

**GENERAL:**

- All materials and workmanship shall be in conformance with the Ontario Building Code.
- Where standards published by various organizations are referred, conform to latest edition of standards as amended and revised to date of contract.
- All dimensions, elevations, openings for pipes, sleeves, equipment locations and the like shall be checked with the architectural and the appropriate structural, mechanical or electrical drawings. Report any discrepancies before proceeding with the work.
- Do not scale the drawings.
- The Contractor shall examine the site and satisfy himself of the actual conditions and requirements of the work.
- Check underground utilities and assume responsibility for same during construction.
- Set all anchors, inserts, etc. as required by other trades.
- The Contractor shall caulk and seal all joints, spaces, etc. to provide a weather-tight building.
- The Contractor shall make any necessary allowances for any variations and/or any revisions made on account of sub-trades and product selection for the completion of the project.
- Features of construction not fully shown shall be of the same character as shown for similar conditions.
- Confirm all measurements that govern the scope of work built into existing building.

**EXCAVATION, GRADING & BACKFILLING:**

- Refer to soil test report, if there is any, for the borehole data and site conditions.
- The accuracy of the soil test report is not guaranteed. Soil data applies for actual test pit location and conditions may differ at other parts of the site.
- All spread footings shall be placed on undisturbed native material. Have base inspected by Engineer before placing footing.
- Design bearing pressure to be 300 kPa unless otherwise stated.
- Excavate and remove all fills, surface features and topsoil from building area before starting the work.
- Protect foundations, slabs on grade, footings, and adjacent soil against freezing and frost action at all times during construction.
- Backfill footings using approved free draining materials.
- Place backfill simultaneously on both sides of walls below grade.
- Slab on grade shall be placed on soil capable of safely sustaining 30 KPa without settlement related to building footings.
- Slab on grade shall be, unless otherwise stated, 100mm thick poured concrete reinforced with 152x152 MW18.7/MW18.7 WWF, on 150mm deep crushed stones compacted to at least 95% standard proctor maximum dry density.
- Restore exterior surfaces to condition equal to that existing prior to excavation unless otherwise noted.

**CONCRETE & REINFORCING STEEL:**

- Concrete construction shall conform to CAN/C.S.A. A23.1-09.
- Concrete compressive strength to be 25MPa at 28 days, maximum aggregate size to be 20mm, slump to be 75mm maximum, unless otherwise stated.
- Concrete cover for reinforcements shall be in accordance with Ontario Building Code and CAN/C.S.A. A23.1-09.
- Exposed concrete shall have air entrainment of 6-7%.
- Form all vertical surfaces of concrete work, where neat excavation in native soil are possible. Concrete for footings need not be formed.
- All floor surfaces shall be level to a tolerance of 10mm and not out of plane by more than 3mm on 3000mm template. Steel trowel finish all floors.
- Reinforcing steel shall be in accordance with C.S.A. G30.18-M92, Grade 400.
- Welded wire fabric shall be in accordance with C.S.A. G30.15-M83.
- The Contractor shall prepare and submit six (6) copies of shop drawings indicating material, size, spacing, and location of reinforcing steel, anchors, and details.
- Reinforcing bars shall be continuous across construction joints and elevation variations unless noted. Continuous bars shall be fully developed by lapping where spliced.
- All beam and joist pockets shall be packed solid with grout.

**MASONRY:**

- Masonry work shall be in accordance with C.S.A. standards A371-04 and the Ontario Building Code.
- Modular concrete block masonry units conform to C.S.A. A165.1-04, A165.2-04 and A165.3-04. Solid block and semi-solid block shall be used in locations shown on drawings.
- Masonry mortar for load bearing walls shall be type S conforming to C.S.A. A179-04.
- Install continuous bond beam where open web steel joist bear on masonry walls unless otherwise notes.
- Over openings or recesses in masonry walls including those for mechanical or electrical services and equipments, provide lintels as per lintel schedule. Where no lintel schedule is provided for opening greater than 150mm supply masonry lintels reinforced with 1-10m reinforcing bars at bottom or for brick veneer provide a L76x76x6.4. Provide minimum 100mm bearing at each end.
- Provide cavity wall reinforcement in all masonry walls. For block and brick walls - Tri-Loc BL11 (Blok-Lok). For plain masonry - heavy duty ladder type masonry reinforcement to suit block size.
- Concrete fill for masonry units to have a minimum compressive strength of 25 MPa at 28 days unless otherwise noted.
- Where bricks are indicated, supply metric modular bricks of type shown unless otherwise noted. Compressive strength of bricks to exceed 40 MPa. Provide solid masonry units below all beams and lintel bearings.
- Where anchors are cast into masonry, fill voids with concrete to two (2) courses below bearing and a minimum of 200mm each side of bearing.
- Provide solid reinforcing core with 1 - 15M continuous adjacent to all wall and door openings and building corners.

**STEEL - INSPECTION AND TESTING:**

- The undertaking to inspect welding shall be qualified in accordance with the requirements of CSA W178.1, "Certification of Welding Inspection Organizations", and certified by the Canadian Welding Bureau.
- The inspection shall cover all moment connections to review for compliance with the CSA S16.
- The inspection agency shall submit reports to the consultant covering the Work inspected and provide details of nonconformities or deficiencies observed.

**STRUCTURAL STEEL:**

- Rolled shapes and plates shall conform to CAN/C.S.A. G40.21-04, Grade 350W.
- Hollow structural sections shall conform to CAN/C.S.A. G40.21-04, Grade 350W.
- Pipe column sections shall conform to ASTM A53, 240 MPa.
- Bolts to be A325 high strength steel bolts for friction type connections, and A307 for anchor bolts.
- Steel deck finish to be zinc coated to A.S.T.M. A123M-02
- Fabrication, erection and workmanship shall be performed by a welder qualified under C.S.A. W47.
- Design open web steel joist to CAN3-S16.1-M84. Provide joist bridging and joist camber as per C.S.A. S16M.
- Surfaces to be welded shall be thoroughly cleaned of all foreign matter including paint film.
- All welded joints shall use E49XX electrodes. Connections that are friction type shall use 20mm diameter ASTM A325 high strength bolts unless otherwise noted.
- All steel deck shall be in conformance with C.S.A. S-136 and shall be designed to safely support all the loads indicated on the drawings.
- Steel decks to be designed to act as diaphragms. Decks to have wipe coat galvanized finish unless noted otherwise on drawings.
- Steel decks and joists shall have a maximum deflection under live load of 1/240 of span.
- Shop prime all structural steel with primer. Do not paint contact surfaces of joints or surfaces to receive field welds.
- The Contractor shall prepare and submit to the Consultant for review six (6) copies of erection diagrams and shop drawings indicating material, size, spacing and location of structural steel members, connection, bridging, reinforcing, bearing shoes, anchors, elevations, details, bearing the stamp of a professional engineer registered in the province of Ontario.
- The Contractor shall prepare and submit to the Consultant six (6) catalogues or tables of joists and steel deck checked and approved by a Professional Engineer of Ontario.
- All loads specified are unfactored in accordance with C.S.A. S16.
- All beam pockets plates not specified on drawings shall be 300x150x12 with 2-20M hooked dowels with 300 embedment and a 50 millimeter hook.
- All beams or columns that have point loads require web stiffeners.

**WOODWORK:**

- Timber work and connections shall conform to the minimum requirements of the Ontario Building Code and CAN/C.S.A. 086-09
- All lumber to be species S-P-F, #1 grade or better.
- Provide approved vapour barrier between timber elements resting on concrete or masonry.
- Anchor sills to masonry using 12mm anchor bolts at 1200mm o.c., in no case less than 2 per wall.
- Conform with good practice for erection of partitions. Coordinate work with plumbers and electricians.
- Sheathing for roofs shall be exterior grade spruce plywood. Provide 50mm nominal subfascia for attachment of sheathing.
- Provide #2 pine finished fascias and soffit boards, 50mm nominal framing for support of all finished work. Trim all openings.
- Prime paint and finish all exposed wood surfaces to Owner's requirement.
- Engineered wood i-joists shall be designed in accordance with CSA 086-01.
- Laminated veneer lumber beams shall be designed to CSA 086-01. Douglas Fir veneer glued on a continuous process with all grain parallel with the length of the member.
- Laminated veneer lumber shall be of single, one piece length, free of finger joint, scarf joint or mechanical connections in full length members.
- Adhesives used to laminate the veneer shall be waterproof, meeting the requirement of ASTM D-2559-76.
- Laminated veneer lumber beams shall be designed to meet the dimensions and loads indicated on the drawings.
- The design of laminated veneer lumber beams shall be under the supervision of a Registered Professional Engineer in the Province of Ontario.
- Roof trusses are to be pre-engineered timber roof trusses designed to accommodate the loads indicated. Truss shop drawings shall bear the stamp of a Professional Engineer registered in the Province of Ontario.

**COLD FORMED STEEL:**

- Unless otherwise specified, Cold Formed Steel to conform to CSA-S16, Steel Structures for Building - Limit States Design and CAN/CSA-S136, Cold Formed Steel Structural Members.
- Work to be executed by firm thoroughly conversant with laws, by-laws and regulations which govern, and capable of workmanship of best grade of modern shop and field practice known to recognized manufacturer's specializing in this work.
- Work shall be executed by workers especially trained and experienced in this type of work. Have a full time, senior, qualified representative at the site to direct the work.
- Install system to provide for movement of components without damage, failure of joint seals, undue stress on fasteners, or other detrimental effects when subject to seasonal or cyclic day/night temperature ranges.
- Install system to accommodate construction tolerances, deflection of building structural members, and clearances of intended openings.
- Galvanized Sheet Steel shall conform to ASTM A653/A653M, minimum Grade D, 50 PSI (345 Mpa) yield for 1.5mm (.060") material.
- Structural Metal Studs to be galvanized sheet steel formed to channel shape, of minimum gauge, sizes, and section properties to meet design requirements, and conforms to ASTM C955.
- Metal Stud Runners/Top and Bottom Tracks to be Galvanized sheet steel formed to channel shape, having same width as studs, with tight fit and solid web, of minimum gauge to meet design requirements, but no less than gauge of metal studs, and conforms to ASTM C955.
- Metal Plates, Bridging, Gussets and Clips to be Formed from galvanized sheet steel, of gauges, shapes and sizes required to meet design requirements determined for conditions encountered, and of same finish as framing members.
- Fasteners to be Self-drilling, Self-tapping Screws, Bolts, Nuts and Washers: Hot-dip galvanized to 1.25 ounce per square foot and conforms to ASTM A153/A153M-09, Class B3, '12-24 x 7/8 HWH #4STLG' by Hilli Canada, or approved equal.
- Anchorage Devices to be power driven, powder actuated, drilled expansion bolts, or screws with sleeves, as application dictates.
- Where required welding shall be performed by a welder qualified under C.S.A. W47.
- Welding Materials to conform to CSA W59.
- Electrodes for welding shall have minimum 480 Mpa tensile strength series, (E480XXX, E480S-X).
- Provide Bridging for restraining member rotation and translation. Bridging shall be continuous and spaced at 1200mm O/C vertical maximum.
- The contractor shall prepare and submit to the consultant for review six(6) copies of erection diagrams and shop drawings indicating material, size, spacing, and location of structural members, connections, bridging, reinforcing, bearing, anchors, elevations, details, shop drawings shall bear the stamp of a professional engineer registered in the province of Ontario.

**DESIGN LOADS:**

- All loads are unfactored.
- Roof: Live Loads = 2.24 kPa (Ss = 2.3 kPa, Sr = 0.4 kPa)  
Dead Loads = 2.0 kPa (Includes Mechanical)
- Private Floor: Live Loads = 1.9 kPa  
Dead Loads = 3.37 kPa (Includes Mechanical & 4" Concrete Topping Partition = 1.0 kPa)
- Public Floor/Corridors: Live Loads = 4.8 kPa  
Dead Loads = 3.37 kPa (Includes Mechanical & 4" Concrete Topping)
- Stairwells: Live Loads = 4.8 kPa  
Dead Loads = 3.37 kPa (Includes Mechanical & 4" Concrete Topping)
- Balcony: Live Loads = 4.8 kPa  
Dead Loads = 4.25 kPa (Includes 4" Concrete Topping & 1" Concrete Pavers)
- Main Floor: Live Loads = 4.8 kPa  
Dead Loads = 3.35 kPa (Includes 4" Concrete Topping & Mechanical Partition = 1.0 kPa)
- Wind:  $q_{30} = 0.48$  kPa  
Uplift = 1 kPa
- Earthquake:  $S_a(0.2) = 0.19$   
 $S_a(0.5) = 0.12$   
 $S_a(1.0) = 0.072$   
 $S_a(2.0) = 0.023$   
PGA = 0.074

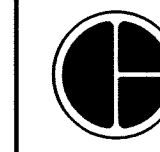
Site classification for seismic response taken as 'C'

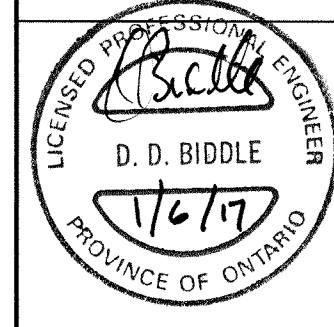
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1	ISSUED FOR REVIEW	OCT 21/16	T.O.	D.B.
NO.	REVISION	DATE	BY	APPROVED

**REVISIONS**

496 TAUNTON ROAD EAST, OSHAWA, ONTARIO. L1H7K4  
PETER HOOGERS

**STRUCTURAL NOTES**

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	SCALE: AS SHOWN	PROJECT NO. 115147
	DRAWN BY: T.R.T.O.	DRAWING NO. S1
	DESIGN BY: T.L.R./J.E.L.	
	CHECKED BY: D.D.B.	CAD FILE: -
DATE: MAY 2016	PLOT DATE: MAY 31/17	SUBMISSION: PERMIT

FOOTING SCHEDULE		
FOOTING	SIZE	REINFORCING
F1	44"x96"x20" POURED CONCRETE	10-20M LONGITUDINAL BARS 7-15M TRANSVERSE BARS
F2	92"x92"x18" POURED CONCRETE	11-15M TOP BARS E/W 15-15M BOTTOM BARS E/W
F3	110"x110"x23" POURED CONCRETE	16-15M TOP BARS E/W 23-15M BOTTOM BARS E/W
F4	92"x92"x18" POURED CONCRETE	15-15M BARS E/W
F5	92"x92"x18" POURED CONCRETE	11-15M TOP BARS E/W 15-15M BOTTOM BARS E/W
F6	48"x48"x12" POURED CONCRETE	4-15M BARS E/W
F7	44"x72"x14" POURED CONCRETE	9-15M LONGITUDINAL BARS E/W 6-15M TRANSVERSE BARS E/W
F8	36"x36"x8" POURED CONCRETE	3-15M BARS E/W
F9	56"x56"x14" POURED CONCRETE	6-15M BARS E/W

\*FOR ALL REINFORCING PROVIDE 3" MINIMUM COVER

PIER SCHEDULE				
PIER	SIZE	VERT. REINF.	HORIZ. REINF.	REMARKS
P1	12"x12"	4-15M BARS	10M @ 12" O/C	15M HOOKED DOWELS TO MATCH VERT. REINF. 36"   24"
P2	16"x16"	4-15M BARS	10M @ 12" O/C	15M HOOKED DOWELS TO MATCH VERT. REINF. 36"   24"
P3	16"x16"	6-15M BARS	10M @ 12" O/C	15M HOOKED DOWELS TO MATCH VERT. REINF. 36"   24"
P4	24"x24"	6-15M BARS	10M @ 12" O/C	15M HOOKED DOWELS TO MATCH VERT. REINF. 36"   24"
P5	24"x24"	8-20M BARS	10M @ 12" O/C	20M HOOKED DOWELS TO MATCH VERT. REINF. 36"   24"
P6	24"x24"	12-20M BARS	10M @ 12" O/C	20M HOOKED DOWELS TO MATCH VERT. REINF. 36"   24"

FOUNDATION WALL SCHEDULE		
WALL	SIZE	STRIP FOOTING
FW1	8" POURED CONCRETE FOUNDATION WALL W/ 15M BARS @ 16" O/C E/W	24"x 8" CONC. STRIP FOOTING W/ 2-15M CONTINUOUS REINF.
FW2	14" POURED CONCRETE FOUNDATION WALL W/ 15M BARS @ 16" O/C E/W	24"x 8" CONC. STRIP FOOTING W/ 2-15M CONTINUOUS REINF.
FW3	14" POURED CONCRETE FOUNDATION WALL W/ 15M BARS @ 16" O/C E/W E/F	24"x 8" CONC. STRIP FOOTING W/ 2-15M CONTINUOUS REINF.
FW4	20" POURED CONCRETE FOUNDATION WALL W/ 15M BARS @ 16" O/C E/W E/F	32"x 8" CONC. STRIP FOOTING W/ 3-15M CONTINUOUS REINF.
FW5	14" POURED CONCRETE FOUNDATION WALL 15M VERTICAL BARS @ 6" O/C (INT.) 15M HORIZONTAL BARS @ 16" O/C (INT.) 15M BARS @ 24" O/C E/W (EXT.)	24"x 8" CONC. STRIP FOOTING W/ 3-15M CONTINUOUS REINF.
FW6	8" POURED CONCRETE FOUNDATION WALL 15M VERTICAL BARS @ 12" O/C (INT.) 15M HORIZONTAL BARS @ 16" O/C (INT.)	24"x8" CONC. STRIP FOOTING W/ 3-15M CONTINUOUS REINF.

BASE PLATE SCHEDULE		
BASE PLATE	BASE PLATE	ANCHORS
BR1	14"x8"x5/8"	4-15M HOOKED ANCHORS 12"   2"
BR2	14"x12"x5/8"	4-15M HOOKED ANCHORS 12"   2"
BR3	14"x12"x1 1/4"	4-20M HOOKED ANCHORS 16"   4"
BR4	16"x16"x1 1/4"	4-25M HOOKED ANCHORS 16"   6"
BR5	16"x6"x1 1/2"	4-25M HOOKED ANCHORS 16"   6"

COLUMN SCHEDULE		
COLUMN	SIZE	REMARKS
C1	HSS152x152x4.8	
C2	HSS152x152x6.4	
C3	HSS152x152x13	
C4	HSS203x102x7.9	
C5	W200x52	
C6	W200x71	
C7	W200x86	
C8	W200x100	
C9	N/A	
C10	W310x158	
C11	W310x202	

STRUCTURAL WALL SCHEDULE		
WALL	SIZE	REMARKS
SW1	600S162-33 STUD W/ CONTINUOUS 600T150-33 TOP DEFLECTION TRACK W/ 600T150-33 BOTTOM TRACK	2-1/4" TAPCONS @ 16" O/C W/ 2" EMBEDMENT
SW2	8" CMU BLOCK	15M VERTICAL REINF. @ 48" O/C
SW3	8" POURED CONCRETE	15M HORIZONTAL REINF. @ 16" O/C 15M VERTICAL REINF. @ 12" O/C
SW4	8" POURED CONCRETE	15M REINF. @ 16" O/C E/W
SW5	4" BRICK 8" POURED CONCRETE	15M HORIZONTAL REINF. @ 16" O/C 15M VERTICAL REINF. @ 6" O/C
SW6	4" BRICK 8" POURED CONCRETE	15M HORIZONTAL REINF. @ 16" O/C 15M VERTICAL REINF. @ 12" O/C
SW7	4" BRICK 8" POURED CONCRETE	15M REINF. @ 16" O/C E/W
SW8	4" BRICK 8" CMU BLOCK 4" BRICK	15M VERTICAL REINF. @ 48" O/C

LINTEL SCHEDULE		
LINTEL	LINTEL	REMARKS
LST1	L102x89x6.4	LOOSE LINTEL
LST2	L127x89x6.4	LOOSE LINTEL
LST3	2 - L89x89x6.4	2-10M HOOKED ANCHORS 6"   2"
LCF1	BUILT UP 600S162-33 STEEL STUDS W/ 600T150-33 STEEL TRACKS W/ #10 SCREWS @ 10" O/C TOP & BOTTOM	BUILT UP COLUMNS 600S162-33 STEEL STUD W/ 600T150-33 STEEL TRACKS W/ #10 SCREWS @ 16" O/C
LCF2	BUILT UP 2-600S162-33 STEEL STUDS W/ 2-600T150-33 STEEL TRACKS W/ 400T150-33 TOP & BOTTOM W/ #10 SCREWS @ 10" O/C	BUILT UP COLUMNS 2-600S162-33 STEEL STUDS W/ 2-600T150-33 STEEL TRACKS W/ #10 SCREWS @ 16" O/C
LCF3	BUILT UP 2-600S162-33 STEEL STUDS W/ 2-600T150-33 STEEL TRACKS W/ 400T150-33 TOP & BOTTOM W/ #10 SCREWS @ 10" O/C	BUILT UP COLUMNS 3-600S162-33 STEEL STUDS W/ 3-600T150-33 STEEL TRACKS W/ #10 SCREWS @ 16" O/C
LC01	8"x24" POURED CONCRETE	2-15M REINF. TOP & BOTTOM W/ 10M STIRRUPS @ 16" O/C

\*NOTE: ALL BUILT UP COLD FORM STEEL LINTELS ARE TO BE CONTINUOUS & LOCATED AT THE TOP & BOTTOM OF OPENINGS

STRUCTURAL FLOOR SCHEDULE			
FL1	1 1/2"x0.048" COMPOSITE STEEL DECK W/ 4" POURED CONCRETE W/ 6x6 6/6 W/M W/ L102x102x6.4 CONTINUOUS PERIMETER ANGLE	FL2	1 1/2"x0.048" COMPOSITE STEEL DECK W/ 4" POURED CONCRETE W/ 6x6 6/6 W/M W/ L102x102x6.4 CONTINUOUS PERIMETER ANGLE W/ 16" OWSJ @ 48" O/C
FL3	1 1/2"x0.048" COMPOSITE STEEL DECK W/ 4" POURED CONCRETE W/ 6x6 6/6 W/M W/ L102x102x6.4 CONTINUOUS PERIMETER ANGLE W/ 18" OWSJ @ 48" O/C	FL4	C100x7 STEEL CHANNELS @ 48" O/C 1 1/2"x0.048" COMPOSITE STEEL DECK 4" POURED CONCRETE W/ 6x6 6/6 W/M L102x102x6.4 CONTINUOUS PERIMETER ANGLE
FL5	C150x10 STEEL CHANNELS @ 48" O/C 1 1/2"x0.048" COMPOSITE STEEL DECK 4" POURED CONCRETE W/ 6x6 6/6 W/M L102x102x6.4 CONTINUOUS PERIMETER ANGLE		

STRUCTURAL ROOF SCHEDULE			
R1	1 1/2"x0.048" STEEL DECK W/ L102x102x6.4 CONTINUOUS PERIMETER ANGLE	R2	1 1/2"x0.048" STEEL DECK W/ L102x102x6.4 CONTINUOUS PERIMETER ANGLE W/ 12" OWSJ @ 72" O/C
R3	1 1/2"x0.048" STEEL DECK W/ L102x102x6.4 CONTINUOUS PERIMETER ANGLE W/ 16" OWSJ @ 72" O/C		

LEGEND

F = FOOTING  
P = PIER  
FW = FOUNDATION WALL  
BR = BASE PLATE  
BRP = BOTTOM BEARING PLATE  
C = COLUMN  
SW = STRUCTURAL WALL  
LST = LINTEL (STEEL)  
LCF = LINTEL (COLD FORM)  
LCO = LINTEL (CONCRETE)  
FL = FLOOR  
R = ROOF  
E/W = EACH WAY  
O/C = ON CENTER  
VERT. = VERTICAL  
HORIZ. = HORIZONTAL  
MAX. = MAXIMUM  
MIN. = MINIMUM  
OWSJ = OPEN WEB STEEL JOIST  
TJI = TRUS JOIST I-JOIST  
HSS = HOLLOW STEEL SECTION  
REINF. = REINFORCEMENT  
TJ = TIE JOIST

NOTE: AT ALL OPENING IN FLOOR USE C150x12 TO SUPPORT STEEL DECK

NOTE: BEAM POCKETS ARE REQUIRED AT ALL OPEN WEB STEEL JOISTS FRAMING INTO CONCRETE ELEVATOR SHAFT. FILL SOLID W/ GROUT (TYP.)

NOTE: ALL BEAMS FRAMING INTO THE CONCRETE ELEVATOR SHAFT WILL REQUIRE A BEAM POCKET W/ 8"x6"x1/2" STEEL BR W/ 2-15M HOOKED ANCHORS (TYP.)

12" | 2"

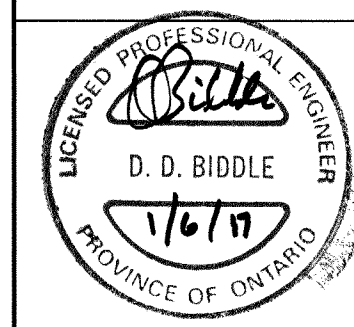
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REVISIONS

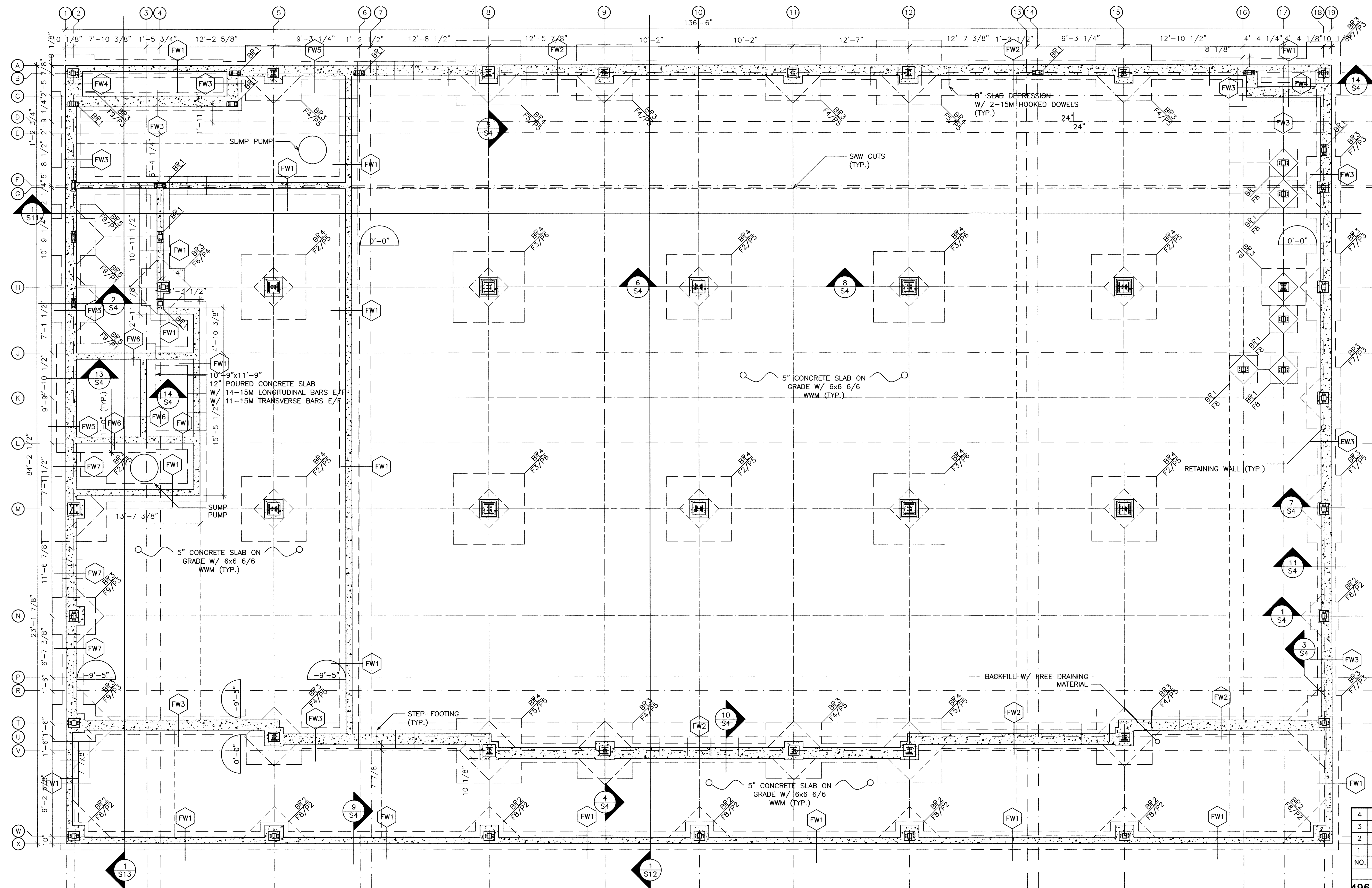
496 TAUNTON ROAD EAST, OSHAWA, ONTARIO. L1H7K4  
PETER HOOGERS

STRUCTURAL  
SCHEDULES & LEGEND

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SCALE:	AS SHOWN	PROJECT NO.	115147
DRAWN BY:	T.R.T.O.	DRAWING NO.	S2
DESIGN BY:	T.L.R./J.E.L.	CAD FILE:	
CHECKED BY:	D.D.B.	PLOT DATE:	MAY 31/17
DATE:	MAY 2016	SUBMISSION:	PERMIT



1 FOUNDATION PLAN  
S3 SCALE: 3/16" = 1'-0"

NOTE: COMMERCIAL BASEPLATES TO BE -6" TO U/S OF STEEL EXCEPT AT RAIN WATER LEADER LOCATIONS WHERE IT SHOULD BE -18" TO U/S OF STEEL

NOTE: SAW CUTS REQUIRED NO GREATER THAN 20'x20' & AT ALL COLUMNS

NOTE: SUMP PIT TO BE LOCATED AT A 1:1 SLOPE AWAY FROM FOUNDATION FOOTINGS

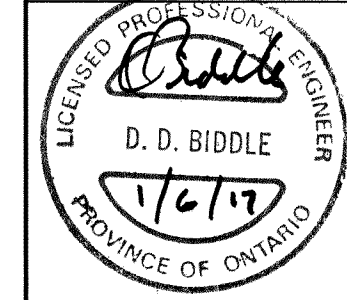
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2	ISSUED FOR PRICING/ARCH. COORD.	OCT 28/16	T.O.	D.B.
1	ISSUED FOR REVIEW	OCT 21/16	T.O.	D.B.

REVISIONS

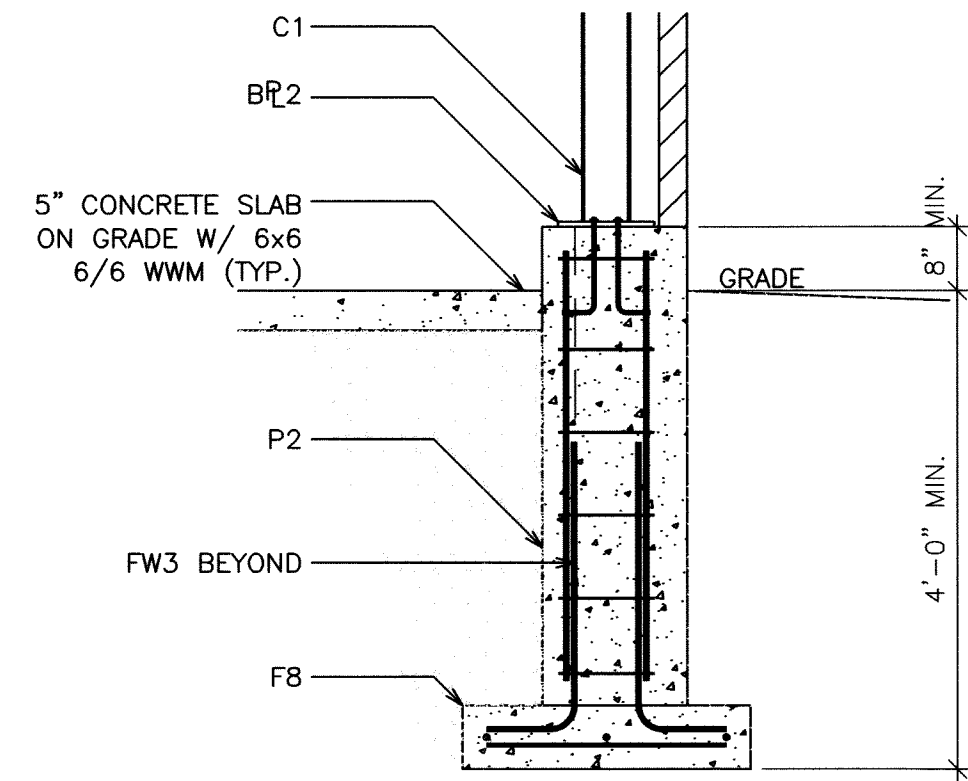
496 TAUNTON ROAD EAST, OSHAWA, ONTARIO. L1H7K4  
PETER HOOGERS

# FOUNDATION PLAN

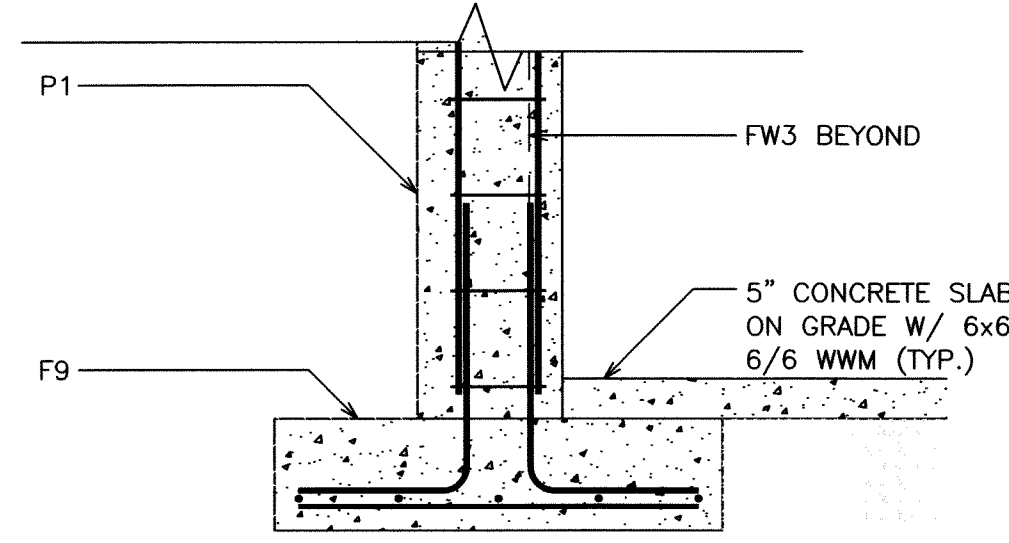
**D.G. Biddle & Associates Limited**  
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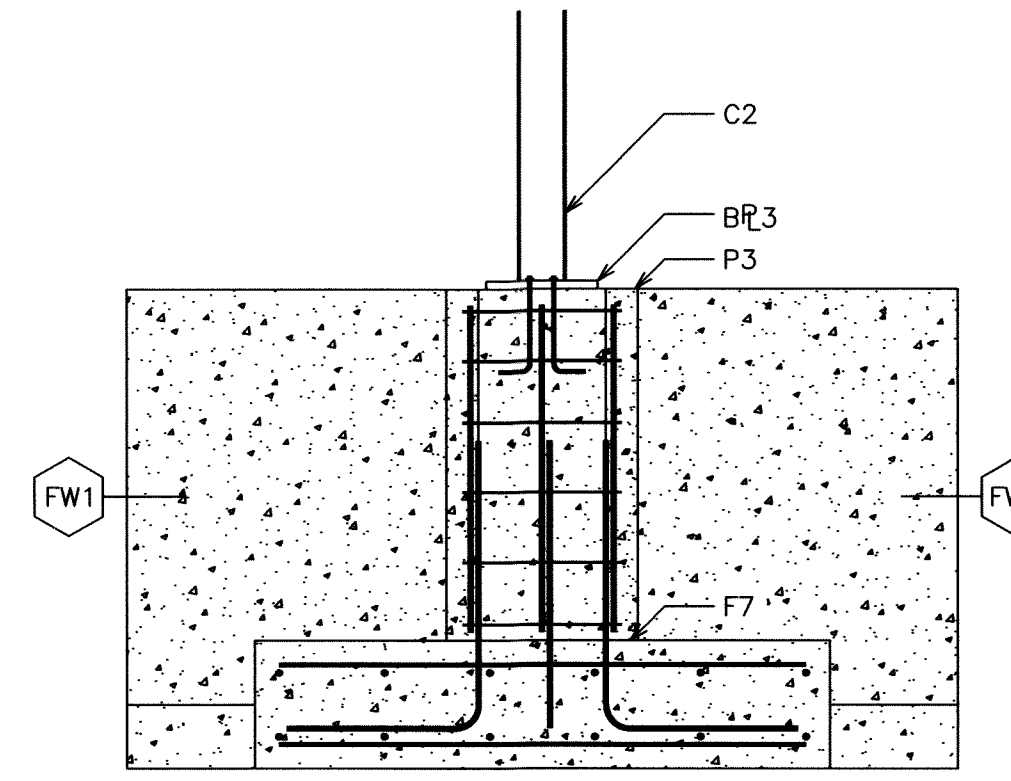
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DESIGN BY: T.L.R./J.E.L.	CAD FILE: -
CHECKED BY: D.D.B.	PLOT DATE: MAY 31/17
DATE: MAY 2016	SUBMISSION: PERMIT



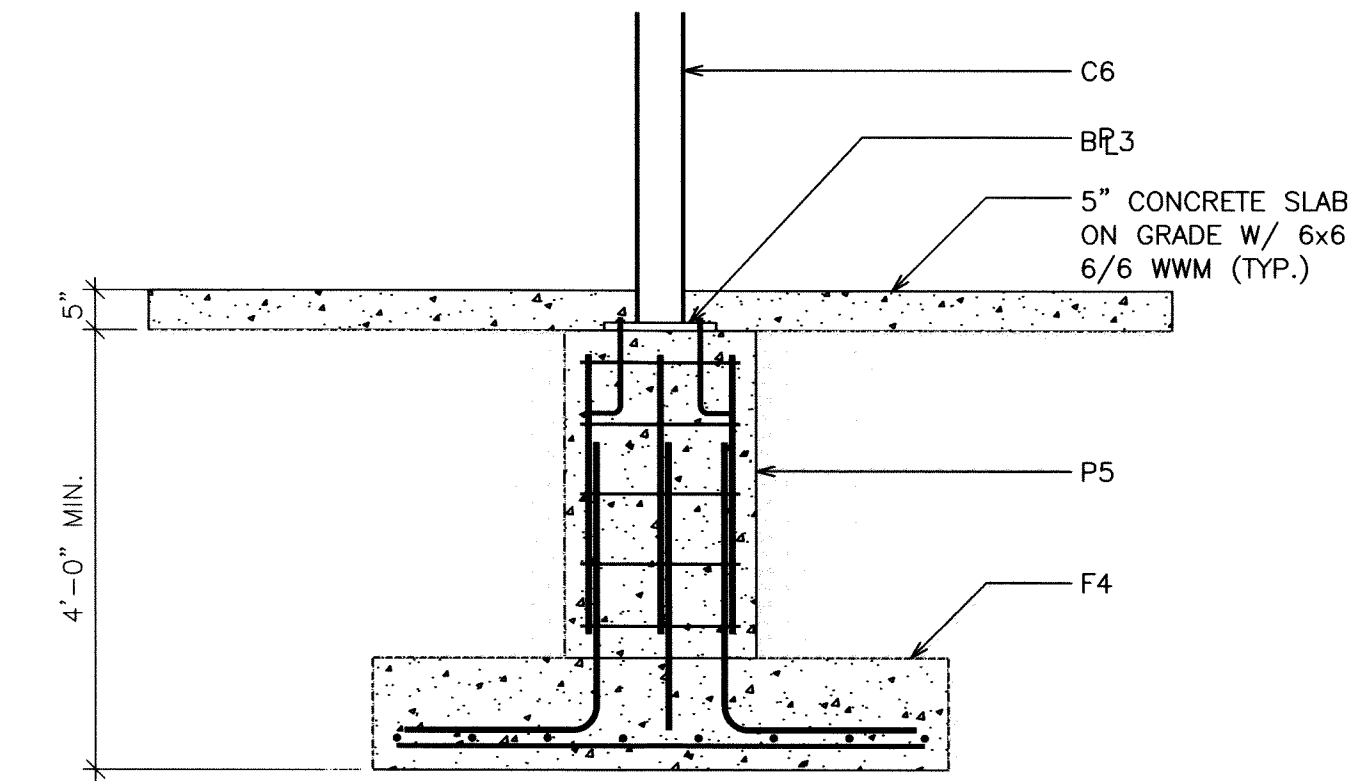
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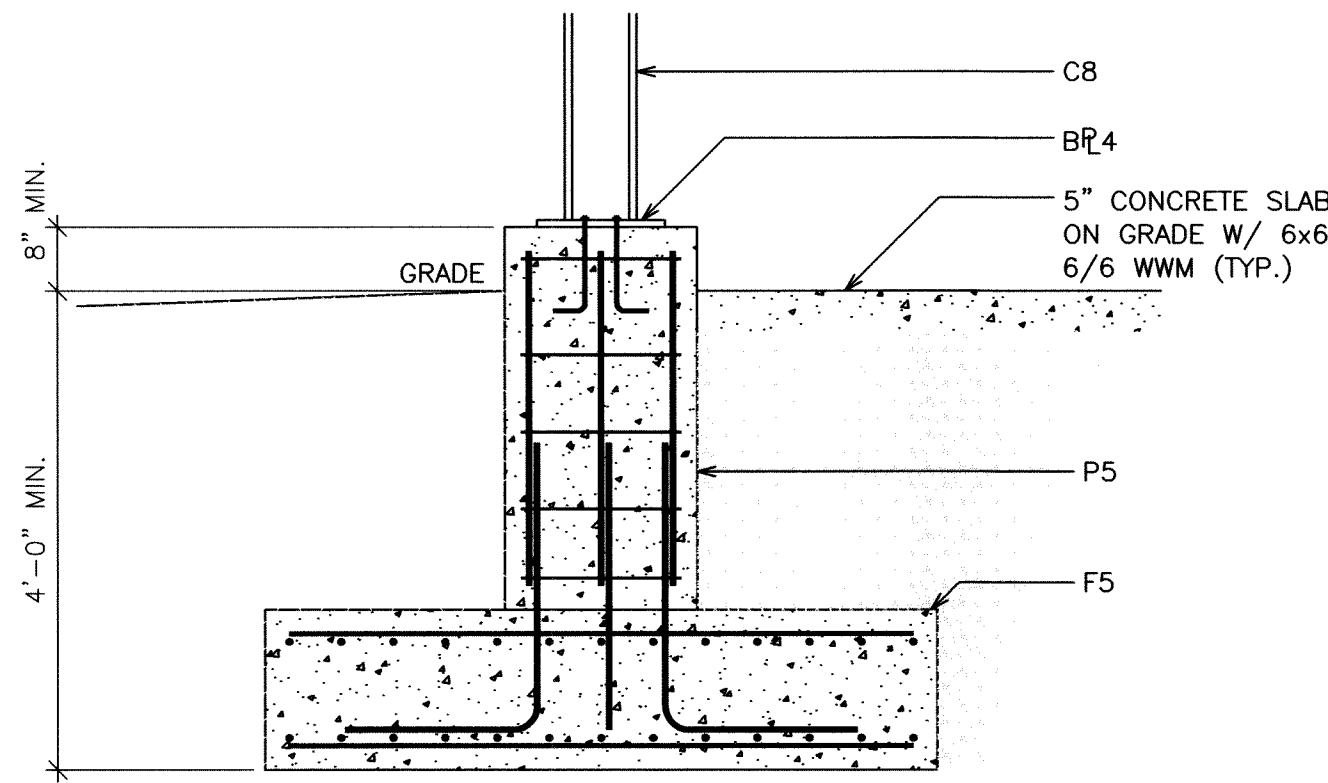
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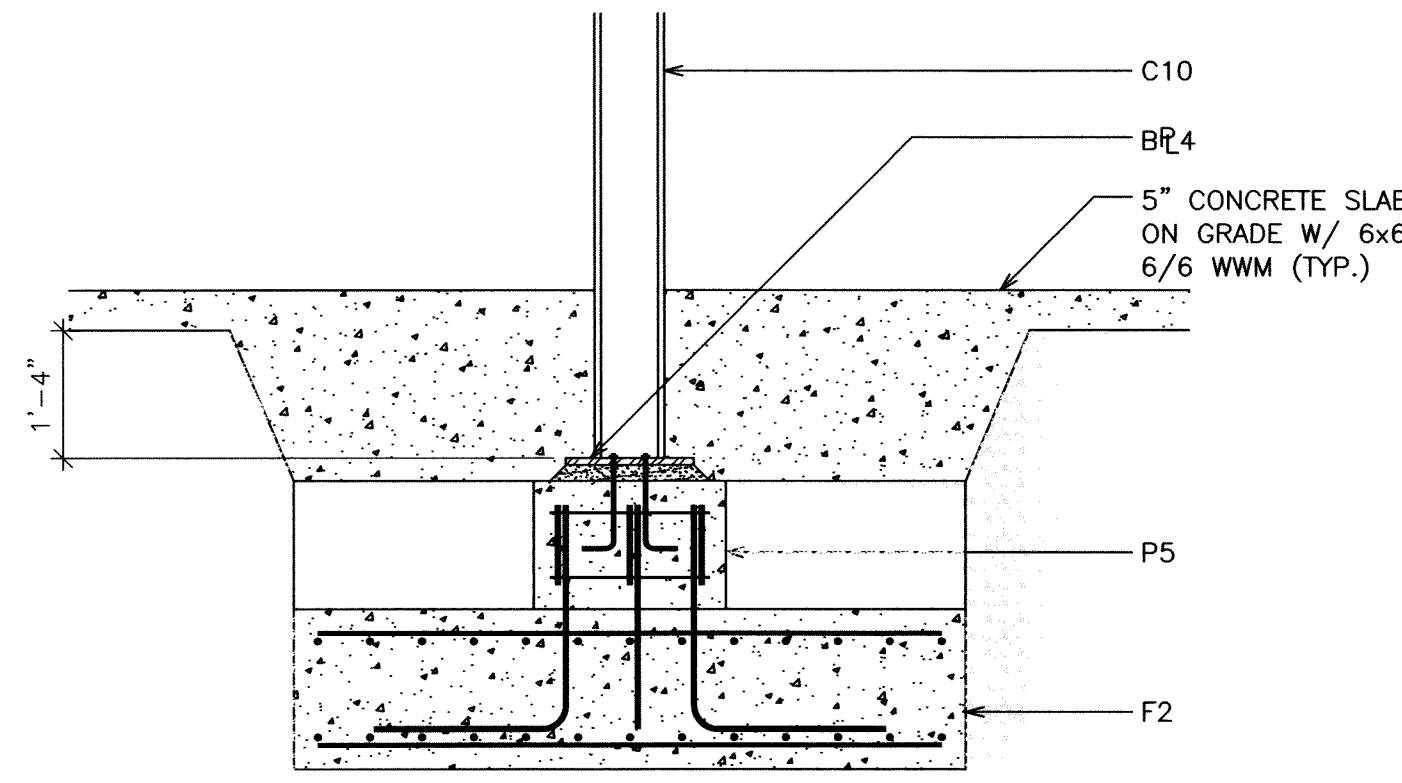
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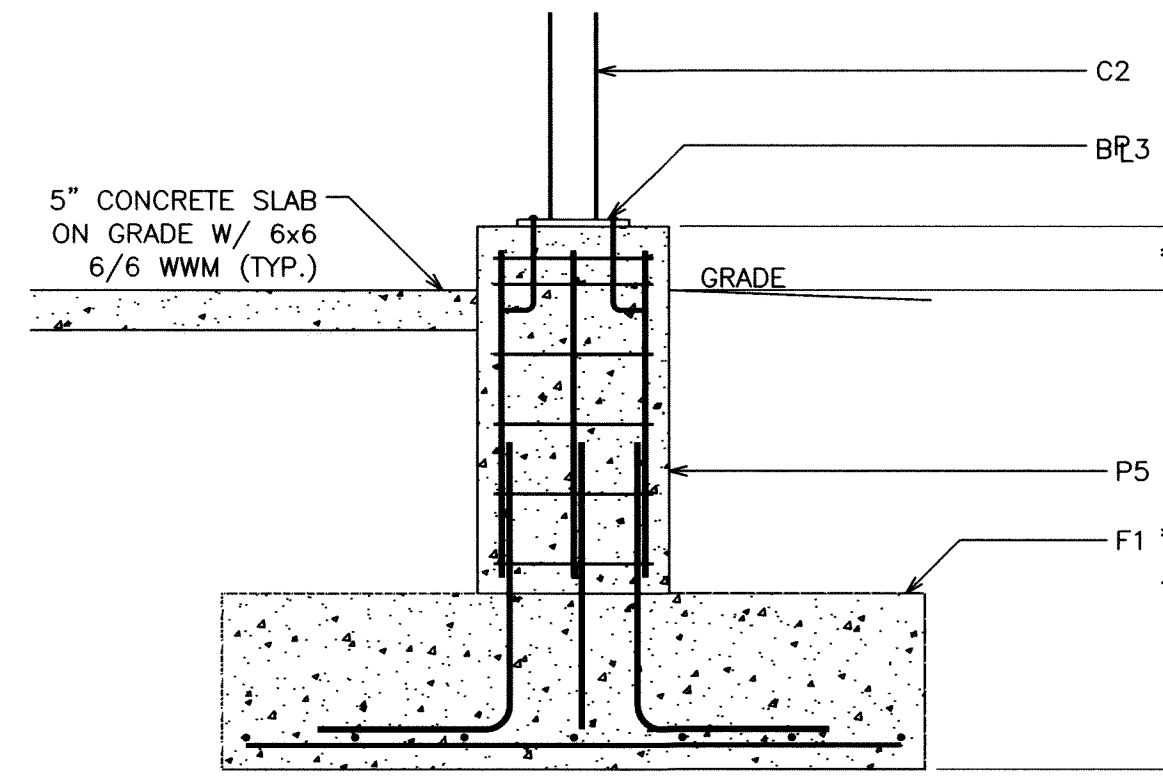
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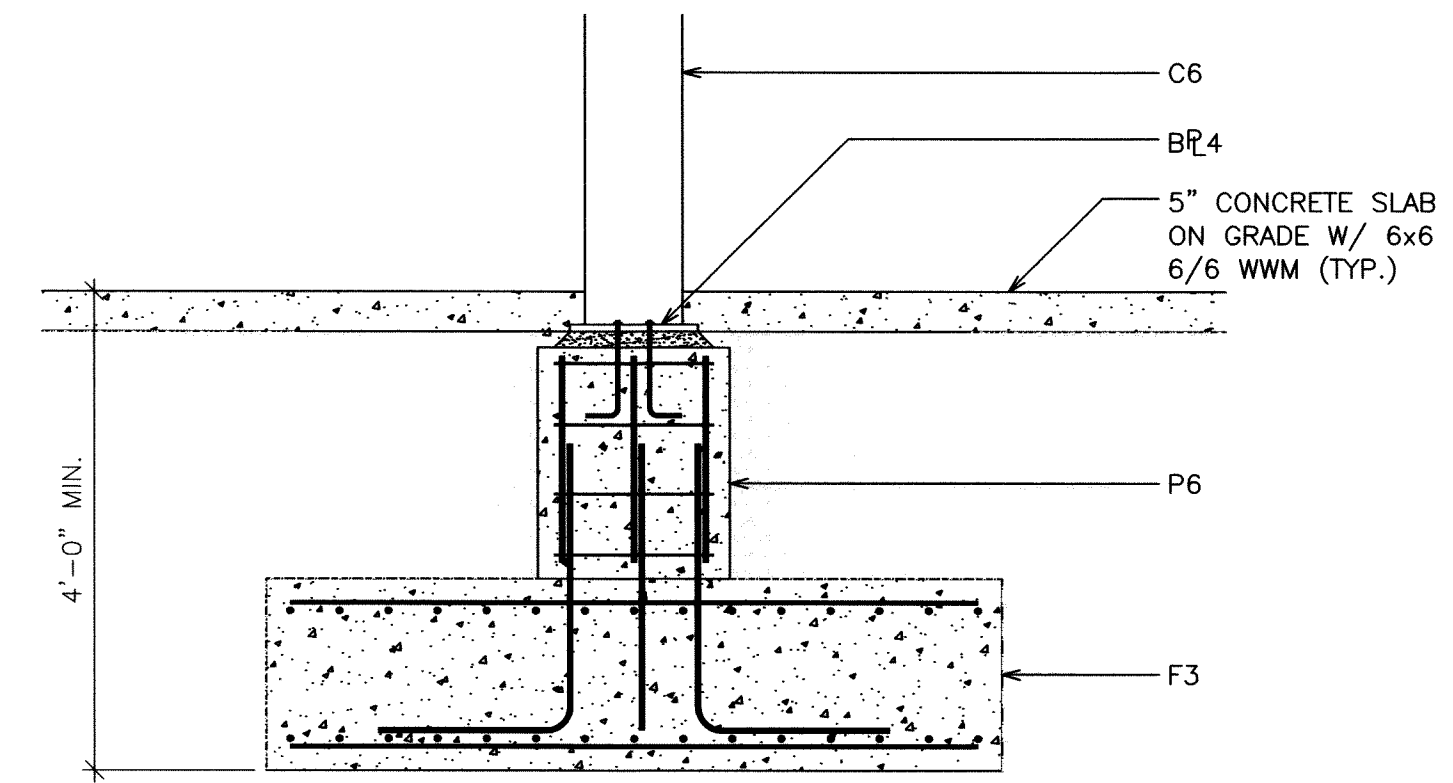
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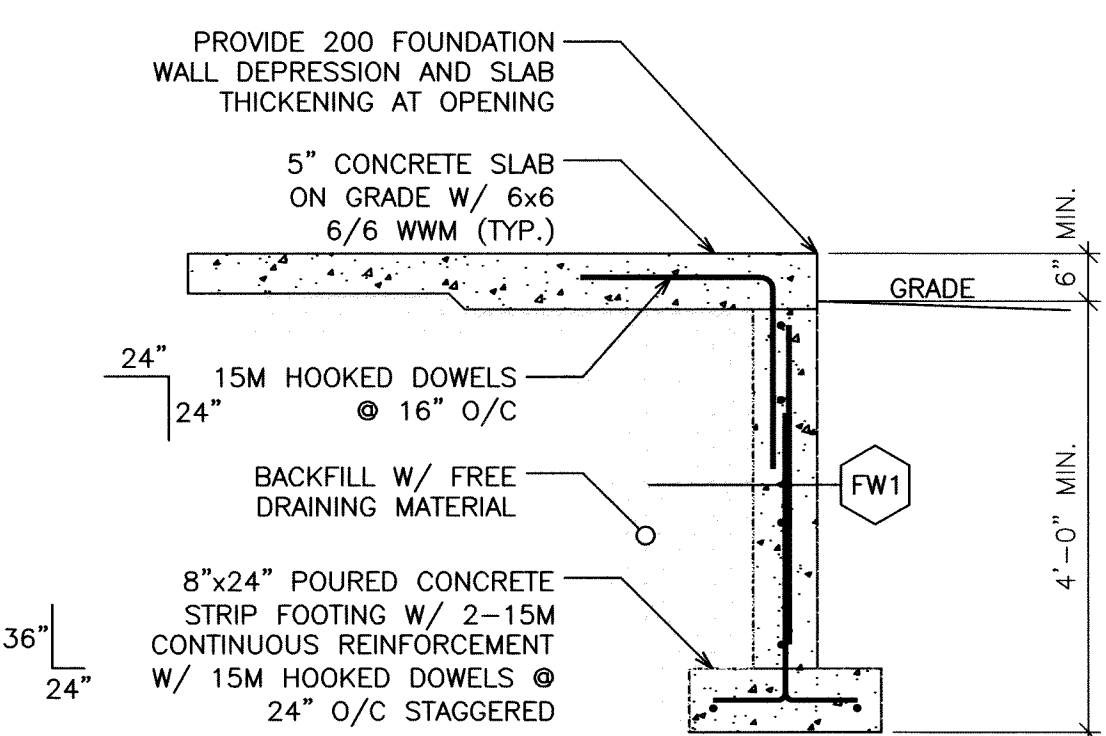
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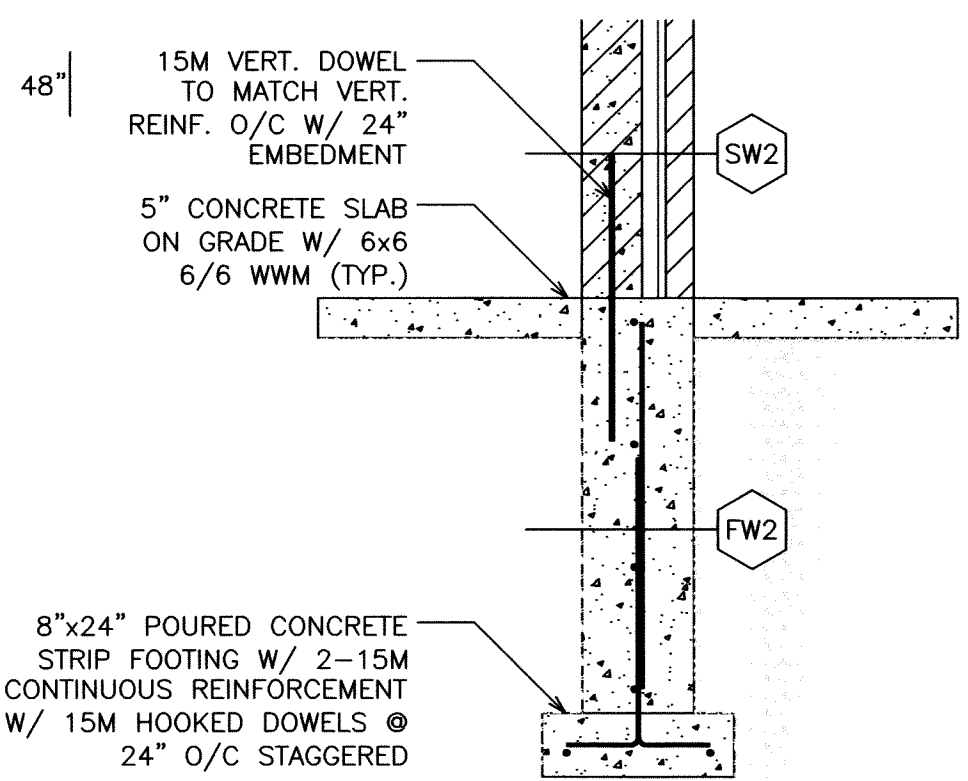
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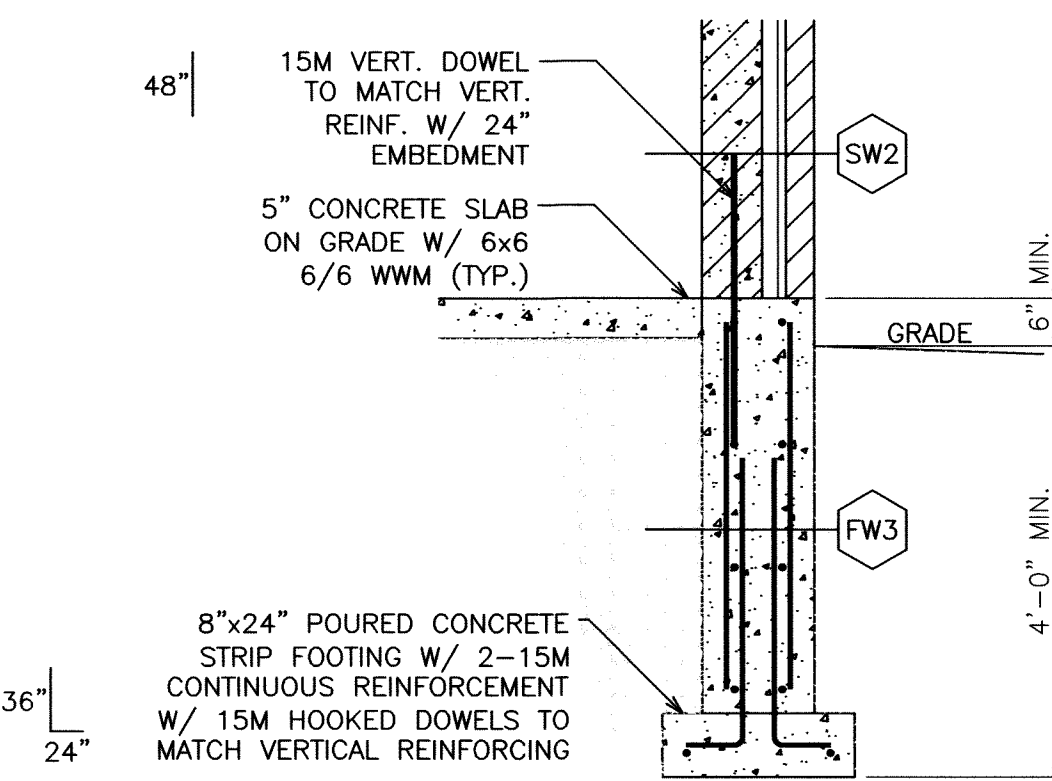
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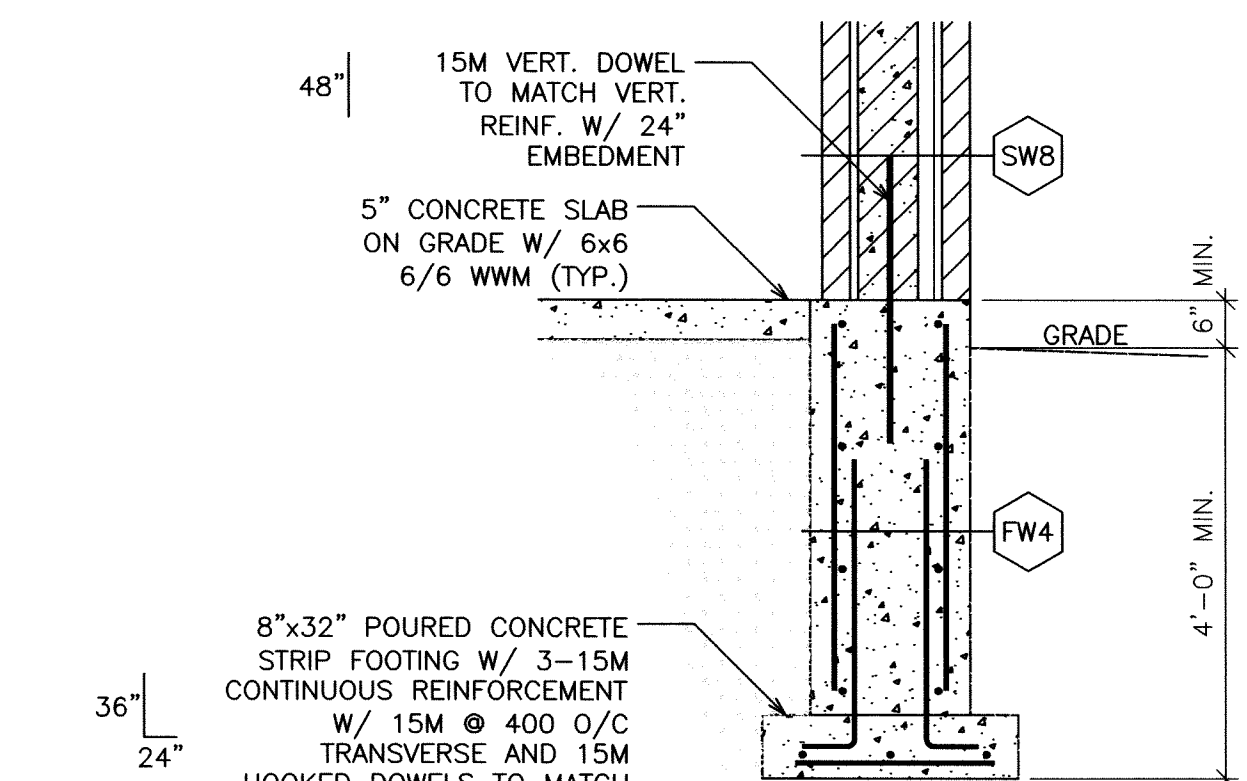
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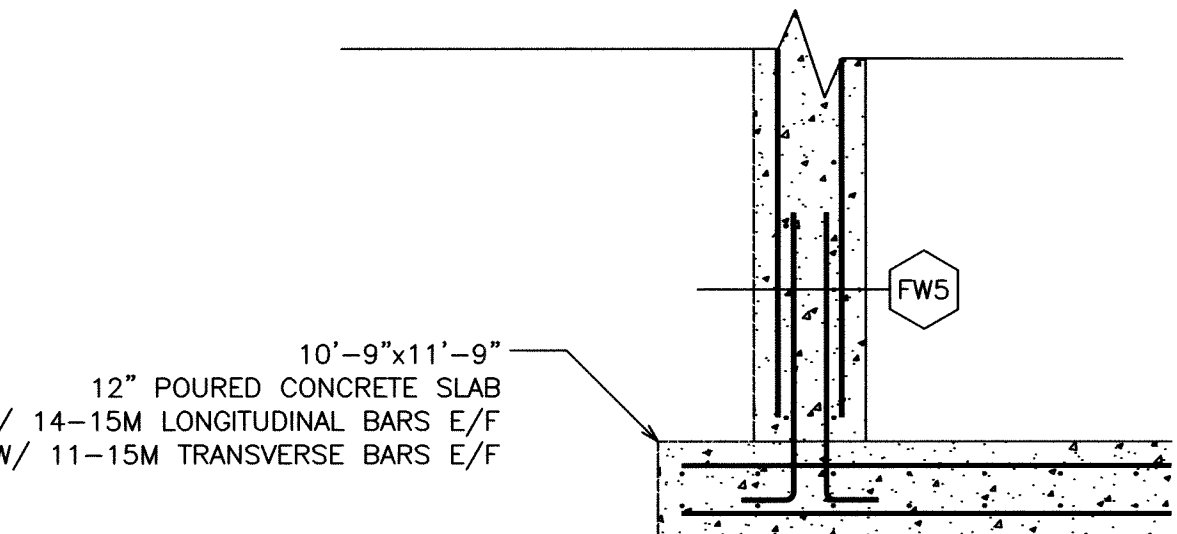
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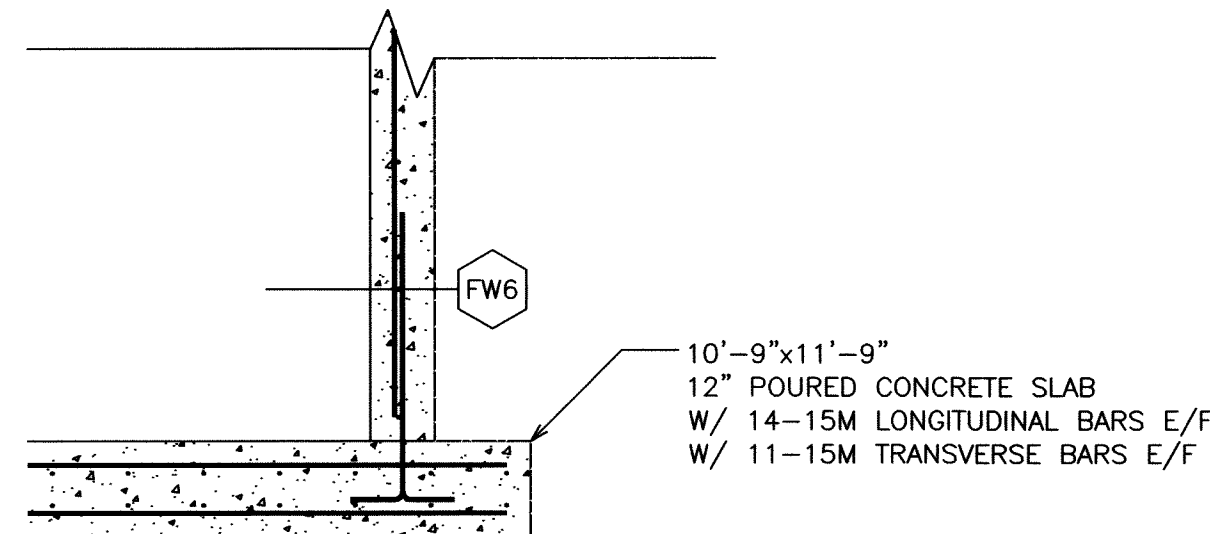
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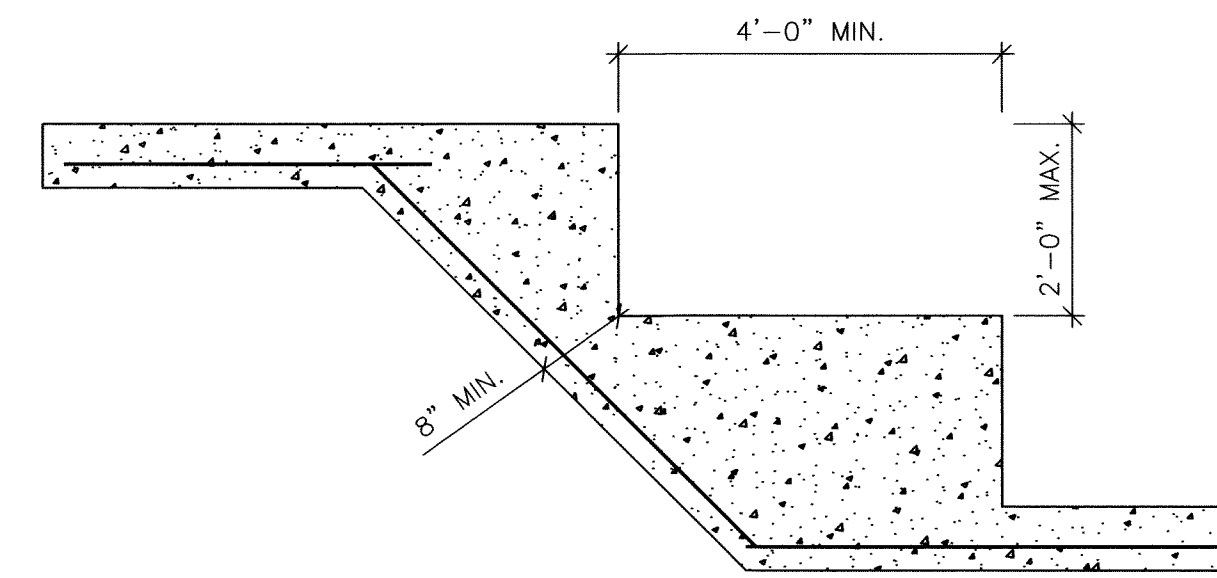
12 FW4 DETAIL  
S4 SCALE: 1/2" = 1'-0"



13 FW5 DETAIL  
S4 SCALE: 1/2" = 1'-0"



14 FW6 DETAIL  
S4 SCALE: 1/2" = 1'-0"



15 TYPICAL STEP FOOTING DETAIL  
S4 SCALE: 1/2" = 1'-0"

NOTE: UNDERSIDE OF FOOTINGS TO BE PLACED AT DENSE TO VERY DENSE SAND LAYER. REFER TO SOIL REPORT.

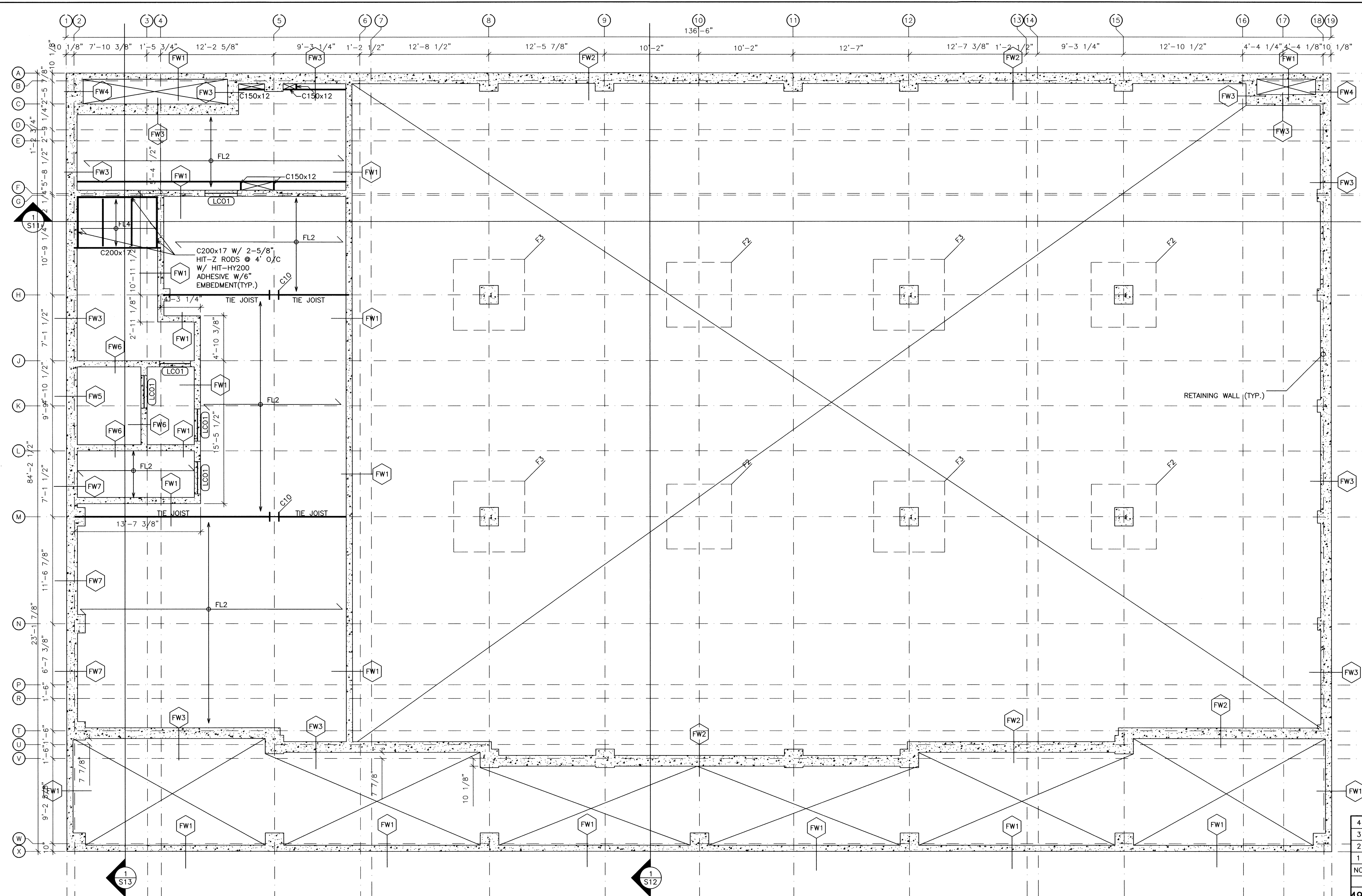
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3	ISSUED FOR PERMIT	DEC 14/16	T.O. D.B.	
2	ISSUED FOR PRICING/ARCH. COORD.	OCT 28/16	T.O. D.B.	
1	ISSUED FOR REVIEW	OCT 21/16	T.O. D.B.	

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## FOUNDATION DETAILS

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SCALE: AS SHOWN	PROJECT NO. 115147
DRAWN BY: T.R.T.O.	DRAWING NO. S4
DESIGN BY: T.L.R./J.L.	CAD FILE: -
CHECKED BY: D.D.B.	PLOT DATE: MAY 31/17
DATE: MAY 2016	SUBMISSION: PERMIT



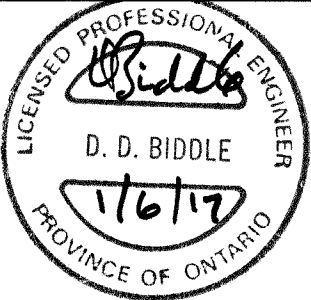
1 MAIN FLOOR STRUCTURAL PLAN  
 S5 SCALE: 3/16" = 1'-0"

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3	ISSUED FOR PERMIT	DEC 14/16	T.O.	D.B.
2	ISSUED FOR PRICING/ARCH. COORD.	OCT 28/16	T.O.	D.B.
1	ISSUED FOR REVIEW	OCT 21/16	T.O.	D.B.
NO.	REVISION	DATE	BY	APPROVED

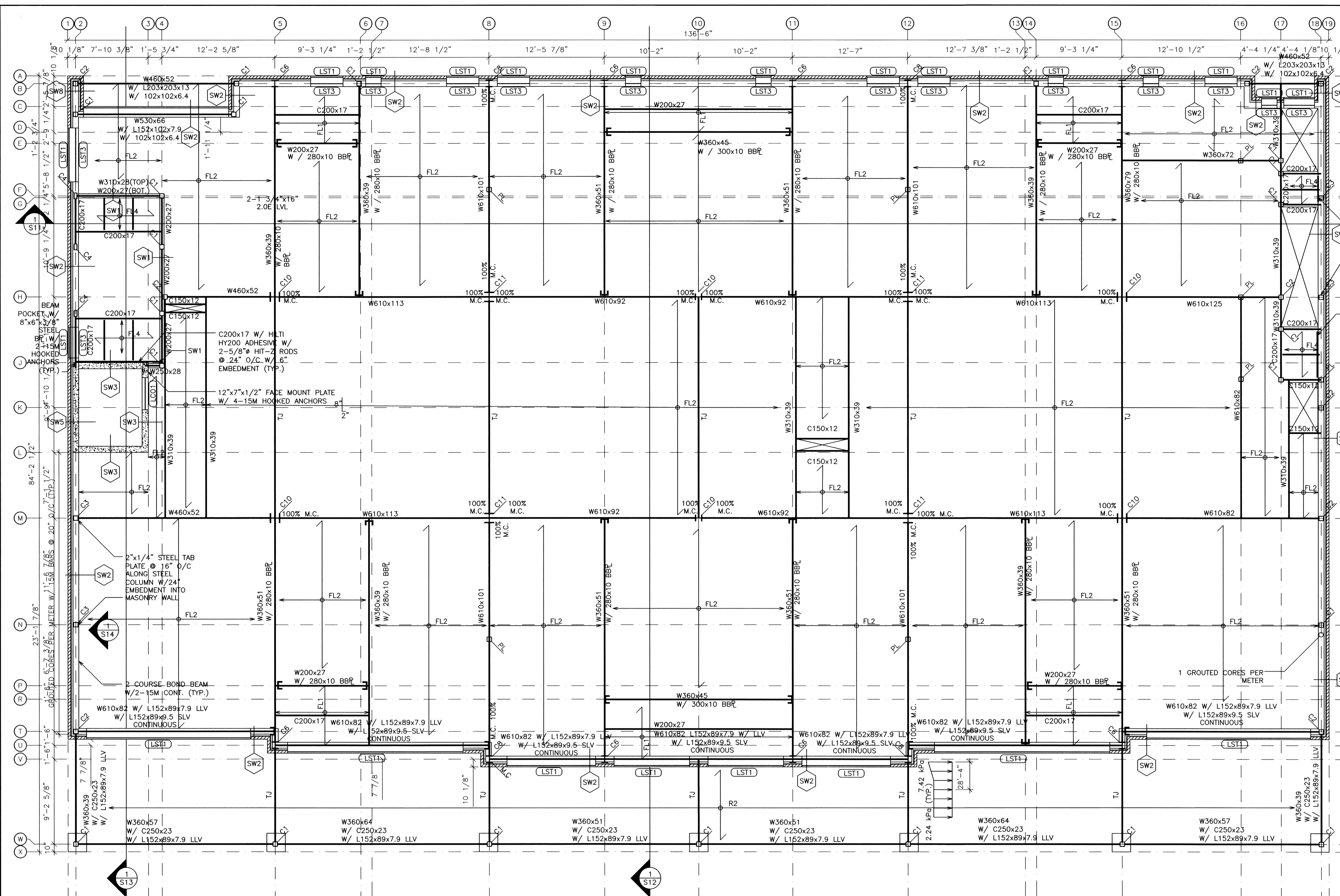
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## MAIN FLOOR STRUCTURAL PLAN

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SCALE:	AS SHOWN	PROJECT NO.	115147
DRAWN BY:	T.R.T.O.	DRAWING NO.	S5
DESIGN BY:	T.L.R./J.L.	CAD FILE:	
CHECKED BY:	D.D.B.	PLOT DATE:	MAY 31/17
DATE:	MAY 2016	SUBMISSION:	PERMIT



2"x1/4" STEEL TAB  
PLATE @ 16" O/C  
ALONG STEEL COLUMN  
W/24" EMBEDMENT INTO  
MASONRY WALL

C200x17 W/ HILTI  
HY200 ADHESIVE W/  
2-5/8" HIT-Z RODS  
@ 24" O/C W/ 6"  
EMBEDMENT (TYP.)

1 SECOND FLOOR STRUCTURAL PLAN  
S6 SCALE: 3/16" = 1'-0"

4	ISSUED FOR PERMIT	JUNE 12/17	T.O. D.B.
3	ISSUED FOR PERMIT	DEC 14/16	T.O. D.B.
2	ISSUED FOR PRICING/ARCH. COORD.	OCT 28/16	T.O. D.B.
1	ISSUED FOR REVIEW	OCT 21/16	T.O. D.B.
NO.	REVISION	DATE	BY APPROVED

REVISIONS

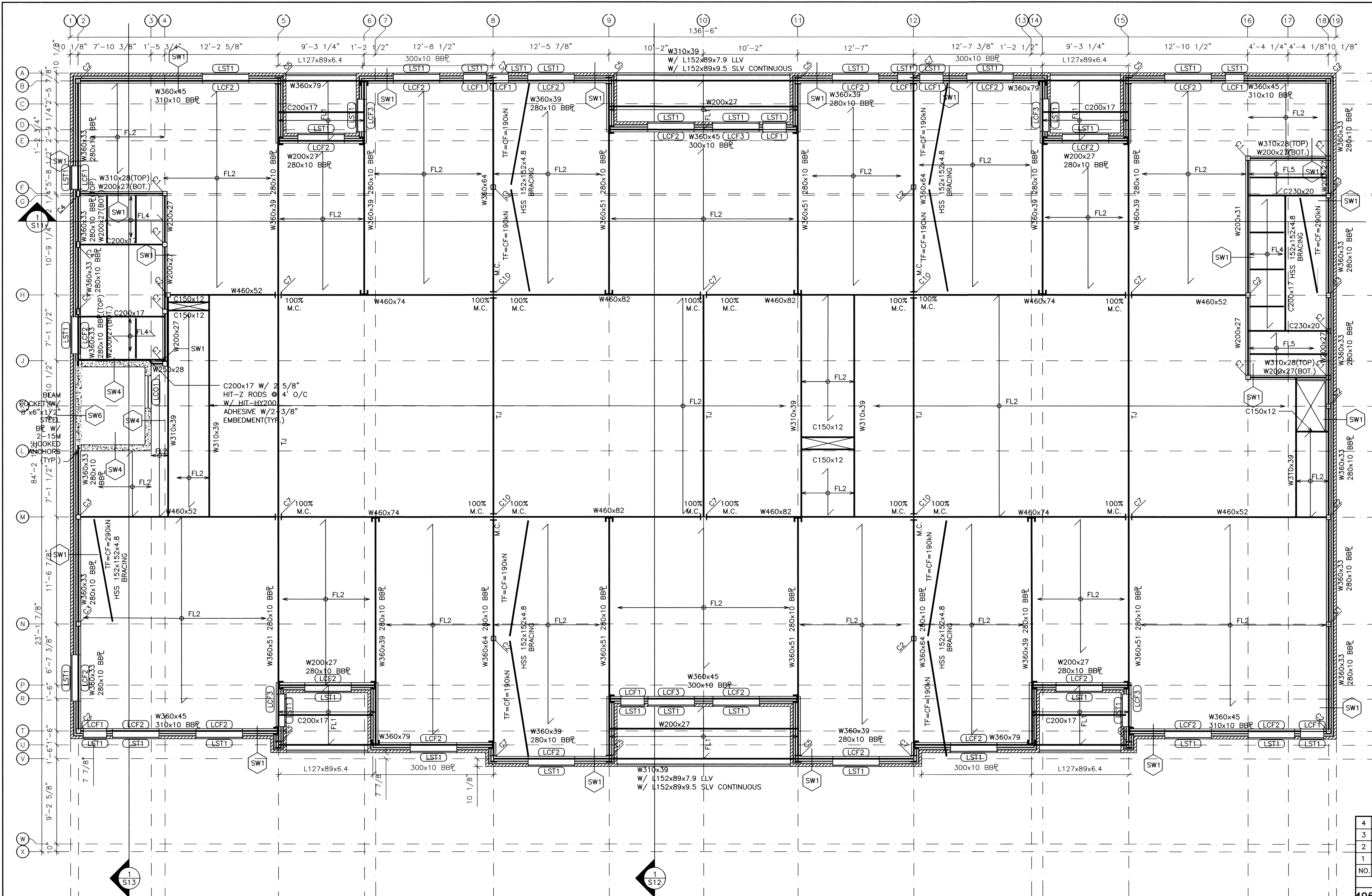
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## SECOND FLOOR STRUCTURAL PLAN

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	SCALE:	AS SHOWN	PROJECT NO.	115147
	DRAWN BY:	T.R.T.O.	DRAWING NO.	S6
	DESIGN BY:	T.L.R./J.L.	CAD FILE:	-
	CHECKED BY:	D.D.B.	PLOT DATE:	JUNE 12/17
	DATE:	MAY 2016	SUBMISSION:	PERMIT



1 THIRD FLOOR STRUCTURAL PLAN  
 S7 SCALE: 3/16" = 1'-0"

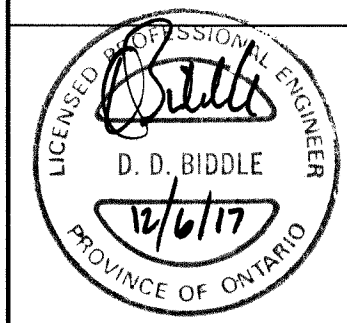
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1	ISSUED FOR REVIEW	OCT 21/16	T.O. D.B.

NO. REVISION DATE BY APPROVED

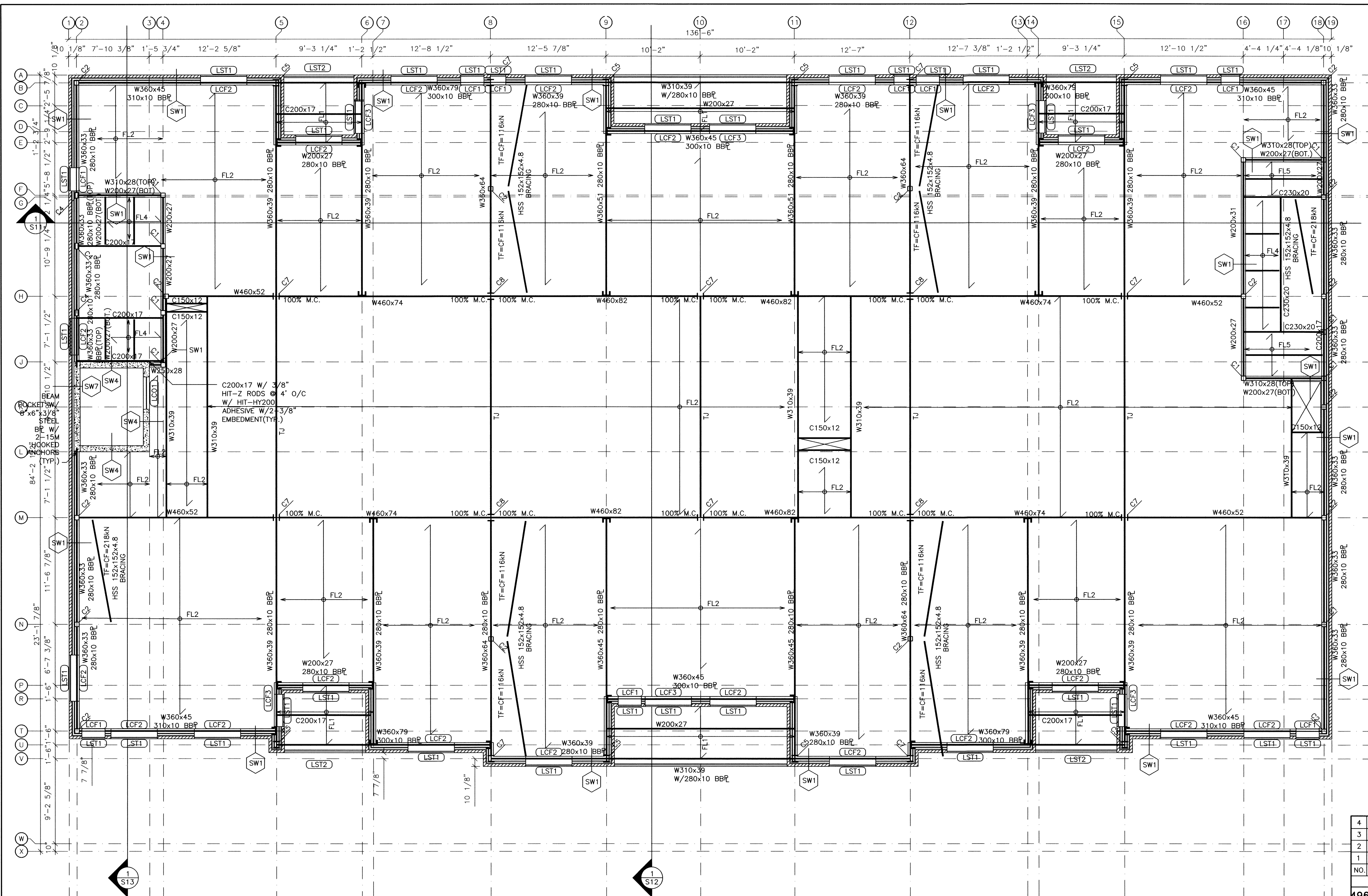
REVISIONS  
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## THIRD FLOOR STRUCTURAL PLAN

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SCALE:	AS SHOWN	PROJECT NO.	115147
DRAWN BY:	T.R.T.O.	DRAWING NO.	S7
DESIGN BY:	T.L.R./J.L.	CAD FILE:	
CHECKED BY:	D.D.B.	PLOT DATE:	JUNE 12/17
DATE:	MAY 2016	SUBMISSION:	PERMIT



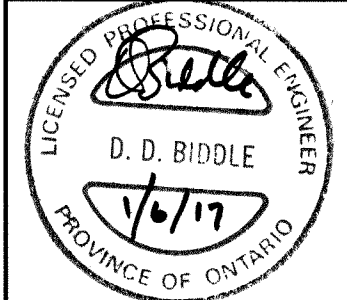
1 FOURTH FLOOR STRUCTURAL PLAN  
 S8 SCALE: 3/16" = 1'-0"

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3	ISSUED FOR PERMIT	DEC 14/16	T.O. D.B.
2	ISSUED FOR PRICING/ARCH. COORD.	OCT 28/16	T.O. D.B.
1	ISSUED FOR REVIEW	OCT 21/16	T.O. D.B.
NO.	REVISION	DATE	BY APPROVED

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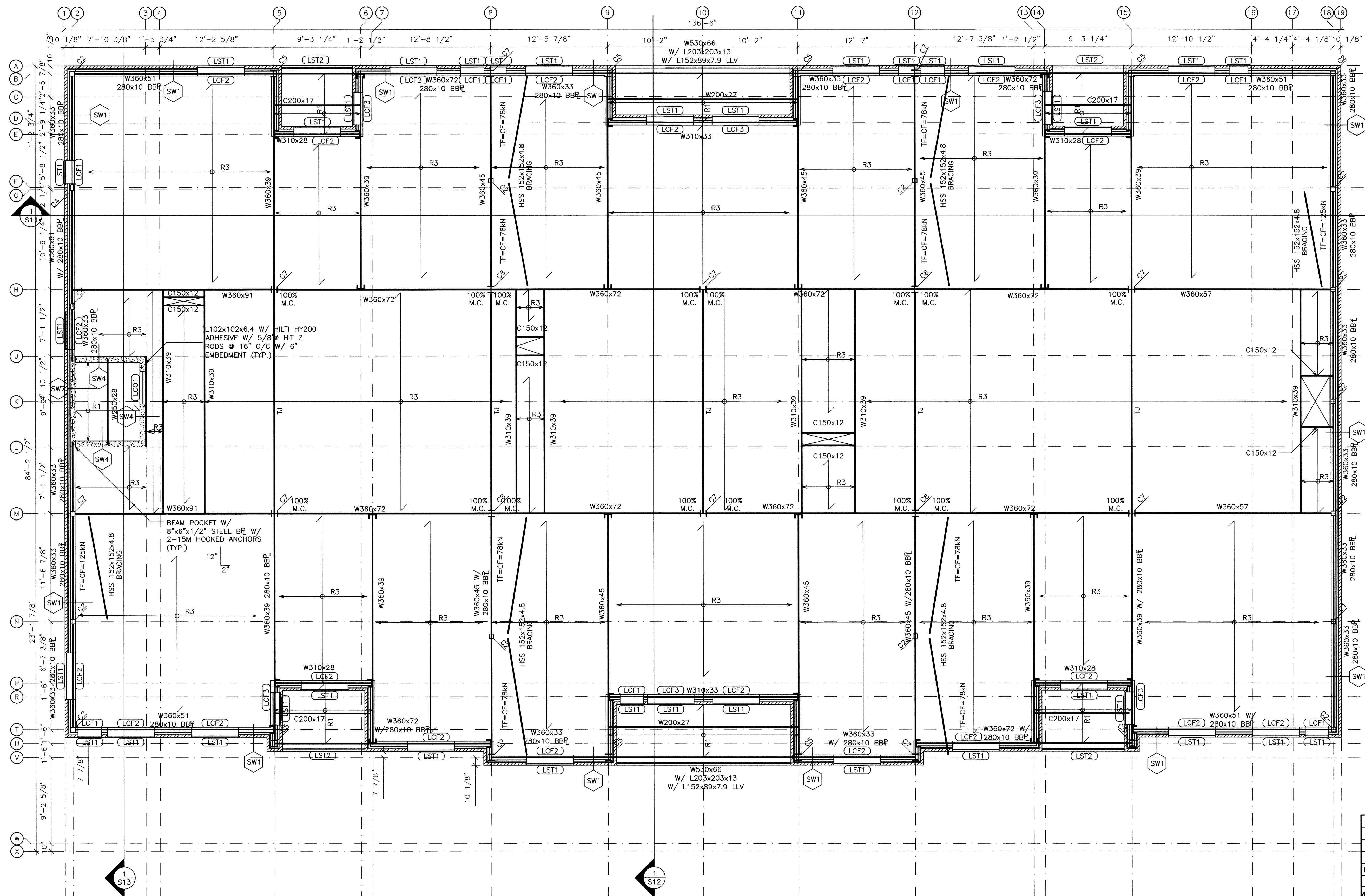
## FOURTH FLOOR STRUCTURAL PLAN

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SCALE:	AS SHOWN	PROJECT NO.	115147
DRAWN BY:	T.R.T.O.	DRAWING NO.	S8
DESIGN BY:	T.L.R./J.L.	CAD FILE:	
CHECKED BY:	D.D.B.	PLOT DATE:	MAY 31/17
DATE:	MAY 2016	SUBMISSION:	PERMIT





1 ROOF STRUCTURAL PLAN  
 S9 SCALE: 3/16" = 1'-0"

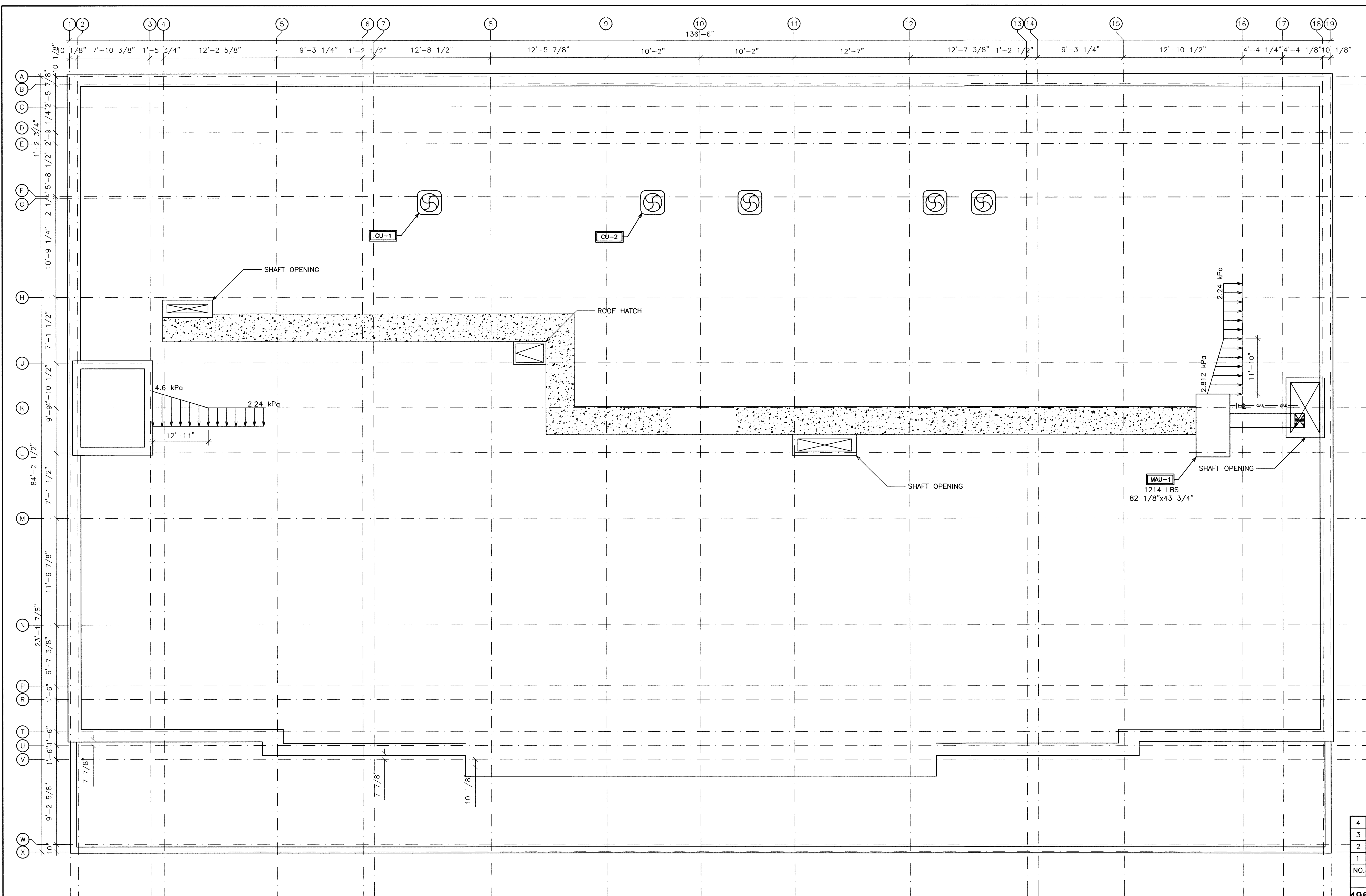
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1	ISSUED FOR REVIEW	OCT 21/16	T.O. D.B.
NO.	REVISION	DATE	BY APPROVED

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## ROOF STRUCTURAL PLAN

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	SCALE: AS SHOWN	PROJECT NO. 115147
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	DESIGN BY: T.L.R./J.L.	CAD FILE: -
	CHECKED BY: D.D.B.	PLOT DATE: MAY 31/17
	DATE: MAY 2016	SUBMISSION: PERMIT



1 ROOF LOADS PLAN  
 S10 SCALE: 3/16" = 1'-0"

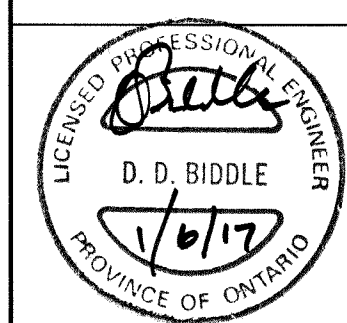
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1	ISSUED FOR REVIEW	OCT 21/16	T.O.	D.B.

NO. REVISION DATE BY APPROVED

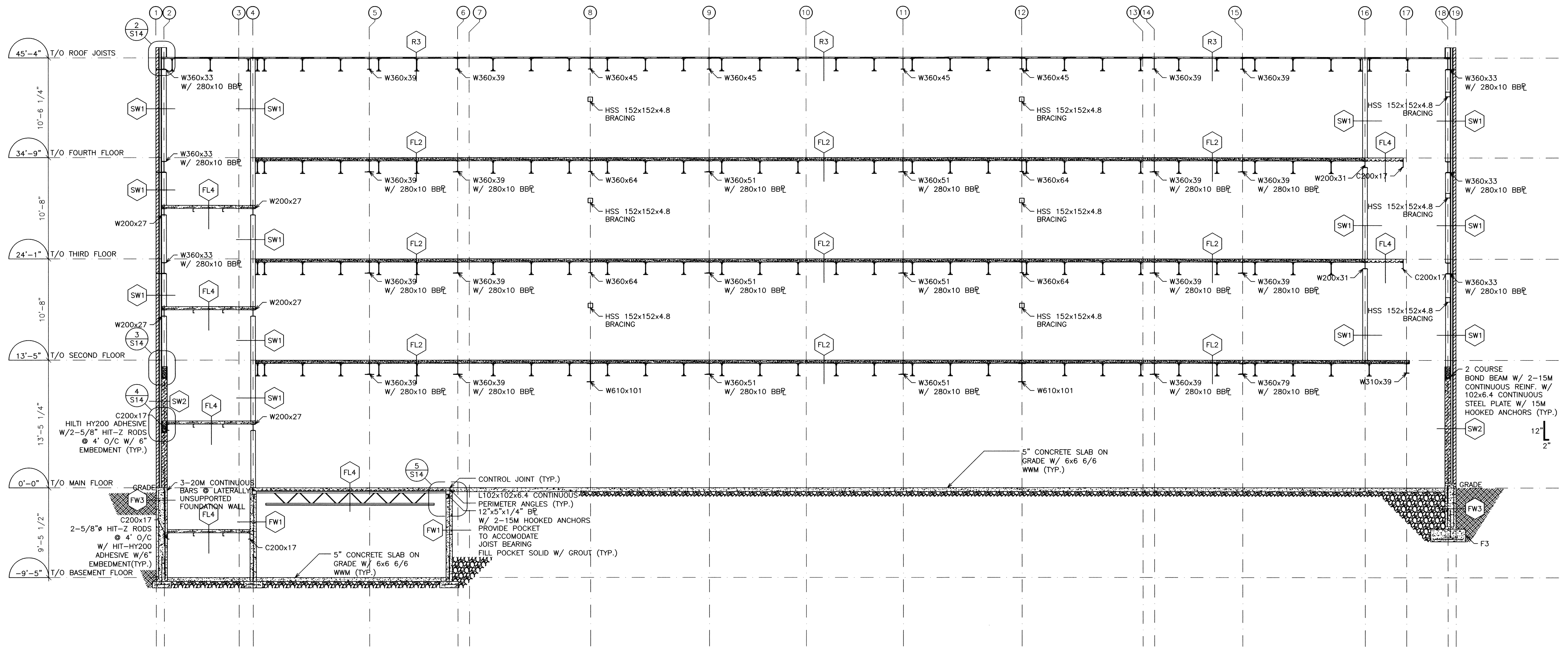
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## ROOF LOADS PLAN

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SCALE:	AS SHOWN	PROJECT NO.	115147
DRAWN BY:	T.R.T.O.	DRAWING NO.	S10
DESIGN BY:	T.L.R./J.L.	CAD FILE:	-
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DATE:	MAY 2016	SUBMISSION:	PERMIT



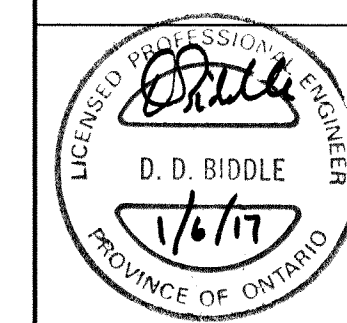
1 ROOF LOADS PLAN  
 S11 SCALE: 3/16" = 1'-0"

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3	ISSUED FOR PERMIT	DEC 14/16	T.O.	D.B.
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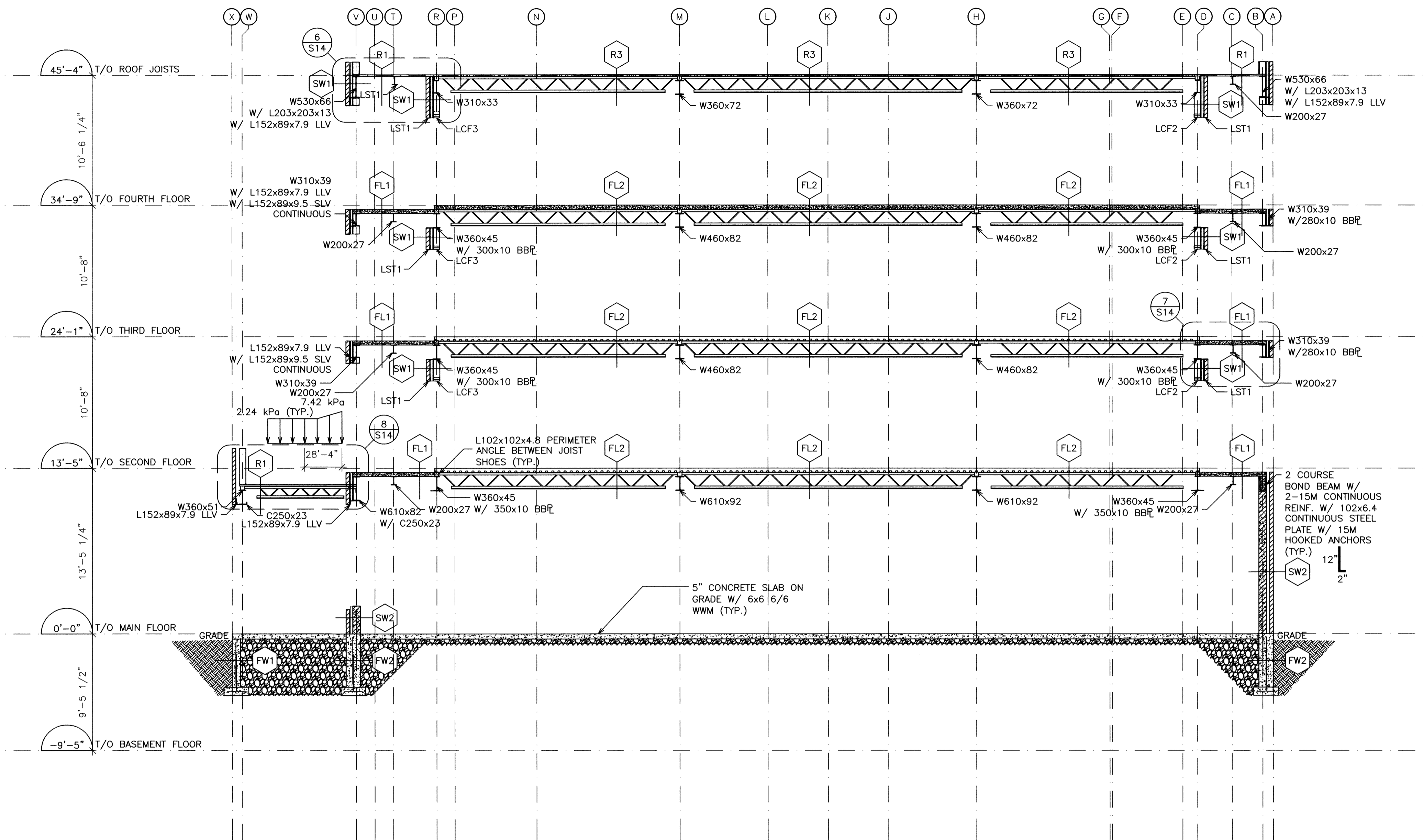
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## STRUCTURAL BUILDING SECTION

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SCALE:	AS SHOWN	PROJECT NO.	115147
DRAWN BY:	T.R.T.O.	DRAWING NO.	S11
DESIGN BY:	T.L.R./J.L.	CAD FILE:	
CHECKED BY:	D.D.B.	PLOT DATE:	MAY 31/17
DATE:	MAY 2016	SUBMISSION:	PERMIT



1 ROOF LOADS PLAN  
 S12 SCALE: 3/16" = 1'-0"

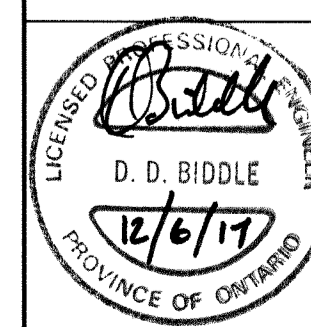
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1	ISSUED FOR REVIEW	OCT 21/16	T.O.	D.B.
NO.	REVISION	DATE	BY	APPROVED

REVISIONS

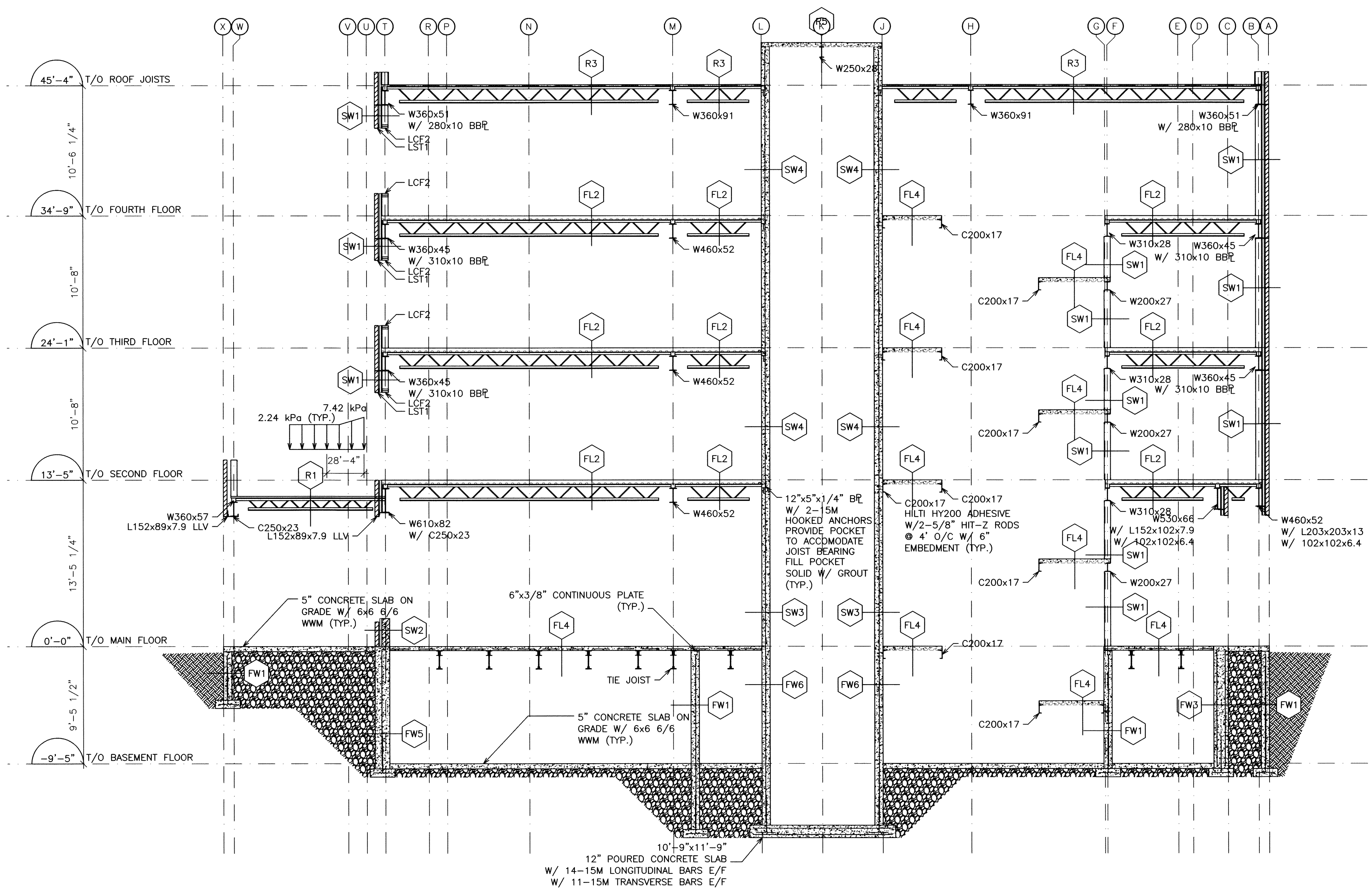
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STRUCTURAL BUILDING  
 SECTION

**D.G. Biddle & Associates Limited**  
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SCALE:	AS SHOWN	PROJECT NO.	115147
DRAWN BY:	T.R.T.O.	DRAWING NO.	S12
DESIGN BY:	T.L.R./J.L.	CAD FILE:	
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DATE:	MAY 2016	SUBMISSION:	PERMIT



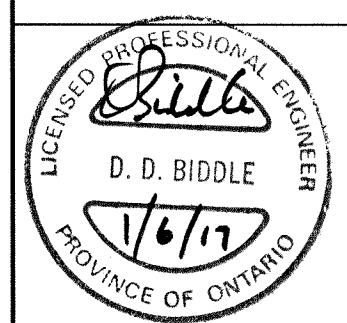
1 ROOF LOADS PLAN  
 S13 SCALE: 3/16" = 1'-0"

NO.	REVISION	DATE	BY	APPROVED
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3	ISSUED FOR PERMIT	DEC 14/16	T.O.	D.B.
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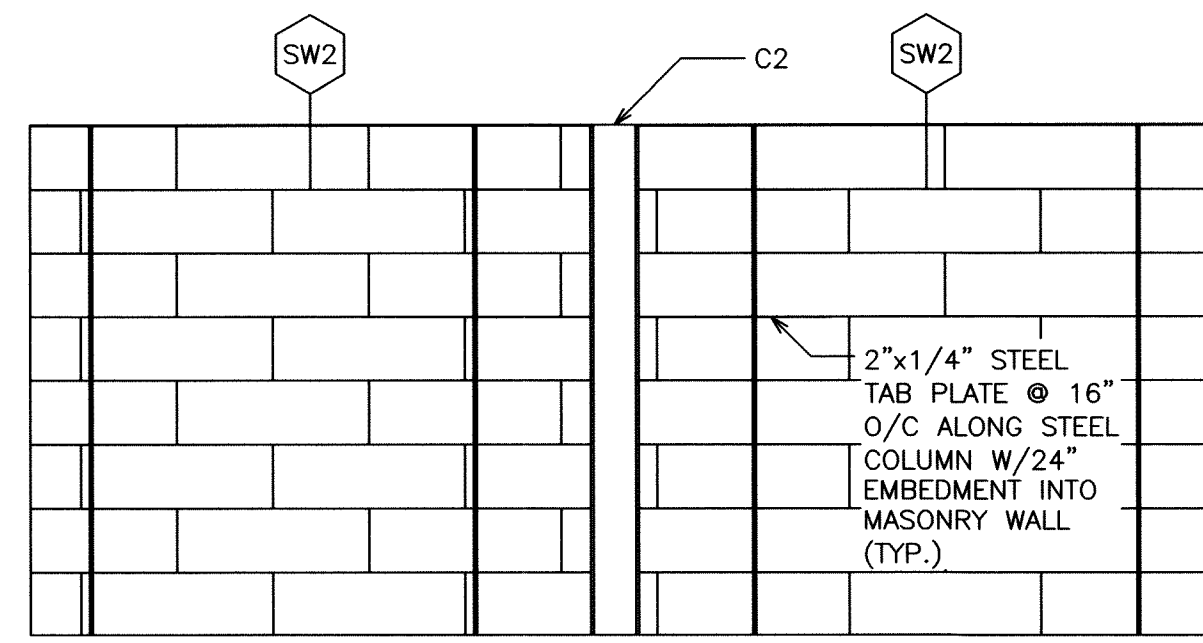
REVISIONS  
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## STRUCTURAL BUILDING SECTION

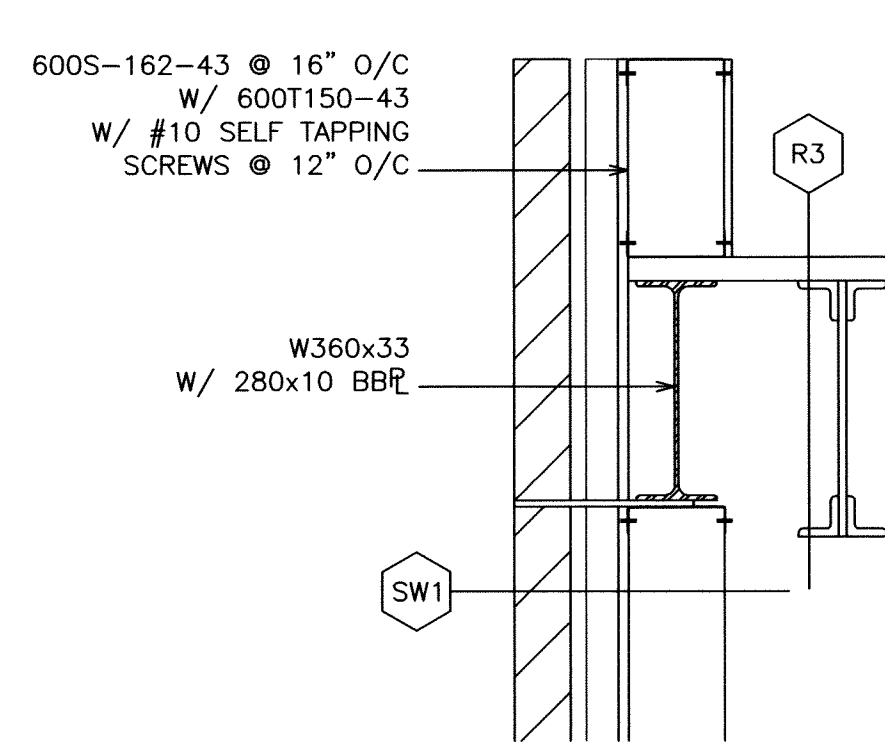
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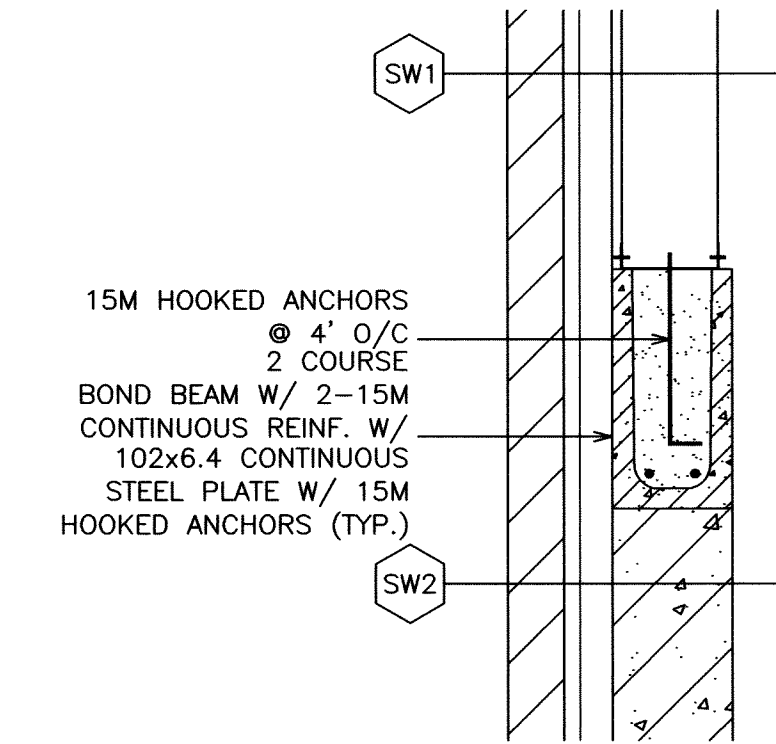
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CHECKED BY:	D.D.B.	PLOT DATE:	MAY 31/17
DATE:	MAY 2016	SUBMISSION:	PERMIT



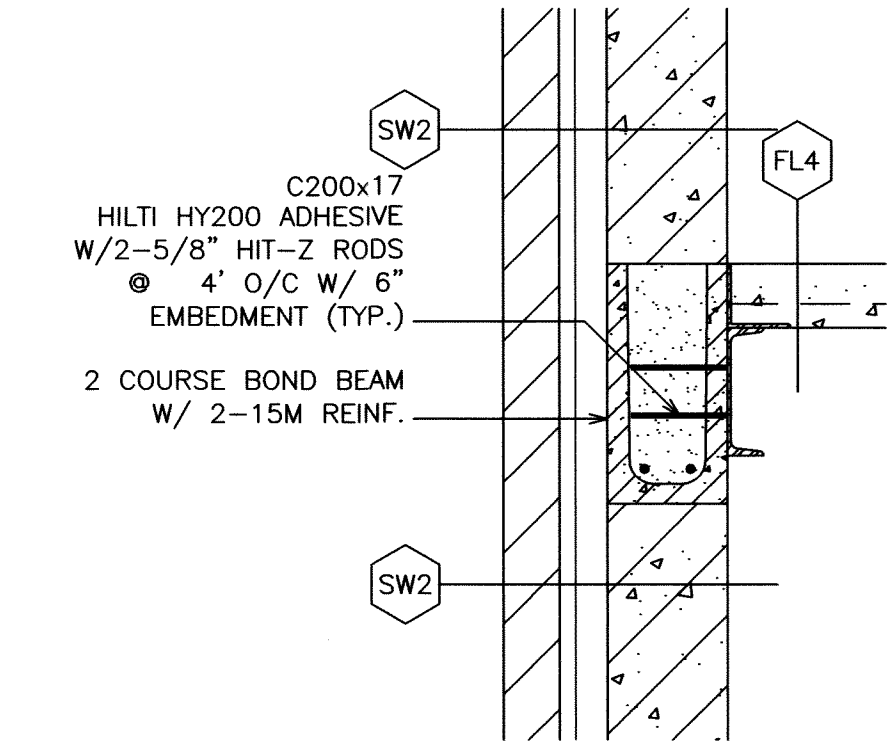
1 BRACING WITHIN CMU DETAIL  
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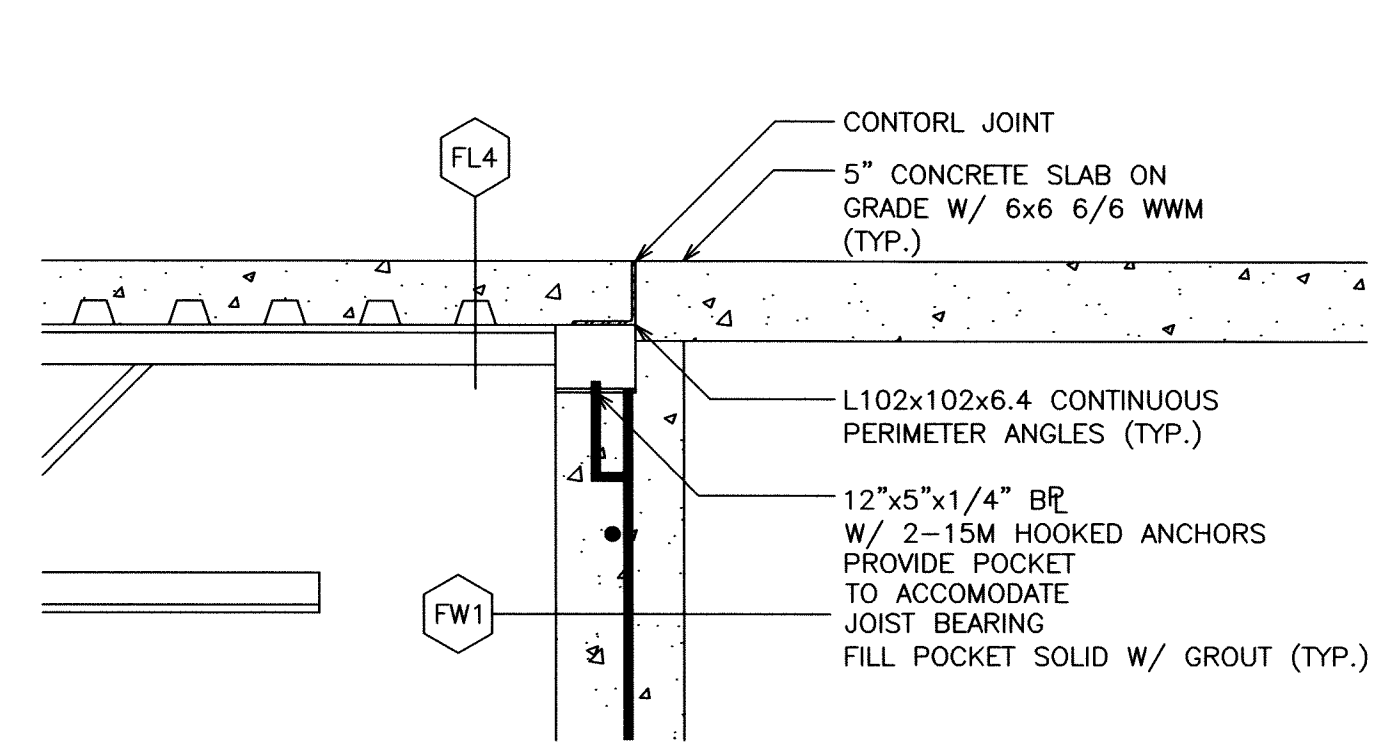
2 PARAPET CONNECTION DETAIL  
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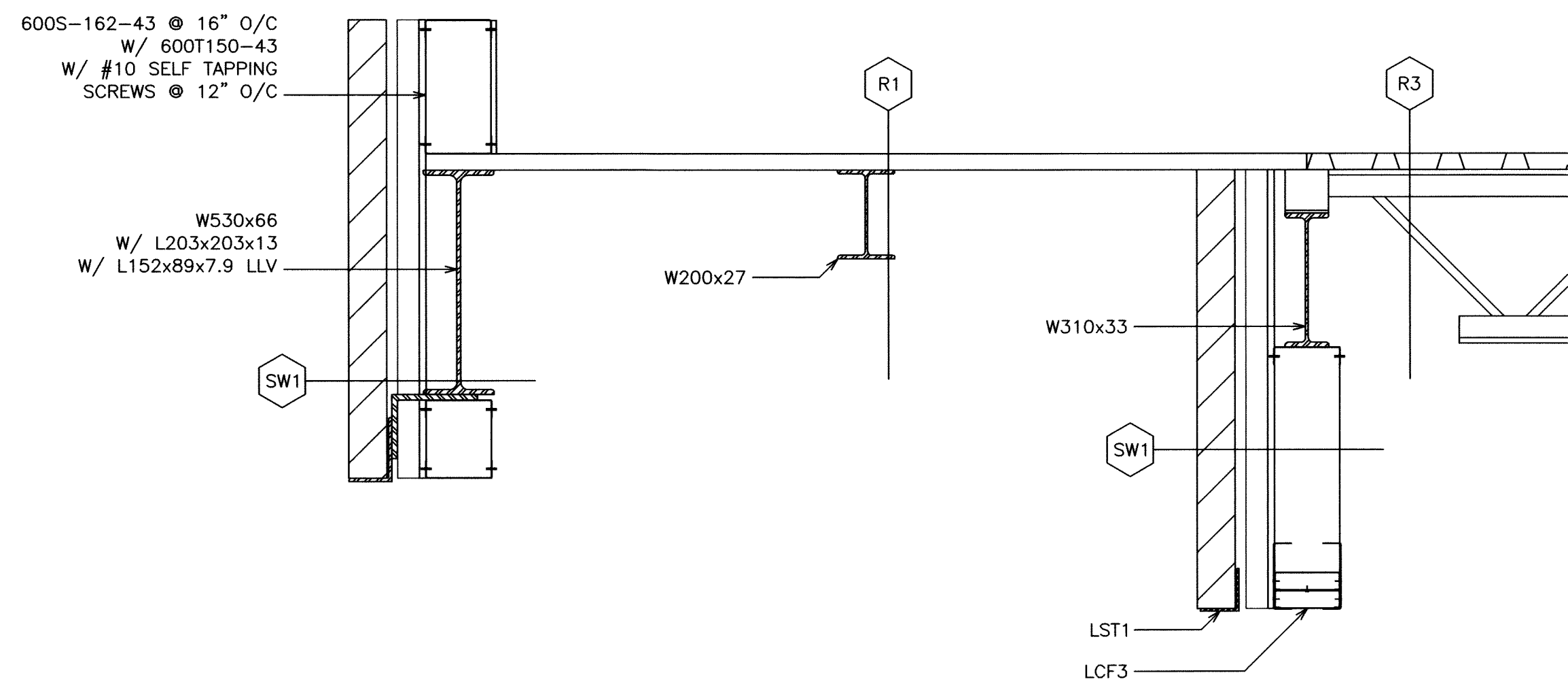
3 CMU TO STEEL STUD CONNECTION DETAIL  
S14 SCALE: 1" = 1'-0"



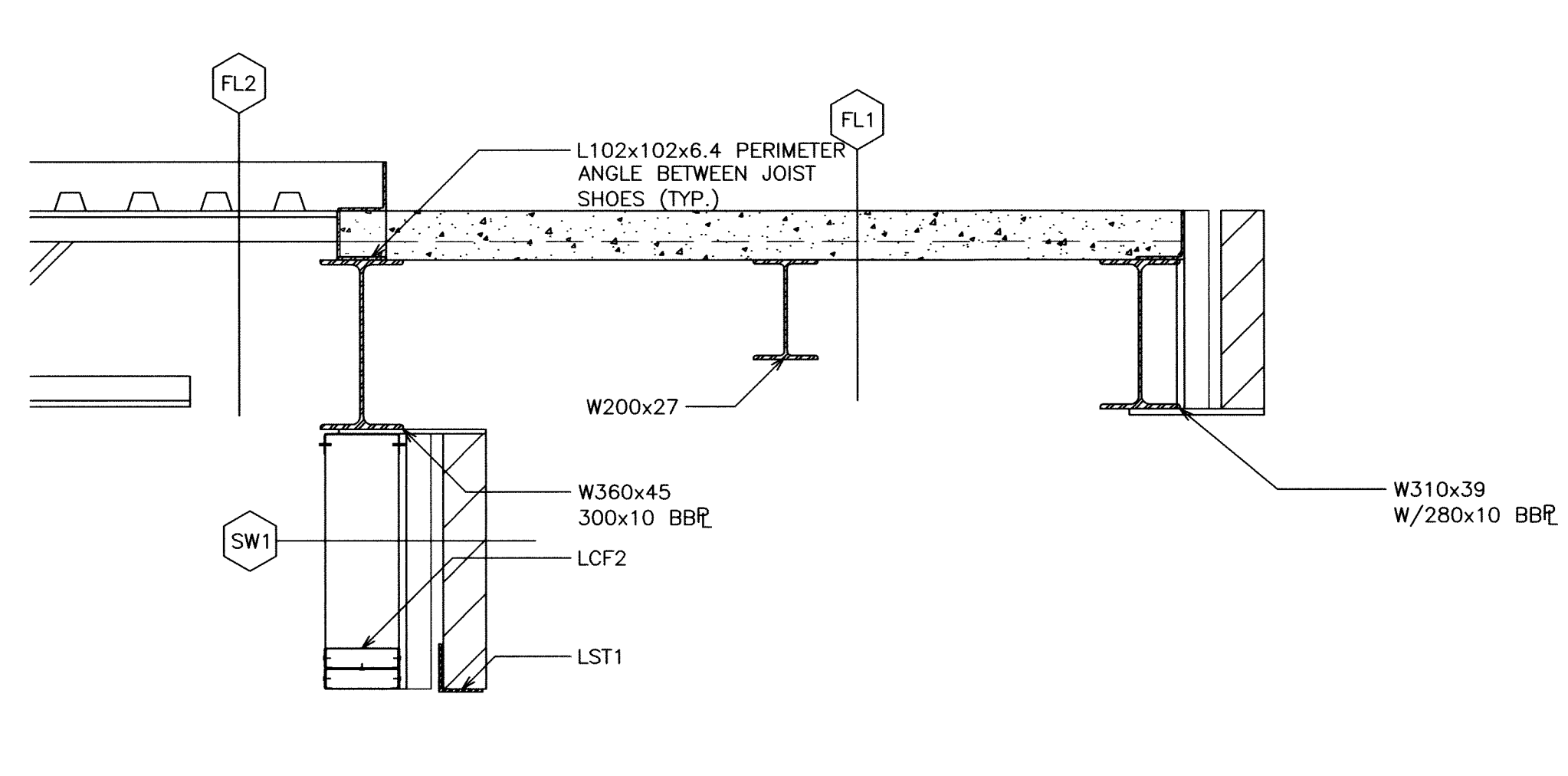
4 STAIR LANDING CONNECTION DETAIL  
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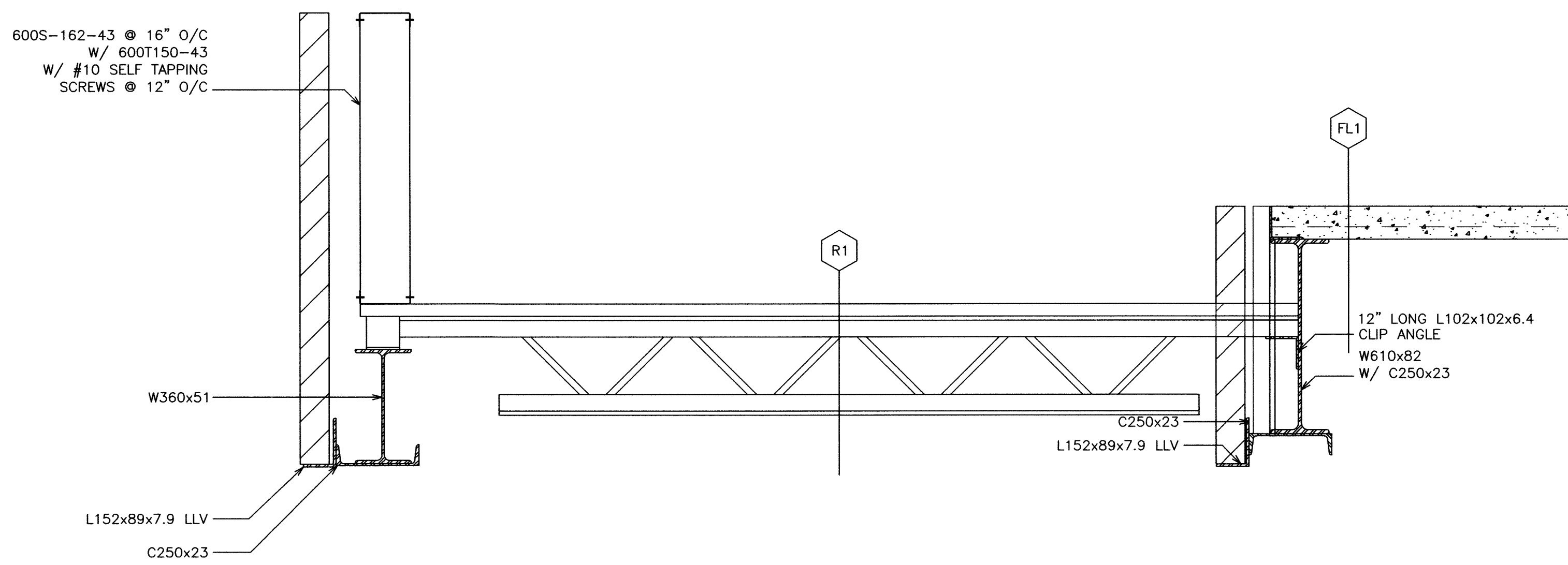
5 STAIR LANDING CONNECTION DETAIL  
S14 SCALE: 1" = 1'-0"



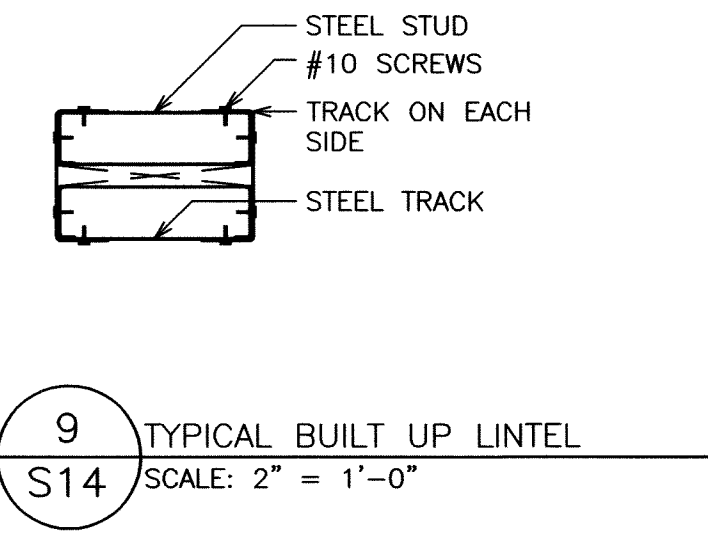
6 BALCONY ROOF DETAIL  
S14 SCALE: 1" = 1'-0"



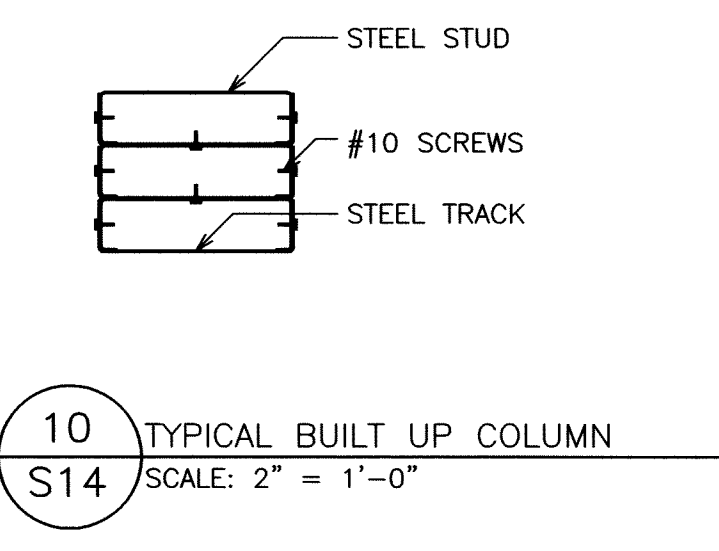
7 BALCONY FLOOR DETAIL  
S14 SCALE: 1" = 1'-0"



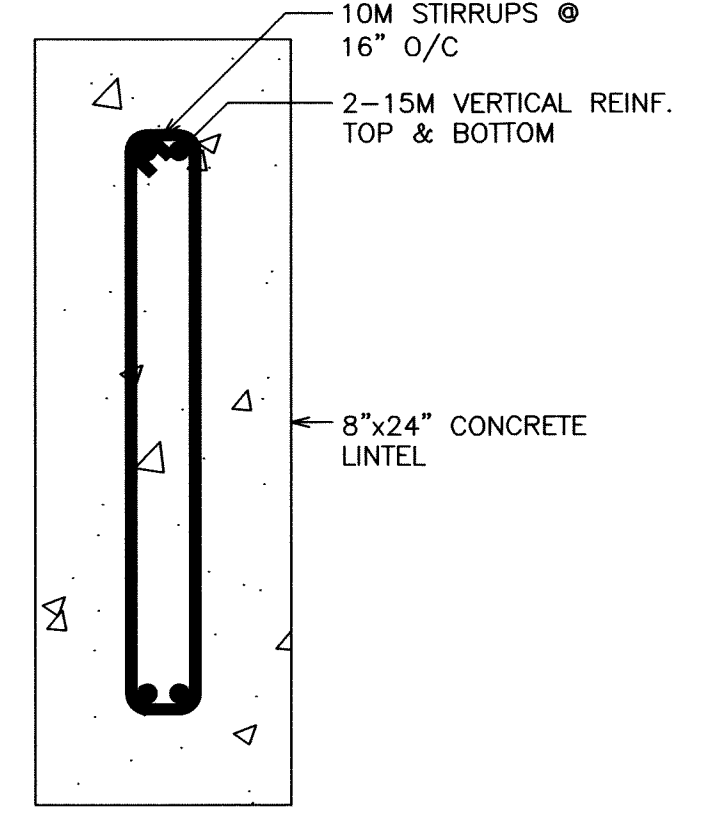
8 CANOPY CONNECTION DETAIL  
S14 SCALE: 1" = 1'-0"



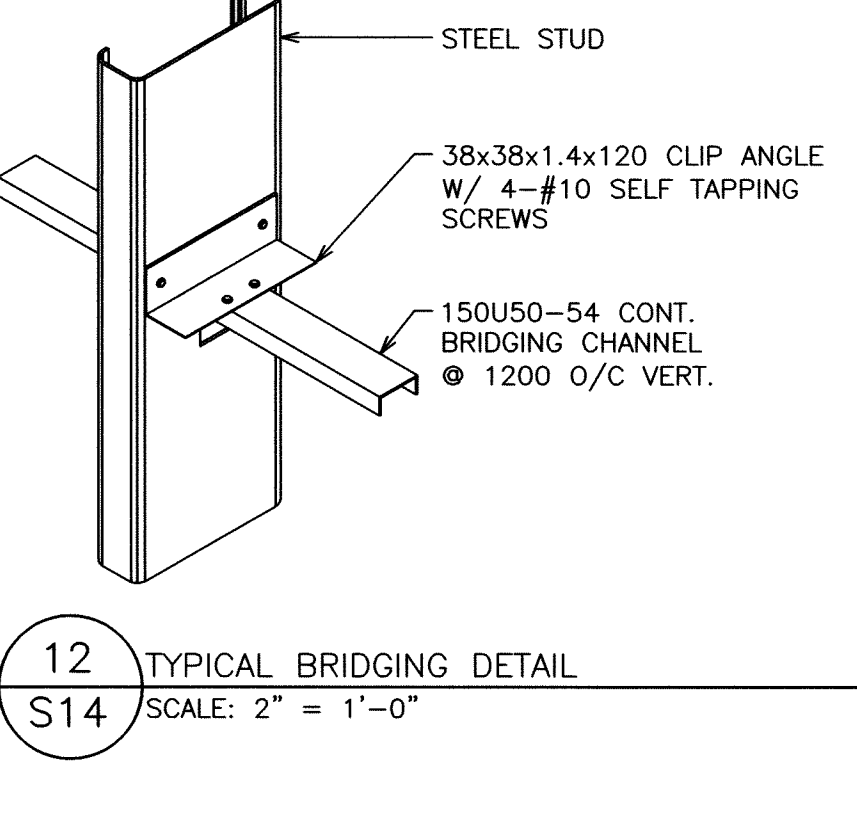
9 TYPICAL BUILT UP LINTEL  
S14 SCALE: 2" = 1'-0"



10 TYPICAL BUILT UP COLUMN  
S14 SCALE: 2" = 1'-0"



11 TYPICAL CONCRETE LINTEL  
S14 SCALE: 2" = 1'-0"



12 TYPICAL BRIDGING DETAIL  
S14 SCALE: 2" = 1'-0"

4	ISSUED FOR PERMIT	MAY 31/17	T.O.	D.B.
3	ISSUED FOR PERMIT	DEC 14/16	T.O.	D.B.
2	ISSUED FOR PRICING/ARCH. COORD.	OCT 28/16	T.O.	D.B.
1	ISSUED FOR REVIEW	OCT 21/16	T.O.	D.B.
NO.	REVISION	DATE	BY	APPROVED

REVISIONS  
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# STRUCTURAL DETAILS

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SCALE:	AS SHOWN	PROJECT NO.	115147
DRAWN BY:	T.R.T.O.	DRAWING NO.	S14
DESIGN BY:	T.L.R./J.L.	CAD FILE:	
CHECKED BY:	D.D.B.	PLOT DATE:	MAY 31/17
DATE:	MAY 2016	SUBMISSION:	PERMIT