

GENERAL STRUCTURAL NOTES

COORDINATION:

- COORDINATE ALL DIMENSIONS, ELEVATIONS & OPENINGS WITH ARCHITECTURAL DRAWINGS. REPORT ANY DISCREPANCIES TO OUR OFFICE.
- SEE ARCHITECTURAL DRAWINGS FOR SLAB FINISHES, DETAILS, AND EXACT LOCATION OF DEPRESSED SLAB AREAS AND FLOOR DRAINS.

OWNER, ARCHITECT, AND CONTRACTOR NOTES:

- IF OUR OFFICE WERE TO BE HELD RESPONSIBLE FOR THE STRUCTURAL ADEQUACY OF THE CONSTRUCTED BUILDING, WE WOULD NEED TO PERFORM THE REVIEW OF ALL REQUIRED SHOP DRAWINGS AND PERFORM THE STRUCTURAL INSPECTIONS FOR THE BUILDING ENVELOPE AND ITS STRUCTURAL COMPONENTS.
- CONTRACTOR, BUILDER AND SUBCONTRACTORS INVOLVED IN ANY FORM OF CONSTRUCTION USING THESE DOCUMENTS SHALL INFORM THE OWNER AND DEVELOPER IN WRITING PRIOR TO CONSTRUCTION OF THE FOLLOWING RESPONSIBILITIES, PERFORMANCE CRITERIA AND LIMITATIONS AND RISKS ASSOCIATED WITH CONSTRUCTION. IF THE OWNER, DEVELOPER OR CONTRACTOR IS NOT ABLE TO ACCEPT RESPONSIBILITIES OR PERFORMANCE CRITERIA AND LIMITATIONS, NOTIFY OUR OFFICE PRIOR TO START OF CONSTRUCTION. IT SHALL BE EXPRESSLY UNDERSTOOD THAT THE ENGINEER IS NOT RESPONSIBLE OR LIABLE FOR THE LACK OF PERFORMANCE OF MATERIALS, SYSTEMS OR DESIGNS NOT BEING LIMITED TO ITEMS OUTLINED BELOW. CONTRACTORS AND SUBCONTRACTORS SHALL THOROUGHLY REVIEW ALL CONDITIONS AND RESPONSIBILITIES STATED IN THESE NOTES, GENERAL STRUCTURAL NOTES, PLANS SECTIONS AND DETAILS AND SHALL NOTIFY THE ENGINEER AND OWNER IN WRITING PRIOR TO CONSTRUCTION OF ANY CONDITIONS OR RESPONSIBILITIES WHICH ARE NOT ACCEPTABLE OR NOT UNDERSTOOD.
- THE ENGINEER SHALL NOT BE RESPONSIBLE FOR VARIATIONS TO PLANS BETWEEN BID PROCESS AND FINALIZED APPROVED DOCUMENTS RELEASED FOR CONSTRUCTION. ADDITIONS AND ALTERATIONS MAY BE MADE BETWEEN RELEASE OF BID DOCUMENTS AND FINALIZED CONSTRUCTION DOCUMENTS.
- THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE STRUCTURAL ENGINEERS IN THIS OR SIMILAR LOCALITIES. THEY NECESSARILY ASSUME THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR, SUBCONTRACTOR AND/OR WORKPERSONS WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, IT IS UNDERSTOOD THAT THE CONTRACTOR WILL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR ALL WORK NOT EXPLICITLY SHOWN.
- THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DESIGN AND PROVIDE ADEQUATE SHORING, BRACING, FORMWORK, ETC. AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. CONSTRUCTION MATERIALS SHALL BE UNIFORMLY SPREAD OUT SUCH THAT DESIGN LIVE LOAD PER SQUARE FOOT AS STATED HEREIN IS NOT EXCEEDED. VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS, CONDITIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL INFORM THE ARCHITECT IN WRITING OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS. ANY SUCH DISCREPANCY, OMISSION, OR VARIATION NOT REPORTED BEFORE START OF CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- TYPICAL DETAILS AND NOTES SHALL APPLY, THOUGH NOT NECESSARILY INDICATED AT A SPECIFIC LOCATION ON PLANS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT. DETAILS MAY SHOW ONLY ONE SIDE OF CONNECTION OR MAY OMIT INFORMATION FOR CLARITY. WHERE DISCREPANCIES OCCUR IN THESE DRAWINGS, NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS.
- DUE TO MOISTURE VARIATIONS AS A RESULT OF AMBIENT CONDITIONS AND MATERIAL CONDITIONS AT TIME OF CONSTRUCTION, WOOD MEMBERS ARE SUSCEPTIBLE TO VOLUME AND SHAPE CHANGES AND DIMENSIONAL VARIATIONS. SPANNING MEMBERS MAY ALSO DEFLECT VERTICALLY OR LATEROALLY. SHEATHING, DRYWALL OR ARCHITECTURAL SURFACES SUPPORTED BY WOOD MEMBERS MAY DISTORT, CRACK AND BULGE DUE TO THESE FACTORS.
- PLAIN CONCRETE, REINFORCED CONCRETE, POST-TENSIONED CONCRETE, OR CONCRETE MASONRY DEVELOP CRACKS. THE CRACKS ARE DUE TO INHERENT SHRINKAGE, CREEP AND RESTRAINING EFFECTS. CRACKS ARE NORMALLY COSMETIC AND THE SYSTEM MAINTAINS SERVICEABILITY AND STRENGTH REQUIREMENTS. JOINTS MAY BE INDICATED TO CONTROL CRACKING, BUT ARE NOT MEANT TO ELIMINATE ALL CRACKING, AS THIS IS NOT PRACTICAL. THE CONTRACTOR SHALL USE ALL STANDARD MEANS TO INSURE PROPER PROTECTION AND CURING OF CEMENTITIOUS MATERIALS TO REDUCE CRACKING. SURFACE SPALLING OR EXTREME CRACKING MAY BE CAUSED BY POOR MATERIAL OR PLACEMENT.

APPLICABLE CODES:

- ALTHOUGH THE ENGINEER OF RECORD HAS STRIVED TO MEET ALL APPLICABLE CODES AND LOCAL ORDINANCE REQUIREMENTS, THE CONTRACTOR IS STILL RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES AND ORDINANCES OF THE EVENT OF CONFLICT OR OVERSIGHT IN THE DRAWINGS THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ARCHITECT OR ENGINEER OF ANY CONFLICT OF DISCREPANCY ENCOUNTERED SO THAT APPROPRIATE REMEDIES MAY BE UNDERTAKEN.

DESIGN LOAD & CRITERIA					
DESIGN CODES	BUILDING CODES		FLORIDA BUILDING CODE (2023 EDITION) ASCE 7-22		
	STRUCTURAL STEEL		ANSI/AISC 360-16 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (16th EDITION)		
	CONCRETE		ACI 318-19 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.		
WIND	RISK CATEGORY		II		
	BASIC WIND SPEED (3 SECOND GUST)		V ₅₀ = 175 M.P.H. V ₆₀ = 136 M.P.H.		
	EXPOSURE CATEGORY		"C"		
	DIRECTIONALITY FACTOR		K _d = 0.85		
	TOPOGRAPHIC FACTOR		K _{z1} = 1.0		
GRAVITY	LOCATION	LIVE LOAD		SUPERIMPOSED DEAD LOAD	
		UNIFORM	CONCENTRATED	UNIFORM	CONCENTRATED
	ROOF	30 PSF	-----	35 PSF	-----
	APARTMENT	40 PSF	-----	35 PSF	-----
	CORRIDORS	40 PSF	-----	35 PSF	-----
	STAIRS	40 PSF	-----	20 PSF	-----
	TERRACE	100 PSF	-----	35 PSF	-----
	NO LIVE LOAD REDUCTION HAS BEEN USED.				

- THIS BUILDING IS LOCATED IN A HVHZ (HIGH VELOCITY HURRICANE ZONE) WIND BORN DEBRIS REGION AND HAS BEEN DESIGNED AS ENCLOSED. ALL PARTS OF THE BUILDING ENVELOPE, INCLUDING BUT NOT LIMITED TO, CLADDING SYSTEMS, EXTERIOR DOORS AND WINDOWS, SKYLIGHTS, AND GLASS BLOCK MEMBERS SHALL MEET IMPACT TEST CRITERIA OR BE PROTECTED WITH AN EXTERNAL PROTECTION DEVICE THAT HAS BEEN TESTED AND MEETS THE IMPACT TEST CRITERIA IN ACCORDANCE WITH SECTION 1626 OF THE FLORIDA BUILDING CODE AND SHALL HAVE A CURRENT NOTICE OF ACCEPTANCE (NOA).

TERMITE PROTECTION:

- AS PER F.B.C. 105.11 BUILDING COMPONENTS AND BUILDING SURROUNDINGS REQUIRED TO BE PROTECTED FROM TERMITE DAMAGE IN ACCORDANCE WITH 1503.6, 2304.11, 2603.9, OR REQUIRED TO HAVE CHEMICAL SOIL TREATMENT IN ACCORDANCE WITH 1816 SHALL NOT BE COVERED OR CONCEALED UNTIL THE RELEASE FROM THE BUILDING OFFICIAL HAS BEEN RECEIVED.
- ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT PROTECTION AGAINST SUBTERRANEAN TERMITES AS PER F.B.C. 1816. A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES".

GEOTECHNICAL CRITERIA:

- FOUNDATIONS HAVE BEEN DESIGNED PER THE RECOMMENDATIONS DONE BY ALL STATE ENGINEERING & TESTING CONSULTANTS, INC. PROJECT DATED FEBRUARY 28 th 2024. FOR THE PROPOSED PROJECT LOCATED AT 13100 SW 80th AVE, MIAMI, FLORIDA 33156
- FOUNDATIONS HAVE BEEN DESIGNED AS A SHALLOW FOUNDATION SYSTEM WITH A SOIL CAPACITY OF 25000 lb/F2

CONTRACTOR SHALL FAMILIARIZE WITH TERMS SPECIFIED ON THE SOILS REPORT BEFORE SOIL PREPARATION OPERATIONS BEGIN. AN ORIGINAL COPY OF THE REPORT SHALL BE KEPT AT THE JOB SITE AT ALL TIMES DURING BUILDING PAD PREPARATION.

CONCRETE:

- ALL STRUCTURAL CONCRETE HAS BEEN DESIGNED IN ACCORDANCE WITH THE ACI 318 LATEST EDITION AND THE BUILDING CODE.
- THE CONCRETE REQUIREMENTS ARE:
 - CEMENT SHALL BE TYPE I OR II CONFORMING TO ASTM C150.
 - FINE AND COURSE AGGREGATES SHALL CONFORM TO ASTM C33.
 - NOMINAL MAXIMUM SIZE OF COARSE AGGREGATE SHALL BE NOT LARGER THAN 3/4"
 - SLUMP SHALL BE 3" TO 6" (UNLESS UTILIZING WATER REDUCING ADMIXTURES)
- COMPRESSIVE STRENGTH AT 28 DAYS:
ALL EXTERIOR CONCRETE (EXPOSED TO EARTH OR WEATHER) SHALL COMPLY WITH ACI 318-14, TABLES 19.3.1.1 & 19.3.2.1, AND SHALL HAVE A MAXIMUM WATER-SOLUBLE ION CONTENT IN CONCRETE PER TABLE BELOW. SEE TABLE BELOW FOR MAXIMUM WATER-CEMENT RATIO.

DISTANCE TO MOISTURE AND CHLORIDES (*)	EXPOSURE CLASS	MAXIMUM WATER-SOLUBLE CHLORIDE ION (Cl-) CONTENT IN CONCRETE BY WEIGHT OF CEMENT
> 4 MILES	C0 (N/A)	N/A
2-4 MILES	C1 (MODERATE)	0.30
< 2 MILES	C2 (SEVERE)	0.15

(*) INCLUDES DEICING CHEMICALS, SALT, SALT WATER, BRACKISH WATER, SEAWATER, OR SPRAY FROM THESE SOURCES.

f'c [PSI]	WATER/CEMENT RATIO	
	NON-AIR ENTRAINMENT (NO EXPOSURE TO FREEZING AND THAWING)	
2000	0.82	
3000	0.68	
4000	0.57	
5000	0.48	
6000	0.41	

f'c [PSI]	MINIMUM MODULUS OF ELASTICITY (KSI)	f'c [PSI]	MINIMUM MODULUS OF ELASTICITY (KSI)
3000	3156	8000	4884
4000	3644	9000	4947
5000	4074	10000	5215
6000	4463	11000	5469
7000	4821	12000	5712

FOOTINGS: 3000 PSI
SLAB ON FILL: 3000 PSI
COLUMNS: 4000 PSI
BEAMS & SLAB 4000 PSI
ALL OTHER POURED-IN-PLACE CONCRETE: 4000 PSI

- TEST: AS PER ACI 5.6.2 THE MINIMUM SAMPLING FREQUENCY PER CLASS OF CONCRETE SHALL BE ONE SET PER POUR PER DAY FOR VOLUMES BETWEEN 5 AND 25 CU YD, AND ADDITIONAL SETS FOR EVERY ADDITIONAL 50 CU YD THEREAFTER. A SET CONSISTS OF A MIN. OF 6 CONCRETE SPECIMENS THAT SHALL BE TAKEN FROM EACH CLASS OF CONCRETE. SPECIMENS SHALL BE TESTED ACCORDING TO A.S.T.M. C-39, ONE AT 3, ONE AT 7, 3 AT 28 DAYS AND 1 AT 56 DAYS.
- COVER:
CONCRETE DEPOSITED AGAINST THE GROUND: 3"
FORMED CONCRETE IN CONTACT WITH THE GROUND: 2"
INTERIOR BEAMS AND COLUMNS: 1 1/2"
EXTERIOR BEAMS AND COLUMNS: 2"
INTERIOR SLABS: 3/4"
EXTERIOR SLABS: 1 1/2"
EXTERIOR POST-TENSIONED SLABS: 1"
INTERIOR POST-TENSIONED SLABS: 3/4"
- LIGHTWEIGHT INSULATING CONCRETE (LWIC) SHALL HAVE A MAXIMUM SPECIFIC WEIGHT OF 38 PCF.
- LIGHTWEIGHT CONCRETE SHALL HAVE A MAXIMUM SPECIFIC WEIGHT OF 115 PCF, MINIMUM F'C OF 3000 PSI AND A MAXIMUM SLUMP OF 6" (+/- 1").

REINFORCING STEEL:

- REINFORCING BARS CONFORMING TO A.S.T.M. A-615 GRADE 60, INCLUDING COLUMN AND BEAM TIES.
- WELDED FIRE FABRIC CONFORMING TO A.S.T.M. A-185 AND SUPPORTED ON SLAB BOLSTERS SPACED AT 3'-0" O/C.
- REINFORCING BARS REQUIRED TO BE WELDED SHALL CONFORM TO THE REQUIREMENTS OF ASTM A706 GRADE 60. WELDING OF REINFORCING OTHER THAN SPECIFIED IS PROHIBITED.
- MECHANICAL CONNECTORS SHALL BE IN ACCORD WITH ACI 439-3R-83.
- FABRICATION AND DETAILING ACCORDING TO A.C.I.-315.
- ALL ACCESSORIES TO HAVE UPTURNED LEGS AND BE PLASTIC DIPPED AFTER FABRICATION. THE CONTRACTOR SHALL INCLUDE IN HIS BASE BID THE COST
- ALL REINFORCING STEEL AT BALCONIES, EXPOSED CORRIDORS, PLANTERS SHALL BE HOT DIP GALVANIZED.
- EXTRA STOCK: OF 5000 LBS. OF ADDITIONAL REINFORCING STEEL INCLUDING FABRICATION, BENDING, FURNISHING AND PLACING. THIS EXTRA STOCK SHALL BE FURNISHED AND USED FOR SPECIAL CONDITIONS AS DIRECTED BY THE ARCHITECT, THE ARCHITECTS AGENT, OR THE OWNERS CONSTRUCTION SUPERVISOR. THE PRICE OF ALL UN-USED EXTRA STOCK SHALL BE CREDITED TO THE OWNERS ACCOUNT.

SHORING, RE-SHORING, AND TEMPORARY BRACING:

- ALL SHORING, RE-SHORING AND TEMPORARY BRACING REQUIRED IN THIS PROJECT IS TO BE DESIGNED BY FLORIDA PROFESSIONAL ENGINEER WHO SPECIALIZES IN FORM WORK/TEMPORARY BRACING DESIGN, AND WHO HAS BEEN HIRED BY THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR IS THE ULTIMATE RESPONSIBLE PARTY FOR SHORING, RE-SHORING, AND TEMPORARY BRACING REQUIRED ON THIS PROJECT AND MUST SATISFY HIMSELF WITH THE ADEQUACY OF THE INSTALLATION OF THESE ITEMS AT ALL TIMES. IN THE SPECIFIC CASE OF POURED SLABS IT IS HIGHLY RECOMMENDED THAT FROM THE SHORING DESIGNER OR HIS AGENT PRIOR TO THE PLACEMENT OF CONCRETE THE GENERAL CONTRACTOR SECURE A CERTIFICATION OF THE INSTALLED SHORING.

SLAB ON FILL-(PLACED ACCORDING TO ACI-302):

- THE FLOOR SLAB ON GRADE SHALL BE SUPPORTED ON A 4" COMPACTED LAYER OF FREE DRAINING, GRANULAR SUBBASE MATERIAL. IF OWNER IS CONCERNED ABOUT VAPOR TRANSMISSION THOUGHT THE CONCRETE FLOOR SLAB, A VAPOR BARRIER SHALL BE USED. IF USED, SEE NOTE 6. VAPOR BARRIER IS REQUIRED AT ALL SLABS ON GRADE COVERED WITH WOOD, TILE, CARPET OR OTHER MOISTURE SENSITIVE OR IMPERVIOUS COVERINGS, OR WHEN SLAB SUPPORTS EQUIPMENTS SENSITIVE TO MOISTURE.
- JOINTS:
ISOLATION JOINTS MUST BE USED AT JUNCTIONS WITH WALLS AND COLUMNS. USE 1/2" THICK PREMOLDED JOINTS. FULL DEPTH OF SLAB. CONTROL JOINTS PLACED AT CENTERLINE OF COLUMN LINES PROVIDE INTERMEDIATE JOINTS IF COLUMN SPACING IS GREATER THAN 30', IN SIDEWALKS PROVIDE TOOLED JOINTS SPACED AT INTERVALS EQUAL TO THE WIDTH OF THE SLAB.
4" & 5" SLABS:1" DEEP TOOLED
JOINTS MUST BE SAWED BEFORE 24 HOURS AFTER CONCRETING. CONSTRUCTION JOINTS MUST BE PLACED IN THE WHERE BUILDING EXPANSION JOINTS ARE SHOWN AND WHERE CONTROL JOINTS ARE SHOWN OR AS PER FOLLOWING:
SLAB 4" THICK 12 FT 8" THICK 20 FT
5" THICK 13 FT 9" THICK 23 FT
6" THICK 15 FT 10" THICK 25 FT
7" THICK 18 FT
WHEN CONCRETING AND OPERATING ARE CONCLUDED FOR THE DAY, CONSTRUCTION JOINTS SHALL BE FORMED WITH BURKE KEYED KOLD METAL JOINT FORM OR APPROVED EQUAL.
- VAPOR BARRIERS:
WATERPROOF MEMBRANES NOT LESS THAN 6-MIL POLYVINYL CHLORIDE (OVERLAPPED 6" AT JOINTS) WITH A PERMEANCE OF LESS THAN 0.3% PERMS IN ACCORDANCE WITH A.S.T.M. E-98 SHALL BE PROVIDED UNDER INTERIOR SLAB, WHERE NO VAPOR BARRIER IS USED THE SUB-GRADE MUST BE DAMPENED WITH WATER IN ADVANCE OF CONCRETING NO FREE WATER STANDING ON THE SUB-GRADE NOR ANY MUDDY OR SOFT SPOT IS PERMITTED.
- ANY STRUCTURAL MEMBER PENETRATING SLAB ON FILL IS TO BE 1/2" PRE-MOLDED JOINT FILLER COMPLYING WITH A.S.T.M. D-1752, TYPE I.
- FINISHING:
NO PREMATURE FINISHING SHALL BE ALLOWED. IMMEDIATE FOLLOWING FLOATING TROWELING WITH STEEL TROWELS SHOULD BE COMMENCED IF REQUIRED BROOMING SHALL BE AFTER THE STEEL TROWELING OPERATION.
- SLAB FINISHES: (UNLESS OTHERWISE NOTED BY THE ARCHITECT)
BUILDING: STEEL TROWELED
OUTSIDE SLAB: BROOMED

MASONRY WALLS:

- CONCRETE BLOCK MASONRY WALLS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH f'm AS SCHEDULED AND COMPLY WITH "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES": TMS 402/602.
 - THE CONCRETE BLOCK UNITS, TO BE TYPE II-NONMOISTURE CONTROLLED, CONFORMING TO ASTM C90, WITH A MINIMUM NET AREA COMPRESSIVE STRENGTH AS SCHEDULED (AVERAGE OF THREE).
 - THE MORTAR SHALL COMPLY WITH ASTM C270, AND SHALL BE TYPE "M" WITH MINIMUM COMPRESSIVE STRENGTH AS SCHEDULED AT 28 DAYS.
 - GROUT FOR GROUTING CELLS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AS SCHEDULED AT 28 DAYS AND SHALL BE IN ACCORDANCE WITH WITH ASTM C476. GROUT TO HAVE A SLUMP BETWEEN 8" TO 11".
- | WALL TYPE: | UNIT STRENGTH (PSI) | MORTAR STRENGTH (PSI) | GROUT STRENGTH (PSI) | f'm DESIGN STRENGTH (PSI) |
|------------|---------------------|-----------------------|----------------------|---------------------------|
| CMU-1 | 2000 | 2000 | 2000 | 2000 |
| CMU-2 | 3250 | 3250 | 2500 | 2500 |
| CMU-3 | 4500 | 4500 | 3000 | 3000 |
- ALL CMU WALLS SHALL BE TYPE CMU-1 U.N.O.
- MASONRY WALLS SHALL BE REINFORCED HORIZONTALLY EVERY OTHER COURSE, WITH 9 GAUGE GALVANIZED, PREFABRICATED STEEL, DUR-O-WAL, "LADDER TYPE", OR EQUAL. EXTEND 4" INTO ADJACENT COLUMNS.
 - FOR CORNER BARS SEE NOTE 13 AT TYPICAL BEAM DIAGRAM ON SCHEDULES SHEET.
 - PROVIDE CLEAN OUTS WHEN GROUTING BLOCK CELLS AND CLEAN OUT BLOCK CELLS OF ALL MORTAR DROPPINGS, MAXIMUM VERTICAL DROP FOR GROUTING IS 4'-0".
 - WHENEVER ANCHORS BOLTS ARE TO BE SET IN MASONRY, TWO CELLS AT THE SETTING LOCATION AND TWO COURSES ABOVE AND BELOW ANCHORS SHALL BE FILLED WITH GROUT.

STRUCTURAL STEEL:

- STRUCTURAL STEEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE BUILDING CODE AND AISC SPECIFICATIONS NINTH EDITION. STRUCTURAL STEEL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS NOTED OTHERWISE ON THE DRAWINGS:

TYPE	ASTM	GRADE	Fy
ALL STANDARD STEEL SHAPES	A36	-----	36 KSI
ANCHOR BOLTS	A307	-----	
STRUCTURAL BOLTS	A325	-----	
HOLLOW STRUCTURAL STEEL	A500	B	46 KSI
- ALL WELDING SHALL BE IN ACCORDANCE WITH LATEST AWS CODE. ALL WELDS SHALL USE E70XX ELECTRODES SERIES LOW HYDROGEN ELECTRODES.
- WELDERS SHALL BE AWS CERTIFIED.
- PROVIDE ONE SHOP COAT OF RUST INHIBITING PAINT MIN. 3 ML DRY FILM THICKNESS).
- ALL STEEL EXPOSED TO THE WEATHER SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 FOR MEMBERS AND ASTM A153 FOR CONNECTION ELEMENTS. THIS INCLUDES ALL STRUCTURAL STEEL USED TO SUPPORT MECHANICAL EQUIPMENT AND ALL ROOF BRACING AND OTHER STRUCTURAL MEMBERS.
- PLATES SHALL BE TOUCHED AFTER WELDING HAS TAKEN PLACE.
- ALL ANCHOR BOLTS/NUT SHALL BE A307 U.N.O. HEAD PLATE SHALL CONFORM TO ASTM-A36.
- NUTS SHALL BE HEAVY HEX
- DRILL OR PUNCH BOLT HOLES 1/8" LARGER THAN BOLT DIAMETER.
- STRUCTURAL BOLTS CONNECTION TYPE SHALL BE SLIP CRITICAL CLASS A
- FINISH COLOR OF PAINT TO BE SELECTED BY THE OWNER AND APPLIED IN THE FIELD.

SAFETY OSHA AND LABOR LAWS:

- THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE AND INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, TEMPORARY BRACING, ETC. THAT MAY BE NECESSARY. SUCH MATERIAL SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER COMPLETION OF THE PROJECT.
- THE STRUCTURAL ENGINEER OF RECORD DOES NOT POSSES, NOR PRESUMES TO POSSES ANY KNOWLEDGE OR EXPERTISE IN MATTERS TO JOB SITE EMPLOYEE SAFETY, OSHA OR LABOR LAE REQUIREMENTS FOR A CONSTRUCTION PROJECT. SAFETY AND COMPLIANCE WITH OSHA AND LABOR LAWS ARE THE ABSOLUTE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THOSE CONSULTANTS HE HIRES TO ADDRESS THESE MATTERS. THE STRUCTURAL ENGINEER OF RECORD SPECIALIZES IN STRUCTURAL DESIGN ONLY, AND THE BOARD OF PROFESSIONAL REGULATION FORBIDS HIM FROM ASSUMING RESPONSIBILITY OUTSIDE HIS AREA OF EXPERTISE.

SHOP DRAWING SUBMITTALS:

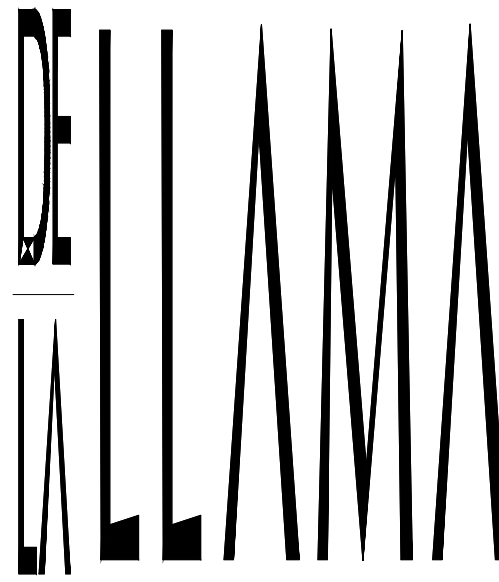
- SUBMIT MINIMUM 3 COPIES OF ALL SHOP DRAWINGS LISTED BELOW. IF SIGNED AND SEALED SHOP DRAWINGS ARE REQUIRED, THEN SUBMIT TWO ADDITIONAL SIGNED AND SEALED PRINTS FOR APPROVAL.
- SHOP DRAWINGS:
REINFORCED STEEL
CONCRETE MIX DESIGN. (SIGNED & SEALED)
RAILINGS (SIGNED & SEALED)
WINDOWS & DOORS (SIGNED & SEALED)
SHORING AND RE-SHORING (SIGNED & SEALED)

NOTE:
ENGINEERING CALCULATIONS AND SHOP DRAWINGS SIGNED AND SEALED BY A P.E. REGISTERED IN FLORIDA MUST BE SUBMITTED TO EOR FOR REVIEW AND APPROVAL.

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TO THE BEST OF THE ENGINEERS' KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES FOR STRUCTURAL REQUIREMENTS AT THE TIME OF THEIR PREPARATION AS DETERMINED BY THE LOCAL AUTHORITIES IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE FLORIDA BUILDING CODE.



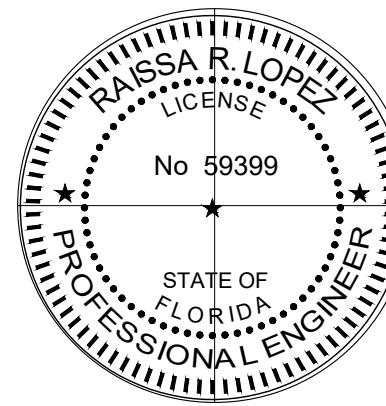
ARCHITECTURE
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INTERIOR DESIGN

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FILE NAME
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DATE
NOVEMBER 7TH, 2024

REVISION DATE BY

DRAWING NAME

GENERAL NOTES

DESING BY:

RAISSA LOPEZ

DRAWN BY:

N.C./AG

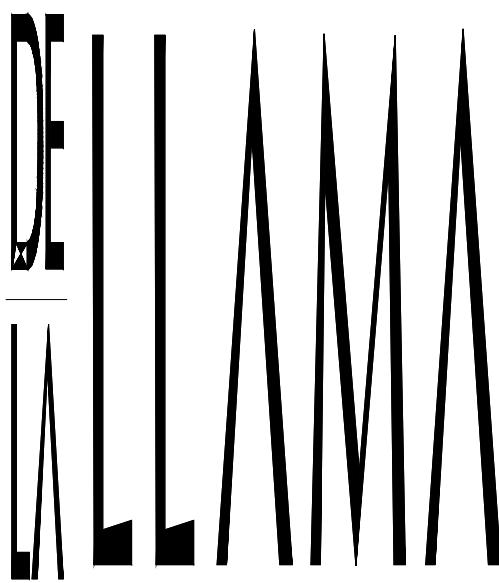
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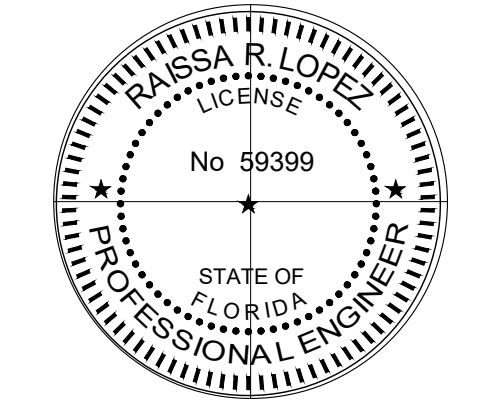
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ARCHITECTURE
PLANNING
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RAISSA LOPEZ, P.E. LIC No. 59399

PROJECT NAME

**P8
PINECREST
EIGHT**

13100 SW 80TH AVE
PINECREST, FLORIDA 33156

FILE NAME
24-0609

DATE
NOVEMBER 7TH, 2024

REVISION DATE BY

DRAWING NAME

FOUNDATION FRAMING PLAN

DESIGN BY:
RAISSA LOPEZ

DRAWN BY:
N.C./A.G.

SHEET NO.

S-1.0

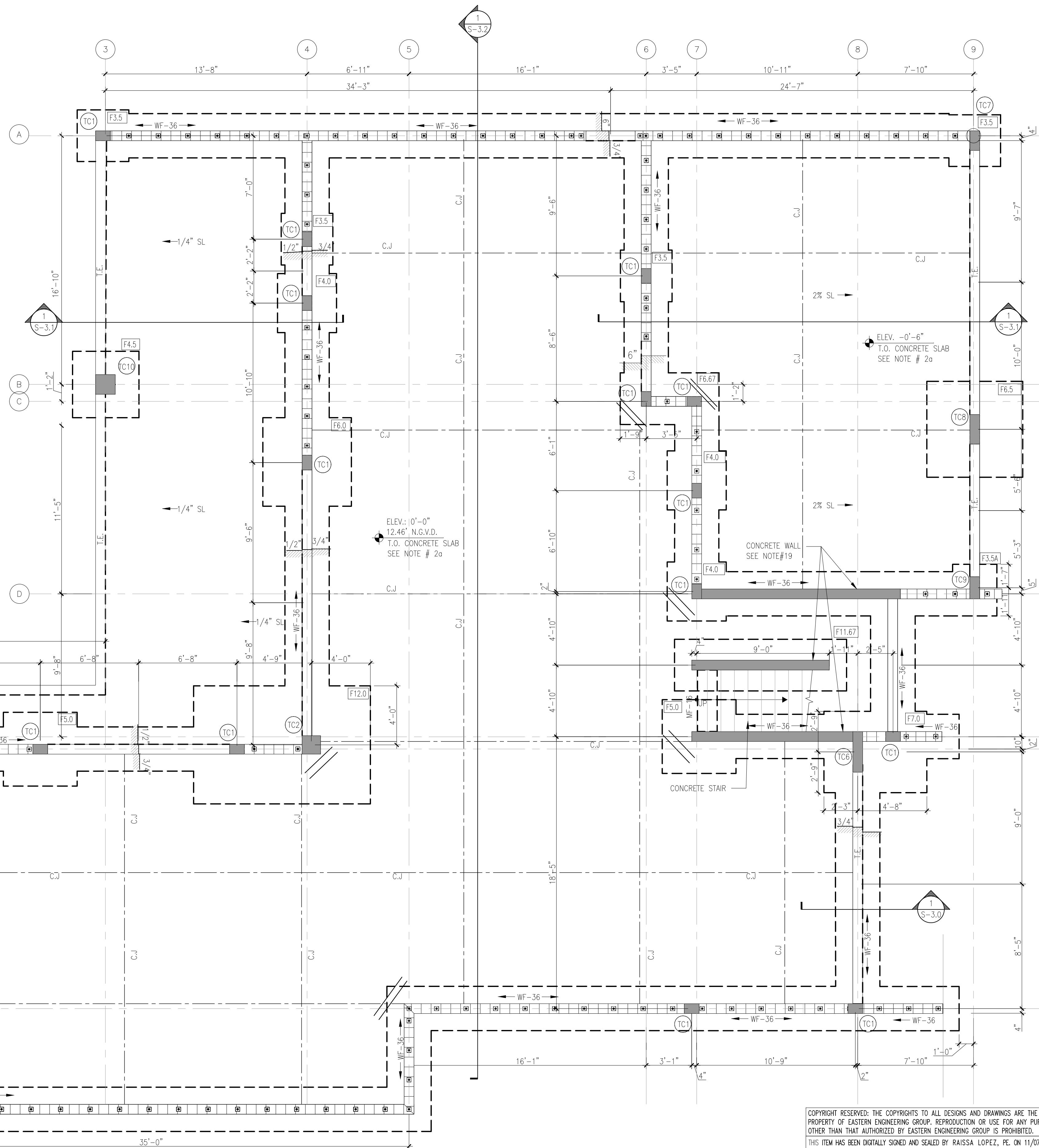
NOTES:

- TOP OF SLAB ELEVATION AS SHOWN AS THUS ELEV. T.O. SLAB
- SLAB NOTE:
a) 4" CONCRETE SLAB ON VAPOR BARRIER OVER WELL-COMPACTED FILL REINFORCED WITH 6x6W1.4xW1.4 WELDED WIRE FABRIC PLACED 1" FROM THE TOP OF SLAB, SEE DETAIL C/S-4.0 FOR TYPICAL CONTROL JOINTS AT SLAB-ON-GRADE.
- FOR GENERAL STRUCTURAL NOTES SEE S-0.0.
- TOP OF WALL FOOTING & ISOLATED FOOTINGS SHALL BE 1'-4" BELOW EXISTING GRADE (TYP.) U.N.O.
- COORDINATE SLAB DEPRESSIONS, SLOPES AND OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- FOR FOOTING SCHEDULE REFER TO SHEET S-2.0.
- FOR COLUMN SCHEDULE REFER TO SHEET S-2.0.
- CENTERLINE OF COLUMNS AND/OR WALLS SHALL COINCIDE WITH THE CENTERLINE OF FOUNDATIONS BELOW, U.N.O. OR SHOWN OTHERWISE.
- SEE ARCHITECTURAL PLANS FOR ANY MECHANICAL PENETRATION AT C.M.U. WALLS.
- FOR GROUND LEVEL CMU JAMB REINFORCEMENT, SEE PLAN AND DETAIL N/S-4.0.
- REFER TO ARCHITECTURAL DRAWINGS FOR WATERPROOFING REQUIREMENTS.
- ALL CMU WALLS SHALL BE TYPE CMU-1. FOR CONCRETE BLOCK WALL NOTES SEE SHEET S-0.0.
- FOR CONTROL JOINTS IN MASONRY WALLS, SEE DETAILS K/S-4.0.
- MF-16 DENOTES MONOLITHIC FOOTING, SEE SCHEDULE ON S-2.0.
- T.E. DENOTES 8"x12"(MIN.) THICKENED CONCRETE SLAB EDGE REINFORCED W/ 2-#5 BOTTOM CONTINUOUS. SEE DETAIL A/S-4.0.
- 8"x8" CONC. WINDOW SILL REINFORCED W/2#5 CONT. (TYP.) FOR OPENINGS LESS THAN 8'-0". 8"x12" CONC. WINDOW SILL REINFORCED W/2#5 TOP, 2#5 BOTTOM AND #3 STIRRUPS @6" FOR OPENINGS MORE THAN 8'-0".
- PROVIDE CONCRETE LINTEL AT EACH OPENINGS, SEE SHEET S-2.1 FOR LINTEL SCHEDULE.
- PROVIDE ONE FILLED CELL #5 AT EACH SIDE OF OPENINGS SMALLER THAN 4'-6" WIDE AND TWO FILLED CELLS #5 AT EACH SIDE OF OPENINGS FROM 4'-6" TO 8'-6" WIDE (U.N.O.), SEE DETAIL N/S-4.0.
- CW DENOTES 8" CONC. WALL REINFORCED W/ #5@12" O.C VERTICAL BARS & W/ #4@12" O.C HORIZONTAL BARS.

LEGEND:

- HATCHED AREA DENOTES LOAD-BEARING 8" MASONRY WALLS FILLED W/ 2000 PSI GROUT AND REINFORCED W/ #5@24" O.C.
- HATCHED AREA DENOTES LOAD-BEARING CONCRETE TIE COLUMN OR COLUMN.
- DENOTES CONCRETE FOOTING AS SHOWN ON PLANS
- DENOTES (2) #4 X 4'-0" DIAGONAL CRACK CONTROL BARS PLACED TOP & BOT. AT ALL RE-ENTRANT CORNERS & AS SHOWN, TYP.

NOTE:
CONTRACTOR SHALL CONFIRM THE LOCATION ALL FOUNDATIONS AND STRUCTURAL FRAMING MEMBERS TO BE SITUATED ON OR WITHIN THE PROPERTY LINE WITH A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA. ALL FOUNDATIONS SHOWN ARE INTENDED TO BE WITHIN OR ON PROPERTY LINE.

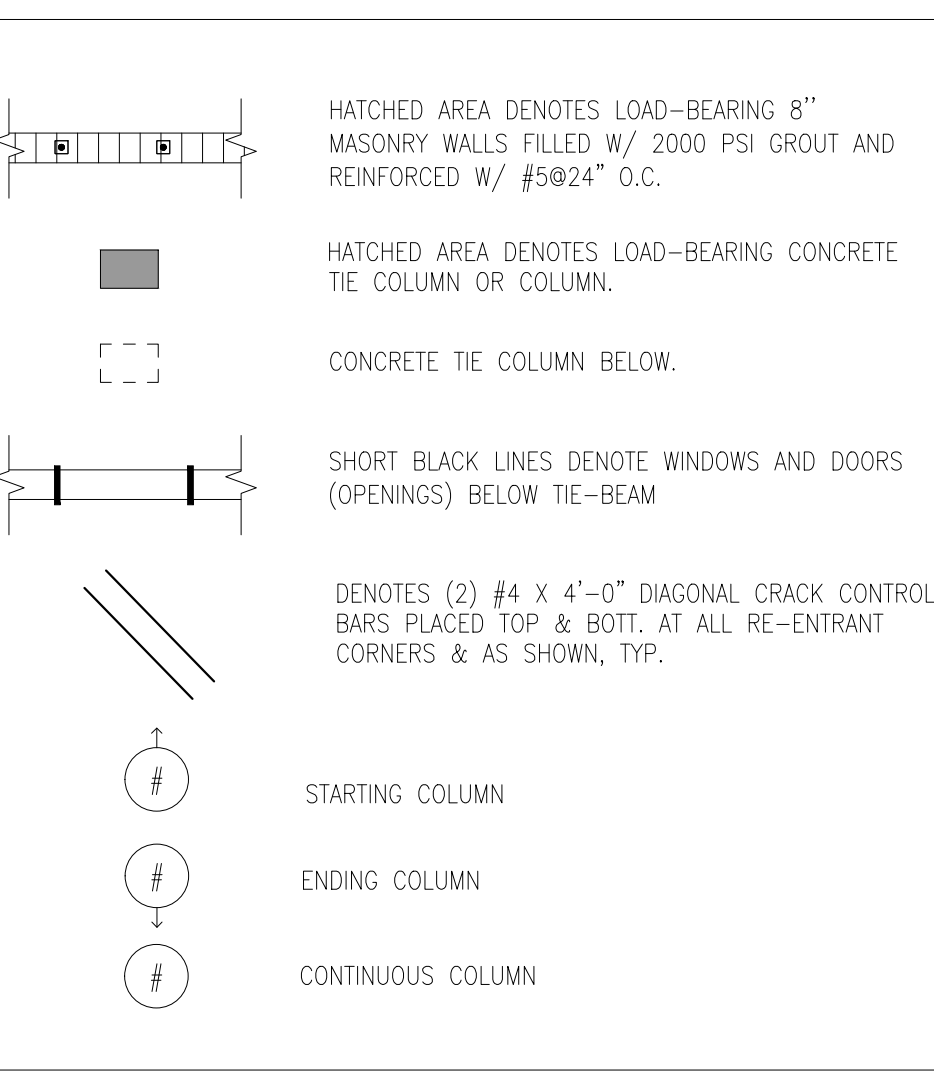


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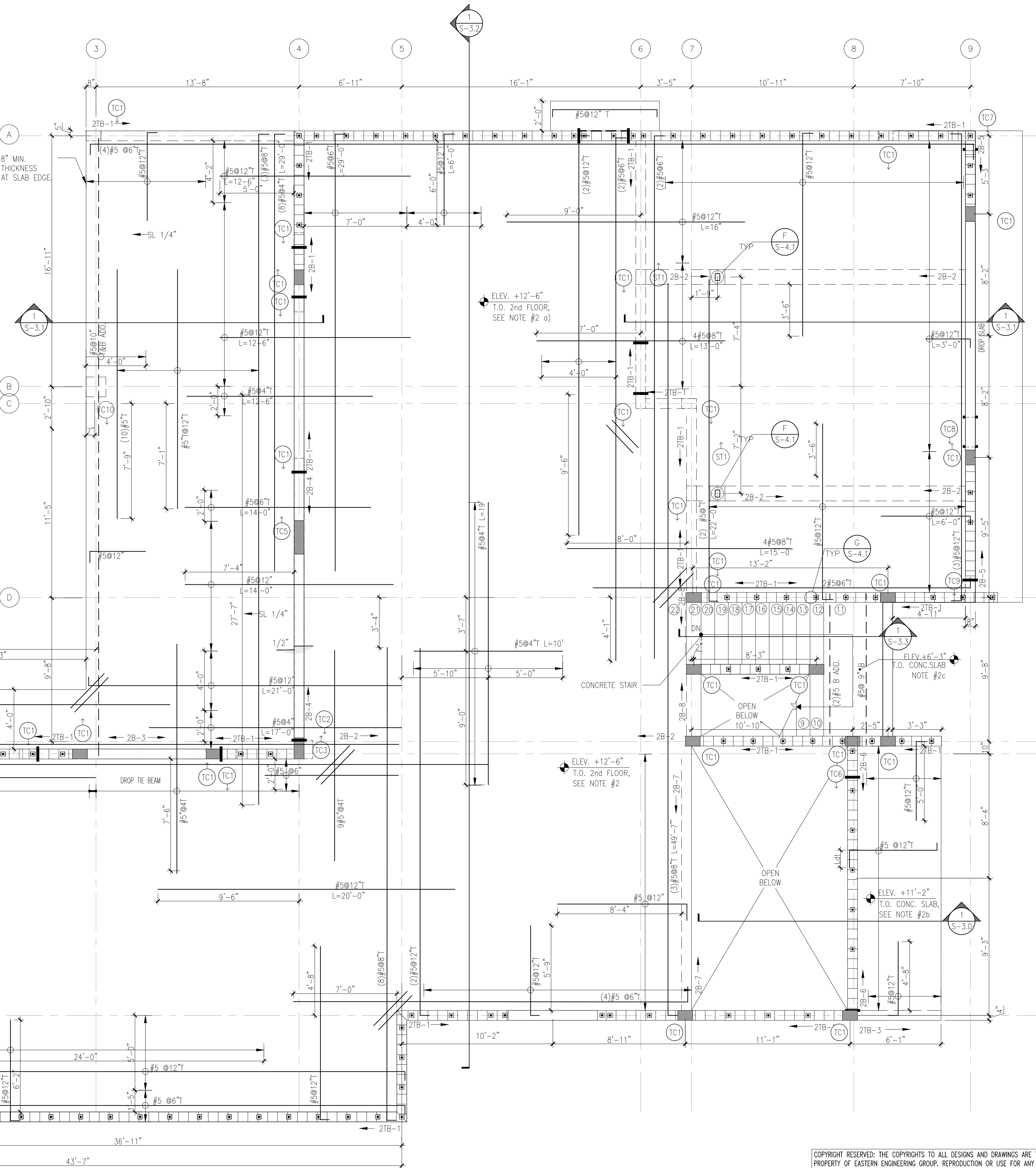
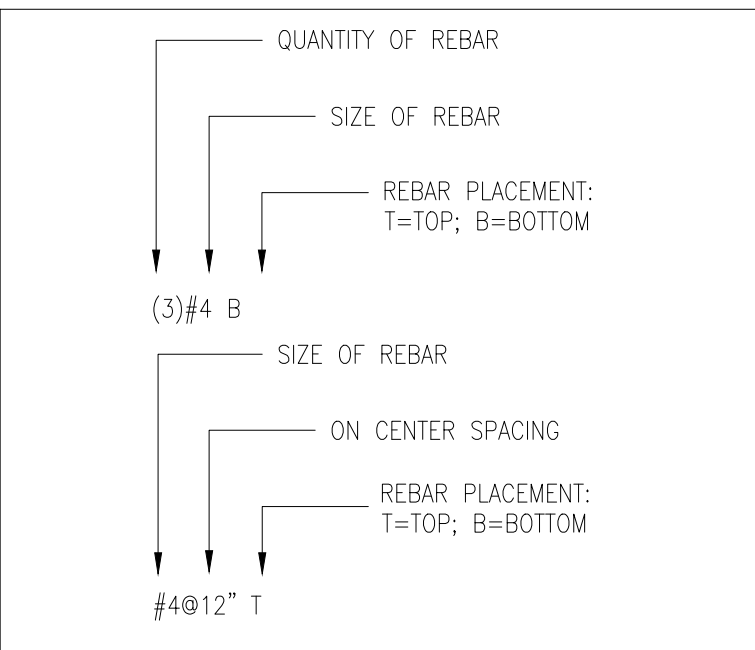
- TOP OF SLAB ELEVATION AS SHOWN AS THUS
- SLAB NOTE:
 - 9" CONCRETE SLAB REINFORCED WITH #5@12" O.C. EACH WAY BOTTOM AND SEE PLAN FOR TOP BARS AND ADDITIONAL BOTTOM BARS. SEE DETAIL A/S-4.1 FOR STRIP WIDTHS AND BAR LENGTHS.
 - 8" CONCRETE SLAB REINFORCED WITH #5@12" O.C. EACH WAY BOTTOM AND SEE PLAN FOR TOP BARS AND ADDITIONAL BOTTOM BARS. SEE DETAIL A/S-4.1 FOR STRIP WIDTHS AND BAR LENGTHS.
 - 6" CONCRETE SLAB REINFORCED WITH #5@12" O.C. EACH WAY BOTTOM AND SEE PLAN FOR TOP BARS AND ADDITIONAL BOTTOM BARS. SEE DETAIL A/S-4.1 FOR STRIP WIDTHS AND BAR LENGTHS.
 - ALL BARS AND ADDITIONAL BOTTOM BARS SPACING SHALL BE MEASURED ON-CENTER.
 - SEE GENERAL DETAILS FOR REINFORCEMENT AT RE-ENTRANT CORNERS AND AROUND SLAB OPENINGS.
 - ALL EXTERIOR CANTILEVER TOP BARS SHALL BE HOT-DIP GALVANIZED.
- FOR GENERAL STRUCTURAL NOTES SEE S-0.0
- COORDINATE SLAB DEPRESSIONS, SLOPES AND OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- CENTERLINE OF COLUMNS AND/OR WALLS SHALL COINCIDE WITH THE CENTERLINE OF COLUMNS AND/OR WALLS BELOW, U.N.O
- FOR COLUMN SCHEDULE REFER TO SHEET S-2.0.
- FOR CONCRETE BEAMS SCHEDULE SEE SHEET S-2.1.
- SEE ARCHITECTURAL PLANS FOR ANY MECHANICAL PENETRATION AT C.M.U. WALLS.
- PROVIDE ONE FILLED CELLS #5 AT EACH SIDE OF OPENINGS SMALLER THAN 4'-6" WIDE AND TWO FILLED CELLS #5 AT EACH SIDE OF OPENINGS FROM 4'-6" TO 8'-6" WIDE (U.N.O.).
- ALL CMU WALLS SHALL BE TYPE CMU-1. FOR CONCRETE BLOCK WALL NOTES SEE SHEET S-0.0.
- FOR CONTROL JOINTS IN MASONRY WALLS, SEE DETAILS K/S-4.0.
- 8"x8" CONC. WINDOW SILL REINFORCED W/2#5 CONT. (TYP.) FOR OPENINGS LESS THAN 8'-0". 8"x12" CONC. WINDOW SILL REINFORCED W/2#5 TOP, 2#5 BOTTOM AND #3 STIRRUPS @6" FOR OPENINGS MORE THAN 8'-0".
- PROVIDE CONCRETE LINTEL AT EACH OPENINGS, SEE SHEET S-2.0 FOR LINTEL SCHEDULE.
- 8" C.M.U. WALL AT PARAPETS WITH HORIZONTAL REINFORCEMENT AS PER GENERAL NOTES & (1)#5@16" O.C. AS VERTICAL REINFORCEMENT.

SUPERIMPOSED LOADS		
LOCATION / USE	DEAD	LIVE
RESIDENTIAL	35 PSF	40 PSF
STAIRS	20 PSF	40 PSF
BALCONY	15 PSF	60 PSF
TERRACE	75 PSF	100 PSF

LEGEND:



REINFORCEMENT LEGEND:

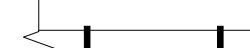
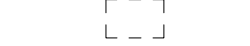


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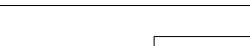
- TOP OF SLAB ELEVATION AS SHOWN AS THIS  ELEV.
T.O. SLAB
- SLAB NOTE:
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 - 10" CONCRETE SLAB REINFORCED WITH #5@12" O.C. EACH WAY BOTTOM AND SEE PLAN FOR TOP BARS AND ADDITIONAL BOTTOM BARS. SEE DETAIL A/S-4.1 FOR STRIP WIDTHS AND BAR LENGTHS.
 - ALL BARS AND ADDITIONAL BOTTOM BARS SPACING SHALL BE MEASURED ON-CENTER.
 - SEE GENERAL DETAILS FOR REINFORCEMENT AT RE-ENTRANT CORNERS AND AROUND SLAB OPENINGS.
 - ALL EXTERIOR CANTILEVER TOP BARS SHALL BE HOT-DIP GALVANIZED.
- FOR GENERAL STRUCTURAL NOTES SEE S-0.0.
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- SEE ARCHITECTURAL PLANS FOR ANY MECHANICAL PENETRATION AT C.M.U. WALLS.
- PROVIDE ONE FILLED CELLS #5 AT EACH SIDE OF OPENINGS SMALLER THAN 4'-6" WIDE AND TWO FILLED CELLS #5 AT EACH SIDE OF OPENINGS FROM 4'-6" TO 8'-6" WIDE (U.N.O.); SEE DETAIL N/S-4.0.
- ALL CMU WALLS SHALL BE TYPE CMU-1. FOR CONCRETE BLOCK WALL NOTES SEE SHEET S-0.0.
- FOR CONTROL JOINTS IN MASONRY WALLS, SEE DETAILS K/S-4.0.
- 8" C.M.U. WALL AT PARAPETS WITH HORIZONTAL REINFORCEMENT AS PER GENERAL NOTES & (1)#5@48" O.C. AS VERTICAL REINFORCEMENT. 8"x8" CONCRETE CAP W/ 2#5 CONT. (TYP.)
- ROOF SLOPES SHALL BE ACHIEVED WITH LIGHTWEIGHT INSULATING CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 125 PSI, AND MAXIMUM SPECIFIC WEIGHT OF 38 PCF. R-30 INSULATION MINIMUM. REFERS TO ARCHITECTURAL PLANS FOR SPECIFICATIONS.
- PROVIDE CONCRETE LINTEL AT EACH OPENINGS, SEE SHEET S-2.1 FOR LINTEL SCHEDULE.
- TOP & BOTTOM REINFORCEMENT TO BE EMBEDDED 6.5" MIN. INSIDE CONCRETE BEAM.

SUPERIMPOSED LOADS		
LOCATION / USE	DEAD	LIVE
ROOF	35 PSF	30 PSF
SOLAR PANELS	3 PSF	-

LEGEND:

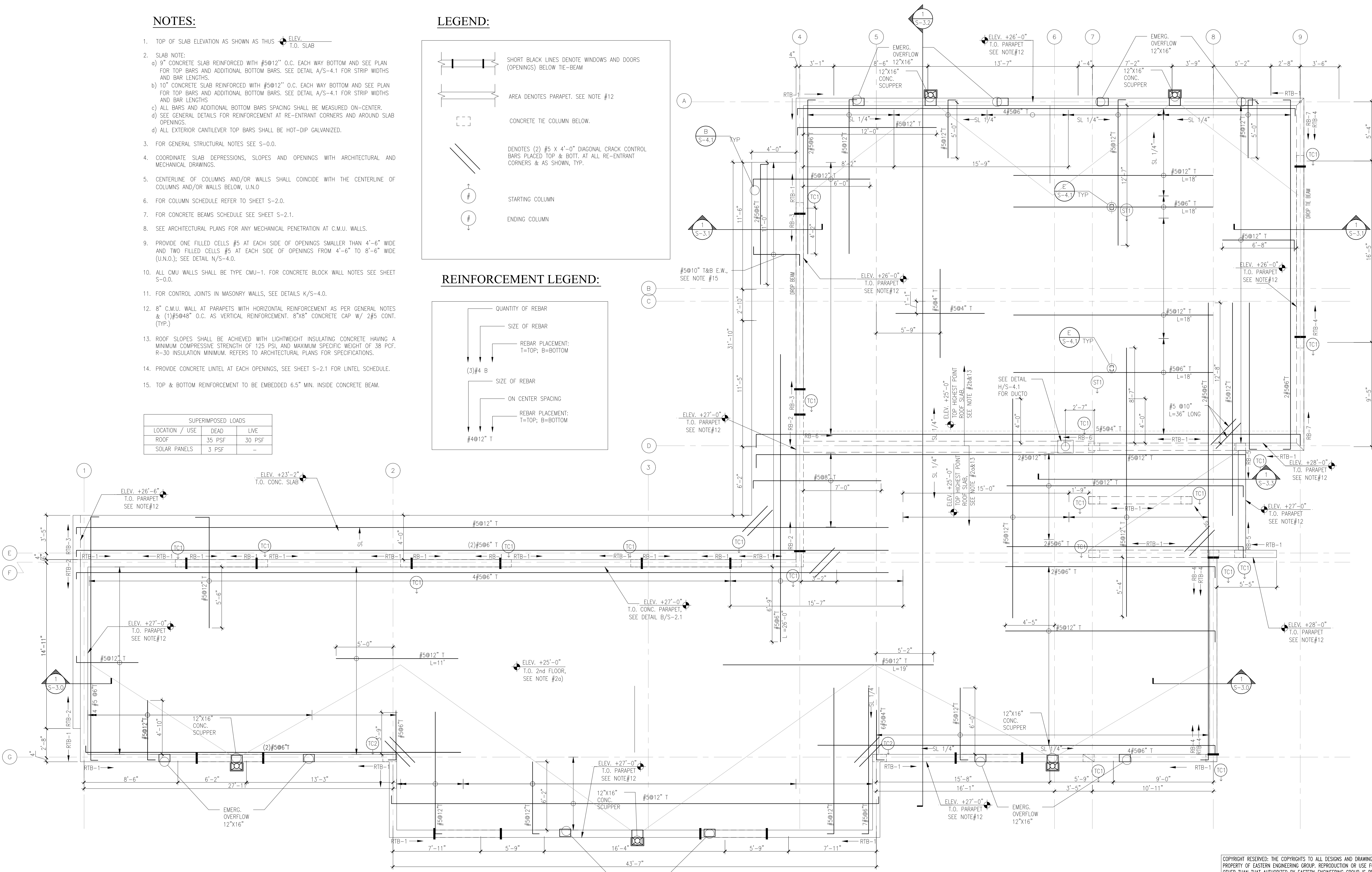
-  SHORT BLACK LINES DENOTE WINDOWS AND DOORS (OPENINGS) BELOW TIE-BEAM
-  AREA DENOTES PARAPET. SEE NOTE #12
-  CONCRETE TIE COLUMN BELOW.
-  DENOTES (2) #5 X 4'-0" DIAGONAL CRACK CONTROL BARS PLACED TOP & BOT. AT ALL RE-ENTRANT CORNERS & AS SHOWN, TYP.
-  STARTING COLUMN
-  ENDING COLUMN

REINFORCEMENT LEGEND:

-  QUANTITY OF REBAR
-  SIZE OF REBAR
-  REBAR PLACEMENT: T=TOP; B=BOTTOM
-  SIZE OF REBAR
-  ON CENTER SPACING
-  REBAR PLACEMENT: T=TOP; B=BOTTOM

ROOF FLOOR FRAMING PLAN

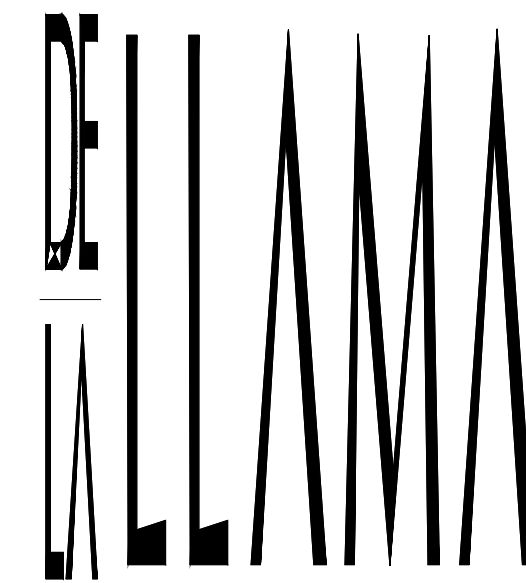
SCALE: 1/4"=1'-0"



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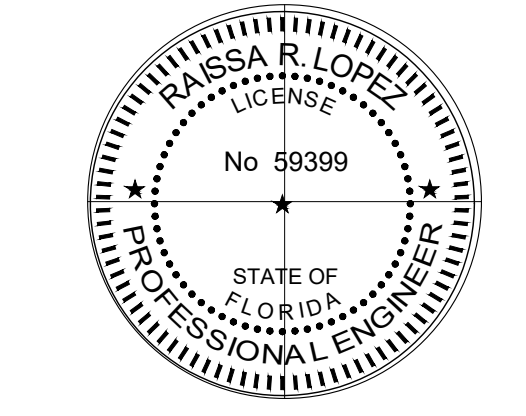


ARCHITECTURE
PLANNING
INTERIOR DESIGN

JORGE A. DE LA LLAMA
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ROOF FLOOR FRAMING PLAN

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RAISSA LOPEZ

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N.C./AG

SHEET NO.

S-1.2

REBAR TENSION (Ldt)/COMPRESSION (Ldc) DEVELOPMENT
LENGTH & HOOKS (Ldh) IN CONCRETE

BAR SIZE	MIN BAR SPACING (IN) NOTE 3	TENSION EMBEDMENT/ DEVELOPMENT LENGTH (Ldt)						COMPRESSION EMBEDMENT/ DEVELOPMENT LENGTH (Ldc)			HOOKED BARS (Ldh) (TENSION ONLY)		
		3000 PSI		4000 PSI		≥ 5000 PSI		3000 PSI		4000 PSI		3000 PSI	
		TOP BARS NOTE 4	OTHER BARS	TOP BARS NOTE 4	OTHER BARS	TOP BARS NOTE 4	OTHER BARS	3000 PSI	4000 PSI	5000 PSI	3000 PSI	4000 PSI	5000 PSI
3	1	22	17	19	15	17	13	8.5	7.5	7	8.5	7.5	6.5
4	1	29	22	25	19	23	17	11	9.5	9	11	9.5	8.5
5	1 1/4	36	28	31	24	28	22	14	12	11.5	14	12	11
6	1 1/2	43	33	37	29	34	26	16.5	14.5	13.5	16.5	14.5	13
7	1 3/4	63	48	54	42	49	38	19.5	17	16	19.5	17	15
8	2	71	55	62	48	56	43	22	19	18	22	19	17
9	2 1/4	81	62	70	54	63	48	25	21.5	20.5	25	21.5	19.5
10	2 1/2	91	70	79	61	71	54	28	24.5	23	28	24.5	22
11	3	101	78	87	67	78	60	31	27	25.5	31	27	24

GENERAL NOTES

- LENGTHS SHOWN CONFORM TO NON-SEISMIC PROVISIONS OF ACI 318-14 FOR NORMAL WT CONCRETE AND UNCOATED BARS W/ $F_y=60$ KSI (YIELD STRENGTH OF REBARS).
- ALL LENGTHS ARE IN INCHES.
- BAR SPACING IS MEASURED AS CLEAR DISTANCE BETWEEN BARS. FOR BARS WITH A CLEAR SPACING OF LESS THAN $2d_b$, MULTIPLY TABULATED VALUES BY 1.5.
- TOP BARS ARE BARS SO PLACED THAT 12 INCHES OR MORE OF FRESH CONCRETE IS CAST IN MEMBER BELOW REINFORCEMENT.
- SEE CONCRETE NOTES FOR SPECIFIED CONCRETE STRENGTH.
- CLEAR COVER FOR REINFORCING SHALL NOT BE LESS THAN 1 BAR DIAMETER OR AS SPECIFIED IN SECTION 20.6.1.3 OF ACI 318-14.
- MULTIPLY THE ABOVE LENGTHS BY 1.33 FOR CONCRETE WITH LIGHTWEIGHT AGGREGATE.
- MULTIPLY THE ABOVE LENGTHS BY 1.5 FOR EPOXY COATED REINFORCING.
- COMPRESSION DEVELOPMENT LENGTH OF REBARS ENCLOSED WITHIN #3 SPIRAL REINFORCEMENT W/ NO MORE THAN @4" PITCH OR #4 TIES @4"OC MAY BE MULTIPLIED BY 0.75.

LAP SPLICE LENGTH
(Lst& Lsc) IN CONCRETE

BAR SIZE	TENSION LAP SPLICE (Lst)				COMPRESSION LAP SPLICE (Lsc)	
	3000 PSI	4000 PSI	≥5000 PSI	≥ 3000 PSI		
	3	4	5	6	7	8
3	22	19	17	12		
4	29	25	23	15		
5	36	31	28	19		
6	43	37	34	22.5		
7	63	54	49	26.5		
8	72	62	56	30		
9	81	70	63	34		
10	91	79	71	38.5		
11	101	87	78	42.5		

GENERAL NOTES

- LENGTHS SHOWN CONFORM TO NON-SEISMIC PROVISIONS OF ACI 318-14 FOR NORMAL WT CONCRETE AND UNCOATED BARS W/ $F_y=60$ KSI (YIELD STRENGTH OF REBARS).
- ALL LENGTHS ARE IN INCHES.
- SPLICES SHALL BE STAGGERED MINIMUM OF 24" O.C.
- SEE CONCRETE NOTES FOR SPECIFIED CONCRETE STRENGTH.
- CLEAR COVER FOR REINFORCING SHALL NOT BE LESS THAN 1 BAR DIAMETER OR AS SPECIFIED IN SECTION 20.6.1.3 OF ACI 318-14.
- MULTIPLY THE ABOVE LENGTHS BY 1.33 FOR CONCRETE WITH LIGHTWEIGHT AGGREGATE.
- MULTIPLY THE ABOVE LENGTHS BY 1.5 FOR EPOXY COATED REINFORCING.
- MULTIPLY THE ABOVE LENGTHS BY 1.5 FOR BARS SPACED LESS THAN $2d_b$ CLEAR.
- COMPRESSION DEVELOPMENT LENGTH OF REBARS ENCLOSED WITHIN #3 SPIRAL REINFORCEMENT W/ NO MORE THAN @4" PITCH OR #4 TIES @4" O.C. MAY BE MULTIPLIED BY 0.75.

COLUMN SCHEDULE

MARK	SIZE	REINFORCEMENT VERTICAL OR BASE PLATE	REINFORCEMENT TIES OR CAP PLATE	REMARKS
TC1	8"x12"	4-#5	#3 @ 8" O.C	CONCRETE COLUMN
TC2	15"x15"	8-#6	#3 @ 8" O.C	CONCRETE COLUMN
TC3	8"x17"	6-#5	#3 @ 8" O.C	CONCRETE COLUMN
TC4	8"x21"	8-#5	#3 @ 8" O.C	CONCRETE COLUMN
TC5	8"x25	8-#5	#3 @ 8" O.C	CONCRETE COLUMN
TC6	8"x33	12-#5	#3 @ 8" O.C	CONCRETE COLUMN
TC7	8"x16"	6-#5	#3 @ 8" O.C	CONCRETE COLUMN
TC8	8"x24"	8-#5	#3 @ 8" O.C	CONCRETE COLUMN
TC9	8"x18"	6-#5	#3 @ 8" O.C	CONCRETE COLUMN
TC10	16"x16"	8-#6		CONCRETE COLUMN
			#3 @ 8" O.C	
ST1	HSS 6"x4"x1/4"	12"x12"x1" THK STEEL PLATE, SEE COLUMN BAR ARRANGEMENT	12"x12"x1" THK STEEL PLATE, SEE COLUMN BAR ARRANGEMENT	STEEL COLUMN $F_y=46$ KSI LOAD BEARING

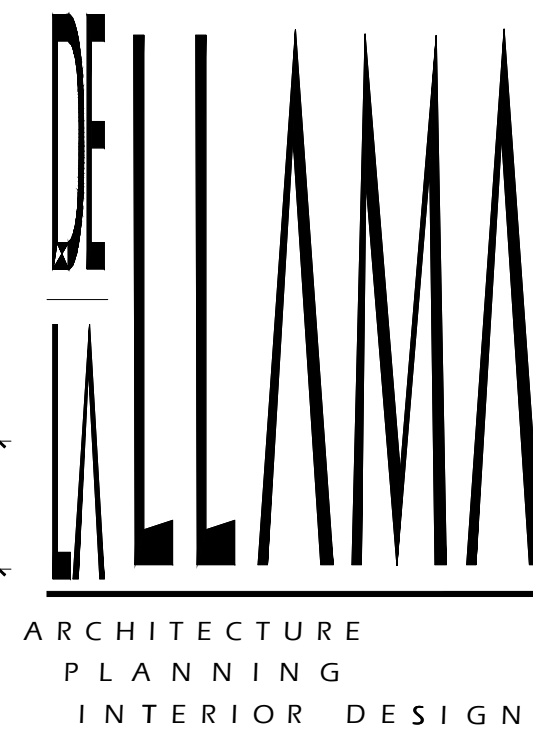
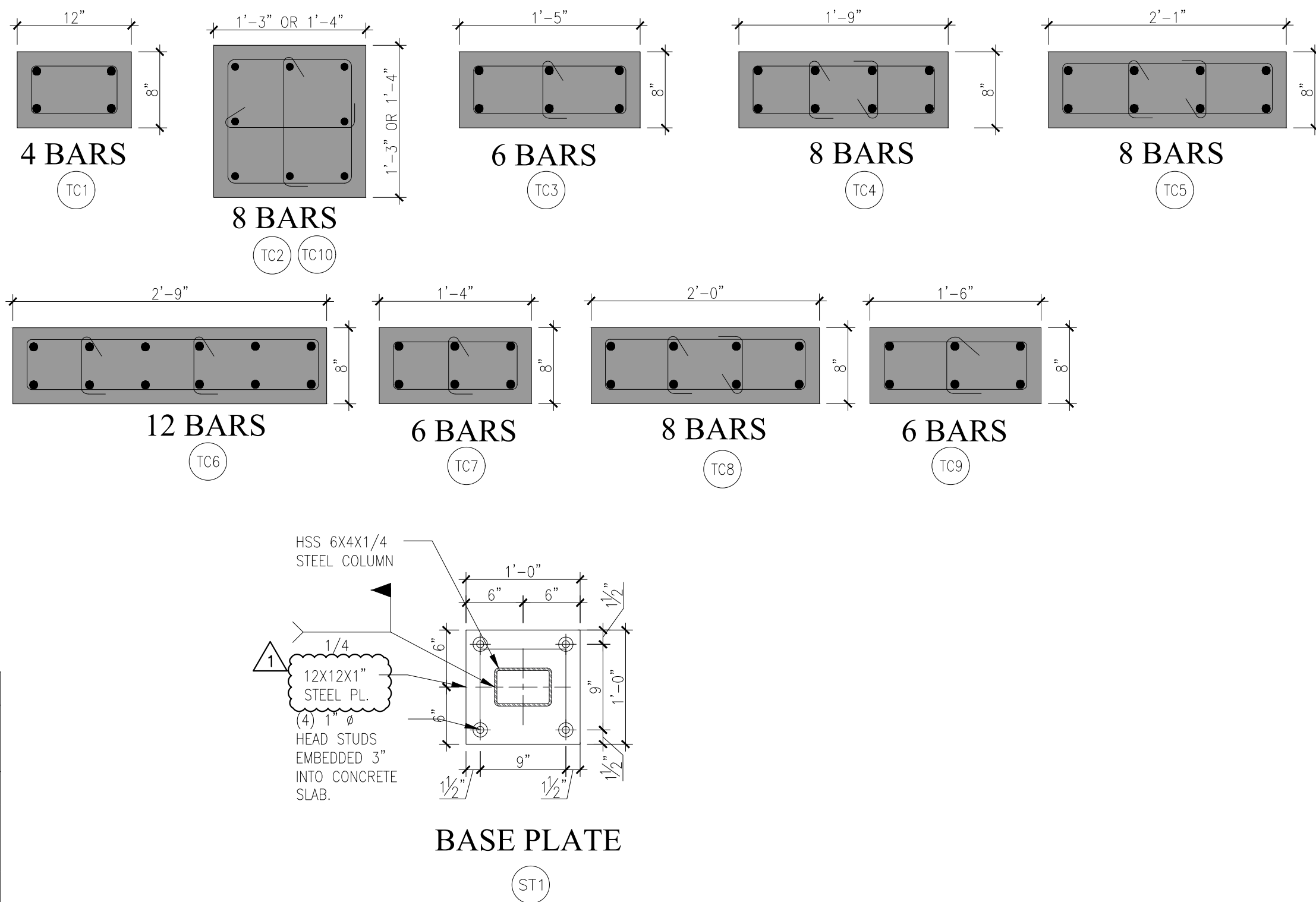
FOOTING SCHEDULE

MARK	SIZE	DEPTH	REINFORCEMENT		REMARKS	f'c
	(W x L)		SHORT BARS	LONG BARS		
MF-16	16" CONT.	12"	#5 @ 12"	3 #5 CONT.	MONOLITHIC FOOTING	3000 PSI
WF-36	36" CONT.	12"	#5 @ 12"	5 #5 CONT.	WALL FOOTING	3000 PSI
WF-48	48" CONT.	14"	#5 @ 12"	5 #5 CONT.	WALL FOOTING	3000 PSI
F3.0	3'-0" x 3'-0"	12"	3-#5	3-#5	ISOLATED FOOTING	3000 PSI
F3.5	3'-6" x 3'-6"	12"	3-#5	3-#5	ISOLATED FOOTING	3000 PSI
F3.5A	3'-6" x 3'-0"	12"	3-#5	3-#5	ISOLATED FOOTING	3000 PSI
F4.0	4'-0" x 4'-0"	12"	4-#5	4-#5	ISOLATED FOOTING	3000 PSI
F4.5	4'-6" x 4'-6"	12"	4-#5	4-#5	ISOLATED FOOTING	3000 PSI
F5.0	5'-0" x 5'-0"	12"	5-#5	5-#5	ISOLATED FOOTING	3000 PSI
F5.5	5'-6" x 5'-6"	14"	5-#5	5-#5	ISOLATED FOOTING	3000 PSI
F6.0	6'-0" x 6'-0"	14"	6-#5	6-#5	ISOLATED FOOTING	3000 PSI
F6.5	6'-6" x 6'-6"	15"	7-#5	7-#5	ISOLATED FOOTING	3000 PSI
F6.67	6'-8" x 3'-6"	12"	6-#5 T&B	4-#5 T&B	ISOLATED FOOTING	3000 PSI
F7.0	7'-0" x 5'-6"	12"	5-#5 T&B	5-#5 T&B	ISOLATED FOOTING	3000 PSI
F12.0	12'-0" x 8'-0"	15"	13-#5 T&B	12-#5 T&B	ISOLATED FOOTING	3000 PSI

NOTES

- CONTRACTOR TO PROVIDE NUMBER OF CORNER BARS AS FOOTING LONGITUDINAL REINF. LAPPED MIN. 48" BAR DIAMETERS. WHEN FOOTING HAS MORE BARS, THE TOTAL OF CORNER BARS SHALL BE THE SAME AS THE NUMBER OF BARS IN THE LARGER FOOTING.
- PROVIDE 2 # 5 CONTINUOUS WALL FOOTING TOP BARS (TYP) AT EACH OPENING GREATER THAN 6'-0". EXTEND 2'-0"(MIN) BEYOND EACH OPENING.

COLUMN BAR ARRANGEMENT

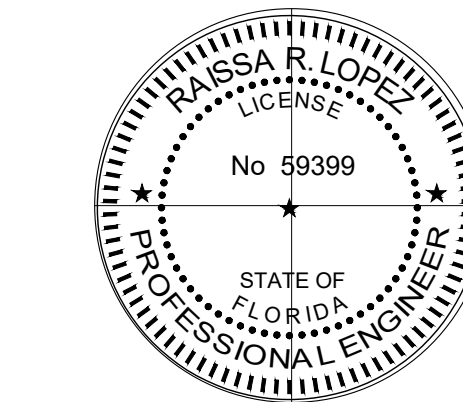


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REVISION	DATE	BY
REVISION #1	4/22/2025	B.D.C

DRAWING NAME

SCHEDULES

DESIGN BY:

RAISA LOPEZ

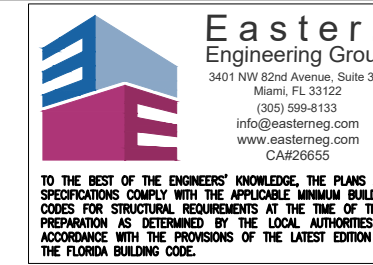
DRAWN BY:

N.C./AG

SHEET NO.

S-2.0

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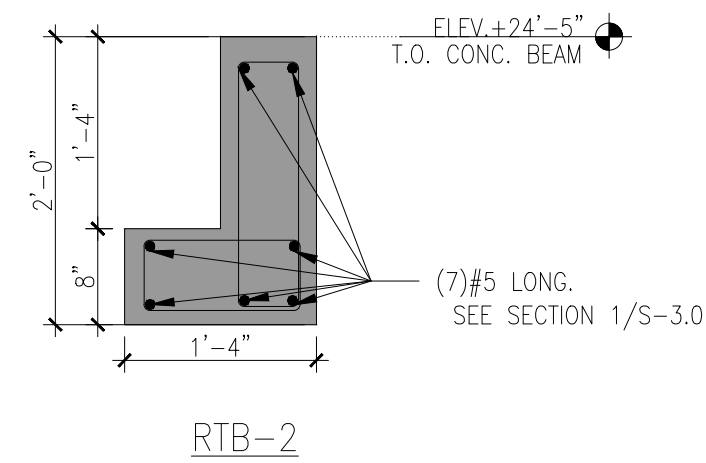


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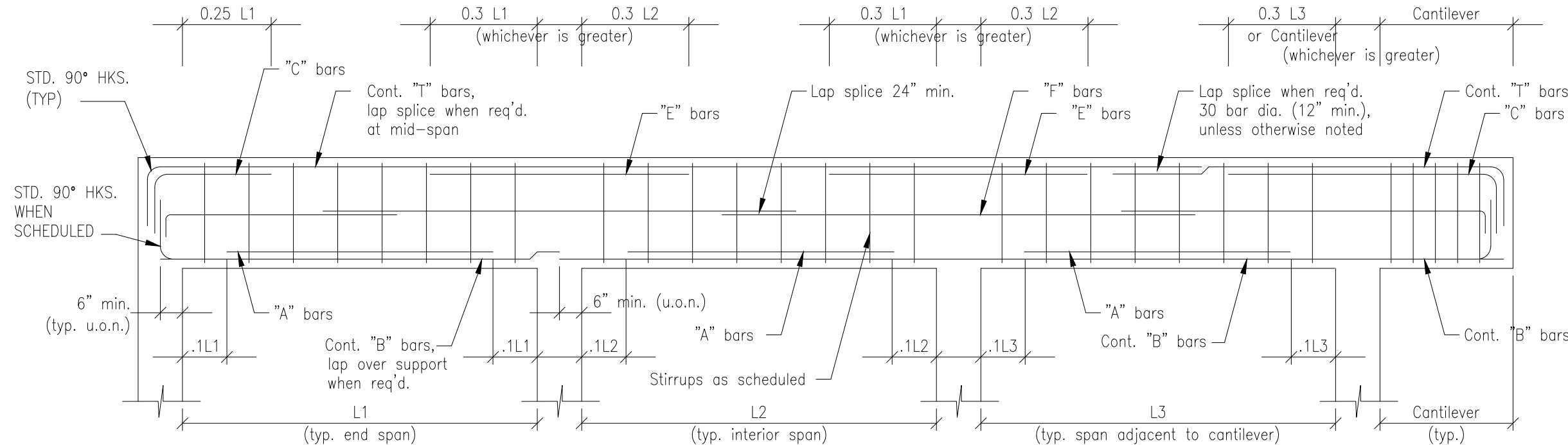
BEAM SCHEDULE													E.F. = EACH FACE E.E. = EACH END PER SPAN, O.C. = ON-CENTER
MARK	TOP OF BEAM ELEV.	SIZE (in.) b x d	LONGITUDINAL REINFORCEMENT						STIRRUPS			REMARKS	
			B	A	T	C	E	F(E.F.)	No.	TYPE	SPACING EA. END		
RTB-1	+24'-5"	8" x 12"(MIN)	2 #5		2 #5				#3	□	⊙ 48"	(4) ⊙ 12" E.E. BAL ⊙ 48" O.C.	
RTB-2	+24'-5"	(**)	(**)		(**)				#3	□	(*) ⊙ 48"	(*) (4) ⊙ 12" E.E. BAL ⊙ 48" O.C. (**) SEE DETAIL A/S-2.1	
RTB-3	+23'-8"	8" x 12"(MIN)	2 #5		2 #5				#3	□	⊙ 48"	(4) ⊙ 12" E.E. BAL ⊙ 48" O.C.	
RTB-4	+20'-4"	8" x 24"	2 #5		2 #5		2 #5		#3	□	⊙ 48"	(4) ⊙ 12" E.E. BAL ⊙ 48" O.C.	
RB-1	+24'-5"	8" x 12"	2 #5		2 #5		1 #5		#3	□	⊙ 4"		
RB-2	+24'-5"	8" x 30"	2 #7		2 #7		1 #5		#3	□	⊙ 7"		
RB-3	+24'-5"	8" x 24"	2 #6		2 #5		1 #5		#3	□	⊙ 6"		
RB-4	+24'-5"	8" x 30"	(*) 4 #5		2 #5				#3	□	⊙ 13"	(*) 2 LAYERS(2&2)	
RB-5	+24'-5"	8" x 12"	2 #5		2 #5				#3	□	⊙ 12"		
RB-6	+24'-5"	12" x 23"	4 #6		2 #6		1 #5		#3	□	⊙ 13"	SEE DETAIL H/S-4.1	
RB-7	+24'-5"	8" x 24"	2 #5		2 #5				#3	□	⊙ 10"		
2TB-1	+12'-6"	8" x 12"(MIN)	2 #5		2 #5				#3	□	⊙ 48"	(4) ⊙ 12" E.E. BAL ⊙ 48" O.C.	
2TB-2	+12'-6"	8" x 12"(MIN)	2 #5		2 #5				#3	□	⊙ 48"	(4) ⊙ 12" E.E. BAL ⊙ 48" O.C.	
2TB-3	+11'-2"	8" x 12"(MIN)	2 #5		2 #5				#3	□	⊙ 48"	(4) ⊙ 12" E.E. BAL ⊙ 48" O.C.	
2TB-3A	+12'-6"	16" x 12"(MIN)	2 #5		2 #5				#3	□	⊙ 48"	(4) ⊙ 12" E.E. BAL ⊙ 48" O.C.	
2B-1	+12'-6"	8" x 24"	2 #5		2 #5				#3	□	⊙ 7"		
2B-2	+12'-6"	12" x 24"	3 #7		3 #6		1 #5		#3	□	⊙ 7"		
2B-3	+12'-6"	8" x 24"	2 #5		2 #5		1 #5		#3	□	⊙ 10"		
2B-4	+12'-6"	8" x 16"	(*) 4 #6		2 #5		1 #5		#3	□	⊙ 6"	(*) 2 LAYERS(2&2)	
2B-5	+12'-6"	8" x 33"	(*) 4 #5		4 #5		1 #5		#3	□	⊙ 7"	(*) 2 LAYERS(2&2)	
2B-6	+12'-6"	8" x 30"	2 #7		2 #7		1 #5		#3	□	⊙ 10"		
2B-7	+12'-6"	8" x 30"	2 #7		2 #7		1 #5		#3	□	⊙ 7"		
2B-8	+12'-6"	12" x 12"	3 #5		3 #5		1 #5		#3	□	⊙ 4"		
												(4) ⊙ 12" E.E. BAL ⊙ 48"-O.C.	
TB-1	+6'-6 1/2"	8" x 12"(MIN)	2 #5		2 #5				#3	□	⊙ 48"		

CONCRETE LINTEL SCHEDULE					
WIDTH	HEIGHT	CLEAR SPAN IN FEET	REINFORCING		TIES
			TOP	BOTTOM	
8"	8"	5'-0" TO 7'-0"	2 #4	2 #5	#3 @ 12" OC
8"	12"	7'-0" TO 9'-0"	2 #5	2 #5	5 #3 @ 4" EE, BAL @ 12" OC
8"	16"	9'-0" TO 12'-0"	2 #5	2 #6	5 #3 @ 6" EE, BAL @ 12" OC

BEAM INTERMEDIATE REINFORCEMENT					
BEAM DEPTH	BEAMS 6" TO 8" WIDE	BEAMS 9" TO 14" WIDE	BEAMS 15" TO 20" WIDE	BEAMS 21" TO 24" WIDE	
UP TO 24"	NONE	NONE	NONE	NONE	
25" TO 36"	1-#5 EACH FACE	1-#5 EACH FACE	1-#5 EACH FACE	1-#6 EACH FACE	
37" TO 54"	2-#5 EACH FACE	2-#5 EACH FACE	2-#5 EACH FACE	2-#6 EACH FACE	
55" TO 72"	3-#5 EACH FACE	3-#5 EACH FACE	3-#5 EACH FACE	3-#6 EACH FACE	



A TIE BEAM DETAIL
SCALE: 3/4"=1'-0"



TYPICAL BEAM DIAGRAM

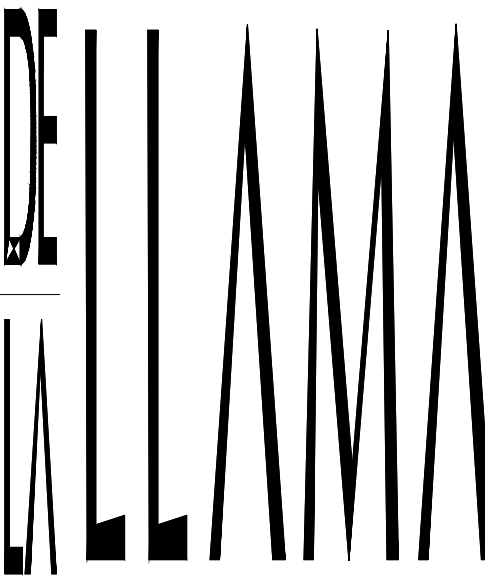
BAR PLACEMENT NOTES:

- BEAMS SHOWN IN PLAN ARE READ FROM LEFT TO RIGHT.
- THE MINIMUM CLEAR DISTANCE BETWEEN PARALLEL BARS IN A LAYER SHALL BE EQUAL TO THE NOMINAL DIAMETER OF THE BARS. IN NO CASE SHALL THE CLEAR DISTANCE BETWEEN BARS BE LESS THAN ONE INCH, NOR LESS THAN ONE AND ONE-HALF TIMES THE MAXIMUM SIZE OF THE COARSE AGGREGATE.
- WHEN REINFORCEMENT IS PLACED IN TWO OR MORE LAYERS, THE CLEAR DISTANCE BETWEEN LAYERS SHALL NOT BE LESS THAN ONE INCH NOR LESS THAN THE DIAMETER OF THE BARS, AND THE BARS IN THE UPPER LAYERS SHALL BE PLACED DIRECTLY ABOVE THOSE IN THE BOTTOM LAYER.
- "B" BARS ARE BOTTOM BARS. "B" BARS OF INTERIOR BEAMS SHALL EXTEND OVER SUPPORTS 6" MIN. UNLESS OTHERWISE NOTED OR THEY MAY BE CONTINUOUS. "B" BARS OF PERIMETER BEAMS SHALL BE SPICED (IF REQUIRED) AT OR NEAR THE SUPPORT WITH CLASS "B" TENSION SPLICE, AND 25% OF "B" BARS SHALL PASS CONTINUOUS OVER SUPPORT AREA BUT NOT LESS THAN TWO BARS. THESE BARS SHALL BE ANCHORED AT END SUPPORT TO DEVELOP fy USING A STANDARD HOOK OR HEADED DEFORMED BAR, SEE SCHEDULE FOR HOOKED BARS LENGTH.
- "A" BARS ARE BOTTOM BARS. "A" BARS DO NOT EXTEND OVER SUPPORTS. "A" BARS SHALL BE PLACED IN THE SAME LAYER AS "B" BARS (U.O.N.).
- "T" BARS ARE CONTINUOUS TOP BARS. "T" BARS SHALL BE LAP SPICED WHEN REQUIRED AT MID-SPAN WITH A CLASS "B" TENSION SPLICE. FOR PERIMETER BEAMS AT LEAST 17% OF "T" BARS SHALL PASS CONTINUOUS OVER SUPPORT AREA BUT NOT LESS THAN TWO BARS, THESE BARS SHALL BE ANCHORED AT END SUPPORT TO DEVELOP fy USING A STANDARD HOOK OR HEADED DEFORMED BAR, SEE SCHEDULE FOR HOOKED BARS LENGTH.
- "C" BARS ARE TOP BARS AT THE DISCONTINUOUS END OF END SPANS. "C" BARS SHALL BE PLACED IN THE SAME LAYER AS "T" BARS UNLESS OTHERWISE NOTED.
- "E" BARS ARE TOP BARS OVER INTERIOR SUPPORTS. "E" BARS SHALL BE PLACED IN THE SAME LAYER AS "T" BARS UNLESS OTHERWISE NOTED.
- "T" BARS SHALL BE EQUALLY SPACED BETWEEN "B" AND "T" BARS, HALF ON EACH VERTICAL FACE. "T" BARS MAY BE CONTINUOUS. SEE BEAM INTERMEDIATE REINFORCEMENT TABLE UNLESS SCHEDULE NOTE.
- STIRRUPS SPACING IS FROM FACE OF SUPPORT. STIRRUPS SHALL HAVE "B" OR "T" BARS TIED IN EACH CORNER.
- ALL REINFORCING BARS TO HAVE A MINIMUM OF 1 1/2" CLEAR COVER (U.O.N.) 12. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE PROVIDED IN ACCORDANCE WITH ACI 318-11, SECTION 7.7.1.
- STIRRUPS IN TIE BEAMS SHALL BE #3 TIES, 4 AT 12"c/c EACH END, BAL. AT 48"c/c U.O.N.
- PROVIDE 2-#5 CORNER BARS (EXTEND 30" IN EACH DIRECTION FROM CORNER).
- WHERE CONC. LINTELS NOT USED DROP TIE-BEAM ABOVE OPENING, ADD 2#5 BOTT AND #3 STIRRUPS @ 8".

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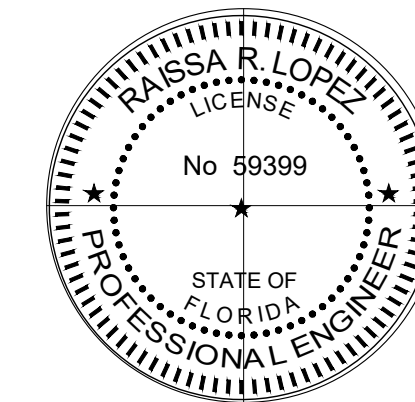
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FILE NAME
24-0609

DATE
NOVEMBER 7TH, 2024

REVISION DATE BY

DRAWING NAME

SCHEDULES

DESIGN BY:

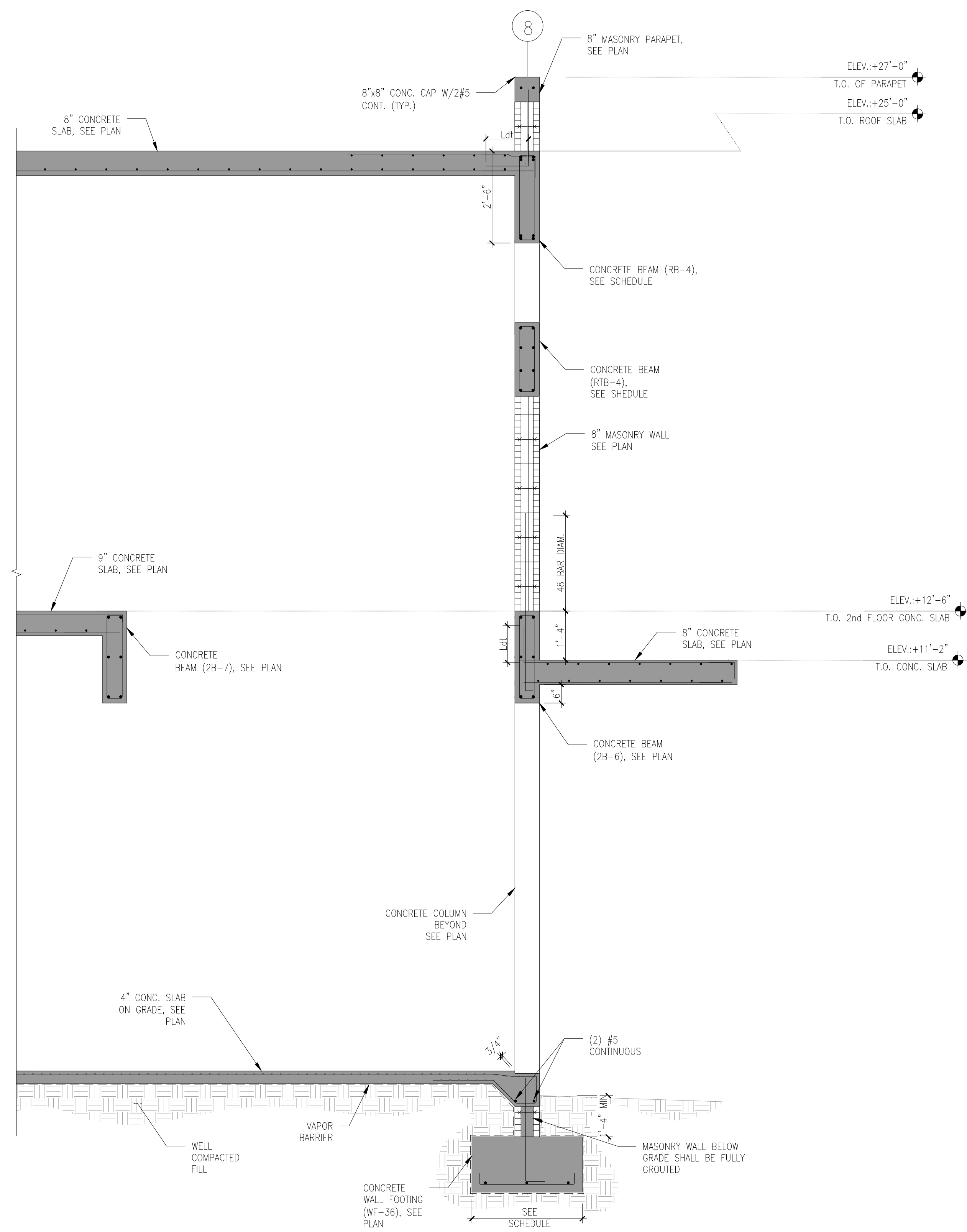
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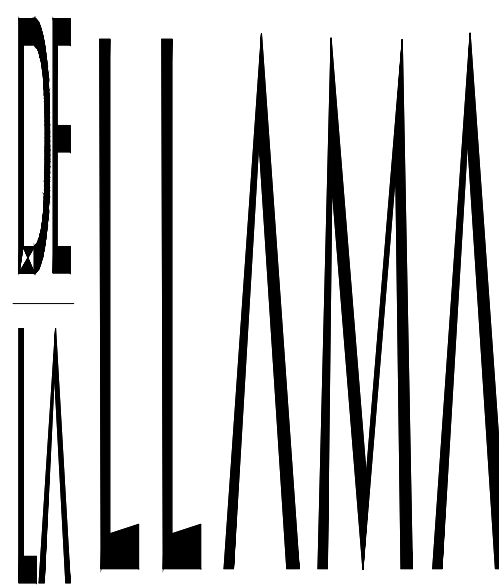
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S-2.1



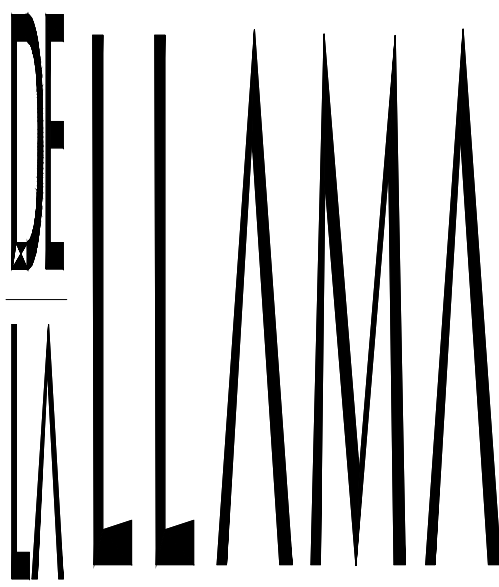
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A circular professional engineer license seal for the State of Florida. The outer ring contains the text "RAISSA R. LOPEZ" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside this ring, the word "LICENSE" is at the top and "STATE OF FLORIDA" is at the bottom, also separated by two stars. In the center of the seal, the license number "No 59399" is displayed. The seal has a decorative border of small dots.

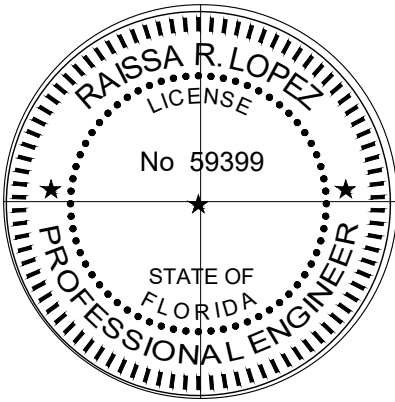
S-3.0



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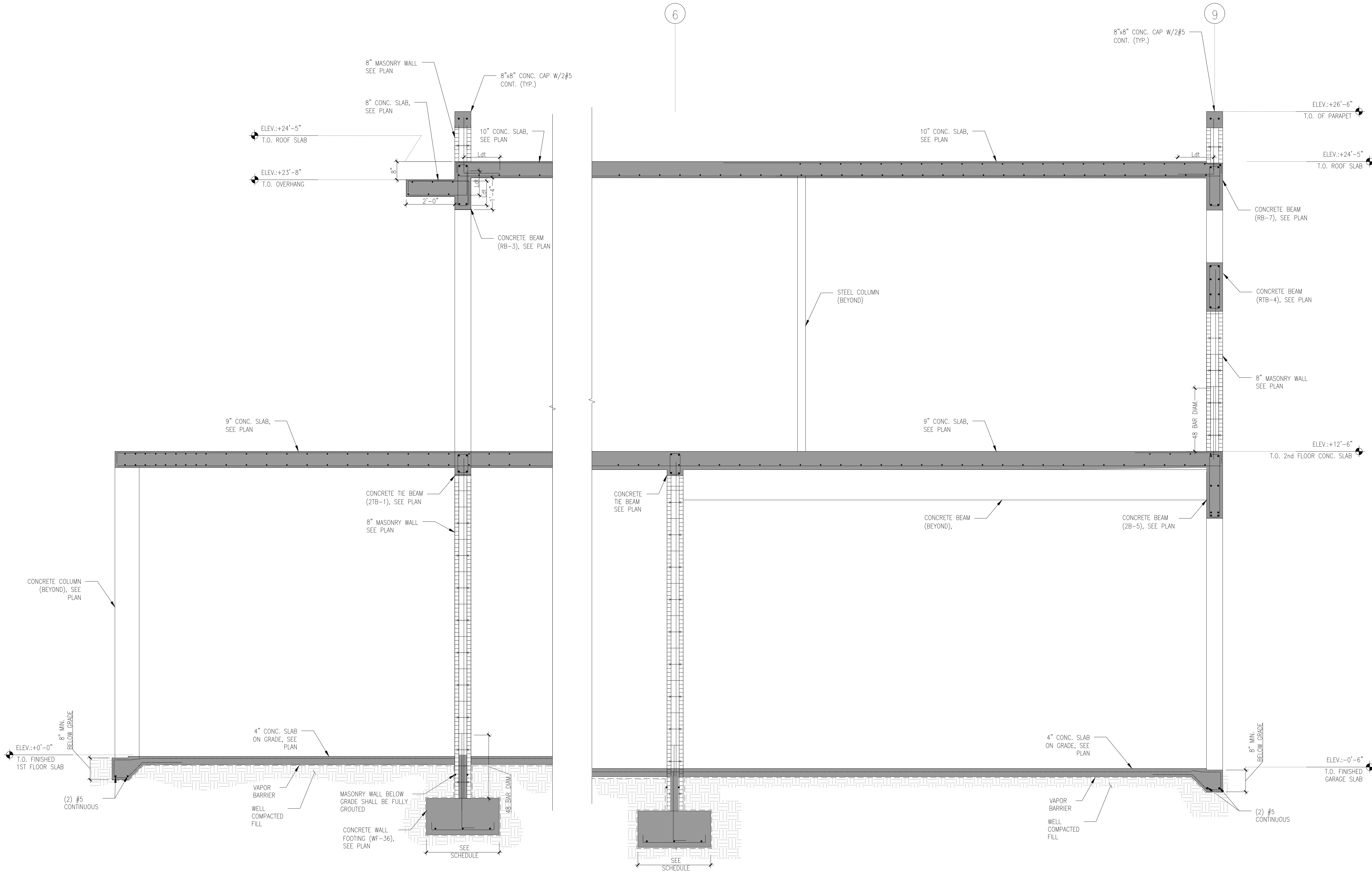
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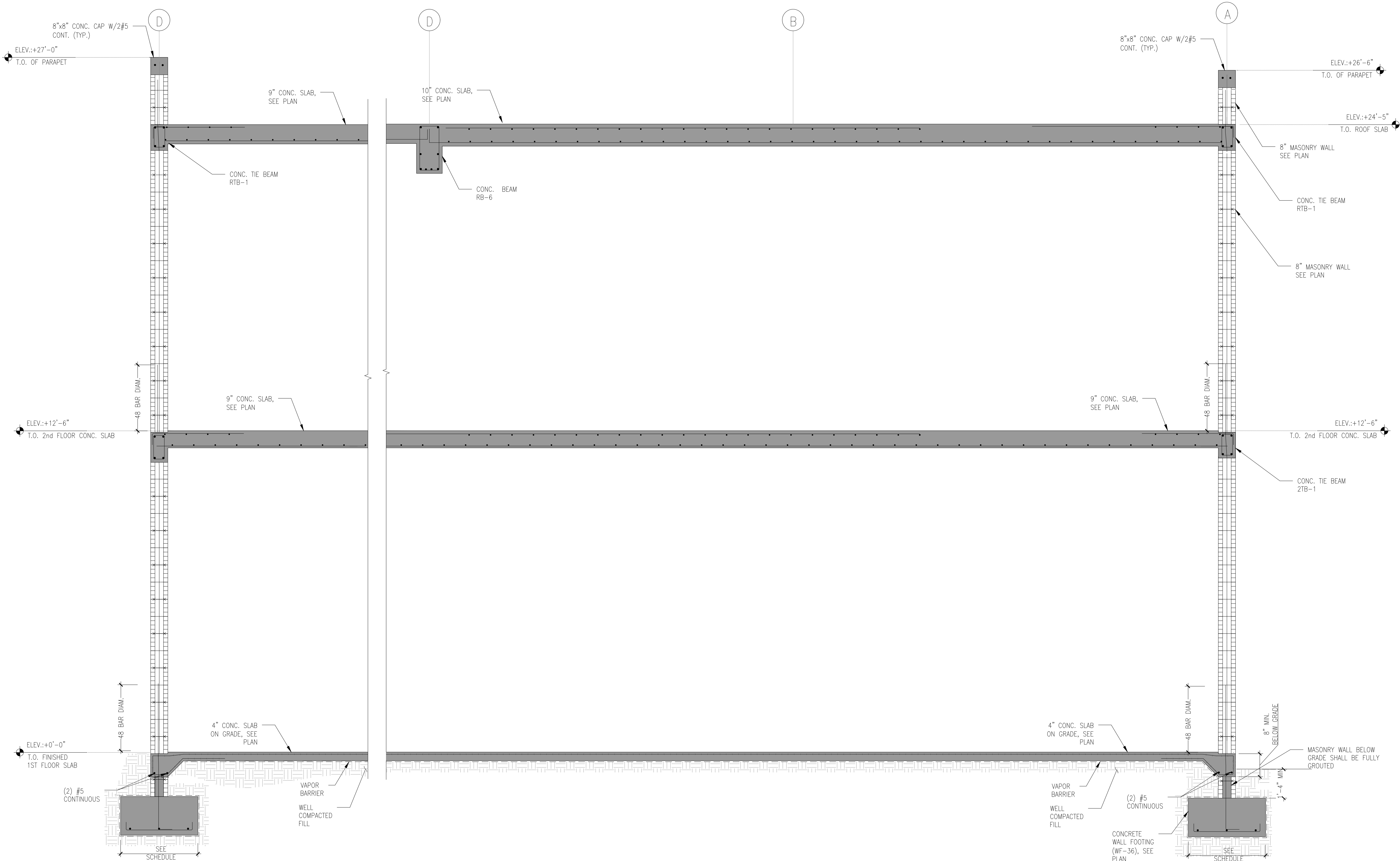
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1 SECTION
S-3.1 SCALE: 1/2"=1'-0"

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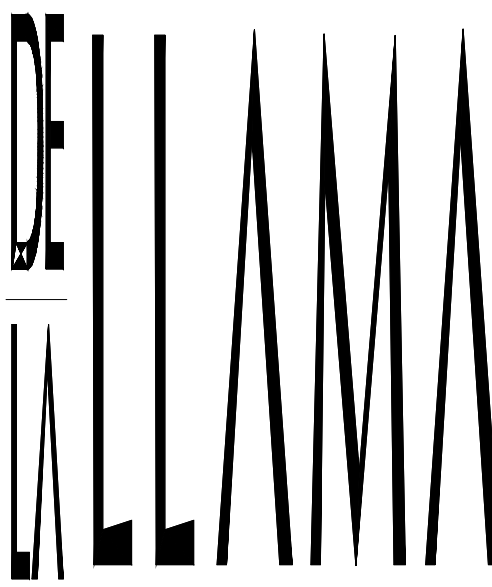




1 SECTION
S-3.2 SCALE: 1/2"=1'-0"

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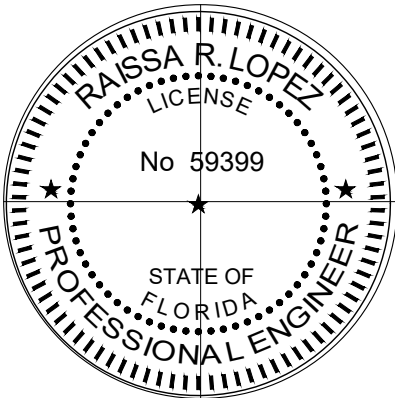
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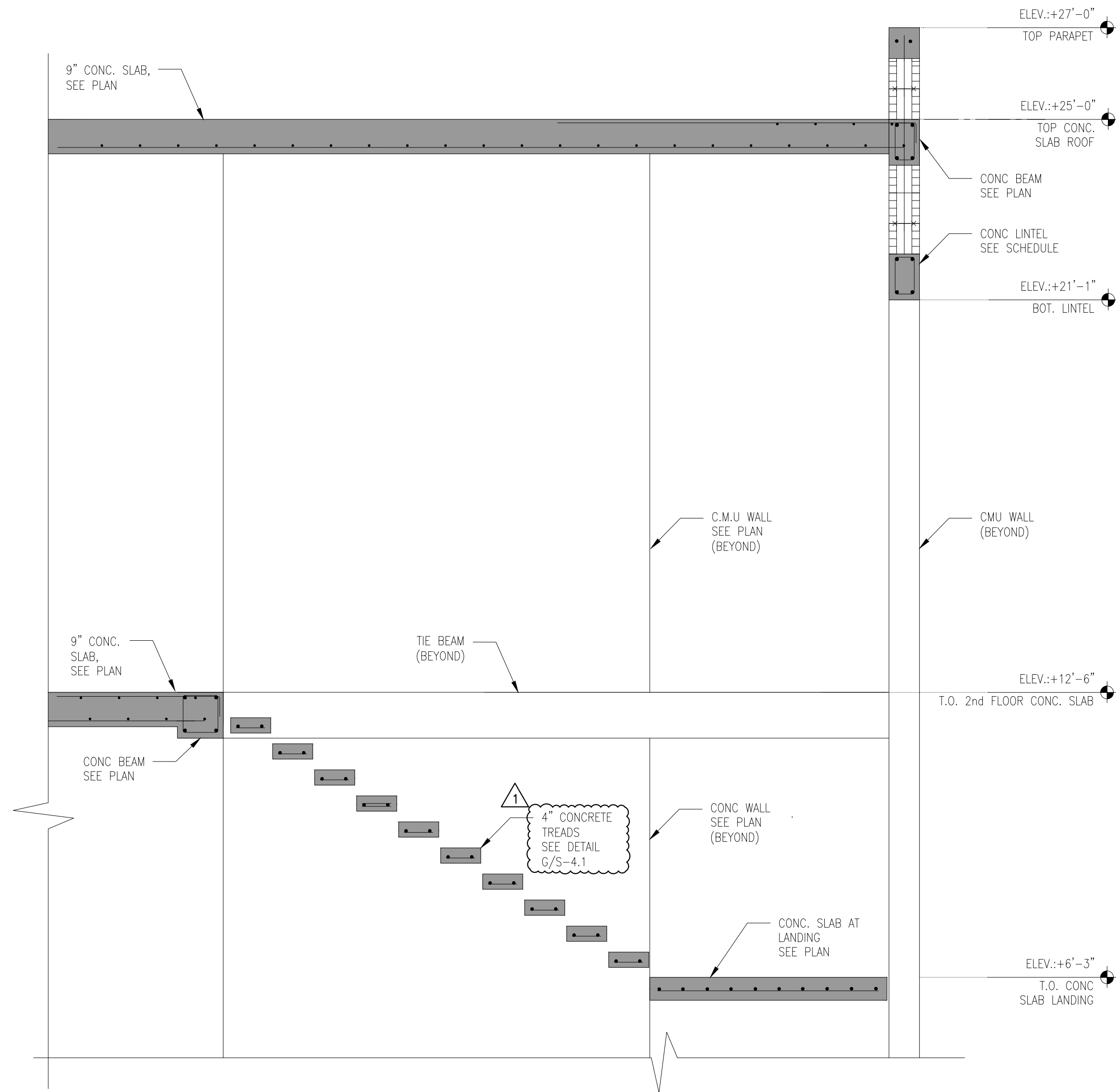
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S-3.2



1 SECTION
S-3.3
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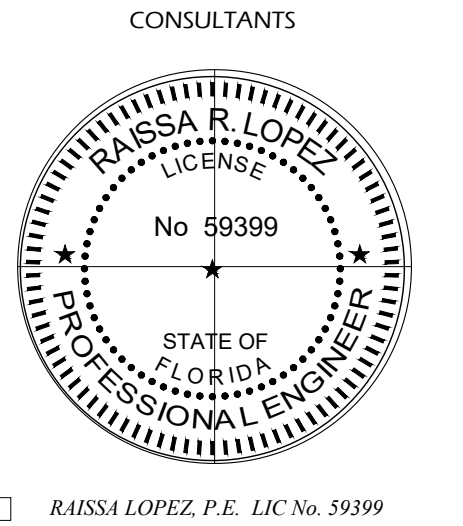
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DATE NOVEMBER 7TH, 2024		
REVISION	DATE	BY
REVISION #1	4/22/2025	B.D.C

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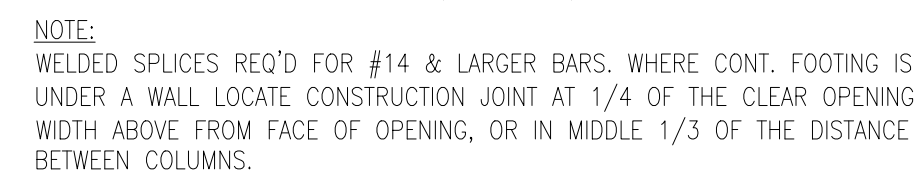
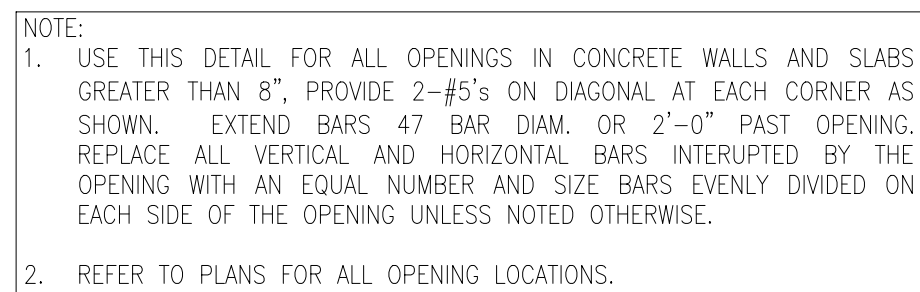
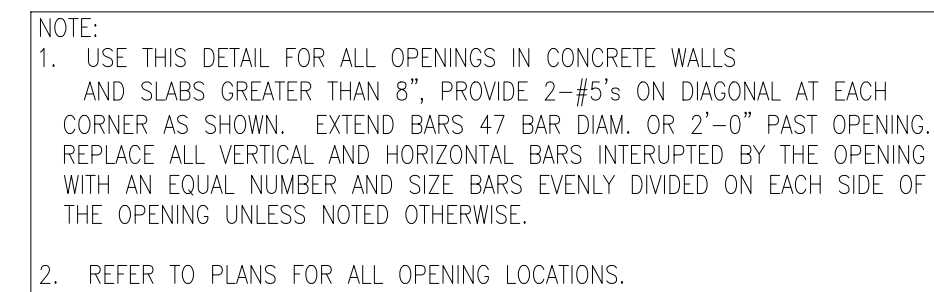
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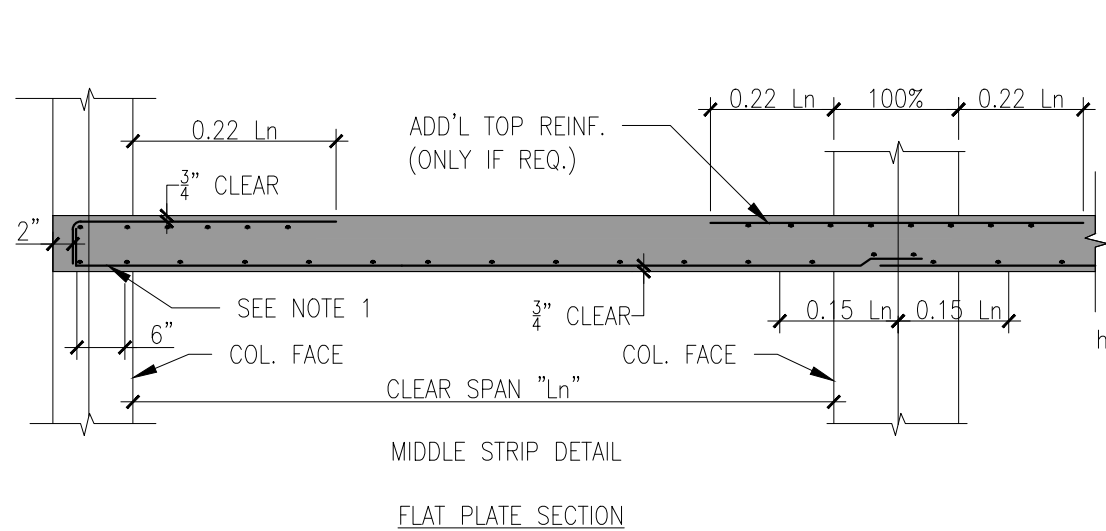
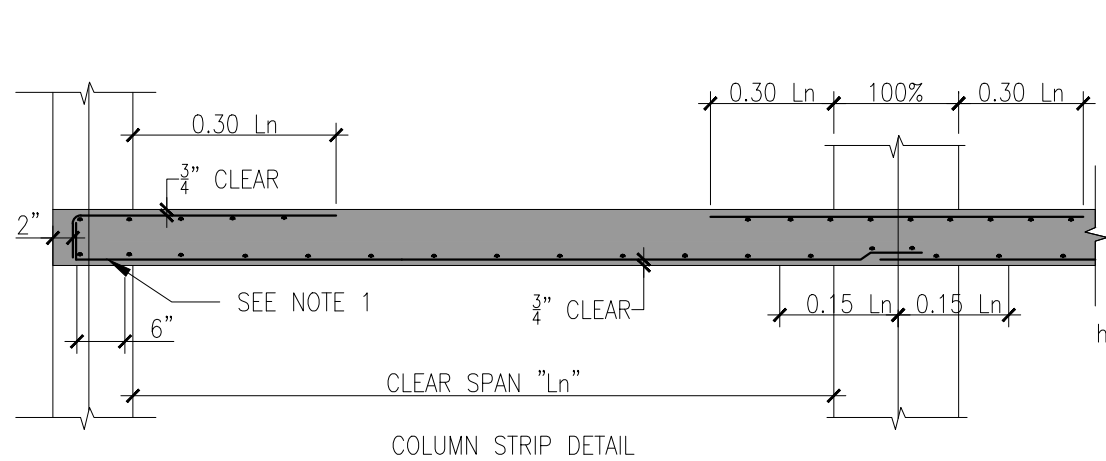
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S-3.3





NOTES:

1-INTegrity REINFORCEMENT IS REQUIRED (ACI 8.7.4.2.1). ALL BOTTOM BARS IN THE COLUMN STRIP MUST BE CONTINUOUS OR SPLICE OVER THE SUPPORT WITH CLASS "B" TENSION LAP SPLICE. AT LEAST TWO OF THE COLUMN STRIP BOTTOM BARS IN EACH DIRECTION MUST PASS WITHIN THE COLUMN AREA AND BE ANCHORED (HOOKED) AT EXTERIOR SUPPORTS.

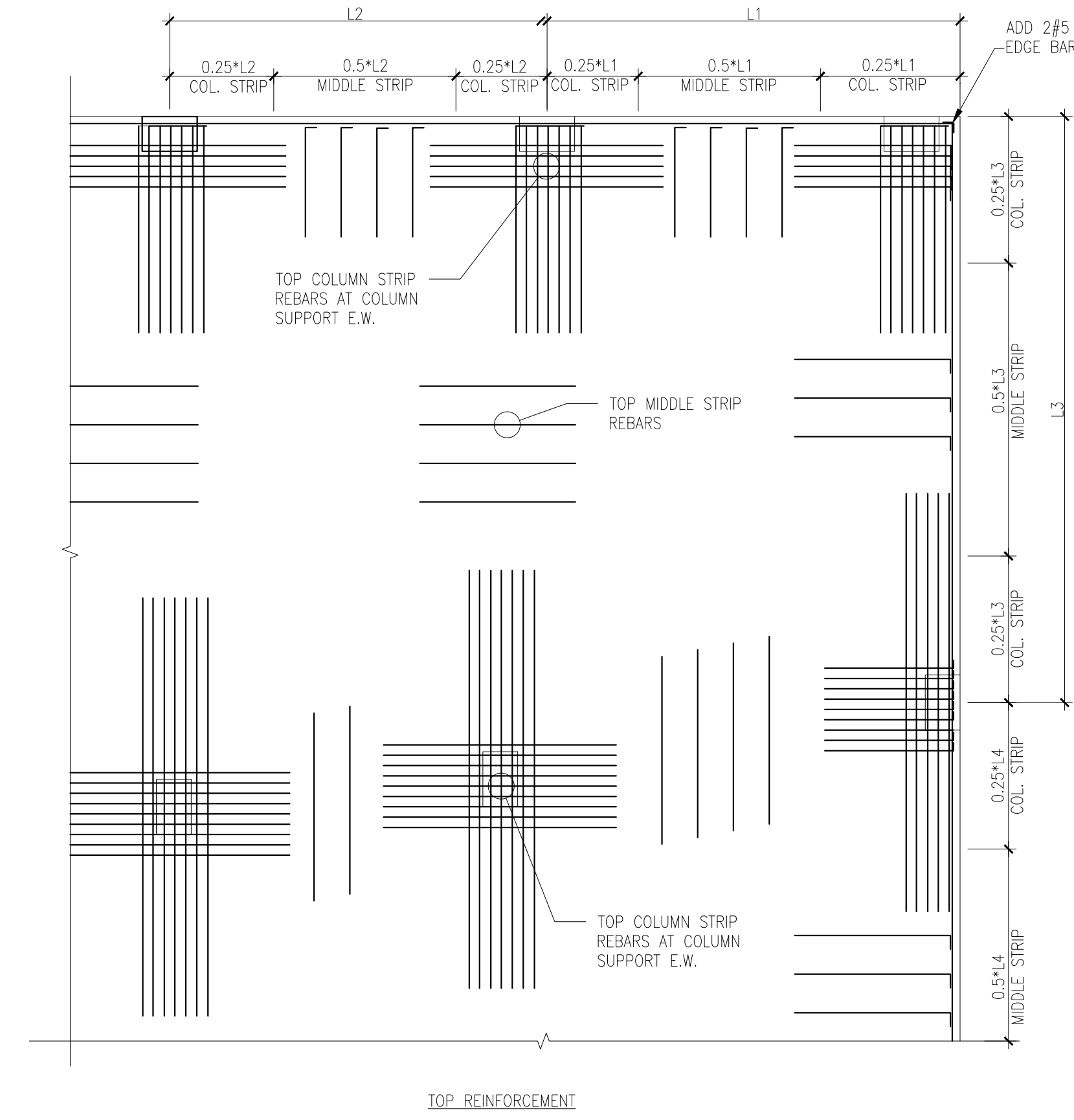
2-60% OF TOP BARS SHALL BE CONCENTRATED WITHIN WIDTH OF THE COLUMN PLUS 1.5'h EACH SIDE OF COLUMN (ACI 8.4.2.3.2 AND 8.4.2.3.5). REMAINING TOP BARS SHALL BE DISTRIBUTED ALONG THE COLUMN STRIP WIDTH.

3-MAIN BOTTOM REINFORCING SHALL BE A CONTINUOUS MAT IN EACH DIRECTION.

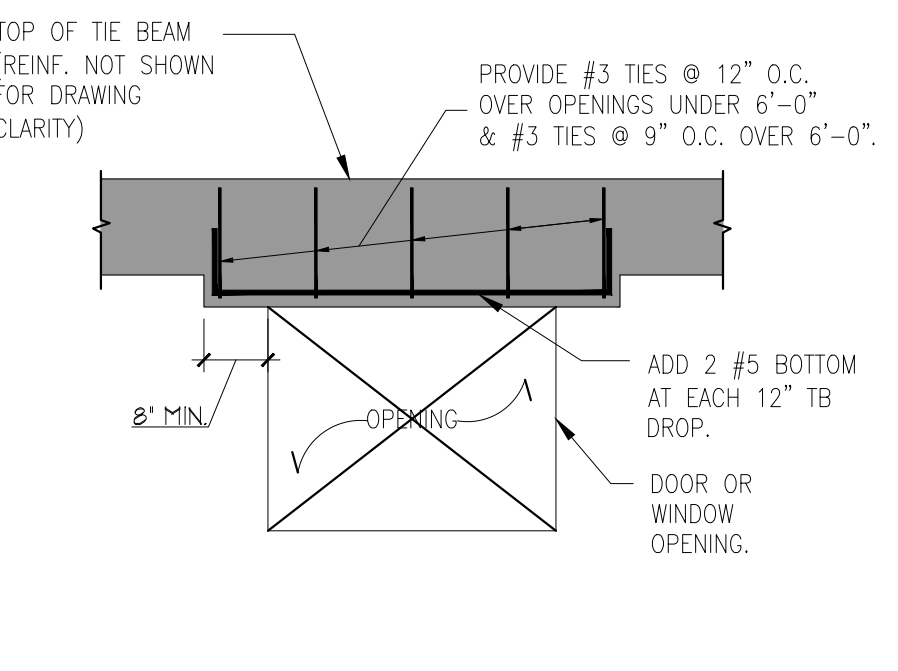
4-AT LEAST 50% OF BOTTOM REINFORCING SHALL BE CONTINUOUS OVER SUPPORTS AND SPLICE SHALL BE MADE IN COLUMN LINE (U.N.O.)

5-ADD 2#5 CONTINUOUS EDGE BARS TOP & BOTTOM.

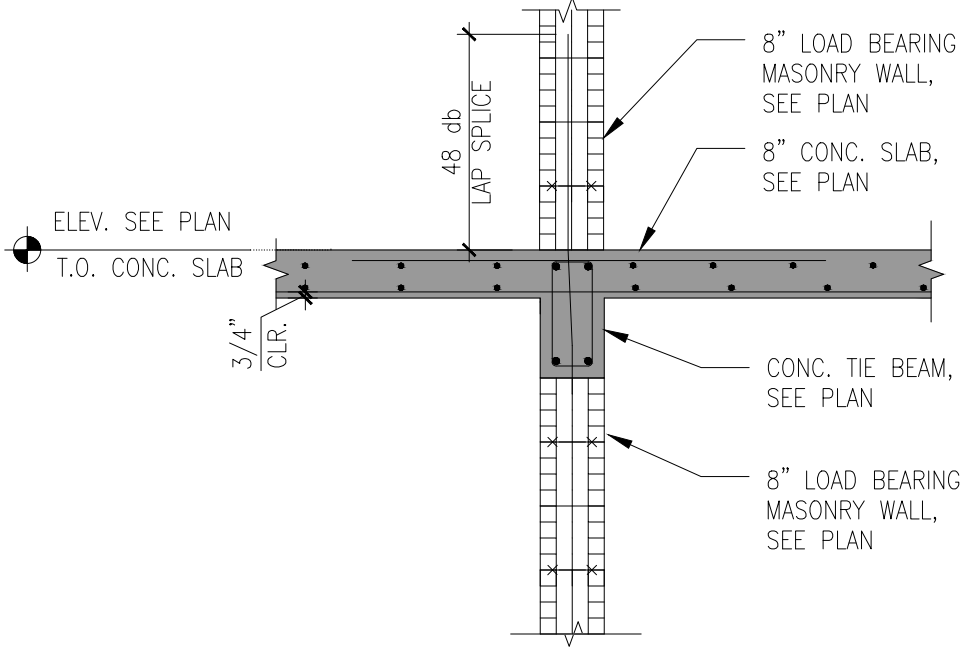
A TYP. FLAT PLATE REINF. PLACEMENT
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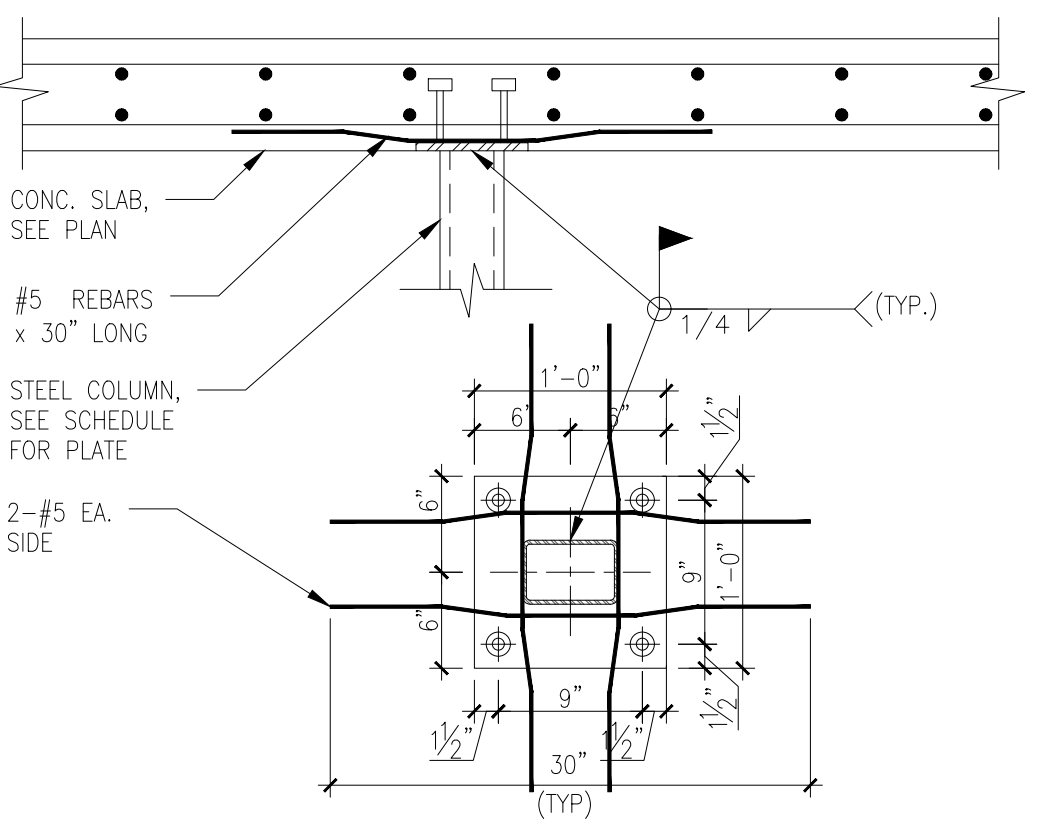
B OVERHANG DETAIL
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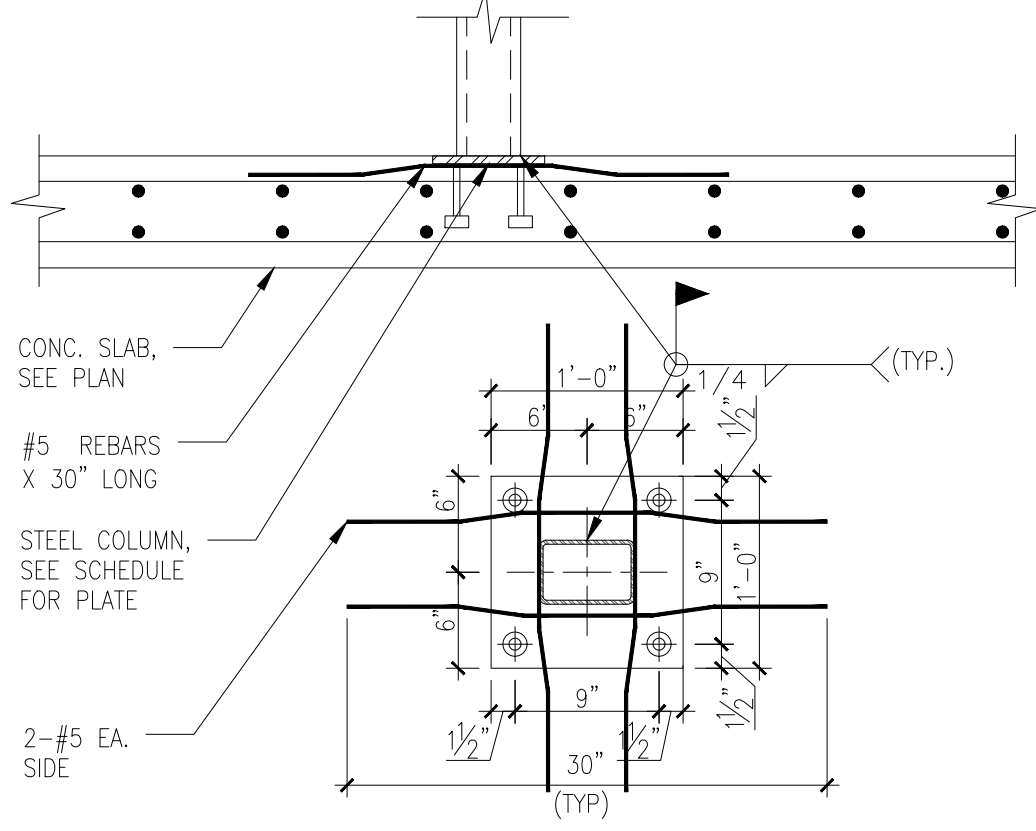
C DROPPED TIE-BEAM DETAIL
SCALE: 1/2"=1'-0"



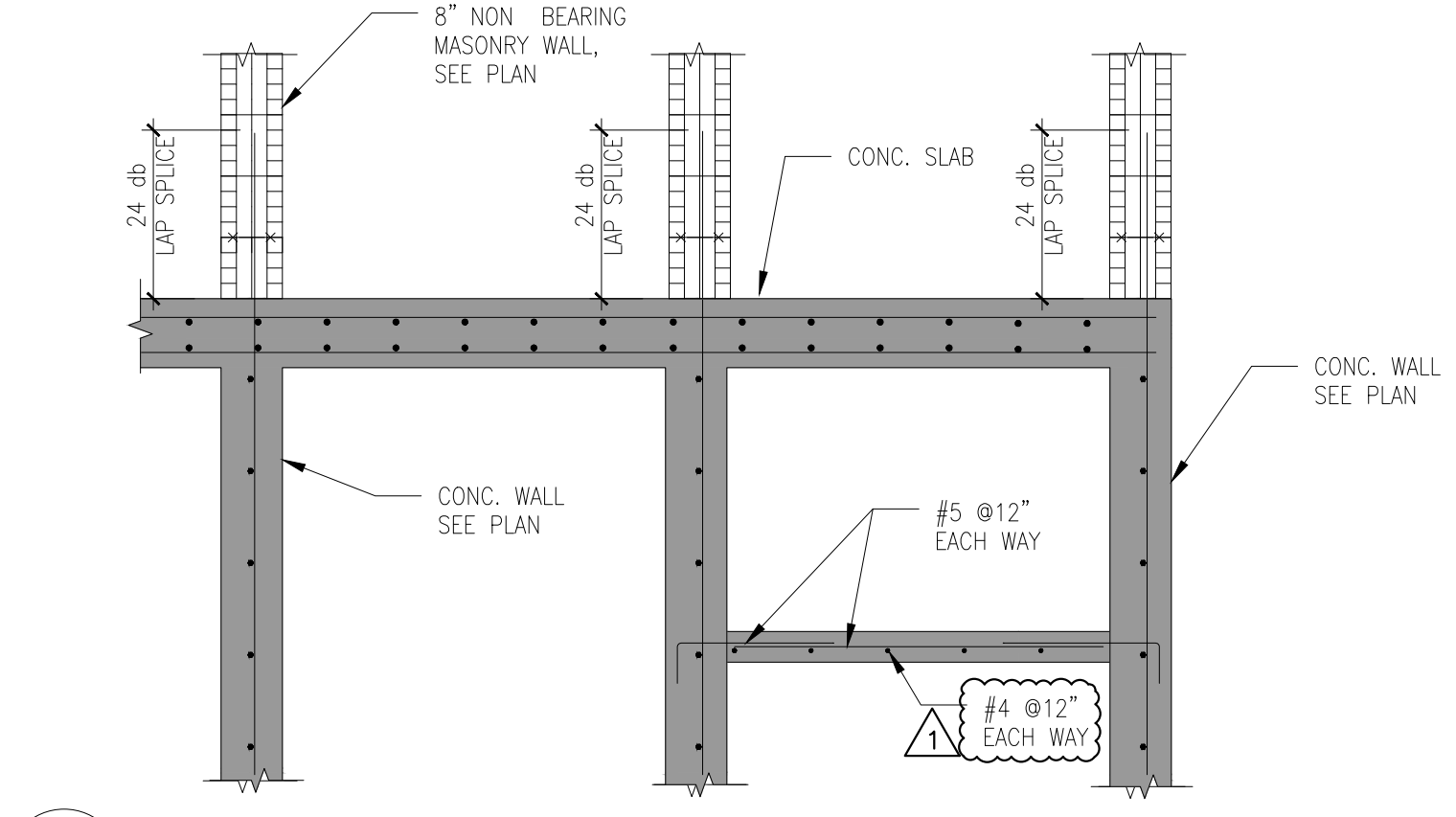
D MASONRY SHEAR WALL DETAIL
SCALE: 1/2"=1'-0"



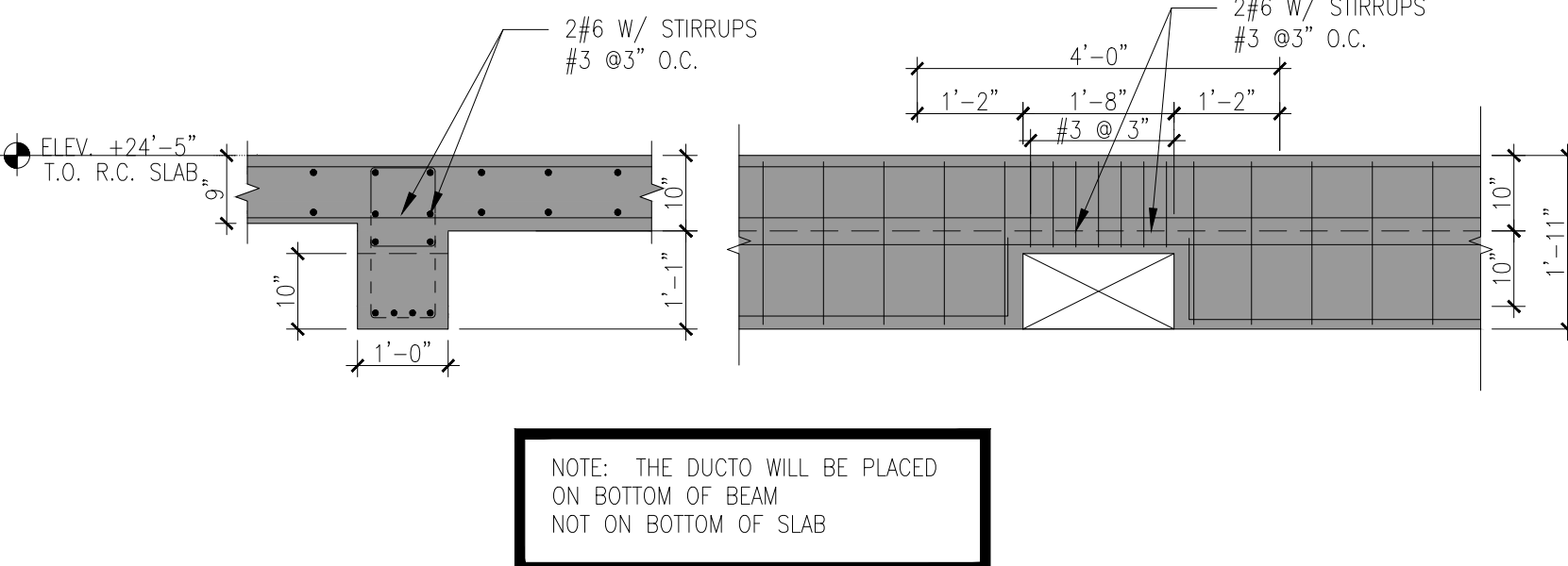
E STEEL COLUMN TO SLAB DETAIL
SCALE: 1"=1'-0"



F STEEL COLUMN TO SLAB DETAIL
SCALE: 1"=1'-0"



G DETAIL STAIR AT CONC. WALL
SCALE: 1/2"=1'-0"



H AC DUCT REINFORCING FOR RB-6
SCALE: 1/2"=1'-0"

NOTE: THE DUCTO WILL BE PLACED ON BOTTOM OF BEAM NOT ON BOTTOM OF SLAB

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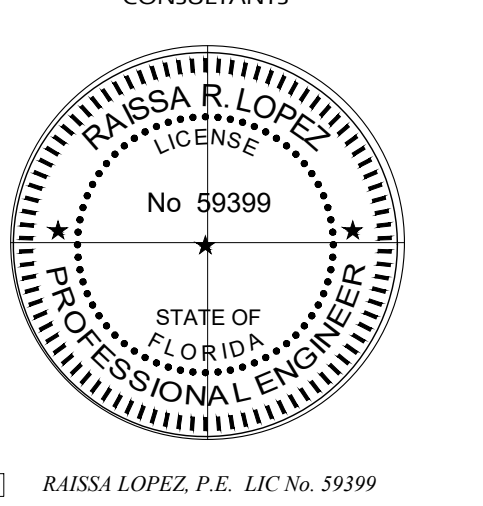
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PROJECT NAME

P8
PINECREST
EIGHT

13100 SW 80TH AVE
PINECREST, FLORIDA 33156

FILE NAME
24-0609

DATE
NOVEMBER 7TH, 2024

REVISION	DATE	BY
REVISION #1	4/22/2025	B.D.C

DRAWING NAME

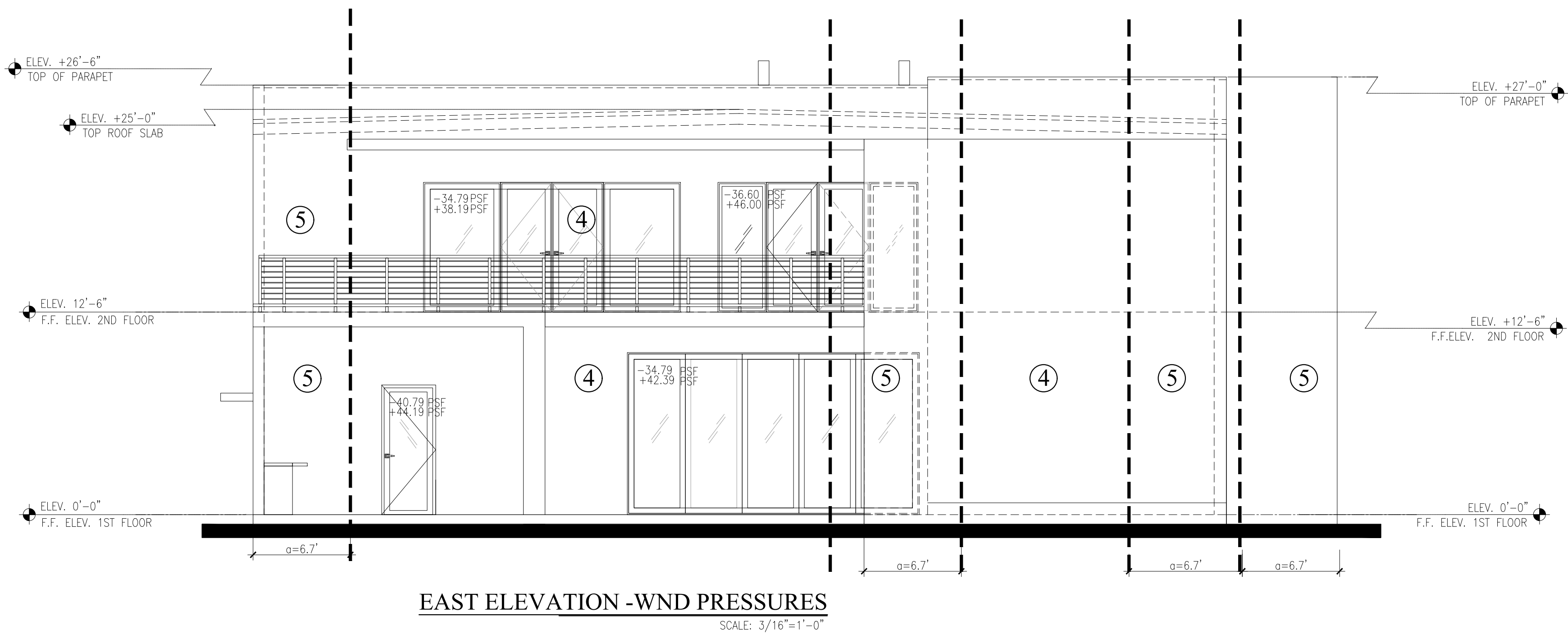
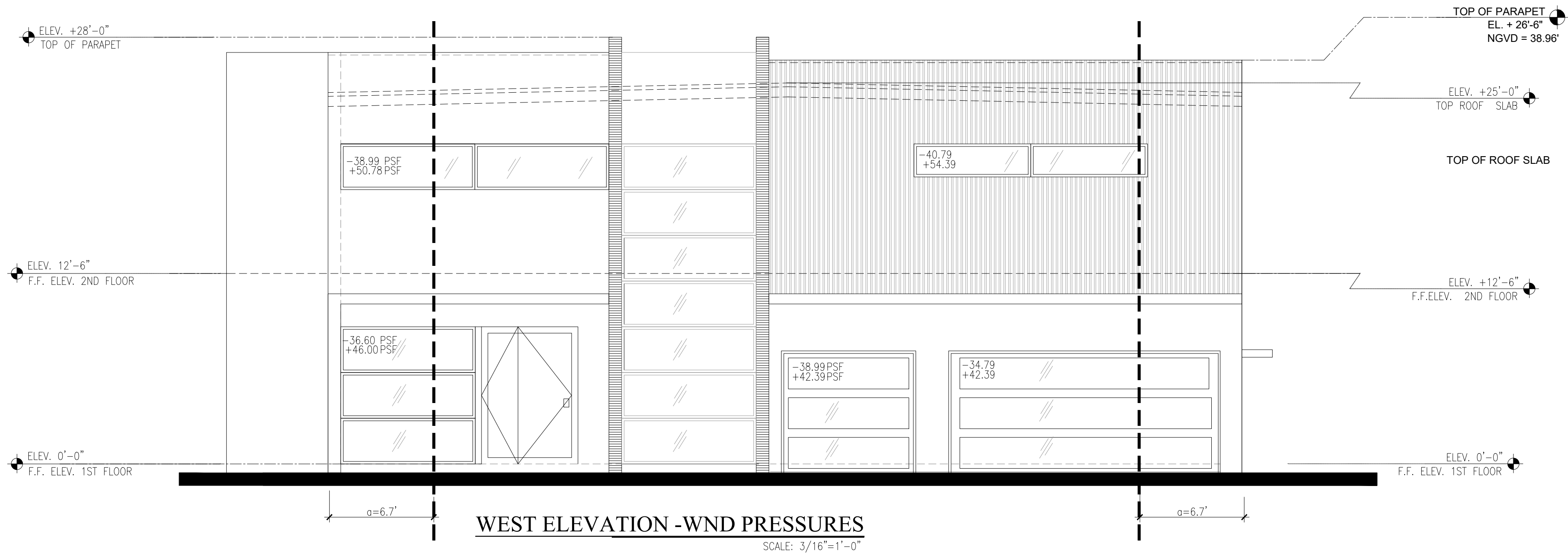
DETAILS

DESIGN BY:
RAISSA LOPEZ

DRAWN BY:
N.C./A.G

SHEET NO.

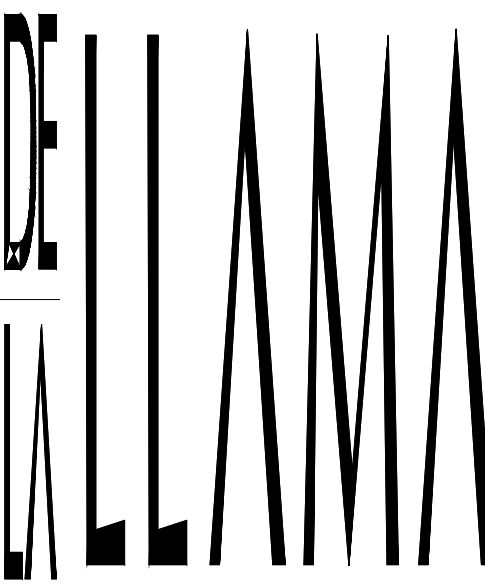
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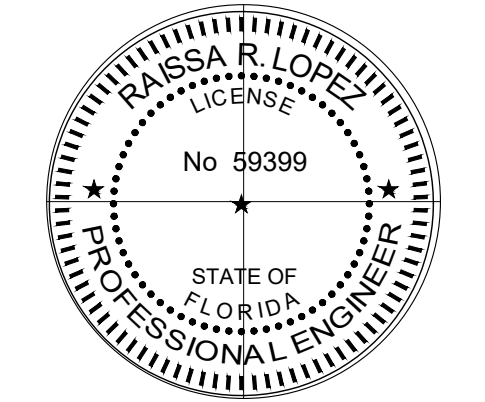


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WALL WIND PRESSURES

DESIGN BY:

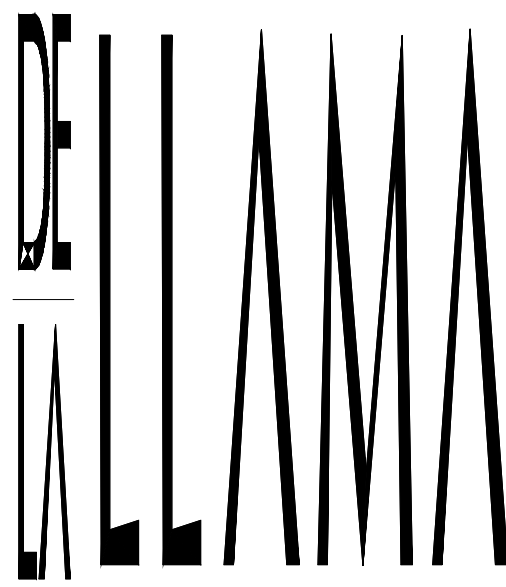
RAISSA LOPEZ

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N. C. / A. G.

SHEET NO.

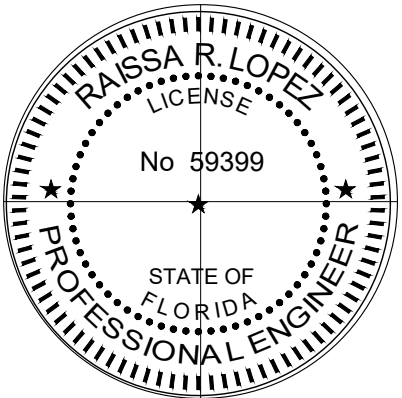
S-5.0



ARCHITECTURE
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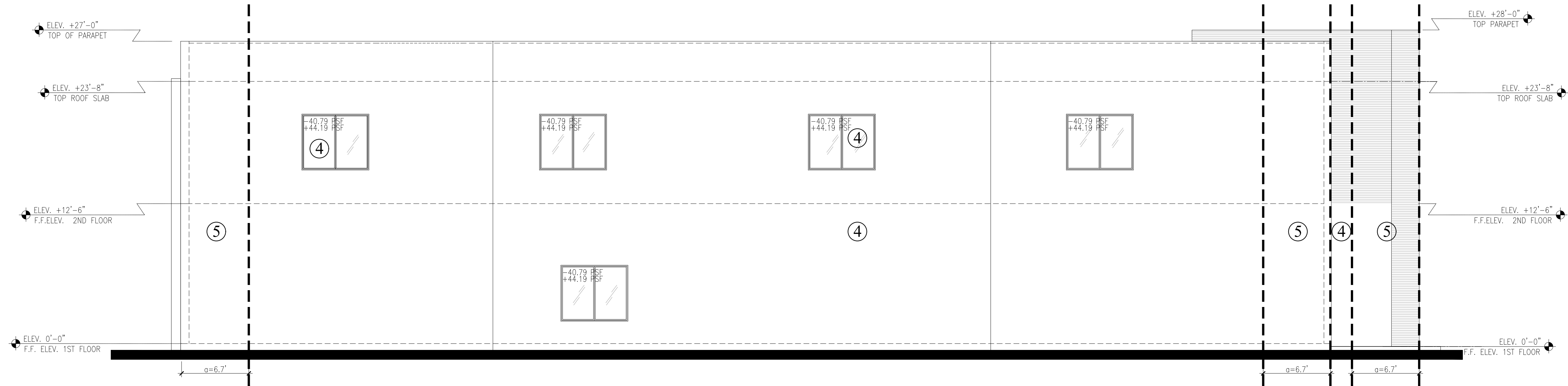
RAISSA LOPEZ

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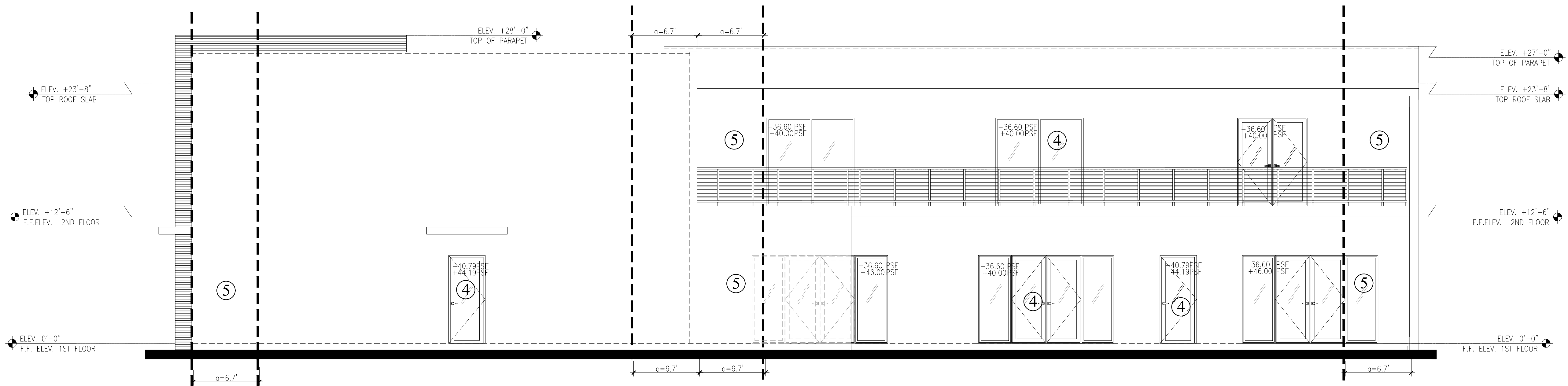
N.C./AG

SHEET NO.

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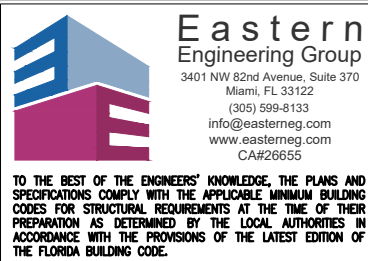


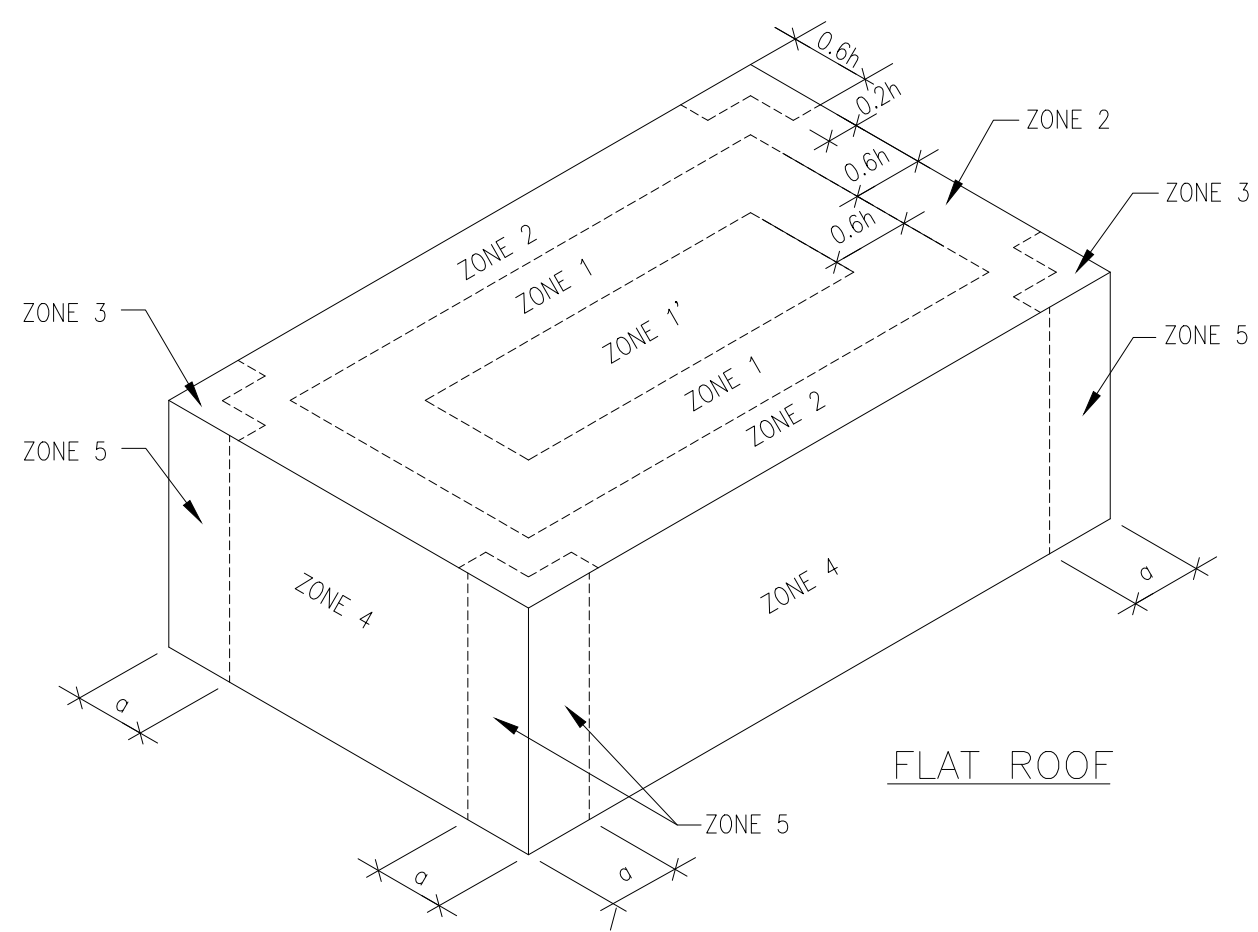
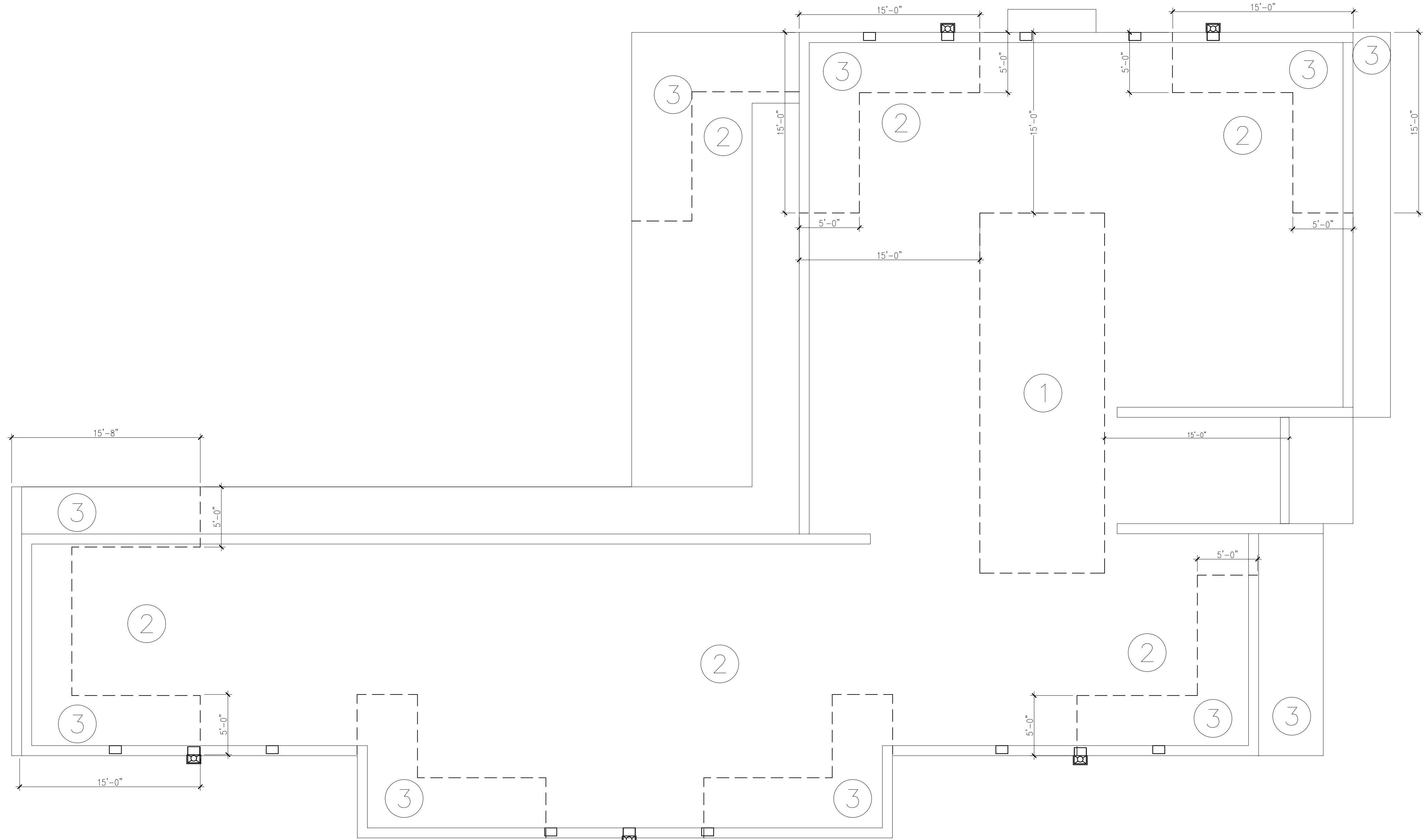
NORTH ELEVATION -WND PRESSURES
SCALE: 3/16"=1'-0"



SOUTH ELEVATION -WND PRESSURES
SCALE: 3/16"=1'-0"

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24 0609 13100 SW 80 TH AVE, PINECREST, FL 33156
BUILDING MEAN ROOF HEIGHT: 25.00 FEET
BUILDING EXPOSURE COEFF. @ ROOF: $K_h = 0.945$
VELOCITY PRESSURE @ ROOF HEIGHT: $q_h = 44.44$ PSF
ROOF GUST FACTOR COEFF: $G_{rf} = 0.85$
INTERNAL PRESSURE COEFF: $G_{pi} = +/- 0.18$

FOR COMPONENTS AND CLADDING: WIND PRESSURE COEFF. ZONE:
 $\alpha = 0.1$ X WIDTH = 6' OR
 $\alpha = 0.04$ X LHD = 2.4 NOT LESS THAN
 $\alpha = 3$
USE $\alpha = 6.7$ FEET

MAXIMUM VERTICAL (ASD) WIND LOAD (ROOF)

ZONE 1		ZONE 2	
AREA	PRESSURE	AREA	PRESSURE
10SF	-71.01 PSF	10SF	-93.67 PSF
20SF	-66.33 PSF	20SF	-87.65 PSF
50SF	-60.13 PSF	50SF	-79.69 PSF

ZONE 1'		ZONE 3	
AREA	PRESSURE	AREA	PRESSURE
10SF	-40.79	10SF	-127.67
20SF	-40.79	20SF	-115.62
50SF	-40.79	50SF	-99.70

MAXIMUM HORIZONTAL (ASD) WIND LOAD (WALLS)

ZONE 4		ZONE 5	
AREA	PRESSURE	AREA	PRESSURE
10SF	-44.13 PSF	10SF	-44.39 PSF
20SF	-38.99 PSF	20SF	-38.99 PSF
50SF	-35.60 PSF	50SF	-35.60 PSF

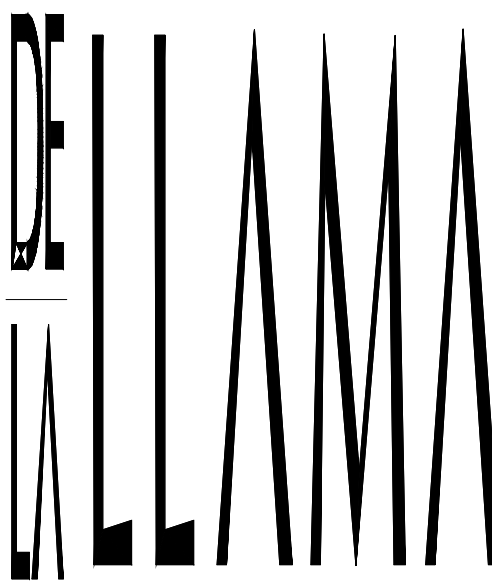
ZONE 1		ZONE 2	
AREA	PRESSURE	AREA	PRESSURE
10SF	-40.79	10SF	-40.79
20SF	-40.79	20SF	-40.79
50SF	-40.79	50SF	-40.79

MAXIMUM VERTICAL (ASD) WIND LOAD (OVERHANGS)

ZONE 2_OHS	
AREA	PRESSURE
10SF	-86.88 PSF
20SF	-78.84 PSF
50SF	-68.23 PSF

ZONE 3_OHS	
AREA	PRESSURE
10SF	-120.87 PSF
20SF	-109.82 PSF
50SF	-88.24 PSF

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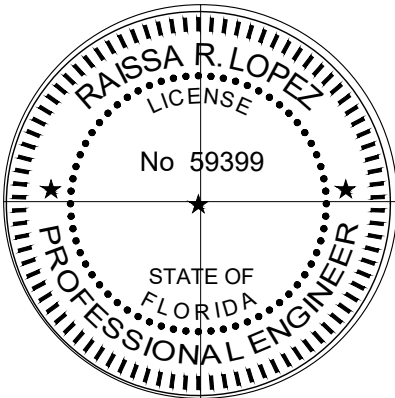


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REVISION DATE BY

DRAWING NAME

ROOF WIND PRESSURES

DESING BY:

RAISSA LOPEZ

DRAWN BY:

N. C. / A.G

SHEET NO.

S-5.2