

CODE SUMMARY:

1. THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2018 NORTH CAROLINA BUILDING CODE, IBC 2015, WITH AMENDMENTS. ASCE 7-16 HAS BEEN UTILIZED IN ITS ENTIRETY IN LIEU OF ASCE 7-10

DESIGN LOADS:

ROOF -	LIVE SNOW	P _f	GROUND	20	PSF
			FLAT ROOF LOAD	12	PSF
			EXPOSURE FACTOR	1.0	
			IMPORTANCE FACTOR	1.0	
			TEMPERATURE FACTOR	1.0	
DEAD	P _d	TOTAL	ROOF	2.5	PSF
			INSULATION	1.5	PSF
			METAL ROOF DECKING	2.0	PSF
			STEEL FRAMING	5.0	PSF
			CEILING	2.0	PSF
			M-E-P-S	7.0	PSF

S.O.M.D. -	LIVE	P _l	75	PSF
			DEAD	80
S.O.G. -	LIVE	P _l	65	PSF
			DEAD	100

WIND:

VELOCITY	V _{ref}	145	MPH
RISK CATEGORY	II	112.3	MPH
EXPOSURE CATEGORY	B		
INTERNAL PRESSURE COEFFICIENT	+/-0.18		

P DESIGN PRESSURE FOR MAIN WIND FORCE RESISTING SYSTEM

HORIZONTAL ZONE A	34.07	PSF
HORIZONTAL ZONE B	-17.65	PSF
HORIZONTAL ZONE C	22.59	PSF
HORIZONTAL ZONE D	-10.81	PSF
VERTICAL ZONE E	-40.90	PSF
VERTICAL ZONE F	-23.26	PSF
VERTICAL ZONE G	-28.46	PSF
VERTICAL ZONE H	-18.00	PSF
OVERHANG ZONE E ₁	-57.27	PSF
OVERHANG ZONE G ₁	-44.63	PSF

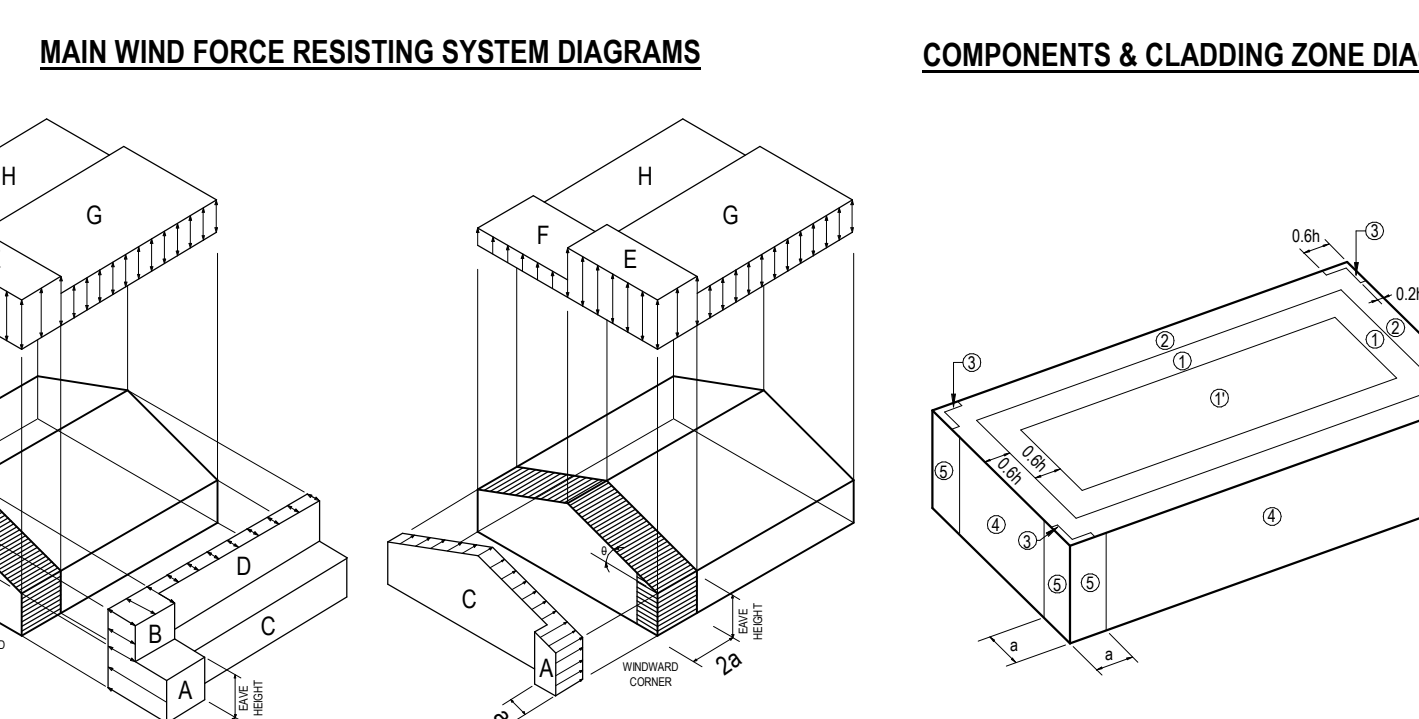
P DESIGN PRESSURE FOR COMPONENTS & CLADDING - NEGATIVE PRESSURE TABLE

ROOF ZONE	EFFECTIVE AREA	PRESSURE			
		108F	205F	505F	1095F
1	41.58	57.48	-52.12	-48.59	
2	-35.34	-35.34	-35.34	-35.34	
3	-81.19	-75.94	-69.05	-63.85	
4	-110.82	-102.22	-86.39	-75.94	
5	-41.87	-40.19	-37.89	-36.11	
6	-51.71	-48.20	-43.61	-40.19	
7	-55.64	-54.07	-53.35	-52.38	
8	-59.28	-58.24	-59.10	-52.17	
9	-104.75	-92.57	-76.45	-64.31	

P DESIGN PRESSURE FOR COMPONENTS & CLADDING - POSITIVE PRESSURE TABLE

ALL ROOF ZONES	EFFECTIVE AREA	PRESSURE			
		108F	205F	505F	1095F
ALL WALL ZONES	15.71	14.69	13.46	12.44	
ALL WALL ZONES	39.66	36.92	34.58	32.84	

PERIMETER WIDTH a = 9.0 FT
WIND BASE SHEAR V_w = 89.60 K
V_u = 234.19 K



SEISMIC:

SEISMIC RISK CATEGORY	II
IMPORTANCE FACTOR I _e	1.0
SITE CLASS	D
DESIGN CATEGORY	B
SEISMIC FORCE RESISTING SYSTEM	INTERMEDIATE PRECAST SHEARWALLS
X - DIRECTION	INTERMEDIATE PRECAST SHEARWALLS
Y - DIRECTION	INTERMEDIATE PRECAST SHEARWALLS
RESPONSE MODIFICATION FACTOR R	4.00
X - DIRECTION	4.00
Y - DIRECTION	4.00
C _s SEISMIC RESPONSE COEFFICIENT	0.00
X - DIRECTION	0.00
Y - DIRECTION	0.00
ANALYSIS PROCEDURE	EQUVALENT LATERAL FORCE
SEISMIC BASE SHEAR	V _w = K V _u = K

2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH SITE, ARCHITECTURAL, PLUMBING, MECHANICAL, ELECTRICAL DRAWINGS, AND APPLICABLE INFORMATION FURNISHED BY MATERIALS AND EQUIPMENT SUPPLIERS. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SEEING THAT TRADES IS COORDINATED WITH THE STRUCTURAL WORK.

3. CONFIRM ALL DIMENSIONS WITH ARCHITECTURAL AND SITE DRAWINGS PRIOR TO CONSTRUCTION

4. PROOF-ROLL SUBGRADE AND SUBBASE BELOW BUILDING SLABS WITH HEAVY PNEUMATIC-TIRED TRUCK TO IDENTIFY SOFT POCKETS AND AREAS OF EXCESS YIELDING. PROOF-ROLL WITH A LOADED, TANDEM-AXLE TRUCK WEIGHING AT LEAST 15 TONS. COMPLETELY PROOF-ROLL IN ONE DIRECTION AND REPEAT IN THE PERPENDICULAR DIRECTION. LIMIT VEHICLE SPEED TO 5mph. RECONSTITUTE ANY AREAS THAT PUMP OR RUT 1/2 INCH OR MORE. THEN REPERFORM THE PROOF-ROLL IN THOSE AREAS.

CONCRETE:

1. CONCRETE HAS BEEN DESIGNED IN ACCORDANCE WITH ACI 318-14. "BUILDING REQUIREMENTS FOR REINFORCED CONCRETE". CONCRETE WORK SHALL COMPLY WITH PROVISIONS OF THE CURRENT EDITIONS OF THE FOLLOWING CODES, SPECIFICATIONS, AND STANDARDS, EXCEPT WHERE MORE STRINGENT REQUIREMENTS ARE REQUIRED.
A. AMERICAN CONCRETE INSTITUTE
- ACI 117 "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS"
- ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
- ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES"
- ACI 347 "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK"
- ACI SP-15 "FIELD REFERENCE MANUAL"
B. CONCRETE REINFORCING STEEL INSTITUTE
- "CRSI MANUAL OF STANDARD PRACTICE FOR REINFORCING PLACEMENT"
C. AMERICAN WELDING SOCIETY
- AWS D1.4

2. REINFORCING STEEL SHALL BE GRADE 60, DEFORMED TYPE, CONFORMING TO ASTM A615. WELDED WIRE FABRIC SHALL BE COLD-DRAWN, RESISTANCE WELDED TYPE, CONFORMING TO ASTM A1064 REQUIREMENTS. MILL TEST REPORTS FOR REINFORCEMENT SHALL BE SUBMITTED FOR REVIEW. REINFORCEMENT SHALL BE CLEAN OF OIL, MUD, OIL, OR OTHER DELETERIOUS COATINGS THAT DECREASE BOND AT TIME OF CONCRETE PLACEMENT. REINFORCEMENT SHALL BE PLACED WITHIN REQUIRED TOLERANCES AND SUPPORTED TO PREVENT DISPLACEMENT BEFORE REQUIRED TOLERANCES DURING CONCRETE PLACEMENT.

3. CONCRETE SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

APPLICATION	WEIGHT	MIN. f'	NOM. MAX. AGG.	MAX. w/c _m	% AIR ENTRAINMENT	
FOUNDATIONS	NORMAL	3000	PSI	3/4"	N/A	N/A
SLAB ON GRADE	NORMAL	3500	PSI	1 1/2"	N/A	N/A
ELEVATED FLOORS	NORMAL	3500	PSI	3/4"	N/A	N/A
TILT-UP PANELS	NORMAL	4000	PSI	3/4"	0.55	N/A
EXTERIOR PAVING	NORMAL	N/A	PSI	N/A	N/A	N/A

4. PORTLAND CEMENT SHALL BE TYPE I OR III, CONFORMING TO ASTM C150 REQUIREMENTS TO MAINTAIN THE MINIMUM COVER INDICATED ON THE DETAILS. PROVIDE NORMAL WEIGHT AGGREGATES CONFORMING TO ASTM C33. FLY ASH SHALL CONFORM TO ASTM C618. MIXING WATER SHALL CONFORM TO ASTM C1012. ADMIXTURES FOR WATER REDUCTION OR SETTING TIME MODIFICATIONS SHALL CONFORM TO ASTM C494. AIR ENTRAINMENT ADMIXTURES SHALL CONFORM TO ASTM C260.

5. DOCUMENTATION OF CONCRETE MIXTURE CHARACTERISTICS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW BEFORE THE MIXTURE IS USED AND BEFORE MAKING CHANGES TO MIXTURES ALREADY IN USE.

CONCRETE (cont'd):

6. CEMENTITIOUS MATERIALS AND AGGREGATES SHALL BE STORED TO PREVENT DETERIORATION OR CONTAMINATION PRIOR TO BATCHING. MATERIAL THAT HAS DETERIORATED, OR HAS BEEN CONTAMINATED SHALL NOT BE USED IN CONCRETE. CONCRETE SHALL BE BATCHED, MIXED, AND DELIVERED IN ACCORDANCE WITH ASTM C94 OR ASTM C895.

7. DEBRIS AND ICE SHALL BE REMOVED FROM SPACES TO BE OCCUPIED BY CONCRETE BEFORE PLACEMENT.

8. CONCRETE SHALL NOT BE PUMPED THROUGH PIPE MADE OF ALUMINUM OR ALUMINUM ALLOYS. EQUIPMENT USED TO CONVEY CONCRETE FROM THE MIXER TO THE LOCATION OF THE FINAL PLACEMENT SHALL HAVE ADEQUATE CAPABILITIES TO ACHIEVE THE PLACEMENT REQUIREMENTS.

9. CONCRETE STRENGTH TEST SPECIMENS SHALL BE AT LEAST TWO 6 x 12 IN. CYLINDERS OR AT LEAST THREE 4 x 8 IN. CYLINDERS MADE FROM THE SAME SAMPLE OF CONCRETE. SAMPLING OF CONCRETE FOR STRENGTH TEST SPECIMENS SHALL BE IN ACCORDANCE WITH ASTM C172. CYLINDERS FOR STRENGTH TESTS SHALL BE MADE AND STANDARD-CURED IN ACCORDANCE WITH ASTM C31 AND TESTED IN ACCORDANCE WITH ASTM C39. THE TESTING AGENCY PERFORMING ACCEPTANCE TESTING SHALL COMPLY WITH ASTM C1017. ALL REPORTS OF ACCEPTANCE TESTS SHALL BE PROVIDED TO THE ENGINEER, CONTRACTOR, AND CONCRETE PRODUCER.

10. SAMPLES FOR PREPARING STRENGTH TEST SPECIMENS OF EACH CONCRETE MIXTURE PLACED EACH DAY SHALL BE TAKEN IN ACCORDANCE WITH THE FOLLOWING:

- AT LEAST ONCE A DAY
- AT LEAST ONCE FOR EACH 150 yd³ OF CONCRETE
- AT LEAST ONCE FOR EACH 5,000 SF OF SURFACE AREA FOR SLABS OR WALLS

11. IF THE TOTAL VOLUME OF CONCRETE IS SUCH THAT THE FREQUENCY OF TESTS OUTLINED ABOVE WOULD PROVIDE FEWER THAN FIVE STRENGTH TESTS FOR A GIVEN CONCRETE MIXTURE, STRENGTH TEST SPECIMENS SHALL BE MADE FROM AT LEAST 5 RANDOMLY SELECTED BATCHES OR FROM EACH BATCH IF FEWER THAN FIVE BATCHES ARE USED.

12. GROUT BASE PLATES WITH A NONSHRINKABLE, NON-METALLIC GROUT CONFORMING TO ASTM C1107. THE GROUT SPECIFIED COMPRESSIVE STRENGTH IS 5000 PSI AT 28 DAYS. DO NOT PRE-GROUT BASEPLATES.

13. POST-INSTALLED ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. POST-INSTALLED ADHESIVE ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPI).

14. FOUNDATION DESIGN IS BASED A SOIL BEARING PRESSURE OF _____ PSF AS PROVIDED IN THE GEOTECHNICAL REPORT PREPARED BY PROJECT NUMBER _____ DATED _____ SOIL BEARING PRESSURE IS TO BE VERIFIED BY THE GEOTECHNICAL ENGINEER, OR THEIR REPRESENTATIVE PRIOR TO CONSTRUCTION.

15. DO NOT PLACE CONDUIT OR PIPES IN ANY CONCRETE ELEMENTS INCLUDING SLABS, BEAMS, WALLS, OR COLUMNS UNLESS INDICATED IN THE STRUCTURAL DOCUMENTS OR APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.

16. TILT-UP PANELS AND TILT-UP PANEL EMBEDS SHALL BE DELEGATED DESIGNED BY THE TILT-UP CONTRACTOR FOR THE DESIGN LOADS SHOWN IN THESE DOCUMENTS. SHOP DETAILS BEARING THE SEAL OF AN ENGINEER LICENSED IN THE PROJECT STATE, SHOWING PANEL DIMENSIONS, REINFORCEMENT DETAILS, AND EMBED LOCATIONS & DETAILS ARE TO BE PROVIDED BY THE CONTRACTOR FOR REVIEW PRIOR TO CONSTRUCTION. TILT-UP PANELS ARE TO BE PREPARED TO SFP-2, AS DEFINED IN ACI 301, U.N.O.

17. DURING ERECTION, TILT-UP PANELS SHALL BE SUPPORTED AND BRACED TO ENSURE PROPER ALIGNMENT, STRENGTH, AND STABILITY UNTIL PERMANENT CONNECTIONS ARE COMPLETED. DESIGN AND DETAILS OF LIFTING DEVICES, EMBEDMENTS, AND RELATED REINFORCEMENT REQUIRED TO RESIST TEMPORARY ERECTION AND BRACING LOADS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW.

18. CONTRACTOR SHALL DESIGN, FABRICATE, INSTALL, AND REMOVE ALL FORMWORK, DESIGN OF FORMWORK SHALL CONSIDER METHOD OF CONCRETE PLACEMENT, RATE OF CONCRETE PLACEMENT, CONSTRUCTION LOADS, AND REASONABLE AVOIDANCE OF DAMAGE TO PREVIOUSLY CONSTRUCTED MEMBERS.

STEEL:

1. SPECIFICATIONS: STRUCTURAL STEEL IS DESIGNED, AND SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH:

- THE STEEL CONSTRUCTION MANUAL, 14TH EDITION, PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC.

2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

STRUCTURAL STEEL W-SHAPES	ASTM A992	F _y = 50ksi
MISC. BARS, PLATES, & THREADED RODS	ASTM A36	F _y = 36ksi
MISC. CHANNELS and ANGLES	ASTM A36	F _y = 36ksi
RECT. STRUCTURAL TUBING	ASTM A500 GRADE C	F _y = 50ksi
ROUND STRUCTURAL TUBING	ASTM A500 GRADE C	F _y = 50ksi
PIPES	ASTM A53 GRADE B	F _y = 35ksi

3. ALL WELDING SHALL CONFORM TO ANSIIAWS D1.1 STRUCTURAL WELDING CODE USING E70XX ELECTRODES. METAL DECK MAY BE PUDDLE WELDED TO STRUCTURE USING E6022 ELECTRODES. ALL WELDING SHALL BE DONE BY WELDERS QUALIFIED UNDER ANSIIAWS D1.1. PROVIDE EVIDENCE OF QUALIFICATION TO ARCHITECT PRIOR TO ERECTION.

4. ALL BOLTED CONNECTIONS SHALL BE MADE USING 3/4" DIA. BOLTS CONFORMING TO ASTM F3125 GRADE A325 IN BEARING TYPE CONNECTION (SNUG TIGHT) UNLESS SHOWN OR NOTED OTHERWISE ON THE DRAWINGS. A307 BOLTS MAY BE USED FOR ERECTION BOLTS. WASHERS SHALL CONFORM TO ASTM F436. NUTS SHALL CONFORM TO ASTM A563

5. ALL STEEL TO STEEL CONNECTIONS, INCLUDING COLUMN SPLICES, WHICH ARE NOT DETAILED IN THESE DRAWINGS SHALL BE DELEGATED DESIGN BY THE STEEL FABRICATOR. CALCULATIONS AND SHOP DETAILS SHOWING ALL CONNECTION GEOMETRY, DIMENSIONS, AND PERTINENT DETAILS ARE TO BE PROVIDED BY THE FABRICATOR TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. DELEGATED CONNECTION DESIGN SHALL REVIEW MEMBER LOCAL BUCKLING AND ACCOUNT FOR ANY ADDITIONAL REQUIRED MEMBER STIFFENERS.

6. METAL STAIRS, RAILINGS, AND LADDERS SHALL BE DELEGATED DESIGN BY THE STEEL FABRICATOR. CALCULATIONS AND SHOP DETAILS SHOWING MEMBER SIZES, CONNECTION GEOMETRY, DIMENSIONS, AND PERTINENT DETAILS ARE TO BE PROVIDED BY THE FABRICATOR TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.

7. ANCHOR RODS SHALL BE OF ASTM F1554 GR 36 MATERIAL w/ DOUBLE A 563a HEX NUTS & DOUBLE F844 WASHERS, U.N.O.

COLD-FORMED METAL STUDS:

1. COLD-FORMED METAL STUDS TO BE DESIGNED BY DELEGATED STUD WALL DESIGNER. SEE ARCHITECTURAL DRAWINGS FOR CLADDING, SHEATHING, WATERPROOFING AND INSULATION REQUIREMENTS. CALCULATIONS, SPECIFICATIONS, AND SHOP DRAWINGS/DETAILS SHOWING ALL METAL STUD LAYOUT, SPACING, CONNECTION DRAWINGS, REQUIRED BRACING, DIMENSIONS, AND ALL OTHER PERTINENT DETAILS ARE TO BE PROVIDED TO THE ARCHITECT FOR REVIEW/ APPROVAL PRIOR TO CONSTRUCTION AND SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT RESIDES.

STATEMENT OF SPECIAL INSPECTIONS:

STRUCTURAL STEEL:

ALL STRUCTURAL STEEL SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISC 300.

FABRICATED ITEMS:

FABRICATED ITEMS SHALL BE FABRICATED BY AN AISC APPROVED FABRICATOR. THE APPROVED FABRICATOR SHALL PROVIDE PROOF APPROVAL PRIOR TO FABRICATION. AT THE COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE OWNER, OR THE OWNER'S AUTHORIZED AGENT, FOR SUBMITTAL TO THE BUILDING OFFICIAL, AS SPECIFIED IN SECTION 1704.5, STATING THAT WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

COLD FORMED STEEL DECK:

ALL COLD FORMED STEEL DECK SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF SDI Q/A/C.

ADDITIONAL SPECIAL INSPECTIONS AS NOTED IN THE FOLLOWING TABLES:

VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC
1. INSTALLATION OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS.		
a. END CONNECTIONS - WELDING OR BOLTED		X
b. STANDARD BRIDGING - HORIZONTAL OR DIAGONAL		X

OPEN WEB STEEL JOISTS AND JOIST GIRDERS:

VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC
1. END CONNECTIONS - WELDING OR BOLTED		X
2. STANDARD BRIDGING - HORIZONTAL OR DIAGONAL		X

CONCRETE CONSTRUCTION:

VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT		X
2. INSPECT ANCHORS CAST IN CONCRETE		X
3. INSPECT CONCRETE ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS		X
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 3.a.		X
4. VERIFYING USE OF REQUIRED DESIGN MIX		X
5. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	X	
6. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	
7. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES		X
8. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS		X
9. INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED		X

SOILS:

VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE DESIGN BEARING CAPACITY		X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS		X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	X	
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		X

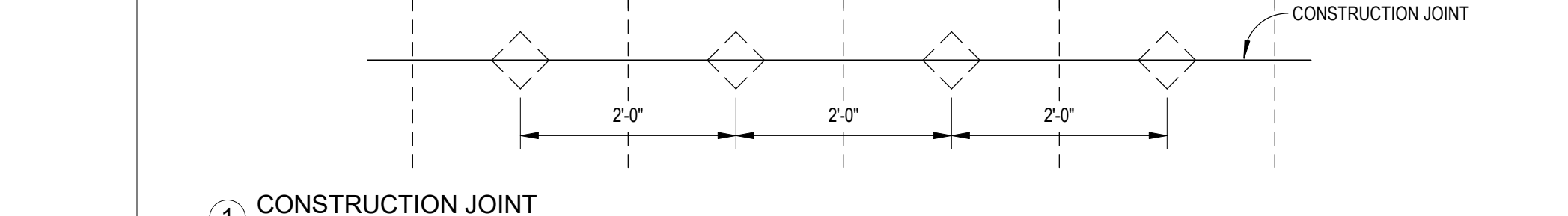
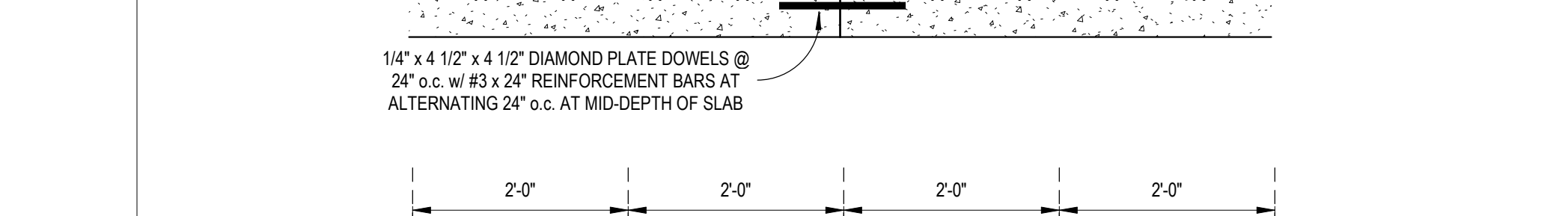
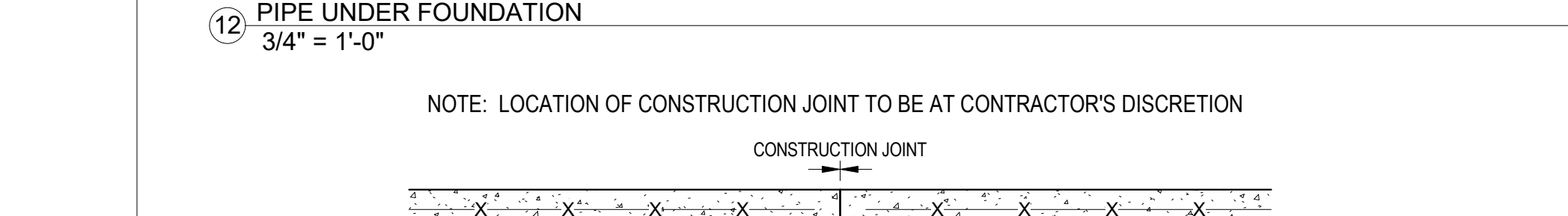
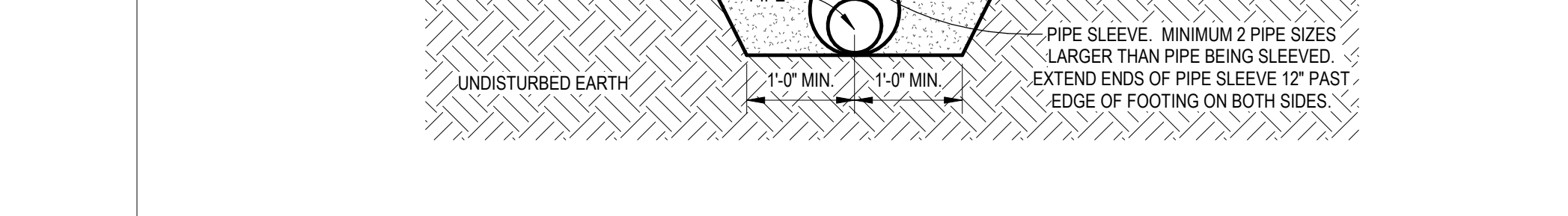
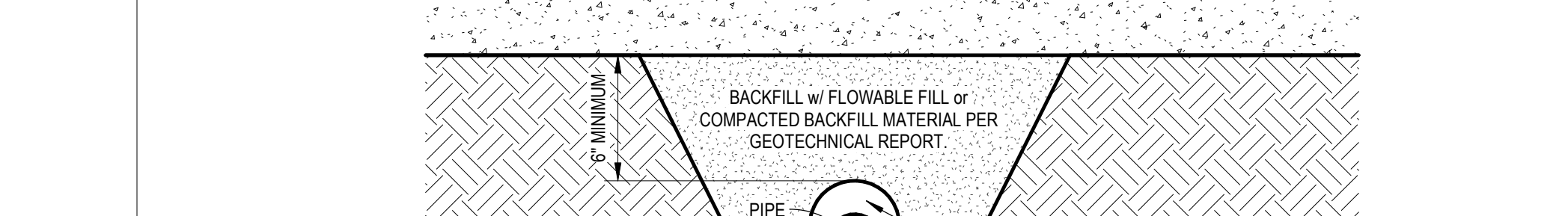
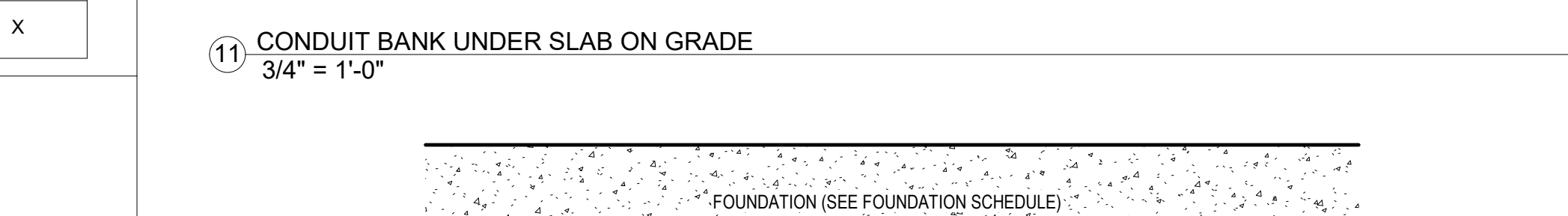
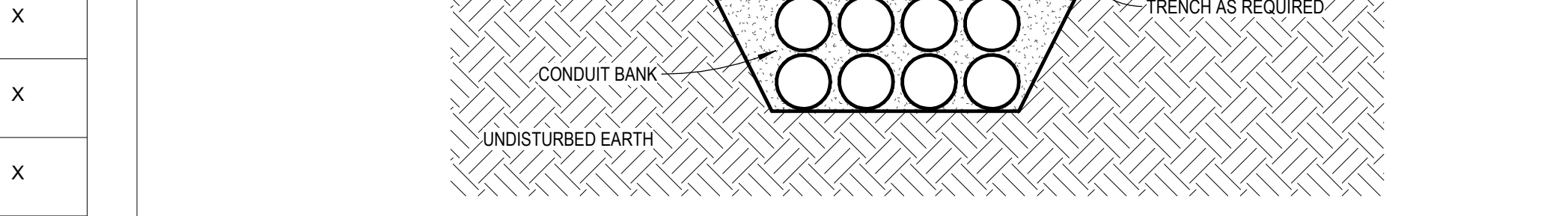
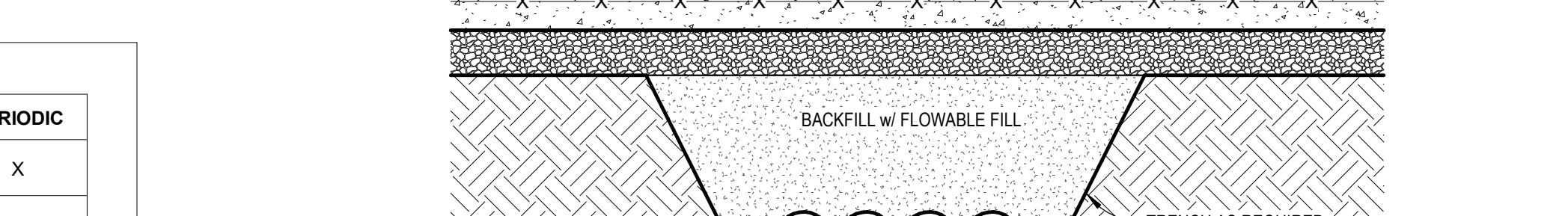
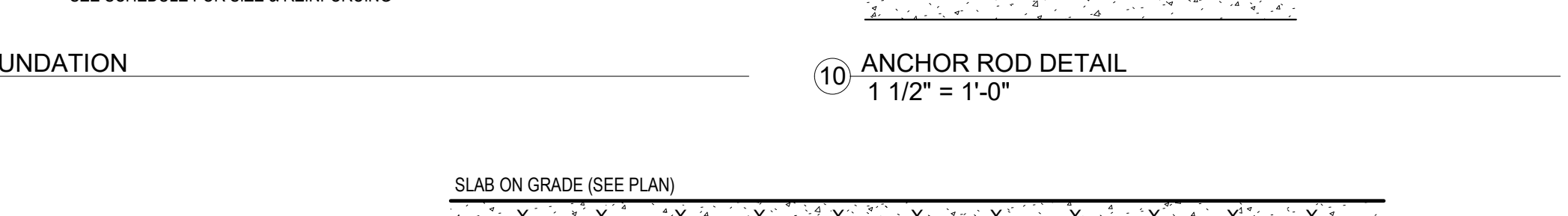
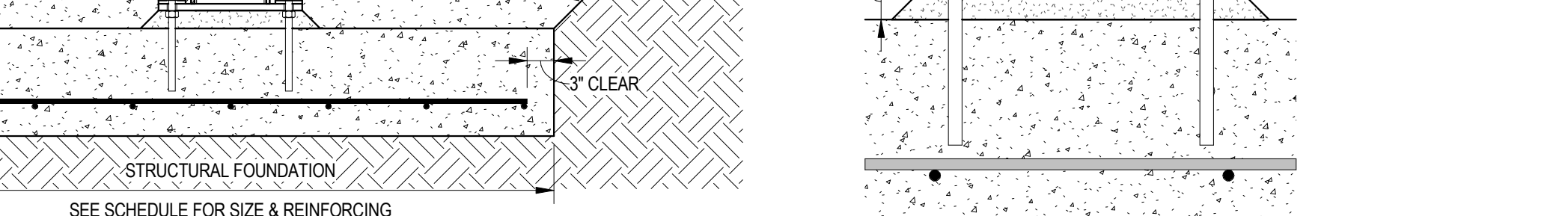
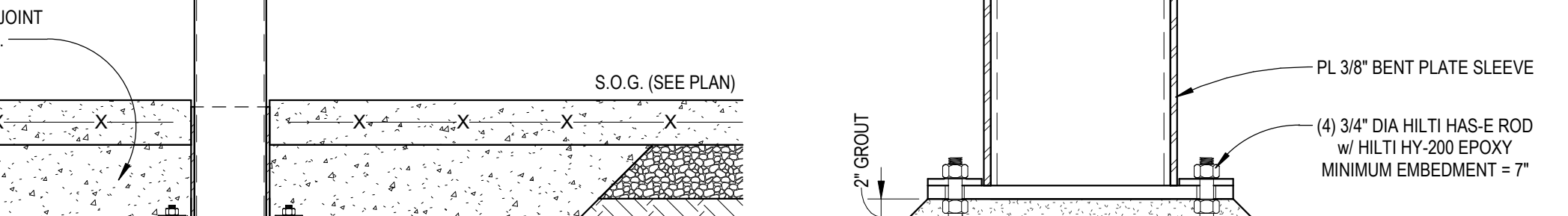
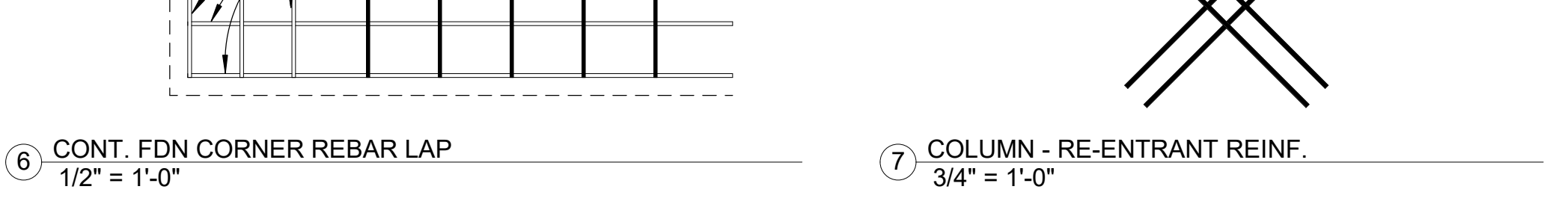
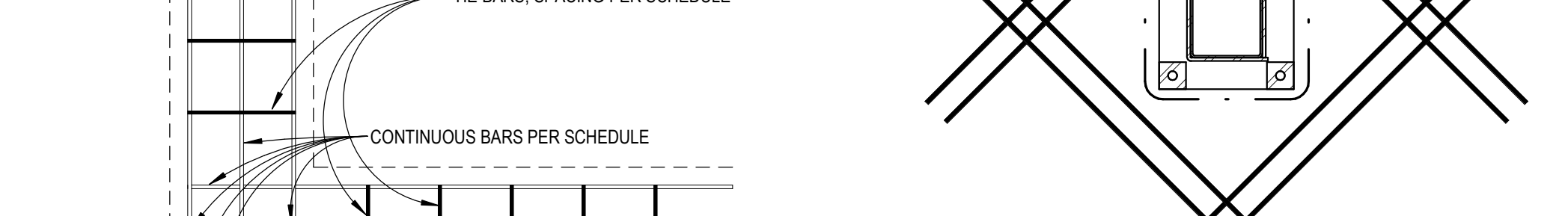
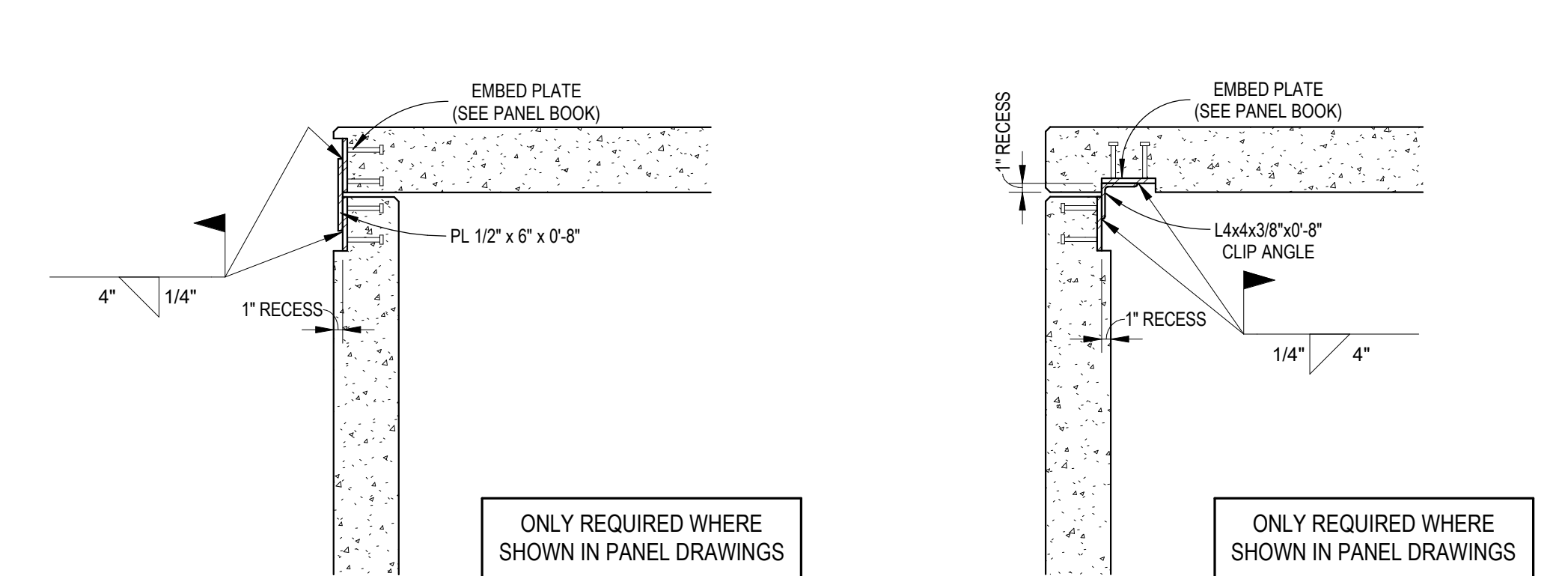
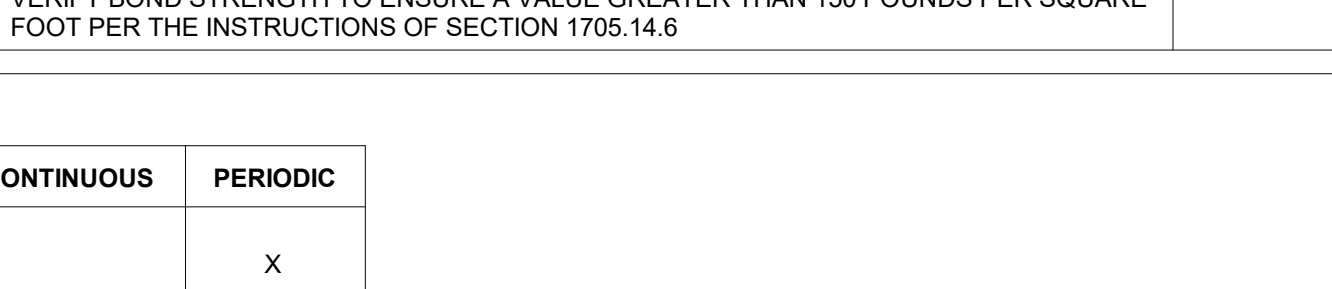
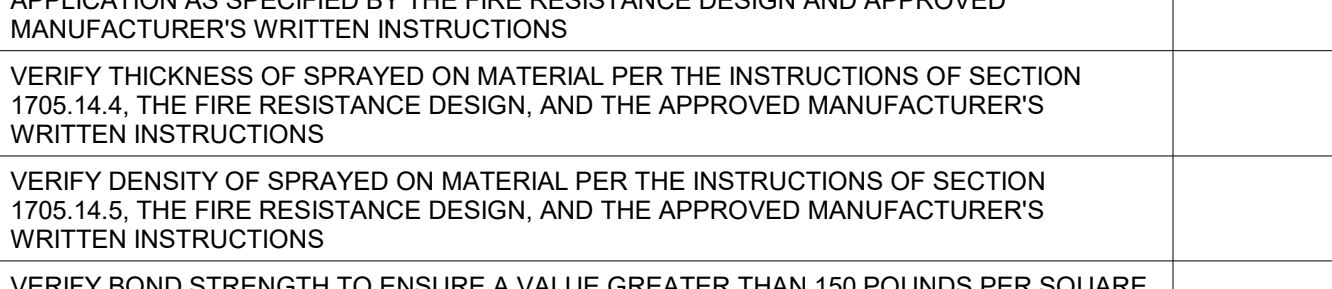
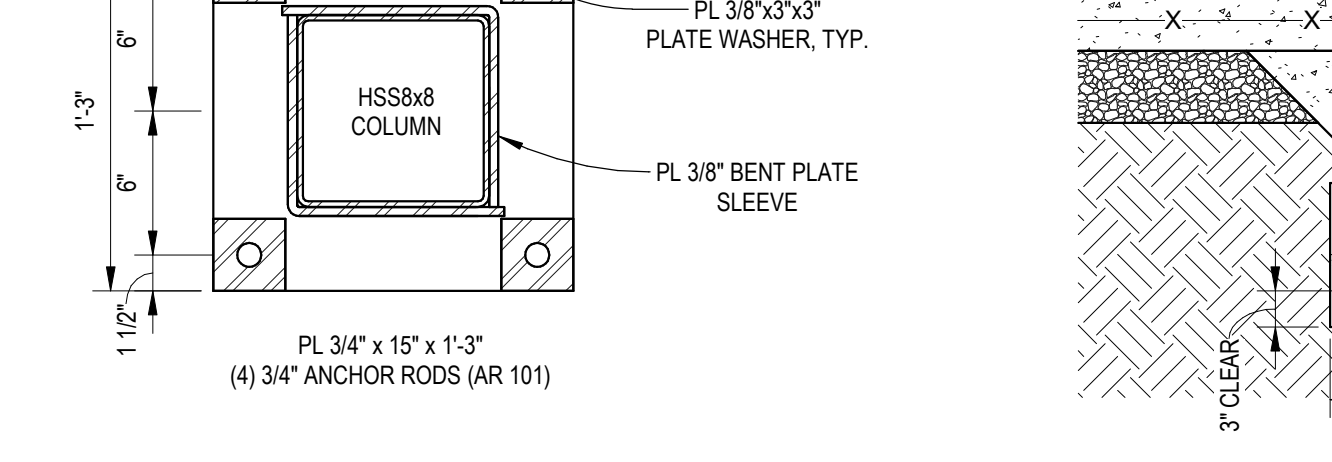
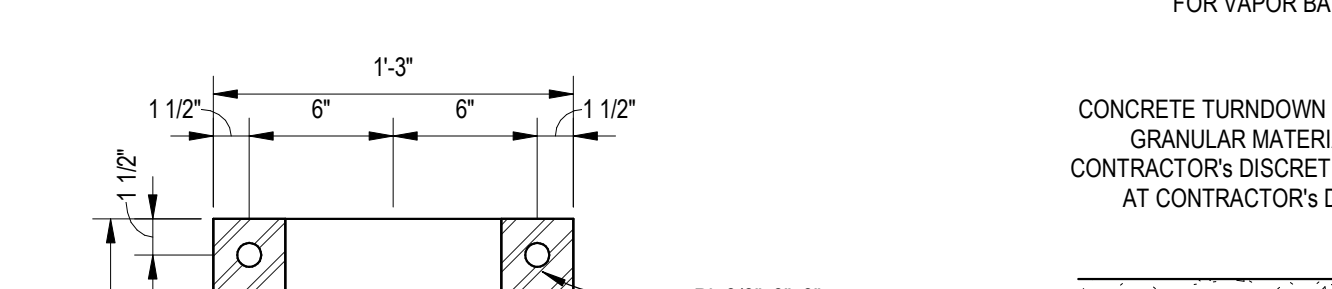
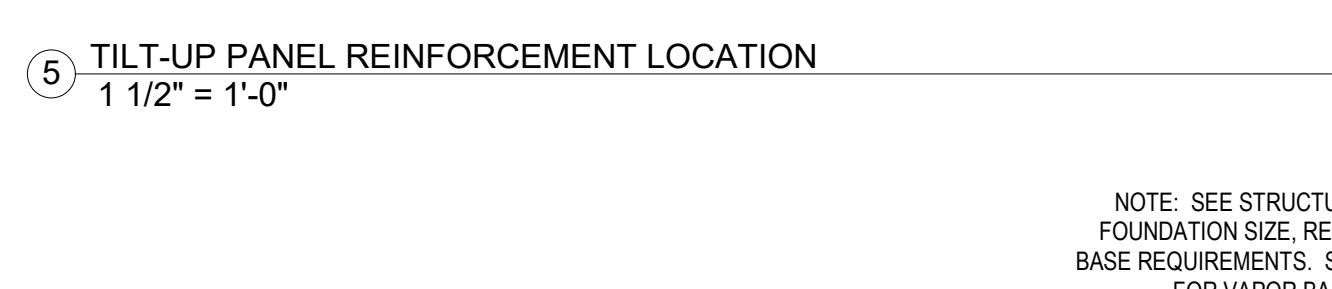
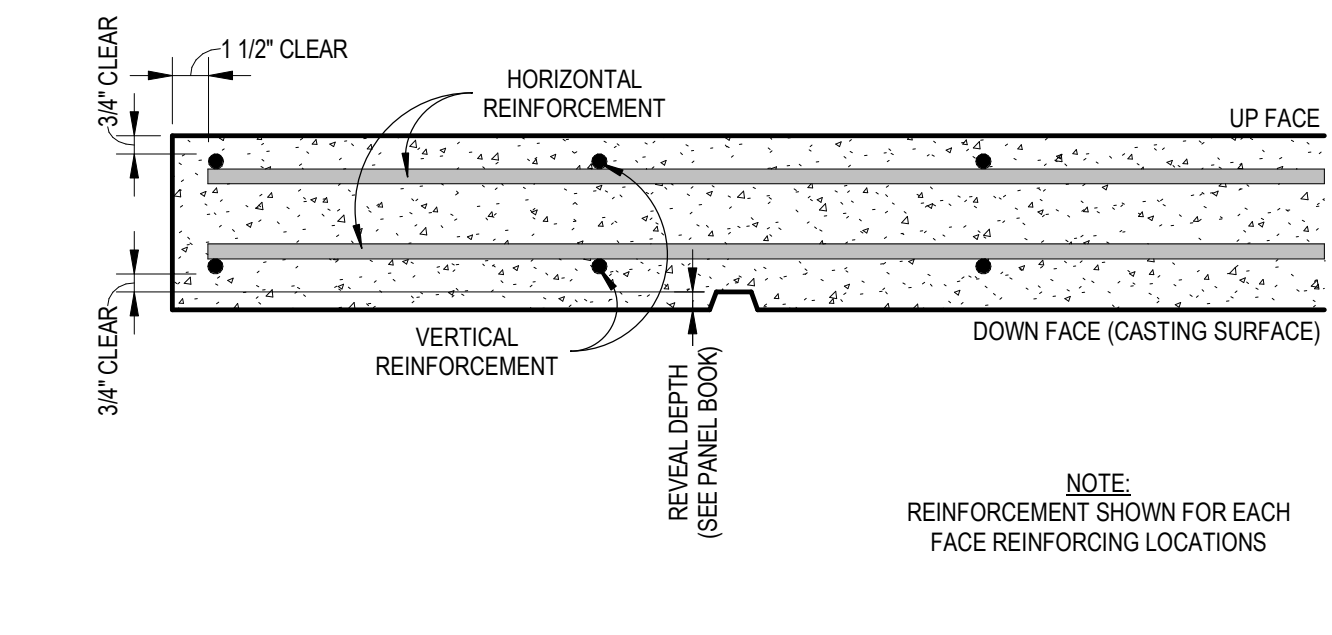
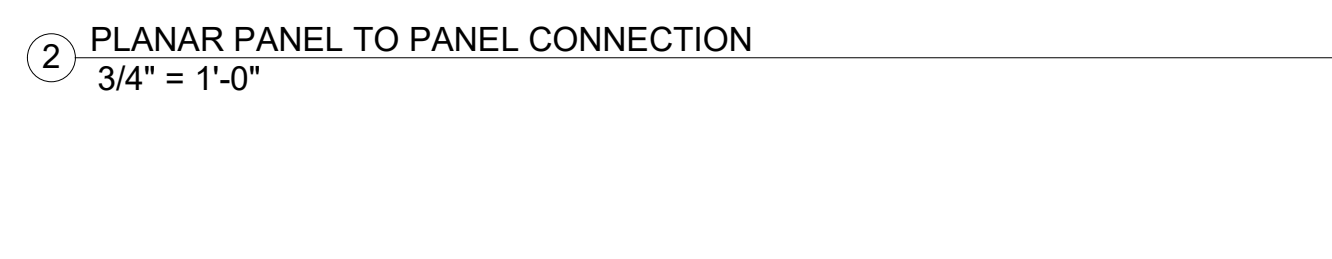
WIND:

VERIFICATION & INSPECTION	CONTINUOUS	PERIODIC
1. ROOF COVERING, ROOF DECK AND ROOF FRAMING CONNECTIONS		X
2. EXTERIOR WALL COVERING AND WALL CONNECTIONS TO ROOF AND FLOOR DIAPHRAGMS AND FRAMING		X

LIST OF STRUCTURAL SHOP DRAWINGS REQUIRING DEFERRED SUBMITTALS:

NOTE: DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH THE NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING

- STRUCTURAL STEEL FIELD USE ERECTION DRAWINGS
- JOIST & DECK FIELD USE ERECTION DRAWINGS & STRUCTURAL CALCULATIONS
- TILT-UP PANEL REINFORCING PLACEMENT DRAWINGS
- TILT-UP PANEL EMBED PLACEMENT & DETAIL DRAWINGS



FLAGSHIP MEDICAL PLAZA II

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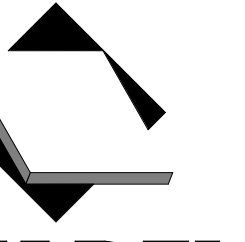
FLAGSHIP MEDICAL PLAZA II
3601 CONVERSE ROAD
WILMINGTON, NC

DESIGN DEVELOPMENT

DATE: 2025-06-30
SCALE: As Indicated
JOB NO. C2513
APPROVED BY: CEJ
CADD: C. JACKSON

STRUCTURAL NOTES

DRAWING NUMBER: S0.1
REVISION NO.



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FLAGSHIP MEDICAL PLAZA II

3601 CONVERSE ROAD
WILMINGTON, NC

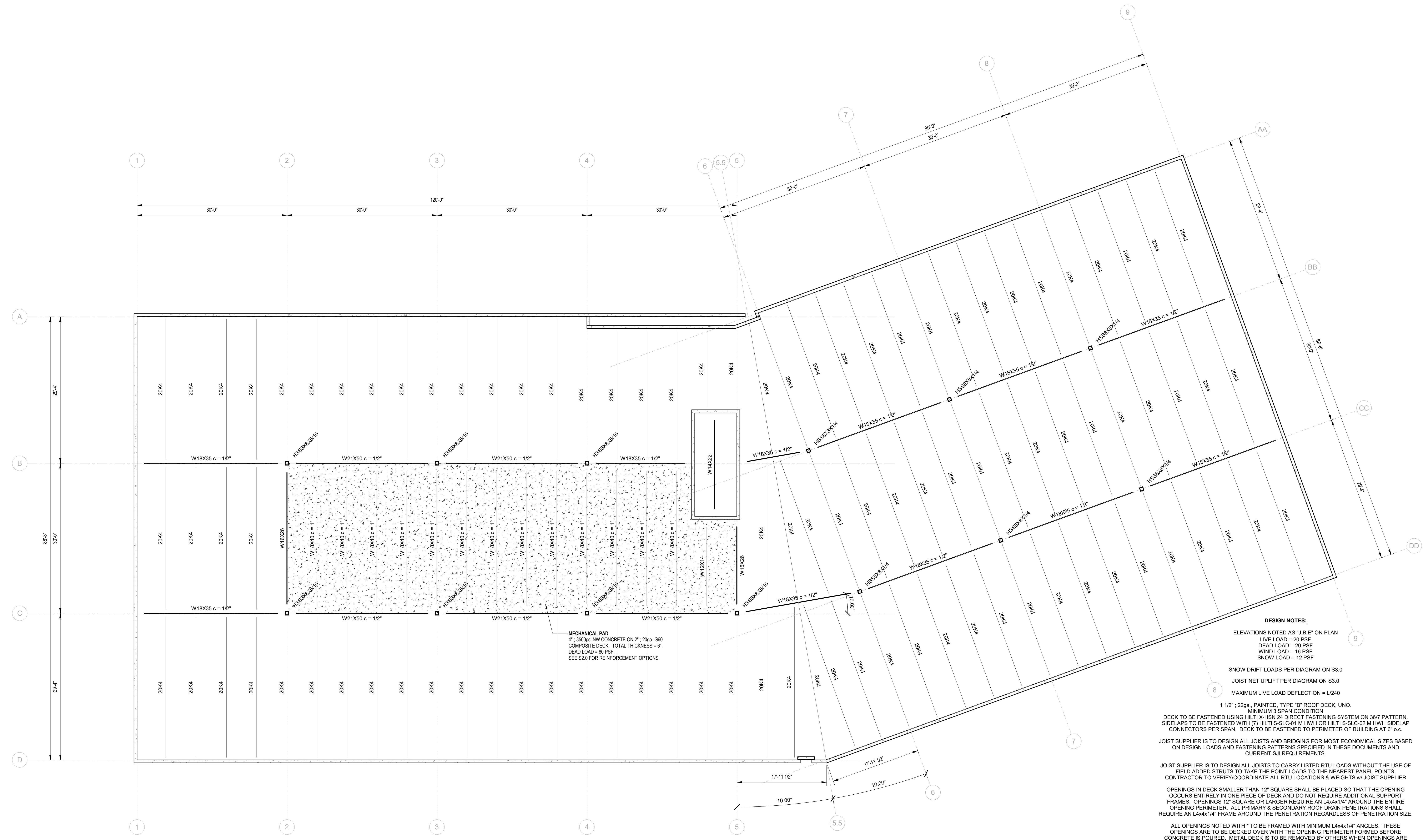
DESIGN DEVELOPMENT

DATE: 2025-06-30
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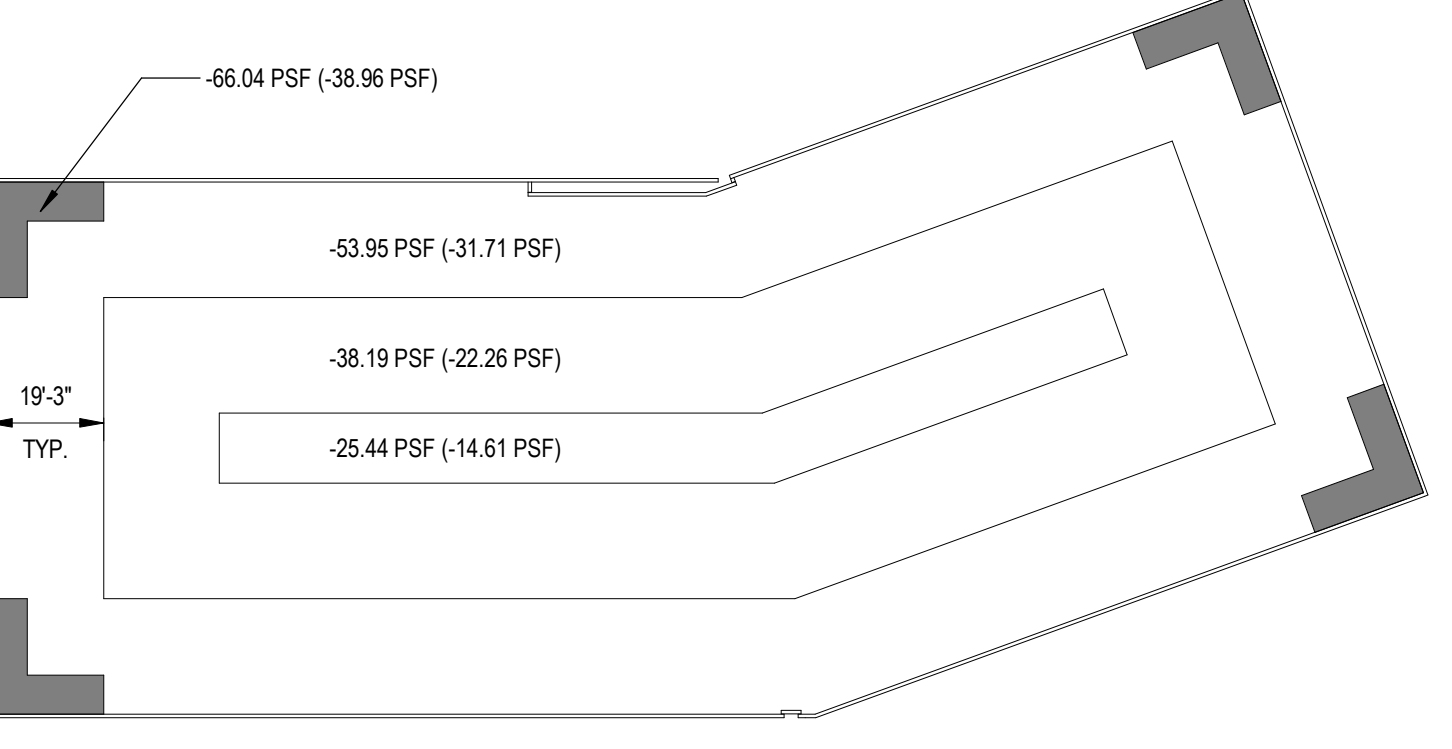
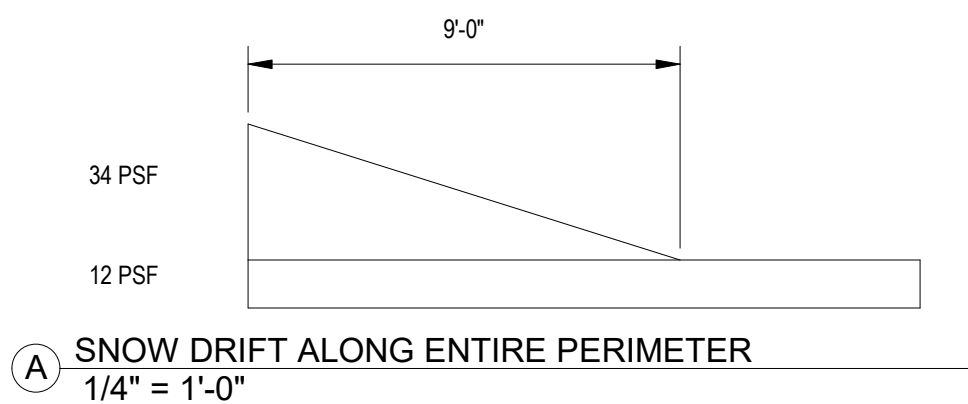
ROOF FRAMING PLAN

DRAWING NUMBER REVISION NO.

S2.1



DESIGN NOTES:
ELEVATIONS NOTED AS "J.B.E." ON PLAN
LIVE LOAD = 20 PSF
DEAD LOAD = 20 PSF
WIND LOAD = 16 PSF
SNOW LOAD = 12 PSF
SNOW DRIFT LOADS PER DIAGRAM ON S3.0
JOIST NET UPLIFT PER DIAGRAM ON S3.0
MAXIMUM LIVE LOAD DEFLECTION = L/240
1 1/2" ; 22ga. PAINTED, TYPE "B" ROOF DECK, UNO.
MINIMUM 3 SPAN CONDITION
DECK TO BE FASTENED USING HILTI HILTI-KH5N 24 DIRECT FASTENING SYSTEM ON 3/67 PATTERN. SIDELAPS TO BE FASTENED WITH (7) HILTI S-SLC-01 M HWH OR HILTI S-SLC-02 M HWH SIDELAP CONNECTORS PER SPAN. DECK TO BE FASTENED TO PERIMETER OF BUILDING AT 6" o.c.
JOIST SUPPLIER IS TO DESIGN ALL JOISTS AND BRIDGING FOR MOST ECONOMICAL SIZES BASED ON DESIGN LOADS AND FASTENING PATTERNS SPECIFIED IN THESE DOCUMENTS AND CURRENT SJI REQUIREMENTS.
JOIST SUPPLIER IS TO DESIGN ALL JOISTS TO CARRY LISTED RTU LOADS WITHOUT THE USE OF FIELD ADDED STRUTS TO TAKE THE POINT LOADS TO THE NEAREST PANEL POINTS. CONTRACTOR TO VERIFY/COORDINATE ALL RTU LOCATIONS & WEIGHTS w/ JOIST SUPPLIER
OPENINGS IN DECK SMALLER THAN 12" SQUARE SHALL BE PLACED SO THAT THE OPENING OCCURS ENTIRELY IN ONE PIECE OF DECK AND DO NOT REQUIRE ADDITIONAL SUPPORT FRAMES. OPENINGS 12" SQUARE OR LARGER REQUIRE AN L4x4x1/4" AROUND THE ENTIRE OPENING PERIMETER. ALL PRIMARY & SECONDARY ROOF DRAIN PENETRATIONS SHALL REQUIRE AN L4x4x1/4" FRAME AROUND THE PENETRATION REGARDLESS OF PENETRATION SIZE.
ALL OPENINGS NOTED WITH * TO BE FRAMED WITH MINIMUM L4x4x1/4" ANGLES. THESE OPENINGS ARE TO BE DECKED OVER WITH THE OPENING PERIMETER FORMED BEFORE CONCRETE IS POURED. METAL DECK IS TO BE REMOVED BY OTHERS WHEN OPENINGS ARE REQUIRED. COORDINATE OPENING SIZES AND LOCATIONS w/ G.C. PRIOR TO CONSTRUCTION.



1 ROOF FRAMING PLAN
1/8" = 1'-0"