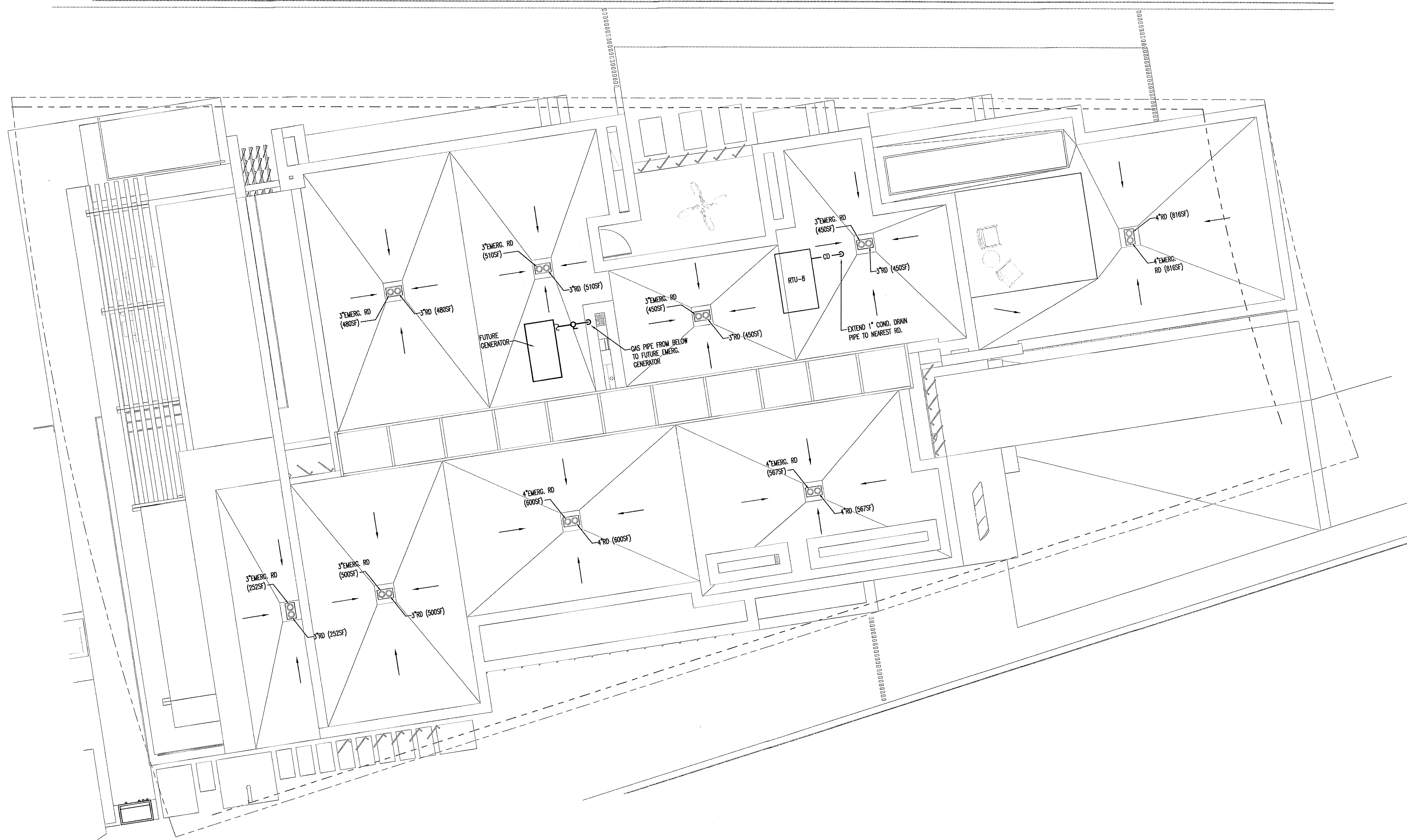


CHOEFF LEVY FISCHMAN
ARCHITECTURE + DESIGN
(305) 564-6338
(305) 562-6292
www.dlarchitects.com

8405 Blueway Blvd. Suite 201
Miami, Florida 33136



ROOF PLUMBING PLAN
3/16" = 1'-0"

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

HENRY VIDAL P.E.
PE # 58204

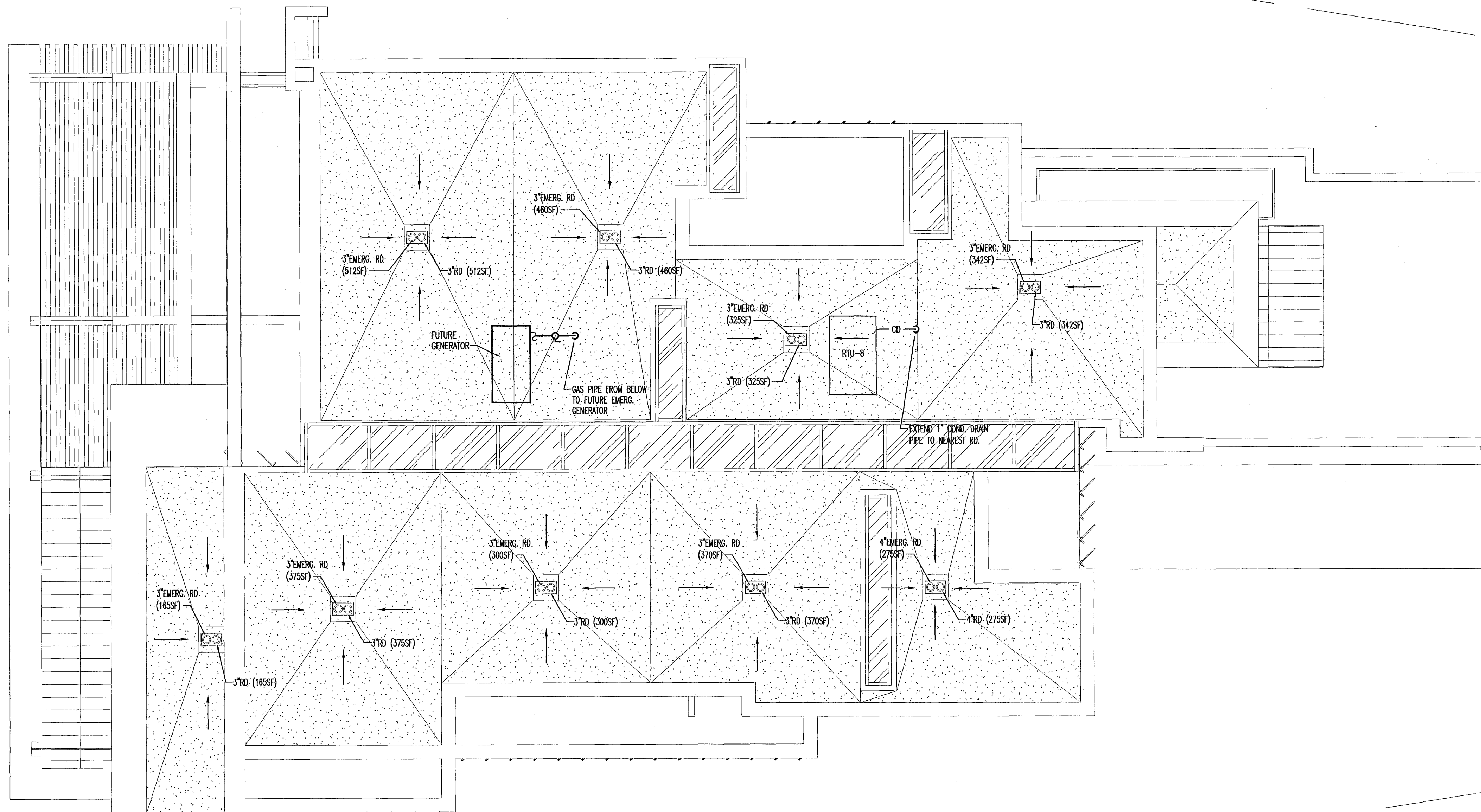
comm no.
1652

date:
02.03.2017

revised:

CONSULTING ENGINEERS
341 N.W. SOUTH RIVER DRIVE
MIAMI, FL 33125
HENRY VIDAL, P.E., PE #58204
CERTIFICATION OF AUTHORIZATION #0056
PHONE: (305) 571-1860 FAX: (305) 711-1861
INFO@VIDALENGINEERING.COM
VIDALENGINEERING.COM

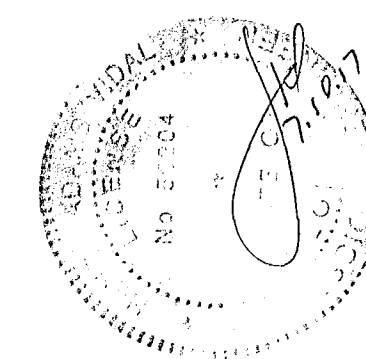
sheet no.
P-3.0



1
ROOF PLUMBING PLAN
3/16" = 1'-0"

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal



HENRY VIDAL, P.E.
PE # 56204

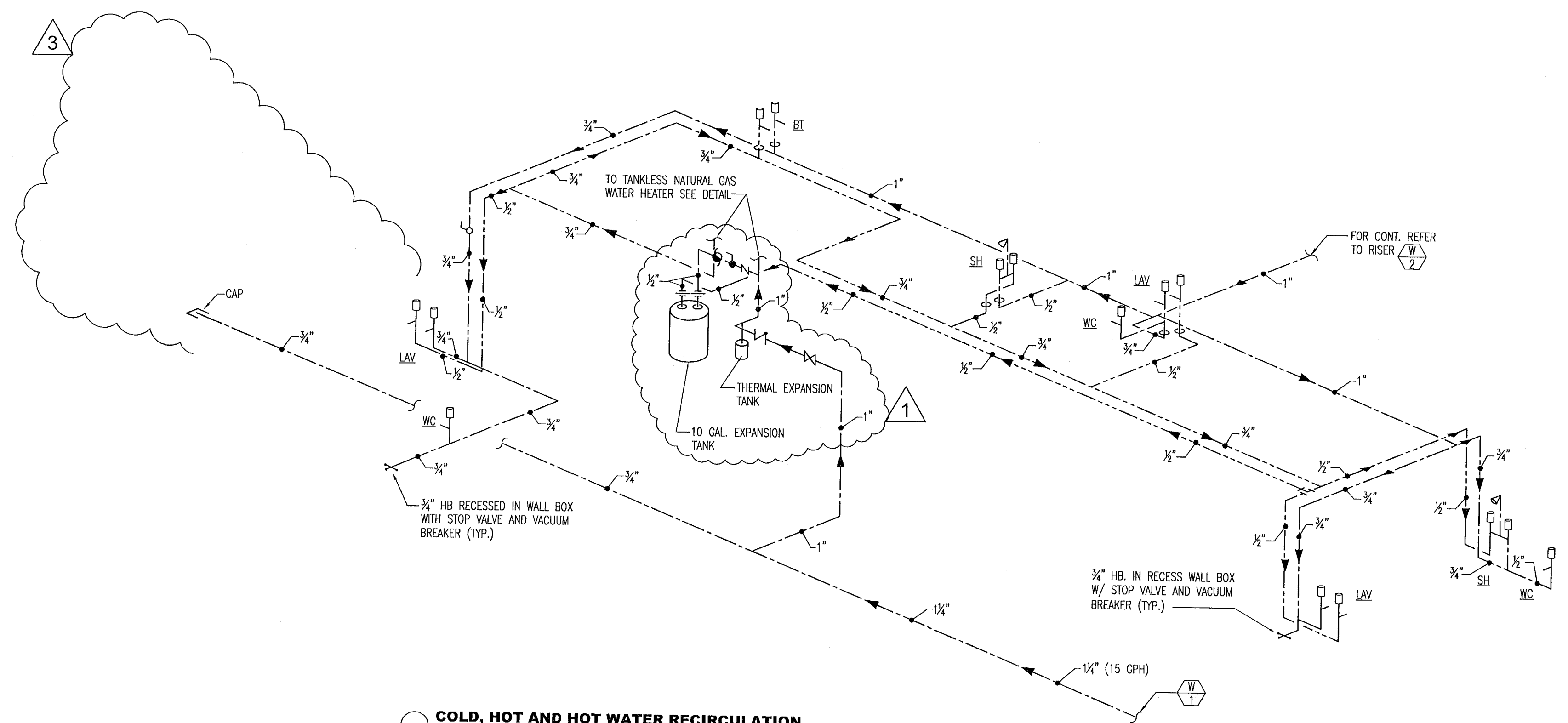
comm no.
1652

date:
02.03.2017

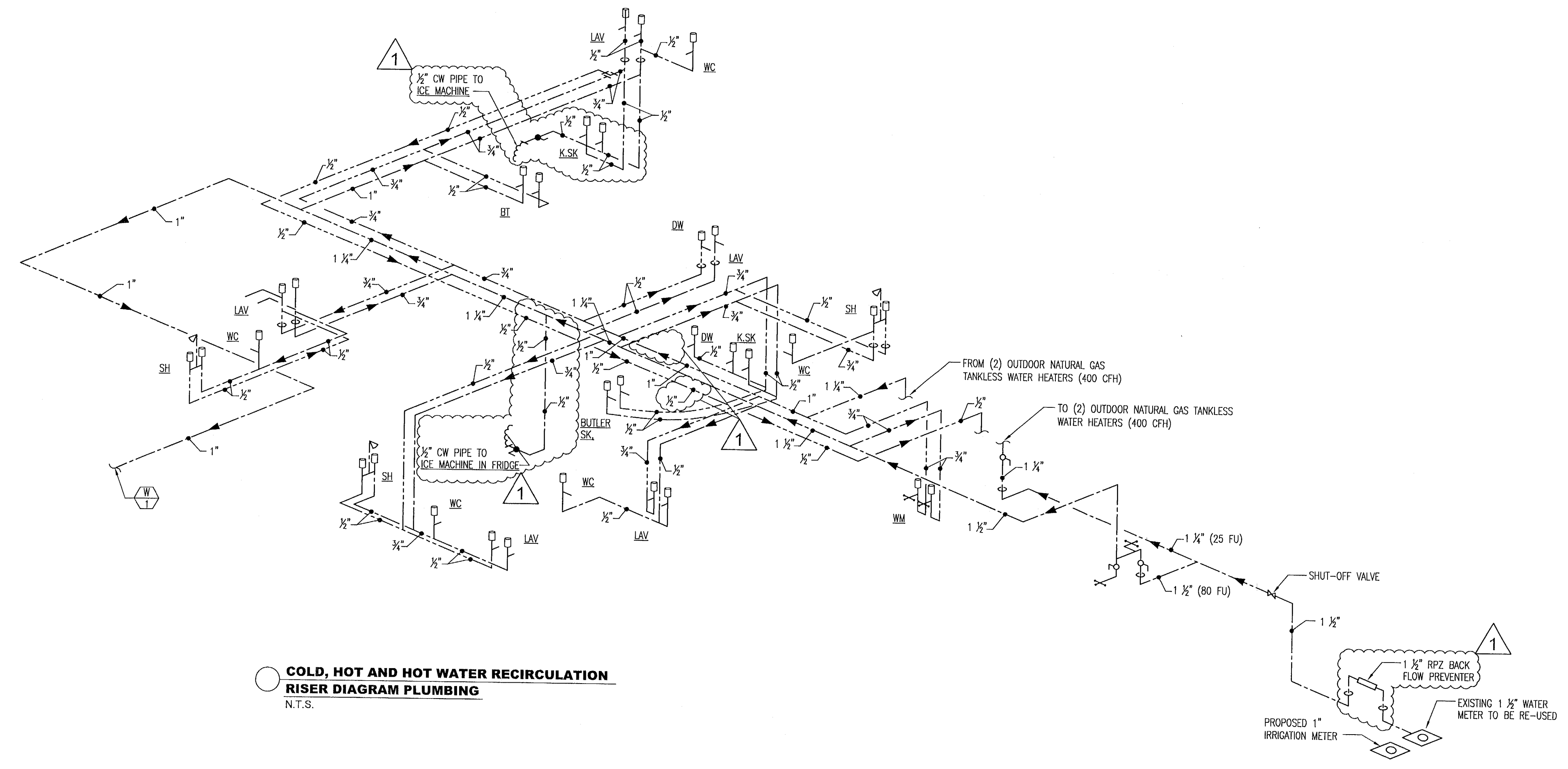
revised:
1 04.13.17 BLDG. DEPT.

sheet no.

P-3.0



**COLD, HOT AND HOT WATER RECIRCULATION
RISER DIAGRAM PLUMBING**
N.T.S.



**COLD, HOT AND HOT WATER RECIRCULATION
RISER DIAGRAM PLUMBING**
N.T.S.

28 W DILDO RESIDENCE
28 WEST DILDO DR,
MIAMI BEACH, FL 33139

seal



HENRY VIDAL, P.E.
PE # 96204

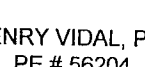
comm no.
1652

date:
02.03.2017

revised:
1 04.13.17 BLDG. DEPT.
3 08.31.17
ENGINEERING COMMENT

sheet no.

P-4.0

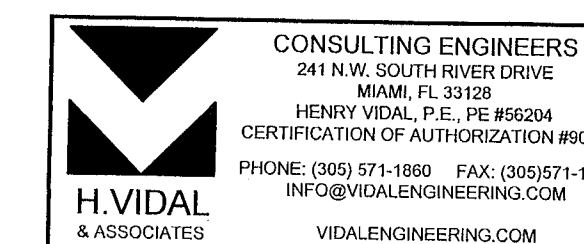


date:
02.03.2017

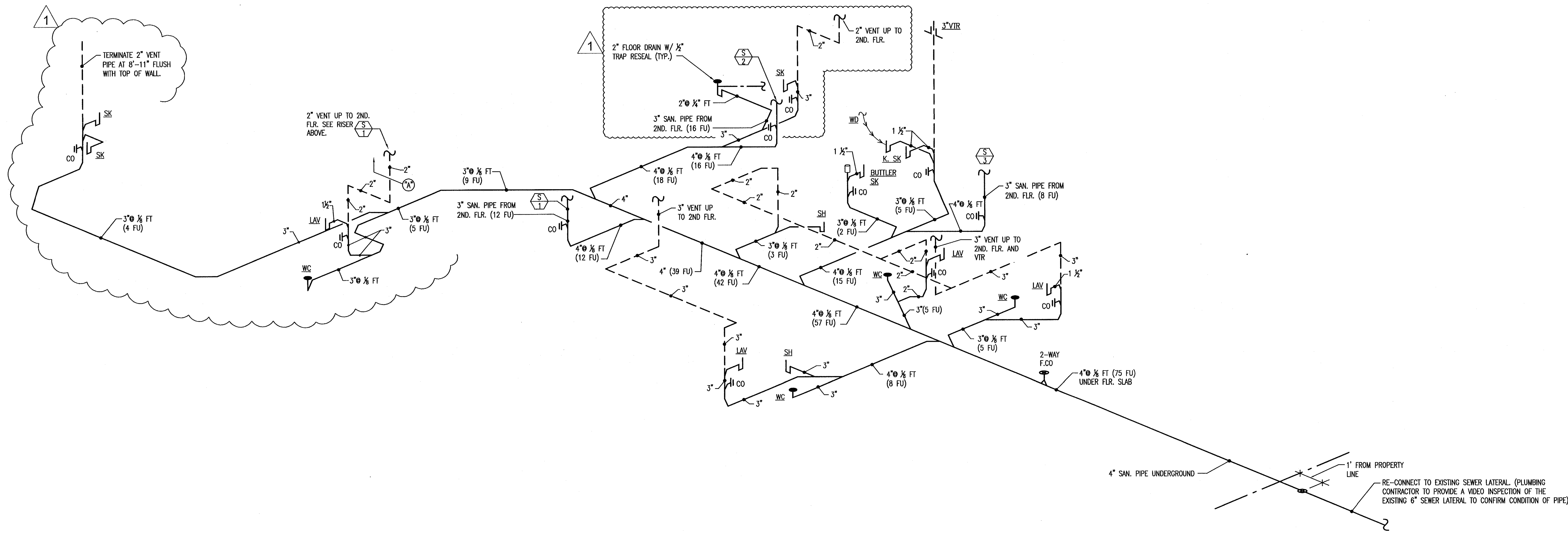
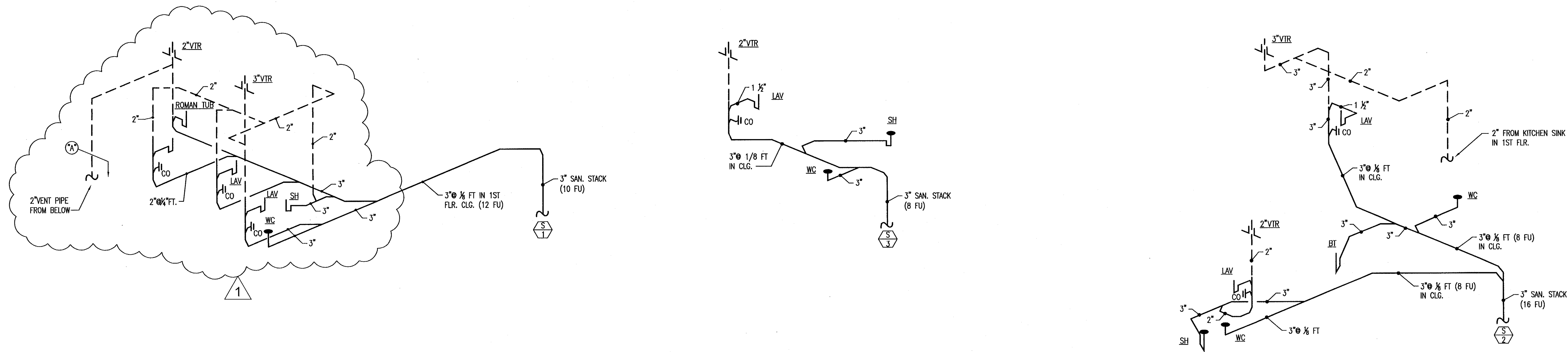
revised:
1 04.13.17 BLDG. DEPT

sheet no.

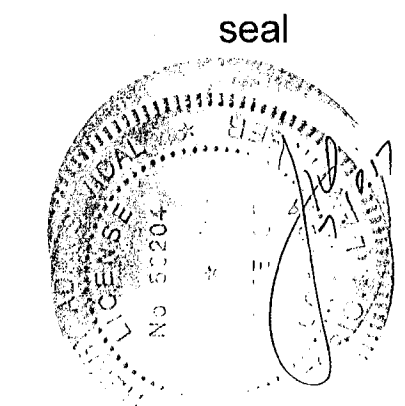
P-4.0







SANITARY RISER / ISOMETRIC PLUMBING
N.T.S.



HENRY VIDAL, P.E.
PE # 56204

comm no.
1652

date:
02.03.2017

revised:
1 04.13.17 BLDG. DEPT.

sheet no.

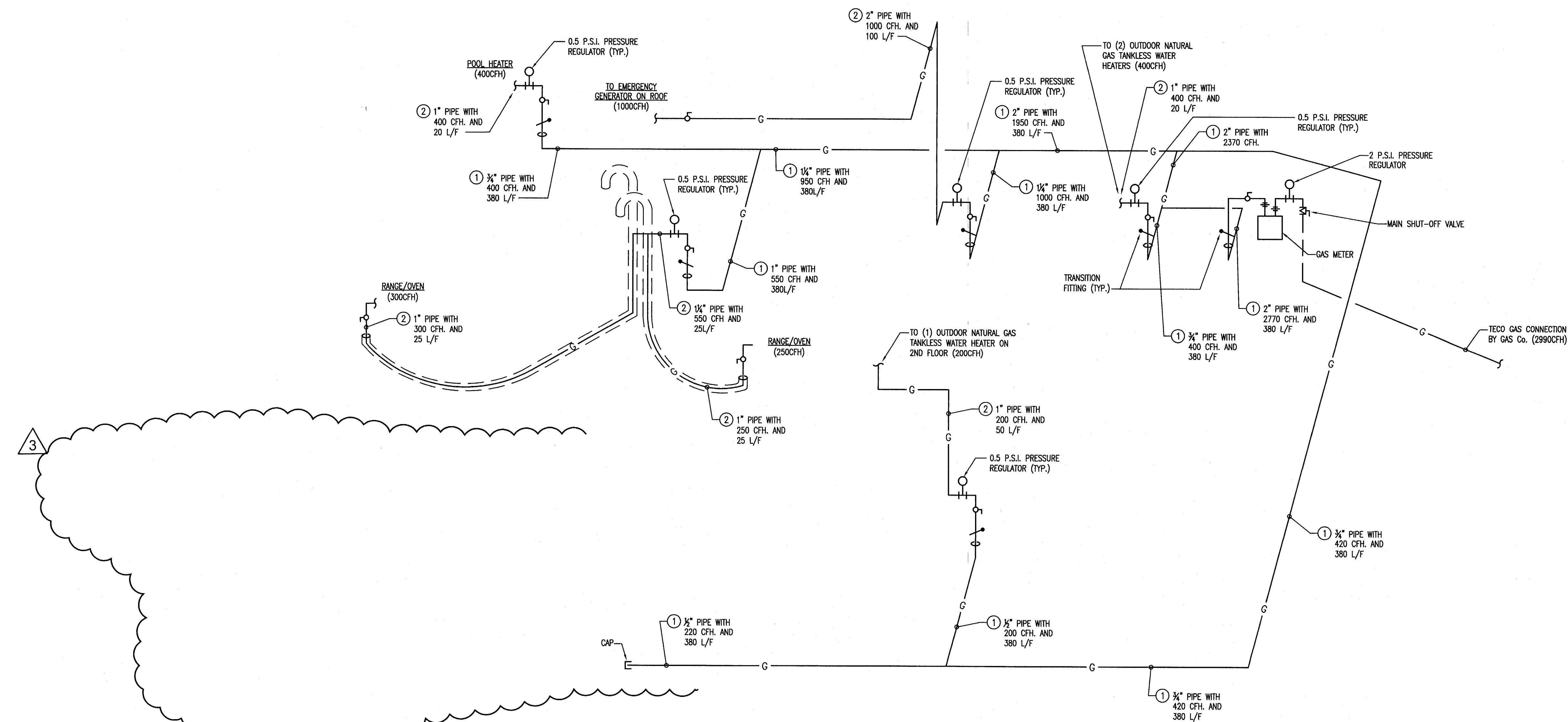
P-5.0

BRI700988
88P001198
58 W Dilido Dr

GAS CALCULATION

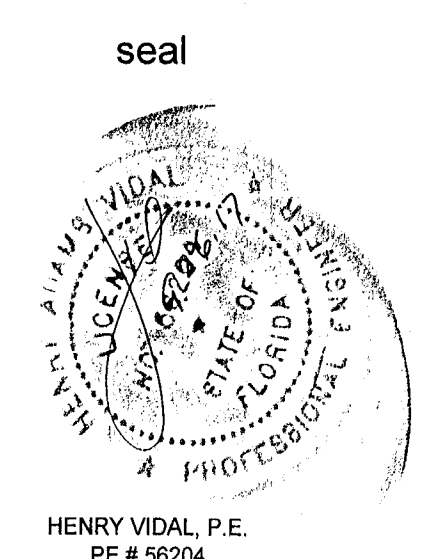
GAS SUMMARY (1ST STAGE) — ①
GAS TYPE: NATURAL GAS
PIPE: POLYETHYLENE PLASTIC PIPE
GAS INPUT: 2 P.S.I.
PRESSURE DROP: 1 P.S.I.
TOTAL LOAD: 2770 C.F.H.
LONGEST RUN: 380LF
SERVICE SIZE:
TABLE: 402.4(22) - G2413.4(8)

GAS SUMMARY (2ND STAGE) — ②
GAS TYPE: NATURAL GAS
PIPE: SCHD. 40 METAL PIPE
GAS INPUT: 0.5 P.S.I. OR LESS
PRESSURE DROP: 0.5" W.C.
TABLE: 402.4(2) - G2413.4(1)



○ NATURAL GAS RISER DIAGRAM
N.T.S.

28 W DILIDO RESIDENCE
28 WEST DILIDO DR.
MIAMI BEACH, FL 33139



comm no.
1652

date:
02.03.2017

revised:

- ① 04.13.17 BLDG. DEPT.
- ③ 08.31.17 ENGINEERING COMMENT
- ④ 09.26.17 BLDG. DEPT.

sheet no.

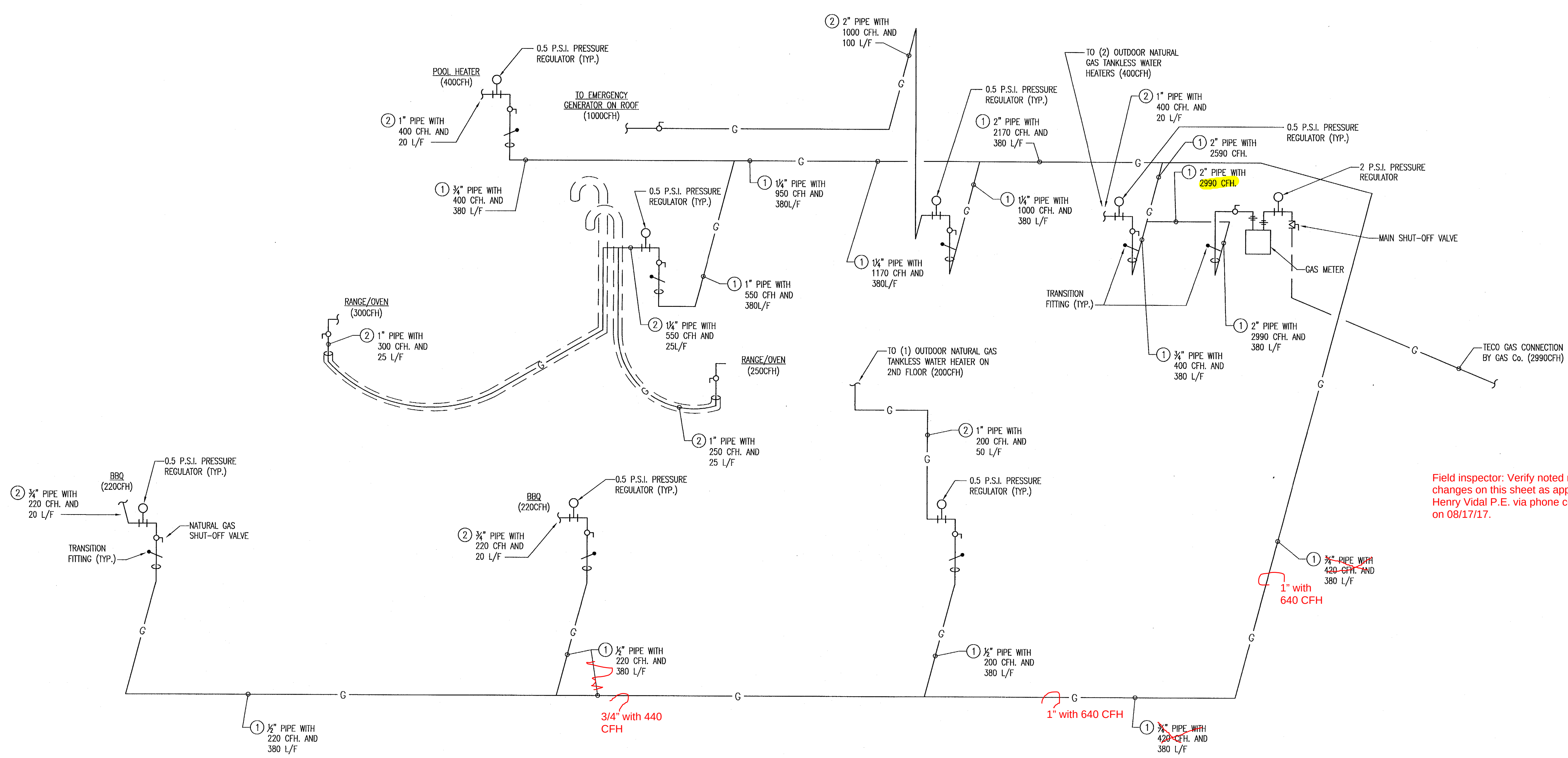
P-6.0

88P00F1
Mobility W88

CHOEFFLEVYFISCHMAN
ARCHITECTURE + DESIGN

8425 Biscayne Blvd. suite 201
Miami, Florida 33138
www.cdfarchitects.com

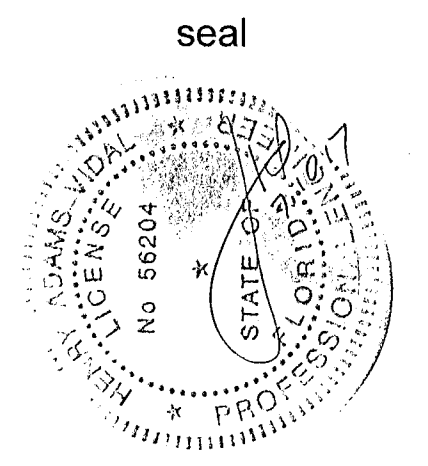
GAS CALCULATION	
GAS SUMMARY (1ST STAGE) - ①	
GAS TYPE: NATURAL GAS	
PIPE: POLYETHYLENE PLASTIC PIPE	
GAS INPUT: 2 P.S.I.	
PRESSURE DROP: 1 P.S.I.	
TOTAL LOAD: 3800 CFH	
LONGEST RUN: 380LF	
SERVICE SIZE: 2990 CFH	
TABLE: 402.4(22) - G2413.4(8)	
GAS SUMMARY (2ND STAGE) - ②	
GAS TYPE: NATURAL GAS	
PIPE: SCHD. 40 METAL PIPE	
GAS INPUT: 0.5 P.S.I. OR LESS	
PRESSURE DROP: 0.5" W.C.	
TABLE: 402.4(2) - G2413.4(1)	



Field inspector: Verify noted red line changes on this sheet as approved by Henry Vidal P.E. via phone conversation on 08/17/17.

NATURAL GAS RISER DIAGRAM
N.T.S.

28 W DILIDO RESIDENCE
28 WEST DILIDO DR.
MIAMI BEACH, FL 33139



HENRY VIDAL, P.E.
PE # 56204

comm no.
1652

date:
02.03.2017

revised:

1 04.13.17 BLDG. DEPT.

sheet no.

P-6.0

CONSULTING ENGINEERS
241 N.W. SOUTH RIVER DRIVE
MIAMI, FL 33128
HENRY VIDAL, P.E., PE #56204
CERTIFICATION OF AUTHORIZATION #9056
PHONE: (305) 571-1860 FAX: (305) 571-1861
INFO@VIDALENGINEERING.COM
VIDALENGINEERING.COM

GENERAL NOTES

CODES:

THE FOLLOWING CODES ARE USED IN THE DESIGN AND SPECIFICATIONS FOR THIS PROJECT.
FLORIDA BUILDING CODE 2014

ACI 318-II	BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-II)
ACI 330-II	BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
ACI 330-III	SPECIFICATION FOR MASONRY STRUCTURES
ASCE 7-10	MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES/ASCE 7-10 (WITH ERRATA DATED JAN. II, 2011)
AISC 14TH EDITION	MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN.

DESIGN CRITERIA:

GROUND FLOOR: SUPERIMPOSED DEAD LOAD.....	30/0 PSF. (UON) SEE PLAN. LIVE LOAD.....	40/0 PSF. (UON) SEE PLAN.
2ND FLOOR: 1) PRECAST JOISTS 14" SLAB	53/0 PSF	
SUPERIMPOSED DEAD LOAD.....	25/0 PSF.	
RESIDENTIAL LIVE LOAD.....	40/0 PSF.	
BALCONY LIVE LOAD.....	60/0 PSF.	
ROOF: 1) PRECAST JOISTS 14" SLAB	53/0 PSF	
SUPERIMPOSED DEAD LOAD.....	30/0 PSF. (UON) SEE PLAN.	
LIVE LOAD.....	30/0 PSF.	
TERRACE LIVE LOAD.....	60/0 PSF.	
MECHANICAL EQUIPMENT ROOFS:		
SUPERIMPOSED DEAD LOAD.....	75/0 PSF.	
LIVE LOAD.....	50/0 PSF.	
DEAD LOAD / A/C UNIT	75/0 LBS.	

WIND LOADS:

WIND LOAD IN ACCORDANCE WITH ASCE 7-10 (WITH ERRATA DATED JAN. II, 2011 AND FBC 2014.	
BASIC WIND SPEED.....	115/0 MPH.
IMPORTANCE FACTOR.....	1.00
EXPOSURE CATEGORY.....	D
INTERNAL PRESSURE COEF.....	0.18
RISK CATEGORY.....	II
COMPONENTS AND CLADDING AS PER ASCE 7-10	
MAIN HOUSE MEAN ROOF HEIGHT.....	10'-0"

CONCRETE:

- ALL CONCRETE SHALL REACH A MINIMUM ULTIMATE STRENGTH AS FOLLOWS:
5,000 PSI @ 28 DAYS, WITH A WATER-CEMENT RATIO OF 0.4.
- THE CONCRETE SUPPLIER SHALL SUPPLY DESIGN MIXES FOR ALL CONCRETE TO BE USED IN THE PROJECT. DATA OF PAST BATCHES SHALL BE SUPPLIED AS PROOF OF DESIGN STRENGTH AND MODULUS OF ELASTICITY. MIXES SHALL INDICATE ALL MATERIALS AND ADMIXTURES USED.
- NO WATER SHALL BE ADDED TO CONCRETE AT THE JOB SITE UNLESS AUTHORIZED BY THE THRESHOLD INSPECTOR. TRANSPORTING, PLACING, DEPOSITING AND CURING OF CONCRETE SHALL COMPLY WITH ACI 318-05.
- CONCRETE SHALL BE COMPACTED BY MECHANICAL VIBRATION.
- THE OWNER SHALL CONTRACT AN APPROVED INDEPENDENT TESTING LABORATORY TO PERFORM CONCRETE STRENGTH TEST IN ACCORDANCE WITH ACI AND ASTM STANDARDS.
- SEE "SPECIAL CONSTRUCTION NOTES" FOR ADDITIONAL INFORMATION.

REINFORCING STEEL:

- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 75. 4 GRADE 60, DEFORMED BARS FREE FROM LOOSE RUST AND SCALE. SEE PLANS, COLUMN SCHEDULES AND SHEARWALL ELEVATIONS FOR LOCATIONS OF EACH STEEL GRADE.
- REINFORCING FABRICATOR SHALL PROVIDE SHOP DRAWINGS INDICATING STEEL FABRICATION IN CONFORMANCE WITH THE LATEST ACI STANDARDS.
- ALL ACCESSORIES SHALL HAVE PLASTIC TIPPED UPTURNED LEGS. PLASTIC CHAIRS ONLY ARE TO BE USED TO SUPPORT BALCONY REINFORCING OR OTHER AREAS EXPOSED TO THE WEATHER. ALL REINFORCING STEEL SHALL BE ACCURATELY LOCATED AND FIRMLY HELD IN PLACE BEFORE AND DURING THE PLACEMENT OF CONCRETE.
- SUPPORT BARS SHALL BE PROVIDED IN ADDITION TO REINFORCING SHOWN OR CALLED FOR IN THESE PLANS. BARS SHALL BE #4 OR GREATER AND NOT SPACED MORE THAN 4'-0" ON CENTER. A MINIMUM OF 3 SUPPORT BARS AND 3 INDIVIDUAL HIGH CHAIRS FOR EACH SUPPORT BAR SHALL BE PROVIDED FOR TOP REINFORCING.
- PLASTIC TIPPED SLAB BOLSTERS SHALL BE PROVIDED ON 4 SIDES FOR VERTICAL COLUMN REINFORCING SO AS TO MAINTAIN 1/2" MINIMUM CLEARANCE TO TIES.
- CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FILE CAPS AND GRADE BEAMS	3"
INTERIOR SLABS	1"
EXTERIOR SLABS AND BALCONIES EXPOSED TO WEATHER ..	1-1/2" (TOP) 1" (BOT.)
BEAMS	1-1/2" (TO TIES)
COLUMNS	1-1/2" (TO TIES)
RETAINING WALLS	2"
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A105 AND BE PLACED AND SUPPORTED IN ACCORDANCE WITH ACI 301 RECOMMENDATIONS.
- THE CONTRACTOR SHALL PROVIDE 10 TONS OF STEEL REINFORCEMENT FOR THE ENGINEER TO USE AT HIS DISCRETION DURING CONSTRUCTION. THE CONTRACTOR SHALL GIVE CREDIT TO THE OWNER FOR ANY UNUSED PORTION OF THE ALLOWANCE AT THE END OF THE PROJECT. THIS REINFORCING IS IN ADDITION TO ANY REINFORCEMENT USED IN THE PLANS.

CONCRETE CONSTRUCTION:

- CONSTRUCTION JOINTS IN BEAMS AND SLABS MAY OCCUR WITHIN THE MIDDLE 1/3 PORTION OF THE SPAN. CONSTRUCTION JOINTS SHALL HAVE A CONTINUOUS 1" KEY BY HALF THE DEPTH OF THE BEAM OR SLAB. ALL REINFORCING SHALL PASS THRU THE KEY IN ITS PROPER POSITION. ADD 4#12' O.C. TOP AND BOTTOM IF NO REINFORCING IS PRESENT.
- CONTRACTOR SHALL CHECK, REVIEW AND VERIFY ALL PLANS, DIMENSIONS AND SITE CONDITIONS PRIOR TO PROCEEDING WITH CONSTRUCTION. THE ENGINEER OF RECORD SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCY OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
- THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND CIVIL DRAWINGS TO LOCATE ALL SLAB DEPRESSIONS, SLOTTES, DRAINS, OUTLETS, RECESSES, OPENINGS, SLEEVES ETC. AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- ALL SLEEVES, BLOCKOUTS, DEPRESSIONS ETC MISPLACED IN BEAMS OR SLAB SHALL HAVE APPROVAL FOR RELOCATION FROM THE ENGINEER PRIOR TO ANY DRILLING OR CHIPPING.
- CONTRACTOR SHALL ADEQUATELY PROTECT HIS WORK, ADJACENT PROPERTY AND THE PUBLIC FROM ALL DAMAGE DUE TO CONSTRUCTION ACTIVITIES.
- ALL FLAT DECK FORMING, BEAM BOTTOMS AND TOPS OF COLUMNS SHALL BE CLEANED BY MEANS OF COMPRESSED AIR SO AS TO REMOVE ALL SAW DUST, DIRT, TIE WIRE AND DEBRIS BEFORE PLACING CONCRETE.
- ALL FORMWORK SHALL BE SPRAYED WITH CLEAN POTABLE WATER BEFORE PLACING CONCRETE. CARE SHALL BE TAKEN SO AS NOT TO CREATE PUDDLES OF WATER ON THE DECK.
- CONSTRUCTION WORK SHALL BE EXECUTED IN ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL BUILDING CODES AND GOVERNING REGULATIONS.
- THE APPROVAL OF ANY WORK BY THE THRESHOLD INSPECTOR DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE STRUCTURAL DRAWINGS.
- APPLY 50KA ARMATEC 110 BONDING AGENT AT CONSTRUCTION JOINTS (EXCEPT SLAB ON GRADE) PRIOR TO PLACEMENT OF NEW CONCRETE.

GENERAL:

- ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITION OF THE FLORIDA BUILDING CODE RESIDENTIAL, THE ACI AND ALSO SPECIFICATIONS AND RECOMMENDED PRACTICE, AS SPECIFIED IN THE SECTIONS DENOTED BELOW.
- NO DIMENSIONS SHALL BE SCALED FROM DRAWINGS.
- GENERAL CONTRACTOR SHALL CHECK, REVIEW AND VERIFY ALL PLANS, DIMENSIONS AND SITE CONDITIONS PRIOR TO CONSTRUCTION. THE ENGINEER OF RECORD SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS, OR ANY VARIATIONS NEEDED IN ORDER TO CONFORM TO THE CODES, RULES AND REGULATIONS.
- ALL REFERENCED STANDARDS REFER TO THE EDITION ENFORCED AT THE TIME THESE PLANS AND SPECIFICATIONS ARE ISSUED FOR BID.
- THESE NOTES SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS ISSUED BY THE ARCHITECT.
- STRUCTURAL DRAWINGS SHALL BE WORKED TOGETHER WITH ARCHITECTURAL, AIR CONDITIONING, MECHANICAL AND ELECTRICAL DRAWINGS TO LOCATE DEPRESSIONED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, REGLETS, BOLT SETTINGS, SLEEVES, ETC. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
- GENERAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL BEFORE FABRICATION OR ERECTION OF ANY STRUCTURAL SYSTEM.
- GENERAL CONTRACTOR SHALL RESTRICT AND PROPERLY ISOLATE ALL CONSTRUCTION EQUIPMENT AND LOADS FROM INDUCING OR TRANSMITTING VIBRATIONS TO THE STRUCTURE DURING CONSTRUCTION.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL ACCUMULATED WATER FROM EXCAVATIONS AND DEWATERING OPERATIONS IN SUCH A WAY AS TO NOT CAUSE INCONVENIENCE TO THE WORK AND DAMAGE TO THE STRUCTURAL ELEMENTS.
- WHEN PERFORMING WORK BELOW GRADE, CARE SHALL BE TAKEN TO AVOID DAMAGING ANY EXISTING UTILITIES. ALL UNKNOWN UTILITIES DISCOVERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPORTED TO ALL AFFECTED PARTIES, INCLUDING THE ARCHITECT/ENGINEER.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING HIS CONSTRUCTION DOCUMENTS WITH ANY REVISED DRAWINGS AND SPECIFICATIONS, FIELD ORDERS, CHANGE ORDERS AND CLARIFICATION SKETCHES ISSUED DURING THE COURSE OF CONSTRUCTION.
- "BY OTHERS" DENOTES LABOR AND MATERIALS BY OTHERS, HOWEVER THE GENERAL CONTRACTOR SHALL PROVIDE COORDINATION AND FREE ACCESS FOR THE WORK. REFER TO SPECIALITY ENGINEERING NOTES.
- "N.C." DENOTES NOT IN CONTRACT. THE OWNER SHALL BE RESPONSIBLE FOR COORDINATING A TIME SCHEDULE OF THE BASE CONTRACT WITH THE "N.C." TRADES.
- TYPICAL DETAILS AND NOTES ON THESE DRAWINGS SHALL APPLY UNLESS SPECIFICALLY NOTED OTHERWISE. CONSTRUCTION DETAILS AND SECTIONS NOT COMPLETELY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS AND SECTIONS SHOWN OR NOTED FOR SIMILAR CONDITIONS.
- THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH THE LOCAL BUILDING DEPARTMENT.
- BACKFILL AROUND THE EXTERIOR PERIMETER OF WALLS SHALL NOT BE PLACED UNTIL AFTER THE WALLS ARE SUPPORTED BY THE COMPLETION OF INTERIOR FLOOR SYSTEMS. DO NOT PROCEED WITH BACKFILL UNTIL (7) DAYS AS A MINIMUM AFTER THE COMPLETION OF INTERIOR FLOOR SYSTEMS UNLESS WALLS ARE ADEQUATELY BRACED. BACKFILL SHALL NOT BE PLACED UNTIL AFTER COMPLETION AND INSPECTION OF WATERPROOFING WHERE WATERPROOFING OCCURS.
- TEMPORARY BRACING SHALL BE PROVIDED AS REQUIRED TO HOLD ALL COMPONENTS OF THE STRUCTURE IN PLACE UNTIL FINAL SUPPORT IS SECURELY ANCHORED.
- THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES OF EVERY KIND, INCLUDING WATER AND POWER NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHOWN OR INDICATED ON THESE DRAWINGS. ALL MATERIALS SHALL BE NEW MATERIALS AND WORKMANSHIP SHALL BE OF GOOD QUALITY. ALL WORKMEN AND SUBCONTRACTORS SHALL BE SKILLED IN THEIR TRADE.
- THE CONTRACTOR SHALL ADEQUATELY PROTECT HIS WORK, ADJACENT PROPERTY AND THE PUBLIC, AND BE RESPONSIBLE FOR DAMAGE OR INJURY DUE TO HIS ACT OR NEGLECT.
- THE PREMISES SHALL BE KEPT FROM ACCUMULATION OF WASTE MATERIALS, AND DEBRIS, AND AT THE END OF THE JOB THE CONTRACTOR SHALL REMOVE ALL RUBBISH, SURPLUS MATERIALS, AND TOOLS AND LEAVE THE BUILDING BROOM CLEAN.
- JOB SITE VISITS BY THE ENGINEER DO NOT CONSTITUTE AN OFFICIAL INSPECTION, UNLESS SPECIFICALLY CONTRACTED FOR "THRESHOLD" INSPECTIONS AS REQUIRED BY THE LOCAL BUILDING DEPARTMENT SHALL BE UNDER A SEPARATE CONTRACT.
- SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.
- THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH SHOP DRAWINGS A MINIMUM OF TWO WEEKS PRIOR TO PLACEMENT. THE REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS ONLY FOR GENERAL COMPLIANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS. THIS REVIEW DOES NOT GUARANTEE IN ANY WAY THAT THE SHOP DRAWINGS ARE CORRECT NOR DOES IT IMPLY THAT THEY SUPERSEDE THE STRUCTURAL DRAWINGS.
- THE STRUCTURAL FRAMING FOR ALL STOREFRONTS SHOWN ON THE ARCHITECTURAL DRAWINGS SHALL BE DESIGNED BY A SPECIALTY ENGINEER.
- IF OPTIMUS STRUCTURAL DESIGN IS NOT RETAINED TO PERFORM INSPECTION SERVICES FOR ALL STRUCTURAL COMPONENTS SHOWN ON THESE DOCUMENTS, OPTIMUS STRUCTURAL DESIGN WILL ACCEPT NO RESPONSIBILITY FOR THE INTERPRETATION OF STRUCTURAL DRAWINGS FOR PERFORMANCE OF STRUCTURAL FRAMING, ETC. FURTHERMORE, OPTIMUS STRUCTURAL DESIGN WILL ACCEPT NO RESPONSIBILITY IF THE PROJECT IS NOT BUILT IN ACCORDANCE WITH FLORIDA BUILDING CODE, STANDARD ENGINEERING PRACTICE, ETC.

REINFORCED MASONRY NOTES:

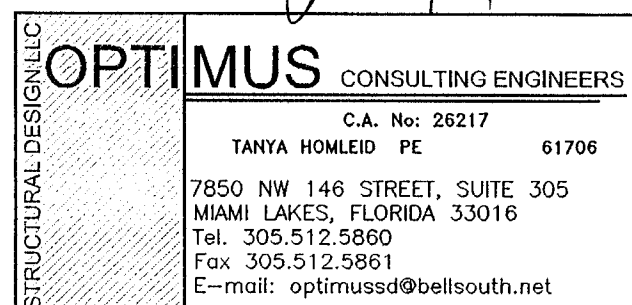
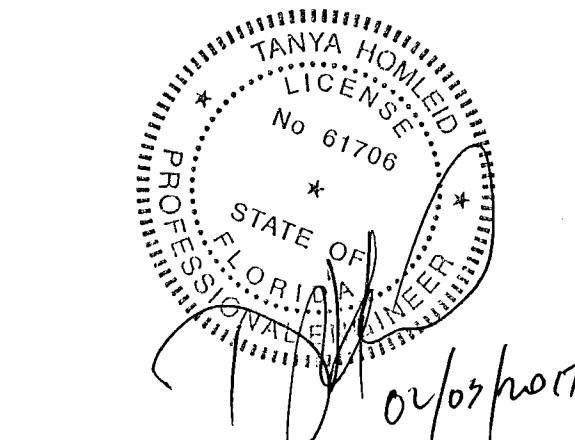
- REINFORCED MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 530-II AND ACI 530P-II.
- MASONRY UNITS SHALL CONFORM TO ASTM C30, STANDARD SPECIFICATION FOR LOAD-BEARING CONCRETE MASONRY UNITS AND HAVE A MINIMUM STRENGTH OF 11=1500 PSI (UON).
- ALL MASONRY UNITS SHALL BE LAYED IN RUNNING BOND. USE ONLY MASONRY UNITS THAT ARE A MINIMUM OF 80% SOLID.
- CMU WALL MORTAR SHALL COMPLY ASTM C270, TYPE "M" (15-2800 PSI). MORTAR JOINTS SHALL BE 3/8" FOR ALL MASONRY UNITS. MORTAR ALL HEAD JOINTS, THE FACE SLEEVES OF ALL BED JOINTS, AND THE BED JOINTS OF WEBS ADJACENT TO CELLS THAT ARE TO BE GROUTED.
- VERTICAL CELLS TO BE GROUTED SHALL BE ALIGNED AND UNOBSTRUCTED. ANY MORTAR PROTRUDING INTO CELL, CAVITIES THAT ARE TO BE GROUTED SHALL BE REMOVED. ALLOW A MINIMUM OF 24 HOURS FOR MORTAR TO CURE BEFORE PLACING GROUT.
- ALL GROUT SHALL BE FINE MASONRY GROUT IN ACCORDANCE WITH ASTM C476 WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS AND TESTED IN ACCORDANCE WITH ASTM C39, WITH SLUMP OF 9" TO 11". TESTS SHALL BE TAKEN EVERY 30 CUBIC YARDS AT A MINIMUM OF EACH DAYS GROUTING.
- IN HIGH LIFT GROUTING USE A MAXIMUM LIFT OF 4'-0", WITH NOT LESS THAN 30 MINUTES OR MORE THAN ONE HOUR BETWEEN LIFTS. MECHANICAL VIBRATE EACH LIFT AND RECONSOLIDATE THE PREVIOUS LIFT AFTER PLACING THE NEXT LIFT. THE MAXIMUM TOTAL HEIGHT OF PLACEMENT SHALL BE 12'-0".
- THE BOTTOM OF ALL GROUTED CELLS SHALL HAVE A CLEAN OUT OPENING PROVIDED. BARS SHALL BE TIED AND ALL MORTAR AND DIRT SHALL BE REMOVED BEFORE PLACING GROUT.
- ALL REINFORCING BARS IN GROUTED CELLS SHALL HAVE A PLASTIC CENTRALIZER ATTACHED TO EACH BAR SPACED AT EVERY 4TH COURSE.
- MORTAR TESTING SHALL BE IN ACCORDANCE WITH ASTM C776, AT A MINIMUM ONE SET OF THREE SAMPLES SHALL BE TESTED FOR EVERY 5,000 SQUARE FEET OF WALL AREA OR ONE SET FOR EACH DAYS WORK.
- PROVIDE 30 GAGE HOT-DIPPED GALVANIZED DOVETAIL ANCHORS SLOTS VERTICALLY IN STRUCTURAL COLUMNS AND THE COLUMNS NOT PLACED INTEGRALLY WITH CMU WALLS THAT ARE ABUTTED BY NON-LOAD BEARING MASONRY WALLS. CMU UNITS SHALL BE TIED INTO COLUMNS WITH 1" X 8" X 16 GAGE CORRUGATED HOT-DIPPED GALVANIZED DOVETAIL ANCHORS.
- LAP DOVETAIL ANCHORS WITH STANDARD HOT-DIPPED GALVANIZED NO. 9 GAGE LADUR-TYPE DUR-O-WALL WITH CROSS RODS PLACED AT 16" O.C. FOR REINFORCED MASONRY WALLS. PLACE DOVETAIL ANCHORS AND DUR-O-WALL EVERY OTHER BLOCK COURSE. OVERLAP CONTINUOUS END A MINIMUM OF 12". HORIZONTAL REINFORCING SHALL CONFORM TO ASTM A62.
- SEE FLOOR PLANS FOR EXTERIOR CMU WALL VERTICAL REINFORCING. LAP REINFORCING 30" MINIMUM UON.
- REFER TO TYPICAL REINFORCEMENT PLACEMENT DETAILS FOR WINDOW AND DOOR OPENINGS ALONG WITH CORNER DETAILS FOR ADDITIONAL CMU REINFORCING.
- THE LOCATION OF CMU WALLS, WINDOW AND DOOR OPENINGS OR ANY OTHER MASONRY FEATURES ARE TO BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.
- WHEN USING POST TENSION SLABS, NO TIE COLUMNS OR GROUTED CELLS OR ANY OTHER MASONRY ITEM SHALL BE INSTALLED UNTIL THE PT SLAB ABOVE AND BELOW IS STRESSED.
- DROP CONCRETE BEAMS AT ALL MASONRY OPENINGS AND ADD 2# BARS BOTTOM FOR EACH 12" DROP OR PROVIDE PRECAST CONCRETE LINTELS WITH 4#4X3#1 SHELVE ANGLE WITH TWO (2) 1/2" DIAMETER FLAT HEAD EXPANSION ANCHORS WITH 3" EMBEDMENT OR 8" BEARING ON MASONRY BLOCK.
- BEAMS INDICATED WITH THE PREFIX "B" SHALL BE CONCRETE AND POURED AFTER THE MASONRY UNITS BELOW ARE PLACED. TIE BEAMS SHALL HAVE 2# BARS TOP AND BOTTOM MINIMUM UON AND HAVE 4 #5 TIES AT 12" O.C. AT CORNERS AND AT EACH END WITH REMAINING TIES AT 48" O.C. UON. CONTINUITY SHALL BE PROVIDED AT CORNERS BY BENDING 2 BARS FROM EACH DIRECTION AROUND THE CORNERS FOR 30" OR BY ADDING 2# BENT BARS WHICH EXTEND 30" EACH WAY. CONTINUITY AT COLUMNS SHALL BE PROVIDED BY CONTINUING HORIZONTAL REINFORCING THRU COLUMNS OR BENDING HORIZONTAL REINFORCING 18" INTO COLUMN.
- REINFORCED MASONRY SHALL BE INSPECTED BY A SPECIAL INSPECTOR AS PER THE FLORIDA BUILDING CODE 2014.

FOUNDATION NOTES:

- THIS FOUNDATION DESIGN IS BASED ON THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION BY ALL STATE ENGINEERING & TESTING CONSULTANTS, REPORT DATED OCTOBER 11TH, 2016.
- FOUNDATION DESIGN IS BASED ON AUGERCAST FILE CAPACITIES AS PER GEOTECHNICAL REPORT. NUMBER OF FILES AND FILECAP SIZES ARE BASED ON DEAD LOAD PLUS LIVE LOADS. THE FOUNDATION SIZES MAY NOT BE INCREASED OR DECREASED WITHOUT WRITTEN PERMISSION OF THE ENGINEER.
- ALL FOUNDATION CONCRETE SHALL BE CAST IN THE DRY. DEWATERING OPERATION SHALL BE DONE IN SUCH A WAY THAT GROUND WATER LEVELS OUTSIDE THE SITE WILL BE MAINTAINED TO AVOID SETTLEMENT AND DAMAGE TO NEARBY BUILDINGS AND STRUCTURES.
- THE ARCHITECT/ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY INTERPRETATION THAT THE SUBSURFACE CONDITION DESCRIBED IN THE TEST BORING LOGS OCCUR CONSISTENTLY THROUGHOUT THE JOB SITE. TEST BORINGS ARE INCLUDED ONLY TO ASSIST THE CONTRACTOR DURING BIDDING AND SUBSEQUENT CONSTRUCTION AND REPRESENT SOIL CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND AT THE PARTICULAR TIMES THEY WERE TAKEN.
- GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SHORING, SHEETING AND BRACING OF EXCAVATIONS.
- EXCAVATION FOR FILE CAPS, FOOTINGS AND GRADE BEAMS SHALL BE FINISHED BY HAND SHOVEL.
- IN NO CASE SHALL TRUCKS, BULLDOZERS OR OTHER HEAVY EQUIPMENT BE PERMITTED CLOSER THAN 8'-0" FROM ANY FOUNDATION WALL UNLESS APPROVED BY THE ENGINEER.
- GENERAL CONTRACTOR SHALL INSTALL ALL PIPE SLEEVES, BOXED OPENINGS, ANCHOR BOLTS, ETC. AS REQUIRED FOR THE VARIOUS TRADES WALL POCKETS TO RECEIVE BEAMS AND SLABS SHALL BE PROVIDED AS REQUIRED FOR THE SUPER-STRUCTURE. SHOP DRAWINGS SHOWING THE POSITION OF OPENINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER PRIOR TO PLACEMENT OF CONCRETE.
- CONCRETE COMPRESSIVE STRENGTH, F_c FOR FOUNDATION WORK SHALL BE 5000 PSI AT 28 DAYS, WITH A WATER-CEMENT RATIO OF 0.4.
- ALL REINFORCING STEEL USED IN FOUNDATION WORK SHALL COMPLY WITH ASTM A625-83 (9), GRADE 60. SEE "REINFORCING STEEL" UNDER "GENERAL NOTES".
- THE SOIL ENGINEER OR HIS REPRESENTATIVE OR THE OWNER'S QUALIFIED REPRESENTATIVE SHALL INSPECT ALL SUBGRADE PREPARATION WORK PRIOR TO THE PLACEMENT OF ANY REINFORCING STEEL OR CONCRETE AND SHALL PERFORM TESTS AS NECESSARY TO VERIFY THAT SUCH WORK IS IN CONFORMANCE WITH THE RECOMMENDATION GIVEN IN THE SOIL REPORT.
- THE DESIGN ENGINEER OR HIS QUALIFIED REPRESENTATIVE OR THE OWNER'S QUALIFIED REPRESENTATIVE SHALL CHECK PLACEMENT OF ALL REINFORCING STEEL PRIOR TO CASTING OF ANY CONCRETE.
- THE BUILDING RETAINING WALLS SHALL BE WATERPROOFED. SEE DRAWINGS AND SPECIFICATIONS.
- PROVIDE CONTROL OR CONSTRUCTION JOINTS AS SHOWN IN PLAN. IF SAW-CUT OPTION IS USED, SLABS SHALL BE CUT NOT MORE THAN 24 HOURS AFTER POURING.

EARTH WORK

CONTRACTOR SHALL DEWATER SITE AS NECESSARY, SO THAT ALL CONCRETE CAN BE PLACED IN THE DRY. ALL BACKFILL SHALL BE ACCOMPLISHED USING MATERIAL CONSISTING OF CRUSHED STONE AND/OR MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER. THE BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557. NO BACKFILL MATERIAL SHALL BE PLACED AGAINST WALLS WHICH DO NOT HAVE PERMANENT FLOORS AT THE TOP AND BOTTOM WITHOUT PROVISIONS FOR ADEQUATE TEMPORARY BRACING OF THOSE WALLS. PROVIDE ADEQUATE EXCAVATION BRACING IN ACCORD WITH GEOTECHNICAL ENGINEER RECOMMENDATIONS TO MAINTAIN EXISTING FOOTINGS, UTILITIES, AND OTHER IMPROVEMENTS IN A SAFE CONDITION.



GENERAL NOTES

CODES:

THE FOLLOWING CODES ARE USED IN THE DESIGN AND SPECIFICATIONS FOR THIS PROJECT.

FLORIDA BUILDING CODE 2014

ACI 318-11	BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-11)
ACI 530-11	BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
ACI 530.1-11	SPECIFICATION FOR MASONRY STRUCTURES
ASCE 1-10	MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, 981/ASCE 1-10 (WITH ERRATA DATED JAN. 11, 2011)
AISC 14TH EDITION	MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN.

DESIGN CRITERIA:

GROUND FLOOR	
SUPERIMPOSED DEAD LOAD	30.0 PSF (UON) SEE PLAN.
LIVE LOAD	40.0 PSF (UON) SEE PLAN.
2ND FLOOR	
8" PRECAST JOISTS 4' 4" SLAB	50.0 PSF
SUPERIMPOSED DEAD LOAD	25.0 PSF
RESIDENTIAL LIVE LOAD	40.0 PSF
BALCONY LIVE LOAD	60.0 PSF
ROOF	
8" PRECAST JOISTS 4' 4" SLAB	50.0 PSF
SUPERIMPOSED DEAD LOAD	30.0 PSF (UON) SEE PLAN.
LIVE LOAD	30.0 PSF
TERRACE LIVE LOAD	60.0 PSF
MECHANICAL EQUIPMENT ROOFS	
SUPERIMPOSED DEAD LOAD	25.0 PSF
LIVE LOAD	50.0 PSF
DEAD LOAD / A/C UNIT	250 LBS

WIND LOADS:

WIND LOAD IN ACCORDANCE WITH ASCE 1-10 (WITH ERRATA DATED JAN. 11, 2011 AND FBC 2014.	
BASIC WIND SPEED	115.0 MPH
IMPORTANCE FACTOR	1.00
EXPOSURE CATEGORY	D
INTERNAL PRESSURE COEFF	0.18
RISK CATEGORY	II
COMPONENTS AND CLADDING AS PER ASCE 1-10	
MAIN HOUSE MEAN ROOF HEIGHT	26'-0"

CONCRETE:

- ALL CONCRETE SHALL REACH A MINIMUM ULTIMATE STRENGTH AS FOLLOWS:
5,000 PSI @ 28 DAYS, WITH A WATER-CEMENT RATIO OF 0.4.
- THE CONCRETE SUPPLIER SHALL SUPPLY DESIGN MIXES FOR ALL CONCRETE TO BE USED IN THE PROJECT. DATA OF PAST PATCHES SHALL BE SUPPLIED AS PROOF OF DESIGN STRENGTH AND MODULUS OF ELASTICITY. MIXES SHALL INDICATE ALL MATERIALS AND ADMIXTURES USED.
- NO WATER SHALL BE ADDED TO CONCRETE AT THE JOB SITE UNLESS AUTHORIZED BY THE THRESHOLD INSPECTOR. TRANSPORTING, PLACING, DEPOSITING AND CURING OF CONCRETE SHALL COMPLY WITH ACI 318-05.
- CONCRETE SHALL BE COMPACTED BY MECHANICAL VIBRATION.
- THE OWNER SHALL CONTRACT AN APPROVED INDEPENDENT TESTING LABORATORY TO PERFORM CONCRETE STRENGTH TEST IN ACCORDANCE WITH ACI AND ASTM STANDARDS.
- SEE "SPECIAL CONSTRUCTION NOTES" FOR ADDITIONAL INFORMATION.

REINFORCING STEEL:

- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 75 & GRADE 60, DEFORMED BARS FREE FROM LOOSE RUST AND SCALE. SEE PLANS, COLUMN SCHEDULES AND SHEARWALL ELEVATIONS FOR LOCATIONS OF EACH STEEL GRADE.
- REINFORCING FABRICATOR SHALL PROVIDE SHOP DRAWINGS INDICATING STEEL FABRICATION IN CONFORMANCE WITH THE LATEST ACI STANDARDS.
- ALL ACCESSORIES SHALL HAVE PLASTIC TIPPED UPTURNED LEGS. PLASTIC CHAIRS ONLY ARE TO BE USED TO SUPPORT BALCONY REINFORCING OR OTHER AREAS EXPOSED TO THE WEATHER. ALL REINFORCING STEEL SHALL BE ACCURATELY LOCATED AND FIRMLY HELD IN PLACE BEFORE AND DURING THE PLACEMENT OF CONCRETE.
- SUPPORT BARS SHALL BE PROVIDED IN ADDITION TO REINFORCING SHOWN OR CALLED FOR IN THESE PLANS. BARS SHALL BE 14 OR GREATER AND NOT SPACED MORE THAN 4'-0" ON CENTER. A MINIMUM OF 3 SUPPORT BARS AND 3 INDIVIDUAL HIGH CHAIRS FOR EACH SUPPORT BAR SHALL BE PROVIDED FOR TOP REINFORCING.
- PLASTIC TIPPED SLAB BOLSTERS SHALL BE PROVIDED ON 4 SIDES FOR VERTICAL COLUMN REINFORCING SO AS TO MAINTAIN 1/2" MINIMUM CLEARANCE TO TIES.
- CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FILE CAPS AND GRADE BEAMS	3"
INTERIOR SLABS	1"
EXTERIOR SLABS AND BALCONIES EXPOSED TO WEATHER	1-1/2" (TOP), 1" (BOT.)
BEAMS	1-1/2" (TO TIES)
COLUMNS	1-1/2" (TO TIES)
RETAINING WALLS	2"

- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A105 AND BE PLACED AND SUPPORTED IN ACCORDANCE WITH ACI 301 RECOMMENDATIONS.
- THE CONTRACTOR SHALL PROVIDE 10 TONS OF STEEL REINFORCEMENT FOR THE ENGINEER TO USE AT HIS DISCRETION DURING CONSTRUCTION. THE CONTRACTOR SHALL GIVE CREDIT TO THE OWNER FOR ANY UNUSED PORTION OF THE ALLOWANCE AT THE END OF THE PROJECT. THIS REINFORCING IS IN ADDITION TO ANY REINFORCEMENT USED IN THE PLANS.

CONCRETE CONSTRUCTION:

- CONSTRUCTION JOINTS IN BEAMS AND SLABS MAY OCCUR WITHIN THE MIDDLE 1/3 PORTION OF THE SPAN. CONSTRUCTION JOINTS SHALL HAVE A CONTINUOUS 1" KEY BY HALF THE DEPTH OF THE BEAM OR SLAB. ALL REINFORCING SHALL PASS THRU THE KEY IN ITS PROPER POSITION. ADD 1/4" @ 12" O.C. TOP AND BOTTOM IF NO REINFORCING IS PRESENT.
- CONTRACTOR SHALL CHECK, REVIEW AND VERIFY ALL PLANS, DIMENSIONS AND SITE CONDITIONS PRIOR TO PROCEEDING WITH CONSTRUCTION. THE ENGINEER OF RECORD SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCY OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
- THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND CIVIL DRAWINGS TO LOCATE ALL SLAB DEPRESSIONS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, SLEEVES ETC AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- ALL SLEEVES, BLOCKOUTS, DEPRESSIONS ETC MISPLACED IN BEAMS OR SLAB SHALL HAVE APPROVAL FOR RELOCATION FROM THE ENGINEER PRIOR TO ANY DRILLING OR CHIPPING.
- CONTRACTOR SHALL ADEQUATELY PROTECT HIS WORK, ADJACENT PROPERTY AND THE PUBLIC FROM ALL DAMAGE DUE TO CONSTRUCTION ACTIVITIES.
- ALL FLAT DECK FORMING, BEAM BOTTOMS AND TOPS OF COLUMNS SHALL BE CLEANED BY MEANS OF COMPRESSED AIR SO AS TO REMOVE ALL SAW DUST, DIRT, TIE WIRE AND DEBRIS BEFORE PLACING CONCRETE.
- ALL FORMWORK SHALL BE SPRAYED WITH CLEAN POTABLE WATER BEFORE PLACING CONCRETE. CARE SHALL BE TAKEN SO AS NOT TO CREATE PUDDLES OF WATER ON THE DECK.
- CONSTRUCTION WORK SHALL BE EXECUTED IN ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL BUILDING CODES AND GOVERNING REGULATIONS.
- THE APPROVAL OF ANY WORK BY THE THRESHOLD INSPECTOR DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE STRUCTURAL DRAWINGS.
- APPLY SIKA ARMATEC 110 BONDING AGENT AT CONSTRUCTION JOINTS (EXCEPT SLAB ON GRADE) PRIOR TO PLACEMENT OF NEW CONCRETE.

GENERAL:

- ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITION OF THE FLORIDA BUILDING CODE RESIDENTIAL, THE ACI AND AISC SPECIFICATIONS AND RECOMMENDED PRACTICE, AS SPECIFIED IN THE SECTIONS DENOTED BELOW.
- NO DIMENSIONS SHALL BE SCALED FROM DRAWINGS.
- GENERAL CONTRACTOR SHALL CHECK, REVIEW AND VERIFY ALL PLANS, DIMENSIONS AND SITE CONDITIONS PRIOR TO CONSTRUCTION. THE ENGINEER OF RECORD SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS, OR ANY VARIATIONS NEEDED IN ORDER TO CONFORM TO THE CODES, RULES AND REGULATIONS.
- ALL REFERENCED STANDARDS REFER TO THE EDITION ENFORCED AT THE TIME THESE PLANS AND SPECIFICATIONS ARE ISSUED FOR BID.
- THESE NOTES SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS ISSUED BY THE ARCHITECT.
- STRUCTURAL DRAWINGS SHALL BE WORKED TOGETHER WITH ARCHITECTURAL, AIR CONDITIONING, MECHANICAL AND ELECTRICAL DRAWINGS TO LOCATE DEPRESSIONED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, REGLETS, BOLT SETTINGS, SLEEVES, ETC. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
- GENERAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL BEFORE FABRICATION OR ERECTION OF ANY STRUCTURAL SYSTEM.
- GENERAL CONTRACTOR SHALL RESTRICT AND PROPERLY ISOLATE ALL CONSTRUCTION EQUIPMENT AND LOADS FROM INDUCING OR TRANSMITTING VIBRATIONS TO THE STRUCTURE DURING CONSTRUCTION.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL ACCUMULATED WATER FROM EXCAVATIONS AND DEWATERING OPERATIONS IN SUCH A MANNER AS TO NOT CAUSE INCONVENIENCE TO THE WORK AND DAMAGE TO THE STRUCTURAL ELEMENTS.
- WHEN PERFORMING WORK BELOW GRADE, CARE SHALL BE TAKEN TO AVOID DAMAGING ANY EXISTING UTILITIES. ALL UNKNOWN UTILITIES DISCOVERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPORTED TO ALL AFFECTED PARTIES, INCLUDING THE ARCHITECT/ENGINEER.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING HIS CONSTRUCTION DOCUMENTS WITH ANY REVISED DRAWINGS AND SPECIFICATIONS, FIELD ORDERS, CHANGE ORDERS AND CLARIFICATION SKETCHES ISSUED DURING THE COURSE OF CONSTRUCTION.
- "BY OTHERS" DENOTES LABOR AND MATERIALS BY OTHERS. HOWEVER THE GENERAL CONTRACTOR SHALL PROVIDE COORDINATION AND FREE ACCESS FOR THE WORK. REFER TO SPECIALTY ENGINEERING NOTES.
- "N/C" DENOTES NOT IN CONTRACT. THE OWNER SHALL BE RESPONSIBLE FOR COORDINATING A TIME SCHEDULE OF THE BASE CONTRACT WITH THE "N/C" TRADES.
- TYPICAL DETAILS AND NOTES ON THESE DRAWINGS SHALL APPLY UNLESS SPECIFICALLY NOTED OTHERWISE. CONSTRUCTION DETAILS AND SECTIONS NOT COMPLETELY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS AND SECTIONS SHOWN OR NOTED FOR SIMILAR CONDITIONS.
- THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH THE LOCAL BUILDING DEPARTMENT.
- BACKFILL AROUND THE EXTERIOR PERIMETER OF WALLS SHALL NOT BE PLACED UNTIL AFTER THE WALLS ARE SUPPORTED BY THE COMPLETION OF INTERIOR FLOOR SYSTEMS. DO NOT PROCEED WITH BACKFILL UNTIL (7) DAYS AS A MINIMUM AFTER THE COMPLETION OF INTERIOR FLOOR SYSTEMS UNLESS WALLS ARE ADEQUATELY BRACED. BACKFILL SHALL NOT BE PLACED UNTIL AFTER COMPLETION AND INSPECTION OF WATERPROOFING WHERE WATERPROOFING OCCURS.
- TEMPORARY BRACING SHALL BE PROVIDED AS REQUIRED TO HOLD ALL COMPONENTS OF THE STRUCTURE IN PLACE UNTIL FINAL SUPPORT IS SECURELY ANCHORED.
- THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES OF EVERY KIND, INCLUDING WATER AND POWER, NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHOWN OR INDICATED ON THESE DRAWINGS. ALL MATERIALS SHALL BE NEW MATERIALS AND WORKMANSHIP SHALL BE OF GOOD QUALITY. ALL WORKMEN AND SUBCONTRACTORS SHALL BE SKILLED IN THEIR TRADE.
- THE CONTRACTOR SHALL ADEQUATELY PROTECT HIS WORK, ADJACENT PROPERTY AND THE PUBLIC, AND BE RESPONSIBLE FOR DAMAGE OR INJURY DUE TO HIS ACT OR NEGLIGENCE.
- THE PREMISES SHALL BE KEPT FROM ACCUMULATION OF WASTE MATERIALS, AND DEBRIS, AND AT THE END OF THE JOB THE CONTRACTOR SHALL REMOVE ALL RUBBISH, SURPLUS MATERIALS, AND TOOLS AND LEAVE THE BUILDING BROOM CLEAN.
- JOB SITE VISITS BY THE ENGINEER DO NOT CONSTITUTE AN OFFICIAL INSPECTION UNLESS SPECIFICALLY CONTRACTED FOR "THRESHOLD" INSPECTIONS AS REQUIRED BY THE LOCAL BUILDING DEPARTMENT SHALL BE UNDER A SEPARATE CONTRACT.
- SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.
- THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH SHOP DRAWINGS A MINIMUM OF TWO WEEKS PRIOR TO PLACEMENT. THE REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS ONLY FOR GENERAL COMPLIANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS. THIS REVIEW DOES NOT GUARANTEE IN ANY WAY THAT THE SHOP DRAWINGS ARE CORRECT NOR DOES IT IMPLY THAT THEY SUPERSEDE THE STRUCTURAL DRAWINGS.
- THE STRUCTURAL FRAMING FOR ALL STOREFRONTS SHOWN ON THE ARCHITECTURAL DRAWINGS SHALL BE DESIGNED BY A SPECIALTY ENGINEER.
- IF OPTIMUS STRUCTURAL DESIGN IS NOT RETAINED TO PERFORM INSPECTION SERVICES FOR ALL STRUCTURAL COMPONENTS SHOWN ON THESE DOCUMENTS, OPTIMUS STRUCTURAL DESIGN WILL ACCEPT NO RESPONSIBILITY FOR THE INTERPRETATION OF STRUCTURAL DRAWINGS, FOR PERFORMANCE OF STRUCTURAL FRAMING, ETC. FURTHERMORE, OPTIMUS STRUCTURAL DESIGN WILL ACCEPT NO RESPONSIBILITY IF THE PROJECT IS NOT BUILT IN ACCORDANCE WITH FLORIDA BUILDING CODE, STANDARD ENGINEERING PRACTICE, ETC.

REINFORCED MASONRY NOTES:

- REINFORCED MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 530-11 AND ACI 530.1-11.
- MASONRY UNITS SHALL CONFORM TO ASTM C32, STANDARD SPECIFICATION FOR LOAD-BEARING CONCRETE MASONRY UNITS AND HAVE A MINIMUM STRENGTH OF $f_m = 1500$ PSI (UON).
- ALL MASONRY UNITS SHALL BE LAYED IN RUNNING BOND. USE ONLY MASONRY UNITS THAT ARE A MINIMUM OF 50% SOLID.
- CMU WALL MORTAR SHALL COMPLY ASTM C270, TYPE "M" ($f_c = 2800$ PSI). MORTAR JOINTS SHALL BE 3/8" FOR ALL MASONRY UNITS. MORTAR ALL HEAD JOINTS, THE FACE SHELLS OF ALL BED JOINTS, AND THE BED JOINTS OF WEBS ADJACENT TO CELLS THAT ARE TO BE GROUTED.
- VERTICAL CELLS TO BE GROUTED SHALL BE ALIGNED AND UNOBTSTRUCTED. ANY MORTAR PROTRUDING INTO CELL CAVITIES THAT ARE TO BE GROUTED SHALL BE REMOVED. ALLOW A MINIMUM OF 24 HOURS FOR MORTAR TO CURE BEFORE PLACING GROUT.
- ALL GROUT SHALL BE FINE MASONRY GROUT IN ACCORDANCE WITH ASTM C476 WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS AND TESTED IN ACCORDANCE WITH ASTM C33, WITH SLUMP OF 9" TO 12". TESTS SHALL BE TAKEN EVERY 30 CUBIC YARDS AT A MINIMUM OF EACH DAY'S GROUTING.
- IN HIGH LIFT GROUTING USE A MAXIMUM LIFT OF 4'-0", WITH NOT LESS THAN 30 MINUTES OR MORE THAN ONE HOUR BETWEEN LIFTS. MECHANICAL VIBRATE EACH LIFT AND RECORD SOLIDATE LIFT AFTER PLACING THE NEXT LIFT. THE MAXIMUM TOTAL HEIGHT OF PLACEMENT SHALL BE 12'-0".
- THE BOTTOM OF ALL GROUTED CELLS SHALL HAVE A CLEAN OUT OPENING PROVIDED. BARS SHALL BE TIED AND ALL MORTAR AND DIRT SHALL BE REMOVED BEFORE PLACING GROUT.
- ALL REINFORCING BARS IN GROUTED CELLS SHALL HAVE A PLASTIC CENTRALIZER ATTACHED TO EACH BAR SPACED AT EVERY 4TH COURSE.
- MORTAR TESTING SHALL BE IN ACCORDANCE WITH ASTM C270, AT A MINIMUM ONE SET OF THREE SAMPLES SHALL BE TESTED FOR EVERY 5,000 SQUARE FEET OF WALL AREA OR ONE SET FOR EACH DAY'S WORK.
- PROVIDE 20 GAGE HOT-DIPPEED GALVANIZED DOVETAIL ANCHORS SLOTS VERTICALLY IN STRUCTURAL COLUMNS. AND TIE COLUMNS NOT PLACED INTEGRALLY WITH CMU WALLS THAT ARE SUBTIED BY INSTEAD MASONRY SHALL BE TIED INTO COLUMNS WITH 1" X 8" X 16 GAGE CORRUGATED HOT-DIPPEED GALVANIZED DOVETAIL ANCHORS.
- LAP DOVETAIL ANCHORS WITH STANDARD HOT-DIPPEED GALVANIZED NO. 3 GAGE LAGUR-TYPE DUK-O-WALL WITH CROSS RODS PLACED AT 16" O.C. FOR REINFORCED MASONRY WALLS. PLASTIC DOVETAIL ANCHORS 16" O.C. FOR CONCRETE BLOCK COURSE. OVERLAP DISCONTINUOUS END A MINIMUM OF 12". HORIZONTAL REINFORCING SHALL CONFORM TO ASTM A62.
- SEE FLOOR PLANS FOR EXTERIOR CMU WALL VERTICAL REINFORCING. LAP REINFORCING 30" MINIMUM UON.
- REFER TO TYPICAL REINFORCEMENT PLACEMENT DETAILS FOR WINDOW AND DOOR OPENINGS ALONG WITH CORNER DETAILS FOR ADDITIONAL CMU REINFORCING.
- THE LOCATION OF CMU WALLS, WINDOW AND DOOR OPENINGS OR ANY OTHER MASONRY FEATURES ARE TO BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.
- WHEN USING POST TENSION SLABS, NO TIE COLUMNS OR GROUTED CELLS OR ANY OTHER MASONRY ITEM SHALL BE INSTALLED UNTIL THE FT SLAB ABOVE AND BELOW IS STRESSED.
- DROP CONCRETE BEAMS AT ALL MASONRY OPENINGS AND ADD 2# BARS BOTTOM FOR EACH 12" DROP OR PROVIDE PRECAST CONCRETE LINTELS WITH 4"x4"x3/8" SHELF ANGLE WITH TWO (2) 1/2" DIAMETER FLAT HEAD EXPANSION ANCHORS WITH 3" EMBEDMENT OR 8" BEARING ON MASONRY BLOCK.
- BEAMS INDICATED WITH THE PREFIX "B" SHALL BE CONCRETE AND POURED AFTER THE MASONRY UNITS BELOW ARE PLACED. THE BEAMS SHALL HAVE 2# BARS TOP AND BOTTOM MINIMUM UON, AND HAVE 4 #3 TIES AT 12" O.C. AT CORNERS AND AT EACH END WITH REMAINING TIES AT 48" O.C. UON. CONTINUITY SHALL BE PROVIDED AT CORNERS BY BENDING 2 BARS FROM EACH DIRECTION AROUND THE CORNERS FOR 30" OR BY ADDING 2# BENT BARS WHICH EXTEND 30" EACH WAY. CONTINUITY AT COLUMNS SHALL BE PROVIDED BY CONTINUING HORIZONTAL REINFORCING THRU COLUMNS OR BENDING HORIZONTAL REINFORCING 18" INTO COLUMN.
- REINFORCED MASONRY SHALL BE INSPECTED BY A SPECIAL INSPECTOR AS PER THE FLORIDA BUILDING CODE 2014.

FOUNDATION NOTES:

- THIS FOUNDATION DESIGN IS BASED ON THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION BY ALL STATE ENGINEERING & TESTING CONSULTANTS, REPORT DATED OCTOBER 11TH, 2016.
- FOUNDATION DESIGN IS BASED ON AUGERCAST PILE CAPACITIES AS PER GEOTECHNICAL REPORT. NUMBER OF PILES AND PILECAP SIZES ARE BASED ON DEAD LOAD PLUS LIVE LOADS. THE FOUNDATION SIZES MAY NOT BE INCREASED OR DECREASED WITHOUT WRITTEN PERMISSION OF THE ENGINEER.
- ALL FOUNDATION CONCRETE SHALL BE CAST IN THE DRY. DEWATERING OPERATION SHALL BE DONE IN SUCH A MANNER THAT GROUND WATER LEVELS OUTSIDE THE SITE WILL BE MAINTAINED TO AVOID SETTLEMENT AND DAMAGE TO NEARBY BUILDINGS AND STRUCTURES.
- THE ARCHITECT/ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY INTERPRETATION THAT THE SUBSURFACE CONDITIONS DESCRIBED IN THE TEST BORING LOGS OCCUR CONSISTENTLY THROUGHOUT THE JOB SITE. TEST BORINGS ARE INCLUDED ONLY TO ASSIST THE CONTRACTOR DURING BID PREPARATION AND SUBSEQUENT CONSTRUCTION AND REPRESENT SOIL CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND AT THE PARTICULAR TIMES THEY WERE TAKEN.
- GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SHORING, SHEETING AND BRACING OF EXCAVATIONS.
- EXCAVATION FOR PILE CAPS, FOOTINGS AND GRADE BEAMS SHALL BE FINISHED BY HAND SHOVEL.
- IN NO CASE SHALL TRUCKS, BULLDOZERS OR OTHER HEAVY EQUIPMENT BE PERMITTED CLOSER THAN 8'-0" FROM ANY FOUNDATION WALL UNLESS APPROVED BY THE ENGINEER.
- GENERAL CONTRACTOR SHALL INSTALL ALL PIPE SLEEVES, BOXED OPENINGS, ANCHOR BOLTS, ETC. AS REQUIRED FOR THE VARIOUS TRADES. WALL ROCKETS TO RECEIVE BEAMS AND SLABS SHALL BE PROVIDED AS REQUIRED FOR THE SUPER-STRUCTURE. SHOP DRAWINGS SHOWING THE POSITION OF OPENINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER PRIOR TO PLACEMENT OF CONCRETE.
- CONCRETE COMPRESSIVE STRENGTH, f_c FOR FOUNDATION WORK SHALL BE 5000 PSI AT 28 DAYS, WITH A WATER-CEMENT RATIO OF 0.4.
- ALL REINFORCING STEEL USED IN FOUNDATION WORK SHALL COMPLY WITH ASTM A625-83 (9), GRADE 60. SEE "REINFORCING STEEL" UNDER "GENERAL NOTES".
- THE SOIL ENGINEER OR HIS REPRESENTATIVE OR THE OWNER'S QUALIFIED REPRESENTATIVE SHALL INSPECT ALL SUBGRADE PREPARATION WORK PRIOR TO THE PLACEMENT OF ANY REINFORCING STEEL OR CONCRETE AND SHALL PERFORM TESTS AS NECESSARY TO VERIFY THAT SUCH WORK IS IN CONFORMANCE WITH THE RECOMMENDATION GIVEN IN THE SOIL REPORT.
- THE DESIGN ENGINEER OR HIS QUALIFIED REPRESENTATIVE OR THE OWNER'S QUALIFIED REPRESENTATIVE SHALL CHECK PLACEMENT OF ALL REINFORCING STEEL PRIOR TO CASTING OF ANY CONCRETE.
- THE BUILDING RETAINING WALLS SHALL BE WATERPROOFED. SEE DRAWINGS AND SPECIFICATIONS.
- PROVIDE CONTROL OR CONSTRUCTION JOINTS AS SHOWN IN PLAN. IF SAW-CUT OPTION IS USED, SLABS SHALL BE CUT NOT MORE THAN 24 HOURS AFTER POURING.

EARTH WORK

CONTRACTOR SHALL DEWATER SITE AS NECESSARY, SO THAT ALL CONCRETE CAN BE PLACED IN THE DRY. ALL BACKFILL SHALL BE ACCOMPLISHED USING MATERIAL CONSISTING OF CRUSHED STONE AND/OR MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER. THE BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 1557. NO BACKFILL MATERIAL SHALL BE PLACED AGAINST WALLS WHICH DO NOT HAVE PERMANENT FLOORS AT THE TOP AND BOTTOM WITHOUT PROVISIONS FOR ADEQUATE TEMPORARY BRACING OF THOSE WALLS. PROVIDE ADEQUATE EXCAVATION BRACING IN ACCORD WITH GEOTECHNICAL RECOMMENDATIONS TO MAINTAIN EXISTING FOOTINGS, UTILITIES, AND OTHER IMPROVEMENTS IN A SAFE CONDITION.

INDEX OF DRAWINGS

1	S-000	GENERAL NOTES, INDEX
2	S-010	GENERAL NOTES & LEGEND
3	S-100	GROUND FLOOR FRAMING PLAN
4	S-110	OVERALL SITE PLAN / POOL AND CABANA FRAMING PLAN
5	S-200	SECOND FLOOR FRAMING PLAN
6	S-250	FLOATING DECK FRAMING PLAN
7	S-300	MAIN ROOF FRAMING PLAN
8	S-400	FOUNDATION SCHEDULE AND DETAILS
9	S-410	COLUMN SCHEDULE AND DETAILS
10	S-420	FOUNDATION DETAILS
11	S-430	BEAM SCHEDULE & DETAILS
12	S-435	BEAM SCHEDULES AND DETAILS
13	S-440	STEEL BEAMS SCHEDULES AND DETAILS
14	S-450	STEEL BEAMS DETAILS
15	S-500	BUILDING SECTIONS
16	S-510	BUILDING SECTIONS
17	S-520	BUILDING SECTIONS
18	S-530	BUILDING SECTIONS
19	S-600	GENERAL SECTIONS & DETAILS
20	S-610	GENERAL SECTIONS & DETAILS
21	S-700	WIND CLADDING PRESSURES
	S-710	WIND CLADDING PRESSURES

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

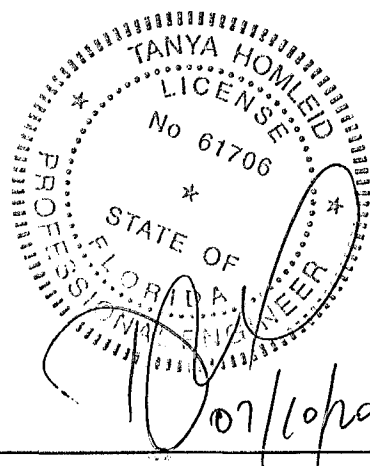
comm no.
1652

date:
02/03/17

revised:
07-10-17 B.D. COMMENTS/O. CHANGES

sheet no.

S-000



STRUCTURAL DESIGN LLC	OPTIMUS CONSULTING ENGINEERS
	C.A. No: 26217 61706
	TANYA HOMLEU PE
	7850 NW 146 STREET, SUITE 305
	MIAMI LAKES, FLORIDA 33016
	Tel. 305.512.5860
	Fax 305.512.5861
	E-mail: optimussd@bellsouth.net

GENERAL NOTES (CONT'D):

SPECIALITY ENGINEERING NOTES:

A SPECIALITY ENGINEER IS A FLORIDA REGISTERED PROFESSIONAL ENGINEER, NOT THE ENGINEER OF RECORD, WHO SPECIALIZES IN AND WHO UNDERTAKES THE DESIGN OF STRUCTURAL COMPONENTS OR STRUCTURAL SYSTEMS INCLUDED IN A SPECIFIC SUBMITTAL PREPARED BY A CONTRACTOR FOR THIS PROJECT.

THE SPECIALITY ENGINEER IS TO BE RETAINED BY THE SUPPLIER OF THE SPECIALITY ITEM OR MAY BE AN EMPLOYEE OF THAT SUPPLIER. ALL COSTS ASSOCIATED WITH THE USE OF A SPECIALITY ENGINEER SHALL BE INCLUDED IN THE BID PRICE OF THE SUPPLIER FOR THE ITEM IN QUESTION.

THE FOLLOWING DESIGN RESPONSIBILITIES ARE ASSIGNED TO THE SPECIALITY ENGINEER: SHOP DRAWINGS AND CALCULATIONS ARE REQUIRED WITH THE IMPRESSED SEAL, DATE, AND SIGNATURE OF THE SPECIALITY ENGINEER. COMPUTER PRINTOUTS ARE AN ACCEPTABLE SUBSTITUTE FOR MANUAL COMPUTATIONS PROVIDED THEY ARE ACCOMPANIED BY SUFFICIENT DESCRIPTIVE INFORMATION TO PERMIT THEIR PROPER EVALUATION. SUCH DESCRIPTIVE INFORMATION SHALL BEAR THE SEAL AND SIGNATURE OF THE SPECIALITY ENGINEER AS AN INDICATION THAT HE HAS ACCEPTED RESPONSIBILITY FOR THE RESULTS. SHOP DRAWINGS AND CALCULATIONS ARE TO BE SUBMITTED TO THE ENGINEER OF RECORD.

FORMING, SHORING AND RESHORING:

- THE CONTRACTOR SHALL FURNISH COMPLETE FORMING PLANS PREPARED BY A SPECIALITY ENGINEER FOR THE PROJECT. PLANS SHALL BE IN ACCORDANCE WITH ACI 347 RECOMMENDED PRACTICE FOR CONCRETE FORMING, AND INCLUDE ALL SLAB, BEAM, AND COLUMN FORMING WITH ALL CROSS AND LATERAL BRACING REQUIRED.
- SHORING AND RESHORING PLANS SHALL INCLUDE ALL LEVELS OF SHORING REQUIRED, TYPE, CAPACITY AND SPACING OF SHORES AND RESHORES.
- CALCULATIONS FOR THE SHORING AND RESHORING PROCESS MUST INCLUDE THE PLACEMENT AND STRIPPING CYCLE BASED ON THE CONSTRUCTION SCHEDULE, THE ASSUMED CONCRETE STRENGTH AT THE TIME OF STRIPPING, AND A DETAILED PROCEDURE FOR THE ENTIRE OPERATION.
- DESIGN FORMS AND SHORES FOR HORIZONTAL CONCRETE MEMBERS FOR NOT LESS THAN THE DEAD LOAD PLUS 50 PSF CONSTRUCTION LOAD AND FOR THE CUMULATIVE LOADS OF SUPPORTED FLOORS.
- ALL MULTISTORY FORMING AND SHORING MUST BE COMPLETELY DETAILED ON PLANS AND SHOW ALL LATERAL BRACING AND CONNECTIONS REQUIRED.
- FOR SPECIAL CONDITIONS SUCH AS TRANSFER SLABS, BEAMS, COLUMNS OR WALLS, OR ANY OTHER STRUCTURAL ELEMENT TRANSFERRING LOAD, THE SPECIALITY ENGINEER PREPARING THE FORMWORK SHOP DRAWINGS SHALL CONTACT THE ENGINEER OF RECORD FOR ADDITIONAL INFORMATION REGARDING LOADS TO BE TRANSFERRED AT THOSE ELEMENTS.
- THE DESIGN AND DETAILING OF MUD SILLS, IF REQUIRED IS TO BE INCLUDED IN THE SHORING PLANS. SOIL CAPACITY AND COMPACTION REQUIREMENTS TO CARRY THE MUD SILLS SHALL BE SHOWN ON THE PLAN.
- PRIOR TO EACH CONCRETE PLACEMENT, THE SHORING AND RESHORING SHALL BE INSPECTED AND CERTIFIED IN WRITING BY THE SPECIALITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE TO INSURE COMPLIANCE WITH HIS DESIGN.
- NO CONVENTIONALLY REINFORCED FLAT SLAB SHALL BE STRIPPED AND RESHORED UNTIL THE CONCRETE HAS BEING PLACED FOR 3 DAYS AND REACHED A MINIMUM OF 2800 PSI.

TOWER CRANES, HOISTS AND CONCRETE PUMPS:

- ALL EQUIPMENT THAT IS TO BE ATTACHED TO THE STRUCTURE MUST HAVE THE MANUFACTURER'S SPECIFICATIONS OR SIGNED AND SEALED SHOP DRAWINGS SUBMITTED FOR REVIEW.
- SHOP DRAWINGS OR MANUFACTURER'S SPECIFICATIONS SHALL INDICATE ALL LATERAL AND AXIAL LOADS, MOMENTS, AND SHEAR FORCES THAT WILL BE IMPOSED ON THE STRUCTURE.
- THE CONTRACTOR SHALL RETAIN A SPECIALITY ENGINEER TO PROVIDE ALL NECESSARY DESIGN AND DETAILS REQUIRED FOR FOUNDATIONS, TIE BACKS, HOLES IN THE STRUCTURE, SHORING, AND BRACING THAT IS ASSOCIATED WITH THE EQUIPMENT THAT IS BEING INSTALLED.
- THE SPECIALITY ENGINEER PERFORMING THIS WORK SHALL INSPECT ALL PHASES OF IT TO INSURE COMPLIANCE WITH HIS DESIGN.

BALCONY RAILINGS, HAND RAILS, STAIR RAILINGS:

- ALL RAILING SYSTEMS FOR BALCONY RAILS, HAND RAILS, STAIR RAILS AND RAMP RAILS SHALL BE DESIGN IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014, WIND LOADS AS SHOWN ON THE STRUCTURAL DRAWINGS OR AS PER WIND TUNNEL TEST REPORT BY RUDI.
- SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED AND INDICATE THE DESIGN FOR EACH SEPARATE ELEMENT OF THE SYSTEM.
- SHOP DRAWINGS SHALL SHOW ALL DIMENSIONS, THICKNESSES AND ALLOYS USED ALONG WITH ALL SCREWS, BOLTS AND WELDED CONNECTIONS.
- ALL PROVISIONS FOR THE ATTACHMENT OF THE SPECIALITY ITEM TO THE STRUCTURE SHALL BE SHOWN FOR EACH CONDITION.
- RAILING POSTS SHALL BE ANCHORED TO THE CONCRETE SLAB OR CURB WITH AN APPROVED HIGH STRENGTH GROUT, WHICH CONTAINS NO GYPSUM MATERIAL.
- APPLY Sika ARMATEC 110 BONDING AGENT TO ALL BLOCK-OUT OR CORED CONCRETE SURFACES AND ANY EXPOSED REINFORCING OR ACCESSORIES PRIOR TO PLACEMENT OF GROUT.
- FULLY COAT ALL RAILING POST ENDS TO DEPTH OF GROUTED CONNECTION FOR PREVENTION OF GALVANIC ACTION WITH SIKADUR 32 HI-MOD EPOXY.
- ALL GROUTED HOLES SHALL BE MOUNDED TO CREATE POSITIVE DRAINAGE AWAY FROM THE RAILING POSTS.
- A SPECIAL INSPECTOR SHALL BE RETAINED TO INSPECT THE INSTALLATION OF ALL PARTS OF THE RAILING SYSTEM, SEPARATE FROM THE THRESHOLD INSPECTOR.

CURTAIN WALL SYSTEMS, EXTERIOR WINDOWS AND DOORS:

- ALL CURTAIN WALL SYSTEMS, EXTERIOR WINDOWS AND DOORS SHALL BE DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014, WIND LOADS AS SHOWN ON THE STRUCTURAL DRAWINGS OR AS PER WIND TUNNEL TEST REPORT BY RUDI.
- COMPLETE DESIGN CALCULATIONS AND SHOP DRAWINGS SIGNED AND SEALED SHALL BE SUBMITTED FOR APPROVAL. SHOP DRAWINGS SHALL INDICATE ALL DIMENSIONS, MEMBER SIZES, ALLOYS USED ALONG WITH ALL SCREWS, BOLTS, ANCHORS AND WELDING REQUIRED.
- ALL PROVISIONS FOR THE ATTACHMENT OF THE SYSTEM TO THE STRUCTURE SHALL BE SHOWN FOR EACH CONDITION, COORDINATE THE LOCATION OF ALL TOP AND BOTTOM TRACKS SO AS TO AVOID ANCHOR INSTALLATION INTO THE BAND LINES OF THE POST TENSION SYSTEM.
- NO CHIPPING OF CONCRETE COLUMNS OR SLABS SHALL BE DONE TO FACILITATE THE INSTALLATION OF WINDOWS OR DOORS WITHOUT THE PERMISSION OF THE ENGINEER.
- A SPECIAL INSPECTOR SHALL BE RETAINED FOR GLAZING INSPECTIONS AS PER THE FLORIDA BUILDING CODE 2014, SEPARATE FROM THE THRESHOLD INSPECTOR.

SHOP DRAWING SUBMITTALS:

- REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AS PRESENTED BY THE CONTRACT DOCUMENTS.
- NO DETAIL CHECK OF QUANTITIES OR DIMENSIONS WILL BE MADE.
- REVIEW OF SHOP DRAWINGS IS NOT CONDUCTED FOR DETERMINING THE ACCURACY AND COMPLETENESS OF DETAILS OR FOR SUBSTANTIATING FABRICATION, INSTALLATION INSTRUCTIONS, OR PERFORMANCE, ALL OF WHICH SHALL REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE STRUCTURAL DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.
- ALL CHANGES AND ADDITIONS MADE ON RE-SUBMITTALS MUST BE CLEARLY FLAGGED AND NOTED. ENGINEERS SECOND REVIEW WILL BE LIMITED TO THESE ITEMS.
- A MAXIMUM OF SIX ORIGINALS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW ONLY. AFTER THEY HAVE BEEN APPROVED BY THE CONTRACTOR FIVE MARKED COPIES WILL BE RETURNED AFTER THE REVIEW.
- POST TENSION SLAB SHOP DRAWINGS AND MILD STEEL SLAB REINFORCING DRAWINGS SHALL BE SUBMITTED SIMULTANEOUSLY FOR EACH FLOOR REQUIRED.
- TURN AROUND TIME BY THE ENGINEER FOR SHOP DRAWING REVIEW WILL BE FIVE WORKING DAYS.

CONDUITS AND PIPES IN CONCRETE SLABS:

- CONDUITS, PIPES, SLEEVES ETC MAY BE EMBEDDED IN THE CONCRETE PROVIDING THE MATERIAL IS NOT HARMFUL TO THE CONCRETE AND THE WORK IS DONE IN SUCH A MANNER THAT NO PART OF THE STRUCTURE IS IMPAIRED. THIS WORK SHALL BE DONE WITH THE APPROVAL OF THE ENGINEER.
- ALL MAJOR HOME RUNS OF CONDUITS OR PIPES, EITHER ELECTRICAL OR MECHANICAL, WILL REQUIRE SHOP DRAWINGS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO THE INSTALLATION. SHOP DRAWINGS SHALL INDICATE ALL PIPE LOCATIONS, NUMBER AND SIZES, BENDS AND SLOPES THAT NEED TO BE PLACED IN THE CONCRETE.
- ALL CONDUITS, PIPES EMBEDDED WITHIN A SLAB, BEAM OR WALL SHALL SATISFY THE FOLLOWING:
 - NO PIPES OR CONDUIT EXCEEDING 1/3 THE SLAB THICKNESS IN OUTSIDE DIAMETER SHALL BE ALLOWED.
 - THEY SHALL BE SPACED NO CLOSER THAN THREE DIAMETERS O.C. AND BE LOCATED BETWEEN THE TOP AND BOTTOM LAYERS OF REINFORCING.
 - NO CONDUITS OR PIPES SHALL BE TIED TO THE POST TENSION TENDONS UNDER ANY CIRCUMSTANCES. NO REINFORCING SHALL BE DISPLACED FROM ITS PROPER POSITION.
 - ALL CHAIRS AND BARS REQUIRED FOR SUPPORT OF CONDUITS AND PIPES SHALL BE SUPPLIED BY THE CONTRACTOR WHO IS INSTALLING THE PIPES.
- ALL RUNS OF CONDUITS OR PIPES OVER 24 INCHES IN WIDTH SHALL HAVE 1/4" O.C. TOP AND BOTTOM ADDED PERPENDICULAR TO THE RUN AND EXTEND 12" BEYOND THE END PIPE.
- ALL CONDUITS AND PIPES SHALL BE OF MATERIALS THAT ARE NOT EXPOSED TO RUSTING OR OTHER DETERIORATION.
- PIPES AND FITTINGS SHALL BE DESIGNED SO AS TO RESIST THE EFFECTS OF PRESSURE, TEMPERATURE AND MATERIALS TO WHICH THEY WILL BE SUBJECTED.
- NO GAS, VAPOR OR LIQUID EXCEEDING 50 PSI PRESSURE SHALL BE PLACED IN PIPES UNTIL THE CONCRETE HAS REACHED ITS DESIGN STRENGTH.

SPECIAL CONSTRUCTION NOTES:

- THE REINFORCING STEEL IN ALL EXPOSED EXTERIOR BALCONIES SHALL BE PROTECTED AGAINST MOISTURE INTRUSION IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014, SECTION 1926.5.5 AS FOLLOWS:
 - MINIMUM CLEARANCE TO ALL TOP (NEGATIVE) REINFORCING SHALL NOT BE LESS THAN 1"
 - THE CONCRETE SHALL BE 6000 PSI (NORMAL WEIGHT CONCRETE) WITH A MAXIMUM WATER CEMENT RATIO OF 0.40 BY WEIGHT.
 - REINFORCING STEEL, STUD RAILS, SHEAR HEADS, SUPPORT BARS, BACK-UP BARS, TIE WIRE ETC IN BALCONY SLABS, BEAMS AND CURBS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH AISI A367. SPECIFICATIONS FOR ZINC-COATED (GALVANIZED) BARS FOR CONCRETE REINFORCEMENT, ONLY USE PLASTIC CHAIRS FOR STEEL SUPPORT.
 - A SURFACE PENETRANT SEALER OF ALKYL-ALKOXY SILANE CLASSIFICATION OR APPROVED EQUAL SHALL BE APPLIED TO ALL EXPOSED CONCRETE.
 - BALCONY SLABS SHALL BE SLOPED A MINIMUM 1/8" PER LINEAR FOOT TO SAFE GUARD AGAINST PONDING OF WATER.
 - PLACEMENT OF SLAB REINFORCEMENT SHALL BE UNDER THE SUPERVISION OF A FLORIDA REGISTERED ARCHITECT OR ENGINEER.
- MIX STEEL CAN BE USED AS AN ALTERNATIVE TO HOT-DIPPED GALVANIZED STEEL IN THE BALCONIES, AT CONTRACTORS OPTION.
- ALL CONCRETE FOR SHEARWALLS AND COLUMNS SHALL BE CURED WITH AN APPROVED CURING COMPOUND IMMEDIATELY AFTER THE FORMS ARE REMOVED.
- FINISHED FLOOR SLABS SHALL BE CURED WITH AN APPROVED WATER BASED CURING COMPOUND WHICH WILL NOT EFFECT THE ADHESION PROPERTIES OF THE CONCRETE.
- ALL MASONRY DOVE-TAIL ANCHORS, DUR-O-WALL REINFORCING SHALL BE HOT DIPPED GALVANIZED FOR STRUCTURES LOCATED IN CORROSIVE ATMOSPHERES.

CONSTRUCTION TOLERANCES:

- THE FRAME SHALL BE BUILT TRUE AND PLUMB. CONSTRUCTION TOLERANCE SHALL CONFORM TO ACI STANDARDS AS SET FORTH IN THE MANUAL OF CONCRETE PRACTICE. MINIMUM TOLERANCE SHALL BE AS FOLLOWS:
 - VARIATIONS FROM PLUMB:
 - IN THE LINE SURFACES OF COLUMNS, PIERS, WALLS, AND IN AREAS AS FOLLOWS:
IN ANY 10 FEET OF LENGTH 1/4 INCH
MAXIMUM FOR ENTIRE LENGTH 1 INCH
 - FOR EXPOSED CORNER COLUMNS, CONTROL JOINTS GROOVES AND OTHER LINES:
IN ANY 20 FEET OF LENGTH 1/4 INCH
MAXIMUM FOR ENTIRE LENGTH 1 INCH
 - VARIATION FROM THE LEVEL OR FROM THE GRADES INDICATED ON THE DRAWINGS:
 - IN SLAB SOFFITS, CEILING, BEAM SOFFITS AND IN AREAS AS FOLLOWS:
IN ANY 10 FEET LENGTH 1/4 INCH
IN ANY BAY OR IN ANY 20 FEET OF LENGTH 3/8 INCH
MAXIMUM FOR ENTIRE LENGTH 3/4 INCH
 - IN EXPOSED LINTELS, SILLS, PARAPETS, HORIZONTAL GROOVES AND OTHER LINES:
IN ANY BAY OR ANY 20 FEET OF LENGTH 1/4 INCH
MAXIMUM FOR ENTIRE LENGTH 1/2 INCH

BALCONY TERRACE DECK MOISTURE PROTECTION

- ALL BALCONY REINFORCING SHALL BE PROTECTED AGAINST MOISTURE INTRUSION IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2014 AS FOLLOWS:
- CLEARANCE TO ALL BALCONY NEGATIVE REINFORCING SHALL BE NO LESS THAN 1".
 - THE CONCRETE PLACED SHALL BE A DESIGN MIX USING A MAXIMUM WATER CEMENT RATIO OF 0.40 BY WEIGHT AND RUST INHIBITIVE ADMIXTURE.

LINTELS:

LINTELS MAY BE USED IN MASONRY OPENINGS UP TO 6'-6" CLEAR. THESE MAY BE PRE-CAST OR CAST IN PLACE. THE LINTEL SHALL BE 8" X 12" MINIMUM WITH 2 #5 TOP AND BOTTOM #5 TIES AT 5" AND SHALL BEAR 2" AT EACH SIDE OF OPENINGS. SEE TYPICAL DETAIL DUGS FOR ALTERNATE DETAILS.

TERMITE PROTECTION:

ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT PROTECTION AGAINST SUBTERRANEAN TERMITES. THE RULES AND LAWS AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES SHALL BE DEEMED AS APPROVED WITH RESPECT TO PRE-CONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST SUBTERRANEAN TERMITES. 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 RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

ALUMINUM NOTES:

- ALUMINUM DESIGN IS IN ACCORDANCE WITH THE F.B.C. AND THE ALUMINUM ASSOCIATION SPECIFICATIONS FOR ALUMINUM STRUCTURES.
- ALUMINUM ALLOYS SHALL BE 6061-T6. ALL WELDING SHALL BE PERFORMED WITH 5183 FILLER ALLOY, UON, AS PER AISC GUIDELINES.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO WORK AND VERIFY CONNECTION OF UNIT TO FRAME DOES NOT VOID MANUFACTURER'S WARRANTY.
- FASTENING ATTACHMENTS OF THE ALUMINUM STANDS TO THE ROOF MEET THE CURRENT FBC WIND LOAD REQUIREMENTS.

STEEL JOIST NOTES:

- OPEN WEB AND LONG SPAN STEEL JOIST AND ACCESSORIES SHALL BE DESIGNED, MANUFACTURED AND ERECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATION OF THE STEEL JOIST INSTITUTE, LATEST EDITION.
- AT JOIST ENDS MARKED THIS BOTTOM CHORD SHALL BE EXTENDED AND CONNECTED TO THE COLUMN OR BEAM. HORIZONTAL AND DIAGONAL BRIDGING SHALL BE PROVIDED AS SHOWN ON THE DRAWINGS AND IN CONFORMANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- ALL BRIDGING AND BRIDGING ANCHORS SHALL BE COMPLETELY INSTALLED BEFORE CONSTRUCTION LOADS ARE PLACED ON THE JOISTS.
- ALL BRIDGING ANGLES AND FIELD WELDS SHALL BE PAINTED. ALL STEEL JOISTS AND ACCESSORIES SHALL RECEIVED ON SHOP COAT OF PAINT WHICH SHALL COMPLY WITH THE APPLICABLE STEEL JOIST INSTITUTE SPECIFICATION OF LATEST ADOPTION.
- ALL ROOF STEEL JOISTS ARE SUBJECT NET UPLIFT AND REQUIRE UPLIFT BRIDGING IN ACCORDANCE WITH SJI STANDARD SPECIFICATIONS.
- DESIGN OF OPEN WEB STEEL JOISTS & GIRDERS SHALL INCLUDE ANY ADDITIONAL LOADS INDICATED AS PART OF THE STRUCTURAL SET OF DRAWINGS. (IE, MEP EQUIPMENT, SCREEN ENCLOSURES, ETC.)
- STEEL JOIST MANUFACTURER SHALL SUBMIT DRAWINGS INDICATED TYPE AND LAYOUT AND ALL REQUIRED CONNECTIONS AND BRIDGING BEARING THE SEAL OF A QUALIFIED STRUCTURAL ENGINEER LICENSED IN THE STATE OF FLORIDA, FOR REVIEW AND ACCEPTANCE PRIOR TO FABRICATION.

STRUCTURAL STEEL NOTES:

- ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN CONFORMANCE WITH THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, WITH COMMENTARY.
- STRUCTURAL STEEL SHAPES SHALL CONFORM TO THE FOLLOWING:

ROLLED SHAPES	ASTM A36
PLATES AND BARS	ASTM A36
STEEL TUBING	ASTM A500 GRADE B
STEEL PIPE	ASTM A53 GRADE B
ANCHOR BOLTS	ASTM A307
HIGH STRENGTH BOLTS	ASTM A325
- ALL BOLTS SHALL BE PROVIDED WITH HARDENED WASHERS CONFORMING TO ASTM F436.
- HOLES SHALL BE CUT, FUNCHED OR DRILLED PERPENDICULAR TO METAL SURFACES. DO NOT FLAME CUT HOLES OR ENLARGE HOLES BY BURNING.
- ALL STRUCTURAL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED INCLUDING BOLTS, NUTS AND WASHERS.
- PROVIDE ONE COAT OF RUST INHIBITING PAINT MIN. 3 MIL. DRY FILM THICKNESS ON ALL OTHER STRUCTURAL STEEL, UON.
- ALL SHOP CONNECTIONS SHALL BE WELDED UNLESS OTHERWISE INDICATED.
- FIELD CONNECTIONS SHALL BE WELDED UNLESS OTHERWISE INDICATED. ALL BOLTED FIELD CONNECTIONS SHALL BE FRICTION TYPE UON.
- CONTRACTOR OR FABRICATOR SHALL PROVIDE ALL TEMPORARY BRACING NECESSARY TO INSURE A STABLE STRUCTURE DURING CONSTRUCTION.
- ALL WELDING IS TO BE PERFORMED BY CERTIFIED WELDERS. WELDING SHALL BE MADE WITH E70XX SERIES ELECTRODES AND CONFORM TO THE CURRENT RECOMMENDATIONS OF THE AISC AND THE AMERICAN WELDING SOCIETY (AWS).
- SHOP DRAWINGS OF ALL STRUCTURAL STEEL SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.
- THE FRAMES SHALL BE CARRIED UP TRUE AND PLUMB AND TEMPORARY BRACING SHALL BE INTRODUCED WHEREVER TO TAKE CARE OF ALL LOAD TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING EQUIPMENT AND OPERATION OF SAME. SUCH BRACING MAY BE THE RESPONSIBILITY OF THE STEEL CONTRACTOR AND SHALL BE IN PLACE AS LONG AS REQUIRED FOR SAFETY.
- ALL WELDED CONNECTIONS SHALL CONFORM TO THE "AMERICAN WELDING SOCIETY CODE", AWS D1.1-17. PROVISIONS SHALL BE MADE FOR FIELD INSPECTION AND TESTING OF WELDS. ALL SHOP WELDS SHALL BE TESTED BY NON-DESTRUCTIVE METHODS AND SHALL BE CERTIFIED. IF ALL SHOP CONNECTIONS SHALL BE HIGH STRENGTH BOLTED OR WELDED, FIELD CONNECTIONS SHALL BE BOLTED, UON. ALL WELDING SHALL BE DONE BY STATE OF FLORIDA CERTIFIED WELDERS.
- STRUCTURAL STEEL DETAILER TO DESIGN AND DETAIL ANY CONNECTION NOT DETAILED ON DRAWINGS (BASED ON LOADS SHOWN).
- FOR FABRICATION OF WORK WHICH WILL BE EXPOSED TO PUBLIC VIEW IN THE COMPLETED STRUCTURE, USE ONLY MATERIALS WHICH ARE SMOOTH AND FREE OF SURFACE BLEMISHES, INCLUDING FITTING, BEAM MARKS, ROLLER TRADE MARKS AND ROUGHNESSES. REMOVE SUCH BLEMISHES BY GRINDING, OR BY WELDING AND GRINDING, PRIOR TO CLEANING, TREATING AND APPLICATION OF SURFACE FINISHES.
- SPLICES FOR HOT ROLLED SHAPES WITH A FLANGE THICKNESS EXCEEDING 2" SHALL COMPLY WITH THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AISC 360-10 CHAPTER A3.15.

LIGHT GAUGE FRAMING:

- UNLESS NOTED OTHERWISE, ALL STUDS SHALL BE EQUAL TO A MINIMUM OF 10" x 14ga. WITH 14ga. TRACKS. ALL JOISTS SHALL BE EQUAL TO A MINIMUM OF 10" x 14ga. WITH 14ga. TRACKS.
- STUD, TRACK AND ACCESSORY DESIGNATIONS ARE BASED UPON THE STEEL NETWORK, INC. CATALOG. MINIMUM FIELD STRENGTH FOR 14ga. STUDS SHALL BE 450 KSI. ALL TRACK SHALL BE 50 KSI. WIND STRAPS ARE BASED UPON THE USE OF 50000 PSI FY MIN.
- ALL STUDS, TRACK BRIDGING AND ACCESSORIES SHALL BE FORMED FROM STEEL OR ATTACHED W/ 10 TEK SCREWS (MIN. 1 SCREW EACH FLANGE). ALL WELDS SHALL BE TOUCHED UP WITH ZINC RICH PAINT.
- STUDS SHALL HAVE FULL BEARING AGAINST INSIDE TRACK WEB PRIOR TO ATTACHMENT AT THEIR BOTH ENDS.
- ALL STUD TO JOIST CONNECTIONS TO BE (4) TEK SCREWS (MIN. UON.)
- AT TRACK BUTT JOINTS, ABUTTING PIECES OF TRACK SHALL BE SECURELY ANCHORED TO A COMMON STRUCTURAL ELEMENT, OR THEY SHALL BE BUTT WELDED OR SPliced TOGETHER.
- A MINIMUM OF 10" UN PUNCHED STEEL IS REQUIRED AT BOTH ENDS OF STUD.
- STUD DIMENSIONS ARE TO THE BACK FACE OF STUD.
- ALL LIGHT GAUGE STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED INCLUDING ALL ACCESSORIES, UON.

DRAFTING SYMBOLS

- | | |
|--|---|
| | DETAIL DESIGNATION |
| | MAJOR/MINOR BUILDING ELEVATION |
| | MAJOR/MINOR BUILDING SECTION |
| | GRID LINE |
| | MATCH LINE |
| | ELEVATION TAG |
| | REFERENCE TO PLAN OR SECTION AREA ENLARGEMENT |
| | COLUMN STARTS AT THIS LEVEL |
| | COLUMN ABOVE & BELOW THIS LEVEL |
| | COLUMN TERMINATES AT THIS LEVEL |
| | SHEARHEAD / STUDRAIL TYPE |
| | STEP IN SLAB |
| | |

STRUCTURAL DESIGN LLC

OPTIMUS CONSULTING ENGINEERS

C.A. No. 28217 61706

MIAMI LAKES, FLORIDA 33016

Tel. 305.512.9860

Fax 305.512.9891

E-mail: optimus9@bellsouth.net

GENERAL NOTES (CONT'D):

SPECIALITY ENGINEERING NOTES:

A SPECIALITY ENGINEER IS A FLORIDA REGISTERED PROFESSIONAL ENGINEER, NOT THE ENGINEER OF RECORD, WHO SPECIALIZES IN AND WHO UNDERTAKES THE DESIGN OF STRUCTURAL COMPONENTS OR STRUCTURAL SYSTEMS INCLUDED IN A SPECIFIC SUBMITTAL PREPARED BY A CONTRACTOR FOR THIS PROJECT.

THE SPECIALITY ENGINEER IS TO BE RETAINED BY THE SUPPLIER OF THE SPECIALITY ITEM OR MAY BE AN EMPLOYEE OF THAT SUPPLIER. ALL COSTS ASSOCIATED WITH THE USE OF A SPECIALITY ENGINEER SHALL BE INCLUDED IN THE BID PRICE OF THE SUPPLIER FOR THE ITEM IN QUESTION.

THE FOLLOWING DESIGN RESPONSIBILITIES ARE ASSIGNED TO THE SPECIALITY ENGINEER: SHOP DRAWINGS AND CALCULATIONS ARE REQUIRED WITH THE IMPRESSED SEAL, DATE, AND SIGNATURE OF THE SPECIALITY ENGINEER. COMPUTER PRINTOUTS ARE AN ACCEPTABLE SUBSTITUTE FOR MANUAL COMPUTATIONS PROVIDED THEY ARE ACCOMPANIED BY SUFFICIENT DESCRIPTIVE INFORMATION TO PERMIT THEIR PROPER EVALUATION. SUCH DESCRIPTIVE INFORMATION SHALL BEAR THE SEAL AND SIGNATURE OF THE SPECIALITY ENGINEER AS AN INDICATION THAT HE HAS ACCEPTED RESPONSIBILITY FOR THE RESULTS. SHOP DRAWINGS AND CALCULATIONS ARE TO BE SUBMITTED TO THE ENGINEER OF RECORD.

FORMING, SHORING AND RESHORING:

- THE CONTRACTOR SHALL FURNISH COMPLETE FORMING PLANS PREPARED BY A SPECIALITY ENGINEER FOR THE PROJECT. PLANS SHALL BE IN ACCORDANCE WITH ACI 341 RECOMMENDED PRACTICE FOR CONCRETE FORMING, AND INCLUDE ALL SLAB, BEAM, AND COLUMN FORMING WITH ALL CROSS AND LATERAL BRACING REQUIRED.
- SHORING AND RESHORING PLANS SHALL INCLUDE ALL LEVELS OF SHORING REQUIRED, TYPE, CAPACITY AND SPACING OF SHORES AND RESHORES.
- CALCULATIONS FOR THE SHORING AND RESHORING PROCESS MUST INCLUDE THE PLACEMENT AND STRIPPING CYCLE BASED ON THE CONSTRUCTION SCHEDULE, THE ASSUMED CONCRETE STRENGTH AT THE TIME OF STRIPPING AND A DETAILED PROCEDURE FOR THE ENTIRE OPERATION.
- DESIGN FORMS AND SHORES FOR HORIZONTAL CONCRETE MEMBERS FOR NOT LESS THAN THE DEAD LOAD PLUS 50 PSF CONSTRUCTION LOAD AND FOR THE CUMULATIVE LOADS OF SUPPORTED FLOORS.
- ALL MULTISTORY FORMING AND SHORING MUST BE COMPLETELY DETAILED ON PLANS AND SHOW ALL LATERAL BRACING AND CONNECTIONS REQUIRED.
- FOR SPECIAL CONDITIONS SUCH AS TRANSFER SLABS, BEAMS, COLUMNS OR WALLS, OR ANY OTHER STRUCTURAL ELEMENT TRANSFERRING LOAD, THE SPECIALITY ENGINEER PREPARING THE FORMWORK SHOP DRAWINGS SHALL CONTACT THE ENGINEER OF RECORD FOR ADDITIONAL INFORMATION REGARDING LOADS TO BE TRANSFERRED AT THOSE ELEMENTS.
- THE DESIGN AND DETAILING OF MUD SILLS, IF REQUIRED IS TO BE INCLUDED IN THE SHORING PLANS. SOIL CAPACITY AND COMPACTION REQUIREMENTS TO CARRY THE MUD SILLS SHALL BE SHOWN ON THE PLAN.
- PRIOR TO EACH CONCRETE PLACEMENT, THE SHORING AND RESHORING SHALL BE INSPECTED AND CERTIFIED IN WRITING BY THE SPECIALITY ENGINEER OR HIS AUTHORIZED REPRESENTATIVE TO INSURE COMPLIANCE WITH HIS DESIGN.
- NO CONVENTIONALLY REINFORCED FLAT SLAB SHALL BE STRIPPED AND RESHORED UNTIL THE CONCRETE HAS BEING PLACED FOR 3 DAYS AND REACHED A MINIMUM OF 2800 PSI.

TOWER CRANES, HOISTS AND CONCRETE PUMPS:

- ALL EQUIPMENT THAT IS TO BE ATTACHED TO THE STRUCTURE MUST HAVE THE MANUFACTURES SPECIFICATIONS OR SIGNED AND SEALED SHOP DRAWINGS SUBMITTED FOR REVIEW.
- SHOP DRAWINGS OR MANUFACTURES SPECIFICATIONS SHALL INDICATE ALL LATERAL AND AXIAL LOADS, MOMENTS, AND SHEAR FORCES THAT WILL BE IMPOSED ON THE STRUCTURE.
- THE CONTRACTOR SHALL RETAIN A SPECIALITY ENGINEER AND PROVIDE ALL NECESSARY DESIGN AND DETAILS REQUIRED FOR FOUNDATIONS, TIE BACKS, HOLES IN THE STRUCTURE, SHORING, AND BRACING THAT IS ASSOCIATED WITH THE EQUIPMENT THAT IS BEING INSTALLED.
- THE SPECIALITY ENGINEER PERFORMING THIS WORK SHALL INSPECT ALL PHASES OF IT TO INSURE COMPLIANCE WITH HIS DESIGN.

BALCONY RAILINGS, HAND RAILS, STAIR RAILINGS:

- ALL RAILING SYSTEMS FOR BALCONY RAILS, HAND RAILS, STAIR RAILS AND RAMP RAILS SHALL BE DESIGN IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2004 WIND LOADS AS SHOWN ON THE STRUCTURAL DRAWINGS OR AS PER WIND TUNNEL TEST REPORT BY RUDI.
- SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED AND INDICATE THE DESIGN FOR EACH SEPARATE ELEMENT OF THE SYSTEM.
- SHOP DRAWINGS SHALL SHOW ALL DIMENSIONS, THICKNESSES AND ALLOYS USED ALONG WITH ALL SCREWS, BOLTS AND WELDED CONNECTIONS.
- ALL PROVISIONS FOR THE ATTACHMENT OF THE SPECIALITY ITEM TO THE STRUCTURE SHALL BE SHOWN FOR EACH CONDITION.
- RAILING POSTS SHALL BE ANCHORED TO THE CONCRETE SLAB OR CURB WITH AN APPROVED HIGH STRENGTH GROUT WHICH CONTAINS NO GYPSUM MATERIAL.
- APPLY SIKKA ARMATEC 110 BONDING AGENT TO ALL BLOCK-OUT OR CORED CONCRETE SURFACES AND ANY EXPOSED REINFORCING OR ACCESSORIES PRIOR TO PLACEMENT OF GROUT.
- FULLY COAT ALL RAILING POST ENDS TO DEPTH OF GROUTED CONNECTION FOR PREVENTION OF GALVANIC ACTION WITH SIKADUR 32 HI-MOD EPOXY.
- ALL GROUTED HOLES SHALL BE MOUNDED TO CREATE POSITIVE DRAINAGE AWAY FROM THE RAILING POSTS.
- A SPECIAL INSPECTOR SHALL BE RETAINED TO INSPECT THE INSTALLATION OF ALL PARTS OF THE RAILING SYSTEM, SEPERATE FROM THE THRESHOLD INSPECTOR.

CURTAIN WALL SYSTEMS, EXTERIOR WINDOWS AND DOORS:

- ALL CURTAIN WALL SYSTEMS, EXTERIOR WINDOWS AND DOORS SHALL BE DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2004 WIND LOADS AS SHOWN ON THE STRUCTURAL DRAWINGS OR AS PER WIND TUNNEL TEST REPORT BY RUDI.
- COMPLETE DESIGN CALCULATIONS AND SHOP DRAWINGS SIGNED AND SEALED SHALL BE SUBMITTED FOR APPROVAL. SHOP DRAWINGS SHALL INDICATE ALL DIMENSIONS, MEMBER SIZES, ALLOYS USED ALONG WITH ALL SCREWS, BOLTS, ANCHORS AND WELDING REQUIRED.
- ALL PROVISIONS FOR THE ATTACHMENT OF THE SYSTEM TO THE STRUCTURE SHALL BE SHOWN FOR EACH CONDITION. COORDINATE THE LOCATION OF ALL TOP AND BOTTOM TRACKS SO AS TO AVOID ANCHOR INSTALLATION INTO THE GLASS LINES OF THE FIX TENSION SYSTEM.
- NO CHIPPING OF CONCRETE COLUMNS OR SLABS SHALL BE DONE TO FACILITATE THE INSTALLATION OF WINDOWS OR DOORS WITHOUT THE PERMISSION OF THE ENGINEER.
- A SPECIAL INSPECTOR SHALL BE RETAINED FOR GLAZING INSPECTIONS AS PER THE FLORIDA BUILDING CODE 2004, SEPERATE FROM THE THRESHOLD INSPECTOR.

SHOP DRAWING SUBMITTALS:

- REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AS PRESENTED BY THE CONTRACT DOCUMENTS.
- NO DETAIL CHECK OF QUANTITIES OR DIMENSIONS WILL BE MADE.
- REVIEW OF SHOP DRAWINGS IS NOT CONDUCTED FOR DETERMINING THE ACCURACY AND COMPLETENESS OF SUBMITTALS, OR FOR SUBSTITUTION OF MATERIALS OR METHODS OF CONSTRUCTION, OR PERFORMANCE, ALL OF WHICH SHALL REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE STRUCTURAL DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.
- ALL CHANGES AND ADDITIONS MADE ON RE-SUBMITTALS MUST BE CLEARLY FLAGGED AND NOTED. ENGINEERS SECOND REVIEW WILL BE LIMITED TO THESE ITEMS.
- A MAXIMUM OF SIX ORIGINALS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW ONLY. AFTER THEY HAVE BEEN APPROVED BY THE CONTRACTOR FIVE MARKED COPIES WILL BE RETURNED AFTER THE REVIEW.
- POST TENSION SLAB SHOP DRAWINGS AND MILD STEEL SLAB REINFORCING DRAWINGS SHALL BE SUBMITTED SIMULTANEOUSLY FOR EACH FLOOR REQUIRED.
- TURN AROUND TIME BY THE ENGINEER FOR SHOP DRAWING REVIEW WILL BE FIVE WORKING DAYS.

CONDUITS AND PIPES IN CONCRETE SLABS:

- CONDUITS, PIPES, SLEEVES ETC MAY BE EMBEDDED IN THE CONCRETE PROVIDING THE MATERIAL IS NOT HARMFUL TO THE CONCRETE AND THE WORK IS DONE IN SUCH A MANNER THAT NO PART OF THE STRUCTURE IS IMPAIRED. THIS WORK SHALL BE DONE WITH THE APPROVAL OF THE ENGINEER.
- ALL MAJOR HOME RUNS OF CONDUITS OR PIPES, EITHER ELECTRICAL OR MECHANICAL WILL REQUIRE SHOP DRAWINGS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO THE INSTALLATION. SHOP DRAWINGS SHALL INDICATE ALL PIPE LOCATIONS, NUMBER AND SIZES, BENDS AND SLOPES THAT NEED TO BE PLACED IN THE CONCRETE.
- ALL CONDUITS, PIPES EMBEDDED WITHIN A SLAB, BEAM OR WALL SHALL SATISFY THE FOLLOWING:
 - NO PIPES OR CONDUIT EXCEEDING 1/3 THE SLAB THICKNESS IN OUTSIDE DIAMETER SHALL BE ALLOWED.
 - THEY SHALL BE SPACED NO CLOSER THAN THREE DIAMETERS O.C. AND BE LOCATED BETWEEN THE TOP AND BOTTOM LAYERS OF REINFORCING.
 - NO CONDUITS OR PIPES SHALL BE TIED TO THE POST TENSION TENDONS UNDER ANY CIRCUMSTANCES. NO REINFORCING SHALL BE DISPLACED FROM ITS PROPER POSITION.
 - ALL CHAIRS AND BARS REQUIRED FOR SUPPORT OF CONDUITS AND PIPES SHALL BE SUPPLIED BY THE CONTRACTOR WHO IS INSTALLING THE PIPES.
- ALL RUNS OF CONDUITS OR PIPES OVER 24 INCHES IN WIDTH SHALL HAVE 4"X12" O.C. TOP AND BOTTOM ADDED PERPENDICULAR TO THE RUN AND EXTEND 12' BEYOND THE END PIPE.
- ALL CONDUITS AND PIPES SHALL BE OF MATERIALS THAT ARE NOT EXPOSED TO RUSTING OR OTHER DETERIORATION.
- PIPES AND FITTINGS SHALL BE DESIGNED SO AS TO RESIST THE EFFECTS OF PRESSURE, TEMPERATURE AND MATERIALS TO WHICH THEY WILL BE SUBJECTED.
- NO GAS, VAPOR OR LIQUID EXCEEDING 50 PSI PRESSURE SHALL BE PLACED IN PIPES UNTIL THE CONCRETE HAS REACHED ITS DESIGN STRENGTH.

SPECIAL CONSTRUCTION NOTES:

- THE REINFORCING STEEL IN ALL EXPOSED EXTERIOR BALCONIES SHALL BE PROTECTED AGAINST MOISTURE INTRUSION IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2004, SECTION 1926.5.5 AS FOLLOWS:
 - MINIMUM CLEARANCE TO ALL TOP (NEGATIVE) REINFORCING SHALL NOT BE LESS THAN 1"
 - THE CONCRETE SHALL BE 5000 PSI (NORMAL WEIGHT CONCRETE) WITH A MAXIMUM WATER CEMENT RATIO OF 0.40 BY WEIGHT.
 - REINFORCING STEEL, STUD RAILS, SHEAR HEADS SUPPORT BARS, BACK-UP BARS, TIE WIRE ETC IN BALCONY SLABS, BEAMS AND CURBS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A163 SPECIFICATIONS FOR ZINC-COATED (GALVANIZED) BARS FOR CONCRETE REINFORCEMENT. ONLY USE PLASTIC CHAIRS FOR STEEL SUPPORT.
 - A SURFACE PENETRANT SEALER OF ALKYL-ALKOXY SILANE CLASSIFICATION OR APPROVED EQUAL SHALL BE APPLIED TO ALL EXPOSED CONCRETE.
 - BALCONY SLABS SHALL BE SLOPED A MINIMUM 1/8" PER LINEAR FOOT TO SAFE GUARD AGAINST PONDING OF WATER.
 - PLACEMENT OF SLAB REINFORCEMENT SHALL BE UNDER THE SUPERVISION OF A FLORIDA REGISTERED ARCHITECT OR ENGINEER.
- MFEX STEEL CAN BE USED AS AN ALTERNATIVE TO HOT-DIPPED GALVANIZED STEEL IN THE BALCONIES, AT CONTRACTORS OPTION.
- ALL CONCRETE FOR SHEARWALLS AND COLUMNS SHALL BE CURED WITH AN APPROVED CURING COMPOUND IMMEDIATELY AFTER THE FORMS ARE REMOVED.
- FINISHED FLOOR SLABS SHALL BE CURED WITH AN APPROVED WATER BASED CURING COMPOUND WHICH WILL NOT EFFECT THE ADHESION PROPERTIES OF THE CONCRETE.
- ALL MASONRY DOVE-TAIL ANCHORS, DUNE-WALL REINFORCING SHALL BE HOT DIPPED GALVANIZED FOR STRUCTURES LOCATED IN CORROSIVE ATMOSPHERES.

CONSTRUCTION TOLERANCES:

- THE FRAME SHALL BE BUILT TRUE AND PLUMB. CONSTRUCTION TOLERANCE SHALL CONFIRM TO ACI STANDARDS AS SET FORTH IN THE MANUAL OF CONCRETE PRACTICE. MINIMUM TOLERANCE SHALL BE AS FOLLOWS:
 - VARIATIONS FROM PLUMB:
 - IN THE LINE SURFACES OF COLUMNS, PIERS, WALLS, AND IN AREAS AS FOLLOWS:

IN ANY 10 FEET OF LENGTH	1/4 INCH
MAXIMUM FOR ENTIRE LENGTH	1 INCH
 - FOR EXPOSED CORNER COLUMNS, CONTROL JOINTS GROOVES AND OTHER LINES:

IN ANY 20 FEET OF LENGTH	1/4 INCH
MAXIMUM FOR ENTIRE LENGTH	1 INCH
 - VARIATION FROM THE LEVEL OR FROM THE GRADES INDICATED ON THE DRAWINGS:
 - IN SLAB SOFFITS, CEILINGS, BEAM SOFFITS AND IN AREAS AS FOLLOWS:

IN ANY 10 FEET LENGTH	1/4 INCH
IN ANY BAY OR IN ANY 20 FEET OF LENGTH	3/8 INCH
MAXIMUM FOR ENTIRE LENGTH	3/4 INCH
 - IN EXPOSED LINTELS, SILLS, PARAPETS, HORIZONTAL GROOVES AND OTHER LINES:

IN ANY BAY OR ANY 20 FEET OF LENGTH	1/4 INCH
MAXIMUM FOR ENTIRE LENGTH	1/2 INCH

BALCONY TERRACE DECK MOISTURE PROTECTION

- ALL BALCONY REINFORCING SHALL BE PROTECTED AGAINST MOISTURE INTRUSION IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2004 AS FOLLOWS:
- CLEARANCE TO ALL BALCONY NEGATIVE REINFORCING SHALL BE NO LESS THAN 1". THE CONCRETE PLACED SHALL BE A DESIGN MIX USING A MAXIMUM WATER CEMENT RATIO OF 0.40 BY WEIGHT AND RUST INHIBITIVE ADJUSTURE.

LINTELS:

LINTELS MAY BE USED IN MASONRY OPENINGS UP TO 6'-6" CLEAR. THESE MAY BE PRE-CAST OR CAST IN PLACE. THE LINTEL SHALL BE 8" X 12" MINIMUM WITH 2" X 5 TOP AND BOTTOM 13 TIES AT 8" AND SHALL BEAR 8" AT EACH SIDE OF OPENINGS. SEE TYPICAL DETAIL DWGS FOR ALTERNATE DETAILS.

TERMITE PROTECTION:

ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT PROTECTION AGAINST SUBTERRANEAN TERMITES. THE RULES AND LAWS AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES SHALL BE DEEMED AS APPROVED WITH RESPECT TO PRE-CONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST SUBTERRANEAN TERMITES. 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 RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

ALUMINUM NOTES:

- ALUMINUM DESIGN IS IN ACCORDANCE WITH THE F.B.C. AND THE ALUMINUM ASSOCIATION SPECIFICATIONS FOR ALUMINUM STRUCTURES.
- ALUMINUM ALLOYS SHALL BE 6061-T6. ALL WELDING SHALL BE PERFORMED WITH 5183 FILLER ALLOY, UON, AS PER AIAA GUIDELINES.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO WORK AND VERIFY CONNECTION OF UNIT TO FRAME DOES NOT VOID MANUFACTURER'S WARRANTY.
- FASTENING ATTACHMENTS OF THE ALUMINUM STANDS TO THE ROOF MEET THE CURRENT FBC WIND LOAD REQUIREMENTS.

STEEL JOIST NOTES:

- OPEN WEB AND LONG SPAN STEEL JOIST AND ACCESSORIES SHALL BE DESIGNED, MANUFACTURED AND ERECTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATION OF THE STEEL JOIST INSTITUTE, LATEST EDITION.
- AT JOIST ENDS MARKED THIS + BOTTOM CHORD SHALL BE EXTENDED AND CONNECTED TO THE COLUMN OR BEAM. HORIZONTAL AND DIAGONAL BRIDGING SHALL BE PROVIDED AS SHOWN ON THE DRAWINGS AND IN CONFORMANCE WITH THE MANUFACTURES SPECIFICATIONS.
- ALL BRIDGING AND BRIDGING ANCHORS SHALL BE COMPLETELY INSTALLED BEFORE CONSTRUCTION LOADS ARE PLACED ON THE JOISTS.
- ALL BRIDGING ANGLES AND FIELD WELDS SHALL BE PAINTED. ALL STEEL JOISTS AND ACCESSORIES SHALL RECEIVED ON SHOP COAT OF PAINT WHICH SHALL COMPLY WITH THE APPLICABLE STEEL JOIST INSTITUTE SPECIFICATION OF LATEST ADOPTION.
- ALL ROOF STEEL JOISTS ARE SUBJECT NET UPLIFT AND REQUIRE UPLIFT BRIDGING IN ACCORDANCE WITH SJI STANDARD SPECIFICATIONS.
- DESIGN OF OPEN WEB STEEL JOISTS + GIRDERS SHALL INCLUDE ANY ADDITIONAL LOADS INDICATED AS PART OF THE STRUCTURAL SET OF DRAWINGS, (IE, MEP EQUIPMENT, SCREEN ENCLOSURES, ETC.)
- STEEL JOIST MANUFACTURER SHALL SUBMIT DRAWINGS INDICATED TYPE AND LAYOUT AND ALL REQUIRED CONNECTIONS AND BRIDGING BEARING THE SEAL OF A QUALIFIED STRUCTURAL ENGINEER LICENSED IN THE STATE OF FLORIDA FOR REVIEW AND ACCEPTANCE PRIOR TO FABRICATION.

STRUCTURAL STEEL NOTES:

- ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN CONFORMANCE WITH THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, WITH COMMENTARY.
- STRUCTURAL STEEL SHAPES SHALL CONFORM TO THE FOLLOWING:

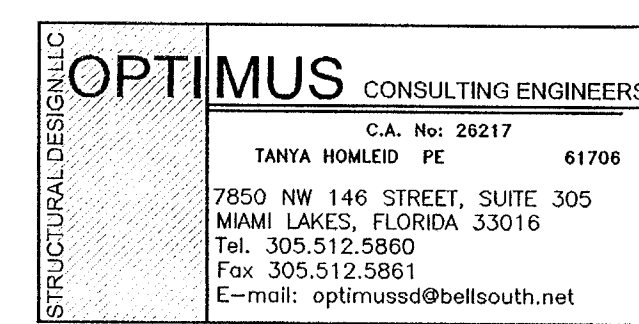
ROLLED SHAPES	ASTM A992
PLATES AND BARS	ASTM A36
STEEL TUBING	ASTM A500 GRADE B
STEEL PIPE	ASTM A53 GRADE B
ANCHOR BOLTS	ASTM A307
HIGH STRENGTH BOLTS	ASTM A325
- ALL BOLTS SHALL BE PROVIDED WITH HARDENED WASHERS CONFORMING TO ASTM F436.
- HOLES SHALL BE CUT, PUNCHED OR DRILLED PERPENDICULAR TO METAL SURFACES. DO NOT FLAME CUT HOLES OR ENLARGE HOLES BY BURNING.
- ALL STRUCTURAL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED INCLUDING BOLTS, NUTS AND WASHERS.
- PROVIDE ONE COAT OF RUST INHIBITING PAINT MIN. 3 MIL. DRY FILM THICKNESS ON ALL OTHER STRUCTURAL STEEL UON.
- ALL SHOP CONNECTIONS SHALL BE WELDED UNLESS OTHERWISE INDICATED.
- FIELD CONNECTIONS SHALL BE WELDED UNLESS OTHERWISE INDICATED. ALL BOLTED FIELD CONNECTIONS SHALL BE FRICTION TYPE UON.
- CONTRACTOR OR FABRICATOR SHALL PROVIDE ALL TEMPORARY BRACING NECESSARY TO INSURE A STABLE STRUCTURE DURING CONSTRUCTION.
- ALL WELDING IS TO BE PERFORMED BY CERTIFIED WELDERS. WELDING SHALL BE MADE WITH E70XX SERIES ELECTRODES AND CONFORM TO THE CURRENT RECOMMENDATIONS OF THE AISC AND THE AMERICAN WELDING SOCIETY (AWS).
- SHOP DRAWINGS OF ALL STRUCTURAL STEEL SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.
- THE FRAMES SHALL BE CARRIED UP TRUE AND PLUMB AND TEMPORARY BRACING SHALL BE INTRODUCED WHEREVER TO TAKE CARE OF ALL LOAD TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING EQUIPMENT AND OPERATION OF SAME. SUCH BRACING SHALL BE THE RESPONSIBILITY OF THE STEEL CONTRACTOR AND SHALL BE IN PLACE AS LONG AS REQUIRED FOR SAFETY.
- ALL WELDED CONNECTIONS SHALL CONFORM TO THE "AMERICAN WELDING SOCIETY CODE". AWS D1.1-TT. PROVISIONS SHALL BE MADE FOR FIELD WELDING AND TESTING OF WELDS. ALL SHOP WELDS SHALL BE TESTED BY NON-DESTRUCTIVE METHODS AND SHALL BE CERTIFIED. IF ALL SHOP CONNECTIONS SHALL BE HIGH STRENGTH BOLTED OR WELDED. FIELD CONNECTIONS SHALL BE BOLTED, UON. ALL WELDING SHALL BE DONE BY STATE OF FLORIDA CERTIFIED WELDERS.
- STRUCTURAL STEEL DETAILER TO DESIGN AND DETAIL ANY CONNECTION NOT DETAILED ON DRAWINGS (BASED ON LOADS SHOWN).
- FOR FABRICATION OF WORK WHICH WILL BE EXPOSED TO PUBLIC VIEW IN THE COMPLETED STRUCTURE, USE ONLY MATERIALS WHICH ARE SMOOTH AND FREE OF SURFACE BLEMISHES, INCLUDING FITTING, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES AND ROUGHNESSES. REMOVE SUCH BLEMISHES BY GRINDING, OR BY WELDING AND GRINDING, PRIOR TO CLEANING, TREATING AND APPLICATION OF SURFACE FINISHES.
- SPLICES FOR HOT ROLLED SHAPES WITH A FLANGE THICKNESS EXCEEDING 2" SHALL COMPLY WITH THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AWS/AISC 360-10 CHAPTER A3.1c.

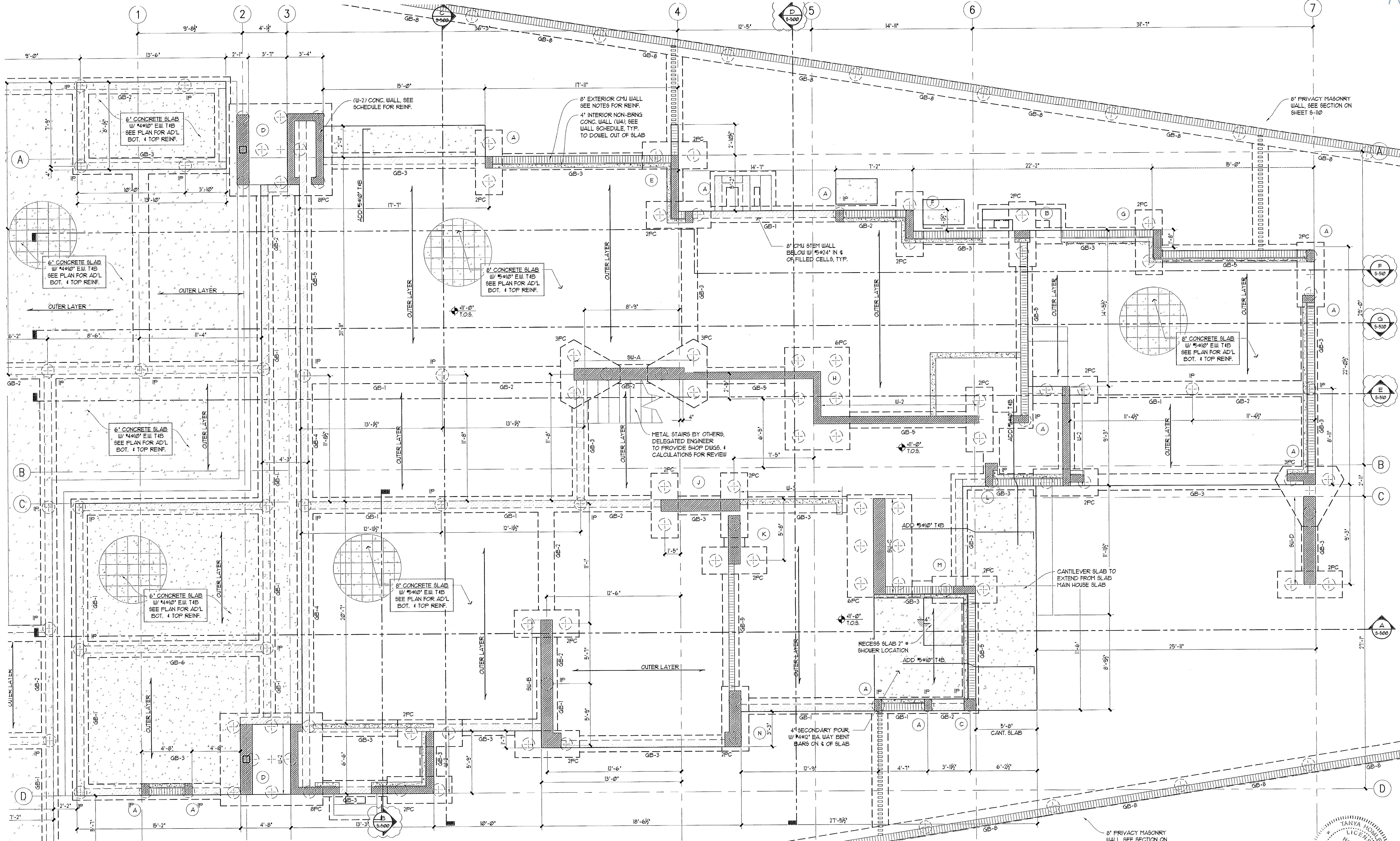
LIGHT GAUGE FRAMING:

- UNLESS NOTED OTHERWISE, ALL STUDS SHALL BE EQUAL TO A MINIMUM OF 10" X 14ga. WITH 14ga. TRACKS. ALL JOISTS SHALL BE EQUAL TO A MINIMUM OF 10" X 14ga. WITH 14ga. TRACKS.
- STUD, TRACK AND ACCESSORY DESIGNATIONS ARE BASED UPON THE STEEL NETWORK, INC. CATALOG. MINIMUM TIE IS STRENGTH FOR 19ga. STUDS SHALL BE 150 ksi. ALL TRACK SHALL BE 50 ksi. WIND STRAPS ARE BASED UPON THE USE OF 50000 PSI FY MIN.
- ALL STUDS, TRACK BRIDGING AND ACCESSORIES SHALL BE FORMED FROM STEEL OR ATTACHED BY #2 TEK SCREWS (MIN. 1 SCREW EACH FLANGE). ALL WELDS SHALL BE TOUCHED UP WITH ZINC RICH PAINT.
- STUDS SHALL HAVE FULL BEARINGS AGAINST INSIDE TRACK WEB PRIOR TO ATTACHMENT AT THEIR BOTH ENDS.
- ALL STUD TO JOIST CONNECTIONS TO BE (4) TEK SCREWS (MIN. UON.)
- AT TRACK BUTT JOINTS, ABUTTING PIECES OF TRACK SHALL BE SECURELY ANCHORED TO A COMMON STRUCTURAL ELEMENT, OR THEY SHALL BE BUTT WELDED OR SPLICED TOGETHER.
- A MINIMUM OF 10" UN PUNCHED STEEL IS REQUIRED AT BOTH ENDS OF STUD.
- STUD DIMENSIONS ARE TO THE BACK FACE OF STUD.
- ALL LIGHT GAUGE STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED INCLUDING ALL ACCESSORIES, UON.

DRAFTING SYMBOLS

- DETAIL DESIGNATION
- MAJOR/MINOR BUILDING ELEVATION
- MAJOR/MINOR BUILDING SECTION
- GRID LINE
- MATCH LINE
- ELEVATION TAG
- REFERENCE TO PLAN OR SECTION AREA ENLARGEMENT
- COLUMN STARTS AT THIS LEVEL
- COLUMN ABOVE & BELOW THIS LEVEL
- COLUMN TERMINATES AT THIS LEVEL
- SHEARHEAD / STUDRAIL TYPE
- STEP IN SLAB
- DRAWING DETAIL NUMBER
- REFERENCE DESIGNATION WHEN USED IN A NOTE
- CENTER LINES, GRID LINES, FLOOR LINES ON EXTERIOR ELEV., PROJECTED LINES
- INVISIBLE HIDDEN LINES, ITEMS TO BE REMOVED, ITEMS NOT IN CONTRACT
- DIMENSIONS
- SLASH LINES AT DIMENSIONS TO CENTER LINES AND GRID LINES
- ARROWS AT DIMENSIONS TO FACE OF MATERIALS.
- REVISION CLOUD & NUMBER
- BREAK LINES





NOTES:

- ALL MASONRY WALLS SHALL BE 8\"/>

LEGEND

- POURED CONCRETE
- NON-BEARING POURED CONCRETE
- BEARING MASONRY WALL
- CONCRETE SUPPORT BELOW
- LOCATION OF 14\"/>

TERMITE PROTECTION:

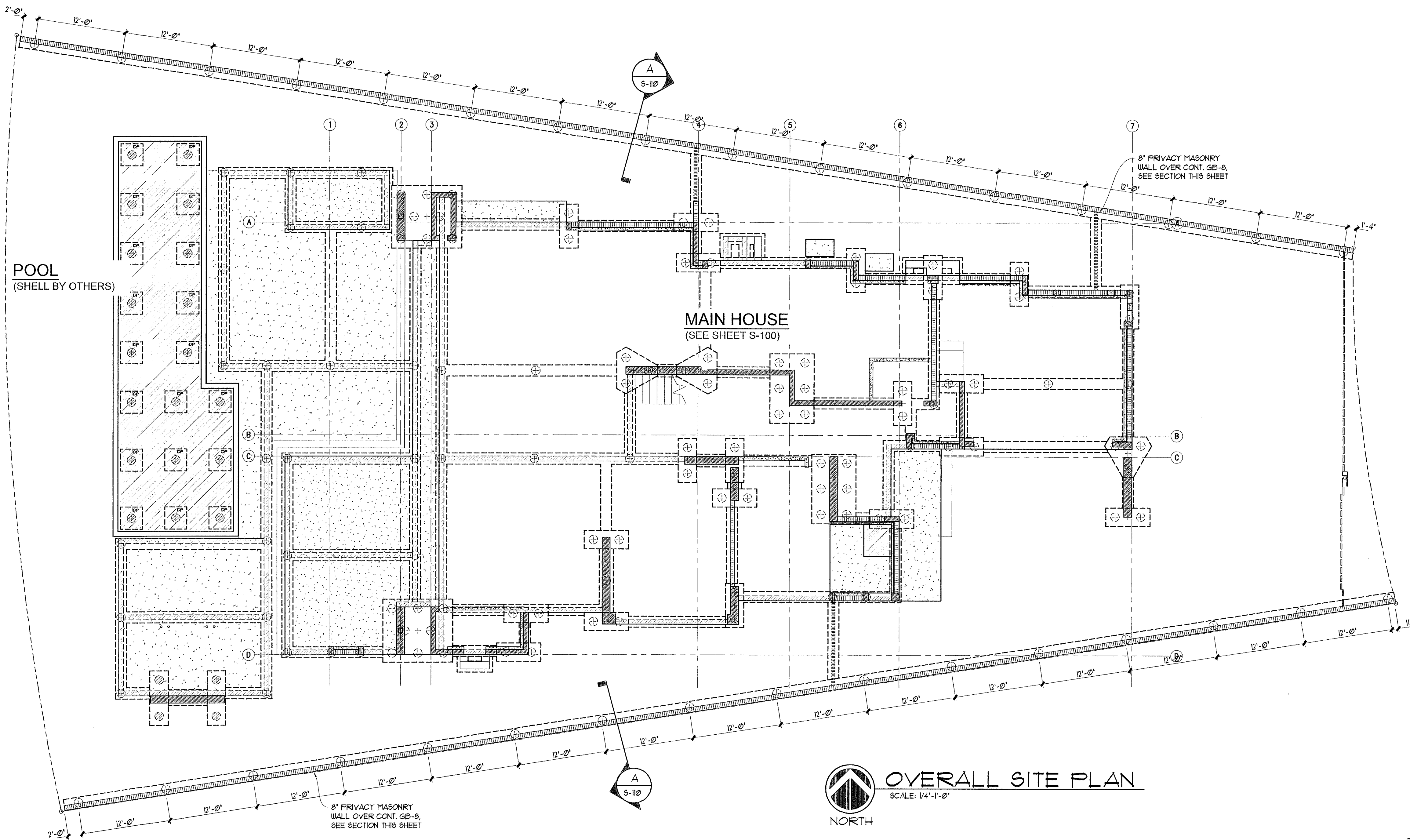
ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT PROTECTION AGAINST SUBTERRANEAN TERMITES. THE RULES AND LAWS AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES SHALL BE DEEMED AS APPROVED WITH RESPECT TO PRE-CONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST SUBTERRANEAN TERMITES. 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 RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."



GROUND FRAMING PLAN
SCALE: 1/4\"/>

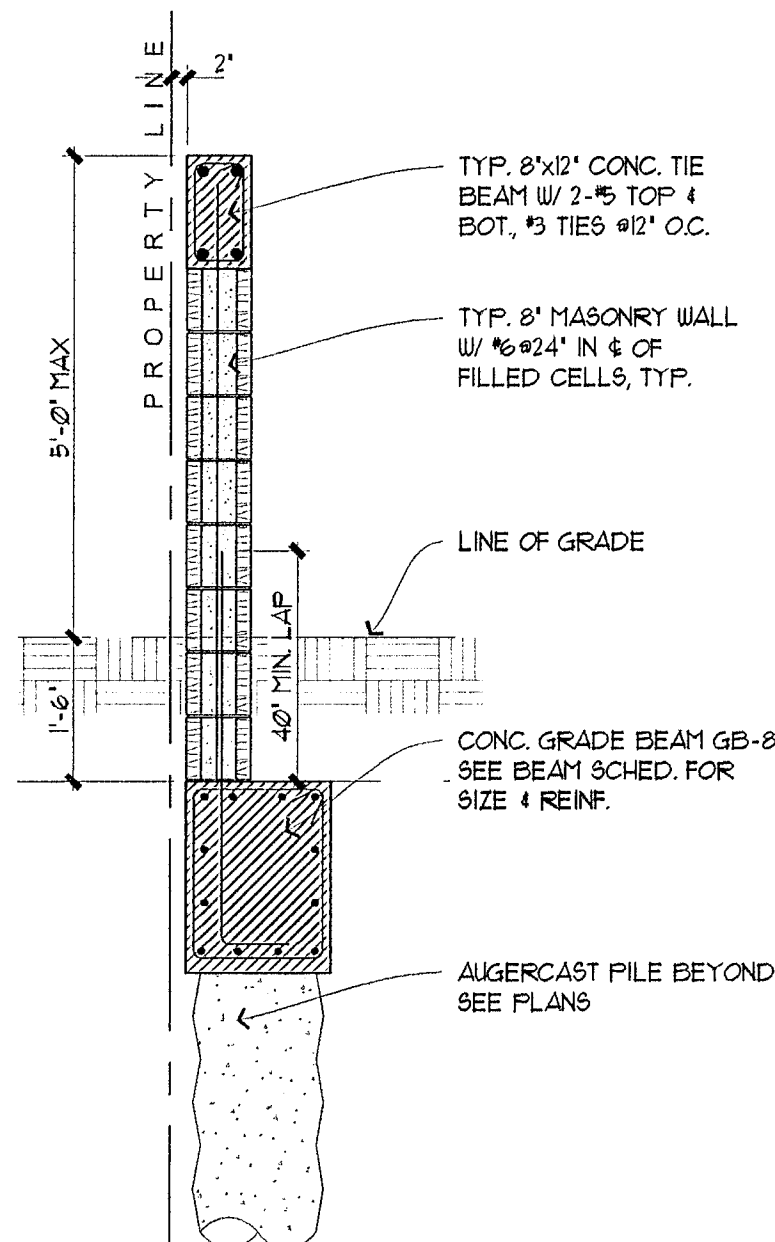
STRUCTURAL DESIGN LLC
OPTIMUS CONSULTING ENGINEERS
C.A. No. 26217
TANYA HOMLEO PE 61706
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel. 305.512.5860
Fax 305.512.5861
E-mail: optimusdbellsouth.net

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.



OVERALL SITE PLAN

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



SITE WALL

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

TERMITE PROTECTION:

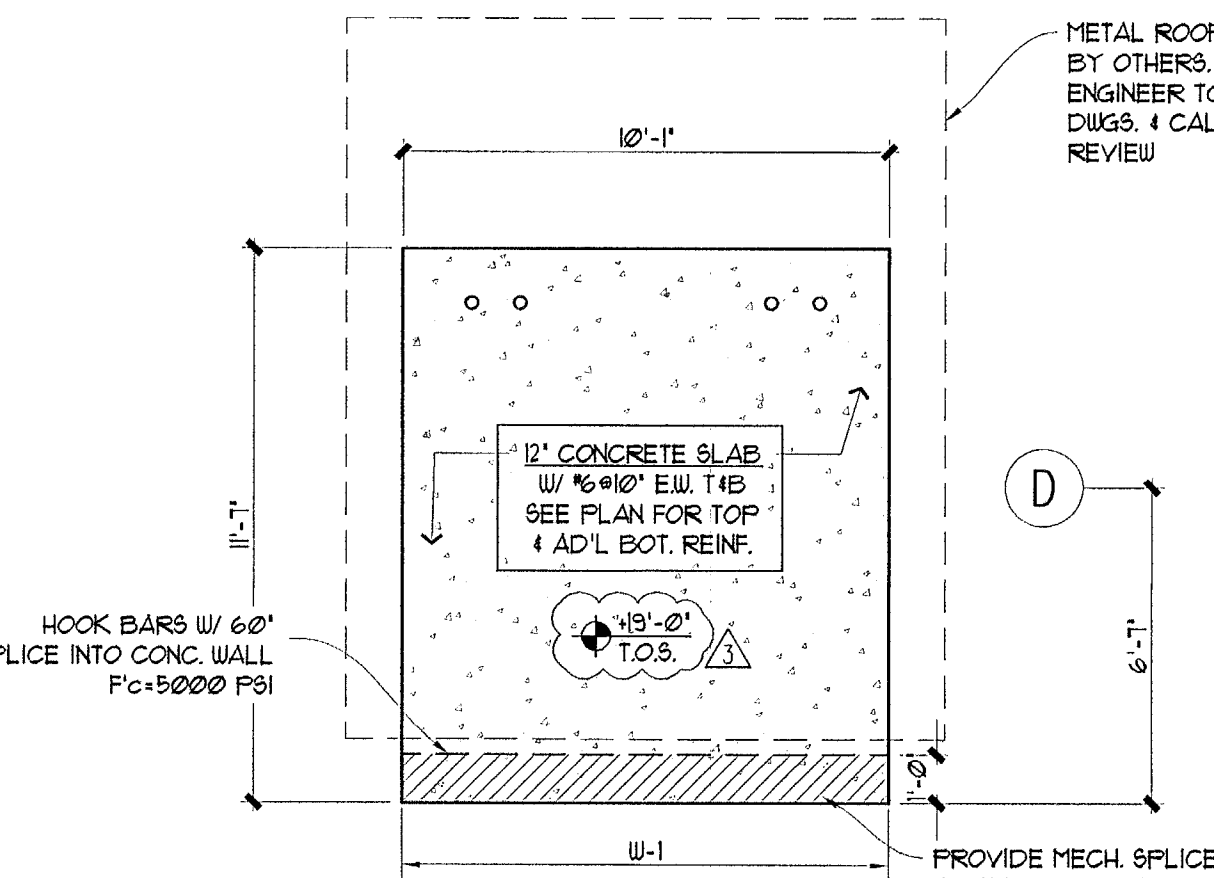
ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT PROTECTION AGAINST SUBTERRANEAN TERMITES. THE RULES AND LAWS AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES SHALL BE DEEMED AS APPROVED WITH RESPECT TO PRE-CONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST SUBTERRANEAN TERMITES. 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 RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

NOTES:

- ALL MASONRY WALLS SHALL BE 8" NOMINAL CMU WALL REINFORCED WITH #6 VERT. BAR SPACED @ 24" O.C. MAX. AND 3 GA. HORIZONTAL JOINT REINFORCING (LADDER TYPE) SPACED AT 16" O.C. MAX. SEE DRAWING S-6000 FOR ADD'L CMU WALL REINFORCING REQUIREMENTS.
- PROVIDE 2"x30"x30" CORNER BARS AT ALL TIE-BEAM/FLOOR BEAM BENDS AND CORNERS.
- SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
- REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB SLOPES, SHAFT OPENING LOCATIONS, DIMENSIONS AND ADDITIONAL INFORMATION.

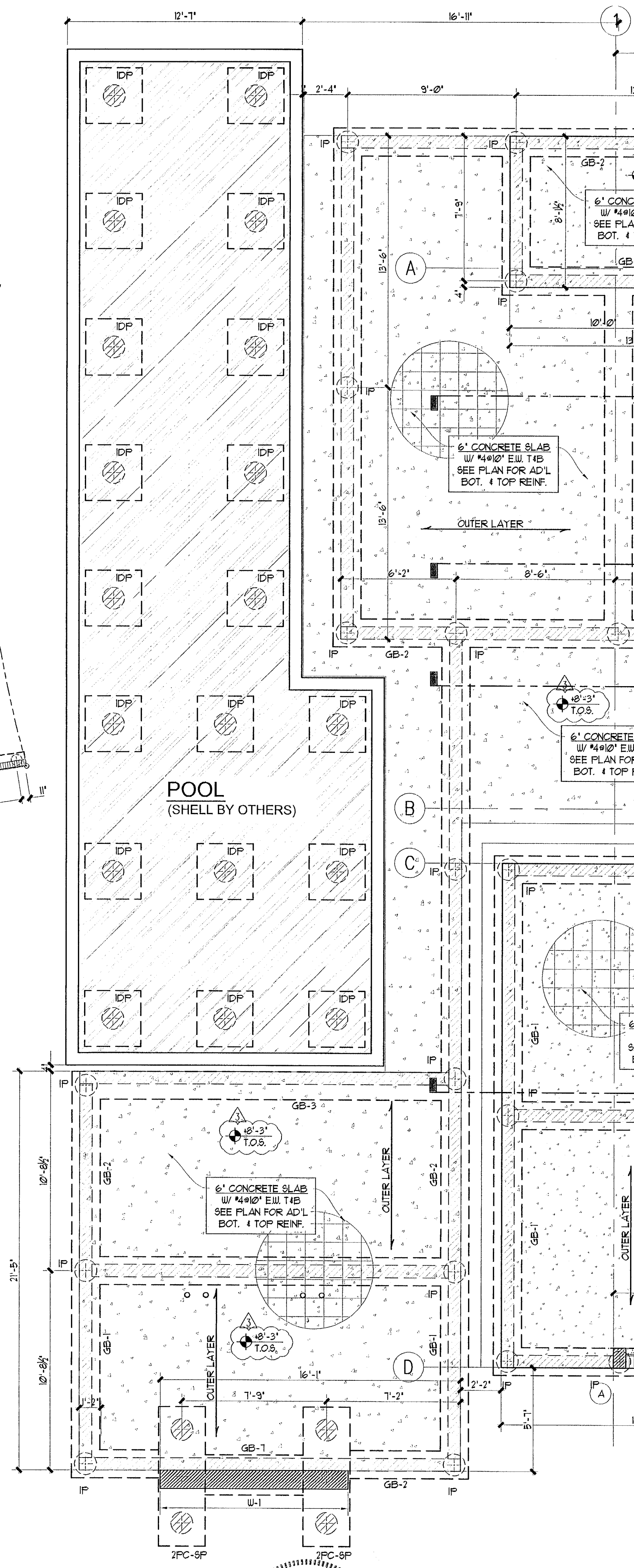
LEGEND

- POURED CONCRETE
- POURED CONCRETE W/ EXPOSED FIN.
- BEARING MASONRY WALL
- CONCRETE SUPPORT BELOW
- LOCATION OF 14" DIA. AUGERCAST CONCRETE PILES, SEE SHEET S-400
- INDICATES TOP BAR REINF.
- INDICATES BOT. BAR REINF.



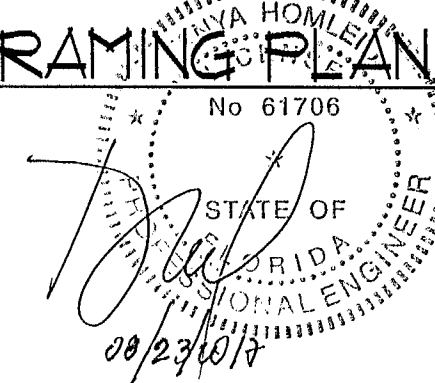
CABANA ROOF PLAN

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



POOL & CABANA FRAMING PLAN

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



OPTIMUS CONSULTING ENGINEERS
C.A. No. 26217 61706
TANYA HOMLEID PE
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel. 305.512.5960
Fax 305.512.5961
E-mail: optimussd@bellsouth.net

28 W DILIDO RESIDENCE
28 WEST DILIDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

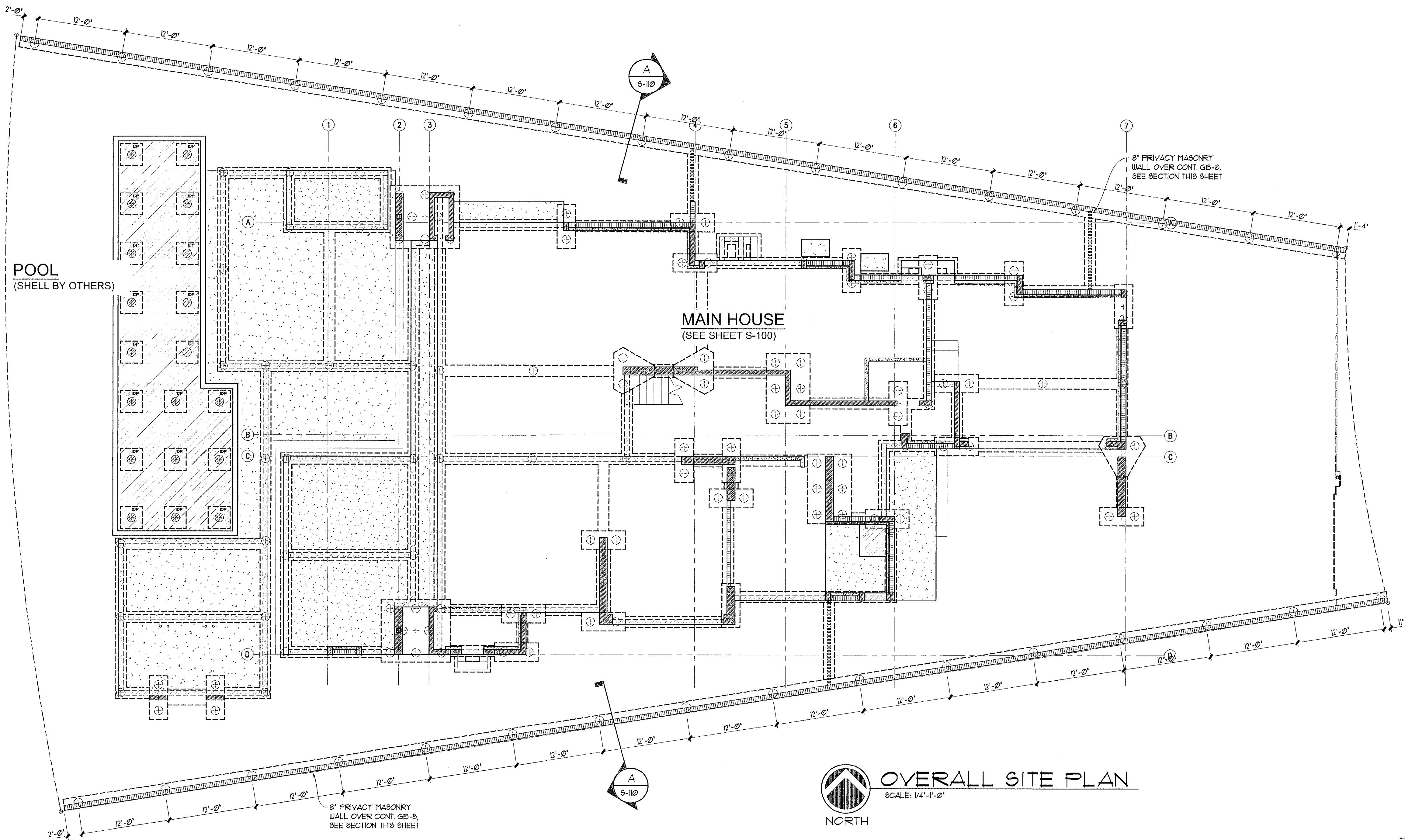
- 07-10-17 B.D. COMMENTS/O. CHANGES
- 08-11-17 B.D. COMMENTS/O. CHANGES
- 08-23-17 B.D. COMMENTS/O. CHANGES

sheet no.

S-110

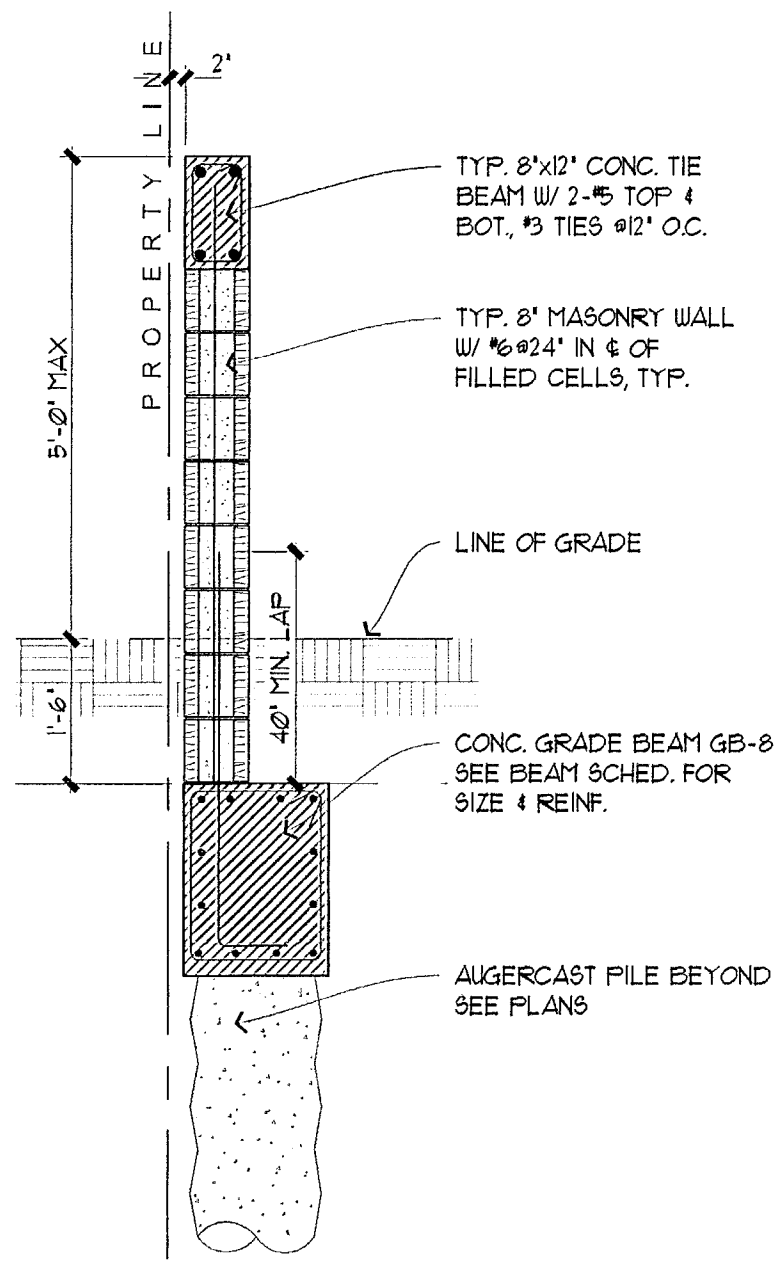
CHOEFF LEVY FISCHMAL
ARCHITECTURE + DESIGN

8425 Biscayne Blvd., suite 201
Miami, Florida 33138
(305) 434.8181
(305) 892.5151
www.clfarchitects.com



OVERALL SITE PLAN

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



A SITE WALL
SCALE 1/2"=1'-0"

TERMITE PROTECTION:

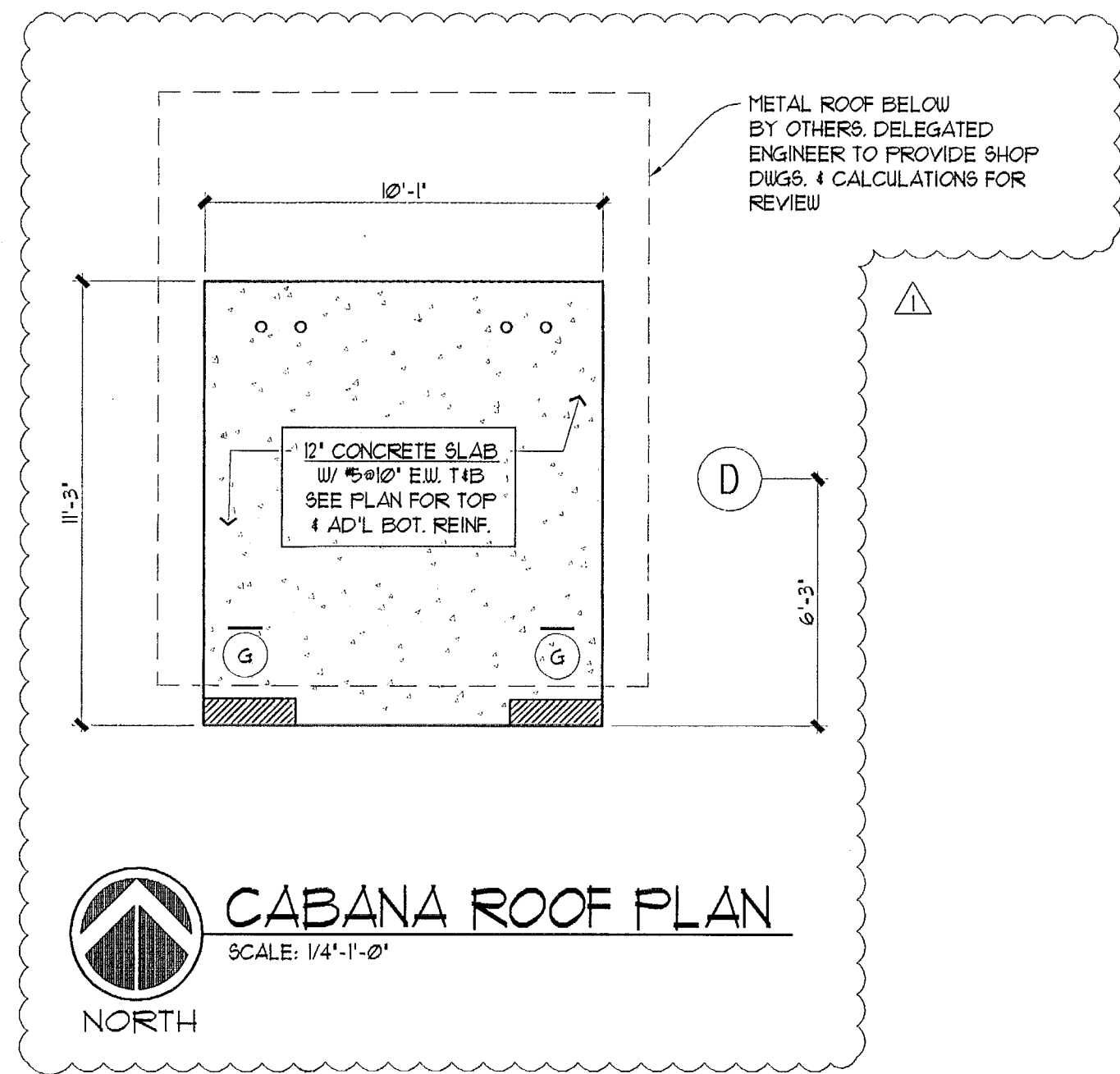
ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT PROTECTION AGAINST SUBTERRANEAN TERMITES. THE RULES AND LAWS AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES SHALL BE DEEMED AS APPROVED WITH RESPECT TO PRE-CONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST SUBTERRANEAN TERMITES. 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 RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

NOTES:

- ALL MASONRY WALLS SHALL BE 8" NOMINAL CMU WALL REINFORCED WITH #6 VERT. BAR SPACED @ 24" O.C. MAX. AND 3 GA. HORIZONTAL JOINT REINFORCING (LADDER TYPE) SPACED AT 16" O.C. MAX. SEE DRAWING S-600 FOR ADD'L CMU WALL REINFORCING REQUIREMENTS.
- PROVIDE 2"x20"x30" CORNER BARS, AT ALL TIE-BEAM/FLOOR BEAM BENDS AND CORNERS.
- SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
- REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB SLOPES, SHAFT OPENING LOCATIONS, DIMENSIONS AND ADDITIONAL INFORMATION.

LEGEND

- FOURED CONCRETE
- FOURED CONCRETE W/ EXPOSED FIN.
- BEARING MASONRY WALL
- CONCRETE SUPPORT BELOW
- LOCATION OF 4" DIA. AUGERCAST CONCRETE PILES, SEE SHEET S-400
- INDICATES TOP BAR REINF.
- INDICATES BOT. BAR REINF.



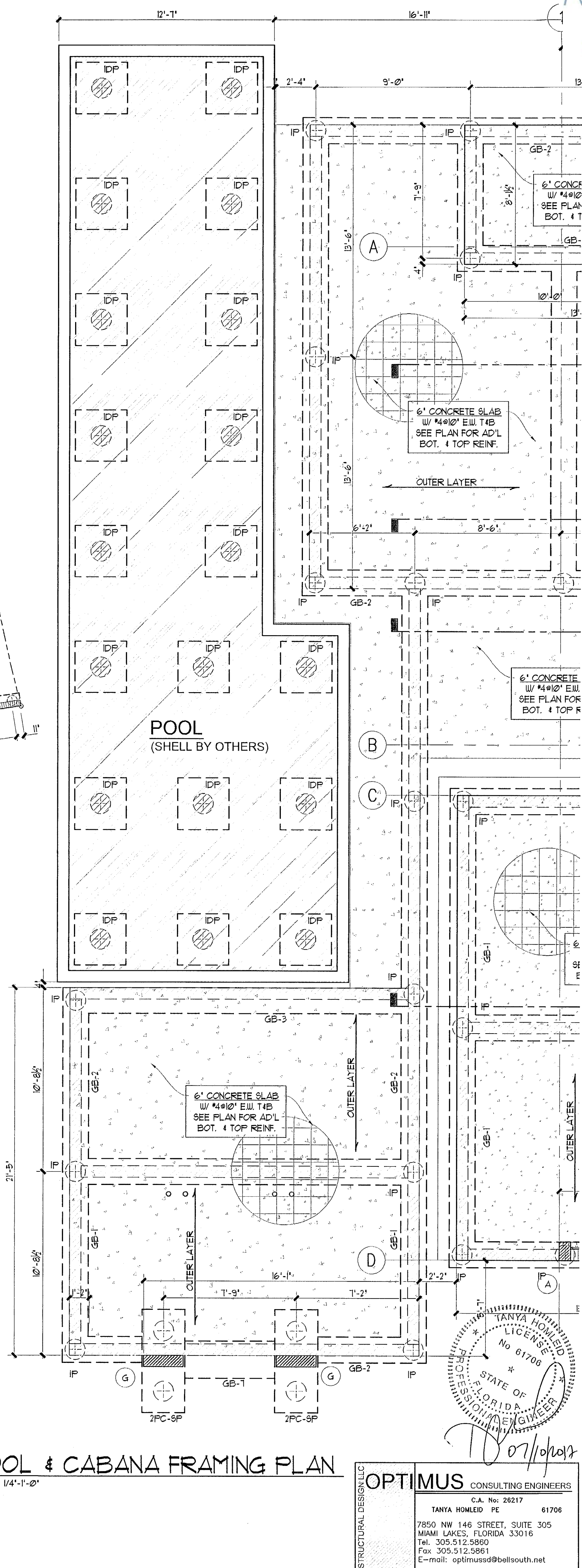
CABANA ROOF PLAN

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



POOL & CABANA FRAMING PLAN

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



OPTIMUS CONSULTING ENGINEERS
C.A. No. 28217 61708
TANYA HOMLED PE
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel. 305.512.5860
Fax 305.512.5861
E-mail: optimusdbellsouth.net

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.

07-10-17 B.D. COMMENTS/O. CHANGES

Raphael Levy
registered architect
AR0094779

seal

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17

revised:

sheet no.

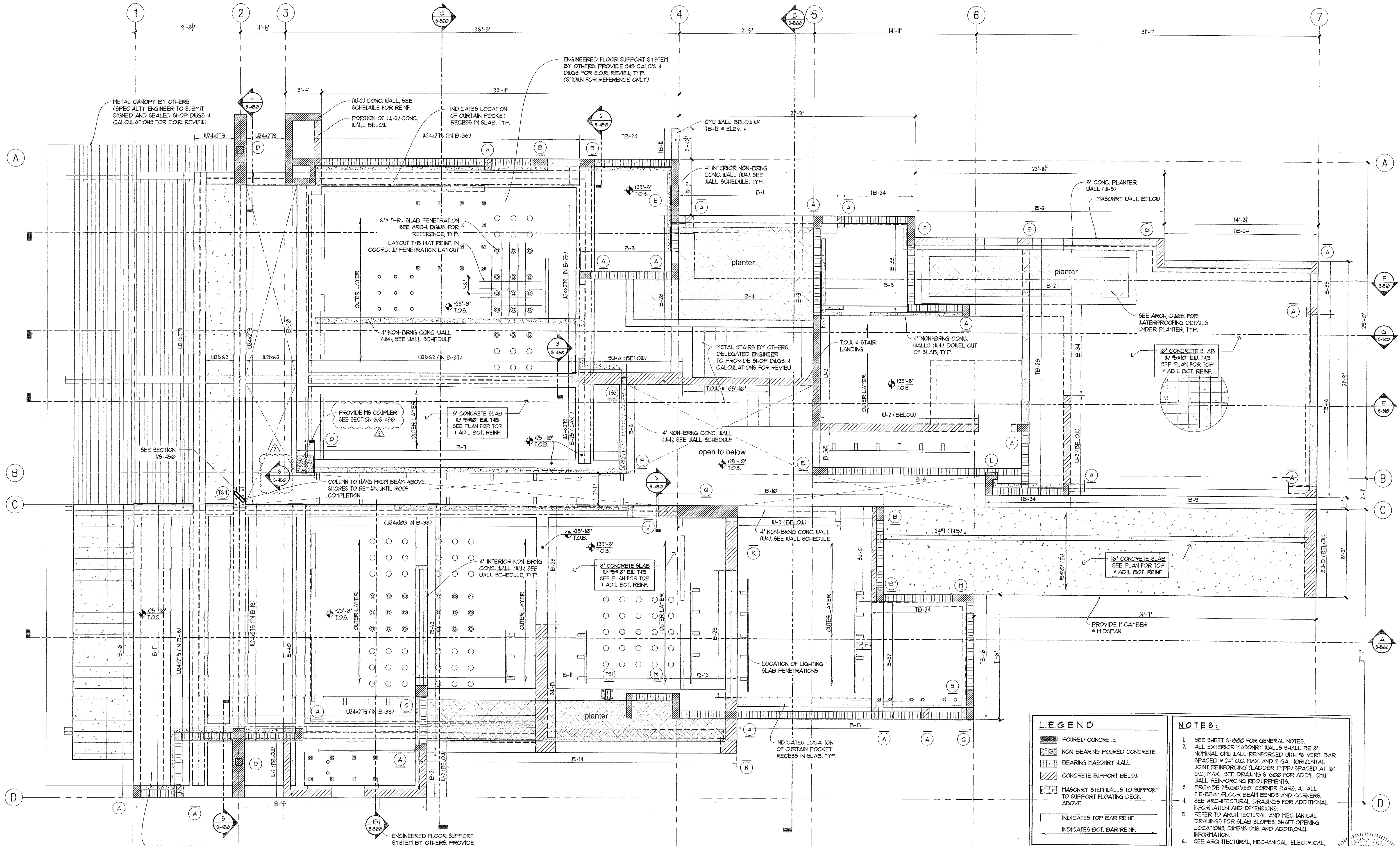
S-110

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

comm no.
1652

date:
02/03/17</



LEGEND

[Symbol]	POURED CONCRETE
[Symbol]	NON-BEARING POURED CONCRETE
[Symbol]	BEARING MASONRY WALL
[Symbol]	CONCRETE SUPPORT BELOW
[Symbol]	MASONRY STEM WALLS TO SUPPORT TO SUPPORT FLOATING DECK ABOVE
[Symbol]	INDICATES TOP BAR REINF.
[Symbol]	INDICATES BOT. BAR REINF.

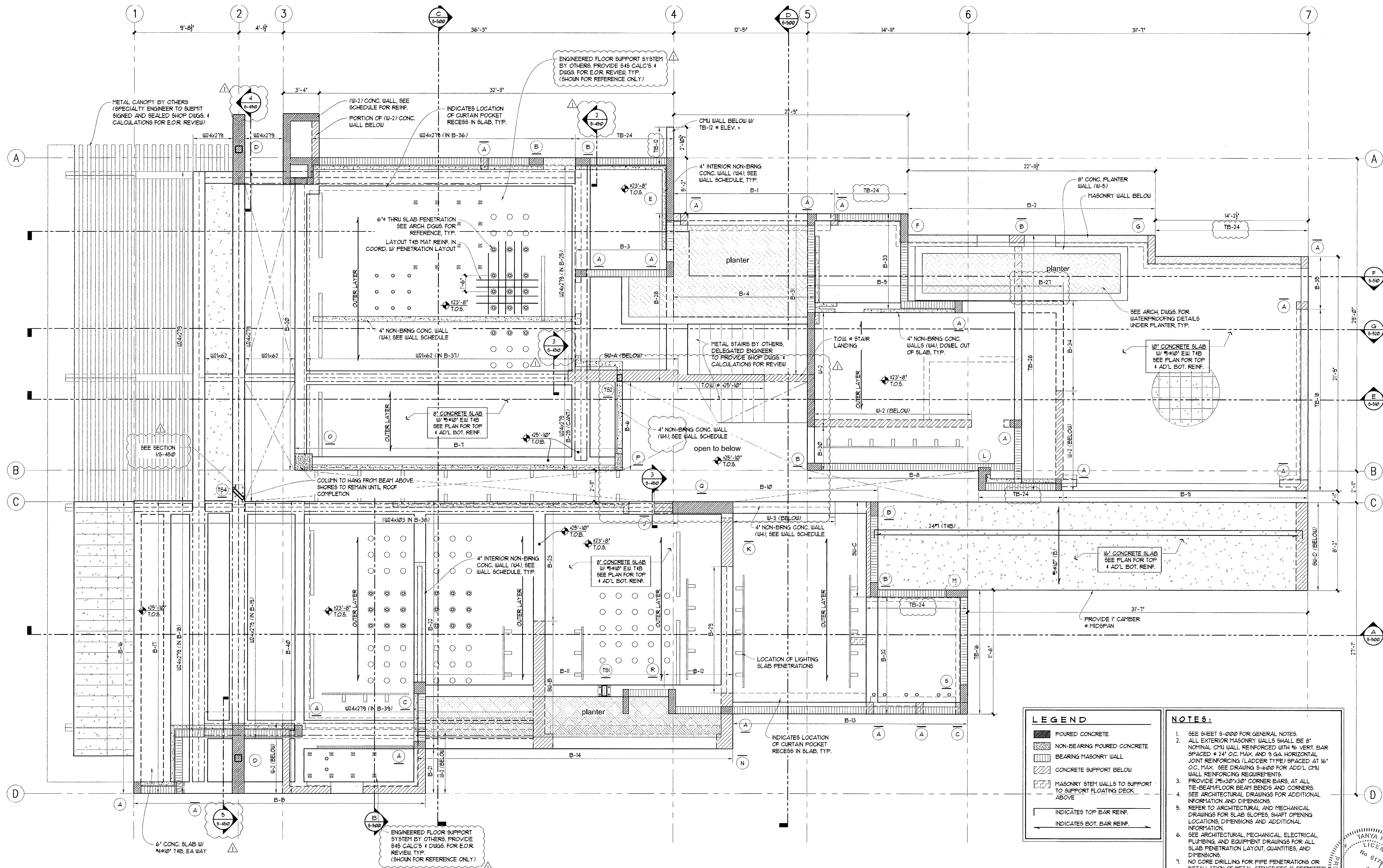
- NOTES:**
- SEE SHEET S-200 FOR GENERAL NOTES.
 - ALL EXTERIOR MASONRY WALLS SHALL BE 8" NOMINAL CMU WALL REINFORCED WITH 1/2" VERT. BAR SPACED @ 24" O.C. MAX. AND 3 GA. HORIZONTAL JOINT REINFORCING (LADDER TYPE) SPACED AT 16" O.C. MAX. SEE DRAWING S-600 FOR ADD'L CMU WALL REINFORCING REQUIREMENTS.
 - PROVIDE 1/2" DIA. CORNER BARS AT ALL TIE-BEAM/FLOOR BEAM BENDS AND CORNERS.
 - SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
 - REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB SLOPES, SHAFT OPENING LOCATIONS, DIMENSIONS AND ADDITIONAL INFORMATION.
 - SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND EQUIPMENT DRAWINGS FOR ALL SLAB PENETRATION LAYOUT, QUANTITIES, AND DIMENSIONS.
 - NO CORE DRILLING FOR PIPE PENETRATIONS OR INSTALLATION OF METAL STRUCTURES IS PERMITTED. PLACEMENT OF ALL PIPE SLEEVES, SLOTS AND ANCHORS SHALL BE DIMENSIONED AND COORDINATED WITH ALL TRADES AND APPROVED BY ARCHITECT, MECHANICAL AND STRUCTURAL ENGINEER PRIOR TO ANY PLACEMENT OF CONCRETE.

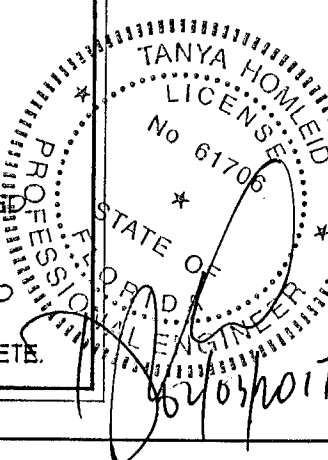
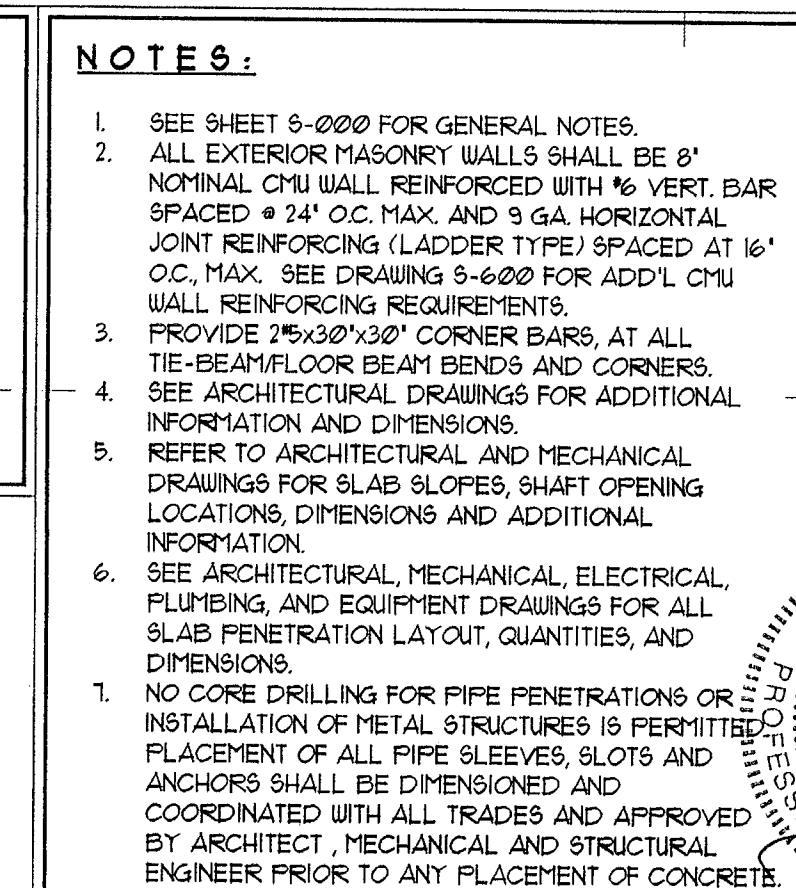


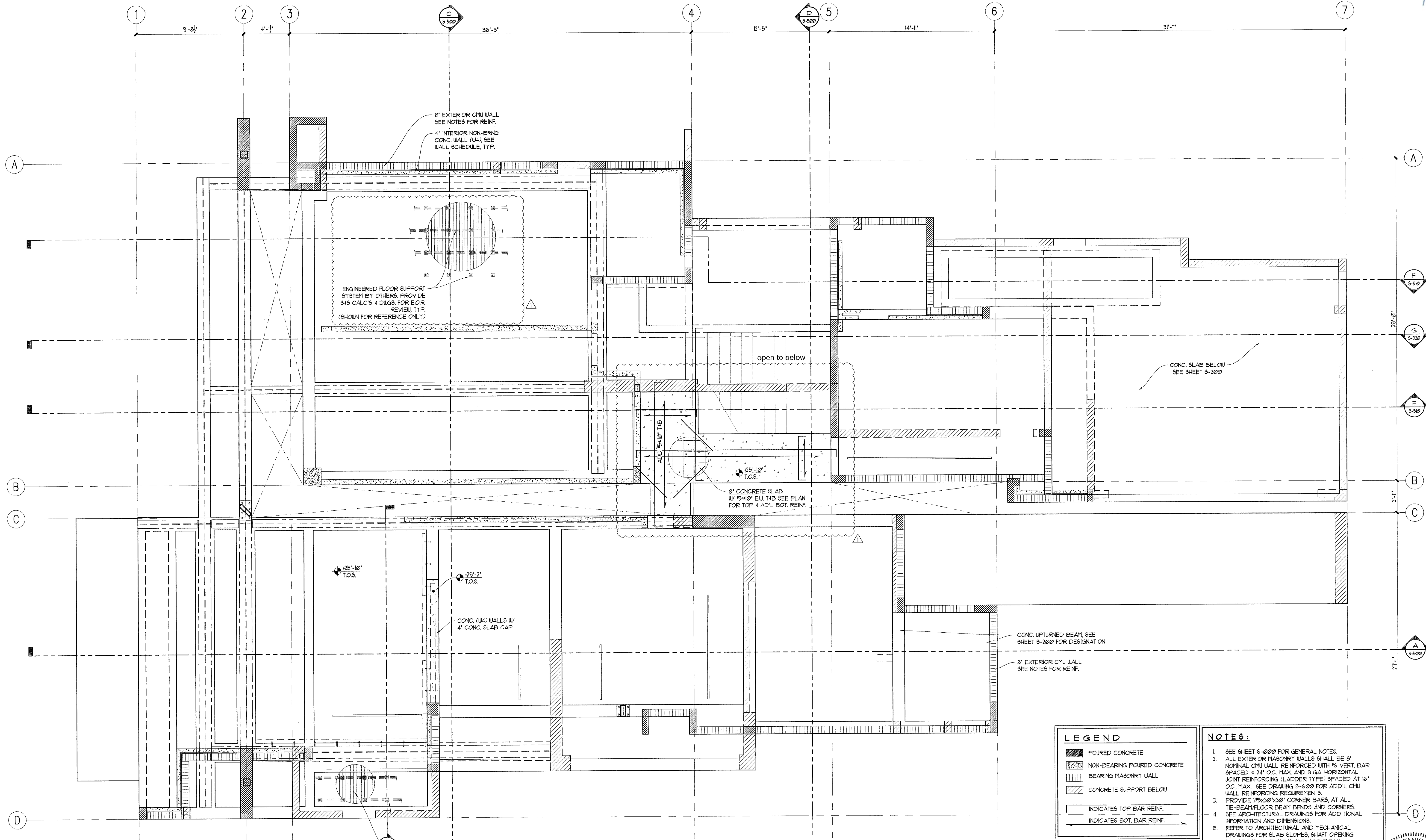
2ND FLOOR FRAMING PLAN
SCALE: 1/4"=1'-0"

OPTIMUS CONSULTING ENGINEERS
C.A. No. 28217 61706
TANYA HOMLEID PE
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel: 305.512.5860 Fax: 305.512.5861
E-mail: optimus@bellsouth.net

THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.

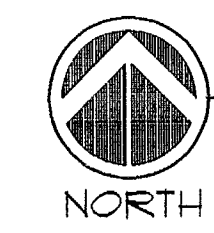
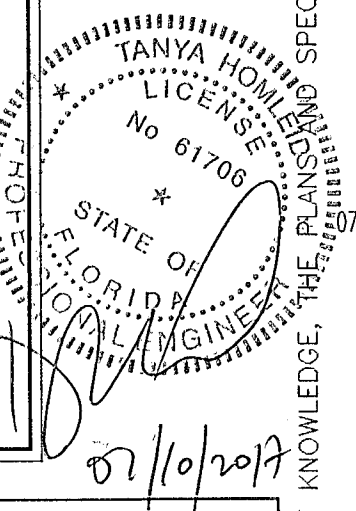






LEGEND	
	POURED CONCRETE
	NON-BEARING POURED CONCRETE
	BEARING MASONRY WALL
	CONCRETE SUPPORT BELOW
	INDICATES TOP BAR REINF.
	INDICATES BOT. BAR REINF.

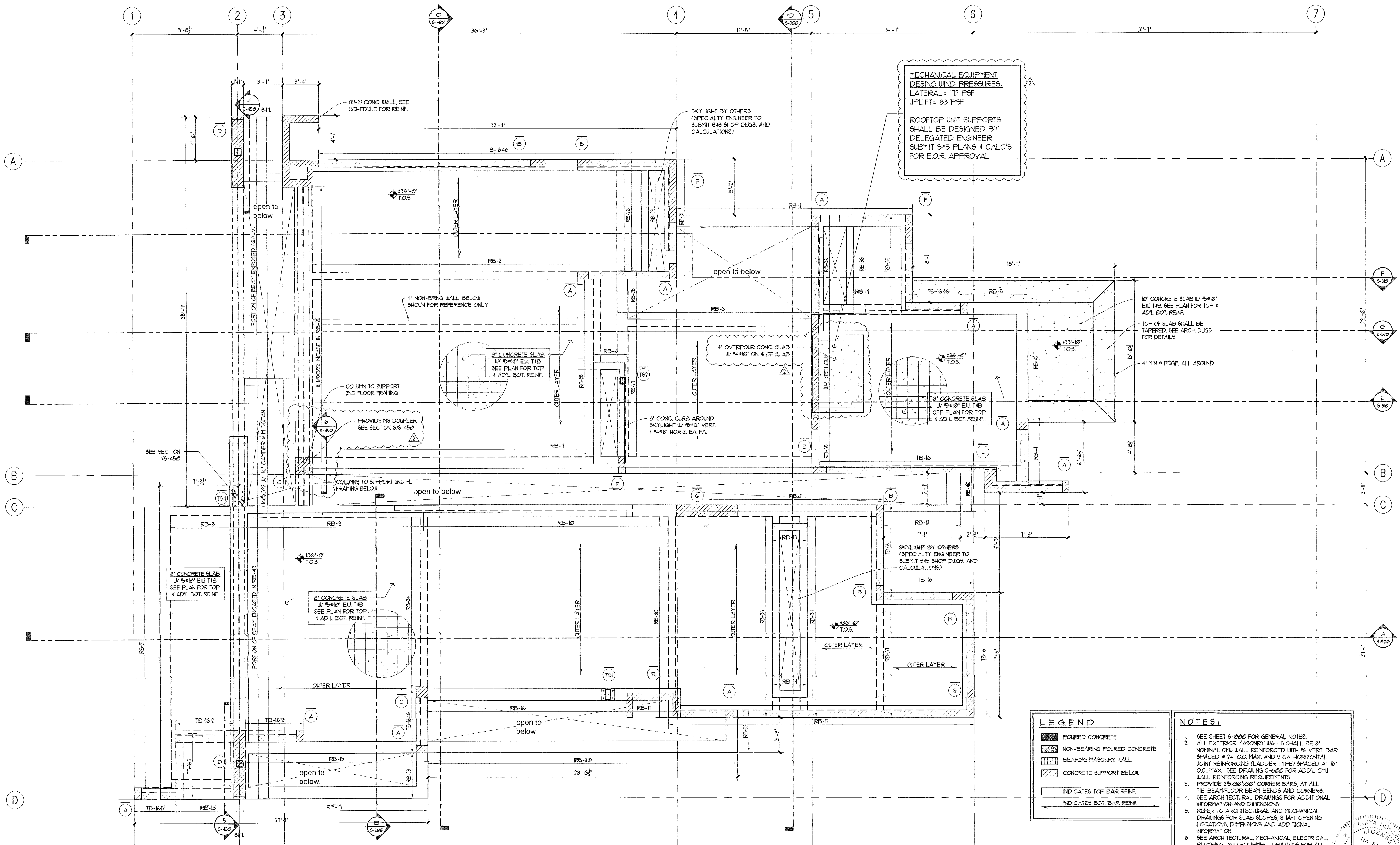
- NOTES:**
- SEE SHEET S-200 FOR GENERAL NOTES.
 - ALL EXTERIOR MASONRY WALLS SHALL BE 8" NOMINAL CMU WALL REINFORCED WITH 1/2" VERT. BAR SPACED @ 24" O.C. MAX. AND 3 GA. HORIZONTAL JOINT REINFORCING (LADDER TYPE) SPACED AT 16" O.C. MAX. SEE DRAWING S-200 FOR ADD'L CMU WALL REINFORCING REQUIREMENTS.
 - PROVIDE 25x30"x30" CORNER BARS, AT ALL TIE-BEAM/FLOOR BEAM BENDS AND CORNERS.
 - SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
 - REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB SLOPES, SHAFT OPENING LOCATIONS, DIMENSIONS AND ADDITIONAL INFORMATION.
 - SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND EQUIPMENT DRAWINGS FOR ALL SLAB PENETRATION LAYOUT, QUANTITIES, AND DIMENSIONS.
 - NO CORE DRILLING FOR PIPE PENETRATIONS OR INSTALLATION OF METAL STRUCTURES IS PERMITTED. PLACEMENT OF ALL PIPE SLEEVES, SLOTS AND ANCHORS SHALL BE DIMENSIONED AND COORDINATED WITH ALL TRADES AND APPROVED BY ARCHITECT, MECHANICAL AND STRUCTURAL ENGINEER PRIOR TO ANY PLACEMENT OF CONCRETE.



FLOATING DECK FRAMING PLAN
SCALE: 1/4"=1'-0"

OPTIMUS CONSULTING ENGINEERS
C.A. No: 28217
TANYA HOMLEID PE 61706
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel. 305.512.5860
Fax 305.512.5861
E-mail: optimus9@bellsouth.net

TO THE BEST OF MY KNOWLEDGE, THE ABOVE SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.



NOTES:

- ALL MASONRY WALLS SHALL BE 8" NOMINAL CMU WALL REINFORCED WITH #6 VERT. BAR SPACED @ 24" O.C. MAX. AND 3 GA. HORIZONTAL JOINT REINFORCING (LADDER TYPE) SPACED AT 16" O.C. MAX. SEE DRAWING S-600 FOR ADD'L CMU WALL REINFORCING REQUIREMENTS.
- PROVIDE 25x30x30" CORNER BARS, AT ALL TIE-BEAM/FLOOR BEAM BENDS AND CORNERS. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
- REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB SLOPES, SHAFT OPENING LOCATIONS, DIMENSIONS AND ADDITIONAL INFORMATION.

LEGEND

- POURED CONCRETE
- POURED CONCRETE W/ EXPOSED FIN.
- NON-BEARING CMU WALL TO BE INSTALLED AFTER COMPLETION OF FLOOR / ROOF ABOVE
- BREAKAWAY WALL, SEE SHEET S-401 FOR NOTES & DETAILS
- CONCRETE SUPPORT BELOW
- LOCATION OF 14" DIA. AUGERCAST CONCRETE PILES, SEE SHEET S-400
- INDICATES TOP BAR REINF.
- INDICATES BOT. BAR REINF.

TERMITE PROTECTION:

ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT PROTECTION AGAINST SUBTERRANEAN TERMITES. THE RULES AND LAWS AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES SHALL BE DEEMED AS APPROVED WITH RESPECT TO PRE-CONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST SUBTERRANEAN TERMITES. 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 RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

LEGEND

- POURED CONCRETE
- NON-BEARING POURED CONCRETE
- BEARING MASONRY WALL
- CONCRETE SUPPORT BELOW
- INDICATES TOP BAR REINF.
- INDICATES BOT. BAR REINF.

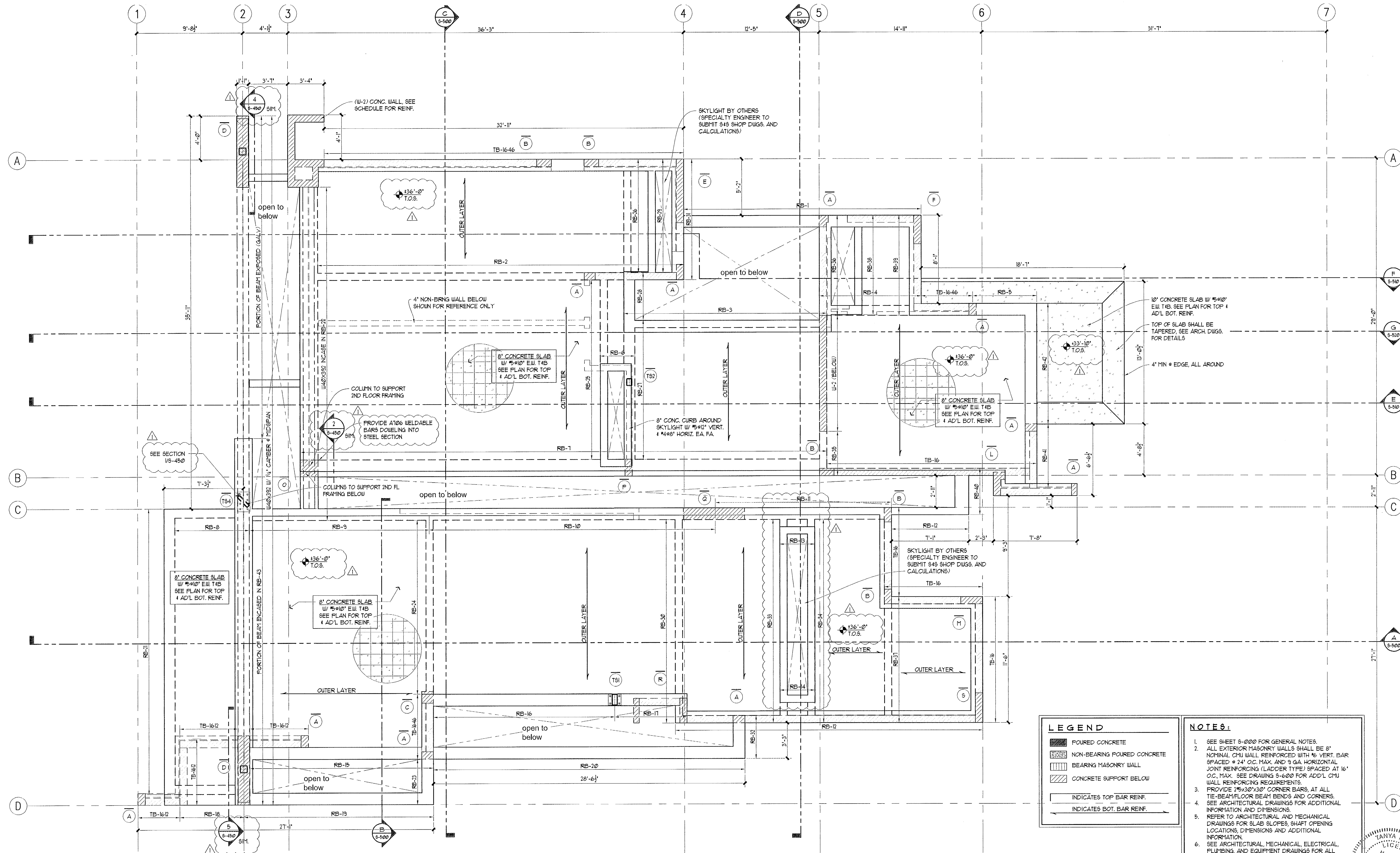
NOTES:

- SEE SHEET S-000 FOR GENERAL NOTES.
- ALL EXTERIOR MASONRY WALLS SHALL BE 8" NOMINAL CMU WALL REINFORCED WITH #6 VERT. BAR SPACED @ 24" O.C. MAX. AND 3 GA. HORIZONTAL JOINT REINFORCING (LADDER TYPE) SPACED AT 16" O.C. MAX. SEE DRAWING S-600 FOR ADD'L CMU WALL REINFORCING REQUIREMENTS.
- PROVIDE 25x30x30" CORNER BARS, AT ALL TIE-BEAM/FLOOR BEAM BENDS AND CORNERS.
- SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
- REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB SLOPES, SHAFT OPENING LOCATIONS, DIMENSIONS AND ADDITIONAL INFORMATION.
- SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND EQUIPMENT DRAWINGS FOR ALL SLAB PENETRATION LAYOUT, QUANTITIES, AND DIMENSIONS.
- NO CORE DRILLING FOR PIPE PENETRATIONS OR INSTALLATION OF METAL STRUCTURES IS PERMITTED. PLACEMENT OF ALL PIPE SLEEVES, SLOTS AND ANCHORS SHALL BE DIMENSIONED AND COORDINATED WITH ALL TRADES AND APPROVED BY ARCHITECT, MECHANICAL AND STRUCTURAL ENGINEER PRIOR TO ANY PLACEMENT OF CONCRETE.

MAIN ROOF FRAMING PLAN
SCALE: 1/4"=1'-0"
NORTH

OPTIMUS CONSULTING ENGINEERS
C.A. No. 26217 61708
TANIA HOMCIC PE
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel. 305.512.5350
Fax. 305.512.5961
E-mail: optimus@bellsouth.net

THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.



- NOTES:**
- ALL MASONRY WALLS SHALL BE 8" NOMINAL CMU WALL REINFORCED WITH 1/2" VERT. BAR SPACED @ 24" O.C. MAX. AND 3 GA. HORIZONTAL JOINT REINFORCING (LADDER TYPE) SPACED AT 16" O.C. MAX. SEE DRAWING S-600 FOR ADD'L CMU WALL REINFORCING REQUIREMENTS.
 - PROVIDE 2"x3"x30" CORNER BARS, AT ALL TIE-BEAM/FLOOR BEAM BENDS AND CORNERS.
 - SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
 - REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB SLOPES, SHAFT OPENING LOCATIONS, DIMENSIONS AND ADDITIONAL INFORMATION.

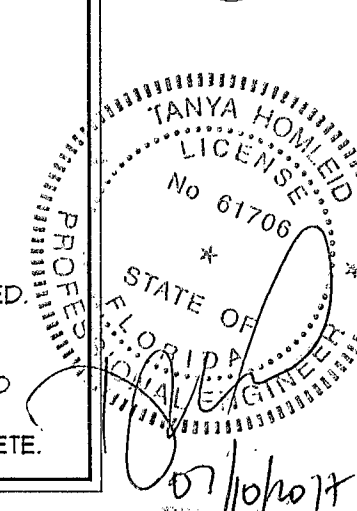
- LEGEND**
- POURED CONCRETE
 - POURED CONCRETE W/ EXPOSED FIN.
 - NON-BEARING CMU WALL TO BE INSTALLED AFTER COMPLETION OF FLOOR / ROOF ABOVE
 - BREAKAWAY WALL, SEE SHEET S-401 FOR NOTES & DETAILS
 - CONCRETE SUPPORT BELOW
 - LOCATION OF 14" DIA. AUGERCAST CONCRETE PILES, SEE SHEET S-400
 - INDICATES TOP BAR REINF.
 - INDICATES BOT. BAR REINF.

TERMITE PROTECTION:

ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT PROTECTION AGAINST SUBTERRANEAN TERMITES. THE RULES AND LAWS AS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES SHALL BE DEEMED AS APPROVED WITH RESPECT TO PRE-CONSTRUCTION SOIL TREATMENT FOR PROTECTION AGAINST SUBTERRANEAN TERMITES. 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 RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

- LEGEND**
- POURED CONCRETE
 - NON-BEARING POURED CONCRETE
 - BEARING MASONRY WALL
 - CONCRETE SUPPORT BELOW
 - INDICATES TOP BAR REINF.
 - INDICATES BOT. BAR REINF.

- NOTES:**
- SEE SHEET S-000 FOR GENERAL NOTES.
 - ALL EXTERIOR MASONRY WALLS SHALL BE 8" NOMINAL CMU WALL REINFORCED WITH 1/2" VERT. BAR SPACED @ 24" O.C. MAX. AND 3 GA. HORIZONTAL JOINT REINFORCING (LADDER TYPE) SPACED AT 16" O.C. MAX. SEE DRAWING S-600 FOR ADD'L CMU WALL REINFORCING REQUIREMENTS.
 - PROVIDE 2"x3"x30" CORNER BARS, AT ALL TIE-BEAM/FLOOR BEAM BENDS AND CORNERS.
 - SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND DIMENSIONS.
 - REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB SLOPES, SHAFT OPENING LOCATIONS, DIMENSIONS AND ADDITIONAL INFORMATION.
 - SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND EQUIPMENT DRAWINGS FOR ALL SLAB PENETRATION LAYOUT, QUANTITIES, AND DIMENSIONS.
 - NO CORE DRILLING FOR PIPE PENETRATIONS OR INSTALLATION OF METAL STRUCTURES IS PERMITTED. PLACEMENT OF ALL PIPE SLEEVES, SLOTS AND ANCHORS SHALL BE DIMENSIONED AND COORDINATED WITH ALL TRADES AND APPROVED BY ARCHITECT, MECHANICAL AND STRUCTURAL ENGINEER PRIOR TO ANY PLACEMENT OF CONCRETE.



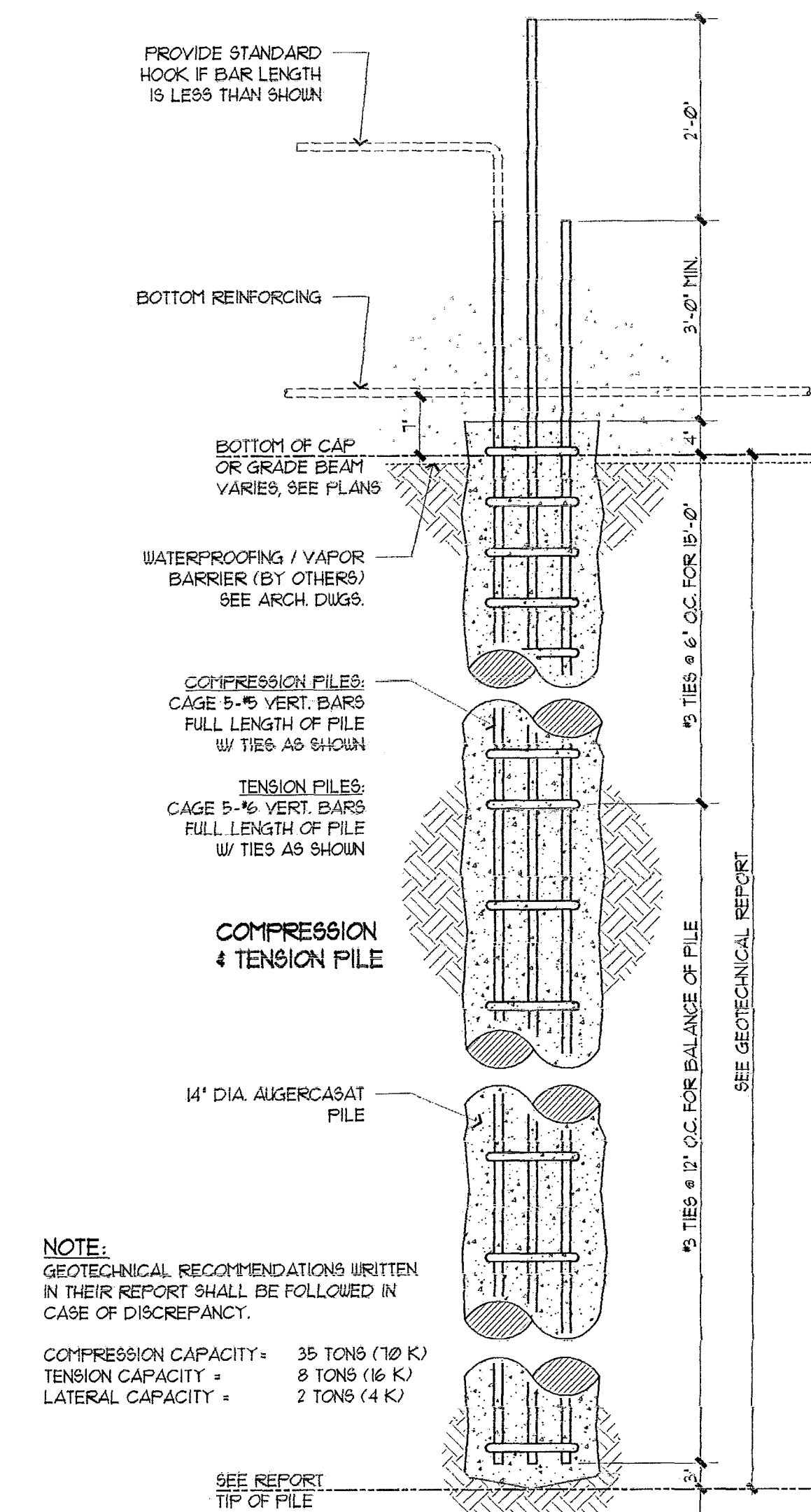
OPTIMUS CONSULTING ENGINEERS
C.A. No. 25217
TANYA HOMLED PE 61706
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel: 305.512.5860
Fax: 305.512.5861
E-mail: optimusd@bellsouth.net

MAIN ROOF FRAMING PLAN
SCALE: 1/4"=1'-0"

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.

FILE FOUNDATION NOTES:

- PC PILES DESIGN LOADS ARE SHOWN BELOW AS PER THE RECOMMENDATION OF THE GEOTECHNICAL INVESTIGATION BY ALL STATE ENGINEERING & TESTING CONSULTANTS. REPORT DATED OCTOBER 11, 2016.
- ALL FILE WORK SHALL BE SUPERVISED BY A STATE OF FLORIDA LICENSED PROFESSIONAL ENGINEER.
- ALL FILE WORK SHALL CONFORM WITH THE FLORIDA BUILDING CODE 2014.
- TOP OF FILE CAPS ARE INDICATED ON PLAN OR THIS. (1'-X'-1" N.G.V.D.) GENERAL CONTRACTOR SHALL IDENTIFY THOSE FILE CAPS WHERE CONFLICT WITH OTHER TRADES EXIST AND BRING THEM TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE COMMENCING WORK AT THAT AREA.
- ALL FILES ARE TO BE INSTALLED DOWN TO THE BEARING STRATA AS PER SOIL CONSULTANT'S RECOMMENDATIONS.
- RECORDS OF FILE PENETRATION OF EVERY FILE, AND THE BEHAVIOR OF SOME DURING INSTALLATION SHALL BE FILED WITH THE BUILDING DEPARTMENT AND SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW.
- A PLAN SHOWING THE IDENTIFICATION AND THE AS-BUILT LOCATION OF ALL FILES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO POURING OF FILE CAPS AND GRADE BEAMS.
- THE OWNER SHALL CONTRACT A COMPETENT SOILS LABORATORY TO SUPERVISE THE INSTALLATION OF FILES, PERFORM FILE GROUT TESTS AS PER SPECIFICATIONS AND SOIL REPORT AND SUPERVISE THE LOAD TESTS.
- LOAD TESTS SHALL BE PERFORMED AS PER THE FLORIDA BUILDING CODE 2014. IN ADDITION THE LOAD TEST SHALL VERIFY THE FILE TENSION AND LATERAL CAPACITIES.
- FILE GROUT SHALL BE A HIGH-STRENGTH MORTAR COMPOSED OF A MIXTURE OF PORTLAND CEMENT, MINERAL FILLER, FILLER SAND AND WATER SO PROPORTIONED AND MIXED AS TO PROVIDE A MORTAR CAPABLE OF MAINTAINING THE SOLIDS IN SUSPENSION WITHOUT APPRECIABLE WATER GAIN, YET WHICH MAY BE PUMPED WITHOUT DIFFICULTY AND WHICH WILL LATERALLY PENETRATE AND FILL ANY VOIDS IN THE FOUNDATION MATERIAL. THE MATERIALS SHALL BE SO PROPORTIONED AS TO PROVIDE A HARDENED MORTAR HAVING AN ULTIMATE COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS FOR ALL FILES.
- CONTRACTOR SHALL PROTECT FROM CORROSION ANY STEEL EXPOSED TO WEATHER FOR A PROLONGED PERIOD OF TIME DURING CONSTRUCTION.
- PROVIDE FULL TENSION SPLICES IN ALL REINFORCING, CONFORM TO ALL APPLICABLE REQUIREMENTS OF "CONCRETE REINFORCEMENT" AND "CAST-IN-PLACE CONCRETE." LOCATION TOLERANCE SHALL BE AS FOLLOWS:
2" SINGLE FILE AND 2" FILE CAPS TRANSVERSE TO LINE OF FILES, ALL OTHERS 3".
- WHERE AS BUILT FILES ARE OUT OF POSITION BY MORE THAN THE TOLERANCES, OR REJECTED BY THE SUPERVISING GEOTECHNICAL ENGINEER, THE CONTRACTOR SHALL BEAR ALL COSTS OF REVIEWING, CHECKING, AND REDESIGNING THE FILE CAPS, FOR ADDITIONAL MATERIALS AND LABOR TO CONSTRUCT THE REVISED CAPS, AND FOR ANY ADDITIONAL FILES THAT ARE REQUIRED TO SATISFY THE DESIGN CRITERIA.

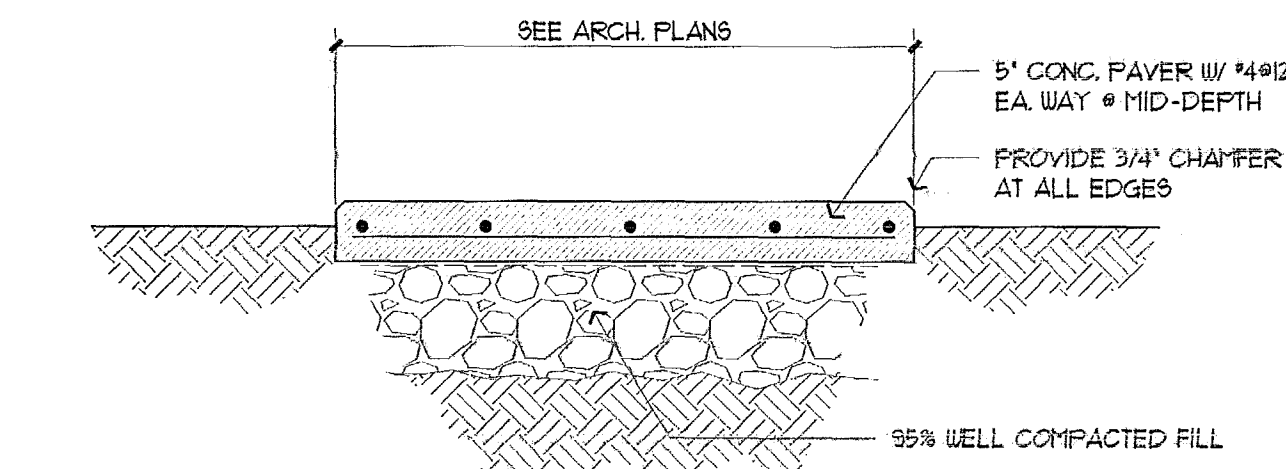
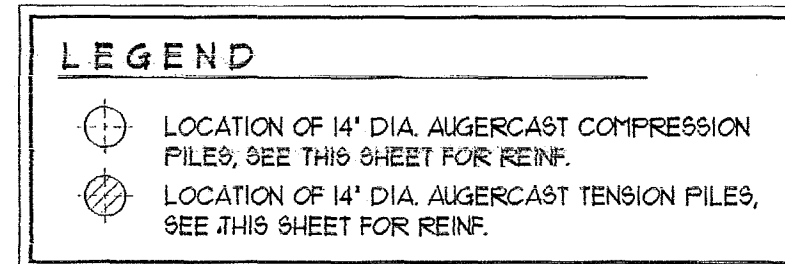
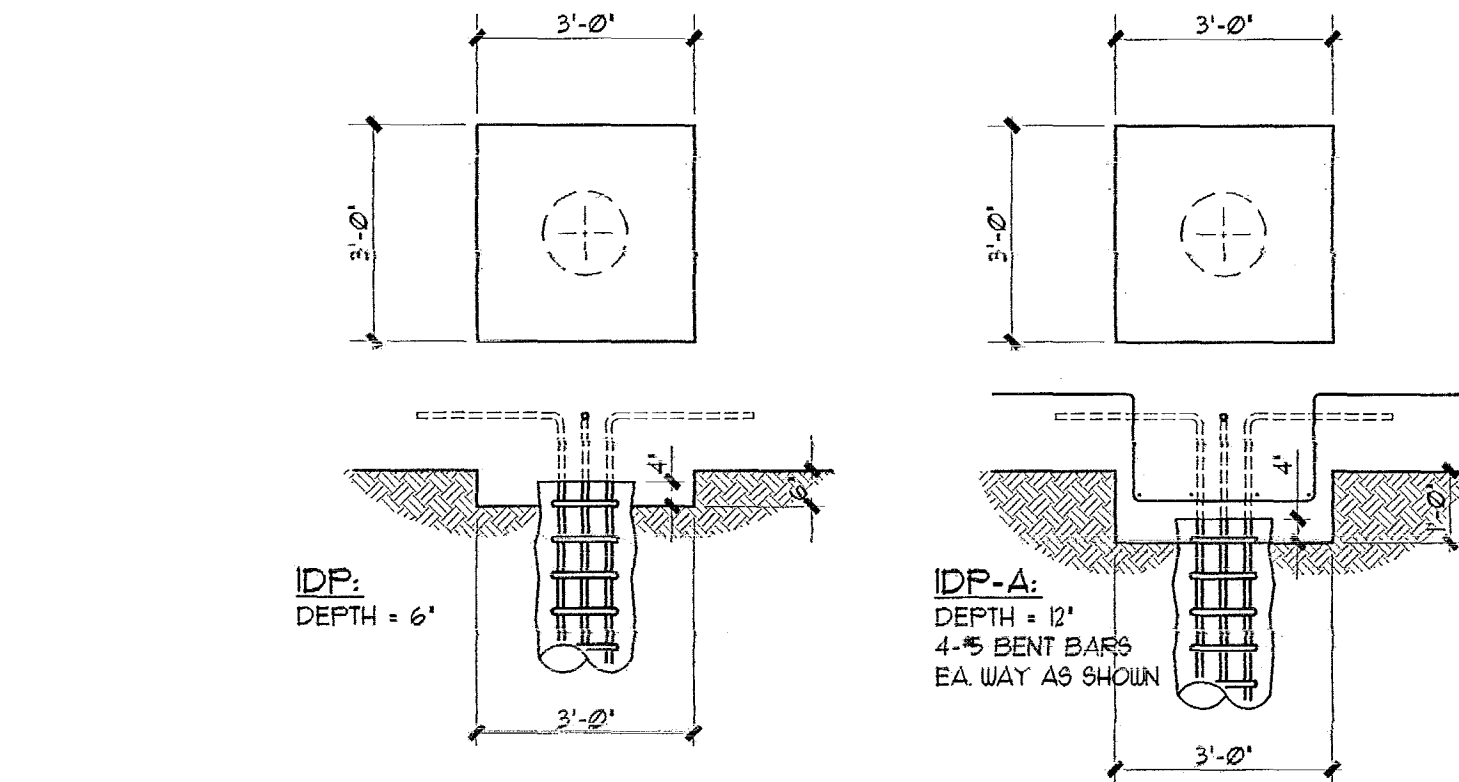
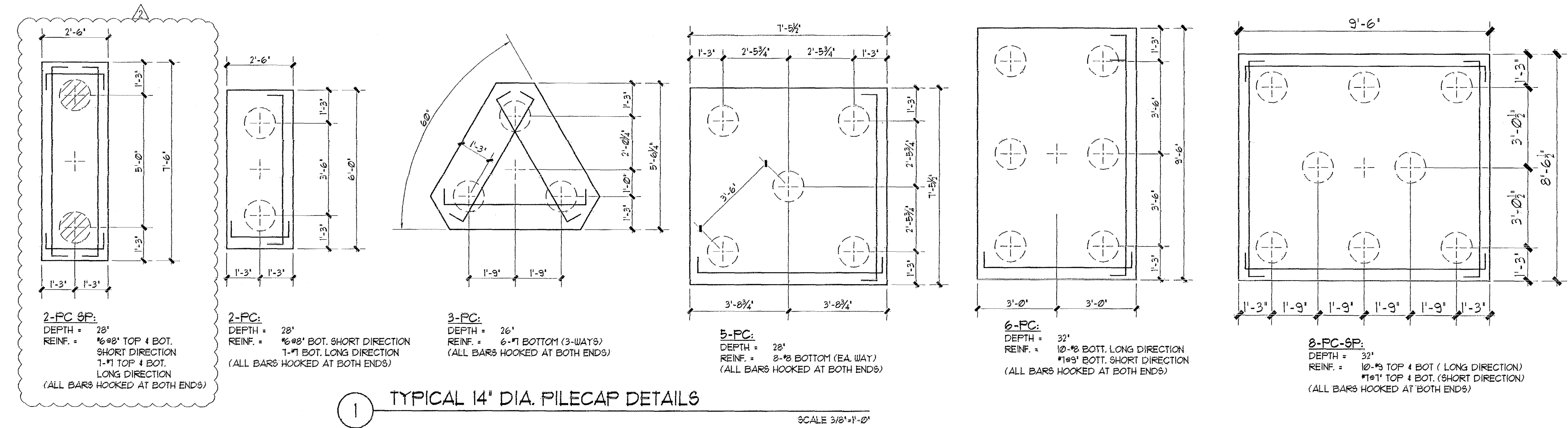


NOTE:
GEOTECHNICAL RECOMMENDATIONS WRITTEN IN THEIR REPORT SHALL BE FOLLOWED IN CASE OF DISCREPANCY.

COMPRESSION CAPACITY = 35 TONS (10 K)
TENSION CAPACITY = 8 TONS (6 K)
LATERAL CAPACITY = 2 TONS (4 K)

SEE REPORT, TIP OF FILE

* NOTE: FILE TIP ELEVATION MAY VARY, SEE SOILS REPORT BY GEOTECHNICAL ENGINEER



5 TYP. CONCRETE PAVER DETAIL
SCALE: 3/4"=1'-0"

STRUCTURAL DESIGN, LLC
OPTIMUS CONSULTING ENGINEERS
C.A. No: 28217
TANYA HOWLEID PE 61708
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
TEL: 305.512.5883
Fax: 305.512.5881
E-mail: optimusd@bellsouth.net

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.

28 W DILIDO RESIDENCE
28 WEST DILIDO DR.
MIAMI BEACH, FL 33139

seal

Raphael Levy
registered architect
AR0094779

comm no.
1652

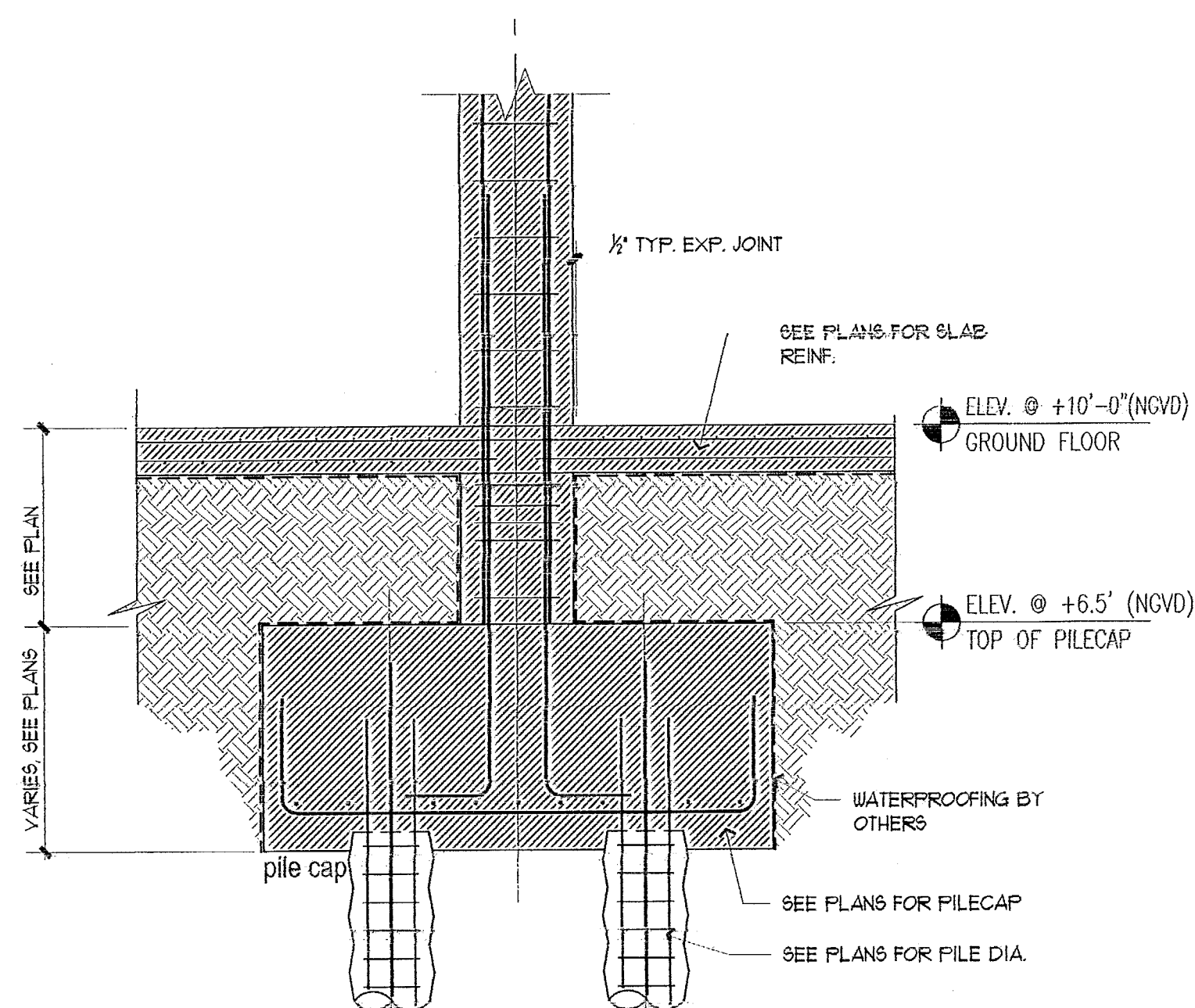
date:
02/03/17

revised:

08-11-17 B.O. COMMENTS/O. CHANGES

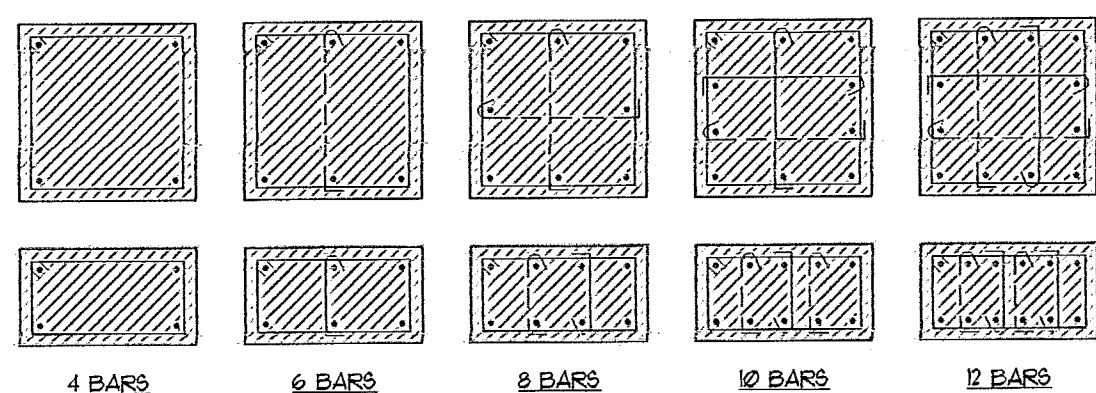
sheet no.

S-400



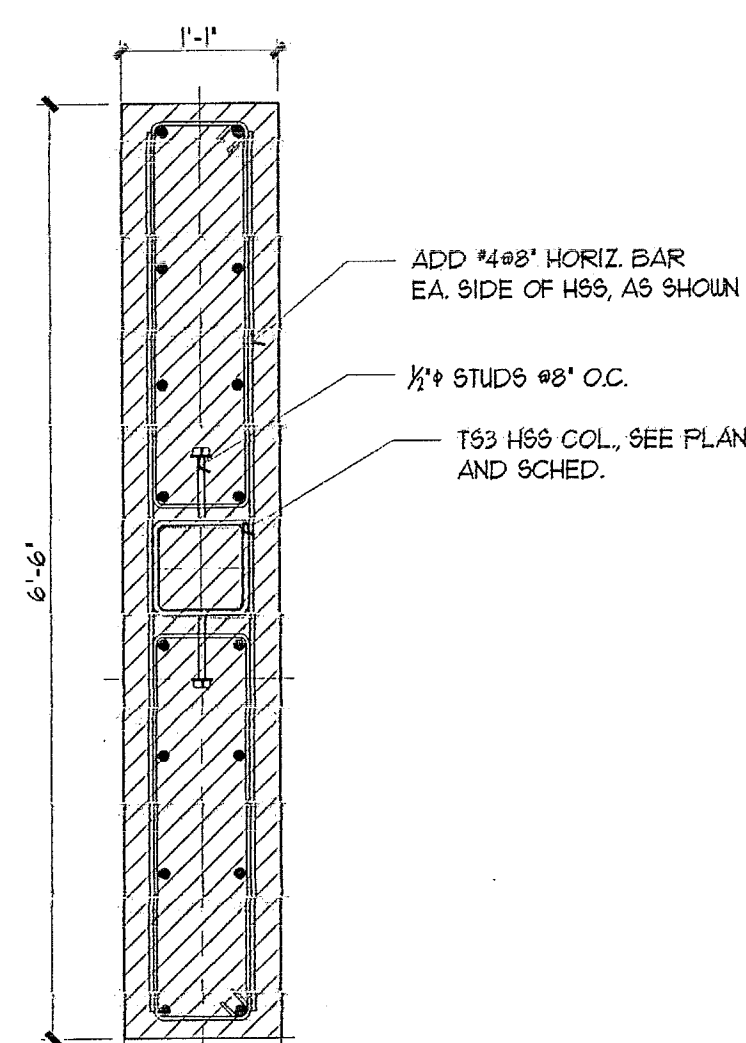
TYPICAL CONCRETE COLUMN DETAIL

SCALE NTS

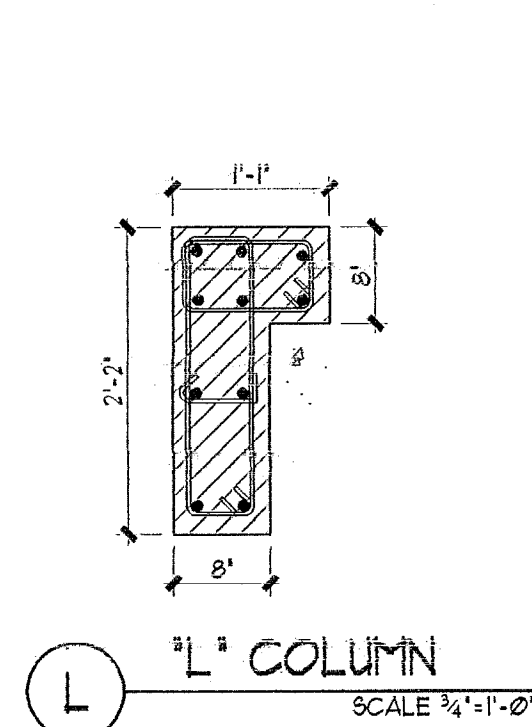


NOTE:

1. PROVIDE "3 HAIRPINS WHERE VERT. BAR SPACING EXCEEDS 6" CLEAR DISTANCE (TYPICAL)
2. DASHED TIES MAY BE OMITTED IF CLEAR DISTANCE BETWEEN ADJACENT VERTICALS LESS THAN 6'.
3. ALTERNATE POSITION OF 90 DEG. HOOKS ON SINGLE TIES.
4. DISTRIBUTION VERTICAL BARS EVENLY.

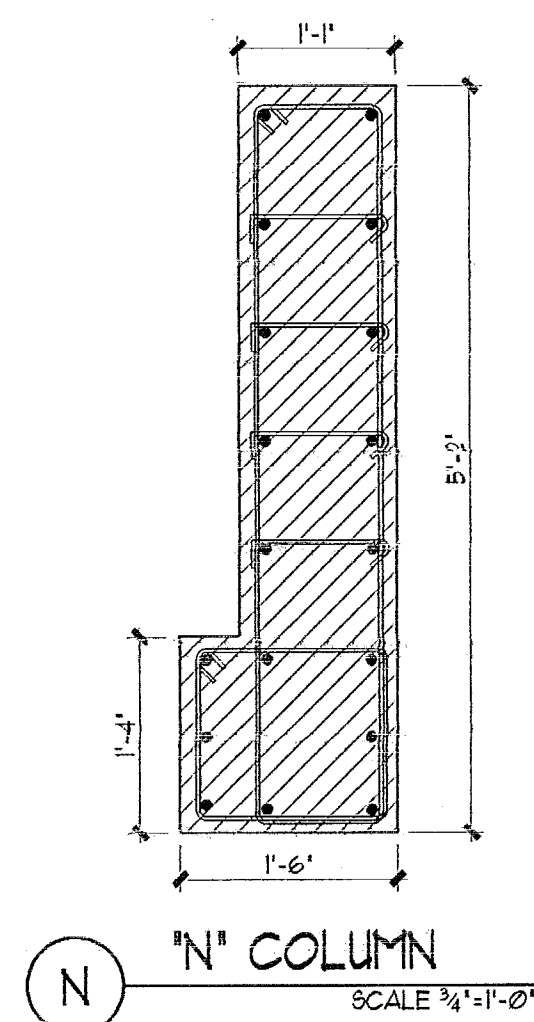


(D) 'D' COLUMN



"L" COLUMN

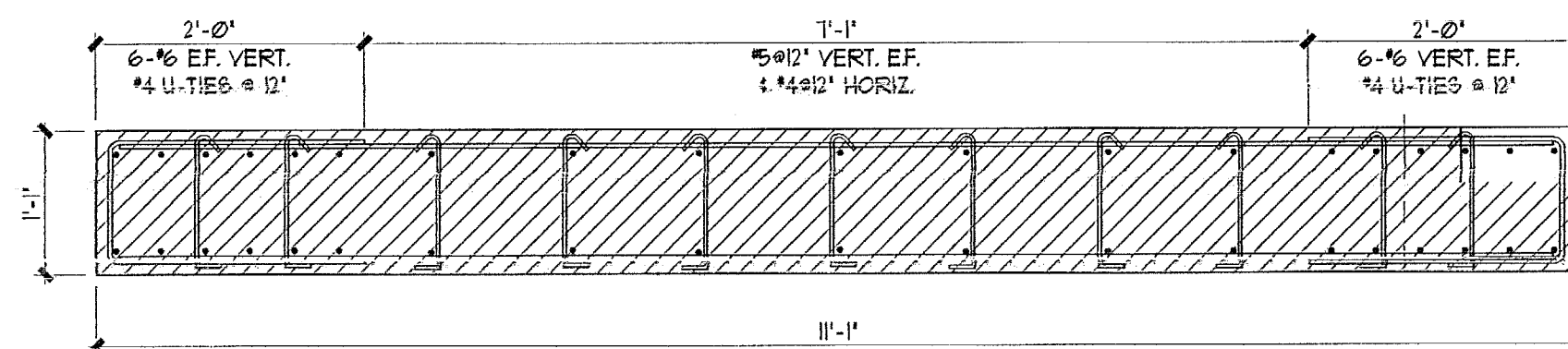
SCALE $\frac{3}{4}" = 1'-0"$



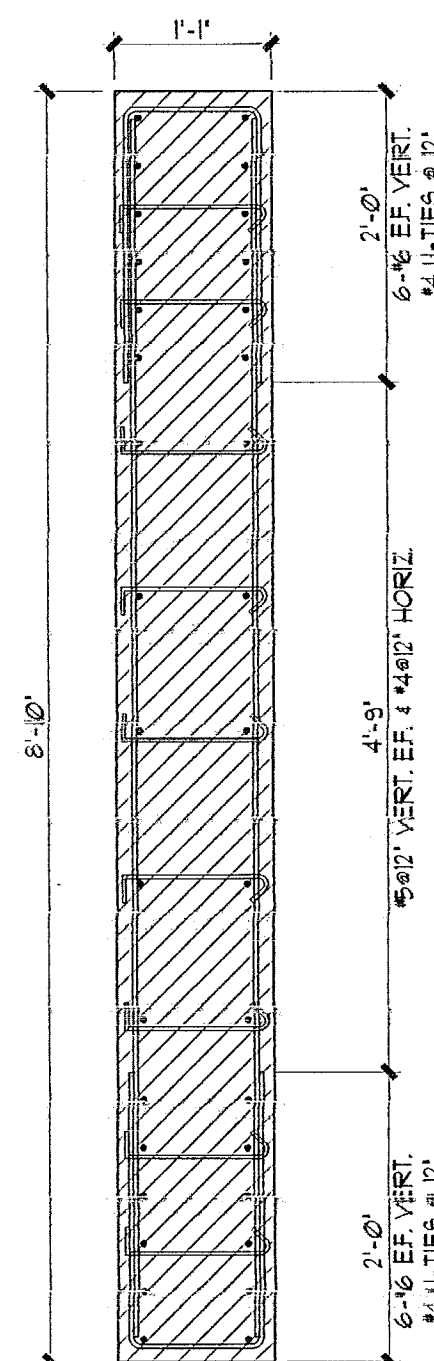
"N" COLUMN

CONCRETE WALL SCHEDULE				
MARK	SIZE (W X D)	REINFORCING		REMARKS
		VERTICAL STEEL	HORIZONTAL STEEL	
W1	12" X SEE PLAN	6 #12 EF.	5 #12 EA FACE	PROVIDE 30' X 30' 1" BARS @ EA END @ 12" O.C.
W2	8" X SEE PLAN	5 #12 EF.	4 #12 EA FACE	PROVIDE 30' X 30' 1" BARS @ EA END @ 12" O.C.
W3	6" X SEE PLAN	4 #8 EA FACE	4 #12 EA FACE	PROVIDE 30' X 30' 1" BARS @ EA END @ 12" O.C.
W4	4" X SEE PLAN	4 #8 ON ϕ	4 #8 ON ϕ	PROVIDE 30' X 30' 1" BARS @ EA END @ 12" O.C.
W5	8" X SEE PLAN	5 #12 EA FACE (OUTER LAYER)	4 #8 EA FACE (INNER LAYER)	PROVIDE 30' X 30' CORNER BARS IF REQUIRED

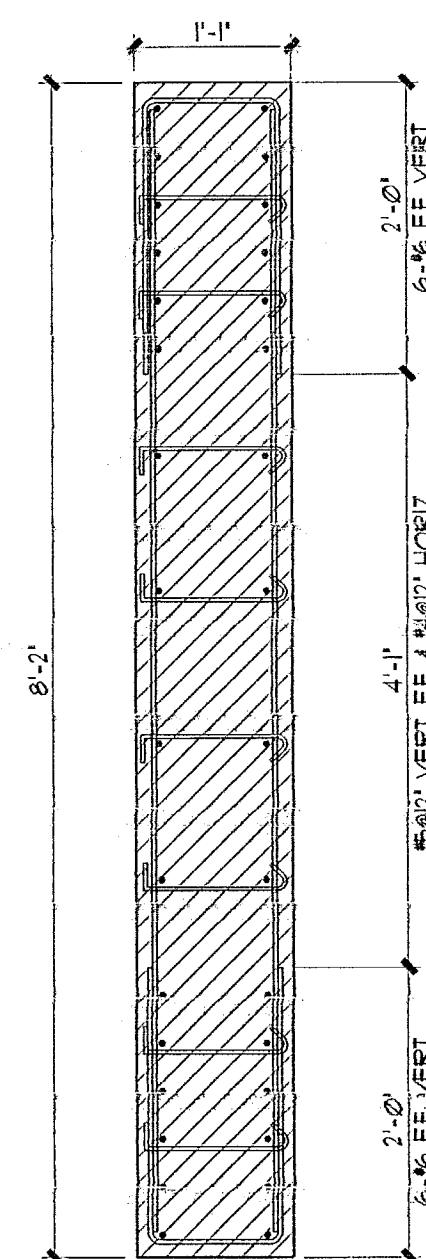
FC = 5000 PSI



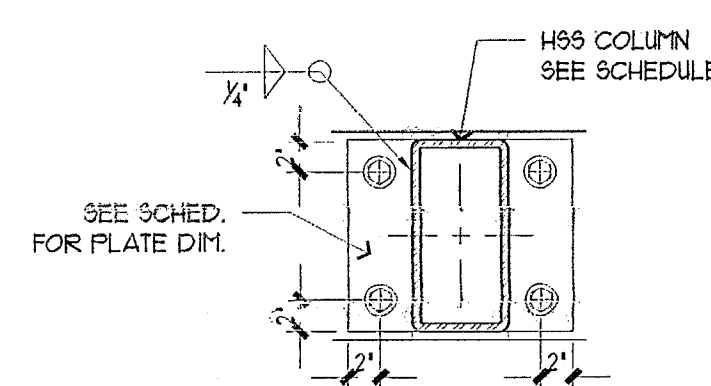

 "SW-A" WALL
 SCALE $\frac{3}{4}" = 1' - 0"$



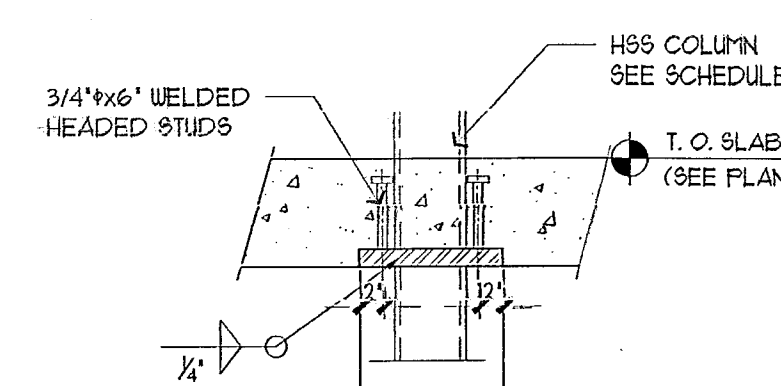
(SWC) "SW-C" WALL
SCALE 3/4"=1'-0"



"SW-D" WALL



1 HSS STEEL PLATE
SCALE 1"=1'-0"



2 TYP. STEEL COL. CONN. SCALE 3/4"=1'-0"

STEEL COLUMN SCHEDULE				
MARK	SIZE	BASE E	CAP E	REMARKS
(T81)	H3612x6x1/2	14"x12"x1" W/ (4) 3/4"x6" STUDS	14"x12"x1" W/ (4) 3/4"x6" STUDS	FILLED WITH 3,000 PSI GROUT
(T82)	H3612x6x1/2	14"x6"x1" W/ (4) 3/4"x6" STUDS	14"x6"x1" W/ (4) 3/4"x6" STUDS	FILLED WITH 3,000 PSI GROUT
(T83)	H3612x6x1/2	14"x10"x1" W/ (4) 3/4"x6" STUDS	14"x10"x1" W/ (4) 3/4"x6" STUDS	FILLED WITH 3,000 PSI GROUT
(T84)	H3616x4x1/2	22"x14"x1 1/4" W/ (6) 3/4" THRU BOLTS	22"x14"x1 1/4" W/ (6) 3/4" THRU BOLTS	

CONCRETE COLUMN SCHEDULE				
MARK	SIZE (W x D)	REINFORCING		REMARKS
		VERT.	TIE SIZE & SPACING	
(A)	8'x13'	4-#6	#3 @ 8' O.C.	
(B)	8'x16'	4-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(C)	13'x13'	6-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(D)	13'x18' SEE DETAIL	16-#7	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(E)	8'x10'	10-#7	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(F)	8'x11 1/2'	8-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(G)	8'x28'	6-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(H)	8'x38'	12-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(J)	13'x28'	20-#7	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(K)	13'x54'	12-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(L)	SEE DETAIL	10-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(M)	8'x24'	6-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(N)	SEE DETAIL	18-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(O)	18 1/2'x19'	8-#7	#3 @ 8' O.C.	PROVIDE MECHANICAL SPLICE (SEE SECTION 6/13-450) PROVIDE #3 HAIRPINS
(P)	8'x18 1/2'	4-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(Q)	13'x67'	14-#7	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(R)	8'x21'	6-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(S)	8'x32'	8-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(TC)	8'x16'	6-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(FA)	16'x16'	8-#6	#3 @ 12' O.C.	STEEL COLUMN FEDESTAL
(FB)	20'x20'	8-#6	#3 @ 12' O.C.	STEEL COLUMN FEDESTAL
(FC)	24'x24'	8-#7	#3 @ 12' O.C.	STEEL COLUMN FEDESTAL

F/C. = 5000 PSI

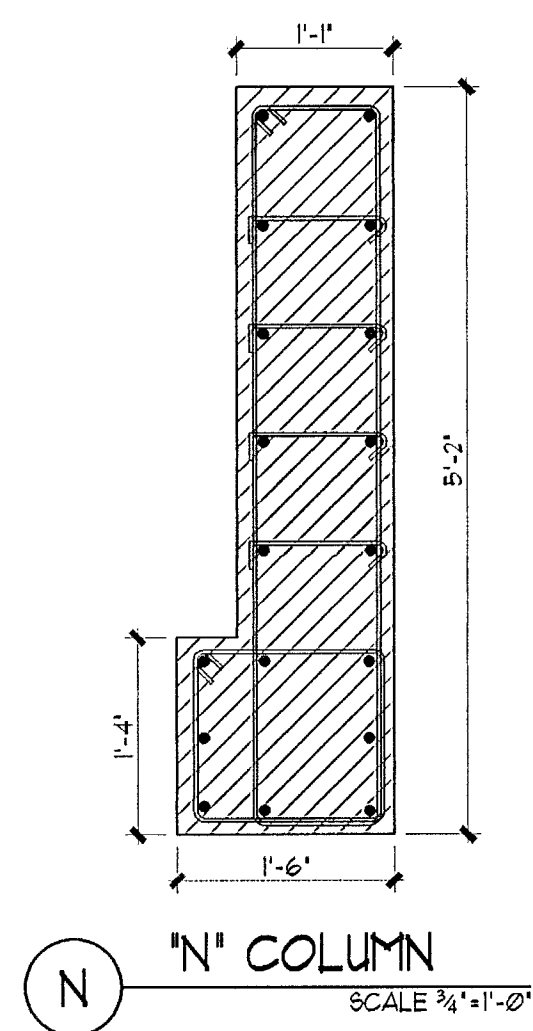
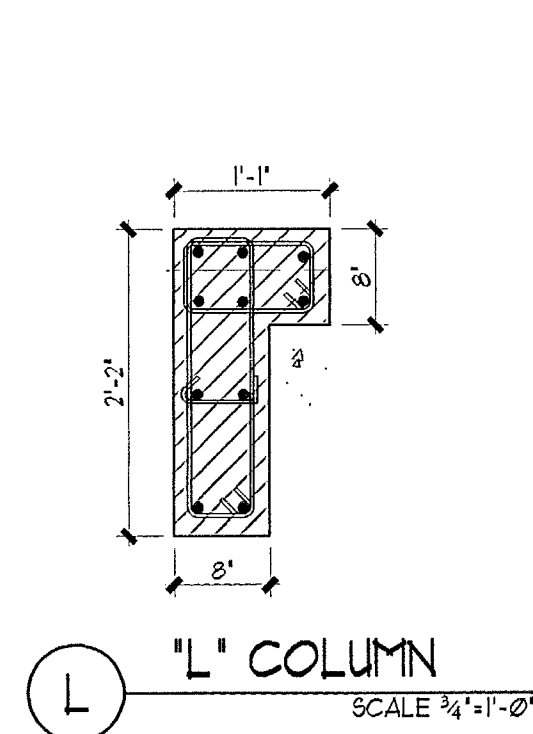
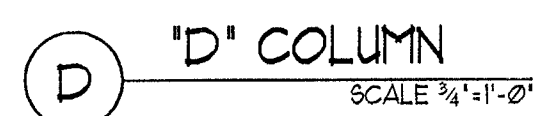
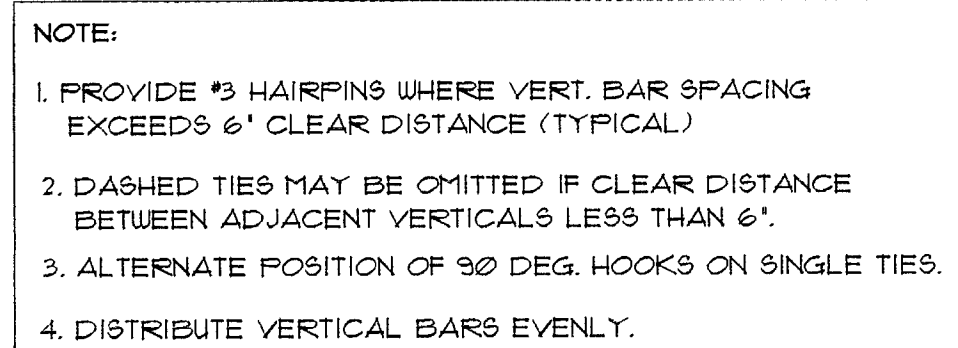
TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.

STRUCTURAL DESIGN LLC

OPTIMUS

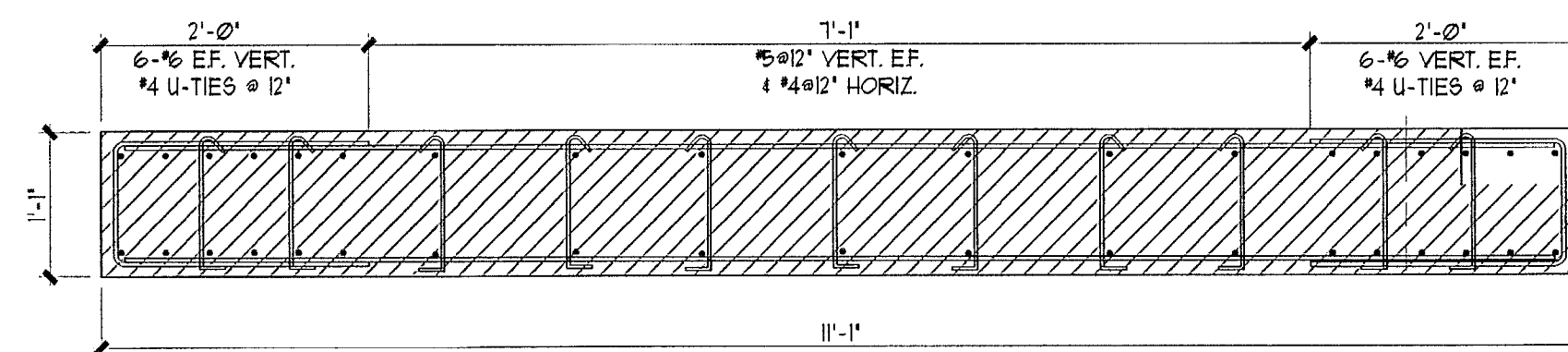
C.A. No: 26217
TANYA HOMLED PC 61706

7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33116
Tel: 305.912.5860
Fax: 305.512.5891
E-mail: optimusss@bellsouth.net

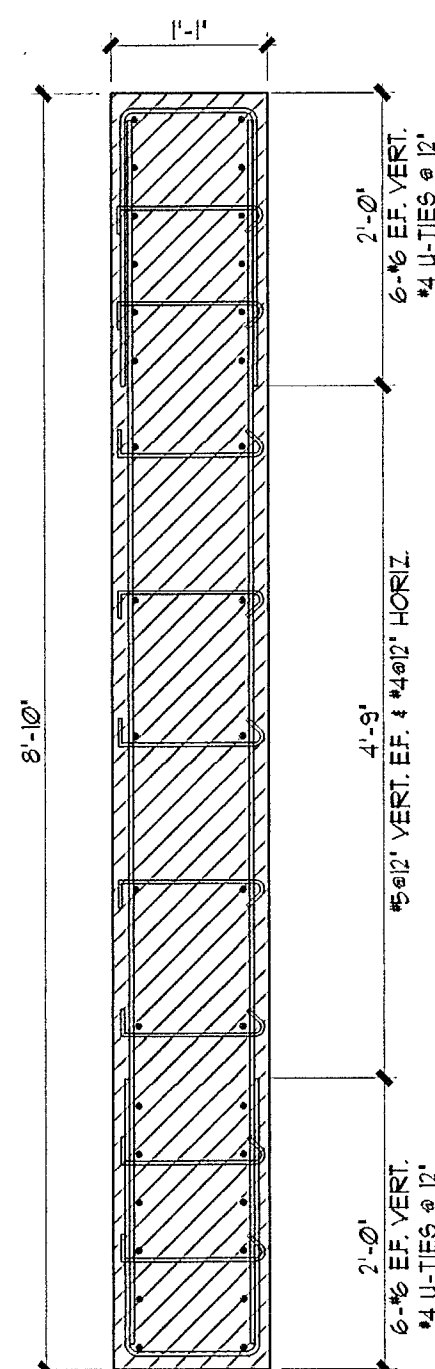


CONCRETE WALL SCHEDULE				
MARK	SIZE (W x D)	REINFORCING		REMARKS
		VERTICAL STEEL	HORIZONTAL STEEL	
W1	12"x SEE PLAN	6-#12' EF.	5-#12' EA. FACE	PROVIDE 30"x30" 1" BARS @ EA. END @ 12' O.C.
W2	8"x SEE PLAN	5-#12' EF.	4-#12' EA. FACE	PROVIDE 30"x30" 1" BARS @ EA. END @ 12' O.C.
W3	6"x SEE PLAN	4-#8' EA. FACE	4-#10' EA. FACE	PROVIDE 30"x30" 1" BARS @ EA. END @ 12' O.C.
W4	4"x SEE PLAN	4-#8' ON E	4-#8' ON E	PROVIDE 30"x30" 1" BARS @ EA. END @ 12' O.C.
W5	8"x SEE PLAN	5-#12' EA. FACE (OUTER LAYER)	4-#8' EA. FACE (INNER LAYER)	PROVIDE 30"x30" CORNER BARS IF REQUIRED

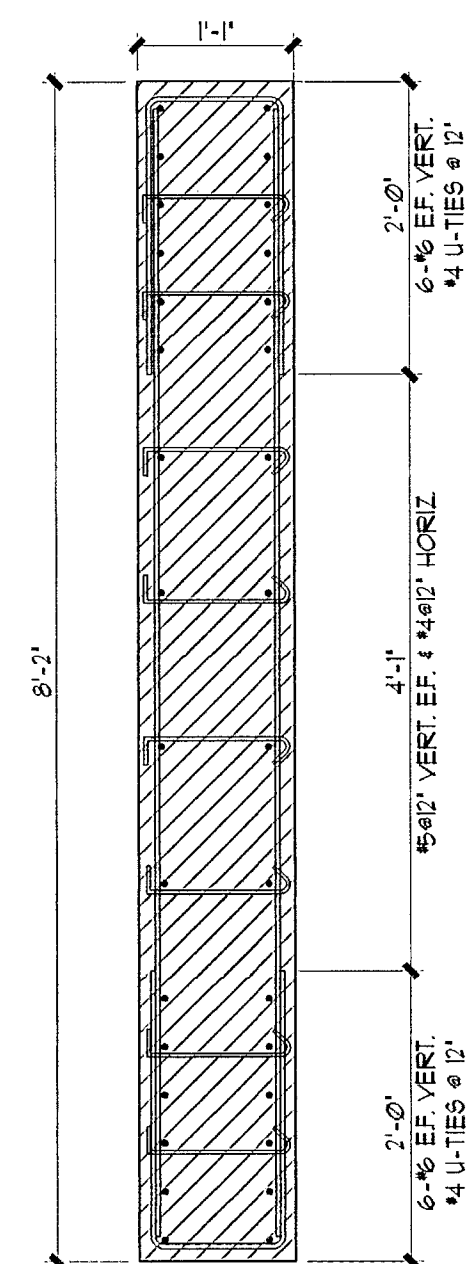
F'C = 5000 PSI



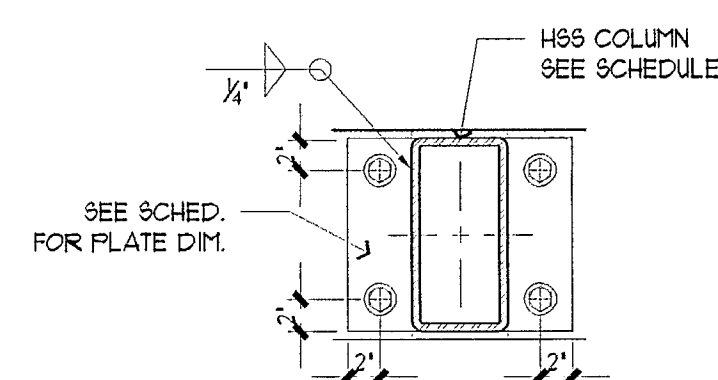

 "SW-A" WALL
 SCALE 3/4" = 1'-0"



SWC "SW-C" WALL
SCALE 3/4" = 1'-0"



SWD "SW-D" WALL
SCALE 3/4"=1'-0"

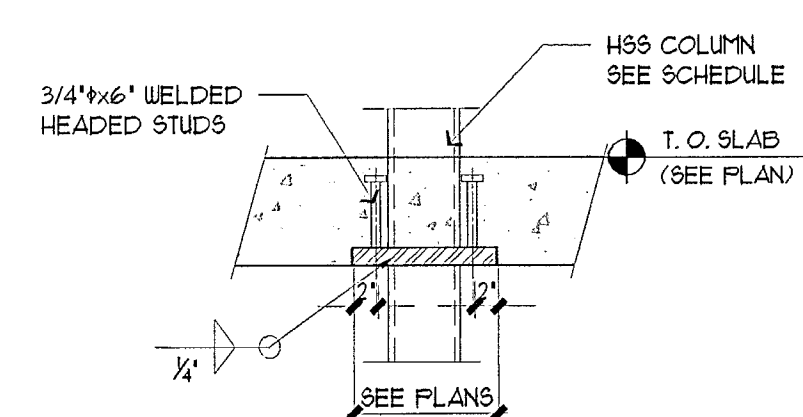


1 HSS STEEL PLATE
SCALE 1"=1'-0"

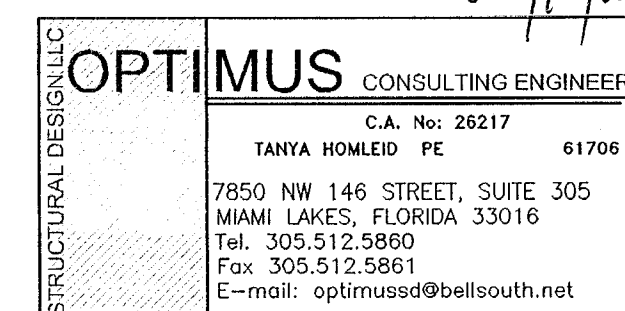
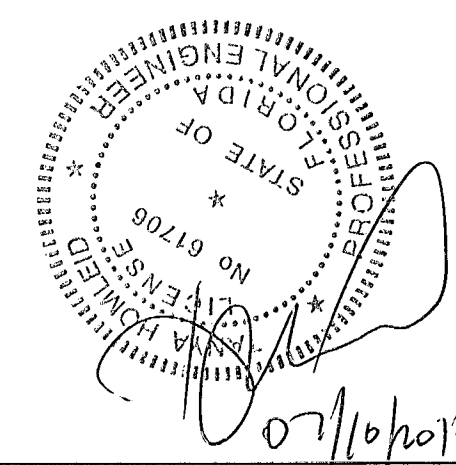
STEEL COLUMN SCHEDULE				
MARK	SIZE	BASE E	CAP E	REMARKS
(T91)	H592x6x1/2	14"x12"x1" W/ (4) 3/4"x6" STUDS	14"x12"x1" W/ (4) 3/4"x6" STUDS	FILLED WITH 3,000 PSI GROUT
(T92)	H358x6x1/2	14"x6"x1" W/ (4) 3/4"x6" STUDS	14"x6"x1" W/ (4) 3/4"x6" STUDS	FILLED WITH 3,000 PSI GROUT
(T93)	H358x8x1/2	14"x10"x1" W/ (4) 3/4"x6" STUDS	14"x10"x1" W/ (4) 3/4"x6" STUDS	FILLED WITH 3,000 PSI GROUT
(T94)	H5916x4x1/2	22"x14"x1" W/ (6) 3/4" THRU BOLTS	22"x14"x1" W/ (6) 3/4" THRU BOLTS	

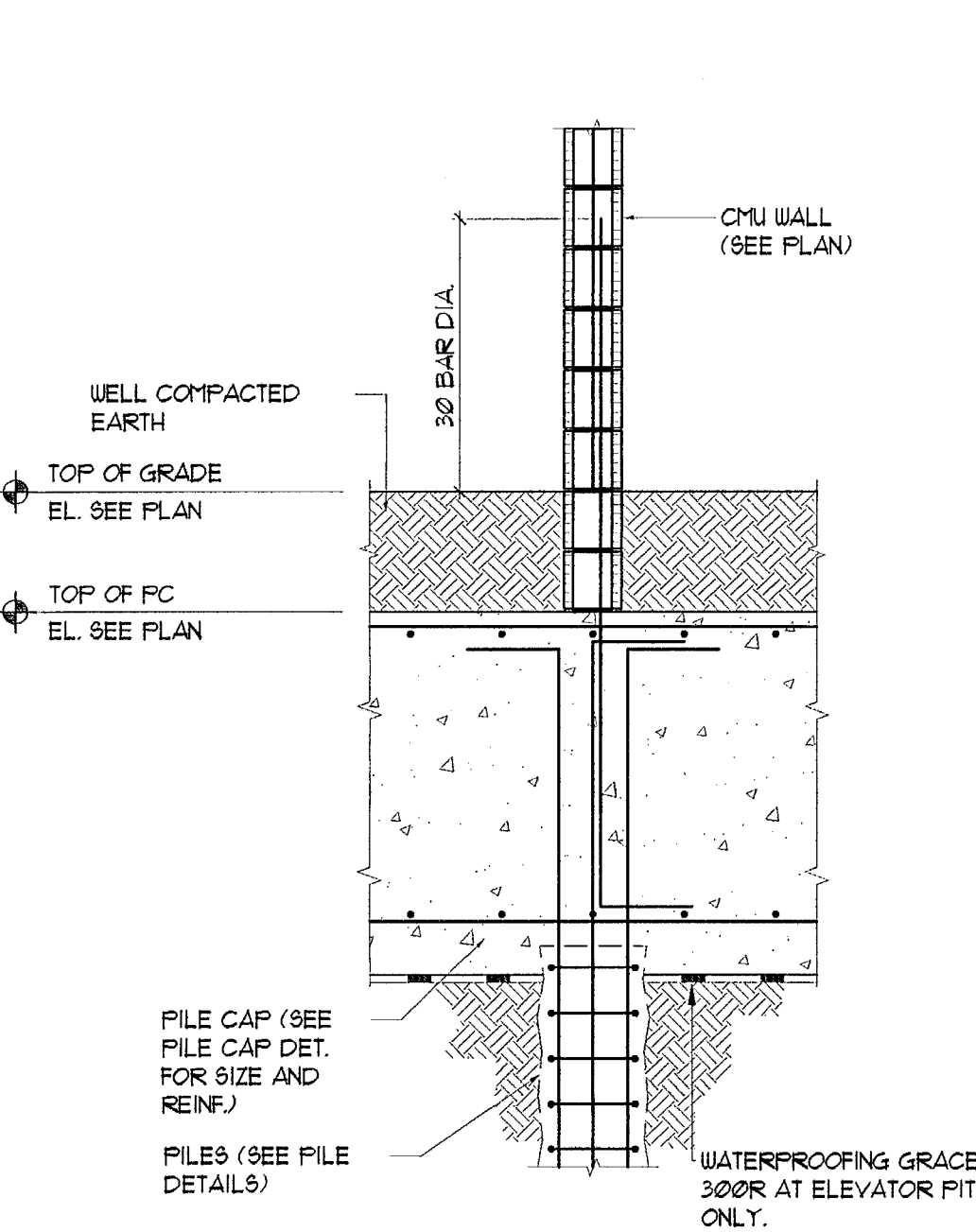
CONCRETE COLUMN SCHEDULE				
MARK	SIZE (W x D)	REINFORCING		REMARKS
		VERT.	TIE SIZE & SPACING	
(A)	8'x3'	4-#6	#3 @ 8' O.C.	
(B)	8'x16'	4-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(C)	13'x13'	6-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(D)	13'x18' SEE DETAIL	16-#7	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(E)	8'x10'	10-#7	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(F)	8'x31 1/2'	8-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(G)	8'x28'	6-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(H)	8'x58'	12-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(J)	13'x28'	20-#7	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(K)	13'x54'	12-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(L)	SEE DETAIL	10-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(M)	8'x24'	6-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(N)	SEE DETAIL	18-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(O)	18 1/2'x20'	8-#7	#3 @ 8' O.C.	PROVIDE #7 DOWELS W/ 4'-8" MIN. TENSION LAP SPLICE. PROVIDE #3 HAIRPINS
(P)	8'x18 1/2'	4-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(Q)	13'x6'1"	14-#7	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(R)	8'x21"	6-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(S)	8'x32'	8-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(TC)	8'x16'	6-#6	#3 @ 8' O.C.	PROVIDE #3 HAIRPINS
(FA)	16'x16'	8-#6	#3 @ 12' O.C.	STEEL COLUMN FEDESTAL
(FB)	20'x20'	8-#6	#3 @ 12' O.C.	STEEL COLUMN FEDESTAL
(FC)	24'x24'	8-#7	#3 @ 12' O.C.	STEEL COLUMN FEDESTAL

FC = 5000 PSI



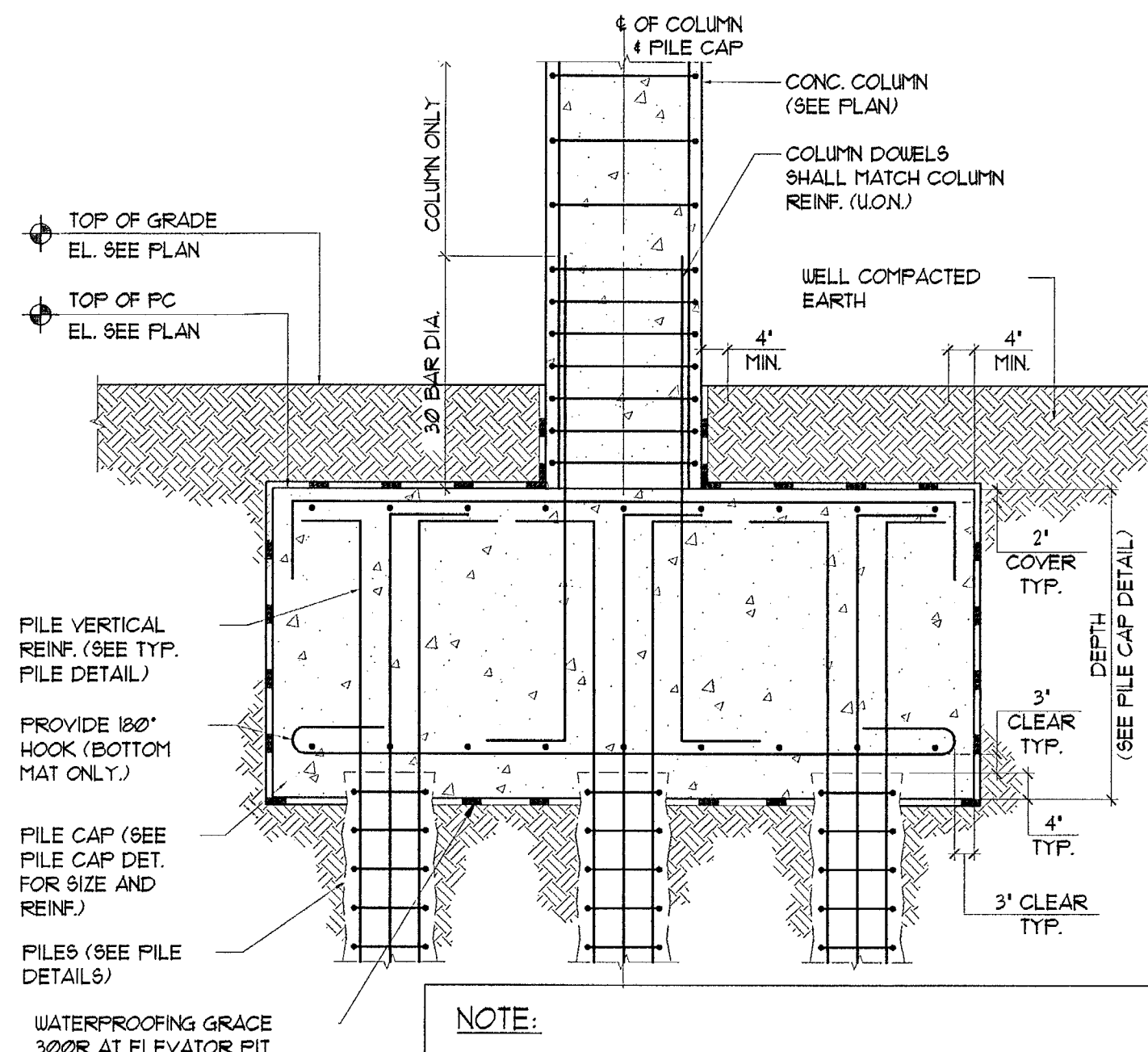
2 TYP. STEEL COL. CONN
SCALE $\frac{3}{4}" = 1'-0"$





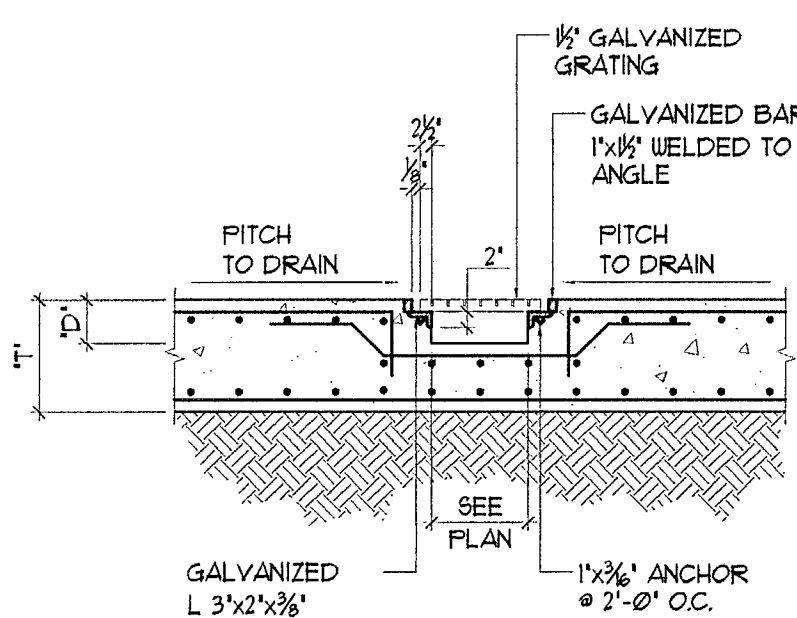
TYPICAL CMU WALL TO PILE CAP
CONNECTION DETAIL

SCALE: N.T.S.

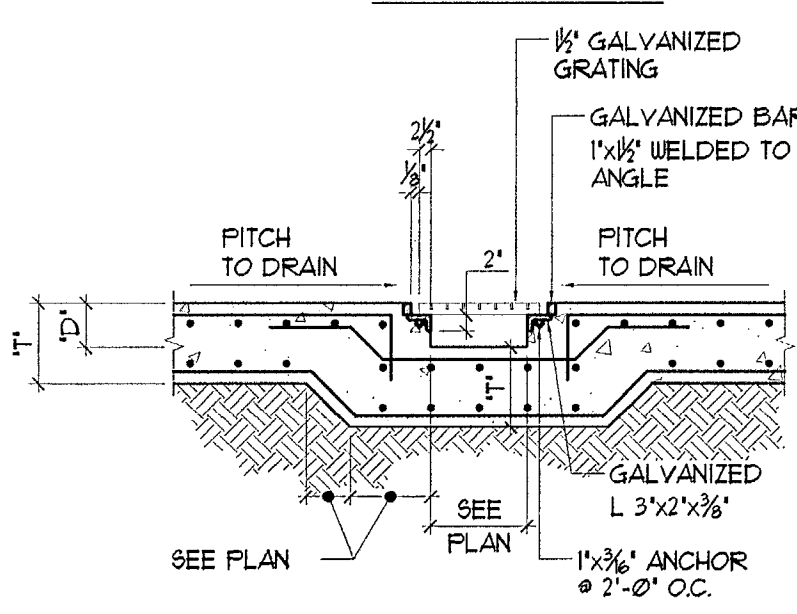


TYP. FILE CAP DET. COLUMN CONNECTION DET.
DET. STRUCTURAL SLAB CONNECTION DET.

SCALE: N.T.S.

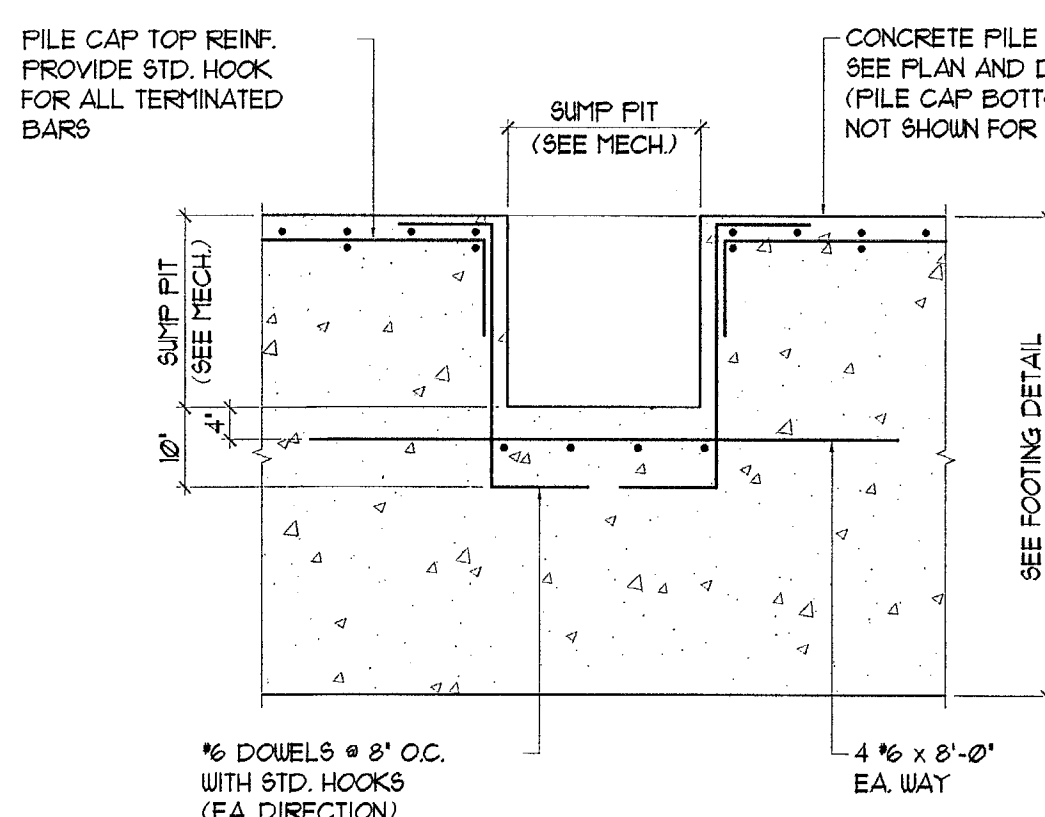


$D < T/2$



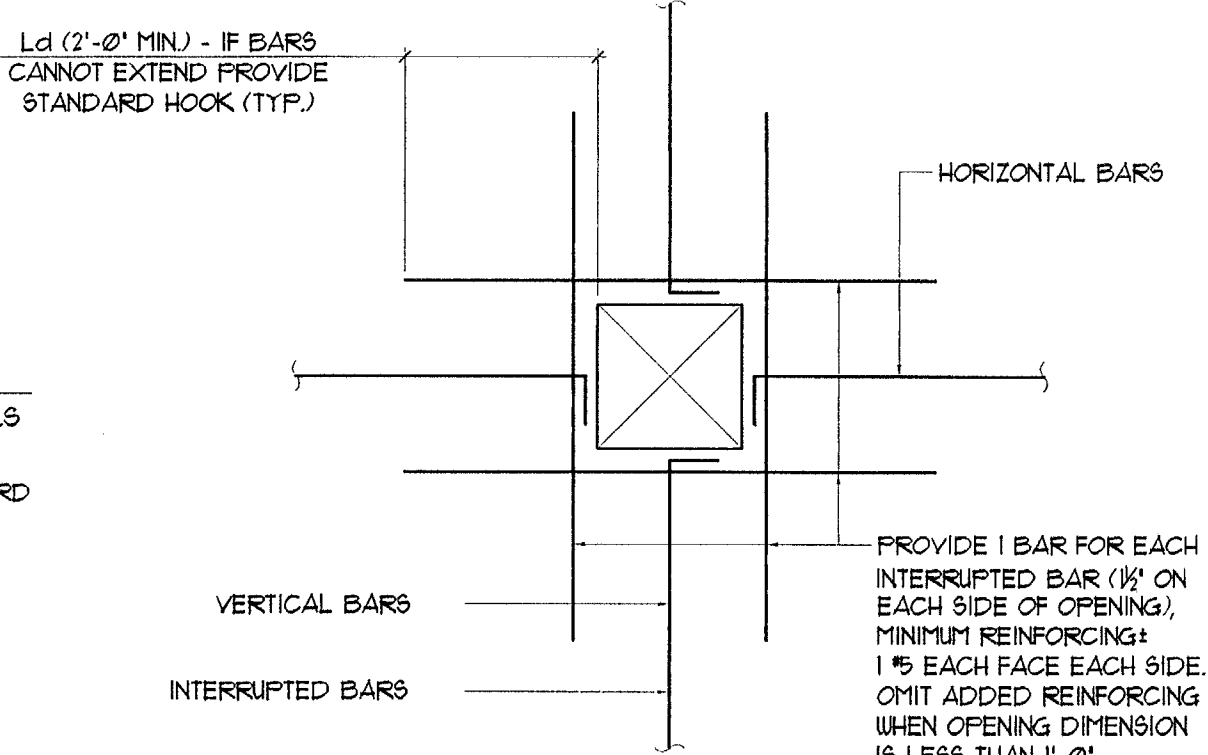
$D > T/2$

TYPICAL SECTION THRU TRENCH DRAIN
 $D > T/2$



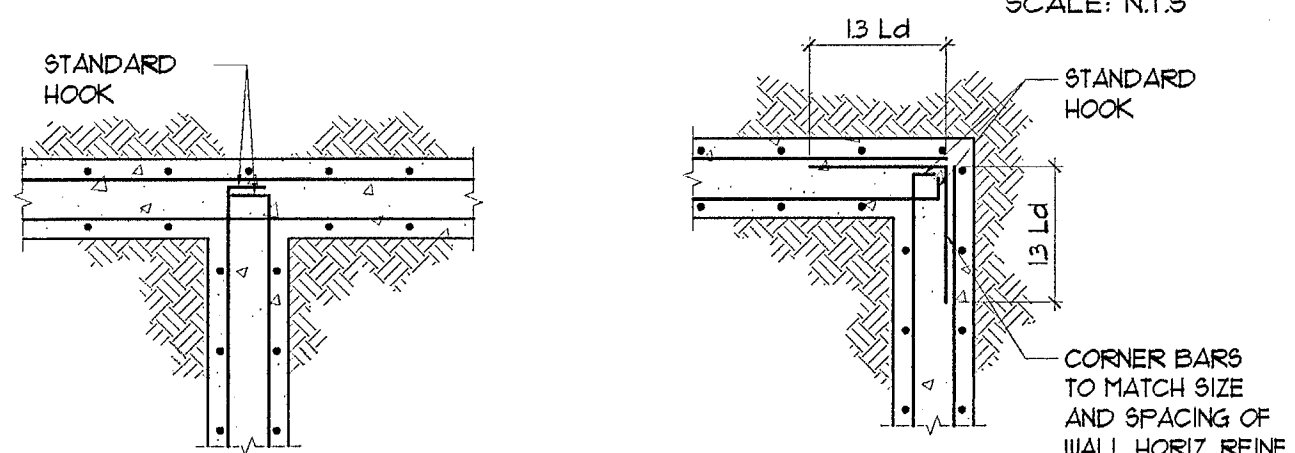
TYPICAL SECTION THRU SUMP PIT

SCALE: N.T.S.



TYPICAL REINFORCING DETAIL
AT FOUNDATION WALL OPENING

SCALE: N.T.S.



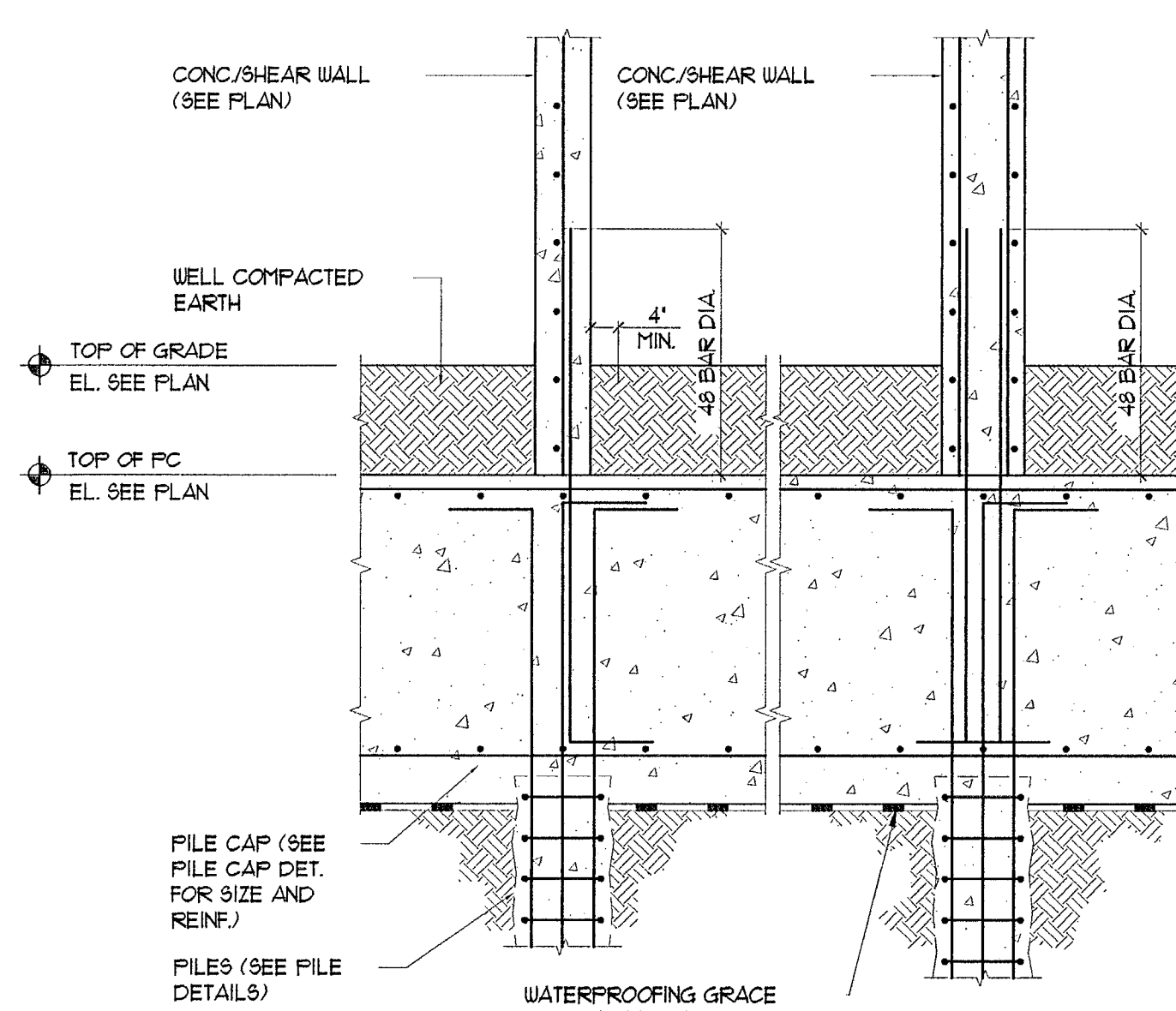
INTERSECTION WALLS

CORNER WALLS

NOTE:
CORNER BARS TO MATCH SIZE
AND SPACING OF HORIZONTAL
BARS IN WALLS.

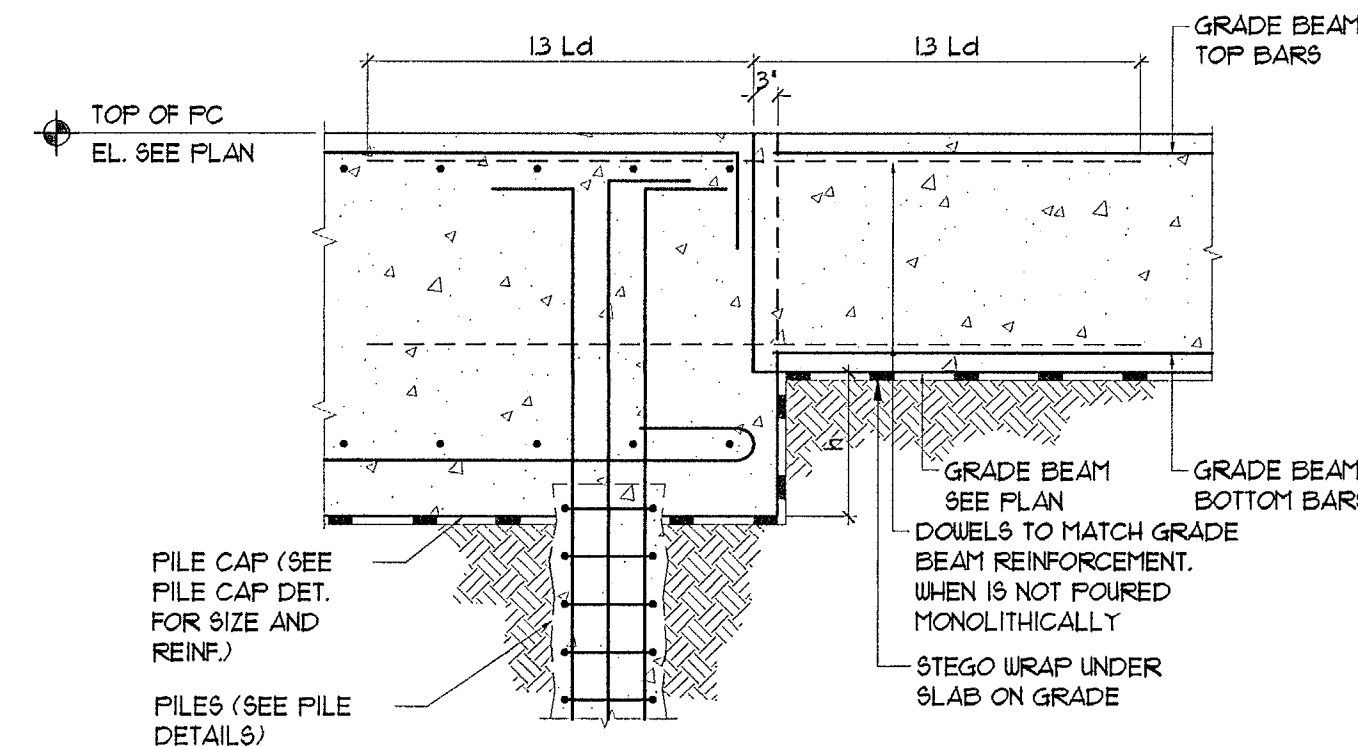
TYPICAL DETAIL OF REINFORCING AT
FOUNDATION WALL CORNERS

SCALE: N.T.S.



TYPICAL CONCRETE/SHEAR WALL
TO PILE CAP CONNECTION DETAIL

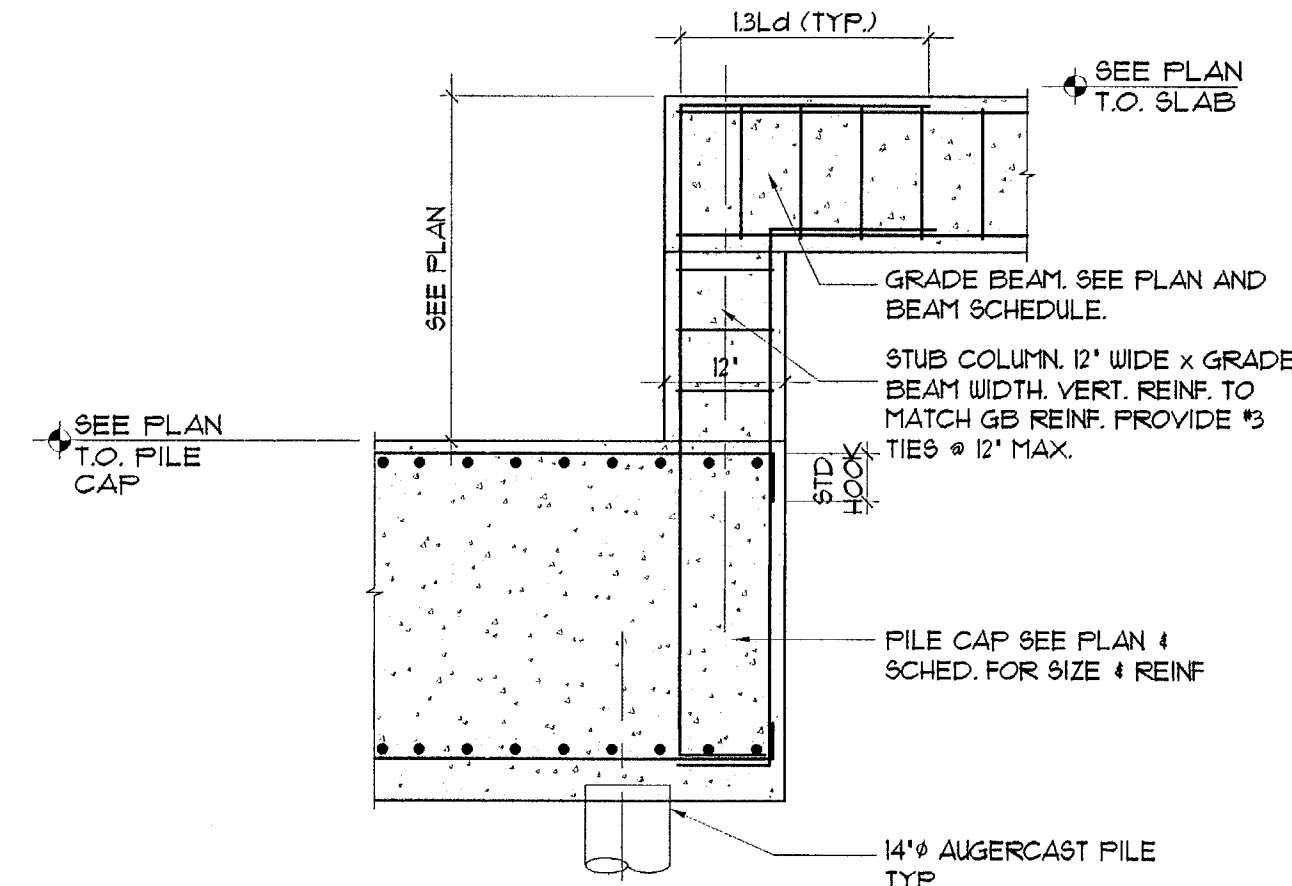
SCALE: N.T.S.



TYPICAL FILE CAP AND GRADE BEAM
CONNECTION DETAIL

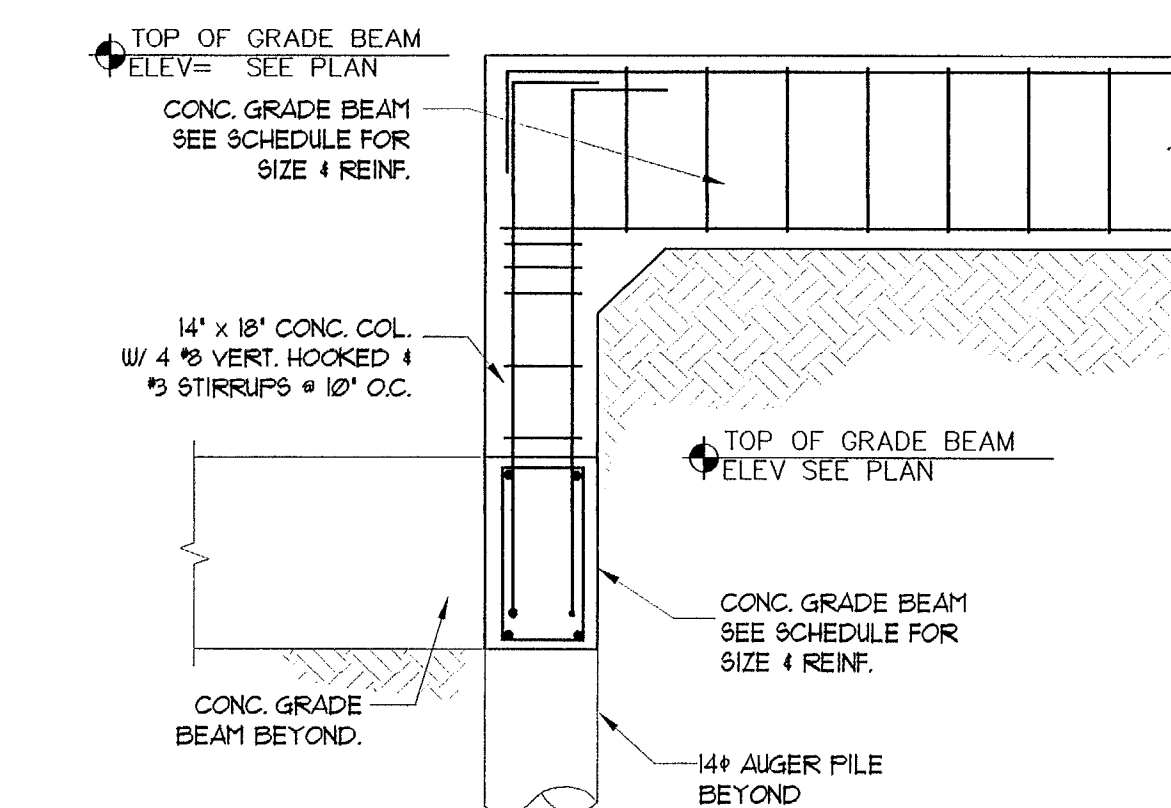
SCALE: N.T.S.

- NOTE:
1. AT THE CONTRACTOR'S OPTION, GRADE BEAM AND FILE CAP MAY BE POURED MONOLITHICALLY.
 2. CONTRACTOR SHALL POUR GRADE BEAM AND FILE CAP MONOLITHICALLY WHEN T IS LESS THAN $D/3$.
 3. GRADE BEAM TOP BARS SHALL RUN CONTINUOUS, WHEN GRADE BEAM IS POURED MONOLITHICALLY.
 4. GRADE BEAM TOP BARS SHALL RUN CONTINUOUS TO CENTER LINE OF FILE CAP, WHEN GRADE BEAM IS POURED MONOLITHICALLY.



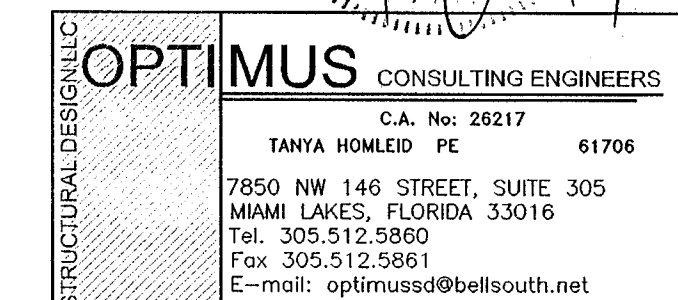
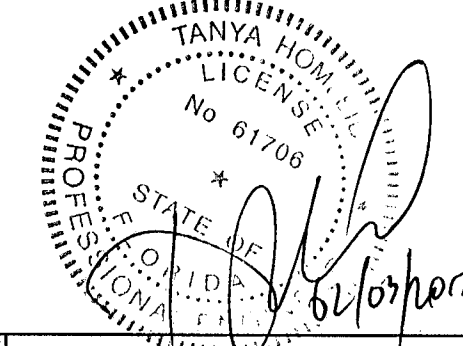
GRADE BEAM - PILECAP STEP DETAIL

SCALE: 3/8" = 1'-0"



TYPICAL STEP GRADE BEAM DETAIL

SCALE: 1" = 1'-0"

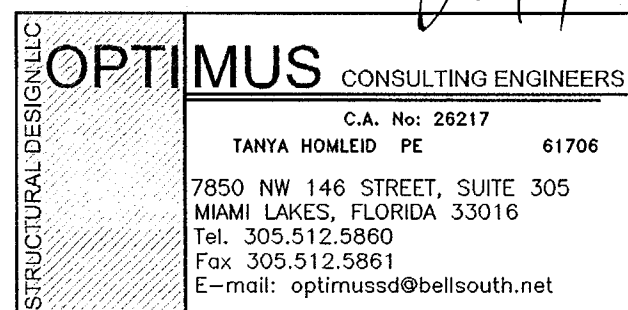


TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.

INTERMEDIATE BEAM REINFORCEMENT									
BEAM DEPTH	BEAM'S 8" WIDE		BEAM'S 9" TO 14"		BEAM'S 15" TO 18"		OVER 18"		
	UP TO 24"	NONE	NONE	2 #4 EA. FACE	2 #5 EA. FACE	2 #5 EA. FACE	2 #5 EA. FACE	5 #5 EA. FACE	
25" TO 36"		2 #4 EA. FACE		2 #4 EA. FACE		2 #5 EA. FACE		5 #5 EA. FACE	
37" TO 54"		5 #5 EA. FACE		5 #5 EA. FACE		5 #5 EA. FACE		5 #5 EA. FACE	
55" & OVER		4 #10" EA. FACE		4 #10" EA. FACE		4 #10" EA. FACE		4 #10" EA. FACE	

CONCRETE BEAM SCHEDULE													
MARK	ELEVATION	SIZE	BOTTOM		TOP CONT		'C' BARS		'E' BARS		STIRRUPS		
		B x D	No.	SIZE	No.	SIZE	No.	SIZE	No.	SIZE	SIZE	SPACING EA. END	TYPE
B-1	±5'-10"	8"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-2	±5'-10"	8"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-3	±5'-10"	8"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-4	±5'-10"	8"x64"	4	(1)	#1	4	(1)	#1			#3	4@3' OC, BAL. #10'	IV
B-5	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-6	±5'-10"	8"x34"	4	(1)	#1	4	(1)	#1			#3	4@3' OC, BAL. #10'	IV
B-7	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-8	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-9	±5'-10"	8"x48"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #4'	IV
B-10	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-11	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-12	±5'-10"	32"x34"	10	#1	10	#1					#3	4@3' OC, BAL. #10'	IV
B-13	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-14	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-15	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-16	±5'-10"	8"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-17	±5'-10"	8"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-18	±5'-10"	20"x34"	4	#6	4	#6					#3	BAL. #12'	IV
B-19	±5'-10"	20"x34"	4	#6	4	#6					#3	BAL. #12'	IV
B-20	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-21	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-22	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-23	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-24	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-25	±5'-10"	20"x34"	4	#6	4	#6					#3	BAL. #12'	IV
B-26	±5'-10"	8"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-27	±5'-10"	8"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-28	±5'-10"	8"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-29	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-30	±5'-10"	8"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-31	±5'-10"	8"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-32	±5'-10"	13"x34"	4	#1	4	#1					#3	4@3' OC, BAL. #10'	IV
B-33	±5'-10"	8"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-34	±5'-10"	8"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-35	±5'-10"	8"x38"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
B-36	±5'-10"	31 1/2"x34"	4	#6	4	#6					#3	BAL. #12'	IV
B-37	±5'-10"	15"x34"	4	#6	4	#6					#3	BAL. #12'	IV
B-38	±5'-10"	15"x34"	4	#6	4	#6					#3	BAL. #12'	IV
B-39	±5'-10"	20"x34"	4	#6	4	#6					#3	BAL. #12'	IV
B-40	±5'-10"	10"x34"	2	#1	2	#1					#3	4@3' OC, BAL. #10'	IV
NOTE: VERIFY WITH ARCHITECTURAL DRAWINGS FOR TOP OF BEAM ELEVATIONS													

CONCRETE BEAM SCHEDULE													
MARK	ELEVATION	SIZE	BOTTOM		TOP CONT		'C' BARS		'E' BARS		STIRRUPS		
		B x D	No.	SIZE	No.	SIZE	No.	SIZE	No.	SIZE	SIZE	SPACING EA. END	TYPE
RB-1	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-2	±3'-8"	8"x24"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-3	±3'-10"	8"x46" (11)	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-4	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-5	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-6	±3'-8"	8"x22"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #8'	IV
RB-7	±10'-2"	8"x50"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-8	±3'-8"	12"x16"	4	#6	4	#6					#3	4@3' OC, BAL. #10'	IV
RB-9	±3'-10"	8"x46"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-10	±3'-10"	8"x46"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-11	±3'-10"	8"x46"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-12	±3'-10"	8"x46"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-13	±3'-8"	8"x22"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #8'	IV
RB-14	±3'-8"	8"x22"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #8'	IV
RB-15	±3'-10"	8"x46" (11)	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-16	±3'-10"	8"x46" (11)	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-17	±3'-10"	8"x46" (11)	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-18	±3'-8"	12"x16"	4	#6	4	#6					#3	4@3' OC, BAL. #10'	IV
RB-19	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-20	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-21	±3'-8"	12"x16"	4	#6	4	#6					#3	4@3' OC, BAL. #10'	IV
RB-22	±10'-1"	12"x48"	4	#6	4	#6					#3	4@3' OC, BAL. #8'	IV
RB-23	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-24	±3'-8"	8"x14"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #5"	IV
RB-25	±3'-8"	8"x22"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #8'	IV
RB-26	±3'-8"	8"x12"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #4"	IV
RB-27	±3'-8"	8"x31"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-28	±3'-10"	8"x46"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-29	±3'-8"	8"x22"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #8'	IV
RB-30	±3'-8"	8"x14"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #5"	IV
RB-31	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-32	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-33	±3'-8"	8"x22"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #8'	IV
RB-34	±3'-8"	8"x22"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #8'	IV
RB-35	±3'-8"	8"x22"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #8'	IV
RB-36	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-37	±3'-8"	8"x12"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #4"	IV
RB-38	±3'-8"	8"x31"	(1)	4	#6	(1)	4	#6			#3	4@3' OC, BAL. #10'	IV
RB-39	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-40	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-41	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-42	±3'-10"	13"x46"	(1)	6	#6	(1)	6	#6			#3	4@3' OC, BAL. #10'	IV
RB-43	±10'-1"	20"x48"	4	#6	4	#6					#3	4@3' OC, BAL. #10'	IV
NOTE: VERIFY WITH ARCHITECTURAL DRAWINGS FOR TOP OF BEAM ELEVATIONS													



STRUCTURAL DESIGN INC.

CONSULTING ENGINEERS

C.A. No. 26217 61706

TANYA HOMLEID P.E.

7850 NW 146 STREET, SUITE 305

MIAMI LAKES, FLORIDA 33016

Tel. 305.512.5860

Fax 305.512.5861

E-mail: optimusd@bellsouth.net

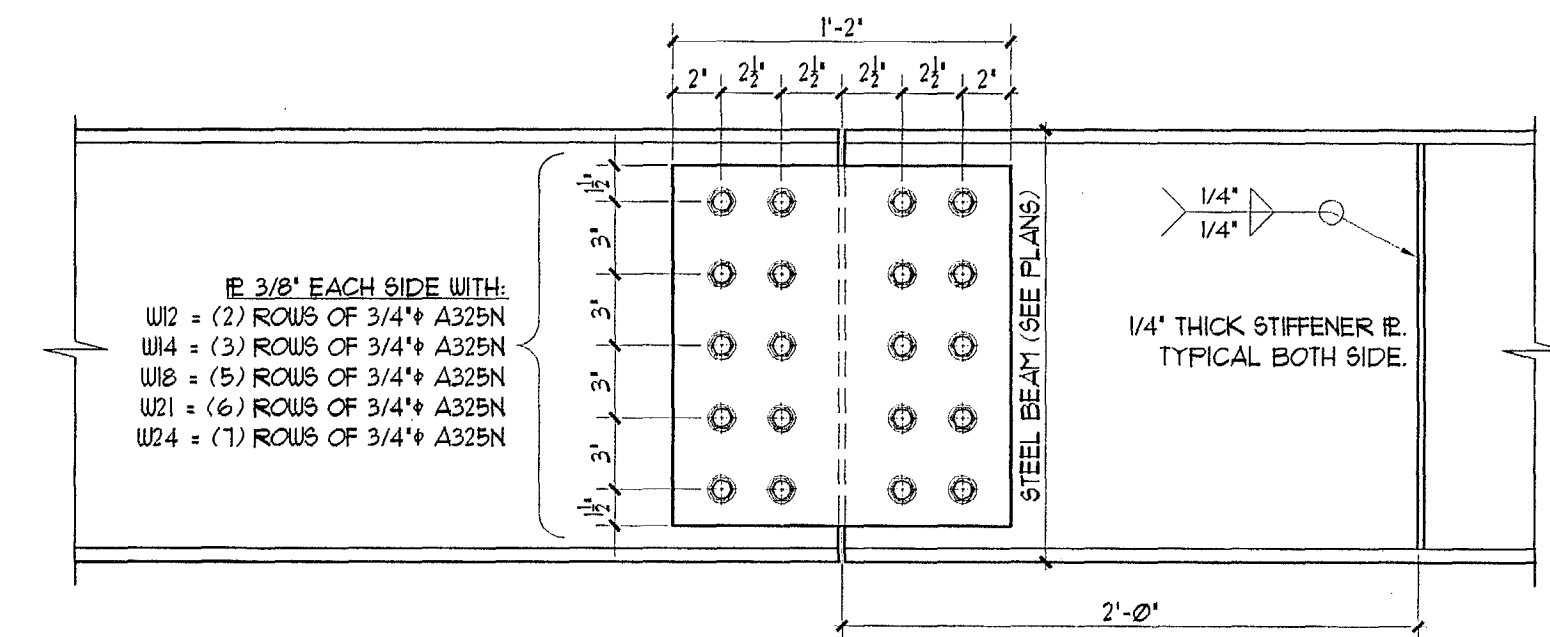
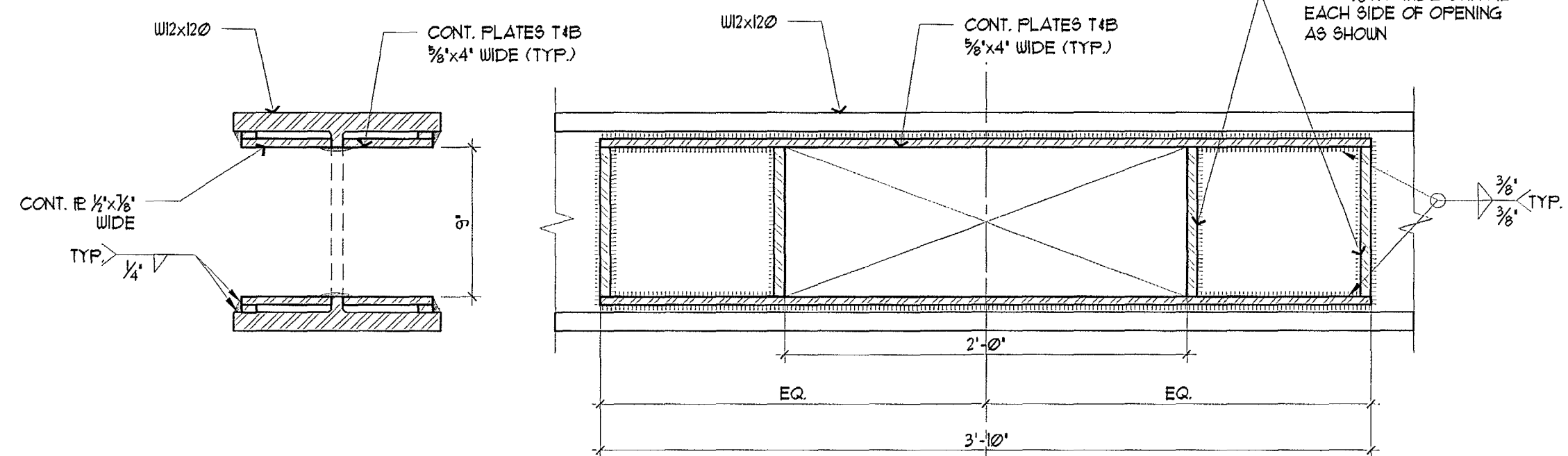
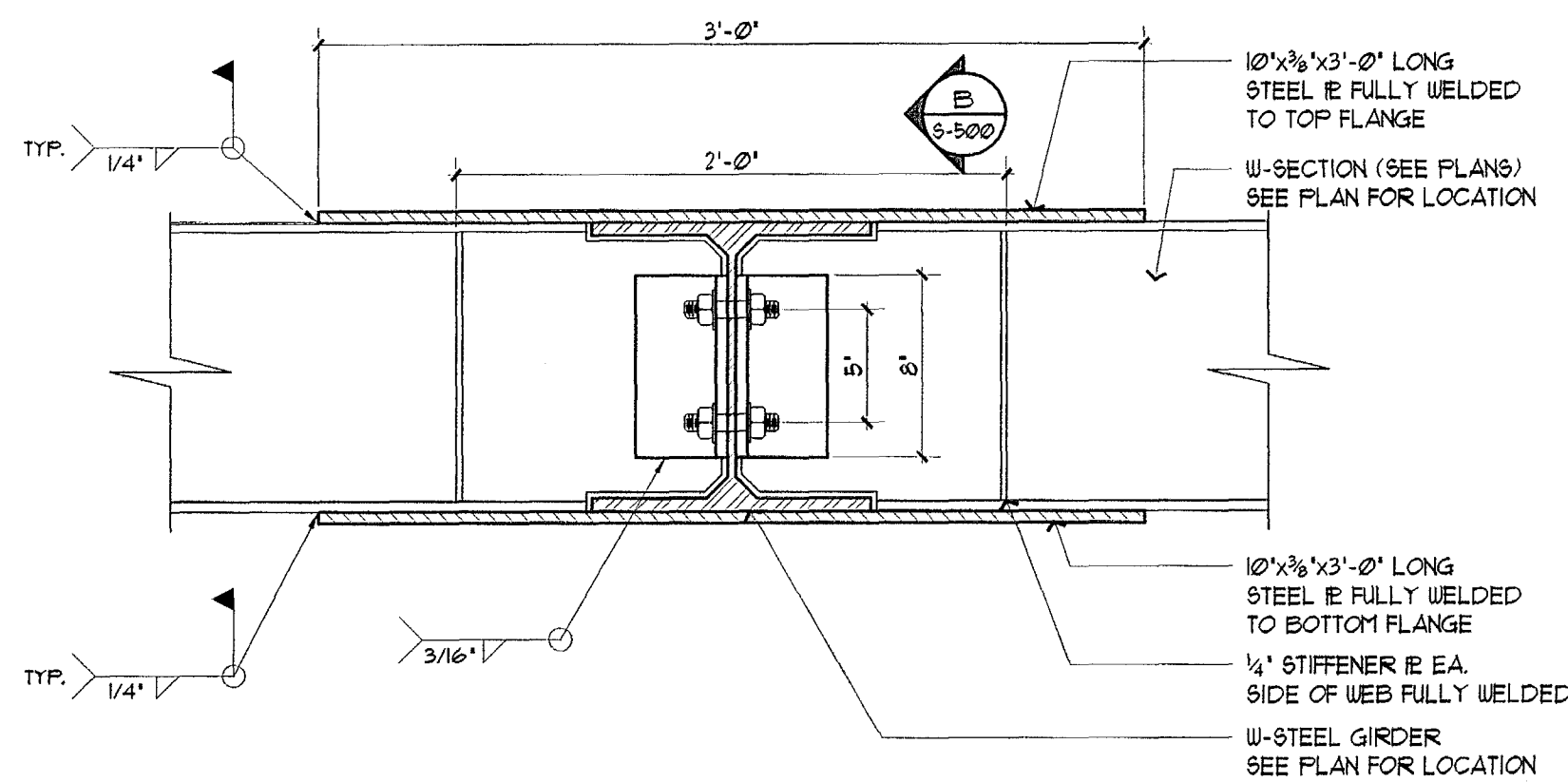
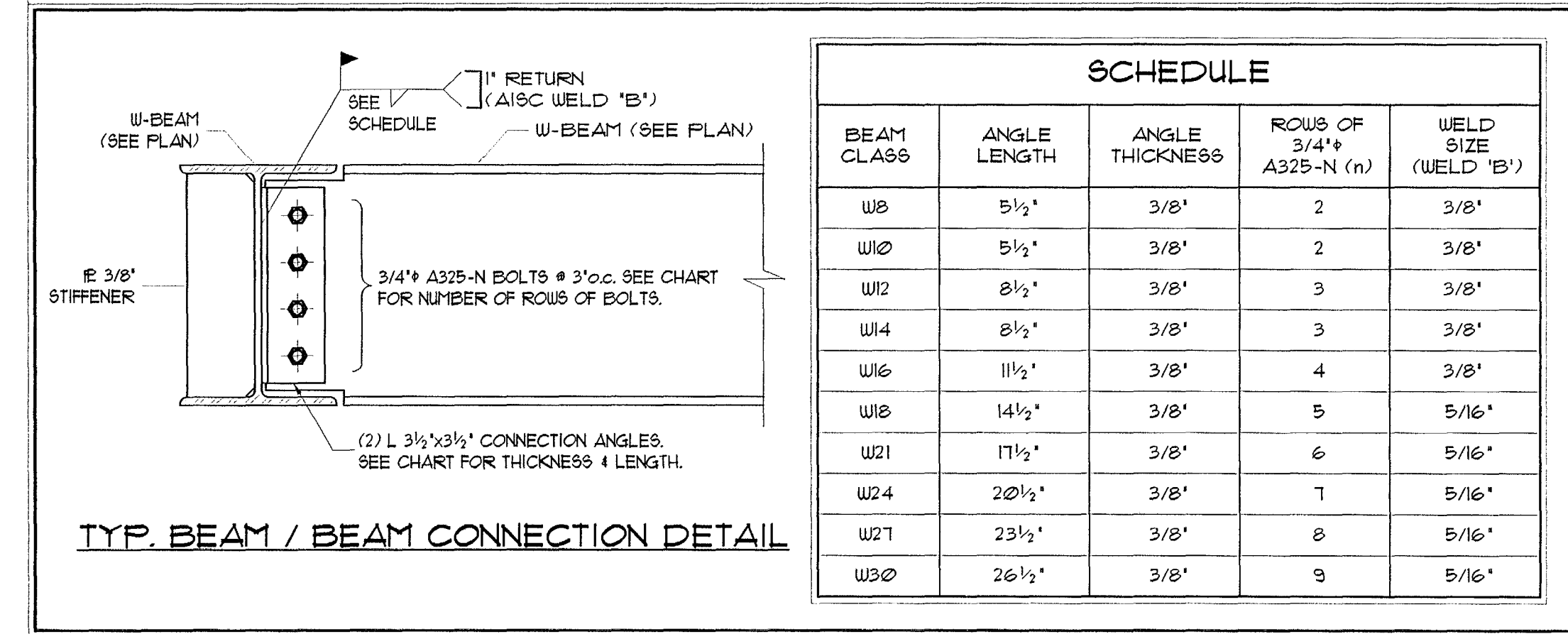
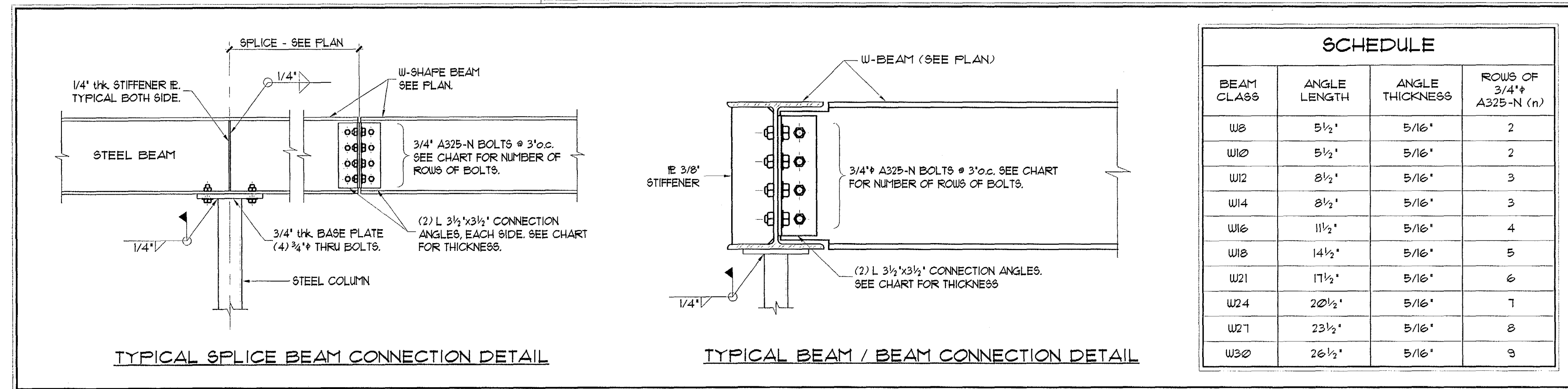
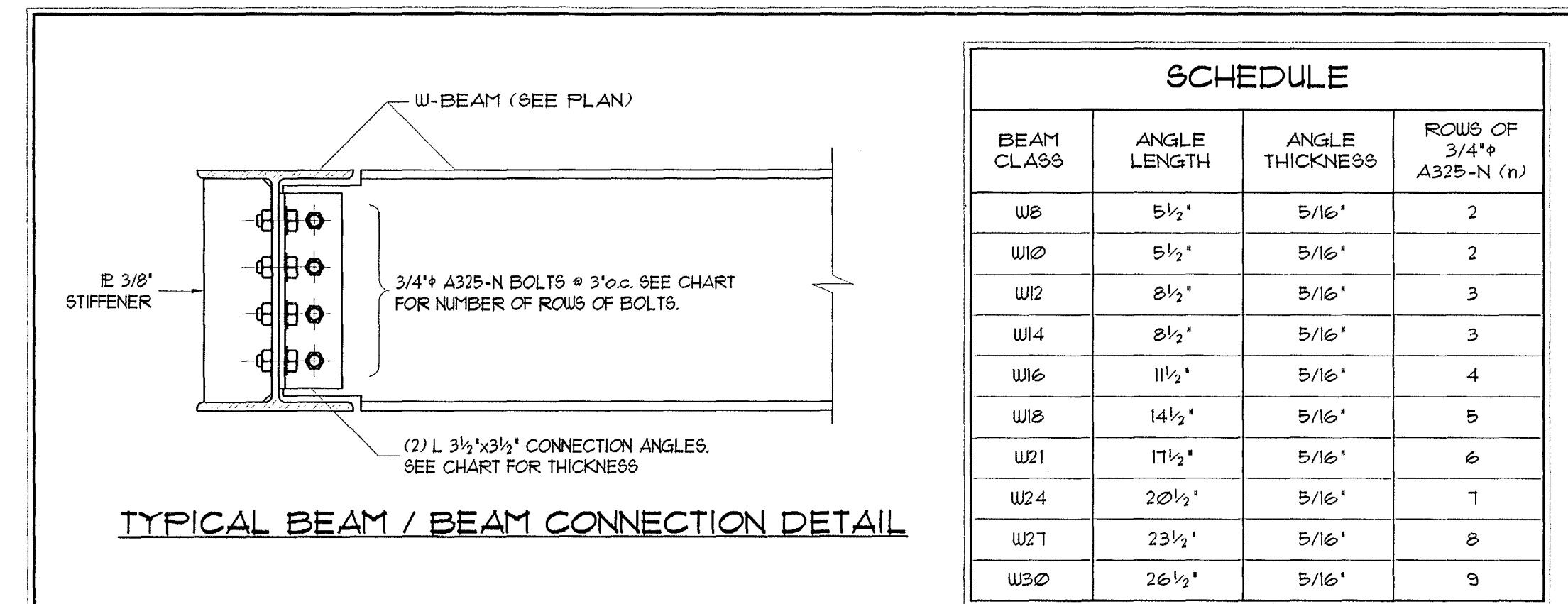
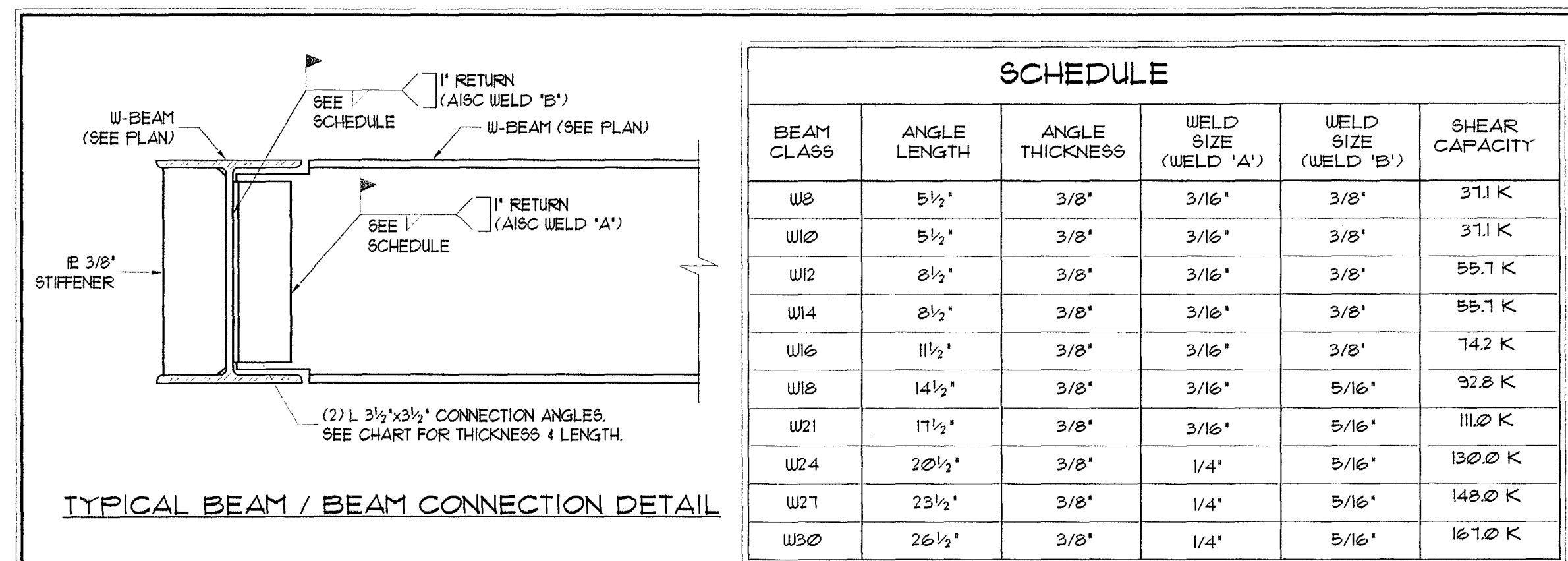
CONCRETE BEAM SCHEDULE

MARK	ELEVATION	SIZE	BOTTOM		TOP CONT		'C' BARS		'E' BARS		STIRRUPS			TYPE	REMARKS
		B x D	No.	SIZE	No.	SIZE	No.	SIZE	No.	SIZE	SIZE	SPACING	EA. END		
B-1	425'-10'	8"x34"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE	
B-2	425'-10'	8"x34"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE	
B-3	425'-10'	8"x34"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE	
B-4	425'-10'	8"x64"	4 (1)	#1	4 (1)	#1					#3	4@3' O.C., BAL. #10'	IV	(1) 2 LAYERS - ADD 5-#5 EA. FACE	
B-5	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-6	425'-10'	8"x34"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE - SEE DETAIL 3/5-510	
B-7	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-8	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-9	425'-10'	8"x48"	(1) 4	#6	(1) 4	#6					#3	4@3' O.C., BAL. #4'	IV	(1) 2 LAYERS - ADD 2-#5 EA. FACE	
B-10	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-11	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-12	425'-10'	32"x34"	10	#1	10	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-13	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED - SEE DETAIL 3/5-530	
B-14	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-15	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-16	425'-10'	8"x34"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - SEE DETAIL 1/5-500	
B-17	425'-10'	8"x34"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - SEE DETAIL 1/5-500	
B-18	425'-10'	20"x34"	4	#6	4	#6					#3	BAL. #12'	IV	ADD 2-#5 EA. FACE - SEE DETAIL 1/5-500	
B-19	425'-10'	20"x34"	4	#6	4	#6					#3	BAL. #12'	IV	ADD 2-#5 EA. FACE - SEE DETAIL 1/5-500	
B-20	425'-10'	13"x32 1/2"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED - SEE DETAIL 3/5-530	
B-21	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-22	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED - SEE DETAIL 2/5-530	
B-23	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-24	NO USED													ADD 2-#5 EA. FACE - UPTURNED	
B-25	425'-10'	20"x34"	4	#6	4	#6					#3	BAL. #12'	IV	ADD 2-#5 EA. FACE - SEE DETAIL 3/5-510	
B-25 (CANT)	425'-10'	20"x34"	4	#6	4	#6					#3	BAL. #12'	IV	ADD 2-#5 EA. FACE	
B-26	425'-10'	8"x34"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - SEE DETAIL 5/5-530	
B-27	NO USED	13"x28"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-28	425'-10'	8"x34"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE	
B-29	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-30	425'-10'	8"x34"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE	
B-31	425'-10'	8"x34"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE	
B-32	425'-10'	13"x34"	4	#1	4	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - UPTURNED	
B-33	425'-10'	8"x34"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE	
B-34	425'-10'	8"x28"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE	
B-35	425'-10'	8"x38"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE	
B-36	425'-10'	31 1/2"x34"	4	#6	4	#6					#3	BAL. #12'	IV	ADD 2-#5 EA. FACE - SEE DETAIL 5/5-530	
B-37	425'-10'	15"x34"	4	#6	4	#6					#3	BAL. #12'	IV	ADD 2-#5 EA. FACE - SEE SECTION B/5-500	
B-38	425'-10'	15"x34"	4	#6	4	#6					#3	BAL. #12'	IV	ADD 2-#5 EA. FACE - SEE SECTION B/5-500	
B-39	425'-10'	20"x34"	4	#6	4	#6					#3	BAL. #12'	IV	ADD 2-#5 EA. FACE - SEE DETAIL 3/5-500	
B-40	425'-10'	10"x34"	2	#1	2	#1					#3	4@3' O.C., BAL. #10'	IV	ADD 2-#5 EA. FACE - SEE DETAIL 1/5-500 FOR ADD REIN.	
NOTE: VERIFY WITH ARCHITECTURAL DRAWINGS FOR TOP OF BEAM ELEVATIONS															

NOTE: VERIFY WITH ARCHITECTURAL DRAWINGS FOR TOP OF BEAM ELEVATIONS

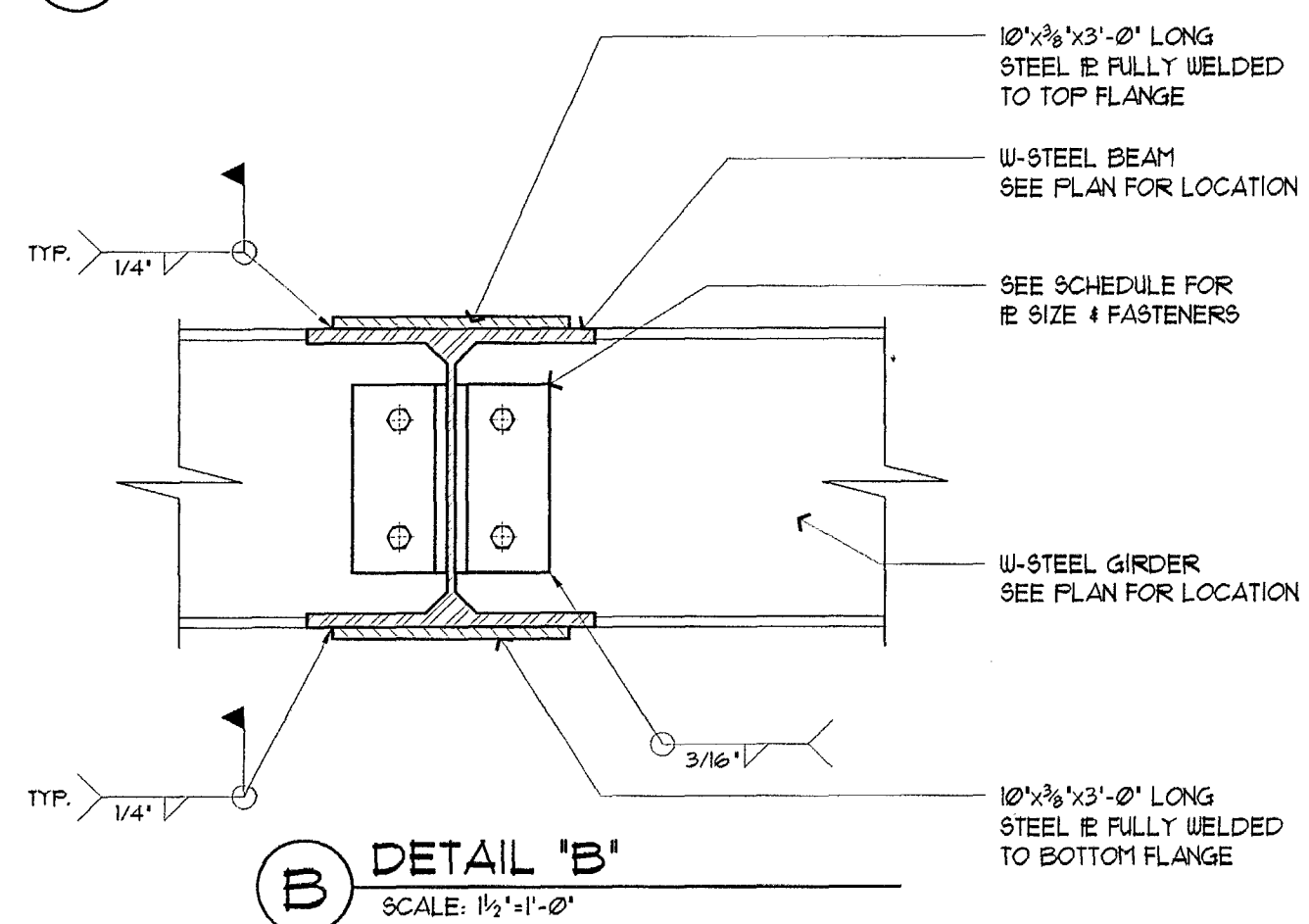
CONCRETE BEAM SCHEDULE

MARK	ELEVATION	SIZE	BOTTOM		TOP CONT.		'C' BARS		'E' BARS		STIRRUPS			TYPE	REMARKS	
		B x D	No.	SIZE	No.	SIZE	No.	SIZE	No.	SIZE	SIZE	SPACING	EA.			END
RB-1	43'-10"	13"x50"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-2	43'-8"	8"x24"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE
RB-3	43'-10"	8"x50"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-4	43'-10"	13"x46"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-5	43'-10"	13"x50"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-6	43'-8"	8"x22"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #8'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE
RB-7	410'-2"	8"x50"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE (SEE DETAIL 1/5-530)
RB-8	43'-8"	12"x16"	4	#6	4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE
RB-9	43'-10"	8"x50"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-10	43'-10"	8"x50"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-11	43'-10"	8"x50"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE (SEE DETAIL 1/5-530)
RB-12	43'-10"	8"x50"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-13	43'-8"	8"x20"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #8'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE (SEE DETAIL 1/5-530)
RB-14	43'-8"	8"x20"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #8'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE
RB-15	43'-10"	8"x38"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE - (1) SEE DETAIL 3/5-530
RB-16	43'-10"	8"x13"x50"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE - (1) SEE DETAIL 6/5-530
RB-17	43'-10"	8"x13"x50"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE - (1) SEE DETAIL 6/5-530
RB-18	43'-8"	12"x16"	4	#6	4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE
RB-19	43'-10"	13"x50"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE (SEE DETAIL 3/5-530)
RB-20	43'-10"	13"x50"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-21	43'-8"	12"x16"	4	#6	4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE
RB-22	410'-1"	13"x150"	5	#1	5	#1					#3	4@3'	O.C.	BAL. #8'	IV	(1) 2 LAYERS - ADD 3-#5 EA. FACE (SEE DETAIL 1/5-510)
RB-23	43'-10"	13"x50"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-24	43'-8"	8"x14"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #5'	IV	(1) 2 LAYERS
RB-25	43'-8"	8"x22"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #8'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE
RB-26	43'-8"	8"x12"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #4'	IV	(1) 2 LAYERS
RB-27	43'-8"	12"x31"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 2-#5 EA. FACE
RB-28	43'-10"	12"x46"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-29	43'-8"	8"x20"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #8'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE
RB-30	43'-8"	8"x14"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #5'	IV	(1) 2 LAYERS
RB-31	43'-10"	13"x46"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-32	43'-10"	13"x50"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-33	43'-8"	8"x20"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #8'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE
RB-34	43'-8"	8"x20"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #8'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE
RB-35	43'-8"	8"x22"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #8'	IV	(1) 2 LAYERS - ADD 1-#5 EA. FACE
RB-36	43'-10"	13"x46"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-37	43'-8"	8"x12"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #4'	IV	(1) 2 LAYERS
RB-38	43'-8"	8"x20"	(1) 4	#6	(1) 4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 2-#5 EA. FACE
RB-39	43'-10"	13"x46"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-40	43'-10"	13"x46"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-41	43'-10"	13"x46"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE
RB-42	43'-10"	13"x50"	(1) 6	#6	(1) 6	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE (SEE DETAIL 2/5-530)
RB-43	410'-1"	20"x48"	4	#6	4	#6					#3	4@3'	O.C.	BAL. #10'	IV	(1) 2 LAYERS - ADD 4-#5 EA. FACE - SEE DETAIL 1/5-530

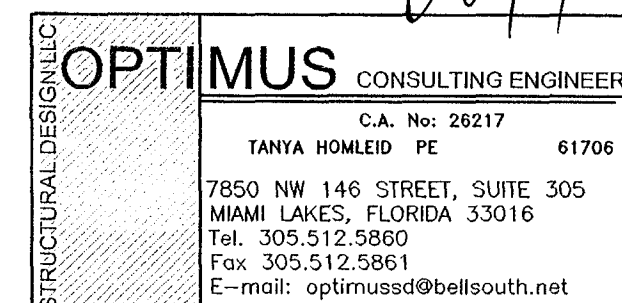
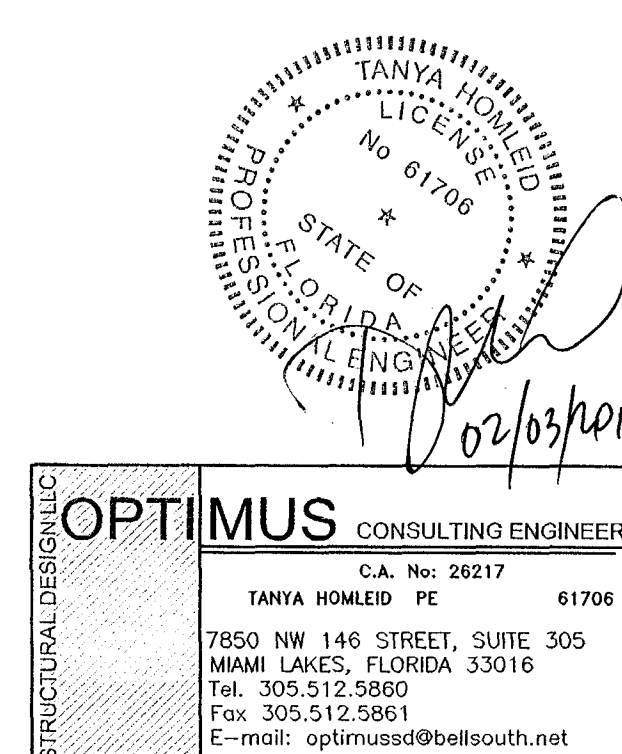


A TYP. MOMENT SPLICE DETAIL @ CANTILEVER ENDS
SCALE: 1/2"=1'-0"

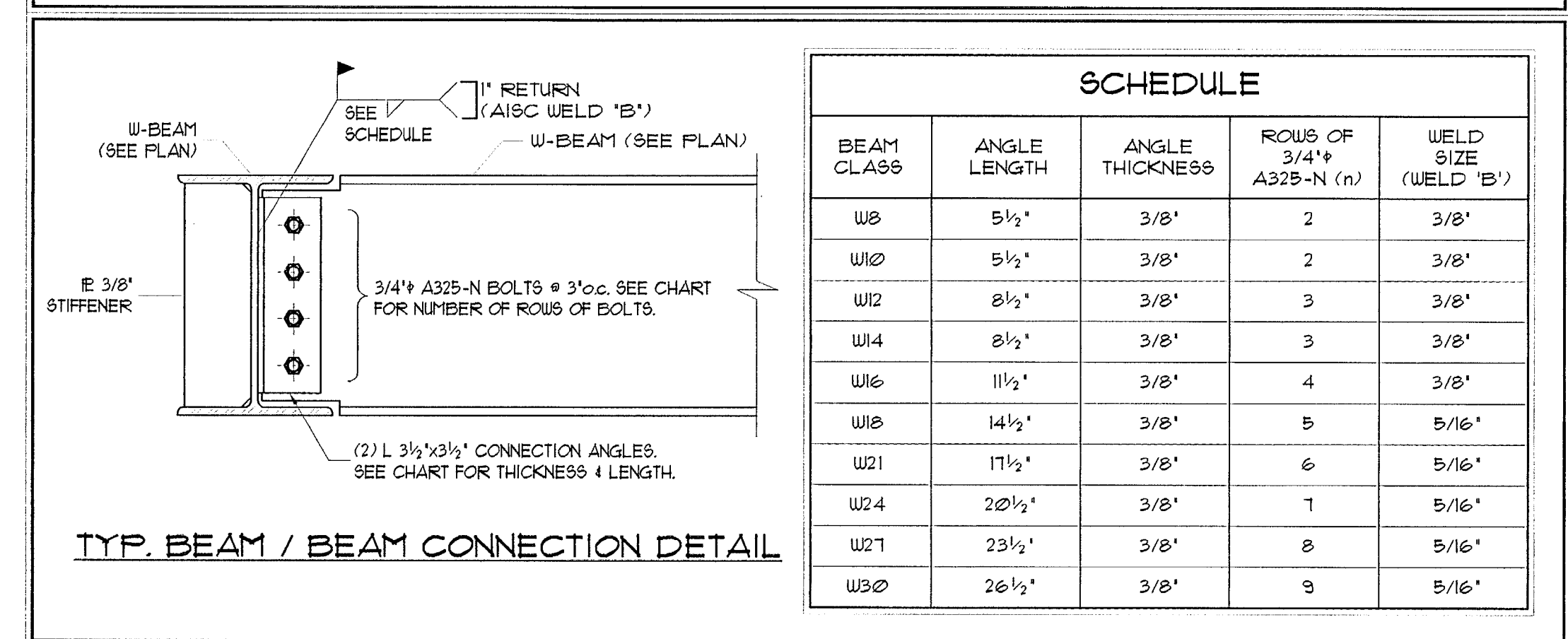
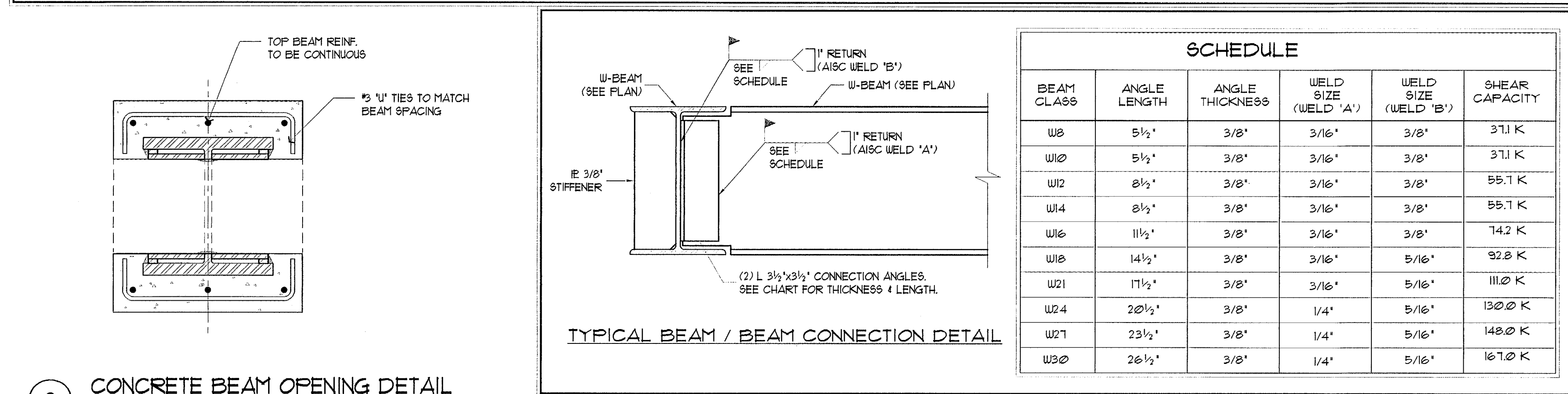
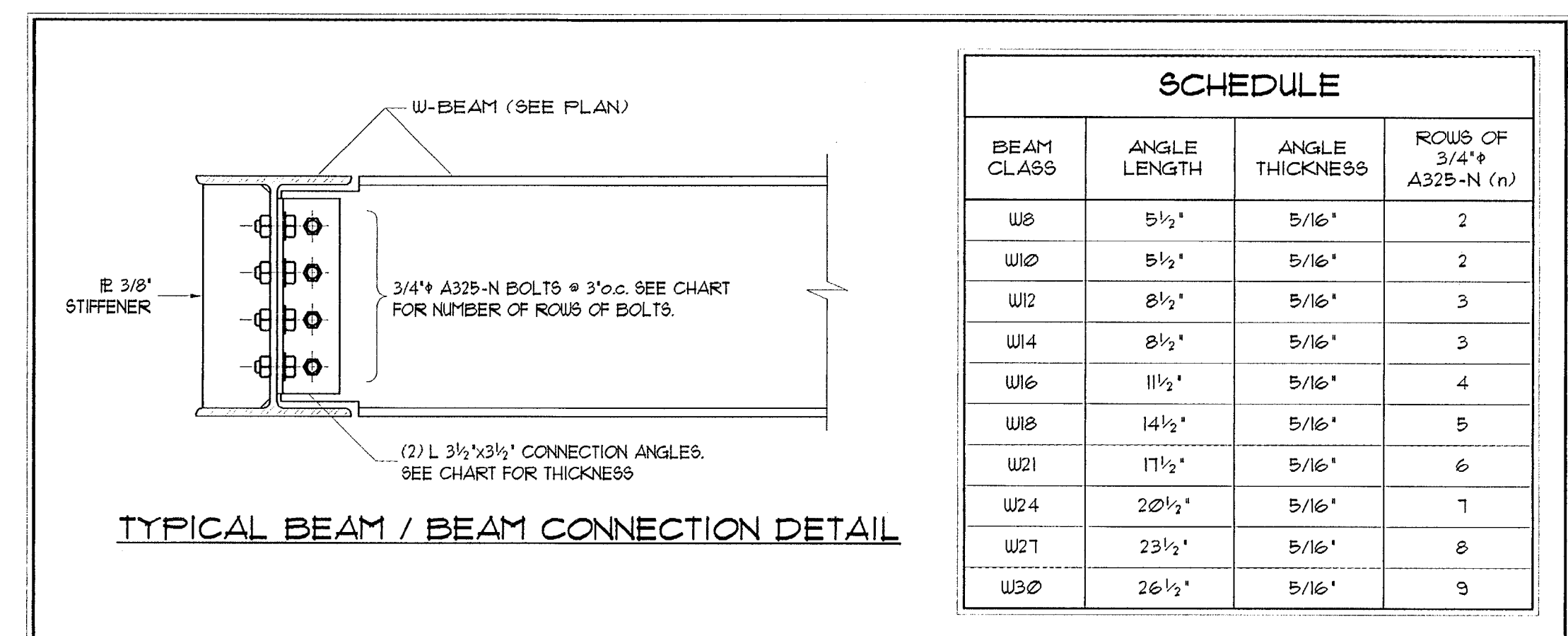
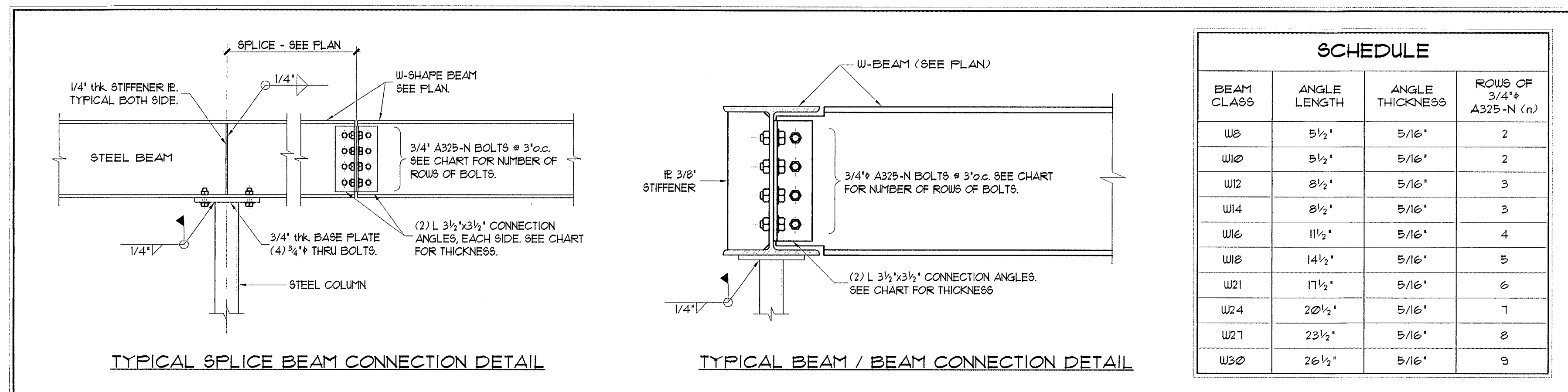
1 TYPICAL WEB OPENING DETAIL
SCALE: 1"=1'-0"



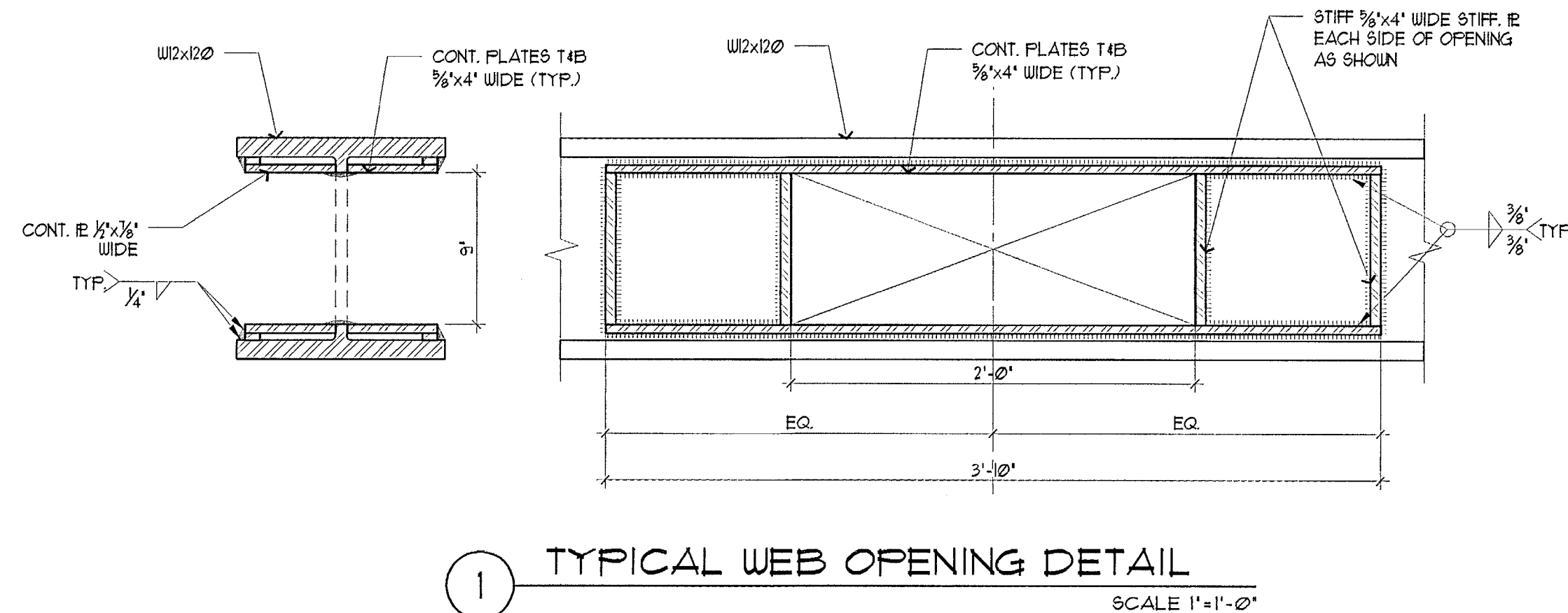
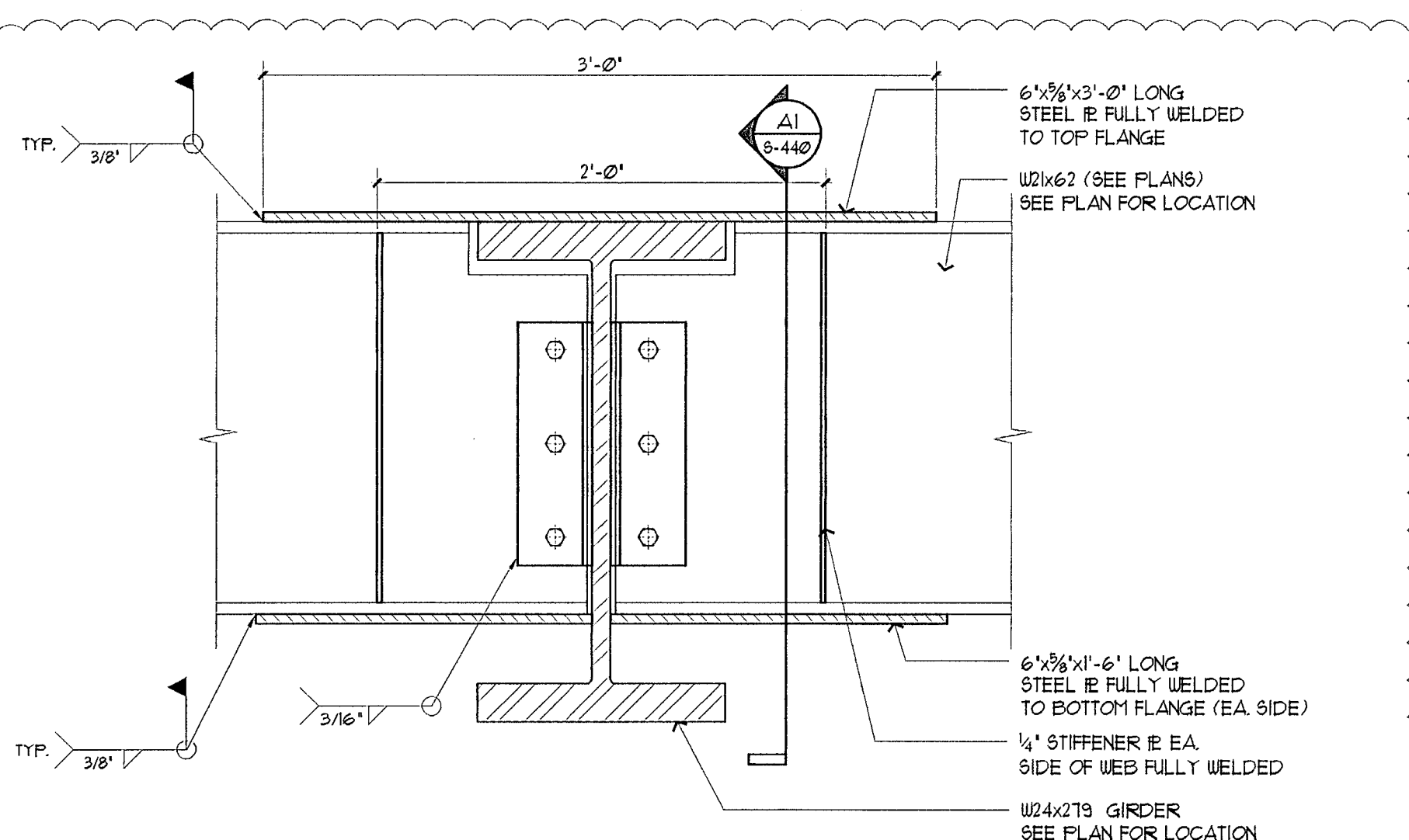
2 CONCRETE BEAM OPENING DETAIL
SCALE: 1"=1'-0"



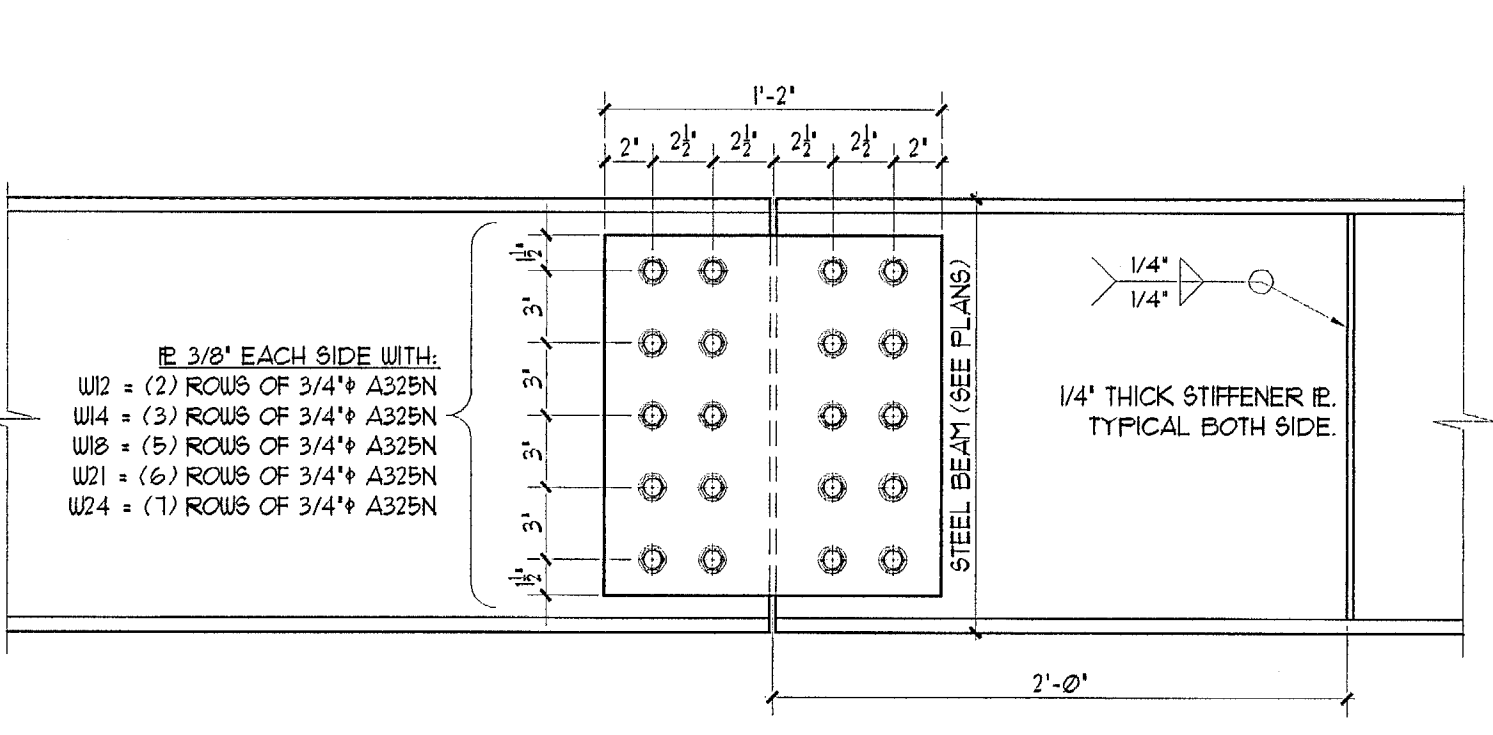
TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.



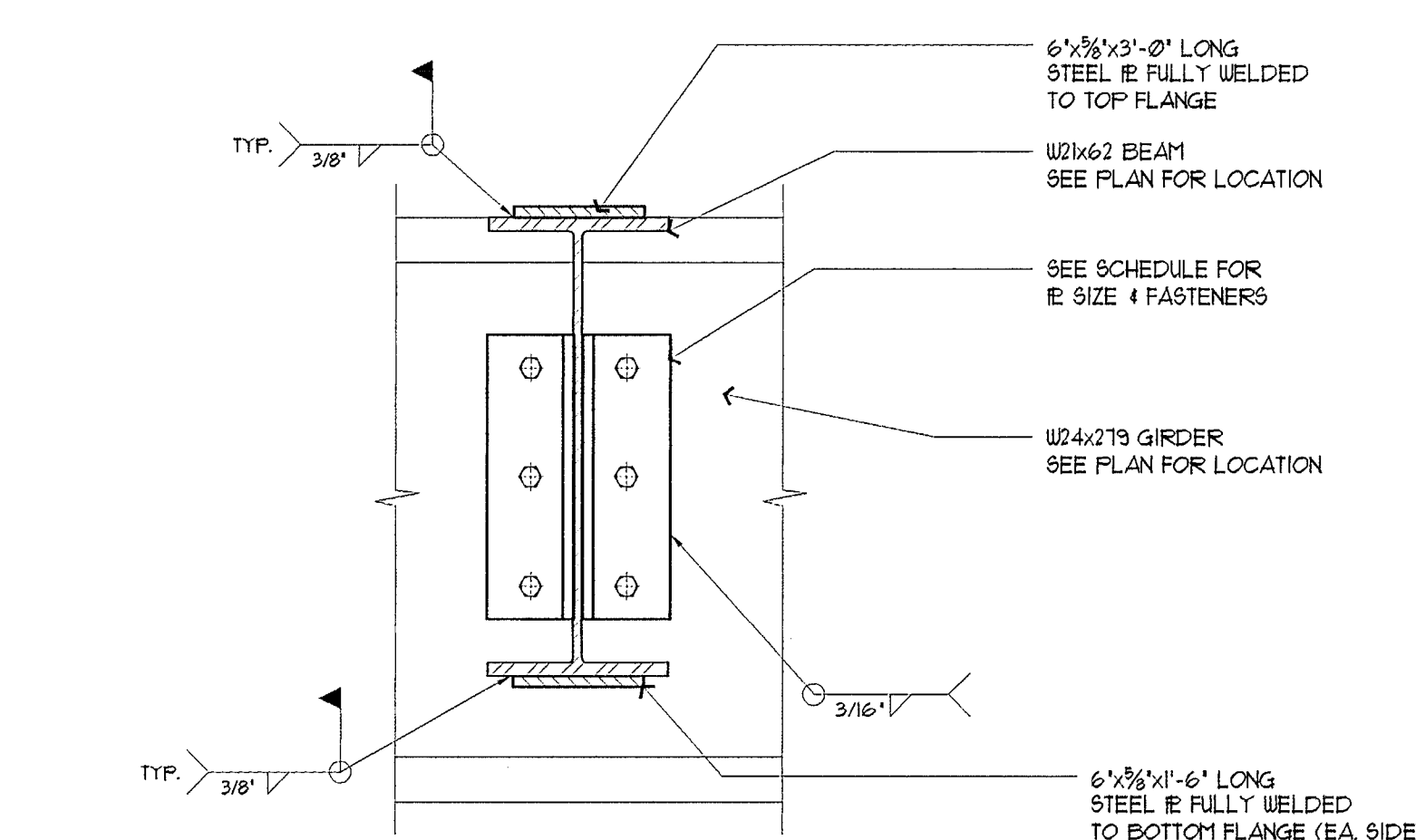
2 CONCRETE BEAM OPENING DETAIL
SCALE: 1"=1'-0"



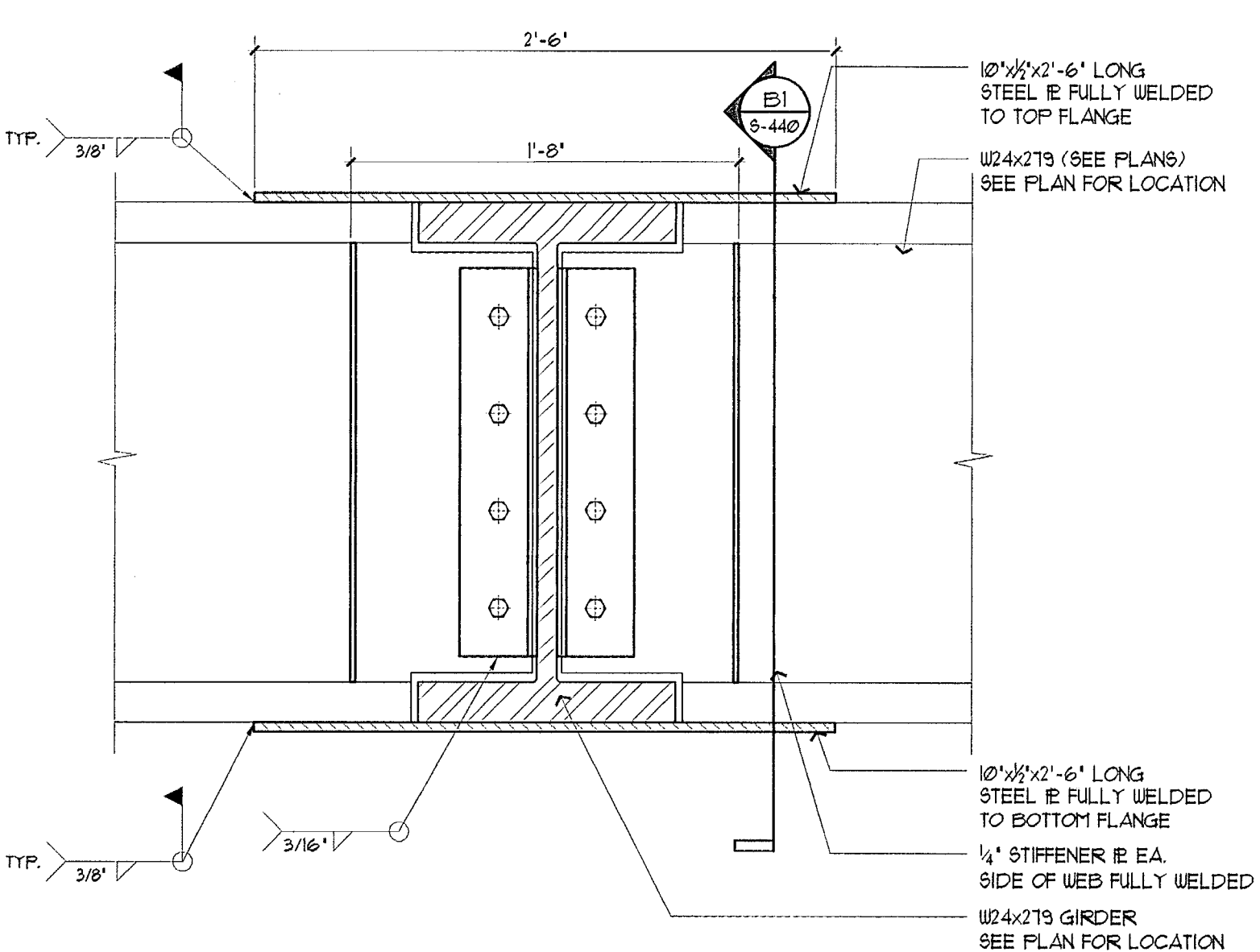
C TYPICAL SPLICE BEAM DETAIL
SCALE: NTS



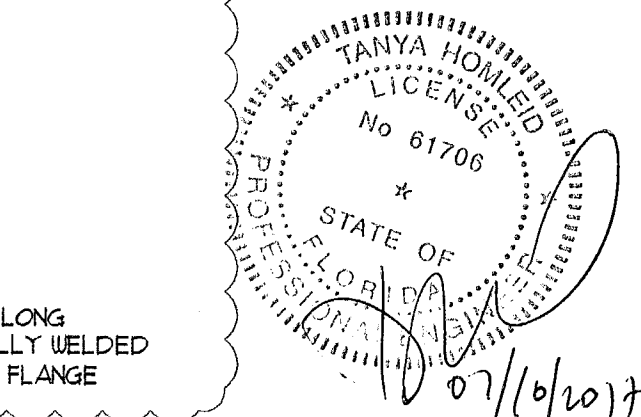
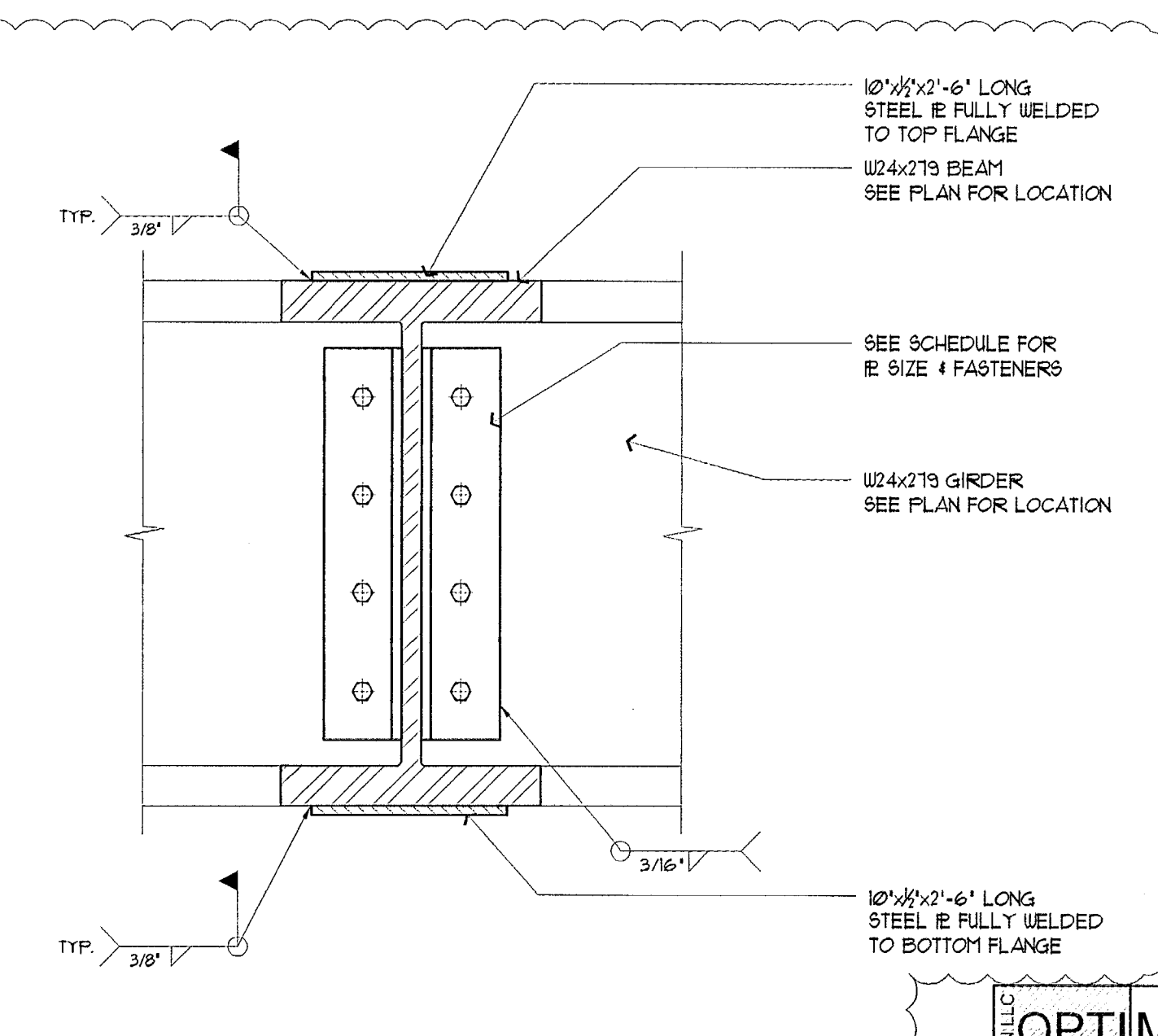
A TYP. MOMENT SPLICE DETAIL @ CANTILEVER ENDS
SCALE: 1/2"=1'-0"



B TYP. MOMENT SPLICE DETAIL @ CANTILEVER ENDS
SCALE: 1/2"=1'-0"

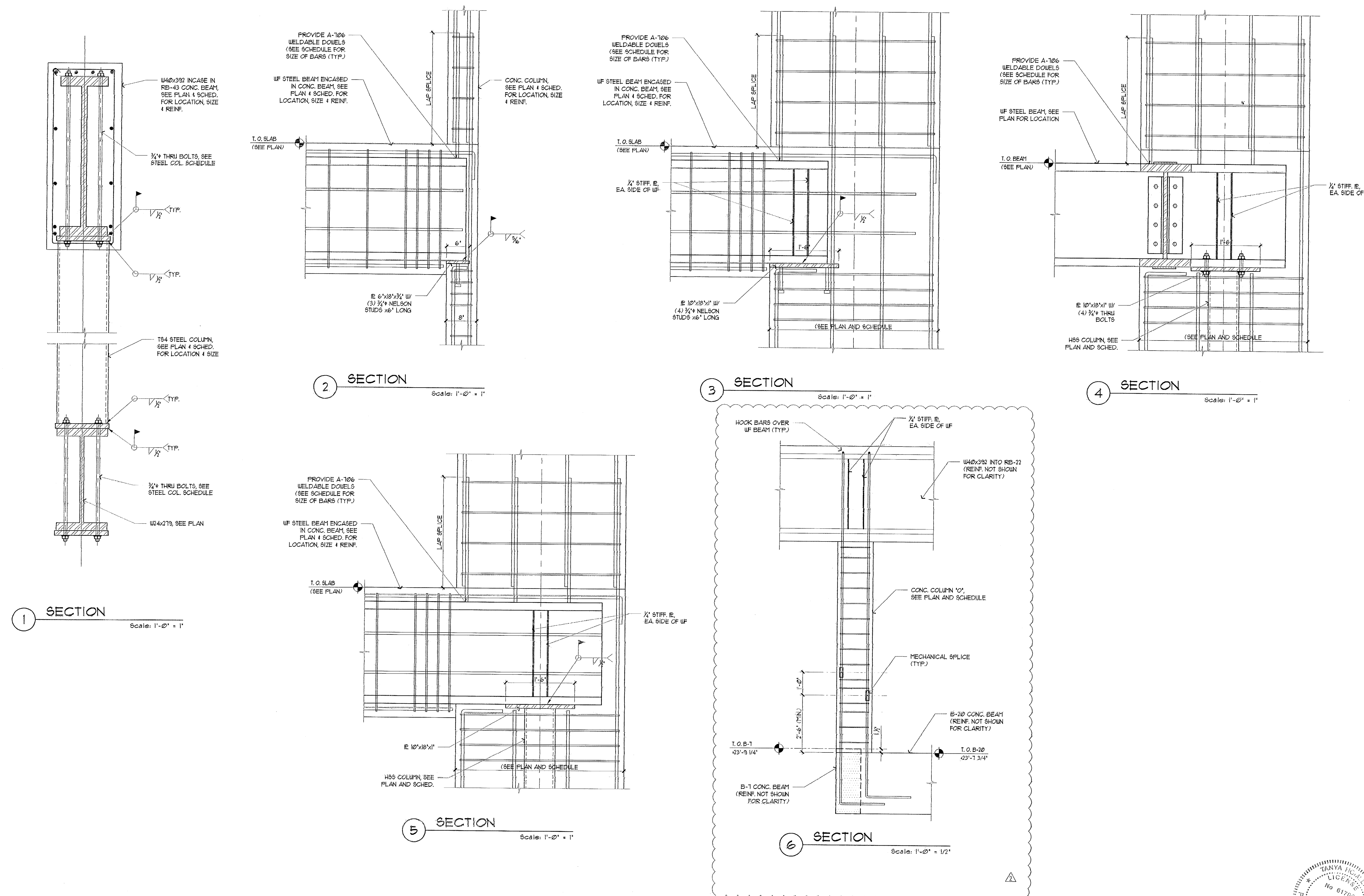


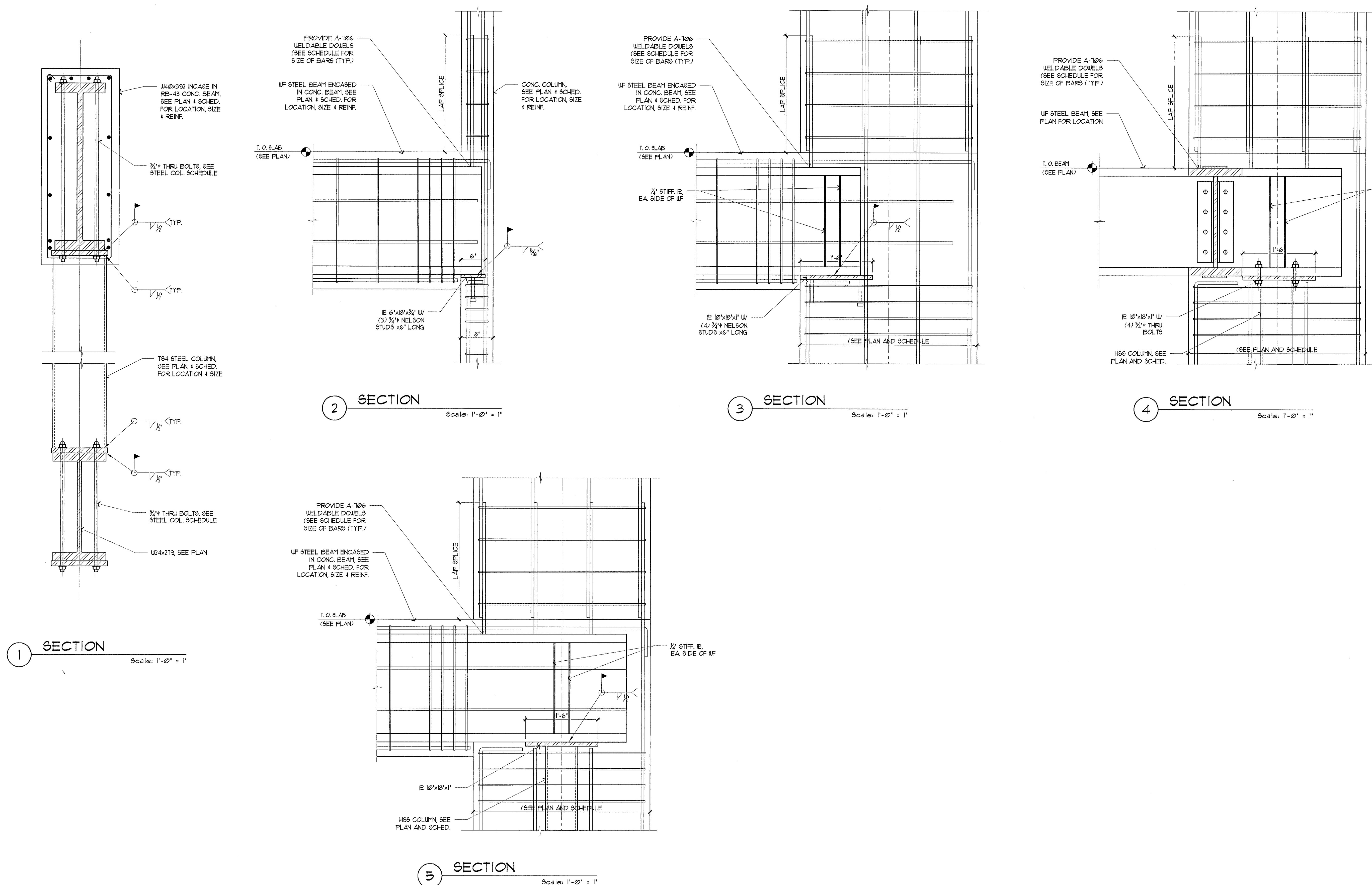
BI DETAIL 'BI'
SCALE: 1/2"=1'-0"



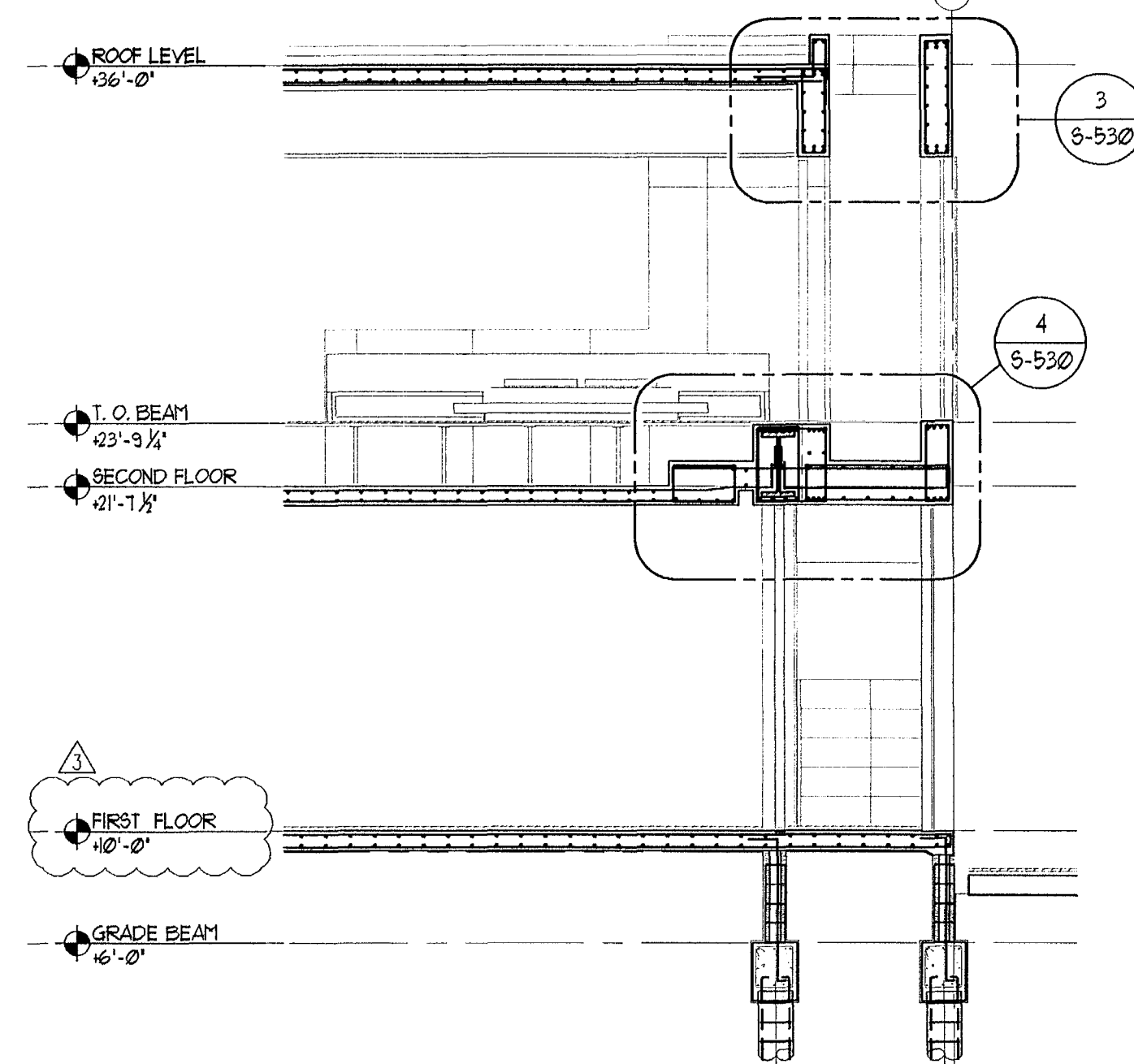
OPTIMUS CONSULTING ENGINEERS
CA. No: 28217 61706
TANYA HOMLEIO PE
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel: 305.512.5880
Fax: 305.512.5961
E-mail: optimusd@bellsouth.net

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.

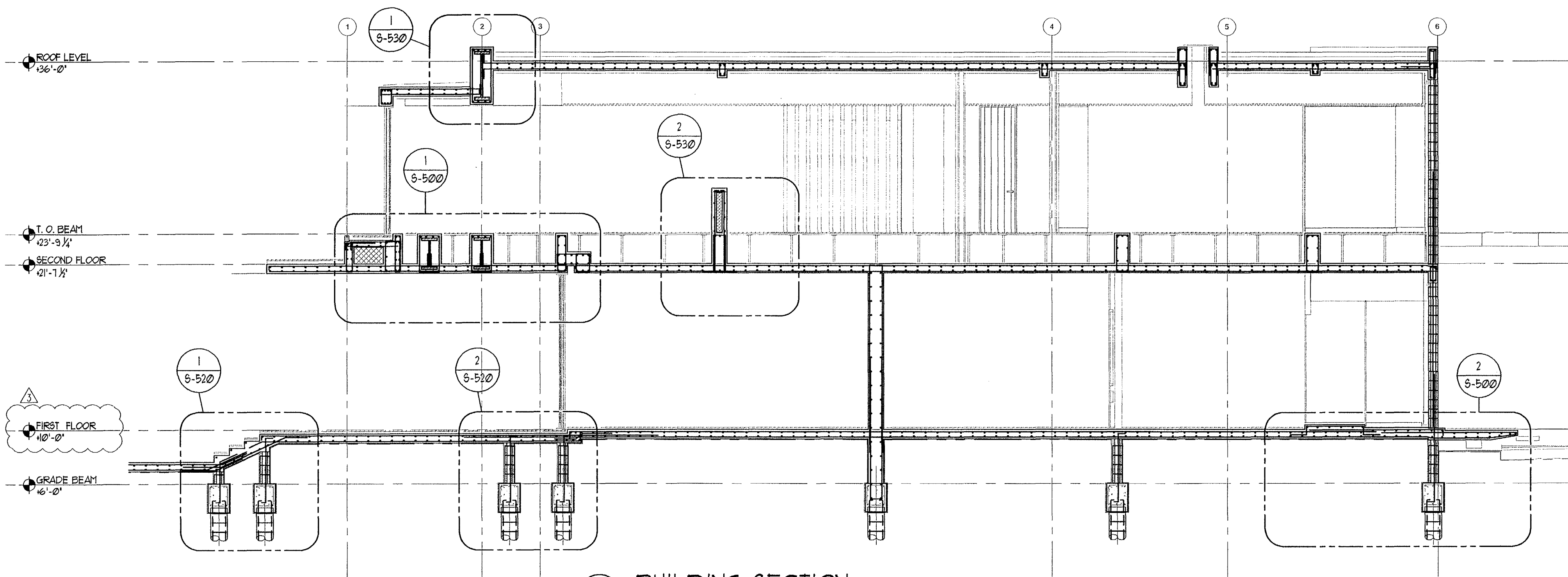




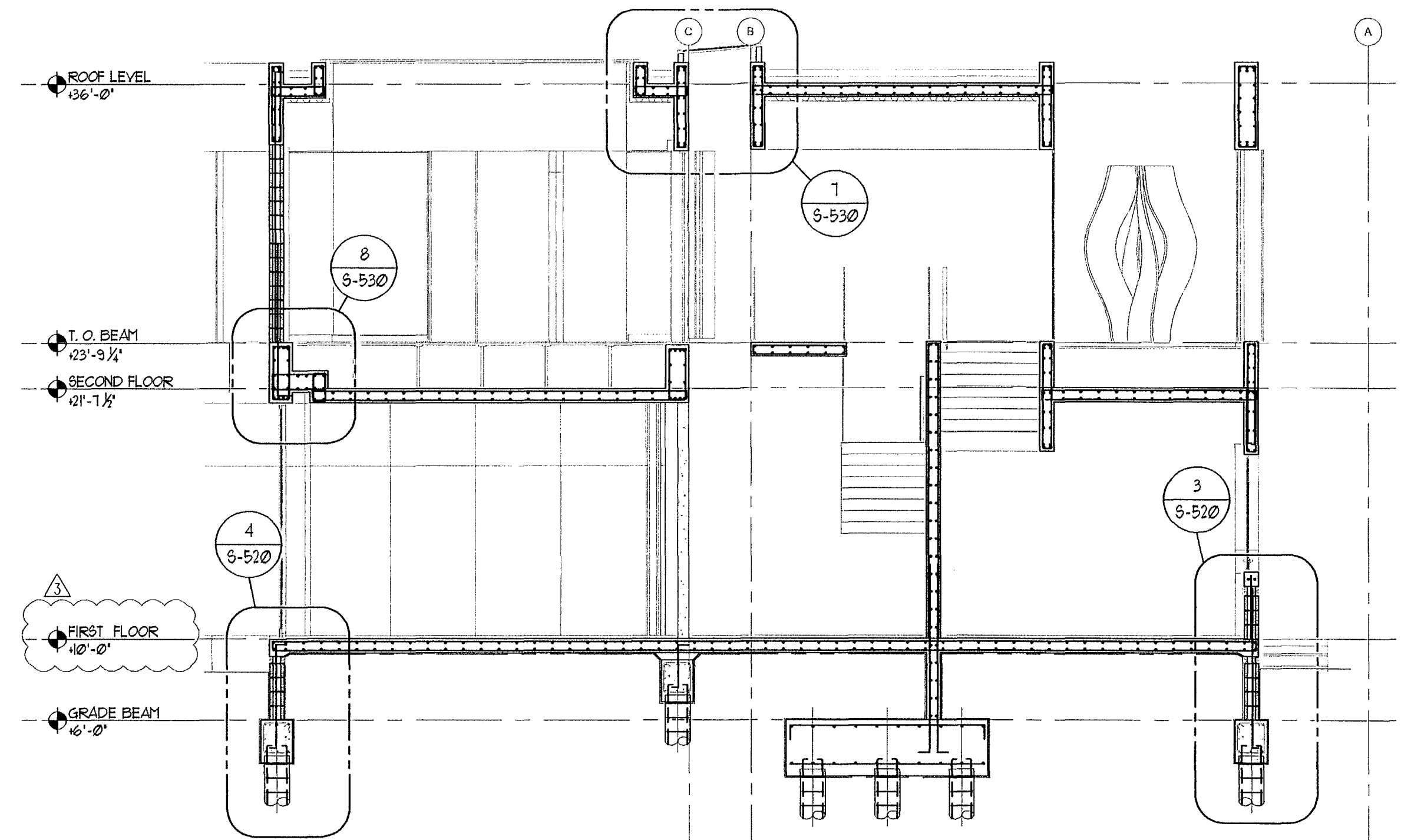
ALL ELEVATION ARE ON N.G.V.D., U.O.N.



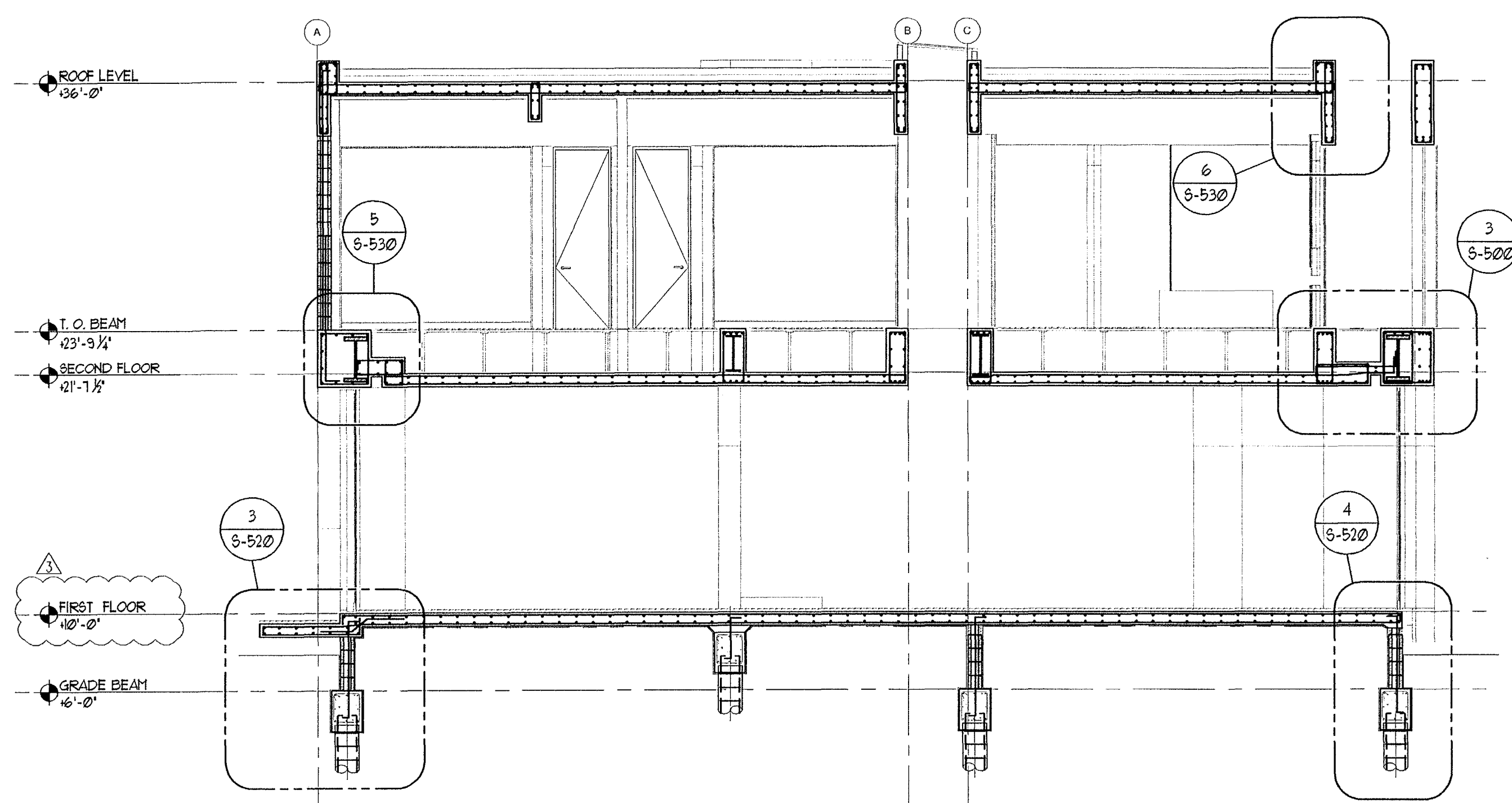
B BUILDING SECTION
Scale: 1'-0" = 3/16"



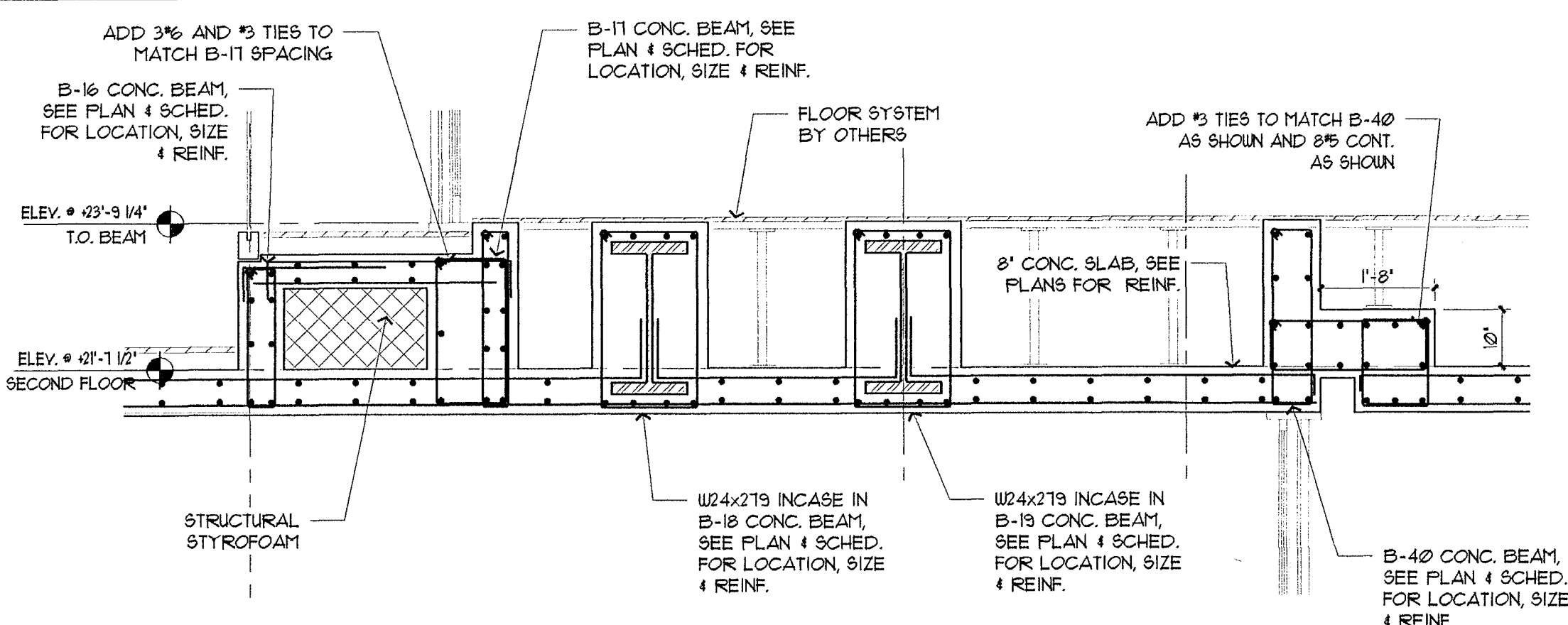
A BUILDING SECTION
Scale: 1'-0" = 3/16"



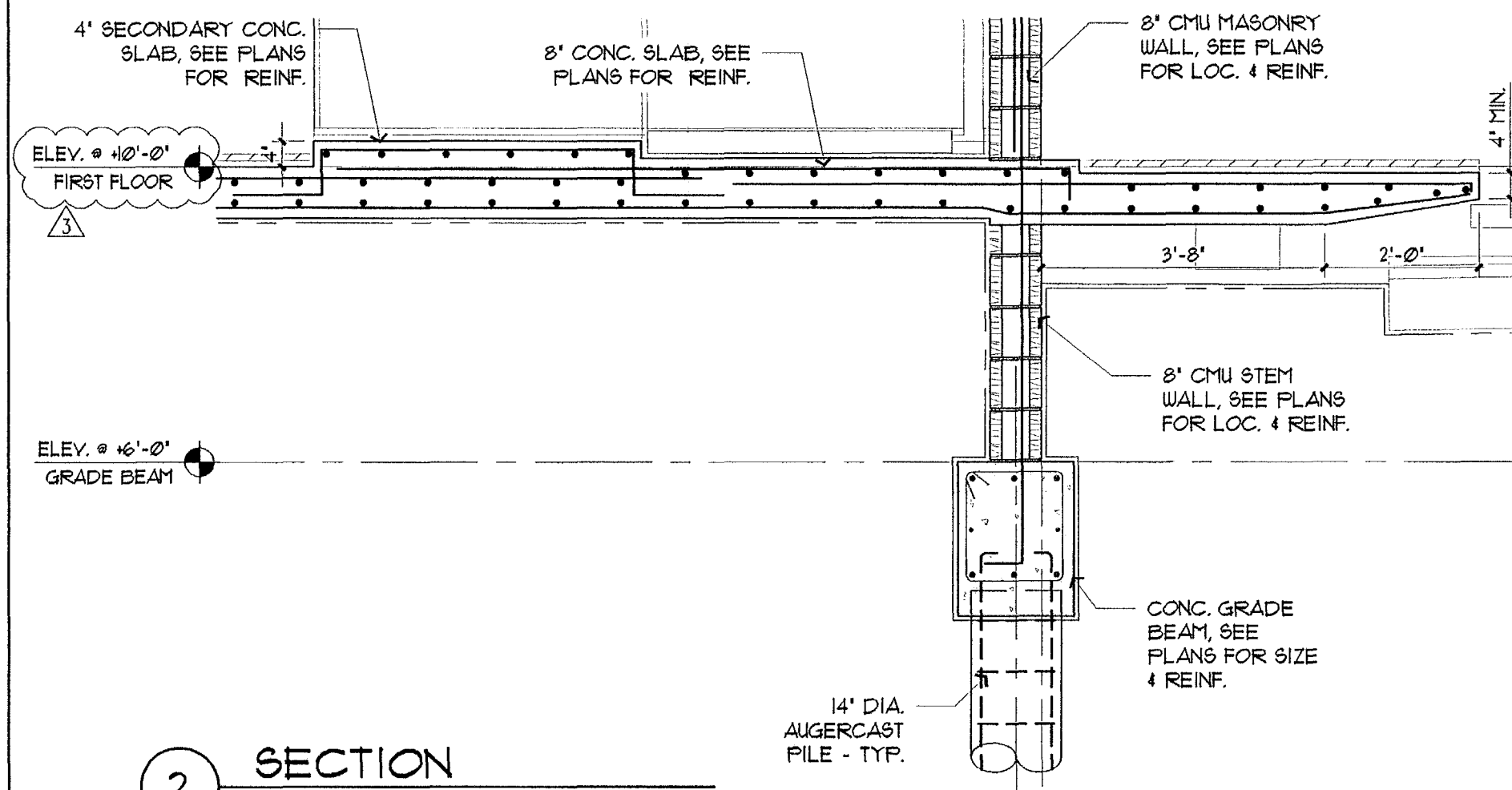
D BUILDING SECTION
Scale: 1'-0" = 3/16"



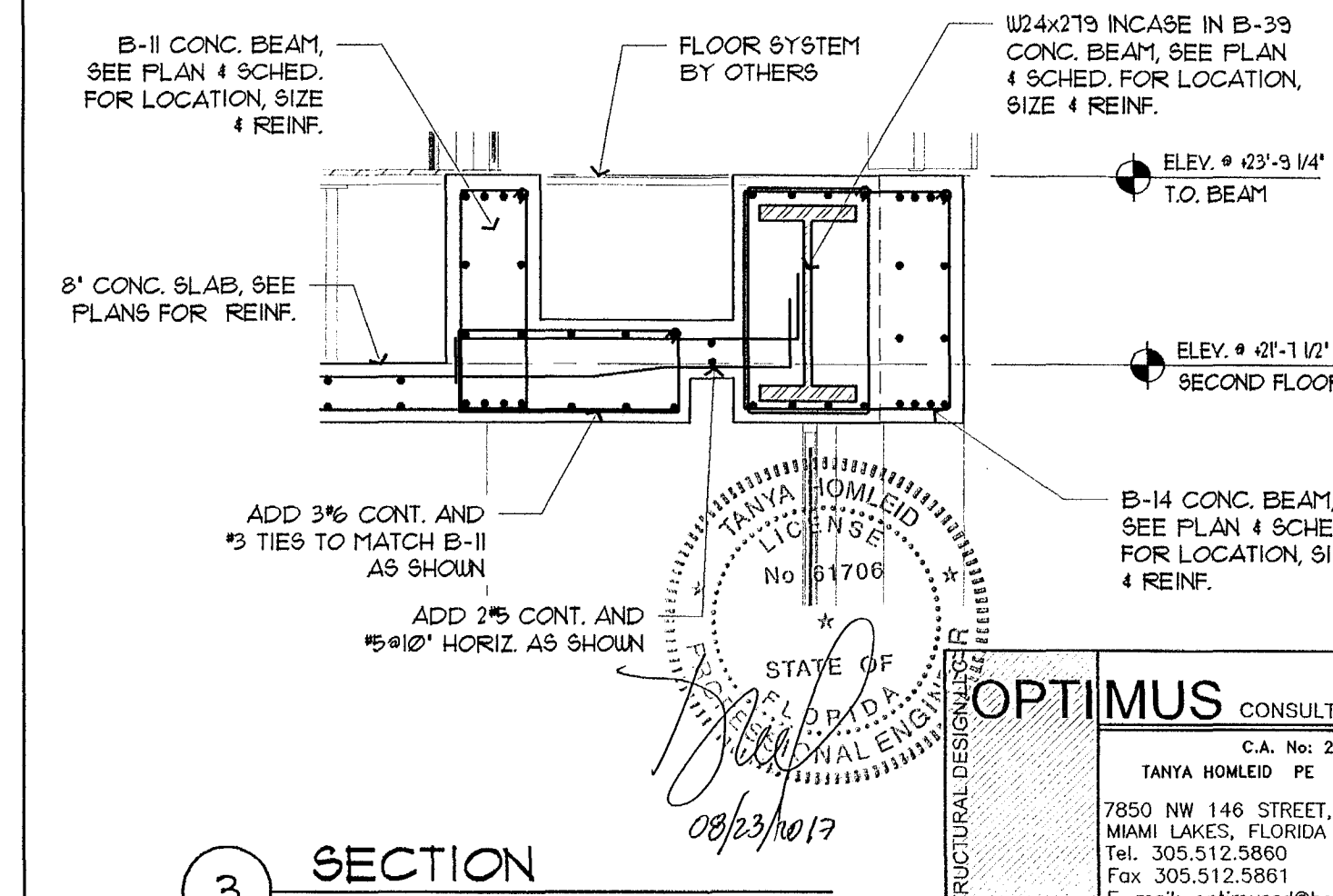
C BUILDING SECTION
Scale: 1'-0" = 3/16"



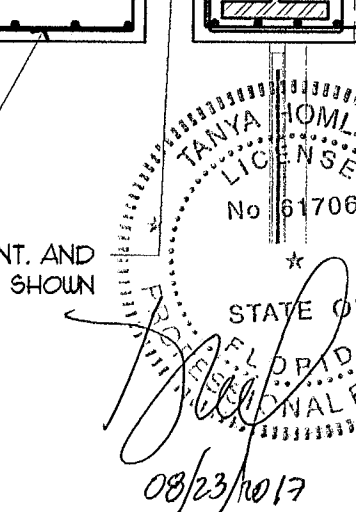
1 SECTION
Scale: 1'-0" = 1/2"



2 SECTION
Scale: 1'-0" = 1/2"

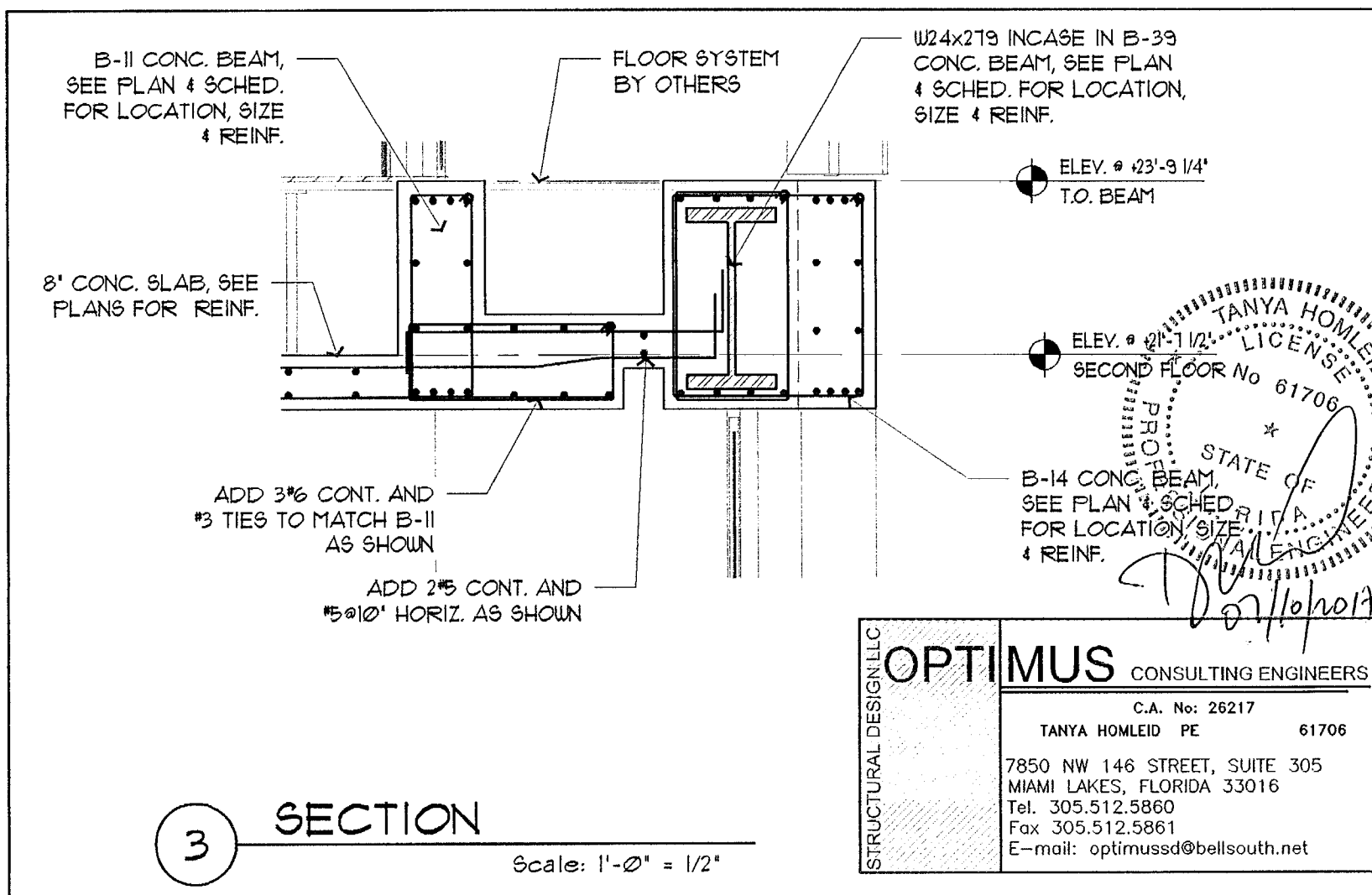
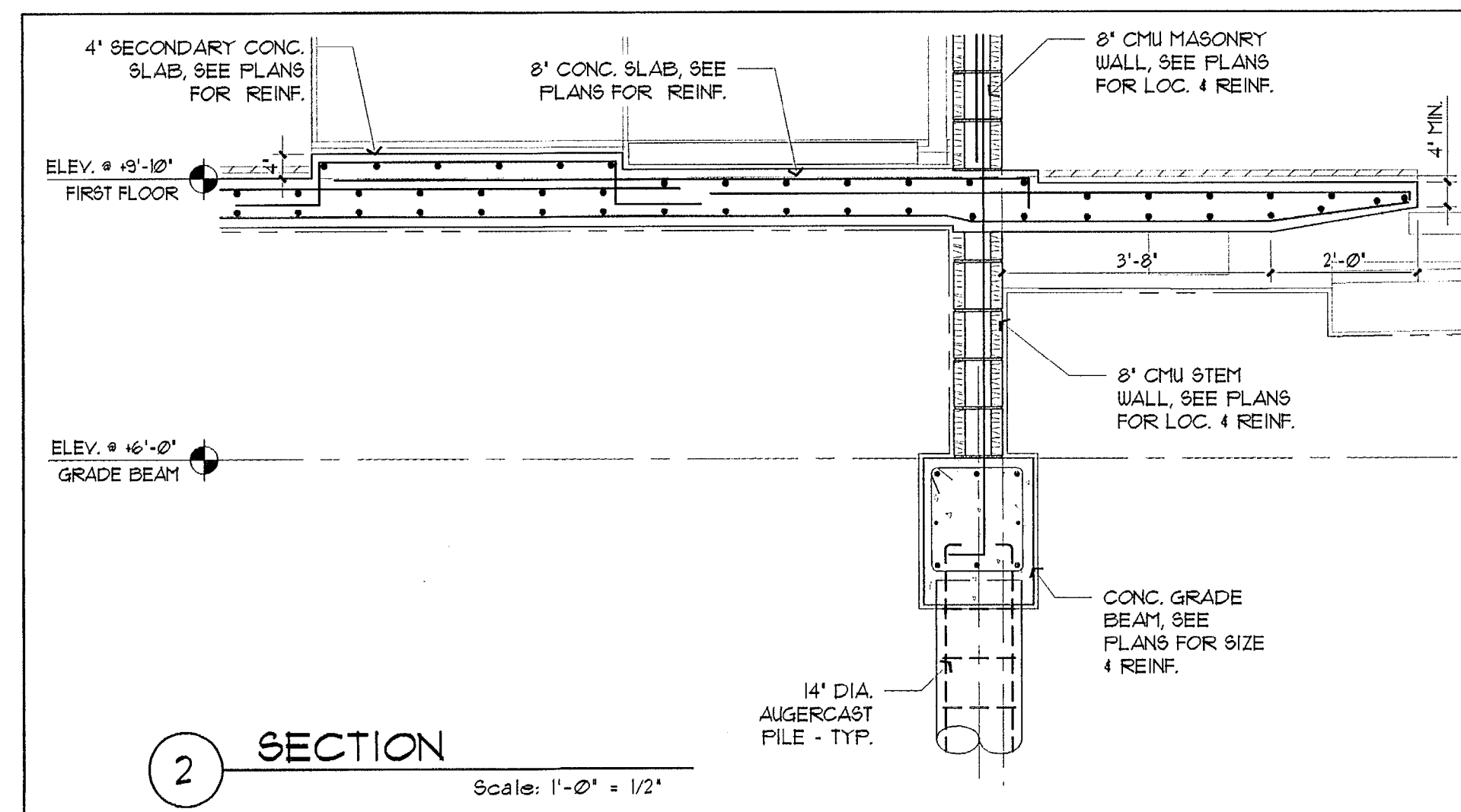
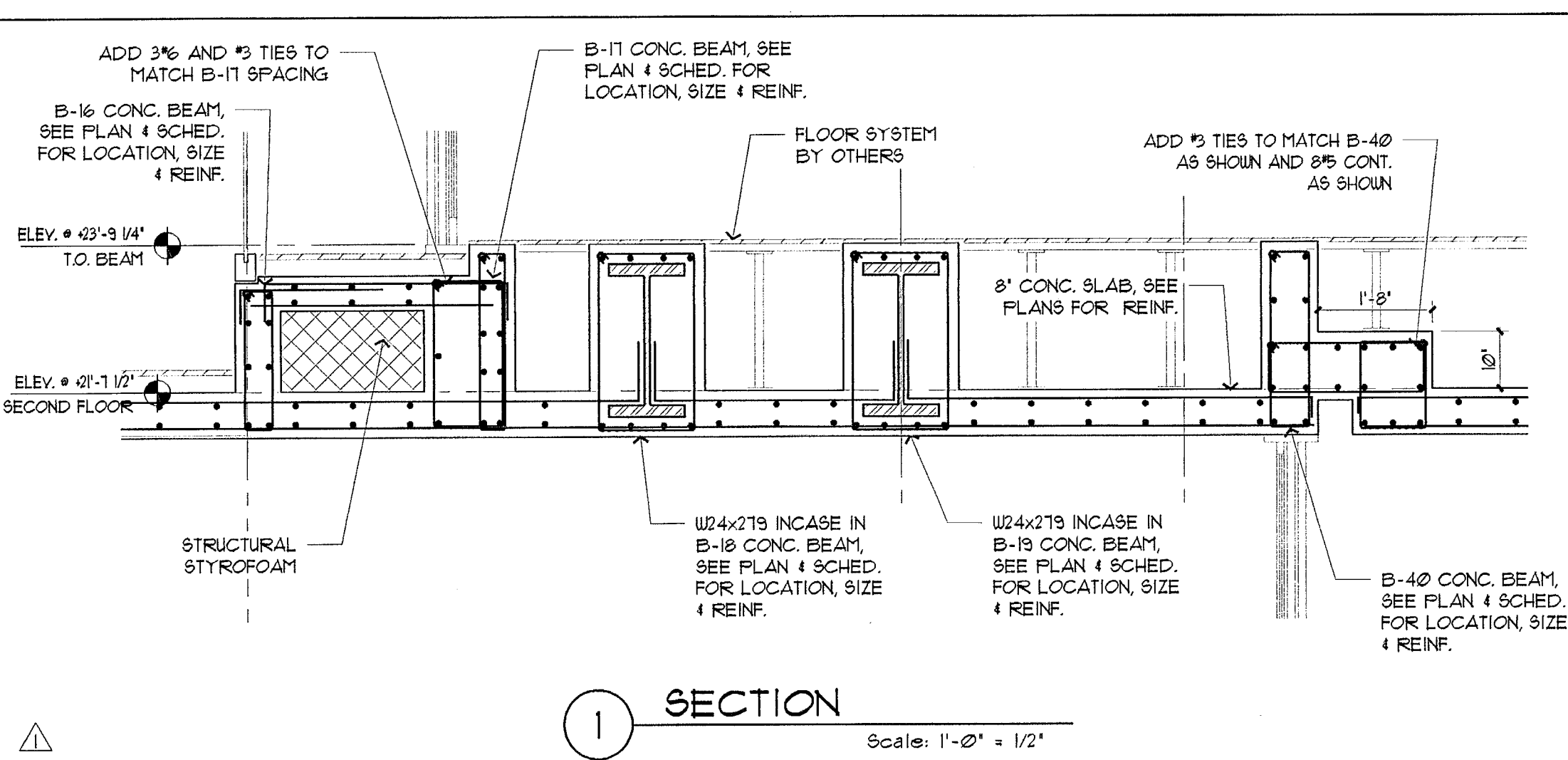
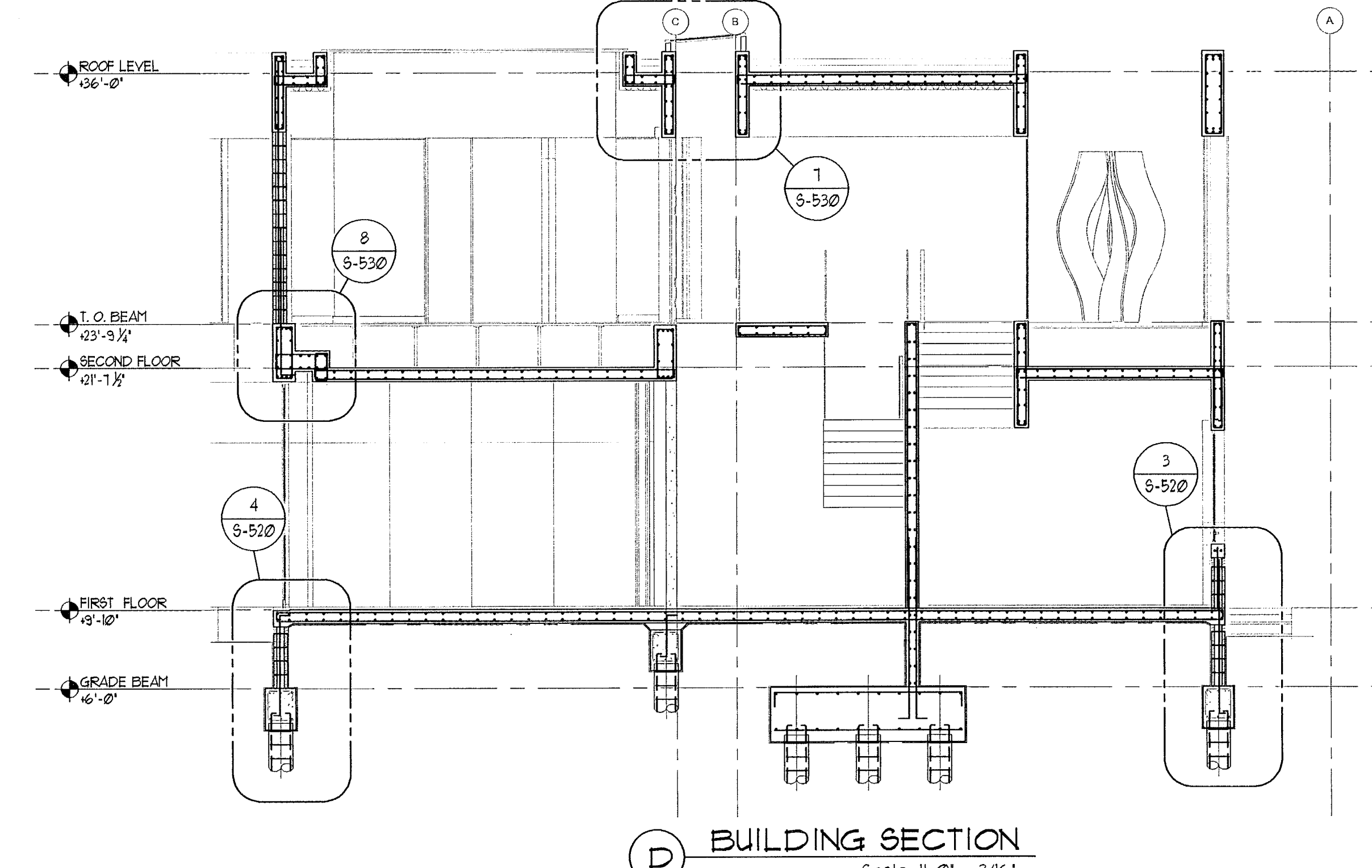
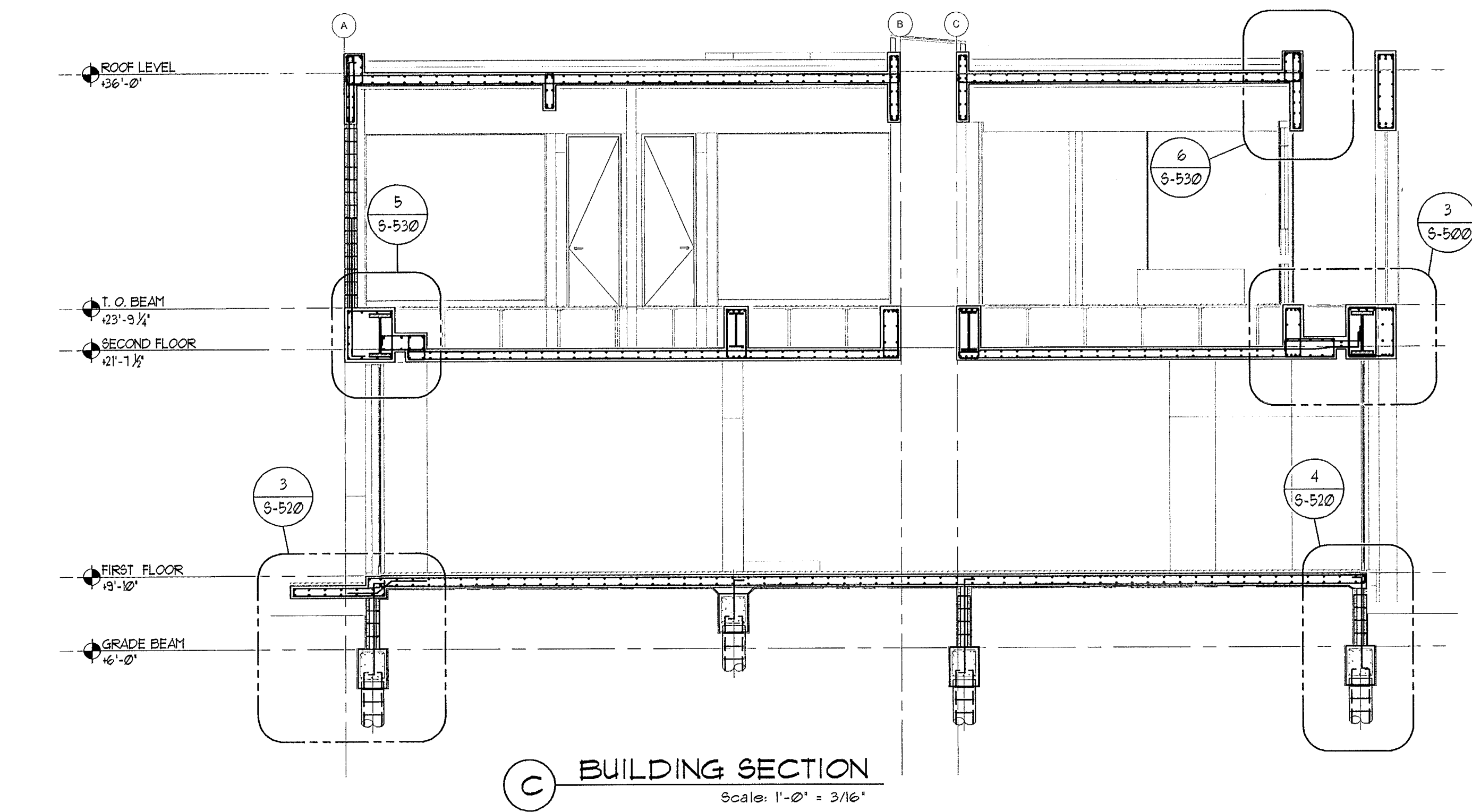
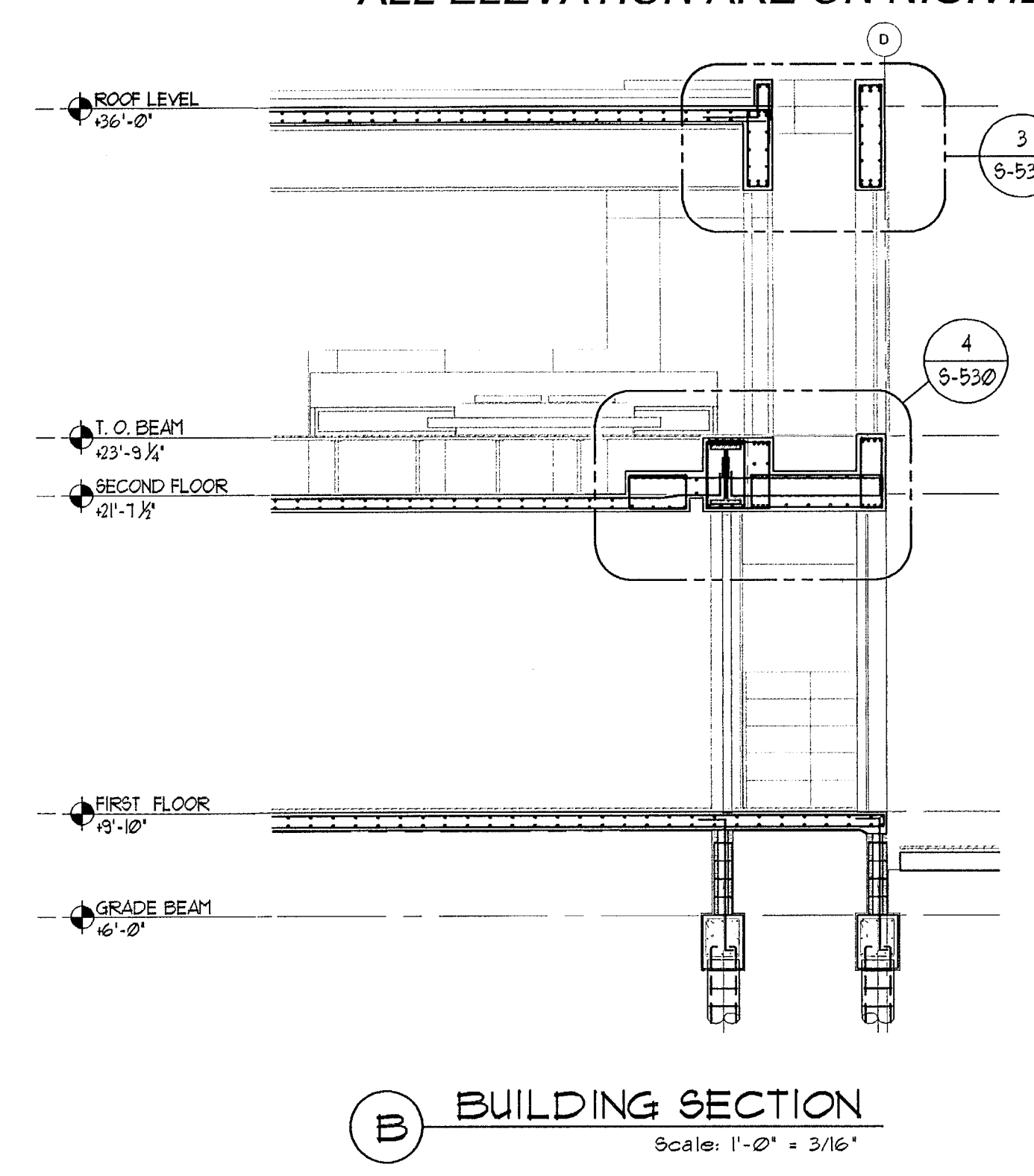
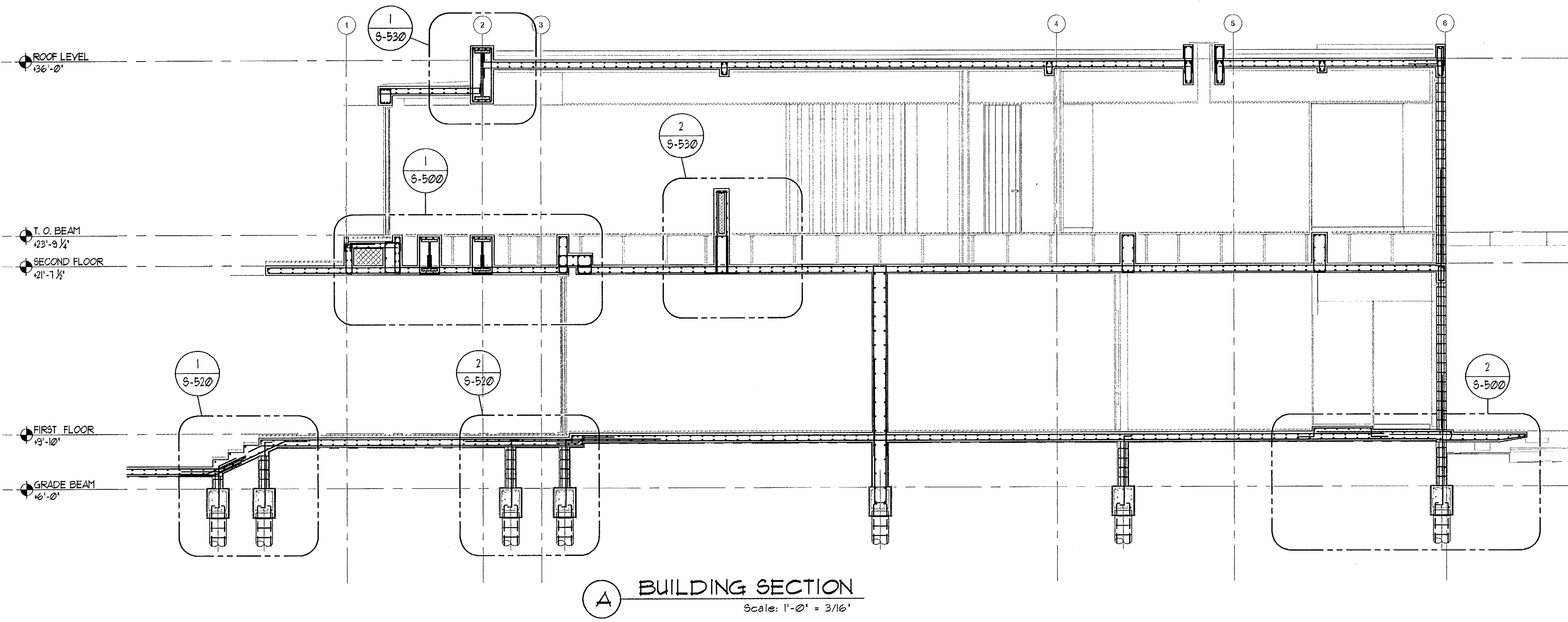


3 SECTION
Scale: 1'-0" = 1/2"



OPTIMUS CONSULTING ENGINEERS
C.A. No: 28217
TANYA HOMLEID PE 61706
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel: 305.512.5860
Fax: 305.512.5861
E-mail: optimusd@bellsouth.net

ALL ELEVATION ARE ON N.G.V.D., U.O.N.



28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

Raphael Levy
registered architect
AR0094779

comm no.
1652

date:
02/03/17

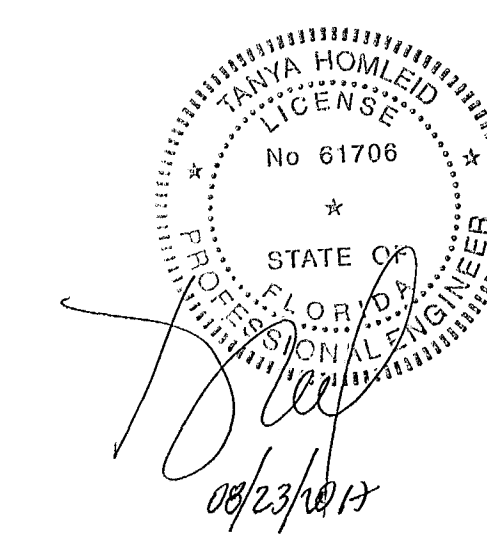
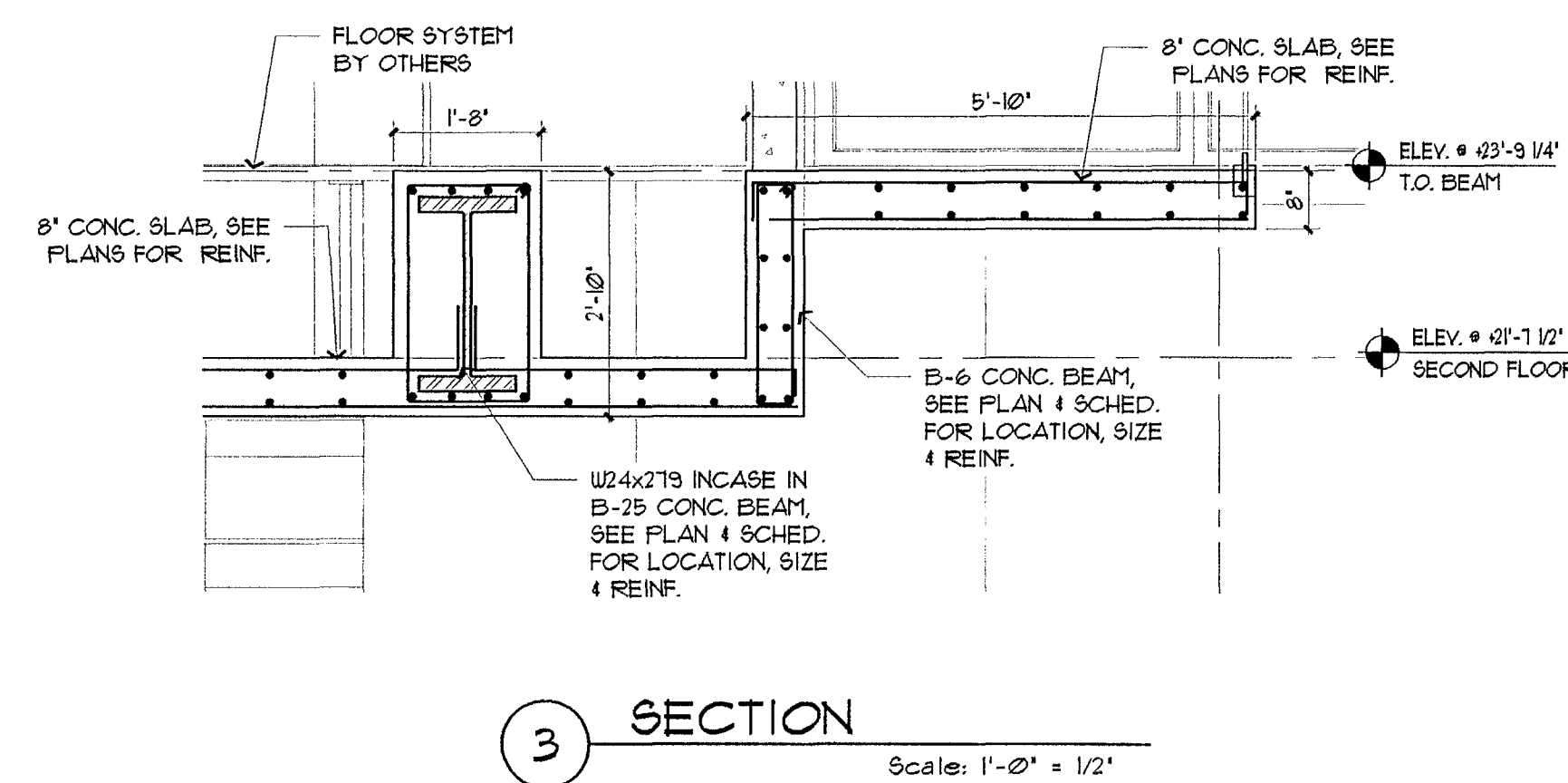
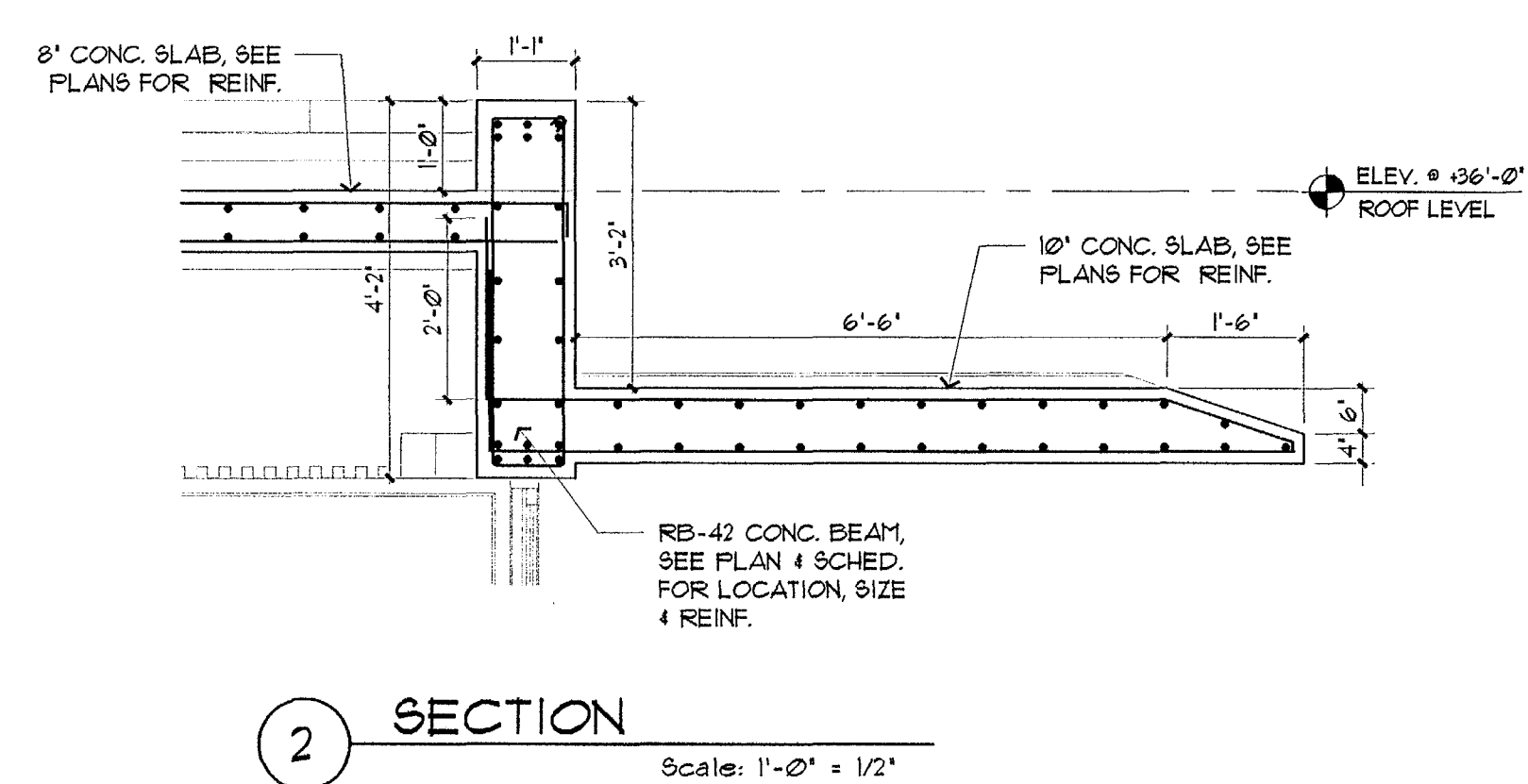
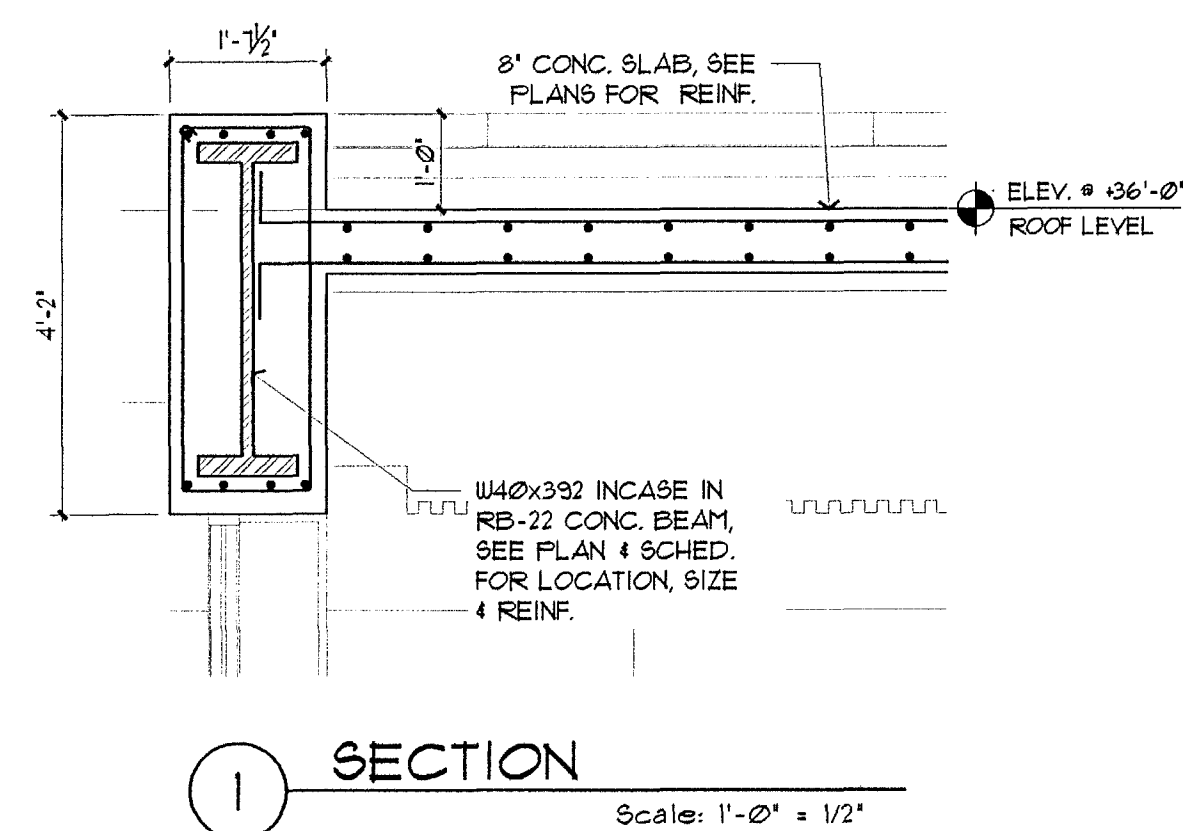
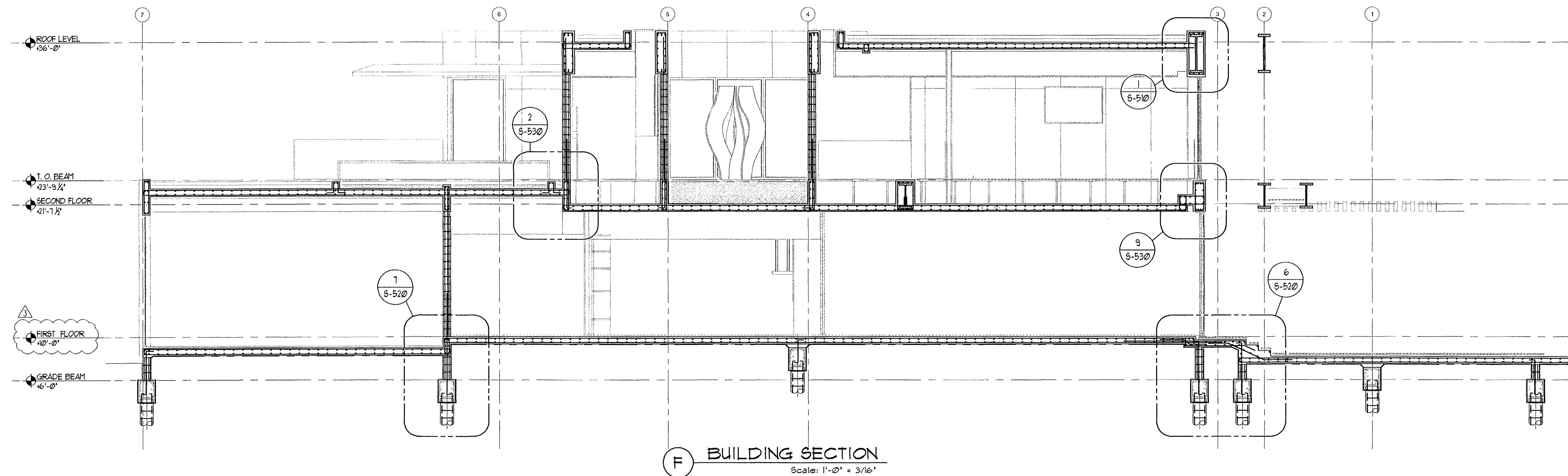
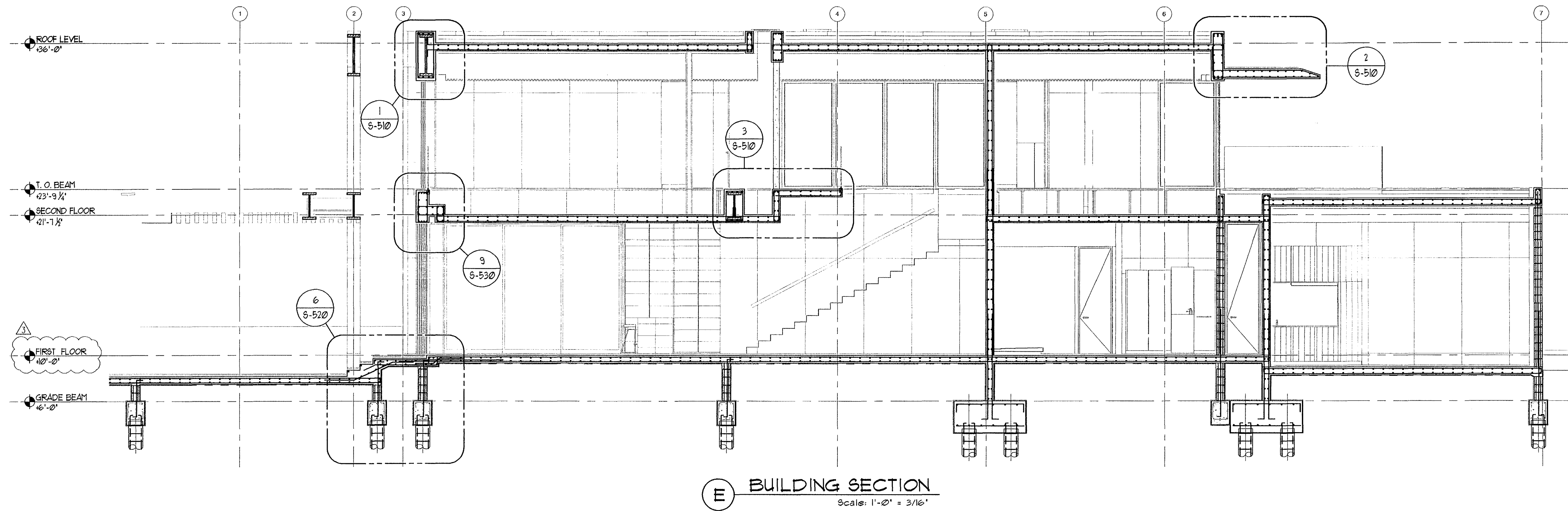
revised:
07-10-17 B.D. COMMENTS/O. CHANGES

sheet no.

S-500

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.

OPTIMUS CONSULTING ENGINEERS
C.A. No. 25217 61706
TANYA HOMLEID PE
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel. 305.512.5860
Fax 305.512.5861
E-mail: optimusd@bellsouth.net



OPTIMUS CONSULTING ENGINEERS
C.A. No. 26217
TANYA HOMLEID PE 61706
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel. 305.512.5860
Fax 305.512.5861
E-mail: optimus30@bellsouth.net

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

Raphael Levy
registered architect
AR0094779

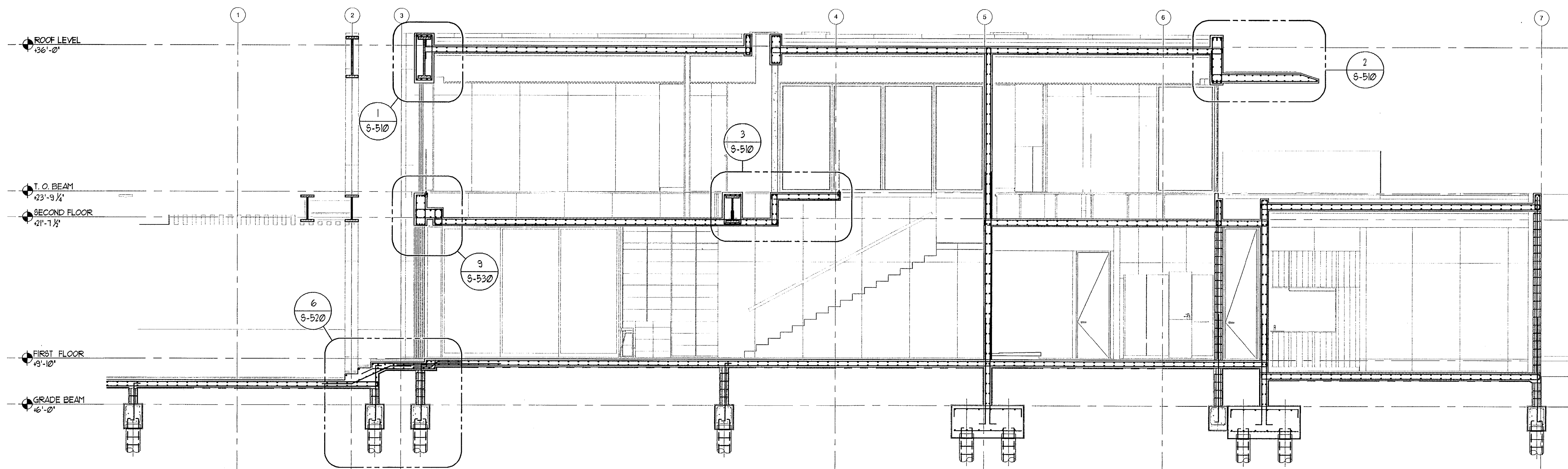
comm no.
1652

date:
02/03/17

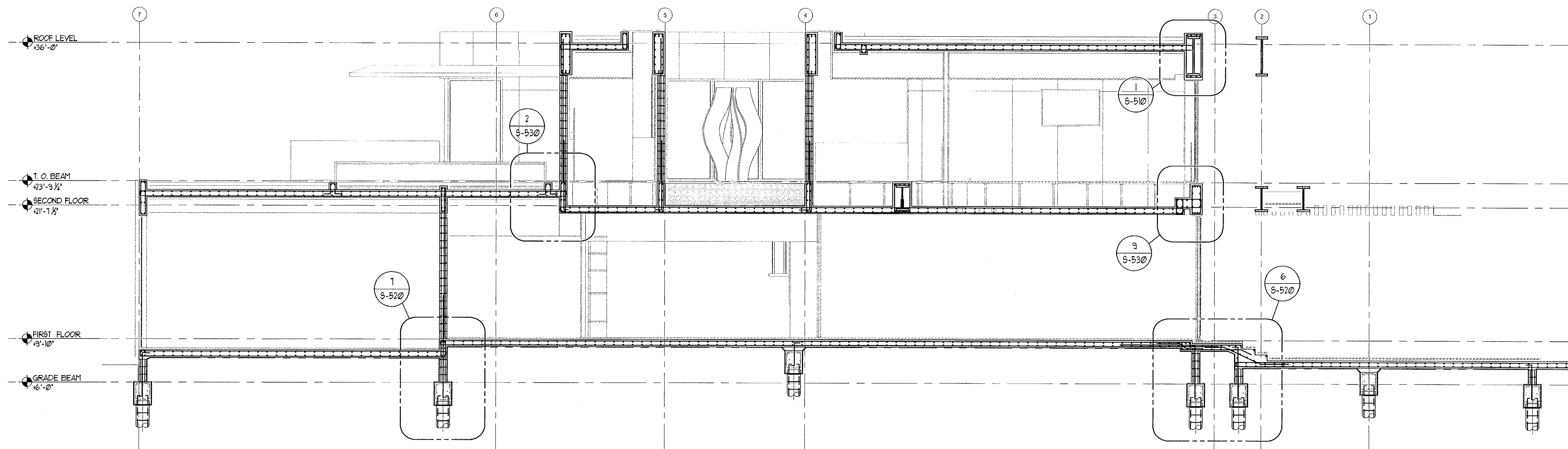
revised:
07-10-17 B.D. COMMENTS/O. CHANGES
08-23-17 B.D. COMMENTS/O. CHANGES

sheet no.
S-510

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.



E BUILDING SECTION
Scale: 1" = 0' = 3/16"



F BUILDING SECTION
Scale: 1" = 0' = 3/16"

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

Raphael Levy
registered architect
AR0094779

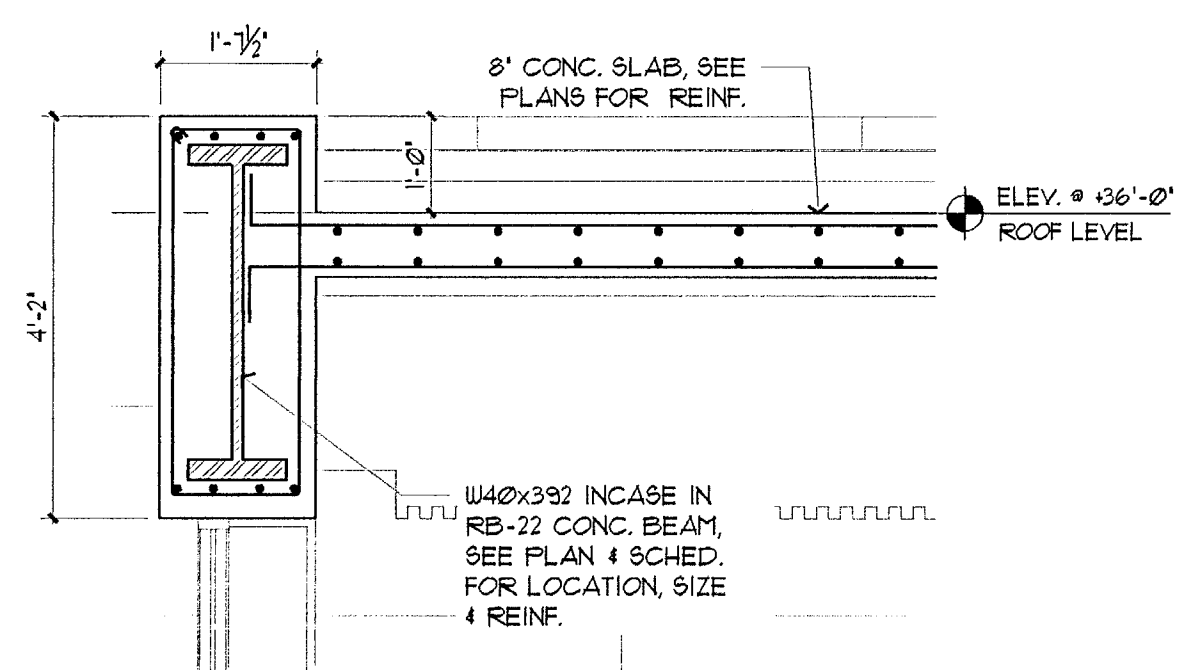
comm no.
1652

date:
02/03/17

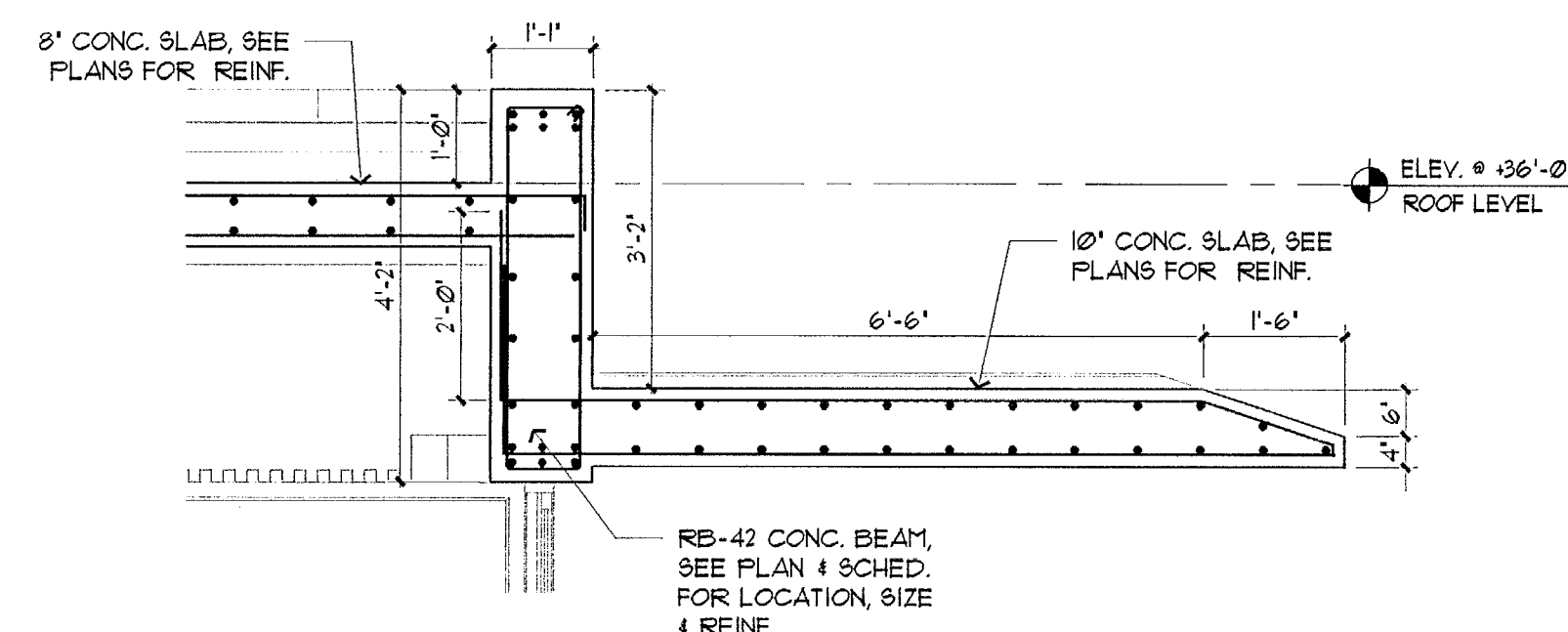
revised:
07-10-17 B.D. COMMENTS/O. CHANGES

sheet no.
S-510

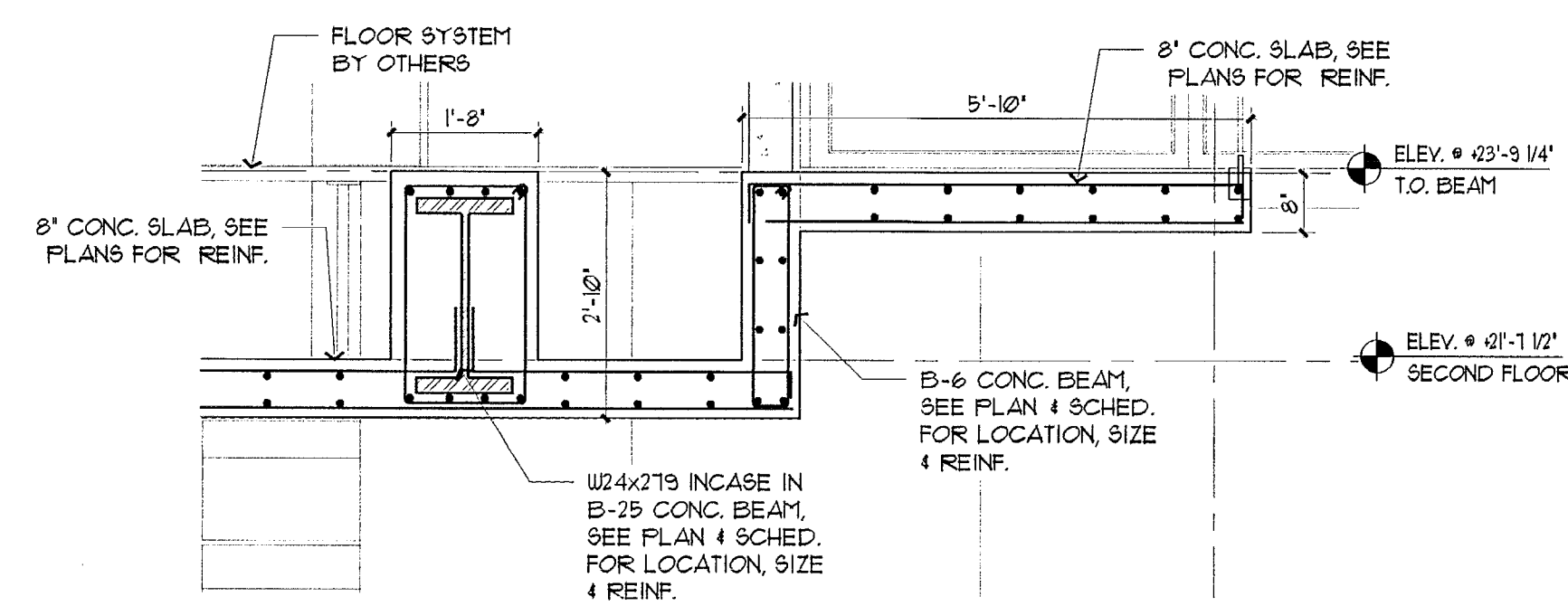
TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.



1 SECTION
Scale: 1" = 0' = 1/2"



2 SECTION
Scale: 1" = 0' = 1/2"

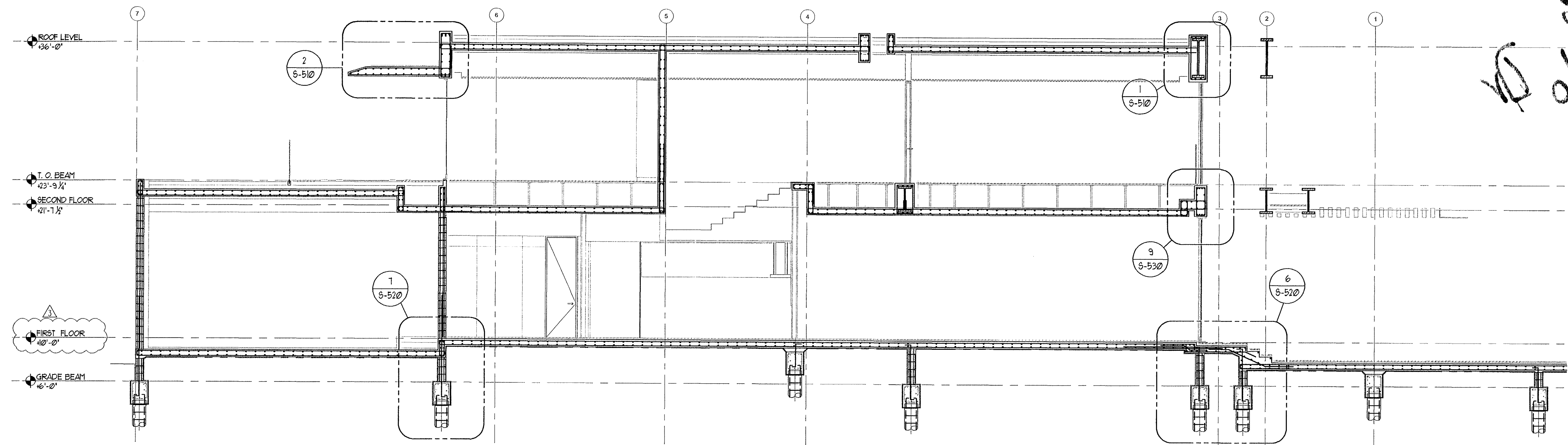


3 SECTION
Scale: 1" = 0' = 1/2"

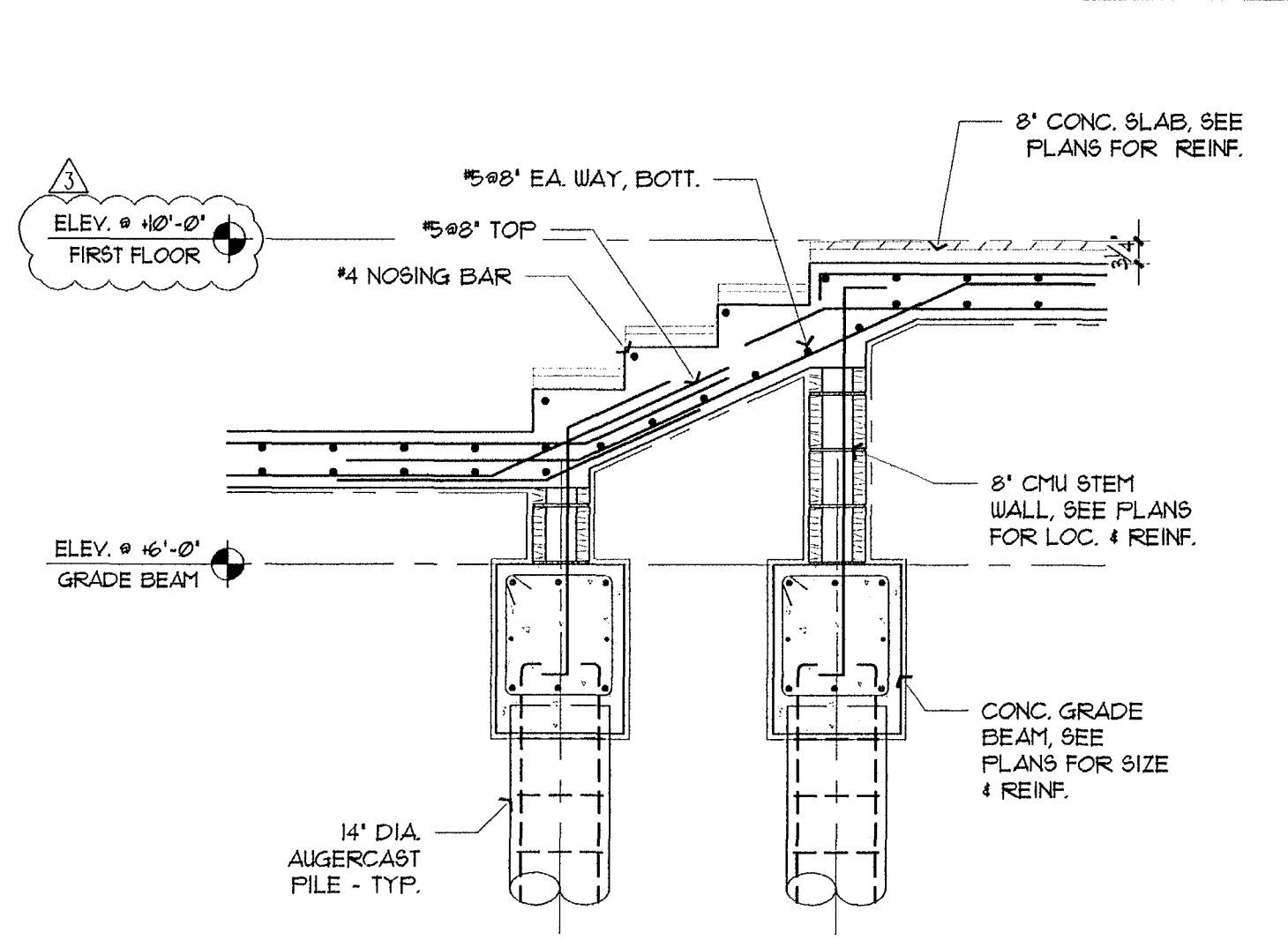
OPTIMUS CONSULTING ENGINEERS
TANYA HOMLED, P.E.
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel: 305.512.5860
Fax: 305.512.5861
E-mail: optimussd@bellsouth.net

TANYA HOMLED
REGISTERED PROFESSIONAL ENGINEER
STATE OF FLORIDA
LICENSE NO. 61706
02/10/2017

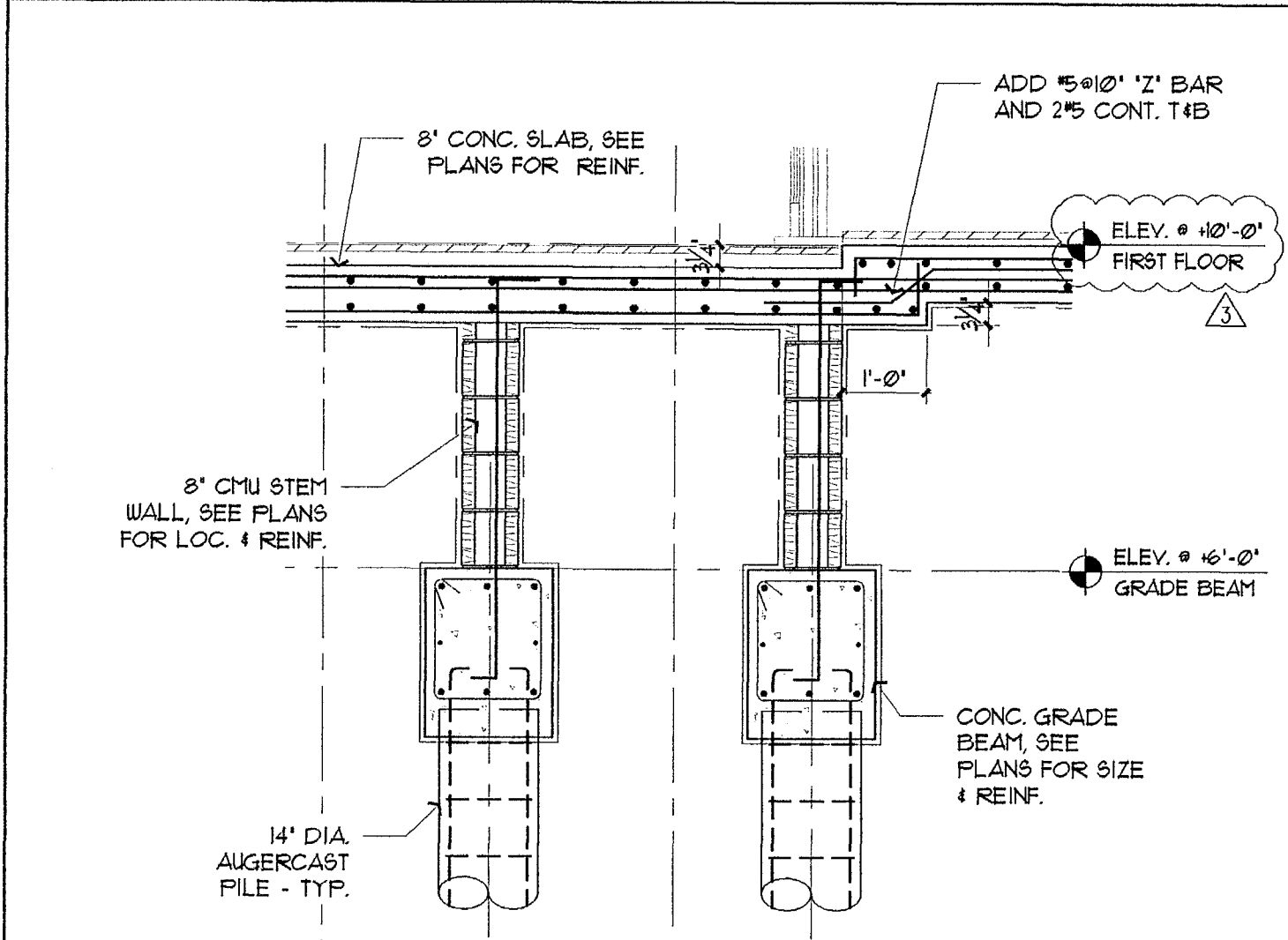
30900 F12
W DILIDO W



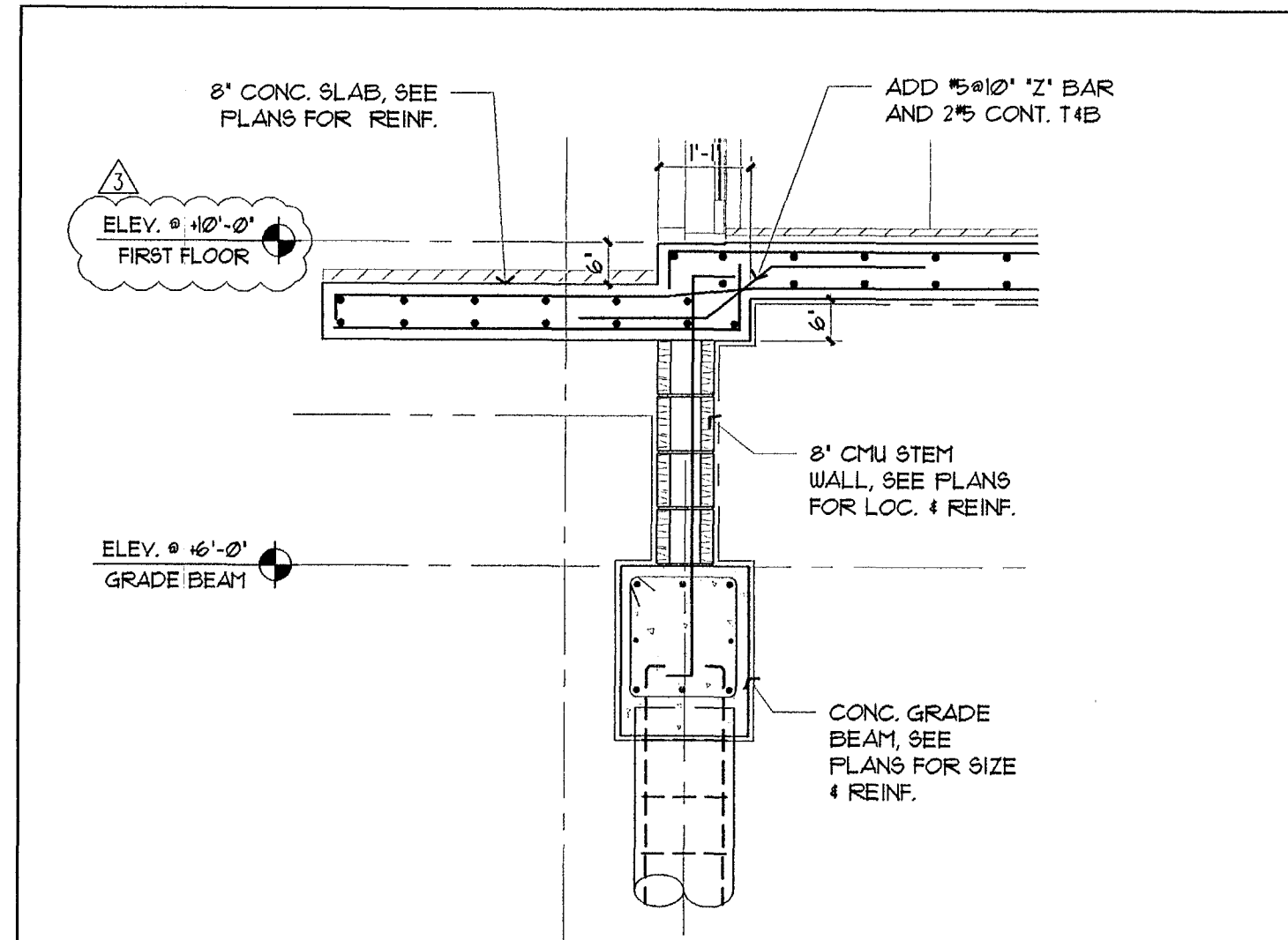
G BUILDING SECTION
Scale: 1" = 0' = 3/16"



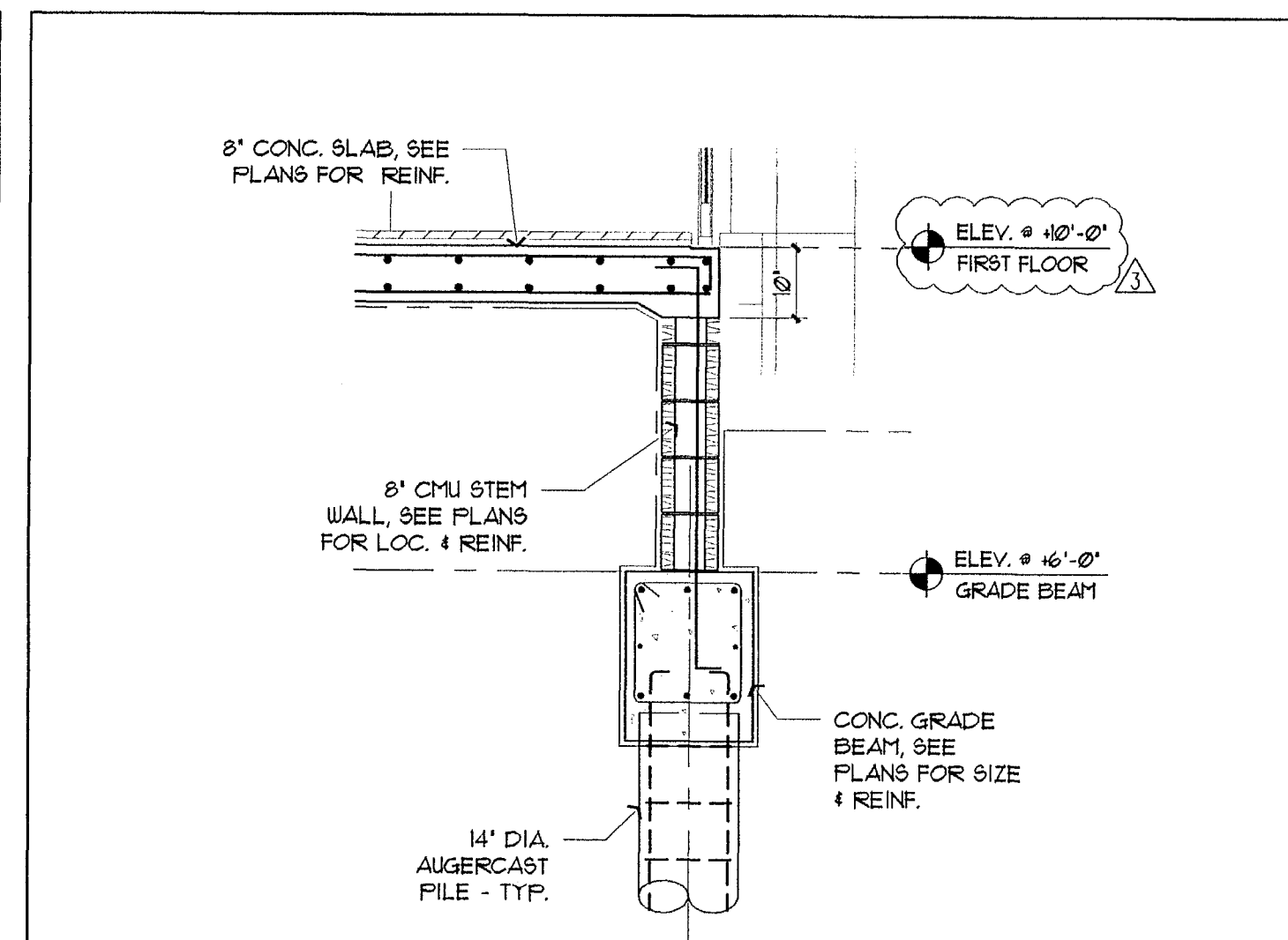
1 SECTION
Scale: 1" = 0' = 1/2"



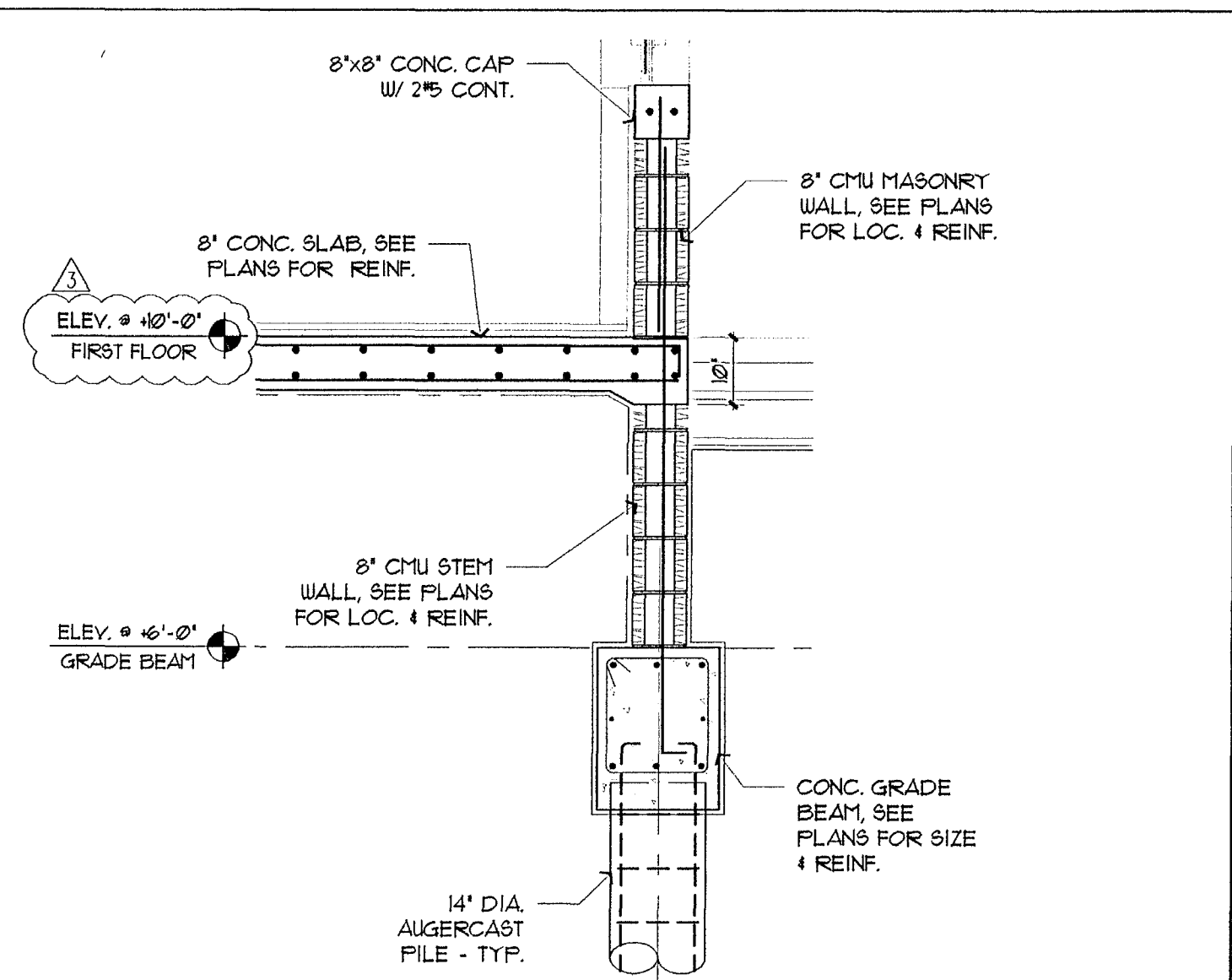
2 SECTION
Scale: 1" = 0' = 1/2"



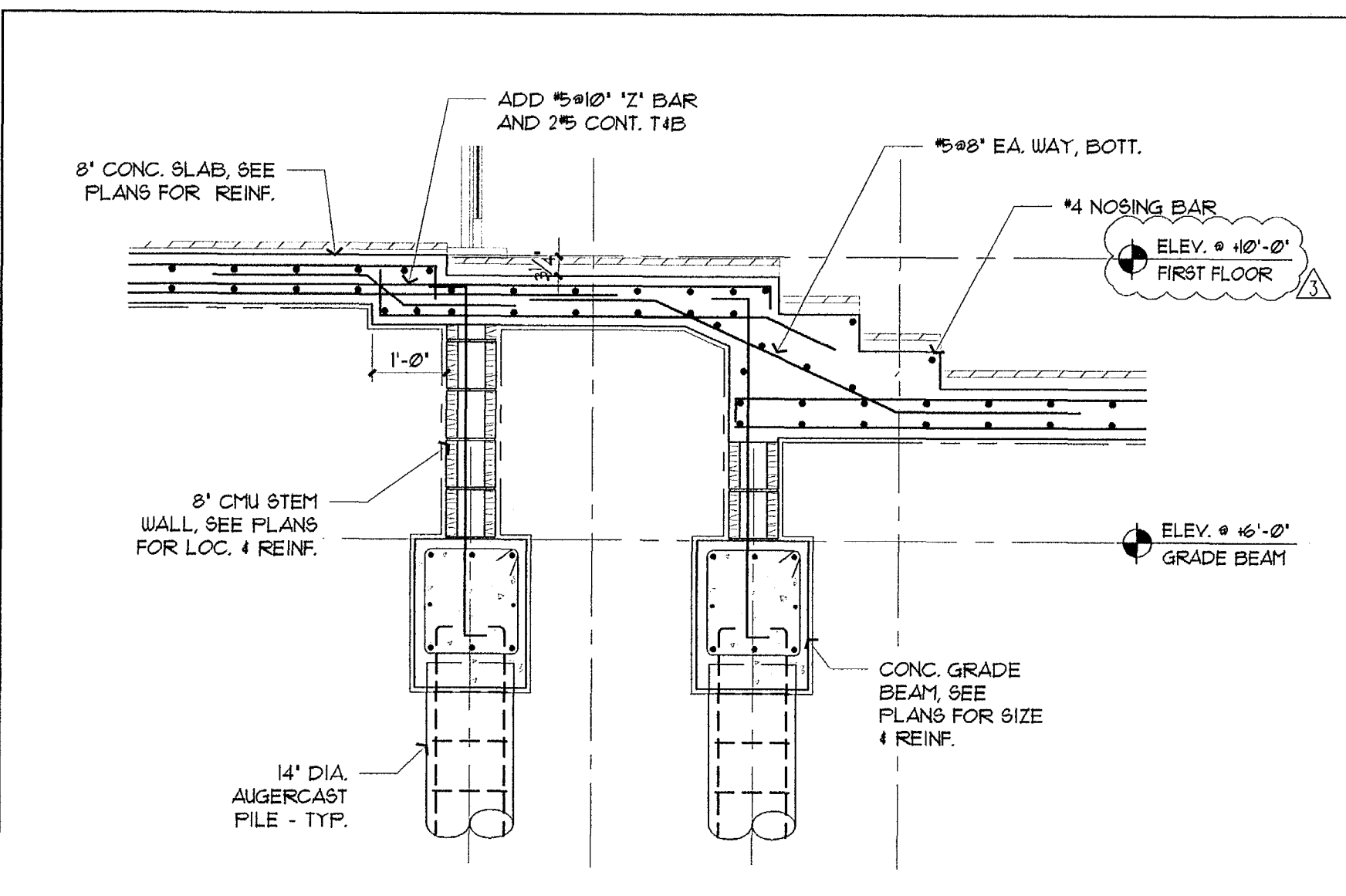
3 SECTION
Scale: 1" = 0' = 1/2"



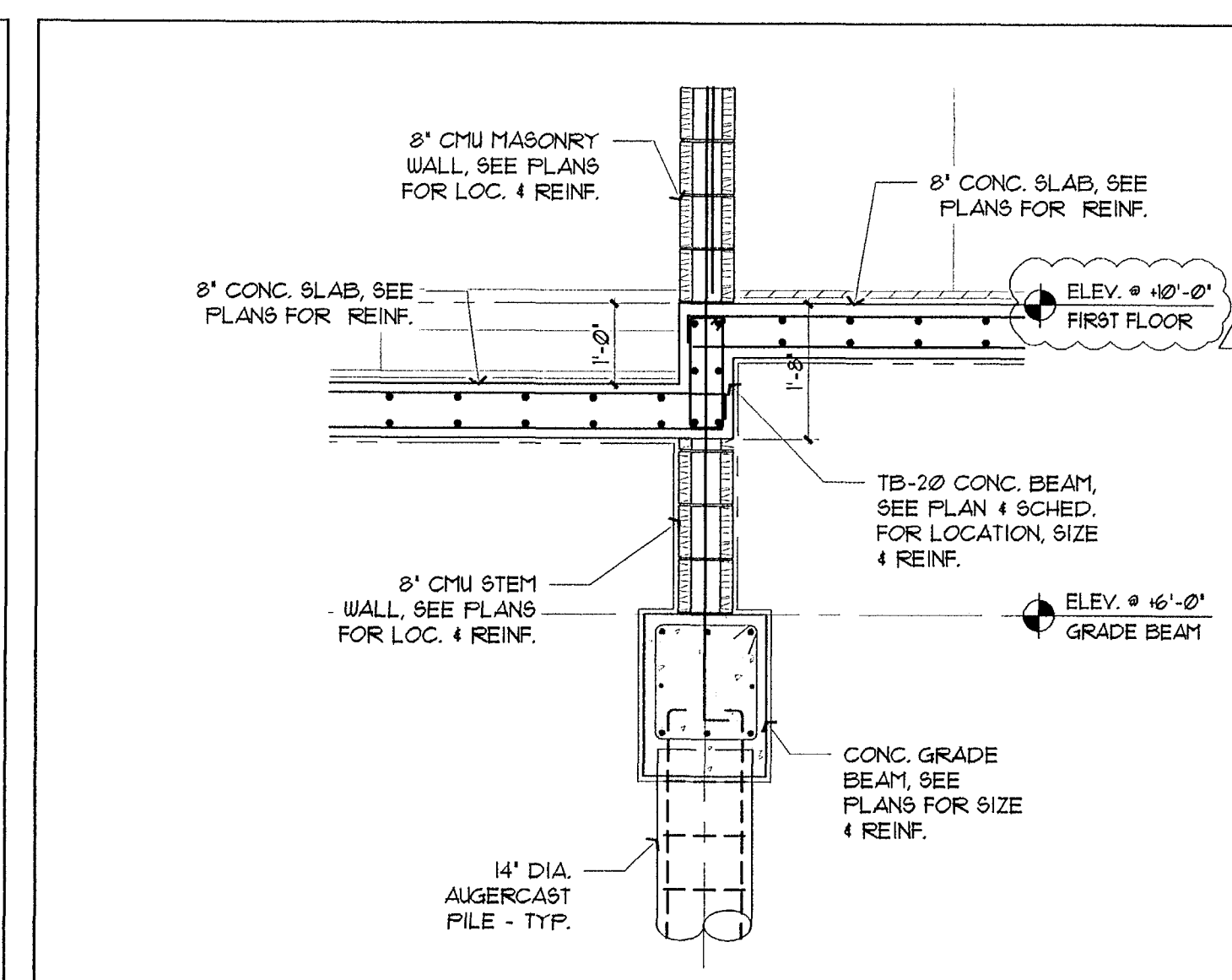
4 SECTION
Scale: 1" = 0' = 1/2"



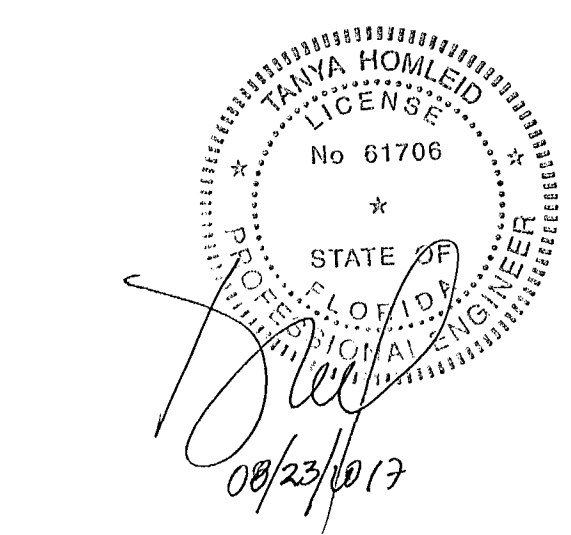
5 SECTION
Scale: 1" = 0' = 1/2"



6 SECTION
Scale: 1" = 0' = 1/2"



7 SECTION
Scale: 1" = 0' = 1/2"



OPTIMUS CONSULTING ENGINEERS
C.A. No. 25217 61706
TANYA HOMLEID PE
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel. 305.512.5860
Fax 305.512.5861
E-mail: optimusd@bellsouth.net

28 W DILIDO RESIDENCE
28 WEST DILIDO DR.
MIAMI BEACH, FL 33139

seal

Raphael Levy
registered architect
AR00094779

comm no.
1652

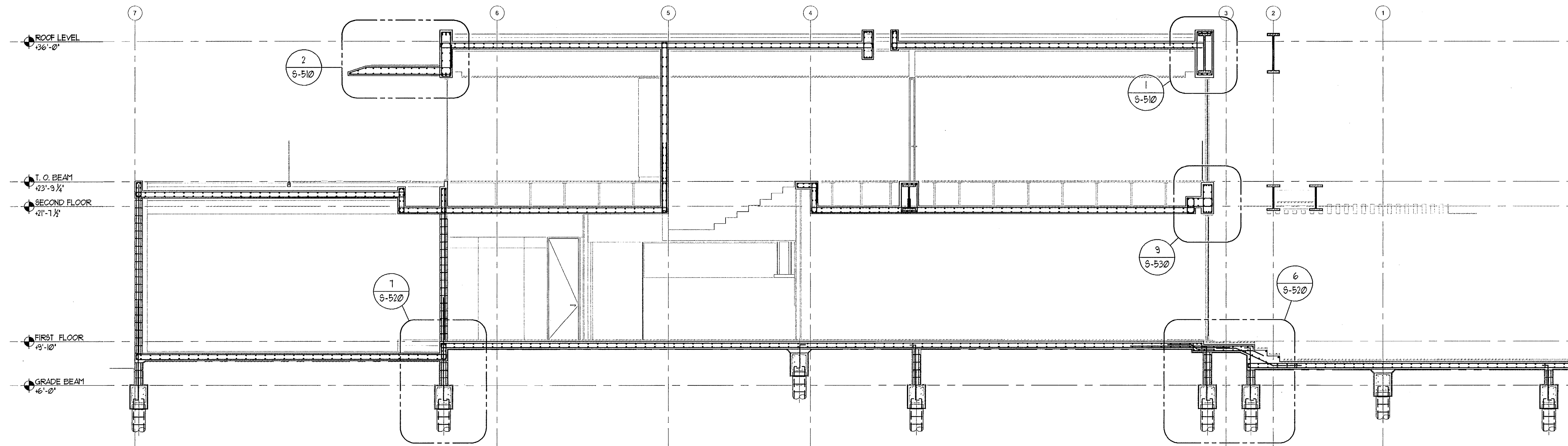
date:
02/03/17

revised:

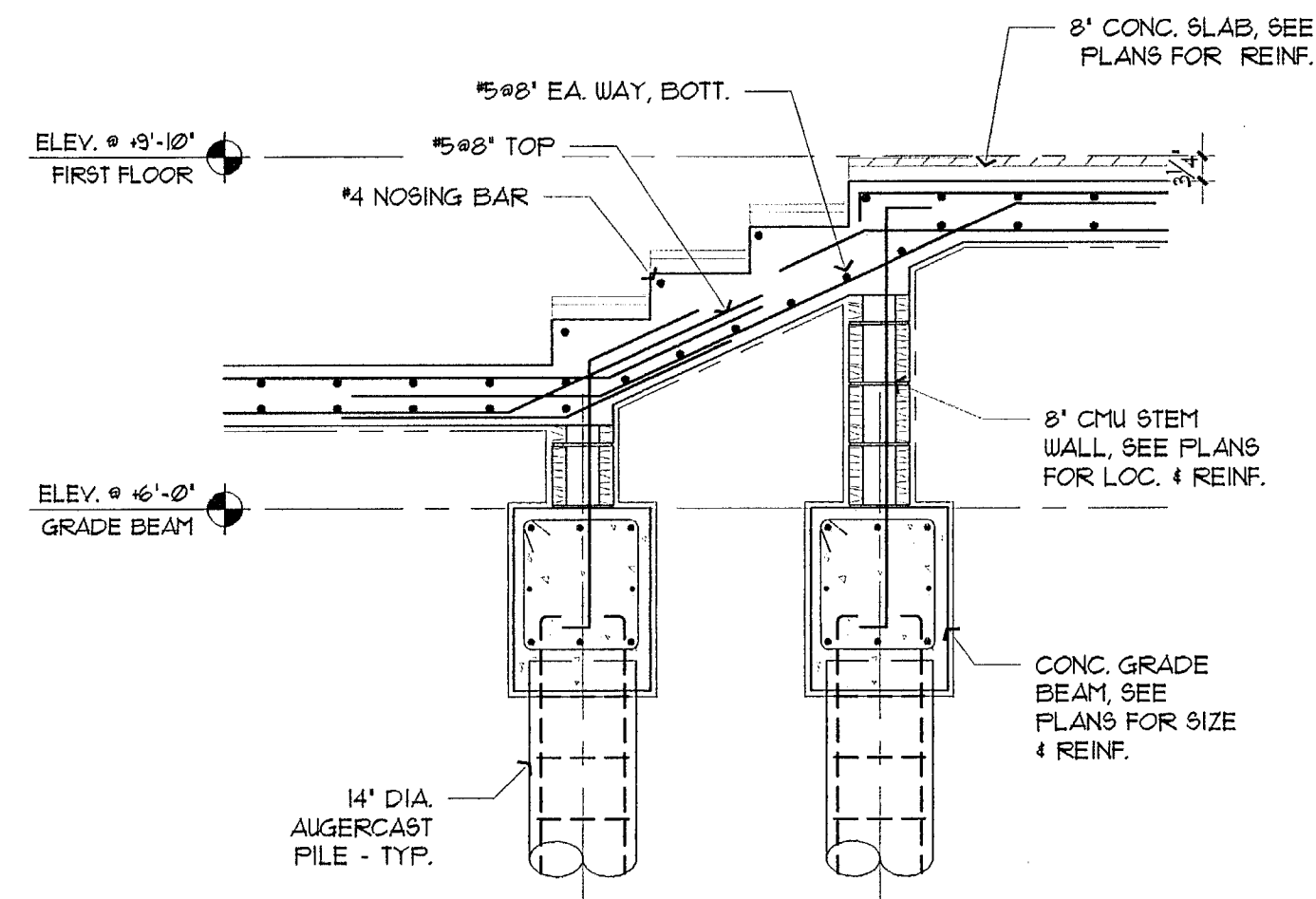
07-10-17 R.D. COMMENTS/O. CHANGES
08-23-17 R.D. COMMENTS/O. CHANGES

sheet no.
S-520

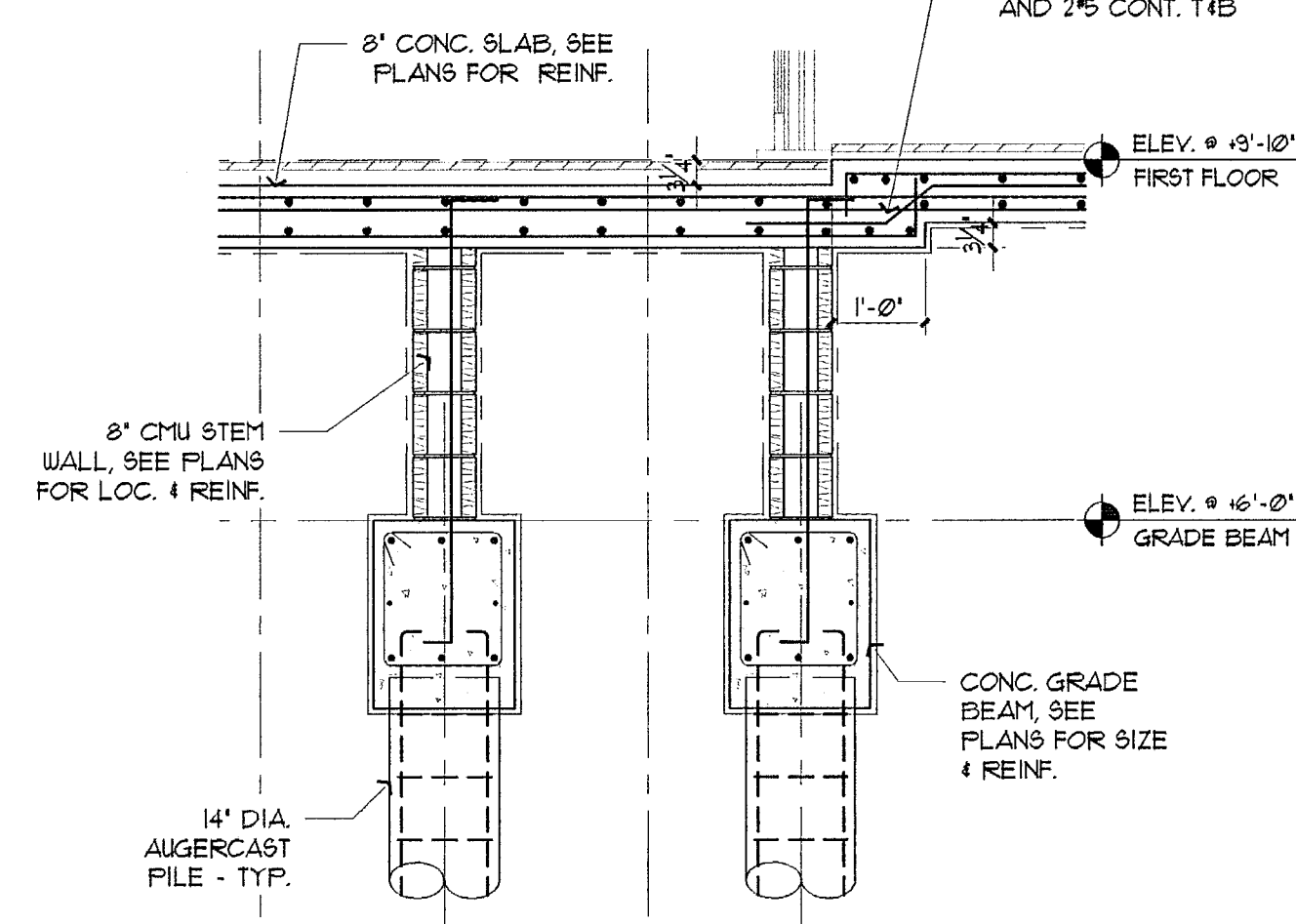
TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.



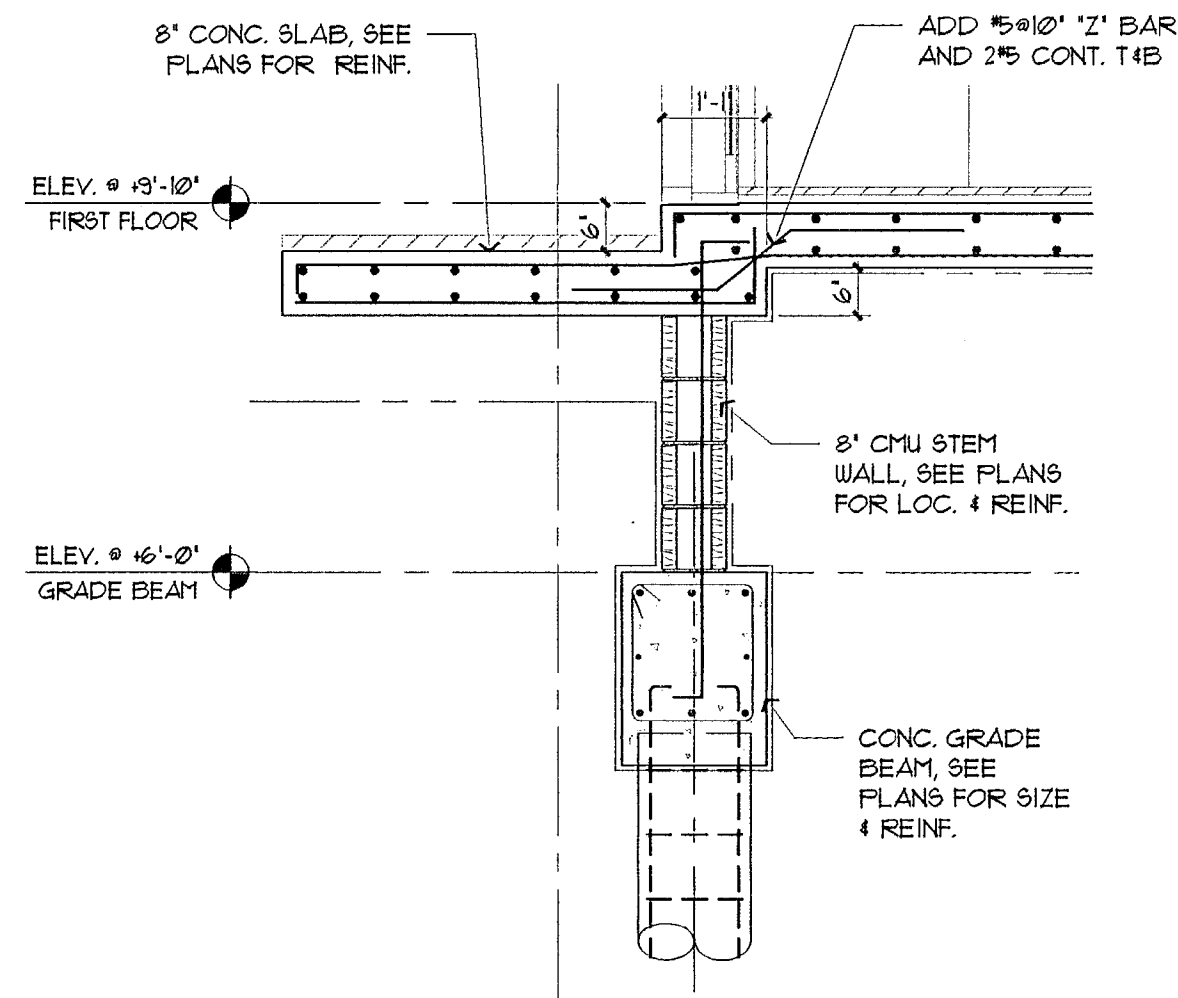
G BUILDING SECTION
Scale: 1" = 0' = 3/16"



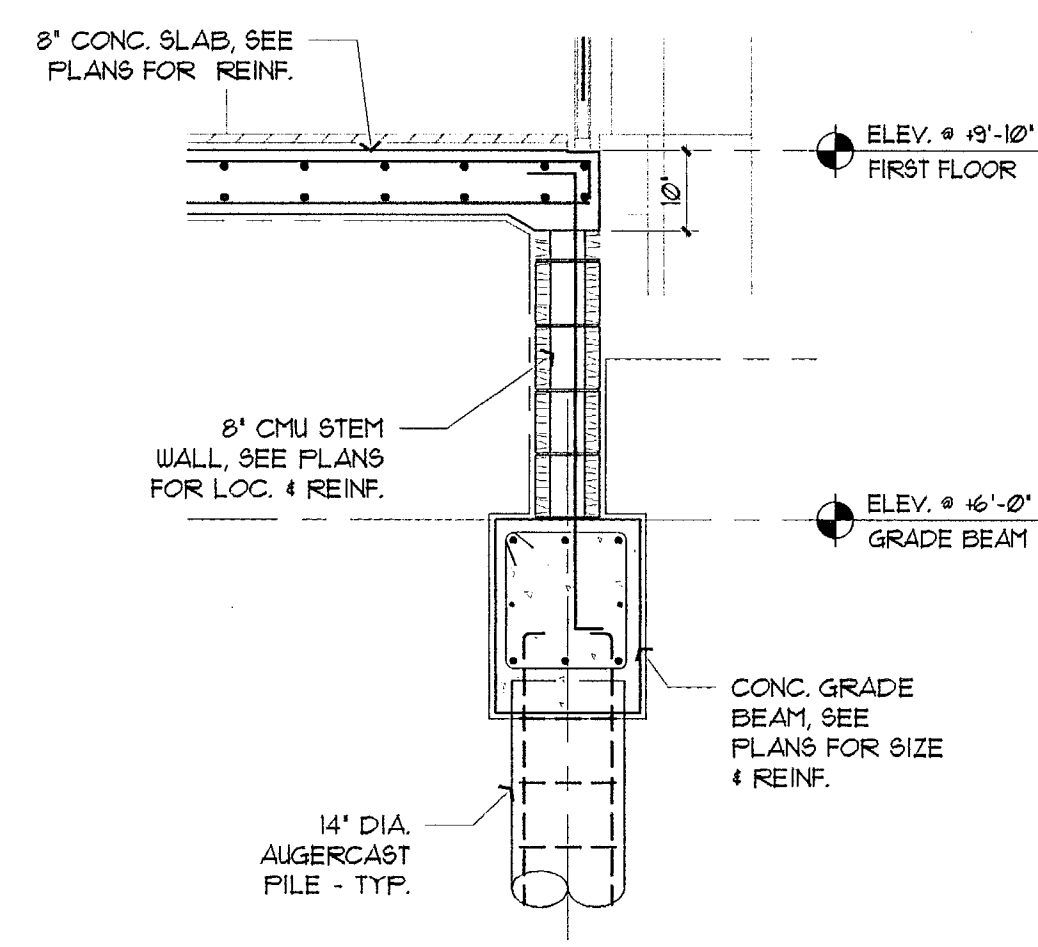
1 SECTION
Scale: 1" = 0' = 1/2"



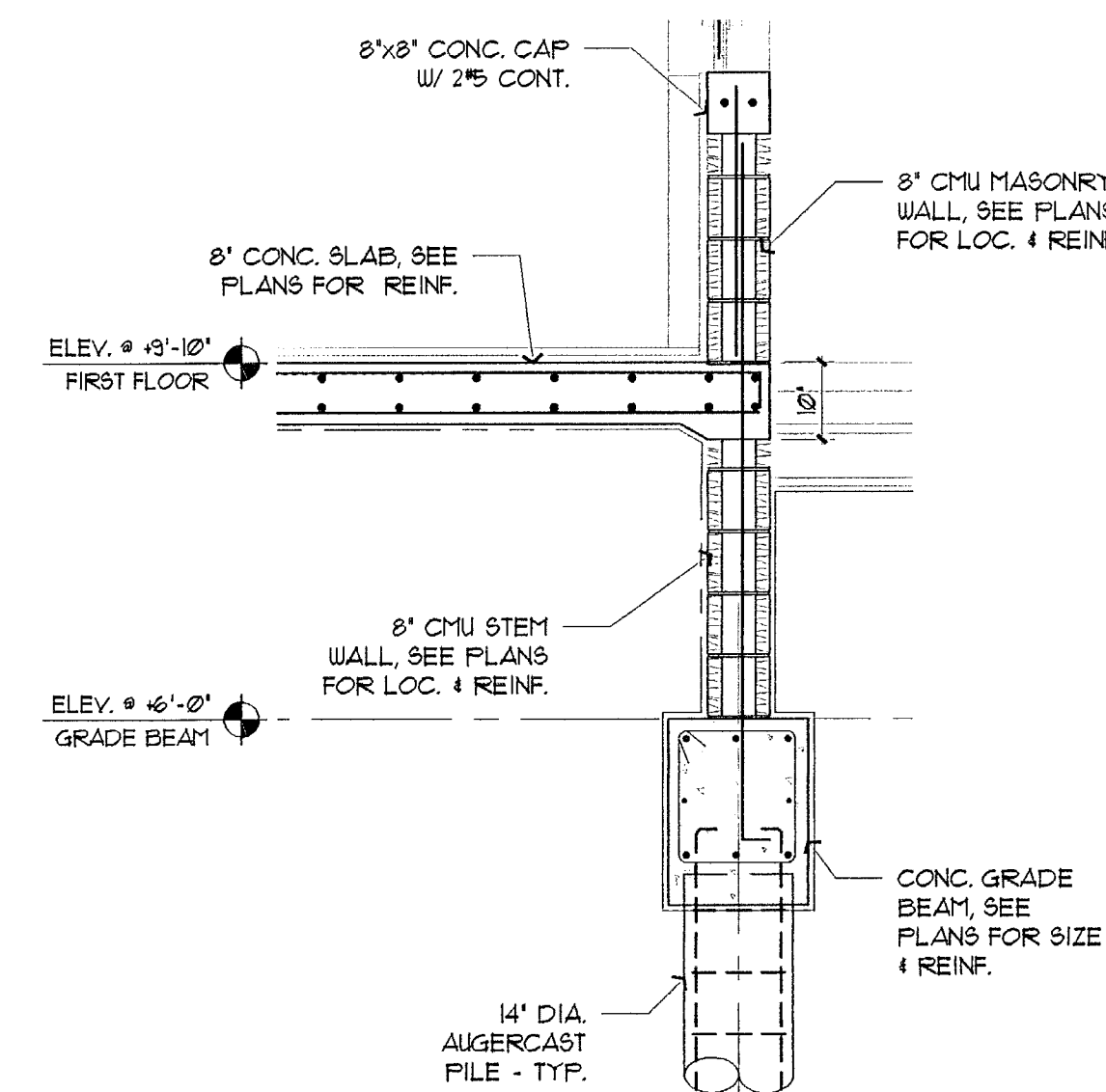
2 SECTION
Scale: 1" = 0' = 1/2"



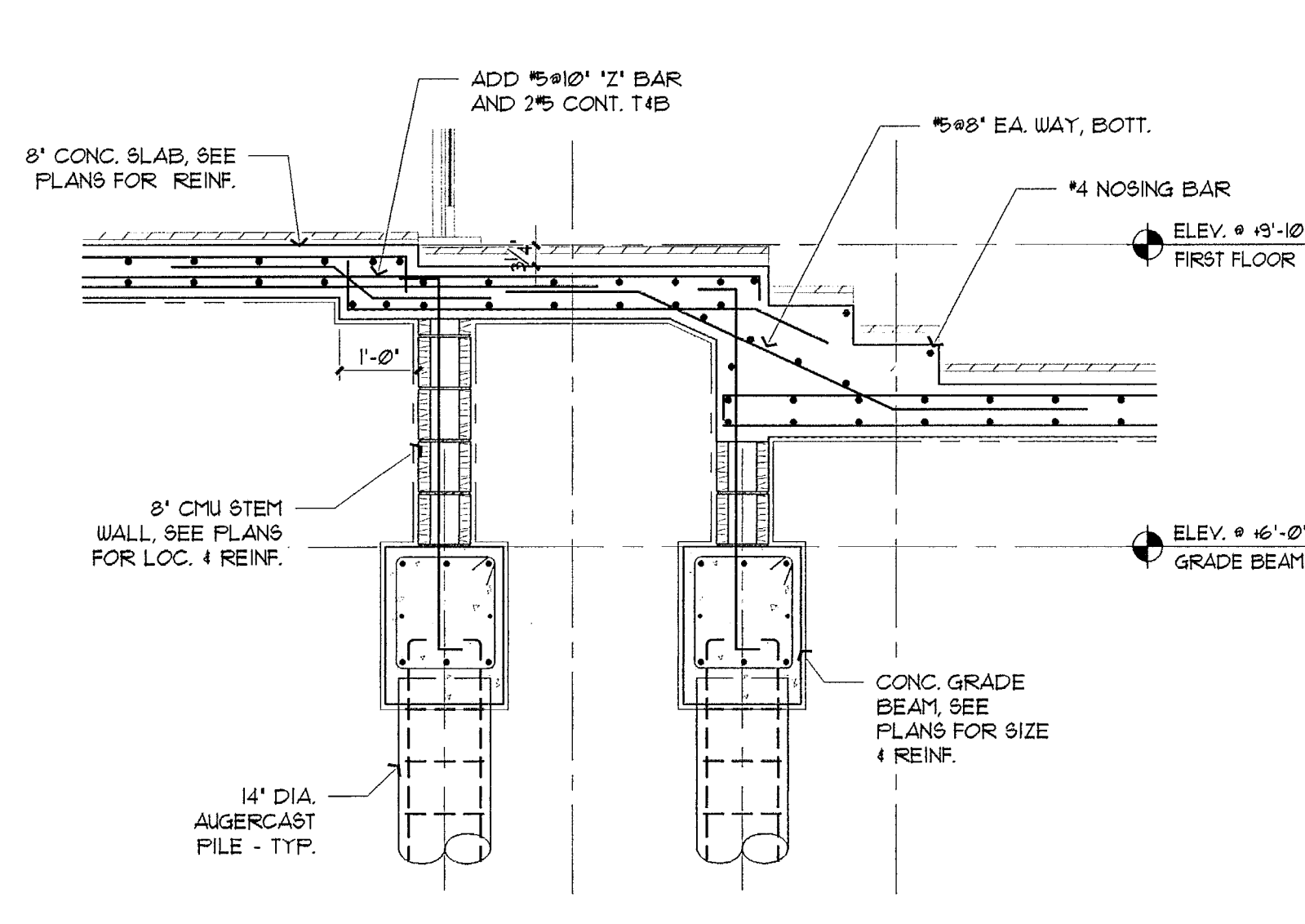
3 SECTION
Scale: 1" = 0' = 1/2"



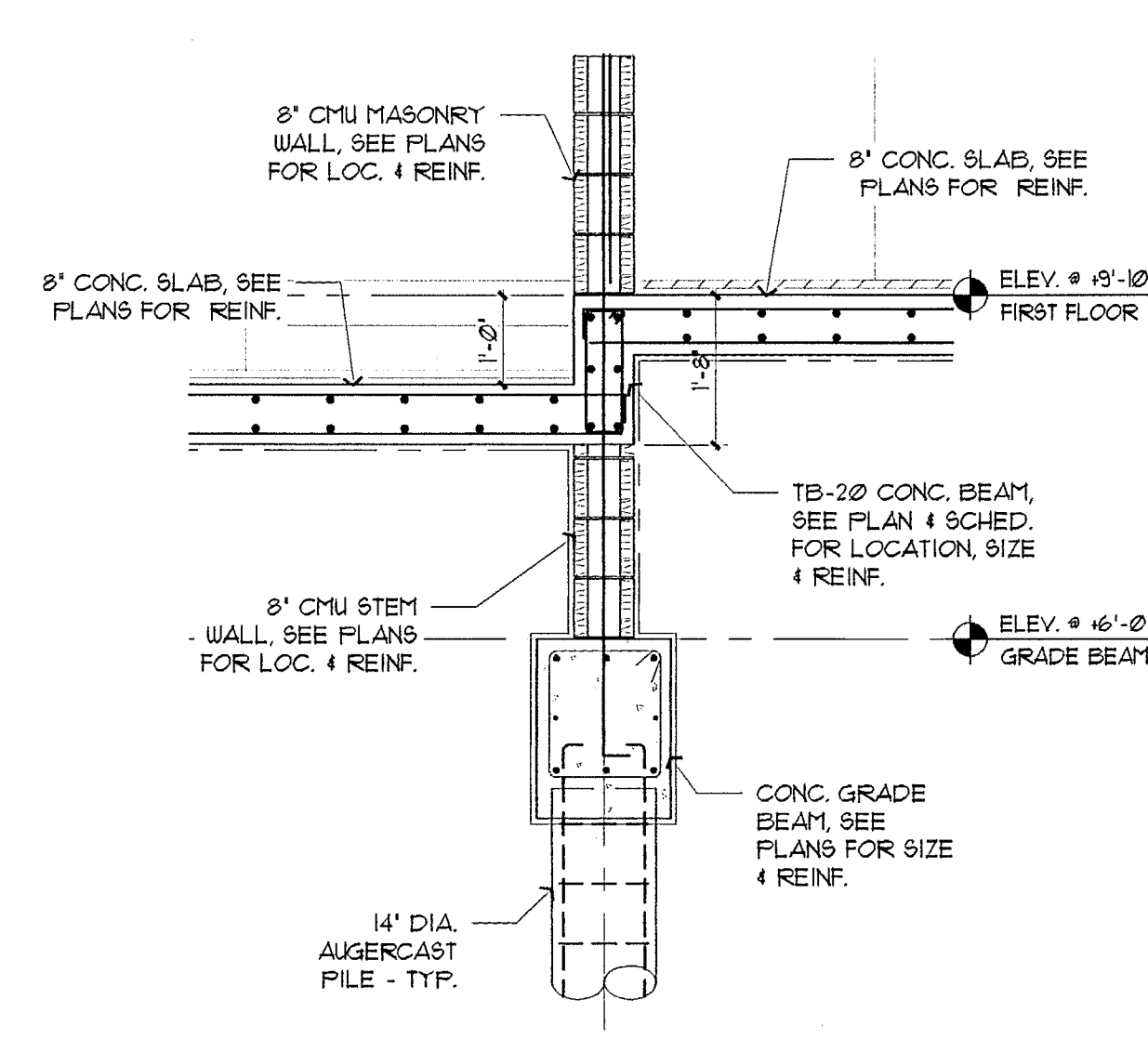
4 SECTION
Scale: 1" = 0' = 1/2"



5 SECTION
Scale: 1" = 0' = 1/2"



6 SECTION
Scale: 1" = 0' = 1/2"



7 SECTION
Scale: 1" = 0' = 1/2"

OPTIMUS CONSULTING ENGINEERS
C.A. No. 28217
TANYA HOWLE PE 61706
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel: 305.512.9900
Fax: 305.512.9901
E-mail: optimussd@bellsouth.net



28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

seal

Raphael Levy
registered architect
AR00694779

comm no.
1652

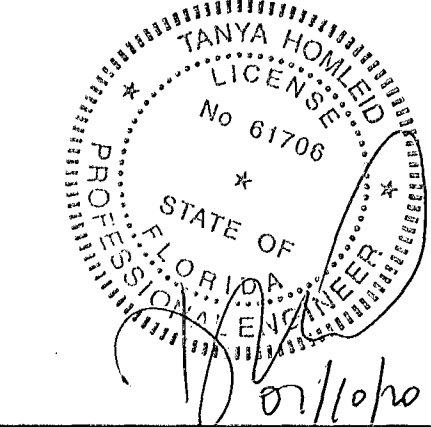
date:
02/03/17

revised:

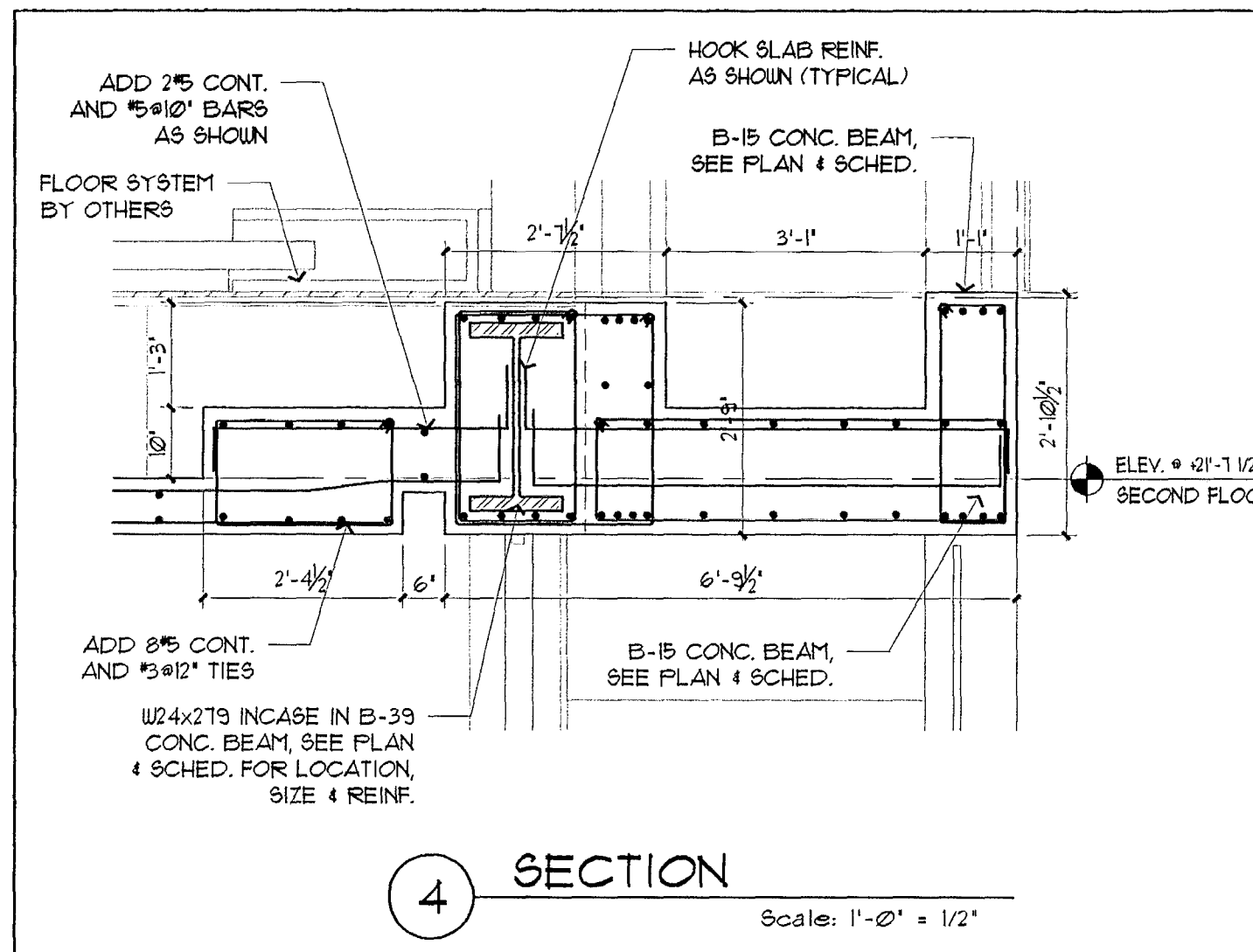
07-10-17 B.D. COMMENTS/O. CHANGES

sheet no.
S-520

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.

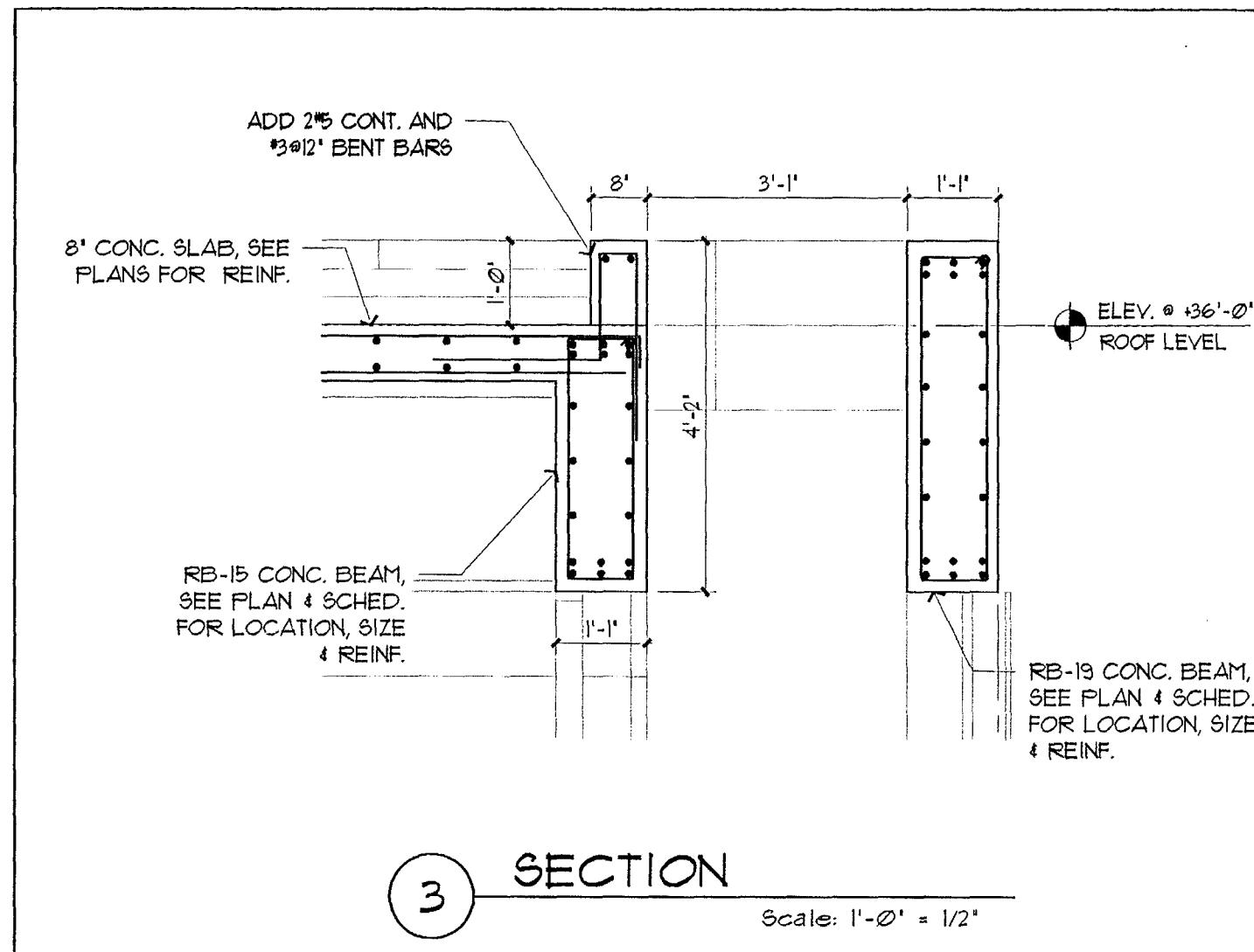


OPTIMUS CONSULTING ENGINEERS
C.A. No: 28217 61706
TANYA HOMLEID PE
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel: 305.512.5900
Fax: 305.512.5961
E-mail: optimussd@bellsouth.net



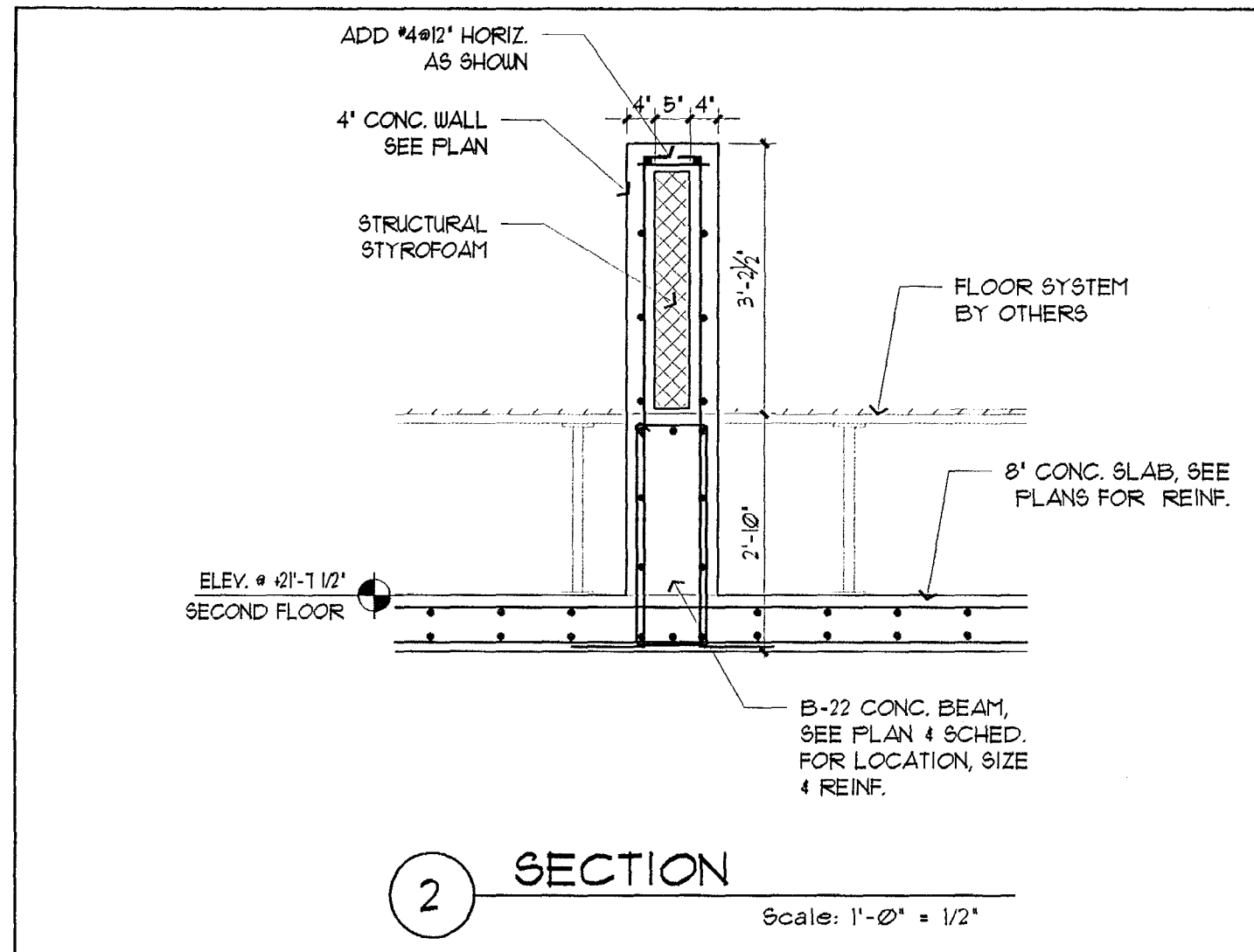
4 SECTION

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



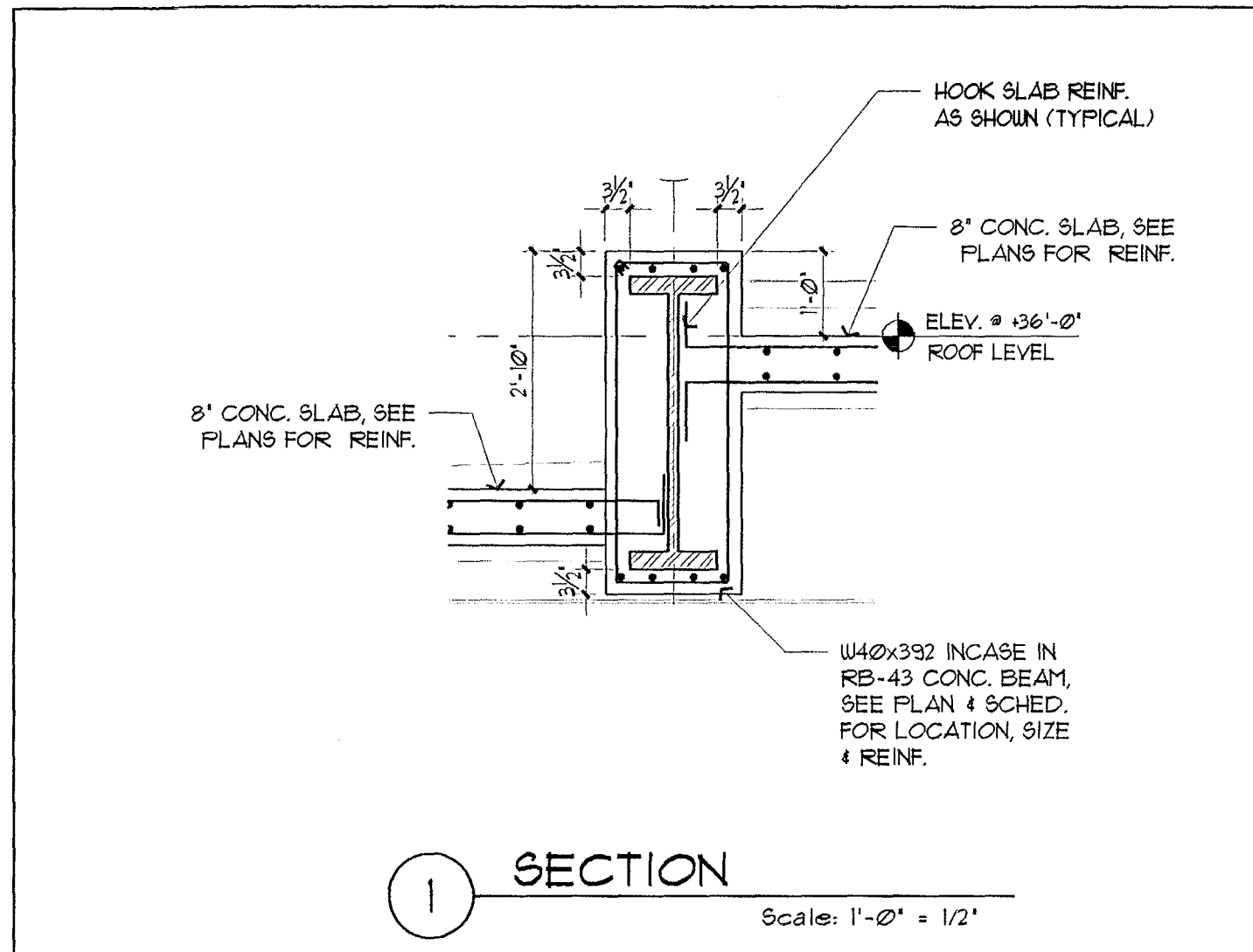
3 SECTION

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



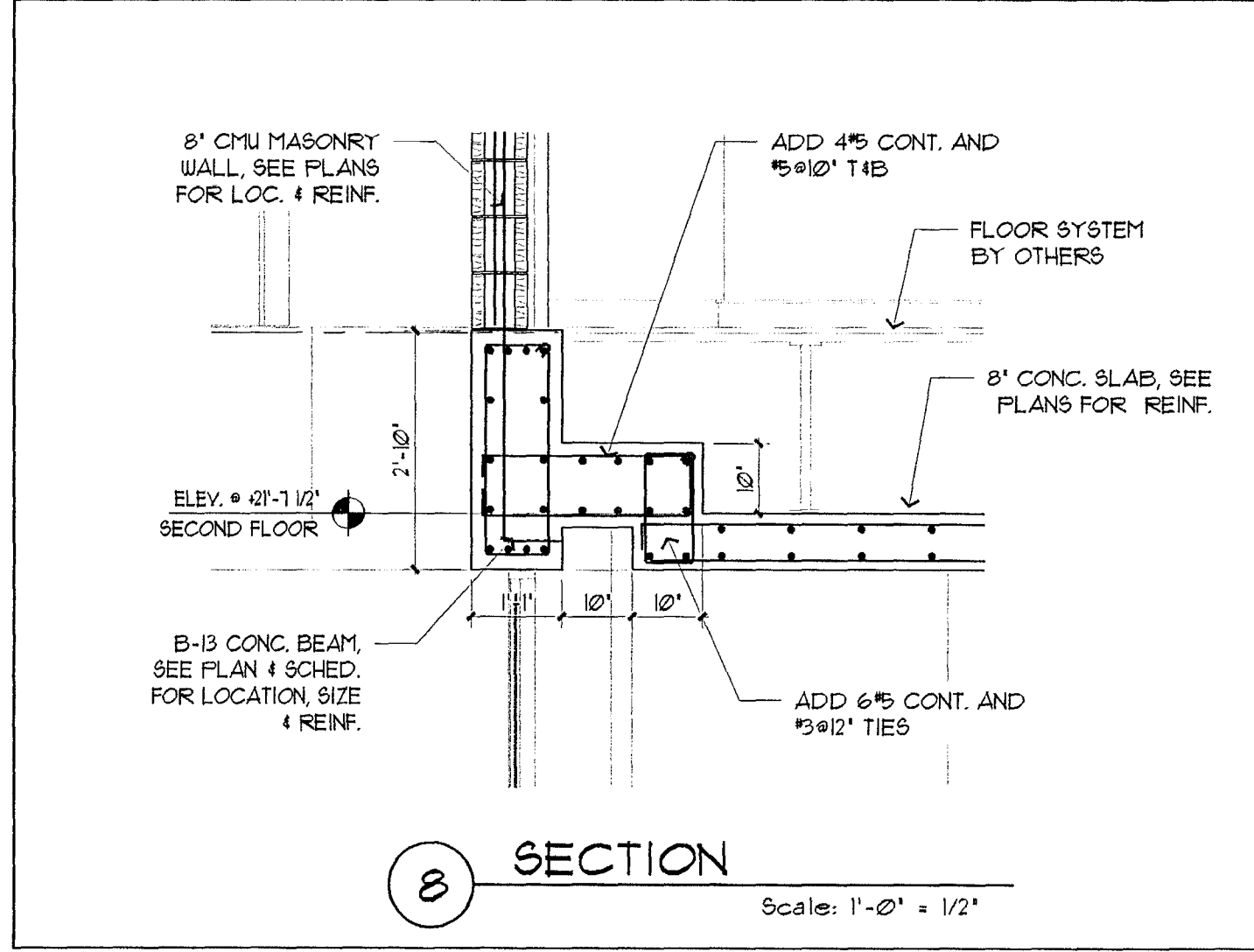
2 SECTION

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



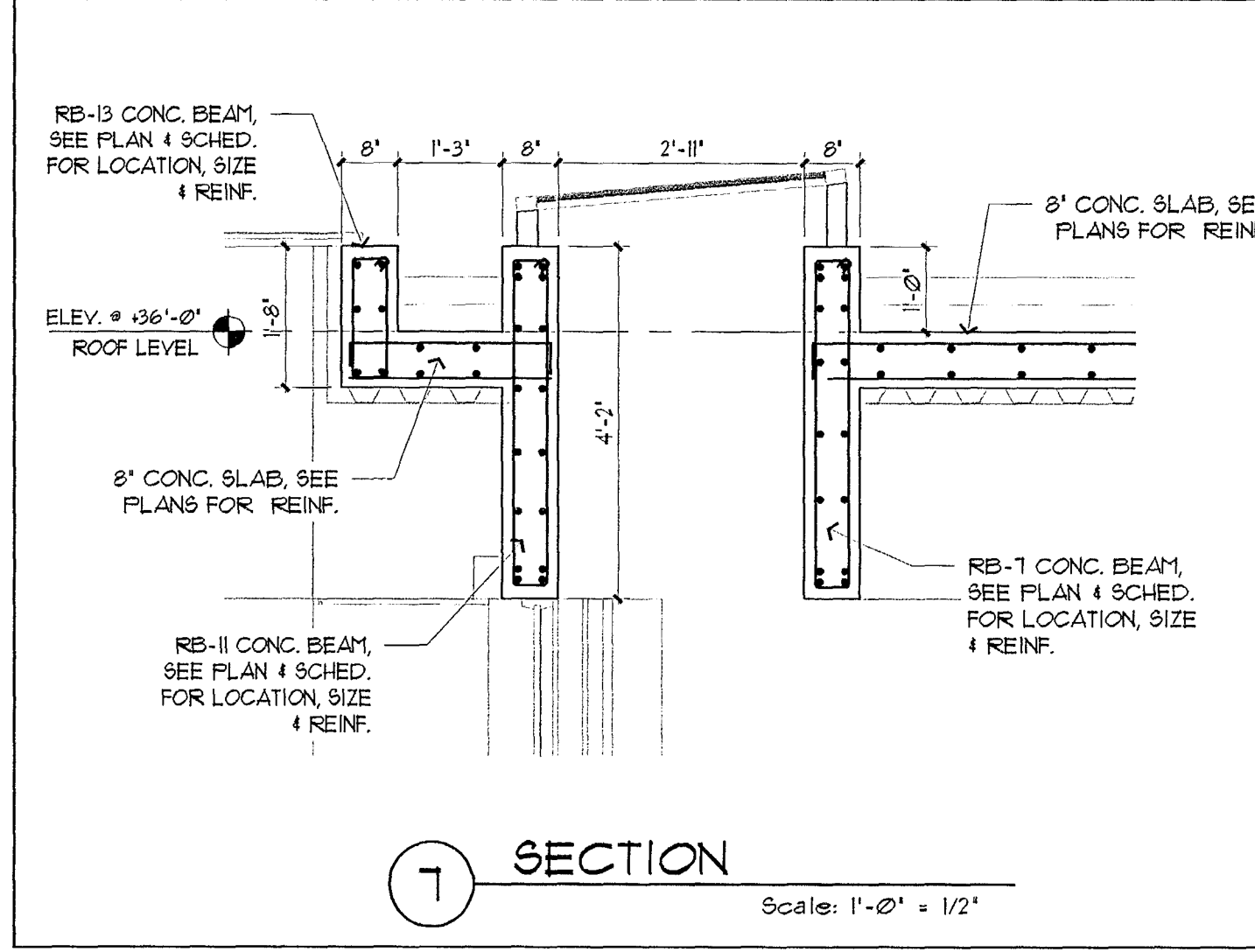
1 SECTION

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



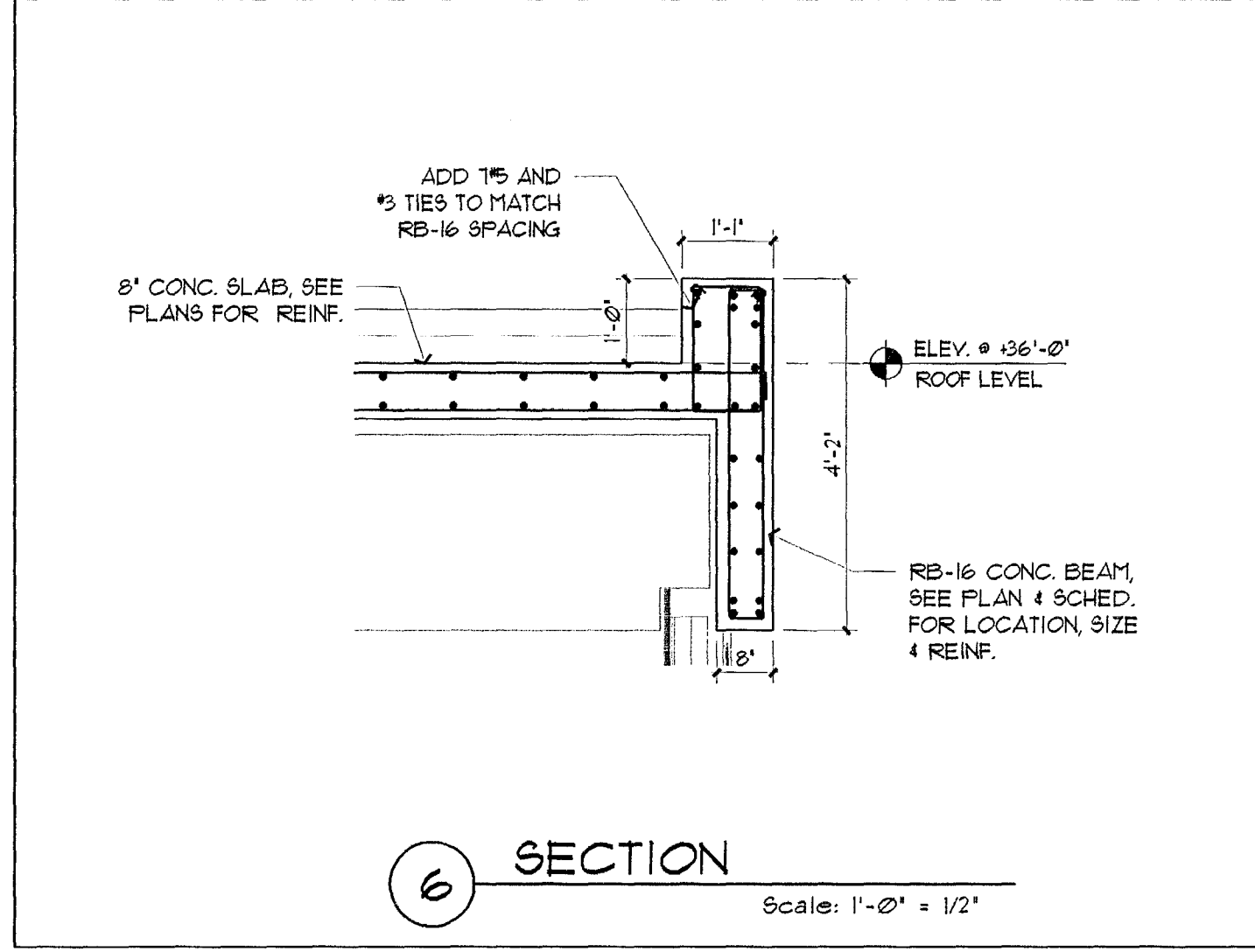
8 SECTION

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



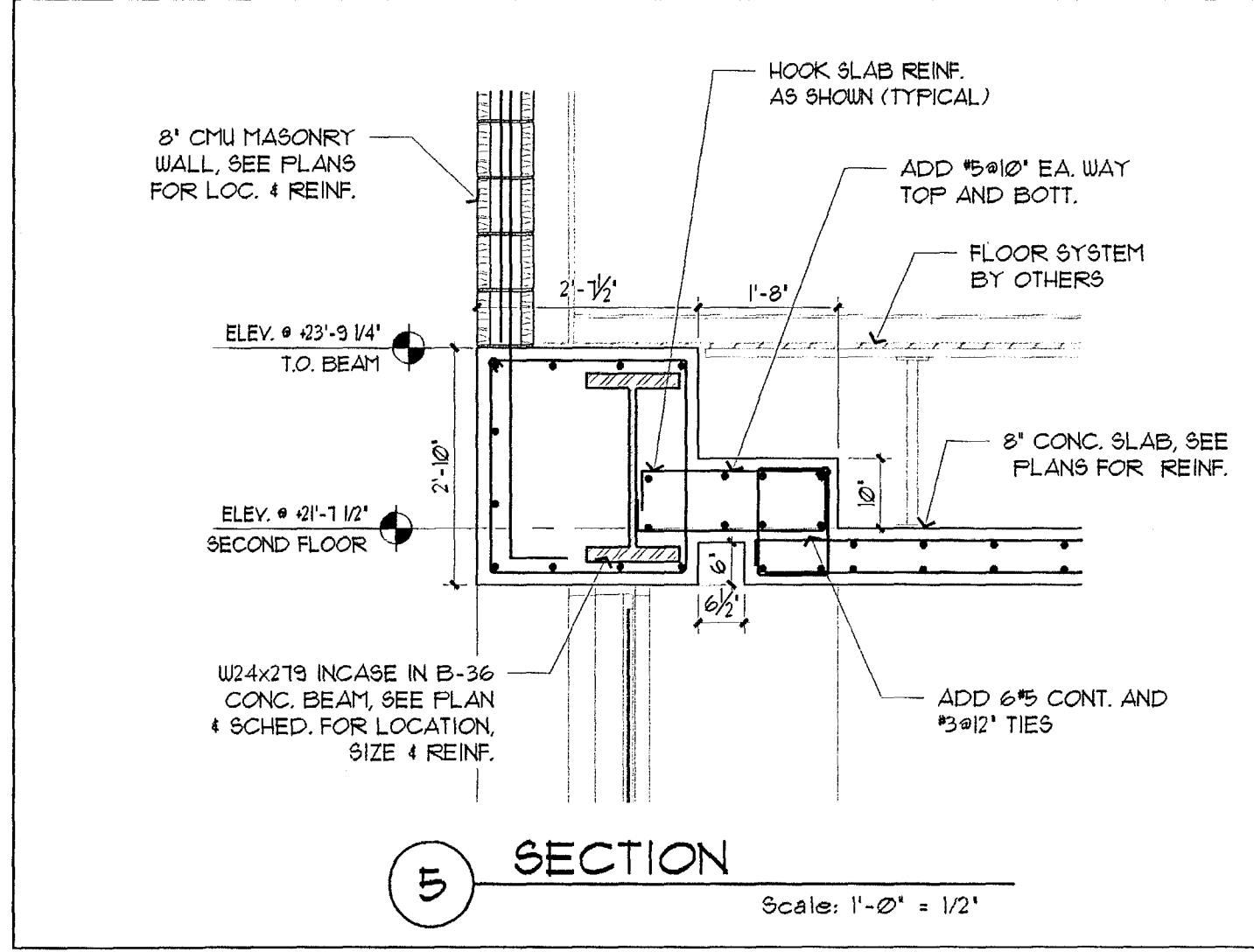
7 SECTION

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



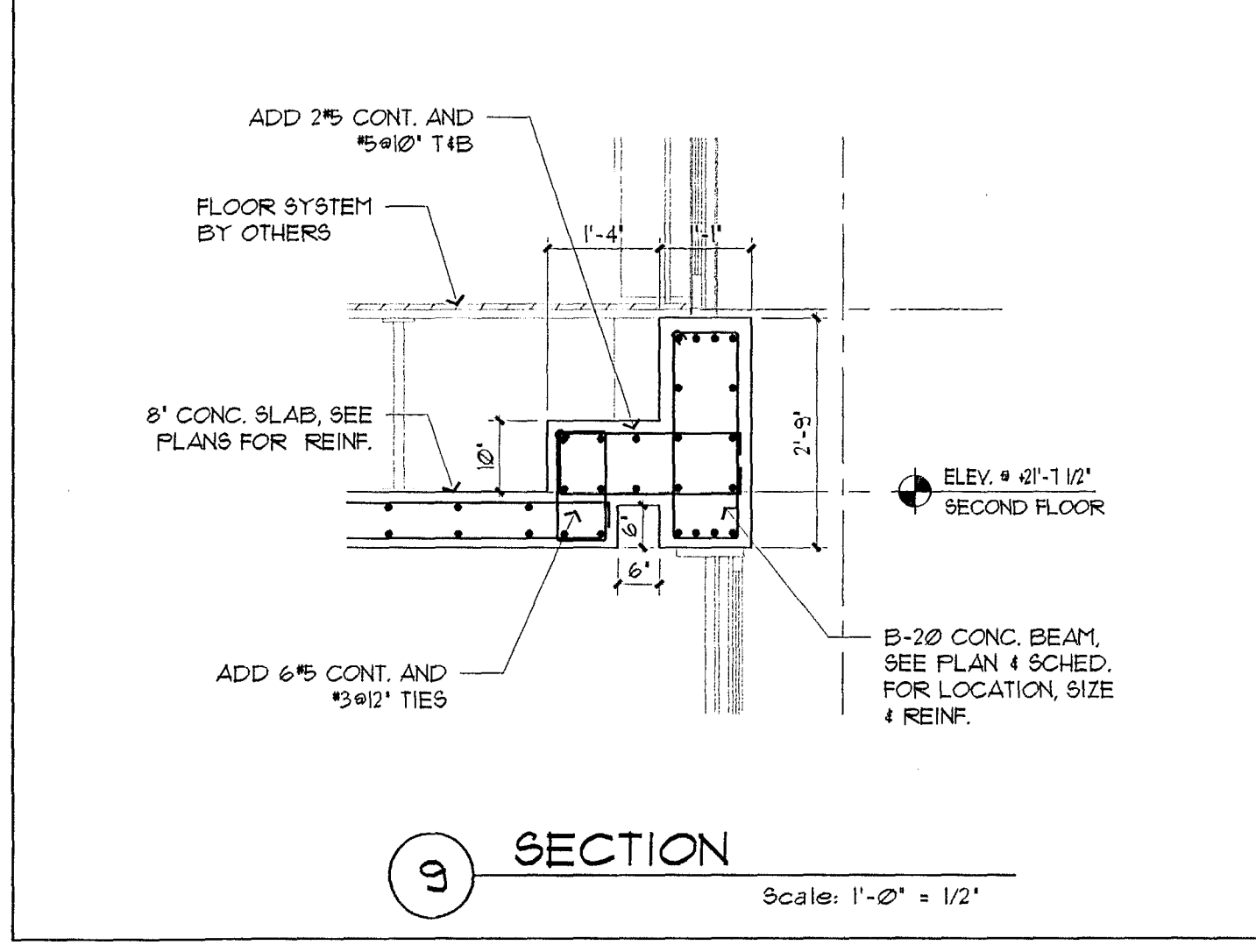
6 SECTION

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



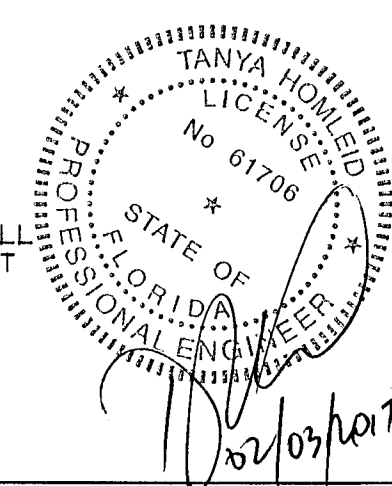
5 SECTION

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



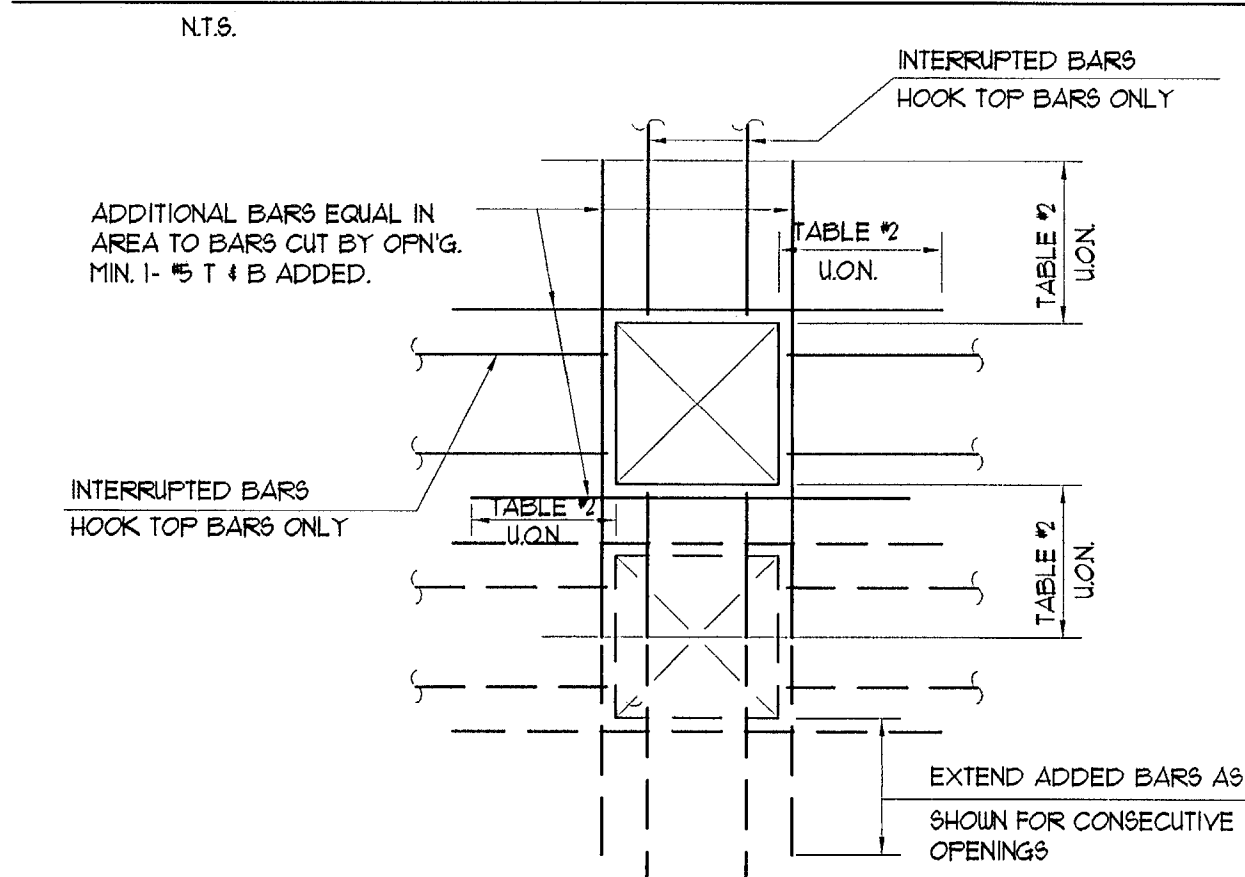
9 SECTION

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

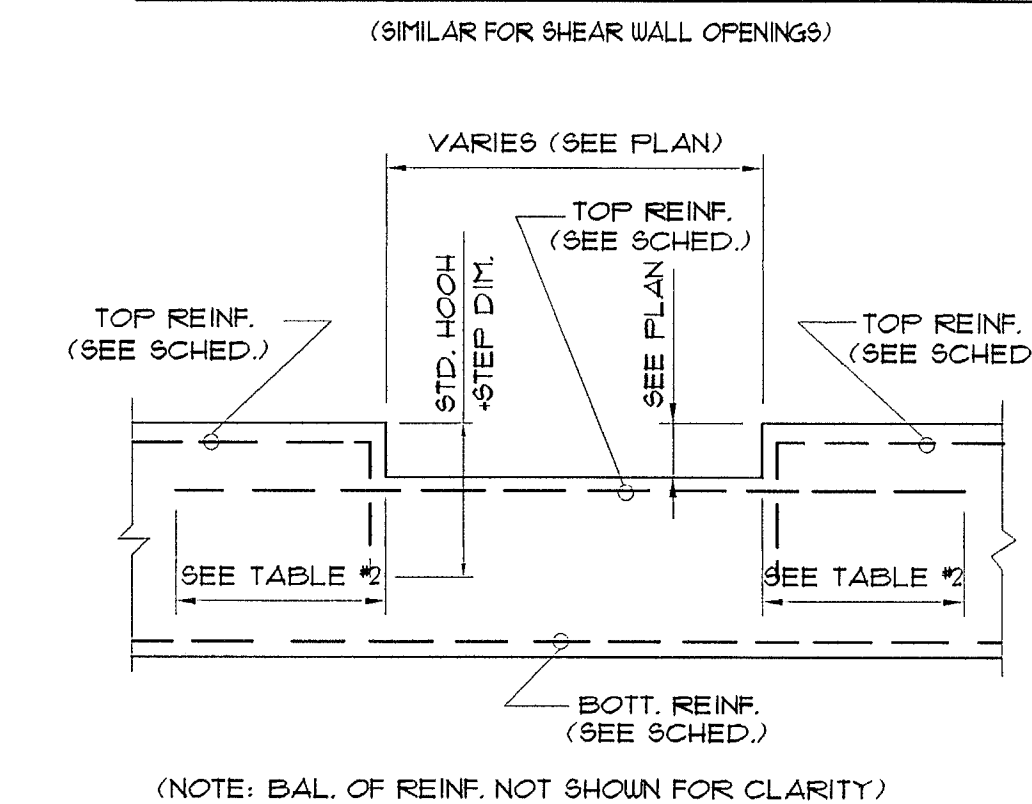


STRUCTURAL DESIGN INC. OPTIMUS CONSULTING ENGINEERS
C.A. No. 28217 61706
TANYA HOMLEID PE
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel. 305.512.5860
Fax 305.512.5861
E-mail: optimusd@bellsouth.net

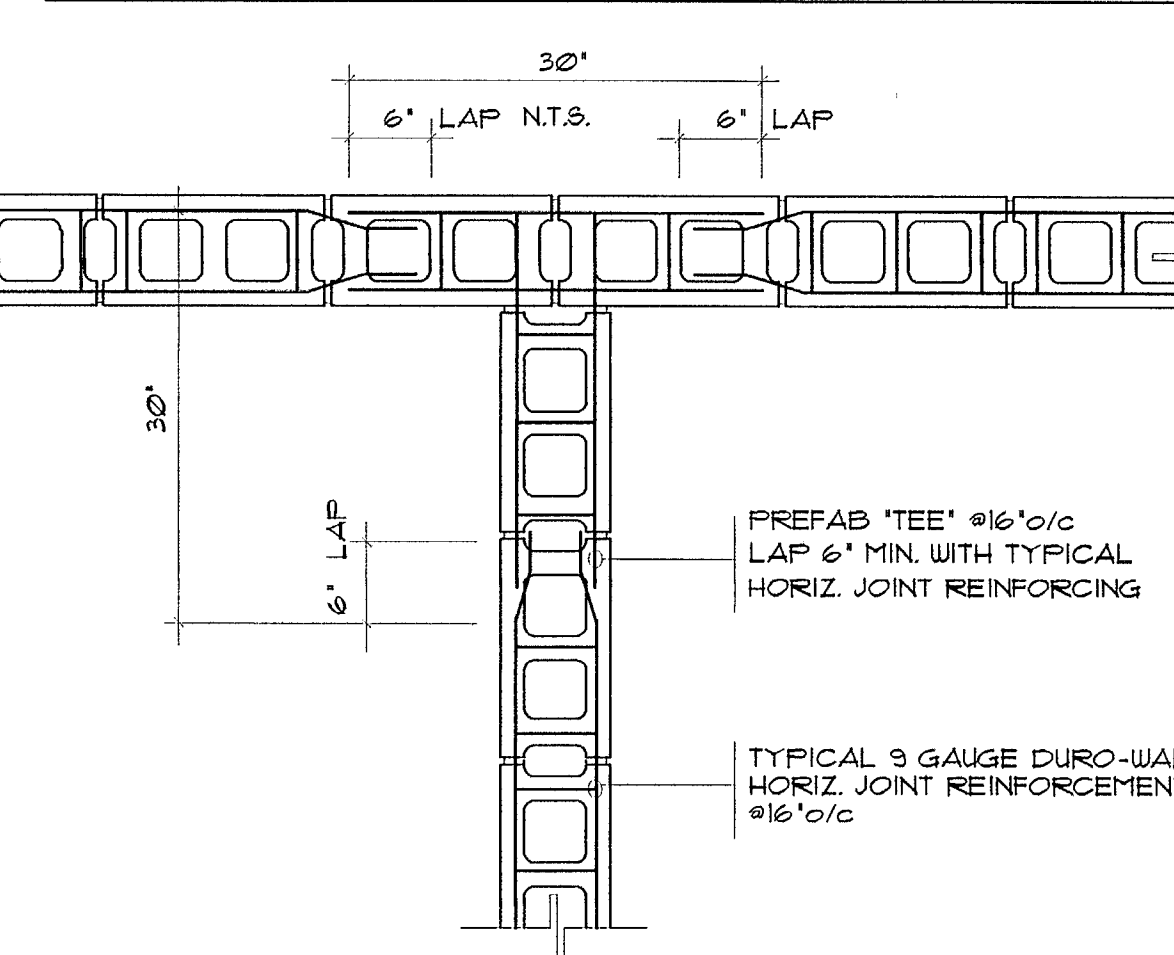
TRIM BARS FOR INTERIOR OPENING IN SLAB



TYPICAL SLAB OPENING DETAIL



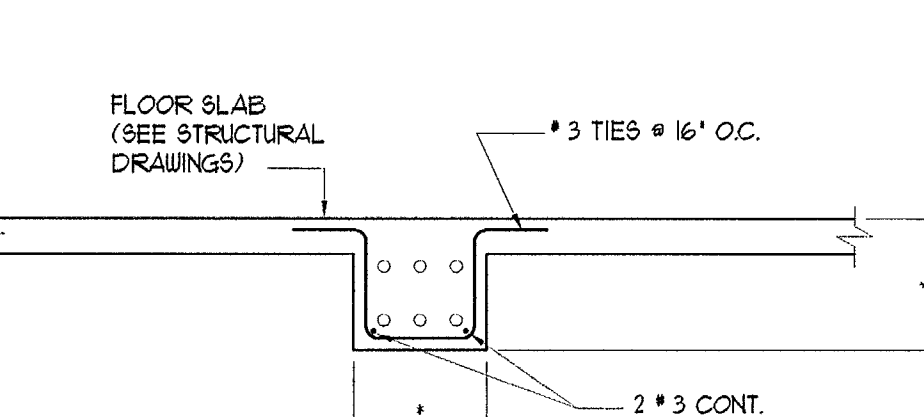
TYPICAL ELEVATION OF NOTCHED BEAM



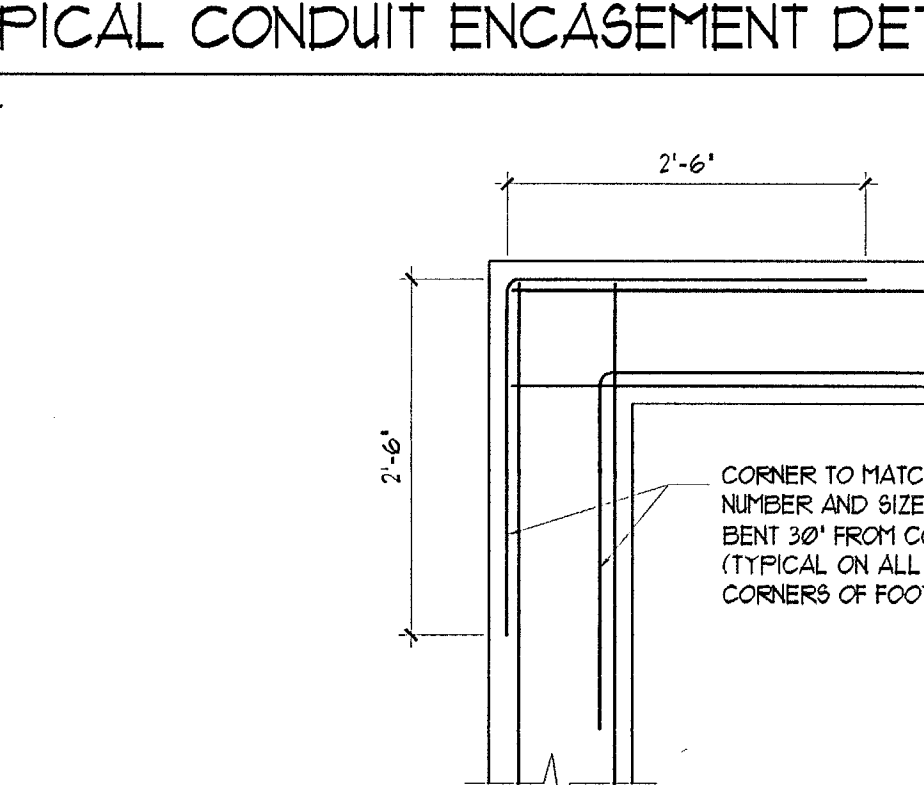
TYPICAL INTERSECTION REINFORCING DETAIL



TRIM BARS FOR OPENING AT SLAB EDGE



TYPICAL CONDUIT ENCASEMENT DETAIL



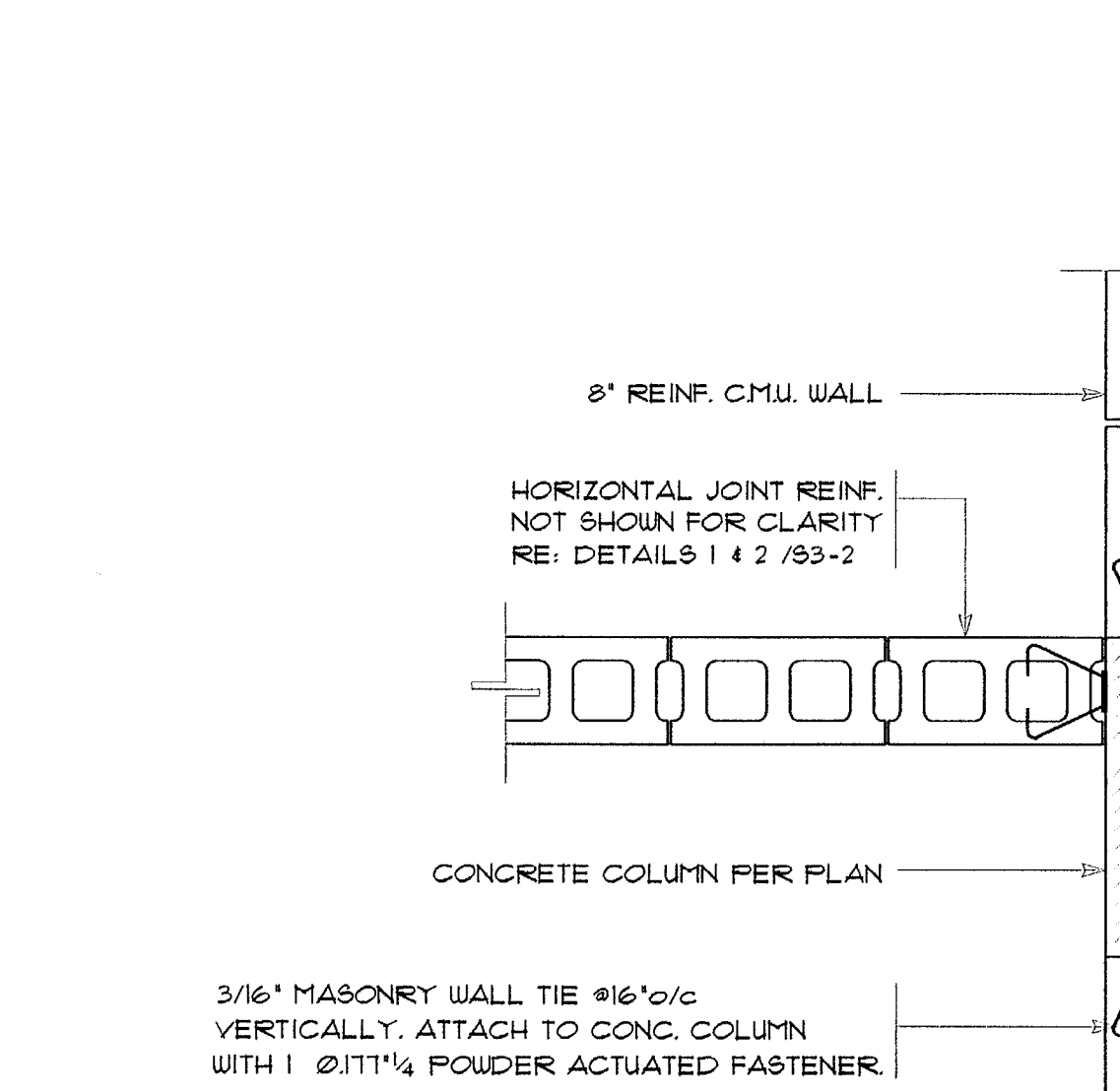
CORNER BAR DETAIL (FOOTING/BEAM)



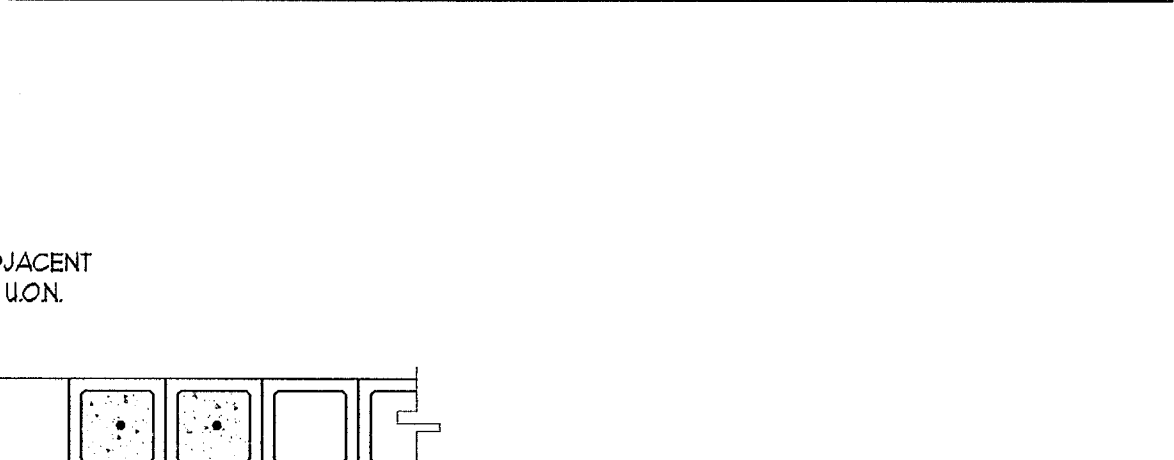
TYPICAL CORNER REINFORCING DETAIL



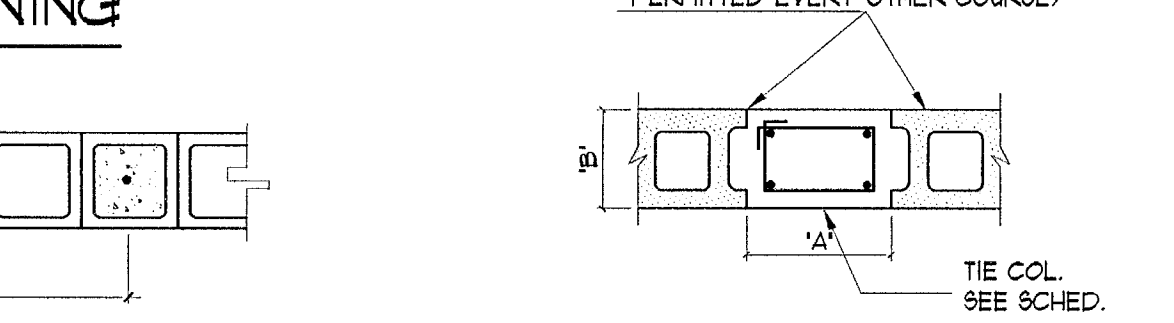
TYPICAL DETAILS OF DROPS IN SLABS



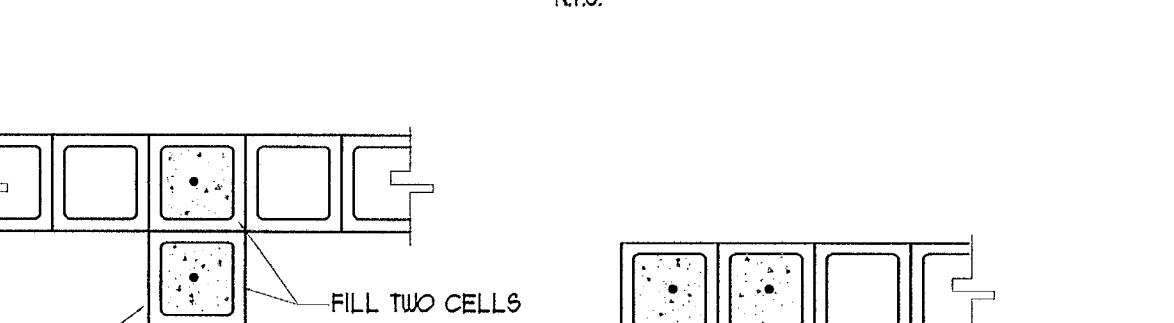
MASONRY TO CONCRETE CONNECTION



WALL OPENING



TYPICAL WALL



TIE COLUMN DETAIL



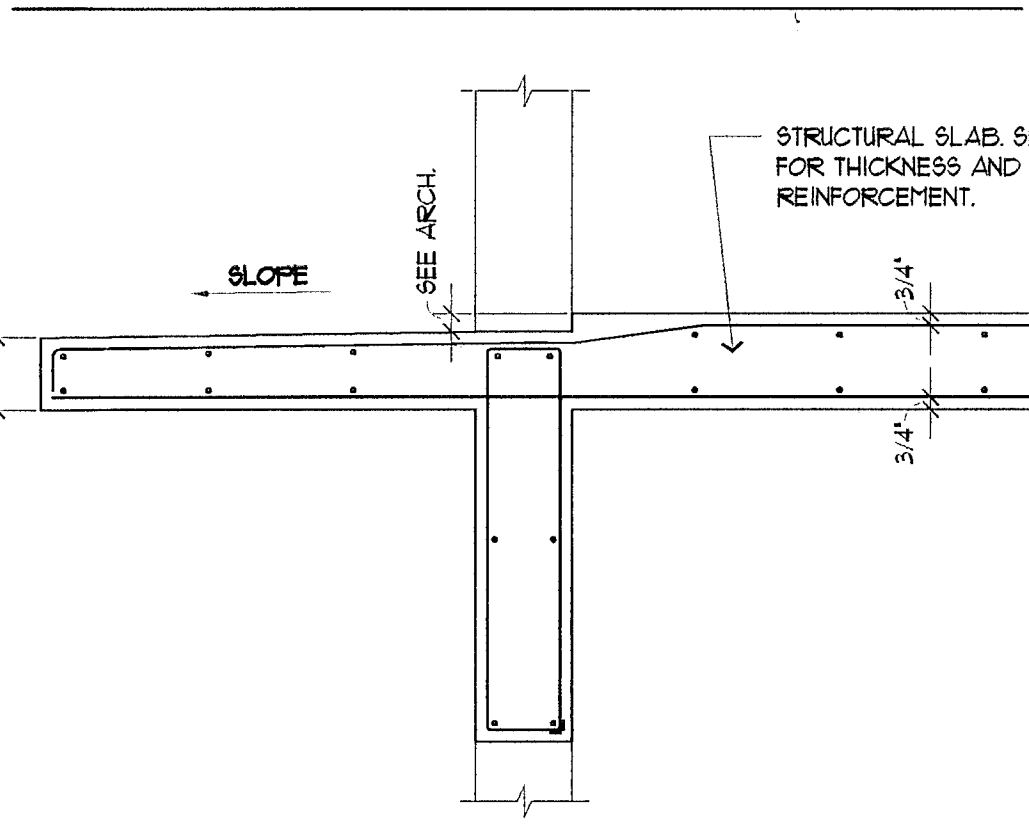
CORNER DETAIL



WALL INTERSECTION



TRIM BARS FOR MULTIPLE OPENINGS

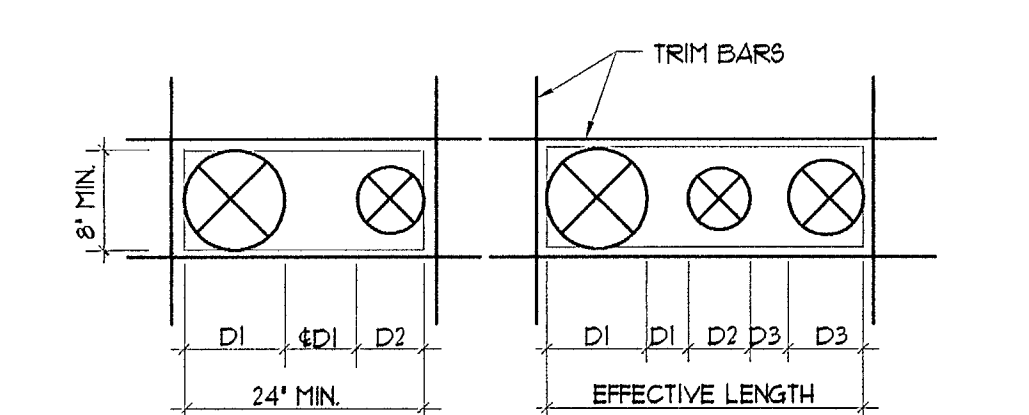


WALL SECTION

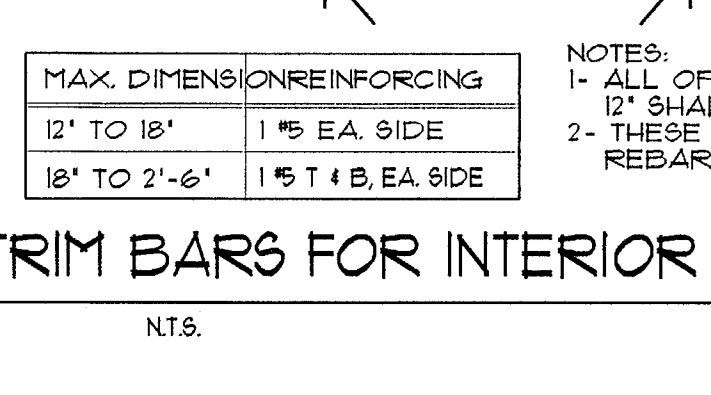
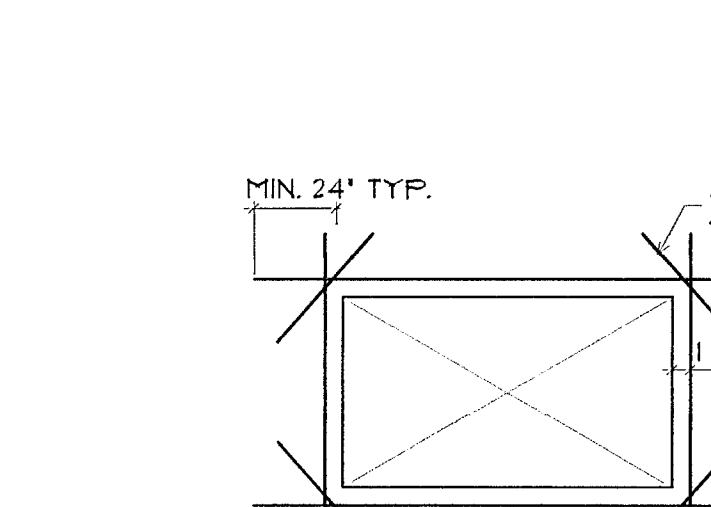
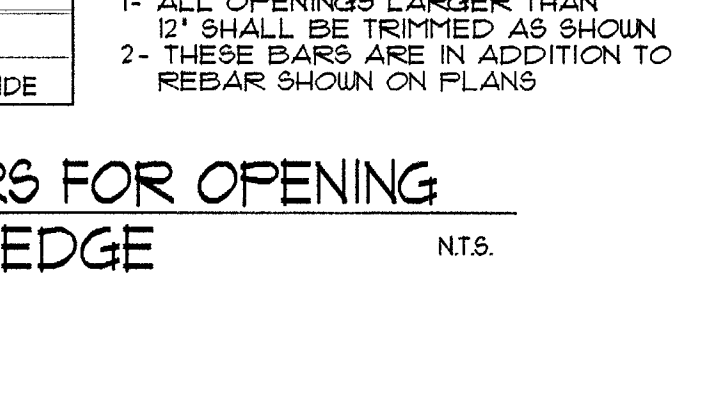
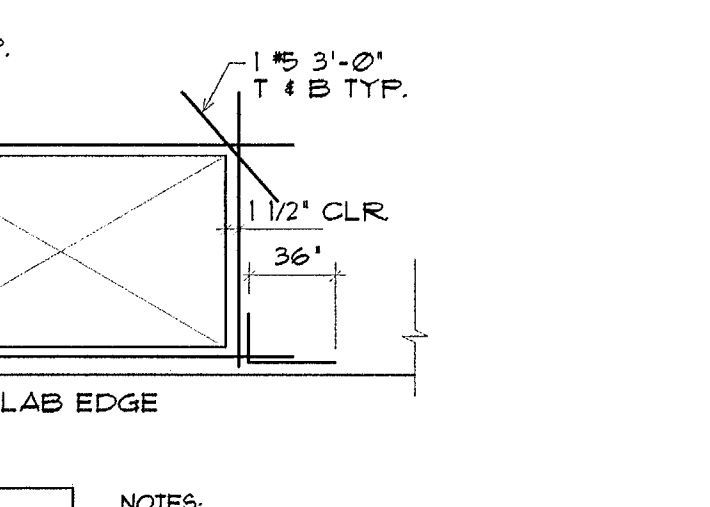
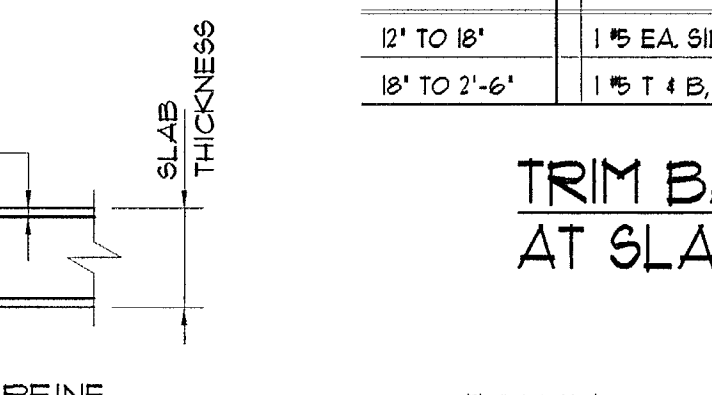
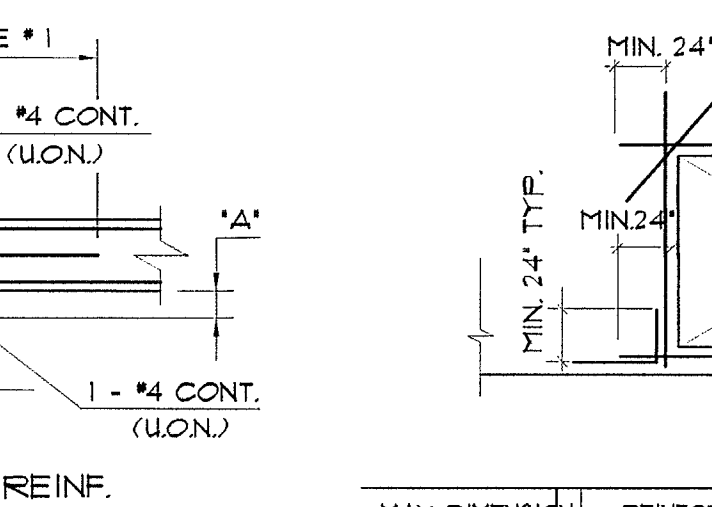
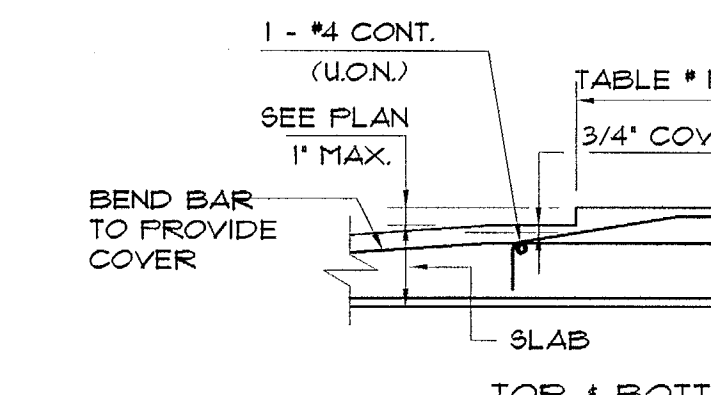
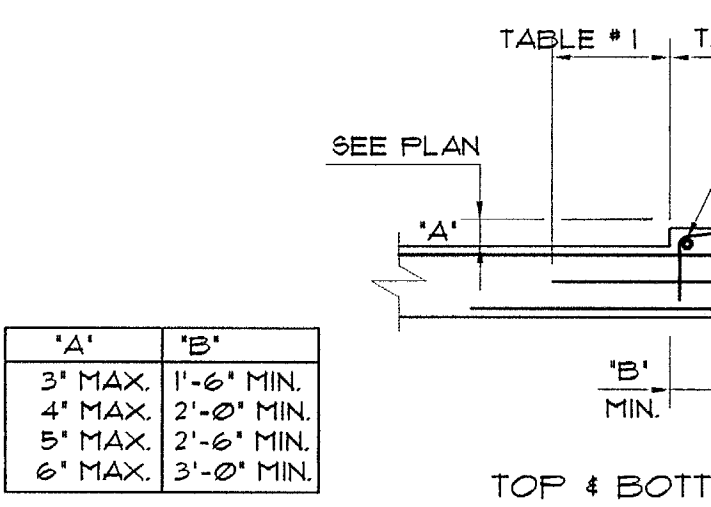
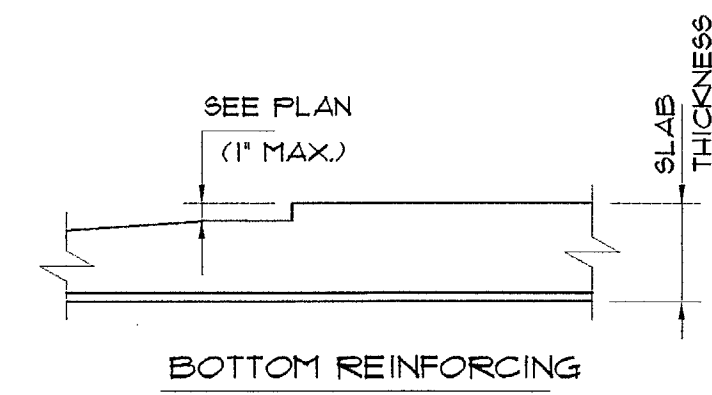
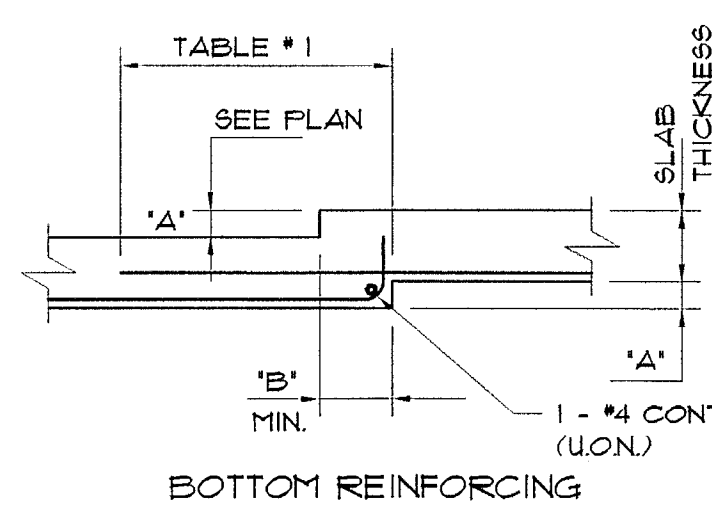
SCALE: 3/4"=1'-0"

WALL SECTION

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



INSERTS WHICH ARE CLOSER TO ONE ANOTHER THAN THE DIAMETER OF THE LARGER OF THE TWO ARE CONSIDERED TO FORM A COMBINED OPENING
- IF THE COMBINED OPENING IS LESS THAN 12" NO TRIM BARS ARE REQUIRED
- IF THE COMBINED OPENING IS MORE THAN 12", BUT LESS THAN 24", PROVIDE 1 #5 T & B WITH 1'-0" EMBEDMENT PAST THE OPENING.
- NO DIAGONAL BARS ARE NECESSARY
- IF COMBINED OPENING IS LARGER THAN 24" REFER FOR TRIM BARS TO



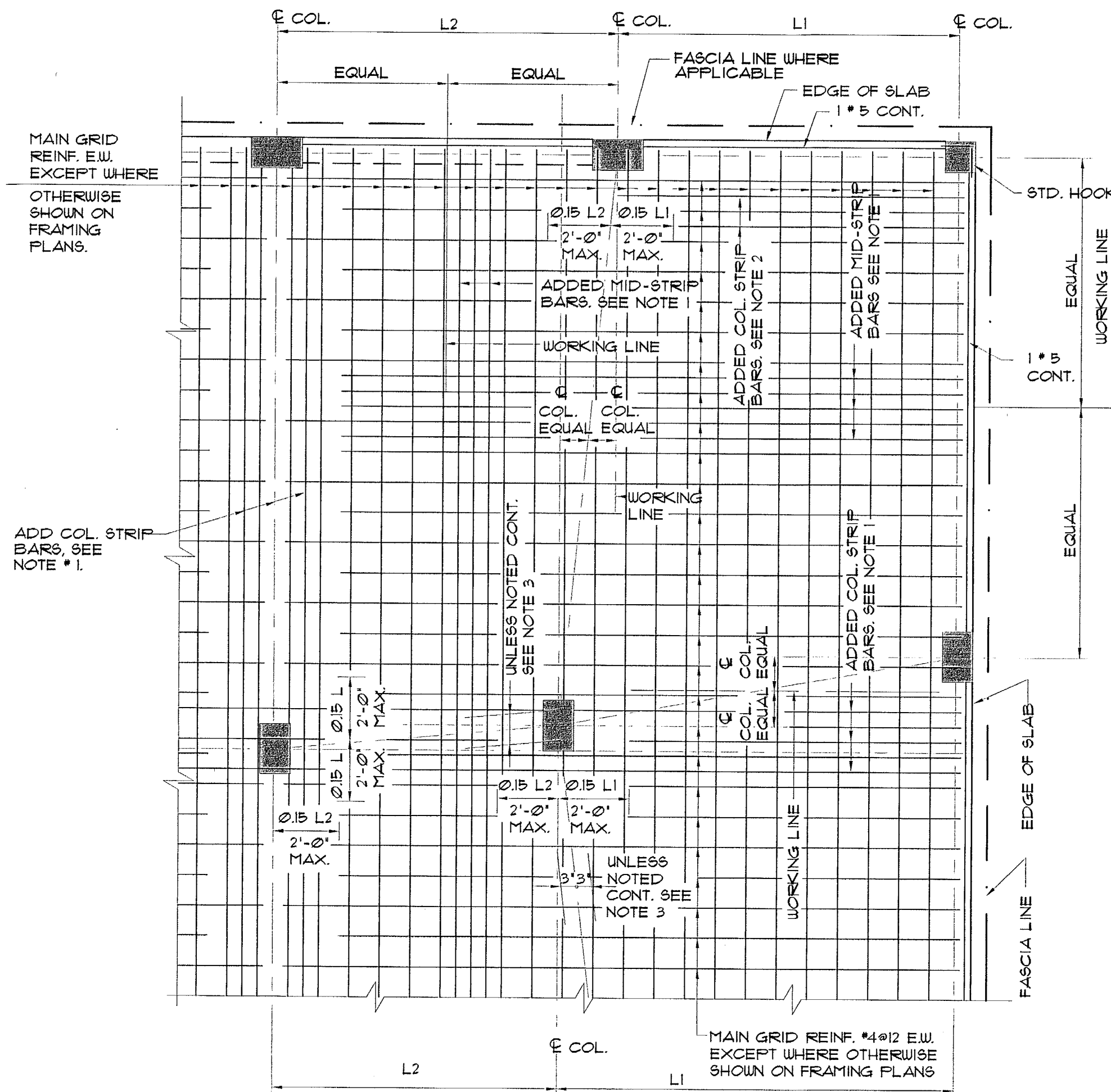
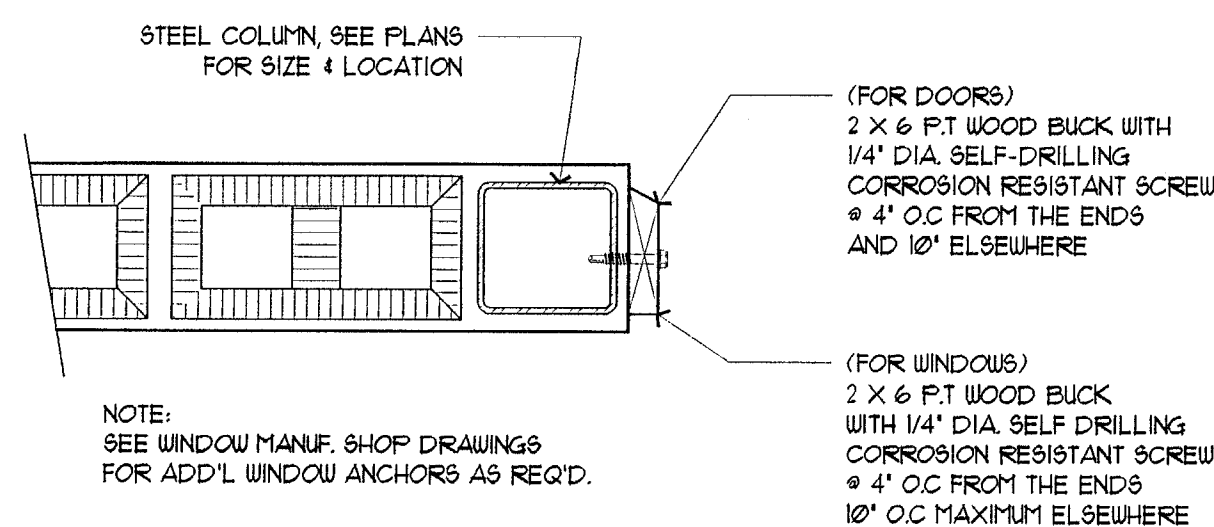
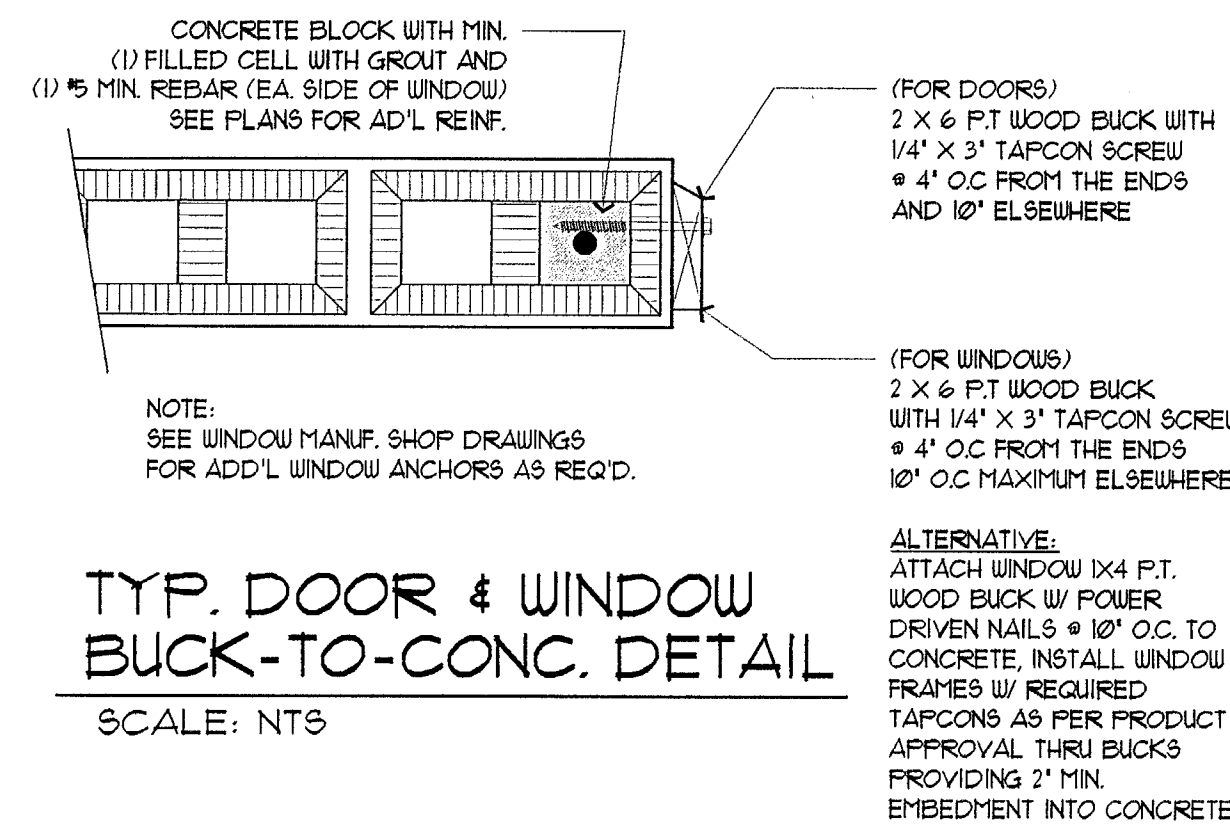
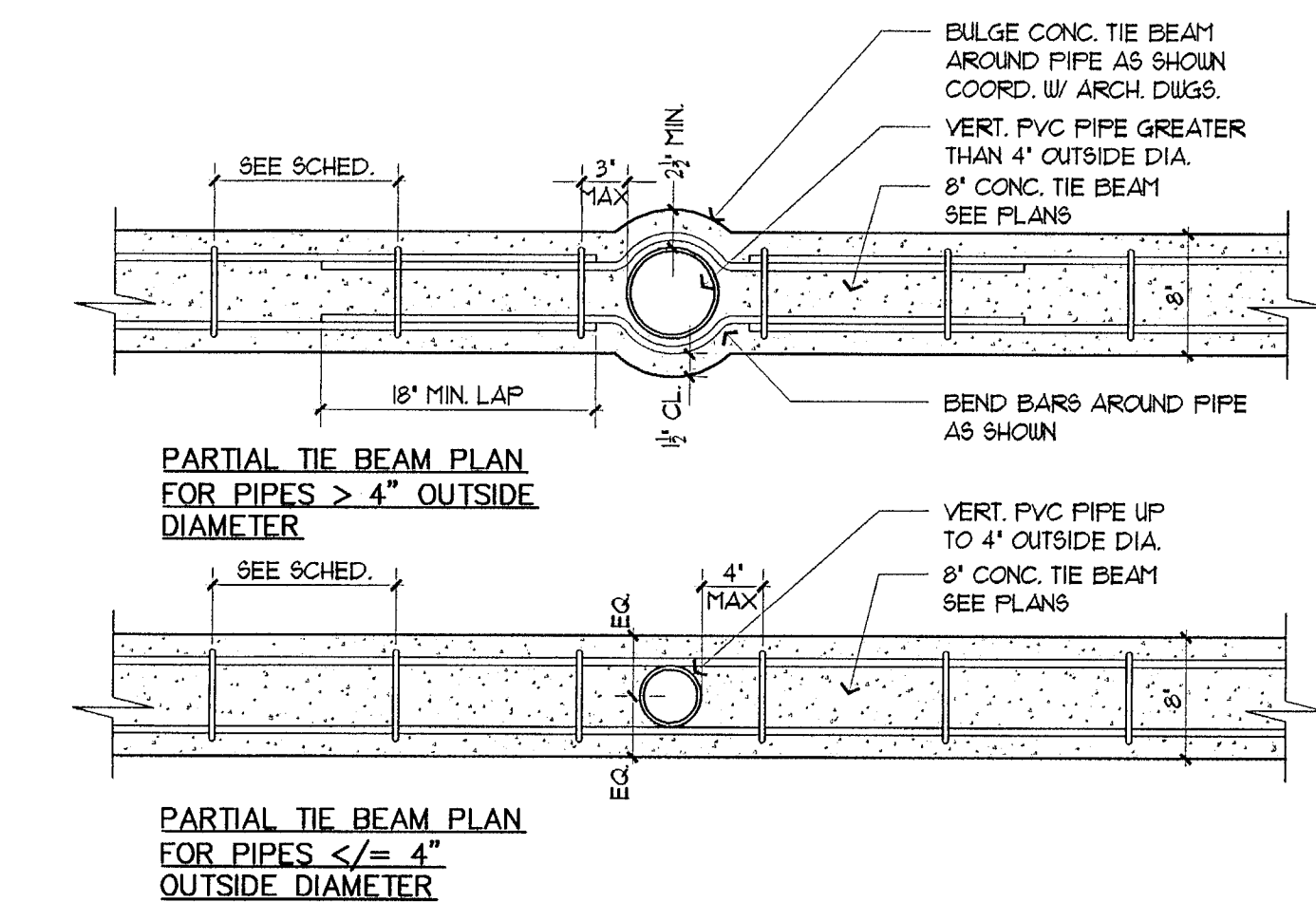
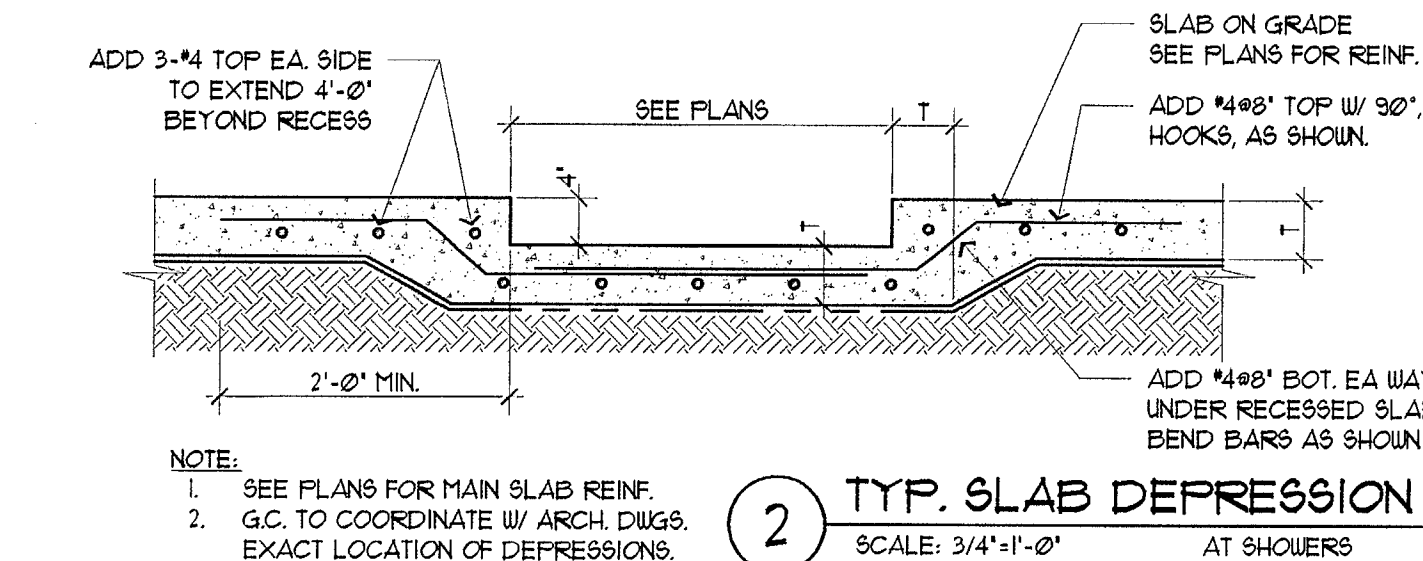
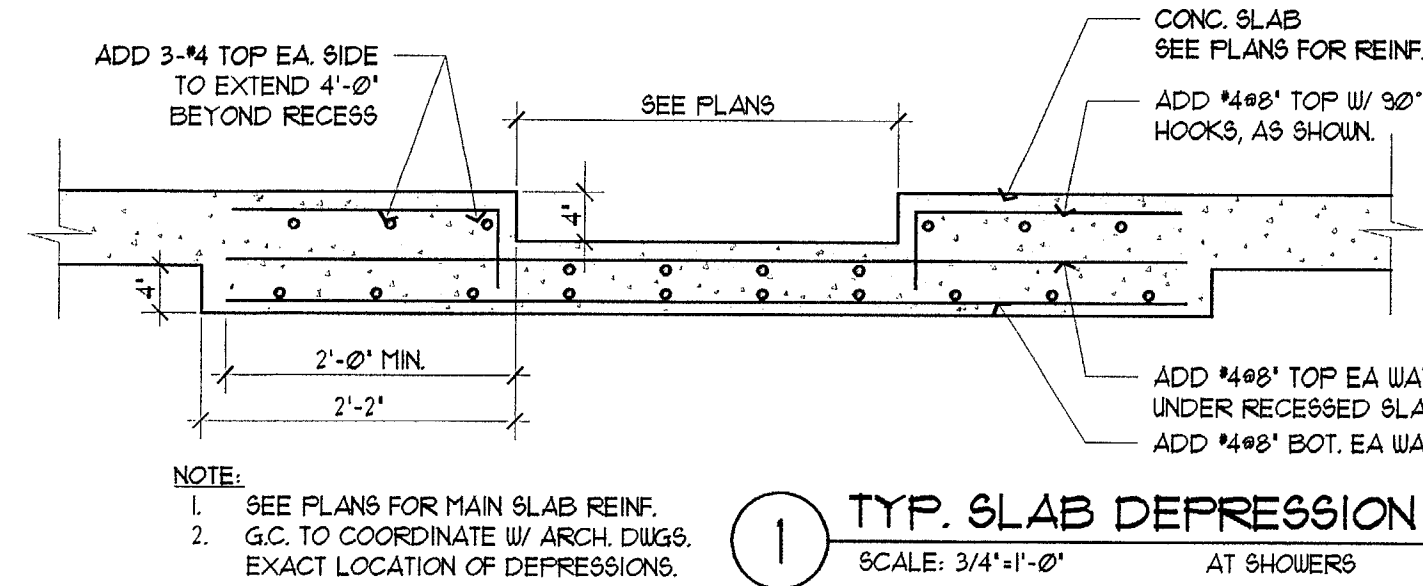


TABLE #2		TENSION DEVELOPMENT LENGTH, L _d															
		CASE 1								CASE 2							
		lengths (in) per concrete strength (psi)								lengths (in) per concrete strength (psi)							
BAR SIZE		3000	4000	5000	6000	7000	8000	9000	10000	3000	4000	5000	6000	7000	8000	9000	10000
#3	T	17	15	13	12	12	12	12	12	25	22	19	16	16	16	15	14
#4	T	22	19	17	16	14	14	13	12	32	28	25	24	21	21	20	19
#5	T	28	25	22	21	19	19	17	16	41	36	32	30	27	26	24	23
#6	T	36	31	28	26	24	23	21	20	54	47	42	39	35	34	32	30
#7	T	43	37	33	32	28	28	25	24	64	56	50	46	42	41	38	36
#8	T	50	43	38	36	32	30	28	27	76	66	59	54	49	47	44	42
#9	T	57	49	43	41	36	34	31	30	87	76	68	62	56	53	50	47
#10	T	64	55	48	45	41	38	34	33	99	87	78	71	64	60	56	53
#11	T	71	61	53	50	45	42	37	36	110	97	87	79	71	66	61	58
#12	T	78	67	58	54	49	45	40	39	121	107	96	87	78	72	66	62
#13	T	85	73	63	59	53	49	43	42	132	117	105	95	85	78	71	67
#14	T	92	80	69	64	57	52	45	44	143	127	114	103	92	84	76	72
#15	T	99	86	74	69	61	56	48	47	154	137	123	111	100	91	82	78
#16	T	106	93	80	74	65	60	51	50	165	147	132	120	108	99	89	84
#17	T	113	100	86	80	70	64	54	53	176	157	141	128	116	106	95	90
#18	T	120	107	92	85	74	68	57	56	187	167	150	136	123	112	101	95

NOTES:
1- Ø = OTHERS BARS; T = TOP BARS
2- ALL TABLE LENGTHS ARE IN INCHES. TABULATED VALUES ARE FOR GRADE 60 REINFORCING BARS AND NORMAL WEIGHT CONCRETE
3- CASE 1: BEAMS OR COLUMNS COVER AT LEAST 10 d_b AND C-C SPACING AT LEAST 20 d_b
ALL OTHERS COVER AT LEAST 10 d_b AND C-C SPACING AT LEAST 30 d_b
4- CASE 2: BEAMS OR COLUMNS COVER LESS THAN 10 d_b OR C-C SPACING LESS THAN 20 d_b
ALL OTHERS COVER LESS THAN 10 d_b OR C-C SPACING LESS THAN 30 d_b
5- TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS
6- FOR LIGHT WEIGHT AGGREGATE CONCRETE, MULTIPLY THE TABULATED VALUES BY 1.3

TABLE #2 - TENSION DEVELOPMENT LENGTH

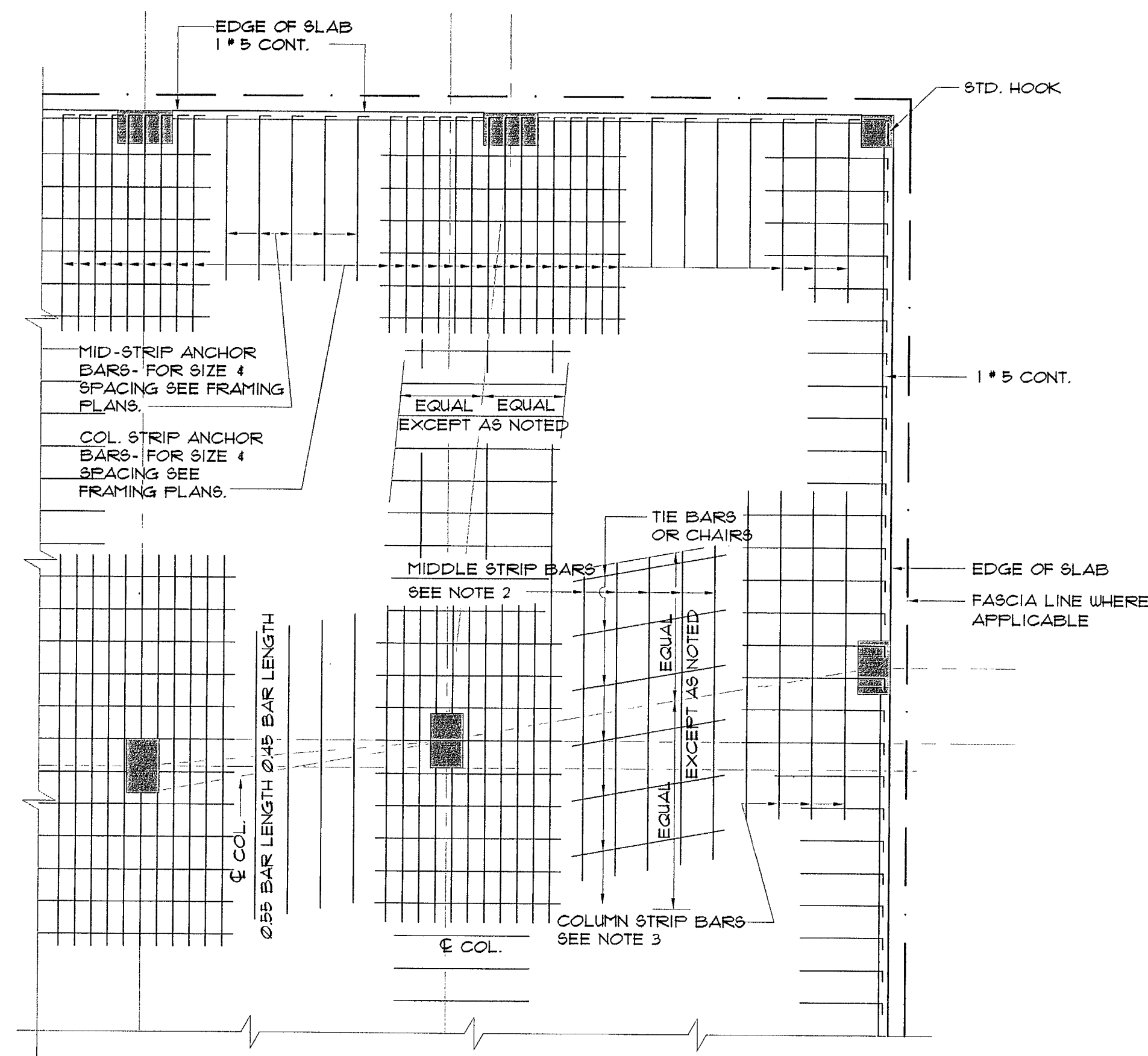
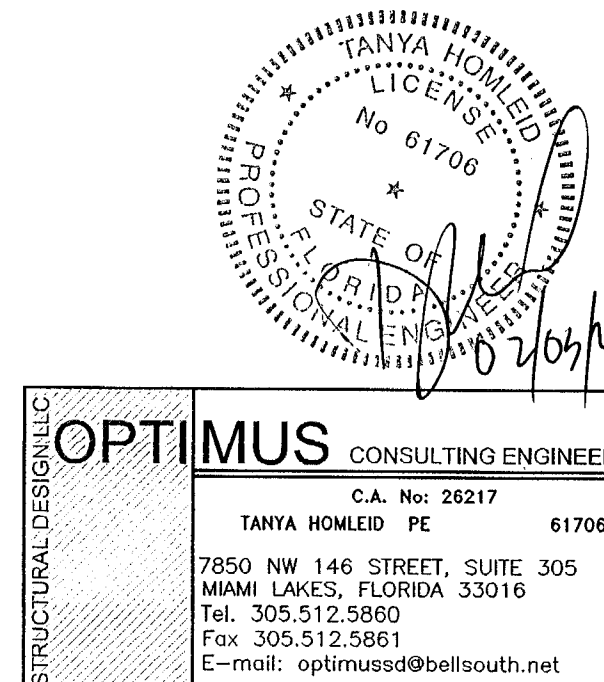


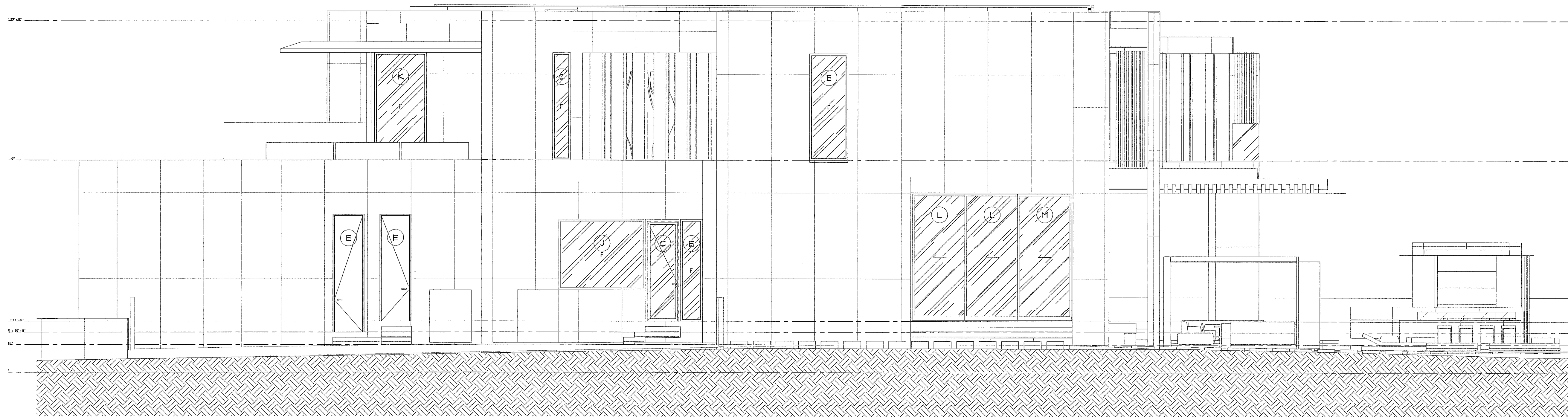
TABLE #1		TENSION LAP SPLICES, 13L _d (TIE MEMBERS NOT INCLUDED)															
		CASE 1								CASE 2							
		lengths (in) per concrete strength (psi)								lengths (in) per concrete strength (psi)							
BAR SIZE		3000	4000	5000	6000	7000	8000	9000	10000	3000	4000	5000	6000	7000	8000	9000	10000
#3	O	22	19	17	16	16	16	16	16	32	28	25	23	21	21	20	19
#4	O	28	24	22	20	18	17	17	17	43	37	33	30	28	28	26	25
#5	O	36	31	28	26	25	23	23	23	56	48	43	40	37	37	33	32
#6	O	43	37	33	31	28	26	25	24	64	56	50	46	42	41	38	36
#7	O	50	43	38	36	32	30	27	26	76	66	59	54	49	47	44	42
#8	O	57	49	43	41	36	34	31	30	87	76	68	62	56	53	50	47
#9	O	64	55	48	45	41	38	34	33	99	87	78	71	64	60	56	53
#10	O	71	61	53	50	45	42	37	36	110	97	87	79	71	66	61	58
#11	O	78	67	58	54	49	45	40	39	121	107	96	87	78	72	66	62
#12	O	85	73	63	59	53	49	43	42	132	117	105	95	85	78	71	67
#13	O	92	80	69	64	57	52	45	44	143	127	114	103	92	84	76	72
#14	O	99	86	74	69	61	56	48	47	154	137	123	111	100	91	82	78
#15	O	106	93	80	74	65	60	51	50	165	147	132	120	108	99	89	84
#16	O	113	100	86	80	70	64	54	53	176	157	141	128	116	106	95	90
#17	O	120	107	92	85	74	68	57	56	187	167	150	136	123	112	101	95
#18	O	127	113	97	90	78	71	60	59	200	178	160	145	131	119	107	101

SEE NOTE #1

NOTES:
1. LAP SPLICES NOT PERMITTED, USE WELDED SPLICES OR MECHANICAL CONNECTION ACCORDING WITH A.C.I. 318, 12.14.3
2- Ø = OTHERS BARS; T = TOP BARS
3- ALL TABLE LENGTHS ARE IN INCHES. TABULATED VALUES ARE FOR GRADE 60 REINFORCING BARS AND NORMAL WEIGHT CONCRETE
4- CASE 1: BEAMS OR COLUMNS COVER AT LEAST 10 d_b AND C-C SPACING AT LEAST 20 d_b
ALL OTHERS COVER AT LEAST 10 d_b AND C-C SPACING AT LEAST 30 d_b
5- CASE 2: BEAMS OR COLUMNS COVER LESS THAN 10 d_b OR C-C SPACING LESS THAN 20 d_b
ALL OTHERS COVER LESS THAN 10 d_b OR C-C SPACING LESS THAN 30 d_b
6- TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS
7- FOR LIGHT WEIGHT AGGREGATE CONCRETE, MULTIPLY THE TABULATED VALUES BY 1.3

TABLE #1 - TENSION LAP SPLICES

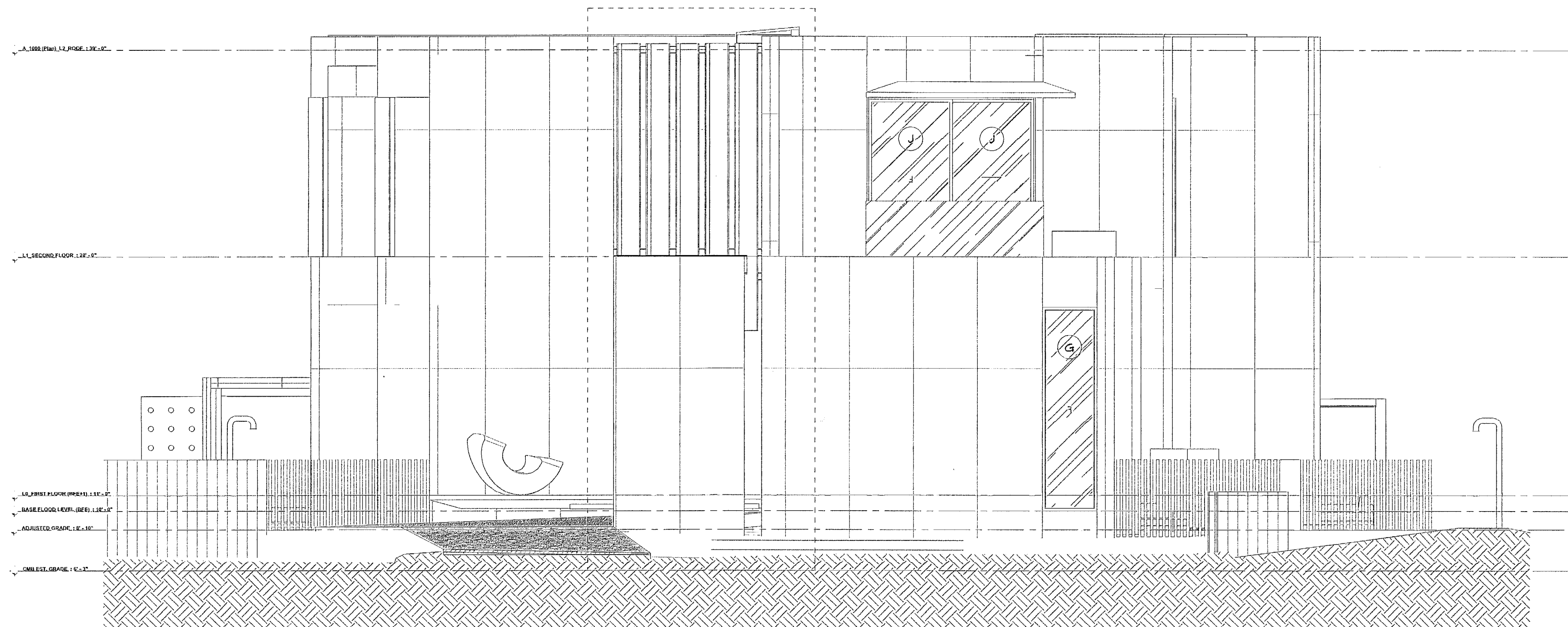




NORTH ELEVATION

SCALE

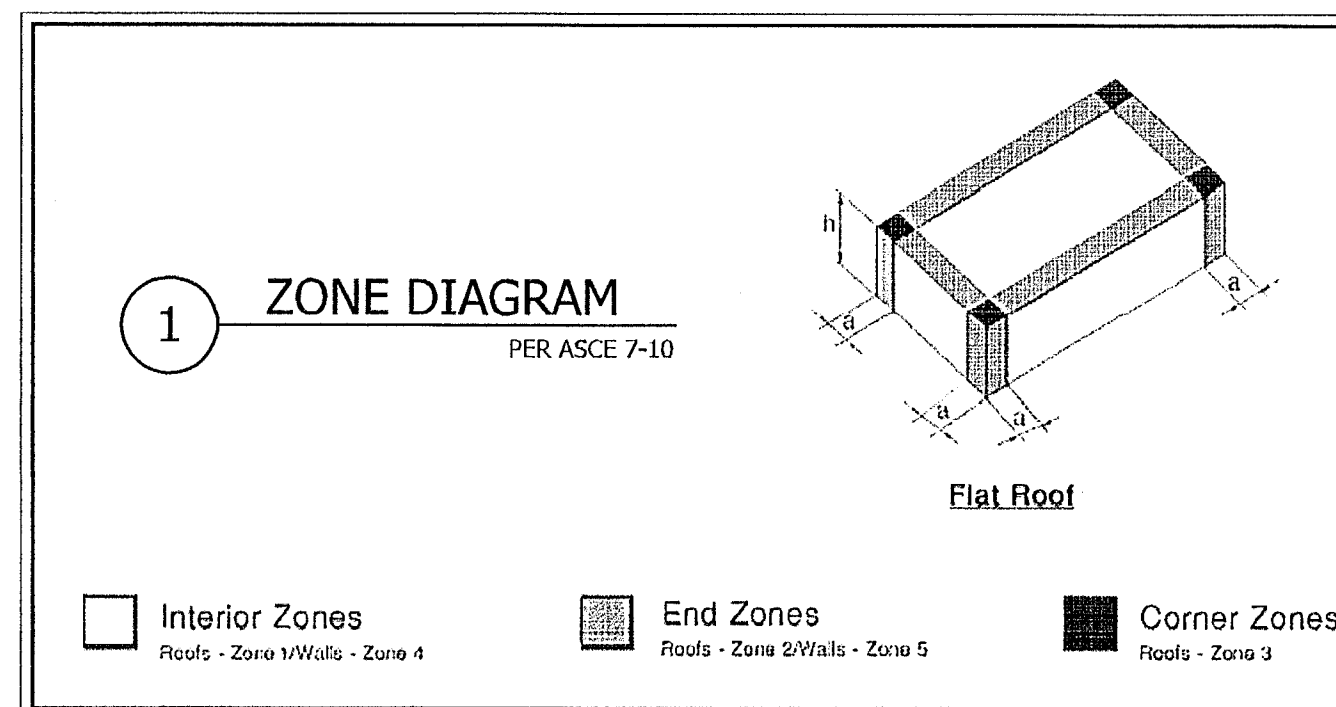
3/16" = 1'-0"



EAST ELEVATION

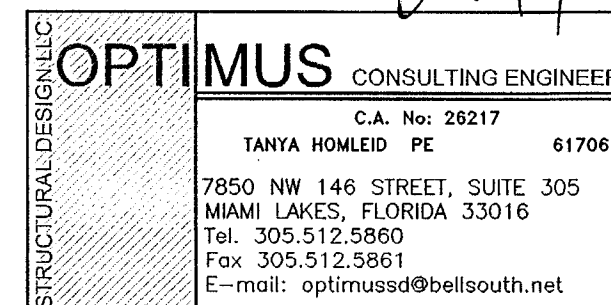
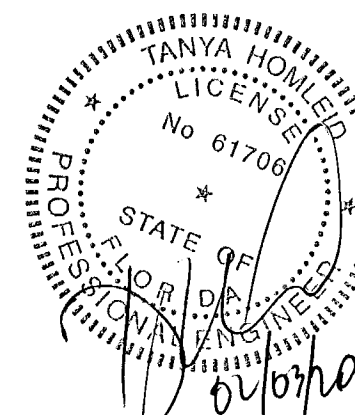
SCALE

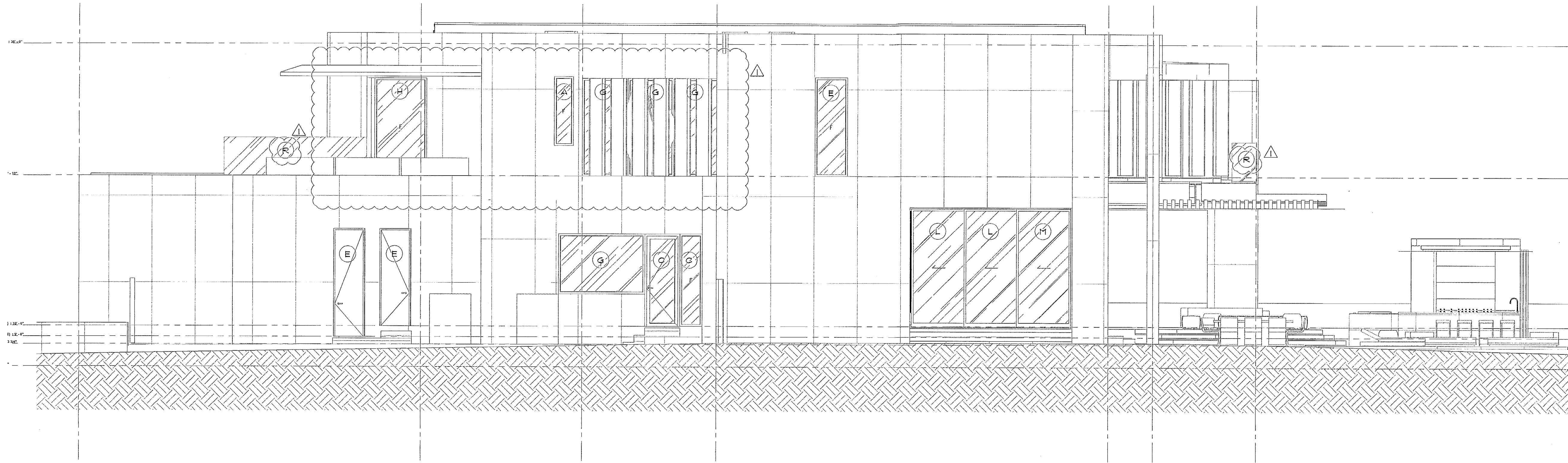
3/16" = 1'-0"



ROOFING PRESSURES		
ZONE 1	+23 PSF	-55 PSF
ZONE 2	+23 PSF	-33 PSF
ZONE 3	+23 PSF	-133 PSF
WALL PRESSURES		
ZONE 4	+51 PSF	-55 PSF
ZONE 5	+51 PSF	-61 PSF

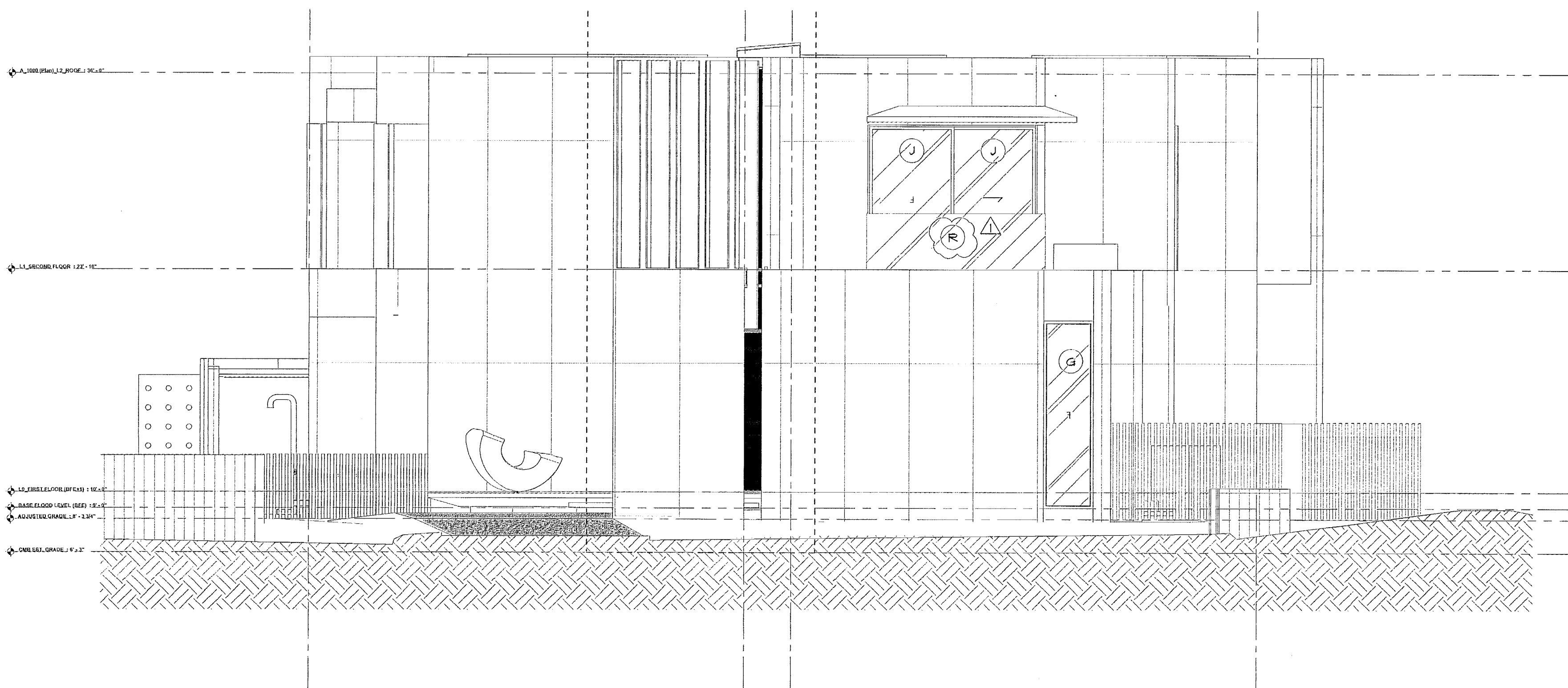
WINDOW / DOOR PRESSURES		
A	+51 PSF	-55 PSF
B	+51 PSF	-61 PSF
C	+43 PSF	-53 PSF
D	+43 PSF	-64 PSF
E	+40 PSF	-52 PSF
F	+40 PSF	-62 PSF
G	+41 PSF	-51 PSF
H	+41 PSF	-59 PSF
J	+46 PSF	-50 PSF
K	+46 PSF	-51 PSF
L	+45 PSF	-43 PSF
M	+45 PSF	-56 PSF
N	+43 PSF	-41 PSF
O	+43 PSF	-53 PSF
P	+43 PSF	-51 PSF





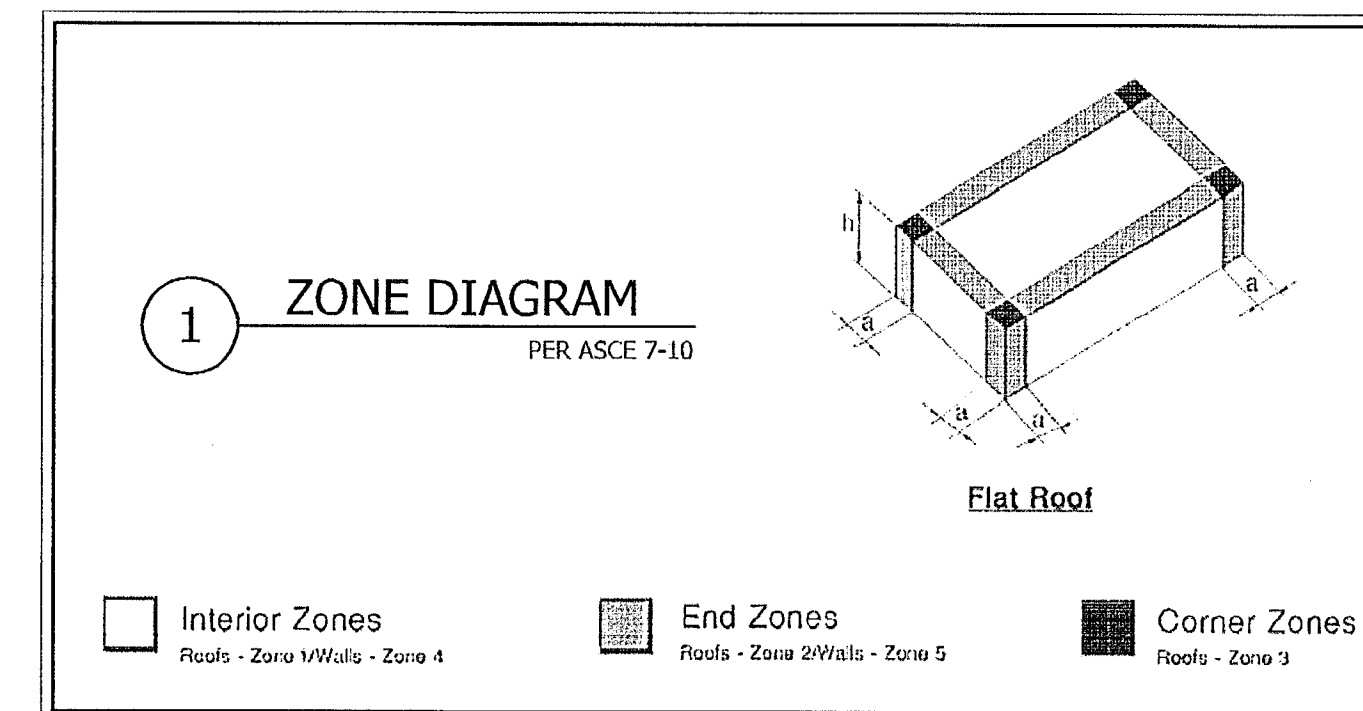
NORTH ELEVATION

SCALE 3/16" = 1'-0"



EAST ELEVATION

SCALE 3/16" = 1'-0"



ROOFING PRESSURES		
ZONE 1	+23 PSF	-55 PSF
ZONE 2	+23 PSF	-93 PSF
ZONE 3	+23 PSF	-133 PSF
WALL PRESSURES		
ZONE 4	+51 PSF	-55 PSF
ZONE 5	+51 PSF	-61 PSF
RAILING PRESSURES		
R	Kz	Qz
	126	+43 PSF

END ZONE LENGTH a=5'-6"		
WINDOW / DOOR PRESSURES		
A	+51 PSF	-55 PSF
B	+51 PSF	-61 PSF
C	+49 PSF	-53 PSF
D	+49 PSF	-64 PSF
E	+48 PSF	-52 PSF
F	+48 PSF	-62 PSF
G	+41 PSF	-51 PSF
H	+41 PSF	-59 PSF
J	+46 PSF	-50 PSF
K	+46 PSF	-51 PSF
L	+45 PSF	-49 PSF
M	+45 PSF	-56 PSF
N	+43 PSF	-47 PSF
O	+43 PSF	-53 PSF
P	+43 PSF	-51 PSF

28 W DILDO RESIDENCE
28 WEST DILDO DR.
MIAMI BEACH, FL 33139

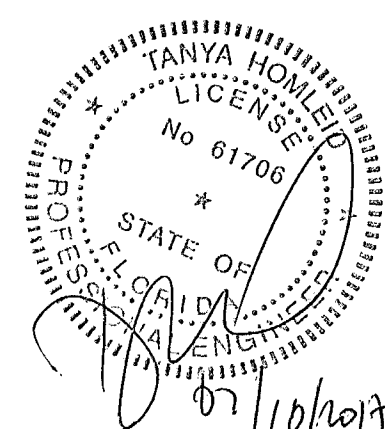
seal

Raphael Levy
registered architect
AR0094779

comm no.
1652

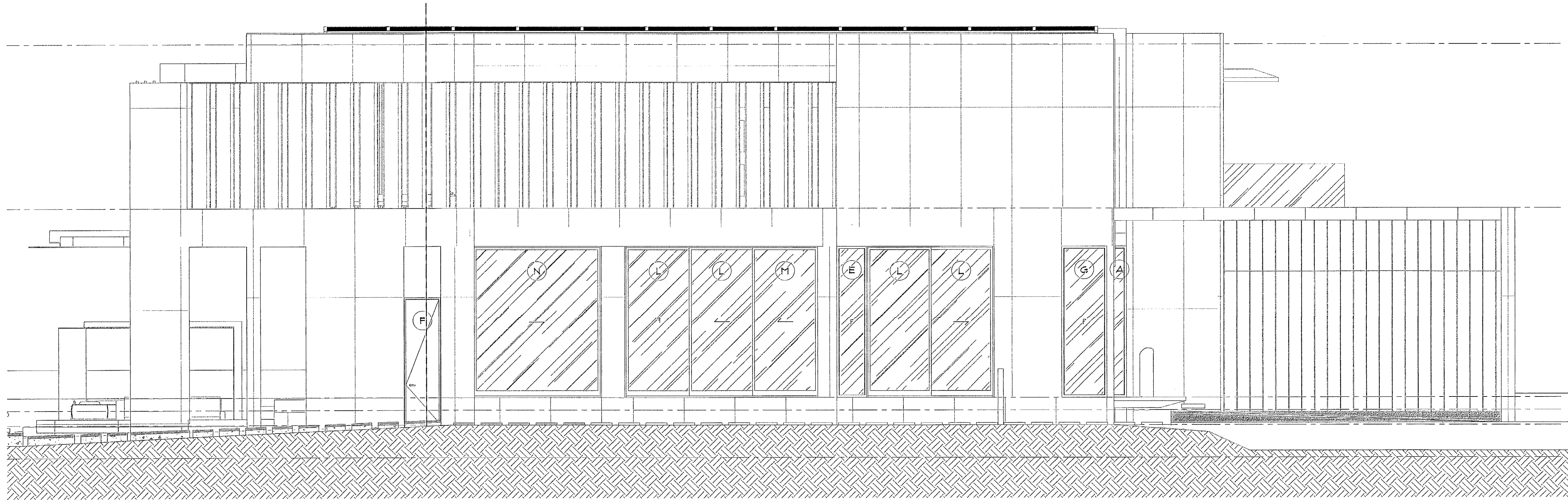
date:
02/03/17

revised:
07-10-17 B.D. COMMENTS/O. CHANGES

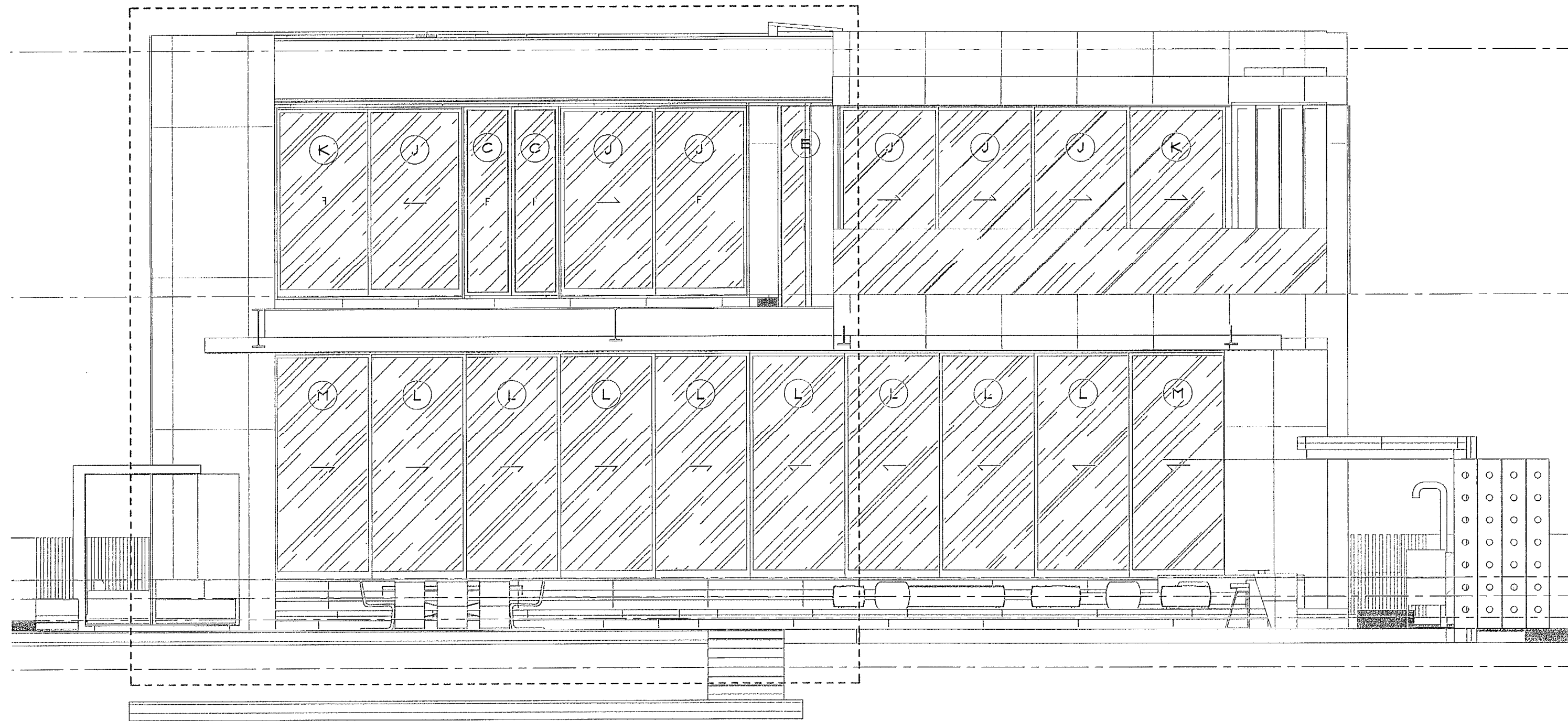


STRUCTURAL DESIGN LLC
OPTIMUS CONSULTING ENGINEERS
E.A. No. 28217 61706
TANYA HOMLEID PE
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel. 305.512.5860
Fax 305.512.5861
E-mail: optimusd@bellsouth.net

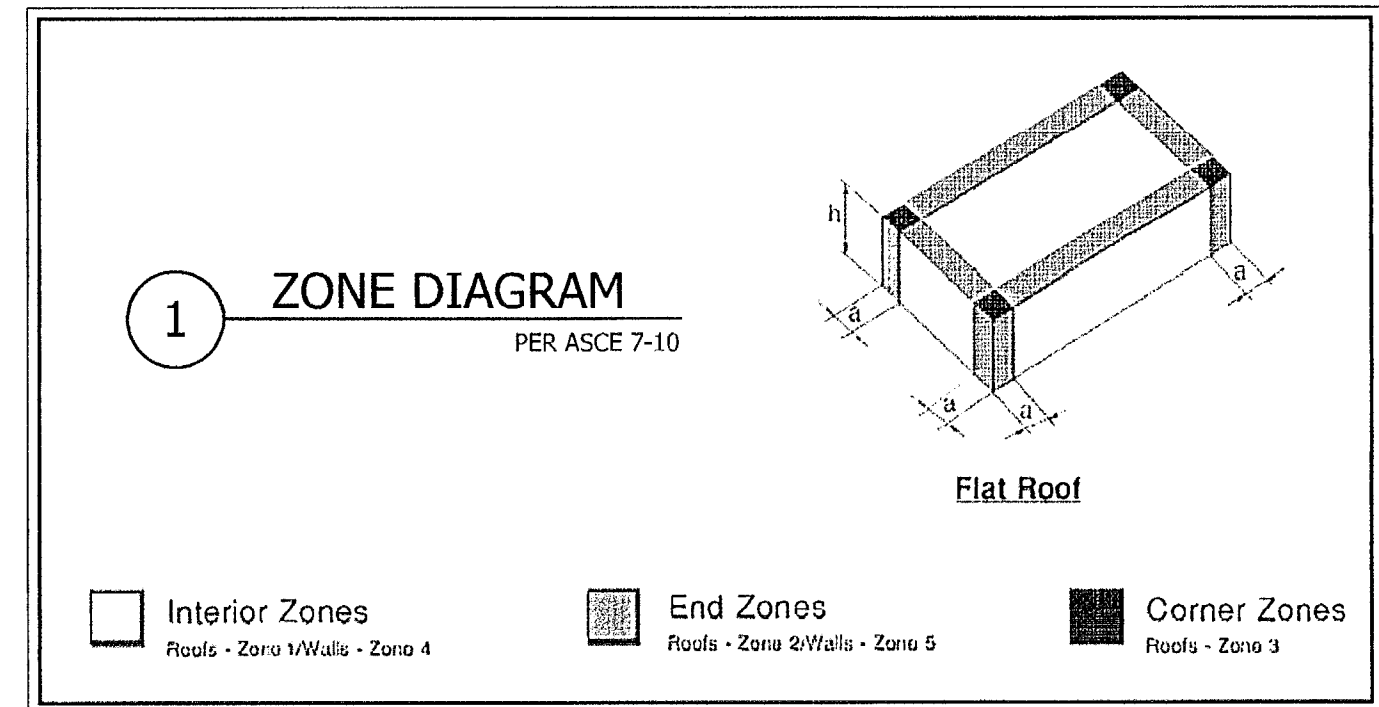
sheet no.
S-700



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



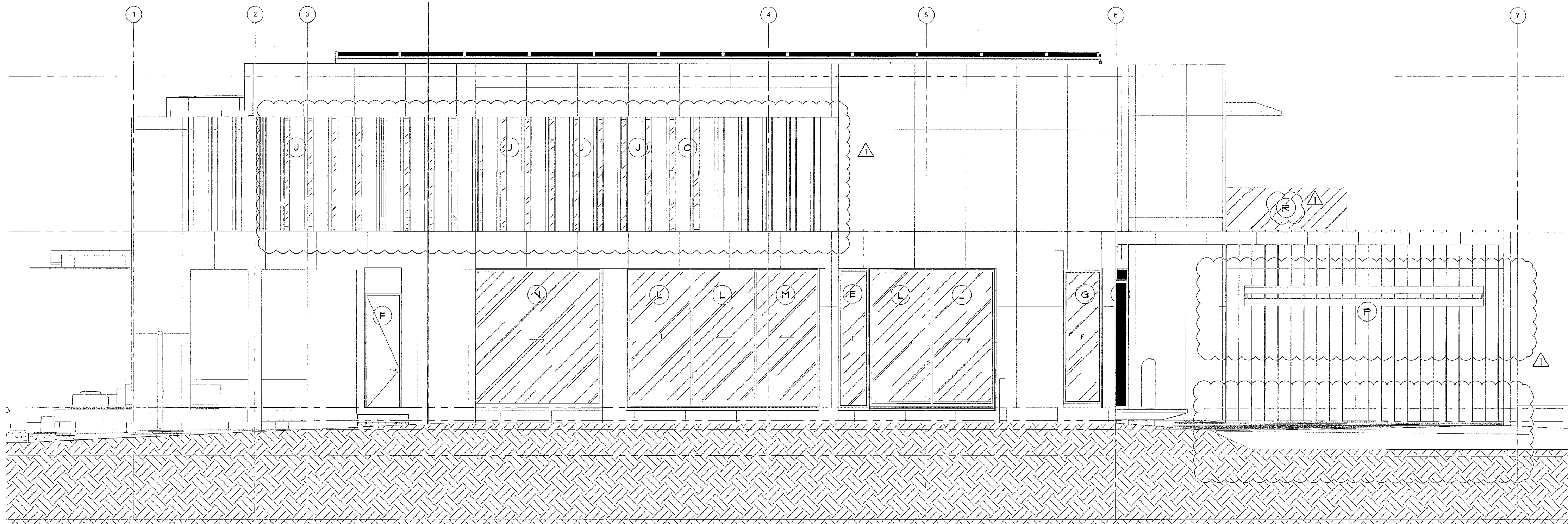
WEST ELEVATION
SCALE 3/16" = 1'-0"



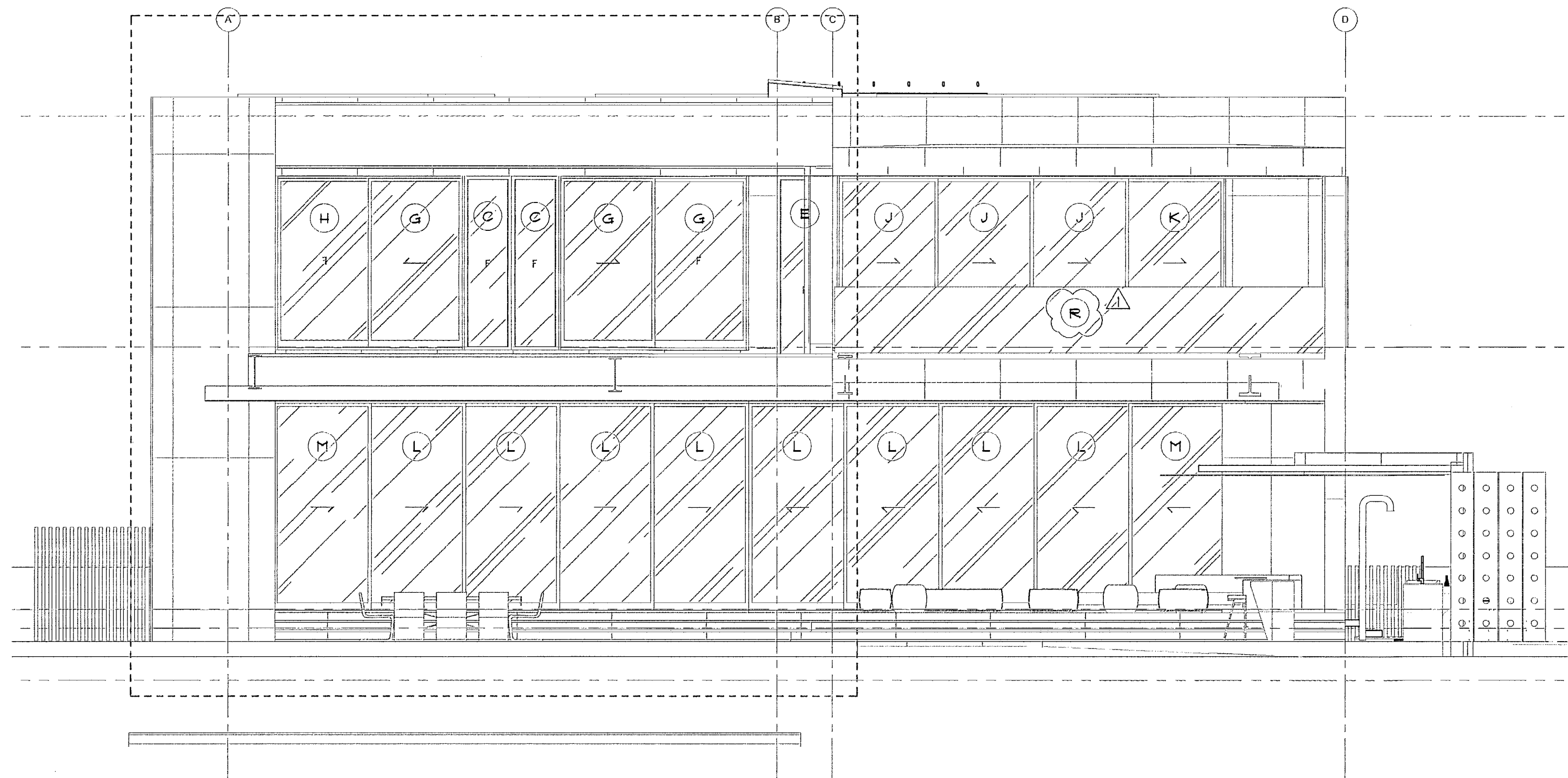
ROOFING PRESSURES		
ZONE 1	+23 PSF	-55 PSF
ZONE 2	+23 PSF	-33 PSF
ZONE 3	+23 PSF	-139 PSF

WALL PRESSURES		
ZONE 4	+51 PSF	-55 PSF
ZONE 5	+51 PSF	-61 PSF

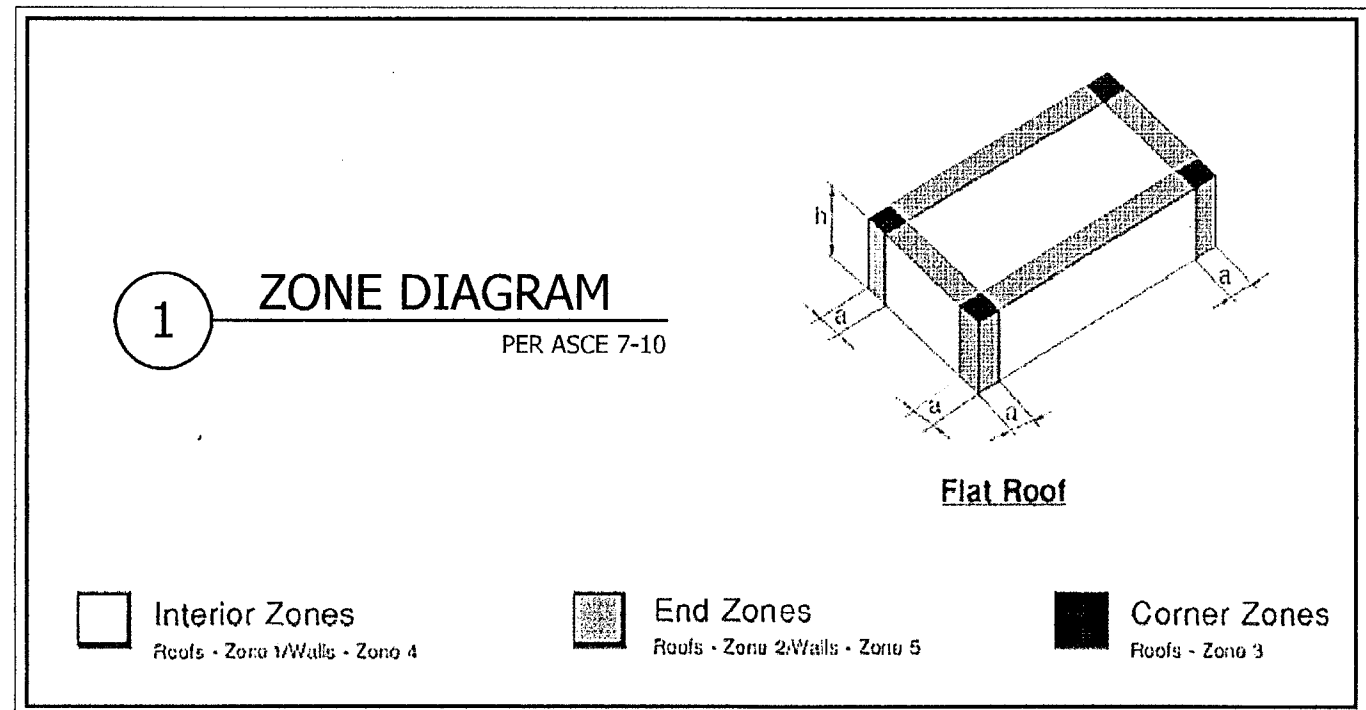
WINDOW / DOOR PRESSURES		
(A)	+51 PSF	-55 PSF
(B)	+51 PSF	-61 PSF
(C)	+49 PSF	-53 PSF
(D)	+49 PSF	-64 PSF
(E)	+48 PSF	-52 PSF
(F)	+48 PSF	-62 PSF
(G)	+41 PSF	-51 PSF
(H)	+41 PSF	-59 PSF
(J)	+46 PSF	-50 PSF
(K)	+46 PSF	-51 PSF
(L)	+45 PSF	-49 PSF
(M)	+45 PSF	-56 PSF
(N)	+43 PSF	-41 PSF
(O)	+43 PSF	-53 PSF
(P)	+43 PSF	-51 PSF



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



WEST ELEVATION
SCALE 3/16" = 1'-0"



ROOFING PRESSURES		
ZONE 1	+23 PSF	-55 PSF
ZONE 2	+23 PSF	-93 PSF
ZONE 3	+23 PSF	-139 PSF
WALL PRESSURES		
ZONE 4	+51 PSF	-55 PSF
ZONE 5	+51 PSF	-61 PSF
RAILING PRESSURES		
R	106	+43 PSF

END ZONE LENGTH d = 5'-6"		
WINDOW / DOOR PRESSURES		
A	+51 PSF	-55 PSF
B	+51 PSF	-61 PSF
C	+49 PSF	-53 PSF
D	+49 PSF	-64 PSF
E	+48 PSF	-52 PSF
F	+48 PSF	-62 PSF
G	+41 PSF	-51 PSF
H	+41 PSF	-59 PSF
I	+46 PSF	-50 PSF
J	+46 PSF	-51 PSF
K	+46 PSF	-49 PSF
L	+45 PSF	-56 PSF
M	+43 PSF	-41 PSF
N	+43 PSF	-53 PSF
O	+43 PSF	-51 PSF
P	+43 PSF	-51 PSF

28 W DILIDO RESIDENCE
28 WEST DILIDO DR.
MIAMI BEACH, FL 33139

seal

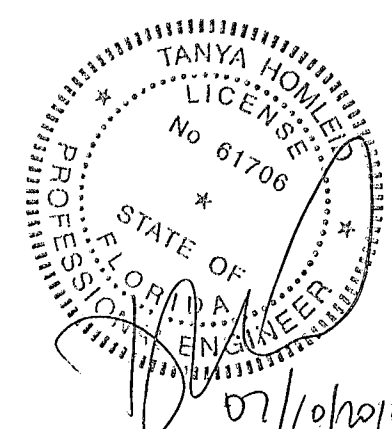
Raphael Levy
registered architect
AR0094779

comm no.
1652

date:
02/03/17

revised:

07-10-17 B.D. COMMENTS/O. CHANGES



STRUCTURAL DESIGN LLC
OPTIMUS CONSULTING ENGINEERS
C.A. No. 28217 61706
TANYA HOMERO, P.E.
7850 NW 146 STREET, SUITE 305
MIAMI LAKES, FLORIDA 33016
Tel. 305.512.5860
Fax 305.512.5861
E-mail: optimussd@bellsouth.net

sheet no.
S-710

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE FLORIDA BUILDING CODE.