED BY THE ABSENCE OF CEILINGS (NEW AND EXISTING) AND KEEP ALL AREAS CLEAN WHEN OCCUPIED. THIS CEILING WORK IS NOT SHOWN ON ELECTRICAL PLANS (SEE ARCHITECTURAL DRAWINGS AND CEILING PLANS AND OTHER TRADES DRAWINGS FOR INFORMATION). THIS CEILING WORK APPLIES REGARDLESS OF THE PARTY REMOVING THE CEILING AND REGARDLESS OF WHETHER OR NOT CEILING REMOVAL IS SHOWN ON DRAWINGS. COORDINATE WITH ALL CONTRACTORS/TRADES TO CONFIRM THE EXTENT OF CEILING WORK AND INCLUDE ALL COSTS IN BID. THIS CEILING WORK ALSO APPLIES WHERE ANY PARTY CHOOSES TO INSTALL NEW CEILING IN LIEU OF REINSTALLING THE EXISTING CEILING.</li> <li>WHERE EXISTING CEILINGS ARE REMOVED AND NEW CEILINGS ARE INSTALLED (EITHER PARTLY OR ENTIRELY), REMOVE ALL EXISTING ELECTRICAL EQUIPMENT (INCLUDING LIGHTING FIXTURES, FIRE ALARM DEVICES [INCLUDING, BUT NOT LIMITED TO, SMOKE AND HEAT DETECTORS, SIGNALING DEVICES, INDICATORS, ETC.], SECURITY/CCTV CAMERAS, MOTION DETECTORS, SPEAKERS, AND ALL OTHER ELECTRICAL DEVICES, EQUIPMENT, AND APPARATUS) FROM THE CEILING GRID AND CEILING TILES. LEAVE IN PLACE AT THE CEILING AND SUPPORT (IN A CODE COMPLIANT MANNER ACCEPTABLE TO LOCAL CODE OFFICIAL) TO FACILITATE CEILING REMOVAL. ONCE NEW CEILING IS INSTALLED, PERMANENTLY REINSTALL ALL ELECTRICAL EQUIPMENT IN THE CEILING. WHERE NEW EQUIPMENT IS SHOWN ON THE DRAWINGS, COMPLETELY DISCONNECT AND REMOVE EXISTING EQUIPMENT (BEING REPLACED) AND ALL ASSOCIATED WIRING AND PROVIDE ALL NEW EQUIPMENT AND ASSOCIATED WIRING AS SHOWN ON THE DRAWINGS. CEILINGS MAY BE LEFT OPEN FOR A LONG PERIOD OF TIME (I.E. THERE MAY BE SEVERAL MONTHS OR MORE BETWEEN THE TIME OF REMOVAL AND THE TIME OF INSTALLING NEW CEILINGS). WHEN CEILINGS ARE NOT IN PLACE, MAINTAIN (AS OPERATIONAL) ALL FIRE ALARM DEVICES AND EQUIPMENT AND NORMAL AND EMERGENCY LIGHTING (TEMPORARILY INSTALL FIRE ALARM DEVICES, SUPPORTED FROM STRUCTURE AND PROVIDE TEMPORARY LIGHTING OR TEMPORARILY SUPPORT NEW OR EXISTING LIGHTING FROM STRUCTURE AS APPLICABLE). WHEN CEILINGS ARE NOT IN PLACE, SAFELY SECURE EVERYTHING WHICH IS EXPOSED BY THE ABSENCE OF CEILINGS (NEW AND EXISTING) AND KEEP ALL AREAS CLEAN WHEN OCCUPIED. THIS CEILING WORK IS NOT SHOWN ON ELECTRICAL PLANS (SEE ARCHITECTURAL DRAWINGS AND CEILING PLANS FOR INFORMATION).</li> <li>WHERE ELECTRICAL WORK INVOLVES REMOVAL AND REINSTALLATION OF EXISTING CEILINGS, REMOVAL AND RELOCATION IS THE RESPONSIBILITY OF THE CONTRACTOR. AS AN ALTERNATIVE (AT THE CONTRACTOR'S OPTION) TO REINSTALLING CEILINGS REMOVED TO FACILITATE WORK, THE CONTRACTOR MAY INSTALL A NEW CEILING OF A TYPE MATCHING THE EXISTING CEILING PROVIDED THERE IS NO COST CHANGE TO THE CONTRACT (WHEREVER NEW CEILING INVOLVES ADDITIONAL COST, NEW CEILING IS NOT ACCEPTABLE). REPLACE ANY CEILING TILES DAMAGED AS PART OF ELECTRICAL WORK.</li> <li>FOR ALL ROOFTOP/ATTIC AND SIMILAR EQUIPMENT, LOCATE ALL EQUIPMENT DISCONNECTING MEANS SO THE DISCONNECTING MEANS IS ACCESSIBLE FROM, OPERABLE FROM, AND SERVICEABLE FROM (INCLUDING SATISFYING NEC WORKING SPACE REQUIREMENTS) CATWALKS, WALKWAYS, OR WALKING PATHS. FULLY COORDINATE IN DETAIL WITH THE OWNER AND ARCHITECT PRIOR TO ROUGH-IN OR INSTALLING ANY DISCONNECTING MEANS.</li> <li>PROVIDE NEC AND OSHA COMPLIANT TEMPORARY LIGHTING AT ALL TEMPORARY PROTECTED EGRESS COVERS (I.E. AT CERTAIN EXITS DURING CONSTRUCTION). PROVIDE TEMPORARY CODE COMPLIANT ILLUMINATED EXIT SIGNS TO IDENTIFY THE ENTIRE TEMPORARY EGRESS PATH. PROVIDE TEMPORARY EMERGENCY LIGHTING (UTILIZING BATTERY UNIT AND/OR REMOTE HEADS) TO SATISFY CODE REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR INFORMATION AND LOCATIONS.</li> </ol>
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NATIONAL ELECTRICAL CODE (NEC), LATEST ADOPTED EDITION

ELECTRICAL CONTRACTOR (EC), REFERENCES ELECTRICAL TRADES (ALL WORK IS BY THE CONTRACTOR, DIFFERENT TRADES ARE FOR REFERENCE ONLY)

MECHANICAL CONTRACTOR (MC), REFERENCES MECHANICAL TRADES IN GENERAL (MECHANICAL, HVAC, ATC, PLUMBING, FIRE PROTECTION, ETC.), REFER TO MECHANICAL DOCUMENTS FOR DISTINCTION BETWEEN TRADES (ALL WORK IS BY THE CONTRACTOR, DIFFERENT TRADES ARE FOR REFERENCE ONLY)

GENERAL CONTRACTOR (GC), REFERENCES GENERAL CONSTRUCTION TRADES IN GENERAL (CARPENTRY, STEEL, CONCRETE, SITE, ETC.), REFER TO ARCHITECTURAL AND SITE DOCUMENTS FOR DISTINCTION BETWEEN TRADES (ALL WORK IS BY THE CONTRACTOR, DIFFERENT TRADES ARE FOR REFERENCE ONLY)

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REVISIONS

D.	
B.	
C.	

Project No. 23-42  
Date: 11/11/24  
Scale: AS NOTED

**ELECTRICAL NOTES**

**E10**

MCE #E7-384  
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**ISSUED FOR BID: 11/11/2024**

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