A. MAJOR CODES AND STANDARDS

1. FLORIDA BUILDING CODE 2020 ASCE 7-16 (Formerly ANSI A58.1) CURRENT EDITION ACI 318-14 AISC ASD 15th Edition. SJI Specifications Current Edition AWS Current Edition. ASTM Current Edition.

Current Edition.

B. DESIGN LOADS

. LIVE LOADS SLABS ON GRADE	100 psf
STORAGE PARTS STORAGE STAIRS MECHANICAL ROOMS	125 psf 150 psf 100 psf 150 psf UNLESS OTHERWISE NOTED

ROOF b. SNOW LOADS

GROUND SNOW LOAD 20 psf MIN. (FBC 1607.12.2.1) SNOW EXPOSURE FACTOR Pq = 0 P.S.F.SNOW IMPORTANCE FACTOR ls = 1.0THERMAL FACTOR Ce = 0.9FLAT ROOF SNOW LOAD Ct = 1.0Pf= 0 P.S.F.

20 psf

c. LATERAL LOADS

 WIND LOADS BASIC WIND SPEED

Vult= 160 MPH WIND CONTROLS IN Vasd= 132 MPH LATERAL DESIGN WIND EXPOSURE VBASE = 140 KCATEGORY INTERNAL PRESS. COEF. GCpi= ± 0.18 V = 140.4 KIPSSHOP EXTENSION WIND BASE SHEAR

EXISTING SHOW ROOM WIND BASE SHEAR V = 189.6 KIPSPROPOSED SHOW ROOM WIND BASE SHEAR V = 204.3 KIPS SHOW ROOM WIND BASE SHEAR INCREASE IS LESS THAN 10%, THEREFORE NO LATERAL ANALYSIS OF THE EXISTING SHOW ROOM REQUIRED PER 2018 IEBC SECTION 806.3.

II. SEISMIC LOADS

SPECTRAL RESPONSE @ SHORT PERIOD	Ss = 0.049	Sds =	0.053
SPECTRAL RESPONSE @ 1-SECOND PERIOD	S1 = 0.059	Sd1 =	= 0.039
SITE CLASS	D (DEFAULT	PER ASC	E 7)
SEISMIC USE GROUP	II		
SEISMIC DESIGN CATEGORY	Α		
SEISMIC IMPORTANCE FACTOR	1.00		
SEISMIC FORCE RESISTING SYSTEM	ORDINARY R SHEAR WALL		D MASONR

RESPONSE MODIFICATION COEFFICIENT $Cd = 2 \frac{1}{4} (MASONRY)$ DEFLECTION AMPLIFICATION FACTOR DESIGN BASE SHEAR ANALYSIS PROCEDURE Equivalent Lateral Force Procedure SHOP EXTENSION SEISMIC BASE SHEAR

- III. DEFLECTION LIMITS MAXIMUM STORY DRIFT FROM WIND LOADS
- 4. NO PART OF THE BUILDING SHALL BE USED AS A STAGING AREA RESULTING IN A LOAD (UNDER THE LIMITED LOADED AREA) THAT EXCEEDS THE DESIGN
- 5. FOR THE WIND DESIGN OF THE CLADDING SYSTEMS, THE HIGH PRESSURE CORNER ZONE DIMENSIONS MUST BE CALCULATED BASED ON THE OVERALL BUILDING DIMENSIONS BUT SHALL APPLY TO ALL CORNERS (OUTSIDE AND INTERMEDIATE) OF THE BUILDING.

C. GENERAL

- 1. ALL DETAILS, SECTIONS, AND NOTES SHOWN ON DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS OTHERWISE SHOWN.
- 2. NO CHANGE IN SIZE, DIMENSION, OR POSITION OF STRUCTURAL ELEMENTS SHALL BE MADE, NOR SHALL ANY OPENINGS OR SLEEVES BE PERMITTED THROUGH ANY STRUCTURAL ELEMENT. WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD, UNLESS DETAILED AND SPECIFICALLY NOTED ON THE STRUCTURAL SHOP DRAWINGS. PROVIDE SEPARATE SHOP DRAWINGS INDICATING ALL PENETRATIONS THROUGH STRUCTURAL ELEMENTS FOR APPROVAL, PRIOR TO SUBMISSION OF THE SHOP DRAWINGS FOR THE AFFECTED STRUCTURAL ELEMENTS.
- 3. CONSULT ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR LOCATIONS AND DIMENSIONS OF CHASES, INSERTS, OPENINGS, SLEEVES, DRIPS, REVEALS, FINISHES, DEPRESSIONS, DOORS, AND OTHER SUCH PROJECT REQUIREMENTS NOT SHOWN ON STRUCTURAL DRAWINGS. ANY SUCH ITEMS SHOWN ON STRUCTURAL DRAWINGS ARE INDICATED FOR INFORMATION ONLY. APPEARANCE OF SAME ON STR. DWGS. IS NOT MEANT TO CONVEY ACTUAL LOCATION OR EXTENT OF WORK.
- 4. PROVIDE ANY ALTERATIONS AND/OR ADDITIONAL COMPONENTS NEEDED TO ACCOMMODATE THE INSTALLATION OF EQUIPMENT OF ANY NATURE. COORDINATE SUCH WORK WITH THE EQUIPMENT SUPPLIER. INCORPORATE SUCH REFINEMENTS ON THE SHOP DRAWINGS, AND OBTAIN THE EQUIPMENT SUPPLIER'S APPROVAL (CLEARLY DISPLAYED ON SHOP DRAWINGS) PRIOR TO SUBMITTING THE SHOP DRAWINGS TO THE ARCHITECT AND ENGINEER FOR APPROVAL.
- 5. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AS REQUIRED TO PROPERLY CONSTRUCT THE BUILDING.
- 6. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING CONSTRUCTION AND/OR SUBMITTING SHOP DRAWINGS FOR APPROVAL. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT.
- 7. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT EXISTING AND NEW UTILITIES AND SHALL ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE DURING CONSTRUCTION.
- 8. PROVIDE MINIMUM 4" CONCRETE PADS REINFORCED WITH #3@12" E.W. @ MID DEPTH AT ALL EQUIPMENT SUPPORTED ON SLABS ON GRADE OR ON FRAMED FLOORS (U.O.N.). USE LIGHT WEIGHT CONCRETE FOR ALL THE PADS ON FRAMED FLOORS. PAD SHALL EXTEND MINIMUM 6" ON ALL SIDES OF THE EQUIPMENT.
- 9. DO NOT SCALE DRAWINGS.
- 10. PIPES OF 2" DIAMETER OR LESS AND AIR DUCTS MAY BE SUSPENDED DIRECTLY FROM THE COMPOSITE DECK SLAB, WHERE APPLICABLE. ALL HANGERS FOR OTHER MECHANICAL PIPING AND EQUIPMENT SHALL BE CONNECTED TO THE STEEL BEAMS ONLY. ALL PIPE GROUPS SHALL BE SUPPORTED ON TRAPEZES WHICH SHALL BE SUSPENDED FROM STEEL BEAMS OR JOISTS. CONTRACTOR MAY PROVIDE SECONDARY MEMBERS SPANNING BETWEEN STRUCTURAL BEAMS AS NEEDED. U.O.N. ON DRAWINGS. HANGERS SHALL BE LOCATED AS TO KEEP THE EQUIVALENT UNIFORM LOAD UNDER 10 PSF. SHOP DRAWINGS FOR HANGER LAYOUT ABOVE MECHANICAL ROOMS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL.
- 11. THE WEB AND BOTTOM FLANGE OF STEEL BEAMS SHALL NOT BE USED FOR THE LATERAL SUPPORT OF CLADDING SYSTEMS UNLESS KICKER IS PROVIDED AT THE POINT OF BRACING. THE SLOPE OF THE KICKER SHALL NOT BE STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL.
- 12. ALL CMU WALLS ON ELEVATED FRAMED FLOORS ARE INDICATED ON THE STRUCTURAL DWGS. NO CMU WALLS ON ELEVATED FRAMED FLOORS SHOULD BE ADDED OR RELOCATED W/O PRIOR APPROVAL OF THE STRUCTURAL ENGINEER OF

D. EARTHWORK / FOUNDATION UNDERPINNING

- 1. ALL EARTH WORK MUST BE OBSERVED BY A GEOTECHNICAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT LOCATION.
- 2. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR SHORING AND BRACING OF THE BUILDING EXCAVATION EMBANKMENT INCLUDING THE EXCAVATION FOR UTILITIES AND UNDERPINNING OF EXISTING BUILDING FOUNDATIONS, AND IS ALSO FULLY RESPONSIBLE FOR THE DESIGN AND PERFORMANCE OF SHORING AND BRACING AND UNDERPINNING DURING CONSTRUCTION.
- CONTRACTOR SHALL SUBMIT SHEETING AND SHORING/ UNDERPINNING SHOP DRAWINGS AND CERTIFICATIONS. SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF THE PROJECT LOCATION. FOR ARCHITECT AND STRUCTURAL ENGINEER'S REVIEW BEFORE CONSTRUCTION BEGINS.
- 4. CONTRACTOR SHALL COORDINATE THE EXTENT OF THE EXCAVATION, SHORING AND BRACING WITH CIVIL DRAWINGS. CONTRACTOR SHALL ALSO REFER TO CIVIL DRAWINGS AND SPECIFICATIONS AND GEOTECHNICAL REPORT FOR DEWATERING AND RELATED INFORMATION NOT COVERED IN THE STRUCTURAL DRAWINGS.

E. FOUNDATION

- STRUCTURAL DRAWINGS WERE PREPARED BASED ON THE FINAL GEOTECHNICAL REPORT DATED SEPTEMBER 8, 2021 PROVIDED BY KSM ENGINEERING AND TESTING ANCILLARY FOOTINGS SHALL BEAR ON 3,000 P.S.F. SOIL. NO FOOTING SHALL BE PLACED PRIOR TO THE APPROVAL OF THE SOIL BEARING CAPACITY. IF LESSER BEARING VALUE IS
- ENCOUNTERED AT THE REQUIRED ELEVATION, THE CONTRACTOR SHALL CONTACT THE ARCHITECT/ENGINEER FOR FURTHER DIRECTION PRIOR TO PLACING THE FOUNDATION. FILL UNDER SLABS ON GRADE SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL
- REPORT RECOMMENDATIONS AND NOTES ON THE DRAWINGS. ALL COMPACTION SHALL BE APPROVED BY OWNER'S SITE SOILS ENGINEER.
- BACKFILL BEHIND MASONRY/CONCRETE WALLS SHALL NOT COMMENCE UNTIL THE WALL HAS ATTAINED 75% OF ITS DESIGN STRENGTH AND THE TOP OF THE WALL IS ADEQUATELY BRACED.
- 5. IF EXISTING FILL OR OTHER UNSUITABLE MATERIAL IS ENCOUNTERED IT SHALL BE REMOVED AND REPLACED WITH COMPACTED STRUCTURAL FILL OR LEAN CONCRETE
- 6. EARTH RETAINING STRUCTURES HAVE BEEN DESIGNED FOR THE FOLLOWING LATERAL EARTH PRESSURE. ACTIVE PRESSURE 40H PSF (NON-HYDROSTATIC PRESSURE) PASSIVE PRESSURE 350D PSF

FRICTION FACTOR 0.4

F. CONCRETE

ALL CONCRETE SHALL BE CONTROLLED CONCRETE, NORMAL WEIGHT (UNLESS OTHERWISE NOTED) WITH COMPRESSIVE STRENGTH AT 28 DAYS AS FOLLOWS:

SLAB ON GRADE	f'c=	4,000 psi
TYPICAL (UNLESS OTHERWISE NOTED)	f'c=	4,000 psi
CONCRETE OVER COMPOSITE METAL DECK Light Weight (110 pcf ± 5 pcf) GROUT FOR CMU WALLS EXPOSED TO WEATHER	f'c= f'c= f'c=	4,000 psi 2,000 psi 4,500 psi W/C=0.5 MAX

- 2. CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL SO AS TO CAUSE SEGREGATION OF AGGREGATES. HOPPERS, VERTICAL CHUTES, OR TRUNKS SHALL BE USED IN SUFFICIENT NUMBERS SO THAT THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED SIX FEET AND TO ENSURE THAT THE CONCRETE IS KEPT LEVEL AT ALL TIMES.
- 3. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST APPROVED EDITIONS OF THE APPLICABLE A.C.I. DOCUMENTS.
- 4. CONCRETE MIX DESIGNS SHALL BE MADE BY AN APPROVED LABORATORY FOR ALL CONCRETE AND SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR APPROVAL BEFORE USE.
- CALCIUM CHLORIDE SHALL NOT BE PERMITTED IN CONCRETE IN ANY FORM.
- 6. ALL CONCRETE EXPOSED TO WEATHER AND WITHIN 4'-0" OF FINISHED GRADE
- SHALL BE AIR ENTRAINED 4% 6%.
- 7. IT IS NOT PERMISSIBLE TO DELAY THE APPLICATION OF CURING COMPOUND UNTIL THE MORNING AFTER THE CONCRETE IS CAST.
- 8. BEFORE FRESH CONCRETE IS PLACED AGAINST CONCRETE IN PLACE, THE CONTACT SURFACES OF CONCRETE IN-PLACE SHALL BE THOROUGHLY CLEANED. ALL LAITANCE SHALL BE REMOVED, AND APPLY AN APPROVED CHEMICAL BONDING COMPOUND. WHERE NOTED, SURFACE OF EXISTING CONCRETE SHALL BE ROUGHENED TO A MINIMUM AMPLITUDE OF 1/4".
- 9. ALL KEYS SHALL BE 1-1/2" DEEP UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 10. FOR SLABS ON GRADE, PROVIDE CONTROL OR CONSTRUCTION JOINTS AT A SPACING NOT TO EXCEED 20 FT. OR AS INDICATED ON STRUCTURAL DWGS. SUBMIT SHOP
- 11. CONCRETE CAST ON SLOPED SURFACES SHALL BEGIN AT THE LOWEST ELEVATION AND CONTINUE MONOLITHICALLY TOWARD THE HIGHER ELEVATION UNTIL THE

DRAWING INDICATING JOINT LAYOUT FOR ARCHITECT/ENGINEER APPROVAL.

- INTENDED POUR IS COMPLETED. 12. PROVIDE 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES UNLESS OTHERWISE NOTED.
- 13. CONDUITS IN CONCRETE SLABS SHALL BE SPACED SUCH THAT THE CENTER TO CENTER DISTANCE BETWEEN CONDUITS IS A MINIMUM OF THREE TIMES THE OUTSIDE DIAMETER OF THE LARGEST CONDUIT.
- 14. CONDUITS IN CONCRETE SLAB HAVING OUTSIDE DIAMETER LARGER THAN ONE THIRD OF THE SLAB THICKNESS SHALL NOT BE PERMITTED. CONDUITS THAT CROSS EACH OTHER WITHIN THE SLAB SHALL NOT CONSUME MORE THAN ONE THIRD OF THE SLAB THICKNESS AT THE POINT OF INTERSECTION. FOR ELEVATED SLABS WHICH ARE ON A DECK, THICKNESS SHALL BE DEFINED AS THE CLEAR DIM. ABOVE THE RIBS.
- 15. ALUMINUM CONDUITS WILL NOT BE PERMITTED IN CONCRETE ELEMENTS. 16. LIGHTWEIGHT CONCRETE FILL OF SLAB DEPRESSIONS SHALL BE REINFORCED
- WITH FIBER REINFORCING.
- 17. PROVIDE 2 # 4 x 4'-0 AT SLAB MID DEPTH AT ALL RE-ENTRANT CORNERS OF FLOOR SLAB (BOTH ELEVATED & S.O.G.)

G. REINFORCING STEEL

- 1. ALL REINFORCING STEEL, INCLUDING STIRRUPS AND TIES, SHALL BE HIGH STRENGTH, NEW BILLET STEEL CONFORMING TO ASTM DESIGNATION A-615 GRADE 60 (Fy = 60,000 PSI). ALL REINFORCING TO BE WELDED SHALL CONFORM TO ASTM A-706 GRADE 60.
- 2. ALL REINFORCING SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH ACI-315 "MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES" (LATEST EDITION).

3. U.O.N. ON STRUCTURAL DRAWINGS, PROVIDE MINIMUM CONCRETE PROTECTION FOR REINFORCING, AS FOLLOWS:

CAST AGAINST EARTH EXPOSED TO EARTH OR WEATHER: 1-1/2" #5 and smaller bars and W.W.F. #6 and larger bars NOT EXPOSED TO EARTH OR WEATHER: SLABS AND WALLS: #11 and smaller bars and W.W.F. 1-1/2" #14 and larger bars BEAMS AND COLUMNS:

- 4. WHERE CONSTRUCTION JOINTS ARE PROVIDED, THE REINFORCEMENT SHALL PASS CONTINUOUSLY THROUGH THE JOINT AND ADEQUATE SHEAR TRANSFER REINFORCEMENT SHALL BE PROVIDED.
- 5. W.W.F. SHALL HAVE ENDS LAPPED ONE FULL PANEL AND SPLICE LACED WITH

6. ALL WELDING OF REINFORCING SHALL BE DONE WITH E90XX ELECTRODES IN

ACCORDANCE WITH A.W.S. SPECIFICATIONS D1.4 (LATEST EDITION).

- 7. ANY MECHANICAL SPLICES USED, MUST BE "TENSION-COMPRESSION" TYPE AND SHALL COMPLY WITH ACI 318-99 SECT. 12.14.3. UNLESS OTHERWISE SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER. SHOP DRAWINGS SUBMITTED FOR STRUCTURAL ENGINEER'S APPROVAL MUST INDICATE THE USE AND THE TYPE OF ANY MECHANICAL SPLICES USED.
- 8. ALL FORMWORK AND SHORING DESIGN IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 9. FORMWORK AND SHORING DRAWINGS, TOGETHER WITH CERTIFICATION OF THE DESIGN FROM A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT, SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER.

<u>H. MASONRY</u>

- ALL CONCRETE MASONRY UNITS SHALL BE HOLLOW LIGHT WEIGHT CONFORMING TO ASTM C90, WITH f'm = 2000 PSI MINIMUM STRENGTH U.O.N. AND MORTAR TYPE 'S' OR 'M'. WEIGHT OF UNITS SHALL BE 30 PSF FOR 6" UNITS, 38 PSF FOR 8" UNITS, 47 PSF FOR 10" UNITS AND 55 PSF FOR 12" UNITS. TOLERANCE FOR MASONRY WEIGHTS SHALL BE 2 PSF HIGH OR LOW.
- 2. PROVIDE GALVANIZED HORIZONTAL JOINT REINFORCEMENT IN FIRST AND SECOND BED JOINTS ABOVE AND BELOW OPENINGS AND IN EVERY OTHER BED JOINT ELSEWHERE. IN REINFORCED MASONRY WALLS, PROVIDE GALVANIZED HORIZONTAL MASONRY REINFORCEMENT AT EVERY OTHER BLOCK COURSE, U.O.N.
- 3. FILL CMU VOIDS SOLID WITH GROUT AROUND ANCHORS, VERTICAL REBARS AND BOND BEAMS.
- 4. ALL TOP CONNECTIONS OF MASONRY WALLS TO STRUCTURE MUST BE DETAILED TO PROVIDE A 1" SOFT JOINT FOR INDEPENDENT VERTICAL MOVEMENT OF THE PRIMARY STRUCTURAL MEMBER ABOVE (U.O.N.).
- 5. ALL HOLLOW MASONRY UNITS BELOW GRADE SHALL BE FILLED SOLID W/ GROUT OR
- 6. PROVIDE 2-#6 VERTICAL REINFORCEMENT FULL HEIGHT OF WALL AT ALL JAMB LOCATIONS. U.O.N.
- 7. AT COLUMN LOCATIONS, ANCHOR MASONRY WALLS TO STEEL COLUMNS WITH FLEXIBLE WELD-ON TIES AT A SPACING OF 16"(MAX) ALONG THE HEIGHT OF COLUMN.
- 8. ALL DOUBLE-WYTHE CMU WALLS SHALL BE TIED TOGETHER WITH LADDER-TYPE HORIZ.
- JOINT REINFORCING ENGAGING BOTH WYTHES AT 16" O.C. VERT. U.O.N. 9. ALL BEARING MASONRY WALLS AND ALL EXTERIOR MASONRY WALLS SHALL BE REINFORCED WITH #5 BARS AT 32" O.C. ON CENTER LOCATED IN THE CENTER OF THE CMU BACKUP
- UNLESS NOTED OTHERWISE. 10. ALL CMU BEARING WALL CONSTRUCTION SHALL HAVE FULLY BEDDED MORTAR JOINTS,
- 11. ALL CMU REINFORCING SPLICE MUST BE 48 DIAMETERS LONG.

INCLUDING FACE SHELLS, HEADS AND WEBS.

I. STRUCTURAL STEEL

- 1. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS: ALL W SHAPES: ASTM A-992 GRADE 50 (FY=50 KSI). ALL CHANNELS, ANGLES & PLATES: ASTM A-36.
- ALL STEEL HSS: ASTM A-500 GRADE C. ALL PIPES: A-500 GRADE B. MILL TEST REPORTS FOR ALL ELEMENTS MUST BE SUBMITTED TO THE ARCHITECT
- AND ENGINEER FOR THE RECORD. 2. HIGH STRENGTH STEEL BOLTS SHALL CONFORM TO ASTM A-325 OR A-490. ANCHOR
- BOLTS SHALL CONFORM TO F-1554 GR 36.

3. STEEL CONNECTIONS:

- a. ALL CONNECTIONS SHALL BE DESIGNED USING ALLOWABLE STRESS DESIGN. b. THE CONNECTIONS SHALL BE DESIGNED FOR THE REACTIONS INDICATED ON THE PLANS PLUS 10%. IN CASE WHERE REACTIONS ARE NOT INDICATED, THE REACTIONS SHALL BE
- CALCULATED AS FOLLOWS: (a) FOR NON-COMPOSITE BEAMS/GIRDERS THE REACTIONS SHALL BE HALF THE TOTAL UNIFORM LOAD CAPACITY SHOWN ON AISC MANUAL "TABLES FOR
- ALLOWABLE LOADS ON BEAMS" FOR THE GIVEN STEEL SECTIONS AND SPAN. (b) FOR COMPOSITE BEAMS/GIRDERS THE REACTIONS SHALL BE HALF THE TOTAL UNIFORM LOAD CAPACITY SHOWN ON AISC MANUAL "TABLES FOR ALLOWABLE FOR ALLOWABLE LOADS ON BEAMS" FOR THE STEEL SECTIONS AND SPAN PLUS 20%.
- c. NO CONNECTION SHALL BE DESIGNED FOR LESS THAN 2 KIPS OF REACTION. d. BOLTS USED SHALL NOT BE SMALLER THAN 3/4" IN DIAMETER. e. ANY "SLIP CRITICAL" CONNECTIONS REQUIRED SHALL BE MADE BY THE USE
- OF "TWIST OFF TENSION CONTROL TYPE BOLTS" CONFORMING TO ASTM F 1852. f. THE MINIMUM NUMBER OF BOLT ROWS PER CONNECTION SHALL BE PER THE FOLLOWING TABLE:
 - NOMINAL BEAM DEPTH MINIMUM # OF ROWS 6, 8, 10, 12 14, 16, 18 21, 24 27, 30 33, 36 40. 44
- g. UN-STIFFENED SEATED CONNECTIONS ARE NOT ALLOWED. h. SINGLE PLATE SHEAR CONNECTIONS, ARE PERMITTED ONLY IN ACCORDANCE WITH
- THE FOLLOWING RESTRICTIONS: (a) FOR BEARING TYPE BOLTS ONLY STANDARD HOLES SHALL BE USED FOR THE CONNECTION TO THE BEAM. SHORT OR LONG SLOTTED HOLES ARE NOT PERMITTED. FOR SLIP CRITICAL TYPE BOLTS/CONNECTION ANY SLOTTED HOLES
- ARE PERMITTED. (b) THE WELD SHALL BE CONSIDERED TO CARRY ONLY SHEAR. ALL MOMENT RESULTING FROM THE ECCENTRICITY SHALL BE RESISTED BY THE BOLT
- (c) THE EFFECT OF THE WELDING ON BOTH SIDES OF A GIRDER OR COLUMN WEB MUST BE ENGINEERED.

- j. SINGLE ANGLE CONNECTIONS ARE PERMITTED ONLY IN ACCORDANCE WITH THE FOLLOWING RESTRICTIONS:
- (a) CONNECTION OF BOTH LEGS OF THE ANGLE SHALL BE BY BOLTS (SHOP & FIELD BOLTED). WELDING OF THE ANGLE TO THE SUPPORTING MEMBER
- IS NOT ALLOWED (b) THE SAME LENGTH, GAGE, NUMBER AND TYPE OF BOLTS MUST BE USED FOR BOTH LEGS OF THE ANGLE.
- (c) FOR BEARING TYPE BOLTS ONLY STANDARD HOLES SHALL BE USED FOR THE CONNECTION. SHORT OR LONG SLOTTED HOLES ARE NOT PERMITTED. FOR SLIP CRITICAL TYPE BOLTS/CONNECTION SLOTTED HOLES ARE PERMITTED.
- k. DOUBLE ANGLE CASE I TYPE CONNECTION (WELDED TO BEAM, BOLTED TO GIRDER/ COLUMN) ARE PERMITTED WITH NO RESTRICTION. I. DOUBLE ANGLE CASE II TYPE CONNECTION (BOLTED TO BEAM, WELDED TO GIRDER/
- COLUMN) ARE PERMITTED ONLY IN ACCORDANCE WITH THE FOLLOWING RESTRICTIONS: (a) FOR BEARING TYPE BOLTS ONLY STANDARD HOLES SHALL BE USED FOR CONNECTION TO THE BEAM. SHORT OR LONG SLOTTED HOLES ARE NOT PERMITTED. FOR SLIP CRITICAL TYPE BOLTS/CONNECTION SLOTTED HOLES ARE
- (b) THE WELD SHALL BE CONSIDERED TO CARRY ONLY SHEAR AND MOMENT
- RESULTING FROM ECCENTRICITY SHALL BE RESISTED BY THE BOLT GROUP. (c) THE EFFECT OF THE WELDING ON BOTH SIDES OF A GIRDER OR COLUMN WEB MUST BE ENGINEERED.
- m. END PLATE SHEAR CONNECTIONS ARE PERMITTED WITH NO RESTRICTIONS. MOMENT, TRUSS & BRACING CONNECTIONS SHALL UTILIZE SLIP CRITICAL BOLTS FOR ALL CONNECTIONS.
- p. ALL STEEL TUBES CONNECTIONS TO BEAMS & COLUMNS SHALL BE END PLATE CONNECTIONS.
- 4. THE MINIMUM BEARING PLATE THICKNESS SHALL BE 1/2" 3/4" THE MINIMUM BOLT DIAMETER SHALL BE (U.O.N.). 3/16" THE MINIMUM WELD THROAT SHALL BE (U.O.N.).
- 5. WELDING ELECTRODES SHALL CONFORM TO ASTM SPECIFICATIONS E-70XX

FIREPROOFING SHALL BE FURNISHED BARE, CLEAN AND UN-PRIMED.

- 6. ALL STRUCTURAL STEEL NOT RECEIVING SPRAY—ON FIREPROOFING, INCLUDING ALL MEMBERS AND CONNECTIONS SHOWN AND NOTED ON THE DRAWINGS AS ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS), SHALL BE SHOP PAINTED WITH A RUST INHIBITIVE GRAY PRIMER. NO ASPHALTIC PAINT IS PERMITTED. ALL STRUCTURAL STEEL SCHEDULED, NOTED OR REQUIRED TO RECEIVE SPRAY-ON
- 7. ALL EXPOSED TO WEATHER STEEL, INCLUDING BUT NOT LIMITED TO; ALL MASONRY SHELF ANGLES, ROOF MOUNTED MECH. EQUIP. AND SCREEN SHALL BE HOT DIP GALVANIZED.
- 8. BASE PLATES, BEAMS, COLUMNS, AND HARDWARE EXPOSED TO SOIL SHALL BE
- COVERED WITH A MINIMUM OF 3" OF CONCRETE PRIOR TO BACKFILL. 9. FABRICATE AND ERECT BEAMS WITH THE NATURAL AND MILL CAMBER UP.
- 10. SPLICING OF STRUCTURAL STEEL MEMBERS WHERE NOT DETAILED IS PROHIBITED.
- 11. NO FINAL BOLTING OR WELDING SHALL BE DONE UNTIL AS MUCH OF THE STRUCTURAL FRAMING AS WILL BE STIFFENED THEREBY HAS BEEN PROPERLY
- 12. ALL TEMPORARY ERECTION BRACING AND TIE RODS SHALL REMAIN IN PLACE UNTIL ALL STRUCTURAL MEMBERS ARE PROPERLY ALIGNED AND CONNECTED AND SHALL NOT BE REMOVED WITHOUT WRITTEN APPROVAL OF ARCHITECT, ENGINEER AND OWNER.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF ALL ERECTION PROCEDURES AND SEQUENCES.
- 14. REFER TO MASONRY NOTES FOR ANY ACCESSORIES REQUIRED TO BE ATTACHED TO STEEL MEMBERS FOR ANCHORING MASONRY.

<u>J. LINTELS</u>

- 1. ALL OPENINGS IN WALLS AND PARTITIONS ARE TO BE PROVIDED WITH LINTELS. LINTELS SHALL BE STRUCTURAL STEEL OR PRECAST CONCRETE AS
- 2. ALL LINTELS SHALL HAVE A 8" MINIMUM BEARING UNLESS OTHERWISE NOTED ON DRAWINGS AND SHALL BE SET IN FULL BED OF MORTAR.
- . CONTRACTOR SHALL SHORE ALL LINTELS AS REQUIRED TO PREVENT ROTATION DURING CONSTRUCTION AND SHALL PAY PARTICULAR ATTENTION TO ECCENTRICALLY LOADED LINTELS.
- 4. CONTRACTOR SHALL COORDINATE SIZE, TYPE AND LOCATION OF LINTEL WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- 5. ALL BEAM LINTELS LARGER THAN W 8 BEAMS TO HAVE ADJUST MASONRY ANCHORS ON EACH FACE OF WEBS SPACED AT 16" o/c.

K. STEEL DECK

- 1. ALL STEEL DECK CONSTRUCTION SHALL CONFORM TO SDI REQUIREMENTS AND
- STANDARD SPECIFICATIONS. 2. ALL STEEL DECK SHALL BE CONTINUOUS OVER A MINIMUM OF THREE SPANS U.O.N.

3. ROOF STEEL DECK

a. 3" ROOF DECK SHALL BE G90 GALVANIZED STEEL DECK WITH MINIMUM PROPERTIES AS FOLLOWS: 3"x20 Ga. TYPE N., I = 0.964 in4, Sp = 0.501 in3, Sn = 0.552 in3. b. 3" ROOF DECK CONNECTIONS TO SUPPORTS TO BE 3/4" PUDDLE WELD ON 36/7 PATTERN. c. ROOF DECK SIDELAP CONNECTIONS TO BE #12 TEK @ 12" O.C. MAX.

L. OPEN WEB STEEL JOISTS - IF USED

ROWS OF BRIDGING AS REQUIRED.

- I. FABRICATION AND ERECTION OF ALL STEEL JOISTS SHALL CONFORM TO STEEL JOIST
- INSTITUTE STANDARD SPECIFICATIONS IN ALL RESPECTS.
- 2. STEEL JOIST SUPPLIER SHALL BE A MEMBER OF THE STEEL JOIST INSTITUTE. 3. PROVIDE AND INSTALL BRIDGING IN ACCORDANCE WITH STEEL JOIST INSTITUTE STANDARDS.

5. ALL ROOF JOISTS SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF. ADD ADDITIONAL

WHERE BRIDGING IS INTERRUPTED BY DUCTS, LIGHT FIXTURES, ETC., PROVIDE THE BRIDGING

ON EACH SIDE OF THE INTERRUPTION. 4. PROVIDE BOT. CHORD EXTENSIONS FOR CEILING WHERE REQUIRED.

M. LIGHT GAGE STEEL

- MINIMUM YIELD STRENGTH OF THE LIGHT GAGE FRAMING COMPONENTS SHALL BE 33KSI FOR 18 GA OR LIGHTER AND 50KSI FOR 16 GA AND HEAVIER. 2. MAXIMUM DEFLECTION OF WALL STUDS BACKUP FOR BRICK/MASONRY VENEER SHALL BE L/600, ALL OTHERS SHALL BE L/360. L IS THE STUD LENGTH
- BETWEEN ITS SUPPORTS. 3. STUD BACKUP SYSTEM SHALL BE DESIGNED AS A FLOOR TO FLOOR SYSTEM
- 4. LIGHT GAGE STEEL FRAMING AND THEIR CONNECTIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT OCCURS TO CONFORM WITH THE APPLICABLE BUILDING CODES AND GOOD DESIGN PRACTICES. MEMBER AND CONNECTION DESIGN SHALL CONSIDER LATERAL FORCES IN THE BUILDING, TEMPERATURE, DEFLECTIONS DUE TO LIVE LOAD, CREEP AND SHRINKAGE THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND CERTIFICATE FOR DESIGN OF MEMBERS AND CONNECTIONS SIGNED & SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT OCCURS.

N. SHOP DRAWINGS

WITHOUT KICKERS.

- SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY THE CONTRACTOR AND REVIEWED BY THE ENGINEER. IF A CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS. DUNLAP ENGINEERING. INC., WILL NOT BE RESPONSIBLE FOR THE STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT. CONTRACTOR MUST SUBMIT FOR A/E REVIEW SHOP DRAWINGS AND SUBMITTALS FOR ALL REINF. AND MODIFICATION OF EXISTING STRUCTURE.
- SHOP DRAWINGS SHALL BE SUBMITTED IN PDF FORMAT ALONG WITH (1) PAPER SET PRINTED AT THE CONTRACTORS EXPENSE.
- 3. AT THE TIME OF SHOP DRAWING SUBMISSION, THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DEVIATIONS OR OMISSIONS FROM THE CONTRACT DOCUMENTS.
- 4. THE GENERAL CONTRACTOR / CONSTRUCTION MANAGER SHALL REVIEW ALL SHOP DRAWINGS BEFORE SUBMITTING TO ENGINEER, MAKE ALL CORRECTIONS AS HE DEEMS NECESSARY AND SHALL CERTIFY ON EACH DRAWING AS FOLLOWS: "I CERTIFY THAT THE CONTRACT DOCUMENT REQUIREMENTS HAVE BEEN MET AND ALL DIMENSIONS, CONDITIONS, AND QUANTITIES ARE VERIFIED AS SHOWN AND/OR AS CORRECTED ON THIS DRAWING."

SIGNED.....(FOR CONTRACTOR)......

- 5. REPRODUCTION OF STRUCTURAL DRAWINGS FOR USE AS SHOP DRAWINGS SHALL NOT BE PERMITTED.
- 6. CONTRACTOR SHALL ALLOW A MINIMUM PERIOD OF 10 WORKINGS DAYS REVIEW OF STRUCTURAL SHOP DRAWINGS BY THE STRUCTURAL ENGINEER.

O. TESTING AND INSPECTION

- INSPECTION FOR ALL STRUCTURAL PORTIONS OF THE PROJECT SHALL BE PROVIDED AS REQUIRED BY THE APPLICABLE BUILDING CODE.
- 2. THE OWNER'S TESTING AGENCY SHALL PERFORM ALL INSPECTIONS AND TESTING.
- THE ENGINEER MAY VISIT THE SITE TO PROVIDE CONSTRUCTION ASSISTANCE OR TO GENERALLY OBSERVE THE PROGRESS OF CONSTRUCTION. SUCH VISITS ARE NOT TO BE CONSTRUED AS MEETING THE AFORESAID INSPECTION REQUIREMENTS UNLESS THE ENGINEER SPECIFICALLY STATES SO IN WRITING.
- 4. ALL CONCRETE WORK SHOWN ON THESE DRAWINGS AND SPECIFIED IN THE SPECIFICATIONS SHALL BE INSPECTED IN ACCORDANCE WITH ACI-318 (LATEST EDITION). COPIES OF FIELD REPORTS, CONCRETE MIXES, CYLINDER TESTS, AND OTHER DATA SHALL BE SENT TO THE ARCHITECT, ENGINEER, AND OWNER.

P. STEEL STAIRS

- 1. ALL STAIR SHOP DRAWINGS AND THEIR CERTIFICATIONS MUST BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT OCCURS.
- 2. ALL STAIR STRINGERS TO BE CONTINUOUS AS REQUIRED BY THE STRUCTURAL DESIGN BUT NOT LESS THAN MC10x8.4. AND SHALL BE WELDED AND MITERED WHERE SPLICED OR CRIPPLED, ETC.
- 3. FOR TREADS AND PLATFORMS USE MINIMUM 12 GAGE STEEL SHEET, CONCRETE PAN (SEE ARCHITECTURAL DRAWINGS). FOR RISERS USE MINIMUM

12 GAGE STEEL SHEET EXPOSED (U.O.N. ON ARCHITECTURAL DRAWINGS).

- 4. STAIR SUPPORTS SHALL BE CONSIDERED ONLY AT THE FLOOR LANDING AND AT THE BACK OF INTERMEDIATE LANDINGS. STAIR DESIGNER SHOULD NOT CONSIDER SUPPORT AT ANY OTHER POINT WITHOUT PRIOR SPECIFIC APPROVAL OF THE STRUCTURAL ENGINEER
- OF RECORD. 5. SEE ARCHITECTURAL DRAWINGS FOR STAIR LOCATIONS, DIMENSIONS AND DETAILS.

Q. ABBREVIATIONS

עי אטטוי	LVIATION	2	L.W.	=	Long Way
A.B.	=	Anchor Bolt	MAX.	=	Maximum
ADD'L	=	Additional	MECH.	=	Mechanical
ARCH.	=	Architectural	MIL.		
AESS	=	Architecturally exposed	MIL. MIN.	=	Millimeter Minimum
, .233		structural steel	MIN. NO.	=	Number
BAL.	=	Balance	NO. NTS		
BM.	=	Beam	0.C. or 0	= /C =	Not to Scale On Center
BOT.	=	Bottom	0.C. 01 0,		Near Face
B.O.D.	=	Bottom of Deck	O.F. OPNG.	=	
C.J.	=	Control Joint		=	Opening
C.J.	=	Centerline	P.C.	=	Precast Concrete
			P.J.F	=	Premolded Joint Filler
CA	=	Column above	PL.	=	Plate
C.C.	=	Center to Center	R	=	Radius
CL.	=	Clear	REINF.	=	Reinforce(ment)
COL.	=	Column	REQ'D.	=	Required
CONC.	=	Concrete	SCHED.	=	Schedule
CONT.	=	Continuous	SECT.	=	Section
DET.	=	Detail	SIM.	=	Similar
DIA.	=	Diameter	S.O.G.	=	Slab On Grade
DWG.	=	Drawing	S.S.	=	Stainless Steel
DWLS	=	Dowels	ST.	=	Steel
EA.	=	Each	STD.	=	Standard
E.F.	=	Each Face	STIFF.	=	Stiffener
E.J.	=	Expansion Joint	S.W.	=	Short Way
EL.	=	Elevation	SYM.	=	Symmetrical
E.W.	=	Each Way	T&B	=	Top & Bottom
E.0.S.	=	Edge Of structural Slab	T.O.F.	=	Top of Footing
EXP.	=	Expansion	T.O.SL.	=	Top of Structural Slab
FIN.	=	Finished	T.O.ST.	=	Top of Steel Beam
FL.	=	Floor	T.O.W.	=	Top of Structural Wall
HORIZ.	=	Horizontal	TYP.	=	Typical
H.D.G.	=	Hot Dip Galvanized	U.O.N.	=	Unless Otherwise Noted
I.F.	=	Inside ['] Face	VERT.	=	Vertical
JT.	=	Joint	V.I.F.	=	Verify in Field
L.L.H.	=	Long Leg Horizontal	W.P.	=	Working Point

L.L.V. R. SYMBOLS

— → H : INDICATES PARTIAL JOINT PENETRATION MOMENT CONNECTION THROUGH BEAM/COL

 $\overline{}$ OR $\overline{}$ OR $\overline{}$ OR $\overline{}$ OR $\overline{}$ OR $\overline{}$ INDICATES BEAM CONTINUOUS OVER COLUMN

W.W.F.

Welded Wire Fabric

—■ H : INDICATES COMPLETE JOINT PENETRATION MOMENT CONNECTION THROUGH BEAM/COL.

S. POST INSTALLED ADHESIVE ANCHORS IN CONCRETE OR MASONRY

Long Leg Vertical

1. HILTI HIT-RE 500 V3 ICC-ES-ESR-3814 (CONCRETE)

2. HILTI HIT-RE 100 ICC-ES-ESR-3829 (CONCRETE) ICC-ES-ESR-3187 & 3963 (CONCRETE & MASONRY) 3. HILTI HIT-HY 200-A 4. HILTI HIT-HY 270 ICC-ES-ESR-4143 & 4144 (CONCRETE & MASONRY)

T. POST INSTALLED MECHANICAL ANCHORS IN CONCRETE OR MASONRY

1. HILTI KWIK BOLT 3 ICC-ES-ESR-1385 (MASONRY) 2. HILTI KWIK BOLT 3 ICC-ES-ESR-2302 (CONCRETE) ICC-ES-ESR-1917 (CONCRETE) HILTI KWIK BOLT TZ

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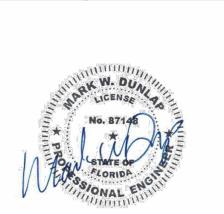
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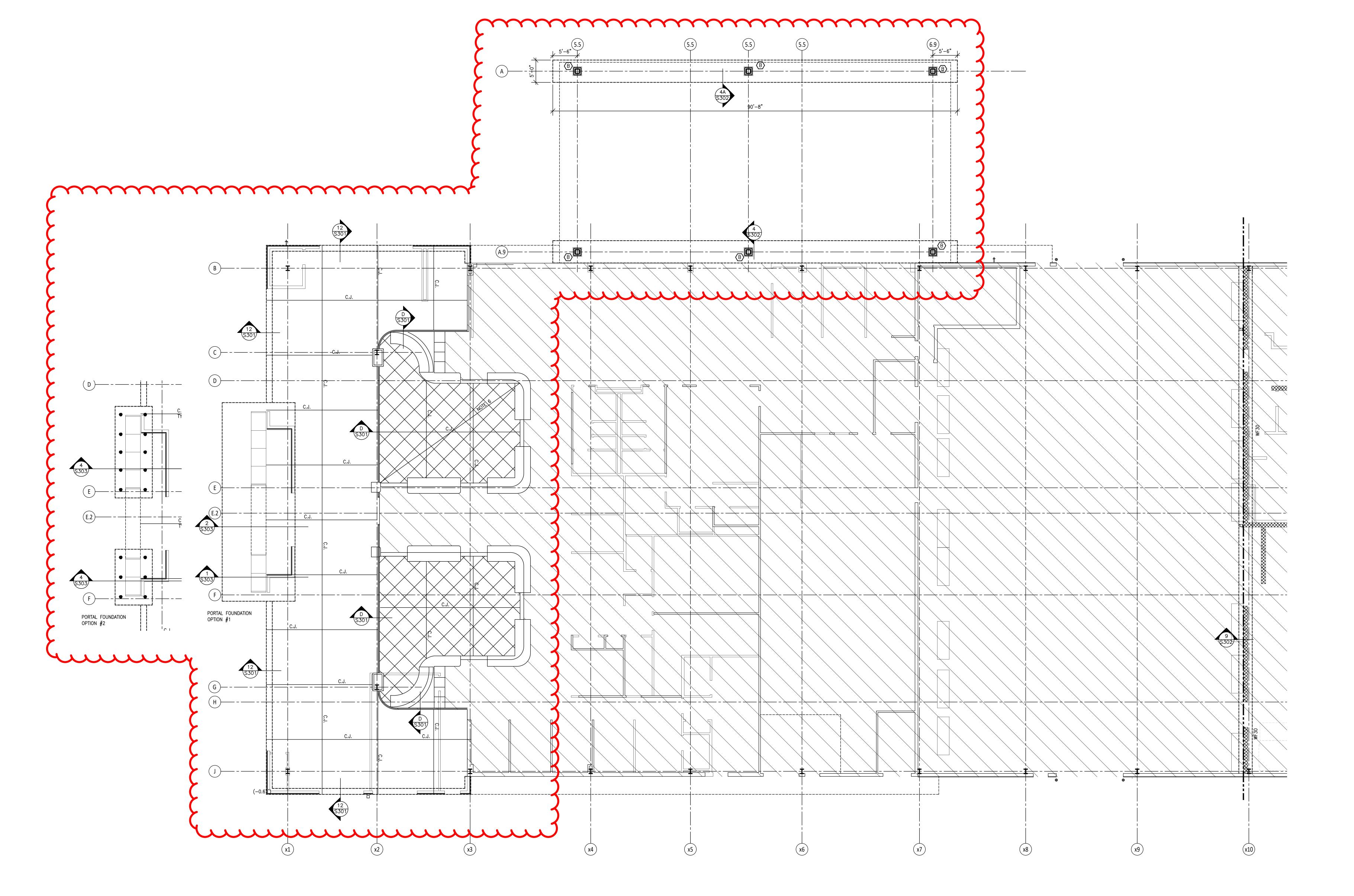
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GENERAL NOTES

DEI 221018





PART. FOUNDATION PLAN

SCALE : $\frac{1}{8}$ " = 1'-0" 1. SLAB ON GRADE TO BE 5" THICK CONCRETE REINF W/ 6 X 6 X W2.9 X W2.9 WWM, OVER 10 MIL VAPOR BARRIER.

2. TOP OF SLAB ELEVATION = 100.00' NAVD (DATUM.), U.N.O.

3. ELEVATION TOP OF FOOTING ON GRADE BEAM NOTED (XXX.XX') IN PLAN.

4. SLAB CONTROL JOINTS NOTED C.J. IN PLAN. SEE DETAIL A/S301

5. AREA NOTED W/ SIS EXISTING SLAB ON GRADE. 6. AREA NOTED W/ SIS FILLED IN #57 STONE AND TOPPED WITH SLAB PER NOTE 1



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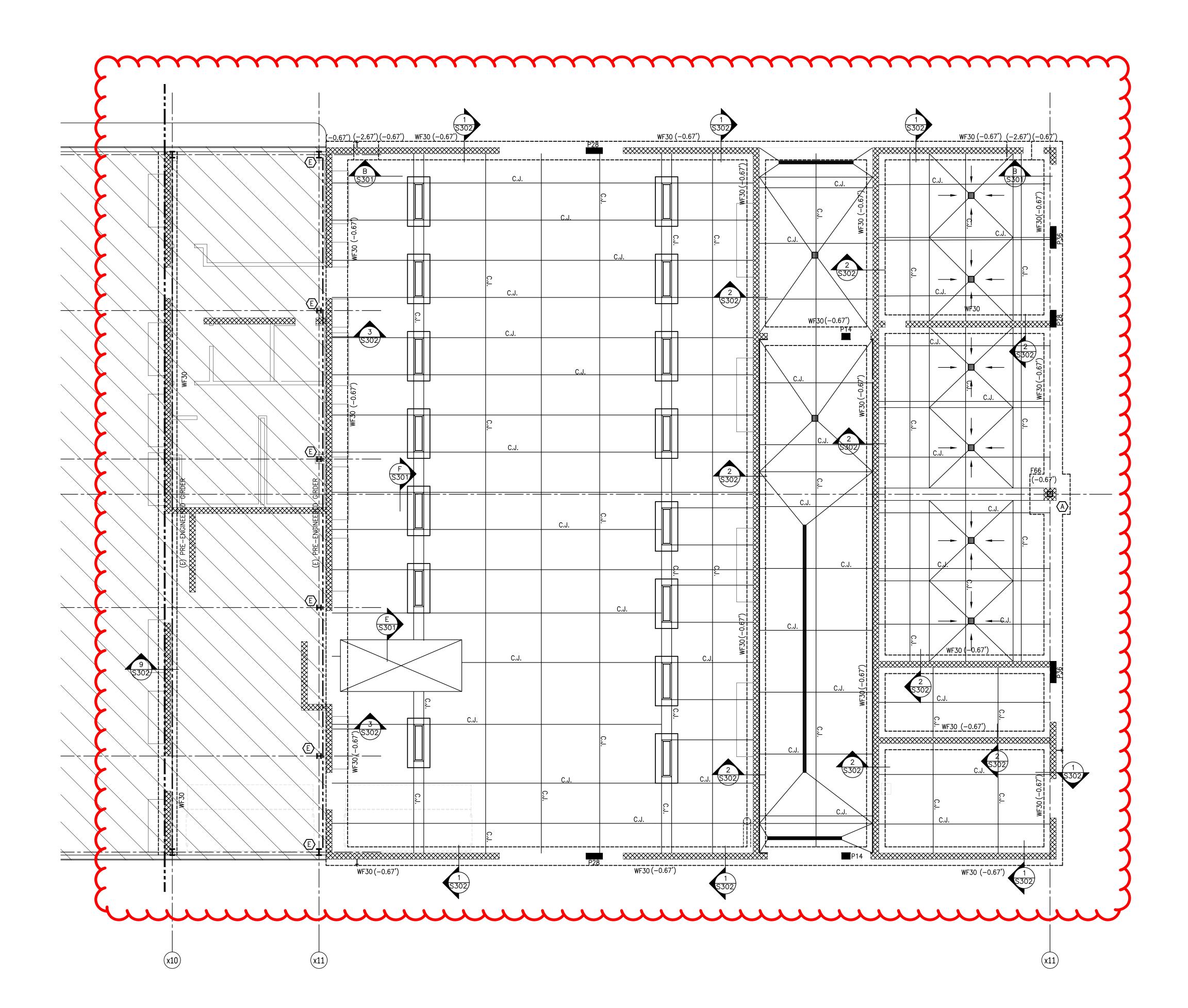
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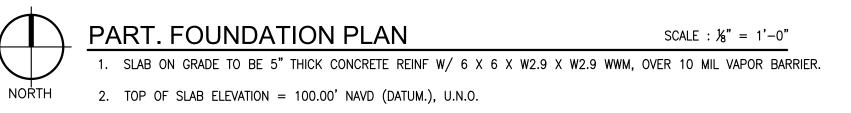
September 30, 2021 Sheet Number

PART. FNDN PLAN

Project Number DEI 221018

File Name





- 3. ELEVATION TOP OF FOOTING ON GRADE BEAM NOTED (XXX.XX') IN PLAN.
- 4. SLAB CONTROL JOINTS NOTED C.J. IN PLAN. SEE DETAIL A/S301
- 5. AREA NOTED W/ SIS EXISTING SLAB ON GRADE.

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PART. FNDN PLAN

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LINTEL SCHEDULE				
MARK	SIZE		REMARKS	
L-1	L4 x 3½ x 5/6" FOR EACH 4" THICKNESS OF WALL	ШL	FOR OPENINGS UP TO 5'-0"	
L-2	L6 x $3\frac{1}{2}$ x $\frac{5}{16}$ " FOR EACH 4" THICKNESS OF WALL	F	FOR OPENINGS 5'-1" TO 10'-0"	
L-3	W 8 x 13 + $\frac{5}{16}$ ° SUS. PLATE W/ $\frac{7}{4}$ ° HANGERS AT 24° o/c	田	AS SHOWN	
L-4	W 12 x 14 + $\frac{5}{16}$ ° SUS. PLATE W/ $\frac{7}{4}$ ° HANGERS AT 24° o/c	Ħ	AS SHOWN	
L-5	W 14 x 22 + $\frac{5}{16}$ ° SUS. PLATE W/ $\frac{7}{4}$ ° HANGERS AT 24° o/c	田	AS SHOWN	
L-6	W 16 x 26 + $\frac{5}{16}$ ° SUS. PLATE W/ $\frac{7}{4}$ ° HANGERS AT 24° o/c	臣	AS SHOWN	
L-7	W 21 x 48 + $\frac{5}{16}$ ° SUS. PLATE W/ $\frac{1}{4}$ ° HANGERS AT 24° o/c	五	AS SHOWN	
Р	8" PRECAST CONC. WITH #5 T + B FOR EACH 4" WYTHE OF MAS.		AS SHOWN	

mmmmm

ALL OPENINGS IN WALLS AND PARTITIONS ARE TO BE PROVIDED WITH LINTELS. LINTELS SHALL BE STRUCTURAL STEEL OR PRECAST CONCRETE AS DIRECTED . ALL LINTELS SHALL HAVE A 8" MINIMUM BEARING UNLESS OTHERWISE NOTED ON DRAWINGS AND SHALL BE SET IN FULL BED OF MORTAR. CONTRACTOR SHALL SHORE ALL LINTELS AS REQUIRED TO PREVENT ROTATION DURING CONSTRUCTION AND SHALL PAY PARTICULAR ATTENTION TO ECCENTRICALLY LOADED LINTELS. CONTRACTOR SHALL COORDINATE SIZE, TYPE AND LOCATION OF LINTEL WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.

ALL BEAM LINTELS LARGER THAN W 8 BEAMS TO HAVE ADJUST MASONRY ANCHORS ON EACH FACE OF WEBS SPACED AT 16" o/c.

ALL EXTERIOR LINTEL TO BE HOT DIPPED GALVANIZED STEEL

WALL FOOTING SCHEDULE					
TYPE	SIZ W	ZE D	TRANSVERSE	HORIZONTAL	
WF30	3'-0"	18"	#6 @ 12" O/C	(4) #6 CONT	

USE WF30 U.N.O.

COLUMN FOOTING SCHEDULE					
TYPE	SIZE W X L	D	BOTT. BARS EW		
F66	6'-6" x 6'-6"	12"	(8) #6		

Cumunum

COLUMN	SCHE	ED	ULI	E
PARAPET	A		B	>
GARAGE EXTENSION				
ELEV.= 23.00'				
SERVICE DRIVE LANE				
ELEV.= 17.00'	HSS 10 × 10 × ½		HSS 8 × 8 × ½	-
SHOWROOM FLOOR				
BASE PL. ANCHOR BOLTS	.75" x 1'-6" x 1'-6" (4) ¾"ø A. BOLTS		5" × 24" × 2'-0"	ir. 55 BOLTS

MILL ALL COLUMN ENDS.

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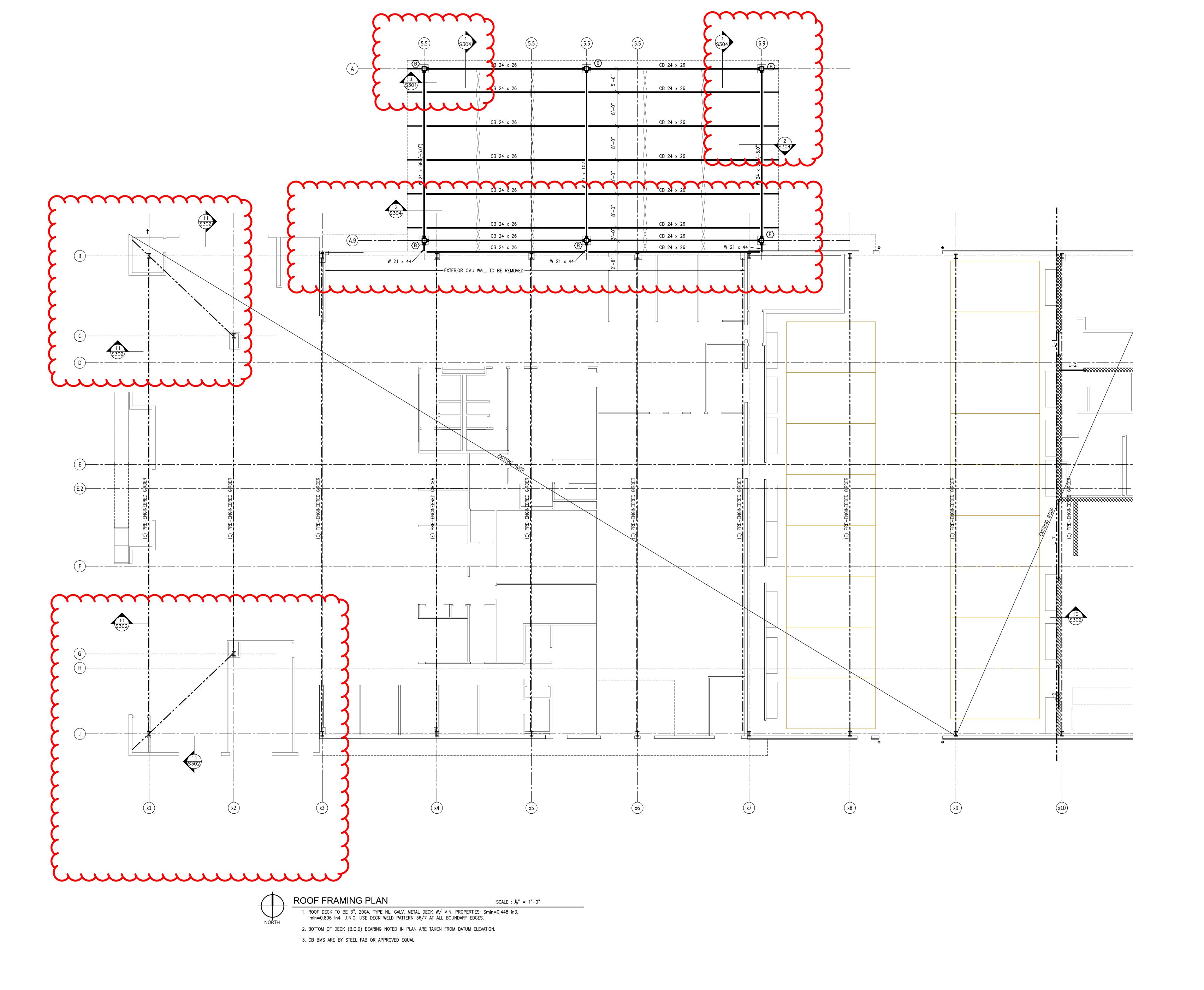
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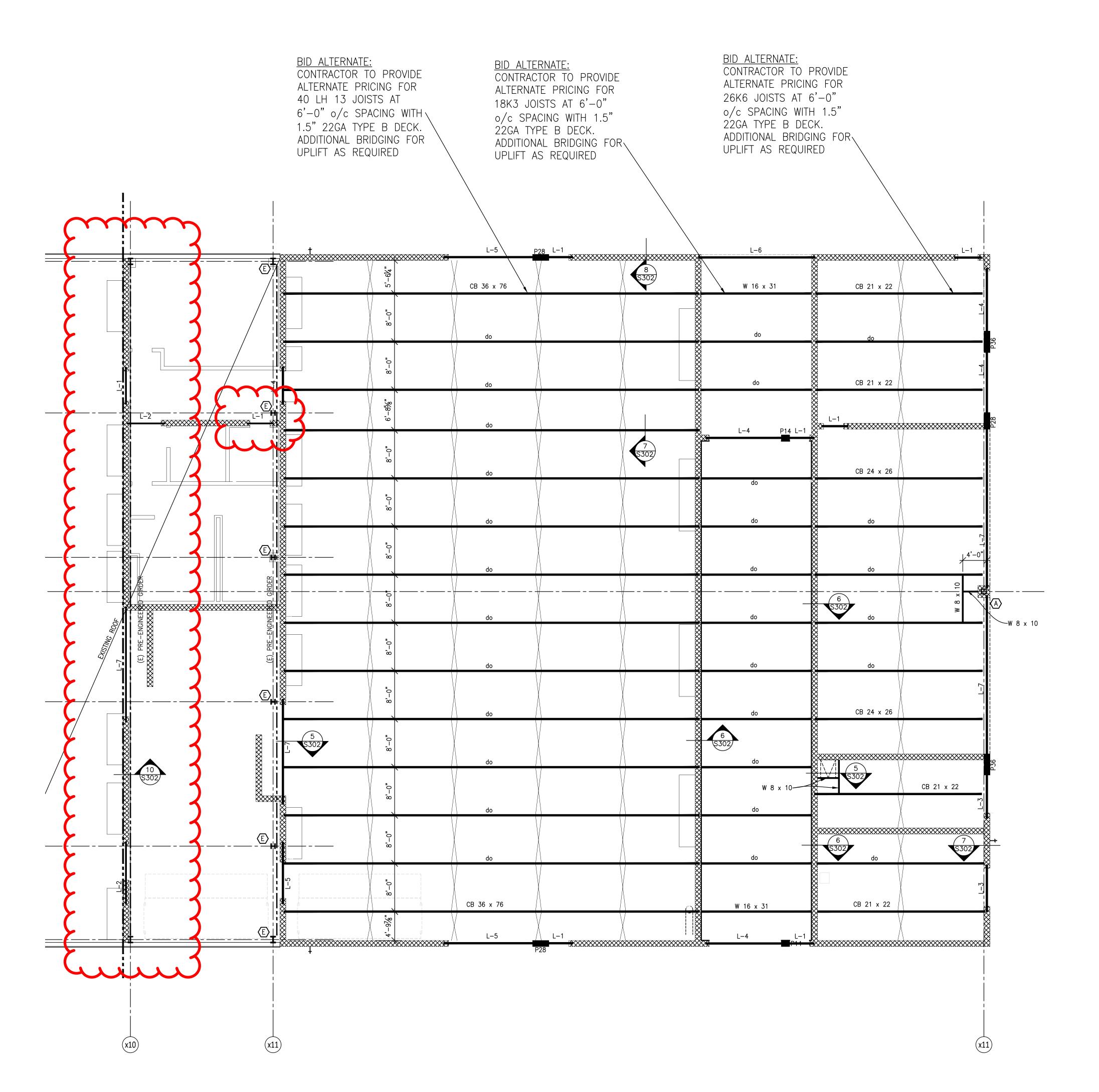
September 30, 2021

Sheet Number S 201

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PART. ROOF FRAMING PLAN

Project Number File Name
DEI 221018



ROOF FRAMING PLAN

SCALE : $\frac{1}{8}$ " = 1'-0"

1. ROOF DECK TO BE 3", 20GA, TYPE NL, GALV. METAL DECK W/ MIN. PROPERTIES: Smin=0.448 in3, Imin=0.806 in4. U.N.O. USE DECK WELD PATTERN 36/7 AT ALL BOUNDARY EDGES.

2. BOTTOM OF DECK (B.O.D) BEARING NOTED IN PLAN ARE TAKEN FROM DATUM ELEVATION. 3. CB BMS ARE BY STEEL FAB OR APPROVED EQUAL.

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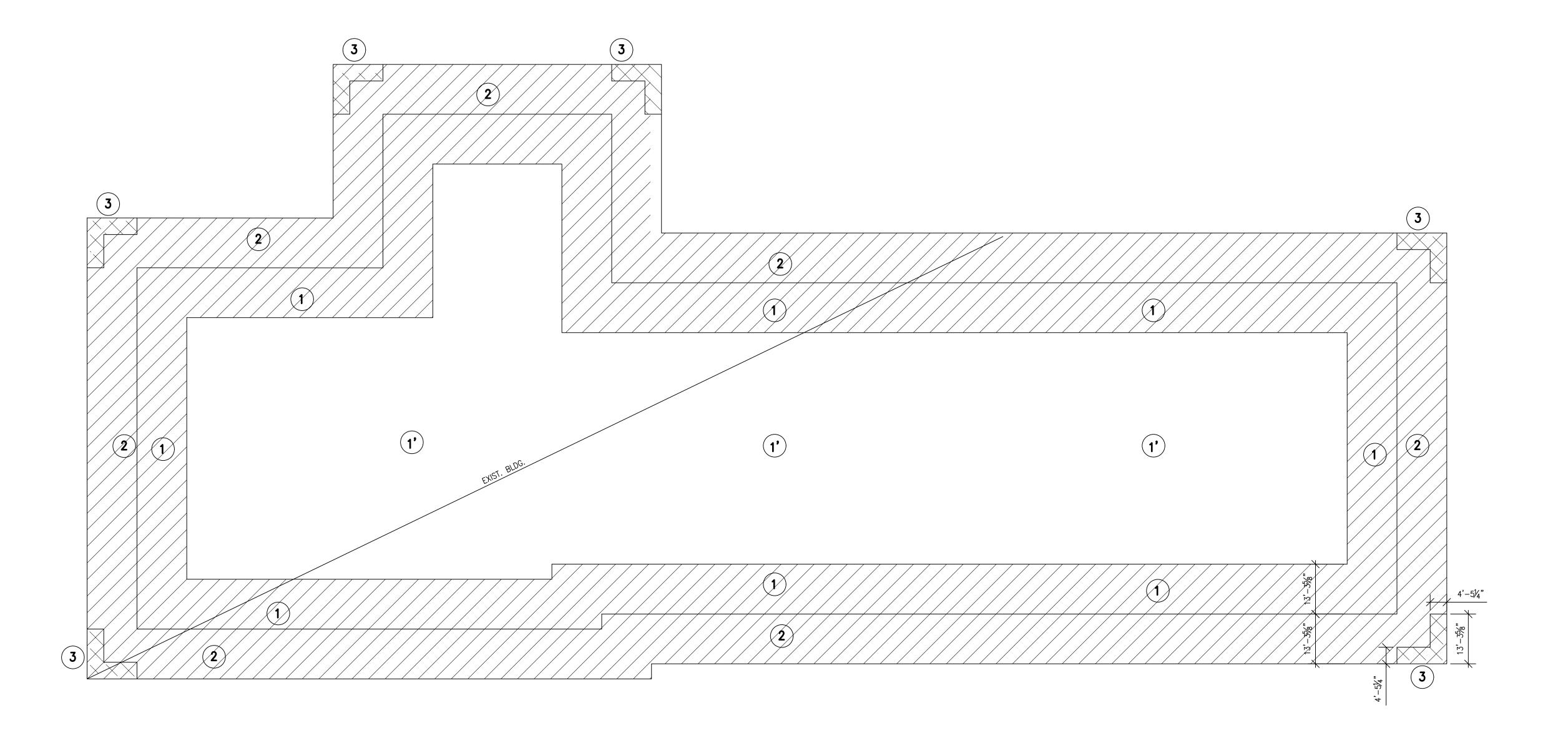
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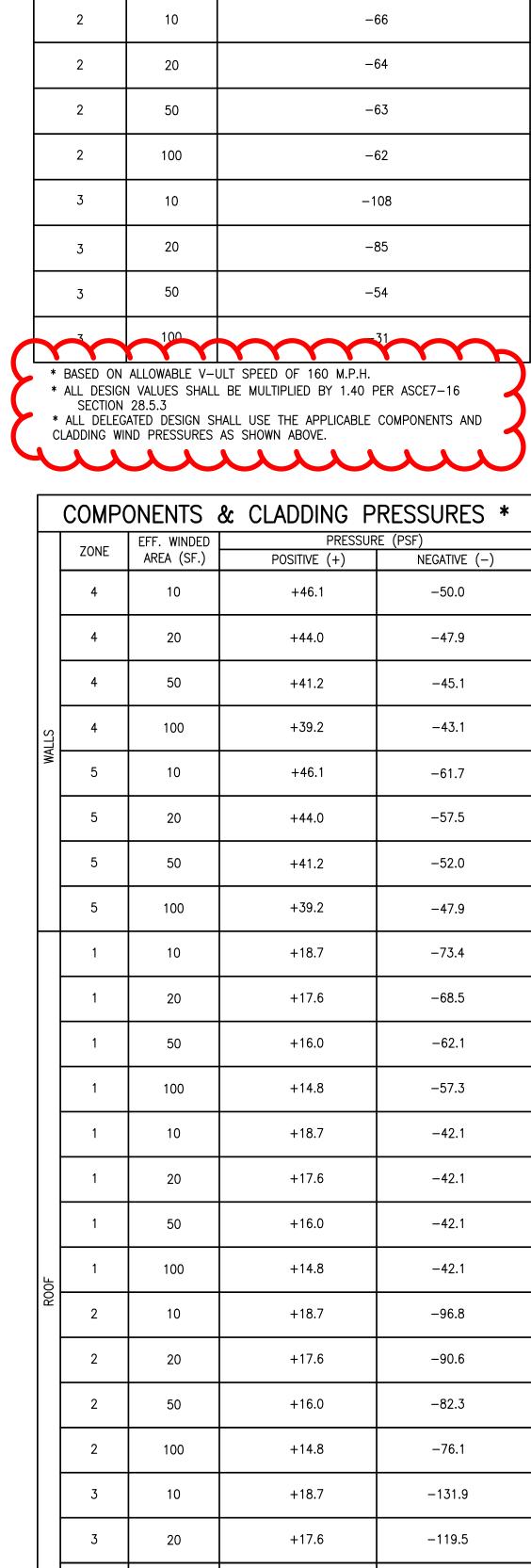
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PART. ROOF FRAMING PLAN

Project Number DEI 221018

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* BASED ON ALLOWABLE V-ULT SPEED OF 160 M.P.H. * ALL DESIGN VALUES SHALL BE MULTIPLIED BY 1.40 PER ASCE7-16 SECTION 30.4.2 * ALL DELEGATED DESIGN SHALL USE THE APPLICABLE COMPONENTS AND CLADDING WIND PRESSURES AS SHOWN ABOVE.

ASCE-	-7 DESIGN WIND R	OOF PRESSURE *		
70NE	PRESSURI	E (PSF)		
ZONE	POSITIVE (+)	NEGATIVE (-)		
1 / (FIELD)	+20.7	-80.2		
1'	+20.7	-58.9		
2	+20.7	-106.5		

3 +20.7 -126.8 * BASED ON ALLOWABLE V-ULT SPEED OF 160 M.P.H. * ALL DESIGN VALUES SHALL BE MULTIPLIED BY 1.40 PER ASCE7—16
SECTION 28.5.3

* ALL DELEGATED DESIGN SHALL USE THE APPLICABLE COMPONENTS AND CLADDING WIND PRESSURES AS SHOWN ABOVE.

ROOF	OVERHANG	NET DESIGN PRESSURE *
ZONE	EFF. WINDED AREA (SF.)	PRESSURE (PSF) NEGATIVE (-)
2	10	-66
2	20	-64
2	50	-63
2	100	-62
3	10	-108
3	20	-85
3	50	-54
7	100	31

* BASED ON ALLOWABLE V-ULT SPEED OF 160 M.P.H. * BASED ON ALLOWABLE V-OLT SPEED OF 160 M.P.H.

* ALL DESIGN VALUES SHALL BE MULTIPLIED BY 1.40 PER ASCE7-16
SECTION 28.5.3

* ALL DELEGATED DESIGN SHALL USE THE APPLICABLE COMPONENTS AND CLADDING WIND PRESSURES AS SHOWN ABOVE.

	COMP	DNENTS	&	CLADDING			*
	ZONE	EFF. WINDED AREA (SF.)		PRESS POSITIVE (+)	SURE	(PSF) NEGATIVE (-)	
WALLS	4	10		+46.1		-50.0	
	4	20		+44.0		-47.9	
	4	50		+41.2		-45.1	
	4	100		+39.2		-43.1	
	5	10		+46.1		-61.7	
	5	20		+44.0		-57.5	
	5	50		+41.2		-52.0	
	5	100		+39.2		-47.9	
	1	10		+18.7		-73.4	
	1	20		+17.6		-68.5	
	1	50		+16.0		-62.1	
	1	100		+14.8		-57.3	
	1	10		+18.7		-42.1	
	1	20		+17.6		-42.1	
	1	50		+16.0		-42.1	
ROOF	1	100		+14.8		-42.1	
	2	10		+18.7		-96.8	
	2	20		+17.6		-90.6	
	2	50		+16.0		-82.3	
	2	100		+14.8		-76.1	
	3	10		+18.7		-131.9	
	3	20		+17.6		-119.5	
	3	50		+16.0		-103.0	
	3	100		+14.8		-90.6	

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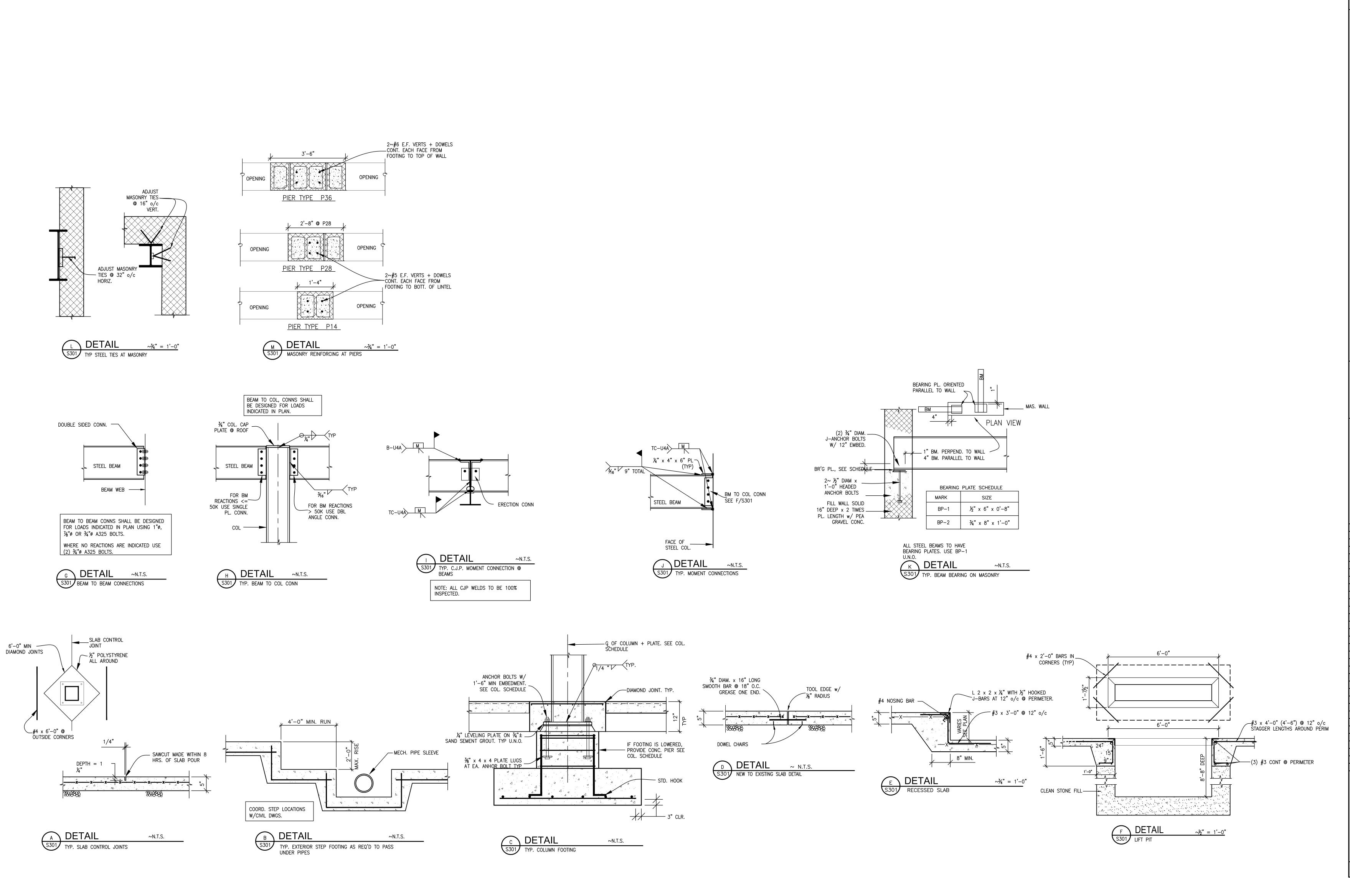
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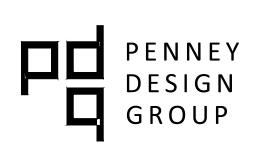
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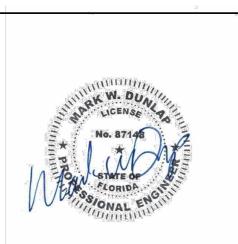
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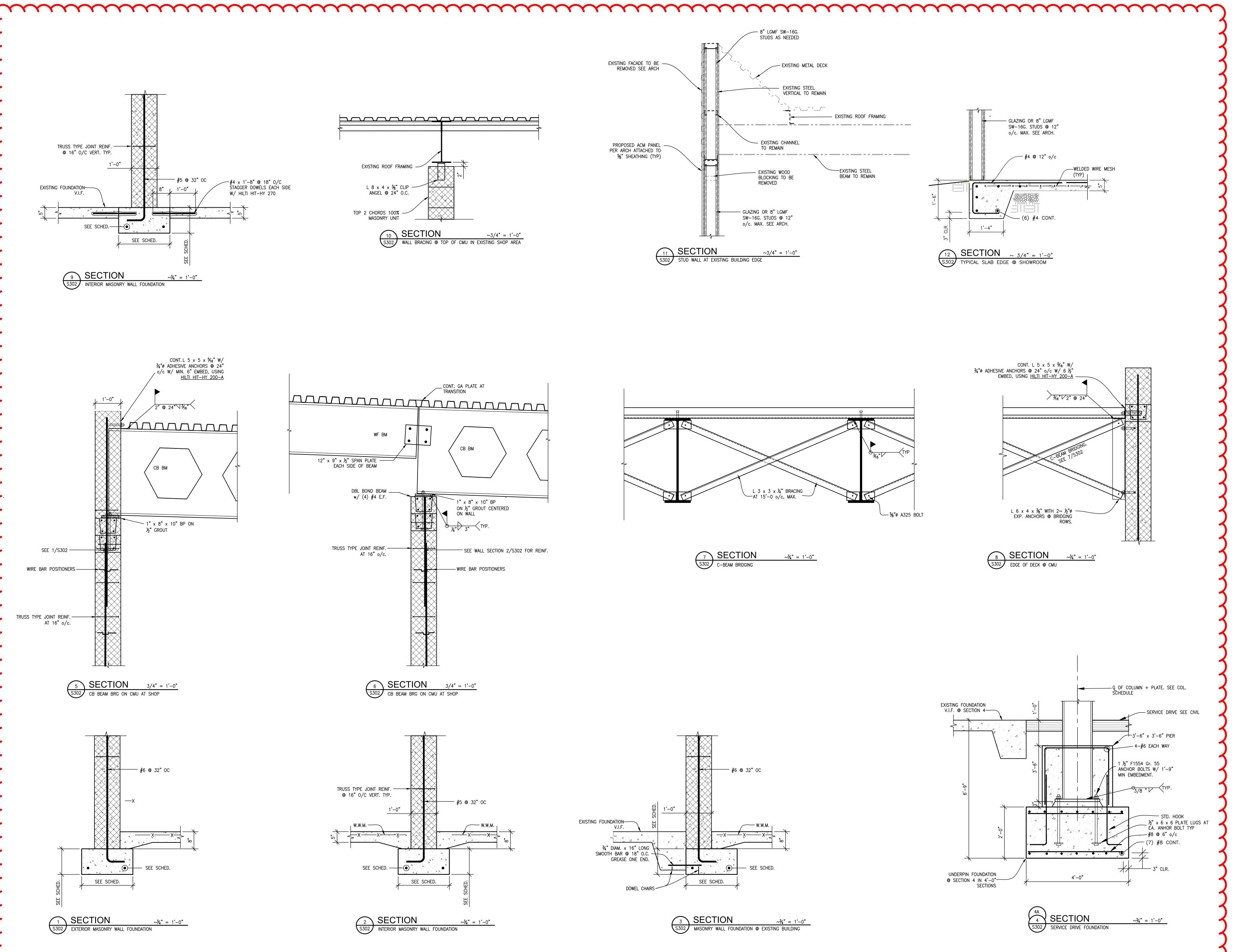
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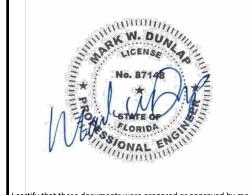
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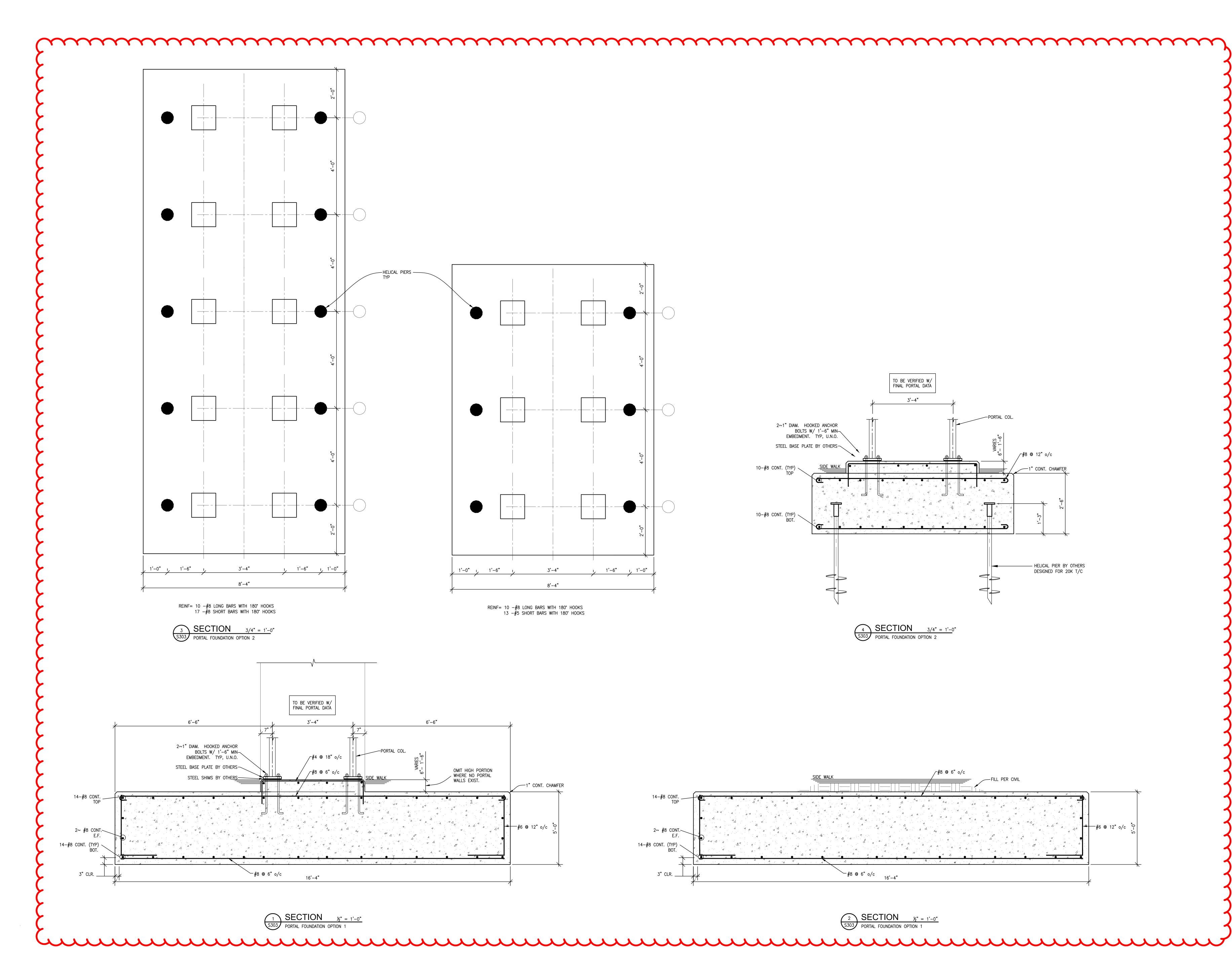
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Bev Smith Toyota Addition & Renovation

Sev Sinik TOYOTA



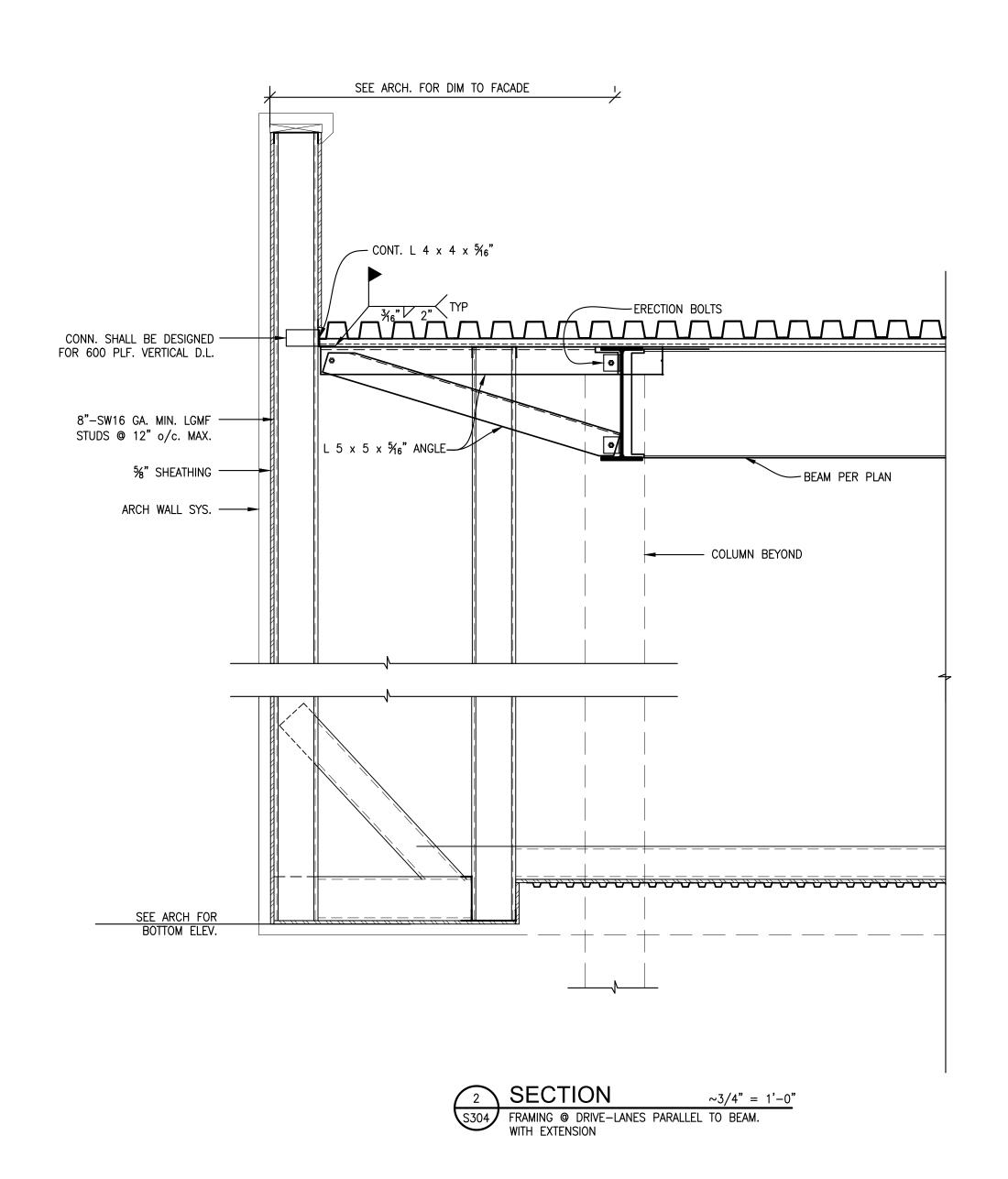
I certify that these documents were prepared or approved by me, and that I am a duly licensed engineer under the laws of the State of Florida, license number: PE87148; expiration date: 02-28-2023.

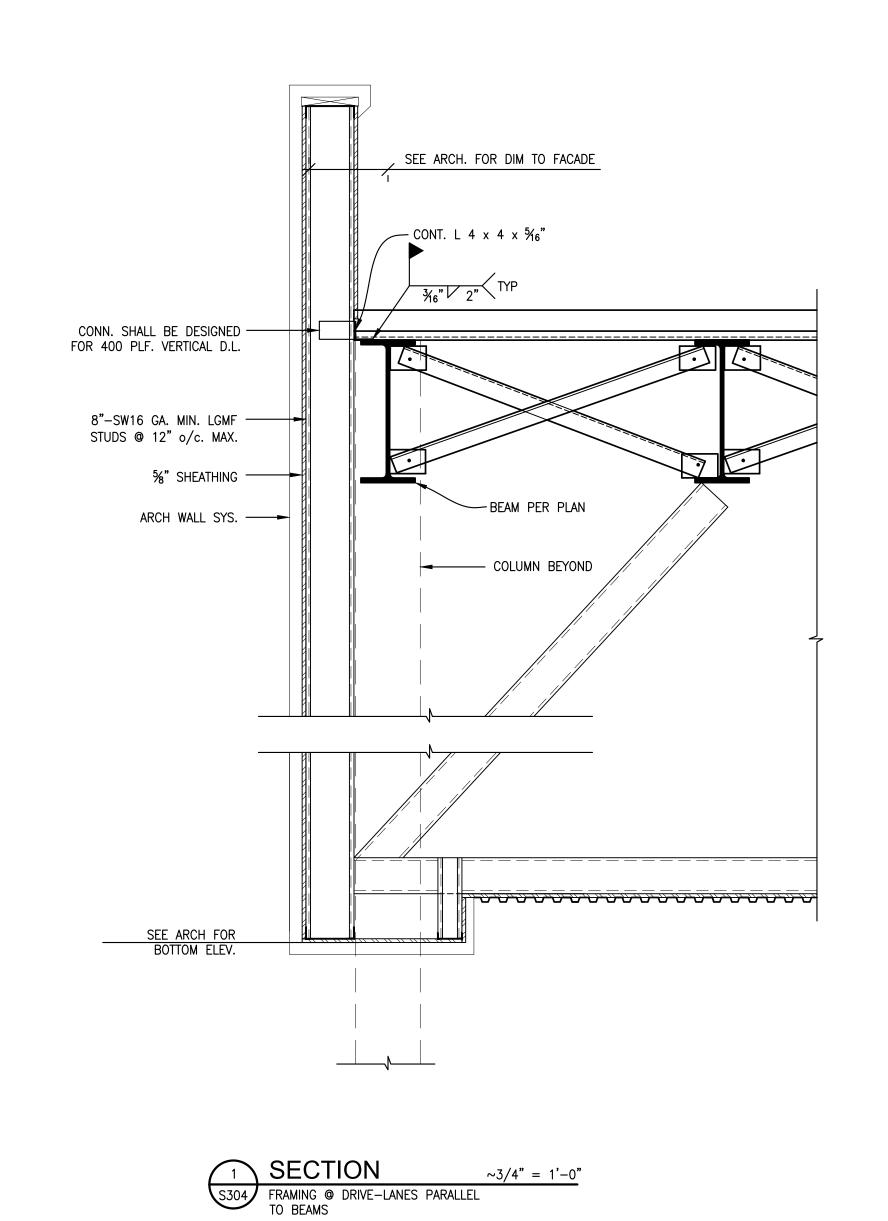
Permit/Bid Set	09/24/2023

Permit/Bid Set 09/24/2022
90 % Progress 07/30/2022
Progress 06/24/2022
No. Issue / Revision Date
Drawn By: NRC
Checked By: MWI
Plot Date: September 30, 202

Sheet Number
Sheet Title
SECTIONS

Project Number File Name





PENNEY
DESIGN
GROUP

ARCHITECTURE | PLANNING | INTERIORS 8120 Woodmont Avenue Suite 750 Bethesda, Maryland 20814

p.301.979.7600 f.301.710.6384 www.penneydesigngroup.com

Dunlap Engineering, Inc. 8120 Woodmont Ave-Suite 752 Bethesda, Maryland 20814 Phone: (301) 339-6200 Fax: (301) 710-6384 www.DunlapEng.com

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3350 US-1 : Pierce, FL 34982





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Permit/Bid Set

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