

LRHSD TRANSPORTATION BUILDING EXTERIOR RESTORATION - DIS-02

LRHSD PROJECT NO. REF21-42-8302

LENAPE REGIONAL HIGH SCHOOL ADMINSTRATION BUILDING
93 WILLOW GROVE ROAD
SHAMONG, NJ 08088

LENAPE REGIONAL HIGH SCHOOL
SCHOOL DISTRICT

PREPARED FOR THE
LENAPE REGIONAL HIGH SCHOOL DISTRICT BOARD OF EDUCATION

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THE DESIGN COLLABORATIVE
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1940 ROUTE 9 NORTH
CAPE MAY COURT HOUSE, NJ 08210

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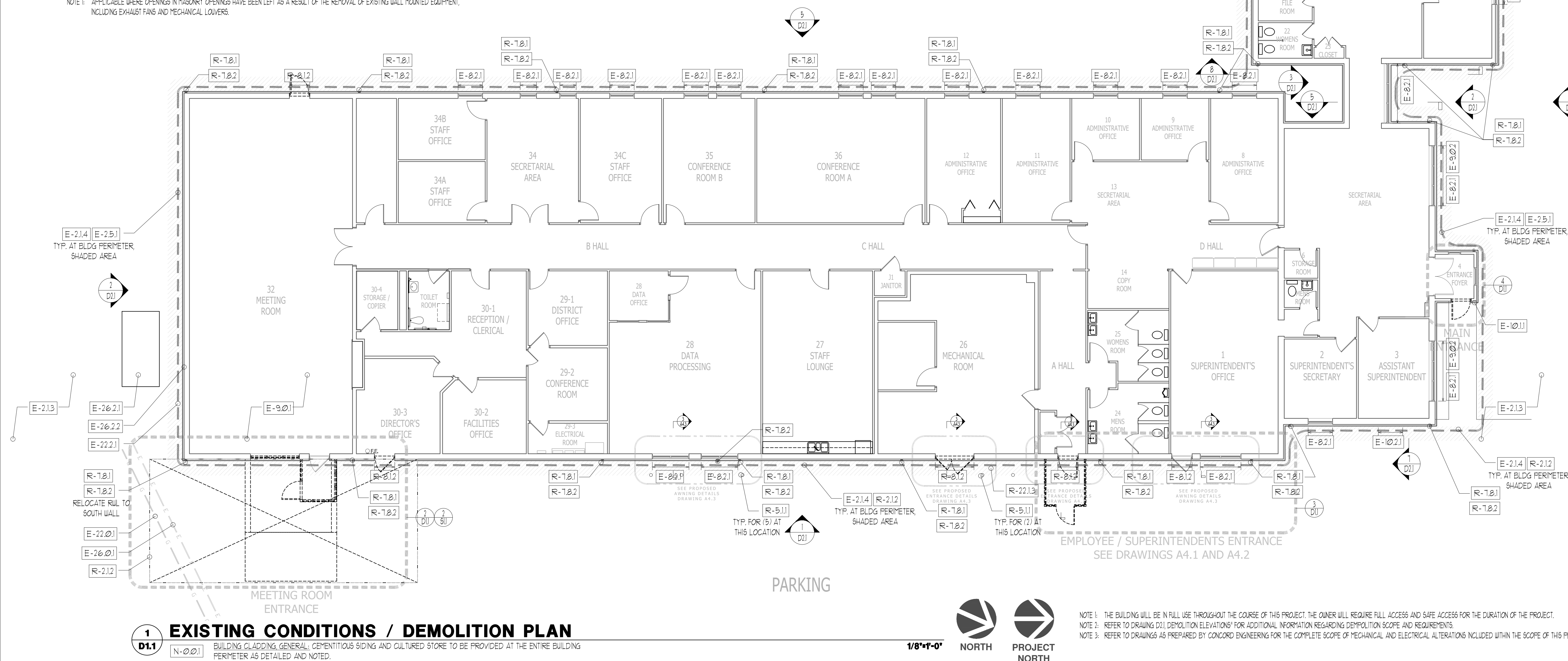
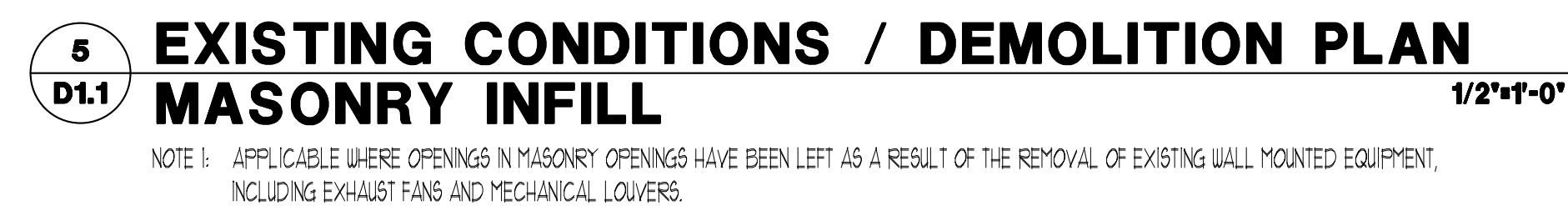
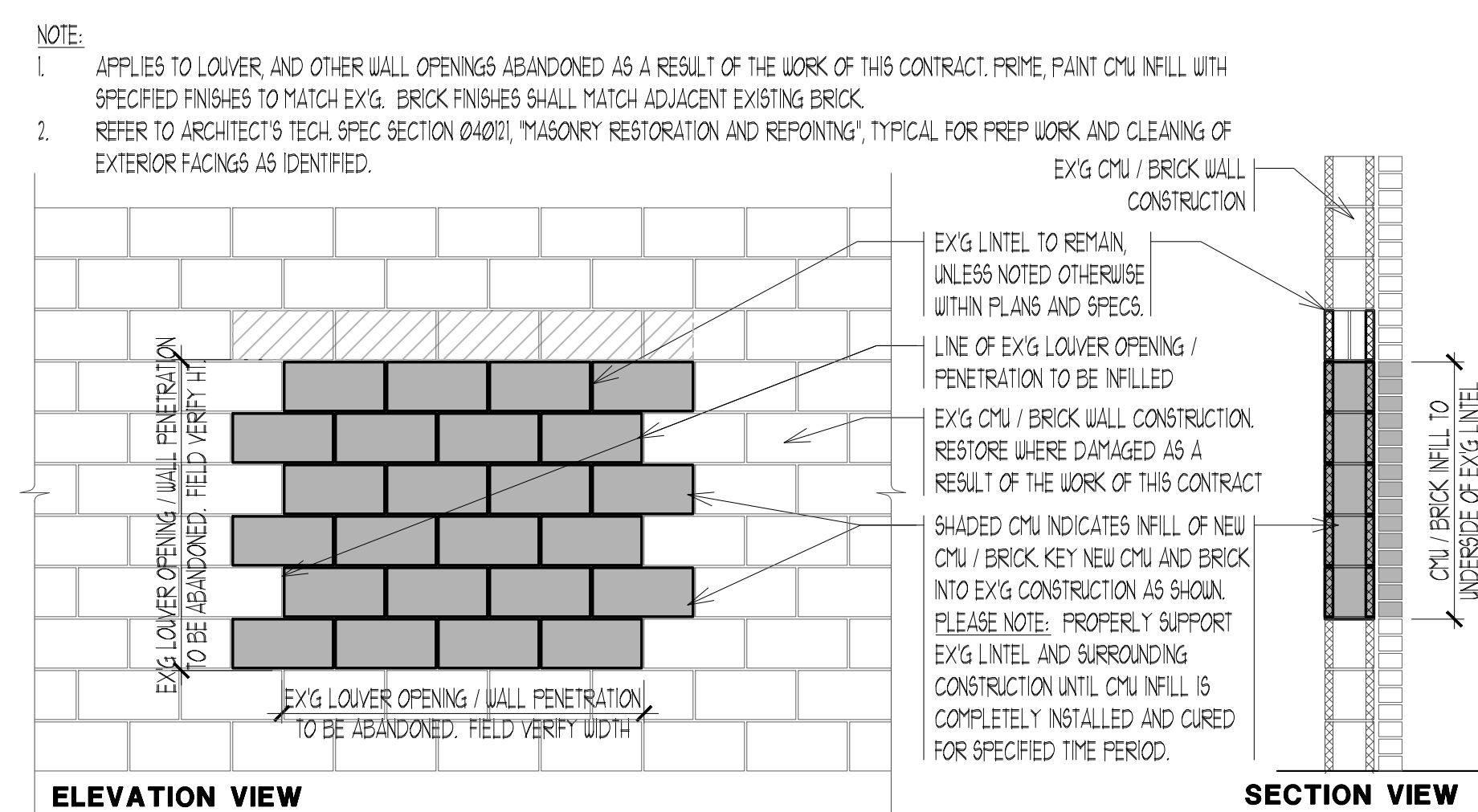
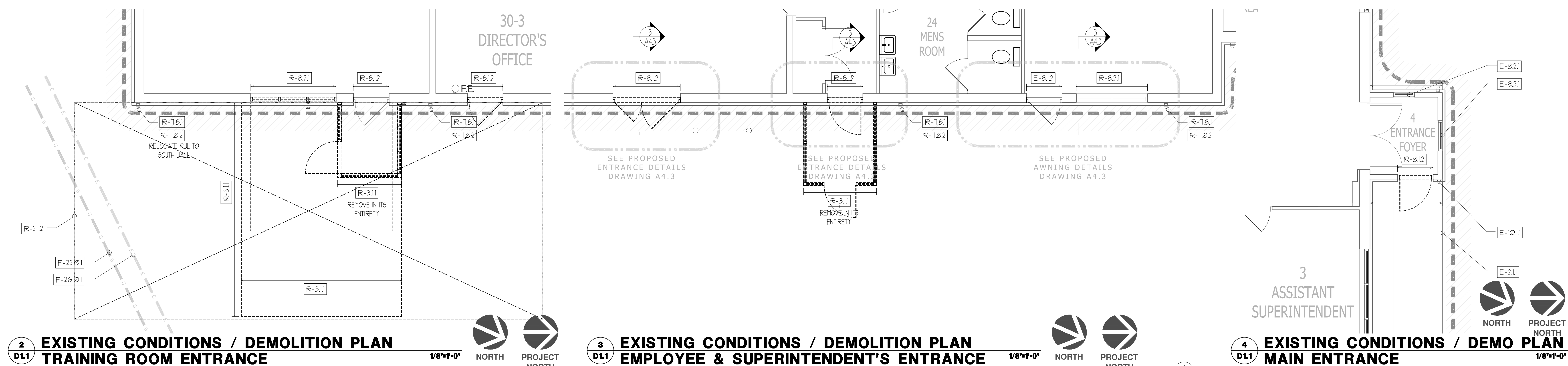
ITEMS REPRESENT EXISTING BUILDING ELEMENTS INTENDED TO REMAIN AS IS, OR TO BE ALTERED AND INCORPORATED INTO THE FINISHED CONSTRUCTION

ITEMS REPRESENT EXISTING BUILDING ELEMENTS INTENDED TO BE REMOVED FROM THE SITE, OR DELIVERED TO THE OWNER IF SO DESIGNATED OR DIRECTED.

R-811	EXG ENTRANCE VESTIBULE: EXG ENTRANCE SYSTEM ENCLOSURE FRAMING AND GLAZING TO BE REMOVED. PREPARE TO NEW CONSTRUCTION REFER TO ARCHITECTURAL DETAILS
R-812	EXG EXTERIOR DOORS: EXG EXTERIOR DOOR FRAME TO BE REMOVED AND REPLACED. PREPARE OPENING FOR NEW DOORS. REFER TO ARCHITECTURAL DRAWINGS AND SCHEDULES FOR DOOR HARDWARE AND TRIM REQUIREMENTS.
R-821	EXG WINDOWS: EXG WINDOWS TO BE REMOVED AND REPLACED. PREPARE OPENING FOR NEW WINDOWS. REFER TO ARCHITECTURAL DRAWINGS AND SCHEDULES FOR WINDOW AND TRIM REQUIREMENTS.
R-223.1	PLUMBING ROOF VENT PENETRATIONS: PLUMBING VENT STACKS TO REMAIN. REPAIR DAMAGE. REMOVE EXCESS SEALANTS. PREPARE METAL COMPONENTS AND ADJ. ROOF SURFACE FOR COATING APPLICATION.
R-26.1	ELECTRICAL DEVICE / CONDUIT / WIRING / JUNCTION BOX: REMOVE ABANDONED WALL MOUNTED ITEMS. REMOVE WIRING AND CONDUCTORS AT THEIR SOURCE.
E-101.1	WALL MOUNTED SIGNAGE: REMOVE, REINSTALL AS REQ'D TO COMPLETE THE WORK OF THIS CONTRACT. PATCH ABANDONED HOLES PRIOR TO COATING.
R-221.1	PLUMBING CONSTRUCTION: EXG ABANDONED OR INACTIVE PLUMBING EQUIPMENT, SERVICES, PIPING, VALVES AND ASSOCIATED CONSTRUCTION LOCATED WITH THE CONTRACT LIMIT LINE TO BE REMOVED. ABANDONED PIPING TO BE REMOVED AND CAPED.
R-221.3	EXG YARD HYDRANT PIPING: CUT EXG COPPER DOMESTIC WATER PIPING, YARD HYDRANT AND REMOVE. PREPARE FOR INSTALLATION OF NEW YARD HYDRANT.
R-232.1	HYAC WALL EXHAUST: REMOVE EXG WALL MOUNTED EXHAUST FAN, FINL. OPENING WITH MASONRY TO MATCH COURSING, DEPTH OF EXG ADJACENT CONSTRUCTION. REFER TO MECHANICAL DUGS FOR ADDITIONAL INFORMATION.
N-222.2	NEW YARD HYDRANT PIPING: PROVIDE JOBS# SERIES 1400-2 FREEZE-RESIST GROUND HYDRANT EXIST. 3" SERVICE, PER NEW SHUT-OFF VALVE. DRAIN AT POINT OF CONNECTION TO EXISTING 24" SQ. 4" TC CONCRETE PAD AT GRADE.
R-23.1	MECHANICAL CONSTRUCTION: EXG ABANDONED OR INACTIVE MECHANICAL EQUIPMENT, TANKS, VENTS AND ASSOCIATED CONSTRUCTION LOCATED WITH THE CONTRACT LIMIT LINE TO BE REMOVED. ABANDONED PIPING TO BE REMOVED AND CAPED.
R-26.1	ELECTRICAL DEVICE / CONDUIT / WIRING / JUNCTION BOX: REMOVE ABANDONED WALL MOUNTED ITEMS. REMOVE WIRING AND CONDUCTORS AT THEIR SOURCE.

ITEMS REPRESENT NEW BUILDING ELEMENTS TO BE INCORPORATED INTO THE FINISHED CONSTRUCTION

N-9.11	INTERIOR WALL FINISH: PROVIDE NEW BUILDING INTERIOR FINISHES AS INDICATED AND SCHEDULED AND AS REQ'D TO COMPLETE THE WORK OF THIS CONTRACT
N-9.12	WALL BASE: 6" H VINYL COVE BASE (V.C.B.)
N-9.13	CARPET: 24"x24" CARPET TILE WALK OFF.
N-10.11	WALL MOUNTED SIGNAGE: SUPPLY AND INSTALL NEW WALL MOUNTED BUILDING SIGNAGE AS INDICATED OR DIRECTED. UTILIZE APPROPRIATE AND APPROVED FASTENERS AND MOUNTING METHODS.
N-22.11	PLUMBING ROOF VENT PENETRATIONS: PLUMBING VENT STACKS TO REMAIN. REPAIR DAMAGE, REMOVE EXCESS SEALANTS, PREPARE METAL COMPONENTS AND ADJ. ROOF SURFACE FOR COATING APPLICATION.
N-22.22	NEW YARD HYDRANT PIPING: PROVIDE .0504" SERIES 1440-2 FREEZELESS GROUND HYDRANT, REMOVE 1/4" CONCRETE, PROVIDE NEW SHUT-OFF VALVE, DRAIN AT POINT OF CONNECTION FOR WINTERIZATION AND 24" SQ. 4' THK. GROUND PAID AT GRADE.
N-23.11	HVAC ROOF EXHAUST / VENT PENETRATIONS: MECHANICAL VENT STACKS TO REMAIN. REPAIR DAMAGE, REMOVE EXCESS SEALANTS, PREPARE METAL COMPONENTS AND ADJ. ROOF SURFACE FOR COATING APPLICATION.



NOTE 1: THE BUILDING WILL BE IN FULL USE THROUGHOUT THE COURSE OF THIS PROJECT. THE OWNER WILL REQUIRE FULL ACCESS AND SAFE ACCESS FOR THE DURATION OF THE PROJECT.

GENERAL DOOR SCHEDULE NOTES:

1. REFER TO DOOR HEAD, JAMB AND SILL DETAILS ON DRAWING A12 FOR ADDITIONAL INFORMATION.
2. FIGURES WITHIN PARENTHESIS PRECEDING THE DOOR SIZE (1) INDICATES THE NUMBER OF DOOR LEAVES.
3. FIGURES WITHIN PARENTHESIS FOLLOWING THE DOOR NUMBER (1) INDICATES THE QUANTITY OF DOOR LOCATIONS. REFER TO THE FLOOR PLANS.
4. DOOR AND ALUMINUM FINISH TO BE COLOR ANODIZED. ALLOW FOR (2) SELECTIONS FOR BOTH DOORS AND FRAMES.
5. IMPACT FILM SHALL BE AVERY-DENISON "5F CLEAR TML." WHERE IMPACT RESISTANT SECURITY FILM IS INDICATED WITHIN THE GLAZING NOTES BELOW.

SPECIAL DOOR SCHEDULE NOTES:
 1. DOOR 1-10 TO REMAIN AND SHALL BE PREPARED AND PAINTED WITH A SPECIAL COATING FINISH.

GLAZING SCHEDULE:
 G-A. 1" INSULATED EXTERIOR LITE: 1/4" CLEAR TEMP. LOW-E 9, SURFACE INTERIOR LITE: 1/4" CLEAR TEMP. PROVIDE IMPACT RESISTANT SECURITY FILM AND IMPACT PROTECTION PROFILE GLAZING STOPS.
 G-B. 1" INSULATED EXTERIOR LITE: 1/4" CLEAR TEMP. LOW-E 9, SURFACE INTERIOR LITE: 1/4" CLEAR TEMP.
 G-C. APPLY PROTECTIVE IMPACT RESISTANT SECURITY FILM AND IMPACT PROTECTION PROFILE GLAZING STOPS TO EX'G DOOR GLAZING. REMOVE ANY EX'G FILM AND PREPARE EX'G GLASS FOR NEW FILM APPLICATION.



- GENERAL NOTES:
1. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING MASONRY OPENING PRIOR TO FABRICATION
 2. PROVIDE SEALANT # BOTH SIDES OF DOOR FRAMES ALL AROUND, TYP. FOR INTERIOR & EXTERIOR DOORS
 3. VP. FRAME TO BE ANEMOSTAT LO PRO-15 STYLE 20 GA STEEL FRAME, SIZED AS NOTED AND AS REQ'D TO ACCOMMODATE GLAZING SPEC'D. COLOR TO BE MFG'S STANDARD BEIGE. FIRE RATING AS SCHEDULED.



ROOM FINISH SCHEDULE NOTES - GENERAL:

1. PAINTING AND SPECIAL COATING: ALL EXPOSED UNFINISHED SURFACES INCLUDING WALLS AND EXPOSED CEILING CONSTRUCTION TO BE PAINTED WITH A SPECIAL COATING PRIMER COAT PLUS FINISH COATS AS NOTED. ALL PREVIOUSLY COATED INTERIOR WALLS TO BE PRIMED THEN PAINTED WITH ONE COAT SPECIAL COATING UNLESS NOTED OTHERWISE BY OWNER.
2. PROVIDE VINYL BASE AT ALL WALL BASE AREAS AND ALL TOE KICKS OF CASEWORK. PROVIDE 4" H. BASE @ TOE KICKS, 4 6" H. AT ALL OTHER LOCATIONS.
3. FLAME SPREAD AND SMOKE DEVELOPED INDEXES FOR WALLS AND CEILING FINISHES SHALL BE IN ACCORDANCE WITH THE FOLLOWING: MATERIALS SHALL BE TESTED IN ACCORDANCE WITH ASTM E84 OR UL T23. FLAME SPREAD - 200 MAX. SMOKE DEVELOPED - 450 MAX.
4. FINISHES NOTED IN THE CONTRACT SHALL BE RESTORED TO MATCH THE EXISTING CONSTRUCTION AND WHERE PATCH TO ACCOMMODATE PROPOSED CONSTRUCTION IS INDICATED, PATCH AND REPAIR ANY DAMAGED FINISHES AND PROVIDE NEW FINISHES TO MATCH EXIST.
5. THE SCOPE OF THE WORK REQUIRES MODIFICATIONS TO THE EXISTING CONSTRUCTION. EXISTING ELECTRICAL DEVICES, RECEPTACLES, SWITCHES, CEILING FINE SYSTEMS, MECHANICAL DIFFUSERS, DUCTWORK, CEILING MOUNTED EQUIPMENT, FIRE ALARM DEVICES AND SPEAKERS SHALL BE SALVAGED/DISCONNECTED AND RELOCATED AS REQUIRED TO ACCOMMODATE THE WORK OF THIS CONTRACT.
6. EXIST FIRE ALARM AND FIRE SUPPRESSION DEVICES SHALL BE DISCONNECTED AND RECONNECTED AS REQUIRED TO ACCOMMODATE THE WORK OF THIS CONTRACT.
7. COLORS SHALL BE SELECTED BY THE OWNER COLOR SELECTIONS SHALL BE FROM THE FULL RANGE OF COLORS REFERENCED WITHIN THE CONTRACT SPECIFICATIONS.
8. TYP. FINISHES NOTED APPLY TO ENTIRE ROOM UNDO.



BLOCK NO. 27.02	LRHSD PROJECT NO. REF#21-42-8302 PROPOSED EXTERIOR BUILDING RESTORATION LRHSD ADMINISTRATION BUILDING 83 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088	LOT NO. 1
	SHAMONG TOWNSHIP	BURLINGTON COUNTY

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KEY PLAN:



PROJECT
NORTH

THE DESIGN COLLABORATIVE

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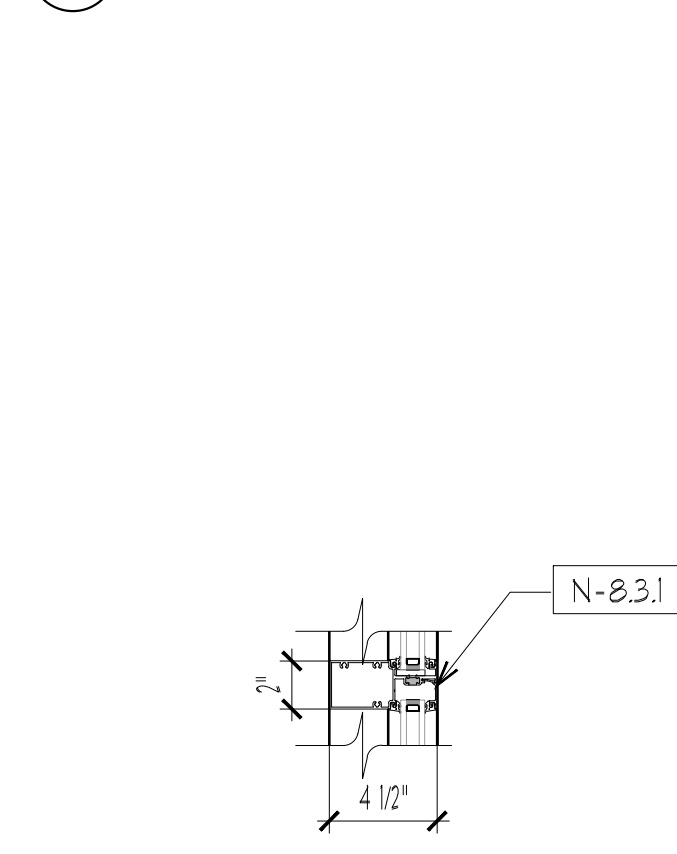
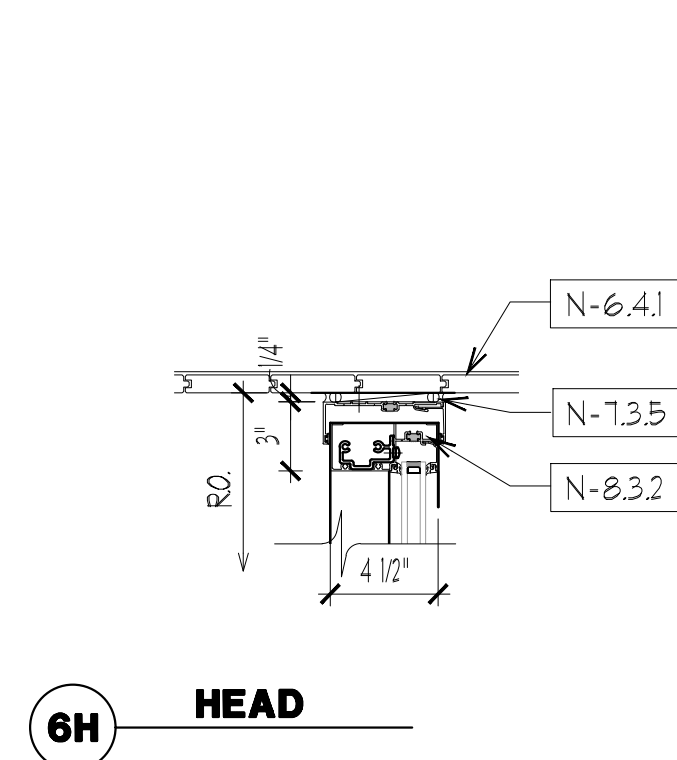
10/23/20 OF DOCUMENTS
THIS SET OF DOCUMENTS IS FOR DESIGN DEVELOPMENT PURPOSES. IT IS NOT A CONTRACT. IT IS THE PROPERTY OF THE DESIGN COLLABORATIVE, P.A. AND IS NOT TO BE REPRODUCED OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF THE DESIGN COLLABORATIVE, P.A.

SCALE:	AS NOTED	DRAWN BY: DCD
COMM. No.:	8302	CHECKED BY: DCD
DATE:	01/02/2025	

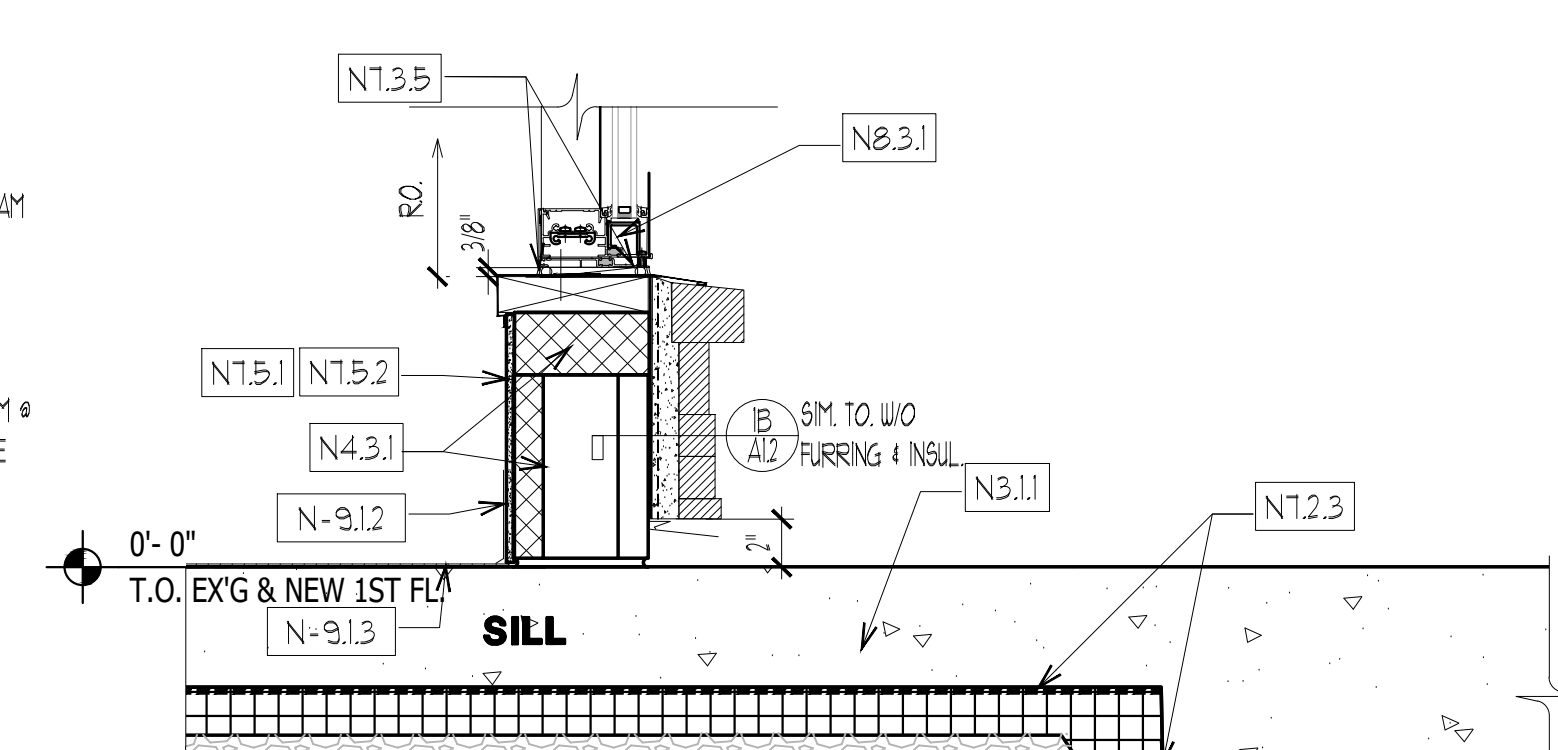
SHEET TITLE:
FLOOR PLANS, SCHEDULES & DETAILS

SHEET No.:

A1.1

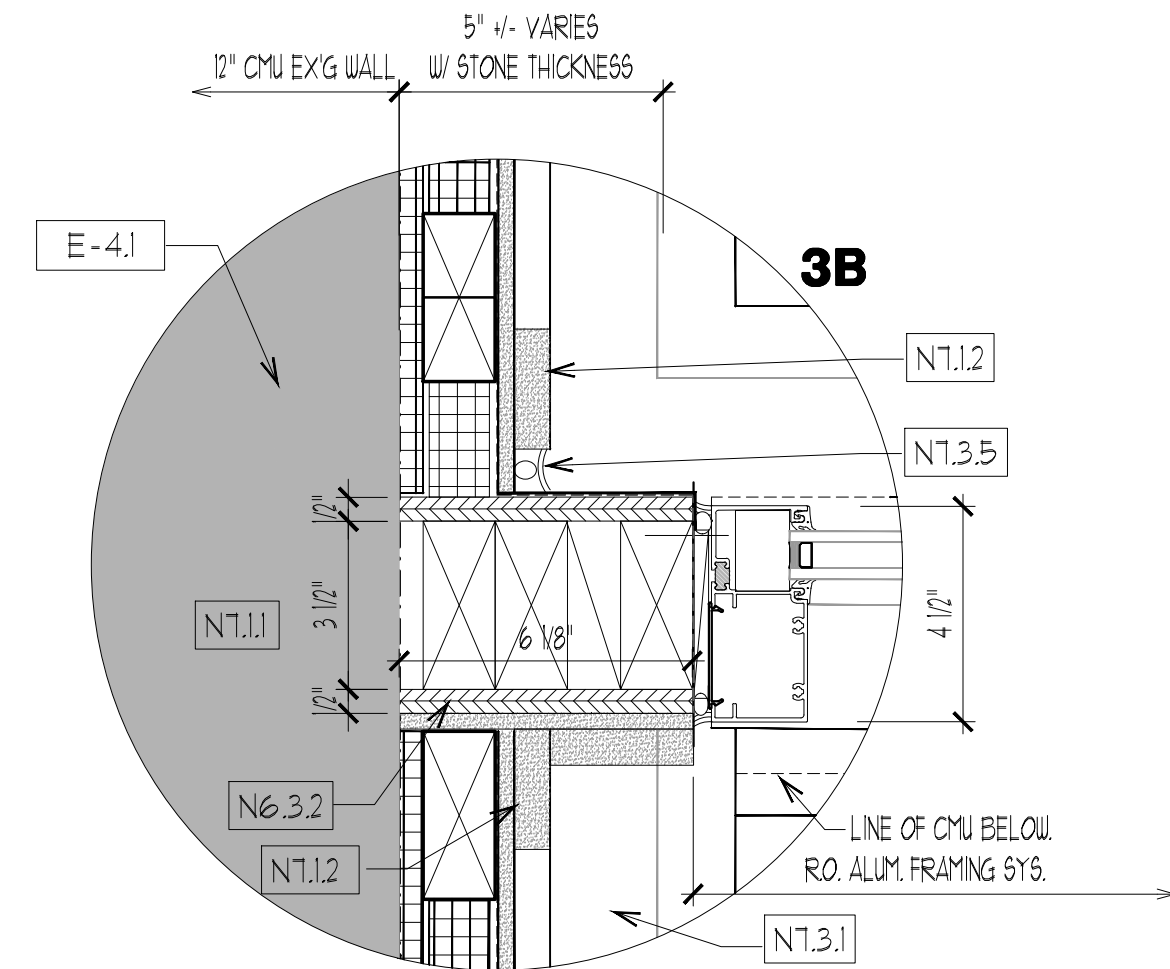


6J TYP. INTERMEDIATE MEMBER @ STOREFRONT

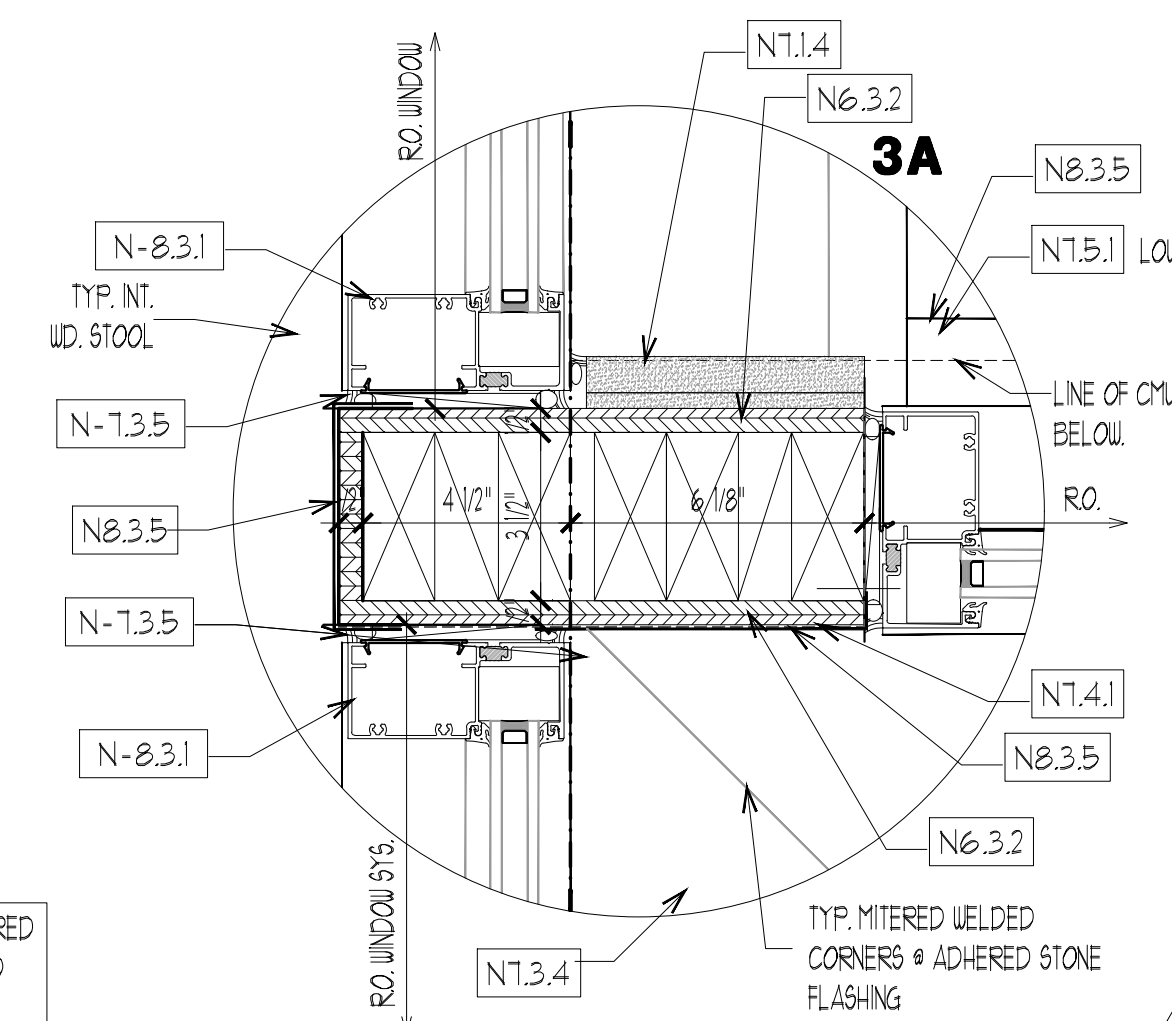


6S **SILL**

6 DETAILS
A1.2 STOREFRONT 1-1/2"x1'-0"



3B

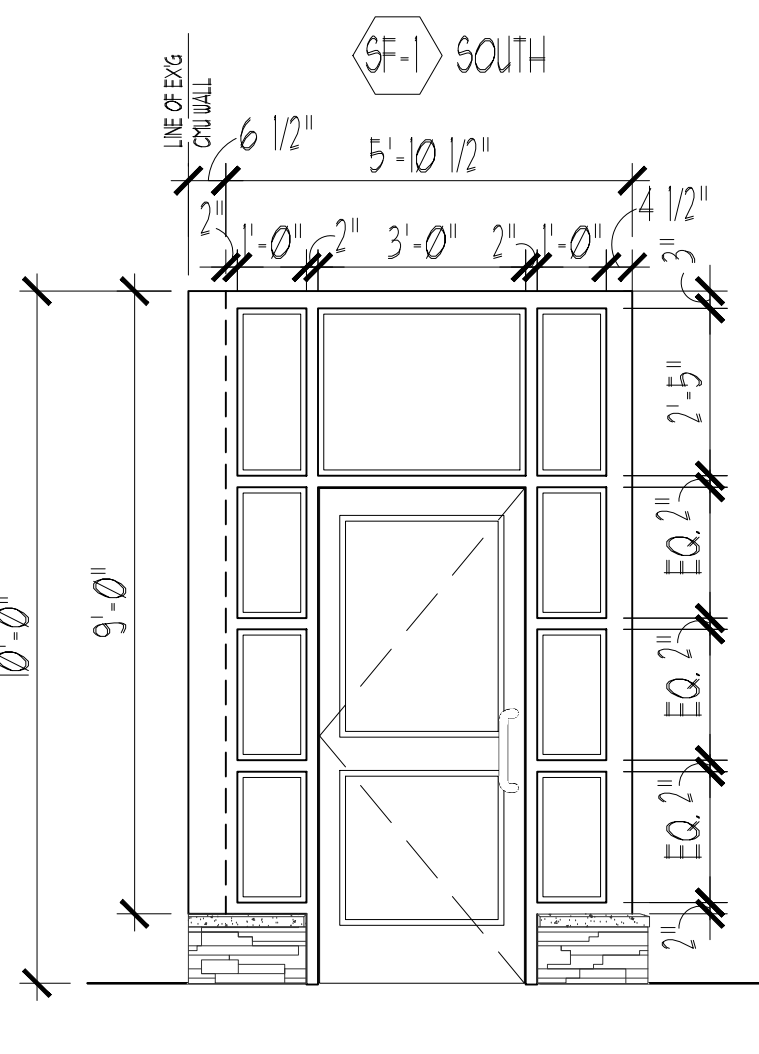
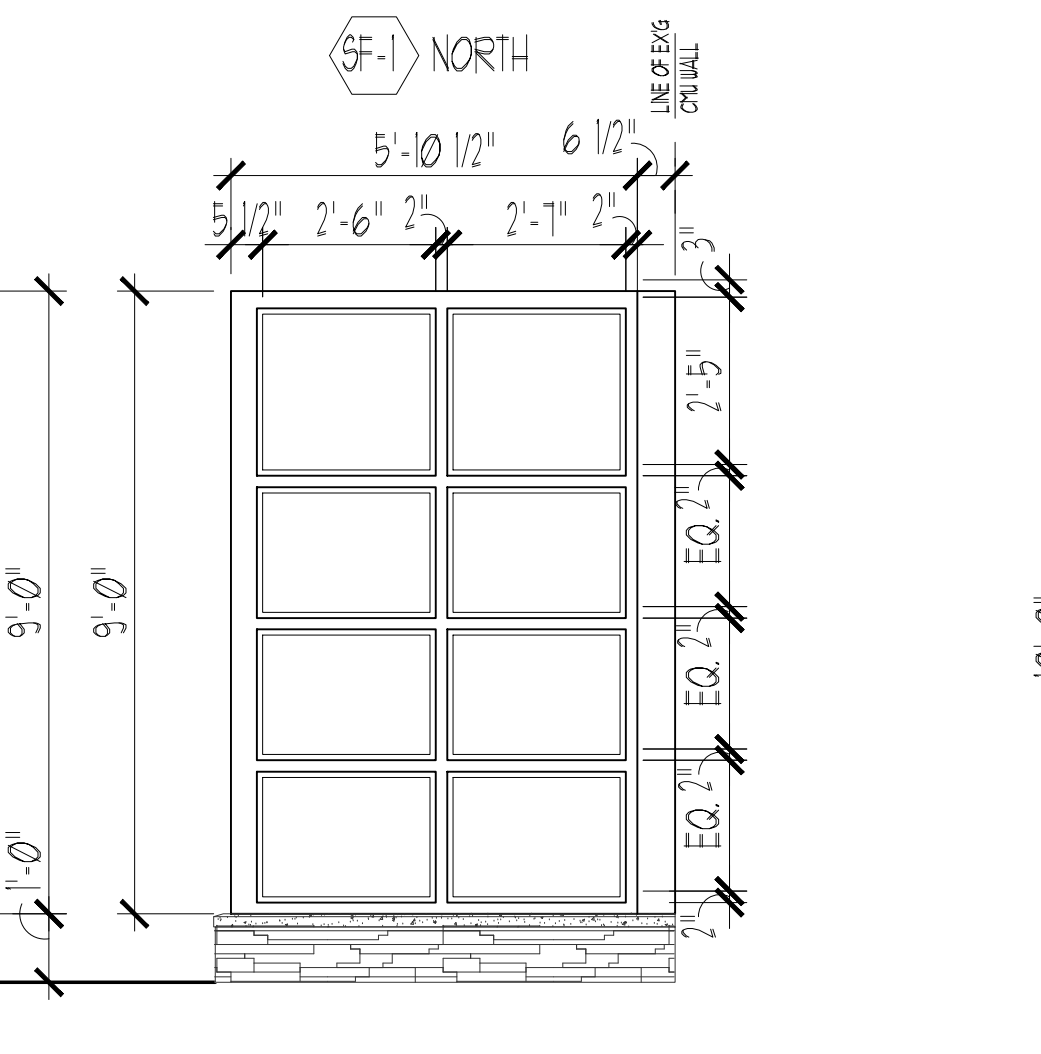
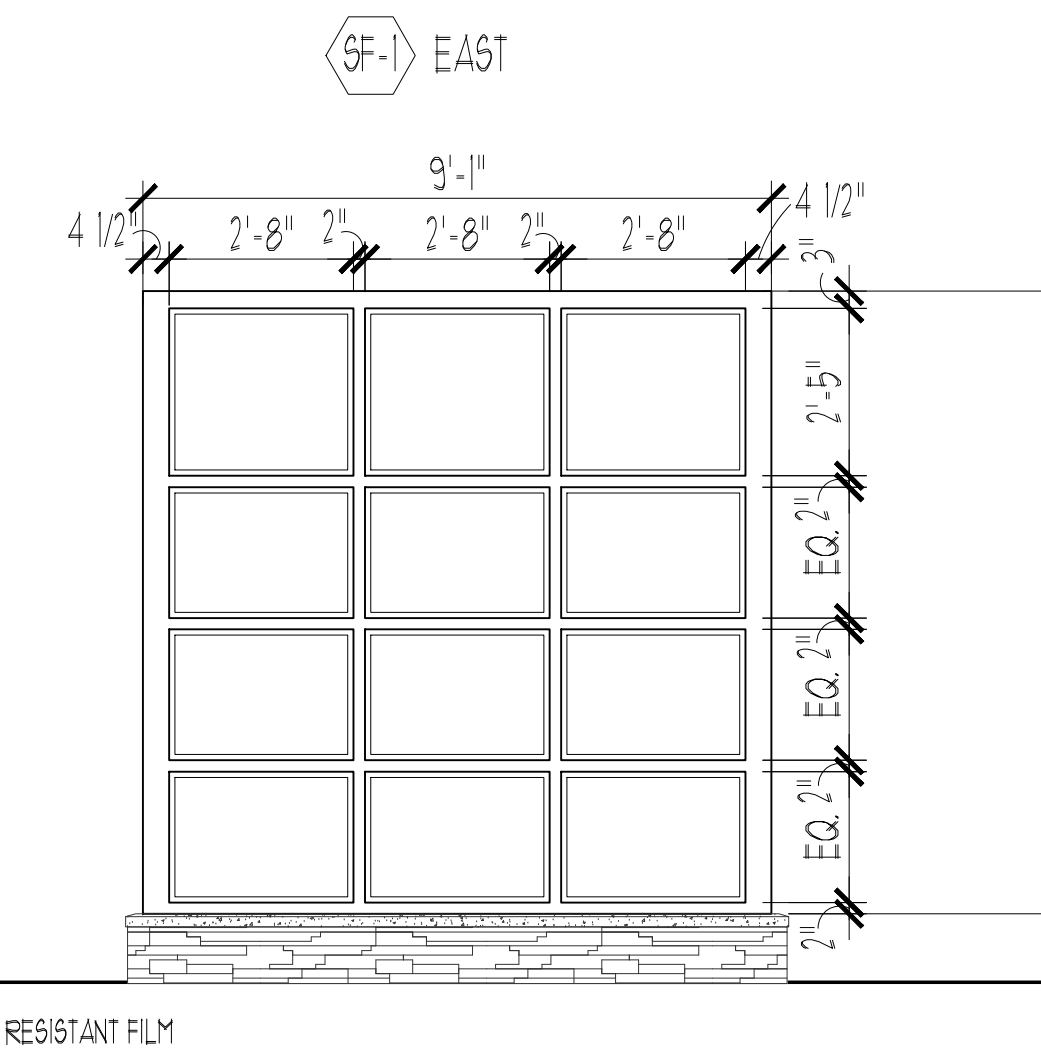


3A

5S **SILL**

DEMO NOTE: REMOVE EX'G WINDOW TRIM AS NEEDED TO PROVIDE NEW FACADE TREATMENT AND WINDOW SURROUNDS AS SHOWN ON BUILDING ELEVATIONS AND DETAILS.

3 ENLARGED PLAN @ 32-A VESTIBULE
A1.2 ENLARGED DETAILS

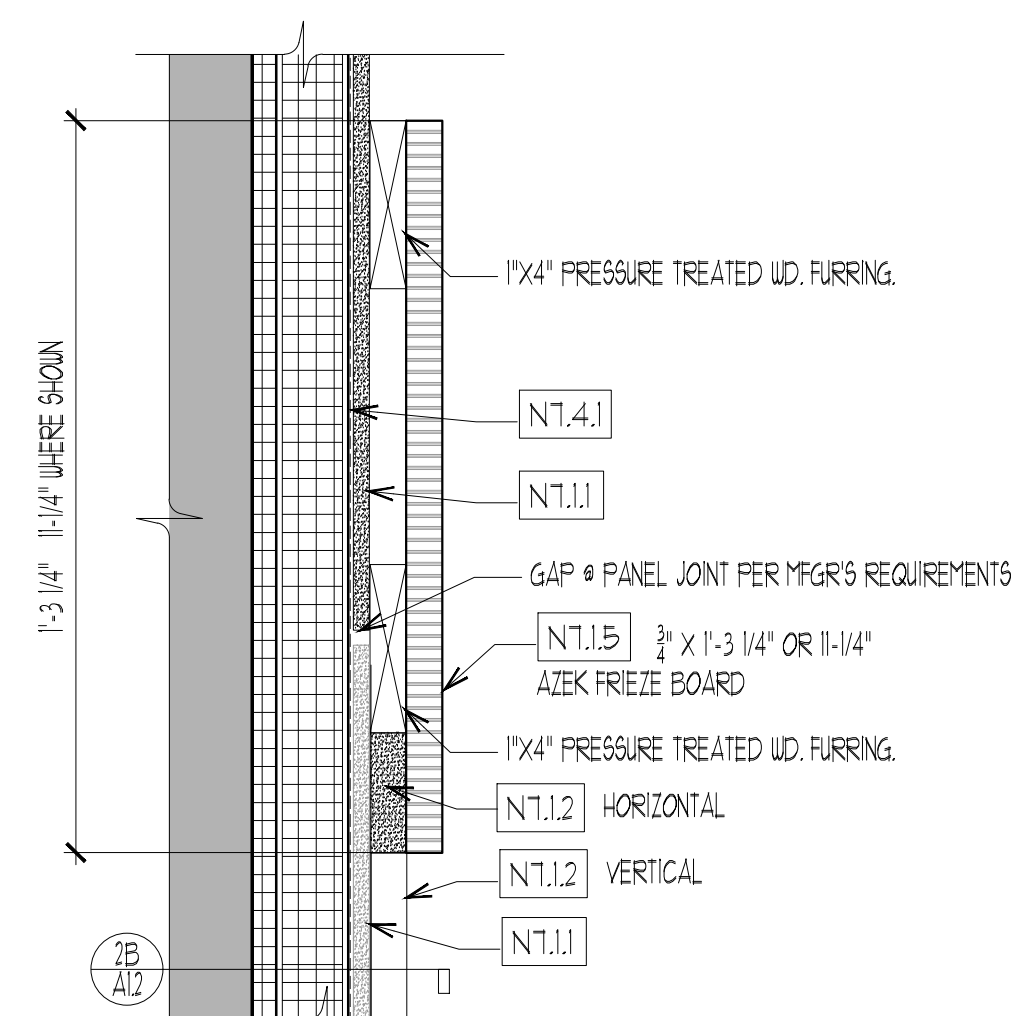


G-A	ALL GLAZING, UNO.
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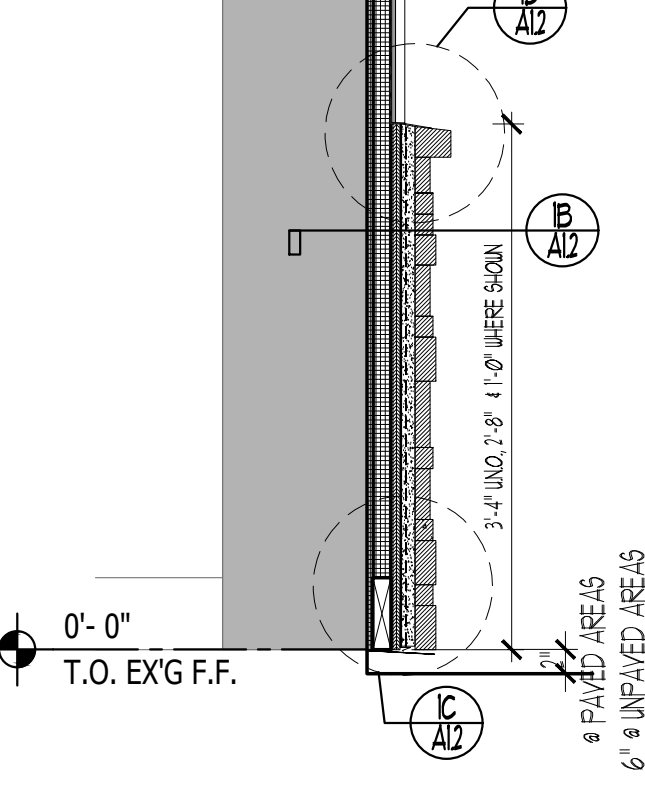
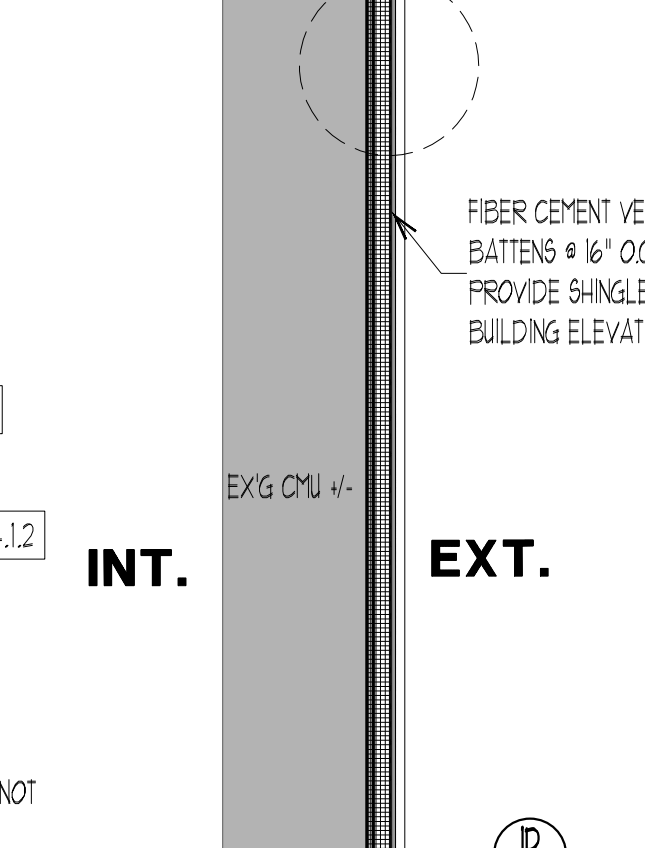
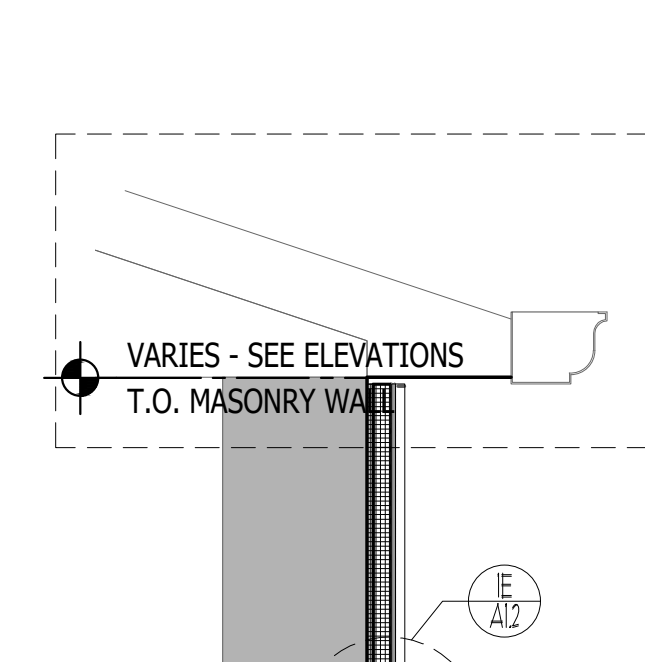
GLAZING NOTES G-A: 1" INSULATED,
EXT. LITE - 1/4" CLEAR TEMP. LOW-E NO. 2 SURFACE
INT. LITE - 1/4" CLEAR TEMP.
INT. IMPACT RESISTANT SECURITY FILM AND IMPACT PROTECTION PROFILE GLAZING STOPS.

G-B: 1" INSULATED,
EXT. LITE - $\frac{1}{4}$ " CLEAR TEMP. LOW-E NO. 2 SURFACE
INT. LITE - $\frac{1}{4}$ " CLEAR TEMP.
NO IMPACT FILM.

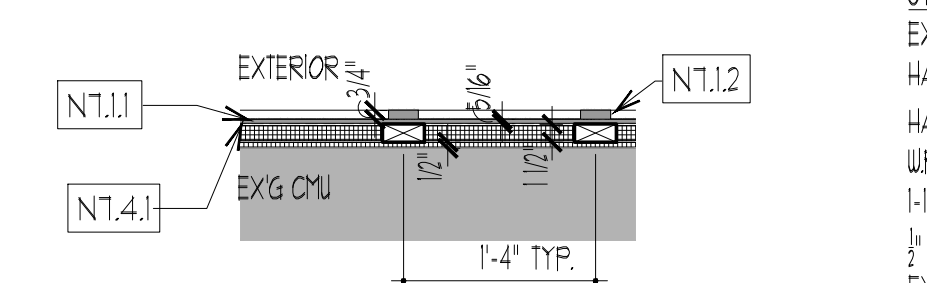
1/4"=1'-0"



1F
A1.2 **TYP. DETAIL**
PVC FRIEZE BOARD
PROVIDE AT LOCATIONS AS
SHOWN ON BUILDING ELEV.



2A **TYP. WALL SECTION**
A1.2 **W/O STONE BASE**



2B
A1.2 **ENLARGED PLAN**
W/O STONE BASE

SYSTEM: **3/4" x 1'-0"**
EXTERIOR
ADHERED CULTURED STONE
LATH AND MORTAR
RAIN SLICKER DRAINAGE
WRB.
2" FLYWOOD
1-1/2" XPS BETWEEN 2X4 FURRING
1/2" XPS
EX'G CMU
INTERIOR

3/4" x 1'-0"
SYSTEM:
EXTERIOR
HARDIE BATTENS
HARDIE PANELS 4' X 8'-10' X $\frac{3}{8}$ "
WRB.
1-1/2" XPS BETWEEN 2X4 FURRING
1" XPS
EXG CMU
INTERIOR

9/28/26	1	RELEASED FOR BID
DATE	No.	REVISION

LOT NO. 1

LRHSD PROJECT NO. REF21-42-8302

BLOCK NO. 27.02

KEY PLAN:



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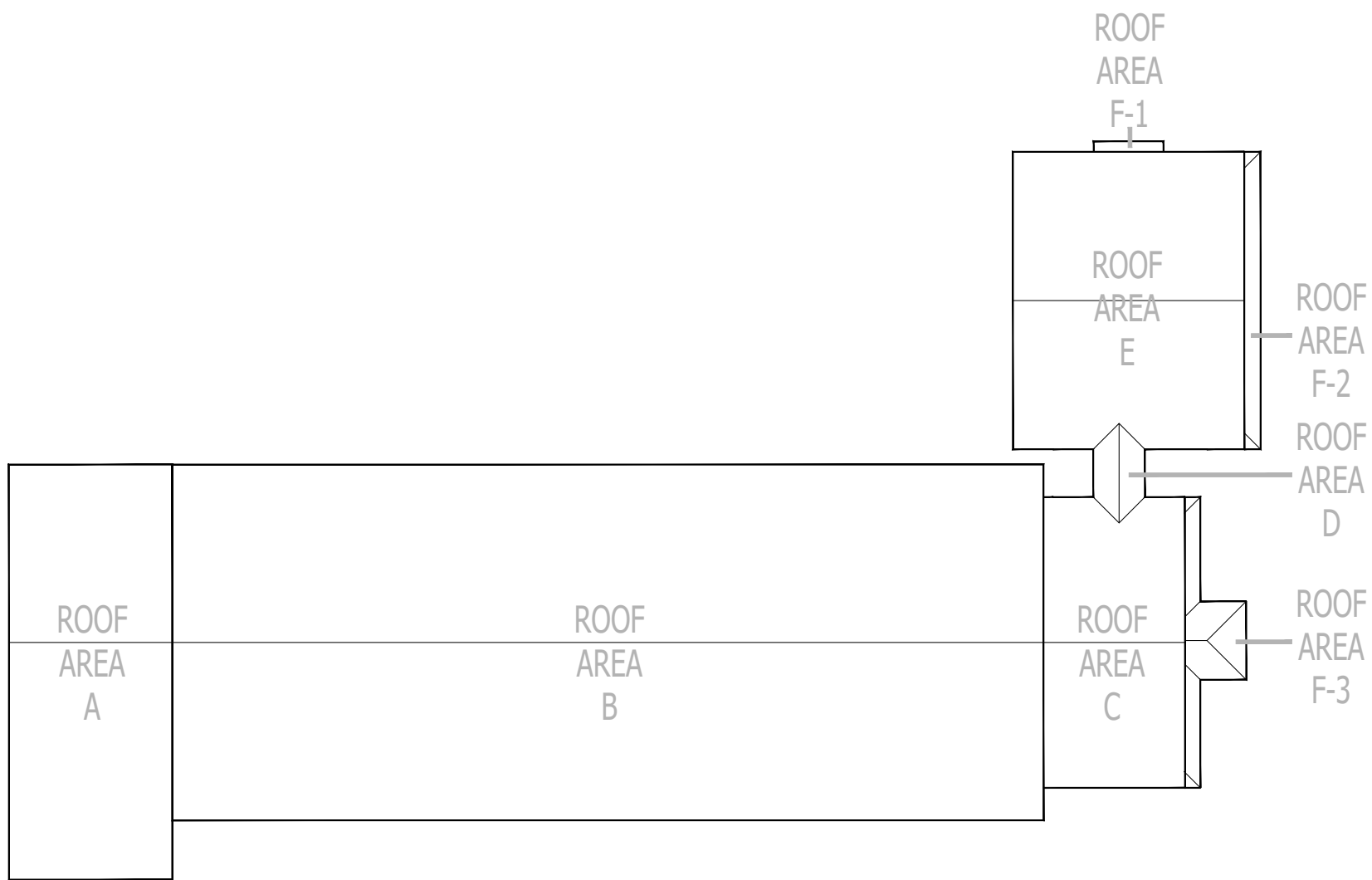
SCALE:	AS NOTED	DRAWN BY: D
COMM. No.	8302	CHECKED BY:
DATE:	01/02/2025	

SHEET TITLE:
STOREFRONT & WINDOW

SHEET No.: **A1.2**

Area ID	Location	Scope	Proposed Roof Finish	Roof Area Horizontal Projection	Average Roof Slope	Roof Area Adjusted for Slope
Roof Area A	Meeting Room Roof	Base Bid	Asphalt Shingle Roofing	2,062 S.F.	4.0 / 12	2,174 S.F.
Roof Area B	General Office Roof	Base Bid	Asphalt Shingle Roofing	9,414 S.F.	4.0 / 12	9,923 S.F.
Roof Area C	Reception Roof	Base Bid	Asphalt Shingle Roofing	1,249 S.F.	4.0 / 12	1,317 S.F.
Roof Area D	Breezeway Roof	Base Bid	Asphalt Shingle Roofing	75 S.F.	4.0 / 12	79 S.F.
Roof Area E	Business Office Roof	Base Bid	Asphalt Shingle Roofing	2,091 S.F.	4.0 / 12	2,204 S.F.
Roof Area F-1	Awning Metal Roof	Base Bid	Standing Seam Metal Roof	510 S.F.	12.0 / 12	721 S.F.
Roof Area F-2	Awning Metal Roof	Base Bid	Standing Seam Metal Roof	147 S.F.	12.0 / 12	208 S.F.
Roof Area F-3	Awning Metal Roof	Base Bid	Standing Seam Metal Roof	22 S.F.	12.0 / 12	31 S.F.
Total Area in Contract - Roof Area-A through Roof Area-F-3 Subtotal				15,570 S.F.		16,657 S.F.

1. AREAS NOTED ARE APPROXIMATE; IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND QUANTITIES.
2. AREA CALCULATIONS ABOVE DO NOT INCLUDE ANY FACTORS FOR EAVE, RAKE OR FASCIAS, ROOF FLASHINGS, GUTTERS, DOWNSPOUTS, ROOF EXHAUST FANS, VENTILATORS, AND ROOF TOP EQUIPMENT, EQUIPMENT CURBS.

[illegible]

1
A1.3

3. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, SQUARE FOOT AREAS, MATERIALS, PERIMETER LENGTHS, ROOF EQUIPMENT LOCATIONS, ROOF EQUIPMENT CONDITIONS, QUANTITIES AND TYPES AT THE PROJECT SITE BEFORE PROCEEDING WITH THIS WORK. ALL DIMENSIONS INDICATED SHALL BE CONSIDERED AS PLUS OR MINUS (±) FIGURES ARE PROVIDED FOR PRELIMINARY ESTIMATING ONLY.
4. EXISTING ASPHALT-SHINGLE SYSTEM UNDERLAYMENT AND EXISTING FLUOYD ROOF SHEATHING IS TO BE REMOVED AND DISPOSED OF. EXISTING DAMAGED OR DETERIORATED FRAMING AND BATT INSULATION SHALL BE RESTORED AS DELINEATED WITH SPECIFICATION SECTION 05000, SUMMARY OF THE WORK.
5. THE CONTRACTOR SHALL VERIFY ALL EXISTING ROOF MATERIALS, SLOPES AND THICKNESSES AT THE PROJECT SITE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO INVESTIGATE AND DETERMINE THE ADEQUACY OF EXISTING ROOF SYSTEM MATERIALS INSTALLED FOR ALL ROOF AREAS, AND TO DETERMINE THE APPROPRIATE FASTENERS TO BE USED FOR THIS WORK WITH PRIOR WRITTEN APPROVAL BY THE ARCHITECT AND THE ROOFING UNDERLAYMENT AND SINGLE MANUFACTURER.
7. ALL NEW WOOD NAILERS, WOOD BLOCKING AND WOOD PLATES SHALL BE ACO TREATED.
8. REMOVE EXISTING WOOD NAILERS THAT HAVE DETERIORATED OR ROTTED AND REPLACE WITH NEW ACO TREATED LUMBER OF THE SAME SIZE AND SHAPE AS EXISTING.
9. PROVIDE APPROPRIATE FASTENERS: SCREW NAILS, GALV. EXPANSION BOLTS AS RECOMMENDED BY ROOFING MEMBRANE MANUFACTURER TO SECURE VARIOUS ACO TREATED WOOD NAILERS, BLOCKING, AND GROUNDOS TO ROOF STRUCTURE, WALLS AND TO EACH OTHER FOR THIS WORK.

1. THIS SCHEDULE IS PROVIDED FOR PRELIMINARY ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND EXISTING ROOF EQUIPMENT AT THE PROJECT SITE.
2. ALL EXISTING ROOF TOP MECHANICAL EQUIPMENT INDICATED TO REMAIN UNO. REMOVE AND REINSTALL AS REQUIRED TO ACCOMMODATE THE NEW WOOD DECK, INSULATION AND ASPHALT SHINGLE INSTALLATION.

1. NO CHANGE IS PROPOSED IN THE EXISTING DRAINAGE SCHEDULE.
2. ALL EXISTING GUTTERS AND DOWNSPOUTS SHALL REMAIN, AND SHALL BE PROTECTED THROUGHOUT THE DURATION OF CONSTRUCTION. EXISTING FINISHES DAMAGED AS A RESULT OF THE WORK OF THIS CONTRACT SHALL BE REPAIRED IN KIND AT NO ADDITIONAL COST TO THE OWNER.

1. REVIEW: SUBMIT SCHEDULE INDICATING PROPOSED METHODS AND SEQUENCE OF OPERATIONS FOR SELECTIVE DEMOLITION WORK TO ARCHITECT FOR REVIEW PRIOR TO COMMENCEMENT OF WORK. INCLUDE COORDINATION FOR SHUTOFF CAPPING AND CONTINUATION OF UTILITY SERVICES AS REQUIRED. TOGETHER WITH DETAILS FOR DUST AND NOISE CONTROL. PROVIDE DETAILED SEQUENCE OF DEMOLITION AND REMOVAL WORK TO ENSURE OTHERS ON-SITE OPERATIONS ARE NOT INTERRUPTED. COORDINATE WITH OWNERS CONTINUING OCCUPATION OF PORTIONS OF EXISTING BUILDING.
2. OCCUPANCY: OWNER WILL BE CONTINUOUSLY OCCUPYING AREAS OF THE BUILDING IMMEDIATELY ADJACENT TO AREAS OF SELECTIVE DEMOLITION. CONDUCT SELECTIVE DEMOLITION WORK IN MANNER THAT WILL MINIMIZE NEED FOR DISRUPTION OF OTHERS' NORMAL OPERATIONS. PROVIDE MINIMUM OF TWO HOURS ADVANCE NOTICE TO OWNERS OF DEMOLITION ACTIVITIES WHICH WILL IMPACT OWNERS' NORMAL OPERATIONS. SPECIAL NOTE: TO THE GREATEST EXTENT POSSIBLE, DEMOLITION WORK WHICH COULD DISTURB THE OWNERS' NORMAL OPERATIONS WILL BE SCHEDULED TO OCCUR DURING THE OWNERS' OFF-PEAK OPERATION PERIOD, AS SPECIFIED BY THE OWNER.
3. STORAGE OR SALE OF REMOVED ITEMS ON SITE WILL NOT BE PERMITTED.
4. PROTECTIONS: PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION AS REQUIRED TO PROTECT OWNERS PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO DEMOLITION WORK.
5. PROVIDE PROTECTIVE MEASURES AS REQUIRED TO PROVIDE FREE AND SAFE PASSAGE OF OWNER PERSONNEL, TO AND FROM OCCUPIED PORTIONS OF BUILDING.
6. PROTECT FROM DAMAGE EXISTING FINISH WORK THAT IS TO REMAIN IN PLACE AND BECOMES EXPOSED
7. CONSTRUCT TEMPORARY INSULATED SLOE DUSTPROOF PARTITIONS WHERE REQUIRED TO SEPARATE AREAS WHERE NOISY OR EXTENSIVE DIRT OR DUST OPERATIONS ARE PERFORMED. EQUIP PARTITIONS WITH DUSTPROOF DOORS AND SECURITY LOCKS IF REQUIRED. PROVIDE TEMPORARY WEATHER PROTECTION DURING INTERVAL BETWEEN DEMOLITION AND REMOVAL OF EXISTING CONSTRUCTION ON EXTERIOR SURFACES, AND INSTALLATION OF NEW CONSTRUCTION TO INSURE THAT NO WATER LEAKAGE OR DAMAGE OCCURS TO STRUCTURE OR INTERIOR AREAS OF EXISTING BUILDING. REMOVE PROTECTIONS AT COMPLETION OF WORK.
8. DAMAGES: PROMPTLY REPAIR DAMAGES CAUSED TO ADJACENT FACILITIES BY DEMOLITION WORK AT NO COST TO OWNER.
9. TRAFFIC: CONDUCT SELECTIVE DEMOLITION OPERATIONS AND DEBRIS REMOVAL IN A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USE FACILITIES.
10. DO NOT CLOSE, BLOCK OR OTHERWISE OBSTRUCT STREETS, ARCADES, DELIVERY AREAS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT THE WRITTEN PERMISSION OF THE GOVERNING AUTHORITIES. PROVIDE ALTERNATE ROUTES, ARMS, OR CLOSED OR OBSTRUCTED TRAFFIC LANE(S) IF REQUIRED BY GOVERNING REGULATION.
11. UTILITY SERVICES: MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN KEEP IN SERVICE AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OCCUPIED OR USE FACILITIES EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES AS ACCEPTABLE TO GOVERNING AUTHORITIES.
12. ENVIRONMENTAL CONTROLS: USE WATER SPRINKLING, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT RISES AND SCATTERING IN AIR TO LOWEST PRACTICAL LEVEL. COMPLY WITH GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION. DO NOT USE WATER WHEN IT MAY CREATE HAZARDOUS OR OBJECTIONABLE CONDITIONS SUCH AS ICE, FLOODING, AND POLLUTION.

1. CONTRACTORS ARE ENCOURAGED TO PERFORM THEIR OWN TESTS FOR CONFIRMATION.

- 2" NOMINAL WOOD FRAMING - TRUSSES
- 5/8" NOMINAL PLYWOOD DECKING
- BUILDING / ROOFING PAPER
- (1) LAYER ASPHALT SHINGLE ROOFING / METAL STANDING SEAM ROOF WHERE NOTED

	Type	Width	Depth	Free Area	Allowable Roof Area, NSCP Table 13.6.1 (*)	Comment
(D5)	3" X 4"	3.00 In.	4.00 In.	12.00 sq. in.	2162.00 sq. ft.	Replace Ex'g
	4" X 4"	4.00 In.	4.00 In.	16.00 sq. in.	2993.00 sq. ft.	Replace Ex'g
(D5)	4" X 5"	4.00 In.	5.00 In.	20.00 sq. in.	4238.00 sq. ft.	Replace Ex'g
	5" X 6"	5.00 In.	6.00 In.	30.00 sq. in.	7256.00 sq. ft.	Replace Ex'g

DESIGNATES 5" ALUM. "K" STYLE GUTTER, 0.032" GAUGE.

 DESIGNATES 6" ALUM. "K" STYLE GUTTER, 0.032" GAUGE,
BAKED ENAMEL FIN., W/ STRAP HANGERS

ALLOWABLE SIZE OF GUTTERS AT STANDING SEAM ROOF AREAS IS BASED ON THE 2009 NATIONAL STANDARD PLUMBING CODE (NSPC), CHAPTER 13, AND THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST) BASED ON THE FOLLOWING FORMULA:

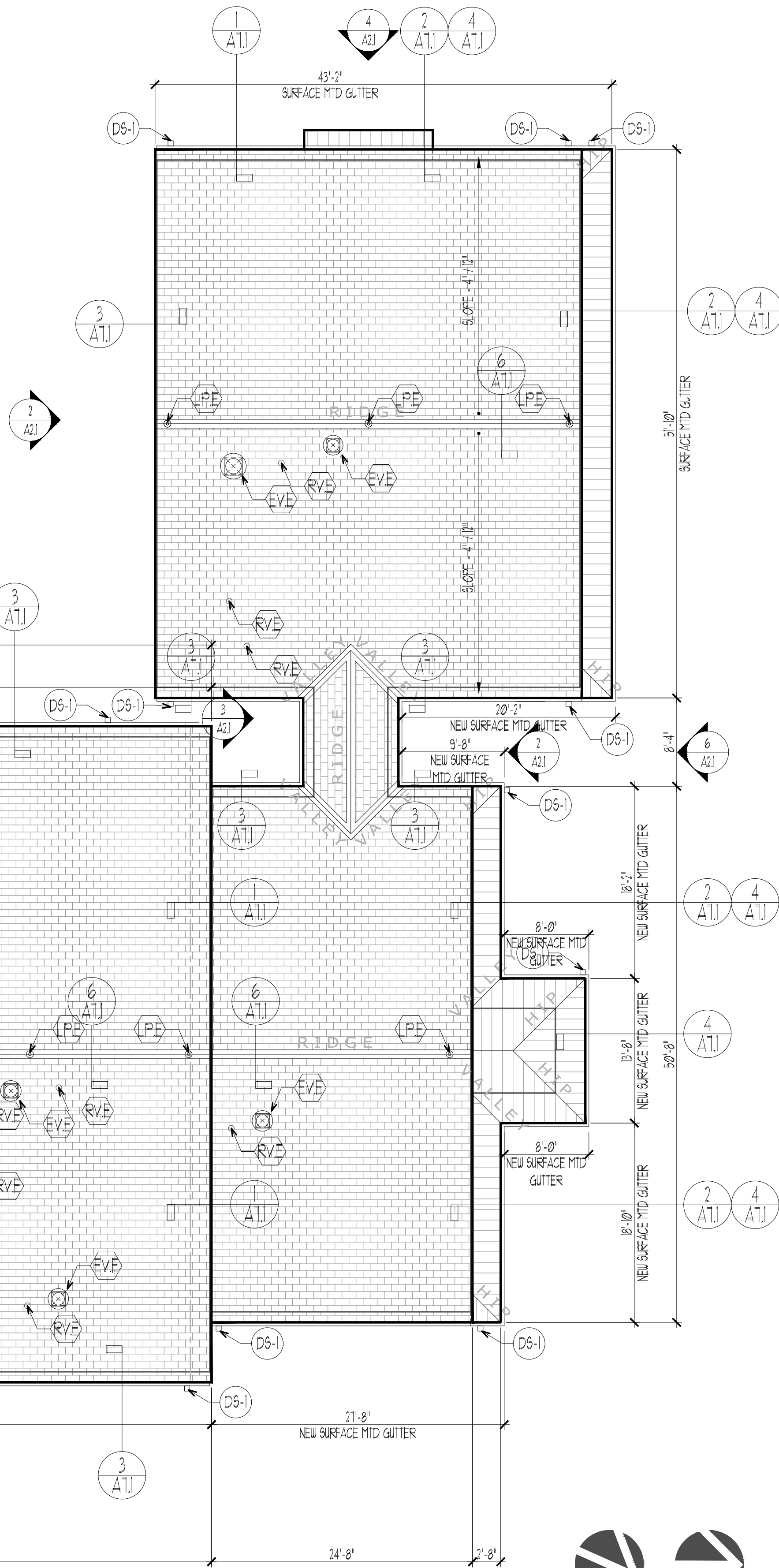
$$W = 0.0106 \text{ M}^{-4/7} \text{ L}^{3/28} (\text{IA})^{5/14}$$

A = AREA TO BE DRAINED (CALCULATIONS BASED ON A MAXIMUM OF 1,650 S.F.)
 I = RAINFALL INTENSITY IN INCHES / HOUR (6 INCHES /HOUR PER N.J.A.C. 5:23-3.1)
 L = LENGTH OF GUTTER IN FEET (CALCULATIONS BASED ON A MAXIMUM OF 30 FT)
 M = RATION OF GUTTER DEPTH TO WIDTH (0.8333 ASSUMED)

BASED ON THE ABOVE VALUES, A MAXIMUM GUTTER WIDTH OF 5.43 INCHES IS REQUIRED. GUTTERS SHALL BE 4" X 5"

ALLOWABLE SIZE OF ROOF DRAINAGE PIPING AND RAINWATER LEADERS IS BASED ON THE 2021 NATIONAL STANDARD PLUMBING CODE (NSPC), CHAPTER 13, AND N.J.A.C. 5:23-3.15

ALLOWABLE SIZE OF VERTICAL STORM WATER CONDUCTORS BASED ON ROOF AREA



NOTE 1: THE EXISTING ROOF FRAMING CONSISTS OF WOOD TRUSSES AT 24" O.C./PLYWOOD SHEATHING AND A COMBINATION OF LOOSE AND BATT INSULATION. CONDITIONS TO BE VERIFIED IN THE FIELD. FRAMING, SHEATHING AND INSULATION ARE TO REMAIN UNLESS NOTED OTHERWISE.

NOTE 2: REFER TO DRAWING A11 FOR ADDITIONAL ROOF DETAILS.

NOTE 3: REFER TO DRAWINGS AS PREPARED BY CONCORD ENGINEERING FOR THE COMPLETE SCOPE OF MECHANICAL AND ELECTRICAL REQUIREMENTS.

ROOF AREA A DESIGNATION OF ROOF AREA



EVENT STACK

ROOF DRAIN AND SUMP

LIGHTNING PROTECTION AIR TERMINAL

NUMBER	DESCRIPTION	SIZE (+/-)	REMARKS
(AS)	ANTENNAE STAND	VARIABLE, V.I.F.	TO REMAIN, SLAVAGE AND REPOINT
(EVE)	EXG EXHAUST VENT	VARIABLE, V.I.F.	TO REMAIN, FLASH PER DETAIL
(LPE)	EXG AIR TERMINAL	VARIABLE, V.I.F.	TO REMAIN, RECERTIFY. REFER TO SPEC. SECTION 26413
(RVE)	EXG ROOF VENT	VARIABLE, V.I.F.	TO REMAIN, EXTEND V.I.R. FLASH PER DETAIL.

LOT NO. 1

LRHSD PROJECT NO. REF21-42-8302

BLOCK NO. 27.02

BURLINGTON COUNTY

Linda M. Viventi, AIA, Secretary/Treasurer

Drew C. Dingler, AIA, President
New Jersey I.C. # 21A10108800

examinal, and the ideas and the designs incorporated herein, as an instrument of professional service, is the property of The Design Collaborative Architects and Planners, P.A. and is not to be used in whole or in part for any other project without the written authorization of The Design Collaborative Architects and Planners, P.A.

KEY PLAN



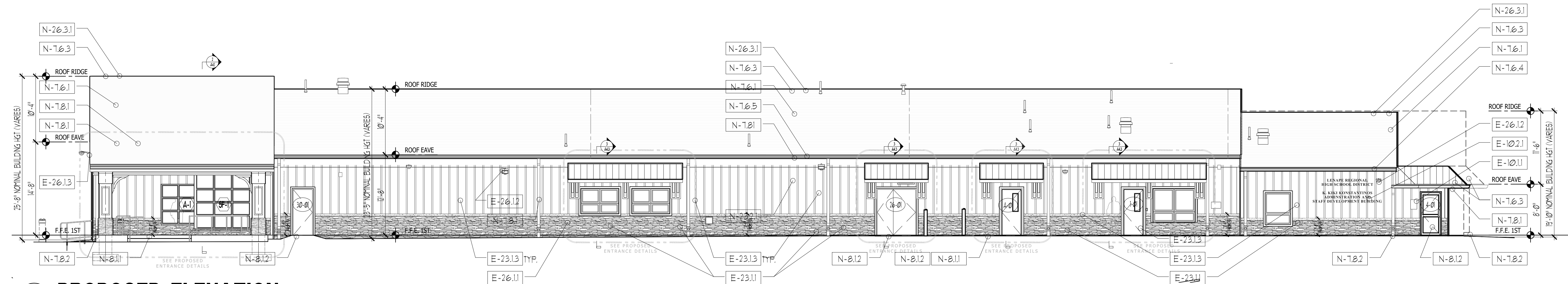
THE DESIGN
COLLABORATIVE
ARCHITECTS AND PLANNERS, PA

SCALE:	AS NOTED	DRAWN BY: DO
COMM. No.	8302	CHECKED BY:
DATE:	01/02/2025	

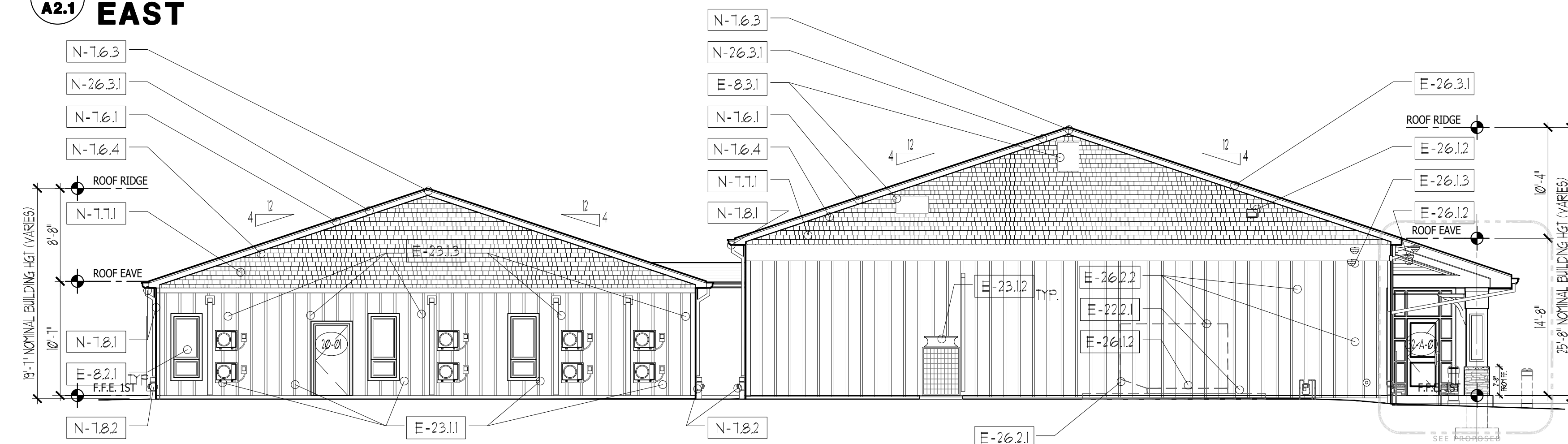
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ROOF PLAN & SCHEDULES

SUBST. No. 1

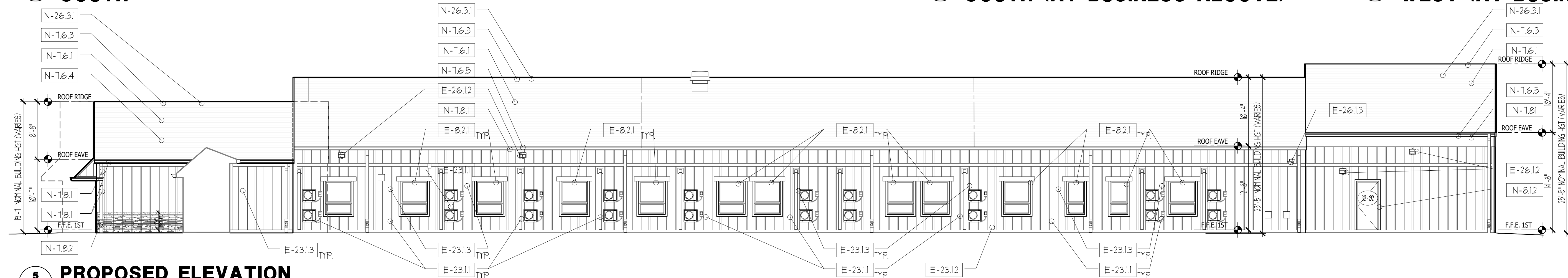
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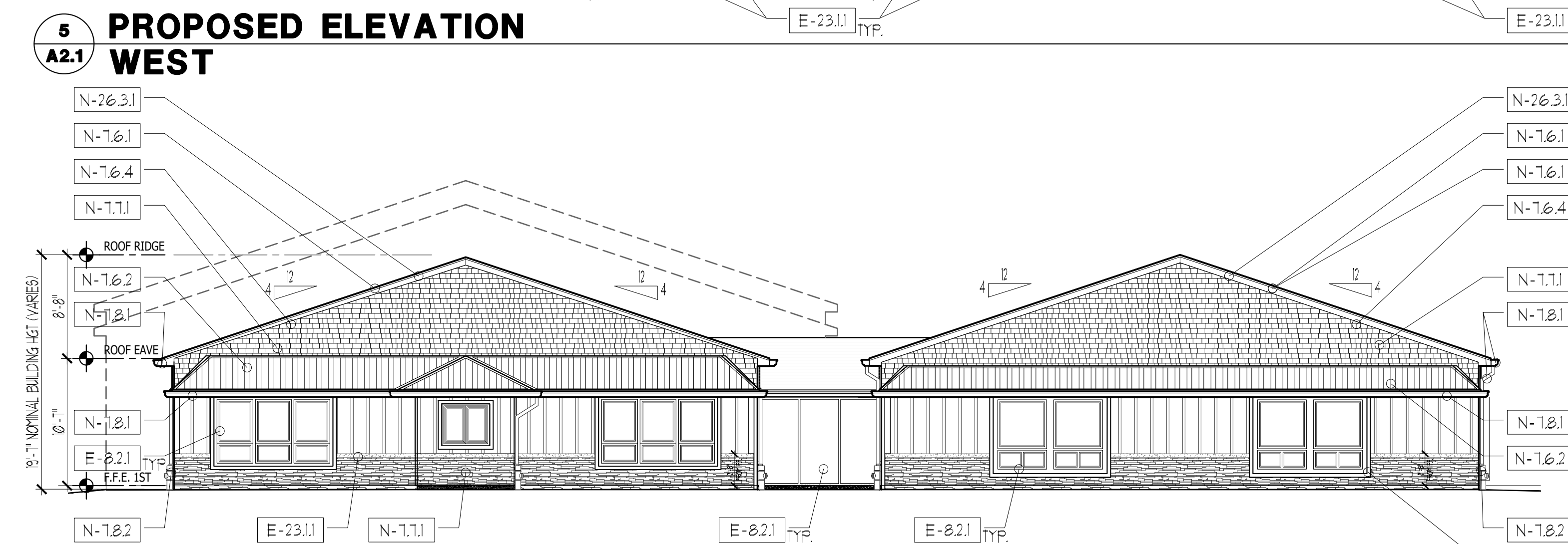
PROPOSED ELEVATION EAST



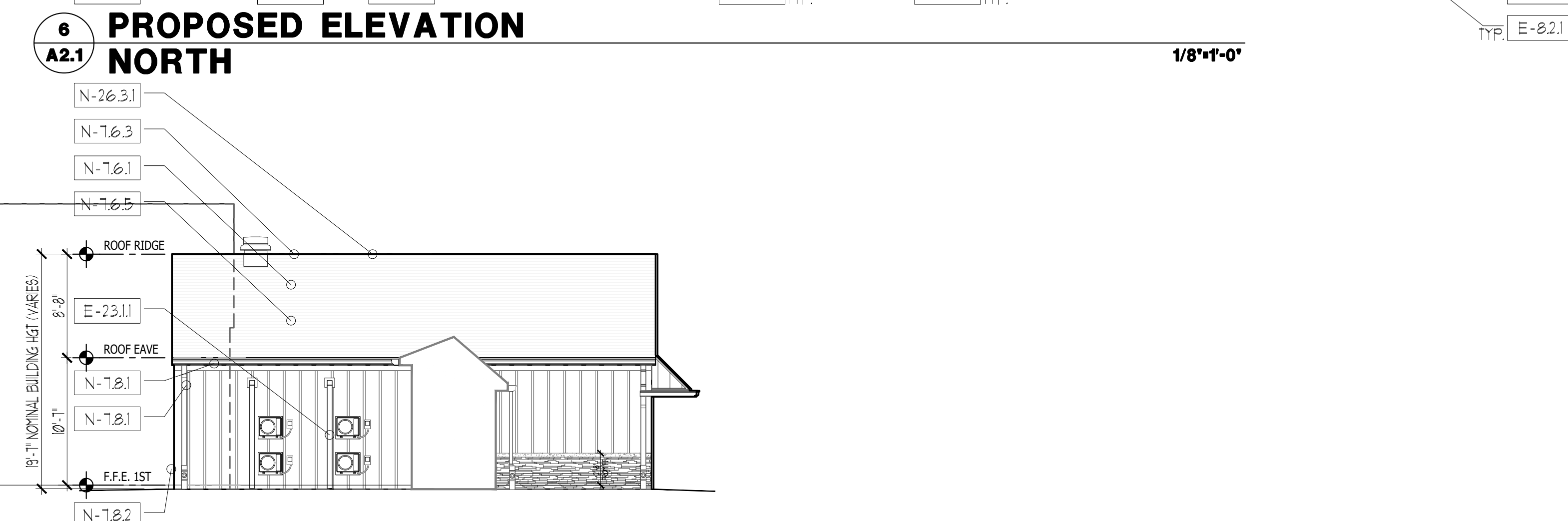
2 PROPOSED ELEVATION A2.1 SOUTH



3 PROPOSED ELEVATION
A2.1 SOUTH (AT BUSINESS ALCOVE) 1/8"=1'-0"



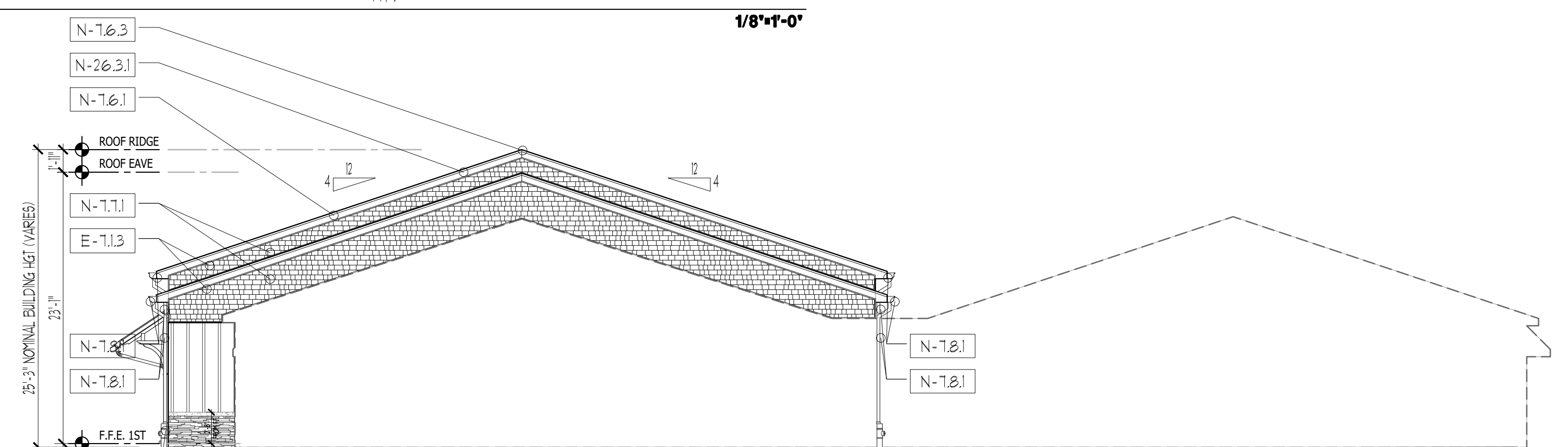
5 PROPOSED ELEVATION
A2.1 WEST



PROPOSED ELEVATION NORTH



8 PROPOSED ELEVATION
A2.1 EAST (AT BUSINESS ALCOVE) 1/8"=1'-0"



7 PROPOSED ELEVATION
A2.1 NORTH (SHOWING ELEVATION BEYOND)

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DATE	No.	REVISION

LOT NO. 1

LRHSD PROJECT NO. REF21-42-8302

BLOCK NO. 27.02

KEY PLAN:



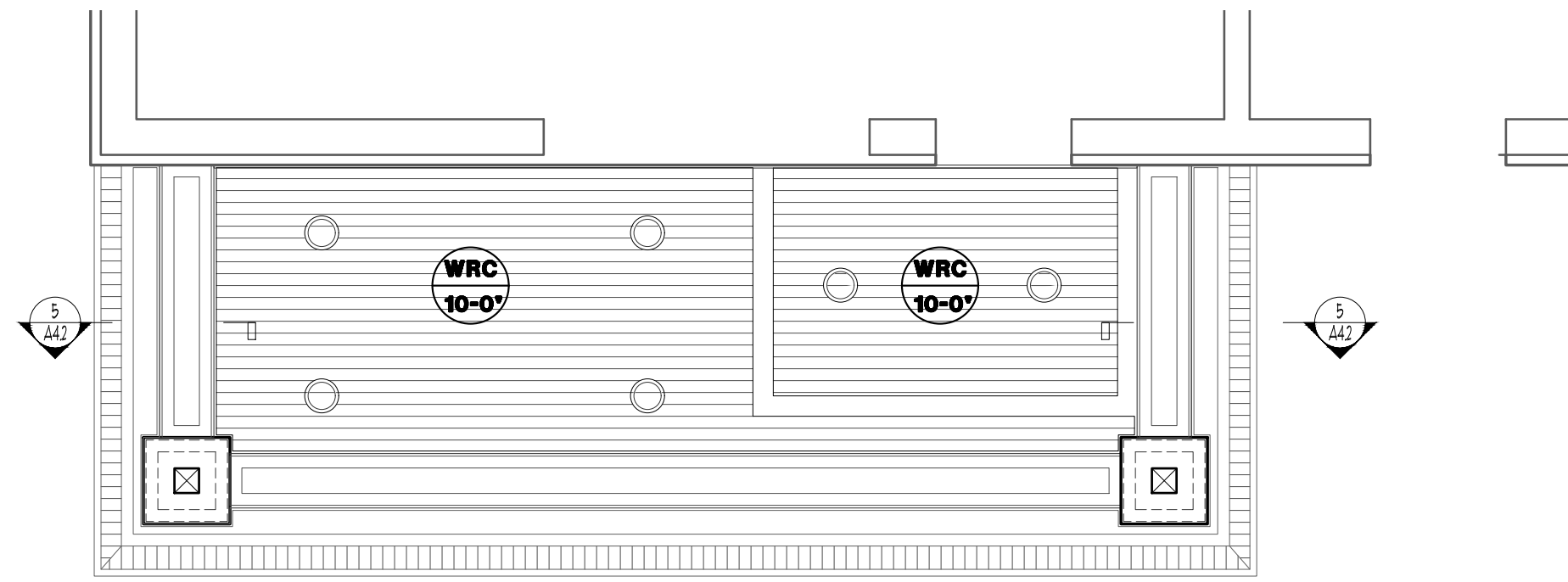
THE DESIGN
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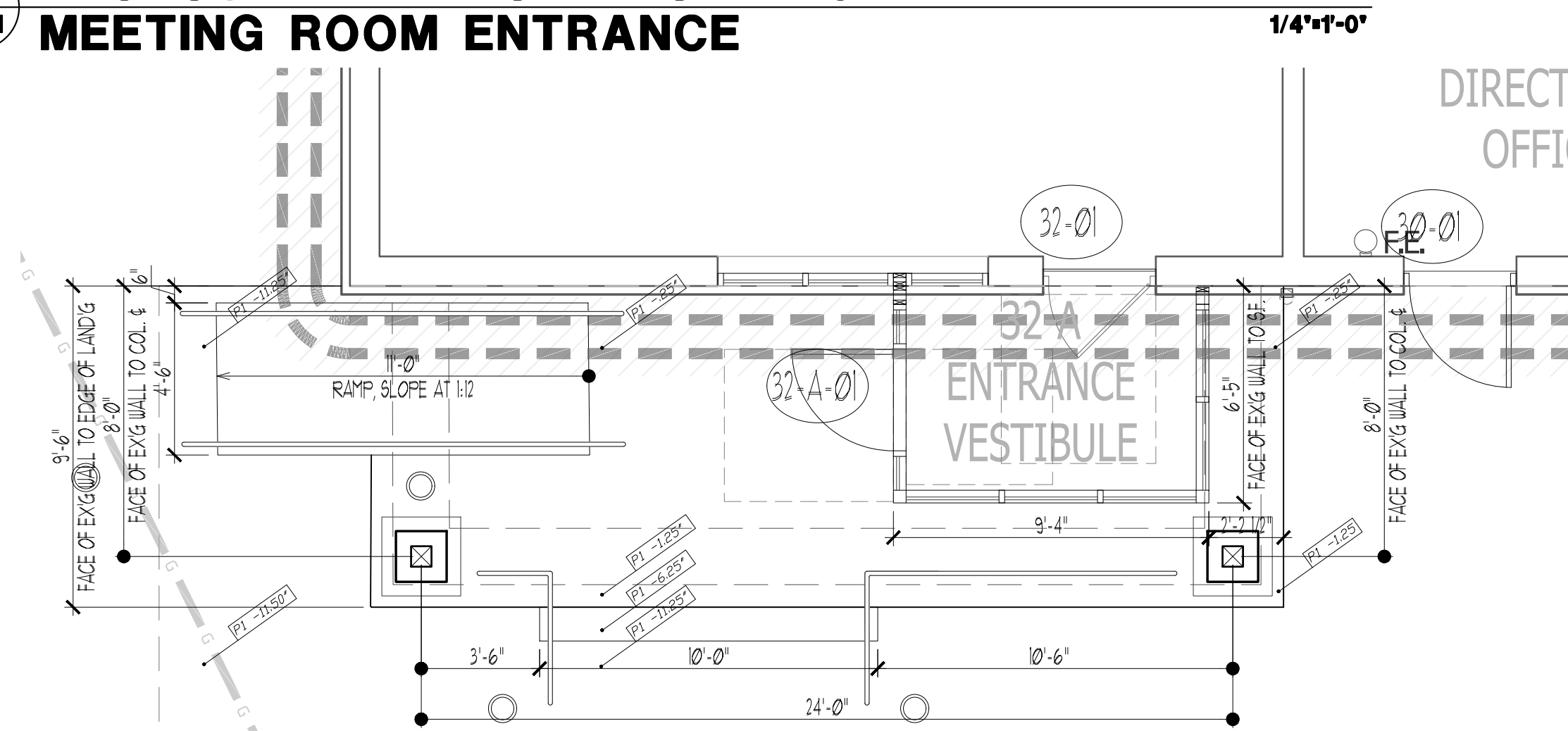
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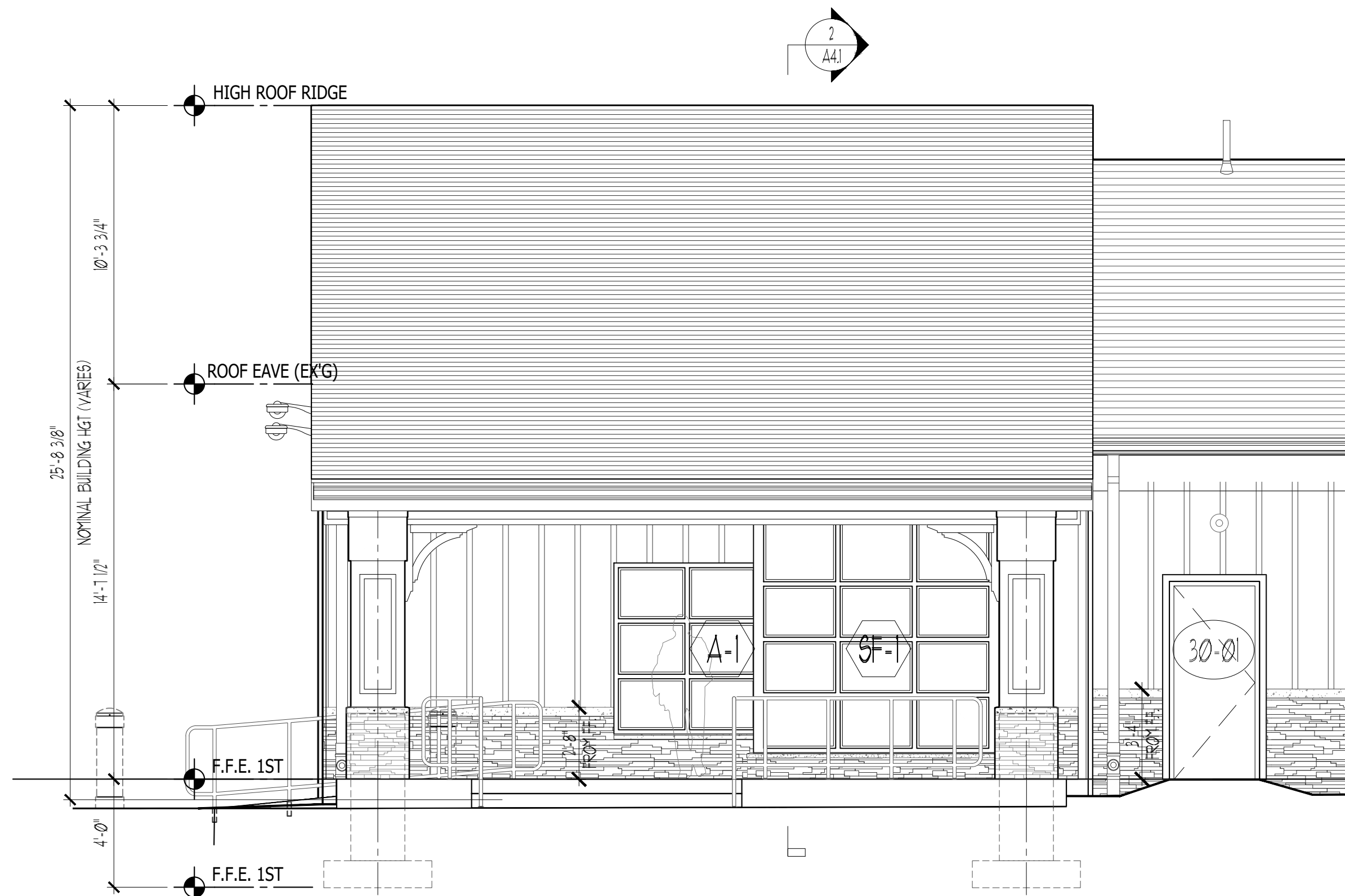
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A4.1



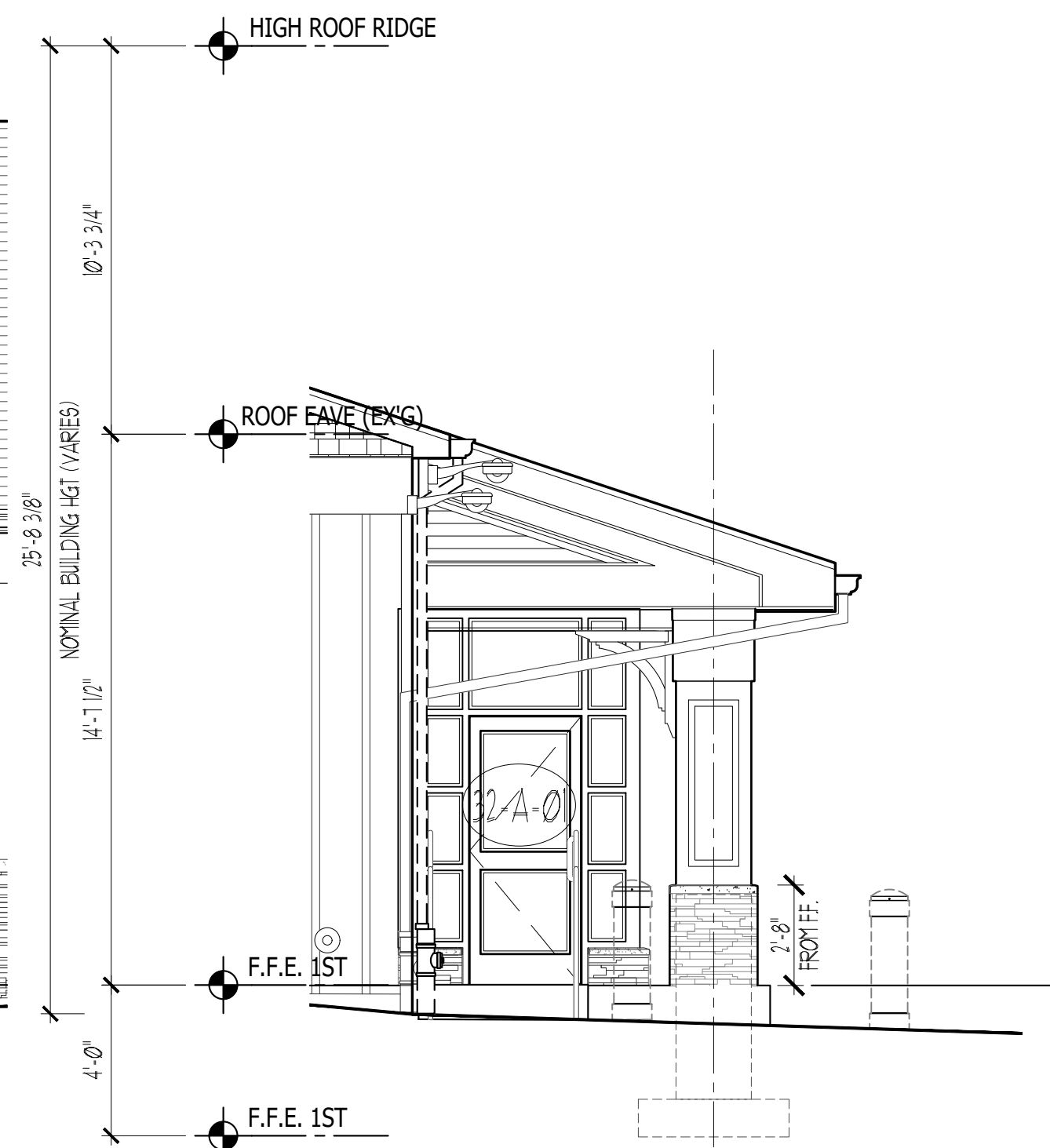
4 PROPOSED REFLECTED CEILING PLAN
A4.1 MEETING ROOM ENTRANCE



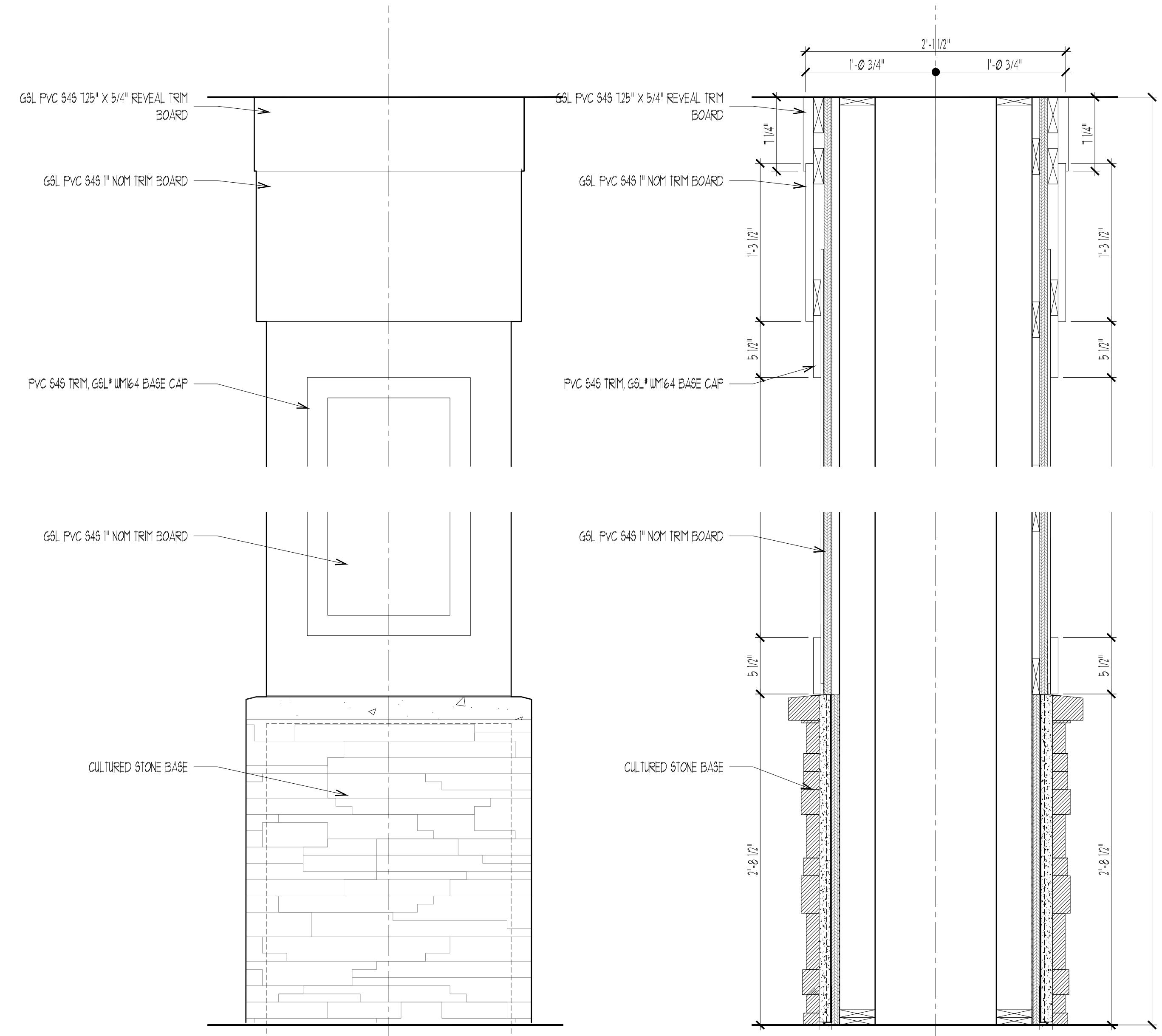
3 PROPOSED FLOOR PLAN
A4.1 MEETING ROOM ENTRANCE



1 ENLARGED MEETING ROOM ENTRANCE
A4.1 EAST

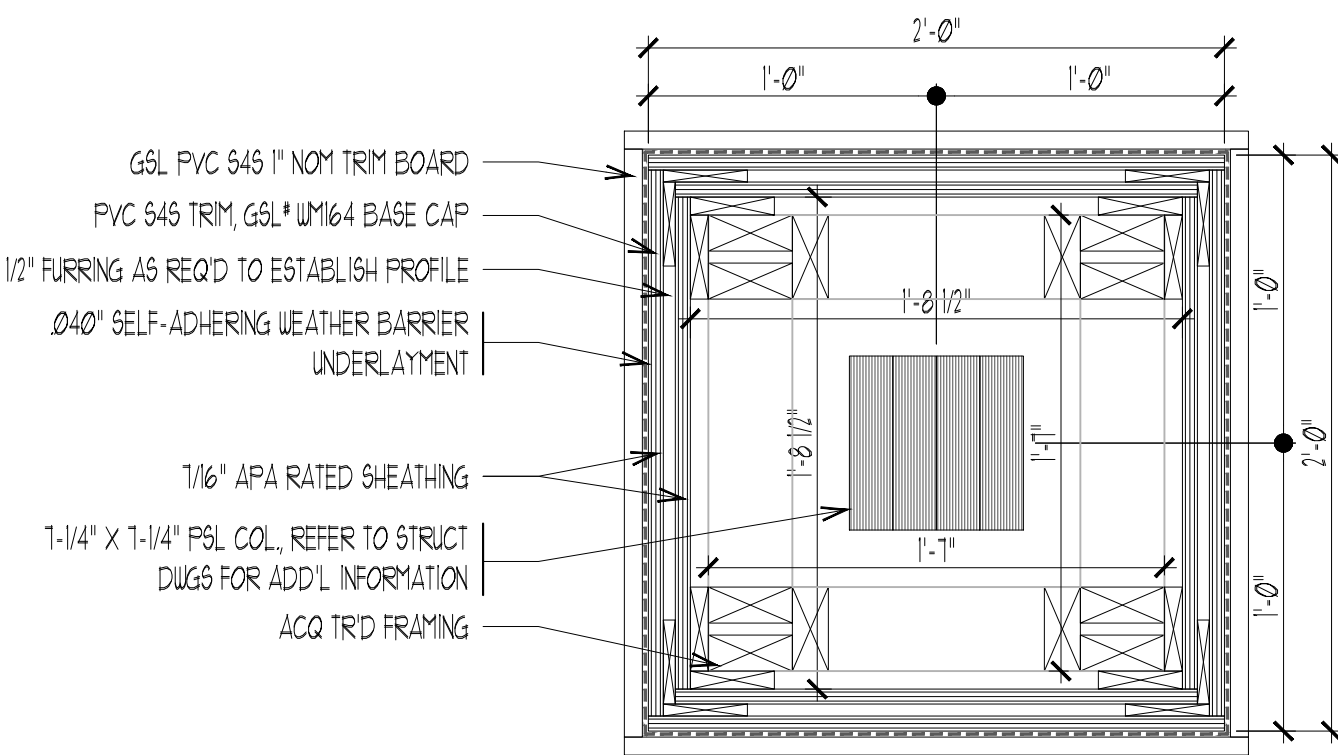


2 ENLARGED MEETING ROOM ENTRANCE
A4.1 EAST

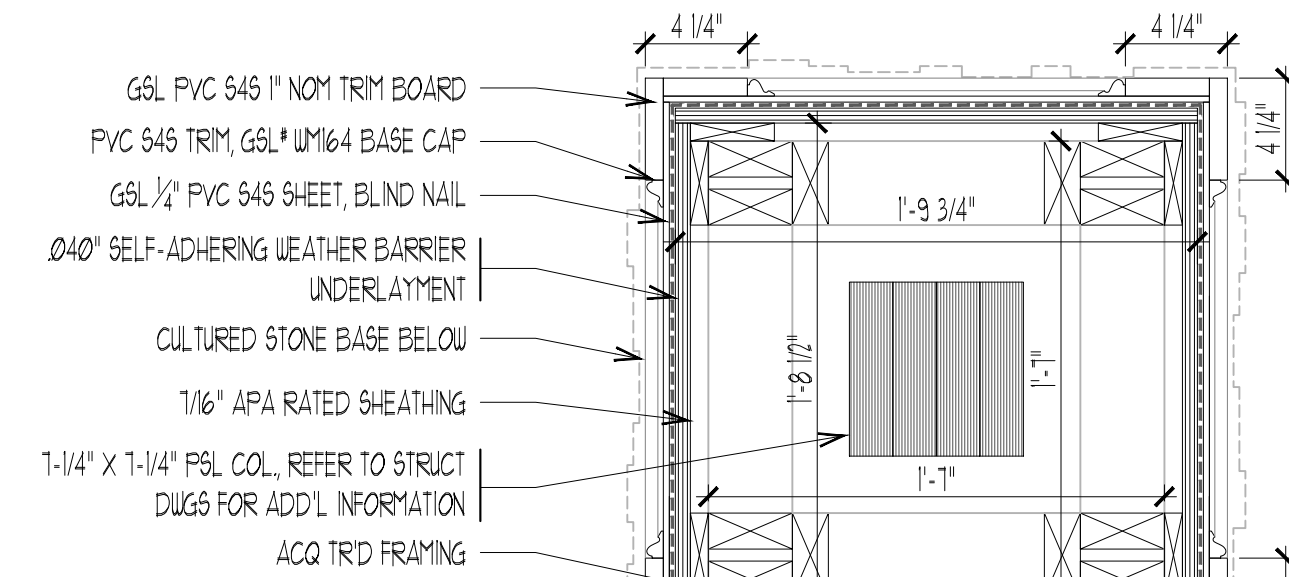


6A ELEVATION A4.1 ENTRANCE COLUMN 1-1/2" x 1'-0"

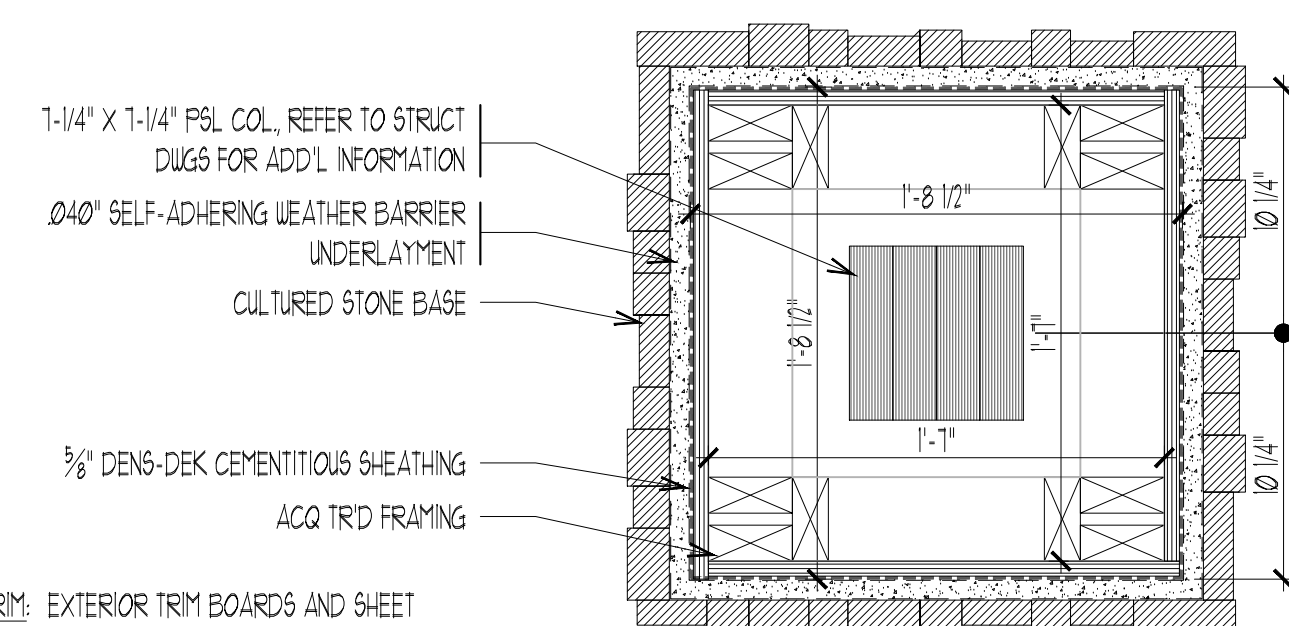
SECTION ENTRANCE COLUMN 1'-1/2"x1'-0"



PLAN DETAIL "A"



PLAN DETAIL "B"



PLAN DETAIL "C"

5 PLAN DETAIL
A4.1 ENTRANCE COLUMN 1'-1/2" x 1'-0"

EXTERIOR TRIM: EXTERIOR TRIM BOARDS AND SHEET NOTED SHALL BE PVC S4S SEALED ALL FOUR SIDES, SMOOTH FINISH. MATERIAL IS AVAILABLE FROM GARDEN STATE LUMBER PRODUCTS CORP, 22 MULLER ROAD, OAKLAND, NJ 07436. PHONE: 800-526-4708 FAX: 201-651-1666. www.gardensatelumber.com

10/28/26	1	RELEASED FOR BID
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LOT NO. 1

LRAHSD PROJECT NO. REF21-42-8302

PROPOSED EXTERIOR BUILDING RESTORATION
LRHSD ADMINISTRATION BUILDING
93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088

SHAMONG TOWNSHIP

Linda M. Viventi, AIA, Secretary/Treasurer
New Jersey Architect LLC, # 21A101090200; P.P. LIC.# 3312000

KEY PLAN:

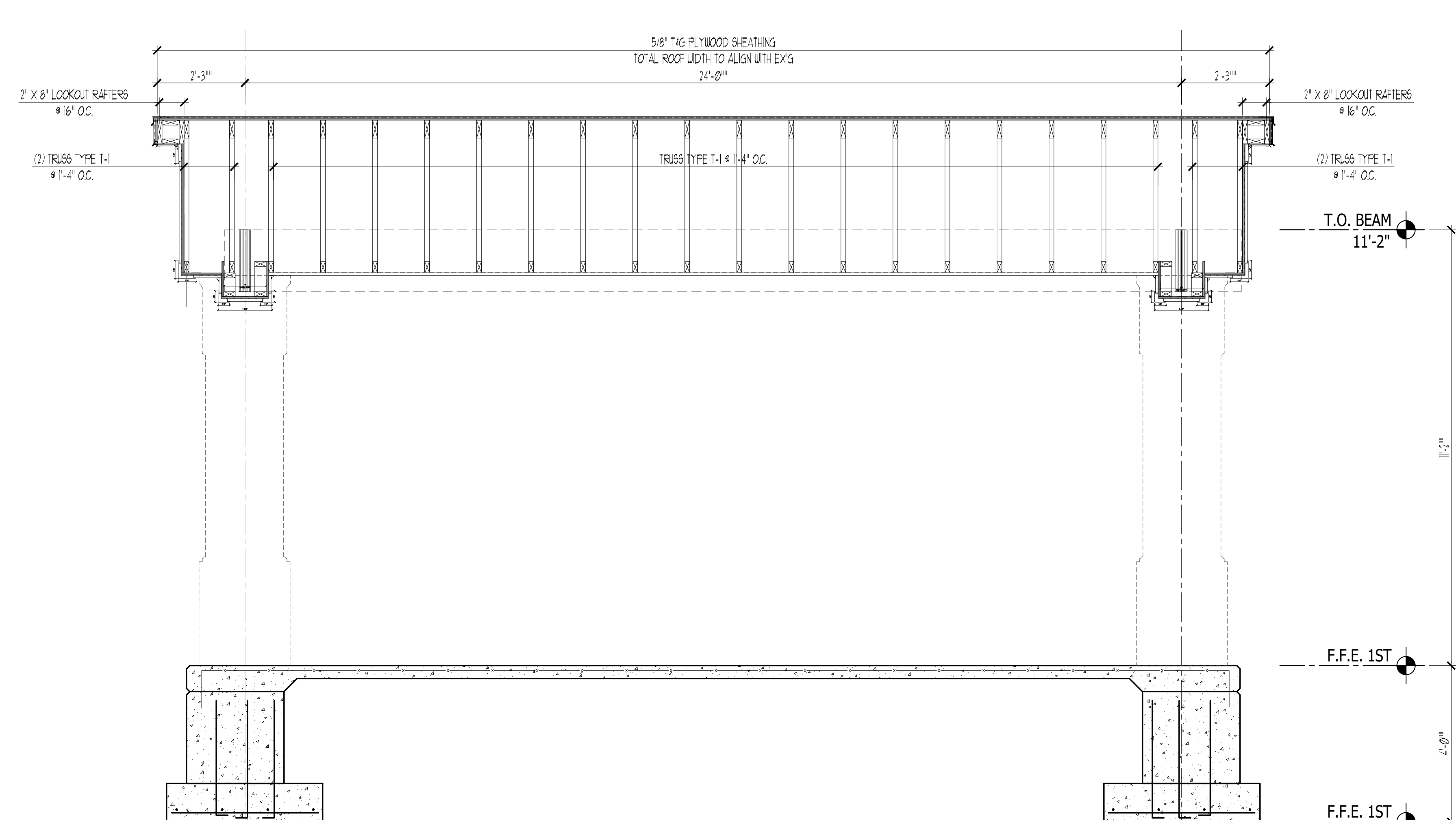
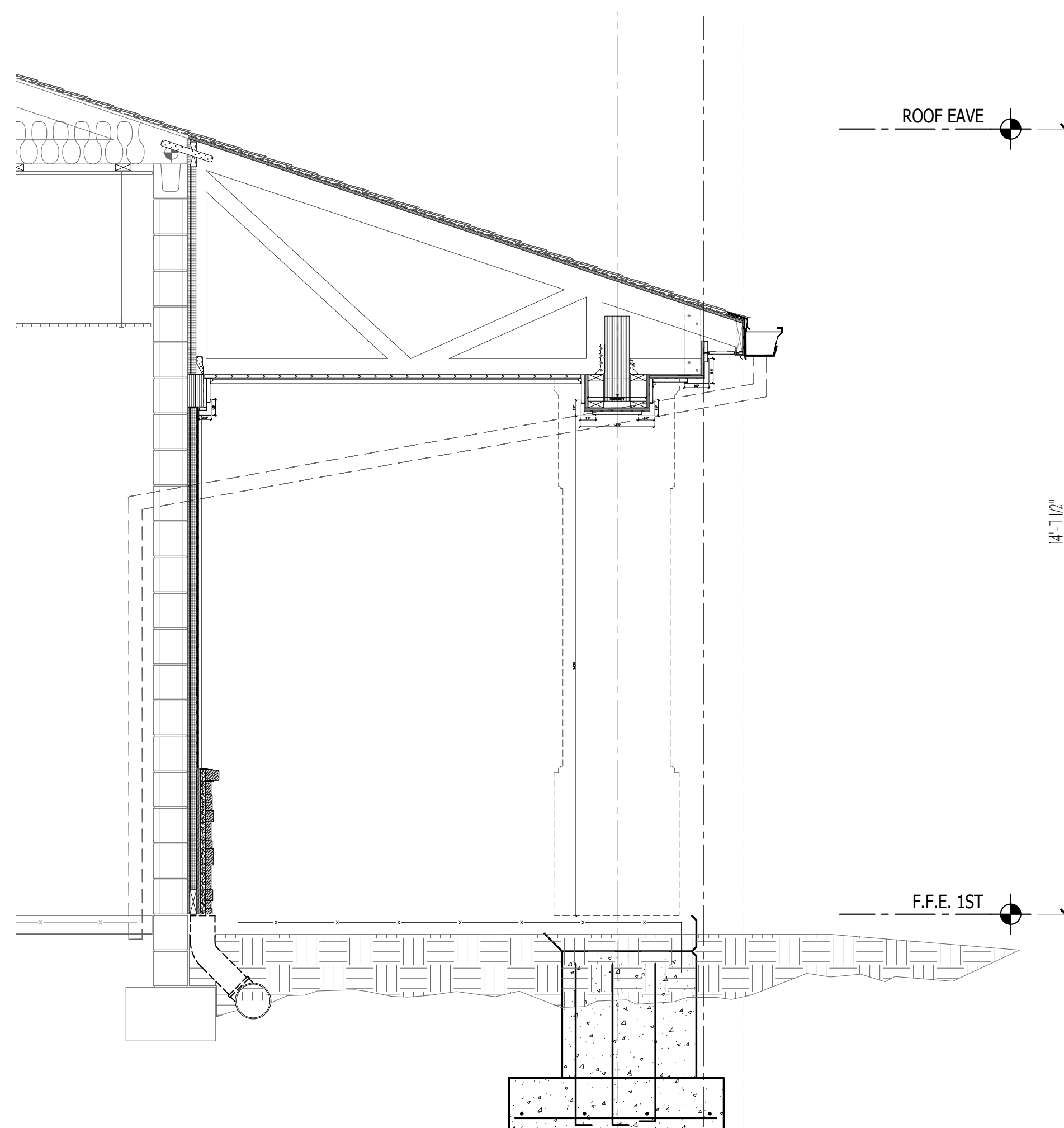
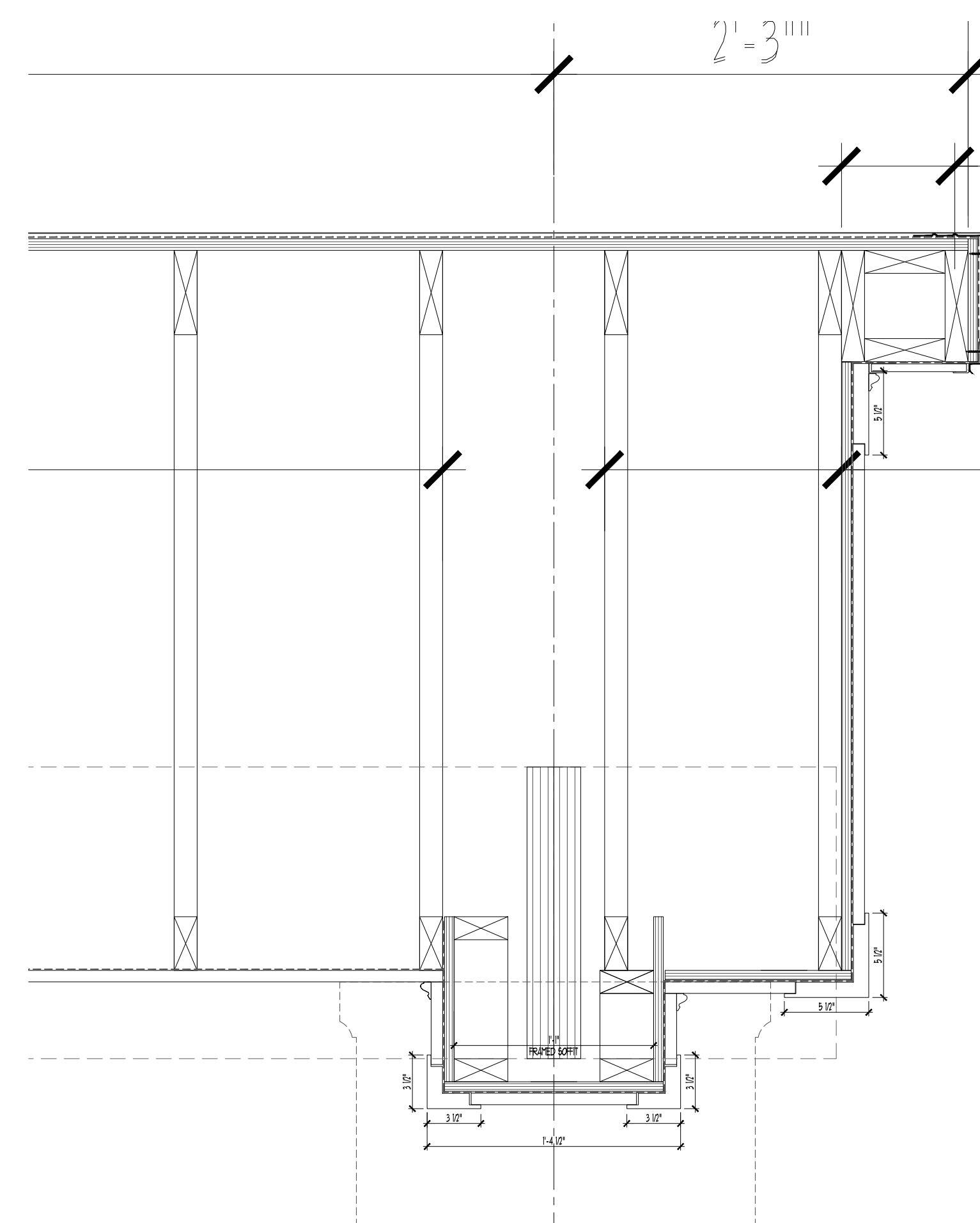
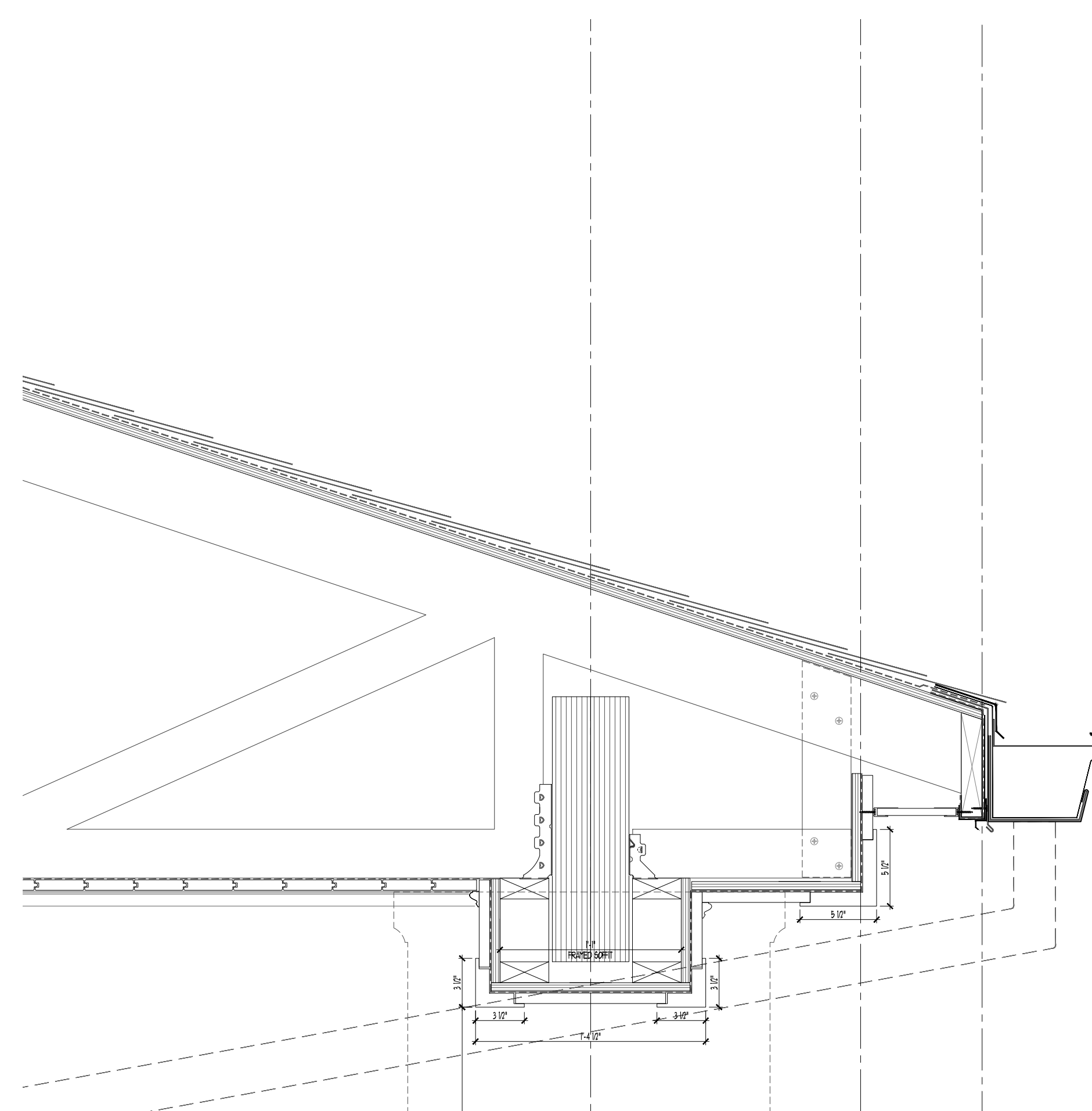
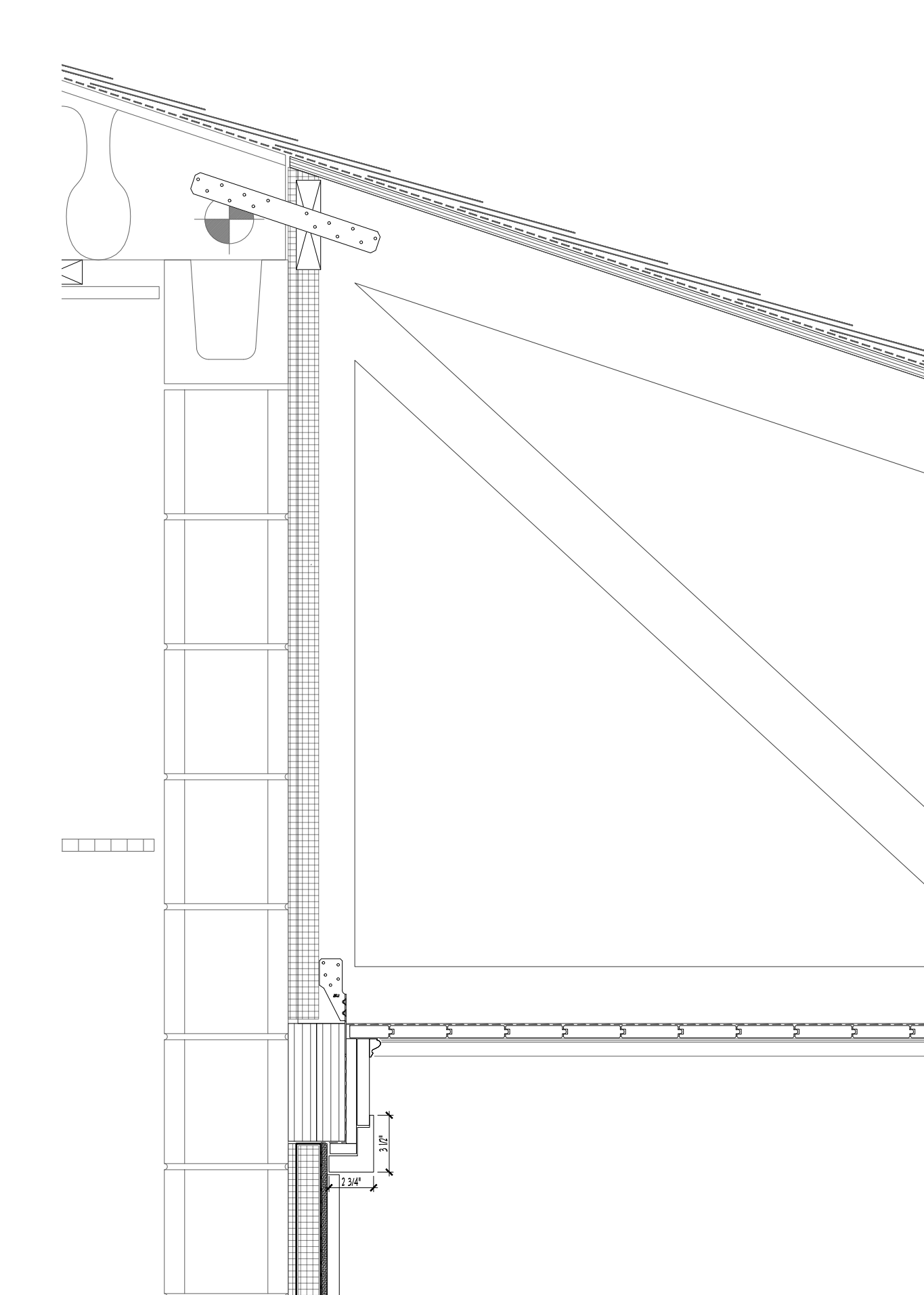


THE DESIGN COLLABORATIVE
ARCHITECTS AND PLANNERS, P.A.
1940 ROUTE 9 NORTH
CAPE MAY COURT HOUSE, NEW JERSEY 08210
PHONE: 609 465 4111 FAX: 609 465 9388
WWW.TDCARCHITECT.COM

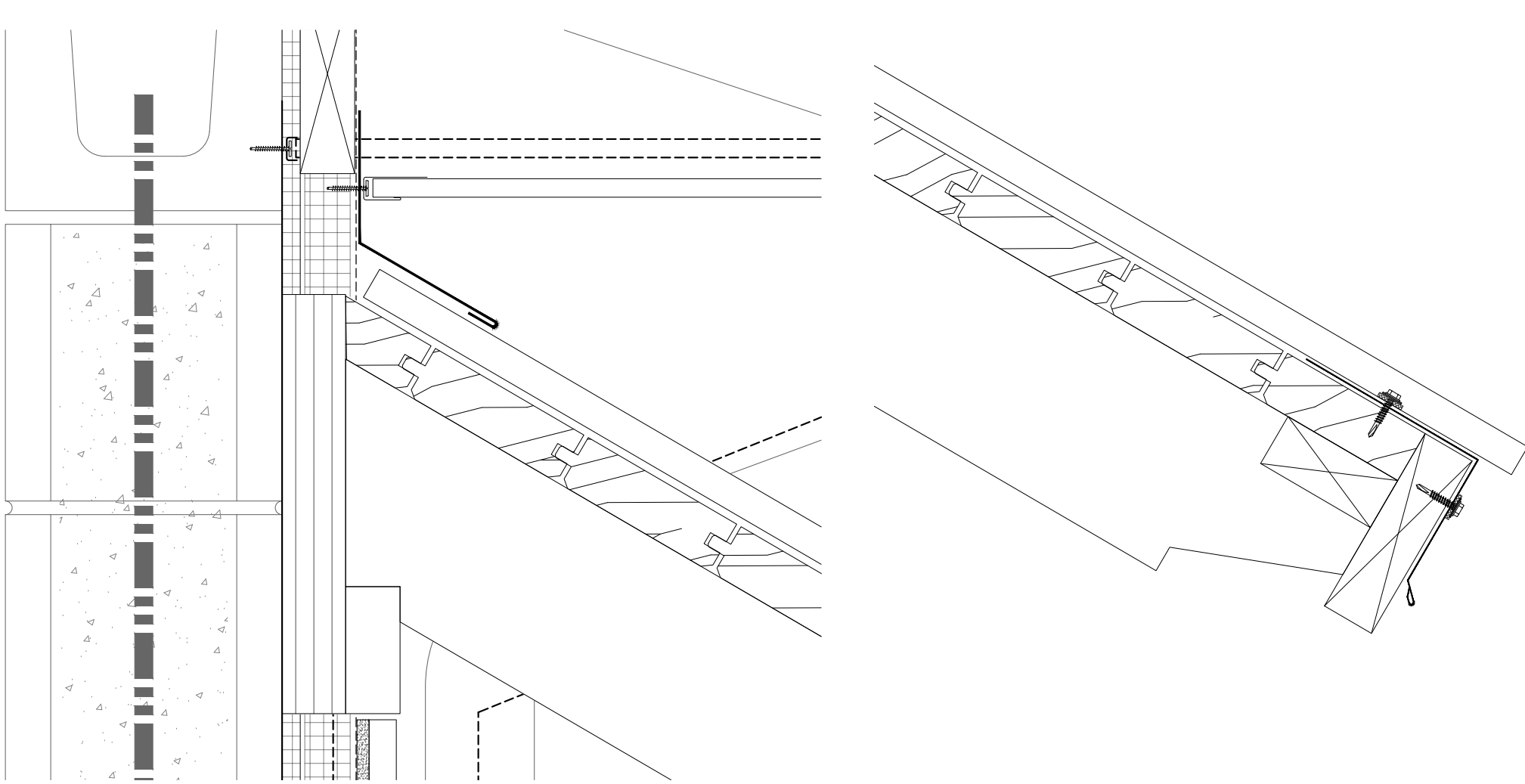
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DDMM. No.	8302	CHECKED BY: DCD
DATE:	01/02/2025	

SHEET TITLE:
MEETING ROOM ENTRANCE PLANS

SHEET No.:



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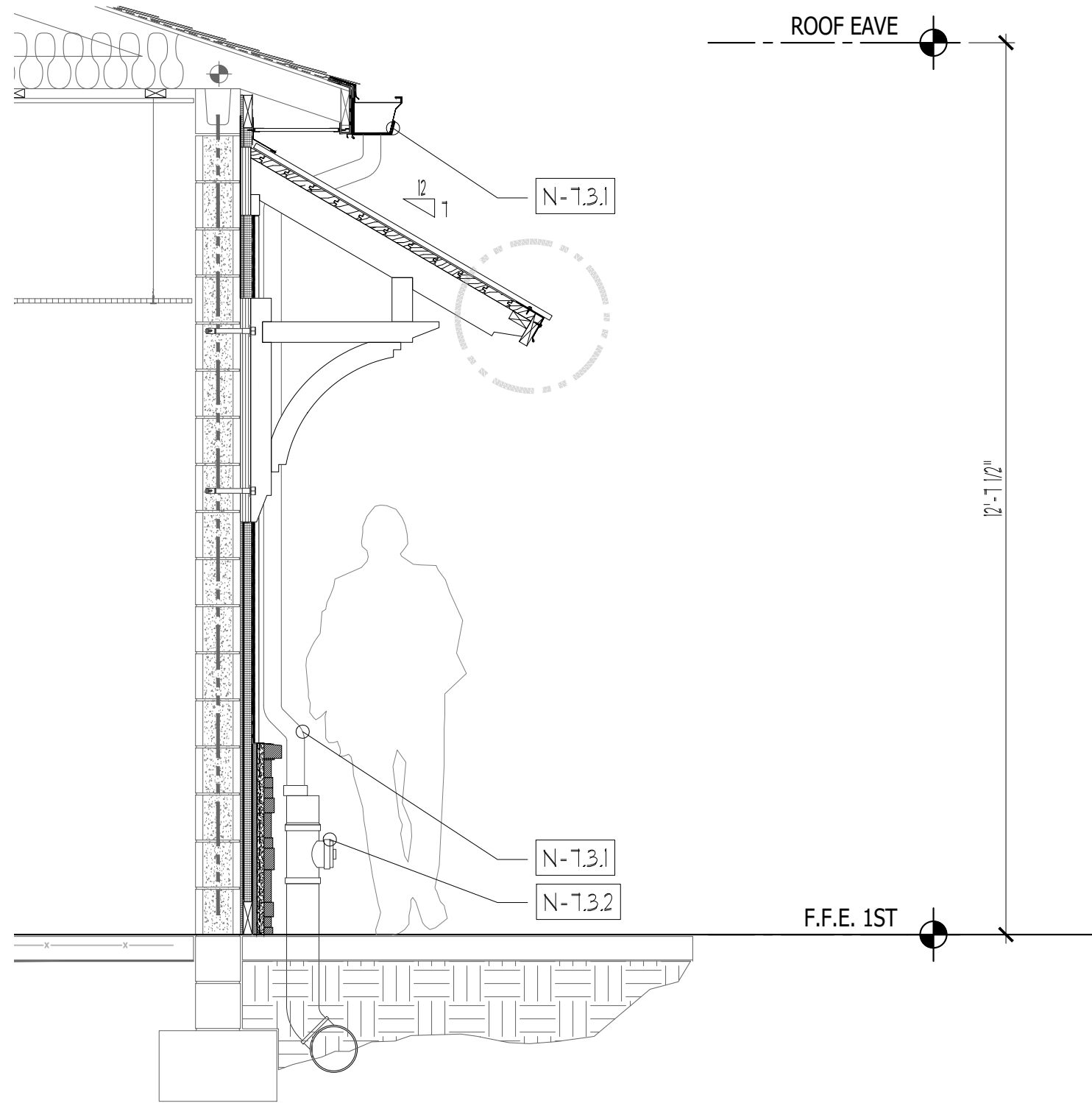


5 EAVE DETAIL
AWNING

3'-0"

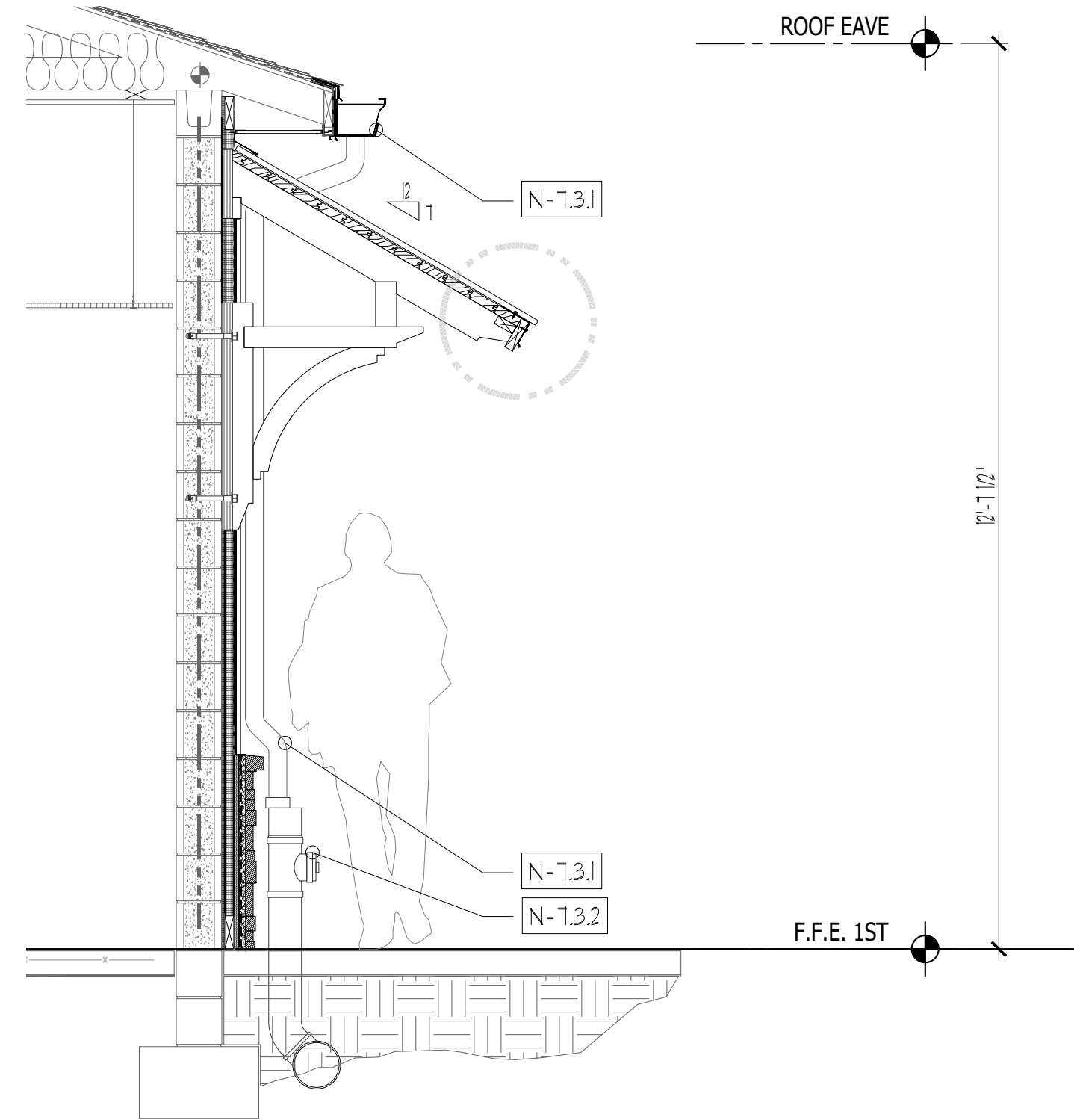
6 EAVE DETAIL
AWNING

3'-0"



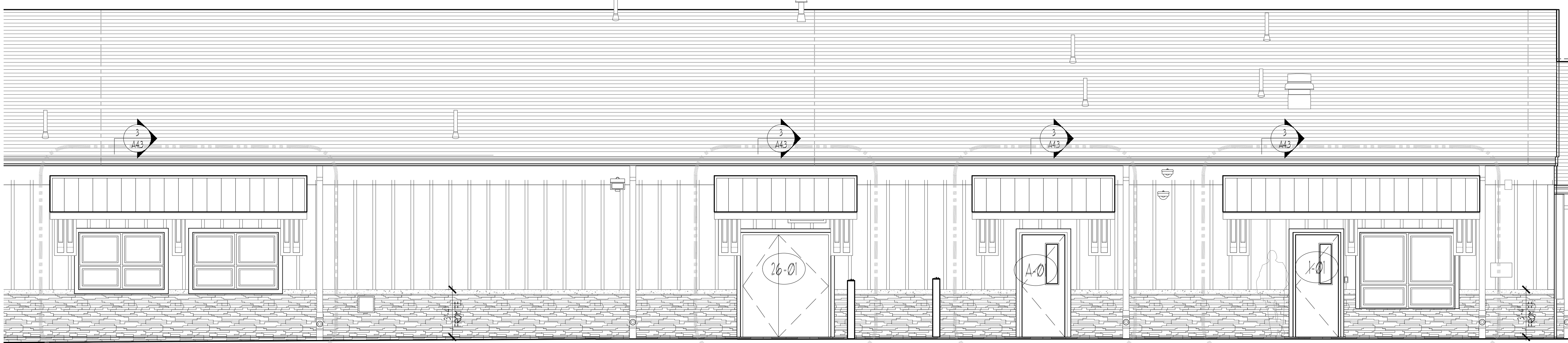
3 PROPOSED FLOOR PLAN
SUPERINTENDENT'S OFFICE

1/2'-0"



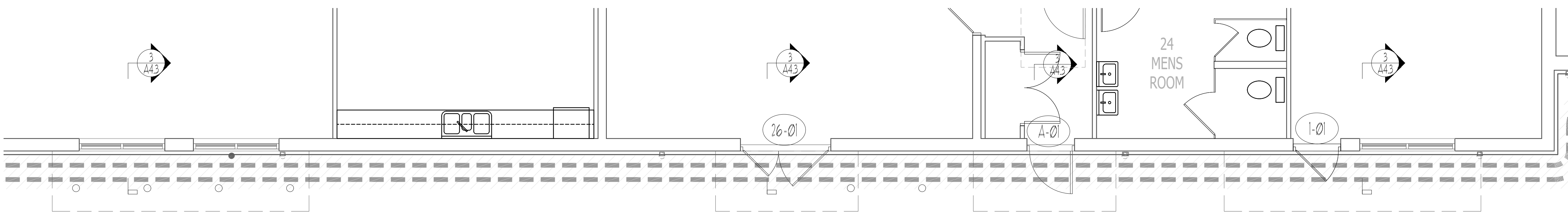
4 PROPOSED FLOOR PLAN
MEETING ROOM ENTRANCE

1/2'-0"



2 ENLARGED PARTIAL FLOOR PLAN
EMPLOYEE AND SUPERINTENDENTS ENTRANCE

1/2'-0"



1 ENLARGED FRONT (EAST) BUILDING ELEVATION
EMPLOYEE AND SUPERINTENDENTS ENTRANCE

1/2'-0"

9/28/26	1	RELEASED FOR BID
DATE	No.	REVISION

LOT NO. 1

LRHSD PROJECT NO. REF21-42-9302

PROPOSED EXTERIOR BUILDING RESTORATION

LRHSD ADMINISTRATION BUILDING

93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088

BLOCK NO. 27.02

SHAMONG TOWNSHIP

BURLINGTON COUNTY

Drew C. Dingler, AIA, President
New Jersey Architect No. 2101008808

Linda M. Viviani, AIA, Secretary/Treasurer
New Jersey Architect No. 2101008808

KEY PLAN:



THE DESIGN
COLLABORATIVE
ARCHITECTS AND PLANNERS, P.A.
1040 ROUTE 9 NORTH
CAPE MAY COURT HOUSE, NEW JERSEY 08204
PHONE: 609 465 4411 FAX: 609 465 9328
WWW.DESIGNCOLLABORATIVE.COM

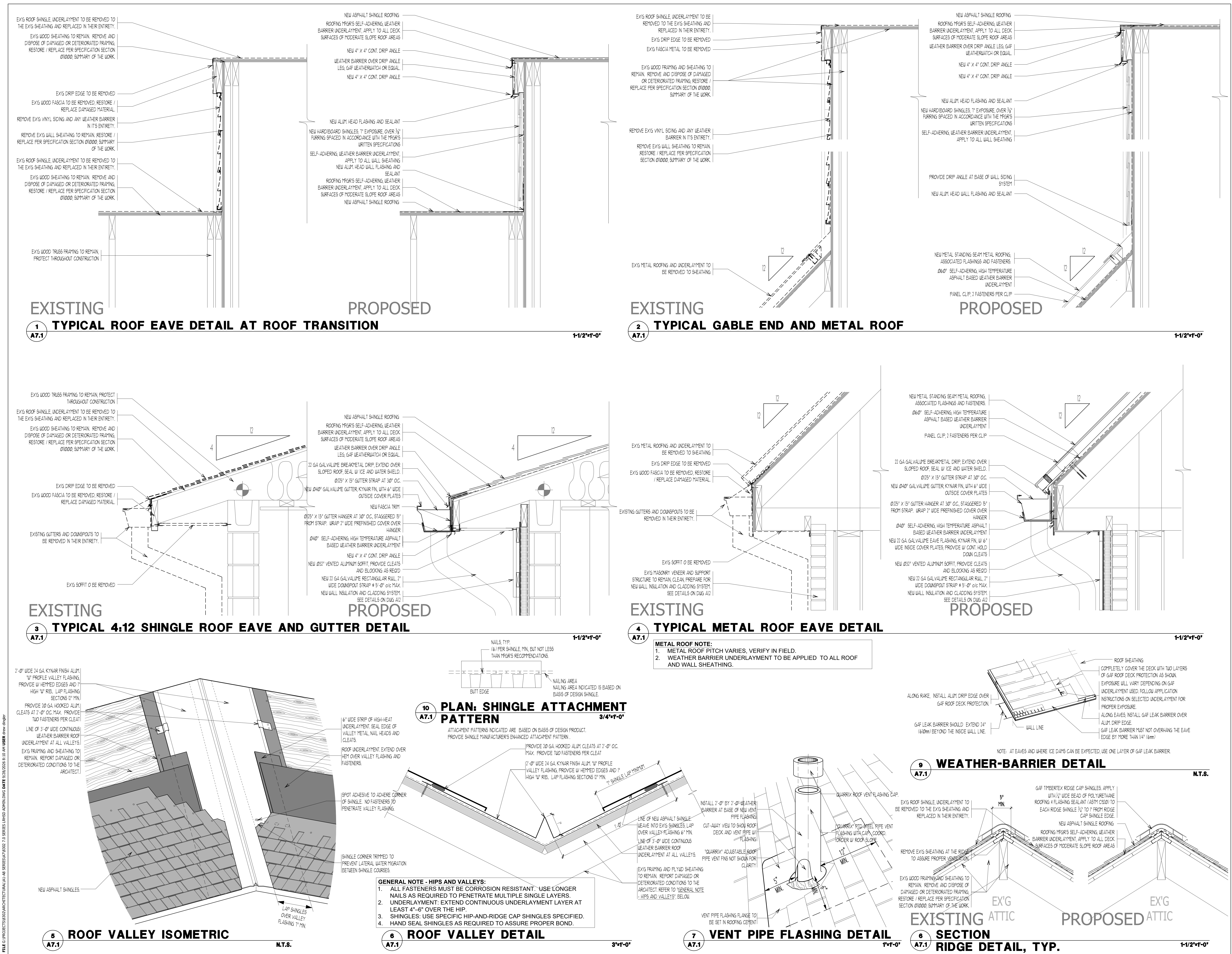
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CONVL. No.	8302	CHECKED BY: DCD
DATE:	01/02/2025	

SHEET TITLE:
BUILDING AWNING PLANS & DETAILS

SHEET No.:

A4.3

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LOT NO. 1

BLOCK NO. 27.02

SHAMONG TOWNSHIP

PROPOSED EXTERIOR BUILDING RESTORATION

LRHSD ADMINISTRATION BUILDING

93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088

BURLINGTON COUNTY

Drawn: C. Dingler, AIA, President
New Jersey Architect No. 2100108869

Design: L. M. Vignelli, AIA, Secretary/Treasurer
New Jersey Architect No. 2100108869

KEY PLAN:

PROJECT MONTH

THE DESIGN COLLABORATIVE

ARCHITECTS AND PLANNERS, P.A.

640 ROUTE 9 NORTH

CAPE MAY COURT HOUSE, NEW JERSEY 08204

PHONE: 609 465 4411 FAX: 609 465 9388

WWW.DCARCHITECT.COM

SCALE: AS NOTED

CONVL. No. 8302

DATE: 01/02/2025

DRAWN BY: DCD

CHECKED BY: DCD

SHEET TITLE: ROOF DETAILS

SHEET No.: A7.1

SPECIAL INSPECTION AND TESTING (IBC 2021 CHAPTER 17)

1. THIS PROJECT HAS BEEN DESIGNED USING THE 2021 INTERNATIONAL BUILDING CODE NEW JERSEY EDITION.
2. THE FOLLOWING PROJECT WAS DESIGNED WITH THE REQUIREMENTS OF THE GEOTECHNICAL REPORT PREPARED BY THE ATLANTIC ENGINEERING LAB DATED SEPTEMBER 29, 2023.
3. STRUCTURAL, SPECIAL INSPECTIONS ARE A REQUIREMENT FOR THIS PROJECT. A QUALIFIED INDEPENDENT INSPECTION AGENCY SHALL BE SELECTED BY THE CONTRACTOR PRIOR TO THE START OF THE PROJECT. THE 17th OF THE INTERNATIONAL BUILDING CODE (SEE THE FOLLOWING TABULAR REFERENCES) ARE REQUIRED AT A MINIMUM. FOR STEEL CONSTRUCTION REFER TO TABLE 1704.3, FOR CONCRETE CONSTRUCTION SEE TABLE 1704.4, FOR MASONRY CONSTRUCTION SEE TABLE 1704.5, FOR SOILS SEE TABLE 1704.7. SEE THE NOTES ON THE DRAWINGS FOR ADDITIONAL REQUIREMENTS.
4. ALL CONTRACTORS AND SUBCONTRACTORS ARE RESPONSIBLE FOR ADHERING TO THE REQUIREMENTS AS INDICATED IN THE NOTES FOR THE PROJECT. FAILURE OF THE CONTRACTOR TO READ THE STRUCTURAL NOTES DOES NOT PERMIT THE CONTRACTOR TO DEVIATE FROM THEIR REQUIREMENTS.
5. NO FIELD MODIFICATIONS TO ANY STRUCTURAL COMPONENTS SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE STRUCTURAL ENGINEER. THIS INCLUDES, BUT IS NOT LIMITED TO REVISIONS DUE TO MIS-CLASSIFICATION, MISPLY, OR ANY OTHER CONSTRUCTION ERRORS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS IN ACCORDANCE WITH ALL OSHA REGULATIONS.
7. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL PEOPLE WHO MAY BE ON OR NEAR THE WORK AREA, BY MAINTAINING A SAFE WORK AREA, SAFE WORKING CONDITIONS, AND LIMITING ACCESS TO THE WORK AREA.
8. CONTRACTOR IS FULLY RESPONSIBLE FOR HIS WORKERS' SAFETY, SAFETY EQUIPMENT, FIRST AID, AND EMERGENCY HANDLING PROCEDURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL PERSONS PRESENT AT ALL TIMES DURING CONSTRUCTION WORK. CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL FOR THE PROPER COORDINATION AND EXPEDIENTING OF THE WORK.
9. THESE DRAWINGS SHALL NOT BE SCALED FOR PURPOSES OF CONSTRUCTION.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, STATE AND FEDERAL, AND INSURING AS REQUIRED FOR ALL CONDITIONS WHERE APPLICABLE.
11. IN CASE OF CONFLICT BETWEEN STRUCTURAL DRAWINGS AND OTHER DRAWINGS OF THIS PROJECT, CONTRACTOR SHALL IMMEDIATELY CONTACT THE PROJECT ARCHITECT TO RESOLVE THE CONFLICT.
12. THE CONTRACTOR IS RESPONSIBLE FOR SURVEYING AND VERIFICATION OF EXISTING CONDITIONS INCLUDING BUT NOT LIMITED TO THE LOCATION, ELEVATIONS AND DIMENSIONS OF EXISTING WALLS AND FRAMING.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION OF ALL TEMPORARY SHORING OF THE EXCAVATIONS AND BUILDING STRUCTURES AS REQUIRED DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS, METHODS, FORM WORK, AND OTHER MEANS AND METHODS STRUCTURES SHALL BE DESIGNED BY ENGINEERS Hired BY THE CONTRACTOR.
15. SECTIONS SHOWN ON PLANS APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES WITHIN THE PROJECT FOR THE FOLLOWING INFORMATION:
 - A. LOCATION OF ALL REQUIRED OPENINGS IN WALLS, FLOORS, ROOF, ETC. ALL OPENINGS MAY NOT BE INDICATED ON STRUCTURAL DRAWINGS.
 - B. SIZE AND LOCATION OF ALL SLEEVES, INSERTS, AND DEPRESSIONS.
 - C. LOCATION AND SIZE OF ALL EQUIPMENT HOUSE KEEPING PANS.

FOR A LISTING OF SHOP DRAWINGS AND OTHER SUBMITTALS REQUIRED FOR THIS PROJECT SEE THE SHOP DRAWING AND SUBMITTAL REQUIREMENTS TABLE. CERTAIN SUBMITTALS MUST BE PREPARED UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER OR ARCHITECT. FOR PROJECTS UNDER THE CONTRACTOR'S JURISDICTION, THE CONTRACTOR IS REQUIRED TO RETAIN SPECIALTY ENGINEERS AS REQUIRED TO PREPARE THESE SUBMITTALS.

SHOP DRAWINGS AND RELATED MATERIALS PREPARED BY SUPPLIERS AND SUBCONTRACTORS SHALL BE REVIEWED BY THE GENERAL CONTRACTOR AND THE ARCHITECT FOR CONFORMANCE WITH THE PROJECT REQUIREMENTS FOR DESIGN, MATERIALS, MANUFACTURING, AND CONSTRUCTION. SUBMISSIONS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS, METHODS, MEANS, TECHNIQUES, SEQUENCES AND OPERATION OF CONSTRUCTION, TECHNICAL COORDINATION, COORDINATION OF TRADES, DIMENSIONAL ACCURACY, SAFETY PRECAUTIONS AND PROGRAMS SHALL BE REVIEWED BY THE ARCHITECT AND THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL APPROVE AND SO STAMP EACH SUBMISSION.

SHOP DRAWINGS, WHEN REQUIRED, SHALL BE PROVIDED AS FOLLOWS: PROVIDE ONE (1) ELECTRONIC PDF COPY TO THE ENGINEER FOR REVIEW AND APPROVAL AND ONE (1) HARD COPY FOR DESIGN REVIEW. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUBMITTAL BEING CHECKED PRIOR TO SUBMISSION. CONTRACTOR SHALL ALLOW (10) WORKING DAYS IN THE CONSTRUCTION SCHEDULE FOR SHOP DRAWING REVIEW. FAX SUBMITTALS OF SHOP DRAWINGS WILL NOT BE ACCEPTED.

ANY REVISIONS TO SHOP DRAWINGS SHALL BE PROVIDED TO THE ARCHITECT AND GENERAL CONTRACTOR FOR REVIEW. ANY REVISIONS TO ANY SHOP DRAWINGS THAT ARE SUBMITTED FOR REVIEW, SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURN THIS INCLUDES RE-PLACE DRAWINGS, FABRICATION DRAWINGS, ERECTION DRAWINGS, ERECTION DETAILS, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUBMITTAL BEING CHECKED PRIOR TO SUBMISSION.

ANY DEVIATION FROM THE DESIGN OR CONSTRUCTION REQUIREMENTS (INCLUDING DETAILS) AS SPECIFIED ON THE "ISSUED FOR CONSTRUCTION" DESIGN DOCUMENT OF THE PROJECT SHALL BE NOTED (BUBBLED, NOTE, ETC.) ON THE SHOP DRAWINGS THAT ARE SUBMITTED FOR APPROVAL.

REVIEW OF SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY CONTRACT REQUIREMENTS EVEN IF SUCH ITEMS ARE NOT SHOWN ON THE SHOP DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUBMITTAL BEING CHECKED PRIOR TO SUBMISSION AND PROJECT REQUIREMENTS, AND DOES NOT IMPLY APPROVAL OR VARIANCE FROM THE CONTRACT DOCUMENTS. QUANTITIES WILL NOT BE CHECKED BY THE ENGINEER.

REVISIONS TO SHOP DRAWINGS AFTER THE FIRST SUBMISSION SHALL BE APPROPRIATELY IDENTIFIED ON SUBSEQUENT SUBMISSIONS.

SUBSTITUTIONS TO PRODUCTS SPECIFIED ON THE DRAWINGS IS ACCEPTABLE PROVIDED THE FOLLOWING CRITERIA ARE MET: THE CONTRACTOR SHALL SUBMIT INFORMATION ON THE PRODUCT TO BE SUBSTITUTED THAT SUBSTANTIATES ITS PERFORMANCE ON AN EQUAL OR BETTER BASIS TO THE SPECIFIED PRODUCT FOR A MINIMUM OF (5) WORKING DAYS IN THE CONSTRUCTION SCHEDULE FOR REVIEW OF THE SUBSTITUTED PRODUCT BY THE ENGINEER.

THE PROVISIONS OF ACI 318-16 HAVE BEEN UTILIZED FOR THE DESIGN OF CONCRETE ELEMENTS ON THIS PROJECT. FLOOR FINISH TOLERANCES FOR THE SLAB ON GRADE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 117. FLOOR FINISH TOLERANCES SHALL BE DETERMINED BY THE CONTRACTOR. THE MAXIMUM ALLOWED DEVIATION SHALL BE 1/4" FOR TWO HIGH SPOTS WITHIN 10' HOURS AFTER SLAB PLACEMENT. THE GAP AT ANY POINT BETWEEN THE STRAIGHT EDGE AND THE FLOOR SHALL NOT EXCEED 1/4". ALL CONCRETE SHALL BE NORMAL WEIGHT, READY-MIX. ALL CONCRETE MIX DESIGNS SHALL BE DESIGNED BY ENGINEERS RETAINED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS. SUBMITTED MIX DESIGNS SHALL INCLUDE MIX CYCLINGS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. ALL SUBMITTED MIX DESIGNS SHALL COMPLY WITH CONCRETE BREAK TEST RESULTS CONFIRMING COMPRESSIVE STRENGTH OF EACH MIX DESIGN.

CONCRETE SHALL BE PLACED IN THE FORMS AND VIBRATED TO OBTAIN THE REQUIRED WORKABILITY. SLAB SHALL NOT BE ACCELERATED BY THE ADDITION OF WATER TO THE MIX. CONCRETE SLUMP PRIOR TO ADMIXTURE ADDITION SHALL BE A MAXIMUM OF 3 INCHES. PROPORTIONS OF CONCRETE ADMIXTURES SHALL BE DETERMINED BY THE CONCRETE MIX DESIGNER.

CONCRETE SHALL NOT CONTAIN CHLORIDES OR PLASTIC OR POZZOLAN ASHES. NOT USED IN ANY CONCRETE UNLESS APPROVED BY THE ENGINEER.

ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITIONS OF THE FOLLOWING ACI PUBLICATIONS ACI 301 (SPECIFICATIONS FOR STRUCTURAL CONCRETE), ACI 308 (GUIDE TO CONCRETE TESTING), ACI 309 (GUIDE TO CONCRETE ADMIXTURES), ACI 311 (GUIDE FOR CONCRETE INSPECTION), ACI 315 (DETAILS AND TOLERANCES OF CONCRETE REINFORCEMENT), ACI 318 (BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE), ACI 347R (GUIDE TO CONCRETE CONSTRUCTION), AND ACI 348R (GUIDE TO CONCRETE REPAIRS). IN ADDITION, REFERENCE TO THE CRSI - MANUAL OF STANDARD PRACTICE FOR DETAILS ON THE FABRICATION AND PLACEMENT OF CONCRETE REINFORCING.

PRIOR TO FABRICATION OR SHIPMENT OF MATERIAL, THE CONTRACTOR SHALL SUBMIT AND RECEIVE APPROVAL OF SHOP DRAWINGS. SHOP DRAWINGS SHALL BE INDENTED AND CARRY THE SIGNATURE OF THE CONTRACTOR. THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR APPROVAL OF SHOP DRAWINGS WILL BE FOR ARRANGEMENT ONLY AND SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR ERRORS, OMISSIONS OR THE ACCURACY OF HIS OWN DIMENSIONS, DRAWINGS AND DETAILS SHALL CONFORM WITH ACI 315. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL.

ALL REINFORCING STEEL SHALL BE MANUFACTURED FROM HIGH STRENGTH BILLET STEEL CONFORMING TO ASTM DESIGNATION A615 GRADE 60. REINFORCING STEEL SHALL BE SUPPLIED IN THE FORM OF BARS OR BARS WITH WELDED END CONNECTIONS. REINFORCING STEEL, FOOTING, SLAB, AND WALL REINFORCEMENT NOT SHOWN ON SECTIONS AND PLANS IS THE SAME AS THAT SHOWN IN SIMILAR SECTIONS AND PLANS.

1. LAP ALL BARS PER TABLE 1. PROVIDE SPLICER LENGTHS FOR CONCRETE, CLASS B LAP ALL W/ A MINIMUM OF 8 INCHES.

1. CONTRACTOR SHALL PROVIDE ALL BOLSTERS, CHAIRS, BAR POSITIONERS, ETC. AS REQUIRED TO SET REBAR AND SLAB W/OUT TO REQUIRE TO BE SHOWN ON DRAWINGS.

2. CONTROL JOINTS FOR SLABS-ON-GRADE SHALL BE SAW CUT IN ACCORDANCE WITH THE PATTERN AS INDICATED ON THE STRUCTURAL DRAWINGS. THE SPACING OF CONTROL JOINTS SHALL BE ARRANGED SUCH THAT THE AREA OF CONCRETE SLAB BETWEEN CONTROL JOINTS DOES NOT EXCEED 225 SQUARE FEET (MAXIMUM). COORDINATE WITH THE STRUCTURAL CONTRACT DRAWINGS FOR TYPICAL CONTROL JOINT DETAILS.

3. CONSTRUCTION JOINTS IN SLABS AND GRADE BEAMS SHALL BE AT MID-SPAN AND KEY JOINTED WITH REINFORCING CONTINUOUS ACROSS JOINTS. COORDINATE WITH ENGINEER FOR STRUCTURAL DETAILS. REINFORCING DETAILS FOR CONSTRUCTION JOINTS ARE TO BE LOCATED WITH RESPECT TO THE JOINTS. PROVIDE SPLICERS, DETAILS, ETC. SHOWN ON THE ARCHITECTURAL DRAWINGS.

4. PROVIDE CONTINUOUS KEYWAYS AND DOWELS IN THE TOP OF FLOOR FOOTINGS SUPPORTING CONCRETE WALLS. AT CONSTRUCTION JOINT, CONCRETE WALLS PROVIDE KEYWAYS AND CONTINUE REINFORCING THROUGH THE JOINTS.

5. PROVIDE REINFORCING DETAILS FOR ALL WATERPROOFING AT ALL INTERSECTIONS, WALLS, AND SLABS.

6. AT CONCRETE WALL INTERSECTIONS PROVIDE CORNER BARS EQUAL IN SIZE AND SPACING TO TYPICAL WALL REINFORCING STEEL.

7. EPOXY COATED REINFORCING STEEL SHALL CONFORM TO ASTM A775.

8. CONCRETE SHALL BE PLACED IN THE FORMS AND VIBRATED TO OBTAIN THE REQUIREMENTS OF ACI 308R "GUIDE TO COLD WEATHER CONCRETE". ALL CONCRETE PLACED IN HOT WEATHER SHALL CONFORM TO THE REQUIREMENTS OF ACI 305R "GUIDE TO HOT WEATHER CONCRETE".

9. CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL SLEEVES, INSERTS, ANCHOR BOLTS, AND OTHER EMBEDDED ITEMS WITH THE CONTRACTOR BY OTHER TRADES.

10. ALL CONCRETE SHALL BE PROPERLY CONSOLIDATED THROUGH THE USE OF VIBRATORS. VIBRATORS SHALL NOT BE USED TO TRANSPORT OR MOVE CONCRETE.

11. CONTRACTOR SHALL FOLLOW THE GUIDELINES IN ACI 303 - GUIDE TO CAST-IN-PLACE ARCHITECTURAL CONCRETE PRACTICE TO ACHIEVE SPECIFIED SURFACE FINISHES OF EXPOSED CONCRETE. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

12. UNLESS OTHERWISE SPECIFIED, A TESTING AGENCY SHALL BE EMPLOYED FOR EVALUATION AND QUALITY CONTROL OF CONCRETE PLACED. THE TESTING AGENCY PERFORMING ACCEPTANCE TESTING SHALL CONFORM TO ASTM C1017. CONCRETE SHALL BE TESTED IN ACCORDANCE WITH ASTM C1017. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS. CONCRETE SHALL BE TESTED AT A MINIMUM OF 10% OF THE VOLUME OF CONCRETE REQUIRED BY THE APPLICABLE BUILDING CODE.

2. SPECIAL INSPECTIONS FOR EXISTING SITE SOIL CONDITIONS, FILL PLACEMENT, AND LOAD BEARING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CITY OF CHICAGO DEPARTMENT OF PUBLIC WORKS, DIVISION OF INSPECTION AND TESTING, DIVISION OF SPECIAL INSPECTIONS.
3. BOTTOM OF ALL FOOTINGS HAVE BEEN DESIGNED TO BEAR ON SOIL, CAPABLE OF SAFELY SUPPORTING 3,000 PSF.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE AUTHORITIES TO LOCATE ALL POTENTIALLY BURIED UTILITIES AND RECORD THE LOCATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION OR FOUNDATION CONSTRUCTION.
5. EXISTING FOUNDATIONS, SLABS, PAVEMENTS, UNDERGROUND UTILITIES, AND OTHER BELOW GRADE STRUCTURES SHALL BE REMOVED FROM THE PROPOSED PROJECT SITE BUILDING FOOTPRINT. REMOVE SURFACE VEGETATION, TOPSOIL, ROOT SYSTEMS, ORGANIC MATERIAL, EXISTING CONCRETE, AND ALL OTHER MATERIALS FROM THE BUILDING AREA.
6. CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING NEW FOUNDATION CONSTRUCTION ACTIVITIES ADJACENT TO EXISTING BUILDING FOUNDATIONS THAT ARE TO REMAIN EVEN IF LOCATED ON AN ADJACENT PROPERTY. SINCE DRAWINGS FOR EXISTING CONSTRUCTION ARE NOT AVAILABLE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION FROM THE CITY OF CHICAGO AND THE CITY OF CHICAGO DEPARTMENT OF PUBLIC WORKS, DIVISION OF INSPECTION AND TESTING, DIVISION OF SPECIAL INSPECTIONS. THESE ASSUMPTIONS TYPICALLY REQUIRE CONTRACTOR FIELD VERIFICATION PRIOR TO CONSTRUCTION OF THE NEW FOUNDATIONS. IN ANY EVENT, THE ENGINEER MUST BE NOTIFIED IMMEDIATELY IF EXISTING SITE OR FOUNDATION CONDITIONS DIFFER FROM THE ASSUMPTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION FROM THE CITY OF CHICAGO TO INSTALL NEW FOUNDATIONS. IF NEW BOTTOM OF FOOTING ELEVATIONS ARE LOWER THAN ADJACENT EXISTING BOTTOM OF FOOTING ELEVATIONS, THE CONTRACTOR SHALL BE NOTIFIED IMMEDIATELY TO PROVIDE ADDITIONAL DETAILS AS REQUIRED TO CONSTRUCT THE NEW FOUNDATIONS AT THE LOWER LEVEL.
7. THE CONTRACTOR MUST PROVIDE SURFACE DRAINAGE AND PUMPS TO PROTECT ALL EXCAVATION FROM FLOODING OR GROUND WATER INFLUX. FLOODING OF ANY EXCAVATION AFTER APPROVAL OF THE SUBGRADE WILL BE CAUSE FOR COMPLETE RE-PREPARATION OF THE SUBGRADE.
8. BOTTOM OF ALL FOOTINGS MUST BE INSPECTED AND APPROVED BY A REGISTERED SOILS ENGINEER BEFORE PLACING ANY CONCRETE. STANDING WATER SHALL BE PROTECTED BY A MINIMUM OF 18 INCHES OF EXCAVATION AND A MINIMUM OF 1,000 PSF FILL OVER ALL FOOTINGS.
9. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF THREE FEET (3'-0") BELOW EXTERIOR FINISH GRADE. STANDARD PROCEDURES FOR PROTECTING EXISTING FOUNDATIONS AND EXCAVATIONS SHALL BE FOLLOWED DURING WINTER CONSTRUCTION. BACKFILLING OF EXCAVATIONS SHALL BE DONE AS SOON AS POSSIBLE TO PROTECT FOUNDATIONS FROM FROST.
10. DUE TO THE PRESENCE OF UNSUITABLE BEARING MATERIALS, OVER EXCAVATION WILL BE REQUIRED IN SOME AREAS TO PROVIDE THE SAFE AND SOUND FOUNDATION FOR THE NEW CONSTRUCTION. THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE REFERENCED GEOTECHNICAL REPORT LISTED ABOVE.
11. ALL EXCAVATION SHALL HAVE CONTROL JOINTS AT 30 FEET MAXIMUM ON ALL SENSORS UNLESS NOTED OTHERWISE.
12. UNLESS OTHERWISE DICTATED BY THE GEOTECHNICAL ENGINEER, ALL FILL AND BACKFILL SHALL BE COMPACTED IN 8 INCH MAXIMUM LIFTS TO NOT LESS THAN 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D1557.
13. ALL EXCAVATION SHALL BE PROTECTED BY CONCRETE OR STEEL CORNER BARS AT ALL CORNERS AND INTERSECTIONS.
14. FOUNDATION PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER. CORNER PENETRATIONS SHALL BE THROUGH THE FOUNDATION SYSTEM WALL OR 6" CLEAR BELOW FOOTING.
15. ALL SMALL VERTICAL VENTILATION MATERIAL SHALL BE FILLED SLOD WITH 3,000 PSF GROUT BELOW FINISHED GRADE ELEVATION UNLESS NOTED OTHERWISE ON PLANS.

- ALL I-WAY BLOCK SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,800 PSI ON THE NET AREA OF INDIVIDUALS. ALL CMU SHALL BE ERECTED IN A RUNNING BOND PATTERN AND SHALL BE LAID IN A FULL BED OF MORTAR.
- ALL EXTERIOR CORNERS AND T-JUNCTIONS SHALL BE REINFORCED WITH AN I-WAY BLOCK SHALL BE LAID USING ASTM C270 TYPE M MORTAR WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS. DO NOT USE ADMIXTURES THAT CONTAIN CHLORIDES. GROUT SHALL BE A HIGH SLUMP MIX IN ACCORDANCE WITH ASTM SPECIFICATION C476 HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI. ALL CORNERS AND T-JUNCTIONS SHALL BE REINFORCED WITH AN I-WAY BLOCK SHALL BE LAID USING ASTM C270 TYPE M MORTAR FOR GROUT. CONSOLIDATION OF GROUT IN BLOCK CORERS SHOULD BE ACHIEVED WITH A LOW VELOCITY MECHANICAL VIBRATOR WHICH HAS A 3/4 INCH HEAD. THE VIBRATOR IS NORMALLY ACTIVATED FOR ONE OR TWO SECONDS IN EACH GROUTED CORER OF HOLLOW UNIT.
- LAID UP MASONRY STRENGTH f_m FOR THE COMPOSITE OF CMU, MORTAR AND GROUT FOR ALL STANDARD MASONRY WALLS SHALL BE 2,800 PSI FOR I-WAY BLOCK AND PERSI.
- ALL REINFORCING BARS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES, ACI 530/ASCE 5/TMS 402" AND "SPECIFICATIONS FOR MASONRY STRUCTURES ACI 530.1/ASCE 5/TMS 602".
- PERFORM INSPECTIONS OF MASONRY CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE BUILDING CODE.
- ALL REINFORCING BARS SHALL BE ERECTED BEFORE BACK FILLING.
- PROVIDE HOT-DIPPED GALVANIZED LADDER TYPE HORIZONTAL JUNCTION REINFORCING (MNM #9 GAGE COLD DRAWN GALVANIZED STEEL WIRE) IN ACCORDANCE WITH ASTM A1034 AT ALL JUNCTIONS OF VERTICAL REINFORCING WALLS, SPANNERS AND JOINTS. JOINTS SHALL BE REINFORCED WITH AN I-WAY BLOCK SHALL BE LAID USING ASTM C270 TYPE M MORTAR FOR GROUT. CONSOLIDATION OF GROUT IN BLOCK CORERS SHOULD BE ACHIEVED WITH A LOW VELOCITY MECHANICAL VIBRATOR WHICH HAS A 3/4 INCH HEAD. THE VIBRATOR IS NORMALLY ACTIVATED FOR ONE OR TWO SECONDS IN EACH GROUTED CORER OF HOLLOW UNIT.
- ALL CMU CORERS SHALL HAVE VERTICAL REINFORCING BARS SHALL BE GROUTED SOLID. ALL CMU JOINTS SHOWN ON PLAN SHALL BE GROUTED SOLID. ALL CORNERS AND T-JUNCTIONS SHALL BE REINFORCED WITH AN I-WAY BLOCK SHALL BE LAID USING ASTM C270 TYPE M MORTAR FOR GROUT. CONSOLIDATION OF GROUT IN BLOCK CORERS SHOULD BE ACHIEVED WITH A LOW VELOCITY MECHANICAL VIBRATOR WHICH HAS A 3/4 INCH HEAD. THE VIBRATOR IS NORMALLY ACTIVATED FOR ONE OR TWO SECONDS IN EACH GROUTED CORER OF HOLLOW UNIT.
- MINIMUM LENGTH OF SPACERS FOR VERTICAL REINFORCING SHALL NOT BE LESS THAN THE VALUE PROVIDED IN THE CMU REINFORCING LAP AND SPlice LENGTH TABLE.
- ALL REINFORCING BARS SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY GALVANIZED BAR POSITIONERS SPACED AT INTERVALS NOT TO EXCEED 12 BAR DIAMETERS. PROVIDE A MINIMUM OF TWO POSITIONERS PER INDIVIDUAL REINFORCING BAR.
- SUBMIT CHECKED SHOP DRAWINGS WHICH DETAIL THE LOCATION OF VERTICAL REINFORCEMENT PLACEMENT FOR ALL WALLS AND PERSI.
- ALL REINFORCING BARS SHALL BE ERECTED BEFORE BACK FILLING.
- DETAIL LOCATION OF REINFORCING STEEL, SPICES, AND LOCATION OF BAR POSITIONERS. WALL DETAILS WHICH INDICATE WHERE REINFORCING STEEL IS LOCATED IN EACH CORER (I.E. CENTER OF CORER, NEAR INTERIOR FACE OF WALLPIER, NEAR EXTERIOR FACE OF WALLPIER), DETAIL OF BAR COUPLERS, DETAIL OF SPICES, AND DETAIL OF THE FOLLOWING THE LOCATION AND SIZE OF REINFORCING STEEL, LOCATION OF REINFORCING STEEL, SPICES, AND LOCATION OF BAR POSITIONERS.
- MASON TO DESIGN, FURNISH AND INSTALL ALL REQUIRED SHORING FOR ERECTION OF THE CMU MASONRY WALLS AND PERSI.
- PROTECT EXISTING WORK AND ADJACENT AREAS FROM DAMAGE DURING THE CONSTRUCTION OF THE MASONRY WALLS AND PERSI. SUBMIT DRAWINGS, COORDINATE WITH THE ARCHITECT FOR ALL MASONRY CONTROL JOINT LOCATIONS.
- ALL REINFORCING BARS SHALL BE ERECTED BEFORE BACK FILLING.
- ALL REINFORCING BARS SHALL BE ERECTED BEFORE BACK FILLING. UNLESS NOTED OTHERWISE ON THE CONTRACT DRAWINGS, #5 KNOCK-OUT CMU BOND BEAMS SHALL BE REINFORCED WITH (1) #5 BAR LONGITUDINAL AND (2) KNOCK-OUT CMU BOND BEAMS SHALL BE REINFORCED WITH (2) #5 BARS LONGITUDINAL. ALL BOND BEAMS SHALL BE FILLED SOLID WITH 3,000 PSI GROUT.
- PROTECT EXISTING WORK AND ADJACENT AREAS FROM DAMAGE DURING THE CONSTRUCTION OF THE MASONRY WALLS AND PERSI.
- PROVIDE CONTINUOUS KNOCK-OUT BOND BEAMS FOR ELEVATOR AND STAIR SHAFT WALLS AT EACH FLOOR.

THE ADHESIVE ANCHOR SYSTEM USED FOR POST-INSTALLED ANCHORAGE TO CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENTLY PUBLISHED ACI 308.4 ACCEPTANCE CRITERIA FOR QUALIFICATION OF POST-INSTALLED ADHESIVE ANCHORS IN CONCRETE OR MASONRY.

THE ADHESIVE ANCHORS SHALL BE SUPPLIED AS AN ENTIRE SYSTEM. THE SYSTEM SHALL INCLUDE, BUT IS NOT LIMITED TO, THE NEW ADHESIVE CARTRIDGE, A CLEAN MIXING NOZZLE, EXTENSION TUBE, A DISPENSING GUN, AND ALL MANUFACTURER RECOMMENDED SUPPLIES FOR THE ADHESIVE.

EYE BOLTS, THREADED STUDS, INTERNAL THREADED PARTS TO BE USED IN ADHESIVE ANCHOR ASSEMBLIES SHALL CONFORM TO ASTM A307, A193 (GRADE S7, S307, S340, S408), OR F1554. STAINLESS STEEL ANCHOR RODS SHALL BE A316 TYPE 304 OR TYPE 316. THREADS SHALL BE UNC. THE ANCHOR RODS SHALL BE SUPPLIED WITH A FINISH THAT IS COMPATIBLE WITH THE ADHESIVE. THE ADHESIVE WITH THE ADHESIVE ROD IS CONSIDERED PART OF THE ASSEMBLY. THE COST OF THE HARDWARE SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLED ADHESIVE ANCHOR ASSEMBLY.

NUTS, WASHERS, AND OTHER HARDWARE USED WITH ALL ANCHOR-BAR ADHESIVE ANCHOR SYSTEM SHALL HAVE A MATERIAL OR AN ALLOY DESIGNATION THAT MATCHES THE ALL-THREAD MATERIAL / ALLOY. GALVANIZED ASSEMBLIES SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A153. GALVANIZED ANCHOR ASSEMBLIES SHALL BE ACCEPTABLE. DISSIMILAR METAL ASSEMBLIES SHALL BE SEPARATED BY A MINIMUM OF 1/8" OR OTHER APPROVED NON-METALLIC WASHERS.

CONCRETE BARS TO BE USED IN ADHESIVE ANCHOR ASSEMBLIES SHALL CONFORM TO ASTM A615.

ANCHOR BARS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (F_{cu}) OF 3,500 PSI FOR ALL ADHESIVE ANCHOR INSTALLATIONS.

THE TIME OF ADHESIVE ANCHOR INSTALLATION SHALL BE A MINIMUM OF 24 HOURS.

CONCRETE TEMPERATURE AT THE TIME OF ADHESIVE ANCHOR INSTALLATION SHALL BE AT LEAST 50 DEGREES F.

EQUIPMENT AND ANCHORING METHODS (STICK-OUT) SHALL BE APPROVED BY THE AIA. THE DRAWING OR DETAIL SHALL BE USED FOR THE PARTICULAR ANCHORING METHOD. THE DRAWING SHALL BE Labeled, AND ANY INFORMATION, THE MINIMUM EMBEDMENT DEPTH SHALL BE 10 TIMES THE ANCHOR DIAMETER IN INCHES AND MINIMUM STICK-OUT SHALL BE AS REQUIRED TO MAKE THE CONNECTION.

THE ANCHORING METHOD SHALL BE APPROVED BY THE SERVICE ENGINEER. THE ANCHORING METHOD SHALL BE APPROVED BY THE SERVICE ENGINEER.

ADHESIVE ANCHORS SHALL BE INSTALLED BY QUALIFIED PERSONNEL TRAINED TO INSTALL ADHESIVE ANCHORS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER AND THE CONTRACT DOCUMENTS. POST-INSTALLED ADHESIVE ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE AIA INSTALLATION INSTRUCTIONS.

INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY THE AIA'S ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM. THESE ANCHORS ARE NOT TO BE USED TO SUPPORT DEAD LOADS OR TO SUPPORT DEAD AND LIVE LOADS. THE DRAWINGS SHALL SHOW ON THESE DRAWINGS SUPPORT TENSION LOADS AND ARE SO DESIGNATED WITH A (CERT) AFTER THE ANCHOR CALL-OUT.

THE INSTALLERS QUALIFICATION SHALL BE SUBMITTED AND APPROVED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

ANCHORS SHALL BE SET USING THE FOLLOWING METHODS: AIR-DRIVEN GUN, AIR-DRIVEN GUN WITH EXTENSION TUBE, AIR-DRIVEN DRILL SETTING TOOLS, CLEAN-OUT BRUSHES, BLOW OUT BULBS, OIL-FREE COMPRESSED AIR, SHOP VACUUMS, WRENCHES, ETC.

ANCHORS SHALL BE INSTALLED IN HOLES DRILLED WITH A ROTARY AIR-POWERED HAMMER DRILL OR ROCK DRILL.

POST-HOLE CLEANING SHALL BE THOROUGHLY CLEANED PRIOR TO ADHESIVE INJECTION, AS REQUIRED BY THE MANUFACTURER'S POST-INSTALLATION INSTRUCTIONS.

ALL TESTS AND INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT TESTING AND INSPECTION AGENCY. THE SPECIAL INSPECTOR FROM THIS TESTING AGENCY SHALL OBSERVE THE WORK FOR CONFORMANCE TO THE DESIGN DRAWINGS AND SPECIFICATIONS. THE SPECIAL INSPECTOR SHALL BE TRANSCENDED/TRANSFERRED TO PERFORM THE REQUIRED SPECIAL INSPECTIONS. THE SPECIAL INSPECTOR SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS OF CERTIFICATION AND REPORTING:

- 1. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER OR ARCHITECT OF RECORD, AND ALL OTHER DESIGNATED INDIVIDUALS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION, IF APPLICABLE, PRIOR TO THE PROCEEDING TO THE NEXT PHASE OF THE PROJECT.
- 2. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED DESIGN DRAWINGS, SPECIFICATIONS, SOLS REPORTS AND ALL APPLICABLE GOVERNING REGULATIONS OF THE JURISDICTION OF THE BUILDING OFFICIAL.
- 3. STRUCTURAL OBSERVATIONS BY THE STRUCTURAL ENGINEER SHALL NOT BE CONSIDERED A SPECIAL INSPECTION.
- 4. THE FOLLOWING ITEMS MARKED "X" REQUIRE SPECIAL INSPECTIONS: (REFER TO IBC 2012 CHAPTER 17 FOR ADDITIONAL INFORMATION)

DIMENSIONAL LUMBER, ENGINEERED LUMBER, SHEATHING

- 1. COMPLY WITH THE FOLLOWING DIMENSIONAL LUMBER USED ON PROJECT. CERTIFICATION SHALL INDICATE LUMBER COMPLIANCE WITH DESIGN PROPERTIES INDICATED IN THESE NOTES AND ON THE DRAWINGS.
- 2. ALL STRUCTURAL LUMBER NOTED ON PLANS SHALL BE HEM-FIR NO. 1 (OR APPROVED EQUAL) AND HAVE MINIMUM ALLOWABLE LUMBER GRADE OF 1000 PSI (OR APPROVED EQUAL). THE DIMENSIONAL LUMBER TO BE STAMPED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTIONS' "CONSTRUCTION MANUAL".
- 3. ALL DIMENSIONAL LUMBER PROVIDED FOR THE PROJECT SHALL BE SURFACE DRY WITH A MAXIMUM MOISTURE CONTENT NOT EXCEEDING 19% (OR APPROVED EQUAL). DIMENSIONAL LUMBER SHALL NOT BE USED FOR THE FOLLOWING PROJECTS:
- 4. ALL LUMBER AND WOOD CONSTRUCTION SHALL COMPLY WITH SPECIFICATIONS AND CODES AS SPECIFIED BELOW:
 - 4.1.A. AMERICAN INSTITUTE OF TIMBER CONSTRUCTION - TIMBER CONSTRUCTION MANUAL.
 - 4.1.B. NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION - 2015.
 - 4.1.C. ENGINEERED WOOD ASSOCIATION (APA) PLYWOOD DESIGN SPECIFICATION.
 - 4.1.D. AMERICAN WOOD-PRESERVERS ASSOCIATIONS STANDARDS.
 - 4.1.E. NATIONAL LUMBER MANUFACTURERS ASSOCIATIONS: NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND ITS FASTENERS.
- 5. ALL WOOD CONNECTIONS ARE TO BE MADE USING PREFABRICATED CONNECTORS. TOE-NAILING WILL NOT BE PERMITTED. SUBMIT MANUFACTURER'S DATA FOR APPROVAL. FASTENERS TO BE AS MANUFACTURED BY SIMPSON OR APPROVED EQUAL.
- 6. ALL WOOD CONNECTIONS SHALL BE PROVIDED IN MANUFACTURED CONNECTIONS FINISH.
- 7. SIMPSON STRONG TIE CONNECTIONS HAVE BEEN SPECIFIED TO MEET THE STRUCTURAL CALCULATIONS OF PLAN ELEMENTS, PRIOR TO SUBSTITUTING AND OTHER END, CONFIRM LOAD CAPACITY BASED ON RELIABLE PUBLISHED TESTING DATA OR CALCULATIONS. SUBSTITUTIONS SHALL BE MADE AT THE SUBMITTER'S RISK.

2. GLULAM MEMBERS SHALL BE DOUGLAS FIR OR SOUTHERN PINE 24F-E (24F-E FOR CANTILEVER OR CONTINUOUS BEAMS) STRESS GRADE WITH QUALITY APPEARANCE GRADE AND 15% MAX. MOISTURE CONTENT. ALL WOOD TO BE TREATED FOR EXTERIOR USE AND ALL EXPOSED WOOD SURFACES TO BE PROTECTED WITH AN APPROVED FINISH. ALL EXPOSED BEAMS ARE TO BE CONCEALED.
3. GLULAM MANUFACTURER MUST QUALIFY UNDER ANSI/AIA 1001.
4. PROVIDE FULL GLULAM PACKAGE WITH POLYURETHANE RESIN ADHESIVE MEETING THE REQUIREMENTS OF ANS I 901.410.
5. PROVIDE 3/4" X 3/4" X 3/4" STAINLESS STEEL ANCHORS 10" ON CENTER.
6. SUBMIT PDF SHOP DRAWINGS SHOWING ALL APPLICABLE DETAILS AND MATERIAL SPECIFICATIONS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS SHALL BE ACCOMPANIED BY A CERTIFICATE OF CONFORMANCE TO MANUFACTURING STANDARDS.
7. AFFIX AUTHORIZED LABEL TO ALL MEMBERS SUPPLIED. ALSO IDENTIFY EACH MEMBER WITH MARK NUMBER.
8. STORE GLULAM OFF THE GROUND WITH SPACER BLOCKS PLACED BETWEEN MEMBERS. KEEP WRAPPING ON THE MEMBERS UNTIL PERMANENT PROTECTION WEATHER IS IN PLACE BUT CUT HOLES ON UNDERSIDE OF WRAPPING TO PREVENT THE ACCUMULATION OF CONDENSATION.
9. ALL PRESSURE TREATED GLULAM TO BE TREATED ACCORDING TO AWPAS STANDARDS 1 (1) AND ALL STANDARDS REFERENCED THEREIN. ALL TREATMENT TO BE COMPLETED BEFORE THE TREATMENT. FIELD APPLY PRESERVATIVE TO EQUIVALENT STANDARD, TO ALL AREAS CUT OR DRILLED.
10. ALL STRUCTURAL STEEL CONNECTING GLULAM ELEMENTS TO EACH OTHER AND TO SUPPORTING MEMBERS SHALL BE DETAILLED, SUBMITTED AND APPROVED BY THE ENGINEER.
11. IN TRANSITION AREA BETWEEN WOOD ELEMENTS AND CONCRETE OR MASONRY, WOOD ELEMENTS TO BE PROTECTED FROM EXPOSURE MOISTURE. PROVIDE LIGHT-GAUGE METAL, ASPHALT IMPREGNATED BUILDING PAPER, CLOSED-CELL FOAM GASKET MATERIAL, TYPE 304, 16 GA. ROOFING OR 0.6 MG. MINIMUM MOISTURE BARRIER.
12. FINISH OF CONCEALED MEMBERS: SEE ARCHITECTURAL FOR DETAILS.
13. FINISH OF EXPOSED MEMBERS (INTERIOR OR EXTERIOR): SEE ARCHITECTURAL FOR DETAILS.
14. PROVIDE ALL NECESSARY BOLTS OR OTHER MEANS OF CONNECTION.
15. SHOP DRAWINGS OF CONNECTIONS AND COMPONENTS DESIGNED BY THE CONTRACTOR SHALL BE SIGNED AND SEALED BY THE SPECIALTY ENGINEER AND SUBMITTED WITH A STATEMENT OF PRODUCT COMPLIANCE WITH DRAWING SPECIFICATIONS AND STANDARDS.

1. FASTENERS FOR MATERIALS SHOWN ON STRUCTURAL DRAWINGS SHALL BE IN ACCORDANCE WITH THE MATERIAL SPECIFICATION AND THE FASTENER MANUFACTURER'S WRITTEN INSTRUCTIONS.
2. INSTALLATION OF ALL THE FASTENERS SHALL BE IN ACCORDANCE WITH THE FASTENER MANUFACTURER'S WRITTEN INSTRUCTIONS.
3. PROVIDE CORROSION RESISTANCE ON ALL FASTENERS BASED ON APPLICATION AND MATERIAL BEING FASTENED. FOR APPLICATIONS INVOLVING RESISTANCE TO LUMBER, OR FOR FASTENERS BEING INSTALLED IN WET AREAS, PROVIDE STAINLESS STEEL OR GALVANIZED FASTENERS. ALL FASTENERS INSTALLED INTO SLAB ON GRADE APPLICATIONS SHALL BE HOT-DIP GALVANIZED OR ZINC PLATED.
4. DO NOT INSTALL PAF OR POST-INSTALLED DRILLED-IN FASTENERS INTO POST-TENSIONED CONCRETE SLABS WITHOUT PRIOR APPROVAL OF STRUCTURAL ENGINEER. DO NOT CUT CONCRETE REINFORCING TO INSTALL POST-INSTALLED DRILLED-IN FASTENERS.
5. ALL POWDER ACTUATED FASTENERS SHALL BE AS MANUFACTURED BY HILTI OR APPROVED EQUAL.
6. ALL PAF SHALL BE INSTALLED IN ACCORDANCE WITH THE FASTENER MANUFACTURER'S WRITTEN INSTRUCTIONS. THE APPROPRIATE PAF FASTENER SHALL BE SELECTED BASED ON THE APPLICATION AND BASE MATERIAL.
7. ALL SCREWS FOR COLD-FORMED STEEL APPLICATIONS SHALL BE AS MANUFACTURED BY ITW BUILDUP.
8. ALL PAF SHALL BE INSTALLED IN ACCORDANCE WITH THE FASTENER MANUFACTURER'S WRITTEN INSTRUCTIONS. THE WORK SURFACE DO NOT OVERLIDE SELF-TAPPING SCREWS. TORSIONAL FATIGUE OF FASTENER OR STRIP OUT OF SUBSTRATE MAY RESULT.
9. INSTALL ALL SELF-DRILLING SCREWS TO PENETRATE BEYOND THE METAL STRUCTURE A MINIMUM OF 3 PITCHES OF THREAD.
10. ALL BOLTS USED FOR JOINTS ON WOODEN JOISTS OR WOOD TRUSSES SHALL BE STEEL SHAPES SHALL BE ASTM A307. PROVIDE HOT-DIP GALVANIZED BOLTS FOR APPLICATIONS INVOLVING WOOD PRESURE TREATING.
11. PROVIDE STEEL WASHERS ON ALL BOLTS ANCHORS INCLUDING WOOD FRAME TO STEEL SHAPES.
12. ALL POST-INSTALLED EXPANSION AND SCREW ANCHORS INTO CONCRETE SHALL BE AS MANUFACTURED BY HILTI OR APPROVED EQUAL.
13. EMBEDMENT DEPTH FOR ALL POST-INSTALLED ANCHORAGE TO CONCRETE SHALL BE AS SHOWN ON THE STRUCTURAL SECTIONS AND DETAILS. IF EMBEDMENT DEPTH IS NOT INDICATED, PROVIDE MANUFACTURER'S STANDARD EMBEDMENT.
14. SEE POST-INSTALLED ADHESIVE ANCHOR NOTES FOR CHEMICAL/EPXY ADHESIVE ANCHORS INSTALLED IN CONCRETE OR HOLLOW CMU.

1	Temporary Shoring of Excavations & Building Structure During Construction. Other Contractor Means & Methods Components (e.g. Scaffolding, Fall Protection, etc.)
2	Wood Pole Barn Building

1. THE ITEMS LISTED IN THIS SCHEDULE HAVE NOT BEEN DESIGNED BY THE STRUCTURAL ENGINEER OF RECORD FOR THIS PROJECT. A SPECIALTY ENGINEER SHALL BE RETAINED BY THE CONTRACTOR TO PERFORM THE REQUIRED DESIGNS.
2. THE SPECIALTY ENGINEER SHALL BE A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT.
3. CALCULATIONS AND/OR SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL TO THE STRUCTURAL ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

Section 3 - Concrete		Yes	Yes
1	Concrete Mix Design	X	
2	Concrete Reinforcing Shop Drawings	X	
Section 4 - Masonry			
1	Masonry Reinforcing Shop Drawings	X	
2	Masonry Materials; Grout, Mortar, CMU Block & Bond Beams	X	

VERIFICATION AND INSPECTION		INSPECTION REQUIRED	
		CONTINUOUS	PERIODIC
1705.3 - CONCRETE CONSTRUCTION			
1.	Inspection of reinforcement and verification of placement		X
2.	Inspection of reinforcing bar welding (in accordance with AWS D1.4):		
a.	Verification of weldability of reinforcing bars other than ASTM A706		X
b.	Inspection of single-pass fillet welds, maximum 5/16"		X
c.	Inspection of all other welds	X	
3.	Inspection of anchors cast in concrete		X
4.	Inspection of anchors post-installed in hardened concrete members:		
a.	Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads	X	
b.	Mechanical anchors and adhesive anchors not defined in 4.a		X
5.	Verification of required design mix		X
6.	Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete	X	
7.	Inspection of concrete and shotcrete placement for proper application techniques	X	
8.	Verification of maintenance of specified curing temperature and techniques		X
9.	Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs		X
10.	Inspection of formwork for shape, location, and dimensions of the concrete member being formed		X

VERIFICATION AND INSPECTION		INSPECTION REQUIRED	
		CONTINUOUS	PERIODIC
1705.4 - MASONRY CONSTRUCTION			
	Special inspection for masonry construction shall be in accordance with TMS 402/ACI 530/ASCE 5 and TMS 602/ACI 530.1/ASCE 6 quality assurance program requirements. At a minimum, the following inspections are required:		
1.	Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified.		X
2.	Verification of f_m and $f_{m,c}$ prior to construction.		X
3.	Verification of slump flow and VSI as delivered to the site for self-consolidating grout.	X	
4.	As masonry construction begins the following shall be verified:		
a.	Proportions of site prepared mortar		X
b.	Grade, type and size of reinforcement, connectors, and anchor bolts		X
c.	Properties of thin-bed mortar for AAC masonry for the first 5,000 square feet	X	
d.	Properties of thin-bed mortar for AAC masonry after the first 5,000 square feet		X
e.	Sample panel construction		X
5.	Prior to grouting, the following shall be verified to ensure compliance:		
a.	Grout space		X
b.	Placement of reinforcement, connectors, and anchor bolts		X
6.	During construction the inspection program shall verify:		
a.	Materials and procedures with the approved submittals		X
b.	Placement of masonry units and mortar joint construction		X
c.	Size and location of structural members		X
d.	Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames, or other construction.		X
e.	Welding of reinforcement	X	
f.	Preparation, construction, and protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F)		X
g.	Placement of grout is in compliance	X	
h.	Placement of AAC masonry units and construction of thin-bed mortar joints for the first 5,000 square feet	X	
i.	Placement of AAC masonry units and construction of thin-bed mortar joints after the first 5,000 square feet		X
7.	Observe preparation of grout specimens, mortar specimens, and/or prisms		X

VERIFICATION AND INSPECTION		INSPECTION REQUIRED	
		CONTINUOUS	PERIODIC
1705.5 - WOOD CONSTRUCTION			
	Special inspection for wood construction shall be in accordance with IBC Section 1705.5. At a minimum, the following inspections are required:		
1.	Verify, size, species and grade of lumber/sheathing complies with construction documents.		X
2.	Verify nailing of diaphragm floor and roof sheathing and shear walls complies with construction documents.	X	
3.	Verify wood shear wall hold-downs conform to construction documents.		X
4.	Verify attachment of shear wall sill plates at foundations and floors.	X	

VERIFICATION AND INSPECTION		INSPECTION REQUIRED	
		CONTINUOUS	PERIODIC
1705.6 - SOILS			
1.	Verification of materials below shallow foundations are adequate to achieve the design bearing capacity		X
2.	Verification that excavations are extended to proper depth and have reached proper material		X
3.	Perform classification and testing of compacted fill materials.		X
4.	Verification of use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill	X	
5.	Prior to placement of compacted fill, inspection of subgrade and verify that site has been prepared properly		X

BAR SIZE	BAR POSITION		STANDARD HOOK EMBEDMENT (SEE NOTE 7)
	CENTER	OFFSET	
#3	12"	15"	6"
#4	20"	26"	8"
#5	23"	40"	10"
#6	43"	54"	12"
#7	60"	63"	14"
#8	72"	82"	16"

- TABLE BASED ON $f'_c = 1500$ PSI (MINIMUM) AND GRADE 60 REINFORCING.
THIS TABLE DOES NOT APPLY TO REINFORCING WITH EPOXY COATINGS.
LAP AND SPICE LENGTHS SHOWN APPLY TO BARS IN TENSION AND COMPRESSION.
BARS IN OFFSET CORNER SHALL HAVE A MINIMUM OF 1" CLEAR COVER FROM OUTSIDE FACE OF CUR TO FACE OF BAR.
MINIMUM LENGTH OF STANDARD HOOK = 1 BAR DIAMETER.
AT CORNERS, CONCRETE PROVIDE MECHANICAL SPICES OF REINFORCING BARS MECHANICAL SPICE SHALL DEVELOP AT LEAST 15% OF THE SPECIFIED BAR YIELD STRENGTH.
STANDARD HOOK EMBEDMENT IS FOR HOOK EMBEDDED INTO ADJOINING MASONRY CONSTRUCTION. FOR HOOKED LENGTHS REQUIRED INTO CONCRETE SEE TABLE 3.

LOCATION	DENSITY NW = 145 pcf LW = 115 pcf	FREEZE/THAW SEVERITY	SULFATE SEVERITY	PERMEABILITY	CORROSION PROTECTION OF REINF	f'c (psi)	AIR CONTENT	w/c RATIO (max)
FOOTINGS	NW	F0	S0	P0	C1	4,000	----	0.50
EXTERIOR WALLS / PIERS	NW	F1	S0	P0	C1	4,500	6 %	0.45
EXTERIOR SLABS	NW	F3	S0	P0	C2	5,000	6 %	0.40

1. CONCRETE MIX SHALL BE DESIGNED BY THE CONCRETE SUPPLIER USING THE INFORMATION CONTAINED IN THIS SCHEDULE AND SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. FOR ADDITIONAL INFORMATION NOT PROVIDED OR NOTED IN THIS SCHEDULE

2. TOTAL AREA LISTED IN THIS SCHEDULE IS BASED ON A MAXIMUM AGGREGATE SIZE OF 3/4" AND SHALL BE ADJUSTED BY THE CONCRETE MIX DESIGNER AS REQUIRED FOR DIFFERENT AGGREGATE SIZES PER ACI-318.

3. REFER TO THE LEAD SHEET FOR THIS SCHEDULE FOR ALL MATERIAL REQUIREMENTS.

4. FLY ASH OR OTHER POZZOLANS SHALL NOT BE UTILIZED IN ANY CONCRETE MIX UNLESS APPROVED BY THE ENGINEER. THE QUANTITY OF POZZOLANS USED IN CONCRETE SUBJECT TO EXPOSURE CLASS F33 SHALL NOT EXCEED THE LIMITS SET FORTH IN ACI-318.

5. THE MINIMUM AMOUNT OF CEMENT TO BE USED IN THE CONCRETE MIX DESIGN IS AS FOLLOWS:

4,000 PSI CONCRETE: 600 LBS OF CEMENT PER CUBIC YARD
5,000 PSI CONCRETE: 650 LBS OF CEMENT PER CUBIC YARD
5,000 PSI CONCRETE: 700 LBS OF CEMENT PER CUBIC YARD

7. FOR ALL SLABS AND PENETRATION ADMIX. BS, DOSAGE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

8. COAT ALL CONCRETE SLABS WITH PENETRATOR CRISTALLINE WATERPROOFING COATING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

CLASS B SPLICE LENGTHS (INCHES)

BAR	3,000 PSI TENSILE				4,000 PSI TENSILE				5,000 PSI TENSILE				6,000 PSI TENSILE			
	TENSION	TEMP	YF	COMP	TENSION	TEMP	YF	COMP	TENSION	TEMP	YF	COMP	TENSION	TEMP	YF	COMP
#3	21	27	12	15	24	24	12	17	22	12	17	20	27	10	12	
#4	29	38	15	18	25	32	15	22	29	15	20	26	15			
#5	37	47	19	31	40	19	28	36	19	25	33		19			
#6	43	56	23	38	48	23	34	43	23	31	39	23				
#7	62	82	27	54	70	27	49	63	27	45	58	27				
#8	72	92	30	62	80	30	56	72	30	51	66	30				
#9	81	104	34	70	91	34	63	81	34	57	74	34				
#10	90	116	39	79	102	39	71	92	39	64	84	39				

CLASS A SPLICE LENGTHS (INCHES)

BAR	3,000 PSI TENSILE			4,000 PSI TENSILE			5,000 PSI TENSILE			6,000 PSI TENSILE		
	TENSION	COMP	TOP	TENSION	COMP	TOP	TENSION	COMP	TOP	TENSION	COMP	TOP
#3	22	21	19	14	18	8	13	17	8	12	16	8
#4	16	29	11	19	25	9	17	22	9	15	20	9
#5	28	36	14	24	31	12	21	29	12	19	25	12
#6	33	43	17	29	37	14	26	33	14	24	30	14
#7	48	63	19	42	54	17	38	49	16	34	45	16
#8	55	71	22	48	62	19	43	56	18	39	51	18
#9	62	80	25	54	70	21	48	63	20	44	57	20
#10	69	89	28	61	79	24	54	71	23	50	64	23

HOOKED-BAR TENSION DEVELOPMENT LENGTHS	2.	material
---	----	----------

LENGTHS (INCHES)					3.	4.
BAR SIZE	3,000 PSI CONCRETE	4,000 PSI CONCRETE	5,000 PSI CONCRETE	6,000 PSI CONCRETE	5.	6.
#3	9	8	7	6		Verification of use and composition of concrete
#4	11	10	9	8		
#5	14	12	11	10		
#6	17	15	13	12		
#7	19	17	15	14		
#8	22	19	17	16		
#9	25	22	20	18		
#10	28	25	23	20		

NOTES (TABLES 1, 2, AND 3):

1. DEVELOPMENT AND LAP SPLICE LENGTHS SHOWN ARE FOR UNCOATED ASTM A615 GRADE 60 (Fy = 60,000 PSI) DEFORMED BARS REINFORCING.
2. DEVELOPMENT LENGTHS ARE BASED ON NORMAL WEIGHT CONCRETE. FOR LIGHT WEIGHT CONCRETE, MULTIPLY THE LENGTHS SHOWN BY 1.333.
3. MINIMUM BARS CLEAR COVER SHALL BE 1 BAR DIAMETER. MINIMUM BARS CLEAR SPACING IS 1 BAR DIAMETER IN BEAMS AND COLUMNS AND 2 BAR DIAMETER IN OTHER CONCRETE ELEMENTS. MULTIPLY THE DEVELOPMENT LENGTH SHOWN BY 1.5 FOR REINFORCING WITH COVER AND SPACING LESS THAN DESCRIBED ABOVE.
4. USE THE 1 BAR SPIRICE LENGTH IN THE TOP COLUMN FOR HORIZONTAL BARS WITH MORE THAN 20% OF CONCRETE BELOW THE BAR.

IN COUNTY

Drew C. Dingler, AIA, President	N.Y. 8 1-212-697-1100 F. 1-212-697-1100 TOLL FREE 1-800-552-5000
Linda M. Viventi, AIA, Secretary/Treasurer	N.Y. 8 1-212-697-1100 F. 1-212-697-1100 TOLL FREE 1-800-552-5000

SHAMONG TOWNS

THE DESIGN

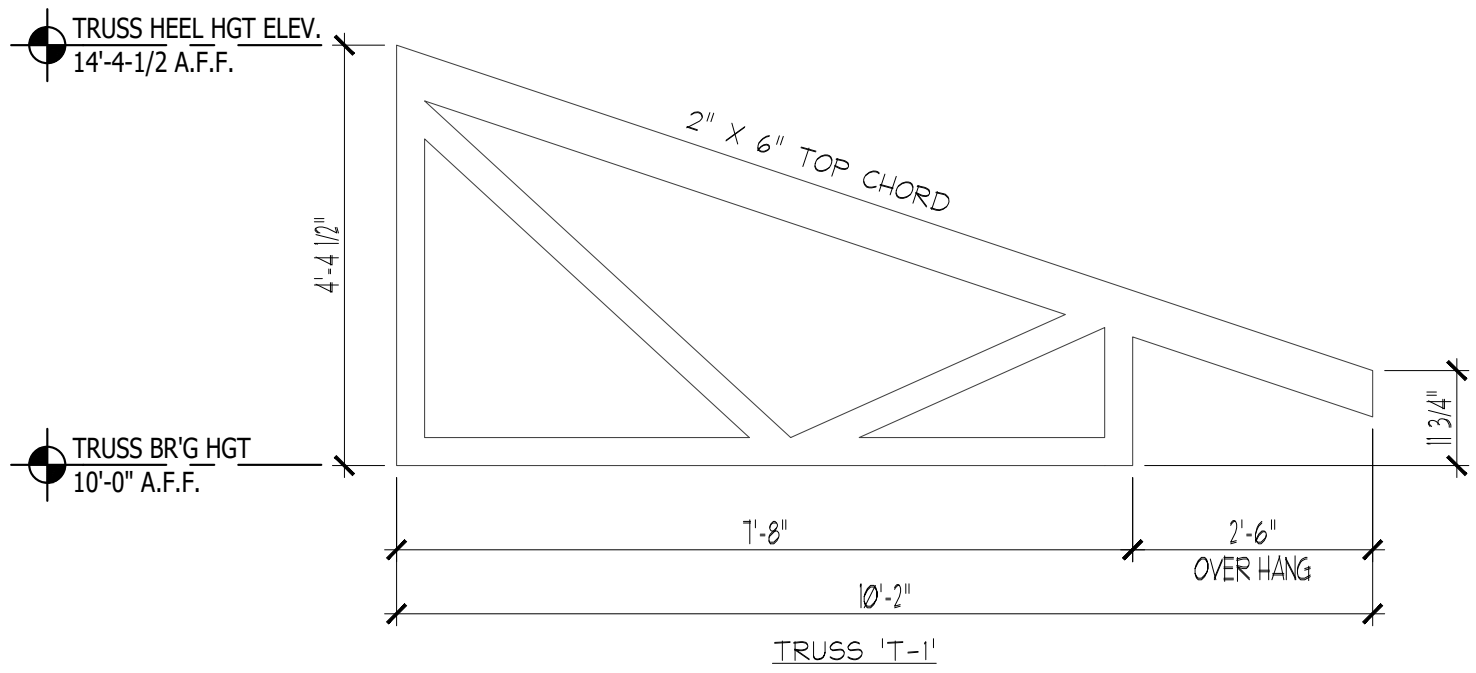
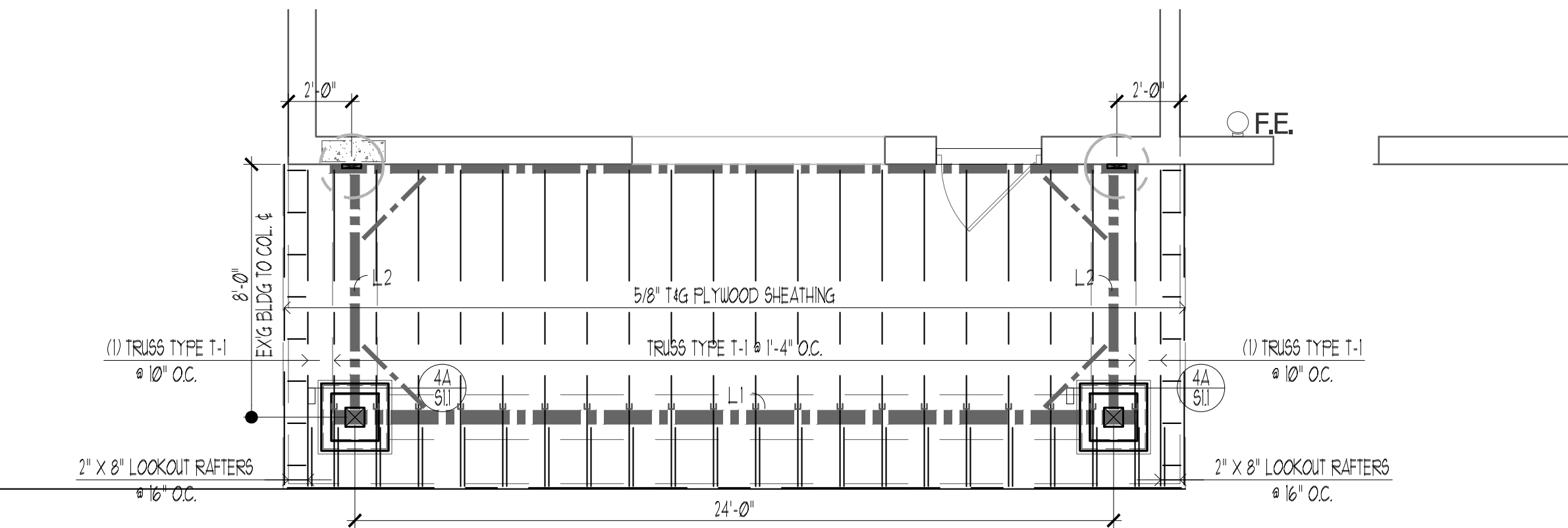
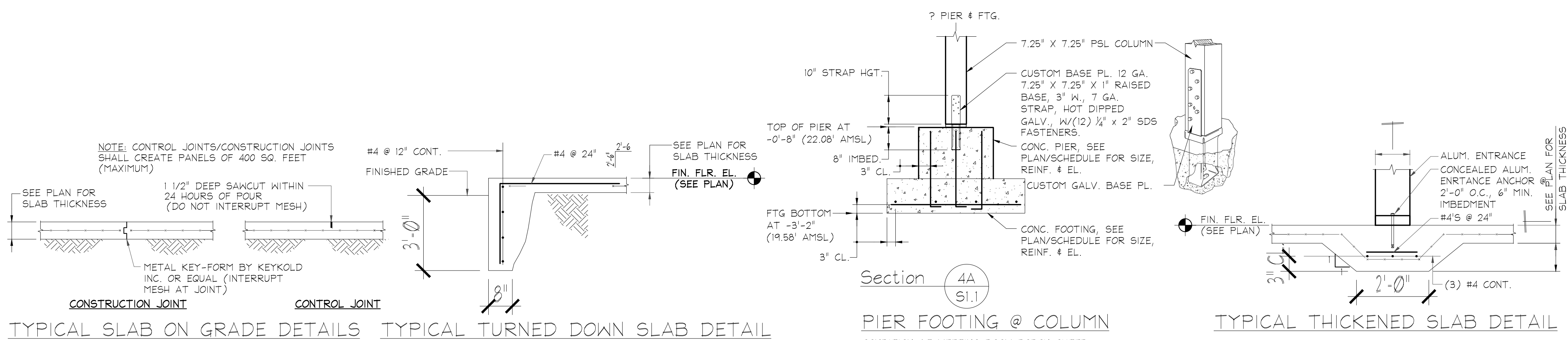
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COMM. No.	8302	CHECKED BY: DCD
DATE:	01/02/2025	

STRUCTURAL NOTES & SCHEDULES

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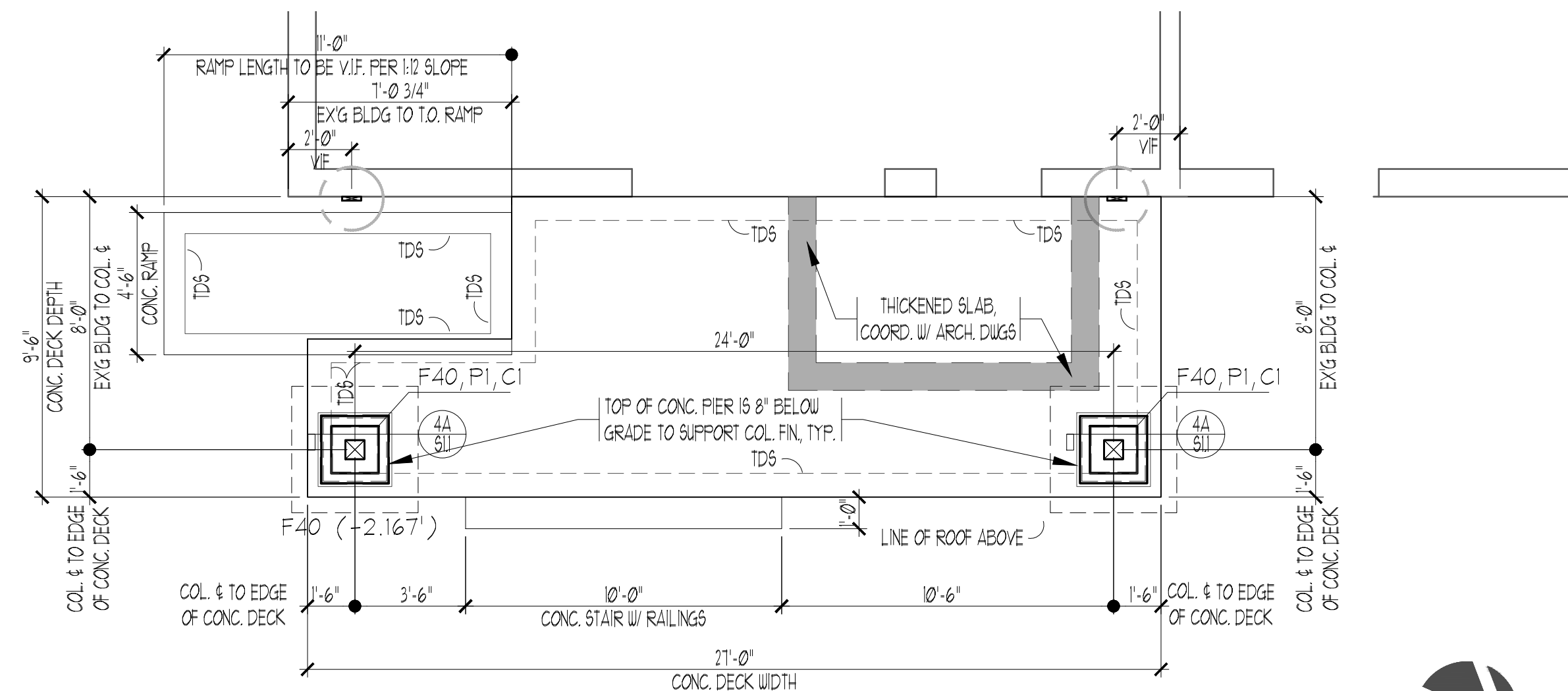
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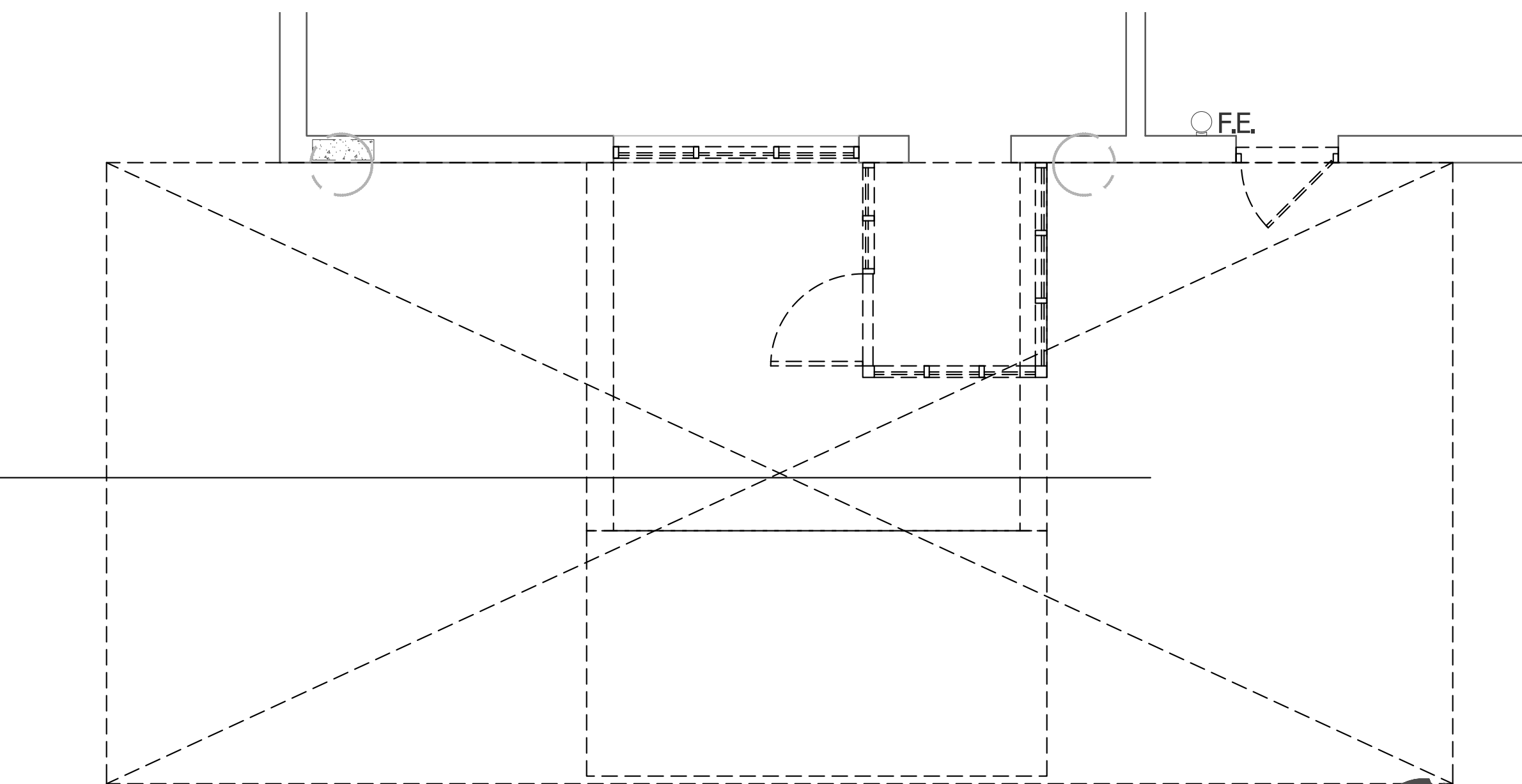


3 S1.1 STRUCTURAL ROOF FRAMING PLAN LRHSD MEETING ROOM ENTRANCE

- NOTES:
- SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ROOF LINES, ROOF SLOPES, AND EXTENT OF WOOD FRAMING.
 - "TDS" REFERS TO TURNED DOWN SLAB, REFER TO STRUCTURAL DETAILS



2 S1.1 STRUCTURAL PORTICO FOUNDATION / SLAB PLAN LRHSD MEETING ROOM ENTRANCE



1 S1.1 STRUCTURAL DEMOLITION PLAN LRHSD MEETING ROOM ENTRANCE

SNOW DESIGN LOAD SCHEDULE INTERNATIONAL BUILDING CODE (2021)			
ITEM	SYMBOL	VALUE	REFERENCE
GROUND SNOW LOAD	P _g	20	FIGURE 1609.2
SNOW EXPOSURE FACTOR	C _e	1.0	TABLE 7-2
SNOW LOAD IMPORTANCE FACTOR	I _s	1.0	TABLE 15-2
THERMAL FACTOR	C _t	1.0	TABLE 7-3
FLAT-ROOF SNOW LOAD	P _f	20	SECTION 7.3

LATERAL LOAD DESIGN SCHEDULE INTERNATIONAL BUILDING CODE (2021)			
WIND LOAD			
ITEM	SYMBOL	VALUE	REFERENCE
BASIC WIND SPEED (3 SEC. GUST)	V	131	FIGURE 1609
WIND LOAD IMPORTANCE FACTOR	-	1.00	TABLE 1604.5
WIND EXPOSURE CATEGORY	-	B	SECTION 1609.4.3

SEISMIC LOAD			
ITEM	SYMBOL	VALUE	REFERENCE
IMPORTANCE FACTOR	I _e	1.25	TABLE 1604.5
SHORT PERIOD SPECTRAL ACCELERATION	S _{ps}	0.288	SECTION 1603.4
(1) SECOND PERIOD SPECTRAL ACCELERATION	S _{pi}	0.114	SECTION 1603.4
OCCUPANCY CATEGORY	-	III	SECTION 1604.5
SEISMIC DESIGN CATEGORY	-	B	TABLE 1603
SITE CLASSIFICATION	-	D	TABLE 20.3-1
BASIC SEISMIC-RESISTING SYSTEM	-	LIGHT FRAMED WALLS SHEATHED WITH WOOD STRUCTURAL PANELS	TABLE 12.2-1
RESPONSE MODIFICATION FACTOR	R	6.5	TABLE 12.2-1
DEFLECTION AMPLIFICATION FACTOR	C _d	4	TABLE 12.2-1
ANALYSIS PROCEDURE	-	EQUIVALENT LATERAL FORCE PROCEDURE	SECTION 12.7

DESIGN LOAD SCHEDULE (ALL LOADS SHOWN ARE IN POUNDS PER SQ. FT.)				
COMPONENT	AREA	SLAB ON GRADE	ROOF	AWNING
CONCRETE SLAB	100			
FRAMING		5	5	
CEILING		2		
COLLATERAL		3	3	
ROOFING & INSULATION		10	2	
TOTAL DEAD LOAD	50	25	10	
TOTAL LIVE LOAD	100	30	30	
TOTAL LOAD	150	50	40	

LINTEL SCHEDULE (BEARING AND NON-BEARING WALLS)		
MARK	WOOD	
L-1	5-1/4" x 16" PSL BEAMS	
L-2	3-1/2" x 16" PSL BEAMS	

FOOTING SCHEDULE		
MARK	SIZE	REINFORCING
F40	4'-0" x 4'-0" x 12"	(4) #5 EWB

PIER SCHEDULE		
MARK	SIZE	REINFORCING
PI	24" x 24" CONC.	(8) #6 VERT w/ #3 TIES @ 12"

COLUMN SCHEDULE			
MARK	SIZE	BASE PLATE	ANCHOR ROD
C1	7.25X7.25 PSL	3/4" X 1'-2" X 1'-2"	(4) 3/4" DIA.

9/10/26	1	RELEASED FOR BID
DATE	No.	REVISION

LOT NO. 1

LRHSD PROJECT NO. REF21-42-8302
PROPOSED EXTERIOR BUILDING RESTORATION
LRHSD ADMINISTRATION BUILDING
93 WILLOW GROVE ROAD, SHAMONG, NEW JERSEY 08088

SHAMONG TOWNSHIP

BURLINGTON COUNTY

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Dore C. Dindler, Atty. President
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KEY PLAN:	

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CONVL. No:	8302	CHECKED BY: DCD
DATE:	01/02/2025	

SHEET TITLE:
STRUCTURAL PLANS & DETAILS

SHEET No.:
S1.1