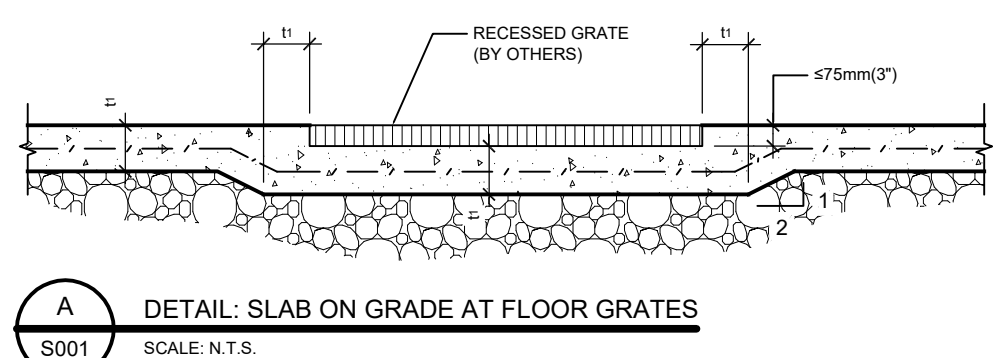
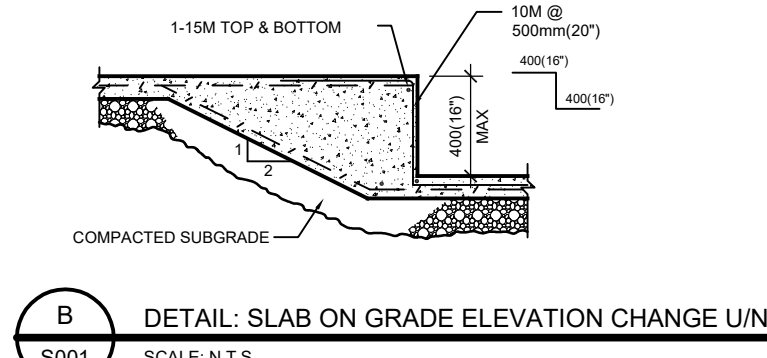


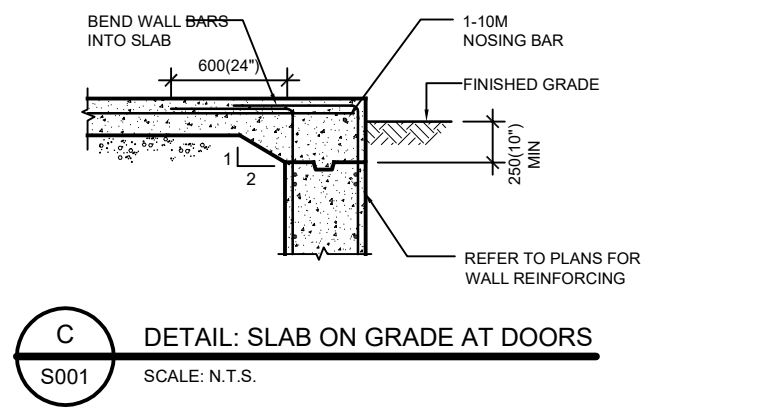
D03-8 SLAB ON GRADE DETAILS:



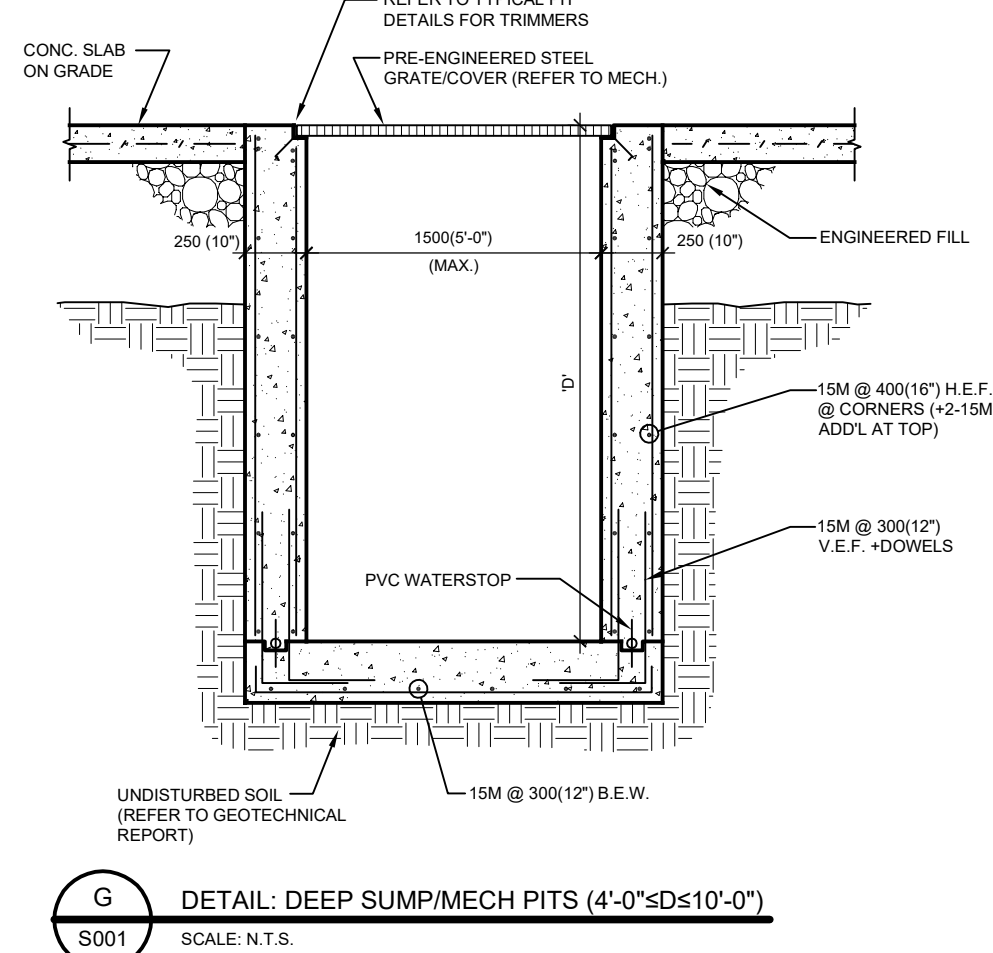
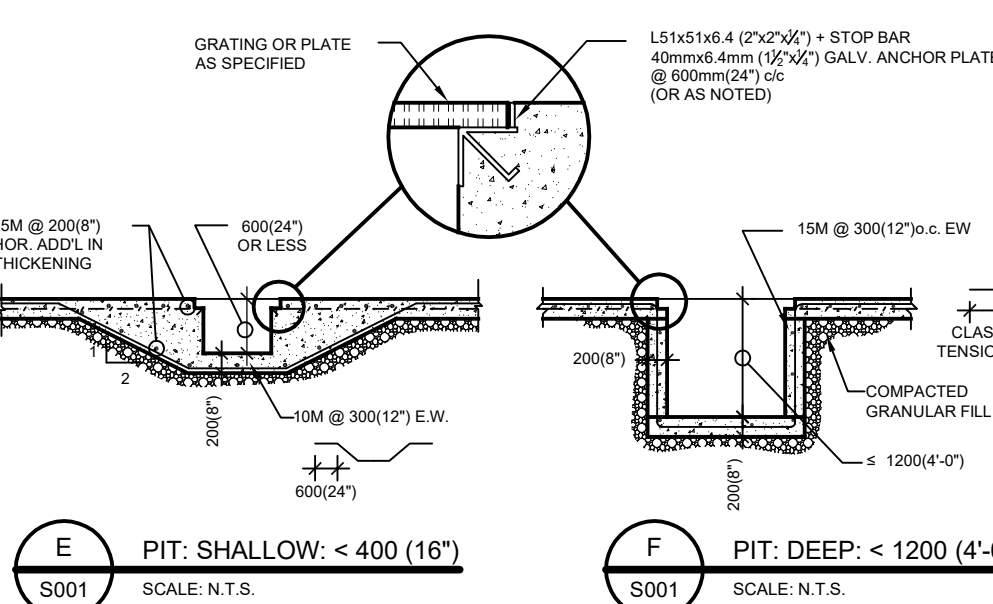
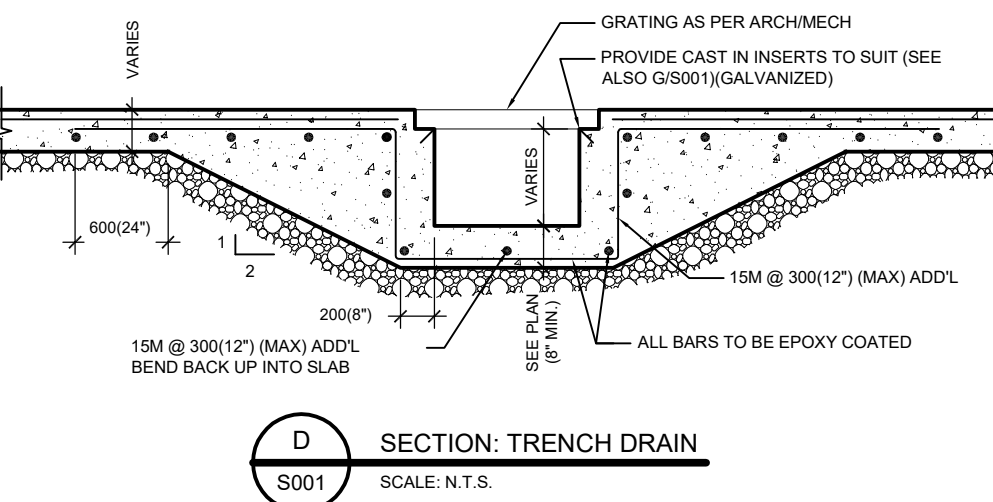
D03-9 SLAB ON GRADE ELEVATION CHANGE UN.



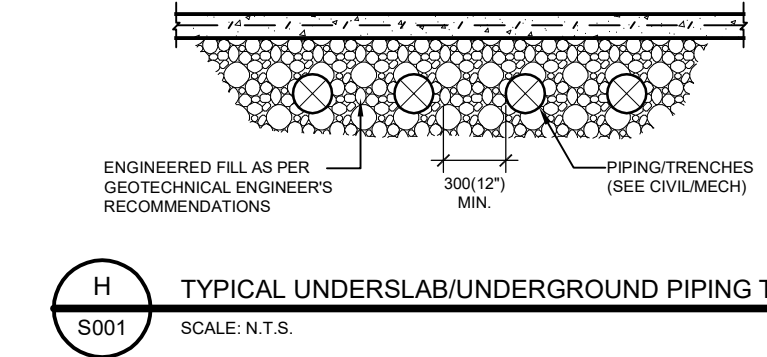
D03-10 SLAB ON GRADE AT DOORS:



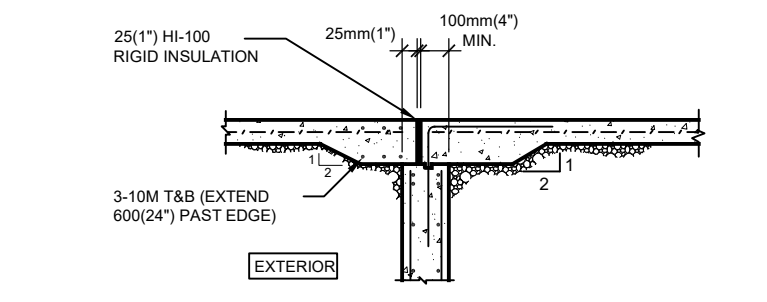
D03-9 PITS/TRENCHES, PADS AND CURBS UN.



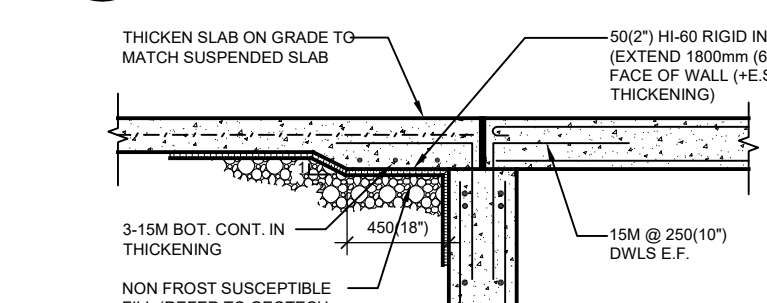
D03-10 UNDERSLAB/UNDERGROUND PIPING TRENCHES



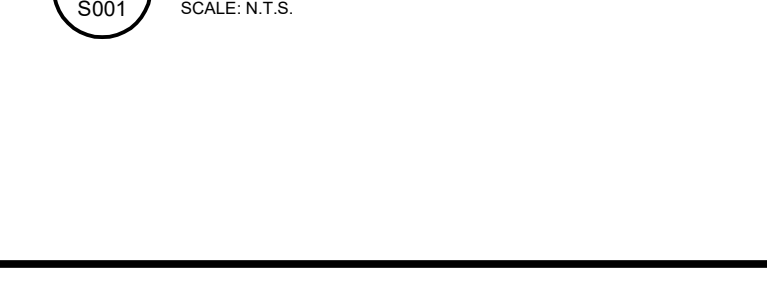
D03-11 EXTERIOR SLAB ON GRADE @ DOORS (WITH EXTERIOR CONC. PADWALKWAY INTERFACES WITH DOORWAY)



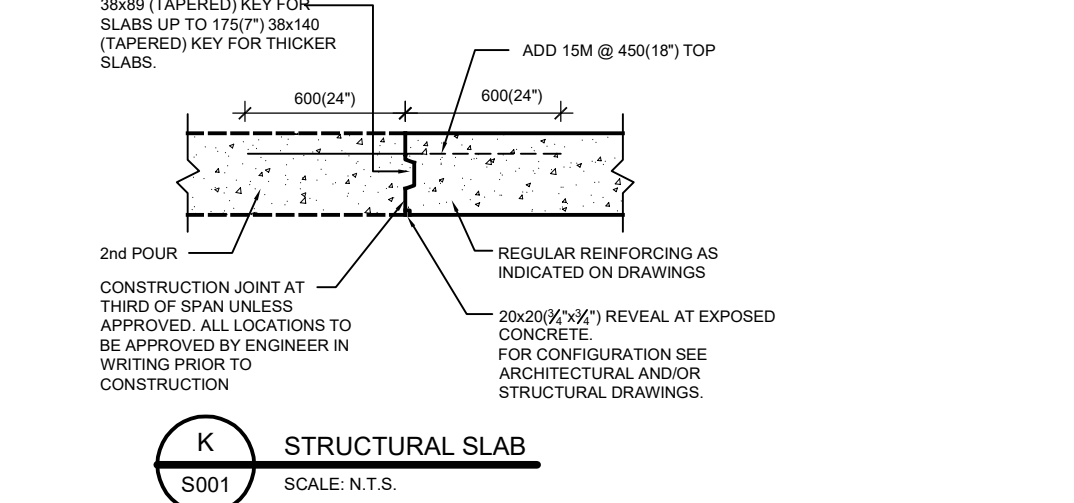
D03-11 EXTERIOR SLAB ON GRADE @ DOORS: SLAB ON GRADE



D03-11 EXTERIOR SLAB ON GRADE @ DOORS: SUSPENDED SLAB

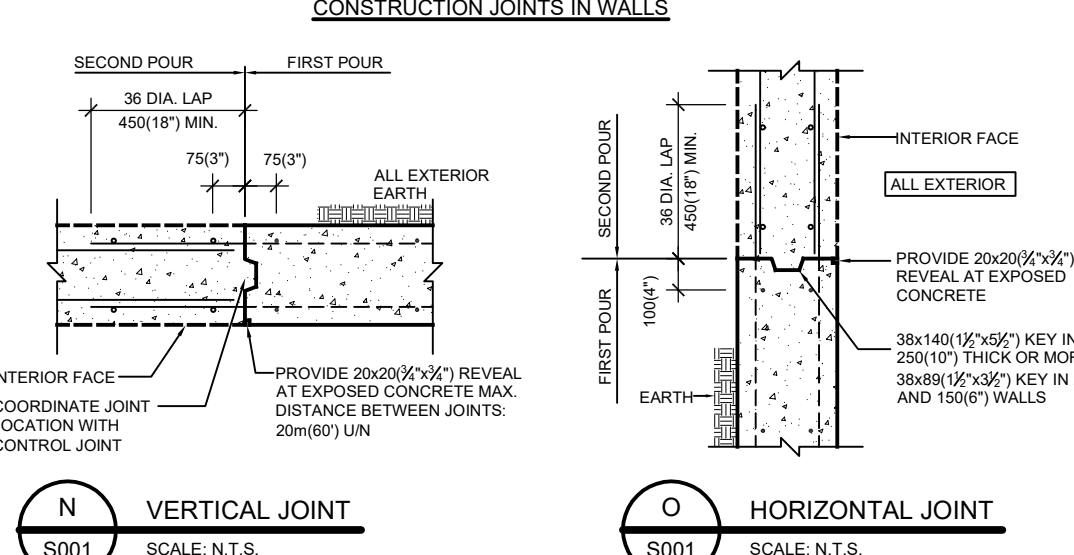
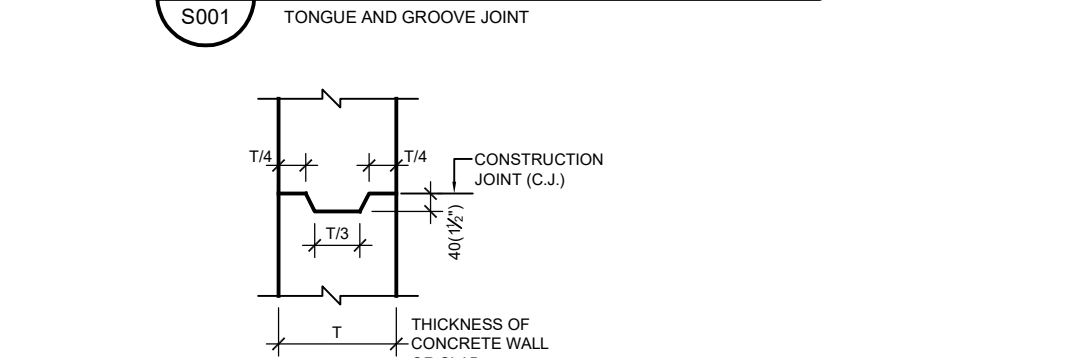
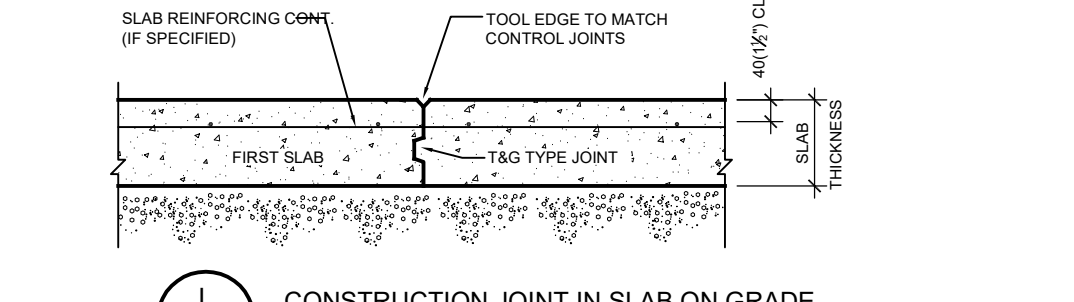


D03-12 CONSTRUCTION JOINTS

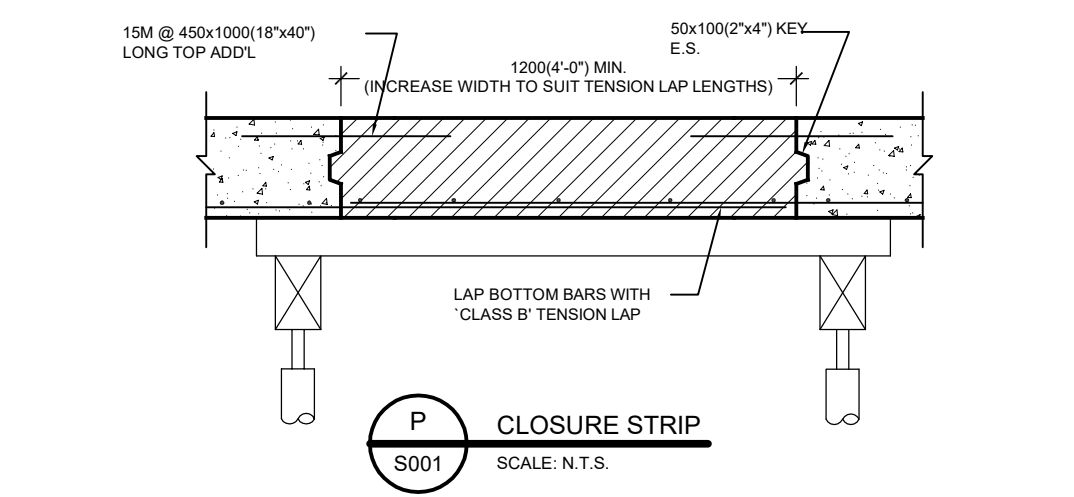


NOTES:

- WHERE BARS ARE EPOXY COATED INCREASE BAR LENGTHS BY 20%.
- FOR TRANSFER BEAMS OR BEAMS GREATER THAN 800 DEEP, LOCATION AND DETAIL OF CONSTRUCTION JOINT TO BE APPROVED BY ENGINEER. IT SHALL BE ASSUMED JOINTS ARE NOT PERMITTED FOR TENSILING PURPOSES.
- CONCRETE SLAB SHALL BE CONCRETED IN SECTIONS NOT EXCEEDING 5000' (800' R) IN AREA. EACH POUR SHALL BE BOUNDED BY A VERTICAL SLABHEAD OR ABUTTING CONSTRUCTION. PROVIDE ADDITIONAL REINFORCING AS PER DETAILS ON TYPICAL DETAILS DRAWING.



D03-13 CLOSURE STRIP (AS REQUIRED ON PLAN)



NOTES:

- SLABS ON E.S. OF CLOSURE STRIP TO BE CONCRETED FIRST.
- ALL FORMS IN BAY CONTAINING CLOSURE STRIP SHALL REMAIN IN PLACE UNTIL THE CONCRETE IN THE CLOSURE STRIP IS 10 DAYS OLD.
- CLOSURE STRIP SHALL BE CONCRETED 28 DAYS (OR MORE) AFTER ADJACENT PORTIONS OF THE SLAB.
- AFTER REMOVAL OF THE FORMS RESHORE THE ENTIRE BAY & KEEP SHORES IN PLACE UNTIL CONCRETE IN CLOSURE STRIP STRIP BEARS FULL LOAD. THE SLAB ARE TO BE SUBJECT TO SHORE ADEQUATE SHORES SHALL BE PROVIDED AND REMAIN IN POSITION FOR SUCH TIME AS THE LOADS ARE IMPOSED.
- FORMS & SHORES UNDER CLOSURE STRIP TO STAY IN POSITION UNTIL CONCRETE IN THE STRIP IS 28 DAYS OLD.
- REINFORCING SHOP DRAWINGS REQUIRED TO SHOW REINFORCING DETAILING/ADDITIONAL BARS AT STRIPS.

D03-14 CONCRETE MIXES

LOCATION	28 DAY STRENGTH	SUMP	CLASS OF EXPOSURE
SLAB ON GRADE (INTERIOR)	25 MPa	80mm(3")	C-2
SLAB ON GRADE (EXTERIOR)	32 MPa	80mm(3")	F-2
FOUNDATION WALLS (NOT IN SHEAR WALLS OR COLUMNS)	30 MPa	75mm(3")	
PIERS	30 MPa	75mm(3")	
SHEAR WALLS	30 MPa	75mm(3")	
COLUMNS	30 MPa	75mm(3")	
SUSPENDED SLABS	30 MPa	75mm(3")	C-2
PERIMETER WALLS	30 MPa	75mm(3")	C-1
RETAINING WALLS	30 MPa	75mm(3")	C-1
EXTERIOR LANDSCAPE WALL ELEMENTS	30 MPa	75mm(3")	C-1

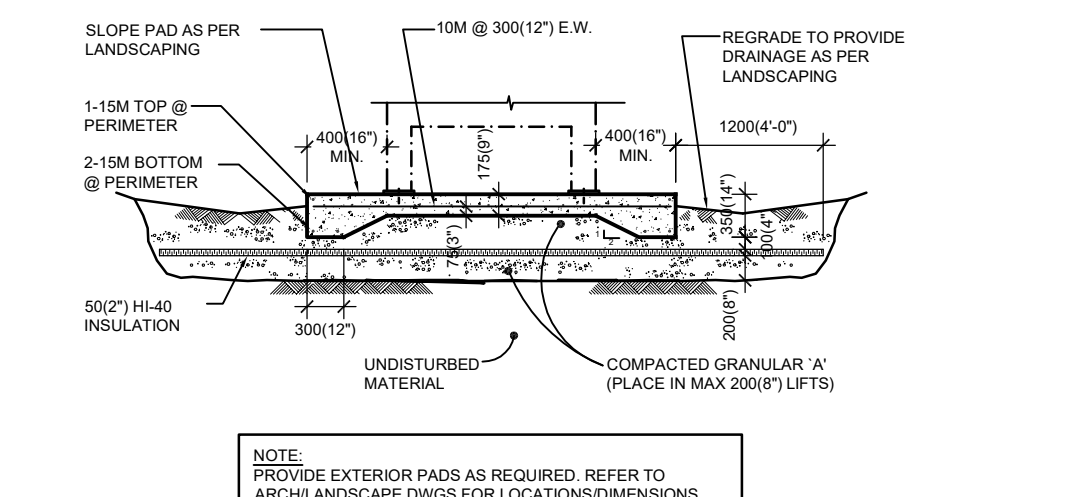
*NOTE: THESE SUMPS WITH AID OF SPECIFIED WATER REDUCING AGENT.

*NOTE: ALL CONCRETE EXPOSED TO EXTERIOR CONDITIONS TO HAVE MINIMUM 6% AIR ENTRAINMENT.

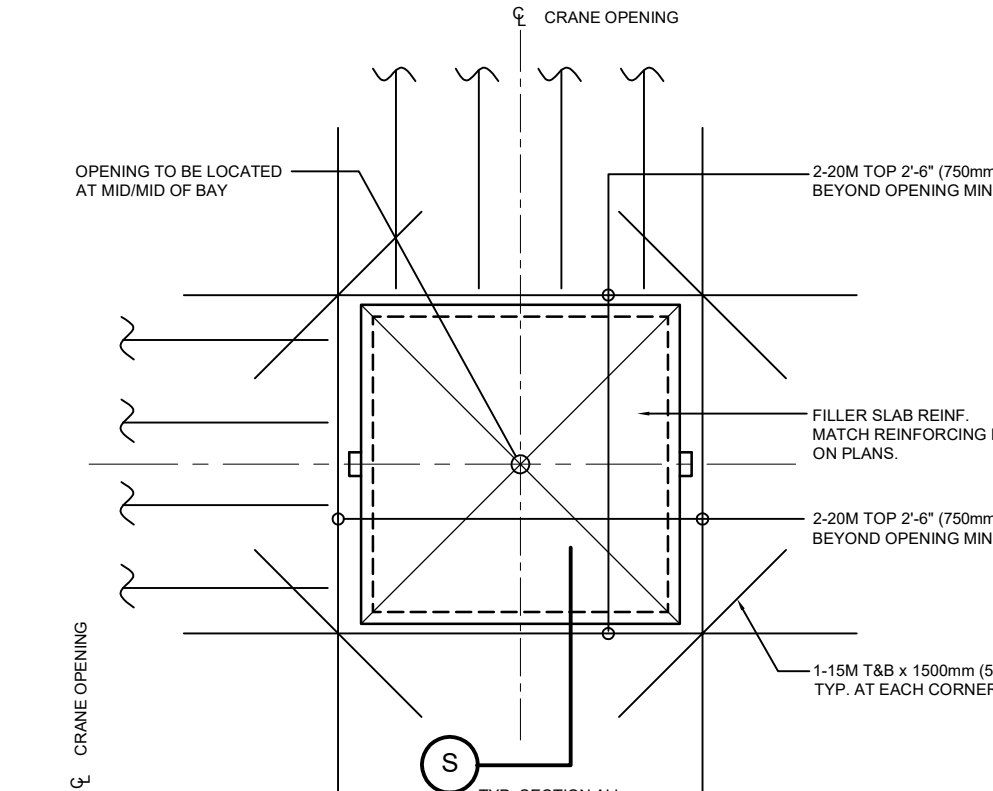
READY-MIXED CONCRETE AND CONCRETE PROPORTIONS SHALL BE IN ACCORDANCE WITH CSA A23.1, CLAUSE 12 AND AS FOLLOWS:

- MINIMUM ALLOWABLE COMPRESSIVE STRENGTH SHALL BE 30 MPa(4350psi) AT 28 DAYS OF AGE, UNLESS OTHERWISE NOTED OR SHOWN.
- IF BLENDED NORMAL PORTLAND-CEMENTITIOUS HYDRAULIC SLAG IS USED EXCEPT FOR FLOOR MIXES, SLAG CONTENT SHALL NOT BE MORE THAN 25% OF TOTAL MASS OF CEMENT. TOTAL VOLUME OF CEMENT IN CONCRETE FLOOR MIXES SHALL BE 10% NORMAL PORTLAND CEMENT. CONSTRUCTION LOADS ADEQUATE SHORES SHALL BE PROVIDED AND REMAIN IN POSITION FOR SUCH TIME AS THE LOADS ARE IMPOSED.
- PROVIDE CERTIFICATION THAT MIX PROPORTIONS SELECTED WILL PRODUCE CONCRETE OF SPECIFIED QUALITY AND YIELD AND THAT STRENGTH WILL COMPLY WITH CANCSA23.1 14MM.
- USE OF CALCIUM CHLORIDE NOT PERMITTED.
- DO NOT CHANGE CONCRETE MIX WITHOUT PRIOR APPROVAL OF CONSULTANT. SHOULD CHANGE IN MATERIAL SOURCE BE PROPOSED, NEW MIX DESIGN TO BE APPROVED BY CONSULTANT.

D03-15 EXTERIOR EQUIPMENT PADS

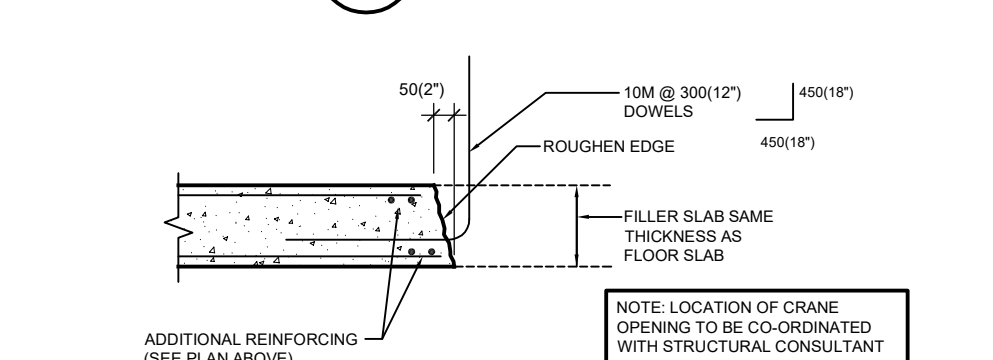


D03-16 TYPICAL CRANE OPENING (UN)

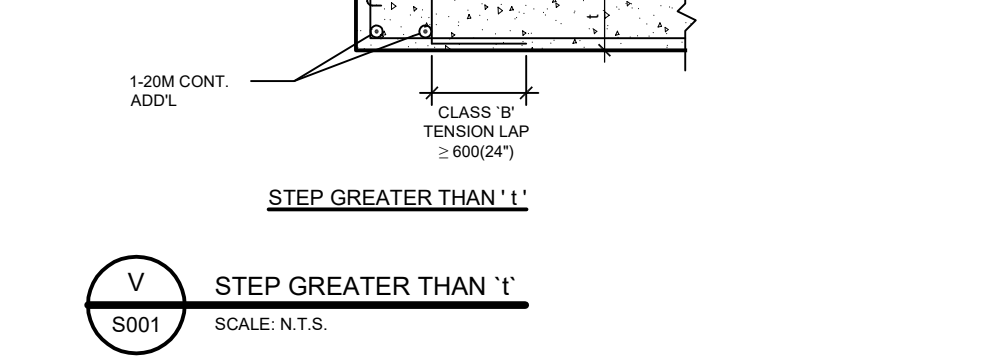
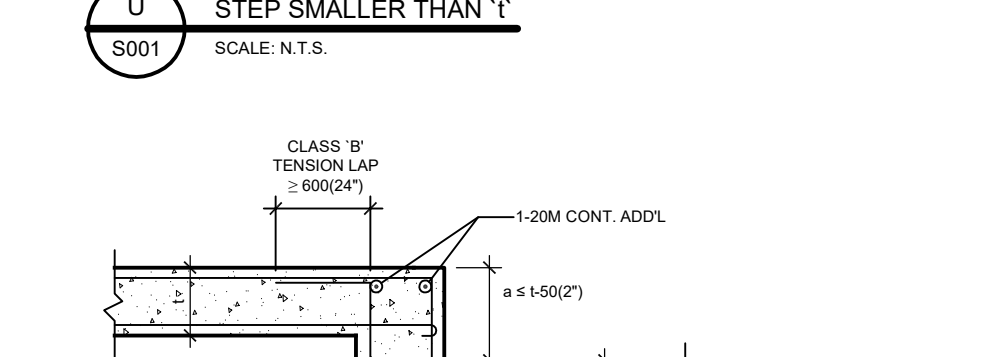
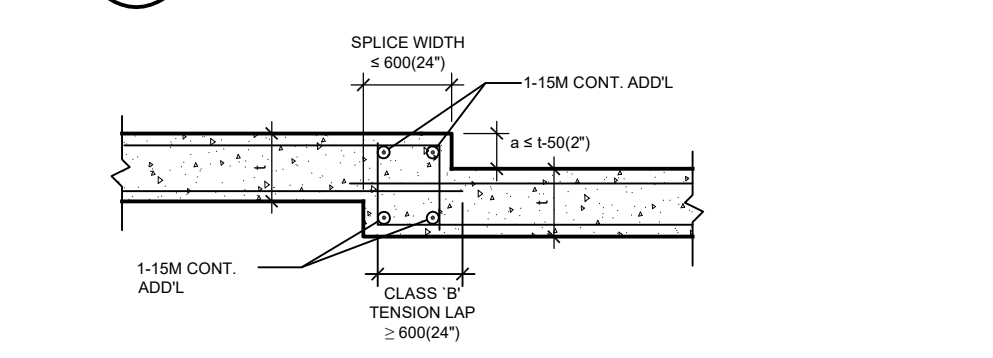
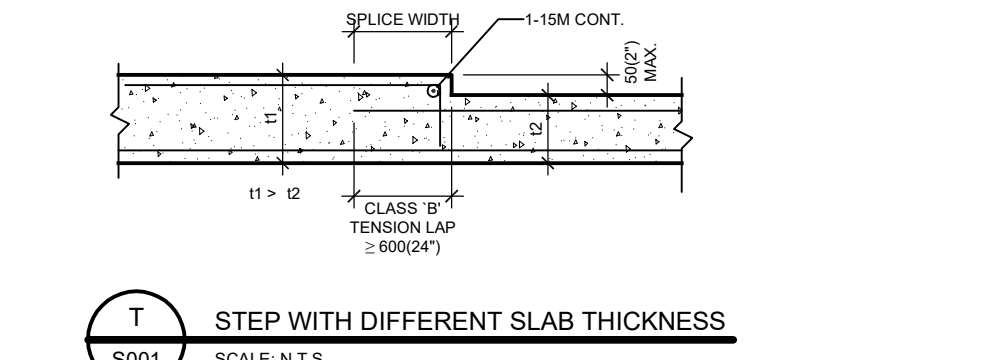


NOTES:

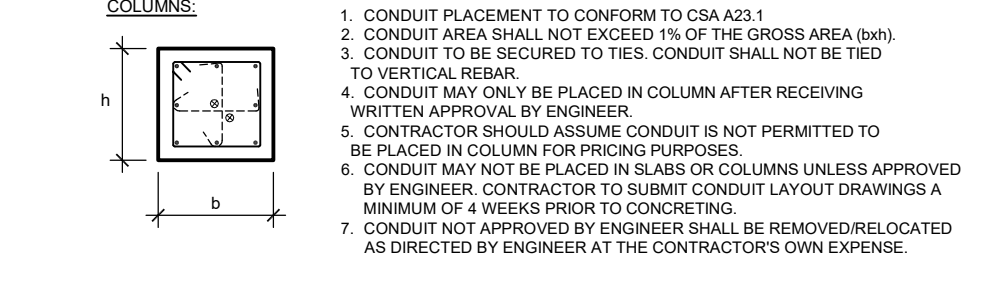
- CUT BOTTOM REIN. STEEL RUNNING THROUGH CRANE OPENING.
- PROVIDE ON EACH SIDE OF OPENING 2% OF AREA STEEL REINFORCED (CUT) BY THE CRANE OPENING 2.25M MIN. THESE BARS SHALL SPAN TO ADJACENT SUPPORTS.



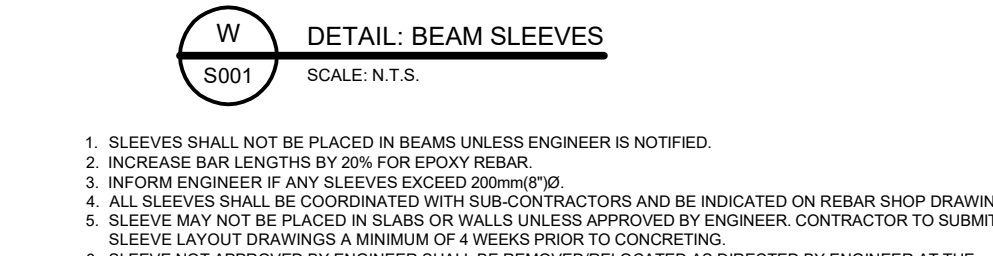
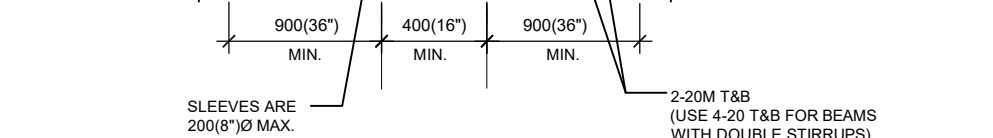
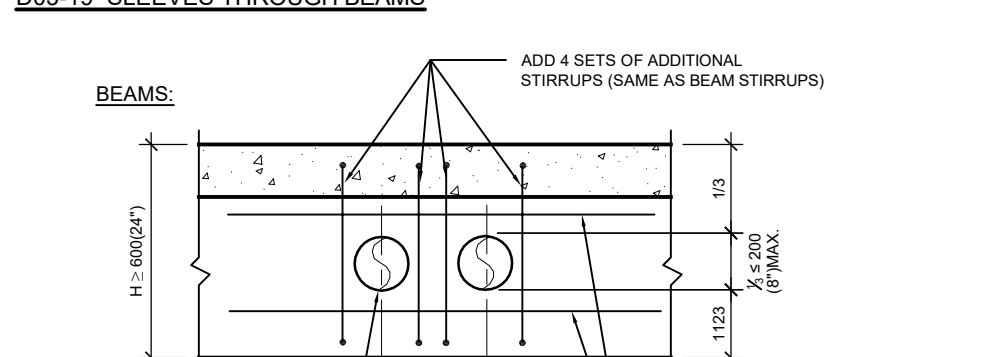
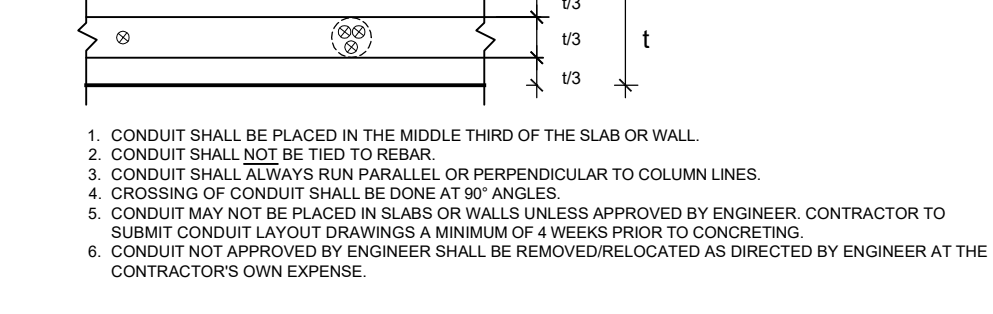
D03-17 CHANGE OF LEVEL IN REINFORCED SLAB (UN)



D03-18 EMBED CONDUIT AND PIPE



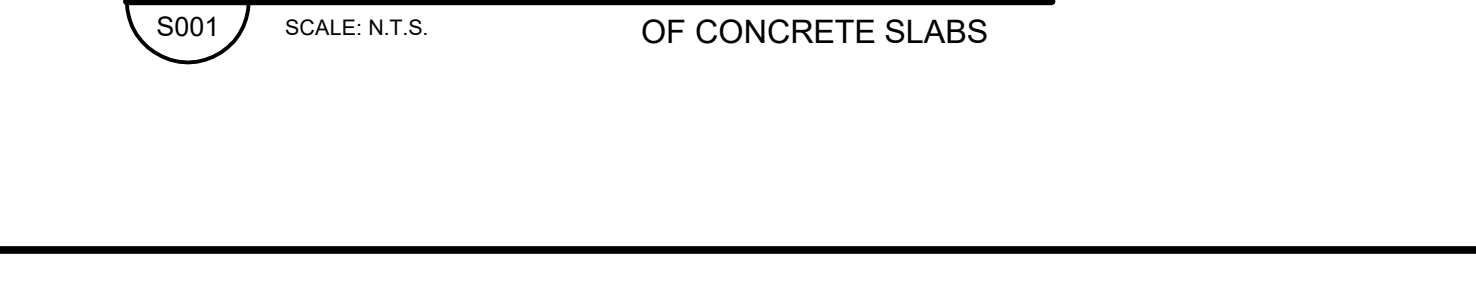
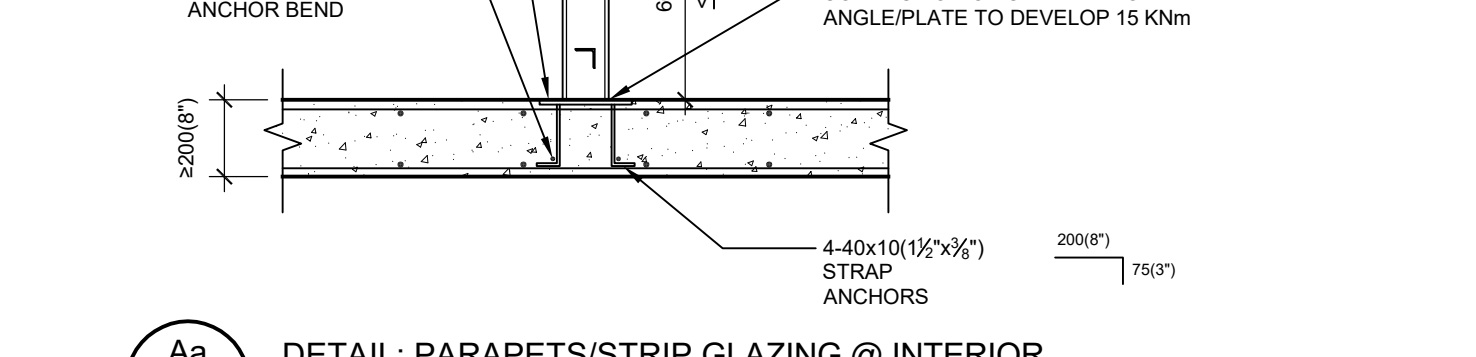
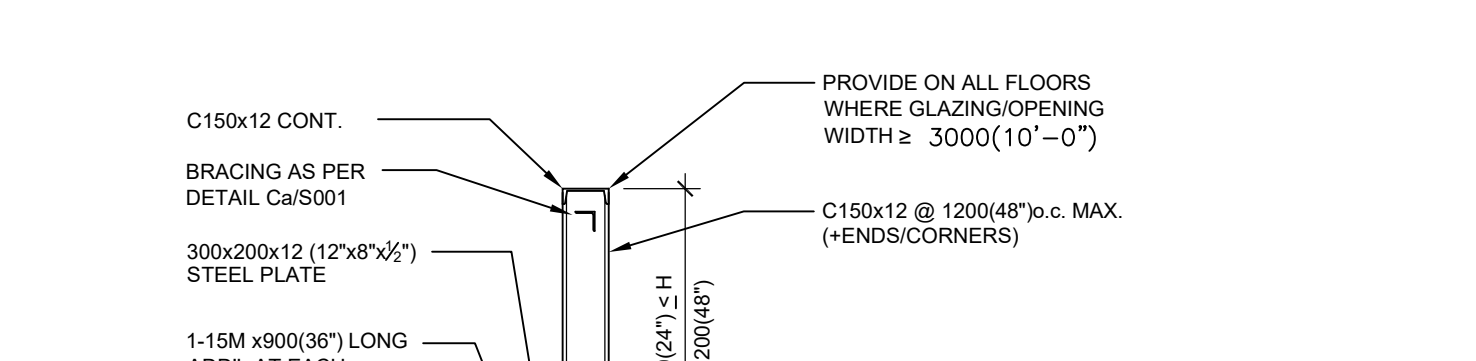
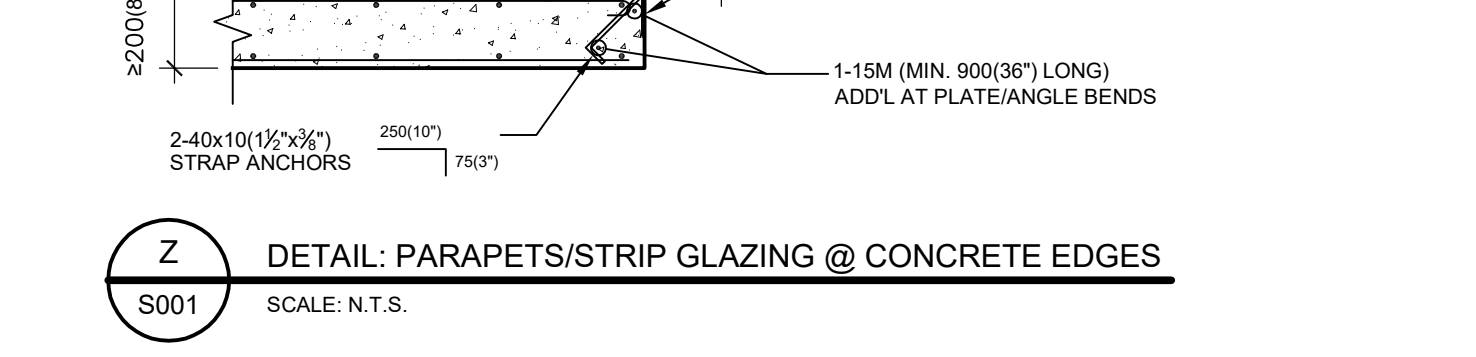
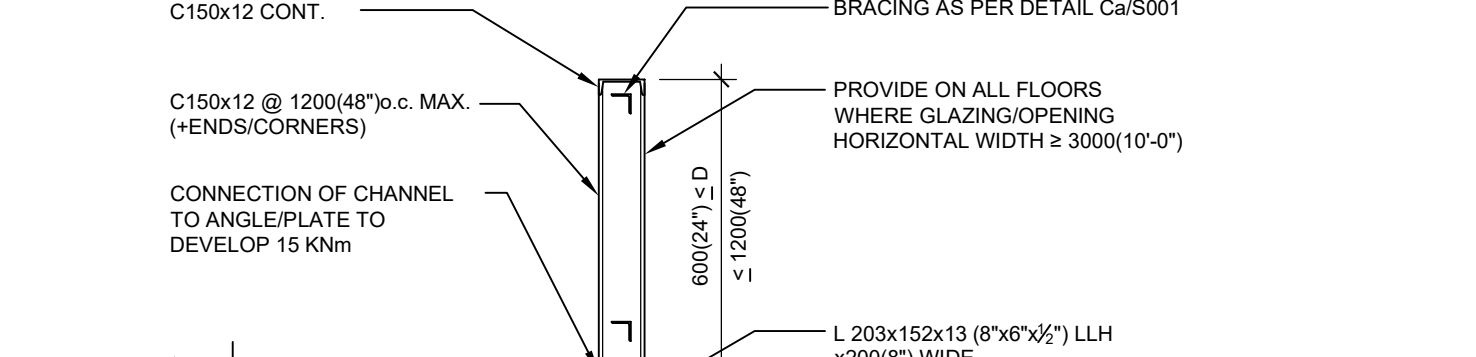
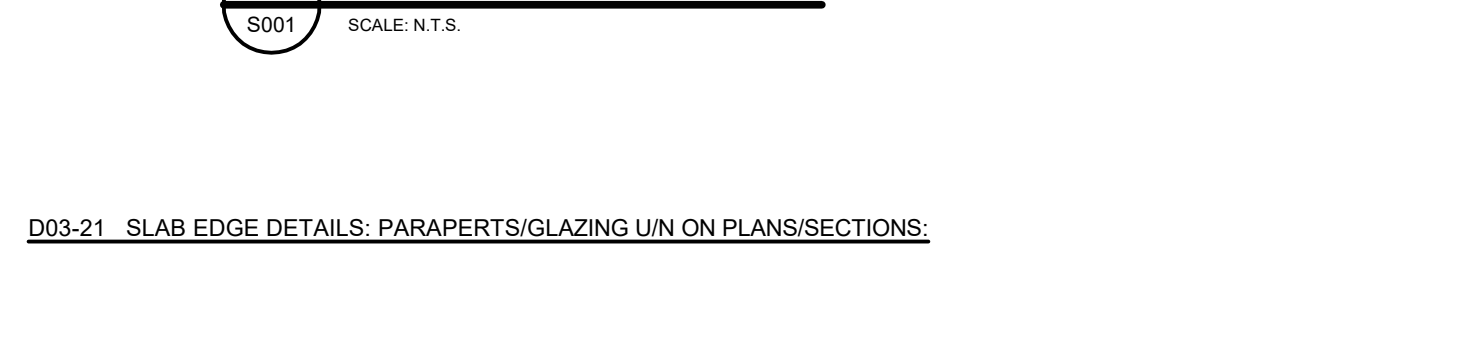
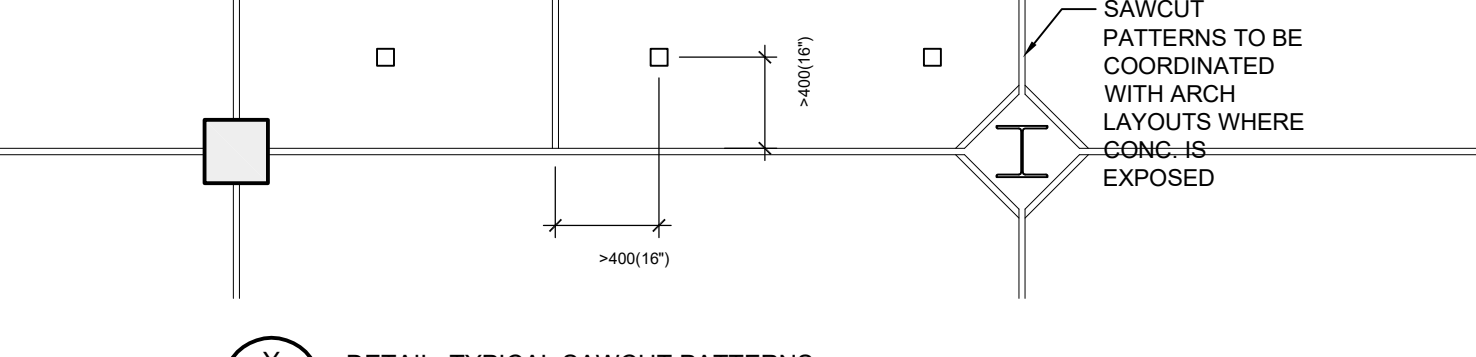
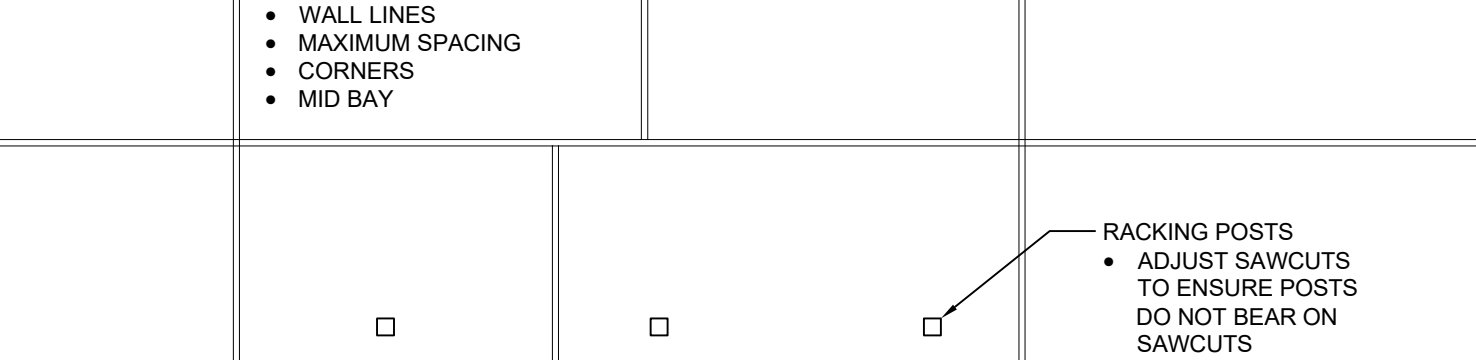
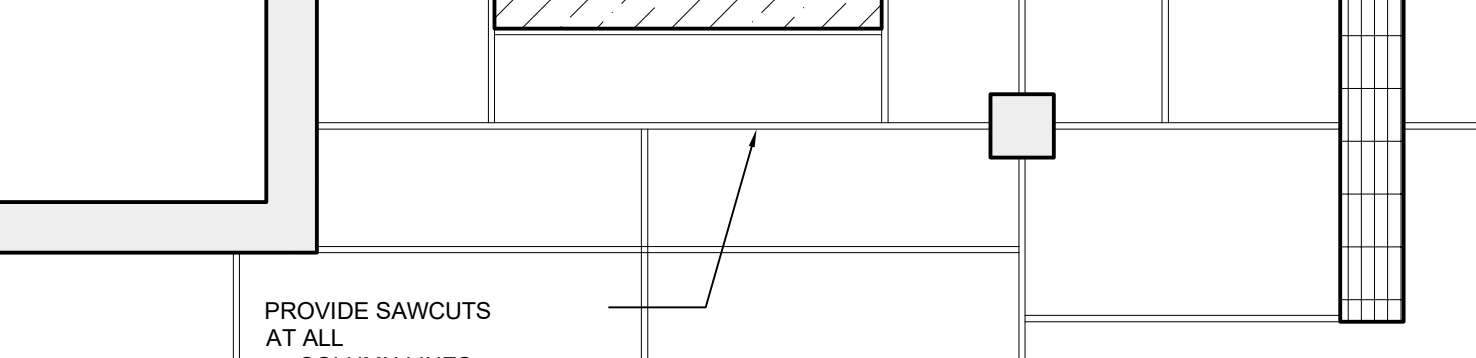
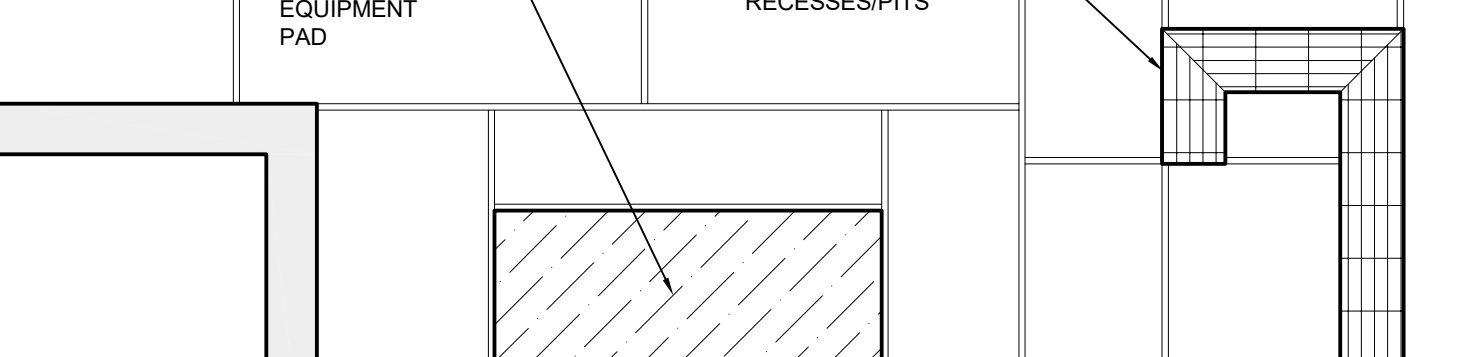
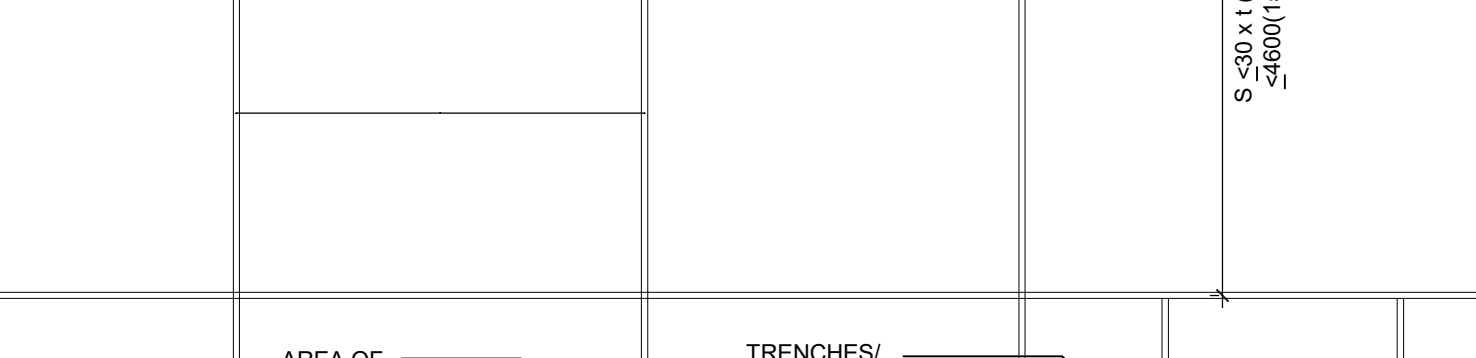
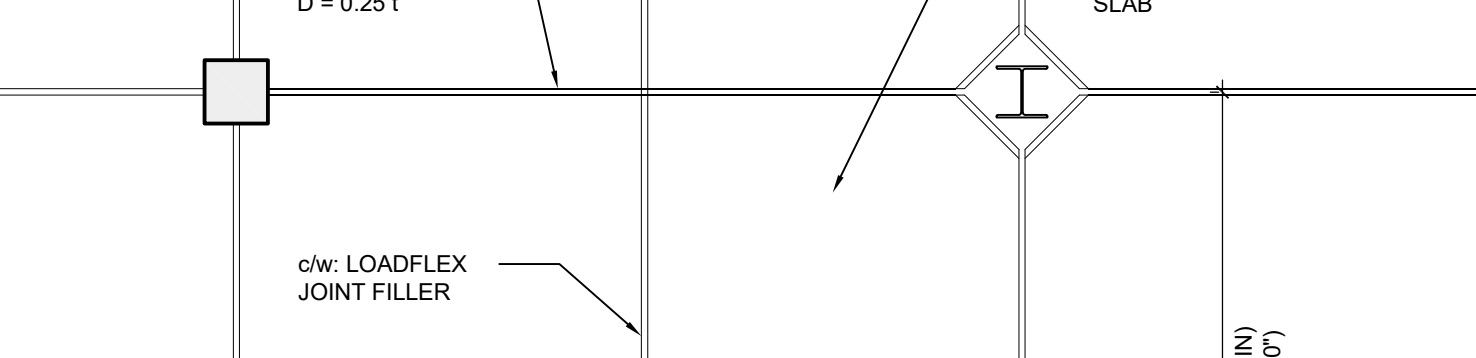
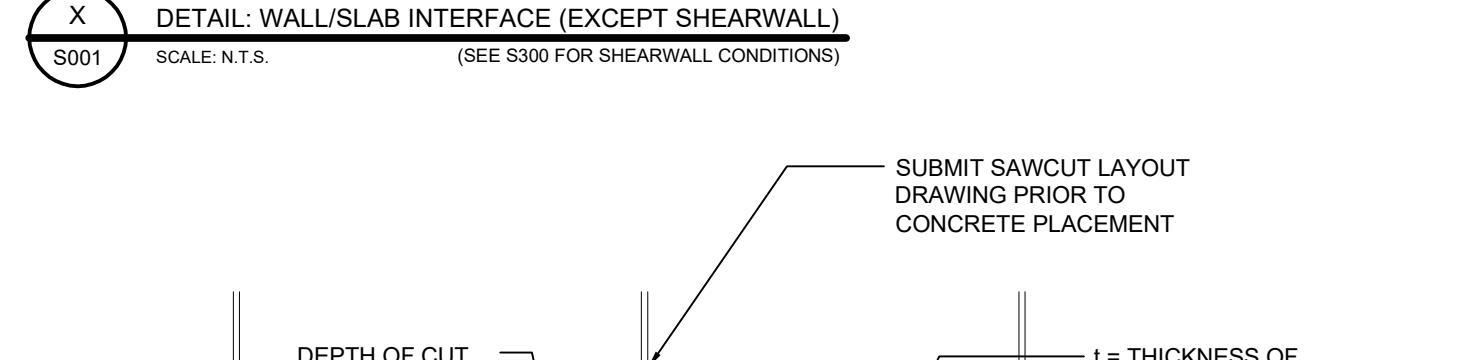
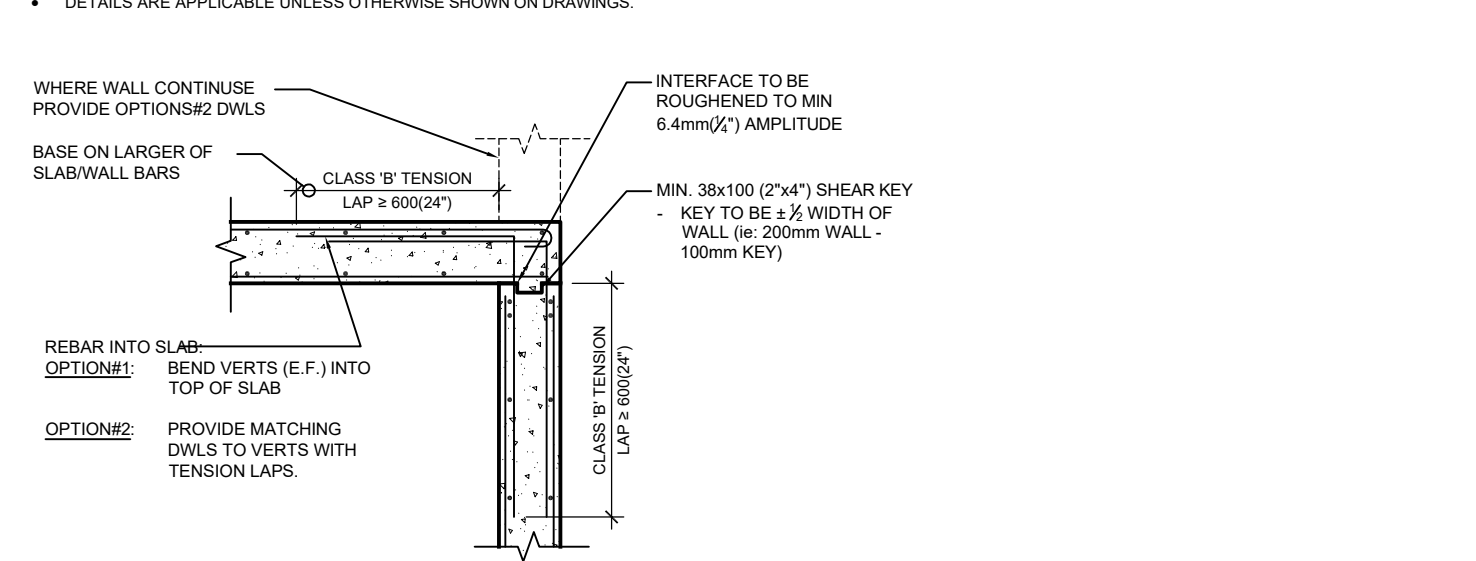
D03-18 SLEEVES THROUGH BEAMS



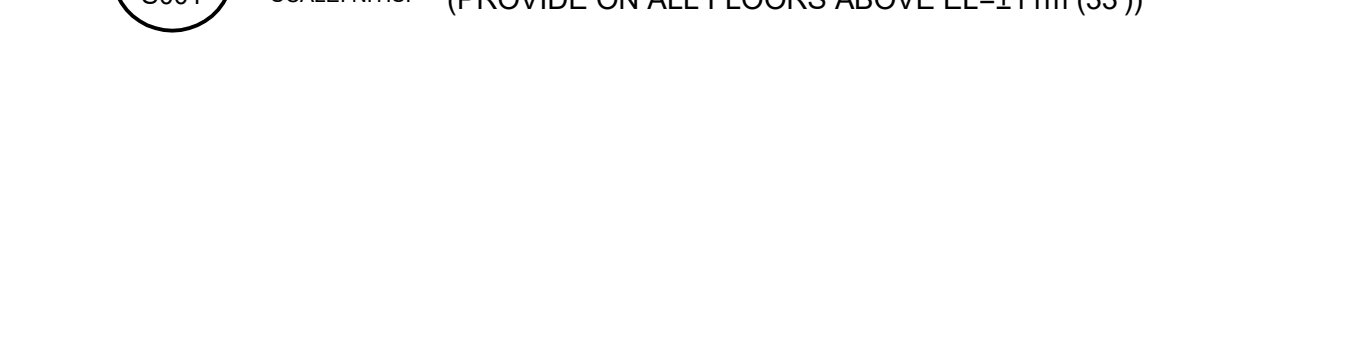
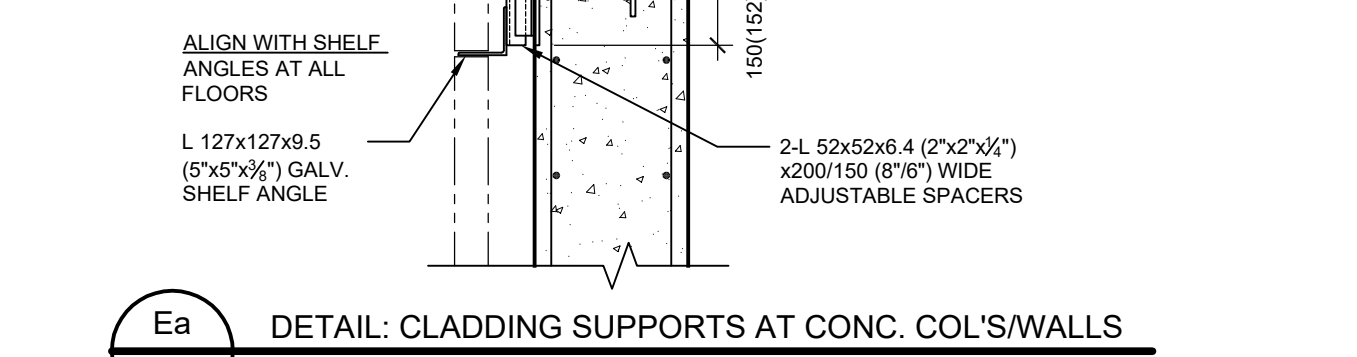
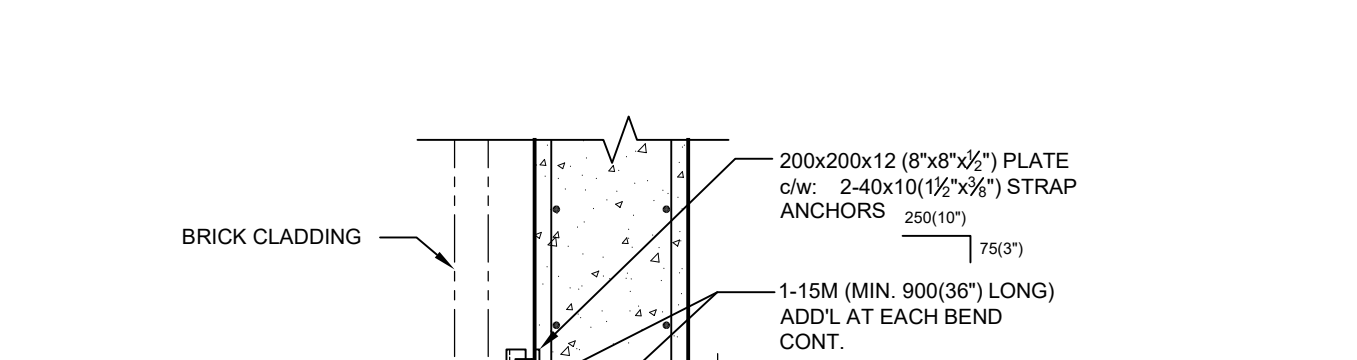
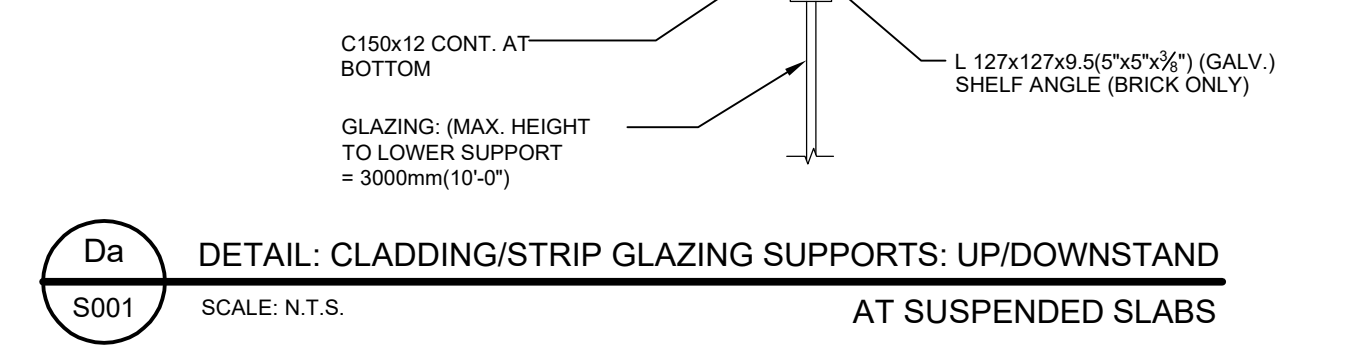
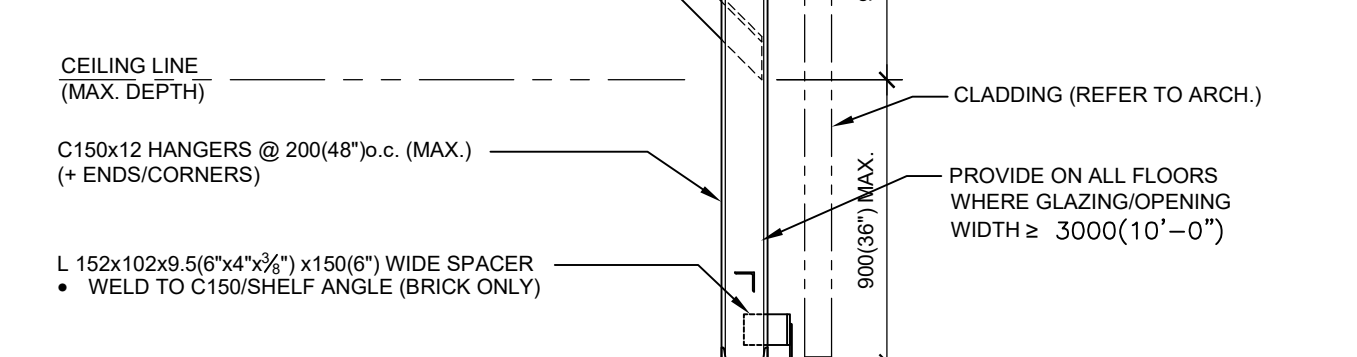
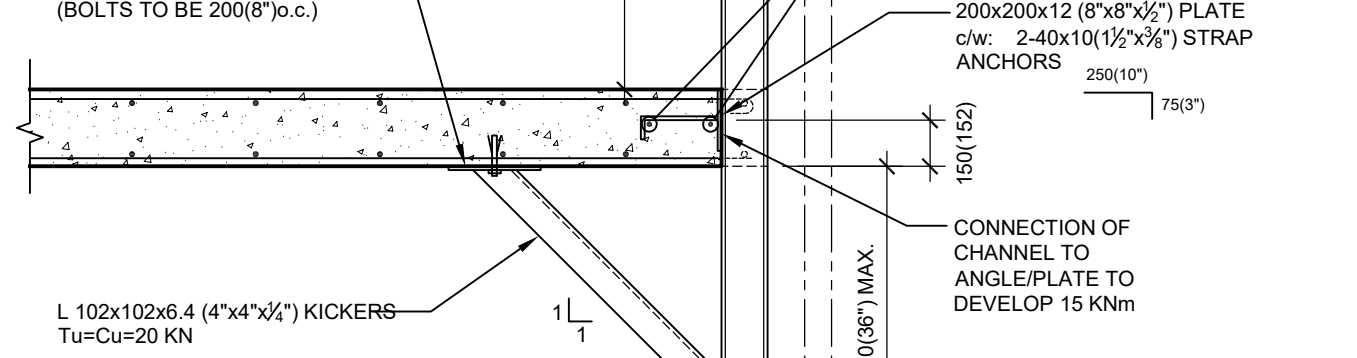
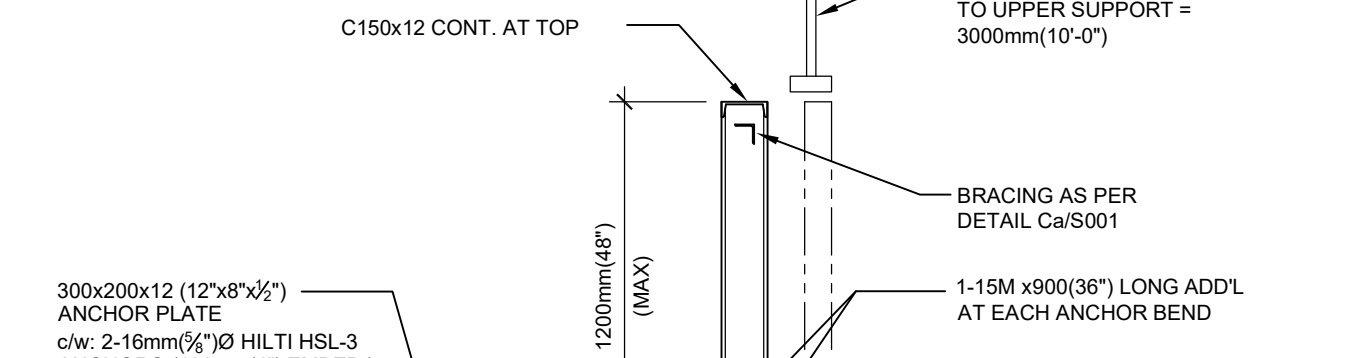
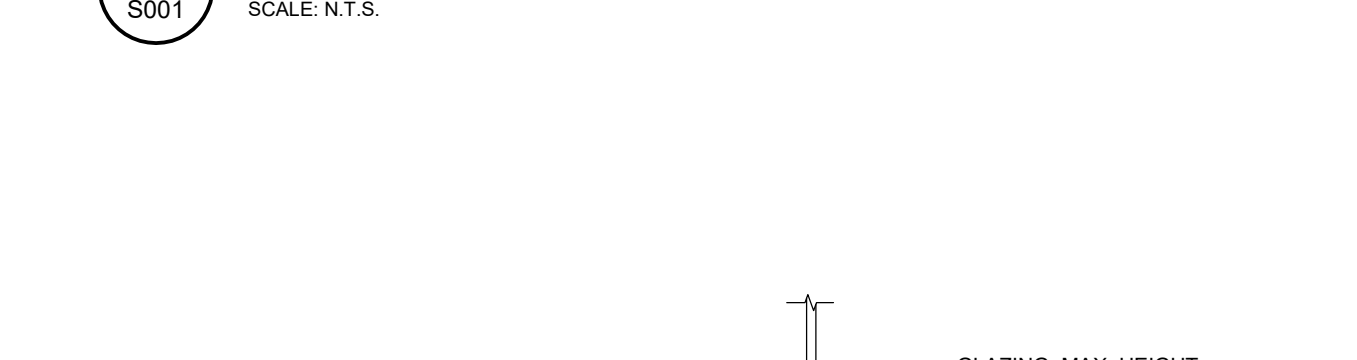
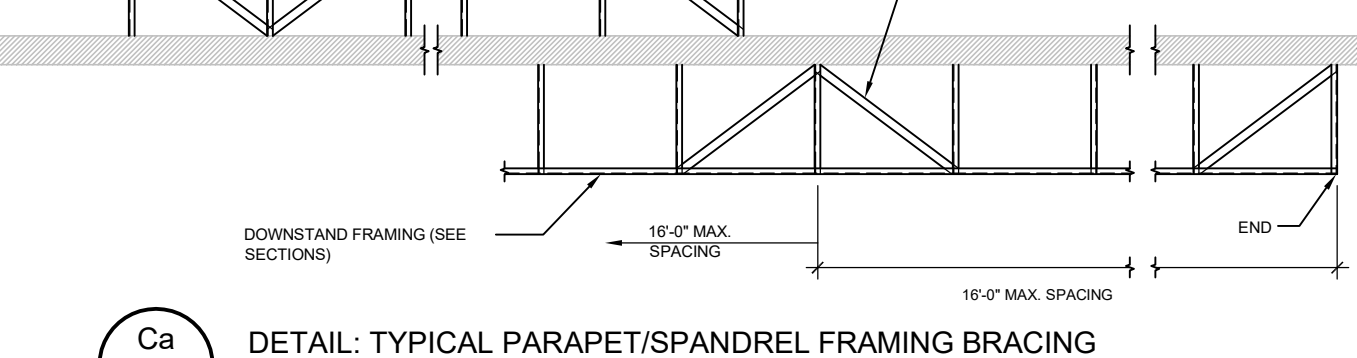
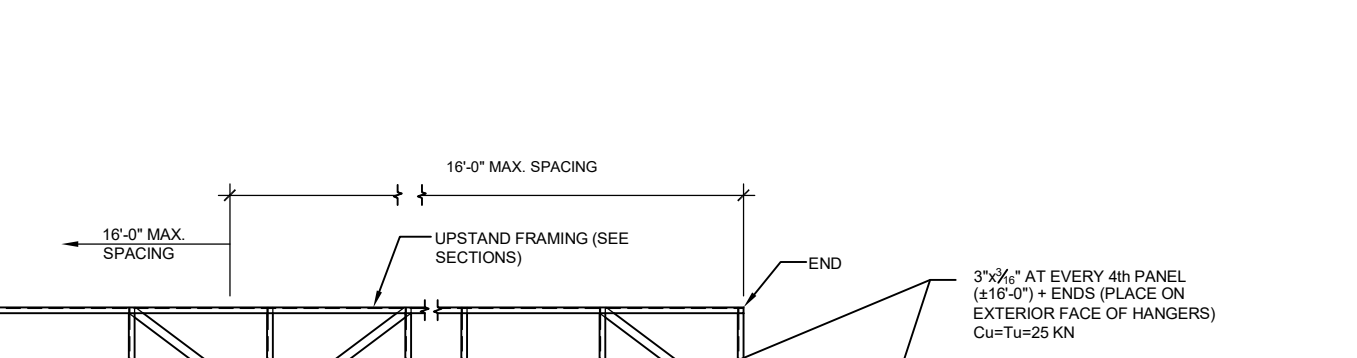
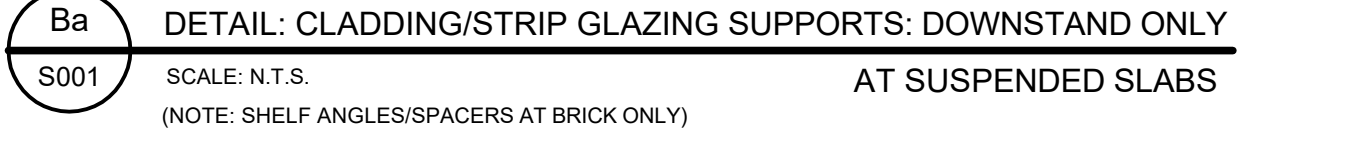
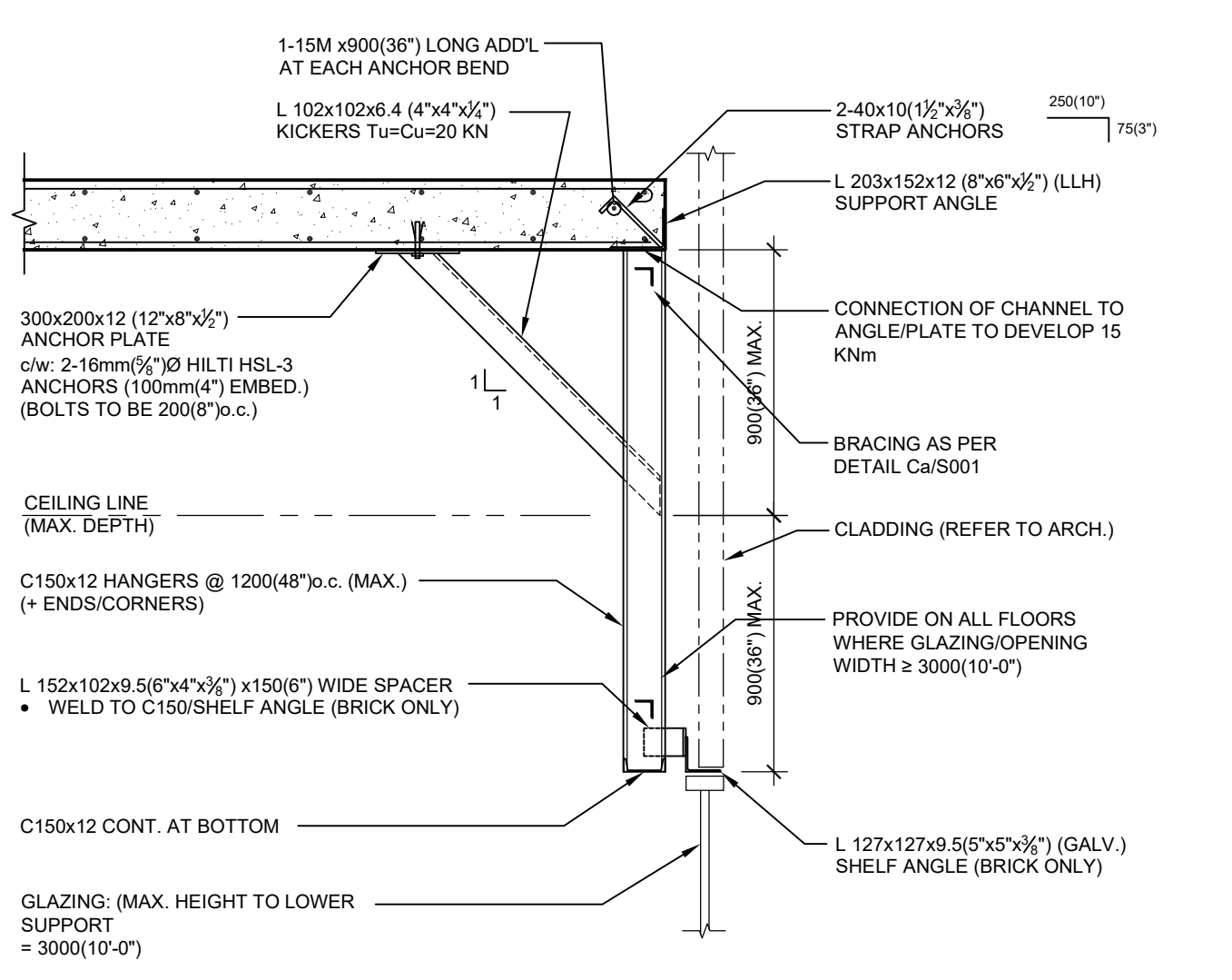
D03-19 SLEEVES THROUGH BEAMS



D03-20 TYPICAL DETAILS:

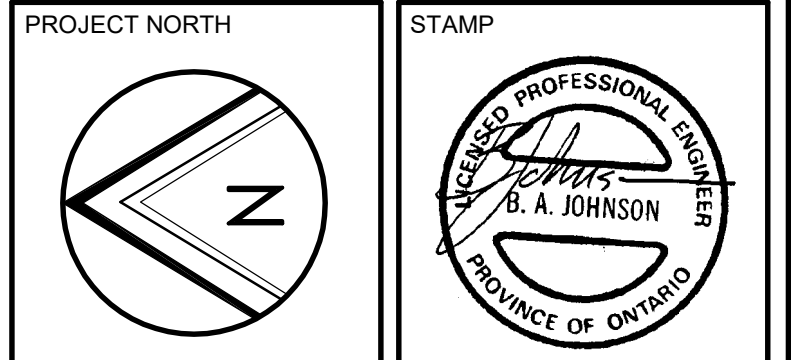


D03-22 SLAB EDGE DETAILS: GLAZING/BRICK



The Contractor shall check and verify all dimensions on site. This drawing is not to be used for construction unless stamped and signed by the Engineer. Do not scale drawings. Copyright reserved. This drawing is the exclusive property of Cleland Jardine Engineering Ltd.

No.	DATE	REVISIONS	BY
11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	SH
9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY DRAWING	SH



FOUNDED ON BYWINDMILL GUIDED BY WISDOM

PROJECT
TOMLINSON
NEW BUILDING

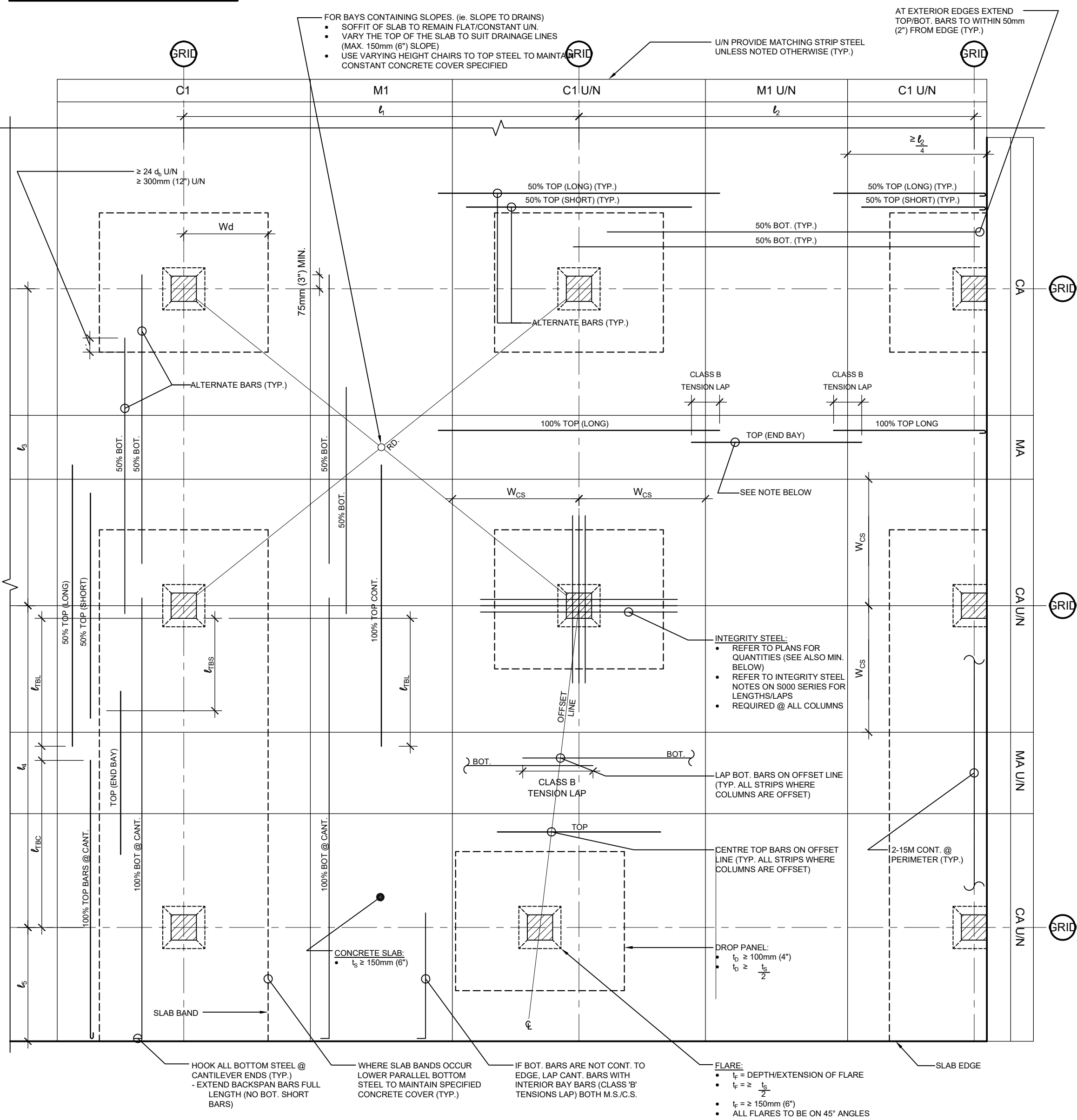
DRAWING
GENERAL NOTES AND
DETAILS

DRAWN	S.H.	DRAWING No.
DESIGNED:	B.J./S.M./A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	N.T.S.	
PROJECT No:	15-0179	

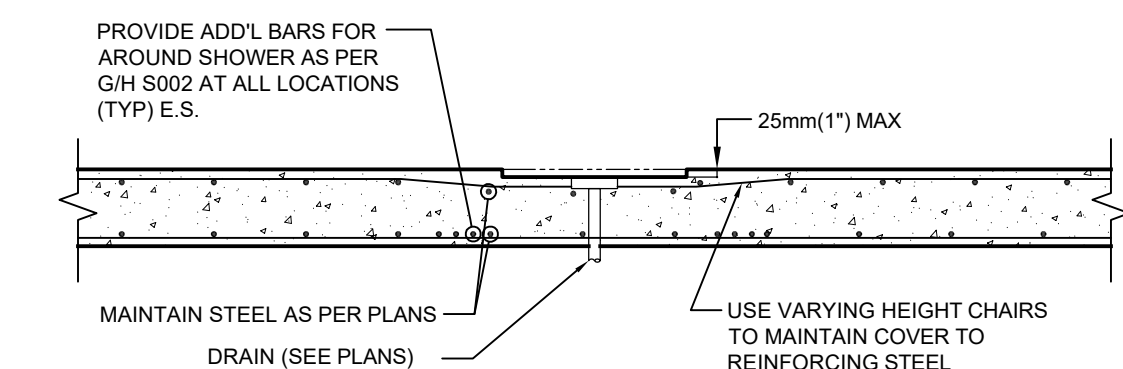
S001

GENERAL NOTES AND DETAILS

D03-23: CONCRETE SLAB/REBAR NOTES



A TYPICAL COLUMN STRIP/MIDDLE STRIP LAYOUT
S002 SCALE: N.T.S.



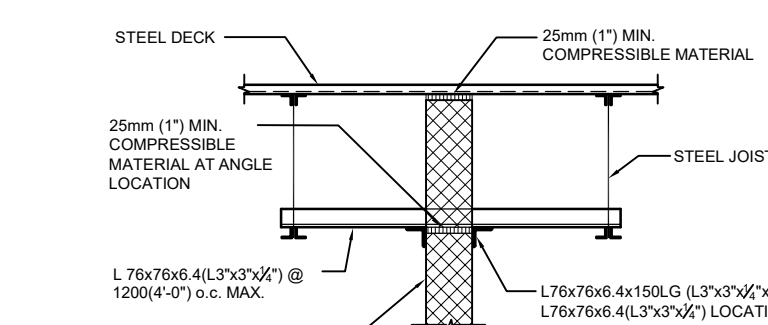
B DETAIL: RECESS IN BATHROOM AREAS
S002 SCALE: N.T.S.

D04) MASONRY

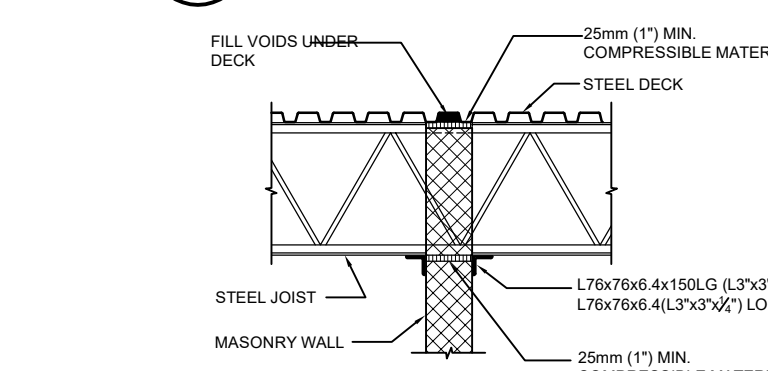
D04-1 GENERAL:

- ALL MASONRY WORK SHALL COMPLY WITH CANCS-8304.1-10, CANCS-A370-M84 AND A371-M84, UNLESS OTHERWISE SPECIFIED.
2. MINIMUM MASONRY REINFORCEMENT (UNLESS OTHERWISE SPECIFIED)
- | WALL THICKNESS | LOAD BEARING | NON-LOAD BEARING |
|----------------|---|---------------------------------------|
| 140mm (14") | HDMR @ 400mm (16")
(HDMR @ 400mm (16") - 1.5M @ 800mm) | HDMR @ 400mm (16")
(1200mm) |
| 190mm (19") | HDMR @ 400mm (16") & 400mm (16") (ALTERNATE) 1.00M @ 1200mm | HDMR @ 400mm (16")
(1200mm) |
| 240mm (19") | HDMR @ 400mm (16") 200%VERT. 1.00M @ 600mm(24") | HDMR @ 400mm (16") 1.00M @ 600mm(24") |
| 290mm (12") | HDMR @ 400mm (16") 200%VERT. 1.00M @ 600mm(24") | HDMR @ 400mm (16") 2.00M @ 800mm(32") |
3. VERTICAL BOND CORERS SHALL BE CONTINUOUS, LAPPED ONLY AT A FLOOR, DOWELED INTO CLIPS AND GROUDED INTO CLEAR VERTICAL BOND CORERS TO BE LAPPED WITH HORIZONTAL BOND CORERS. REINFORCEMENT SHALL BE PLACED AT BOTTOM OF EACH ISOLATED CORNER. CORERS SHALL BE PLACED AT EACH CORNER AND INTERSECTION (N/A). CORERS SHALL BE INSPECTED. PROVIDE THREE GROUDED REINFORCED CORERS AT EACH CORNER AND INTERSECTION (N/A).
4. PROVIDE 1.00M IN 2 COURSE DEEP FULLY GROUTED HORIZONTAL BOND BEAM AT THE TOP OF ALL LOAD BEARING WALLS AND PROVIDE APPROVED LATERAL SUPPORT TO TOP AND BOTTOM OF MASONRY WALLS AT GROUDED CORNER LOCATIONS ON AT TOP AND BOTTOM OF MASONRY WALLS AND VERTICAL REINFORCEMENT IS REQUIRED. ALSO AT EACH OF MASONRY PANEL JOINTS.
5. COMPRESSIVE STRENGTH OF MATERIALS USED FOR LOAD BEARING AND PANEL WALLS SHALL BE IN EXCESS OF THE FOLLOWING VALUES -
- | | |
|--------------------------------------|-------------------|
| 1. SOLID CONCRETE BLOCK | 15 MPa (2200 psi) |
| 2. SOLID CONCRETE BLOCK (GROSS AREA) | 15 MPa (2200 psi) |
7. TYPE 'S' MORTAR SHALL BE USED FOR ALL MASONRY JOINTS. JOINT STRENGTH N/A = 12.4 MPa (1800 psi) TYPE 'N' MORTAR SHALL BE USED ABOVE GRADE. MIN. STRENGTH N/A = 5.2 MPa (750 psi).
8. GROUT TO BE A MINIMUM OF 0.10M MIN. GROUT (2" MIN. GROUT @ 200mm (8")
9. MORTAR FOR EXPOSED MASONRY SHALL BE AIR ENRICHED.
10. ALL MASONRY JOINTS SHALL BE FULLY GROUTED. STRUCTURAL DRAWINGS SHOW ON THE EQUIPMENT OR STRUCTURAL DRAWINGS INCLUDING THOSE FOR MECHANICAL OR ELECTRICAL SERVICES OF THE EQUIPMENT. (SEE LISTS, SPECIFIED)
11. INTERSECTING OR ADJUTING WALLS SHALL BE BONDED Adequately TOGETHER.
12. PROVIDE MINIMUM 200mm (8") GROUT UNDER ALL WALLS AND BASE PLATES.

D04-2 NON-LOADBEARING MASONRY WALL @ STEEL JOIST:

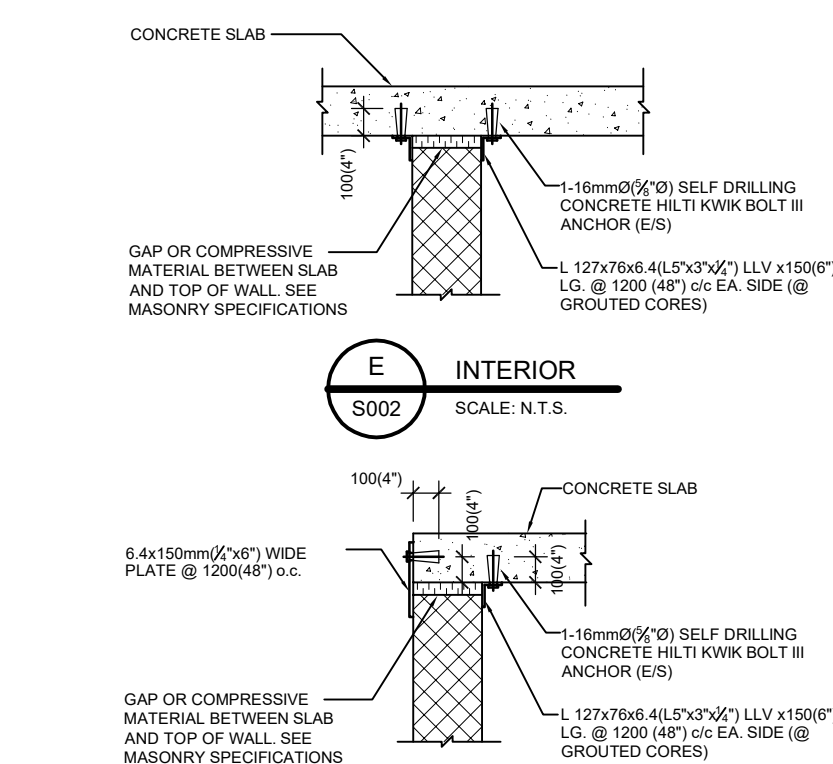


C WALL PARALLEL TO JOIST/BEAM
S002 SCALE: N.T.S.



D WALL PERPENDICULAR TO JOIST/BEAM
S002 SCALE: N.T.S.

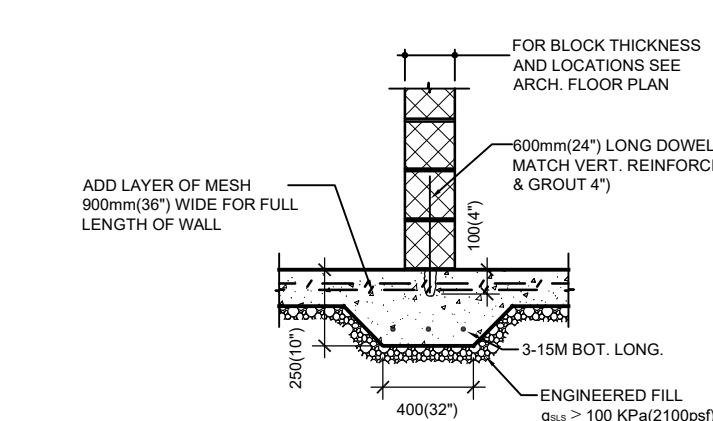
D04-3 NON-LOADBEARING MASONRY WALL @ CONCRETE SLAB:



F
S002

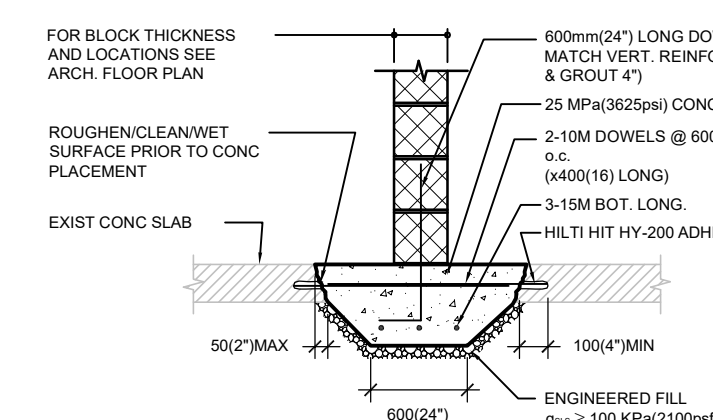
EXTERIOR
SCALE: N.T.S.

D04-5 NON-LOADBEARING MASONRY WALL @ SLAB-ON-GRADE: $H \leq 5m(16'-0")$



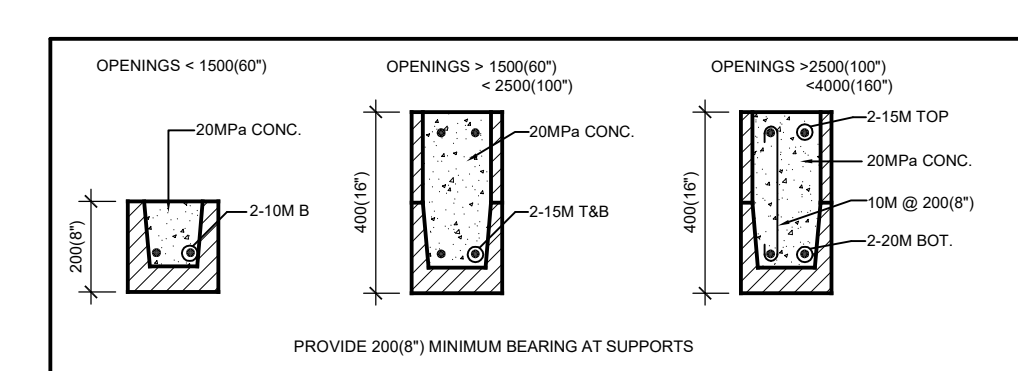
G
S002

NEW WALL/SLAB
SCALE: N.T.S.



H NEW WALL/EXISTING SLAB
S002 SCALE: N.T.S.

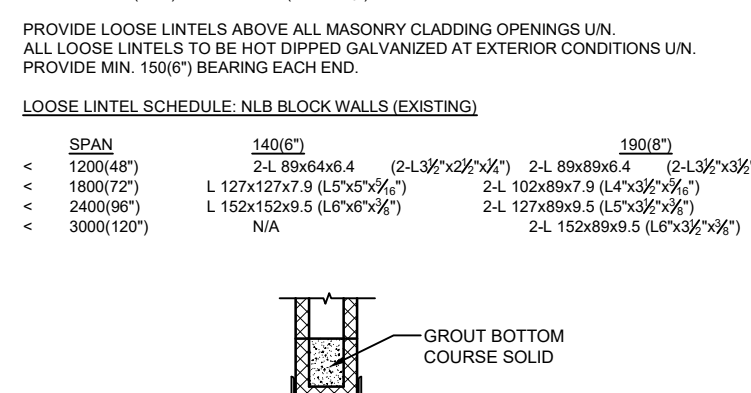
D04-6 MASONRY LINTELS FOR NON-LOADBEARING WALLS:



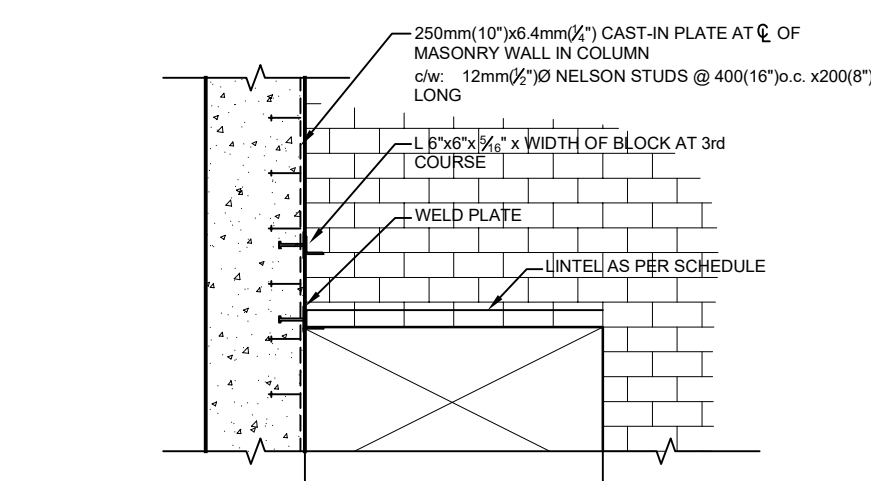
D04-7 LOOSE LINTEL SCHEDULE - 90mm(3½") BRICK MASONRY:

LOOSE INTEL SCHEDULE

SPANS < 1200(48") L 90x90x8.4 (L3/8"x3/8"x1/2")
 SPANS < 1800(72") L 102x90x7.9 (L4"x3/8"x1/2")
 SPANS < 2400(96") L 127x90x7.9 (L5"x3/8"x1/2")
 SPANS < 3000(120") L 152x102x10 (L6"x1/2"x1/2")

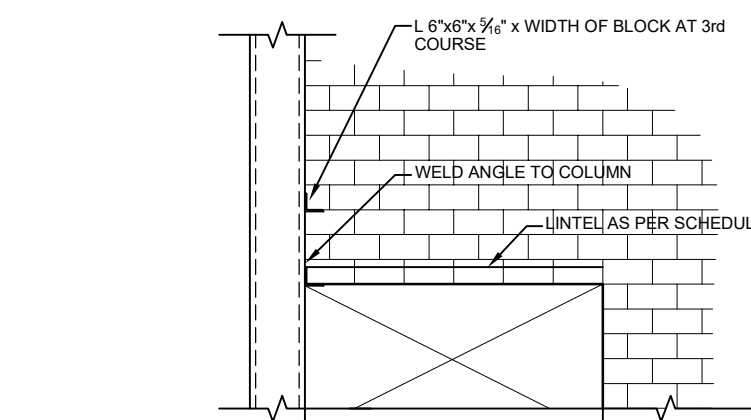


D04.7 MASONRY SUPPORT AT COLUMNS

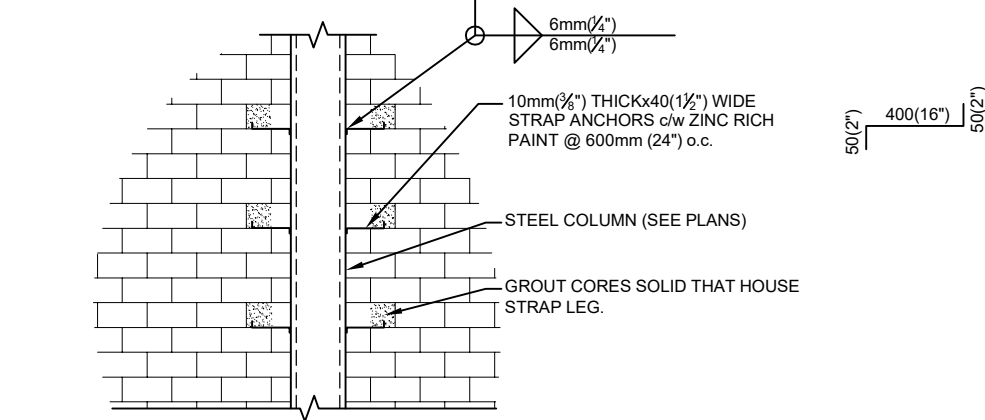


1
S002

DETAIL: MASONRY SUPPORT AT CONCRETE COLUMN/WALL
SCALE: N.T.S.

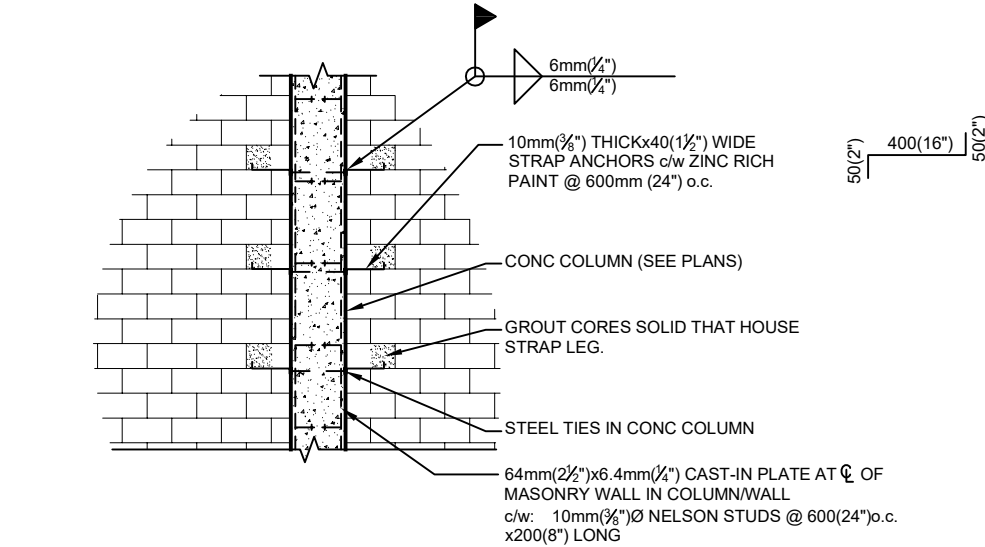


J DETAIL: MASONRY SUPPORT AT STEEL COLUMN
S002 SCALE: N.T.S.

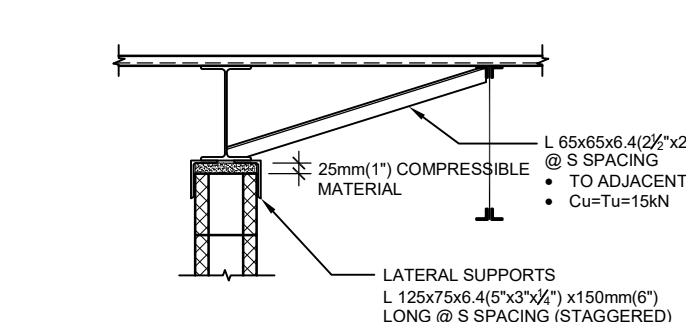


K
S002

DETAIL: MASONRY TIES AT STEEL COLUMN
SCALE: N.T.S.



L DETAIL: MASONRY TIES AT CONC COLUMN/WALL
S002 SCALE: N.T.S.



M
S002

DETAIL: BLOCK AT U/S OF BEAM
SCALE: N.T.S.

The Contractor shall check and verify all dimensions on site.
This drawing is not to be used for construction unless
stamped and signed by the Engineer.
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11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/FOUNDATION CONSTRUCTION	SH
9	JULY 7/16	ISSUED FOR EXCAVATION/FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED AT-RISK	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH
No. DATE	REVISIONS		BY

PROJECT NORTH 	STAMP 
--	--



**CLELAND
JARDINE**
ENGINEERING LTD

200-660 TERRY FOX DR.
KANATA, ON K2L 4B9
(613) 591-1533

TOMLINSON tomlinsongroup.com
FOUNDED ON STRENGTH GUIDED BY VISION

PROJECT	TOMLINSON NEW BUILDING
---------	---------------------------

DRAWING	
GENERAL NOTES AND DETAILS	
DRAWN: S.H.	S002
DESIGNED: B.J./S.M./B.A.	
APPROVED: B.J.	
DATE: OCT. 2015	
SCALE: N.T.S.	
PROJECT No: 15-0179	

D05) STEEL

D05-1 STRUCTURAL STEEL

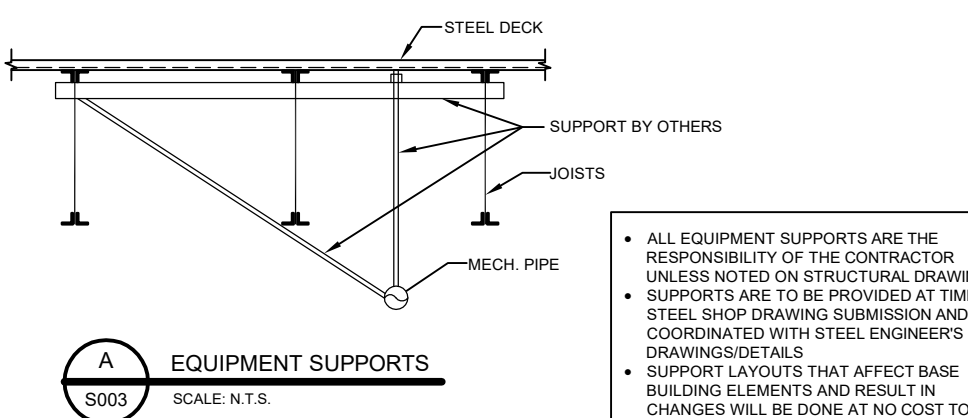
STRUCTURAL STEEL SHALL COMPLY WITH CAN/S16-1(010) (UNLESS OTHERWISE NOTED)

ITEM	APPLICABLE SPECIFICATION (UNLESS OTHERWISE NOTED)
ROLLED SECTIONS	G40.21M - 350W
HSS TUBES/SECTIONS CONNECTION	G40.21M (CLASS 0)
ROSTERS	A325 (BENDING TYPE)
ANCHOR BOLTS	A307 (UNLESS OTHERWISE NOTED IN BASE PLATE SCHEDULE)
BRACE FRAMING BEARING PLATES	G40.21M-300W

1. ALL STEEL WORK SHALL BE GIVEN ONE COAT OF APPROVED PRIMER.
2. FIELD AND SHOP CONNECTIONS SHALL BE WELDED OR HIGH TENSILE BOLTED (ASTM STANDARD A305).
3. WELDING SHALL CONFORM TO LATEST CSA SPECIFICATION W59 AND BE UNDERTAKEN BY A FABRICATOR APPROVED BY THE CANADIAN WELDING BUREAU TO THE REQUIREMENTS OF CSA SPECIFICATION W47.1.
4. ALL EXPOSED WELDS SHALL BE CONTINUOUS AND BE GRIND SMOOTH.
5. ALL EXTERIOR EXPOSED STRUCTURAL STEEL SHALL BE GALVANIZED OR PAINTED WITH APPROVED RUST INHIBITIVE PAINT.
6. STRUCTURAL STEEL MEMBERS SHALL NOT BE SPICED UNLESS APPROVED BY THE STRUCTURAL ENGINEER IN WRITING.
7. WHERE STRUCTURAL STEEL MEMBERS SPECIFIED ON THE STRUCTURAL DRAWINGS ARE UNAVAILABLE TO THE CONTRACTOR, THE STRUCTURAL STEEL CONTRACTOR SHALL PROVIDE MEMBERS HAVING ALL SECTION PROPERTIES EQUAL TO OR BETTER THAN THAT OF THE SPECIFIED MEMBERS AT NO ADDITIONAL COST. CONTACT ENGINEER FOR ACCEPTANCE OF ANY AND ALL SUBSTITUTIONS.

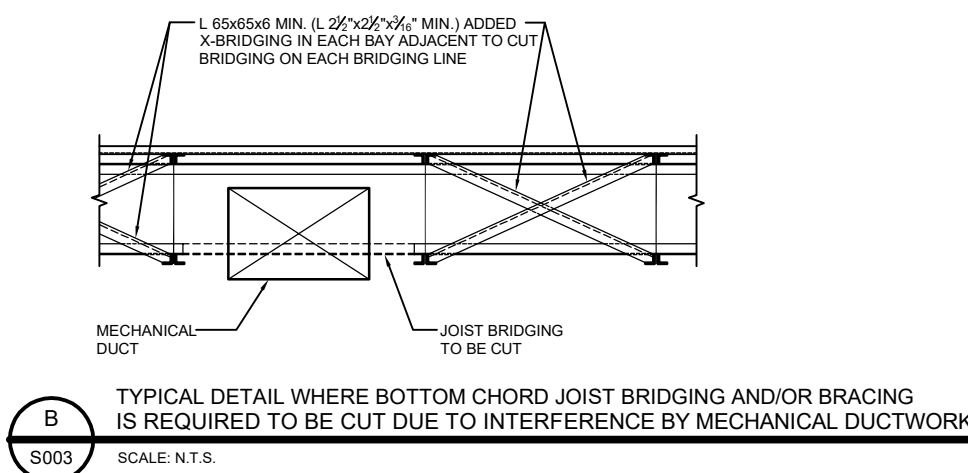
D05-2 STEEL DECK

1. ALL METAL DECK SHALL BE A MINIMUM OF 38mm (1 1/2") DEEP, WITH DECK FLUTES AT 150mm (6") CENTRES, CONTINUOUS OVER AT LEAST THREE SPANS AND SHALL BE FORMED FROM SHEET STEEL CONFORMING TO CSB31 (MAY VARY), MINIMUM GRADE 'A', WITH A BASE STEEL NOMINAL THICKNESS SPECIFIED ON PLANS, AND A MINIMUM ZINC COATING DESIGNATION OF 'W500 COAT'.
2. DECK CONNECTIONS TO SUPPORTING STRUCTURE TO BE AS FOLLOWS (UN ON PLANS):
 - FLOORS: 38x122 (1 1/2" x 4 7/8")
 - FLOORS: 38x122 (1 1/2" x 4 7/8")
 - FLOORS: 38x122 (1 1/2" x 4 7/8")
3. ALL WELDS SHALL BE PRIME PAINTED BY DECK CONTRACTOR.
4. STEEL DECK CONTRACTOR TO REINFORCE ALL OPENINGS IN DECK IF N SIZE OR SMALLER.
5. ALL DECK CLOSURES SHALL BE SUPPLIED AND INSTALLED BY THE DECK CONTRACTOR. PROVIDE DECK CLOSURES AT ALL AREAS WHERE DECK EDGES ARE WALK.
6. WEDGE THE FLUTES OF THE STEEL ROOF DECK UNDER WOOD SLEEPERS CARRYING ROOF TOP UNITS (THIS SHALL ALSO APPLY TO ROOF TOP UNITS WITH METAL CURBS).
7. NO MECHANICAL OR ELECTRICAL EQUIPMENT ACCESSORIES SHALL BE HUNG FROM THE STEEL DECK.
8. HANGERS FOR SUSPENSION OF CEILING ARE TO BE ATTACHED TO THE STEEL JOISTS. THESE MAY HOWEVER BE ATTACHED IN BETWEEN STEEL JOISTS TO THE SIDE OF THE DECK FLUTES AND BY LOOPING AND TYING AROUND, BUT ON NO ACCOUNT SHOULD THESE HANGERS BE PUNCHED THROUGH THE BOTTOM FLUTES.

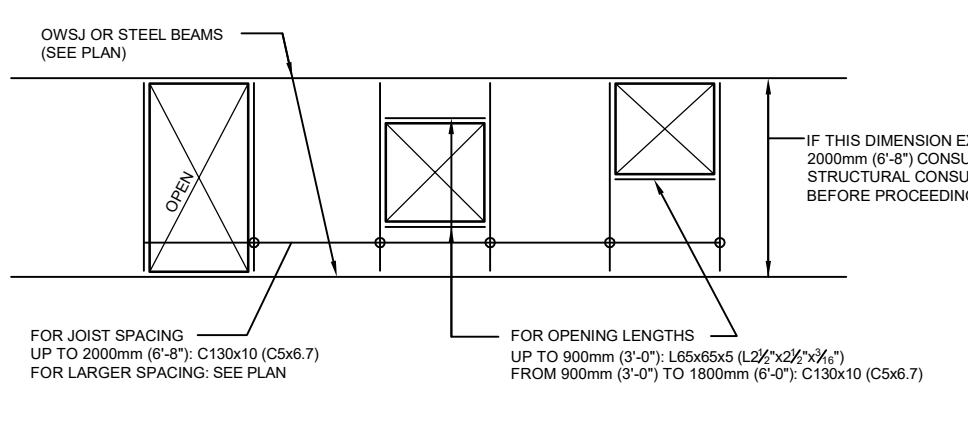


D05-3 STEEL JOISTS AND BRIDGING, S16.1 AND S136

1. ALL JOISTS ARE TO BE EQUALLY SPACED BETWEEN THE JOIST BRIMS.
2. ALL JOISTS ARE TO BE DIMENSIONED FOR FULL DEAD LOAD DEFLECTION, LIMIT LIVE LOAD DEFLECTION TO NOT MORE THAN 1/260 FOR ROOF AREAS AND NOT MORE THAN 1/480 FOR FLOOR AREAS. TOTAL LOAD DEFLECTION FOR FLOOR JOISTS NOT TO EXCEED LIVE FLOOR JOISTS TO ALSO MEET VIBRATION CRITERIA OUTLINED IN S136 CLAUSE 4.1.3.6.
3. IN ORDER TO FACILITATE THE PASSAGE OF MECHANICAL DUCTS AND PIPES THROUGH THE ROOF JOISTS, THE JOIST SUPPLIER SHALL LOCATE THE DIAGONALS SO THAT THEY LINE UP FROM JOIST TO JOIST.
4. SPECIFIED POINT LOADS ARE SHOWN ON PLANS.
5. ALL PIPES MUST BE HUNG FROM TOP CHORD OF JOISTS. IF A LOAD (APPROVED BY THE STRUCTURAL ENGINEER) IS HUNG FROM A JOIST AT A LOCATION OTHER THAN THE PANEL POINT, THEN A WEB DIAGONAL SHALL BE DERIVED FROM THE HANGER LOCATION TO THE NEAREST PANEL POINT ON THE OPPOSITE CHORD.
6. LOADING DIAGRAMS:
 - AREAS SHADED ON ROOF PLAN INDICATE EXTENT OF ADDITIONAL SNOW PILING WITH PEAK (SPECIFIED LOADS NOTED). ROOF DECK AND JOISTS SHALL BE DESIGNED, MANUFACTURED AND ERECTED TO SUPPORT BASIC SPECIFIED AS WELL AS ADDITIONAL SNOW LOADING.
7. a) PROVIDE A ROW OF HORIZONTAL BRIDGING AT FIRST BOTTOM CHORD PANEL POINT AT EACH END OF JOIST. PROVIDE ADDITIONAL CROSS BRIDGING AS INDICATED ON PLAN.
 - b) STEEL CONTRACTOR SHALL DESIGN, SUPPLY AND ERECT REMAINDER OF HORIZONTAL JOIST BRIDGING OF SUPPORT SIZE AND SPACING IN ACCORDANCE WITH CAN S16, LATEST EDITION.
8. DESIGN JOISTS FOR ALL LOADING CONDITIONS SPECIFIED IN THE NATIONAL BUILDING CODE IN ADDITION TO THE SNOW LOADS SPECIFIED ON PLANS.
9. PROVIDE ADDITIONAL BRIDGING BETWEEN THE OUTSIDE PERIMETER BEAMS AND THE FIRST ROW OF JOIST RUNNING PARALLEL. ADDITIONAL BRIDGING IS SHOWN AS: --- ON PLAN. MINIMUM SIZE TO BE: 38mm x 4.50 x 100mm (1 1/2" x 3/8" x 4") SPACED @ 1800mm (6') C.C. (MAX) UNLESS OTHERWISE NOTED.

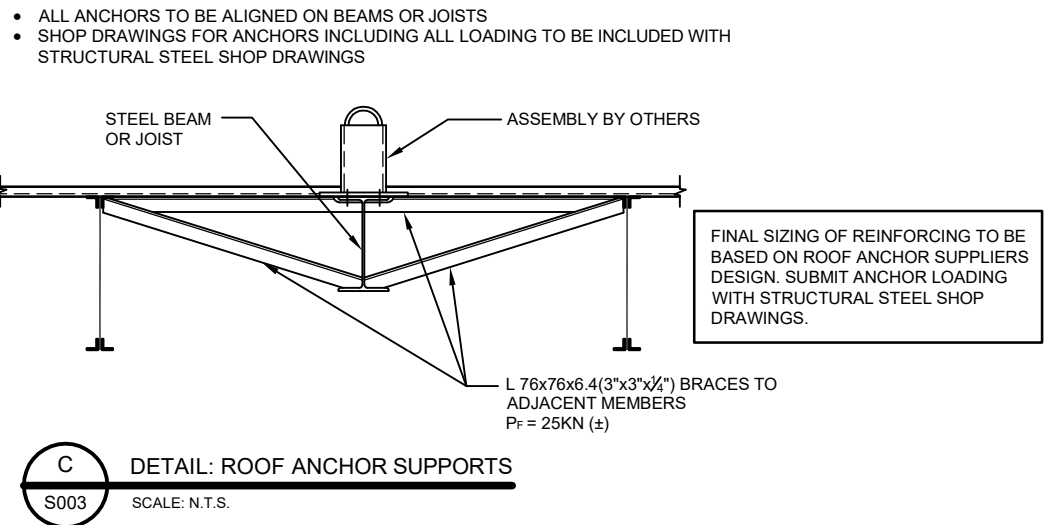


D05-5 TYPICAL DETAILS FOR TRIMMING TO OPENINGS THROUGH STEEL ROOF DECK

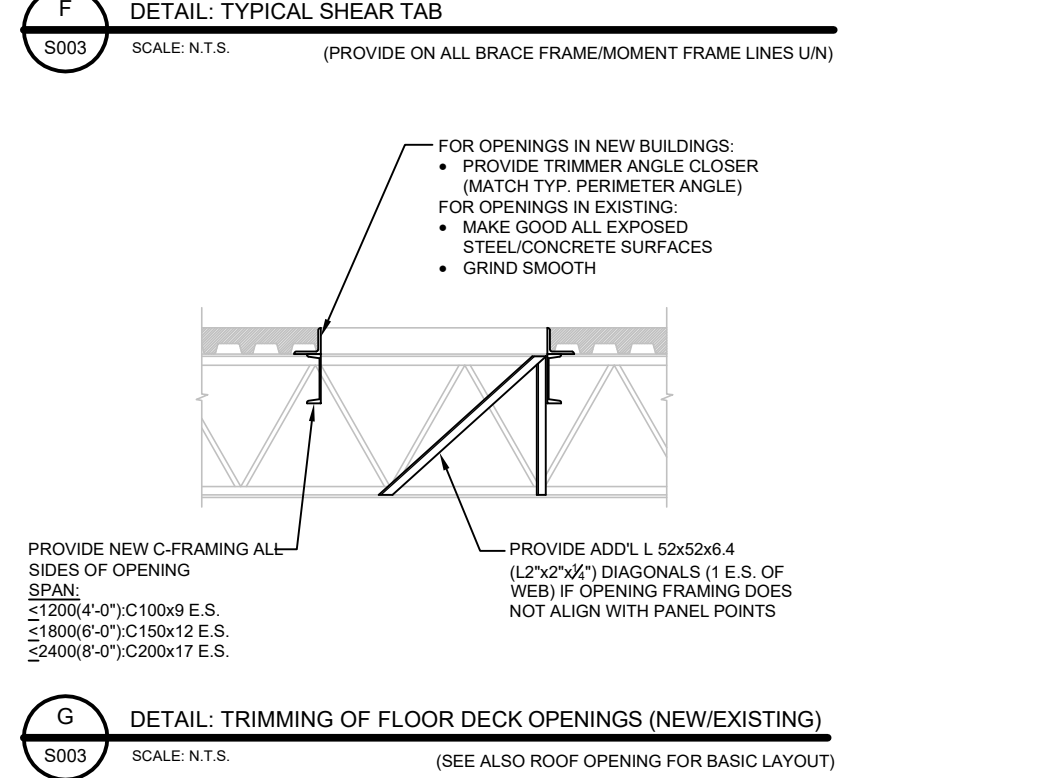
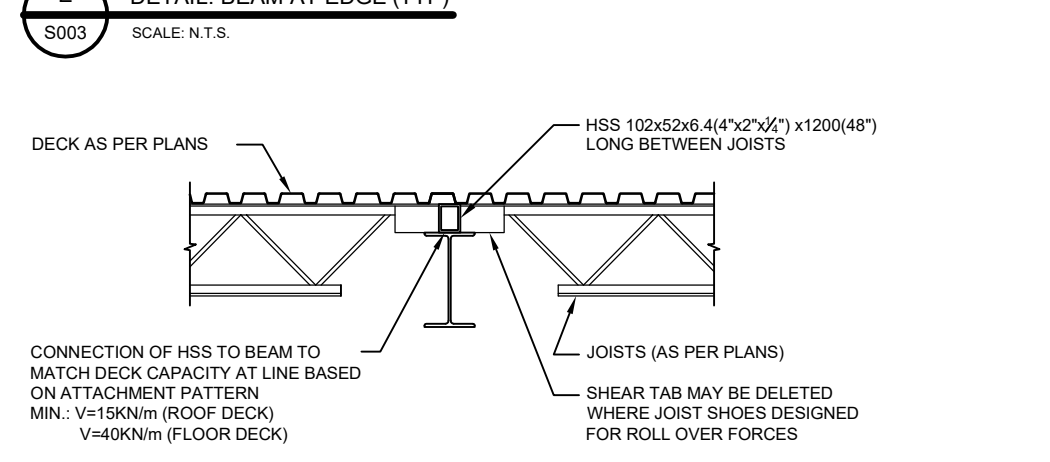
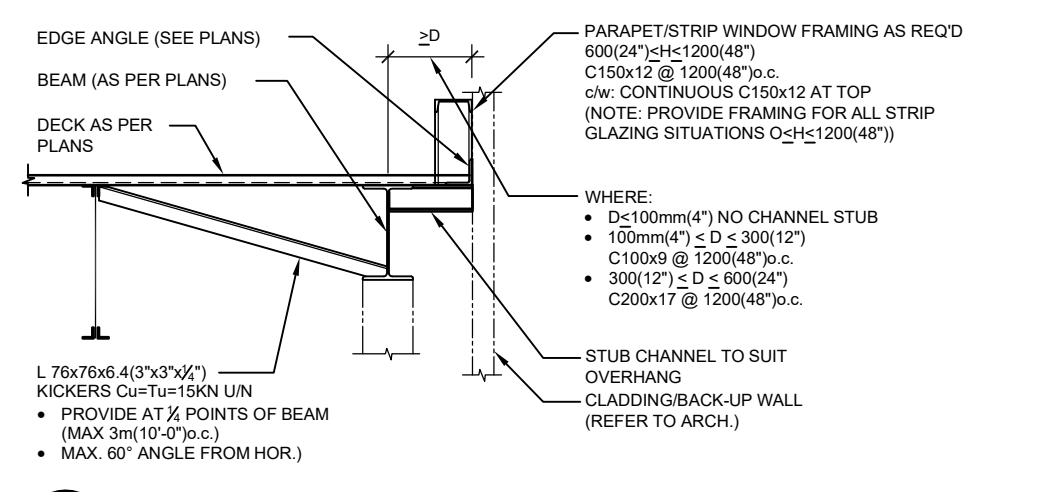
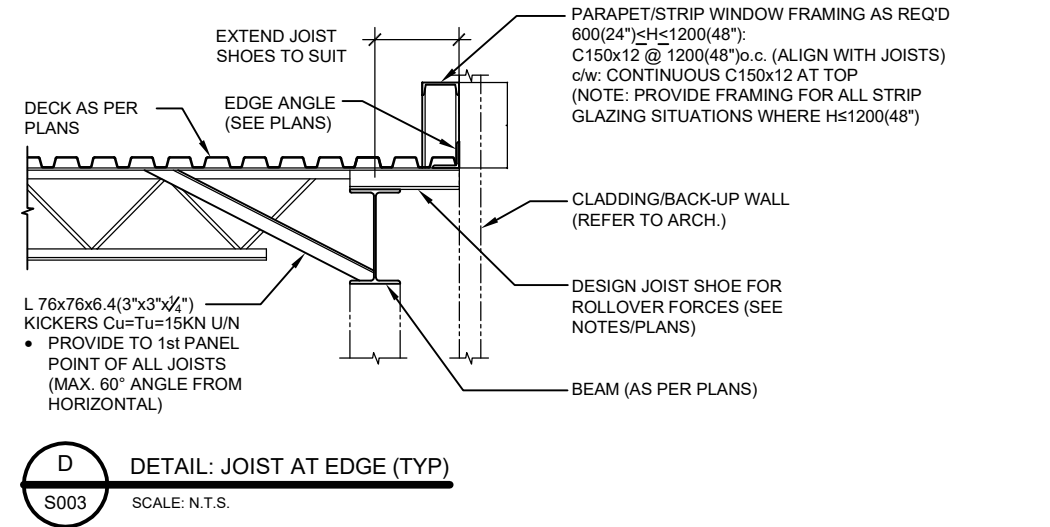


- NOTES:
1. TOP OF ALL TRIMMING STEEL AT UNDERSIDE OF STEEL DECK UNLESS OTHERWISE NOTED.
 2. LOCATION OF ALL MECHANICAL UNITS AND OPENINGS THROUGH ROOF IS BASED ON INFORMATION SHOWN ON MECHANICAL DRAWINGS. THE STRUCTURAL STEEL SUB-CONTRACTOR MUST CONFIRM ALL THESE DIMENSIONS AND SIZES WITH THE MECHANICAL CONTRACTOR.
 3. OWLS MUST BE DESIGNED FOR ADDITIONAL LOADS FROM MECHANICAL UNITS.
 4. IF ACTUAL LOCATION OR DETAILS VARY FROM THOSE SHOWN, THE STRUCTURAL CONSULTANT MUST BE INFORMED AND INSTRUCTIONS RECEIVED BEFORE PROCEEDING WITH THE WORK.
 5. THE STRUCTURAL STEEL SUB-CONTRACTOR IS TO SUBMIT ERECTION DRAWINGS TO THE MECHANICAL ENGINEER AND/OR CONTRACTOR FOR APPROVAL OF SIZE AND LOCATION OF OPENINGS FOR MECHANICAL UNITS.

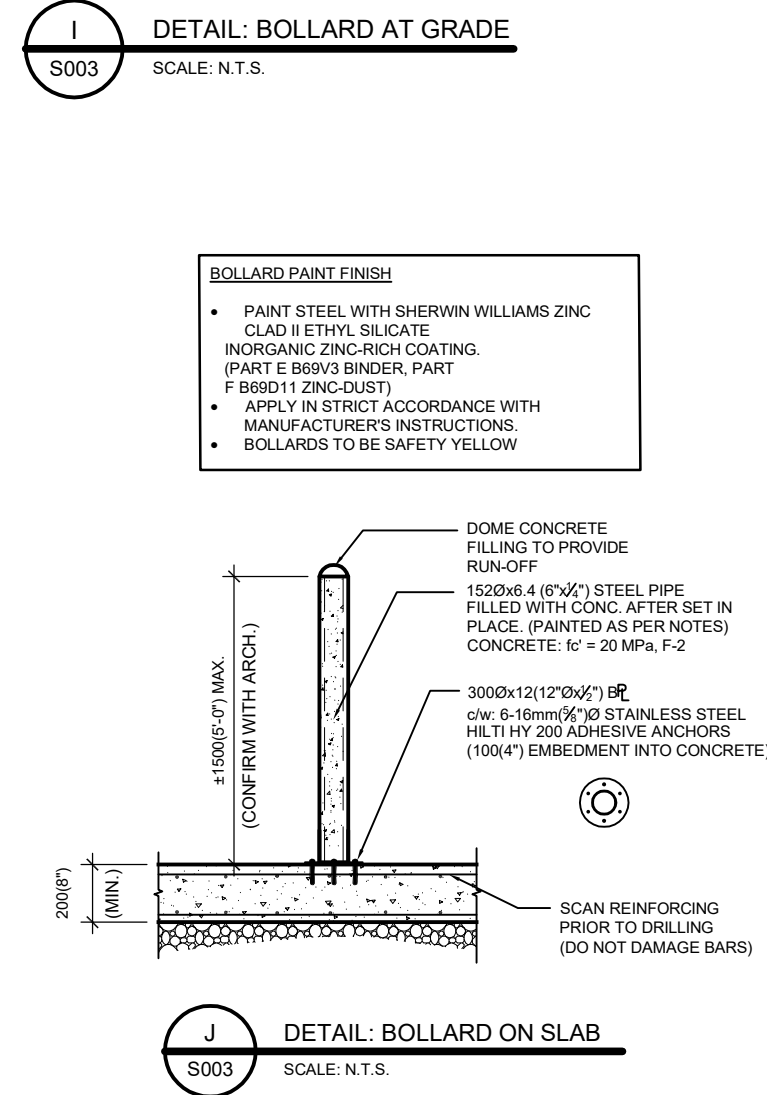
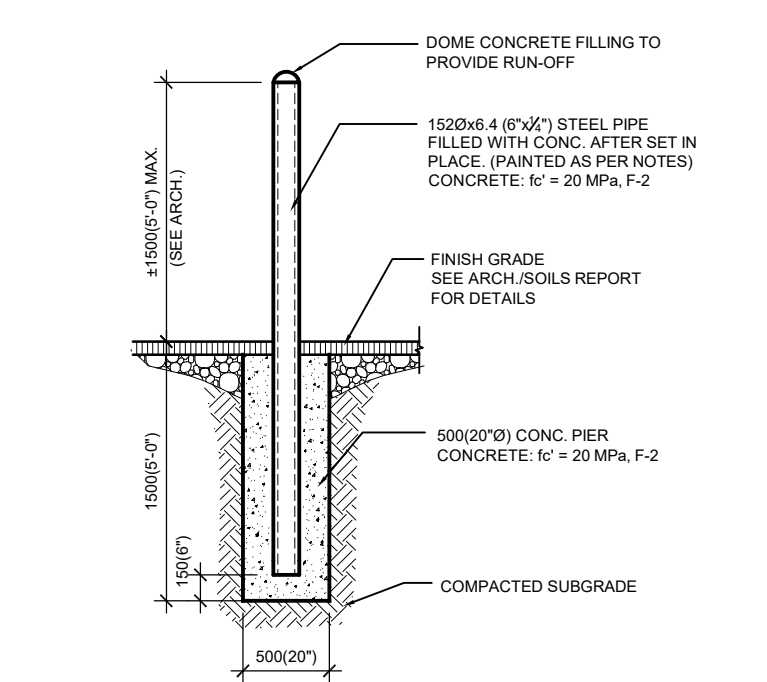
D05-6 TYPICAL ROOF SAFETY ANCHOR



D05-7 TYPICAL JOIST/BEAM/EDGE DETAILS (UN ON PLANS/SECTIONS)



D06) TYPICAL BOLLARD DETAILS:

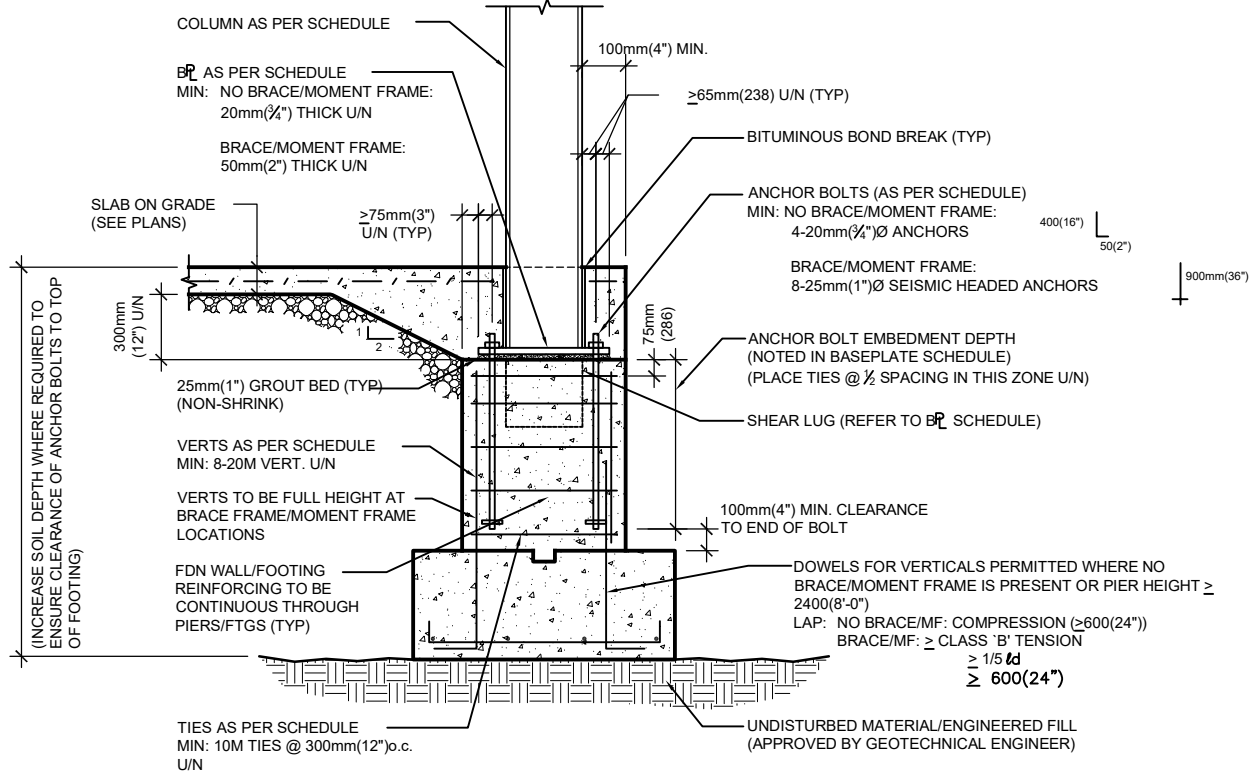


DRAWING LIST:

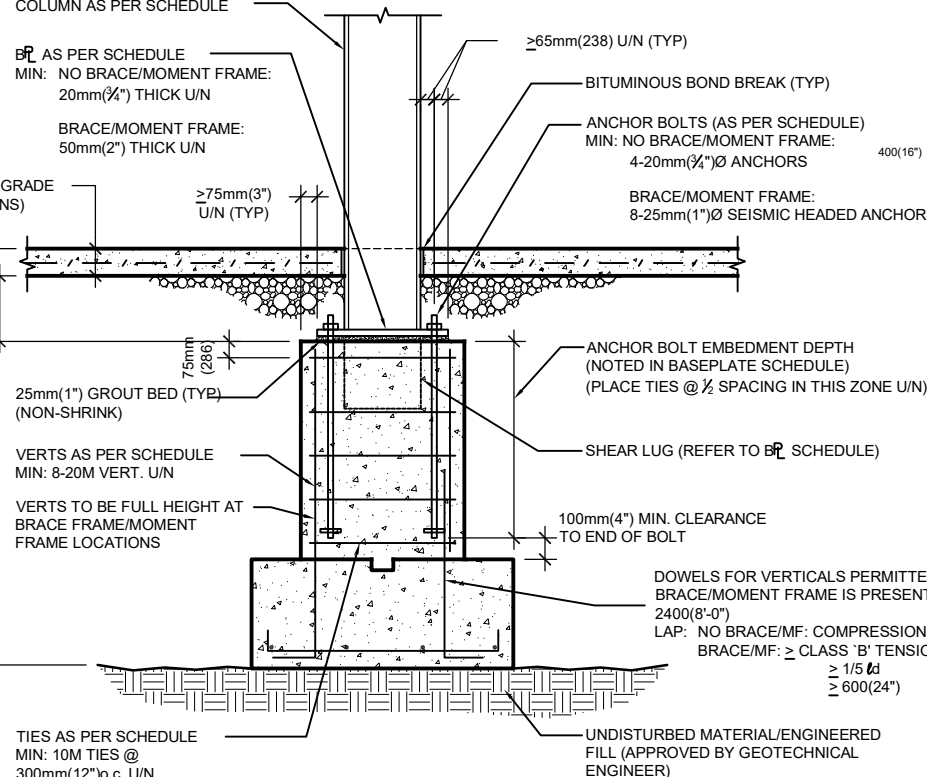
S000	GENERAL NOTES AND DETAILS
S001	GENERAL NOTES AND DETAILS
S002	GENERAL NOTES AND DETAILS
S003	GENERAL NOTES AND DETAILS
S004	GENERAL NOTES AND DETAILS
S005	GENERAL NOTES AND DETAILS
S006	GENERAL NOTES AND DETAILS
S007	GENERAL NOTES AND DETAILS
S008	GENERAL NOTES AND DETAILS
S009	GENERAL NOTES AND DETAILS
S010	FOUNDATION / GRADE FLOOR PLAN
S100	SHEAR WALL / CORE WALL FOOTING REINFORCING PLAN
S101	SECOND FLOOR (REINFORCING PLAN)
S101H1	SECOND FLOOR (REINFORCING PLAN)
S101H2	SECOND FLOOR (REINFORCING PLAN)
S102	THIRD FLOOR PLAN
S102H1	THIRD FLOOR PLAN (TYPICAL REINFORCING UN)
S102H2	THIRD FLOOR PLAN (TYPICAL REINFORCING UN)
S103	FOURTH FLOOR (REINFORCING PLAN)
S103H1	FOURTH FLOOR (REINFORCING PLAN)
S104	ROOF PLAN
S104H1	ROOF (REINFORCING PLAN)
S104H2	ROOF (REINFORCING PLAN)
S105	PENTHOUSE ROOF PLAN
S200	SECTIONS AND DETAILS
S201	SECTIONS AND DETAILS
S300	CORE WALL DETAILS: CW1
S301	CORE WALL DETAILS: CW2
S310	SHEAR WALL DETAILS
S1100	TEST FACILITY: FOUNDATION / GRADE FLOOR PLAN
S1101	TEST FACILITY: ROOF PLAN
S2100	TEST FACILITY: SECTIONS AND DETAILS

TYPICAL DETAILS: FOUNDATIONS

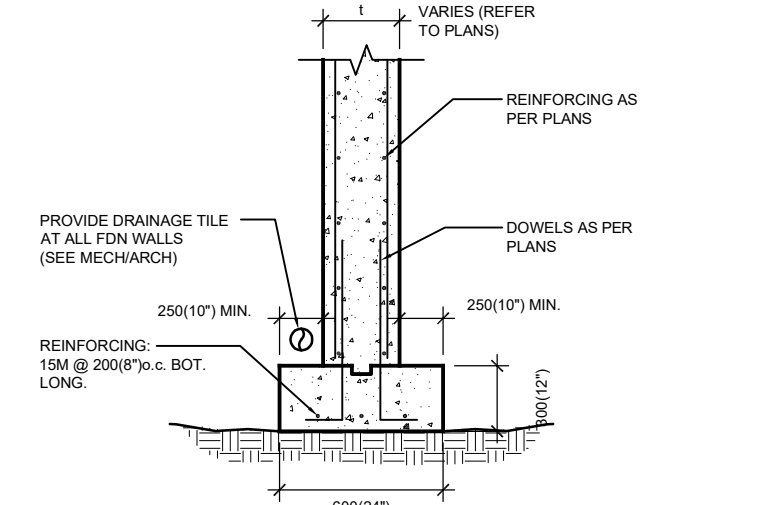
NOTE:
THESE DETAILS ARE TO BE USED WHERE ELEMENTS ARE NOT OTHERWISE ON DRAWINGS



A
3004
SCALE: N.T.S.
DETAIL: TYPICAL STEEL COLUMN BASE PLATE/PIER/FOOTING - EXTERIOR



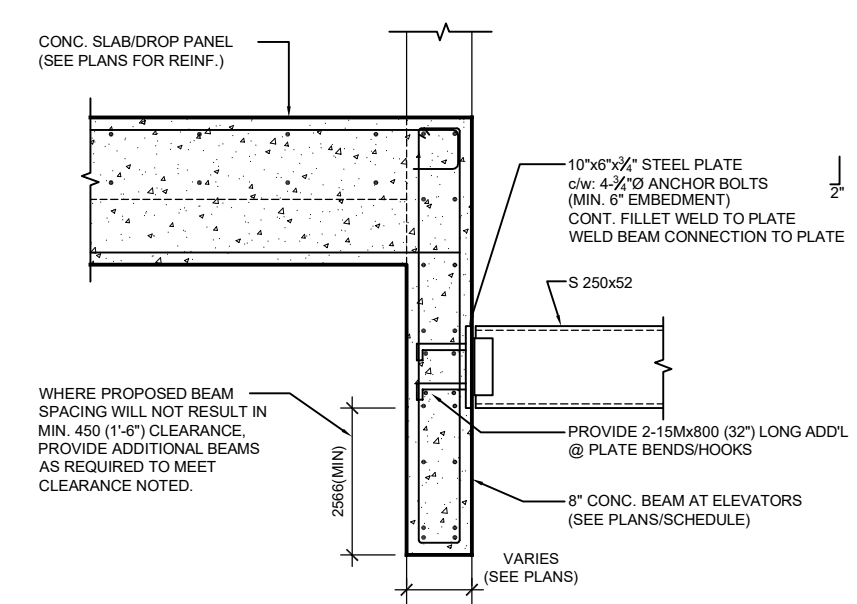
B
3004
SCALE: N.T.S.
DETAIL: TYPICAL STEEL COLUMN BASE PLATE/PIER/FOOTING - INTERIOR



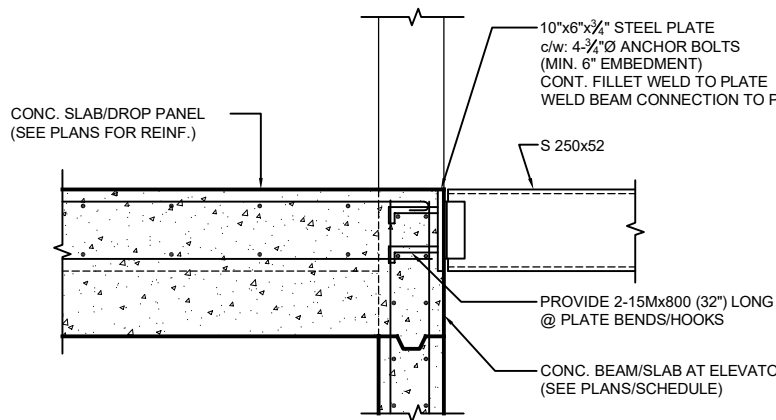
C
3004
SCALE: N.T.S.
DETAIL: TYPICAL FOUNDATION WALL STRIP FOOTING (TYP)

TYPICAL ELEVATOR SHAFT DETAILS

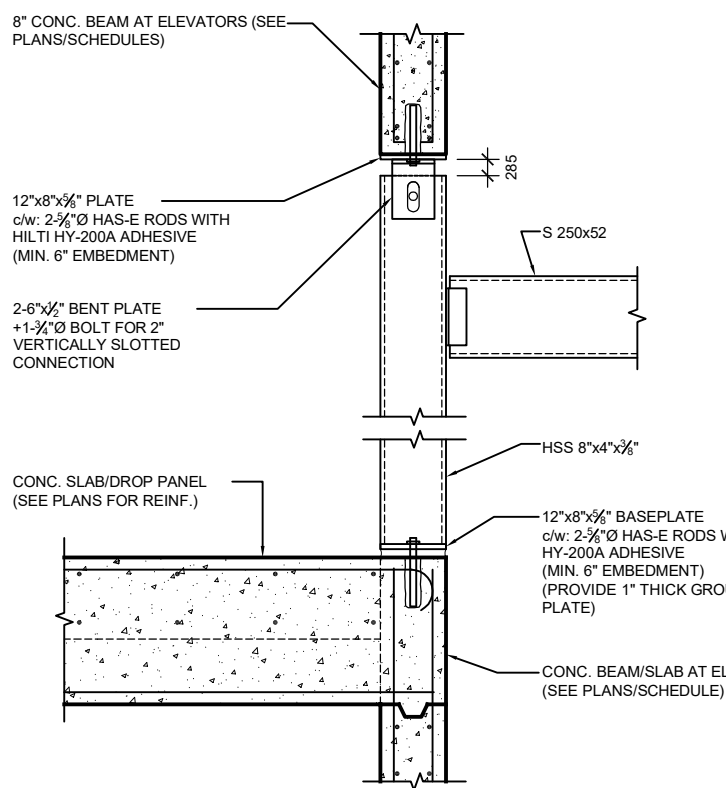
- NOTES ON ELEVATOR SHAFT BEAMS:
- ALL BEAM SIZES TO BE 200x400
 - MAXIMUM SPACING OF DIVIDER BEAMS TO BE 10'0" N.A. REFER TO ELEVATOR SUPPLIER'S REQUIREMENTS. IF INCREASED SPACING TO ELEVATOR SUPPLIER'S REQUIREMENT OF BEAMS RESULTS IN LARGER BEAM MODIFICATIONS TO BE DONE AT NO ADDL. COST TO THE CONTRACT.
 - PROVIDE HSS 8"x4"x1/4" AT LOCATIONS WHERE CONNECTION TO CONCRETE SLAB OR BEAM IS NOT POSSIBLE.
 - ELEVATOR SHAFT DRAWINGS ARE REQUIRED TO BE SUBMITTED WITH STEEL SHOP DRAWINGS TO VERIFY ELEVATOR DATA/EXCAVATION/GEOMETRY/ELEVATIONS. STEEL SHOP DRAWINGS SUBMITTED WITHOUT THIS INFORMATION WILL BE RETURNED UNREVIEWED.
 - WHERE ELEVATOR SUPPLIER REQUIREMENTS RESULT IN MODIFICATIONS TO STEEL FRAMING/CONNECTIONS/PERFORMANCES/CONC. ELEVATIONS NOTED, MODIFICATIONS TO BE DONE AT NO ADDL. COST TO THE CONTRACT.
 - DETAILS/NOTATION PROVIDED FOR BIDDING PURPOSES ONLY. DESIGN/DETAILING/CONFIRMATION OF THE ELEVATOR SUPPORT FRAMING INCLUDING OVERSIGHTS/NOTES/SUPPORTS/ANCHORS/REINFORCEMENTS TO BE BY DIVISION 5. COORDINATE ALL REQUIREMENTS WITH ELEVATOR SUPPLIER.



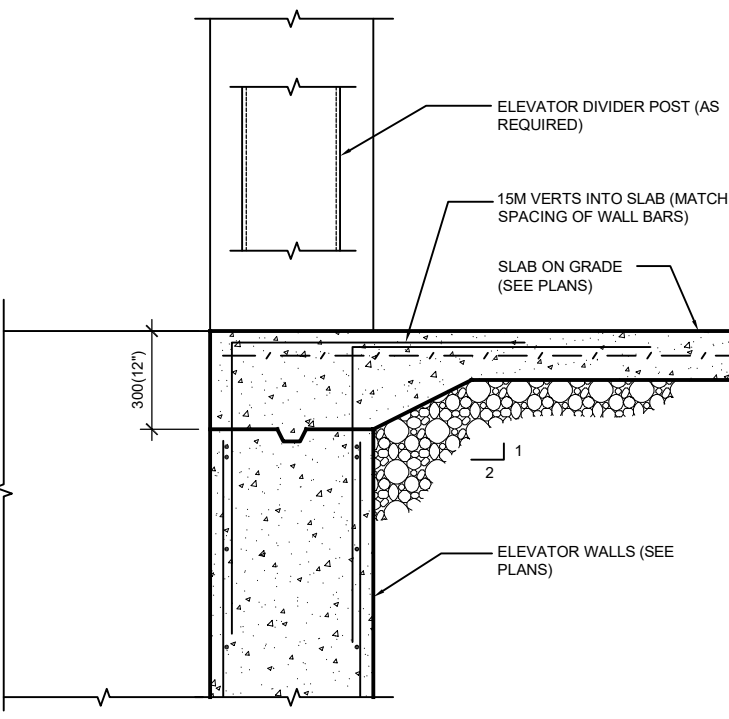
D
3004
SCALE: N.T.S.
DETAIL: ELEVATOR DIVIDER BEAM AT CONC. BEAM/WALL



E
3004
SCALE: N.T.S.
DETAIL: ELEVATOR DIVIDER BEAM AT CONC. SLAB



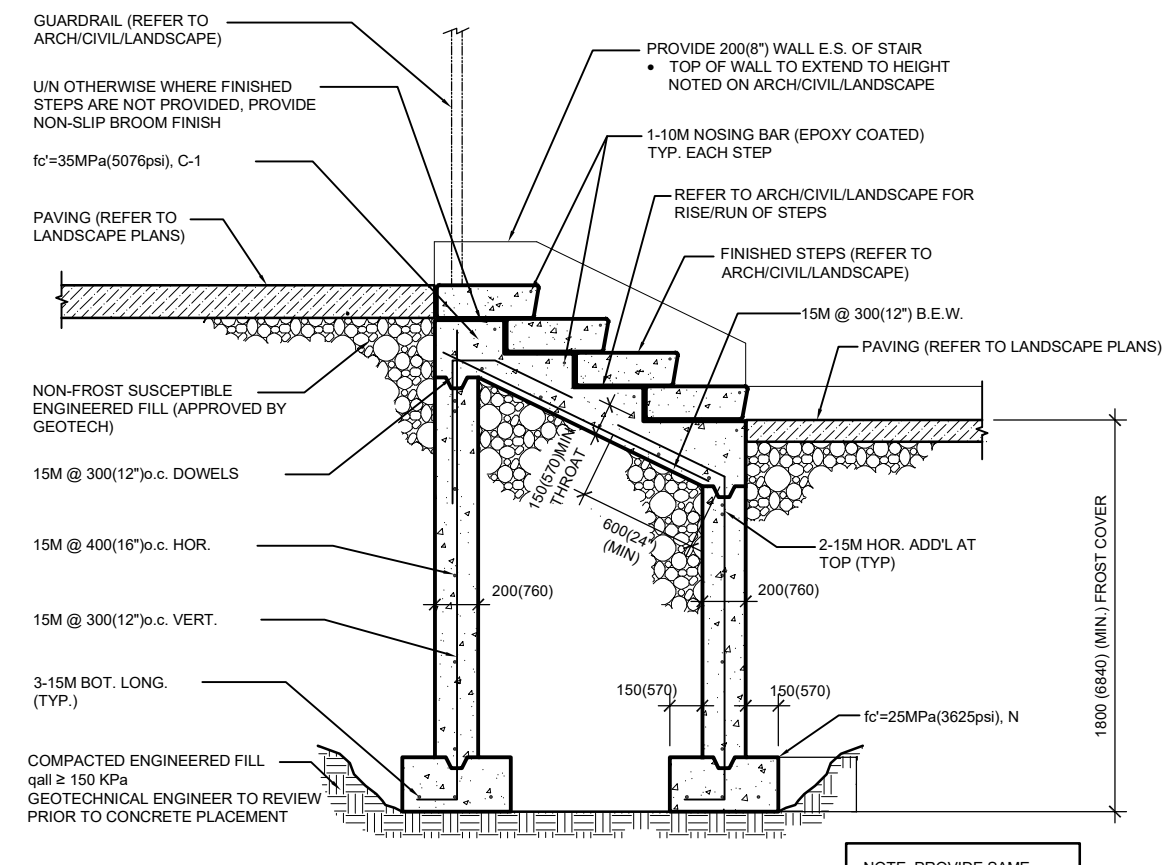
F
3004
SCALE: N.T.S.
DETAIL: ELEVATOR DIVIDER BEAM AT OPENING



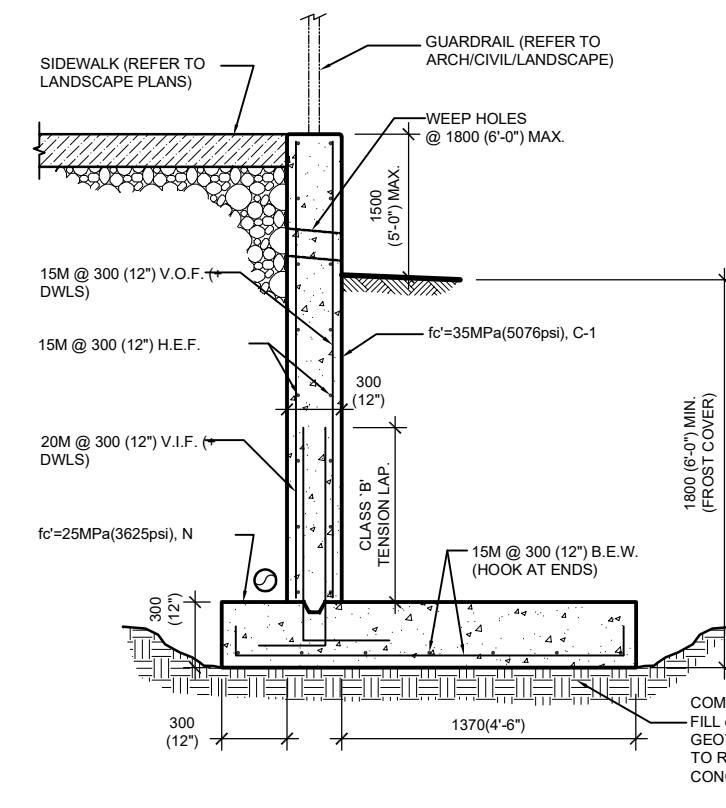
G
3004
SCALE: N.T.S.
DETAIL: SLAB ON GRADE AT ELEVATOR DOOR

TYPICAL EXTERIOR LANDSCAPE ELEMENTS

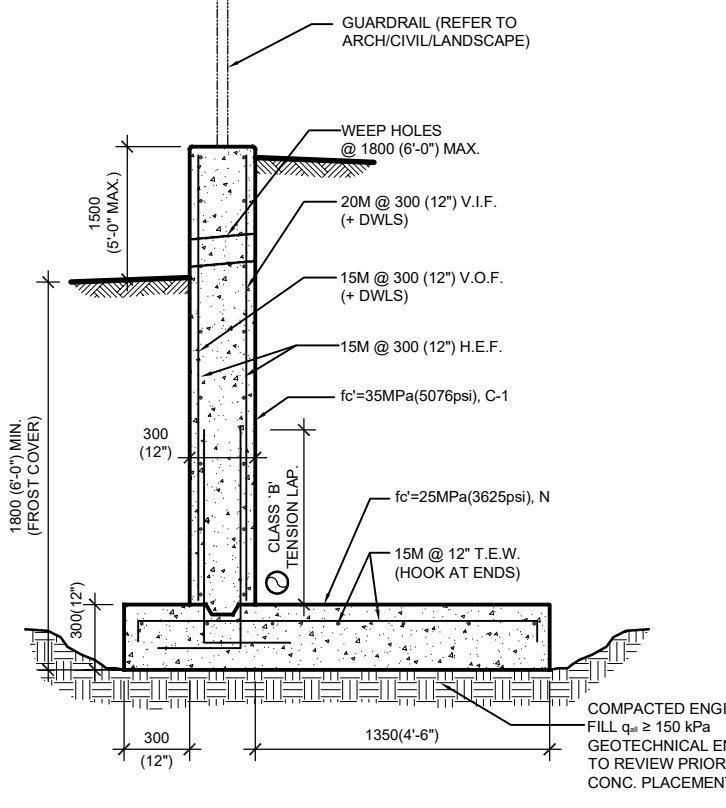
NOTE:
THESE DETAILS ARE TO BE USED WHERE ELEMENTS ARE NOT OTHERWISE ON DRAWINGS



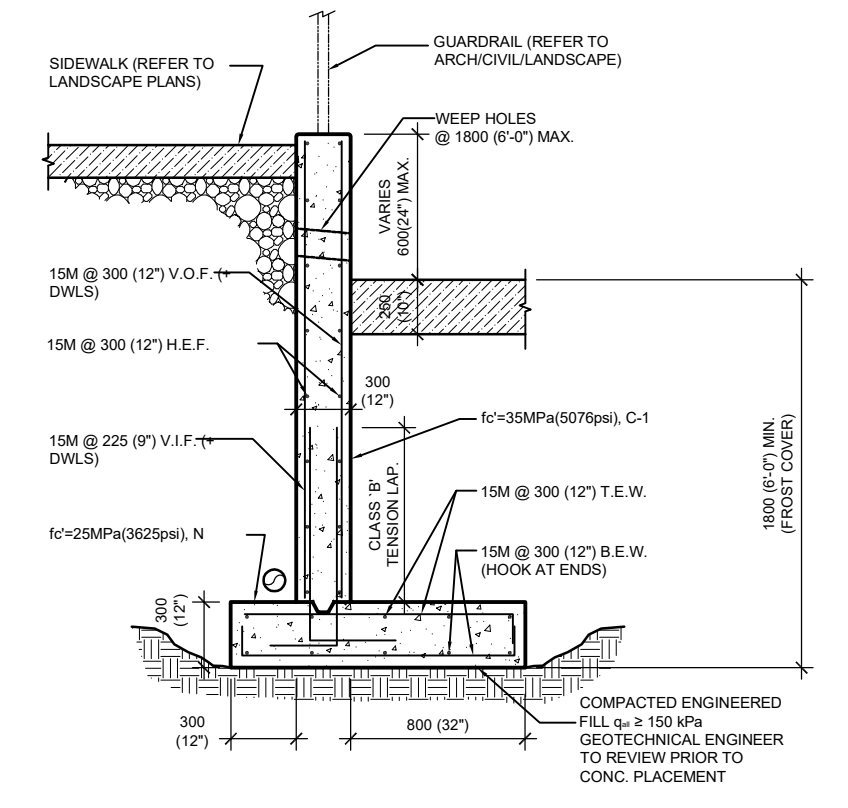
H
3004
SCALE: N.T.S.
DETAIL: CONCRETE STAIRS



I
3004
SCALE: N.T.S.
SECTION: TYPICAL SIDEWALK/RAMP RETAINING WALL (HIGH)



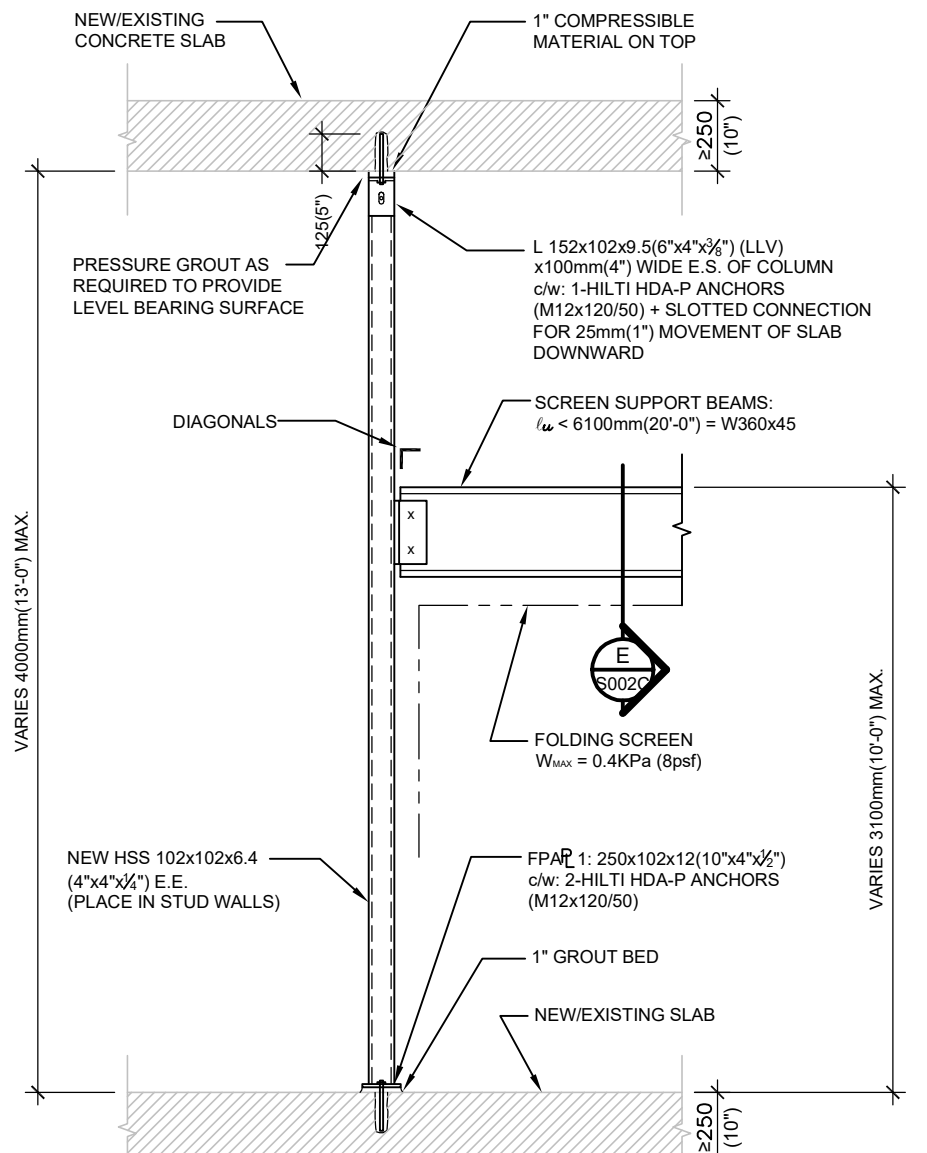
J
3004
SCALE: N.T.S.
SECTION: TYPICAL PLANTER RETAINING WALL



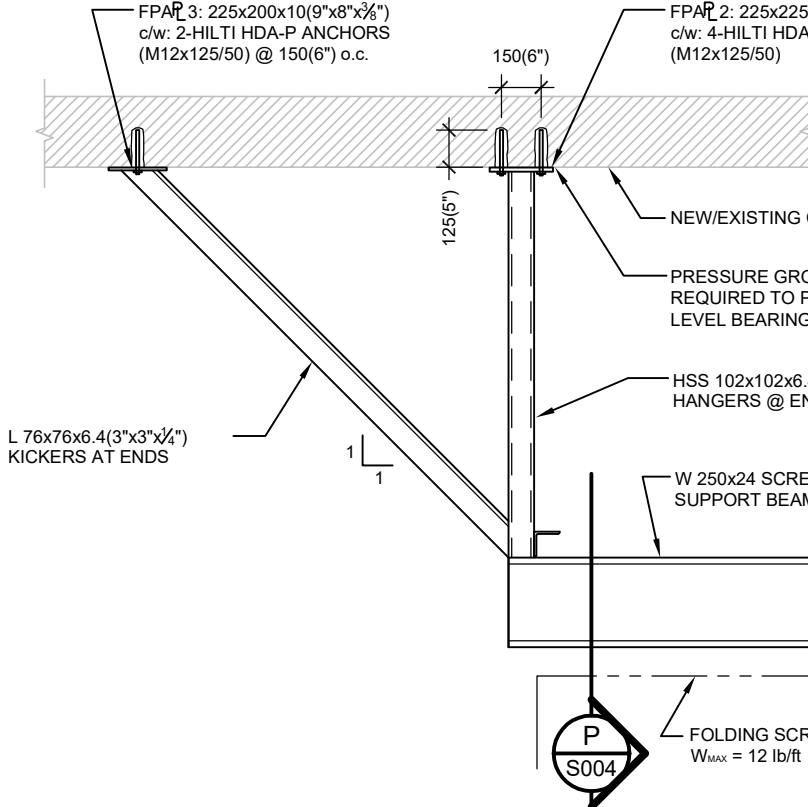
K
3004
SCALE: N.T.S.
SECTION: TYPICAL SIDEWALK/RAMP RETAINING WALL (LOW)

TYPICAL DETAILS: FOLDING PARTITION SCREENS

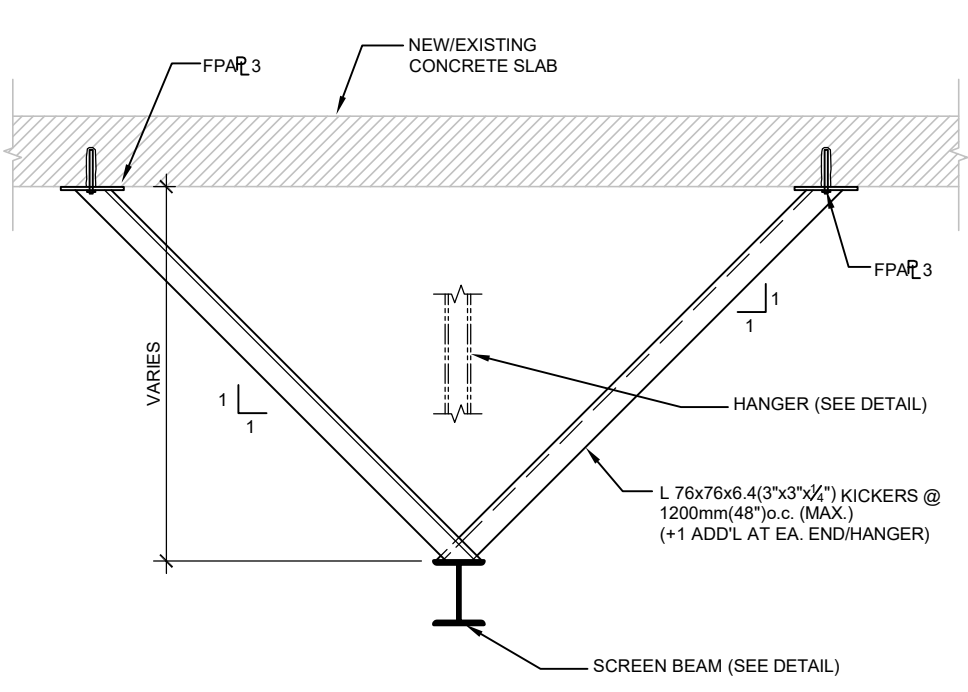
NOTE:
STEEL SHOP DRAWING SUBMISSIONS TO BE SUBMITTED WITH SCREEN REQUIREMENTS SCREEN DATA TO INCLUDE WEIGHTS AND DEFLECTION CRITERIA.



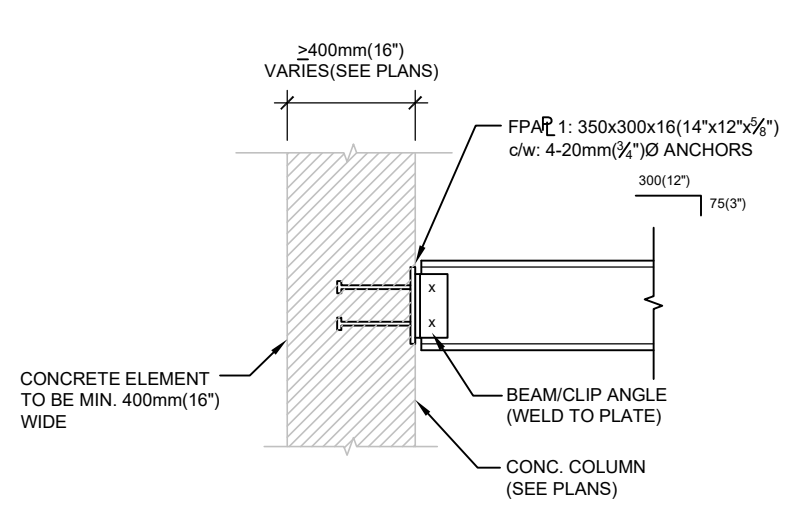
N
3004
SCALE: 1:25
DETAIL: TYPICAL SCREEN BEAM SUPPORT AT END



O
3004
SCALE: 1:25
DETAIL: SCREEN BEAM SUPPORT - ALTERNATE
(MAY ONLY BE USED IF END POST NOT PERMITTED)



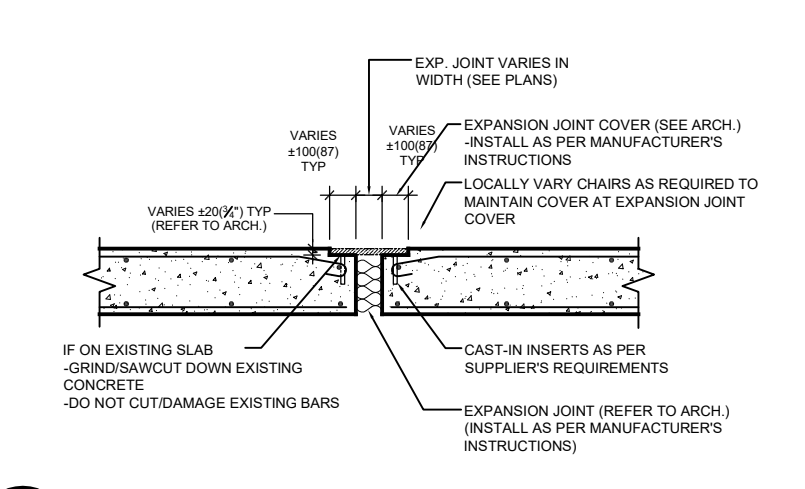
P
3004
SCALE: 1:25
DETAIL: SCREEN BEAM SUPPORT - LATERAL SUPPORTS
(PROVIDE @ END (SPACING NOTE))



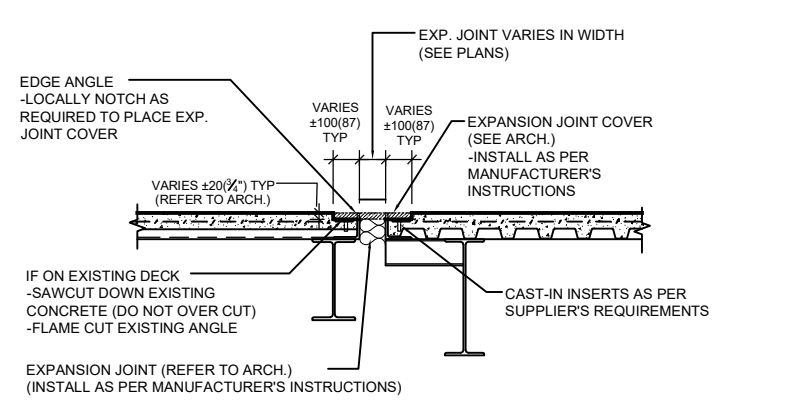
Q
3004
SCALE: 1:25
DETAIL: SCREEN BEAM SUPPORT @ CONC. COLUMN/WALL

TYPICAL DETAILS: EXPANSION JOINTS AT FLOORS

NOTE:
THESE DETAILS ARE TO BE USED WHERE ELEMENTS ARE NOT OTHERWISE ON DRAWINGS

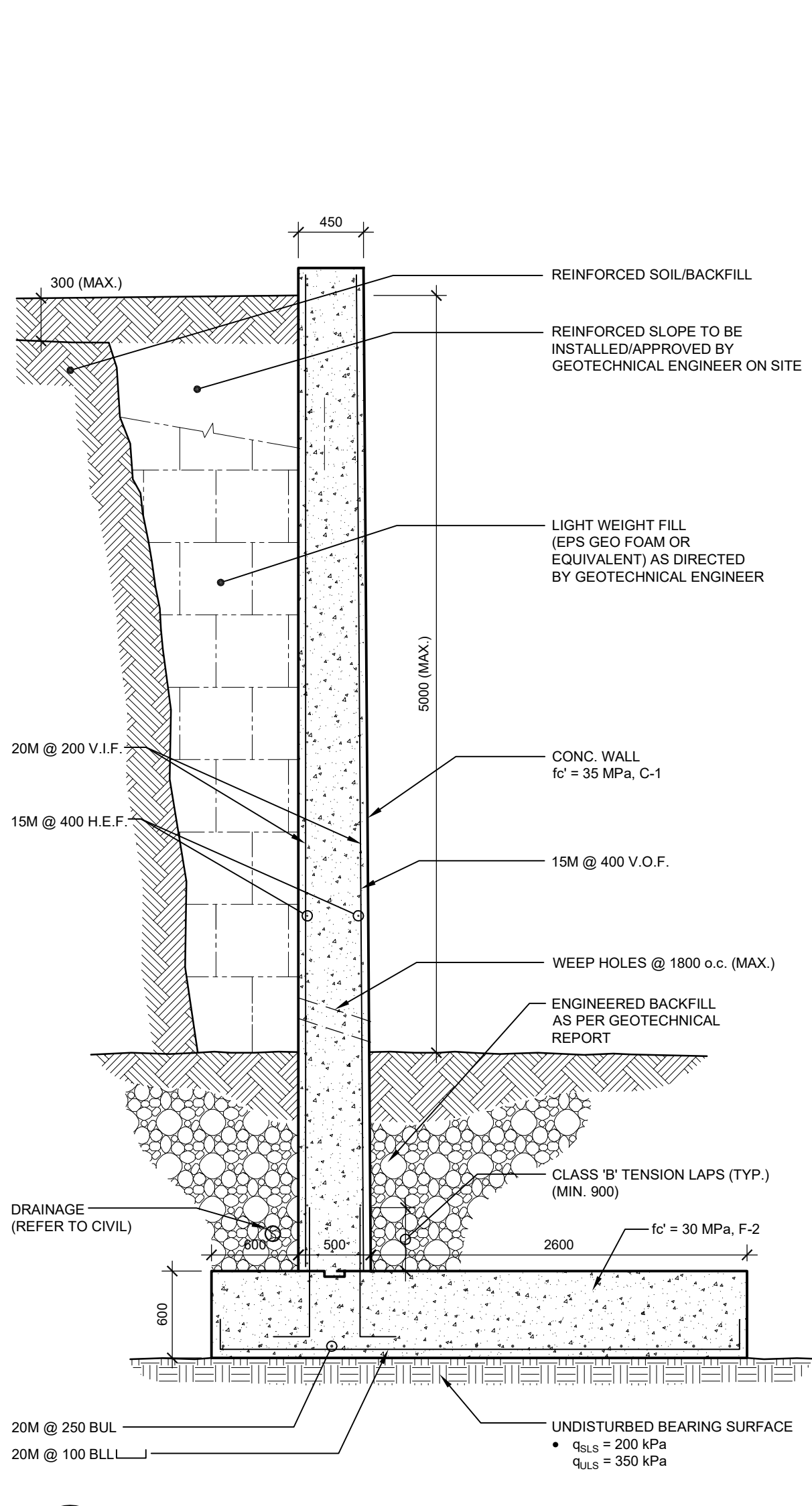


L
3004
SCALE: N.T.S.
TYPICAL DETAIL - EXPANSION JOINT COVER - FLOORS - CONCRETE



M
3004
SCALE: N.T.S.
TYPICAL DETAIL - EXPANSION JOINT COVER - FLOORS - CONCRETE/DECK

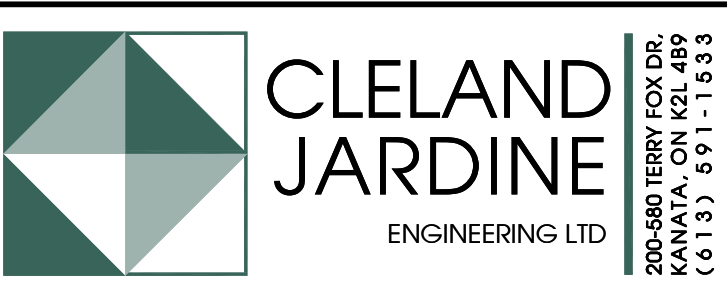
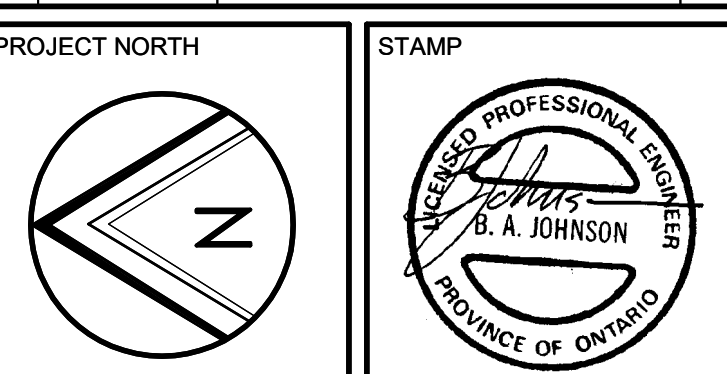
TYPICAL DETAILS: RETAINING WALLS



R
3004
SCALE: N.T.S.
SECTION: BERM RETAINING WALLS

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No.	DATE	REVISIONS	BY
11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/FOUNDATION CONSTRUCTION	SH
9	JULY 7/16	ISSUED FOR EXCAVATION/FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH



TOMLINSON NEW BUILDING

PROJECT

DRAWING

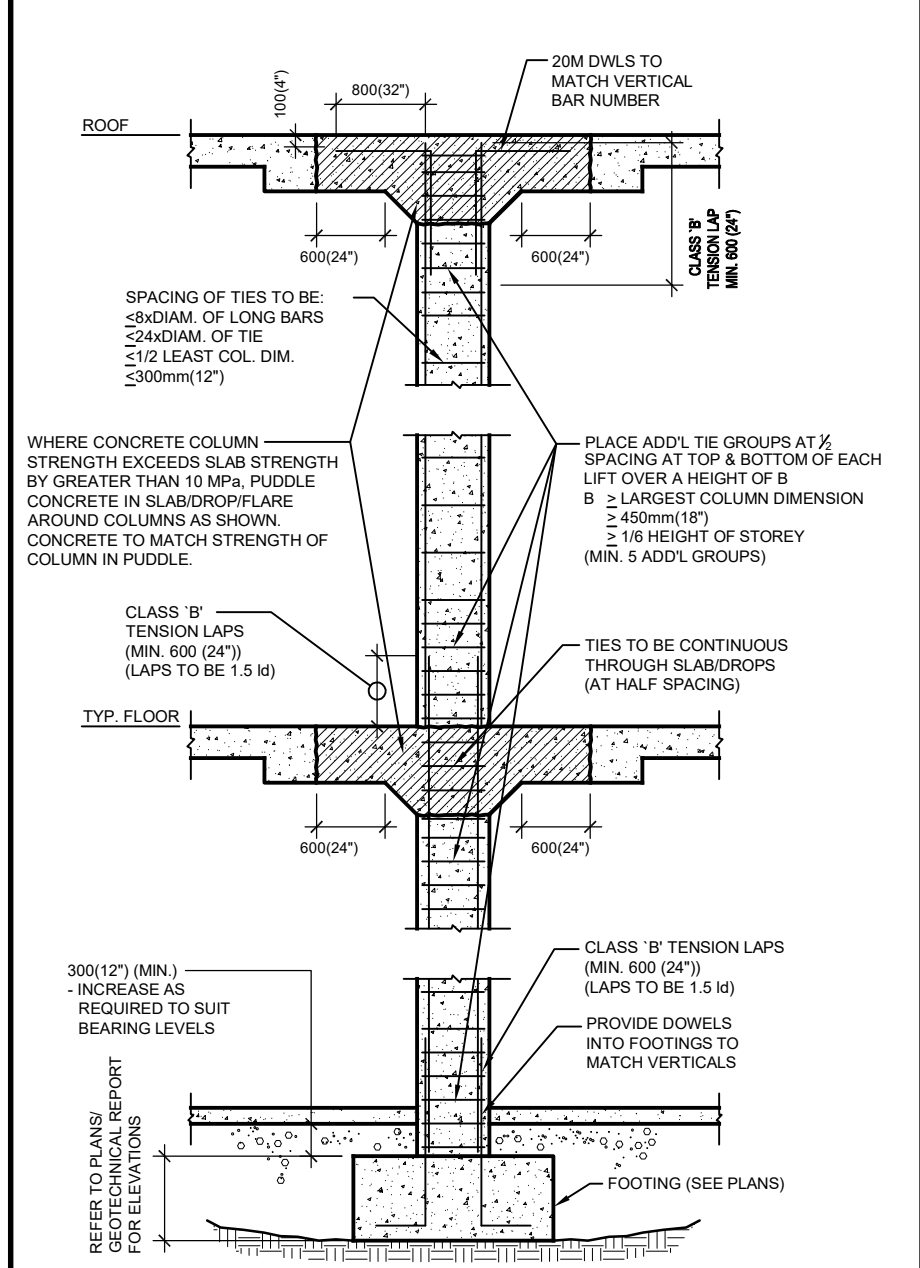
GENERAL NOTES AND DETAILS

DRAWN	S.H.	DRAWING No.
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	N.T.S.	
PROJECT No:	15-0179	

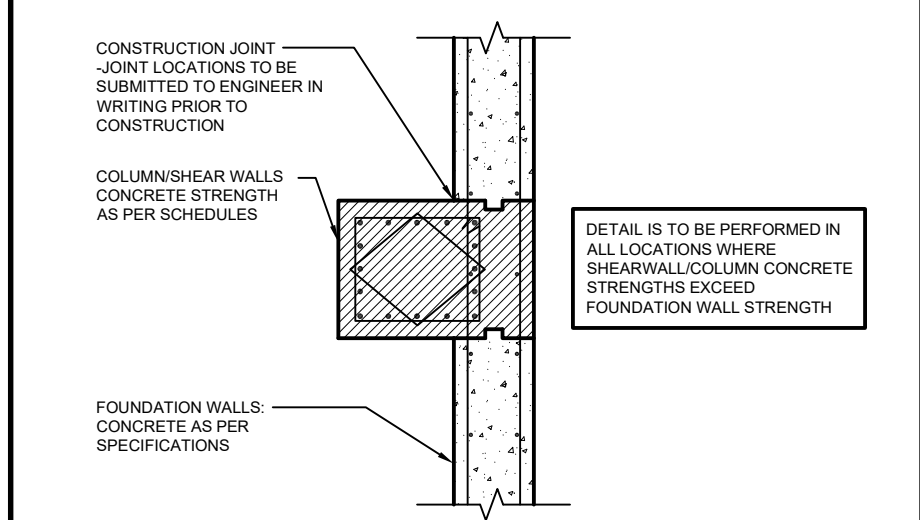
S004

CONCRETE COLUMN SCHEDULE			
CC1	CC2	CC3	CC4
600mmØ 14-20M VERT. 1-10M TIE @ 300c.c.	600mmØ 14-20M VERT. 1-10M TIE @ 300c.c.		300x1175 13-30M VERT. 3-10M TIES @ 300c.c.
600mmØ 14-20M VERT. 1-10M TIE @ 300c.c.	600mmØ 14-20M VERT. 1-10M TIE @ 300c.c.		300x1175 13-30M VERT. 3-10M TIES @ 300c.c.
600mmØ 14-20M VERT. 1-10M TIE @ 300c.c.	600mmØ 14-20M VERT. 1-10M TIE @ 300c.c.		300x1175 13-30M VERT. 3-10M TIES @ 300c.c.
600mmØ 14-20M VERT. +DWLS 1-10M TIE @ 300c.c.	600mmØ 14-20M VERT. +DWLS 1-10M TIE @ 300c.c.	600mmØ 14-20M VERT. +DWLS 1-10M TIE @ 300c.c.	300x1175 13-30M VERT. +DWLS 3-10M TIES @ 300c.c.

- NOTES:
1. PROVIDE CARBON/FOOTING DOVELS TO MATCH VERTICAL REINFORCING.
 2. REFER TO PLANS FOR ADDITIONAL DETAILS/NOTES.
 3. PROVIDE ADD'L TIE GROUPS AS NOTED IN DETAIL A UN.
 4. BEND VERTICAL BARS INTO SLAB WHERE COLUMNS TERMINATE.
 5. FOOTING AND BOTTOM OF COLUMN ELEVATIONS TO BE ESTABLISHED FROM PLANS AND GEOTECHNICAL REPORT. COLUMNS ARE TO BE TERMINATED SUCH THAT THEY ARE FOUNDED ON UNDISTURBED NATIVE MATERIAL (WITH APPROPRIATE FROST COVER) OR PILE/CARBON CAPS APPROVED BY GEOTECHNICAL ENGINEER ON SITE. REFER ALSO TO GEOTECHNICAL REPORT.



A DETAIL: TYPICAL COLUMN REQUIREMENTS UN
SCALE: N.T.S.



B DETAIL: POUR BREAK @ COLUMNS/WALLS
SCALE: N.T.S.

FOOTING SCHEDULE		
MARK	SIZE (LxWxT)	NOTES
F1	4500x4500x1000	TYPICAL CORNER FOOTINGS 20M @ 200 B.E.W. 12' x 25 MPa N Q _u ≥ 200 MPa
F2	6000x6000x1100	TYPICAL EXTERIOR FOOTINGS 30M @ 200 B.E.W. 12' x 25 MPa N Q _u ≥ 250 MPa
F3	600x300	TYPICAL EXTERIOR STRIP FOOTINGS 4-10M B.E. LONG 12' x 25 MPa N Q _u ≥ 200 MPa
F4	1500x350	FIN WALL STRIP FOOTING 15M @ 200 B.E. TRANS. 15M @ 200 B.E. LONG 12' x 25 MPa N Q _u ≥ 200 MPa
F5	1600 DP FTG	ELEVATOR CORE FOOTING (SEE PLANS FOR DETAILS)
F6	1500 DP FTG	STAIR CORE FOOTING (SEE PLANS FOR DETAILS)

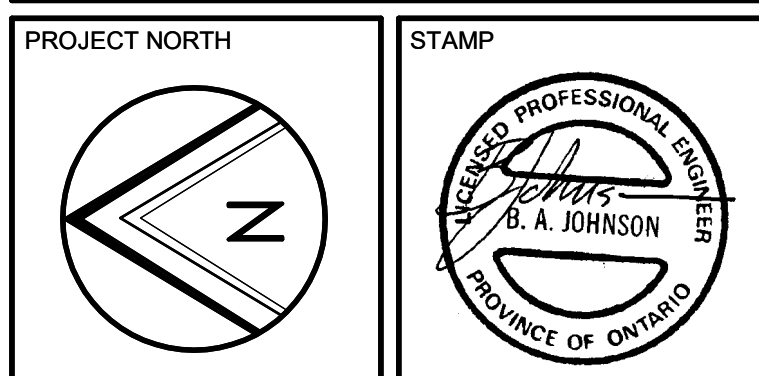
- NOTES:
1. ALL FOOTINGS TO BEAR ON SUITABLE BEARING STRATA AS APPROVED BY GEOTECHNICAL ENGINEER IN ACCORDANCE WITH GEOTECHNICAL REPORT WITH MINIMUM BEARING PRESSURES NOTED IN TABLE.
 2. PROVIDE MINIMUM 1000x100x75 FROST COVER TO ALL FOOTINGS EXPOSED TO EXTERIOR CONDITIONS UNLESS OTHERWISE NOTED ON DRAWINGS/GEOTECHNICAL REPORT.
 3. CONCRETE STRENGTH: 12' x 25 MPa UN.
 4. TOPS OF INTERIOR FOOTINGS TO BE A MINIMUM OF 300mm (12") BELOW THE USE OF THE SLAB ON GRADE. STEP DOWN INTERIOR FOOTINGS TO EXTERIOR FOOTINGS AS REQUIRED. IF FINAL BEARING ELEVATIONS TO BE BASED ON GEOTECHNICAL INVESTIGATION.
 5. FOOTING AND BOTTOM OF WALL ELEVATIONS TO BE ESTABLISHED FROM PLANS AND GEOTECHNICAL REPORT. WALLS/COLUMNS ARE TO BE TERMINATED SUCH THAT THEY ARE FOUNDED ON COMPACTANT BEDROCK (WITH APPROPRIATE FROST COVER) APPROVED BY GEOTECHNICAL ENGINEER ON SITE.
 6. GEOTECHNICAL ENGINEER TO CONFIRM ALL BEARING CAPACITIES ON SITE PRIOR TO PLACING CONCRETE.
 7. FOOTINGS ARE TO BE LOWERED AS REQUIRED IN THE AREAS OF PIT/SHAFTS @ FOUNDATION LEVEL SUCH THAT THE USE OF THE PIT/SHAFT IS AT THE TOP OF THE FOOTING. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ELEVATIONS/STEPS IN FOOTING. CONTRACTOR IS REQUIRED TO PREPARE FOOTING ELEVATION DRAWINGS PRIOR TO EXCAVATION.
 8. 15M SIDE BARS @ 200mm (8") c.c. REQUIRED FOR FOOTINGS 600mm (24") DEEP AND GREATER.
 9. HOOK FOOTING BARS 90° WHERE EDGE OF FOOTING IS LESS THAN 600mm (24") PAST EDGE OF SUPPORTED PERIWALL.

STEEL COLUMN SCHEDULE: TOWER		
MARK	SIZE	NOTES
SC1	HSS 102x102x8.0	PENTHOUSE INTERIOR COLUMN
SC2	HSS 203x203x6.5	MECH. SCREEN VERTICAL COLUMNS (NOT DP ONLY)

- NOTES:
1. REFER TO PLANS FOR ELEVATIONS AND ORIENTATIONS.
 2. ALL HSS COLUMNS TO BE CLASS 'C'.

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No.	DATE	REVISIONS	BY



PROJECT

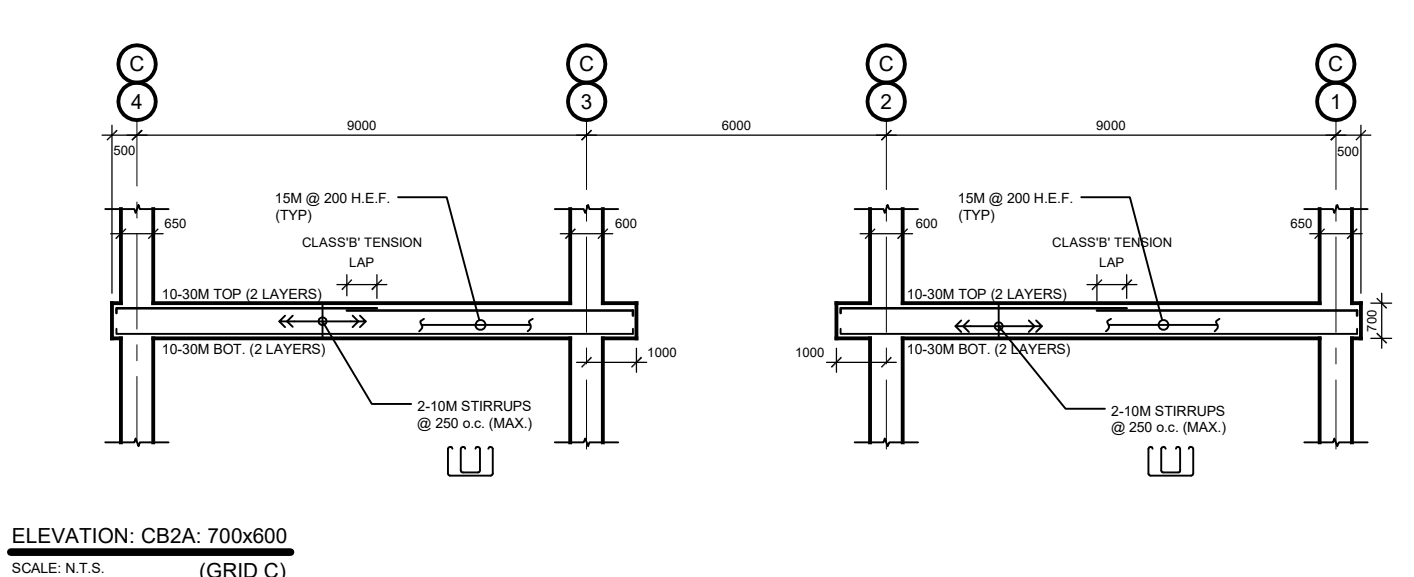
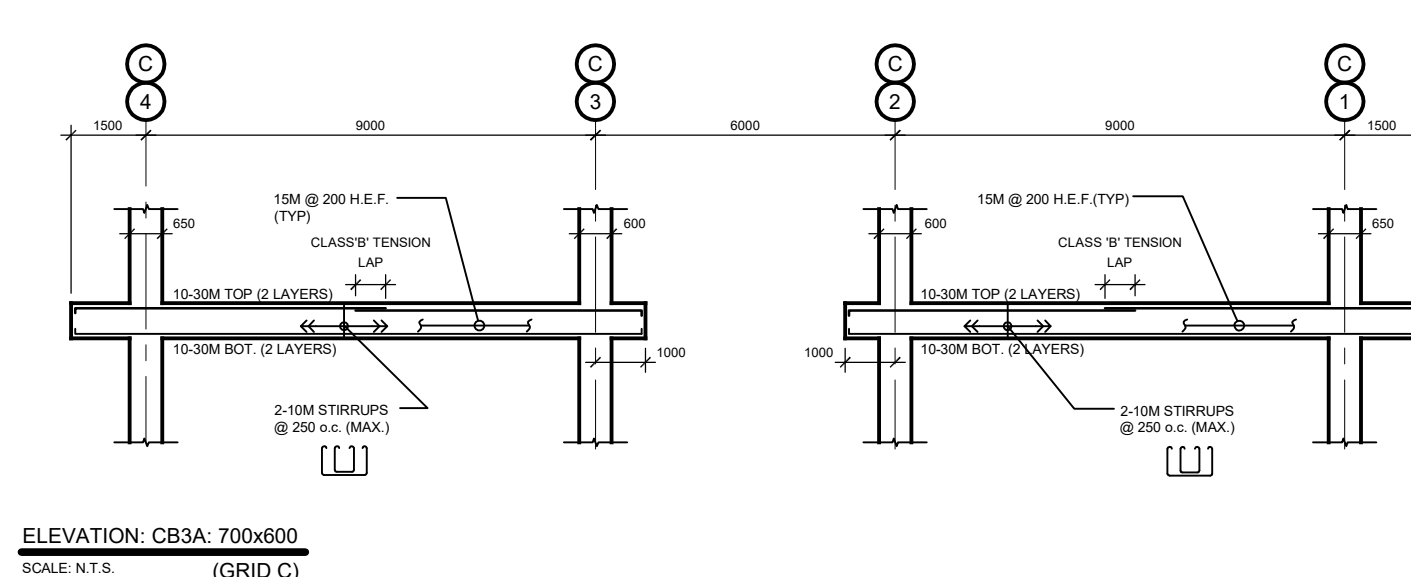
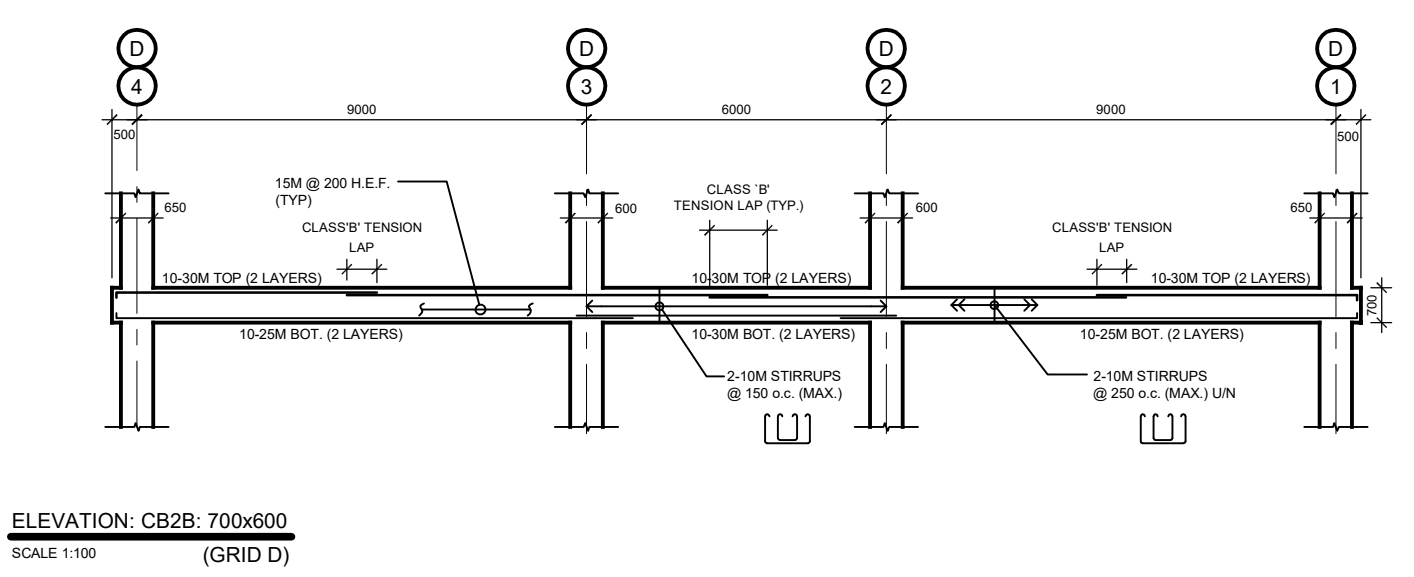
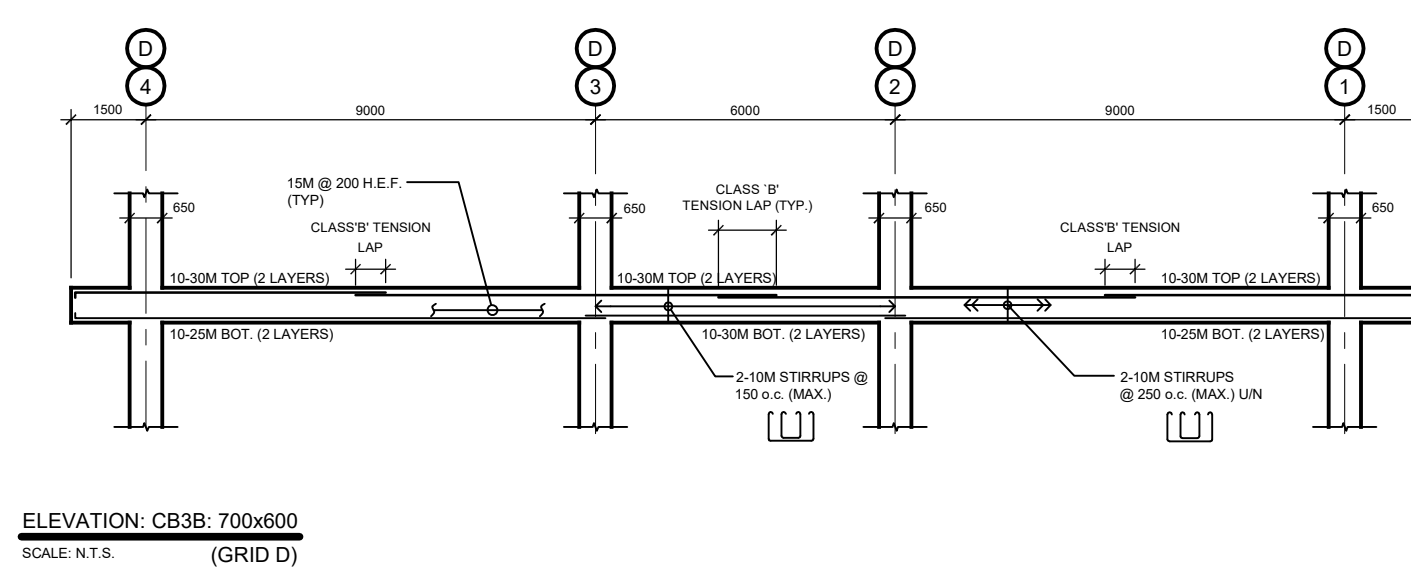
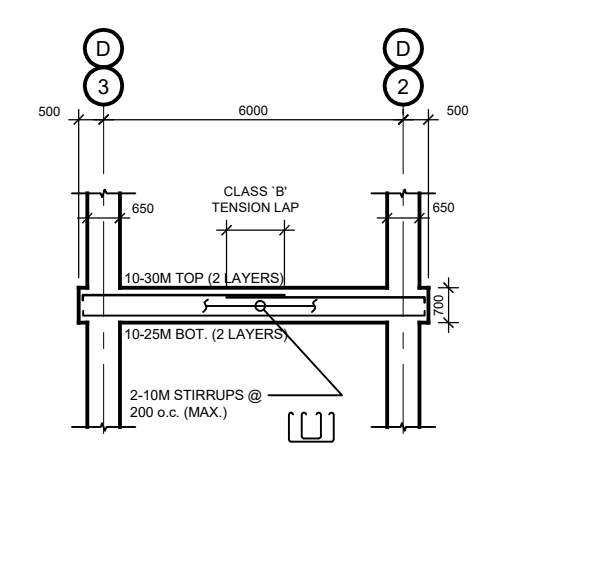
**TOMLINSON
NEW BUILDING**

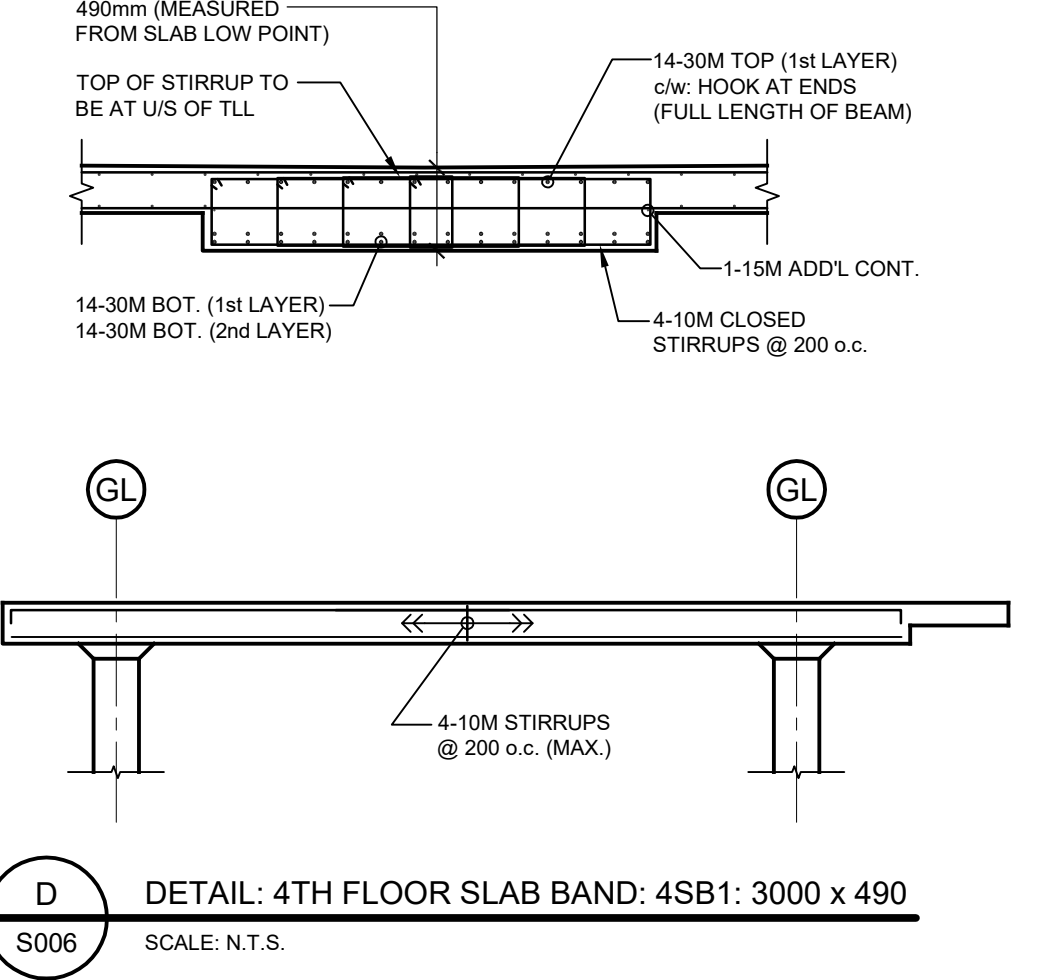
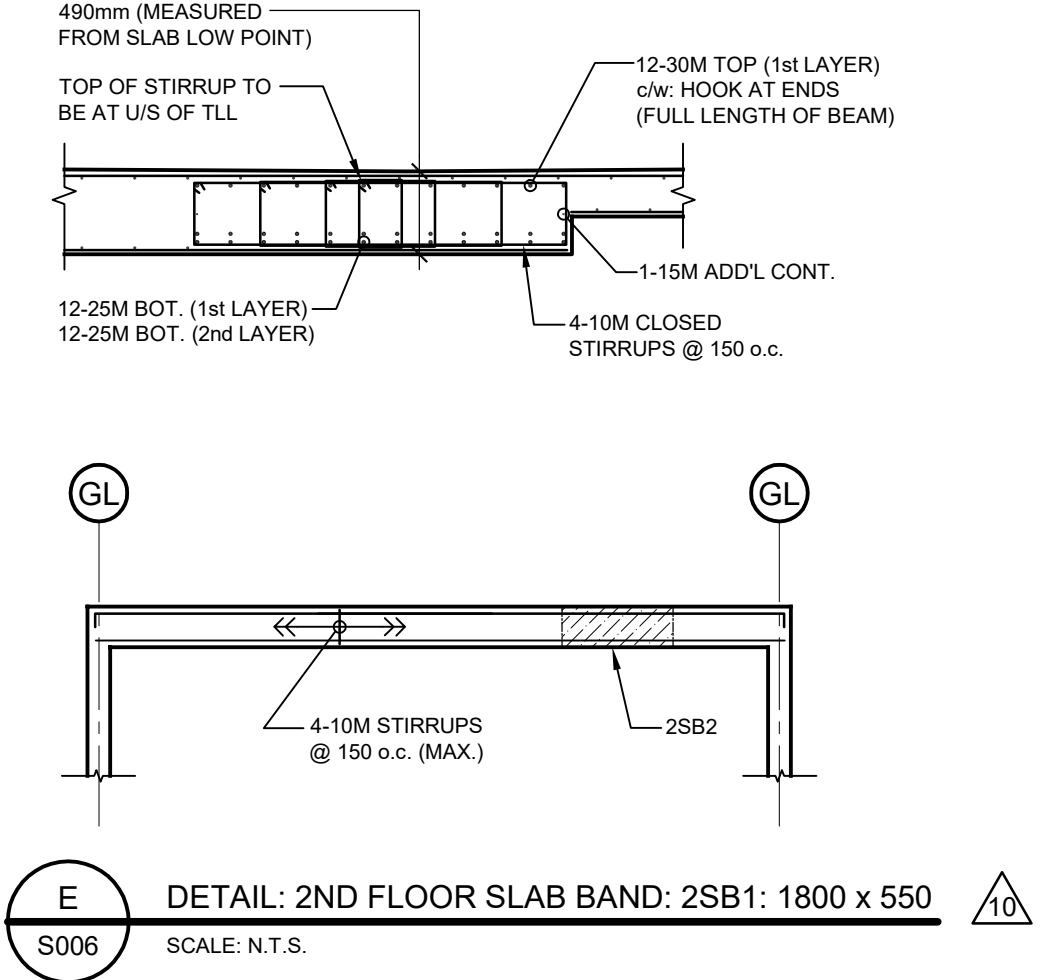
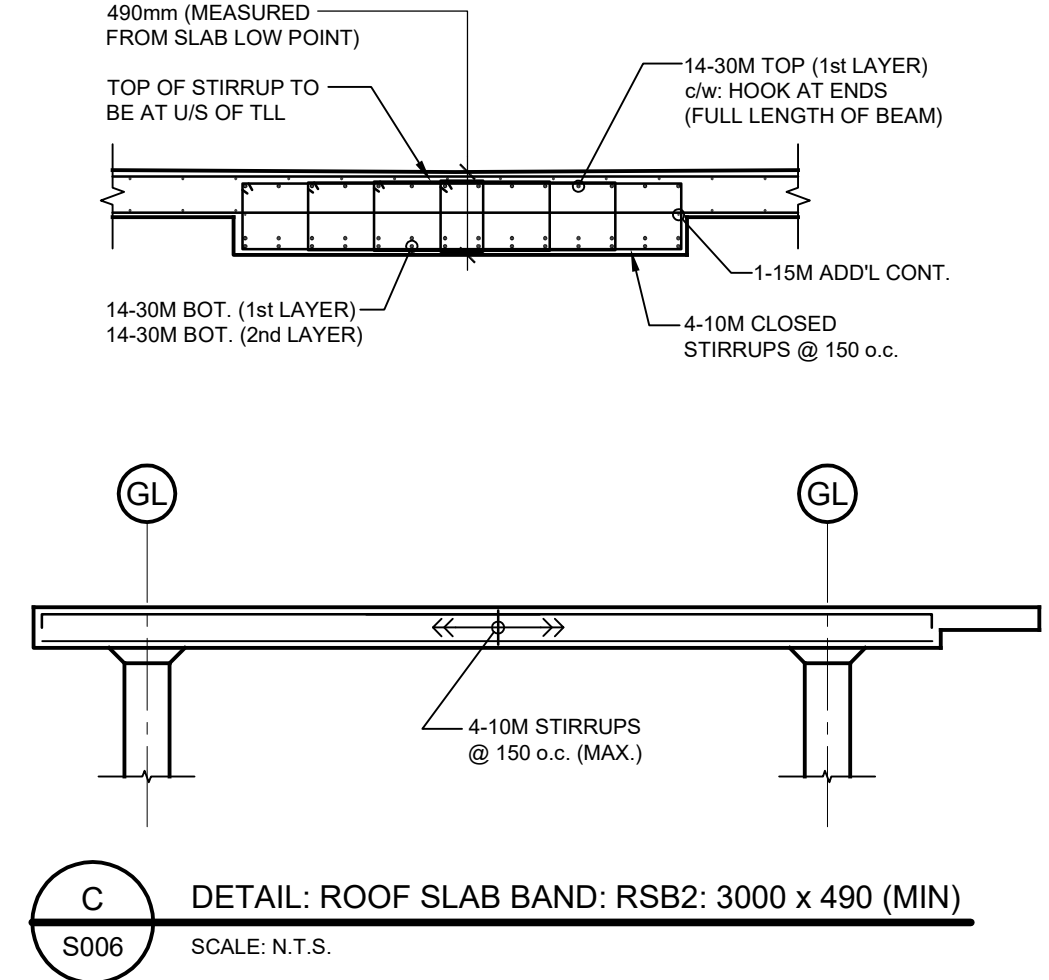
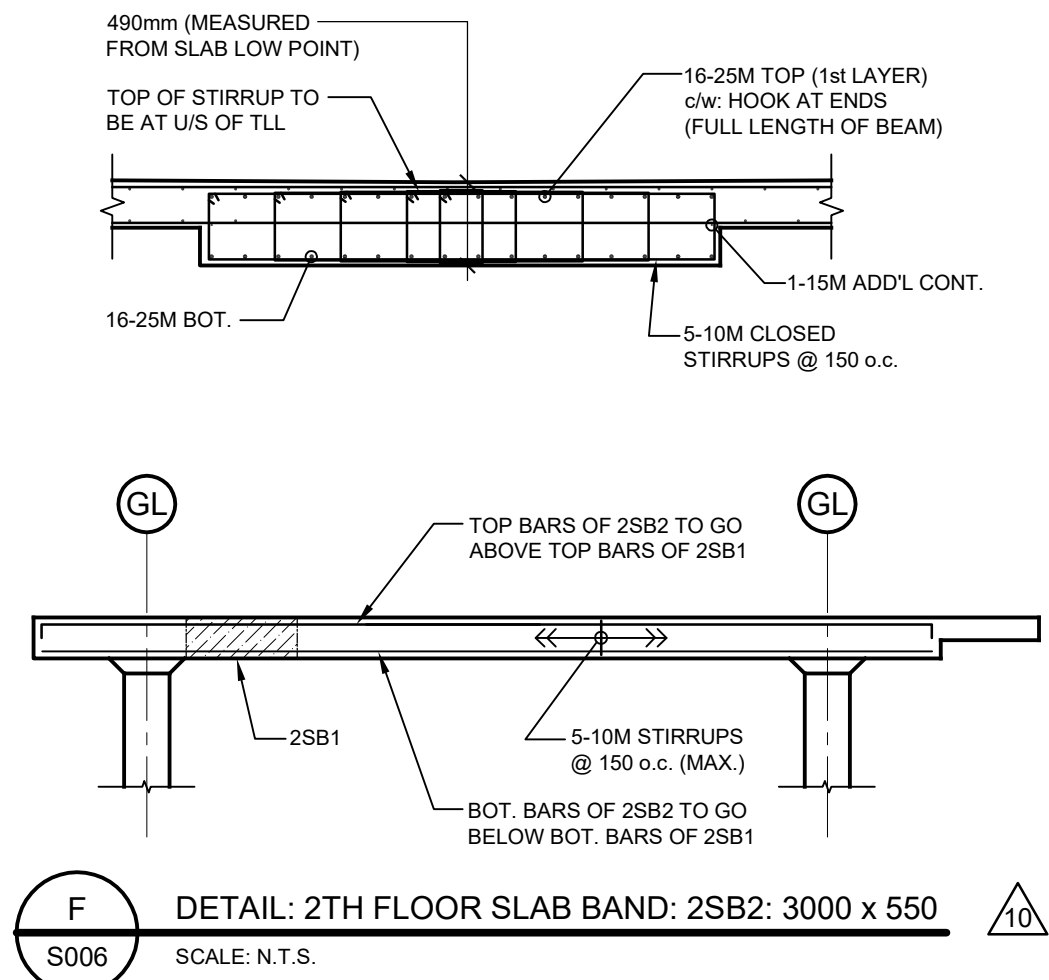
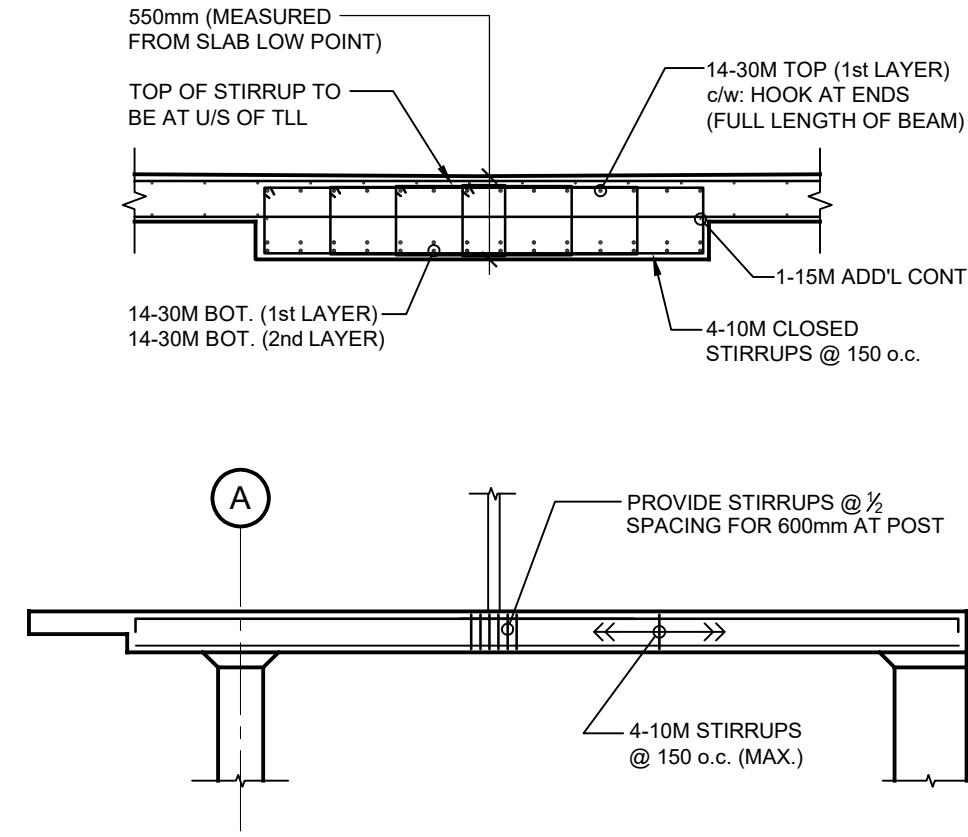
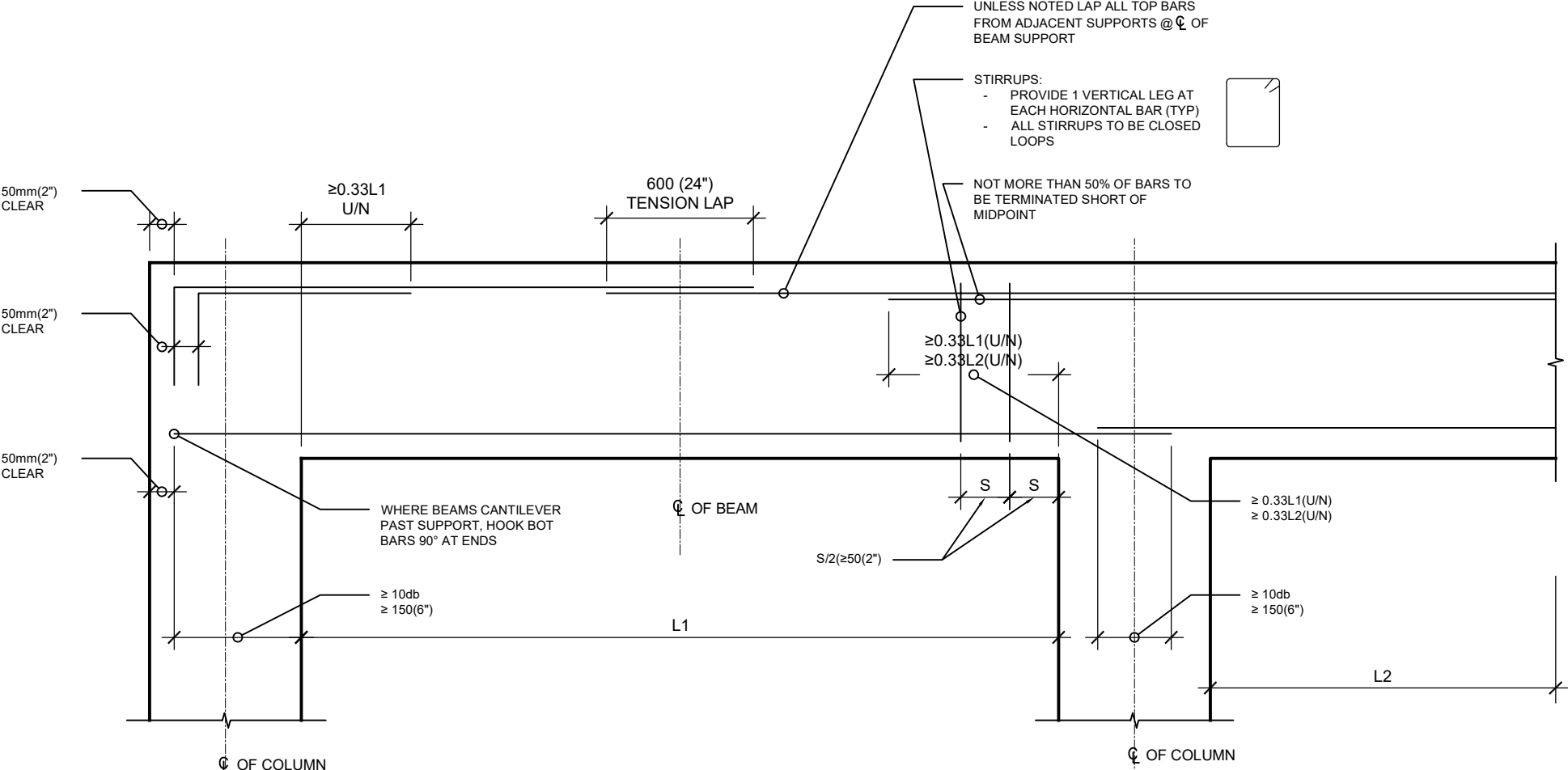
DRAWING

**GENERAL NOTES AND
DETAILS: SCHEDULES**

DRAWN:	S.H.	DRAWING No:
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	N.T.S.	
PROJECT No:	15-0179	

S005

CONCRETE BEAM SCHEDULE (W x H)			
LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
 ELEVATION: CB2A: 700x600 SCALE: N.T.S. (GRID C)	 ELEVATION: CB3A: 700x600 SCALE: N.T.S. (GRID C)		
 ELEVATION: CB2B: 700x600 SCALE: N.T.S. (GRID D)	 ELEVATION: CB3B: 700x600 SCALE: N.T.S. (GRID D)	 ELEVATION: CB4A: 700x600 SCALE: N.T.S. (GRID D)	



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3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH
No.	DATE	REVISIONS	BY

PROJECT NORTH

STAMP

CLELAND JARDINE ENGINEERING LTD

200-000 TERRY FOX DR. (613) 991-1553

PROJECT

NEW BUILDING

DRAWING

CONCRETE BEAM SCHEDULE AND DETAILS

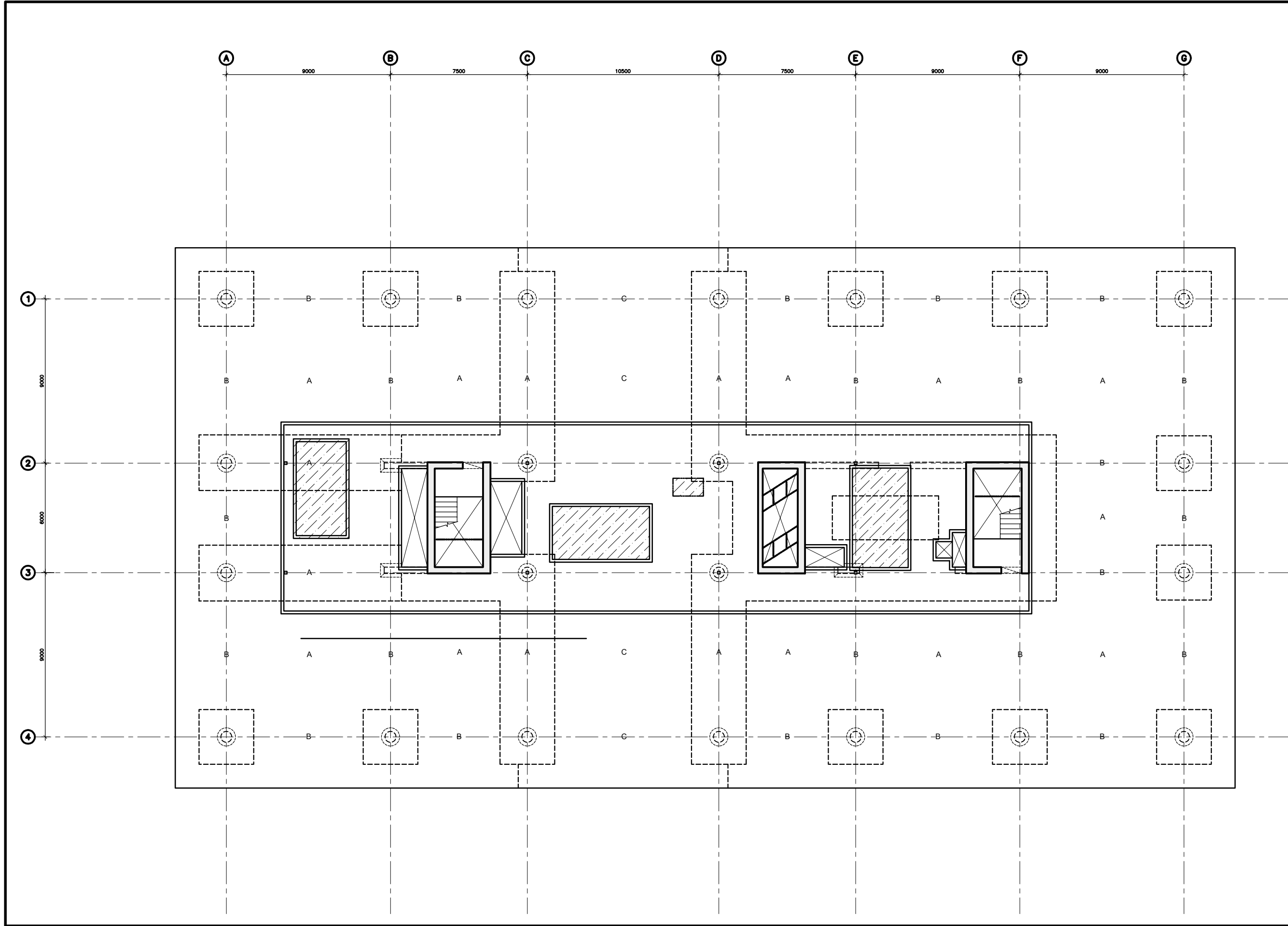
DRAWN:	S.H.	DRAWING No:
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	N.T.S.	
PROJECT No:	15-0179	

S006

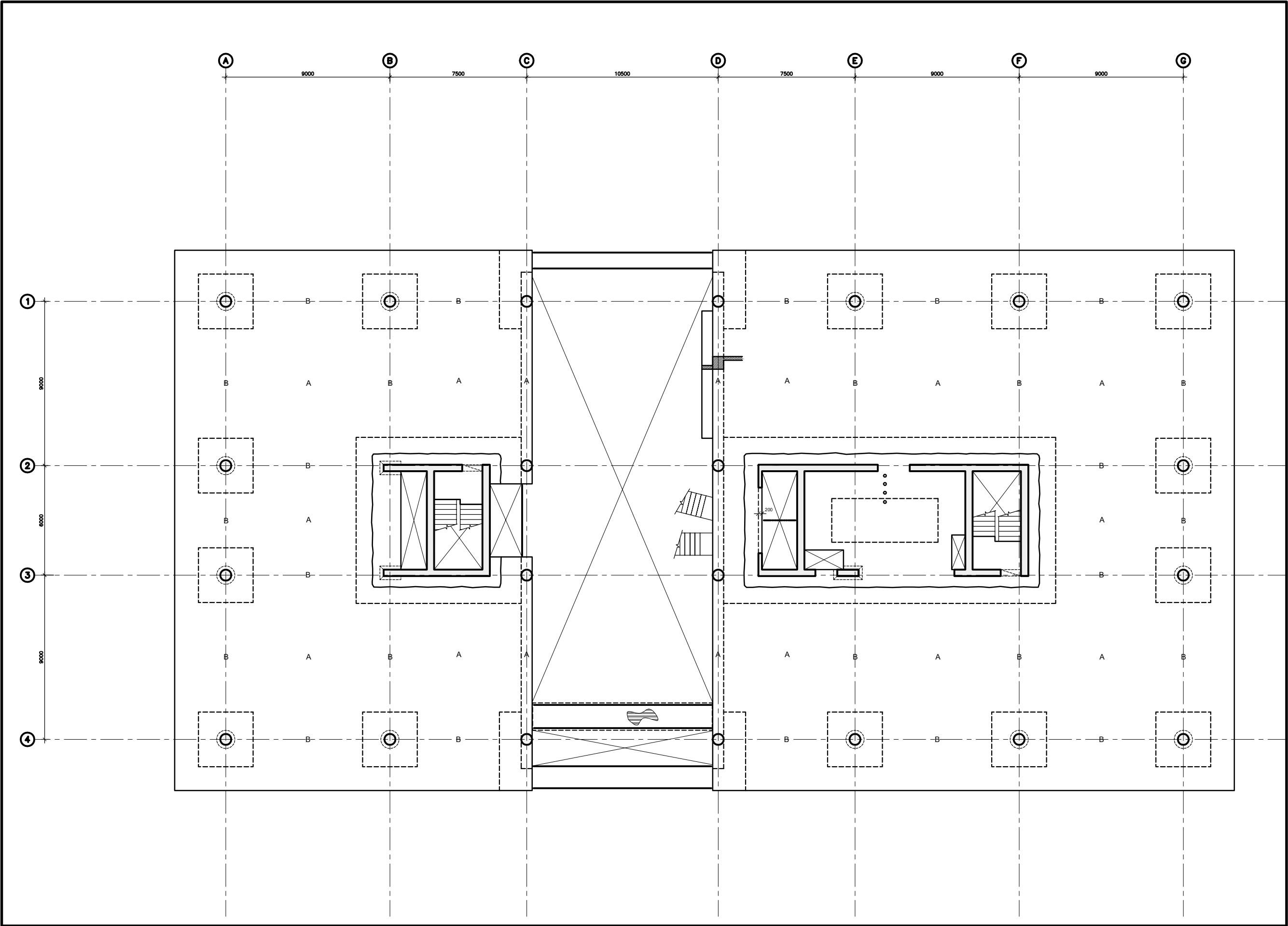
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CAMBER SIZES

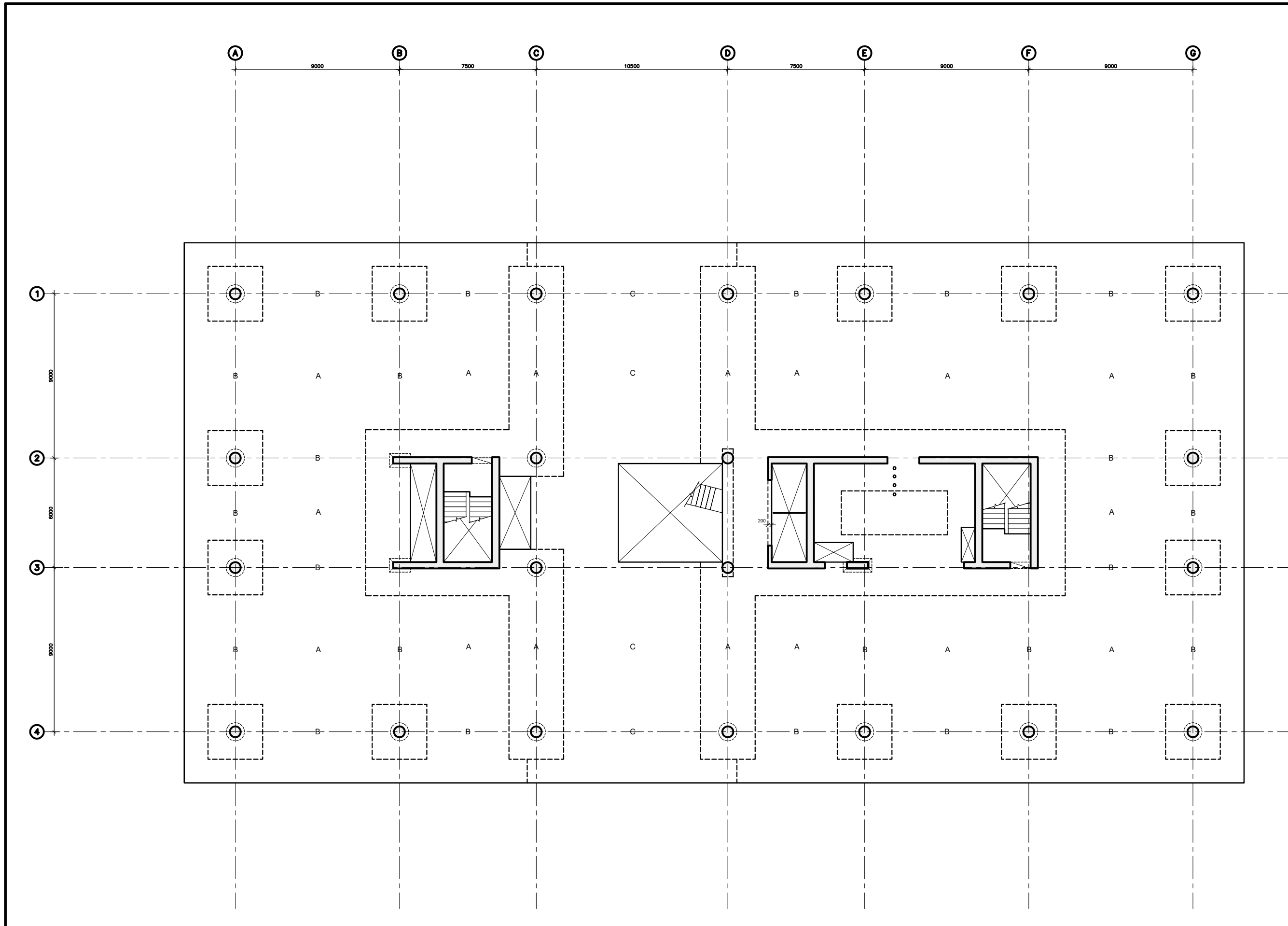
A= 20mm
B= 16mm
C= 30mm



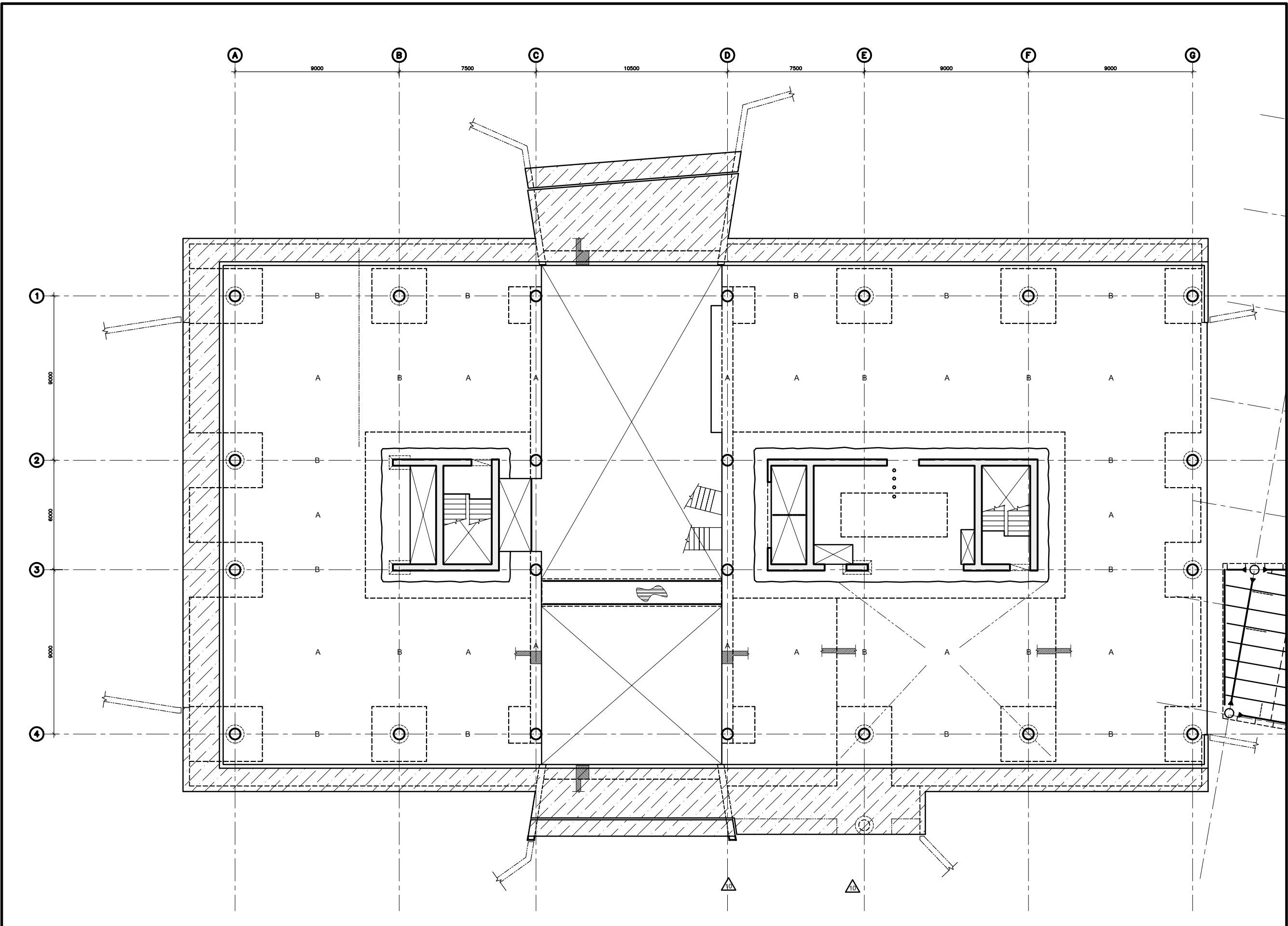
CAMBER DIAGRAM: ROOF



CAMBER DIAGRAM: THIRD FLOOR

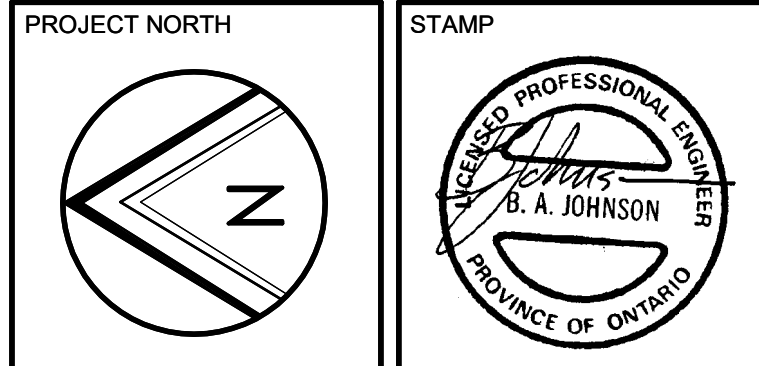


CAMBER DIAGRAM: FOURTH FLOOR



CAMBER DIAGRAM: SECOND FLOOR

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6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH
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PROJECT
**TOMLINSON
NEW BUILDING**

DRAWING
CAMBER DIAGRAMS

DRAWN:	S.H.	DRAWING No.
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	N.T.S.	
PROJECT No:	15-0179	

S007

11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	SH
6	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
6	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - DESIGNED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING SH	SH
No.	DATE	REVISIONS	BY



**CLELAND
JARDINE**
ENGINEERING LTD

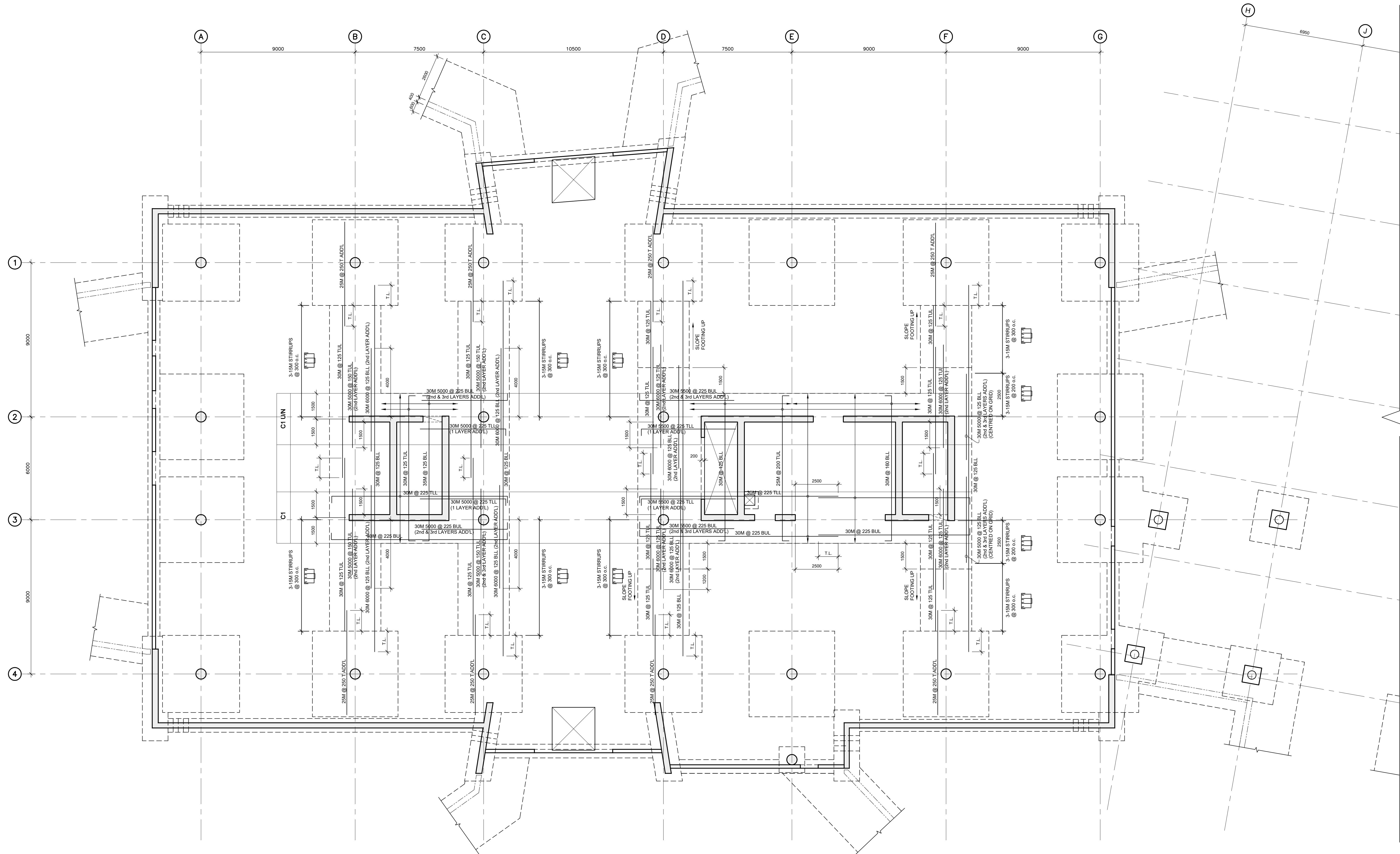
200-580 TERRY FOX DR.
KANAHA, ON K2L 4B9
(613) 591-1533

PROJECT	TOMLINSON NEW BUILDING
---------	---------------------------

DRAWN:	S.H.	DRAWING No. S100
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	1:100	
PROJECT No:	15-0179	

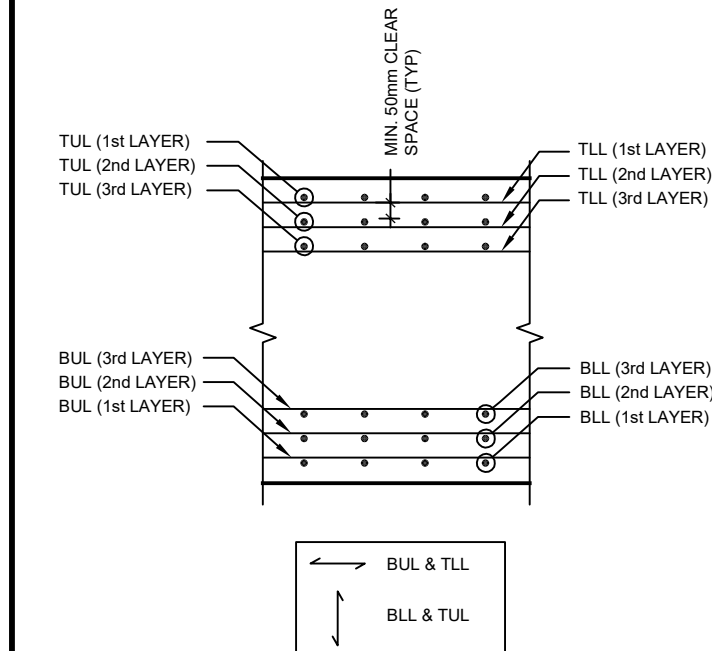
GENERAL NOTES:

1. ALL BEARING ELEVATIONS ARE TO BE CONFIRMED/COORDINATED WITH THE GEOTECHNICAL REPORT/DATA. WHERE GEOTECHNICAL REPORT INDICATES BEARINGS ELEVATIONS THAT ARE LOWER THAN THOSE PROVIDED, GEOTECHNICAL REPORT VALUES GOVERN. CONTRACTOR IS RESPONSIBLE FOR COORDINATION BETWEEN BOTH SETS OF DATA PROVIDED.
2. LOWER FTG'S IN AREAS ADJACENT TO UNDERGROUND SERVICES/PITS AS REQUIRED TO MAINTAIN MINIMUM 2H'V ELEVATION OFFSET FOR BEARING SURFACES (REFER TO S000) (TYP. ALL LOCATIONS).
3. ENGINEERED FILL/COMPACTED GRANULAR:
REFER TO GEOTECHNICAL REPORT FOR ALL REQUIREMENTS.



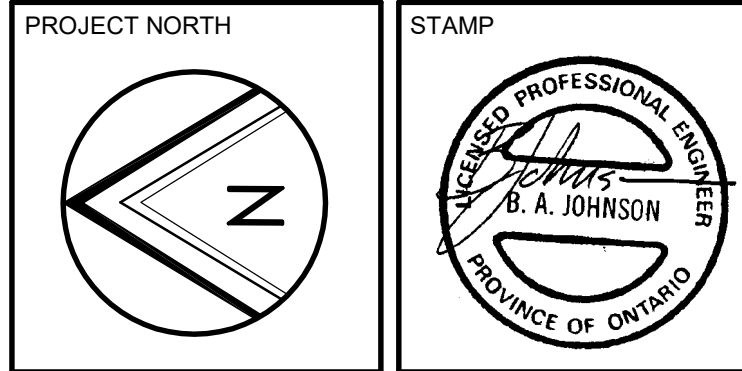
REFER TO DRAWING ST-100 FOR TEST FACILITY

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TYPICAL REINFORCING LAYOUT

No.	DATE	REVISIONS	BY
11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
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2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH



TOMLINSON
FOUNDED ON BYTHENITH GUIDED BY VISION

PROJECT
**TOMLINSON
NEW BUILDING**

DRAWING
**SHEAR WALL / CORE WALL
FOOTING REINFORCING PLAN**

DRAWN:	S.H.	DRAWING No:
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	S100R1
SCALE:	1:100	
PROJECT No:	15-0179	

CONCRETE SLAB/REBAR NOTES:

1. COVER:

BOT. = 25mm CLEAR TO BILL
TOP. = 25mm CLEAR TO TUL

2. REINFORCING STEEL LAYOUT:

BLL — BUL
TUL — TLL

REINFORCING TO BE SIMILAR TO 3rd FLOOR UN.

3. MINIMUM REINFORCING:

BOT: CS: 20M @ 250 (+ HOOK AT CANTILEVER ENDS)
MS: 15M @ 300 (+ HOOK AT CANTILEVER ENDS)
TOP(INT.): CS: 20M @ 250
TOP(EXT.): CS: 20M 3300/6000 @ 250 (+ HOOK AT DISCONTINUOUS ENDS) (EXTEND 3300 INTO CONTINUOUS SIDE)
MS: 15M 130 @ 300 (+ HOOK AT DISCONTINUOUS EDGE) (6000 LONG @ EXTERIOR EDGES EXTEND 3300 INTO CONTINUOUS SIDE)

4. INTEGRITY STEEL @ COLUMNS:

(OVER WIDTH OF COLUMN CAP)

PROVIDE ADDL. BOTTOM STEEL AT ALL COLUMNS UN.

INTERIOR COLUMN: 3-25M B.E.W.

EXTERIOR COLUMN: 3-25M B + HOOK.

EXTERIOR CORNER: 4-20M B + HOOK.

5. FLAT SLAB GEOMETRY UN:

5. FLAT SLAB GEOMETRY UN:

SLAB: 250 THICK
DROPS: 3000x3000/240 UN
SLAB BANDS: 240 UN
FLARES: 200 UN
CONCRETE: 30 MPa UN
T.O.C. EL.: 4200

WHERE 1/2 WALL OR COLUMN > 10 MPa + 1/2 SLAB: PROVIDE PUDDLE OF CONCRETE AT COLUMNS/SHEARWALLS THAT MATCHES STRENGTH OF VERTICAL ELEMENT. EXTEND PUDDLE TO MIN. OF 600mm ALL AROUND VERTICAL ELEMENT.

6. DESIGN LOADS

2nd FLOOR: OFFICE:

DEAD: 250 CONC.: 6.10 kPa
240 DROPS: 1.65 kPa
CEILING: 0.25 kPa
MECH.: 0.25 kPa
PARTITION: 1.00 kPa
FLOORING: 0.10 kPa
9.35 kPa

LIVE: OFFICE: 3.80 kPa
EXITS: 4.80 kPa

2nd FLOOR: LANDSCAPE:

DEAD: 250 CONC.: 6.10 kPa
240 DROPS: 1.65 kPa
CEILING: 0.25 kPa
MECH.: 0.25 kPa
ROOFING: 0.60 kPa
300 SOIL: 6.00 kPa
14.65 kPa

LIVE: ROOF: 1.0 kPa
SNOW: 2.4 kPa (+ DRIFT)

2nd FLOOR: BRIDGE:

DEAD: 100 CONC./DECK: 2.00 kPa
CEILING: 0.25 kPa
MECH.: 0.25 kPa
FLOORING: 0.10 kPa
STEEL: 2.85 kPa

LIVE: ASSEMBLY: 4.80 kPa

2nd FLOOR: MOBILE STORAGE:

DEAD: 300 CONC.: 7.20 kPa
190 DROPS: 1.65 kPa
CEILING: 0.25 kPa
MECH.: 0.25 kPa
FLOORING: 0.10 kPa
PARTITION: 0.00 kPa (INCLUDED IN STORAGE LOAD)
9.45 kPa

LIVE: MOBILE STORAGE: kPa

7. TYPICAL DETAIL: OPENINGS (UN)

TERMINATE AFFECTED STEEL @ FACE OF OPENING

TERMINATE AFFECTED STEEL @ FACE OF OPENING

PROVIDE EQUIVALENT AREA OF STEEL (BASED ON TERMINATED BARS) (E.S. OF OPENING @ 1/2 SPACING (MIN. 2-150M))

PROVIDE 1-15M#800(32") LONG ADDL. @ CORNERS

PROVIDE 1-15M#800(32") LONG ADDL. @ CORNERS

TERMINATE AFFECTED STEEL @ FACE OF OPENING (c/w. HOOK)

ADDL. E.S. OF OPENING (EXTEND 1200mm (4'-0") PAST EDGE)

TOP STEEL

BOTTOM STEEL

8. SLEEVING/CONDUIT

CONTRACTOR IS REQUIRED TO SUBMIT SLEEVING AND CONDUIT DRAWINGS (IN-SLAB) TO ENGINEER FOR REVIEW A MINIMUM OF 25 WORKING DAYS PRIOR TO CONC. PLACEMENT. DRAWINGS ARE TO DETAIL AND DIMENSION ALL ELEMENTS PASSING THROUGH SLAB. ANY SLEEVING/OPENINGS IN SLAB ELEMENTS NOT INDICATED ON REVIEWED DRAWINGS MAY BE REMOVED BY ENGINEER ON SITE AT CONTRACTORS OWN EXPENSE. NO CONCRETE IS TO BE PLACED PRIOR TO RECEIVING WRITTEN APPROVAL OF ENGINEER. SEE ALSO 8000 SERIES OF DRAWINGS FOR DETAILS. DURING SHOP DRAWING REVIEW ENGINEER MAY REMOVE ANVIL CONDUIT FROM SLAB NOT DEEMED SATISFYING TYPICAL REQUIREMENTS AT NO ADDITIONAL COST TO THE PROJECT.

9. EXTERIOR EDGE CONDITIONS:

UNLESS OTHERWISE NOTED ON PLANS, PROVIDE COLUMN STRIP TOP/BOT BARS AT EXTERIOR EDGES, WITH REDUCTION IN BAR SPACING OF 50mm (2"). BAR SIZE TO REMAIN AS NOTED (w. CRINT): 20M @ 250 B, CW(EXT): 20M @ 200 B)

10. SLAB BANDS:

IN PORTIONS OF SLAB CONTAINING SLAB BANDS LOWER LONGITUDINAL BOTTOM STEEL TO BOTTOM OF SLAB BAND. PROVIDE TYPICAL BOTTOM STEEL COVER REQUIREMENTS UN.

11. CLADDING SUPPORTS:

ALL CLADDING ELEMENTS (CURTAIN WALL/MASONRY/METAL PANELS) TO BE SUPPORTED VERTICALLY/LATERALLY AT EACH FLOOR LEVEL. DESIGNS FOR THESE ELEMENTS THAT ARE SHOWN SUPPORTING MULTI FLOORS AT A SINGLE LEVEL WILL BE REJECTED AND REDESIGNED/CONSTRUCTED AT CONTRACTOR'S OWN COST.

12. REFER TO 5000 SERIES DRAWINGS FOR CAMBERING OF SLAB.

13. ADDL. 3-20M T & B @ FACE OF SLAB OPENINGS TO BE PROVIDED.

The Contractor shall check and verify all dimensions on site. This drawing is not to be used for construction unless stamped and signed by the Engineer. Do not scale drawings. Copyright reserved. This drawing is the exclusive property of Cleland Jardine Engineering Ltd.

SECOND FLOOR PLAN
SCALE: 1:100

11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	SH
9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH
No.	DATE	REVISIONS	BY

PROJECT NORTH

STAMP

CLELAND JARDINE
ENGINEERING LTD.
FOUNDED ON BYTHRENGTH GUIDED BY VISION

200-040 TERRY FOX DR.
SCARBOROUGH, ONTARIO M1V 4Y7
(416) 331-5971 • 1-855-3

TOMLINSON

PROJECT
TOMLINSON
NEW BUILDING

DRAWING
SECOND FLOOR PLAN

DRAWN: S.H.	DRAWING No.
DESIGNED: B.J./S.M./B.A.	
APPROVED: B.J.	
DATE: OCT. 2015	
SCALE: 1:100	
PROJECT No: 15-0179	

S101

CONCRETE SLAB/REBAR NOTES:

1. COVER:

SLAB: 250 THICK

TOP: 25mm CLEAR TO TUL

REINFORCING STEEL LAYOUT:

BL: 25mm

TUL: 25mm

REINFORCING TO BE SIMILAR TO 3rd FLOOR UN.

2. MINIMUM REINFORCING:

CS: 20M @ 250 (+ HOOK AT CANTILEVER ENDS)

MS: 15M @ 300 (+ HOOK AT CANTILEVER ENDS)

TOP(EXT.): CS: 20M @ 250

TO(EXT.): CS: 20M @ 250 (+ HOOK AT DISCONTINUOUS ENDS) (EXTEND 3300 INTO CONTINUOUS SIDE)

MS: 15M @ 300 (+ HOOK AT DISCONTINUOUS ENDS) (EXTEND 3300 INTO CONTINUOUS SIDE)

3. INTEGRITY STEEL @ COLUMNS:

(OVER WIDTH OF COLUMN CAP)

PROVIDE ADDL BOTTOM STEEL AT ALL COLUMNS UN.

INTERIOR COLUMN: 3-25M B E.W.

EXTERIOR COLUMN: 3-25M B + HOOK

EXTERIOR CORNER: 4-20M B + HOOK

5. FLAT SLAB GEOMETRY UN:

SLAB: 250 THICK

DROPS: 3000x3000x240 UN

SLAB BANDS: 240 UN

FLARES: 200 UN

CONCRETE: 30 MPa UN

T.O.C. EL.: 4200

WHERE 6' WALL OR COLUMN > 10 MPa + 6' SLAB: PROVIDE PUDDLE OF CONCRETE AT COLUMNS/STAIRWALLS THAT MATCHES STRENGTH OF VERTICAL ELEMENT. EXTEND PUDDLE TO MIN. OF 600mm ALL AROUND VERTICAL ELEMENT.

6. DESIGN LOADS

2nd FLOOR OFFICE:

DEAD: 250 CONC.: 6.10 kPa

240 DROPS: 1.65 kPa

CEILING: 0.25 kPa

MECH: 0.25 kPa

PARTITION: 1.00 kPa

FLOORING: 0.10 kPa

9.55 kPa

LIVE: OFFICE: 3.80 kPa

EXITS: 4.80 kPa

2nd FLOOR LANDSCAPE:

DEAD: 250 CONC.: 6.10 kPa

240 DROPS: 1.65 kPa

CEILING: 0.25 kPa

MECH: 0.25 kPa

ROOFING: 0.60 kPa

300 SOIL: 6.00 kPa

14.85 kPa

LIVE: ROOF: 1.0 kPa

SNOW: 2.4 kPa (+ DRIFT)

2nd FLOOR BRIDGE:

DEAD: 100 CONC./DECK: 2.00 kPa

CEILING: 0.25 kPa

MECH: 0.25 kPa

FLOORING: 0.10 kPa

STEEL: 0.25 kPa

2.85 kPa

LIVE: ASSEMBLY: 4.80 kPa

2nd FLOOR MOBILE STORAGE:

DEAD: 300 CONC.: 7.20 kPa

190 DROPS: 1.65 kPa

CEILING: 0.25 kPa

MECH: 0.25 kPa

FLOORING: 0.10 kPa

PARTITION: 0.00 kPa (INCLUDED IN STORAGE LOAD)

9.45 kPa

LIVE: MOBILE STORAGE: kPa

7. TYPICAL DETAIL: OPENINGS (UN)

TERMINATE AFFECTED STEEL @ FACE OF OPENING

TERMINATE AFFECTED STEEL @ FACE OF OPENING

PROVIDE EQUIVALENT AREA OF STEEL (BASED ON TERMINATED BARS) (E.S. OF OPENING @ 1/2 SPACING (MIN. 2-15M))

TERMINATE AFFECTED STEEL @ FACE OF OPENING (c/w HOOK)

BARS ARE TO EXTEND FULL LENGTH NOTED ON DRAWINGS (MIN. 1200mm (4'-0") FROM FACE OF OPENING)

PROVIDE 3-20M @ 150W(2")

ADDL E.S. OF OPENING (EXTEND 1200mm (4'-0") PAST EDGE)

8. SLEEVING/CONDUIT

CONTRACTOR IS REQUIRED TO SUBMIT SLEEVING AND CONDUIT DRAWINGS (IN-SLAB) TO ENGINEER FOR REVIEW A MINIMUM OF 20 WORKING DAYS PRIOR TO CONC. PLACEMENT. DRAWINGS ARE TO DETAIL AND DIMENSION ALL ELEMENTS PASSING THROUGHIN SLAB. ANY SLEEVING/OPENINGS IN SLAB ELEMENTS NOT INDICATED ON REVIEWED DRAWINGS MAY BE REMOVED BY ENGINEER ON SITE AT CONTRACTOR'S OWN EXPENSE. NO CONCRETE IS TO BE PLACED PRIOR TO RECEIVING WRITTEN APPROVAL OF ENGINEER. SEE ALSO 5000 SERIES OF DRAWINGS FOR DETAILS. DURING SHOP DRAWING REVIEW ENGINEER MAY REMOVE ANVIL CONDUIT FROM SLAB NOT DEEMED SATISFYING TYPICAL REQUIREMENTS AT NO ADDITIONAL COST TO THE PROJECT.

9. EXTERIOR EDGE CONDITIONS:

UNLESS OTHERWISE NOTED ON PLANS, PROVIDE COLUMN STRIP TOP/BOT BARS AT EXTERIOR EDGES, WITH REDUCTION IN BAR SPACING OF 50mm (2") BAR SIZE TO REMAIN AS NOTED (w/ CRINT): 20M @ 250 B, CW(EXT): 20M @ 200 B)

10. SLAB BANDS:

IN PORTIONS OF SLAB CONTAINING SLAB BANDS LOWER LONGITUDINAL BOTTOM STEEL TO BOTTOM OF SLAB BAND. PROVIDE TYPICAL BOTTOM STEEL COVER REQUIREMENTS UN.

11. CLADDING SUPPORTS:

ALL CLADDING ELEMENTS (CURTAIN WALL/MASONRY/METAL PANELS) TO BE SUPPORTED VERTICALLY/LATERALLY AT EACH FLOOR LEVEL. DESIGNS FOR THESE ELEMENTS THAT ARE SHOWN SUPPORTING MULTI FLOORS AT A SINGLE LEVEL WILL BE REJECTED AND REDESIGNED/CONSTRUCTED AT CONTRACTOR'S OWN COST.

12. REFER TO 5000 SERIES DRAWINGS FOR CAMBERING OF SLAB.

13. ADDL 3-20M T & B @ FACE OF SLAB OPENINGS TO BE PROVIDED.

The Contractor shall check and verify all dimensions on site. This drawing is not to be used for construction unless stamped and signed by the Engineer. Do not scale drawings. Copyright reserved. This drawing is the exclusive property of Cleland Jardine Engineering Ltd.

SECOND FLOOR PLAN
SCALE: 1:100

11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	SH
9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH
No.	DATE	REVISIONS	BY

PROJECT NORTH

STAMP

CLELAND JARDINE
ENGINEERING LTD

200-480 TERRY FOX DR.
SCARBOROUGH, ONTARIO M1T 4B7
(416) 291-1553

TOMLINSON
FOUNDED ON BYBENEFITH GUIDED BY VISION

PROJECT
TOMLINSON
NEW BUILDING

DRAWING
SECOND FLOOR
(REINFORCING PLAN)

DRAWN:	S.H.	DRAWING No:
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	S101R1
SCALE:	1:100	
PROJECT No:	15-0179	

CONCRETE SLAB/REBAR NOTES:

1. COVER:

BOT. = 25mm CLEAR TO BLL.
TOP = 25mm CLEAR TO TUL.

2. REINFORCING STEEL LAYOUT:

BLL. — BUL.
TUL. — TLL.

REINFORCING TO BE SIMILAR TO 3rd FLOOR UN.

3. MINIMUM REINFORCING:

BOT. CS: 20M @ 250 (+ HOOK AT CANTILEVER ENDS)
MS: 15M @ 300 (+ HOOK AT CANTILEVER ENDS)
TOP(INT.): CS: 20M @ 250
TOP(EXT.): CS: 20M 330/660 @ 250 (+ HOOK AT DISCONTINUOUS ENDS) (EXTEND 3300 INTO CONTINUOUS SIDE)
MS: 15M 150 @ 300 (+ HOOK AT DISCONTINUOUS EDGE) (6600 LONG @ EXTERIOR EDGES EXTEND 3300 INTO CONTINUOUS SIDE)

4. INTEGRITY STEEL @ COLUMNS:

(OVER WIDTH OF COLUMN CAP)

PROVIDE ADDL. BOTTOM STEEL AT ALL COLUMNS UN.

INTERIOR COLUMN: 3-25M B.E.W.

EXTERIOR COLUMN: 3-25M B + HOOK

EXTERIOR CORNER: 4-20M B + HOOK

5. FLAT SLAB GEOMETRY (UN)

SLAB: 250 THICK
DROPS: 3000x3000x240 UN
SLAB BANDS: 240 UN
FLARES: 200 UN
CONCRETE: 30 MPa UN
T.O.C. EL.: 8200

WHERE 1/2 WALL OR COLUMN > 10 MPa + 1/2 SLAB: PROVIDE PUDDLE OF CONCRETE AT COLUMNS/SHAP/WALLS THAT MATCHES STRENGTH OF VERTICAL ELEMENT. EXTEND PUDDLE TO MIN. OF 600mm ALL AROUND VERTICAL ELEMENT.

6. DESIGN LOADS

3rd FLOOR:

DEAD: 250 CONC.: 6.10 kPa
240 DROPS: 1.65 kPa
CEILING: 0.25 kPa
MECH.: 0.25 kPa
PARTITION: 1.00 kPa
FLOORING: 0.10 kPa
9.35 kPa

LIVE: OFFICE: 3.80 kPa
EXITS: 4.80 kPa

BRIDGE:

DEAD: 100 CONC./DECK: 2.00 kPa
CEILING: 0.25 kPa
MECH.: 0.25 kPa
FLOORING: 0.10 kPa
STEEL: 0.25 kPa
2.85 kPa

LIVE: ASSEMBLY: 4.80 kPa

7. TYPICAL DETAIL: OPENINGS (UN)

PROVIDE 1-15M#800(32") LONG ADDL. @ CORNERS

TERMINATE AFFECTED STEEL @ FACE OF OPENING

TERMINATE AFFECTED STEEL @ FACE OF OPENING

PROVIDE EQUIVALENT AREA OF STEEL (BASED ON TERMINATED BARS) E.S. OF OPENING @ 1/2 SPACING (MIN. 2-15M#8)

TERMINATE AFFECTED STEEL @ FACE OF OPENING (c/w HOOK)

BARS ARE TO EXTEND FULL LENGTH NOTED ON DRAWINGS (MIN. 1200mm (4'-0") FROM FACE OF OPENING)

PROVIDE 3-20M @ 150(6") ADDL. E.S. OF OPENING (EXTEND 1200mm (4'-0") PAST EDGE)

8. SLEEVING/CONDUIT

CONTRACTOR IS REQUIRED TO SUBMIT SLEEVING AND CONDUIT DRAWINGS (IN-SLAB) TO ENGINEER FOR REVIEW A MINIMUM OF 20 WORKING DAYS PRIOR TO CONC. PLACEMENT. DRAWINGS ARE TO DETAIL AND DIMENSION ALL ELEMENTS PASSING THROUGHIN SLAB. ANY SLEEVING/OPENINGS IN SLAB ELEMENTS NOT INDICATED ON REVIEWED DRAWINGS MAY BE REMOVED BY ENGINEER ON SITE AT CONTRACTOR'S OWN EXPENSE. NO CONCRETE IS TO BE PLACED PRIOR TO RECEIVING WRITTEN APPROVAL OF ENGINEER. SEE ALSO 800V SERIES OF DRAWINGS FOR DETAILS. DURING SHOP DRAWING REVIEW ENGINEER MAY REMOVE ANY/ALL CONDUIT FROM SLAB NOT DEEMED SATISFYING TYPICAL REQUIREMENTS AT NO ADDITIONAL COST TO THE PROJECT.

9. EXTERIOR EDGE CONDITIONS:

UNLESS OTHERWISE NOTED ON PLANS, PROVIDE COLUMN STRIP TOP/BOT BARS AT EXTERIOR EDGES, WITH REDUCTION IN BAR SPACING OF 50mm (2"). BAR SIZE TO REMAIN AS NOTED (w/ CRINT); 20M @ 250 B, CW(EXT); 20M @ 200 B)

10. SLAB BANDS:

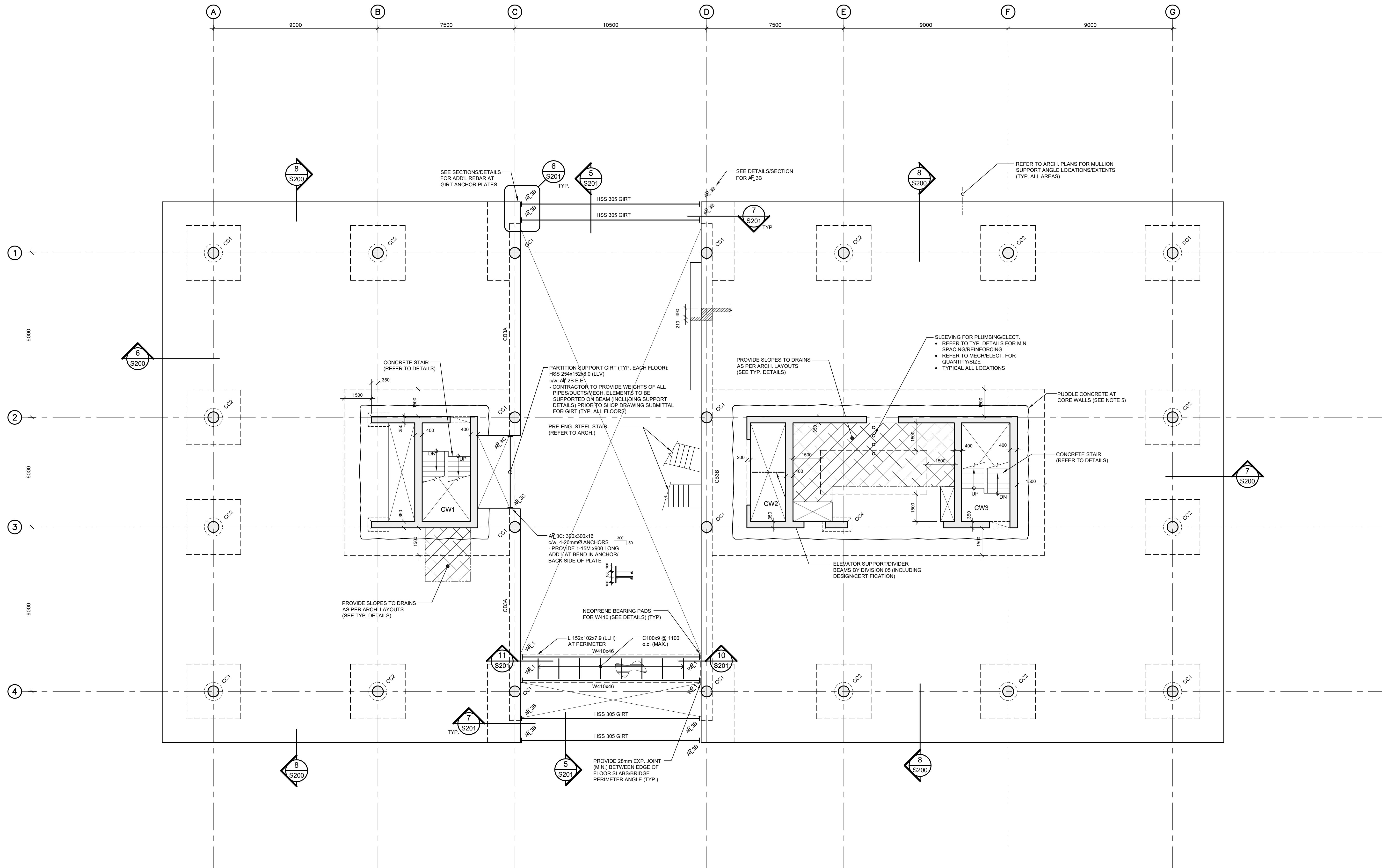
IN PORTIONS OF SLAB CONTAINING SLAB BANDS LOWER LONGITUDINAL BOTTOM STEEL TO BOTTOM OF SLAB BAND. PROVIDE TYPICAL BOTTOM STEEL COVER REQUIREMENTS UN.

11. CLADDING SUPPORTS:

ALL CLADDING ELEMENTS (CURTAIN WALL/MASONRY/METAL PANELS) TO BE SUPPORTED VERTICALLY/LATERALLY AT EACH FLOOR LEVEL. DESIGNS FOR THESE ELEMENTS THAT ARE SHOWN SUPPORTING MULTI FLOORS AT A SINGLE LEVEL WILL BE REJECTED AND REDESIGNED/CONSTRUCTED AT CONTRACTOR'S OWN COST.

12. REFER TO 5000 SERIES DRAWINGS FOR CAMBERING OF SLAB.

13. ADDL. 3-20M T & B @ FACE OF SLAB OPENINGS TO BE PROVIDED.



THIRD FLOOR PLAN
SCALE: 1:100

The Contractor shall check and verify all dimensions on site.
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11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	SH
9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH
No.	DATE	REVISIONS	BY

PROJECT NORTH

STAMP

CLELAND JARDINE
ENGINEERING LTD.
200-400 TERRY FOX DR.
SCARBOROUGH, ONTARIO M1V 5E3
(416) 291-1553

TOMLINSON
FOUNDED ON BYWYNETH GUIDED BY VISION

PROJECT

**TOMLINSON
NEW BUILDING**

DRAWING

THIRD FLOOR PLAN

DRAWN: S.H.

DESIGNED: B.J./S.M./B.A.

APPROVED: B.J.

DATE: OCT. 2015

SCALE: 1:100

PROJECT No: 15-0179

DRAWING No:

S102

1. COVER: BOT. = 25mm CLEAR TO BL
TOP = 25mm CLEAR TO TU

- ## 2. REINFORCING STEEL LAYOUT

2. REINFORCING STEEL LAYOUT

BUL |
TLL |
REINFORCING TO BE SIMILAR TO 3rd FLOOR U.N.

3. MINIMUM REINFORCING:

BOT: CS: 20M @ 250 (+ HOOK AT CANTILEVER ENDS)
MS: 15M @ 300 (+ HOOK AT CANTILEVER ENDS)
TOP(INT.): CS: 20M 3300/6600 @ 250
TOP(EXT.): CS: 20M @ 250 (+ HOOK AT DISCONTINUOUS ENDS)
(EXTEND 3300 INTO CONTINUOUS SIDE)
MS: 15M @ 300 (+ HOOK AT DISCONTINUOUS EDGE)
(6600 LONG @ EXTERIOR EDGES 3300 INTO
CONTINUOUS SIDE)

4. INTEGRITY STEEL @ COLUMNS

PROVIDE ADD'L BOTTOM STEEL AT ALL COLUMNS U/N

INTERIOR COLUMN: 4-25M B.

EXTERIOR COLUMN: 3-20M B. + HOOK.

5. FLAT SLAB GEOMETRY UN

SLAB: 250 THICK
DROPS: 3000x3000x240 U/N
SLAB BANDS: 240 U/N
FLARES: 200 U/N
CONCRETE: 30 MPa U/N
T.O.C. EL.: 8200

WHERE f_c' WALL OR COLUMN $> 10 \text{ MPa}$ + f_c' SLAB: PROVIDE PUDDLE OF CONCRETE AT COLUMNS/SHEARWALLS THAT MATCHES STRENGTH OF VERTICAL ELEMENT. EXTEND PUDDLE TO MIN. OF 600mm ALL AROUND VERTICAL ELEMENT.

8. DESIGN LOADS

<u>3rd FLOOR:</u>		
DEAD:	250 CONC.:	6.10 kPa
	240 DROPS:	1.65 kPa
	CEILING:	0.25 kPa
	MECH.:	0.25 kPa
	PARTITION:	1.00 kPa
	FLOORING:	0.10 kPa
		<u>9.35 kPa</u>

LIVE: OFFICE: 3.80 kPa

EXITS: 4.80 kPa

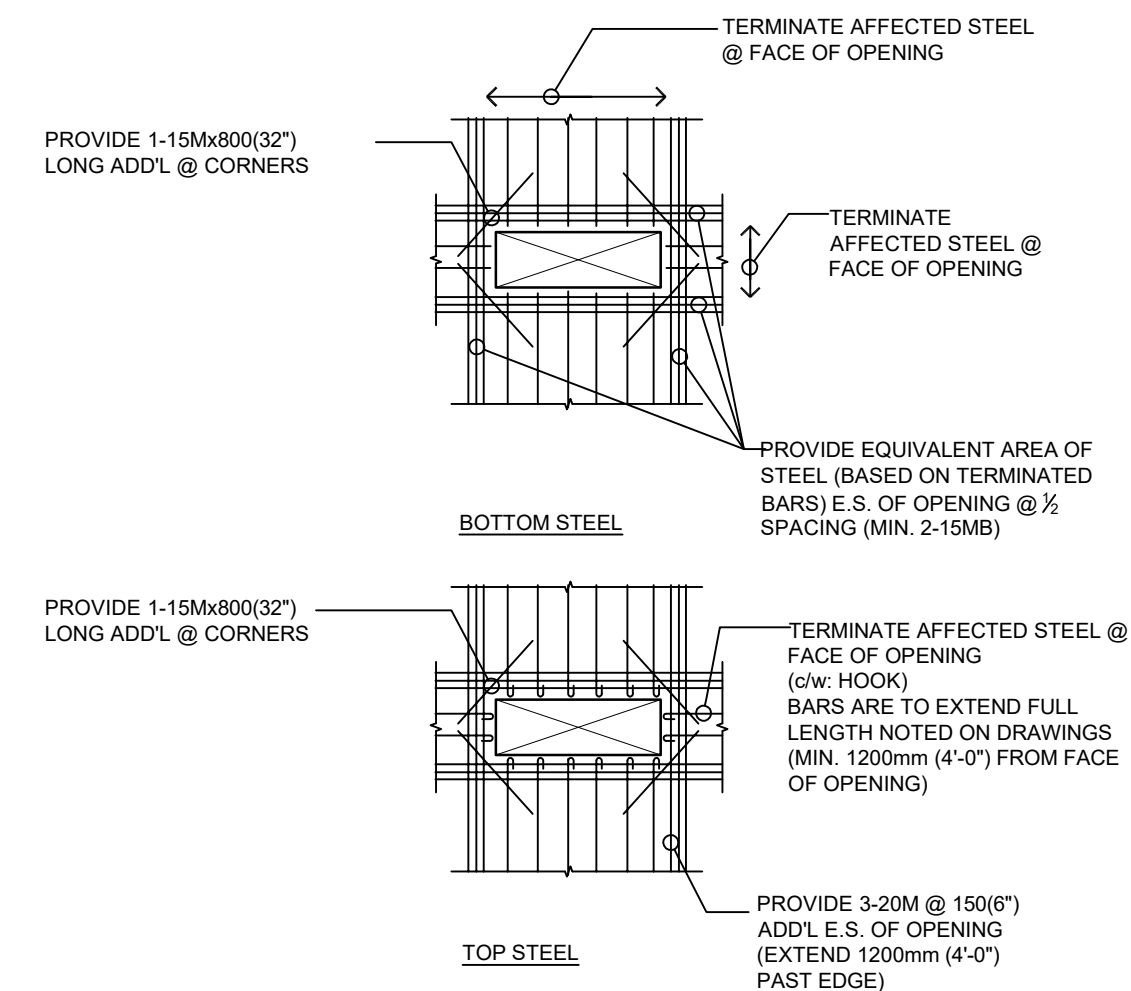
BRIDGE

DEAD:	100 CONC./DECK:	2.0
	CEILING:	0.2
	MECH.:	0.2
	FLOORING:	0.1
	STEEL:	<u>0.2</u>
		2.8

1.5/E	ASSEMBLY	1.9
-------	----------	-----

7. TYPICAL DETAIL: OPENINGS (U/N)

PROVIDE 1-15Mx800(32")
LONG ADD'L @ CORNERS

8. SLEEVING/CONDUIT

CONTRACTOR REQUIRED TO SUBMIT SLEEVING AND CONDUIT DRAWINGS (IN-SLAB) TO ENGINEER FOR REVIEW A MINIMUM OF 20 WORKING DAYS PRIOR TO CONC. PLACEMENT. DRAWINGS ARE TO DETAIL AND DIMENSION ALL ELEMENTS PASSING THROUGH/IN SLAB. ANY SLEEVING/OPENINGS/IN SLAB ELEMENTS NOT INDICATED ON REVIEWED DRAWINGS MAY BE REMOVED BY ENGINEER ON SITE AT CONTRACTOR'S OWN EXPENSE. NO CONCRETE IS TO BE PLACED PRIOR TO RECEIVING WRITTEN APPROVAL OF ENGINEER. SEE ALSO 5000 SERIES OF DRAWINGS FOR DETAILS. DURING SHOP DRAWING REVIEW ENGINEER MAY REMOVE ANY/ALL CONDUIT FROM SLAB NOT DEEMED SATISFYING TYPICAL REQUIREMENTS AT NO ADDITIONAL COST TO THE PROJECT.

9. EXTERIOR EDGE CONDITIONS

UNLESS OTHERWISE NOTED ON PLANS, PROVIDE COLUMN STRIP TOP/BOT BARS AT EXTERIOR EDGES, WITH REDUCTION IN BAR SPACING OF 50mm (2"). BAR SIZE TO REMAIN AS NOTED
(ie. C#(INT): 20M @ 250 B, C#(EXT): 20M @ 200 B)

10. SLAB BANDS

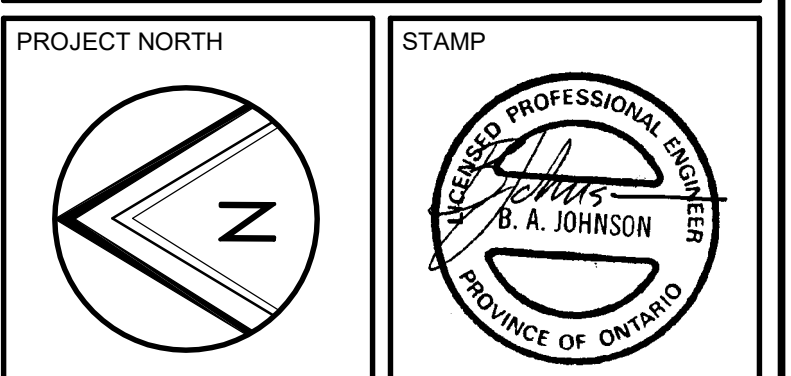
IN PORTIONS OF SLAB CONTAINING SLAB BANDS LOWER LONGITUDINAL BOTTOM STEEL TO BOTTOM OF SLAB BAND. PROVIDE TYPICAL BOTTOM STEEL COVER REQUIREMENTS U/N.

11. CLADDING SUPPORTS

ALL CLADDING ELEMENTS (CURTAIN WALL/MASONRY/METAL PANELS) TO BE SUPPORTED VERTICALLY/LATERALLY AT EACH FLOOR LEVEL. DESIGNS FOR THESE ELEMENTS THAT ARE SHOWN SUPPORTING MULTI FLOORS AT A SINGLE LEVEL WILL BE REJECTED AND REDESIGNED/CONSTRUCTED AT CONTRACTOR'S OWN COST.

12. REFER TO S000 SERIES DRAWINGS FOR CAMBERING OF SLAB

13. ADD'L 3-20M T & B @ FACE OF SLAB OPENINGS TO BE PROVIDED



TOMLINSON tomlinsongroup.com

PROJECT

TOMLINSON
NEW BUILDING

DRAWING

THIRD FLOOR PLAN
(TYPICAL REINFORCING U/N)

DRAWN:	S.H.	DRAWING No. S102R2
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	1:100	
PROJECT No:	15-0179	

CONCRETE SLAB/REBAR NOTES:

1. COVER:

BOT. = 25mm CLEAR TO BLL
TOP = 25mm CLEAR TO TUL

2. REINFORCING STEEL LAYOUT:

BLL = BLL
TUL = TLL
REINFORCING TO BE SIMILAR TO 3rd FLOOR UN.

3. MINIMUM REINFORCING:

BOT:

CS: 20M @ 250 (+ HOOK AT CANTILEVER ENDS)
MS: 15M @ 300 (+ HOOK AT CANTILEVER ENDS)

TOP(INT.):

CS: 20M @ 250

TOP(EXT.):

CS: 20M 3300/6600 @ 250 (+ HOOK AT DISCONTINUOUS ENDS) (EXTEND 3300 INTO CONTINUOUS SIDE)
MS: 15M 150 @ 300 (+ HOOK AT DISCONTINUOUS EDGE) (6600 LONG @ EXTERIOR EDGES EXTEND 3300 INTO CONTINUOUS SIDE)

4. INTEGRITY STEEL @ COLUMNS:

(OVER WIDTH OF COLUMN CAP)
PROVIDE ADDL BOTTOM STEEL AT ALL COLUMNS UN.

INTERIOR COLUMN:

3-25M B.E.W.

EXTERIOR COLUMN:

3-25M B + HOOK

EXTERIOR CORNER:

4-20M B + HOOK

5. FLAT SLAB GEOMETRY UN:

SLAB:

250 THICK
3000x3000x240 UN

SLAB BANDS:

240 UN

FLARES:

200 UN

CONCRETE:

30 MPa UN

T.O.C. EL:

12,200

WHERE 1/2 WALL OR COLUMN > 10 MPa + 1/2 SLAB: PROVIDE PUDDLE OF CONCRETE AT COLUMNS/Shearwalls THAT MATCHES STRENGTH OF VERTICAL ELEMENT. EXTEND PUDDLE TO MIN. OF 600mm ALL AROUND VERTICAL ELEMENT.

6. DESIGN LOADS

4th FLOOR:

DEAD:

250 CONC.: 6.10 kPa
240 DROPS: 1.65 kPa
CEILING: 0.25 kPa
MECH: 0.25 kPa
PARTITION: 1.00 kPa
FLOORING: 0.10 kPa
9.35 kPa

LIVE:

OFFICE: 3.80 kPa
EXITS: 4.80 kPa

300 CONC.:

240 DROP: 1.65 kPa
CEILING: 0.25 kPa
MECH: 0.25 kPa
PARTITION: 1.00 kPa
FLOORING: 0.10 kPa
10.45 kPa

7. TYPICAL DETAIL: OPENINGS (UN)

PROVIDE 1-15M#800(32") LONG ADDL @ CORNERS

TERMINATE AFFECTED STEEL @ FACE OF OPENING

TERMINATE AFFECTED STEEL @ FACE OF OPENING

PROVIDE EQUIVALENT AREA OF STEEL (BASED ON TERMINATED BARS) E.S. OF OPENING @ 1/2 SPACING (MIN. 2-15M#8)

TERMINATE AFFECTED STEEL @ FACE OF OPENING (1/2W HOOK)
BARS ARE TO EXTEND FULL LENGTH NOTED ON DRAWINGS (MIN. 1200mm (4'-0") FROM FACE OF OPENING)

PROVIDE 3-20M @ 150(6") ADDL E.S. OF OPENING (EXTEND 1200mm (4'-0") PAST EDGE)

TOP STEEL

BOTTOM STEEL

8. SLEEVING/CONDUIT

CONTRACTOR IS REQUIRED TO SUBMIT SLEEVING AND CONDUIT DRAWINGS (IN-SLAB) TO ENGINEER FOR REVIEW A MINIMUM OF 20 WORKING DAYS PRIOR TO CONC. PLACEMENT. DRAWINGS ARE TO DETAIL AND DIMENSION ALL ELEMENTS PASSING THROUGHIN SLAB. ANY SLEEVING/OPENINGS IN SLAB ELEMENTS NOT INDICATED ON REVIEWED DRAWINGS MAY BE REMOVED BY ENGINEER ON SITE AT CONTRACTOR'S OWN EXPENSE. NO CONCRETE IS TO BE PLACED PRIOR TO RECEIVING WRITTEN APPROVAL OF ENGINEER. SEE ALSO 8000 SERIES OF DRAWINGS FOR DETAILS. DURING SHOP DRAWING REVIEW ENGINEER MAY REMOVE ANY WALL CONDUIT FROM SLAB NOT DEEMED SATISFYING TYPICAL REQUIREMENTS AT NO ADDITIONAL COST TO THE PROJECT.

9. EXTERIOR EDGE CONDITIONS:

UNLESS OTHERWISE NOTED ON PLANS, PROVIDE COLUMN STRIP TOP/BOT BARS AT EXTERIOR EDGES, WITH REDUCTION IN BAR SPACING OF 50mm (2"). BAR SIZE TO REMAIN AS NOTED (W. CRINT): 20M @ 250 B, CW(EXT): 20M @ 200 B)

10. SLAB BANDS:

IN PORTIONS OF SLAB CONTAINING SLAB BANDS LOWER LONGITUDINAL BOTTOM STEEL TO BOTTOM OF SLAB BAND. PROVIDE TYPICAL BOTTOM STEEL COVER REQUIREMENTS UN.

11. CLADDING SUPPORTS:

ALL CLADDING ELEMENTS (CURTAIN WALL/MASONRY/METAL PANELS) TO BE SUPPORTED VERTICALLY/LATERALLY AT EACH FLOOR LEVEL. DESIGNS FOR THESE ELEMENTS THAT ARE SHOWN SUPPORTING MULTI FLOORS AT A SINGLE LEVEL WILL BE REJECTED AND REDESIGNED/CONSTRUCTED AT CONTRACTOR'S OWN COST.

12. REFER TO 5000 SERIES DRAWINGS FOR CAMBERING OF SLAB.

13. ADDL 3-20M T & B @ FACE OF SLAB OPENINGS TO BE PROVIDED.

FOURTH FLOOR PLAN
SCALE: 1:100

The Contractor shall check and verify all dimensions on site.
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11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	SH
9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH
No.	DATE	REVISIONS	BY

PROJECT NORTH

STAMP

CLELAND JARDINE

ENGINEERING LTD.

200-480 TERRY FOX DR. #200

SCARBOROUGH, ONTARIO M1T 4B7

(416) 291-1553

TOMLINSON Engineering & Construction
FOUNDED ON BYWYNETH GUIDED BY VISION

PROJECT

TOMLINSON

NEW BUILDING

DRAWING

FOURTH FLOOR PLAN

DRAWN:	S.H.	DRAWING No:
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	1:100	
PROJECT No:	15-0179	

S103

1. COVER: BOT. = 25mm CLEAR TO BLL.
TOP = 25mm CLEAR TO TUL

- BUL
-
- TLL
-
- REINFORCING TO

BOT: CS: 20M @ 250 (+ HOOK AT CANTILEVER ENDS)
MS: 15M @ 250 (+ HOOK AT CANTILEVER ENDS)
TOP(INT.): CS: 20M 3300/6600 @ 250
TOP(EXT.): CS: 20M @ 250 (+ HOOK AT DISCONTINUOUS ENDS)
(EXTEND 3300 INTO CONTINUOUS SIDE)
MS: 15M @ 300 (+ HOOK AT DISCONTINUOUS EDGE) (6600
LONG @ EXTERIOR EDGES EXTEND 3300 INTO
CONTINUOUS SIDE)

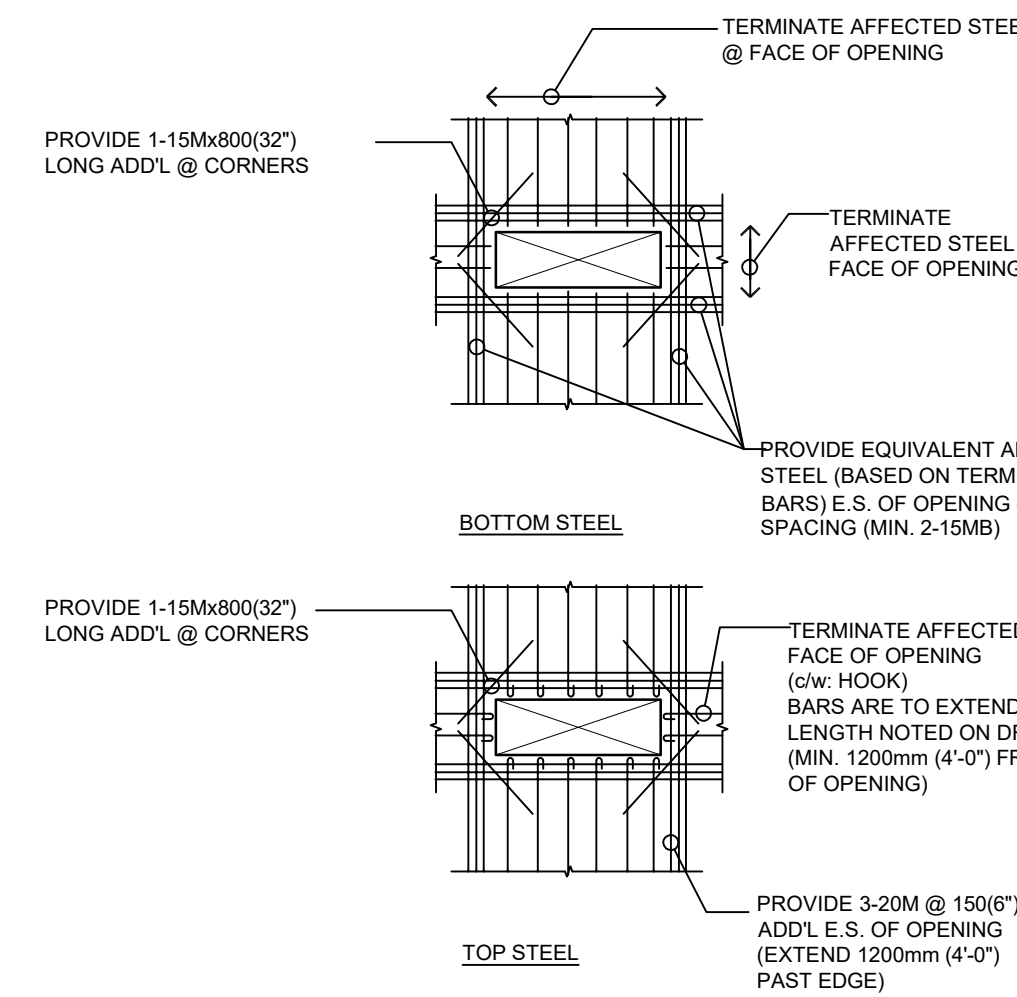
PROVIDE ADD'L BOTTOM STEEL AT ALL COLUMNS U/N.

SLAB: 250 THICK
DROPS: 3000x3000x240 U/N
SLAB BANDS: 240 U/N
FLARES: 200 U/N
CONCRETE: 30 MPa U/N
T.O.C. EL: 12,200

4th FLOOR:

DEAD:	250 CONC.:	6.10 kPa	300 CONC.:	7.20 kPa
	240 DROPS:	1.65 kPa	240 DROP:	1.65 kPa
	CEILING:	0.25 kPa	CEILING:	0.25 kPa
	MECH.:	0.25 kPa	MECH.:	0.25 kPa
	PARTITION:	1.00 kPa	PARTITION:	1.00 kPa
	FLOORING:	0.10 kPa	FLOORING:	0.10 kPa
		9.35 kPa		10.45 kPa

LIVE:	OFFICE:	3.80 kPa
	EXITS:	4.80 kPa



CONTRACTOR IS REQUIRED TO SUBMIT SLEEVING AND CONDUIT DRAWINGS (IN-SLAB) TO ENGINEER FOR REVIEW A MINIMUM OF 20 WORKING DAYS PRIOR TO CONC. PLACEMENT. DRAWINGS ARE TO DETAIL AND DIMENSION ALL ELEMENTS PASSING THROUGH/IN SLAB. ANY SLEEVING/OPENINGS/IN SLAB ELEMENTS NOT INDICATED ON REVIEWED DRAWINGS MAY BE REMOVED BY ENGINEER ON SITE AT CONTRACTOR'S OWN EXPENSE. NO CONCRETE IS TO BE PLACED PRIOR TO RECEIVING WRITTEN APPROVAL OF ENGINEER. SEE ALSO 5000 SERIES OF DRAWINGS FOR DETAILS. DURING SHOP DRAWING REVIEW ENGINEER MAY REMOVE ANY/ALL CONDUIT FROM SLAB NOT DEEMED SATISFYING TYPICAL REQUIREMENTS AT NO ADDITIONAL COST TO THE PROJECT.

UNLESS OTHERWISE NOTED ON PLANS, PROVIDE COLUMN STRIP TOP/BOT BARS AT EXTERIOR EDGES, WITH REDUCTION IN BAR SPACING OF 50mm (2"). BAR SIZE TO REMAIN AS NOTED
(ie. C#(INT): 20M @ 250 B, C#(EXT): 20M @ 200 B)

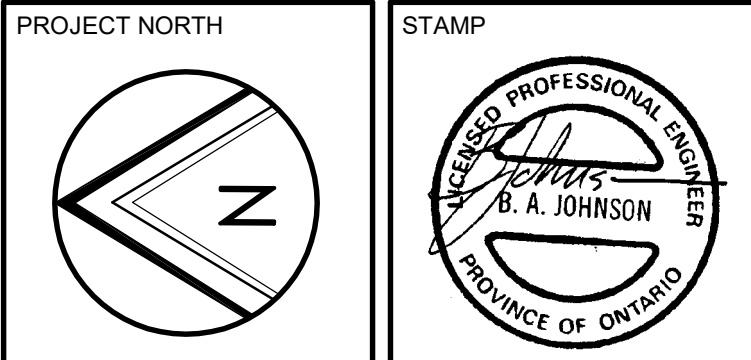
IN PORTIONS OF SLAB CONTAINING SLAB BANDS LOWER LONGITUDINAL BOTTOM
STEEL TO BOTTOM OF SLAB BAND. PROVIDE TYPICAL BOTTOM STEEL COVER
REQUIREMENTS U/N.

ALL CLADDING ELEMENTS (CURTAIN WALL/MASONRY/METAL PANELS) TO BE SUPPORTED VERTICALLY/LATERALLY AT EACH FLOOR LEVEL. DESIGNS FOR THESE ELEMENTS THAT ARE SHOWN SUPPORTING MULTI FLOORS AT A SINGLE LEVEL WILL BE REJECTED AND REDESIGNED/CONSTRUCTED AT CONTRACTOR'S OWN COST.

13. ADD'L 3-20M T & B @ FACE OF SLAB OPENINGS TO BE PROVIDED



11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	SH
9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - RECEIVED AT UTM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING SH	SH
No.	DATE	REVISIONS	BY



TOMLINSON tomlinsongroup.com

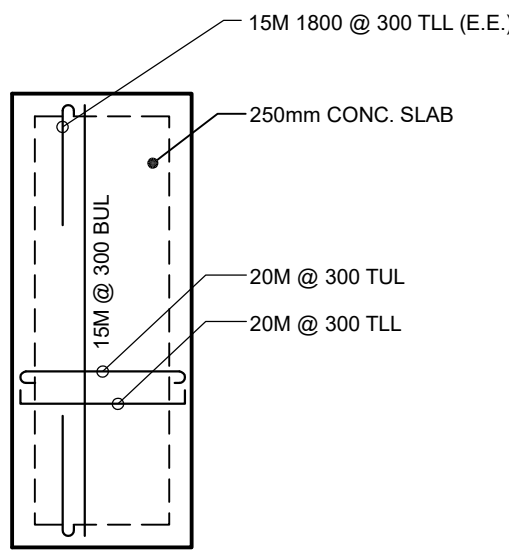
PROJECT

TOMLINSON
NEW BUILDING

DRAWING

FOURTH FLOOR
(REINFORCING PLAN)

DRAWN:	S.H.	DRAWING No. S103R2
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	1:100	
PROJECT No:	15-0179	

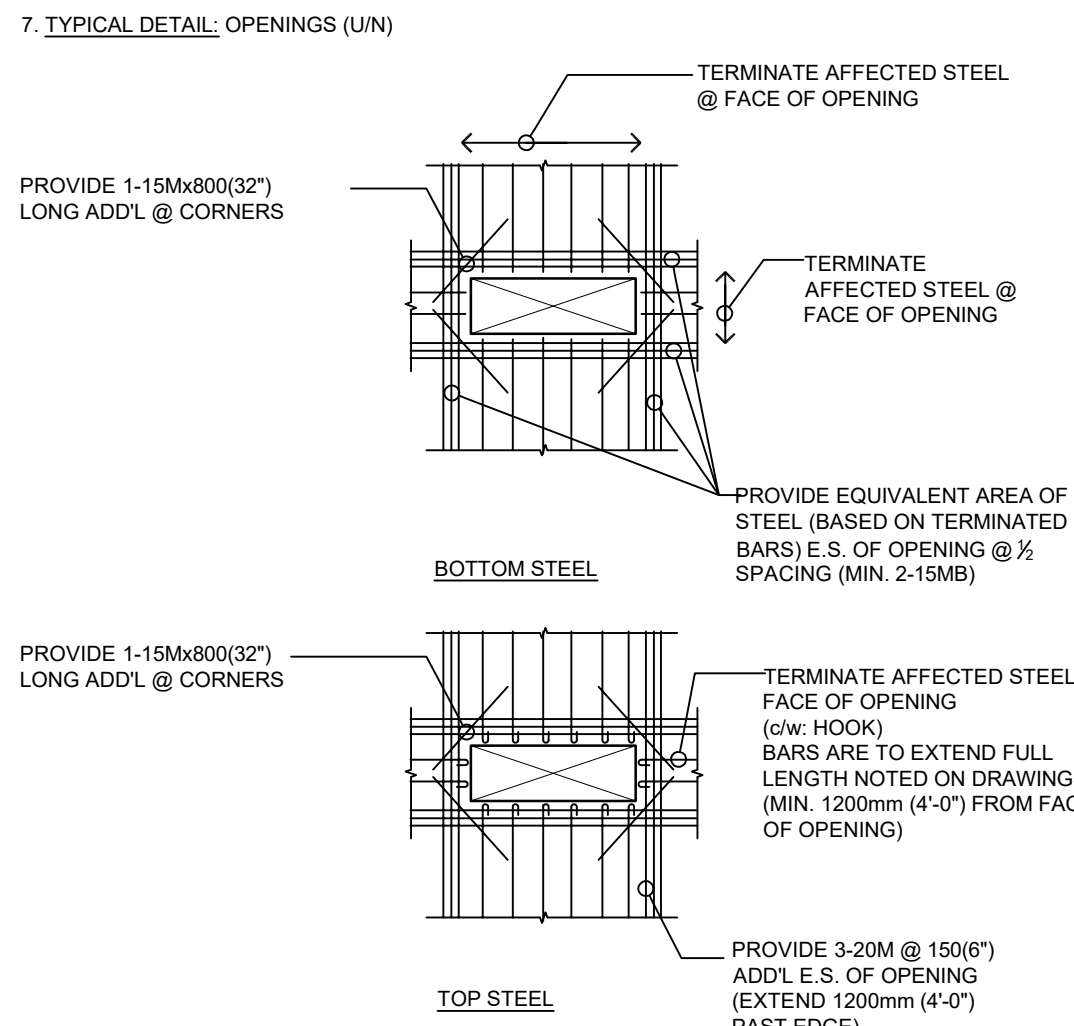


PARTIAL PLAN: ELEVATOR OVERRUN
SCALE: 1:100

- CONCRETE SLAB/REBAR NOTES:**
- COVER:** BOT: +25mm CLEAR TO BLL
TOP: +25mm CLEAR TO TUL
REINFORCING TO BE SIMILAR TO 3rd FLOOR UN.
 - REINFORCING STEEL LAYOUT:**
BLL: — BLL
TUL: — TUL
 - MINIMUM REINFORCING:**
BOT: CS: 20M @ 250 (+ HOOK AT CANTILEVER ENDS)
MS: 15M @ 300 (+ HOOK AT CANTILEVER ENDS)
TOP(EXT.): CS: 20M @ 250
MS: 15M @ 300 (+ HOOK AT DISCONTINUOUS ENDS) (EXTEND 3300 INTO CONTINUOUS SIDE)
MS: 15M 130 @ 300 (+ HOOK AT DISCONTINUOUS EDGE) (6000 LONG @ EXTERIOR EDGES EXTEND 3300 INTO CONTINUOUS SIDE)
 - INTEGRITY STEEL @ COLUMNS:**
(OVER WIDTH OF COLUMN CAP)
PROVIDE ADDL BOTTOM STEEL AT ALL COLUMNS UN.
INTERIOR COLUMN: 3-25M B.E.W.
EXTERIOR COLUMN: 3-25M B + HOOK
EXTERIOR CORNER: 4-20M B + HOOK

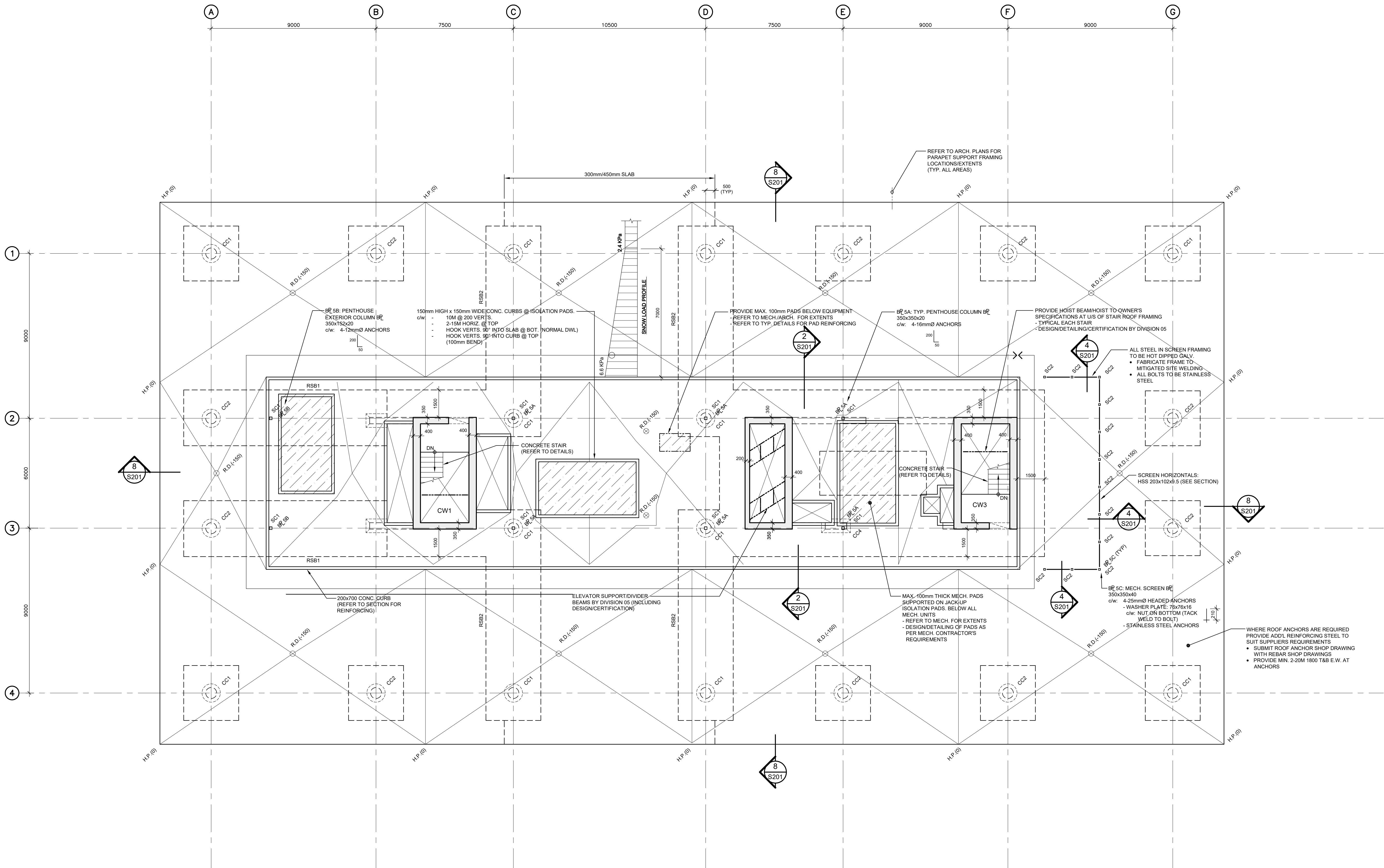
- 5. FLAT SLAB GEOMETRY UN:**
- SLAB: 425 MAX./275 MIN. THICK - 450 MAX/300 MIN.
DROPS: 3000x3000/240 UN
SLAB BANDS: 240 UN
FLARES: 200 UN
CONCRETE: 30 MPa UN
- T.O.C. EL.: P.H. FLOOR: 16.200
T.O.C. EL.: ROOF: 16.200 (LOW POINT)
T.O.C. EL.: ROOF: 16.350 (HIGH POINT)
- WHERE 1/2 WALL OR COLUMN > 10 MPa + 1/2 SLAB: PROVIDE PUDDLE OF CONCRETE AT COLUMNS/SHEARWALLS THAT MATCHES STRENGTH OF VERTICAL ELEMENT. EXTEND PUDDLE TO MIN. OF 600mm ALL AROUND VERTICAL ELEMENT.
- PROVIDE VARYING HEIGHT CHAIRS TO TOP STEEL TO MAINTAIN 25mm CLEAR COVER FROM TOP OF SLOPING SLAB.
- REFER TO LEVEL 3 REINFORCING UN.
- 6. DESIGN LOADS:**
- ROOF AREAS: CONCRETE SLAB:**
- DEAD: 425 MAX/275 MIN. CONC.: 9.00 kPa
240 DROPS: 1.65 kPa
CEILING: 0.25 kPa
MECH: 0.25 kPa
ROOFING: 0.60 kPa (CONVENTIONAL)
11.75 kPa
- LIVE: ROOF: 1.00 kPa
SNOW: 2.40 kPa (+ DRIFT)

- MECH AREAS: CONCRETE SLAB:**
- DEAD: 275 CONC.: 6.00 kPa
240 DROPS: 1.65 kPa
CEILING: 0.25 kPa
MECH: 0.25 kPa
FLOORING: 0.10 kPa
8.85 kPa
- LIVE: MECH. ROOM: 7.20 kPa (NCL 100mm EQUIPPADS)
- ELEVATOR OVERRUN:**
- DEAD: 200 CONC.: 4.80 kPa
CEILING: 0.25 kPa
MECH: 0.25 kPa
FLOORING: 0.10 kPa
5.40 kPa
- LIVE: MECH. ROOM: 7.20 kPa (NCL 100mm EQUIPPADS)



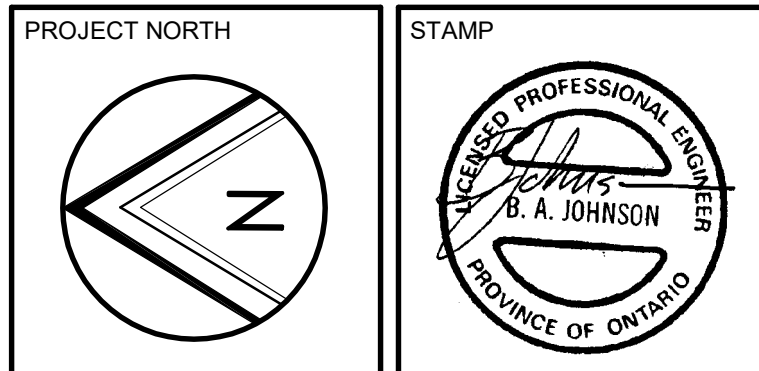
- 8. SLEEVING/CONDUIT:**
- CONTRACTOR IS REQUIRED TO SUBMIT SLEEVING AND CONDUIT DRAWINGS (N-SLAB) TO ENGINEER FOR REVIEW A MINIMUM OF 20 WORKING DAYS PRIOR TO CONC. PLACEMENT. DRAWINGS ARE TO DETAIL AND DIMENSION ALL ELEMENTS PASSING THROUGHIN SLAB. ANY SLEEVING/OPENINGS IN SLAB ELEMENTS NOT INDICATED ON REVIEWED DRAWINGS MAY BE REMOVED BY ENGINEER ON SITE AT CONTRACTORS OWN EXPENSE. NO CONCRETE IS TO BE PLACED PRIOR TO RECEIVING WRITTEN APPROVAL OF ENGINEER. SEE ALSO 5000 SERIES OF DRAWINGS FOR DETAILS. DURING SHOP DRAWING REVIEW ENGINEER MAY REMOVE ANY/ALL CONDUIT FROM SLAB NOT DEEMED SATISFYING TYPICAL REQUIREMENTS AT NO ADDITIONAL COST TO THE PROJECT.
- 9. EXTERIOR EDGE CONDITIONS:**
- UNLESS OTHERWISE NOTED ON PLANS, PROVIDE COLUMN STRIP TOP/BOT BARS AT EXTERIOR EDGES, WITH REDUCTION IN BAR SPACING OF 50mm (2"). BAR SIZE TO REMAIN AS NOTED
(@ CWNT): 20M @ 250 B. CW(EXT): 20M @ 200 B)
- 10. SLAB BANDS:**
- IN PORTIONS OF SLAB CONTAINING SLAB BANDS LOWER LONGITUDINAL BOTTOM STEEL TO BOTTOM OF SLAB BAND. PROVIDE TYPICAL BOTTOM STEEL COVER REQUIREMENTS UN.
- 11. CLADDING SUPPORTS:**
- ALL CLADDING ELEMENTS (CURTAIN WALL/MASONRY/METAL PANELS) TO BE SUPPORTED VERTICALLY/LATERALLY AT EACH FLOOR LEVEL. DESIGNS FOR THESE ELEMENTS THAT ARE SHOWN SUPPORTING MULTI FLOORS AT A SINGLE LEVEL WILL BE REJECTED AND REDESIGNED/CONSTRUCTED AT CONTRACTORS OWN COST.
- 12. REFER TO 5000 SERIES DRAWINGS FOR CAMBERING OF SLAB.**
- 13. ADDL 3-20M T & B @ FACE OF SLAB OPENINGS TO BE PROVIDED.**

The Contractor shall check and verify all dimensions on site. This drawing is not to be used for construction unless stamped and signed by the Engineer. Do not scale drawings. Copyright reserved. This drawing is the exclusive property of Cleland Jardine Engineering Ltd.



ROOF PLAN
SCALE: 1:100

11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	SH
9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH
No.	DATE	REVISIONS	BY



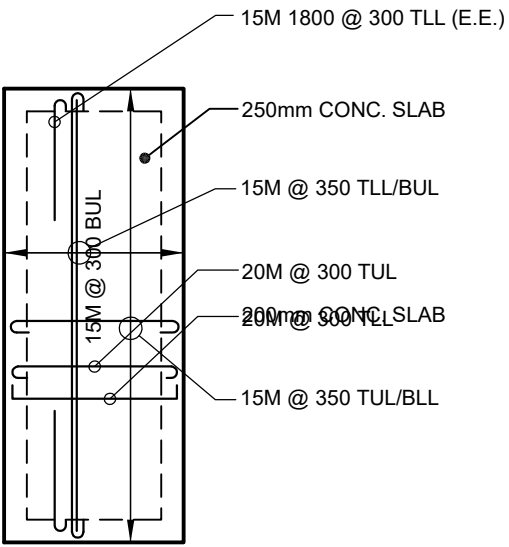
TOMLINSON Engineering & Construction
FOUNDED ON BYWYNETH GUIDED BY VISION

PROJECT
**TOMLINSON
NEW BUILDING**

DRAWING
ROOF PLAN

DRAWN: S.H.	DRAWING No:
DESIGNED: B.J./S.M./B.A.	
APPROVED: B.J.	
DATE: OCT. 2015	
SCALE: 1:100	
PROJECT No: 15-0179	

S104



PARTIAL PLAN: ELEVATOR OVERRUN
SCALE: 1:100

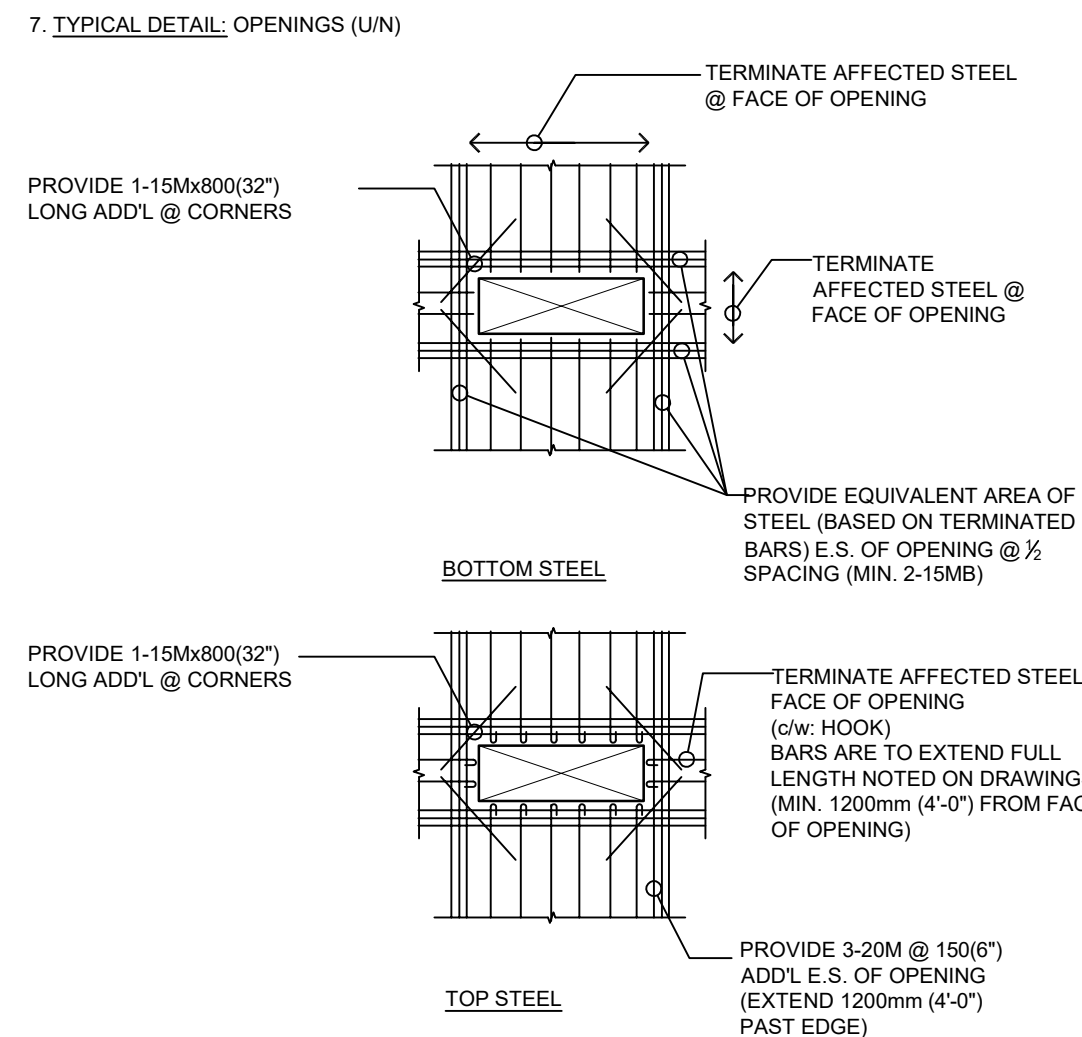
- CONCRETE SLAB/REBAR NOTES:**
- COVER:** BOT. = 25mm CLEAR TO BLL
TOP = 25mm CLEAR TO TUL
 - REINFORCING STEEL LAYOUT:**
BLL — BLL
TUL — TUL
REINFORCING TO BE SIMILAR TO 3rd FLOOR UN.
 - MINIMUM REINFORCING:**
BOT. CS: 20M @ 200 (+ HOOK AT CANTILEVER ENDS)
MS: 15M @ 200 (+ HOOK AT CANTILEVER ENDS)
TOP/EXT.: CS: 20M @ 200
TO/EXT.: CS: 20M @ 250 (+ HOOK AT DISCONTINUOUS ENDS)
MS: 15M @ 250 (+ HOOK AT DISCONTINUOUS EDGE)
 - INTEGRITY STEEL @ COLUMNS:**
(OVER WIDTH OF COLUMN CAP)
PROVIDE ADD'L BOTTOM STEEL AT ALL COLUMNS UN.

INTERIOR COLUMN: 4-25M S.E.W.
EXTERIOR COLUMN: 4-25M B + HOOK
EXTERIOR CORNER: 4-25M B + HOOK

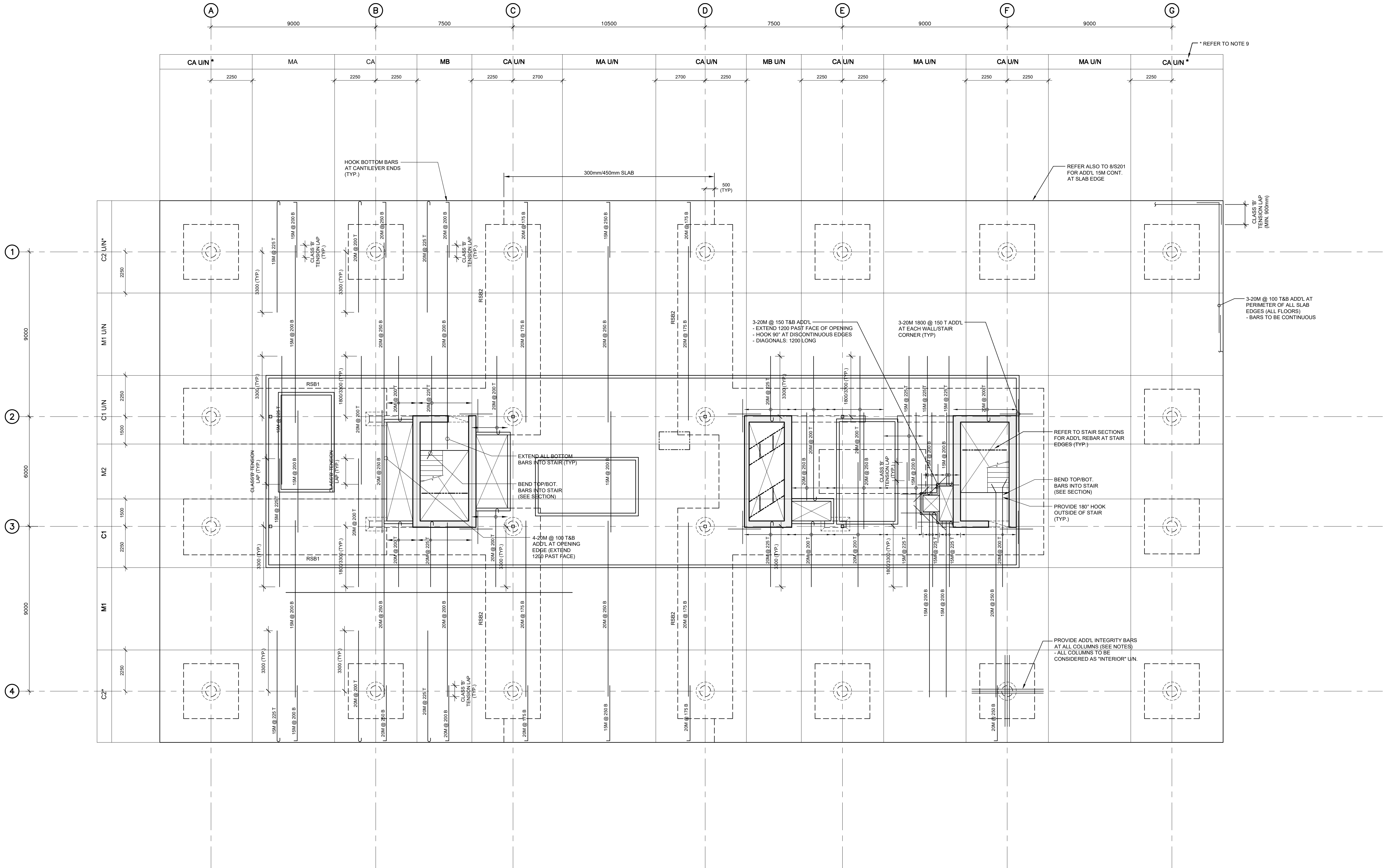
- 5. FLAT SLAB GEOMETRY UN:**
- SLAB: 425 MAX./275 MIN. THICK - 450 MAX/300 MIN.
DROPS: 3000/3000/2400 UN
SLAB BANDS: 240 UN
FLARES: 200 UN
CONCRETE: 30 MPa UN
- T.O.C. EL.: P.H. FLOOR: 16.200
T.O.C. EL.: ROOF: 16.200 (LOW POINT)
T.O.C. EL.: ROOF: 16.350 (HIGH POINT)
- WHERE T.O. WALL OR COLUMN > 10 MPa + 1' SLAB: PROVIDE PUDDLE OF CONCRETE AT COLUMNS/SHEARWALLS THAT MATCHES STRENGTH OF VERTICAL ELEMENT. EXTEND PUDDLE TO MIN. OF 600mm ALL AROUND VERTICAL ELEMENT.
- PROVIDE VARYING HEIGHT CHAIRS TO TOP STEEL TO MAINTAIN 25mm CLEAR COVER FROM TOP OF SLOPING SLAB.
- REFER TO LEVEL 3 REINFORCING UN.

- 6. DESIGN LOADS**
- ROOF AREAS: CONCRETE SLAB:**
- DEAD: 425 MAX/275 MIN. CONC.: 9.00 kPa
240 DROPS: 1.65 kPa
CEILING: 0.25 kPa
MECH.: 0.25 kPa
ROOFING: 0.60 kPa (CONVENTIONAL)
11.75 kPa
- LIVE: ROOF: 1.00 kPa
SNOW: 2.40 kPa (+ DRIFT)

- MECH. AREAS: CONCRETE SLAB:**
- DEAD: 275 CONC.: 6.60 kPa
240 DROPS: 1.65 kPa
CEILING: 0.25 kPa
MECH.: 0.25 kPa
FLOORING: 0.10 kPa
8.85 kPa
- LIVE: MECH. ROOM: 7.20 kPa (NCL. 100mm EQUIPPADS)
- ELEVATOR OVERRUN:**
- DEAD: 200 CONC.: 4.80 kPa
CEILING: 0.25 kPa
MECH.: 0.25 kPa
FLOORING: 0.10 kPa
5.40 kPa
- LIVE: MECH. ROOM: 7.20 kPa (NCL. 100mm EQUIPPADS)



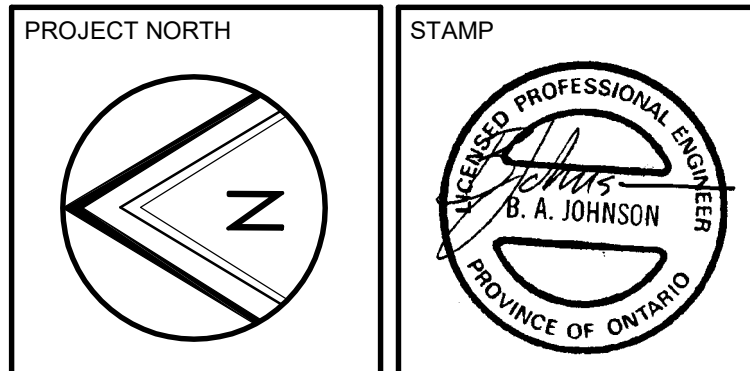
- 8. SLEEVING/CONDUIT**
- CONTRACTOR IS REQUIRED TO SUBMIT SLEEVING AND CONDUIT DRAWINGS (N-SLAB) TO ENGINEER FOR REVIEW A MINIMUM OF 20 WORKING DAYS PRIOR TO CONC. PLACEMENT. DRAWINGS ARE TO DETAIL AND DIMENSION ALL ELEMENTS PASSING THROUGHIN SLAB. ANY SLEEVING/OPENINGS IN SLAB ELEMENTS NOT INDICATED ON REVIEWED DRAWINGS MAY BE REMOVED BY ENGINEER ON SITE AT CONTRACTOR'S OWN EXPENSE. NO CONCRETE IS TO BE PLACED PRIOR TO RECEIVING WRITTEN APPROVAL OF ENGINEER. SEE ALSO 5000 SERIES OF DRAWINGS FOR DETAILS. DURING SHOP DRAWING REVIEW ENGINEER MAY REMOVE ANY WALL CONDUIT FROM SLAB NOT DEEMED SATISFYING TYPICAL REQUIREMENTS AT NO ADDITIONAL COST TO THE PROJECT.
- 9. EXTERIOR EDGE CONDITIONS:**
- UNLESS OTHERWISE NOTED ON PLANS, PROVIDE COLUMN STRIP TOP/BOT BARS AT EXTERIOR EDGES, WITH REDUCTION IN BAR SPACING OF 50mm (2"). BAR SIZE TO REMAIN AS NOTED
(@ C/UNT): 20M @ 250 B, C/EXT): 20M @ 200 B
- 10. SLAB BANDS:**
- IN PORTIONS OF SLAB CONTAINING SLAB BANDS LOWER LONGITUDINAL BOTTOM STEEL TO BOTTOM OF SLAB BAND. PROVIDE TYPICAL BOTTOM STEEL COVER REQUIREMENTS UN.
- 11. CLADDING SUPPORTS:**
- ALL CLADDING ELEMENTS (CURTAIN WALLS/ONRYMETAL PANELS) TO BE SUPPORTED VERTICALLY/LATERALLY AT EACH FLOOR LEVEL. DESIGNS FOR THESE ELEMENTS THAT ARE SHOWN SUPPORTING MULTI FLOORS AT A SINGLE LEVEL, WILL BE REJECTED AND REDESIGNED/CONSTRUCTED AT CONTRACTOR'S OWN COST.
- 12. REFER TO 5000 SERIES DRAWINGS FOR CAMBERING OF SLAB.**
- 13. ADD'L 3-20M T & B @ FACE OF SLAB OPENINGS TO BE PROVIDED.**



ROOF PLAN
SCALE: 1:100

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9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY DRAWING	SH
No.	DATE	REVISIONS	BY



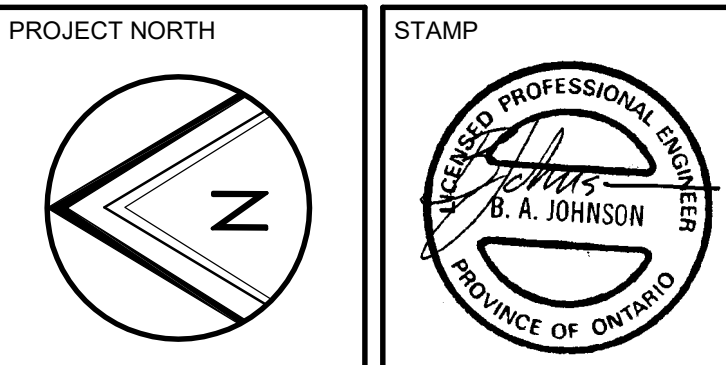
PROJECT
**TOMLINSON
NEW BUILDING**

DRAWING
**ROOF
(REINFORCING PLAN)**

DRAWN: S.H.	DRAWING No:
DESIGNED: B.J./S.M./B.A.	
APPROVED: B.J.	
DATE: OCT. 2015	S104R2
SCALE: 1:100	
PROJECT No: 15-0179	

The Contractor shall check and verify all dimensions on site.
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stamped and signed by the Engineer.
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is the exclusive property of Cleland Jardine Engineering Ltd.

11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SI
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	SI
9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	
5	MAY 17/16	ISSUED FOR 50% REVIEW	SI
4	APR 25/16	ISSUED FOR 33% REVIEW	SI
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED AT RUM	SI
2	JAN 22/16	ISSUED FOR 25% REVIEW	
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING SI	B
No.	DATE	REVISIONS	



PROJECT

TOMLINSON
NEW BUILDING

DRAWING

PENTHOUSE ROOF PLAN

DRAWN:	S.H.	DRAWING No. S105
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	1:100	
PROJECT No:	15-0179	

FOOTING SCHEDULE - TEST FACILITY		
MARK	SIZE (LxWxT)	NOTES
FT1	500x250	EXTERIOR STRIP FOOTING AT GLAZING 3-15M BOT. LONG. f _c ' = 25 MPa, N Q _{ult} ≥ 200 kPa Q _{ult} ≥ 350 kPa
FT2	1200x1200x300	INTERIOR FOOTINGS 15M @ 300 E.W. f _c ' = 25 MPa, N Q _{ult} ≥ 200 kPa Q _{ult} ≥ 350 kPa
FT3	800x800x300	EXTERIOR PAD FOOTINGS 3-15M B.E.W. f _c ' = 25 MPa, N Q _{ult} ≥ 200 kPa Q _{ult} ≥ 350 kPa
FT4	3000x500	BRACE FRAME PAD FOOTINGS 20M @ 250 B.E.W. 20M @ 250 T.E.W. IN 3mx3m MAT AT EACH COL. f _c ' = 25 MPa, N Q _{ult} ≥ 200 kPa Q _{ult} ≥ 350 kPa
FT5	800x300	SHEAR WALL STRIP FOOTING 1-15M BOT. LONG. f _c ' = 25 MPa, N Q _{ult} ≥ 200 kPa Q _{ult} ≥ 350 kPa
FT6	3000x3000x800	LINK PIER FOOTINGS 20M @ 200 B.E.W. 20M @ 200 T.E.W. f _c ' = 25 MPa, N Q _{ult} ≥ 200 kPa Q _{ult} ≥ 350 kPa
FT7	1800x1800x400	LINK PADS AT BUILDING 20M @ 300 B.E.W. f _c ' = 25 MPa, N Q _{ult} ≥ 200 kPa Q _{ult} ≥ 350 kPa

- NOTES:**
- ALL FOOTINGS TO BEAR ON SUITABLE BEARING STRATA AS APPROVED BY GEOTECHNICAL ENGINEER IN ACCORDANCE WITH GEOTECHNICAL REPORT WITH MINIMUM BEARING PRESSURES NOTED IN TABLE.
 - PROVIDE MINIMUM 1500(5'-0") FROST COVER TO ALL FOOTINGS EXPOSED TO EXTERIOR CONDITIONS UNLESS OTHERWISE NOTED IN GEOTECHNICAL REPORT.
 - CONCRETE STRENGTH: f_c' = 25 MPa, N.
 - TOPS OF INTERIOR FOOTINGS TO BE A MINIMUM OF 300mm (12") BELOW THE US OF THE SLAB ON GRADE. STEP DOWN INTERIOR FOOTINGS TO EXTERIOR FOOTINGS AS REQUIRED. FINAL BEARING ELEVATIONS TO BE BASED ON GEOTECHNICAL INVESTIGATION.
 - FOOTING AND BOTTOM OF WALL ELEVATIONS TO BE ESTABLISHED FROM PLANS AND GEOTECHNICAL REPORT. WALLS/COLUMNS ARE TO BE TERMINATED SUCH THAT THEY ARE FOUNDED ON COMPETANT BEDROCK (WITH APPROPRIATE FROST COVER) APPROVED BY GEOTECHNICAL ENGINEER ON SITE.
 - GEOTECHNICAL ENGINEER TO CONFIRM ALL BEARING CAPACITIES ON SITE PRIOR TO PLACING CONCRETE.
 - FOOTINGS ARE TO BE LOWERED AS REQUIRED IN THE AREAS OF PITS/SHAFTS @ FOUNDATION LEVEL SUCH THAT THE US OF THE PIER/SHAFT IS AT THE TOP OF THE FOOTING. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ELEVATIONS/STEPS IN FOOTINGS. CONTRACTOR IS REQUIRED TO PREPARE FOOTING ELEVATION DRAWINGS PRIOR TO EXCAVATION.
 - 15M SIDE BARS @ 200mm (8") o.c. REQUIRED FOR FOOTINGS 800mm (24") DEEP AND GREATER.
 - HOOK FOOTING BARS 90° WHERE EDGE OF FOOTING IS LESS THAN 600mm (24") PAST EDGE OF SUPPORTED PIERWALL.

PIER SCHEDULE - TEST FACILITY		
MARK	SIZE	REINFORCING
PT1	500x500	TYPICAL PIER c/w: 8-20M VERT. + DWLS 2-10M TIES @ 300 o.c. (+ ADD'L T&B)
PT2	650x650	BRACE PIER c/w: 15-20M VERT. (FULL HEIGHT) 3-10M TIES @ 250 o.c. (+ ADD'L T&B)
PT3	1000x1000	LINK MOMENT FRAME PIER c/w: 20-25M VERT. (FULL HEIGHT) 5-10M TIES @ 300 o.c. (+ ADD'L T&B)

BASEPLATE SCHEDULE - TEST FACILITY		
MARK	SIZE	REMARKS
BP1A	250x200x16	GIRDER PLATE 4-16mmØ ANCHOR BOLTS (WELD TO US OF PLATE)
BP1B	(SEE 1/S200T)	COLLECTOR GIRDER PLATE (SEE 1/S200T FOR DETAILS)
BP1C	150x200x16 (MIN. SIZE)	TYP. JOIST ANCHOR 2-16mmØ ANCHOR BOLTS (INCREASE SIZE OF PLATE TO SUIT JOIST DESIGN REQUIREMENTS)
BP1D	300x300x20	INTERIOR BASEPLATE 4-16mmØ ANCHOR BOLTS
BP1E	450x450x50	BRACE BASEPLATE 4-32mmØ SEISMIC HEADED ANCHORS + W200x171 SHEAR STUB x 250 LONG
BP1F	850x850x75	LINK PIER MOMENT FRAME PLATE 8-32mmØ SEISMIC HEADED ANCHORS

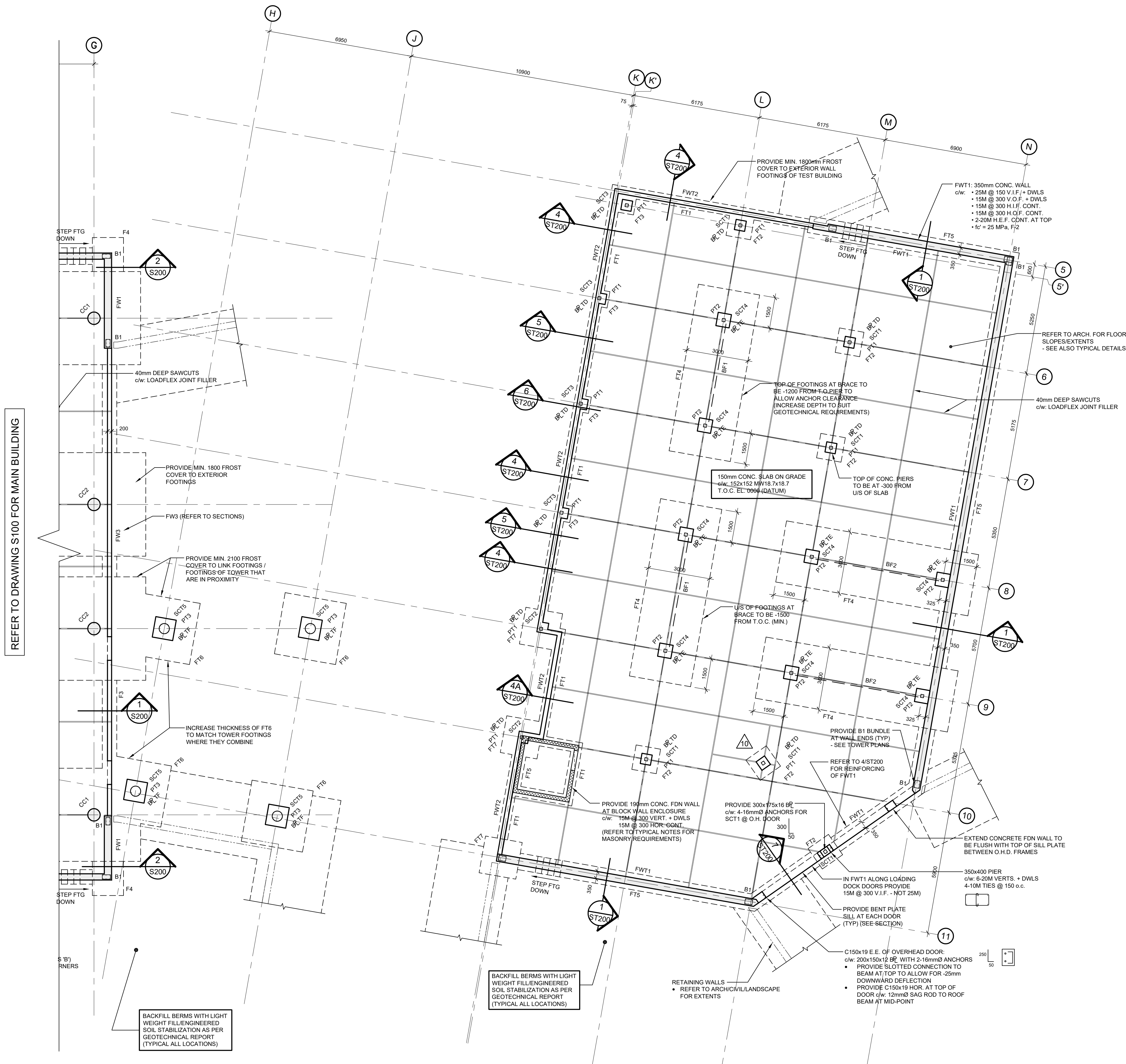
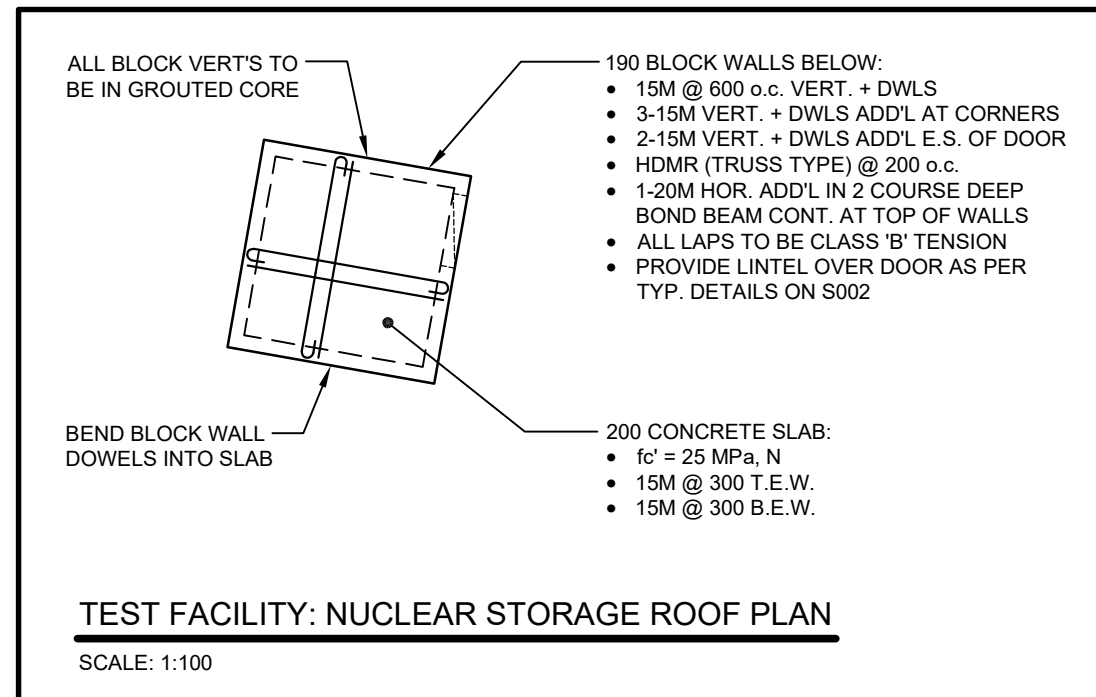
- NOTES:**
- LENGTH OF ANCHORS IS EMBEDMENT LENGTH. FABRICATOR TO PROVIDE ADDITIONAL LENGTH AS REQUIRED FOR THREADS/NUTS/TOLERANCES, ETC.
 - ALL ANCHORS TO BE CAST-IN OR GROUTED INTO PLACE.
 - PROVIDE MIN. 25(1") THICK GROUT BED BELOW BASE PLATE.
 - SEISMIC SHEAR LUG DETAIL (PROVIDE AS REQUIRED IN SCHEDULE).
5. SEISMIC HEADED ANCHORS: FOLLOWING OUTLINES MINIMUM WASHER PLATE (c/w: NUT ABOVE/BELOW PLATE) SIZES FOR BOLT ENDS:
- | | |
|---------------------|-------------------------------|
| 16mmØ: 52x52x16mm | (1/2"Ø: 2"x2"x1/2") |
| 19mmØ: 63x63x16mm | (3/4"Ø: 2 1/2"x2 1/2"x1/2") |
| 25mmØ: 76x76x20mm | (1"Ø: 3"x3"x1/2") |
| 32mmØ: 76x76x20mm | (1 1/4"Ø: 3 1/2"x3 1/2"x1/2") |
| 38mmØ: 102x102x20mm | (1 1/2"Ø: 4"x4"x1/2") |
6. ANCHOR BOLT EMBEDMENT LENGTHS HAVE BEEN DEVELOPED IN ACCORDANCE WITH CANCSA A23.3-04 CLAUSES 7.1.4, ANNEX D, 12.2 AND 21.2.7. DEPTHS ARE BASED ON MINIMUM EMBEDMENTS AND THE DEVELOPMENT OF THE PIER REINFORCING STEEL IN TENSION ABOVE THE CONE OF FAILURE CREATED BY THE BOLT HEAD.
7. VERTICAL ANCHOR PLATES/CONTINUOUS WELD PLATES:
- PROVIDE MIN. 1-10M HOR. AT ENDBEND OF ALL STUD/STRAP ANCHORS.
 - 10M TO BE CONTINUOUS WHERE MULTIPLE PLATES ALIGN. WHERE PLATE IS ISOLATED, PROVIDE MIN. 36" LONG BAR.
 - FACE OF PLATES TO BE CAST-IN FLUSH WITH FACE OF CONCRETE.
 - WELD ANCHORS TO PLATE TO DEVELOP FULL SHEAR/TENSION CAPACITY OF ANCHORS.
8. PROVIDE MIN. 1-15M x 32" LONG REBAR AT EACH STRAP ANCHOR AT EMBEDDED ENDS.

STEEL COLUMN SCHEDULE - TEST FACILITY		
MARK	SIZE	NOTES
SCT1	HSS 152x152x8.0	TYPICAL INTERIOR COLUMN
SCT2	HSS 152x152x13	INTERIOR COLUMN AT BRIDGE
SCT3	HSS 152x152x6.4	EXTERIOR COLUMN
SCT4	HSS 152x152x13	BRACE COLUMN
SCT5	HSS 508 Ø x 13	BRIDGE COLUMN

- NOTES:**
- REFER TO PLANS FOR ELEVATIONS AND ORIENTATIONS.
 - ALL HSS COLUMNS TO BE CLASS 'C'.

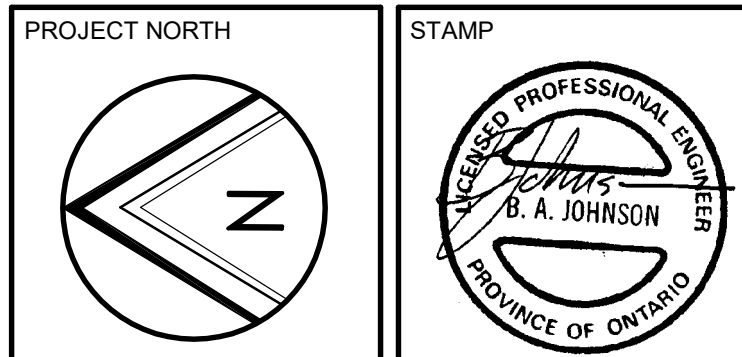
- GENERAL NOTES:**
- ALL BEARING ELEVATIONS ARE TO BE CONFIRMED/COORDINATED WITH GEOTECHNICAL REPORT DATA. WHERE GEOTECHNICAL REPORT INDICATES BEARING ELEVATIONS THAT ARE LOWER THAN THOSE PROVIDED, GEOTECHNICAL REPORT VALUES GOVERN. CONTRACTOR IS RESPONSIBLE FOR COORDINATION BETWEEN BOTH SETS OF DATA PROVIDED.
 - LOWER FTGS IN AREAS ADJACENT TO UNDERGROUND SERVICES/PIPS AS REQUIRED TO MAINTAIN MINIMUM 2H' V. ELEVATION OFFSET FOR BEARING SURFACES (REFER TO S000) (TYP. ALL LOCATIONS).
 - ENGINEERED FILL/COMPACTED GRANULAR: REFER TO GEOTECHNICAL REPORT FOR ALL REQUIREMENTS.

DESIGN LOADS	
STORAGE ROOF:	
DEAD:	200mm CONC. 4.80 kPa CEILING: 0.25 kPa MECH.: 0.25 kPa 5.30 kPa
LIVE:	ROOF: 1.0 kPa



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9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
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5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH



PROJECT	
TOMLINSON NEW BUILDING	

DRAWING	
TEST FACILITY: FOUNDATION / GROUND FLOOR PLAN	

DRAWN	S.H.	DRAWING No.
DESIGNED:	B.J./S.M./B.A.	ST100
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	1:100	
PROJECT No:	15-0179	

<u>DESIGN LOADS:</u>	
<u>TEST FACILITY:</u>	
DEAD:	STEEL: 0.25 kPa DECK 0.10 kPa CEILING: 0.25 kPa MECH: 0.25 kPa ROOFING: 1.50 kPa 2.35 kPa
LIVE:	ROOF: 1.00 kPa
SNOW:	2.40 kPa (+ DRIFT U/N)



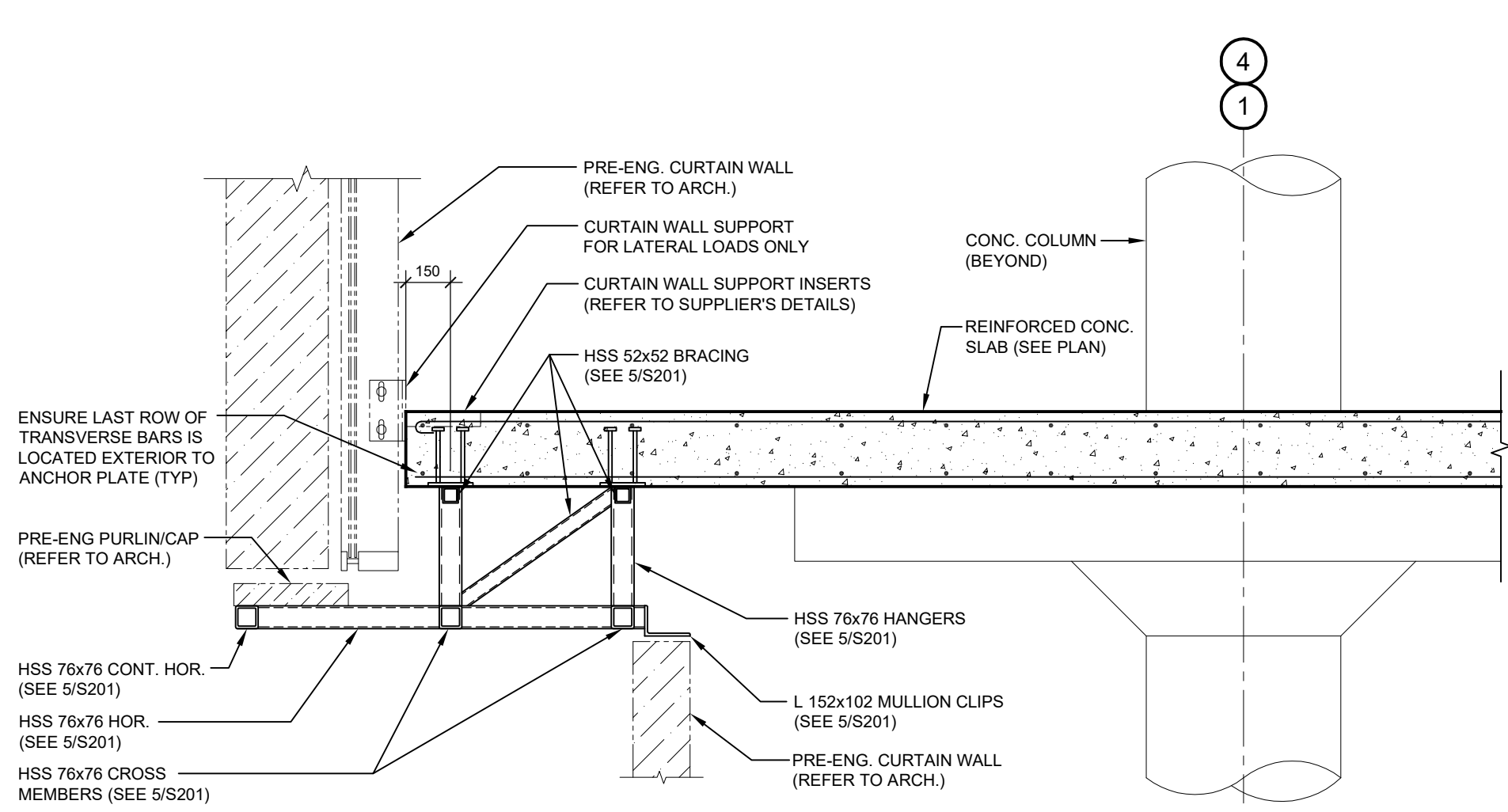
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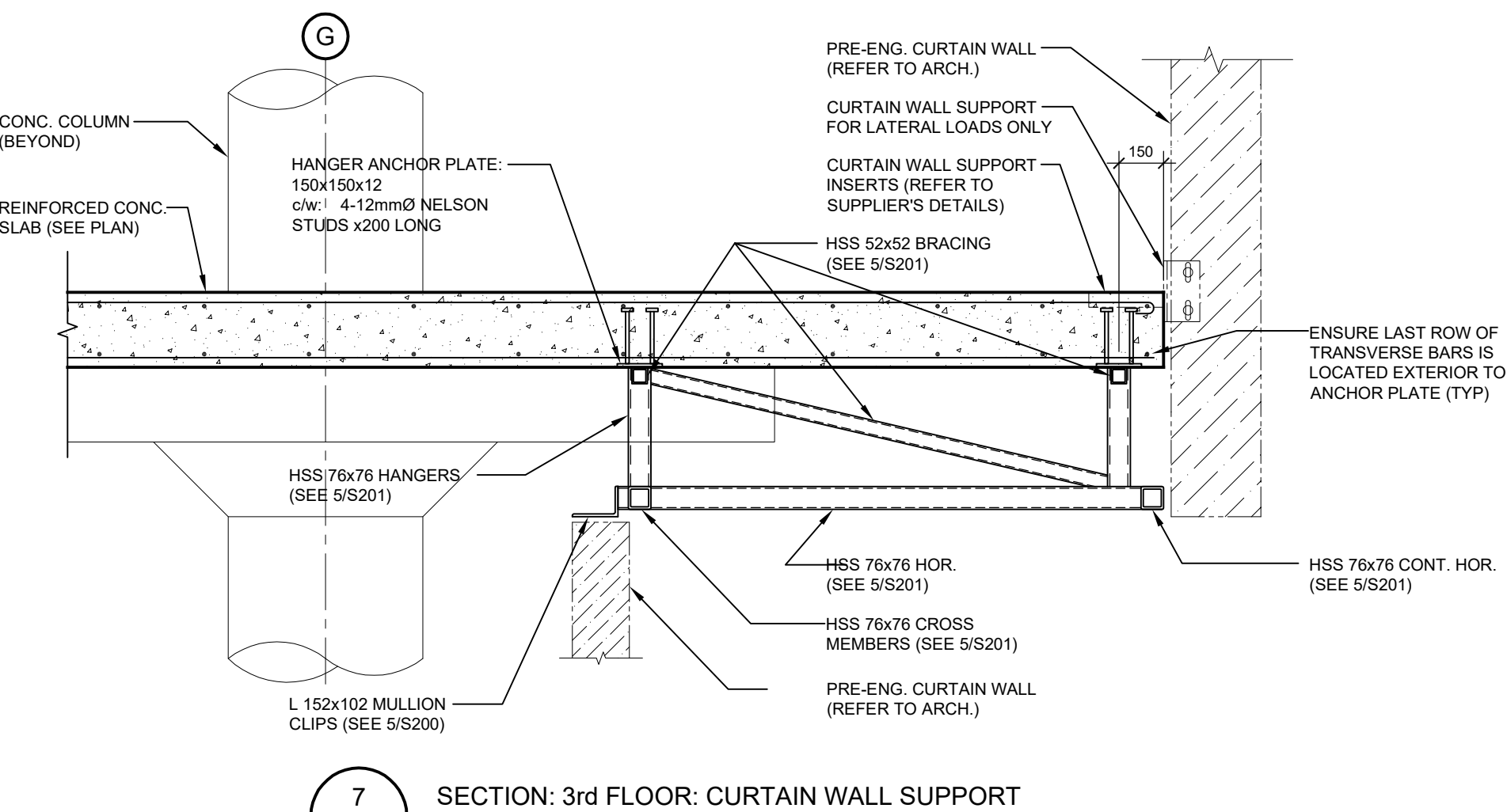
DRAWING

TEST FACILITY:
ROOF PLAN

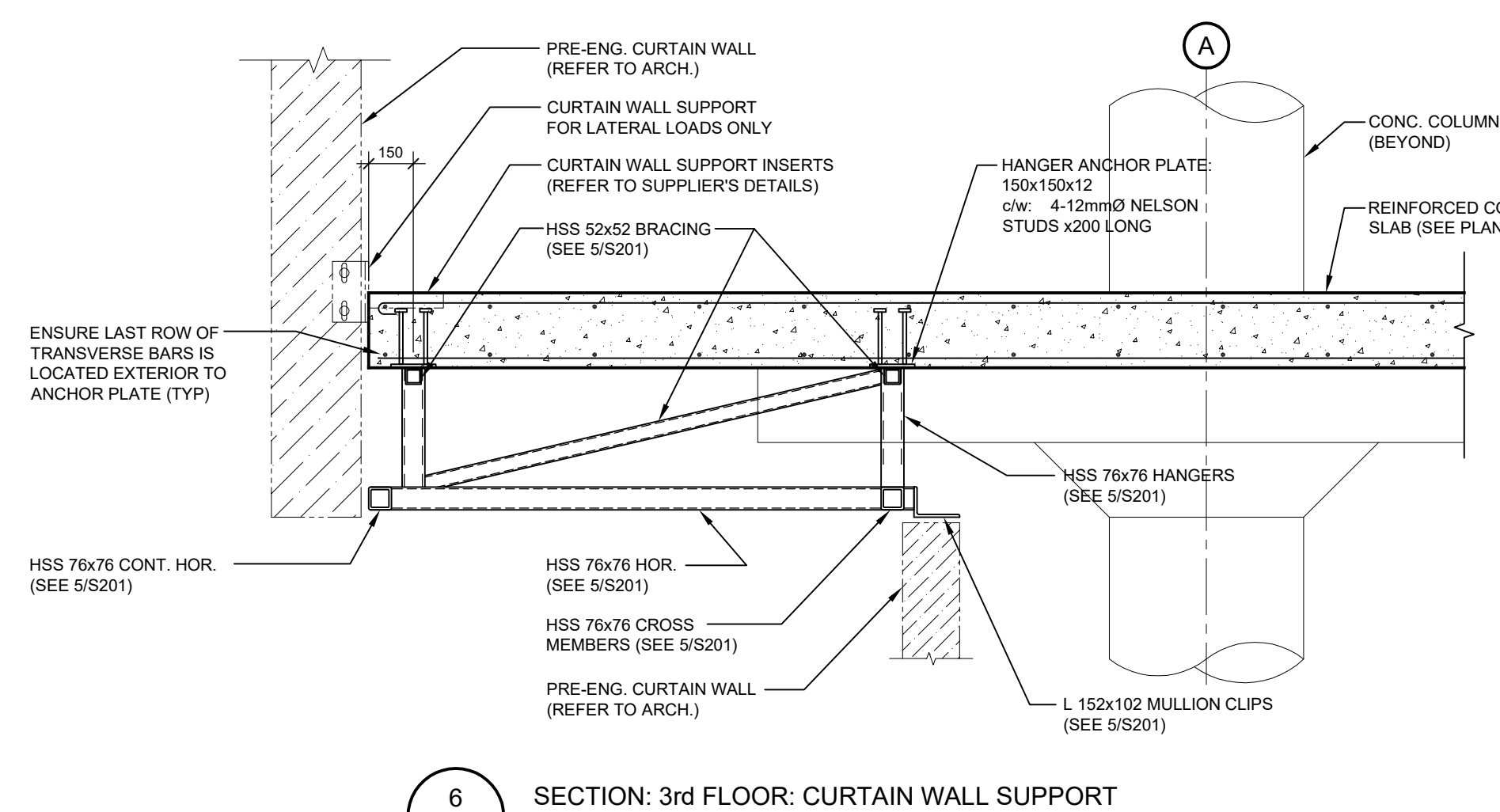
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DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	1:100	
PROJECT No:	15-0179	



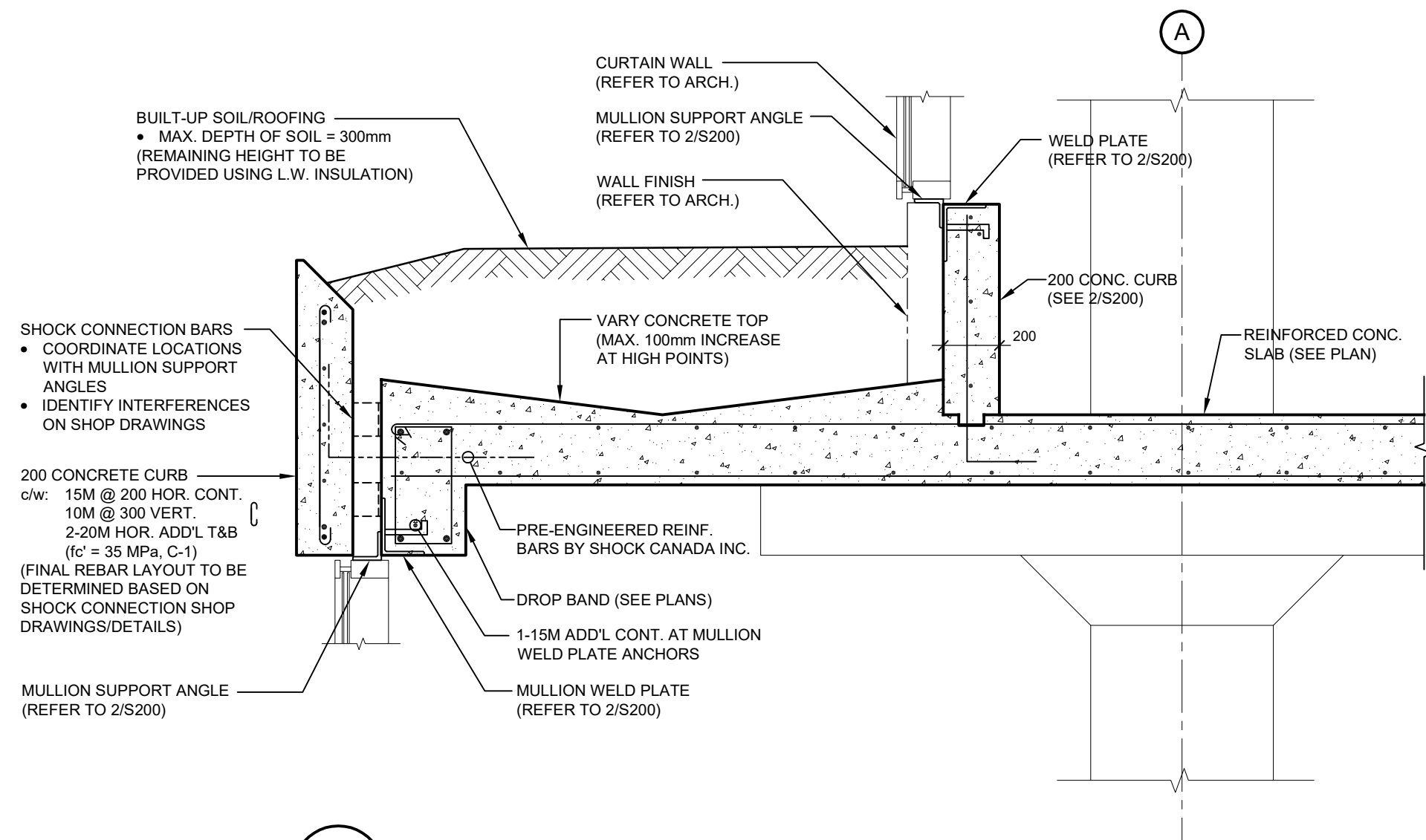
8 SECTION: 3rd FLOOR: CURTAIN WALL SUPPORT
S200 SCALE 1:20



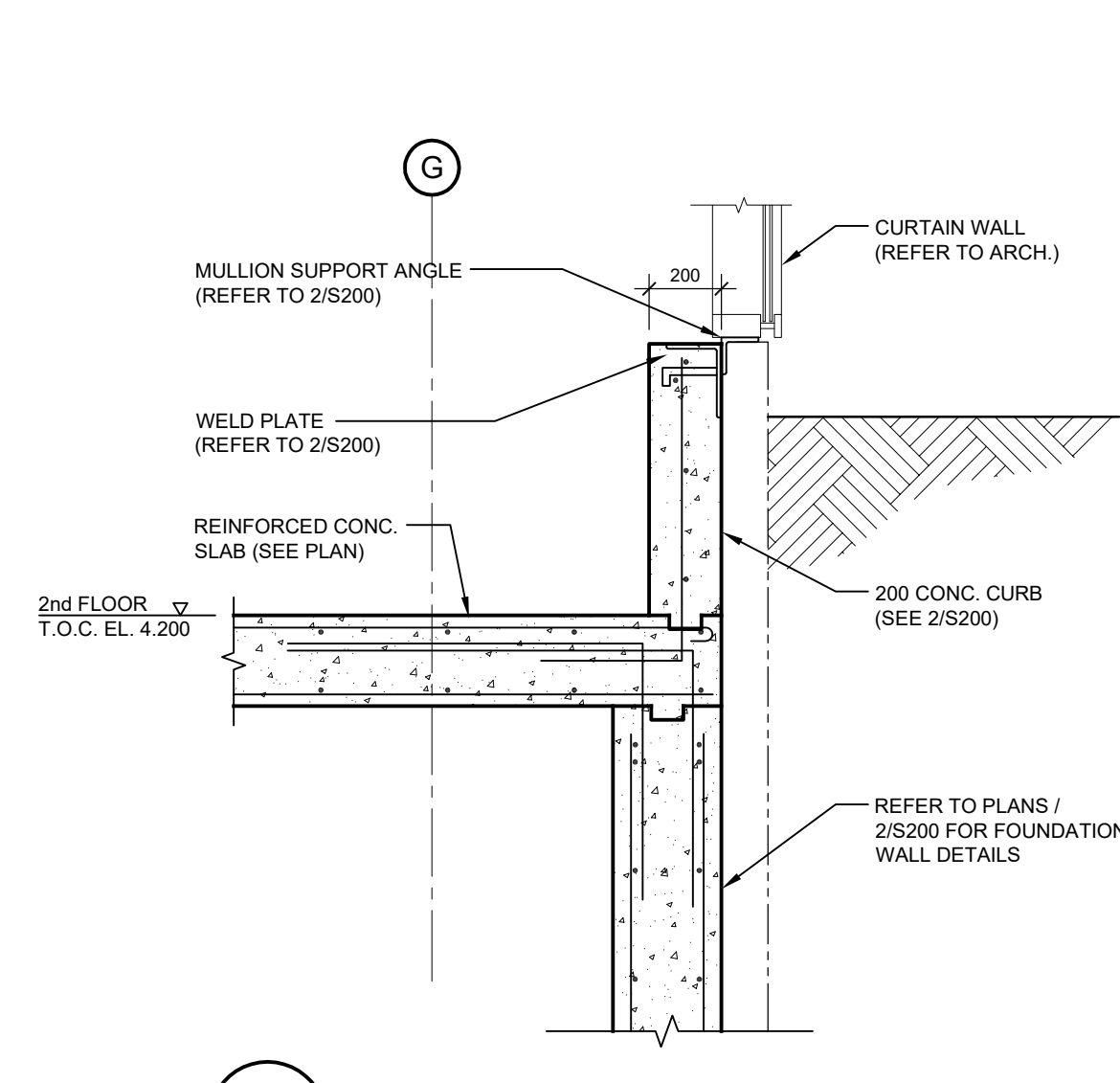
7 SECTION: 3rd FLOOR: CURTAIN WALL SUPPORT
S200 SCALE 1:20



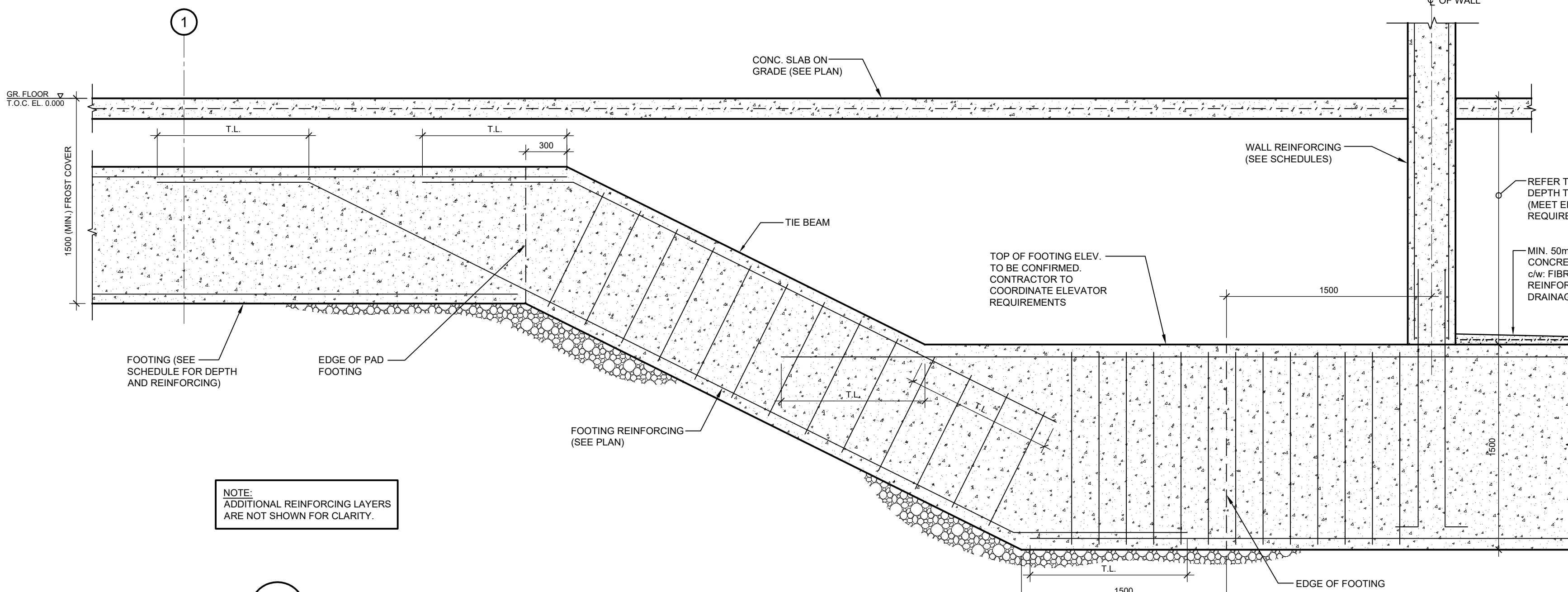
6 SECTION: 3rd FLOOR: CURTAIN WALL SUPPORT
S200 SCALE 1:20



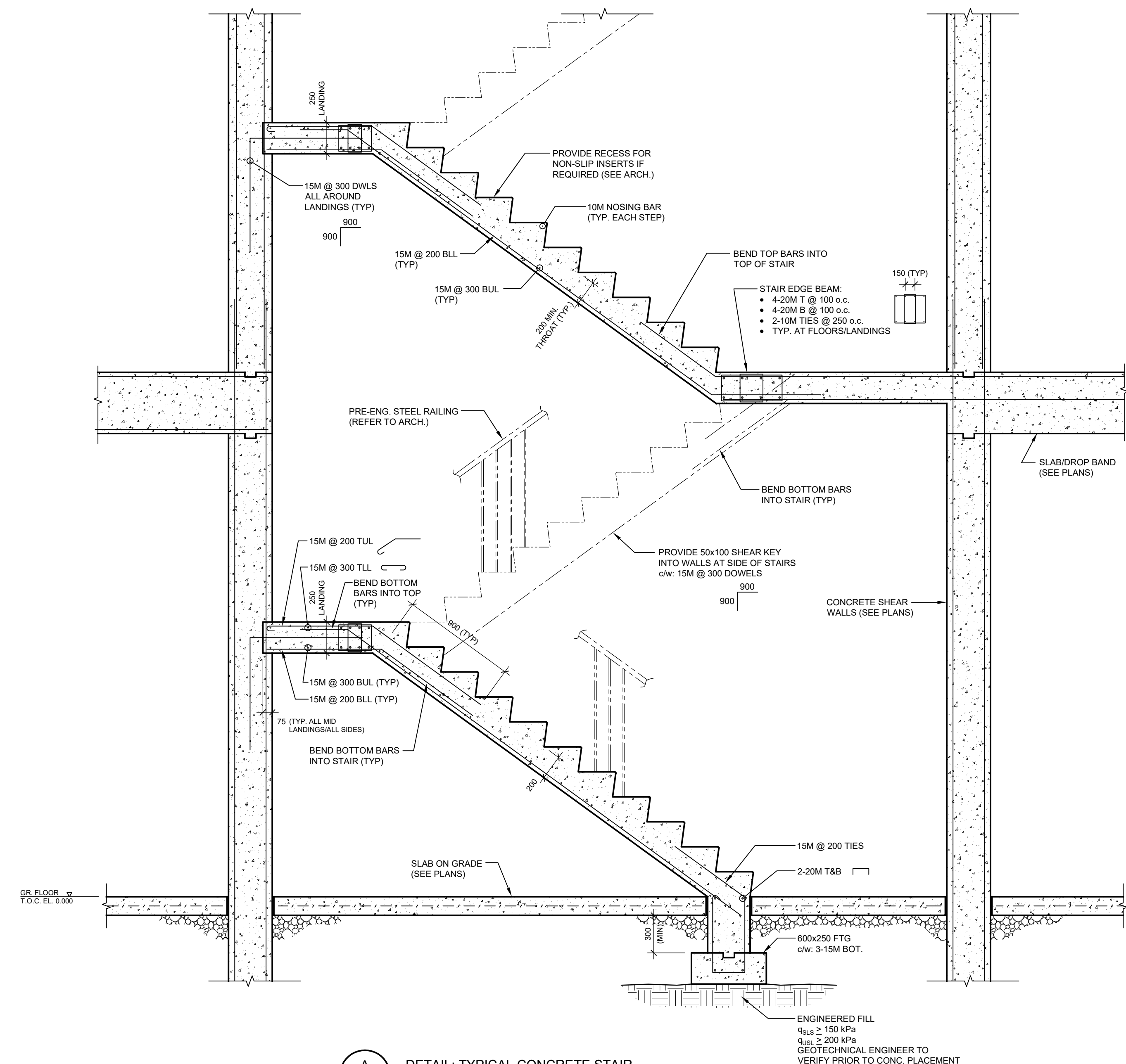
4 SECTION: 2nd FLOOR NORTH ENTRANCE ROOF
S200 SCALE 1:20



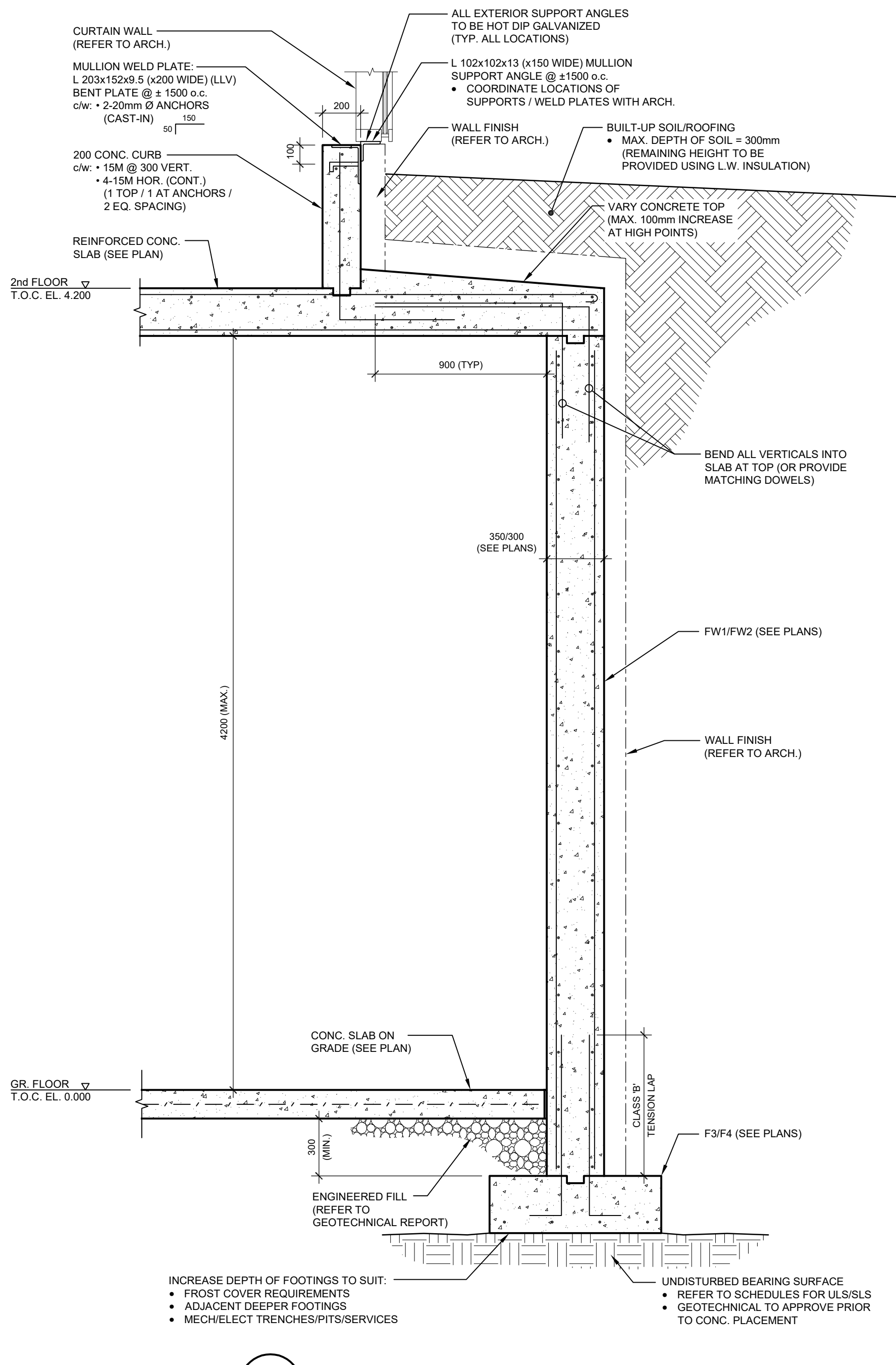
3 SECTION: 2ND FLOOR CURTAIN WALL CURB (SOUTH END)
S200 SCALE 1:20



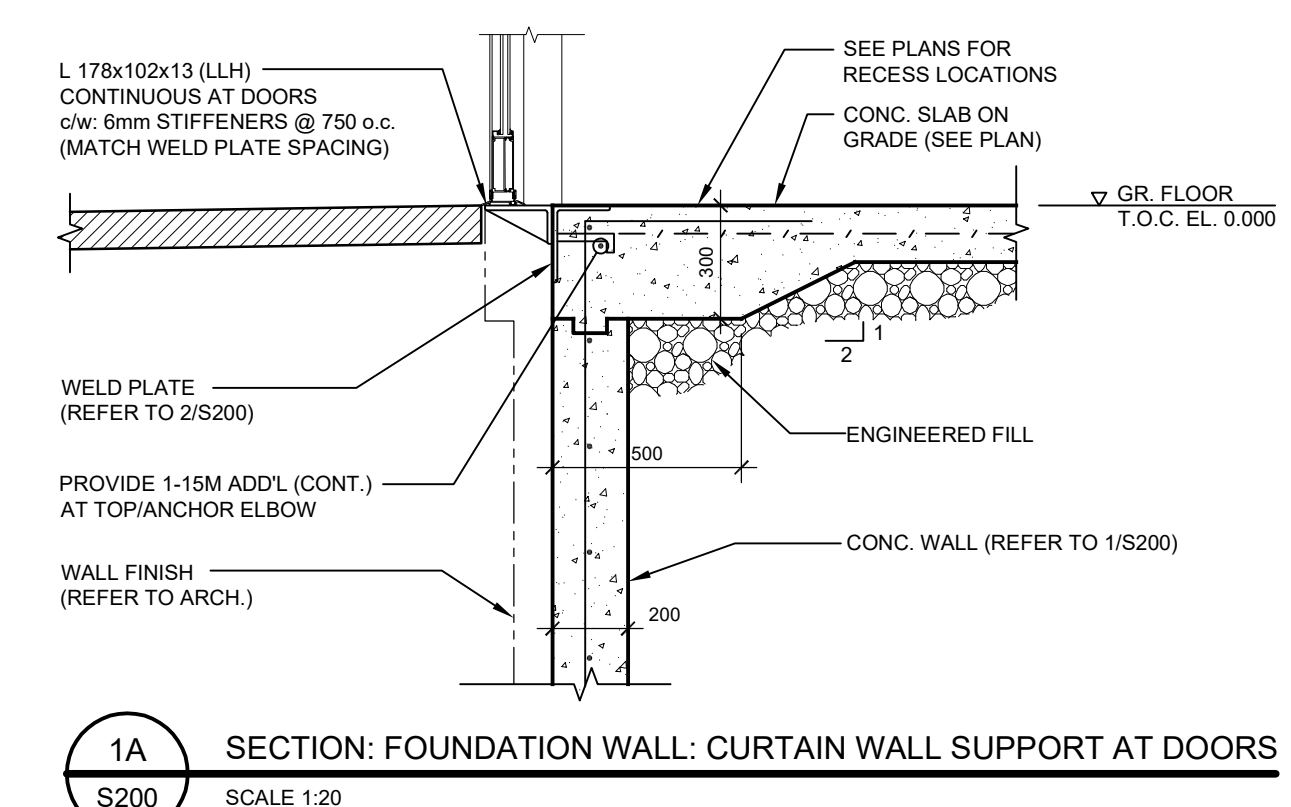
5 DETAIL: STEP IN FOOTING
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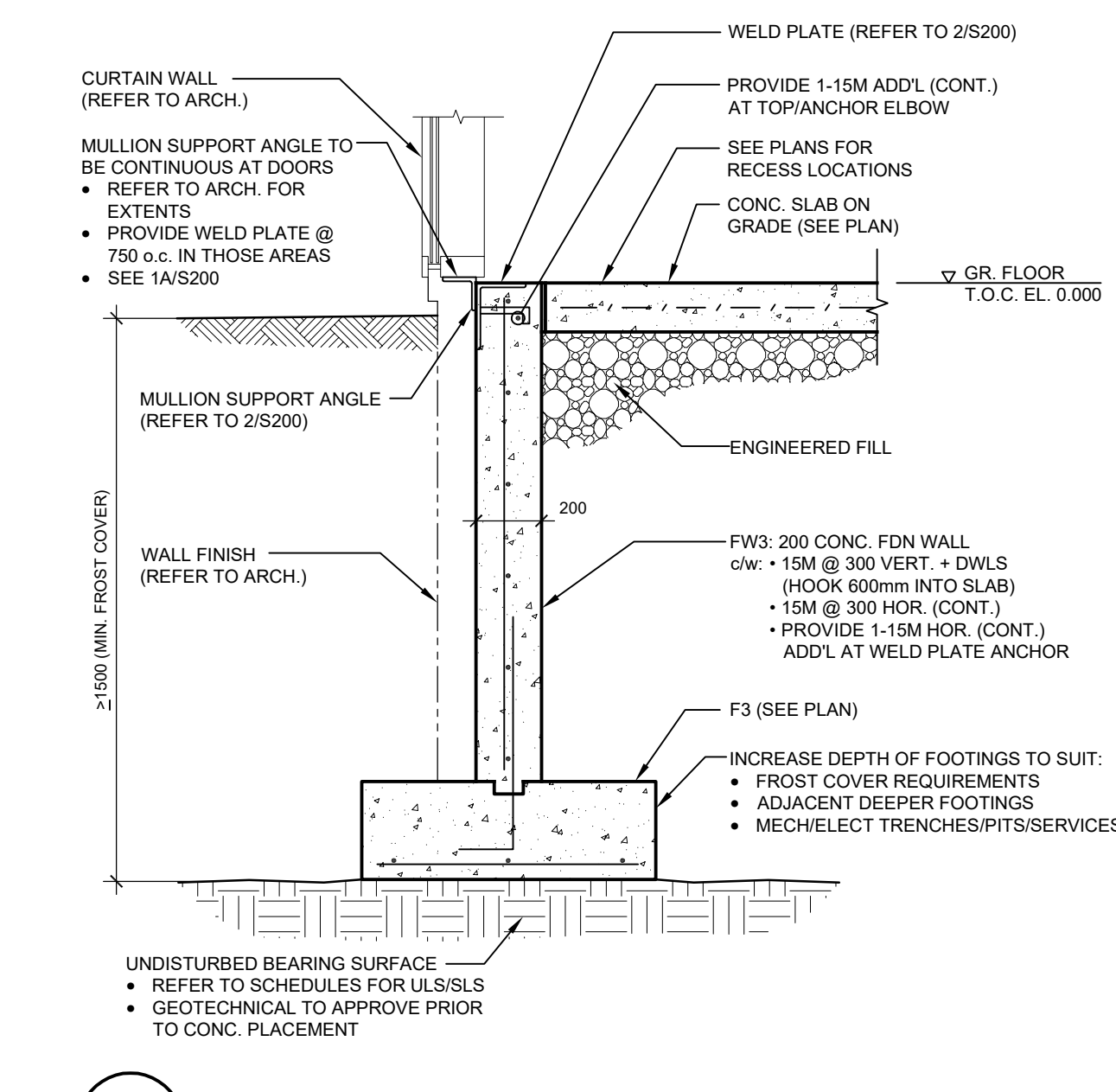
A DETAIL: TYPICAL CONCRETE STAIR
S200 SCALE 1:25



2 SECTION: TYPICAL FOUNDATION WALL
S200 SCALE 1:20



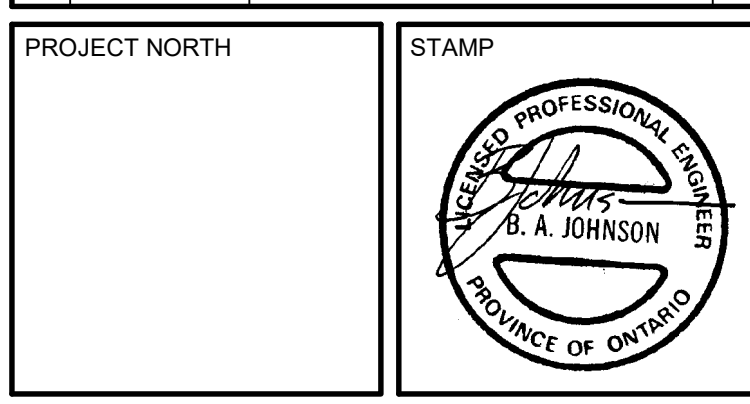
1A SECTION: FOUNDATION WALL: CURTAIN WALL SUPPORT AT DOORS
S200 SCALE 1:20



1 SECTION: FOUNDATION WALL: CURTAIN WALL SUPPORT
S200 SCALE 1:20

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2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH



FOUNDED ON BYWINDRITH GUIDED BY VISION

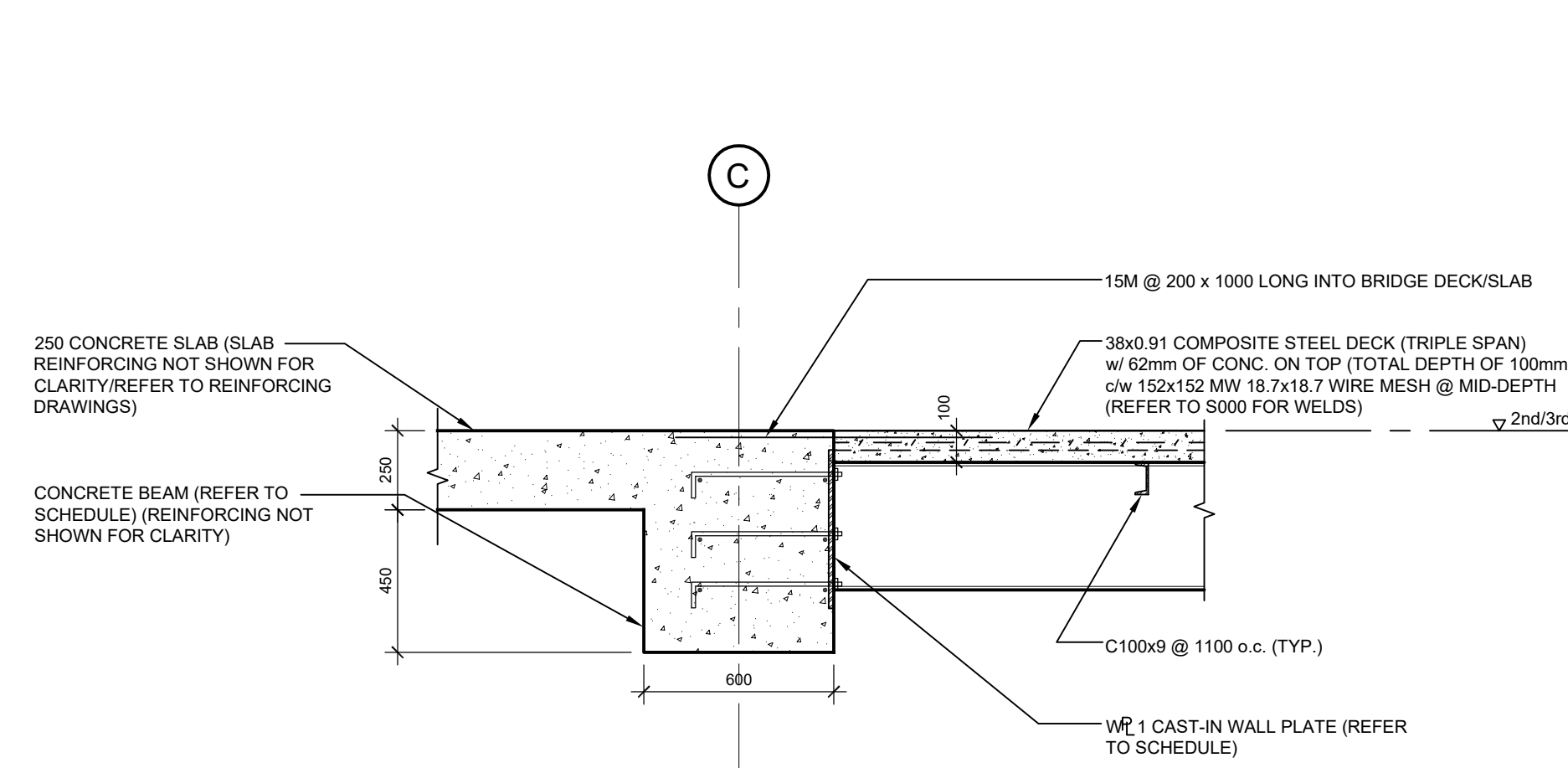
PROJECT
**TOMLINSON
NEW BUILDING**

DRAWING
SECTIONS & DETAILS

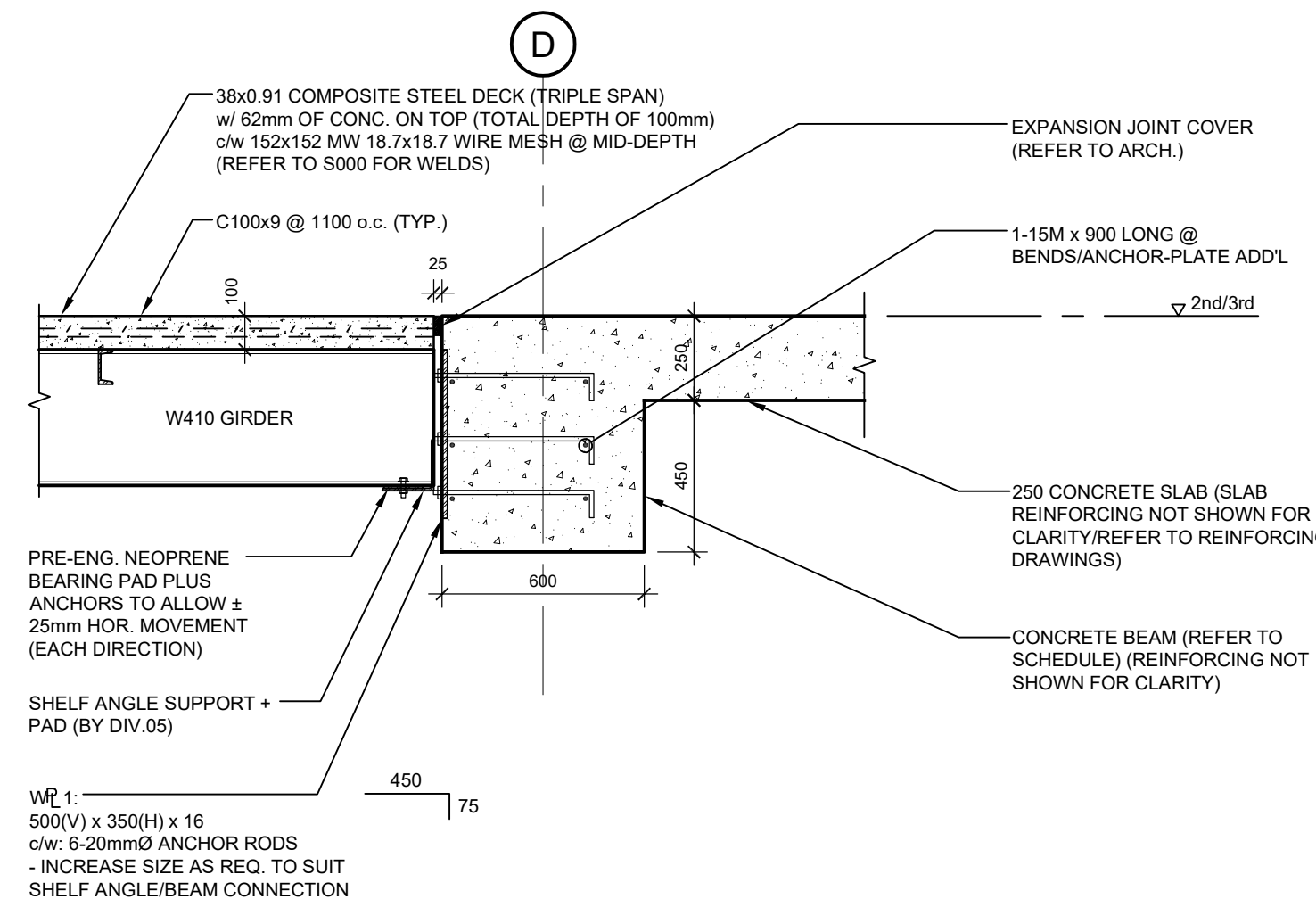
DRAWN:	S.H.	DRAWING No.
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	AS SHOWN	
PROJECT No.:	15-0179	

S200

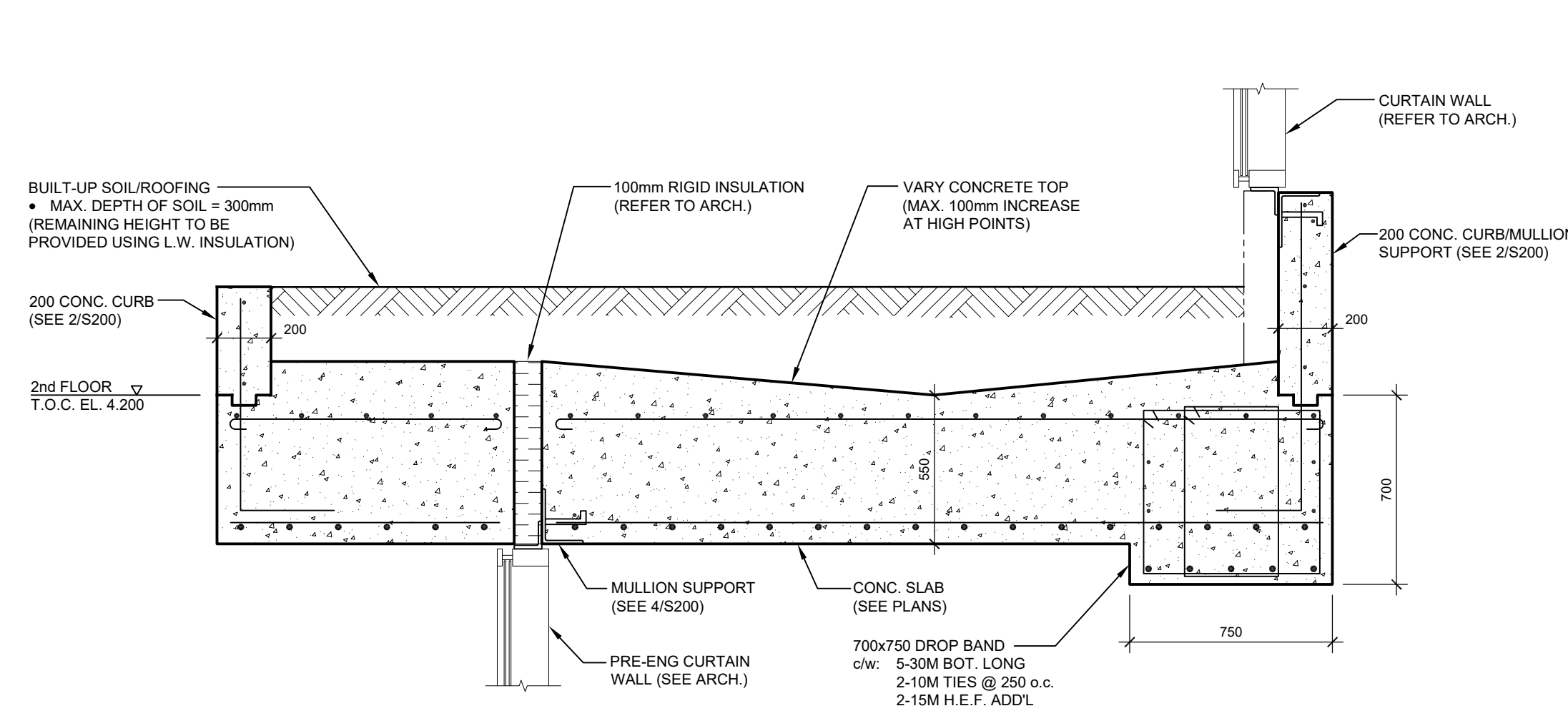
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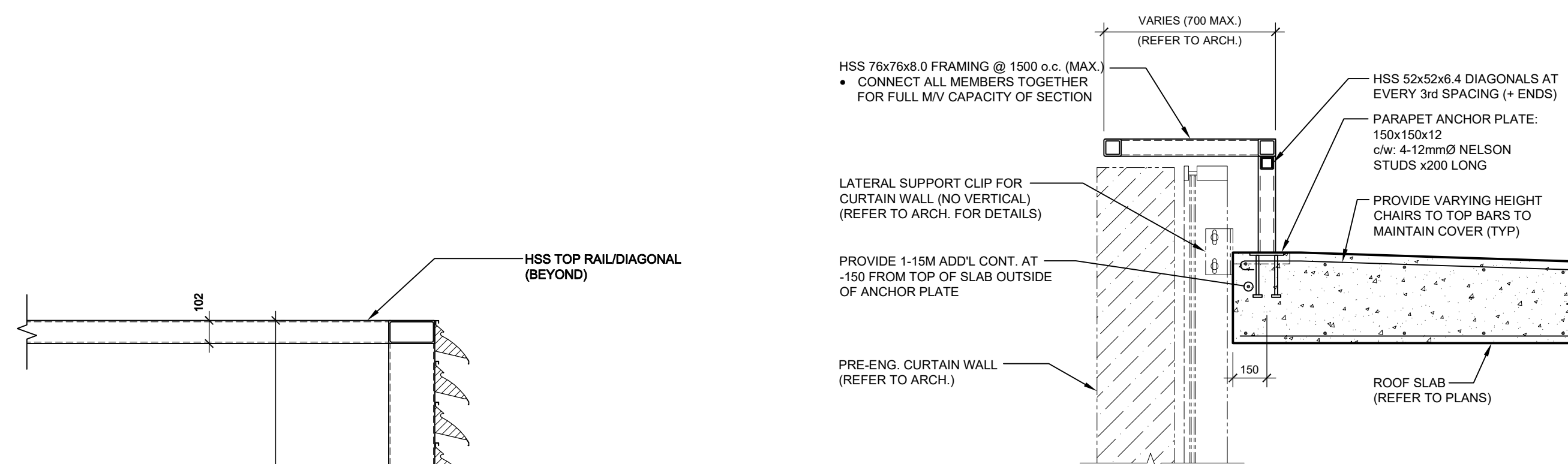
11 SECTION: BRIDGE CONNECTION: @ SMALL POD
S201 SCALE 1:20



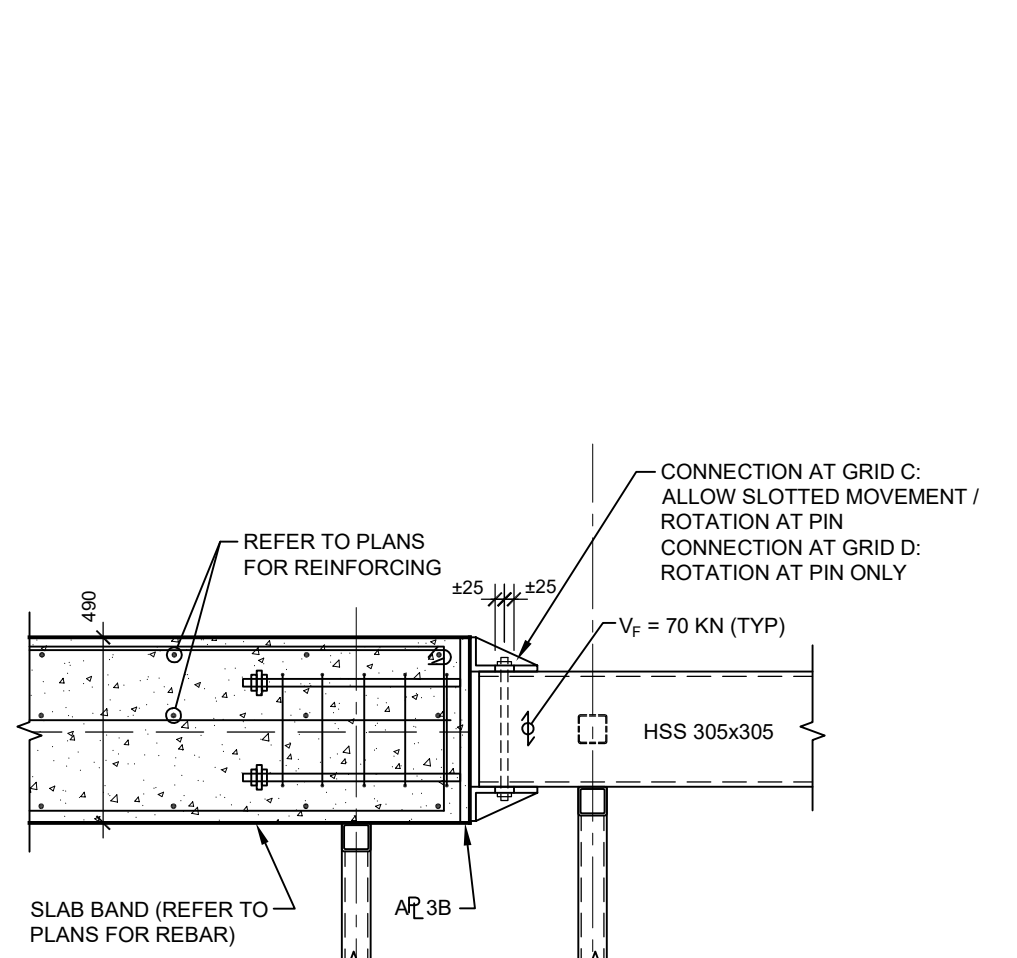
10 SECTION: BRIDGE CONNECTION: @ BIG POD
S201 SCALE 1:20



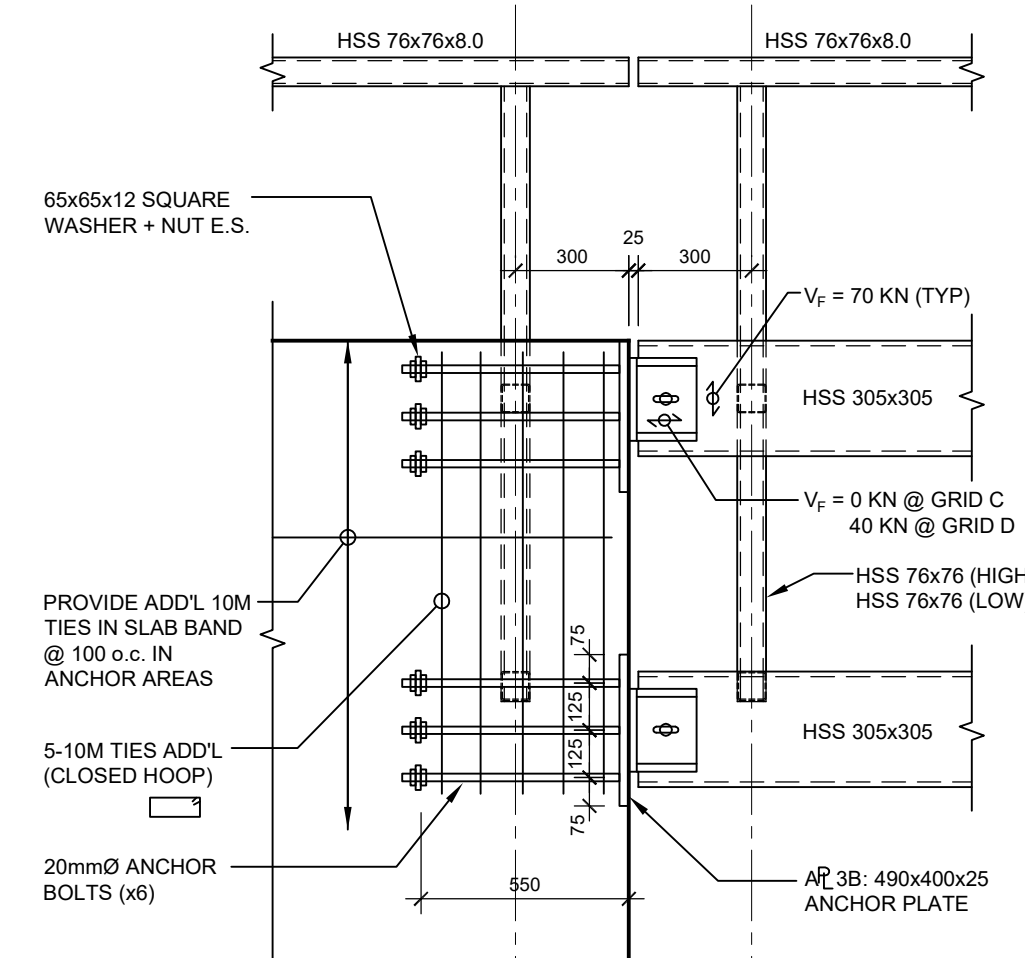
9 SECTION: 2ND FLOOR: EXTERIOR ROOFS AT ENTRANCES
S201 SCALE 1:20



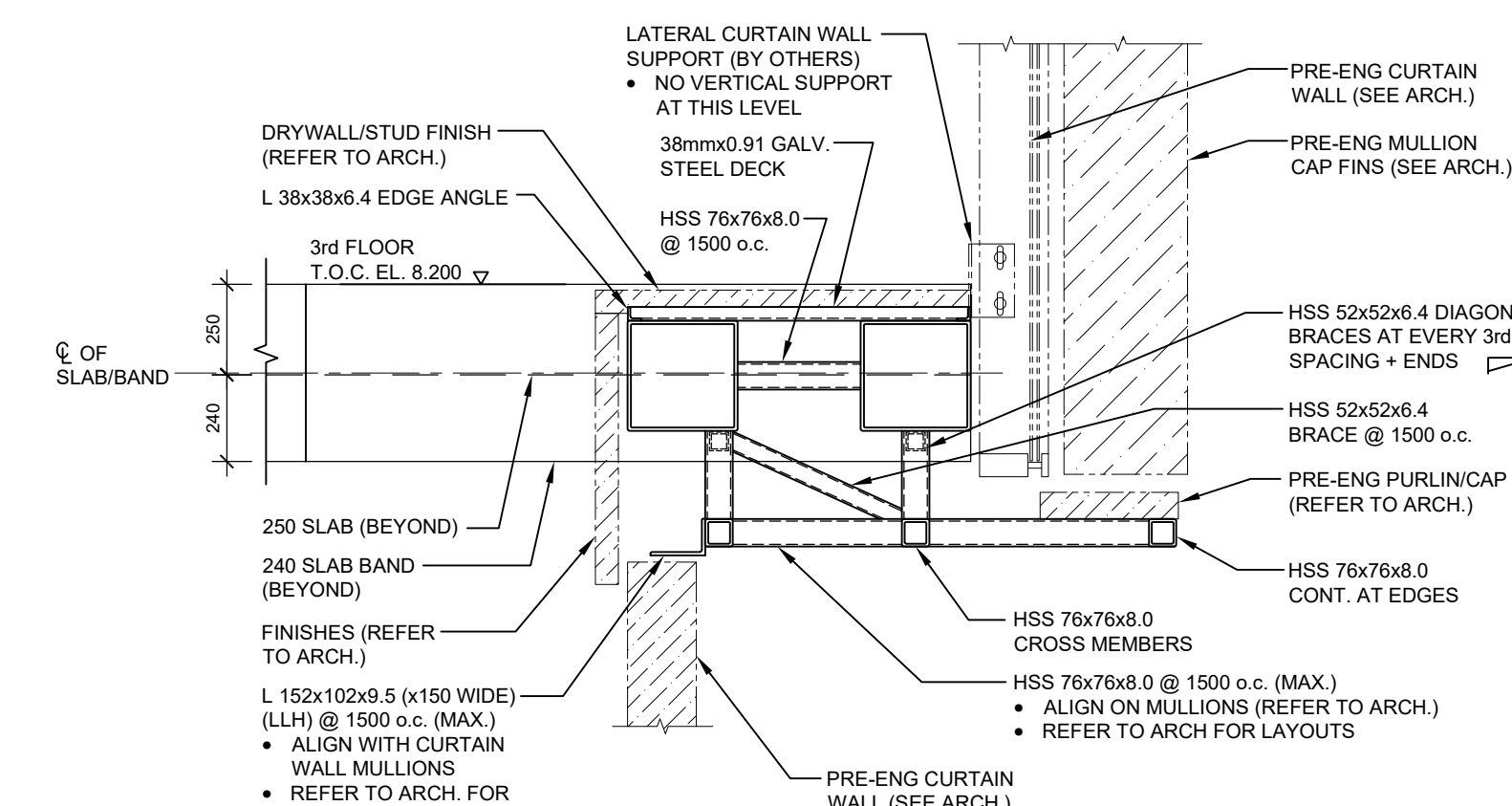
8 SECTION: ROOF: PARAPET SUPPORT FRAMING
S201 SCALE 1:20



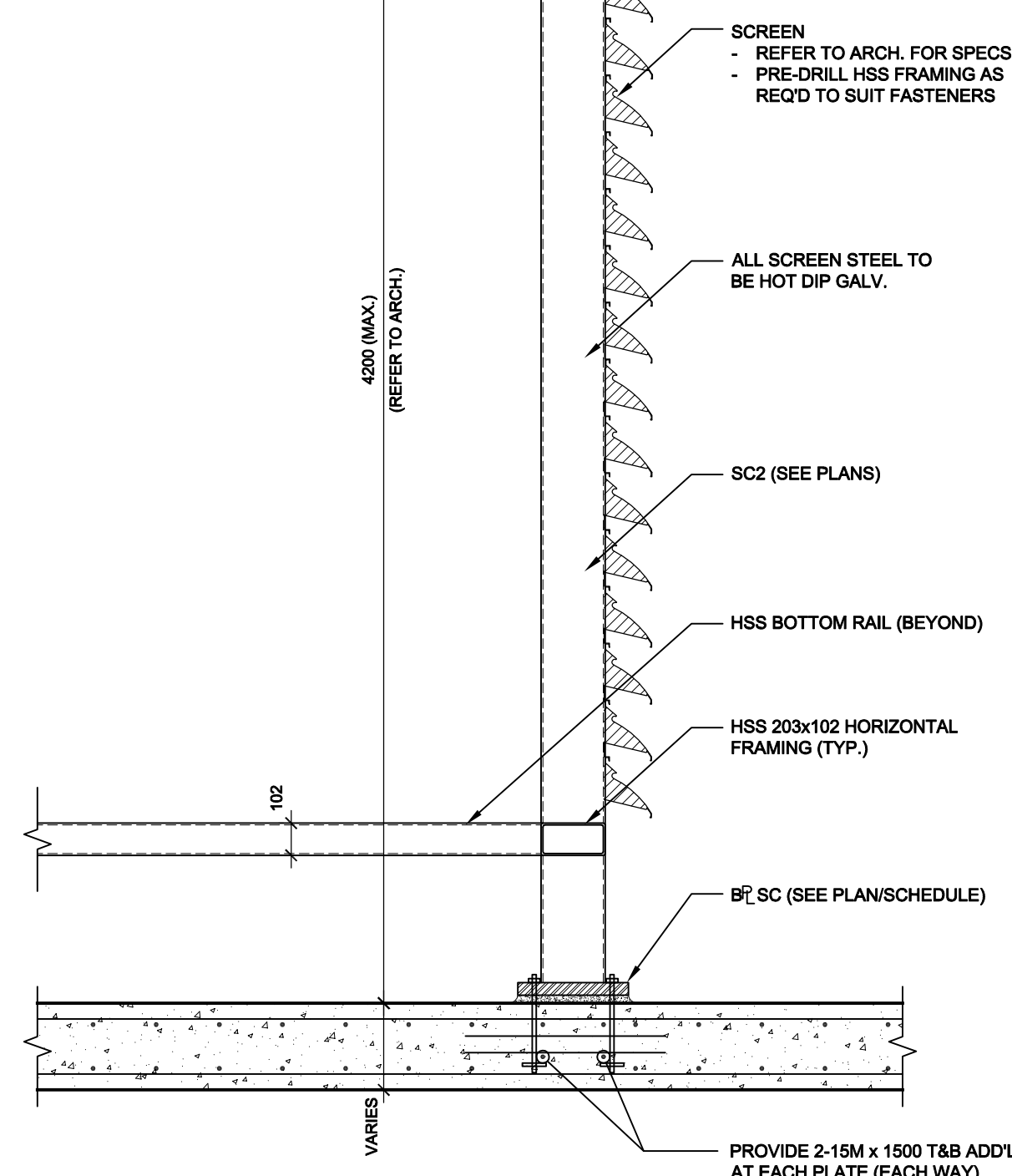
7 SECTION: 3rd FLOOR: ATRIUM GIRT SUPPORT AT SLAB
S201 SCALE 1:20



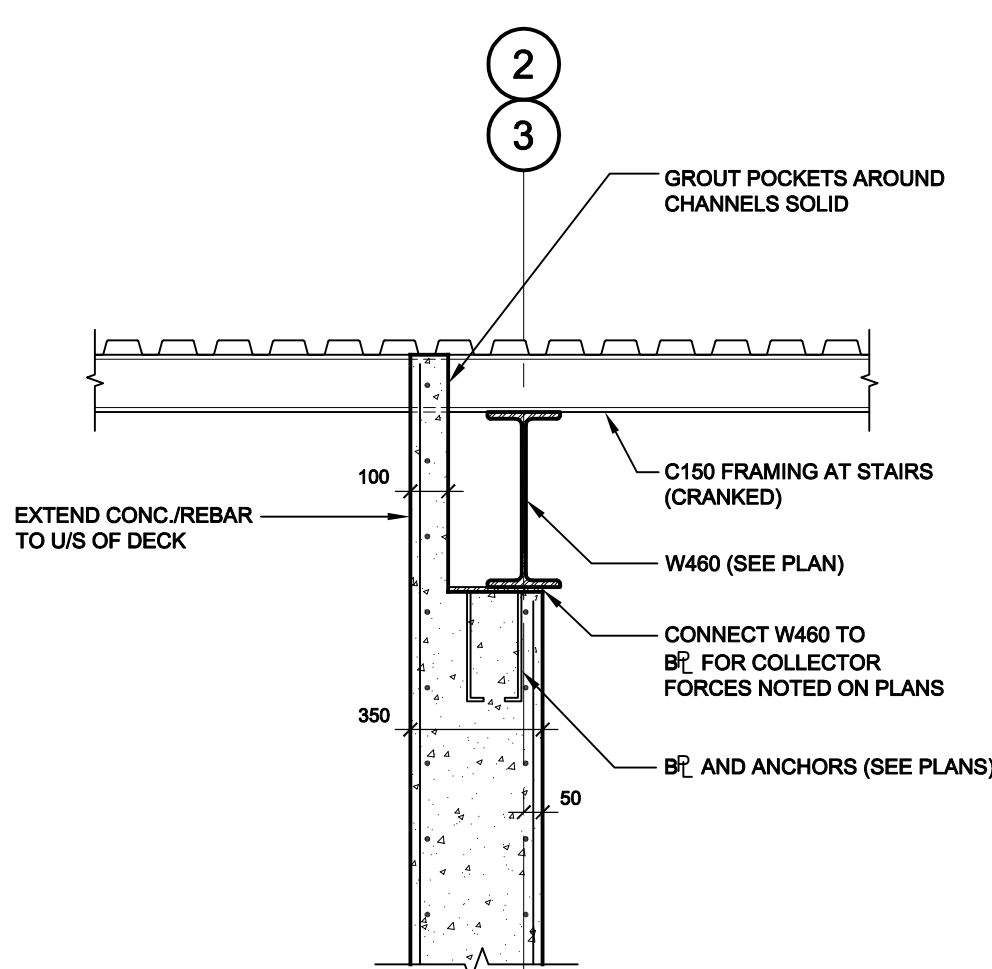
6 SECTION: 3rd FLOOR: ATRIUM GIRT SUPPORT AT SLAB
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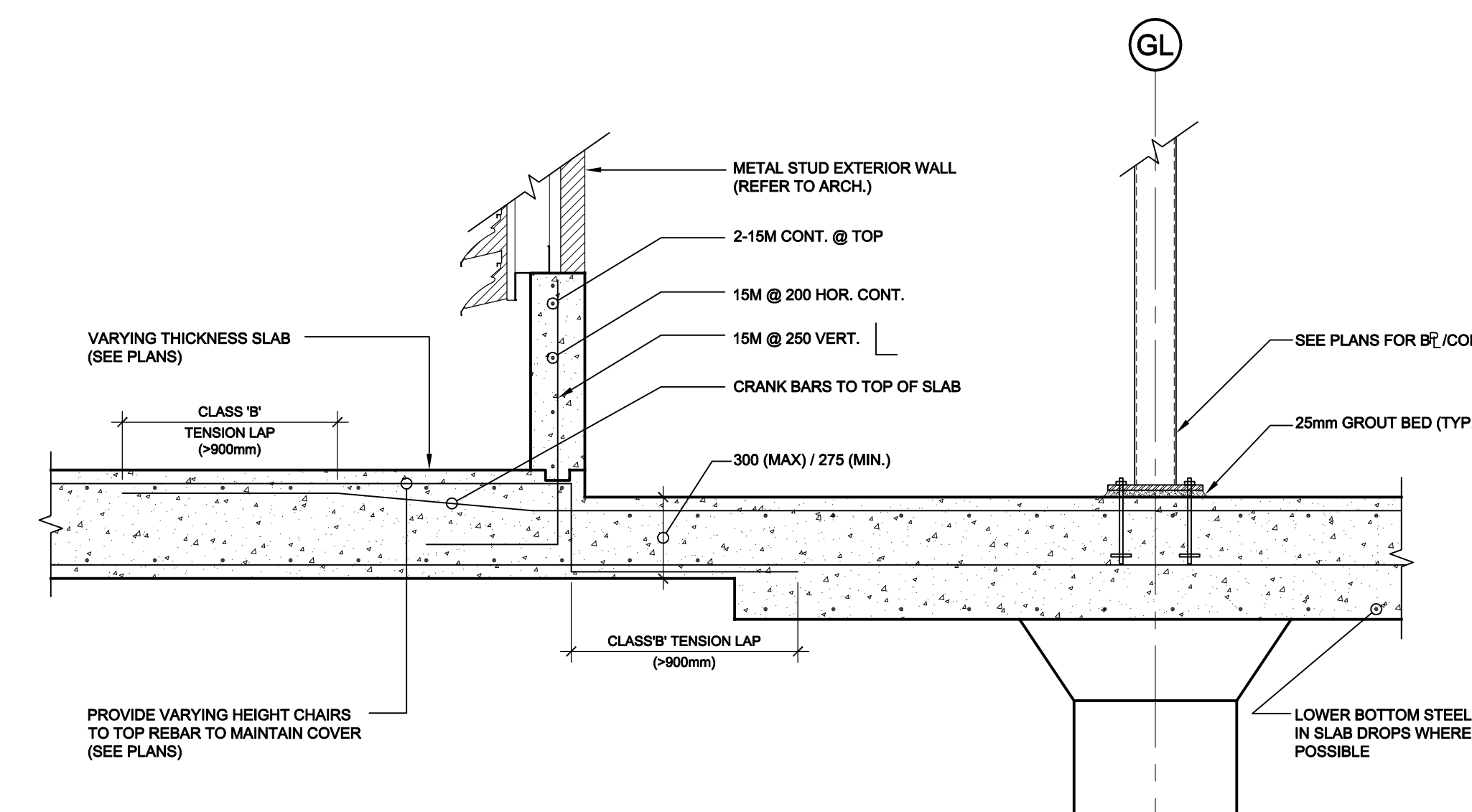
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S201 SCALE 1:20



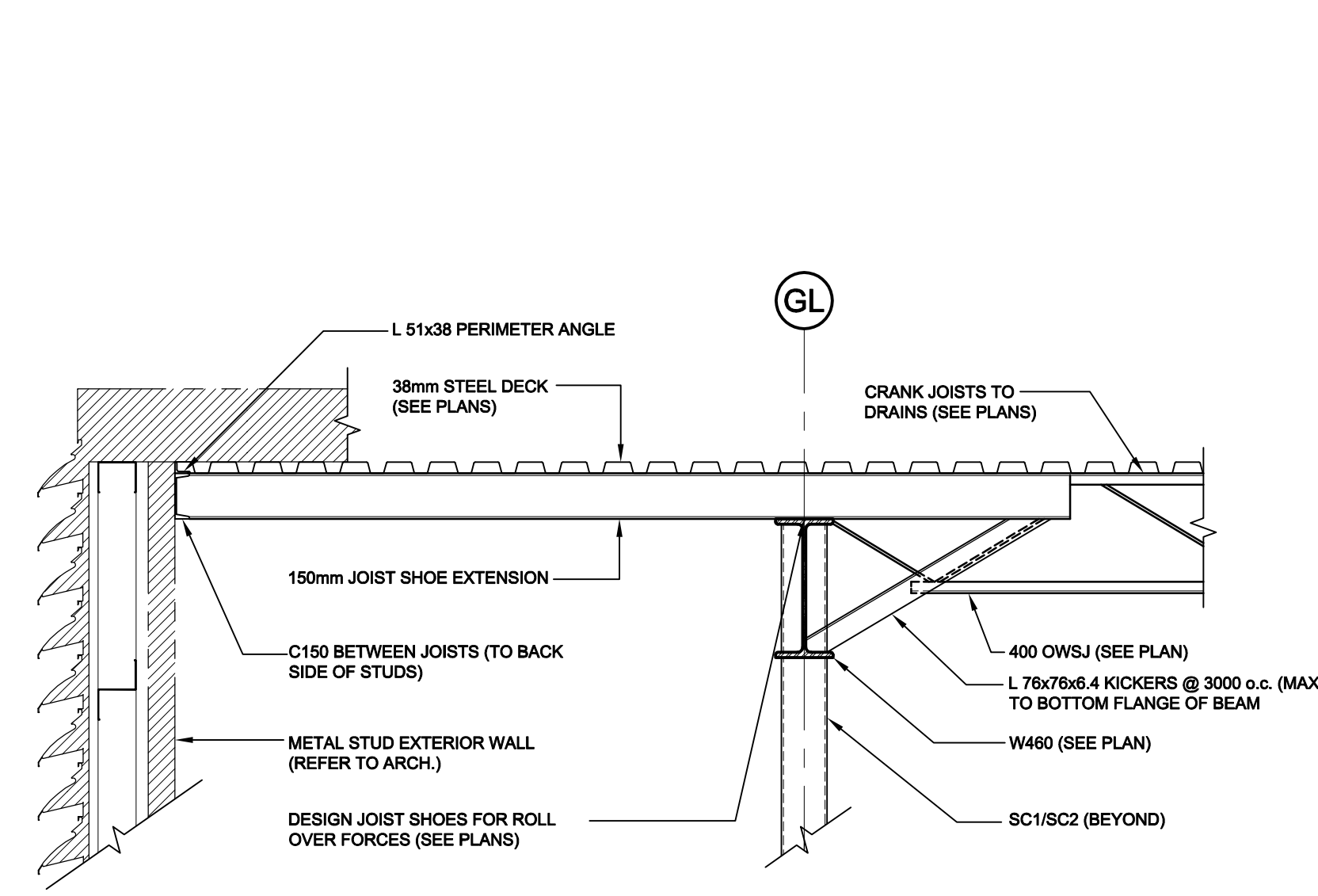
4 SECTION: PENTHOUSE FLOOR: MECH. UNIT SCREEN
S201 SCALE 1:20



3 SECTION: PENTHOUSE ROOF: GIRDER/CORE INTERFACE
S201 SCALE 1:20



2 SECTION: PENTHOUSE FLOOR: EXTERIOR EDGE OF PENTHOUSE
S201 SCALE 1:20



1 SECTION: PENTHOUSE ROOF: EXTERIOR EDGE
S201 SCALE 1:20

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1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH

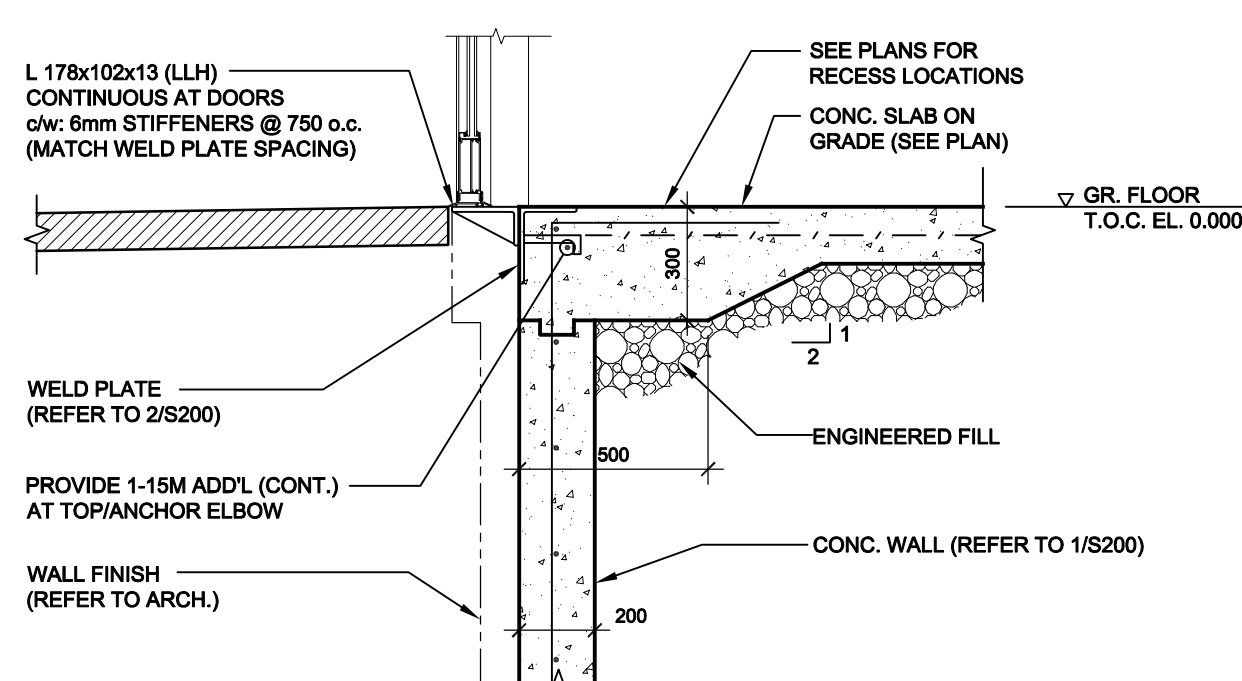
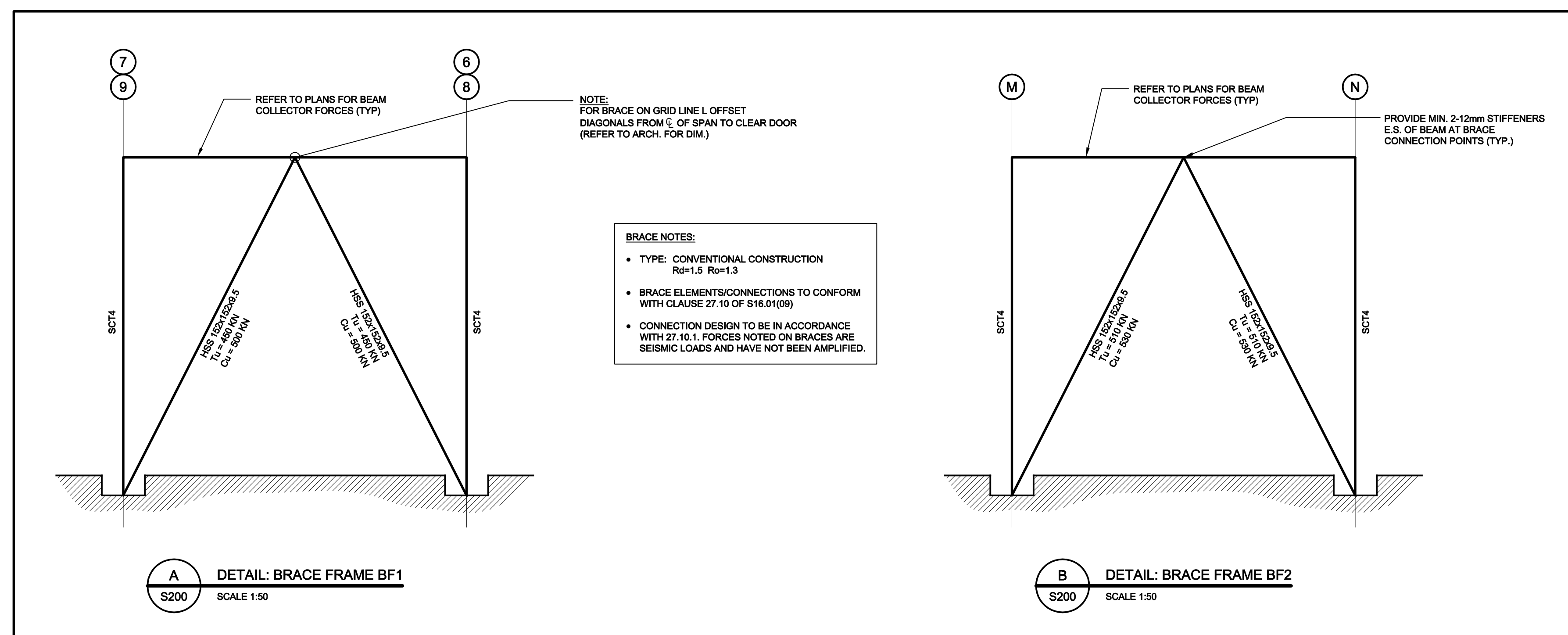
PROJECT NORTH	STAMP



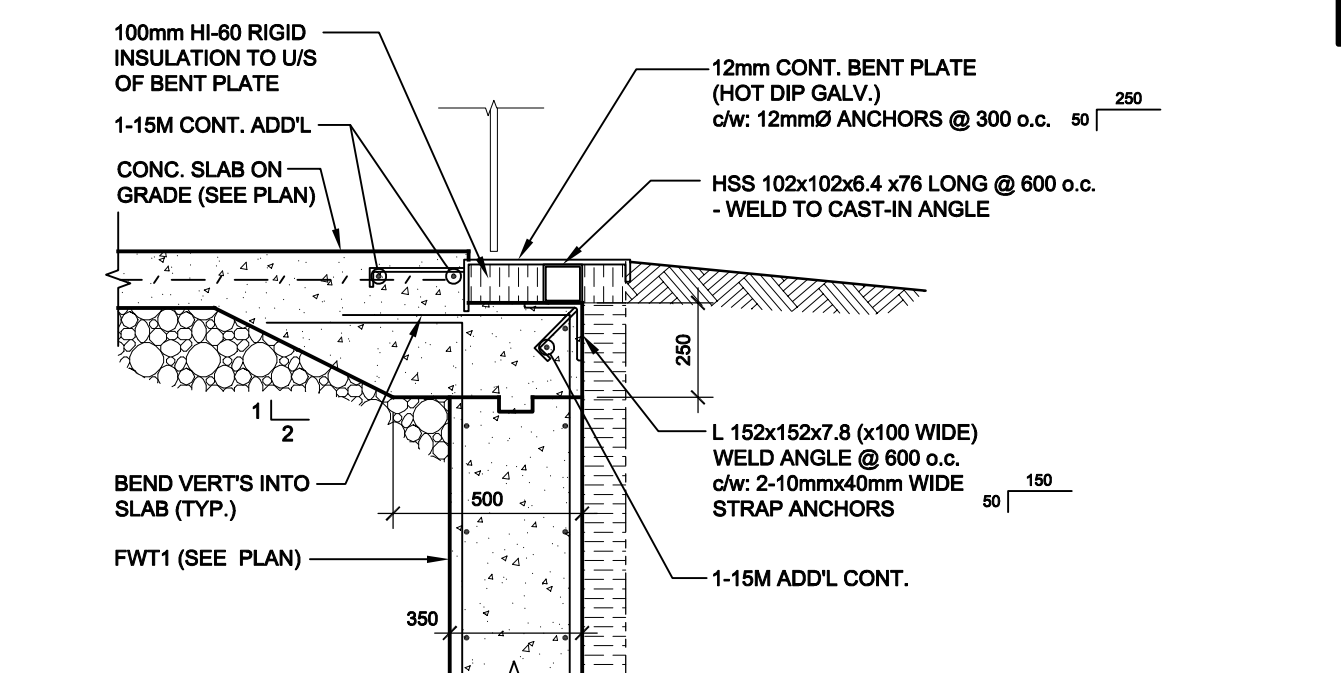
TOMLINSON FOUNDATION BY DESIGN GUIDED BY VISION

PROJECT	TOMLINSON NEW BUILDING
DRAWING	SECTION AND DETAILS

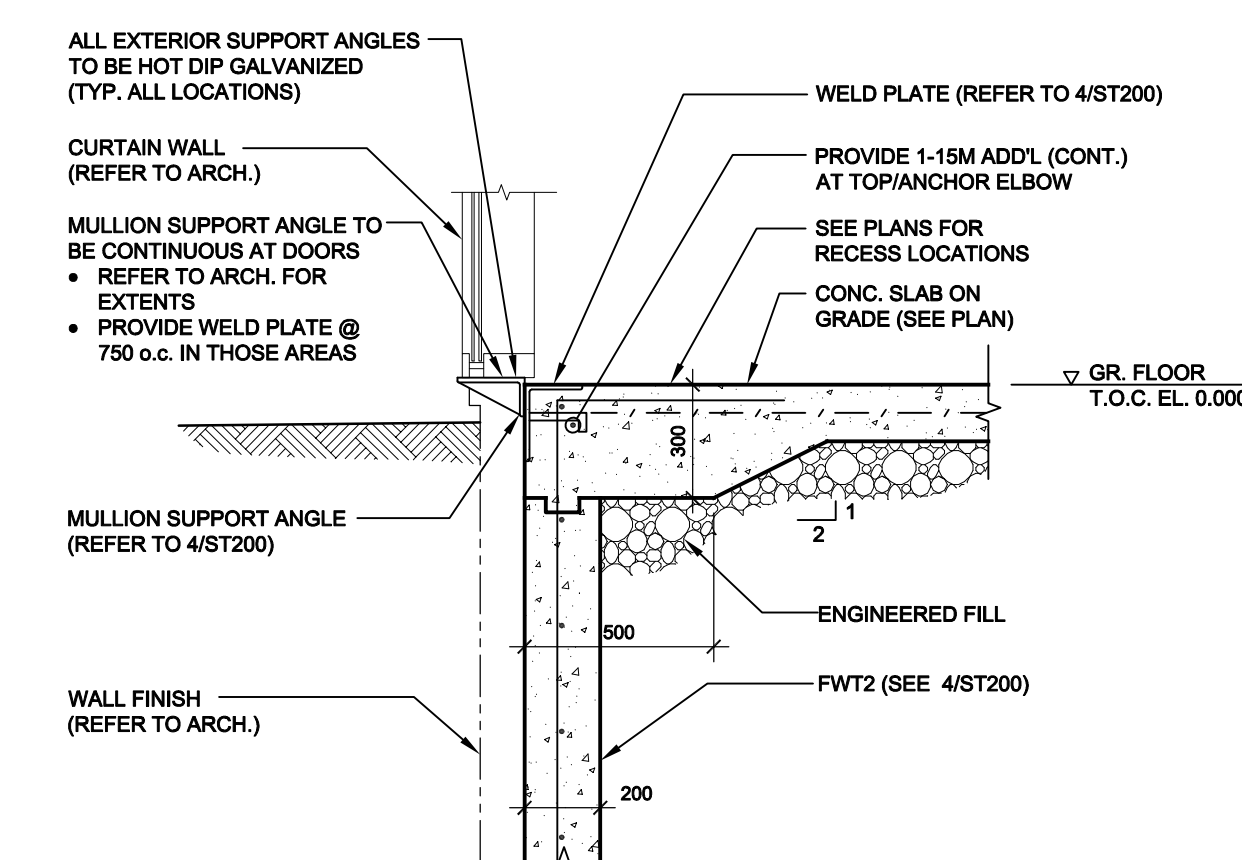
DRAWN: S.H.	DRAWING No. S201
DESIGNED: B.J./S.M./B.A.	
APPROVED: B.J.	
DATE: OCT. 2015	
SCALE: AS SHOWN	
PROJECT No: 15-0179	



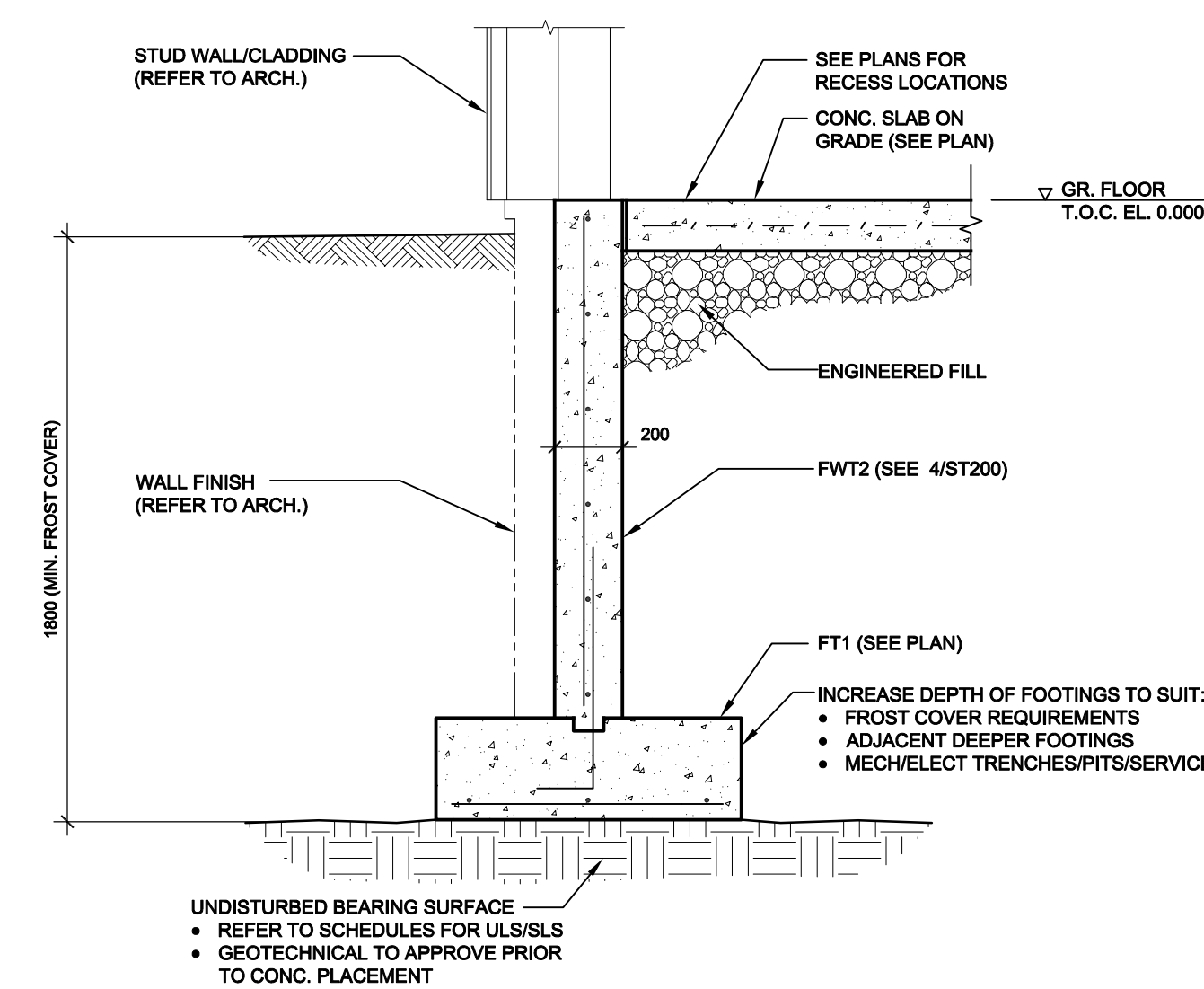
4B SECTION: TEST FACILITY: FOUNDATION WALL:
ST200 SCALE 1:20 CURTAIN WALL SUPPORT AT DOORS



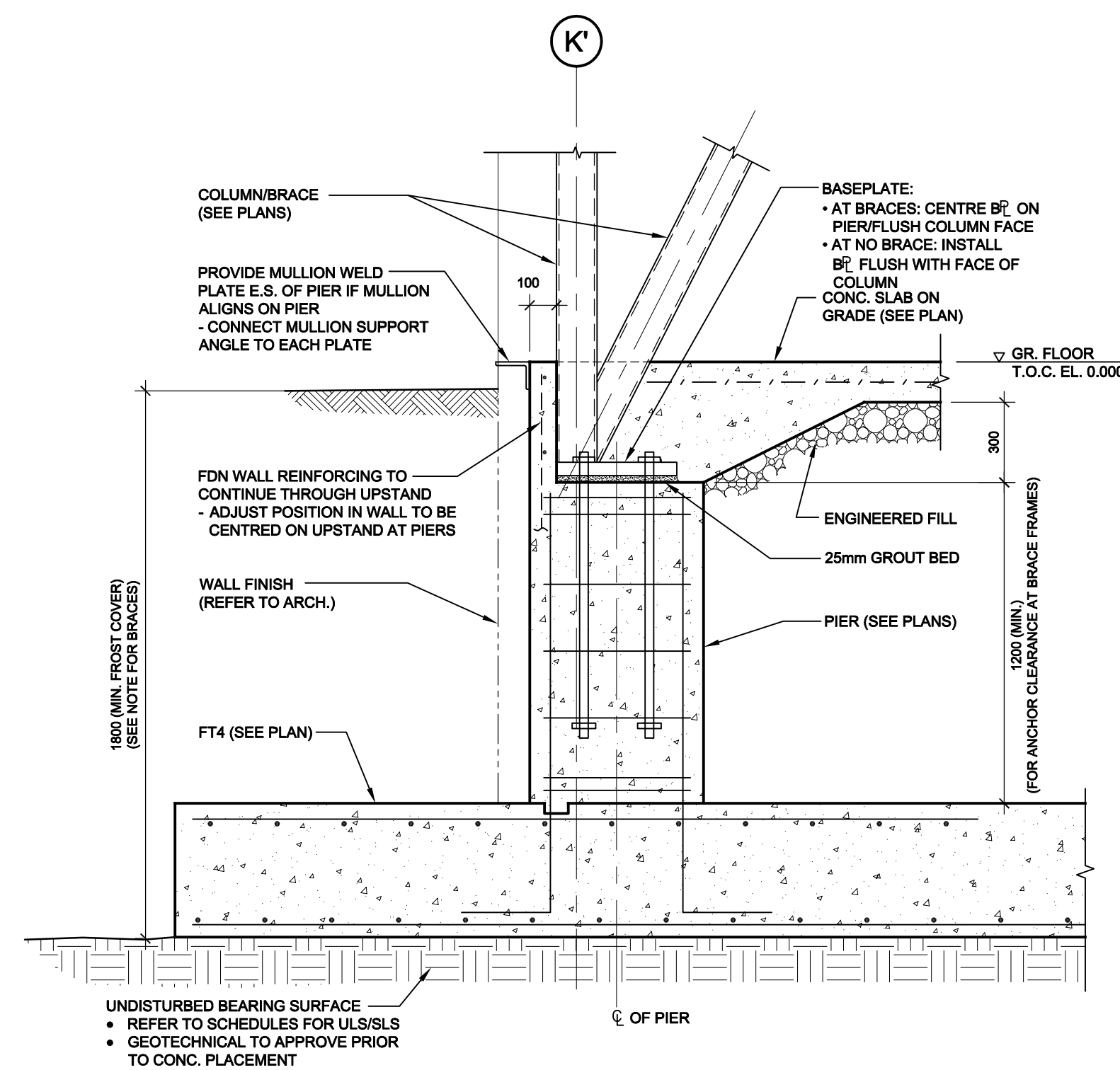
7 SECTION: TEST FACILITY: FOUNDATION WALL AT LOADING DOCK
ST200 SCALE 1:20



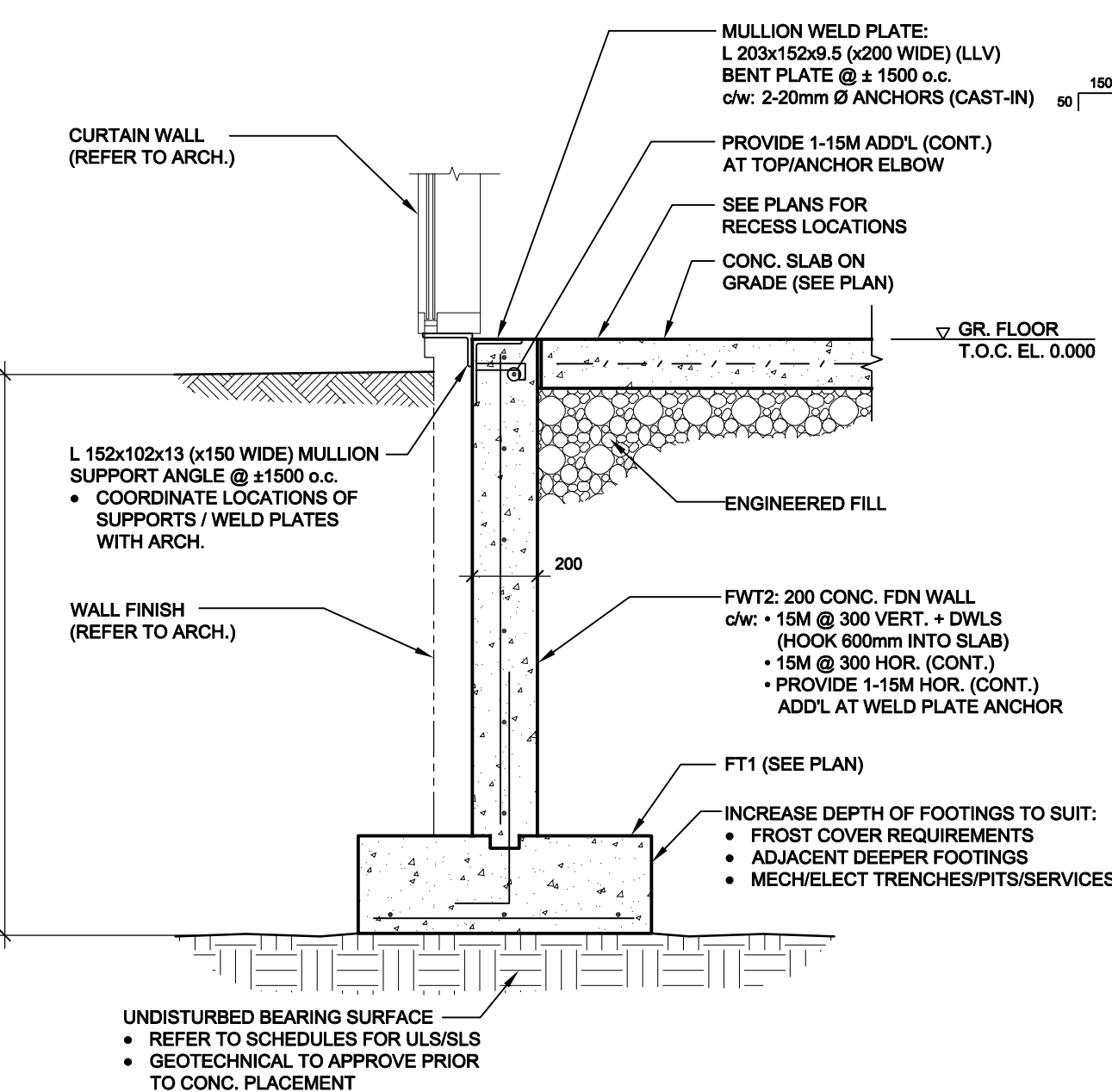
4A SECTION: TEST FACILITY: FOUNDATION WALL:
ST200 SCALE 1:20 CURTAIN WALL SUPPORT



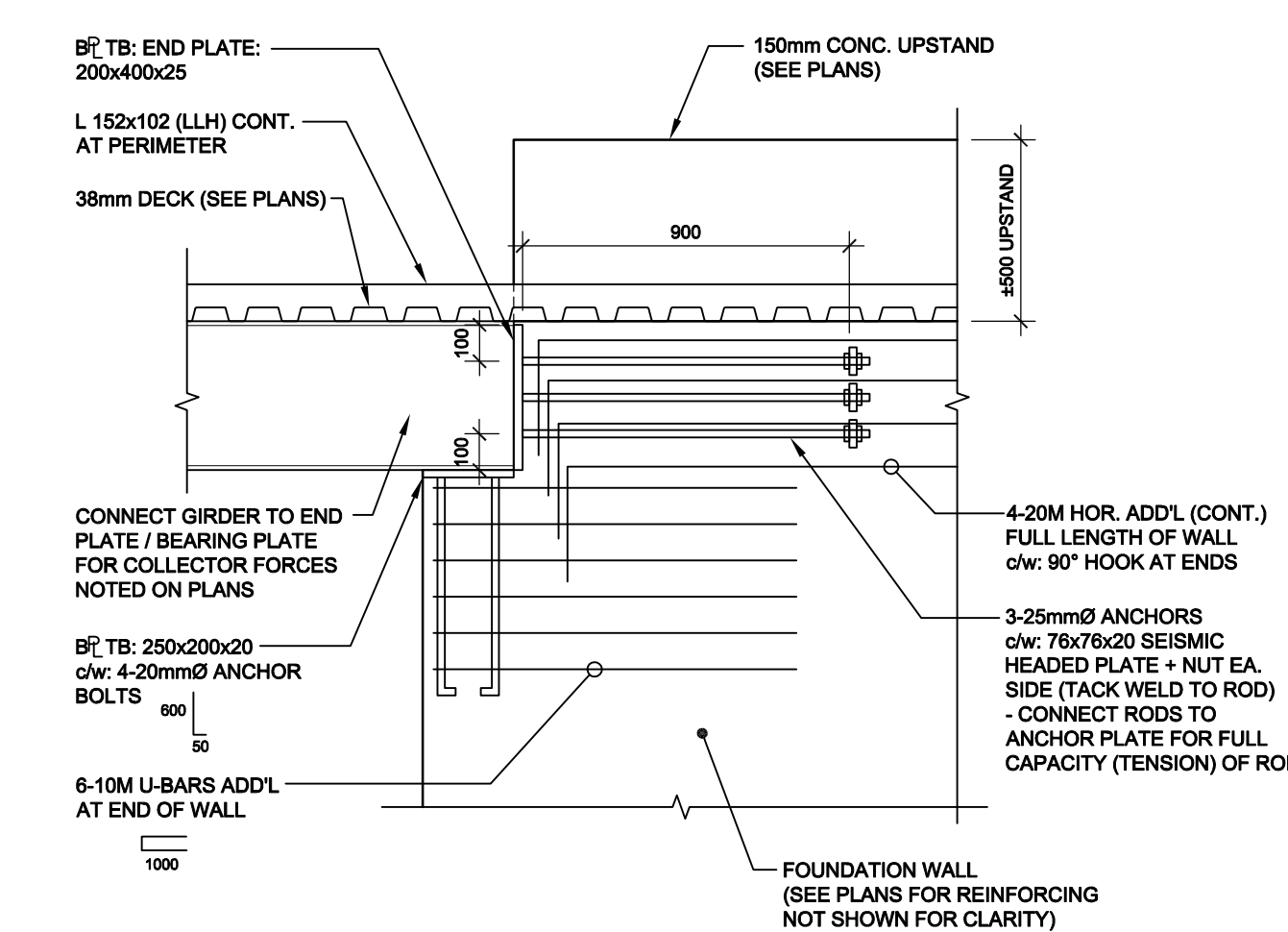
5 SECTION: TEST FACILITY: FOUNDATION WALL: NO CURTAIN WALL
ST200 SCALE 1:20



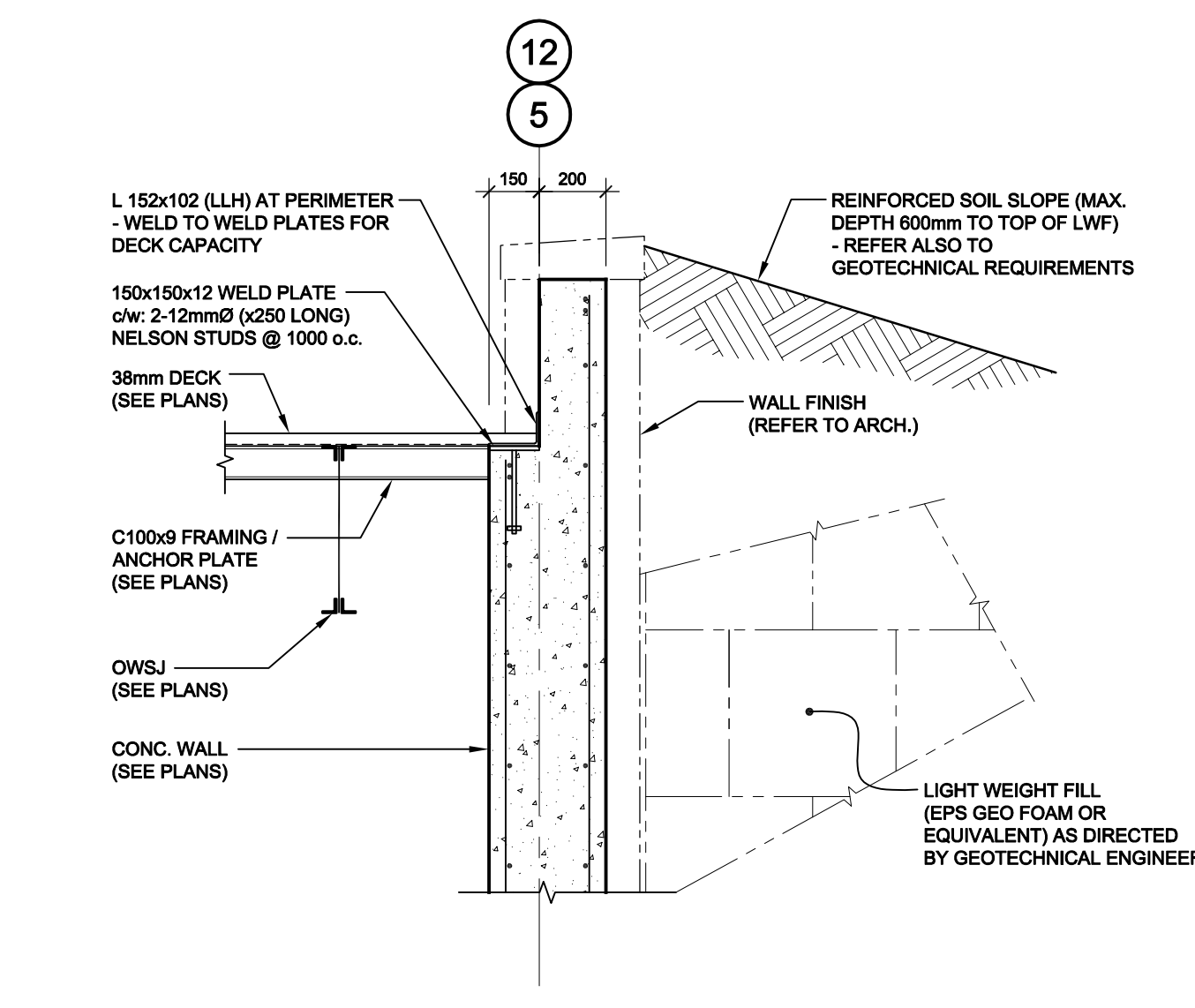
6 SECTION: TEST FACILITY: FOUNDATION AT EXTERIOR PIER
ST200 SCALE 1:20



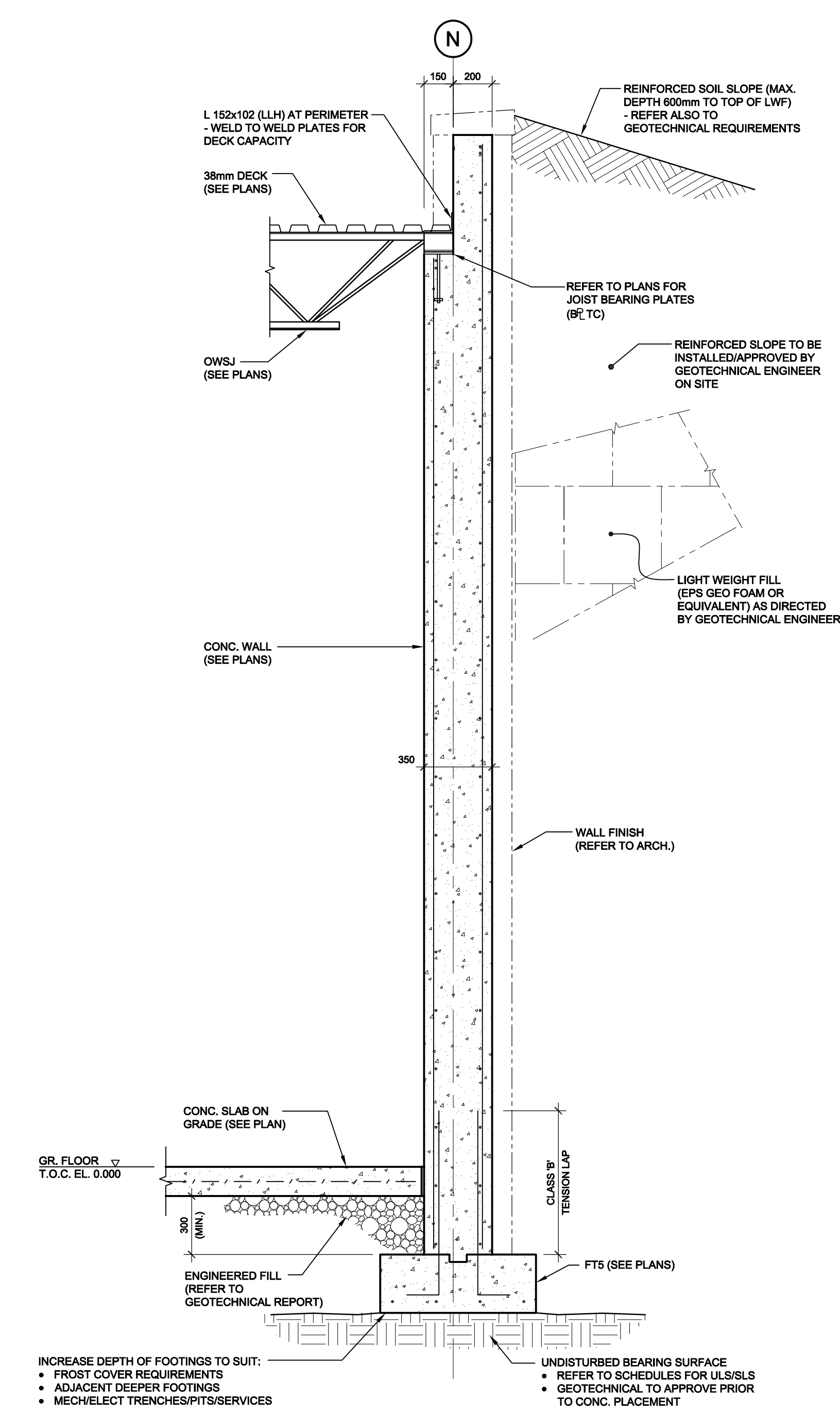
4 SECTION: TEST FACILITY: FOUNDATION WALL:
ST200 SCALE 1:20 CURTAIN WALL SUPPORT



3 SECTION: TEST FACILITY ROOF: COLLECTOR ANCHOR
ST200 SCALE 1:20



2 SECTION: TEST FACILITY: EAST/WEST FOUNDATION WALL AT ROOF
ST200 SCALE 1:20



1 SECTION: TEST FACILITY: SOUTH FOUNDATION WALL
ST200 SCALE 1:20

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3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATTRILUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH
No.	DATE	REVISIONS	BY

PROJECT NORTH	STAMP
	



**CLELAND
JARDINE**
ENGINEERING LTD

200-560 TERRY FOX DR.
KANATA, ON K2L 4B9
(G T S) 671-1933

TOMLINSON tomlinsongroup.com
FOUNDED ON STRENGTH GUIDED BY VISION

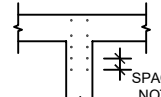
PROJECT
TOMLINSON NEW BUILDING

DRAWING	
TEST FACILITY: SECTION AND DETAILS	
DRAWN: S.H.	DRAWING No. ST200
DESIGNED: B.J./S.M./B.A.	
APPROVED: B.J.	
DATE: OCT. 2015	
SCALE: AS SHOWN	
PROJECT No: 15-0179	

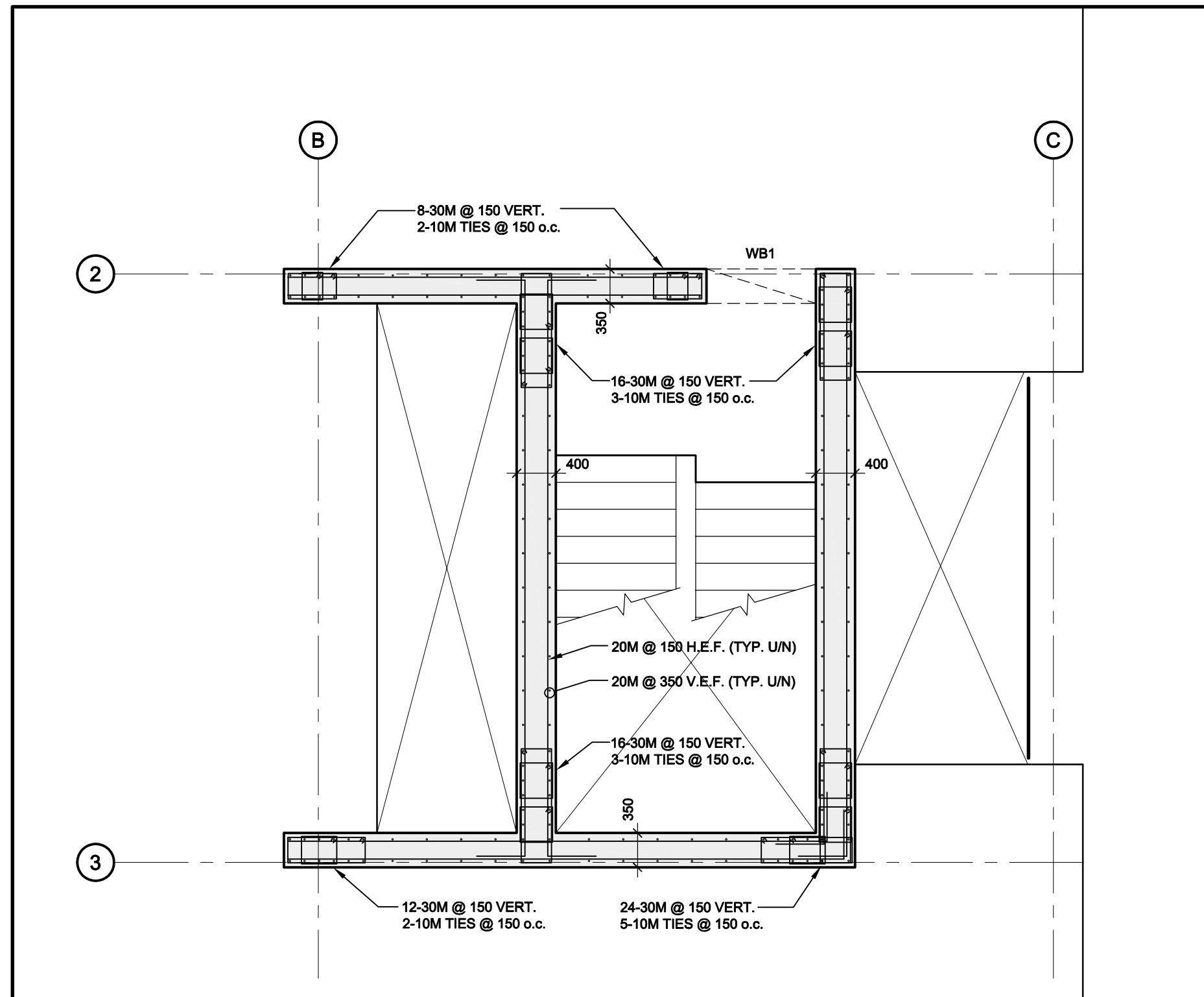
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COREWALL/SHEAR WALL NOTES:

1. CONCRETE STRENGTH:
FTG - 2ND: $f_c' = 40$ MPa
2ND - 3RD: $f_c' = 40$ MPa
3RD - 4TH: $f_c' = 35$ MPa
4TH - ROOF: $f_c' = 35$ MPa
ROOF - PHR: $f_c' = 30$ MPa
- MAXIMUM AGGREGATE SIZE IS 20mm UNLESS NOTED ON COREWALL PLANS.
2. REINFORCING:
ALL WALLS TO BE REINFORCED AS FOLLOWS UN ON DETAILED DRAWINGS:
• 20M @ 100 H.E.F.
• 20M @ 350 V.E.F.
• 10-30M @ 150 VERT. +10M TIES @ 100 @ ENDS/EACH SIDE OF DOORS/OPENINGS/CORNERS
• 4-20M TIEB: S.H.E.F. OF MECH. OPENINGS UN (EXTEND MIN. 600 PAST FACE OF OPENINGS)
• BEND VERTICALS INTO SLAB WHERE WALLS TERMINATE
• ALL LAPS TO BE CLASS 1B TENSION LAPS (MIN. 600, MIN. 1.5 l_d)
• WHERE WALLS INTERSECT SPACING OF CONCENTRATED REINFORCING TO BE BASED ON GEOMETRY OF WALLS (AREA OF CORE CREATED BY INTERSECTION). SPACE ALL OTHER VERTS AT SPACING NOTED.

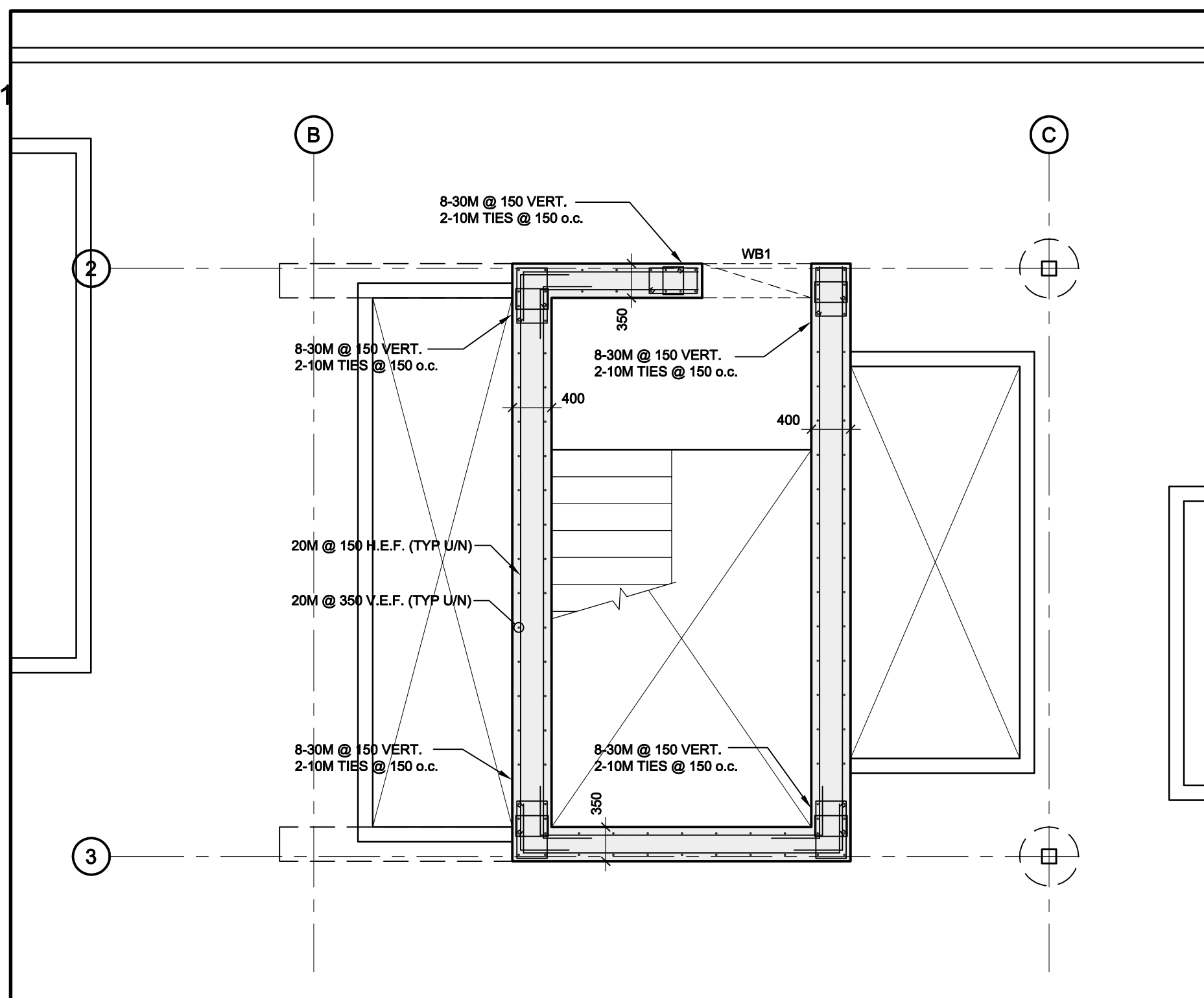


3. GEOMETRY:
FDN - ROOF LEVEL: 350 (MIN.), 400 (MAX.) (SEE PLANS)
SEE COREWALL PLANS FOR DIMENSIONS. REFER TO ARCH.
4. WB1: 350x400x1600
10-25M T (3 LAYERS)
10-25M B (3 LAYERS)
10M @ 150 H.E.F.
5-10M STIRRUPS @ 100 o.c.
- WB2: 200x1600
6-25M T (3 LAYERS)
6-25M B (3 LAYERS)
20M @ 150 H.E.F. (OR 150 @ UPPER FLOORS)
10M STIRRUPS @ 100 o.c.
(EXTEND HOR. BARS TO GRID 2&3)



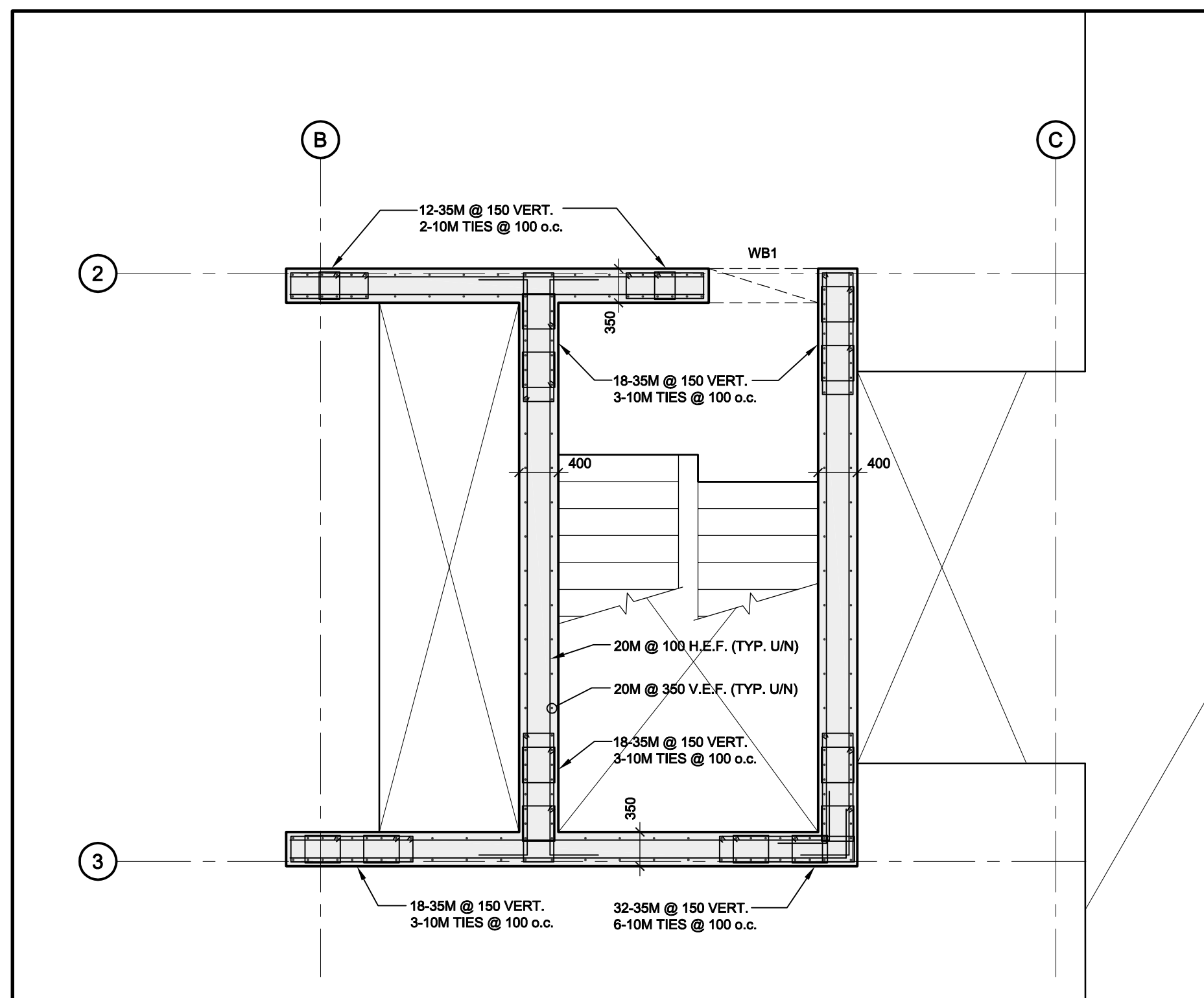
COREWALL DETAIL CW1: THIRD TO FOURTH

SCALE 1:50



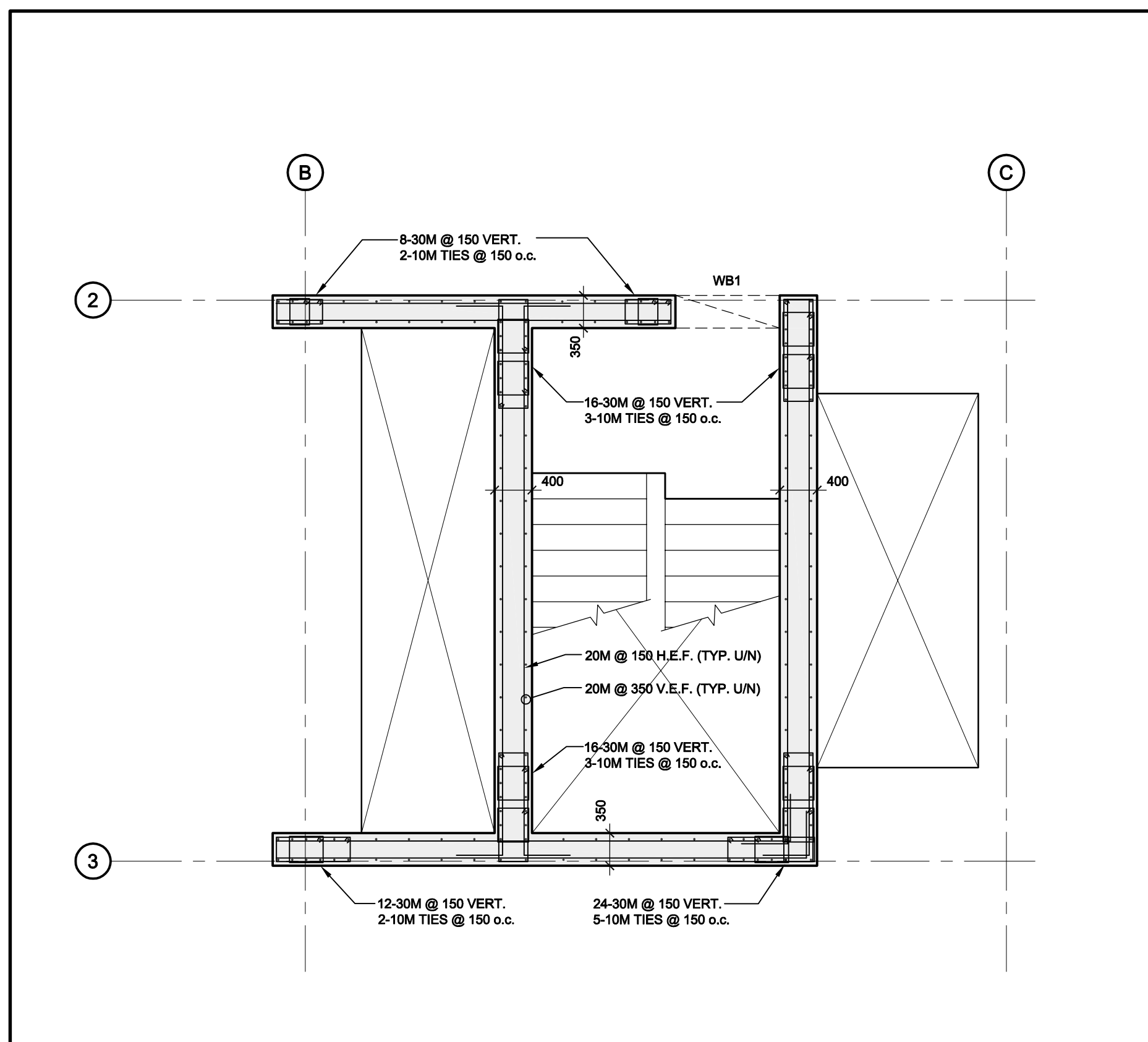
COREWALL DETAIL CW1: PENTHOUSE ROOF

SCALE 1:50



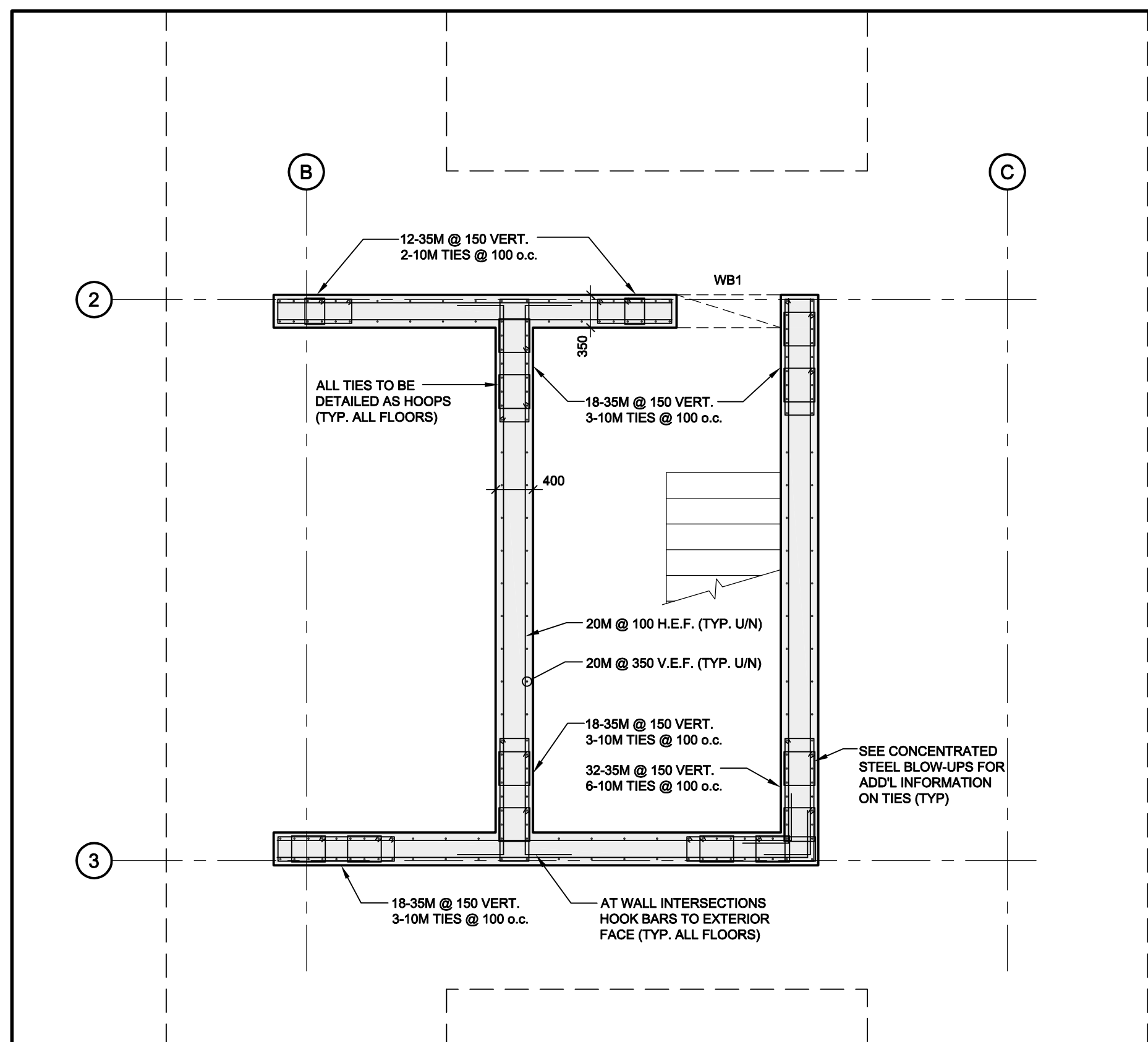
COREWALL DETAIL CW1: SECOND TO THIRD

SCALE 1:50



COREWALL DETAIL CW1: FOURTH TO ROOF

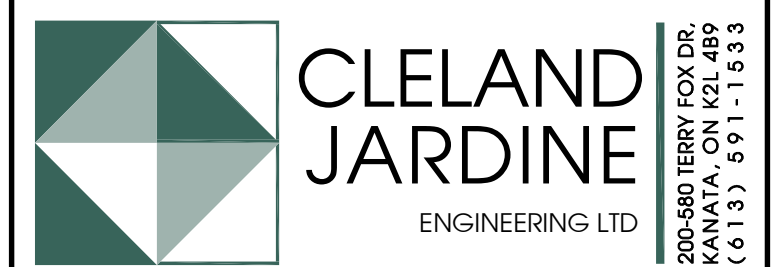
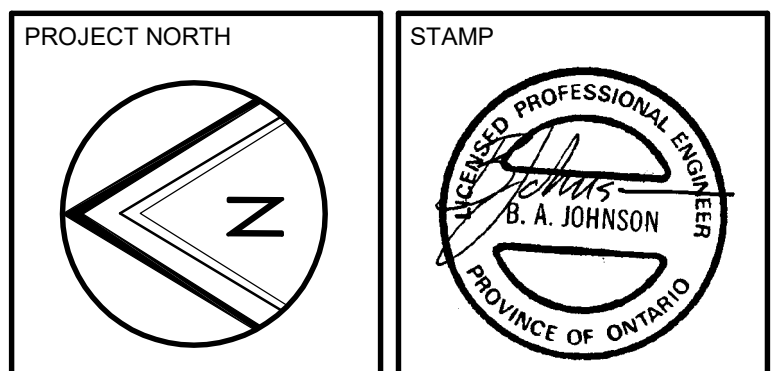
SCALE 1:50



COREWALL DETAIL CW1: FOUNDATION TO SECOND

SCALE 1:50

11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	SH
9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH
No.	DATE	REVISIONS	BY



TOMLINSON ENGINEERING GROUP
FOUNDED ON WYRENNETH GUIDED BY VISION

PROJECT
**TOMLINSON
NEW BUILDING**

DRAWING
COREWALL DETAILS: CW1

DRAWN: S.H.	DRAWING No:
DESIGNED: B.J./S.M./B.A.	
APPROVED: B.J.	
DATE: OCT. 2015	
SCALE: AS NOTED	S300
PROJECT No: 15-0179	

The Contractor shall check and verify all dimensions on site.
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COREWALL SHEAR WALL NOTES:

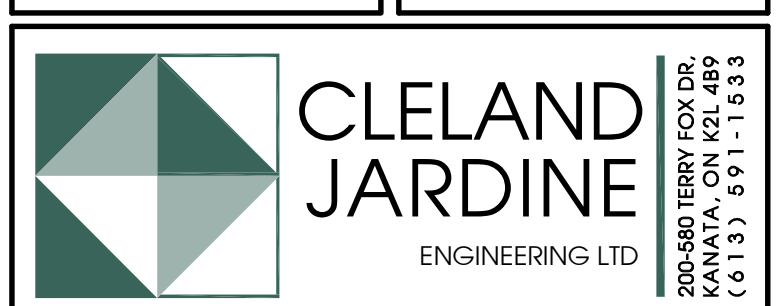
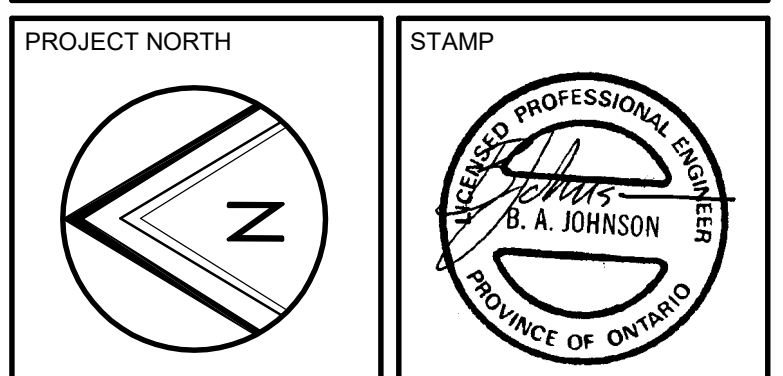
1. CONCRETE STRENGTH:
FTG - 2ND: $f'_{c} = 40 \text{ MPa}$
2ND - 3RD: $f'_{c} = 40 \text{ MPa}$
3RD - 4TH: $f'_{c} = 35 \text{ MPa}$
4TH - ROOF: $f'_{c} = 35 \text{ MPa}$
ROOF - PHR: $f'_{c} = 30 \text{ MPa}$
2. REINFORCING:
ALL WALLS TO BE REINFORCED AS FOLLOWS UN ON DETAILED DRAWINGS:
• 20M @ 100 H.E.F.
• 20M @ 350 V.E.F.
• 10-30M @ 150 VERT. +10M TIES @ 100 @ ENDS/EACH SIDE OF DOORS/OPENINGS/CORNERS
• 4-20M TIE @ 5 H.E.F. OF MECH. OPENINGS UN (EXTEND MIN. 600 PAST FACE OF OPENINGS)
• BEND VERTICALS INTO SLAB WHERE WALLS TERMINATE
• ALL LAPS TO BE CLASS 1B TENSION LAPS (MIN. 500, MIN. 1.5d)
• WHERE WALLS INTERSECT SPACING OF CONCENTRATED REINFORCING TO BE BASED ON GEOMETRY OF WALLS AREA OF CORE CREATED BY INTERSECTION. SPACE ALL OTHER VERTS AT SPACING NOTED.

3. GEOMETRY:
FDN - ROOF LEVEL: 350 (MIN.), 400 (MAX.) (SEE PLANS)
SEE COREWALL PLANS FOR DIMENSIONS. REFER TO ARCH.

4. WB1: 350x400x1600
10-25M T (3 LAYERS)
10-25M B (3 LAYERS)
10M @ 150 H.E.F.
5-10M STIRRUPS @ 100 o.c.

- WB2: 200x1600
6-25M T (3 LAYERS)
6-25M B (3 LAYERS)
20M @ 150 H.E.F. (OR 150 @ UPPER FLOORS)
10M STIRRUPS @ 100 o.c.
(EXTEND HOR. BARS TO GRID 2&3)

11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	SH
9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
6	MAY 31/16	ISSUED FOR FOUNDATION PERMIT	SH
5	MAY 17/16	ISSUED FOR 50% REVIEW	SH
4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH
No.	DATE	REVISIONS	BY

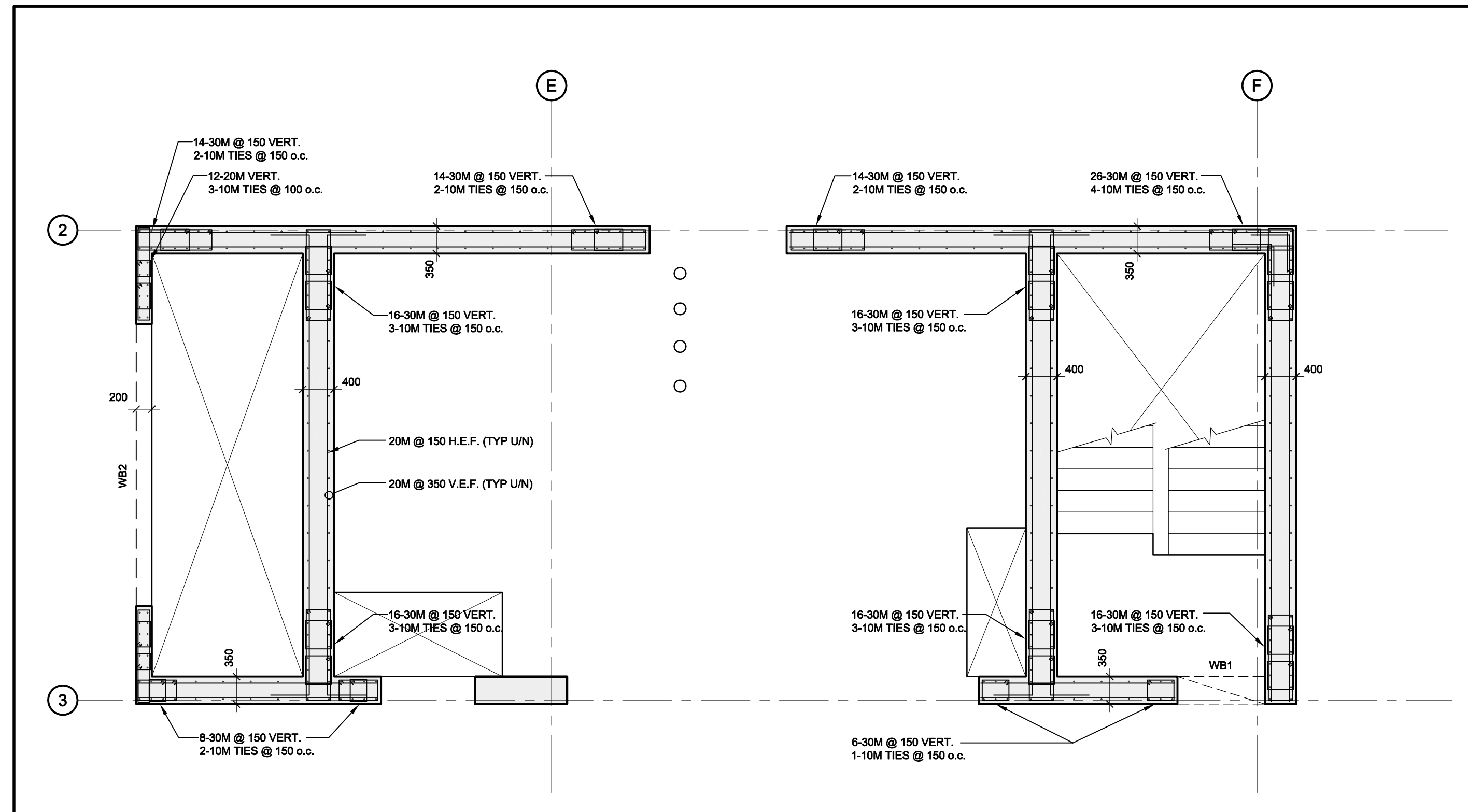


PROJECT
**TOMLINSON
NEW BUILDING**

DRAWING
COREWALL DETAILS: CW2

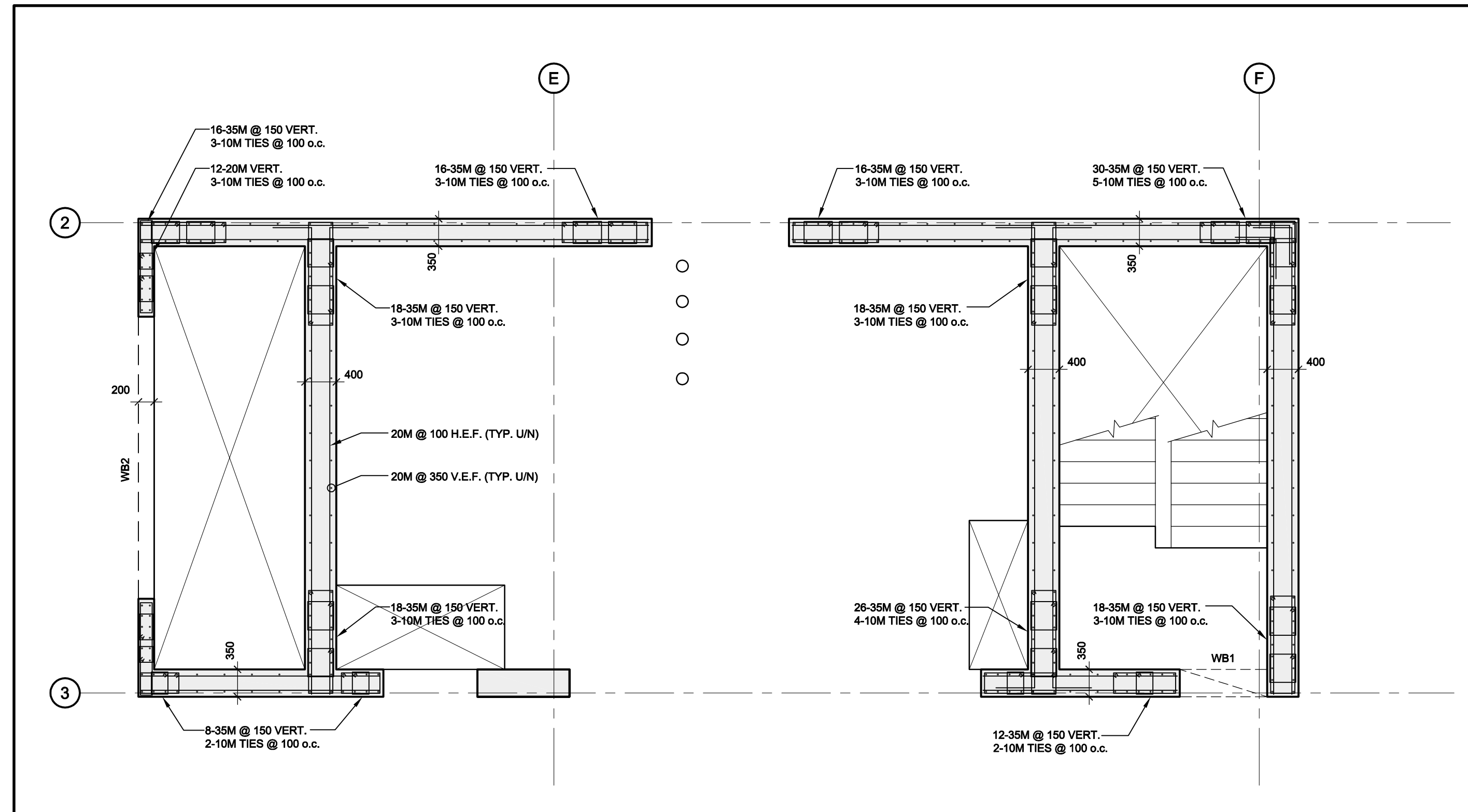
DRAWN:	S.H.	DRAWING No:
DESIGNED:	B.J./S.M./B.A.	
APPROVED:	B.J.	
DATE:	OCT. 2015	
SCALE:	AS NOTED	
PROJECT No:	15-0179	

S301



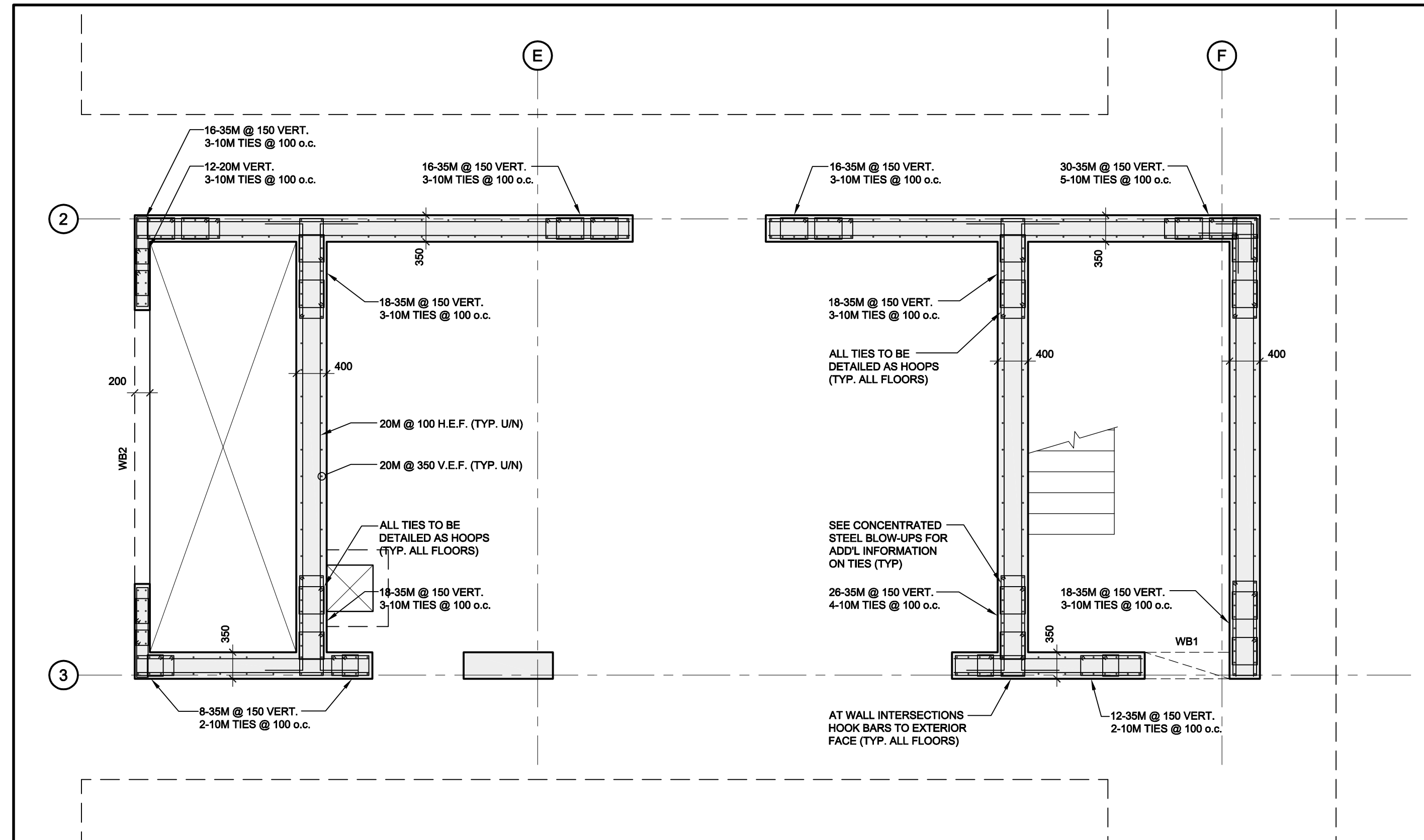
COREWALL DETAIL CW2: THIRD TO FOURTH

SCALE 1:50



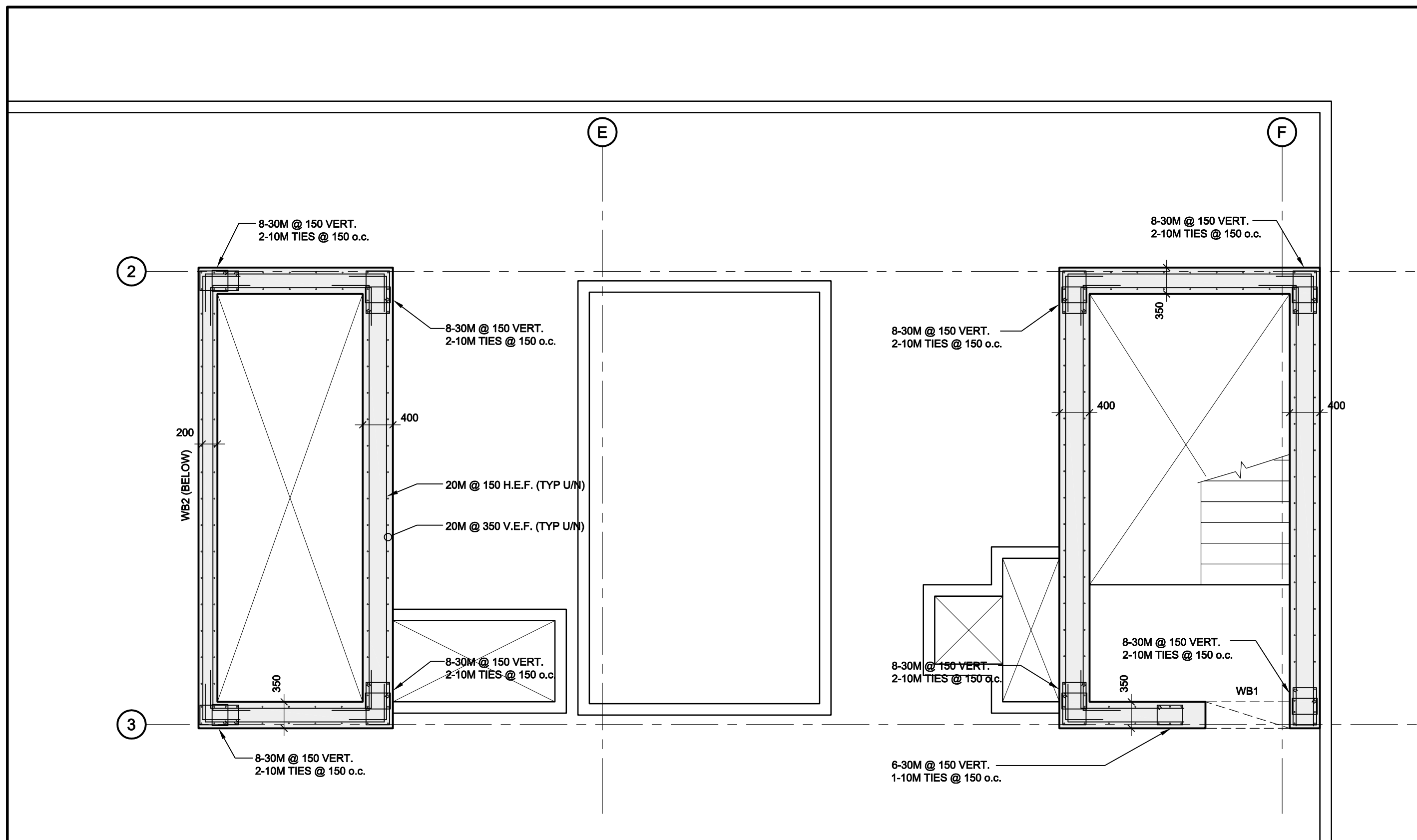
COREWALL DETAIL CW2: SECOND TO THIRD

SCALE 1:50



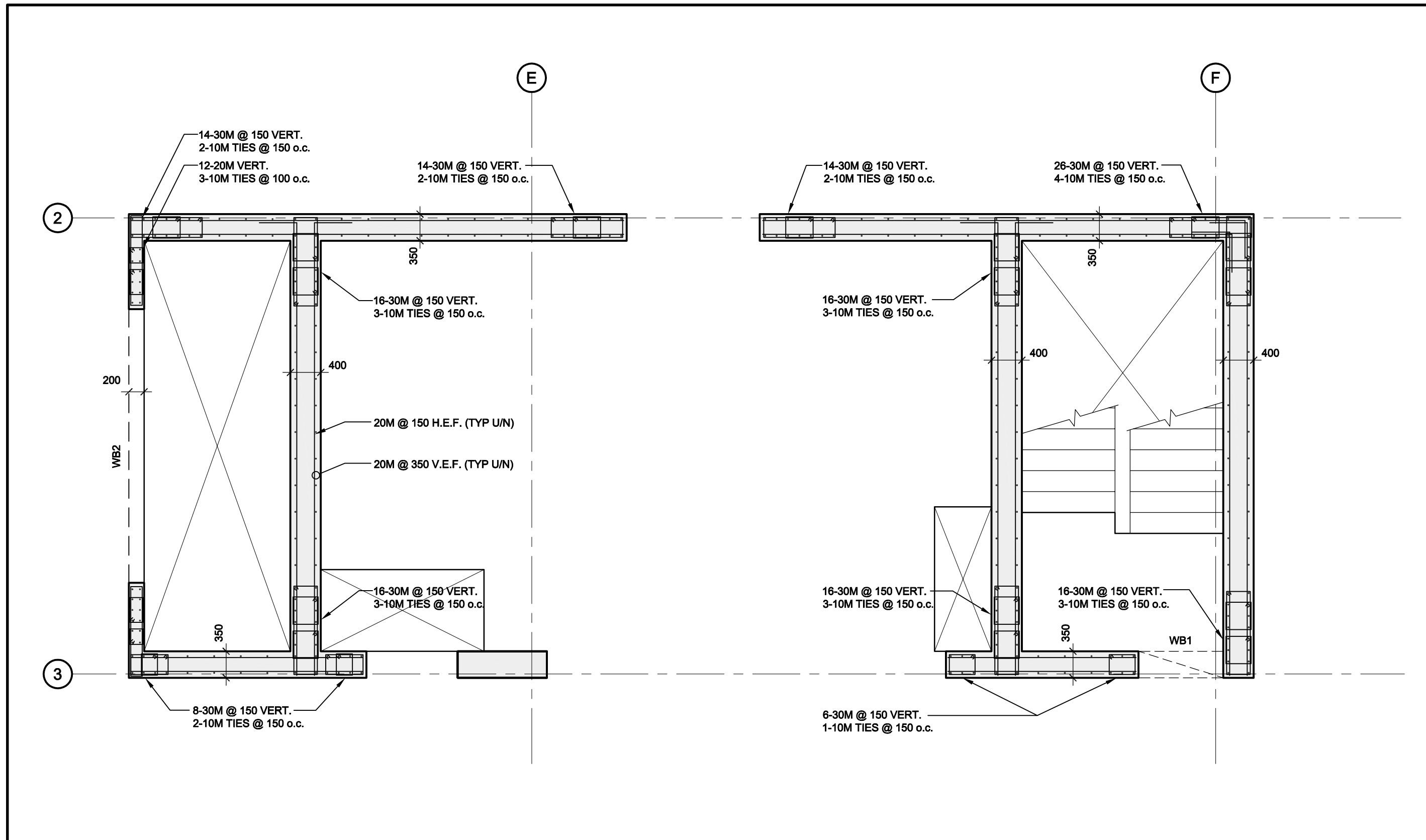
COREWALL DETAIL CW2: FOOTING TO SECOND

SCALE 1:50



COREWALL DETAIL CW2: PENTHOUSE ROOF

SCALE 1:50



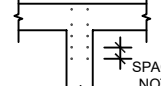
COREWALL DETAIL CW2: FOURTH TO ROOF

SCALE 1:50

The Contractor shall check and verify all dimensions on site.
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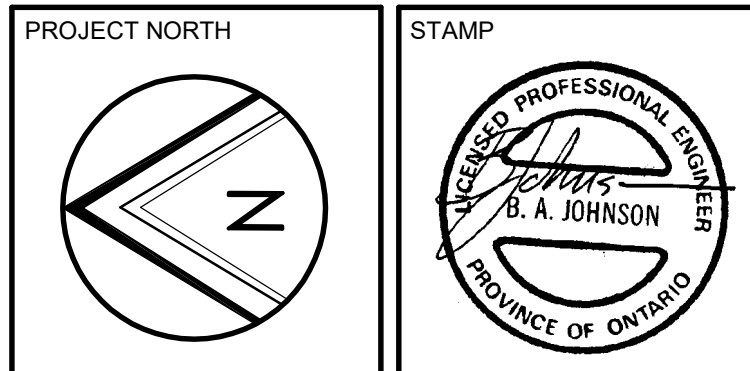
COREWALL/SHEAR WALL NOTES:

1. CONCRETE STRENGTH:
FTG - 2ND: $f_c' = 40$ MPa
2ND - 3RD: $f_c' = 40$ MPa
3RD - 4TH: $f_c' = 35$ MPa
4TH - ROOF: $f_c' = 35$ MPa
ROOF - PHR: $f_c' = 30$ MPa
• MAXIMUM AGGREGATE SIZE IS 20mm UNLESS NOTED ON COREWALL PLANS
2. REINFORCING:
ALL WALLS TO BE REINFORCED AS FOLLOWS UN ON DETAILED DRAWINGS:
• 20M @ 100 H.E.F.
• 20M @ 350 V.E.F.
• 10-20M @ 150 VERT. +10M TIES @ 100 @ ENDS/EACH SIDE OF DOORS/OPENINGS/CORNERS
• 4-20M TIEB.S.E.F. OF MECH. OPENINGS UN (EXTEND MIN. 600 PAST FACE OF OPENINGS)
• BEND VERTICALS INTO SLAB WHERE WALLS TERMINATE
• ALL LAPS TO BE CLASS 'B' TENSION LAPS (MIN. 600, MIN. 1.5d)
• WHERE WALLS INTERSECT SPACING OF CONCENTRATED REINFORCING TO BE BASED ON GEOMETRY OF WALLS AREA OF CORE CREATED BY INTERSECTION. SPACE ALL OTHER VERTS AT SPACING NOTED.



3. GEOMETRY:
FDN - ROOF LEVEL: 350 (MIN.), 400 (MAX.) (SEE PLANS)
SEE COREWALL PLANS FOR DIMENSIONS. REFER TO ARCH.
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10-25M B (3 LAYERS)
10M @ 150 H.E.F.
2-10M STIRRUPS @ 100 o.c.
WB2: 200x1600
6-25M T (3 LAYERS)
6-25M B (3 LAYERS)
20M @ 100 H.E.F. OR 150 @ UPPER FLOORS
10M STIRRUPS @ 100 o.c.
(EXTEND HOR. BARS TO GRID 2x3)

11	AUG 5/16	ISSUED FOR BUILDING PERMIT	SH
10	JULY 14/16	RE-ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	SH
9	JULY 7/16	ISSUED FOR EXCAVATION/ FOUNDATION CONSTRUCTION	JL
8	JULY 7/16	ISSUED FOR SUPERSTRUCTURE TENDER	JL
7	JULY 7/16	ISSUED FOR SUPERSTRUCTURE PERMIT	JL
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4	APR 25/16	ISSUED FOR 33% REVIEW	SH
3	APR 7/16	ISSUED FOR 25% REVIEW - REVISED ATRIUM	SH
2	JAN 22/16	ISSUED FOR 25% REVIEW	SH
1	DEC 17/15	ISSUED FOR PRELIMINARY FRAMING	SH
No.	DATE	REVISIONS	BY



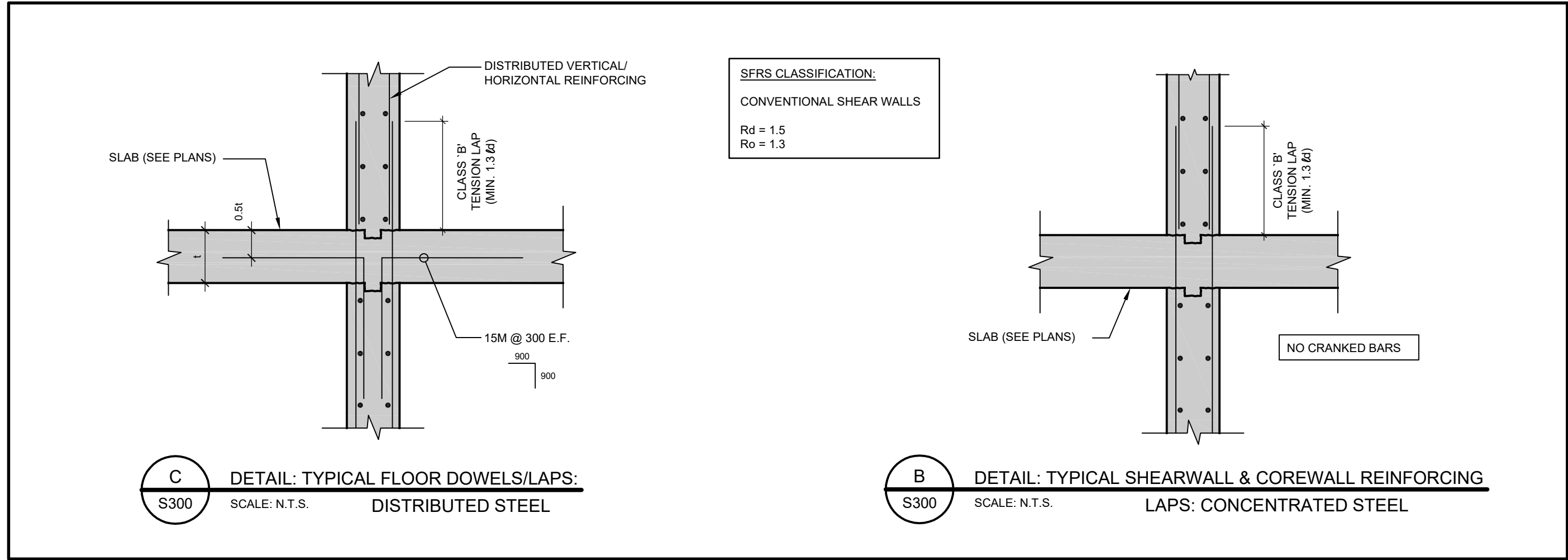
TOMLINSON FOUNDATION BY WYREBIRTH GUIDED BY VISION

PROJECT
**TOMLINSON
NEW BUILDING**

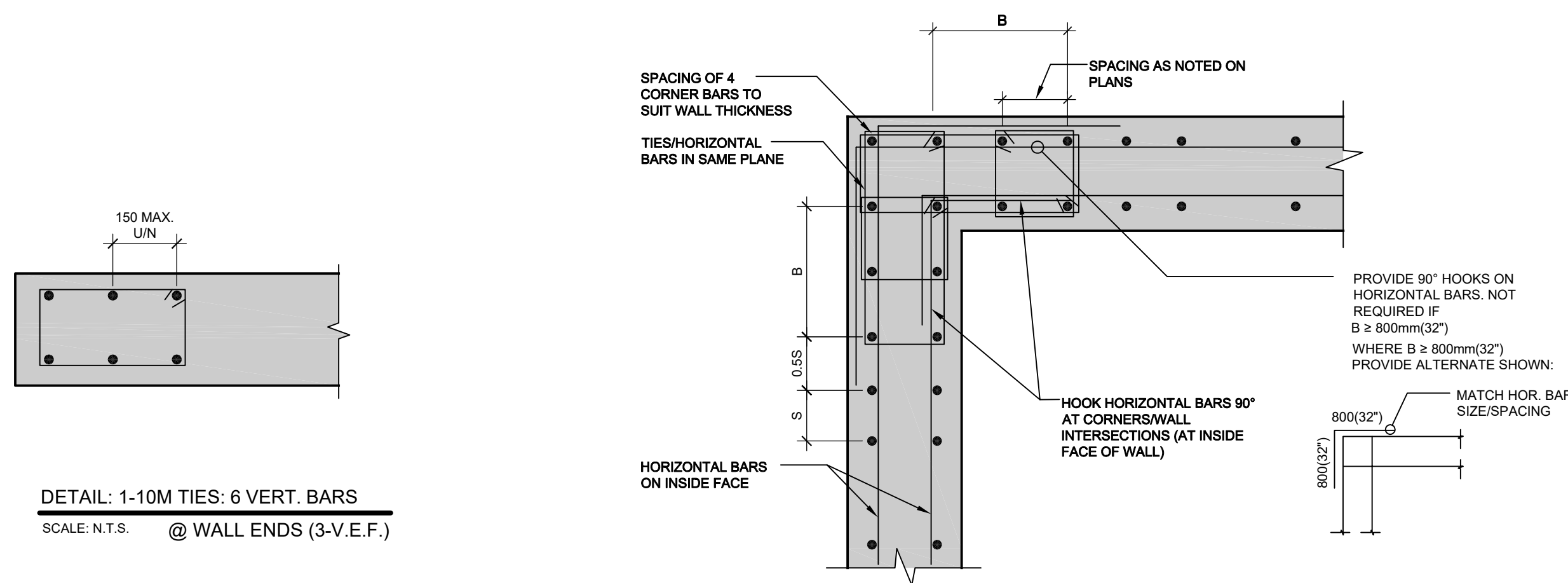
DRAWING
SHEAR WALL DETAILS

DRAWN: S.H.	DRAWING No:
DESIGNED: B.J./S.M./B.A.	
APPROVED: B.J.	
DATE: OCT. 2015	
SCALE: AS NOTED	
PROJECT No: 15-0179	

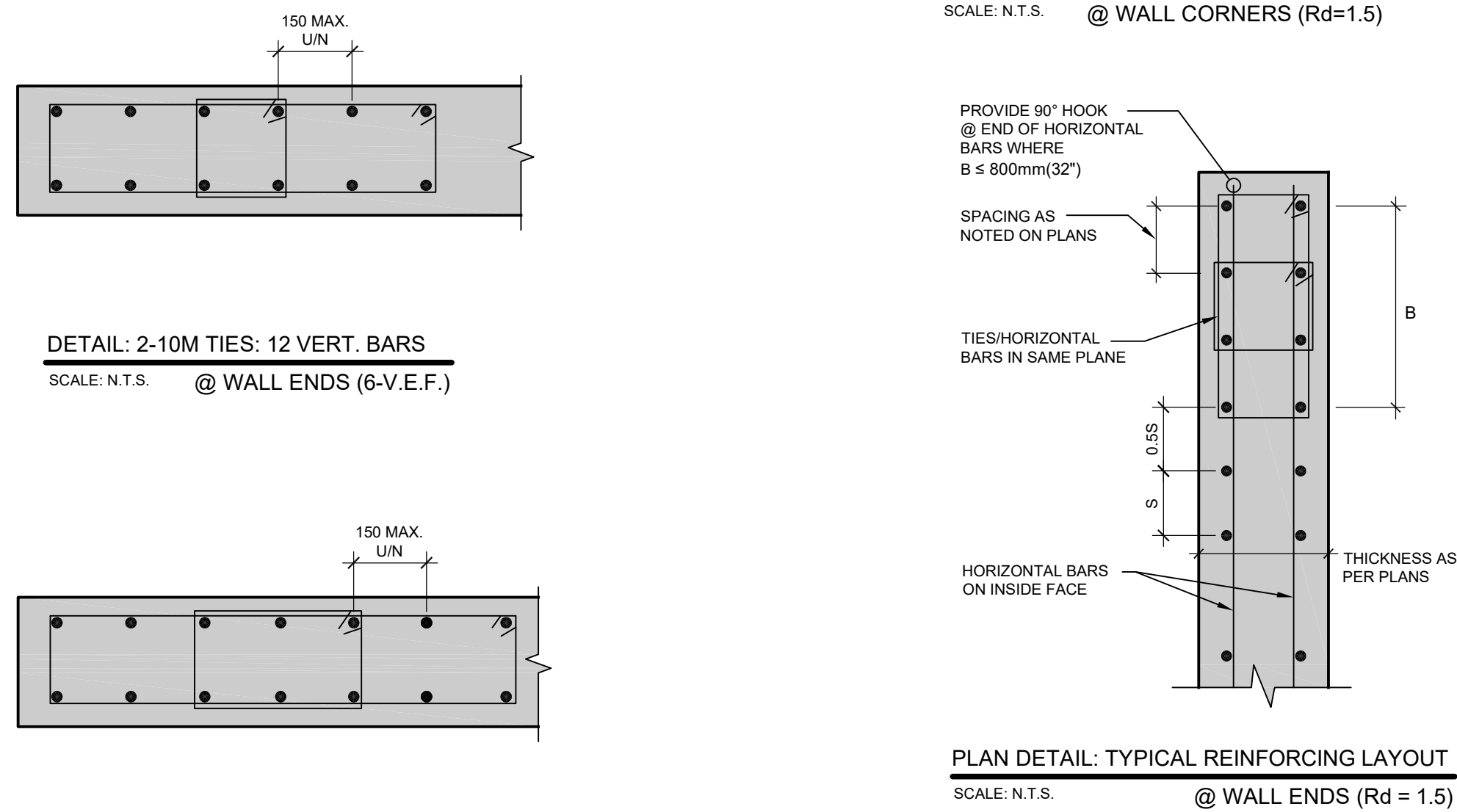
S302



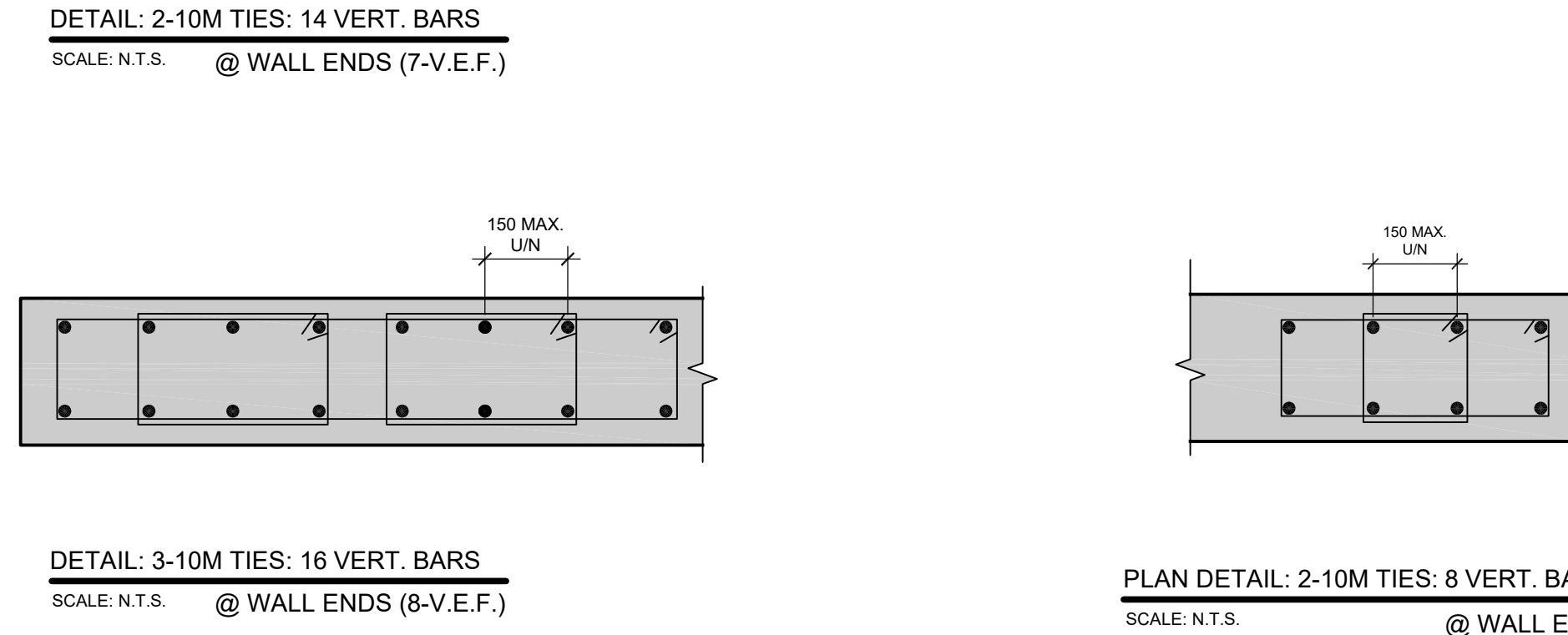
CONCENTRATED REINFORCING STEEL LAYOUTS AND TYPICAL COREWALL DETAILS
(UNLESS OTHER WISE NOTED ON SCHEDULES)



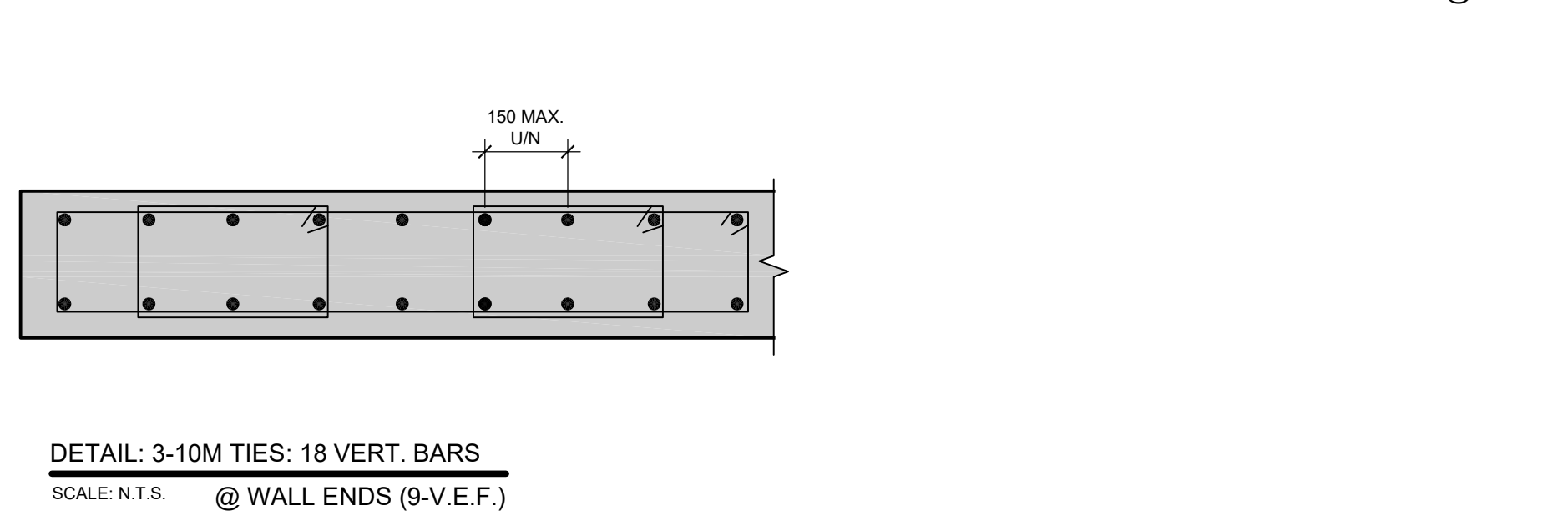
DETAIL: TYPICAL REINFORCING LAYOUT
SCALE: N.T.S. @ WALL CORNERS (Rd=1.5)



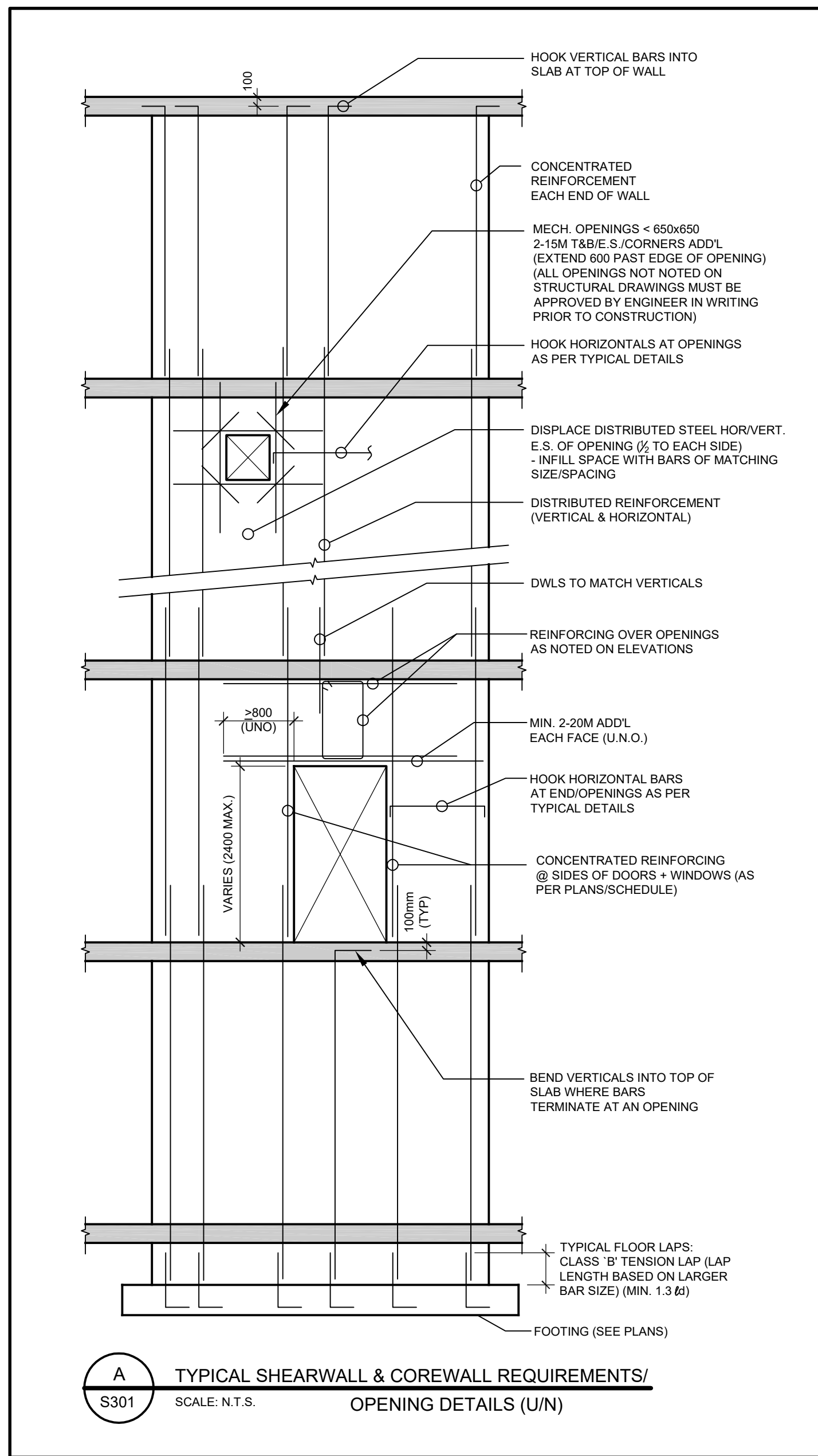
PLAN DETAIL: TYPICAL REINFORCING LAYOUT
SCALE: N.T.S. @ WALL ENDS (Rd = 1.5)



PLAN DETAIL: 2-10M TIES: 8 VERT. BARS
SCALE: N.T.S. @ WALL ENDS



DETAIL: 3-10M TIES: 18 VERT. BARS
SCALE: N.T.S. @ WALL ENDS (9-V.E.F.)



DETAIL: TYPICAL SHEARWALL & COREWALL REQUIREMENTS/
SCALE: N.T.S. OPENING DETAILS (U/N)