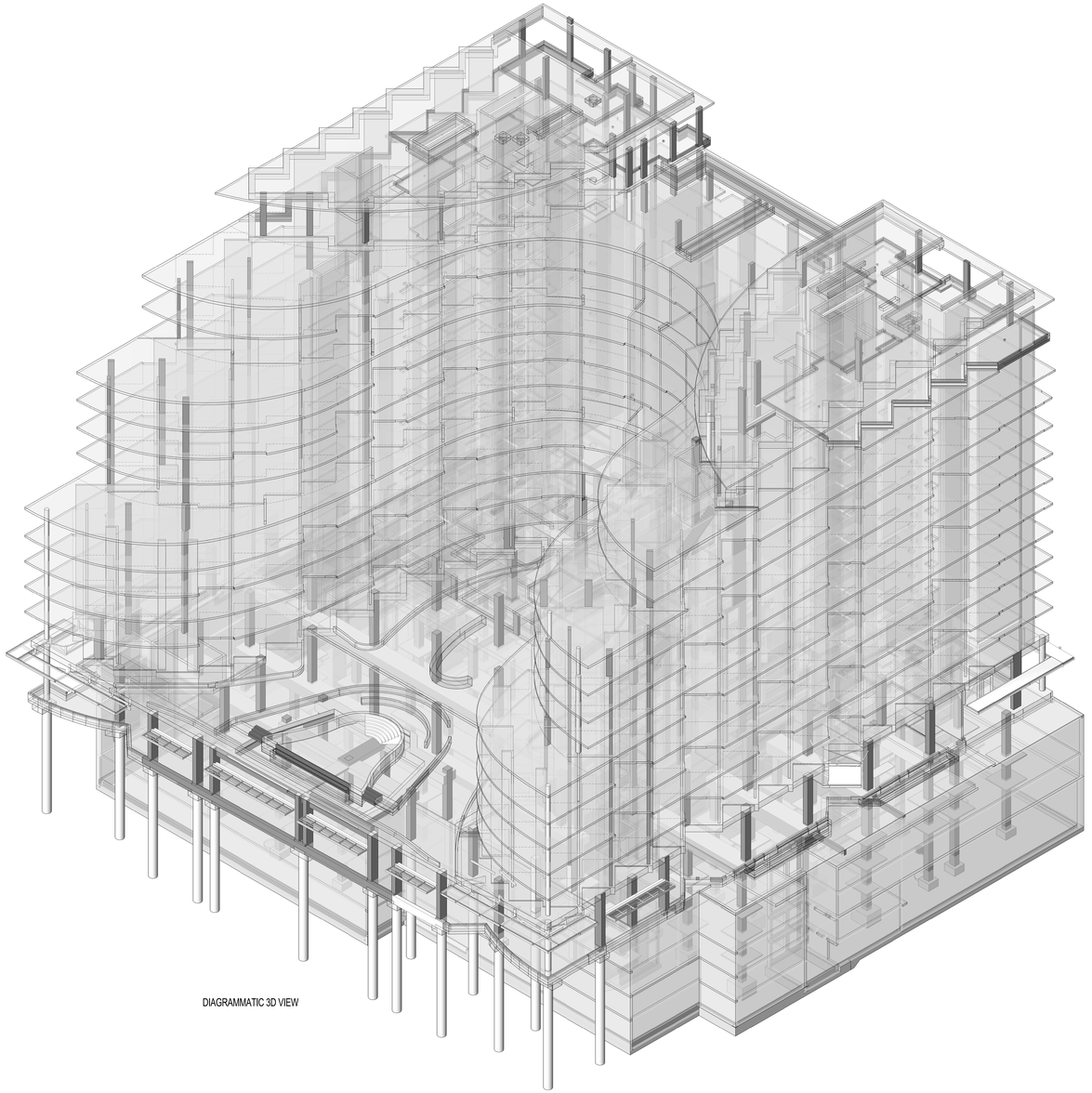

DIAGRAMMATIC 3D VIEW

DRAWING LIST

Sheet Number	Sheet Name
S0 SERIES - COVER SHEET	
S0-01	COVER SHEET
S1 SERIES - PLANS	
S1-01	FOUNDATION PLAN
S1-02	LEVEL P3 FLOOR FRAMING PLAN
S1-03	LEVEL P2 FLOOR FRAMING PLAN
S1-04	LEVEL P1 FLOOR FRAMING PLAN
S1-05	LEVEL P1 MEZZANINE FRAMING PLAN
S1-06	LEVEL 1-GROUND FLOOR FRAMING PLAN - WITH TOP REINFORCEMENT AND DETAILS
S1-07	LEVEL 1-GROUND FLOOR FRAMING PLAN - WITH BOTTOM REINFORCEMENT AND SCHEDULES
S1-08	LEVEL L1 MEZZANINE FRAMING PLAN
S1-09	LEVEL 2 FLOOR FRAMING PLAN
S1-10	LEVEL 3 FLOOR FRAMING PLAN
S1-11	LEVEL 4 FLOOR FRAMING PLAN
S1-12	LEVEL 5 FLOOR FRAMING PLAN
S1-13	LEVEL 6 FLOOR FRAMING PLAN
S1-14	LEVEL 7 FLOOR FRAMING PLAN
S1-15	LEVEL 8 FLOOR FRAMING PLAN
S1-16	LEVEL 9 FLOOR FRAMING PLAN
S1-17	LEVEL 10 FLOOR FRAMING PLAN
S1-18	LEVEL 11 FLOOR FRAMING PLAN
S1-19	LEVEL 12 / PH1 FLOOR FRAMING PLAN
S1-20	LEVEL 13/PH2/ MECH. FLOOR FRAMING PLAN
S1-21	ROOF FRAMING PLANS
S2 SERIES - SCHEDULES	
S2-01	COLUMN SCHEDULES - LEVEL 2 AND BELOW
S2-02	COLUMN SCHEDULE - LEVEL 2 ABOVE AND CONNECTION PLATE SCHEDULE
S2-03	BEAM SCHEDULES
S3 SERIES - WALL ELEVATIONS	
S3-01	WALL ELEVATIONS AND NOTES
S3-02	WALL ELEVATIONS
S3-03	WALL ELEVATIONS
S3-04	WALL ELEVATIONS
S3-05	WALL ELEVATIONS
S3-06	WALL ELEVATIONS
S3-07	WALL ELEVATIONS
S3-08	WALL ELEVATIONS
S3-09	WALL ELEVATIONS
S3-10	WALL ELEVATIONS
S4 SERIES - FOUNDATION ELEVATION AND SECTIONS	
S4-01	FOUNDATION ELEVATIONS
S4-02	FOUNDATION SECTIONS
S4-03	FOUNDATION SECTIONS
S4-04	FOUNDATION SECTIONS
S5 SERIES - PODIUM FLOOR SECTIONS	
S5-01	PODIUM FLOOR SECTIONS
S6 SERIES - FLOOR SECTIONS	
S6-01	FLOOR SECTIONS
S7 SERIES - ROOF SECTIONS	
S7-01	ROOF SECTIONS
S8 SERIES - TYPICAL NOTES & DETAILS	
S8-01	GENERAL NOTES & TYPICAL DETAILS
S8-02	TYPICAL DETAILS

Contractor Must Check And Verify All Dimensions On The Job.

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stephenson ENGINEERING

2550 Victoria Park Ave, Suite 402
Toronto ON M2J 5A9 | Tel.(416) 495 7976
www.stephenson-eng.com | info@stephenson-eng.com

No	Revision	Date

7	ISSUED FOR STEEL TENDER	DEC.18.2015
4	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
3	BUILDING PERMIT RESUBMISSION	JULY 22.2015
2	BUILDING PERMIT SUBMISSION	JUNE 12.2015
1	ISSUED FOR MT REVIEW	MAY 01.2015

No	Issued For	Date

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title

COVER SHEET

Project

Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale

Drawn by
DC

Checked by
BBS

Project No.
2014/0031

Date
DEC.18.2015

Drawing No.
S0-01

Plot Date: 12/18/2015 12:04:29 PM

DESIGN CRITERIA NOTES

1. GENERAL
   1.1. THE PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2012 OBC
   1.2. THE PARKING GARAGE HAS BEEN DESIGNED IN ACCORDANCE TO THE STRUCTURAL REQUIREMENTS OF CSA S413-07 PARKING STRUCTURES. SEE ARCHITECTURAL DRAWINGS FOR WATERPROOFING, SEALERS, ETC., DETAILED IN ACCORDANCE WITH CSA S413-07. SEE ALSO MECHANICAL DRAWINGS FOR COMPLIANCE WITH THE MECHANICAL REQUIREMENTS OF CSA-S413-07.
   1.3. CSA S413-07 CLAUSE 4.1.5.2 STATES THAT PARKING GARAGES HAVE BEEN DESIGNED FOR CLAUSES 4.1.5.3, 4.1.5.5, APPENDIX A OF THE OBC AND WHERE APPLICABLE GARAGE ROOF SLABS HAVE BEEN DESIGNED FOR THE REQUIREMENTS OF THE CITY OF TORONTO GUIDELINES FOR GARBAGE TRUCK AND FIRE TRUCK WHEEL LOADING
   1.4. ALL REINFORCED CONCRETE SLABS, BEAMS, COLUMNS, AND SHEAR WALLS HAVE BEEN DESIGNED TO CSA A23.3-04 AND ARE DETAILED ACCORDINGLY.
   1.5. MISCELLANEOUS METAL, PRECAST AND STAIR FABRICATORS SHALL:
      1.5.1. PROVIDE SHOP DRAWINGS TO THE ARCHITECT PRIOR TO FABRICATION, STAMPED, SIGNED AND DATED BY A PROFESSIONAL ENGINEER.
      1.5.2. DESIGN ALL GUARDS TO MEET LATERAL LOADS DESCRIBED IN OBC 4.1.5.15.
      1.5.3. DESIGN ALL STAIRS TO MEET LIVE LOADS DESCRIBED IN OBC 4.1.5.15.
      1.5.4. DESIGN ALL STAIRS TO SUPPORT A MINIMUM DEAD LOAD OF 4.5kPa.
   1.6. ARCHITECTURAL PRECAST FABRICATOR SHALL:
      1.6.1. PROVIDE SHOP DRAWINGS TO THE ARCHITECT PRIOR TO FABRICATION, STAMPED, SIGNED AND DATED BY A PROFESSIONAL ENGINEER.
      1.6.2. DESIGN ALL GUARDS TO MEET GUARD DESIGN THE PRECAST AND CONNECTIONS TO MEET LATERAL LOADS DESCRIBED IN OBC 4.1.5.15.
   1.7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR WHO IS SUPPLYING AND INSTALLING EQUIPMENT, THAT ALL ELEMENTS OF STRUCTURES LISTED IN TABLE 4.1.8.17 OF THE OBC 2012 ARE DESIGNED IN ACCORDANCE WITH CLAUSE 4.1.8.17.
   1.8. THE BUILDING IS DESIGNED FOR GRAVITY, WIND, AND EARTHQUAKE (0 NORMAL (sn=1.0)
   1.9. STAIR ELEMENTS NOT PART OF SFRS SHALL BE SEPARATED FROM THE STRUCTURE AS PER OBC CLAUSE 4.1.8.5 (ie. EXAMPLES INCLUDE, BUT NOT LIMITED TO MASONRY PARTITIONS, BRICK VENEER, PRECAST CLADDING ETC. IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR TO PROVIDE SHOP DRAWINGS, STAMPED, SIGNED AND DATED BY A PROFESSIONAL ENGINEER DEMONSTRATING COMPLIANCE. PROVIDE MINIMUM 10mm SEPARATION UNLESS NOTED OTHERWISE ON DRAWINGS AND SPECIFICATION.

2. LATERAL LOADS ON STRUCTURE
   2.1. WIND
      $q = 0.640\ kPa$
      Ce = (h/10)0.2 NOT LESS THAN 1.0 AND NOT GREATER THAN 2.5(DYNAMIC APPROACH)
      Cg = 1.0
      Cp = AS PER FIGURE I-15 OF USER'S GUIDE - NBC 2005 STRUCTURAL COMMENTARIES (PART 4 OF DIVISION B)
   2.2. EARTHQUAKE
      Sa(0.2) = 0.22 — PGA = 0.12 — Fa = 1.0
      Sa(0.5) = 0.13 — SITE CLASS = C — Fv = 1.0
      Sa(1.0) = 0.067 — Ry = 1.5 — Ie = 1.0
      Sa(2.0) = 0.031 — Rd = 1.3
      THE BUILDING CONSISTS OF CONCRETE SHEAR WALLS
      STRUCTURAL IRREGULARITIES CONSIDERED IN THE DESIGN PER CLAUSE 4.1.8.6. CONSIST OF:
      TYPES 1, 2, 3, 4, 5 & 8
      METHOD OF ANALYSIS - DYNAMIC
3. FOUNDATION WALLS
   3.1. ALL FOUNDATION WALLS RETAINING EARTH ARE DESIGNED TO SAFELY WITHSTAND HORIZONTAL EARTH AND HYDROSTATIC PRESSURE (PH) (YH1+Yh2+q+Ka/E).
      WHERE
      H = 0.40
      W = 22kN/m
      q = 10kPa (1 HR LIVE LOAD SURCHARGE)
      h1 = DEPTH TO GROUND WATER TABLE, IN METRES
      h2 = DEPTH BELOW GROUND WATER TABLE, IN METRES
      Y = (2.4)kN/m³ (SOIL UNIT WEIGHT)
      Y = 12 kN/m³ (SUBMERGED SOIL UNIT WEIGHT)
      Ya = 10kN/m³ (WATER UNIT WEIGHT)

	STRENGTH AT 28 DAYS (Mpa)	SLUMP AT DELIVERY (mm)	AIR ENTRAINMENT	MAXIMUM W/C RATIO	EXPOSURE CLASSIFICATION
GENERAL (NON-EXPOSED) CONCRETE INTERIOR SLABS, WALLS, COLUMNS, BEAMS AND FOUNDATIONS (SEE PLAN & SCHEDULE FOR STRENGTH)	25 30 35 40 45	80 ± 20	·····	TO SUIT	N
EXTERIOR (EXPOSED) CONCRETE WALLS AND ON COLUMNS, EXCEPT PARKING STRUCTURE	25 30 35 40 45	80 ± 20	4 - 7 %	0.55	F - 2
(1) GENERAL INTERIOR SLAB - ON - GRADE	25	80 ± 20	·····	TO SUIT	N
EXTERIOR SLABS-ON-GRADE, SIDEWALKS, CURBS AND GUTTERS (UNREINFORCED)	32	80 ± 20	5 - 8 %	0.45	C - 2
(1) PARKING STRUCTURE (SLAB, COLUMNS, BEAMS WALLS GRADE BEAMS/CAPS AND FOOTINGS)	35 40 45	80 ± 20	5 - 8 %	0.40	C - 1
(1) EXTERIOR GARAGE ROOF (PROVIDE DCI AT A DOSAGE OF 10L/m³)	35	80 ± 20	5 - 8 %	0.40	C - 1
(1) PARKING SLABS-ON-GRADE	32	80 ± 20	5 - 8 %	0.45	C - 2
NON WATER PROOFED EXPOSED BALCONY SLAB, POOL	30	80 ± 20	5 - 8 %	0.50	F - 1
LEAN MIX CONCRETE	15	80 ± 20	·····	TO SUIT	N

1) REINFORCED WITH SYNTHETIC FIBRES ADDED AT BATCHING PLANT - SEE SPECIFICATION.
2) CHLORIDE ION PENETRABILITY REQUIREMENTS < 1500 COULOMBS WITHIN 56 DAYS.

CAISSON SCHEDULE							
		UPPER SHAFT			EMBEDMENT INTO		
CAISSON NUMBER	CAISSON DIA.	REINFORCEMENT	STIRRUPS ZONE	REMAINING STIRRUPS	SOUND BEDROCK m	CONCRETE STRENGTH	LOAD ULS kN
C1	915Ø	11-25 V + 10@150 TIES	2750	10@300	2.0	25MPa	3700
C2	915Ø	16-25 V + 10@150 TIES	2750	10@200	3.0	25MPa	5500

FOOTING SCHEDULE				
FOOTING NUMBER	FOOTING NUMBER AND SIZE	FOOTING REINF. LG. (HOOKED EE)	FOOTING REINF. TR. (HOOKED EE)	LOAD ULS KN
F1	1000x1100x600 DP.	10-20B	11-20B	4400
F1a	1000x1000x600 DP.	10-20B	11-20B	4400
F2	1300x1400x600 DP.	13-20B	14-20B	7300
F3	1600x1700x1100 DP.	12-25B	13-25B	10900
F4	1900x2100x1400 DP.	19-25B	21-25B	16000
F5	900x1300x650 DP.	9-20B	13-20B	4700

CAISSON CAP SCHEDULE			
CAP #	CAP SIZE	REINF. HOOKED EE	CONCRETE STRENGTH
CP1	1300x1300x800 DP.	6-20 BEW	25 MPa
CP2	1300W/07%x800DP, LENGTH TO SUIT	6-20 BEW	25 MPa
CP3	2315W/07%x800DP, LENGTH TO SUIT	6-20 T&B LG. 3-20 T&B TR.	25 MPa

FOUNDATION PLAN NOTES:

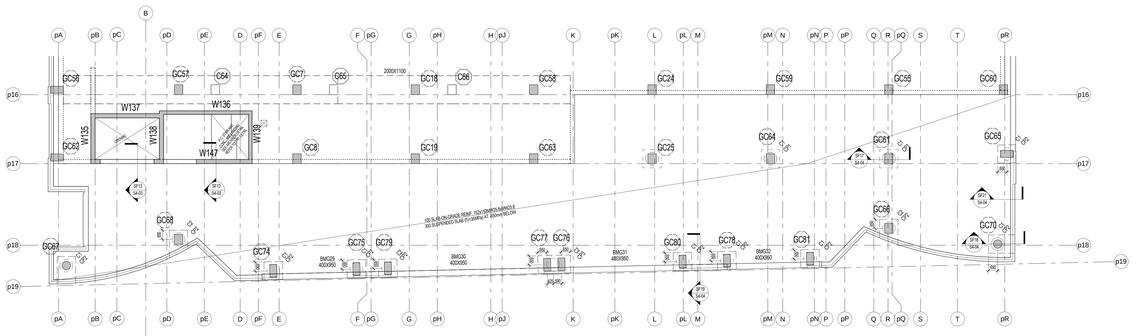
1. TOP OF SLAB VARIES IN PARKING LEVEL AND IS TO BE SLOPED TO SUIT DRAINAGE AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
2. PROVIDE 300 x 300 SUMP AT LOW POINT WITH SWI CUTS @3000 c/c EACH WAY. SEE SPECIFICATIONS.
3. PROVIDE SLAB DEPRESSIONS, OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS, AS REQUIRED BY ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS.
4. SLAB-ON-GRADE TO BE PLACED ON A 150 mm MINIMUM LAYER OF COMPACTED 19mm MAXIMUM SIZE CLEAR CRUSHED STONE.
5. ALL FOOTINGS TO BE CARRIED DOWN TO SOUND BEDROCK WITH A FACTORED GEOTECHNICAL RESISTANCE @ULS OF 3000 kPa.
   ALL SPREAD AND STRIP FOOTINGS TO BE CAST AGAINST SIDES OF EXCAVATION.
6. FROST PROTECTION SHOULD BE PROVIDED FOR LESS BEING STRENGTH OF 75MPa BETWEEN CONCRETE AND SOUND SHALE.
7. THE FOUNDATION WALLS ARE VALUED TO BE FOUND AT THE ELEVATIONS SHOWN. ANY VARIATIONS MUST BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
8. REFER TO SOIL REPORT BRM-SOILS19 PL-LEVELS APRIL 24, 2015 PREPARED BY EXP. AND MEMORANDUM DATED APRIL 30,2015.
9. BEDROCK AT THE UNDERSIDE OF ALL FOOTINGS IS TO BE INSPECTED AND APPROVED BY A REPRESENTATIVE OF EXP. SERVICES INC. PRIOR TO PLACING OF CONCRETE. A MINIMUM OF 100mm CONCRETE SKIM SLAB IS TO BE PLACED ON BEDROCK IMMEDIATELY AFTER EXCAVATION AND INSPECTION IS COMPLETED.
10. TOP OF FOOTINGS TO BE AT ELEVATIONS AS NOTED ON PLAN (TOF +)
11. EOF = STATION FOOTING STOPS IN ANY FOOTING SHALL BE 300mm MIN. AND 1H:1V SLOPE TO 1V:5HT.
12. UNLESS OTHERWISE NOTED, ALL WALL FOOTINGS TO BE 300 mm DEEP WITH 150 mm PROJECTION EACH SIDE. ALL COLUMN FOOTINGS TO BE SQUARE.
    ALL PERIMETER FOUNDATION WALL FOOTINGS TO BE WITH 150 mm PROJECTION.
    PROTECT FOOTING BASE BY 50mm CONCRETE IF CONCRETE PLACEMENT NOT OCCUR ON THE SAME DAY.
    DO NOT PLACE BACKFILL AGAINST WALLS RETAINING EARTH UNTIL FLOORS AT TOP AND BOTTOM OF WALLS ARE PLACED AND HAVE ATTAINED SPECIFIED DESIGN STRENGTH (4).
13. ALL FOOTINGS TO BE CAST AGAINST SIDES OF EXCAVATION. FORMS TO BE USED AND COMPACTED.
14. DIMENSIONS IN SOUTH SIDES TO EQUALIZE SOIL PRESSURE.
15. CO-ORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ENGINEER AND ARCHITECT PRIOR TO PROCEEDING WITH ANY WORK.
16. CENTRE LINES OF COLUMNS, WALLS, CAPS, CAISSONS AND FOOTINGS ARE CONCIDENT UNLESS OTHERWISE NOTED ON DRAWINGS.
17. CONCRETE FOR FOUNDATION WALLS AND ALL FOOTINGS SHALL BE CLASS C-1 WITH A MINIMUM CONCRETE STRENGTH AT 28 DAYS OF 35 MPa (4).
18. ALL CONCRETE WALLS POURED MONOLITHICALLY WITH COLUMNS AND/OR SHEAR WALLS SHALL HAVE THE SAME CONCRETE STRENGTH AS INDICATED FOR THE COLUMNS AND/OR SHEAR WALLS WHICHEVER IS GREATER.
19. THE FORMING CONTRACTOR IS TO SUBMIT FOR REVIEW PROPOSED SLAB-ON-GRADE SAWCUT LAYOUT SEE TYPICAL DETAILS.
20. THE PROJECT SUPERINTENDENT MUST CONTACT THE OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE.
21. SEE COLUMN SCHEDULES AND SHEAR WALL ELEVATIONS.
22. SEE ALSO GENERAL NOTES AND TYPICAL DETAILS.
23. SEE TYPICAL CONCRETE MIX CHART DRAWING S1-01
24. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR UNDER SLAB-ON-GRADE WEEPING TILE SYSTEM.
25. PROVIDE DCI AT A DOSAGE OF 10L/m³ CONCRETE IN THE FINNED RAMP SLAB AND ALL TURNING AREAS.
26. SEE SCHEDULE FOR CAISSON, SEE SCHEDULE ON THIS DRAWING.
27. CP = CAP IN ANCHORED CAISSON, SEE SCHEDULE ON THIS DRAWING.
28. REFER TO SOIL REPORT RECOMMENDATIONS REGARDING HEAVE WELL BOND STRENGTH FOR CAISSONS.

SITE PREPARATION NOTES FOR SLAB-ON-GRADE (WITHIN BUILDING ENVELOPE)

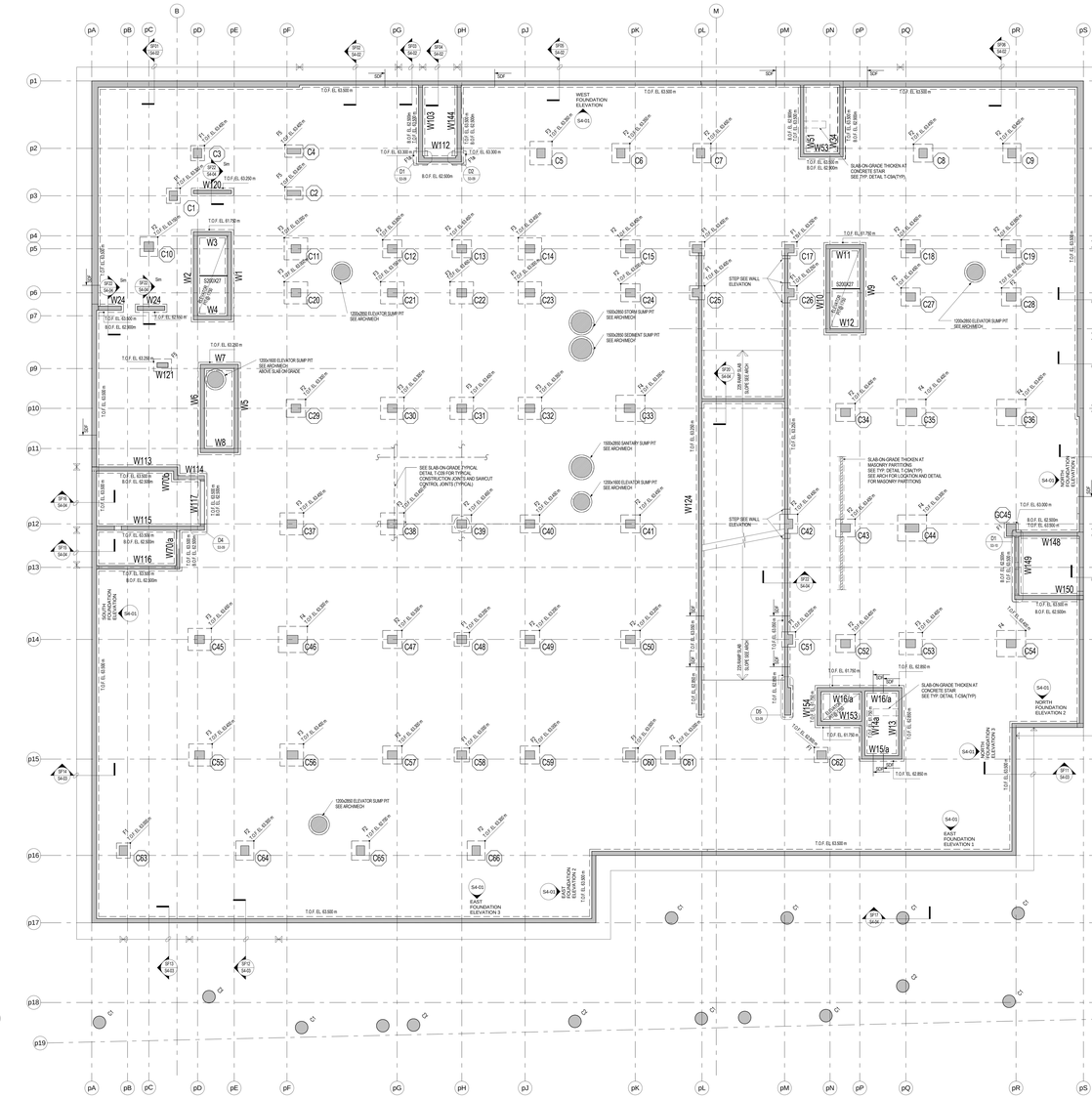
1. THE AREA WITHIN THE BUILDING SHALL BE STRIPPED OF THE UPPER LAYER SOIL, TILL, ORGANICALLY CONTAMINATED MATERIAL AND RUBBLE AND TO A MINIMUM OF 200mm (#1 BELOW THE UNDERSIDE OF THE SLAB ON GRADE.
2. THE EXPOSED SUB-GRADE SHALL BE EXAMINED AND APPROVED BY THE SOIL CONSULTANT.
3. THE ENTIRE AREA SHALL BE PROOF ROLLED UNDER THE OVERSIGHT OF A REPRESENTATIVE OF THE SOILS CONSULTANT WITH A HEAVY CONTRACTOR TO A MINIMUM OF 98% STANDARD PROCTOR MAX. DRY DENSITY AND TO THE APPROVAL OF THE SOIL CONSULTANT.
4. ANY SOFT, WET OR OTHERWISE UNSUITABLE SPOTS ENCOUNTERED SHALL BE SUB-EXCAVATED AND BACKFILLED WITH COMPACTED APPROVED MATERIAL.
5. FILL REQUIRED TO RAISE THE GRADES SHALL BE COMPRISED OF APPROVED GRANULAR 'B' TYPE 1 CONFORMING TO OPSS.1010. PLACED IN LOOSE/MAX. LOOSE 200mm/PT LAYERS EACH COMPACTED TO AT LEAST 95% OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY.
6. THE LAYER IMMEDIATELY BELOW THE SLAB-ON-GRADE SHALL BE 200mm (8") OF GRANULAR 'A' COMPACTED TO 100% MIN. STANDARD PROCTOR MAX. DRY DENSITY.
7. ALL PROCEDURES, EQUIPMENT AND MATERIALS SHALL BE APPROVED BY THE SOIL CONSULTANT WHO SHALL CONDUCT SUFFICIENT TESTS TO ENSURE THAT THE SPECIFIED MATERIALS AND DENSITIES ARE ACHIEVED.
8. THE CONTRACTOR SHALL CO-ORDINATE WITH THE SOIL CONSULTANT AND ARRANGE A SUITABLE PROGRAM FOR SAMPLING AND INSPECTING, ETC. AND NOTIFY THE ARCHITECT ACCORDINGLY.
9. EXISTING ON-SITE MATERIAL SHALL NOT BE USED WITHIN THE BUILDING AREA FOR BACKFILLING IN TRENCHES AGAINST FOUNDATION WALLS OR UNDER SLAB-ON-GRADE.
10. REFER TO THE SPECIFICATION AND THE SOIL REPORT FOR PREPARATION OF AREAS OUTSIDE THE BUILDING ENVELOPE.

LEGEND

- WALLS AND COLUMN SHADED AS THUS INDICATE WALL AND COLUMN BELOW SLAB
- WALLS AND COLUMN SHADED AS THUS INDICATE WALL AND COLUMN ABOVE SLAB
- - INDICATES COLUMN NUMBER OF BELOW SLAB. REFER TO COLUMN SCHEDULE
- - INDICATES COLUMN NUMBER OF ABOVE SLAB. REFER TO COLUMN SCHEDULE



FOUNDATION PLAN AT GROUND LEVEL
1 : 100



FOUNDATION PLAN
1 : 100

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stephenson ENGINEERING
2500 Victoria Park Ave. Suite 402
Toronto ON M2J 5A9 T 647.329.6135 RPE
www.stephenson-eng.com | info@stephenson-eng.com

No.	Revision	Date

No.	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	ISSUED FOR CAISSONS RE-ISSUED FOR SUPPLY	NOV.30.2015
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2	BUILDING PERMIT SUBMISSION	JUNE 12.2015
1	ISSUED FOR MT REVIEW	MAY 15.2015

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
FOUNDATION PLAN

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	Drawn by
As indicated	DC
Checked by	
BBS	
Project No.	Date
2014-0033	DEC.18.2015

Drawing No.
S1-01

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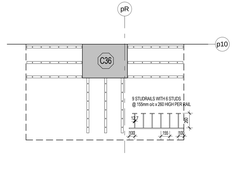
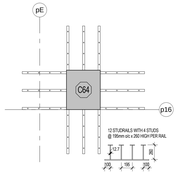


D2 PLAN DETAIL
S1-02 1 : 25



D3 PLAN DETAIL
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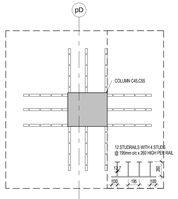
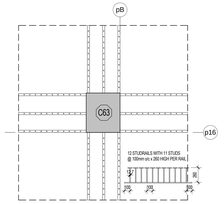
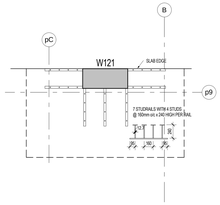


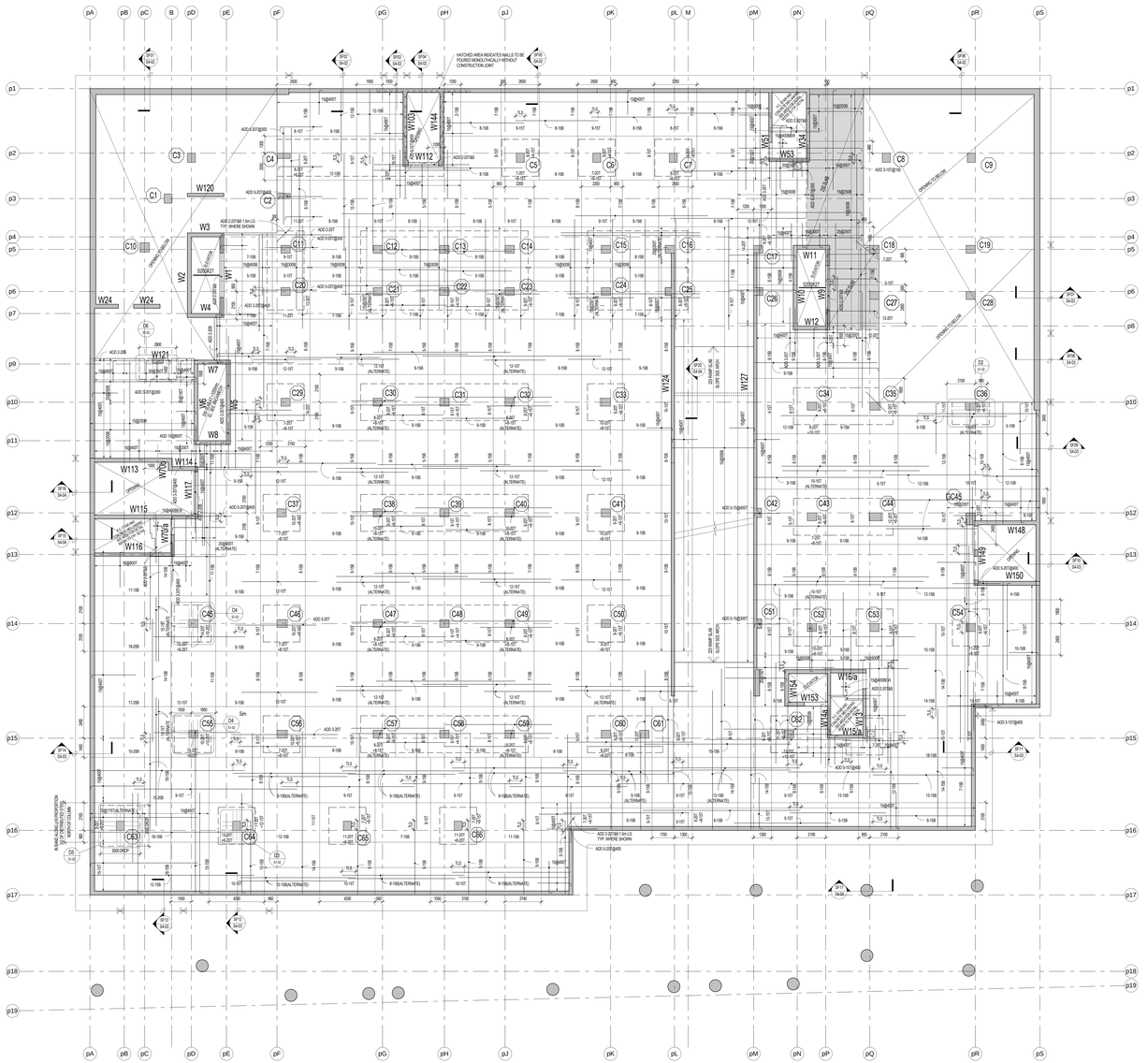
D4 PLAN DETAIL
S1-02 1 : 25

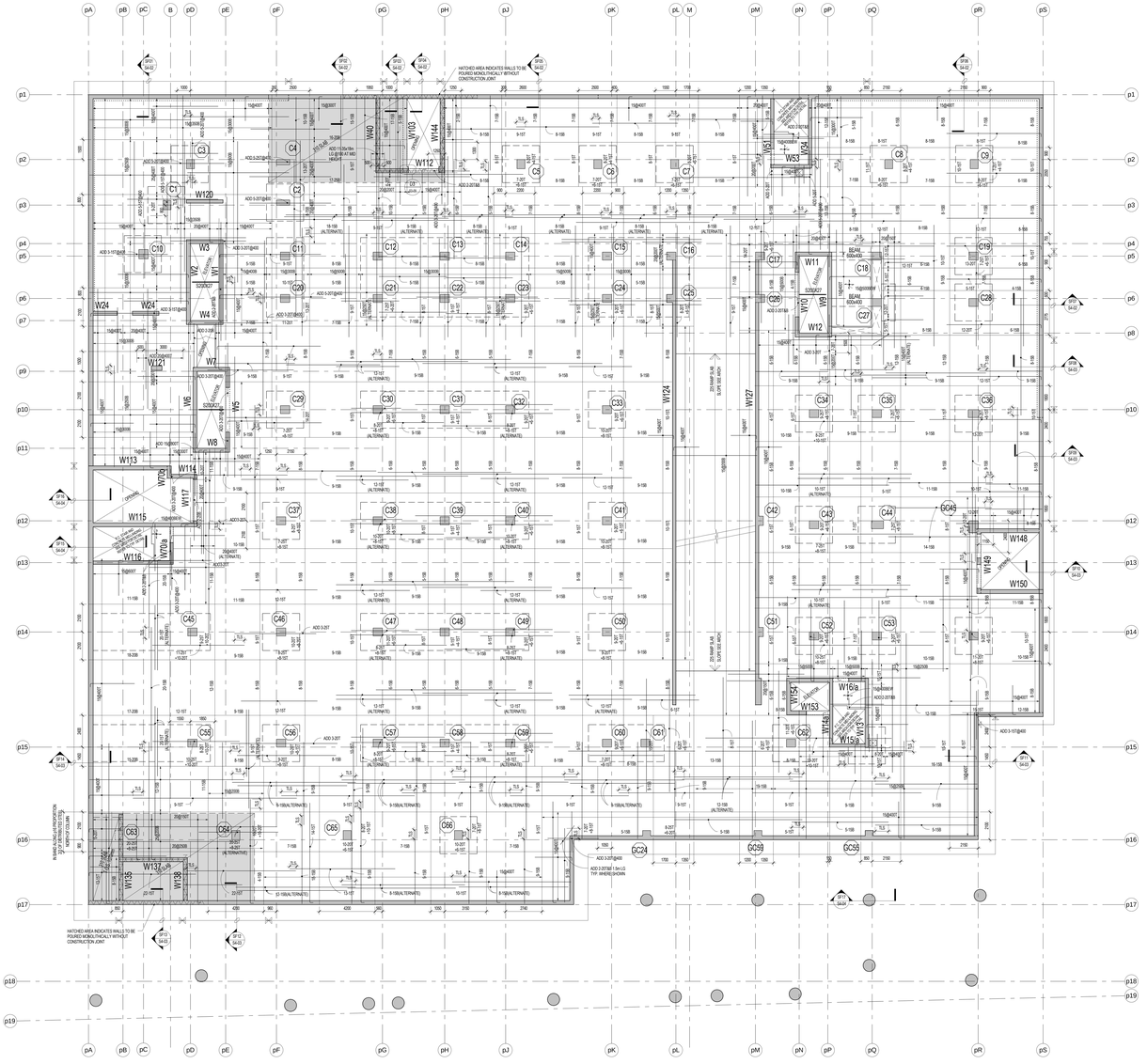


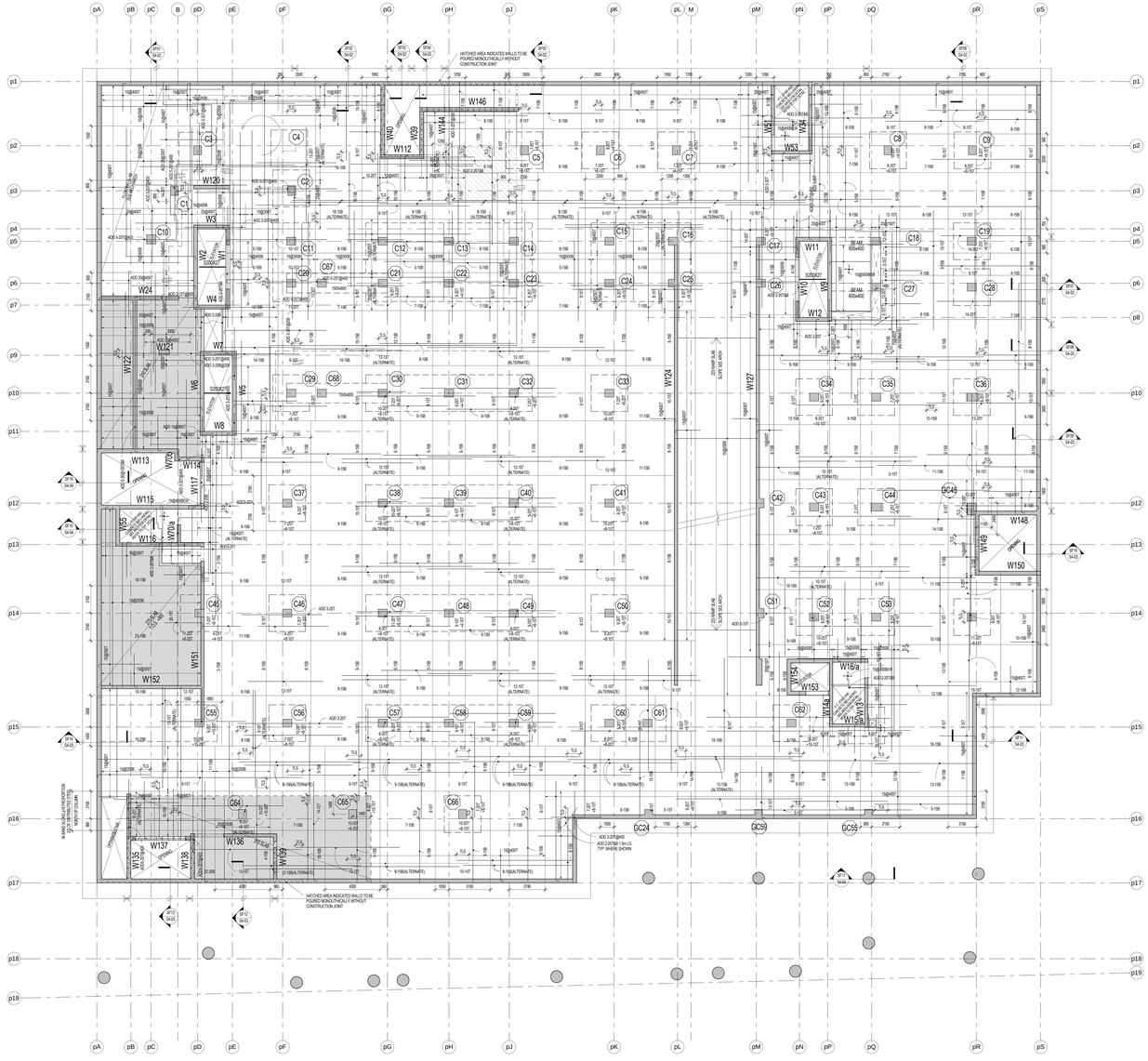
D5 PLAN DETAIL
S1-02 1 : 25



D6 PLAN DETAIL
S1-02 1 : 25




HATCHED AREA INDICATES WALLS TO BE POURED MONOLITHICALLY WITHOUT CONSTRUCTION JOINT
HATCHED AREA INDICATES WALLS TO BE POURED MONOLITHICALLY WITHOUT CONSTRUCTION JOINT
BUMP ALONG LINE OF OPPOSITE SLOPE TO CONTROL FLOW
ADD 3-10T@400 TAF 1.5m LG TYP WHERE SHOWN
ADD 3-20T@400
ADD 3-20T@400
ADD 3-20T@400



LEVEL P1 FRAMING PLAN

1 : 100

1. TOP OF STRUCTURAL SLAB VARIES FROM FINISHED PARKING LEVEL DATUM ELEVATION TO 200m AT ELEVATOR CORE. TOP OF SLAB ELEVATION VARIES AND IS TO BE SLOPED TO SUIT DRAINAGE AS SHOWN ON ARCHITECTURAL AND CIVIL DRAWINGS.
2. THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) AND SUPERIMPOSED DEAD LOADS (SDL) IN ADDITION TO THE SELF WEIGHT.

	LL	SDL
PARKING	2.4 kPa	0.5 kPa
STORAGE AND LOCKERS	7.3 kPa	0.5 kPa
STAIRS AND ELEVATOR LOBBIES	4.8 kPa	0.5 kPa
MECHANICAL AND ELECTRICAL	7.3 kPa	1.0 kPa
AMENITY	4.8 kPa	1.0 kPa
WATER TANK	TO HIGHEST	1.0 kPa
WHIRLPOOL, SPA AREA	7kPa	1.0 kPa

3. CONCRETE SHALL MEET THE REQUIREMENTS FOR CLASS C1 EXPOSURE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 35 MPa AT 28 DAYS. REFER ALSO TO COLUMN AND WALL SCHEDULES. SEE ALSO CONCRETE MIX SCHEDULE ON FOUNDATION PLAN.
4. MINIMUM COVER FOR TOP BARS IN SLABS TO BE 40 mm, CONCRETE COVER FOR BOTTOM BARS IN SLABS TO BE 20mm.
5. APPROVAL MUST BE OBTAINED FROM ENGINEER FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON PLAN. THE PROJECT SUPERINTENDENT MUST CONTACT THIS OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE FOR A REVIEW OF PREPARATIONS.
6. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF BEARING MASONRY WALLS.
7. SEE ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS FOR CURBS. REINFORCE AS PER TYPICAL DETAIL
8. SEE COLUMN AND WALL SCHEDULES.
9. SEE ALSO TYPICAL NOTE AND DETAIL DRAWINGS.
10. REFER TO BEAM SCHEDULES.
11. ALL BEAMS SHALL BE CONTINUOUS OR HAVE HOOK BARS AT OPENING AND ADD BARS OF SAME SIZE ON EACH SIDE OF THE OPENING, EQUAL TO 1/2 THE NUMBER OF BARS HOOKED.
12. PROVIDE 25mm CHAMFER ON ALL EXPOSED EDGES OF COLUMNS, WALLS, BEAMS AND DROPS.
13. AREAS NOTED THUS [▨] IN PLAN, INDICATE THICKENED SLAB. SEE PLAN FOR THICKNESS.
14. AREAS NOTED THUS [▨] IN PLAN, ARE BUILT-UP CONCRETE. SEE TYPICAL DETAILS.
15. TRANSFER SLABS TO BE SHORED UNTIL REACH SPECIFIED 28 DAYS CONCRETE STRENGTH.
16. SHORING SHOULD NOT BE SUPPORTED ON BUILDING SLABS.
17. PROVIDE 825 AT A DEGREE OF 15g/m³ CONCRETE IN THE FINNED RAMP SLAB AND ALL TURNING AREAS.
18. SLAB SLOPED AS FOLLOW TOP OF SLAB SLOPES TO MAINTAIN SLAB THICKNESS AS NOTED.
19. WHERE BOTTOM STEEL NOT SHOWN, PROVIDE CONTINUOUS TEMPERATURE STEEL.

REINFORCEMENT PLACEMENT DIAGRAM	
SLAB:	200 MIN. s/n
INTEGRITY BARS:	3-20M BEW
TEMP. STEEL:	15@600
DROP:	2950x3950x1100P s/n
CONCRETE STRENGTH	35 MPa CLASS C1
SLAB:	225 RAMP SLAB
INTEGRITY BARS:	3-20M BEW
TEMP. STEEL:	15@450
CONCRETE STRENGTH	35 MPa CLASS C1
SLAB:	275 MIN.
INTEGRITY BARS:	3-20M BEW
TEMP. STEEL:	15@450
CONCRETE STRENGTH	35 MPa CLASS C1
SLAB:	315 MIN.
INTEGRITY BARS:	3-20M BEW
TEMP. STEEL:	15@300
CONCRETE STRENGTH	35 MPa CLASS C1

Contractor Must Check And Verify All Dimensions On The Job.

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stephenson ENGINEERING
2550 Victoria Park Ave, Suite 402
Toronto ON M2J 5A9 | Tel: (416) 495 7976
www.stephenson-eng.com | info@stephenson-eng.com

No	Revision	Date

No	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY.22.2015
2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

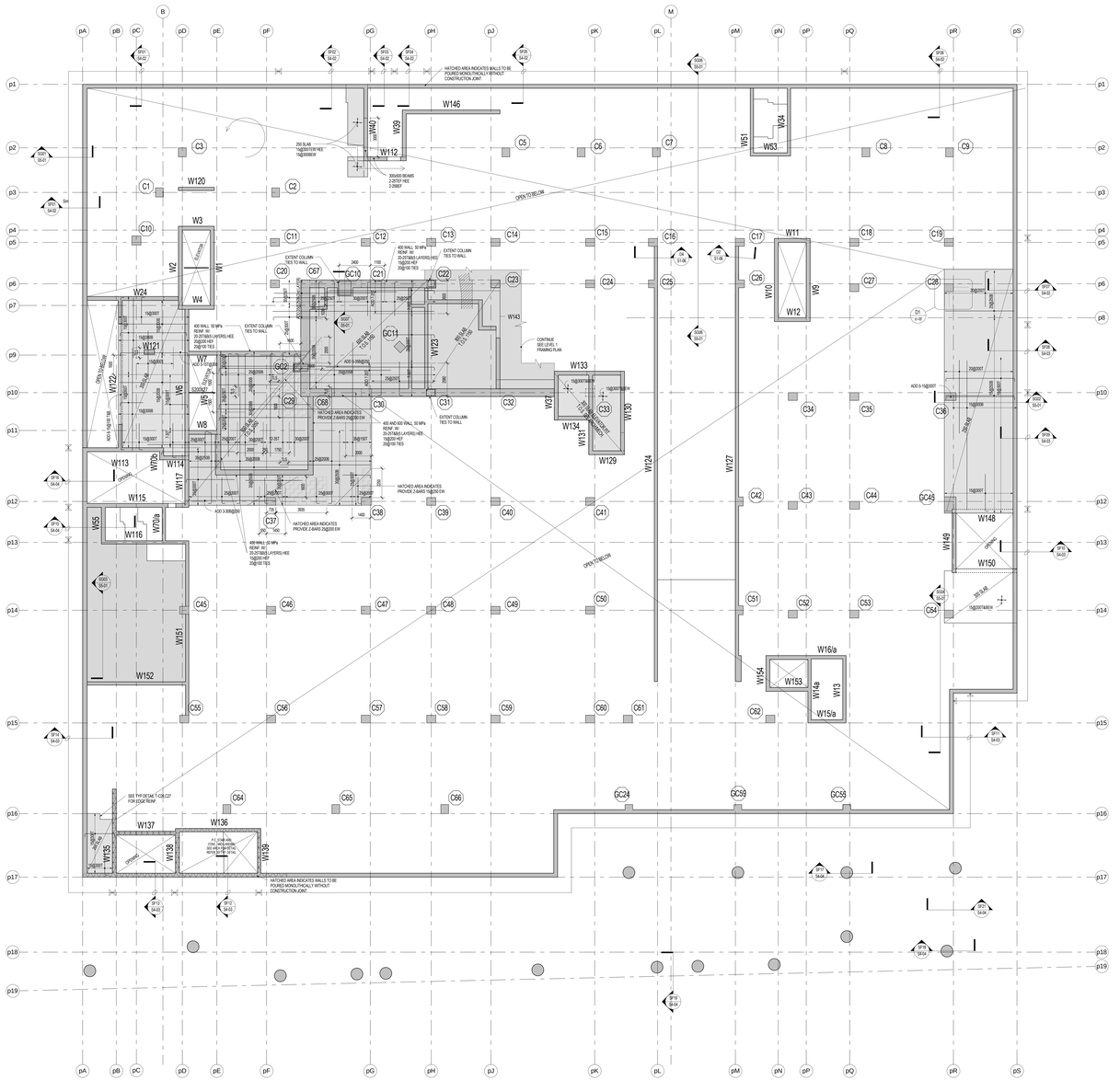
AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
LEVEL P1 FLOOR FRAMING PLAN

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	As indicated
Drawn by	DC
Checked by	PC/BBS
Project No.	2014-0033
Date	DEC.18.2015
Drawing No.	S1-04

Plot Date: 12/18/2015 12:04:48 PM



LEVEL P1 MEZZ. FRAMING PLAN

1 : 100

1. TOP OF LEVEL 1 MEZZANINE FLOOR STRUCTURAL SLAB TO BE 0.6 mm BELOW FINISHED GROUND FLOOR DATUM ELEVATION 75.85m. THE STRUCTURAL SLAB STEPS AT THE EDGE OF GROUND FLOOR. SEE PLAN AND DETAILS FOR ELEVATION CHANGES. SEE ALSO ARCHITECTURAL DRAWINGS AND LANDSCAPE DRAWINGS FOR GARAGE ROOF ELEVATIONS AND SLOPES TO DRAINS.
2. THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) AND SUPERIMPOSED DEAD LOADS (SDL) IN ADDITION TO SELF WEIGHT:

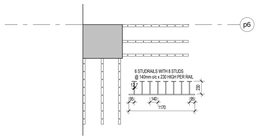
	LL kPa	SDL kPa
STAIRS / MEZZANINE	4.8 kPa	0.5 kPa

3. CONCRETE SHALL MEET THE REQUIREMENTS FOR CLASS C1 EXPOSURE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 35 MPa AT 28 DAYS. REFER ALSO TO COLUMN AND WALL SCHEDULES. SEE ALSO CONCRETE MIX SCHEDULE ON FOUNDATION PLAN.
4. CONCRETE COVER FOR TOP BARS IN SLABS TO BE 25 mm. CONCRETE COVER FOR BOTTOM BARS IN SLABS TO BE 30 mm.
5. NO OPENINGS MUST BE OBTAINED FROM ENGINEER FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON PLAN.
6. THE PROJECT SUPERINTENDENT MUST CONTACT THIS OFFICE 48 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE FOR A REVIEW OF PREPARATIONS.
7. SEE TYPICAL DETAIL FOR LINTELS IN NON-LOAD BEARING MASONRY WALLS.
8. SEE ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS FOR CURBS, REINFORCE AS PER TYPICAL DETAIL.
9. SEE COLUMN AND WALL SCHEDULES.
10. SEE ALSO TYPICAL NOTE AND DETAIL DRAWINGS.
11. REFER TO BEAM SCHEDULE.
12. SEE ARCHITECTURAL DRAWINGS FOR ALL EXPOSED EDGES OF COLUMNS, WALLS, BEAMS & DROPS.
13. WHERE BOTTOM STEEL NOT SHOWN, PROVIDE CONTINUOUS TEMPERATURE STEEL, HOOKED AT EDGE OF SLAB AND OPENINGS.

TLL = TOP UPPER LAYER
TLL = TOP LOWER LAYER
BLL = BOTTOM UPPER LAYER
BLL = BOTTOM LOWER LAYER

REINFORCEMENT PLACEMENT DIAGRAM

SLAB	250 MIN.	
INTEGRITY BARS	3.0M BEW	
CONCRETE STRENGTH	35 MPa	
TEMP. STEEL	15@300 c/c	
SLAB	250 MIN.	
INTEGRITY BARS	3.0M BEW	
CONCRETE STRENGTH	35 MPa	
TEMP. STEEL	15@300 c/c	
SLAB	300 MIN.	
INTEGRITY BARS	3.0M BEW	
CONCRETE STRENGTH	35 MPa	
TEMP. STEEL	15@300 c/c	
SLAB	800 MIN.	
INTEGRITY BARS	5.0M BEW	
CONCRETE STRENGTH	40 MPa	
TEMP. STEEL	25@300 c/c	



D1 / S1.05 DETAIL 1 : 25

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PROFESSIONAL ENGINEER DEC. 18,2015 S. SHROWAH-SHAD 100149855 PROVINCE OF ONTARIO

stephenson ENGINEERING
2550 Victoria Park Ave, Suite 402
Toronto ON M2J 5A9 | Tel.:(416) 499 9775
www.stephenson-eng.com | info@stephenson-eng.com

No	Revision	Date

No	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18,2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23,2015
5	BUILDING PERMIT RESUBMISSION	JULY 22,2015
4	BUILDING PERMIT SUBMISSION	JUNE 12,2015
3	ISSUED FOR MT REVIEW	MAY.01,2015

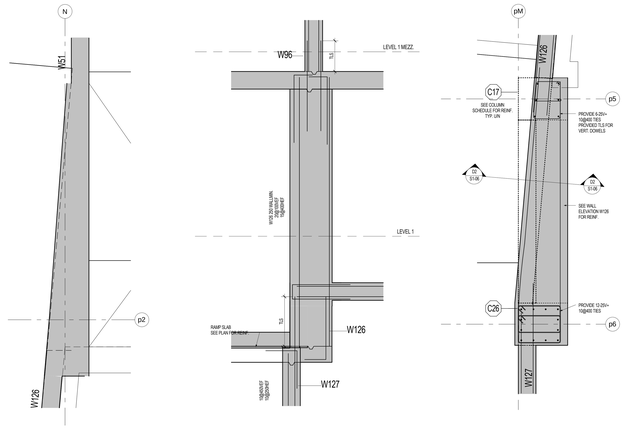
AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
LEVEL P1 MEZZANINE FRAMING PLAN

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	As indicated
Drawn by	DC
Checked by	PC/BBS
Project No.	2014/0031
Date	DEC.18.2015
Drawing No.	S1-05

Plot Date: 12/18/2015 12:04:52 PM



D5 PLAN DETAIL
S1-06 1 : 20

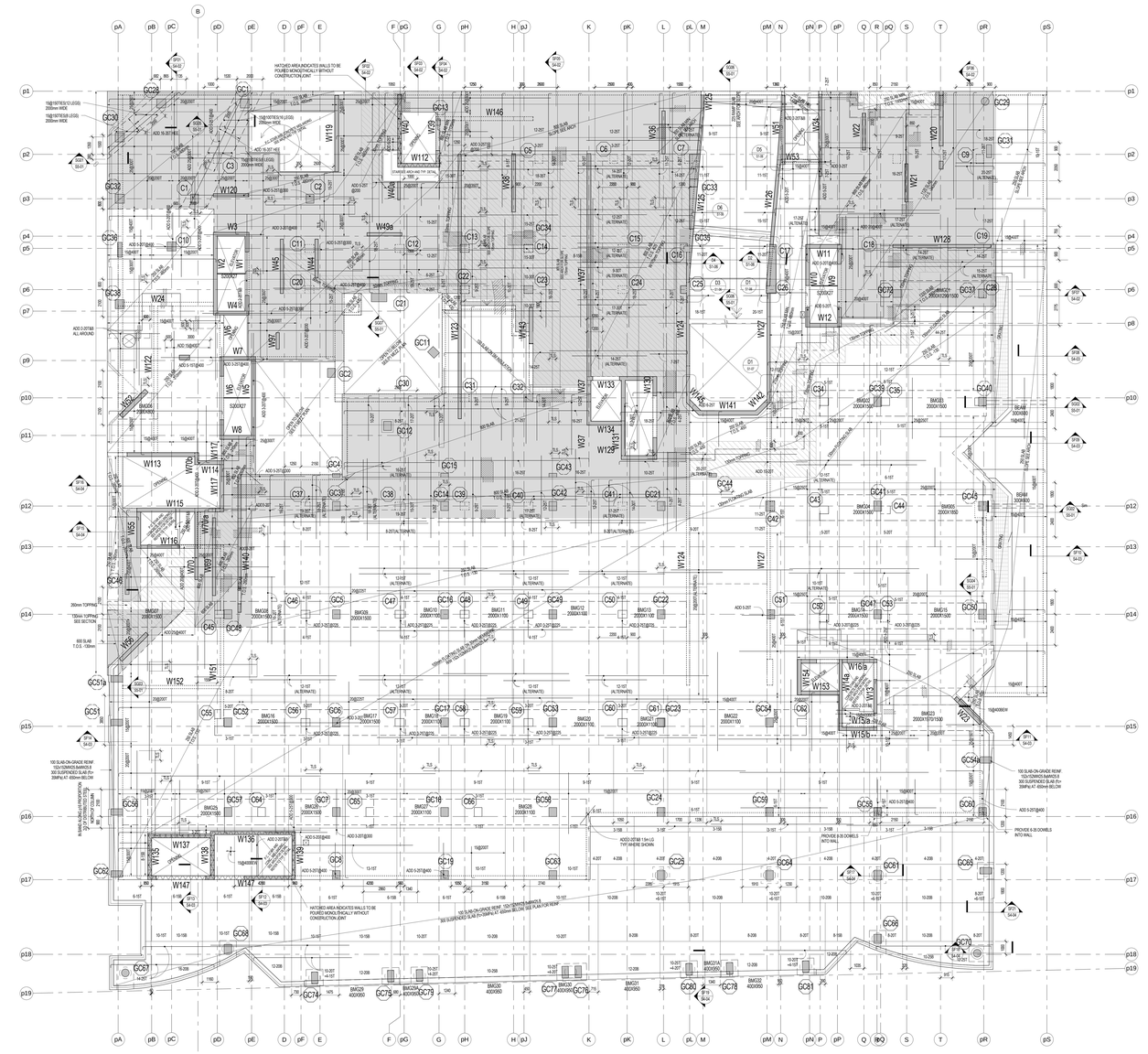
D2 ELEVATION DETAIL
S1-06 1 : 20

D1 PLAN DETAIL
S1-06 1 : 20

D6 PLAN DETAIL
S1-06 1 : 20

D4 PLAN DETAIL
S1-06 1 : 20

D3 PLAN DETAIL
S1-06 1 : 20


HATCHED AREA INDICATES WALLS TO BE POURED MONOLITHICALLY WITHOUT CONSTRUCTION JOINT
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150@100TB3(1 LEG)S 200mm WIDE
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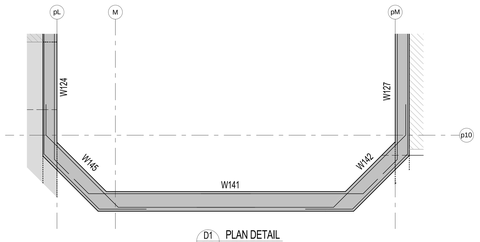
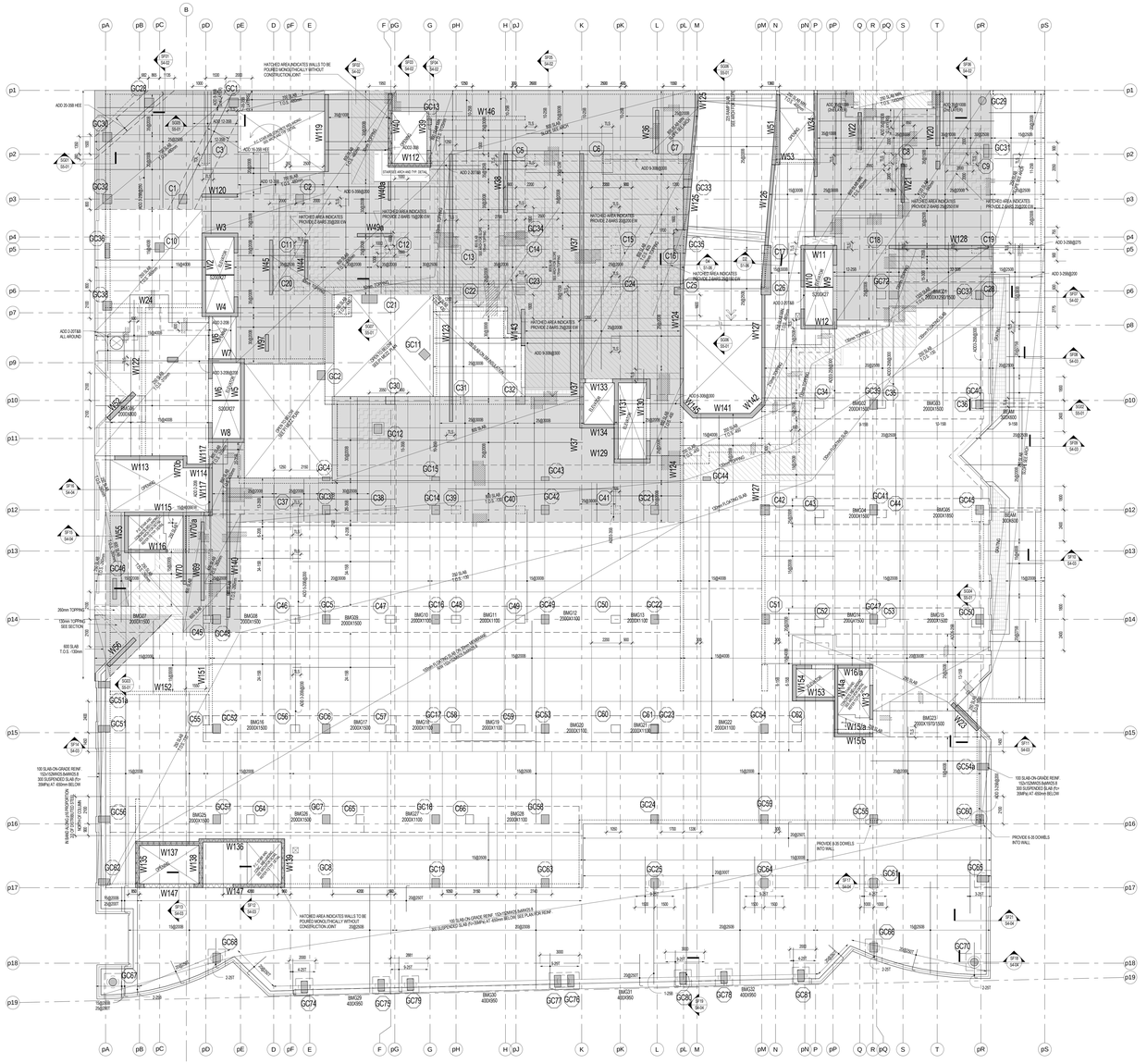


D1 / S1-07 PLAN DETAIL
1 : 25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HATCHED AREA INDICATES WALLS TO BE POURED MONOLITHICALLY WITHOUT CONSTRUCTION JOINT
HATCHED AREA INDICATES PROVIDE 2.64KG 15@200 EW
HATCHED AREA INDICATES PROVIDE 2.64KG 20@200 EW
HATCHED AREA INDICATES PROVIDE 2.64KG 25@200 EW
HATCHED AREA INDICATES PROVIDE 2.64KG 30@200 EW
HATCHED AREA INDICATES PROVIDE 2.64KG 15@200 EW
HATCHED AREA INDICATES PROVIDE 2.64KG 20@200 EW
HATCHED AREA INDICATES PROVIDE 2.64KG 25@200 EW
HATCHED AREA INDICATES PROVIDE 2.64KG 30@200 EW
HATCHED AREA INDICATES WALLS TO BE POURED MONOLITHICALLY WITHOUT CONSTRUCTION JOINT
100 SLAB-ON-GRADE REINF 10ZA15@400EW,BARS B 300 SUSPENDED SLAB EW 20@PILA T 450mm BELOW SEE PLAN FOR REINF
PROVIDE 8-30 DOWELS INTO WALL
PROVIDE 8-30 DOWELS INTO WALL
100 SLAB-ON-GRADE REINF 10ZA15@400EW,BARS B 300 SUSPENDED SLAB EW 20@PILA T 450mm BELOW
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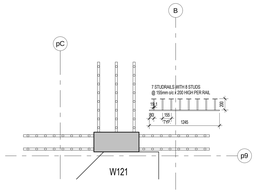
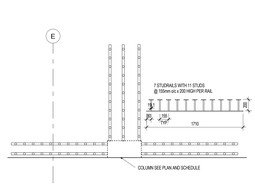
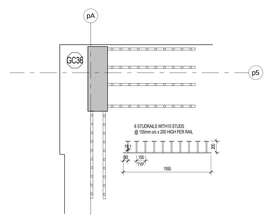


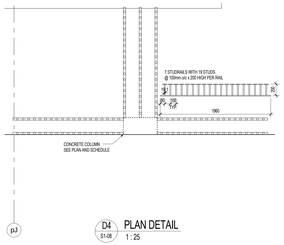
D1 PLAN DETAIL
S1-08 1 : 25



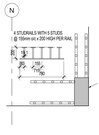
D2 PLAN DETAIL
S1-08 1 : 25



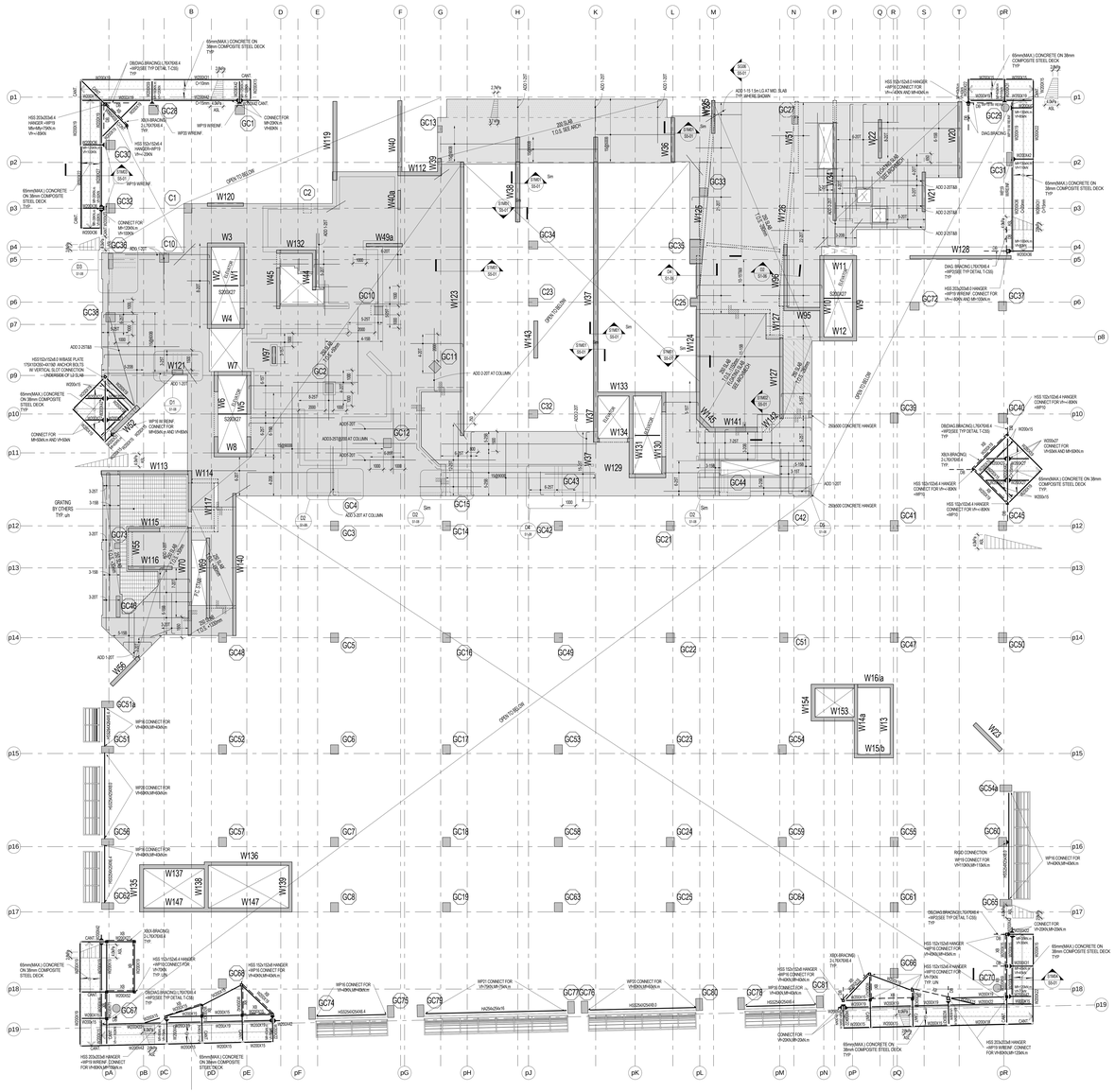
D3 PLAN DETAIL
S1-08 1 : 25



D4 PLAN DETAIL
S1-08 1 : 25



D5 PLAN DETAIL
S1-08 1 : 25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65mmMAX.) CONCRETE ON 38mm COMPOSITE STEEL DECK TYP.
DIAG.BRACING L76X76X6.4 =WP3SEE TYP DETAIL T-C(B)
HSS 203x203x6.4 HANGER =WP3 MH=MN=75Min VH=45kN
HSS 152x152x6.4 HANGER =WP3 MH=MN=75Min VH=45kN
HSS 152x102x6.4 HANGER =WP3 MH=MN=75Min VH=45kN
HSS 102x102x6.4 HANGER =WP3 MH=MN=75Min VH=20kN
CONNECT FOR MH=20kN.m VH=80kN
CONNECT FOR MH=100kN.m VH=100kN
CONNECT FOR MH=30kN.m VH=30kN
WP3 WIREINF.
WP2D WIREINF.
WP1B WIREINF.
WP1B CONNECT FOR VH=80kN,MH=80kN.m
WP1B CONNECT FOR VH=80kN,MH=40kN.m
WP1C CONNECT FOR VH=70kN,MH=0kN.m
WP1D CONNECT FOR VH=80kN,MH=0kN.m
WP1E CONNECT FOR VH=80kN,MH=0kN.m
WP1E CONNECT FOR VH=80kN,MH=80kN.m
WP1E CONNECT FOR VH=80kN,MH=40kN.m
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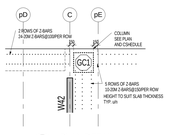
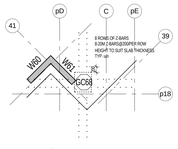
WP3 WIREINF. CONNECT FOR VH=80kN,MH=40kN.m
WP3 WIREINF. CONNECT FOR VH=80kN,MH=80kN.m
HSS 152x102x6.4 HANGER =WP3 CONNECT FOR VH=40kN AND MH=80kN.m
HSS 152x152x6.4 HANGER =WP3 CONNECT FOR VH=40kN AND MH=80kN.m
HSS 203x203x6.4 HANGER =WP3 WIREINF. CONNECT FOR VH=40kN AND



D1 PLAN DETAIL
S1-09 1 : 50



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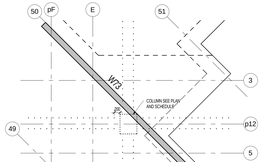

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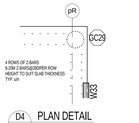

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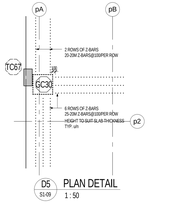

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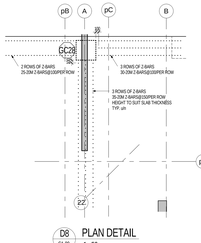

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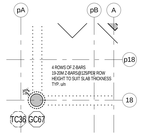

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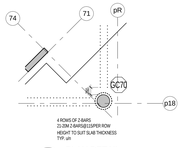

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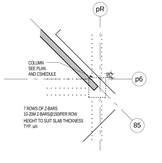

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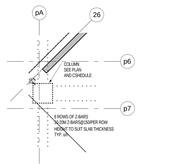

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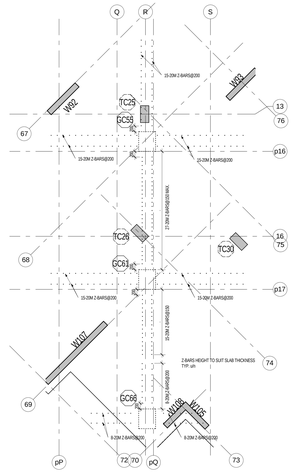

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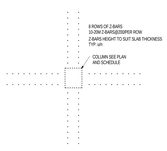

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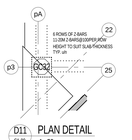

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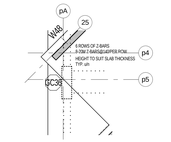

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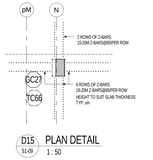

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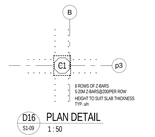

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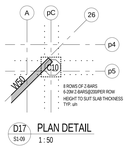

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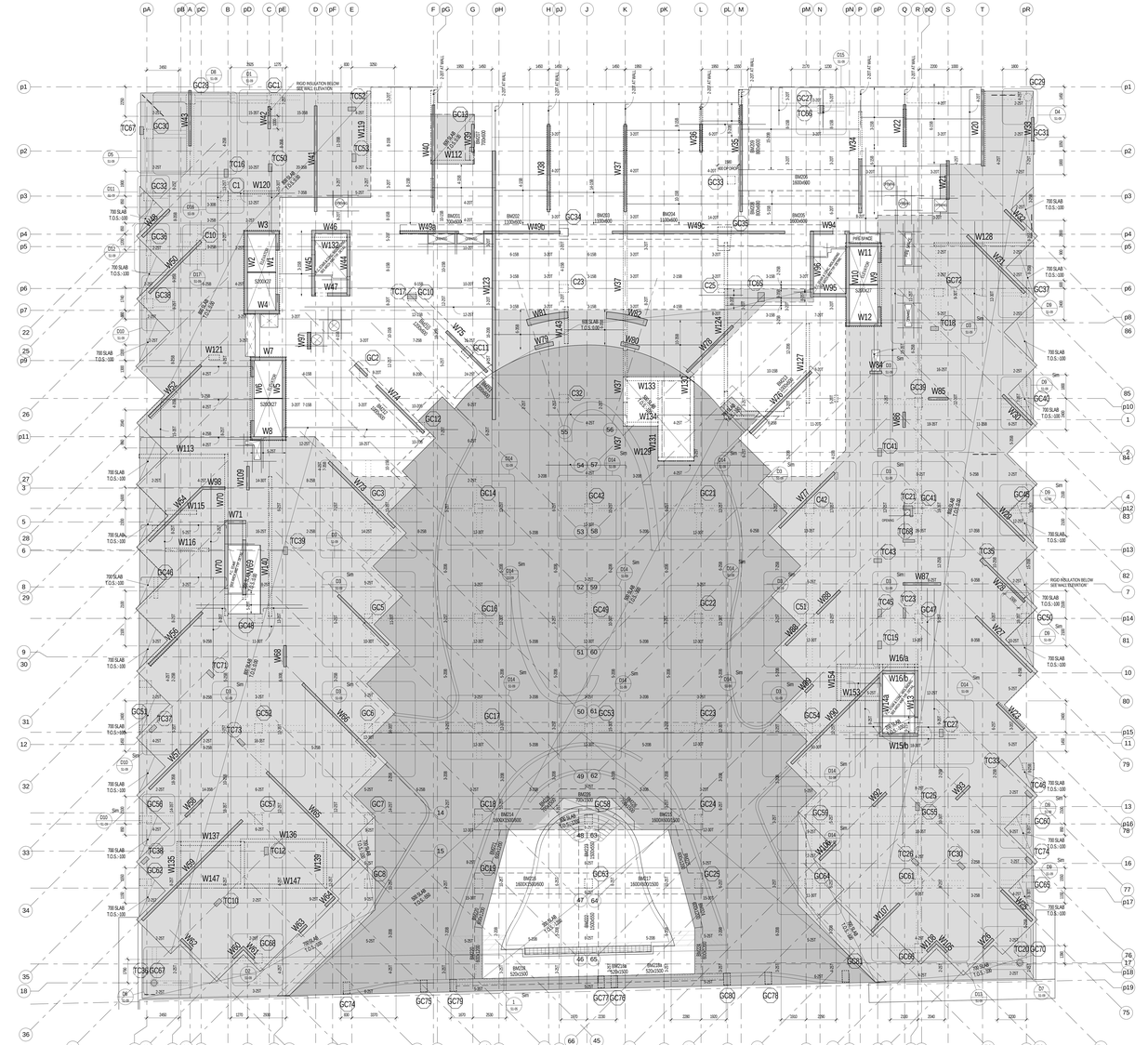
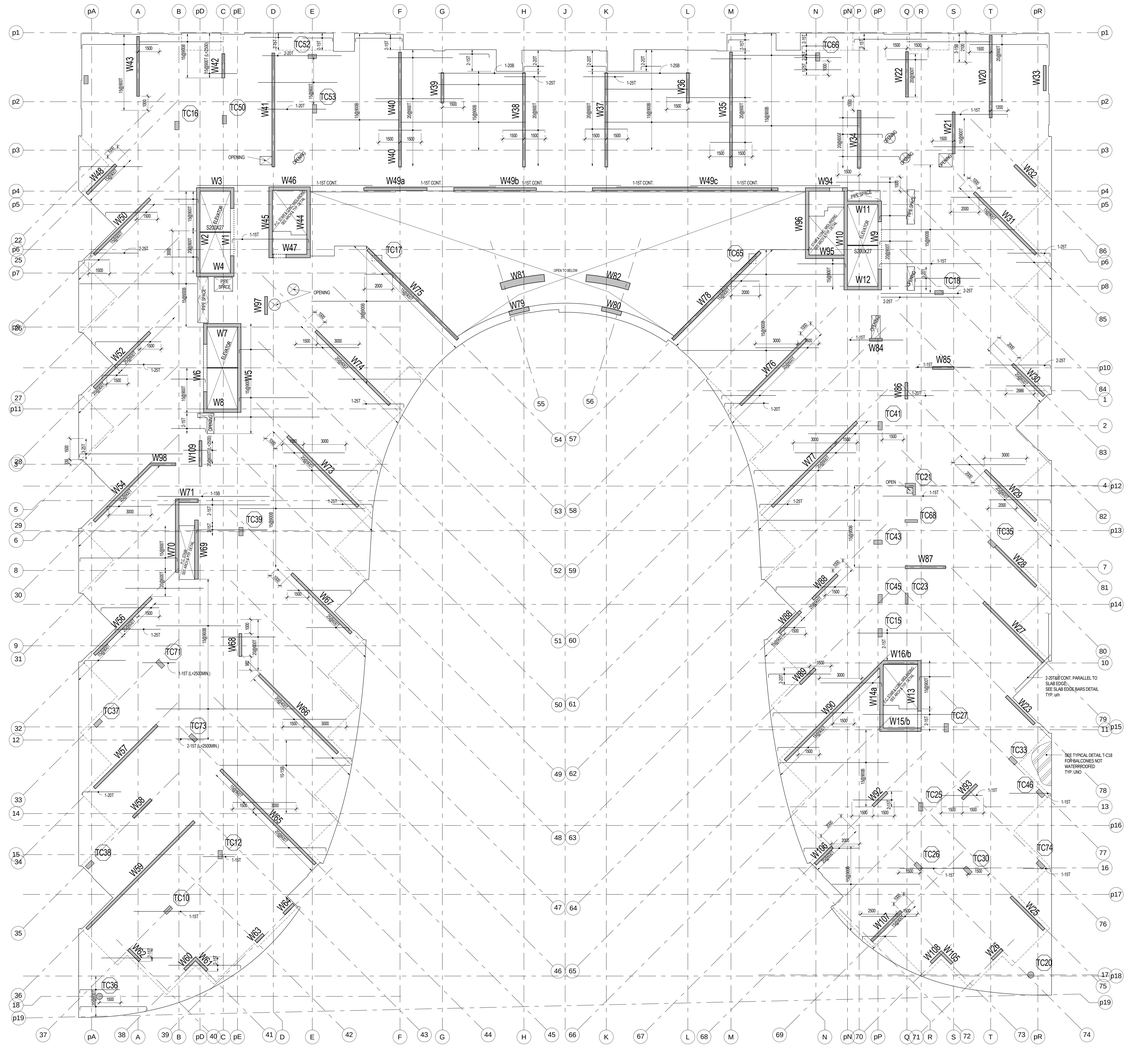


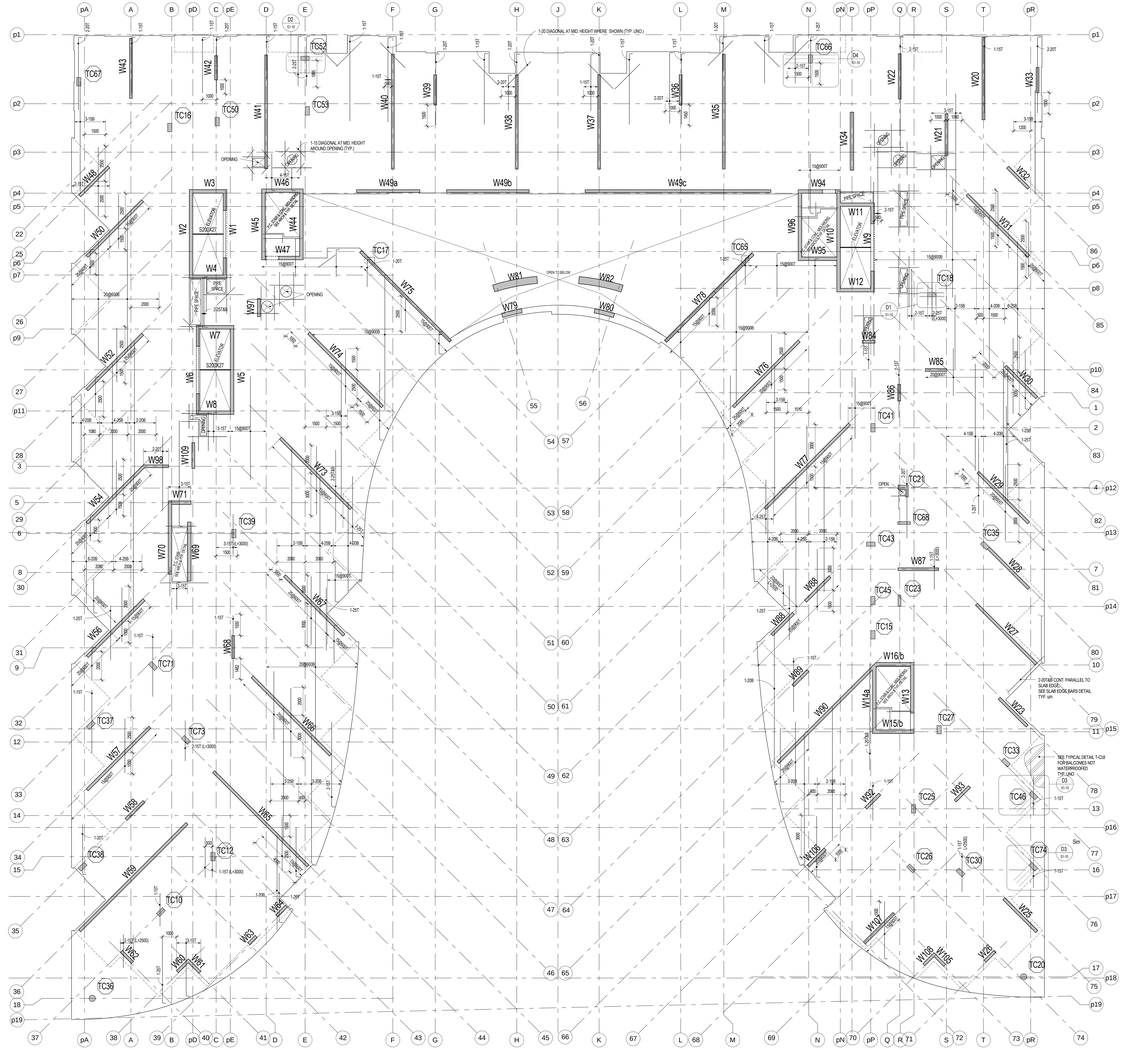
LEVEL 3 FRAMING PLAN - WITH BUL AND TLL

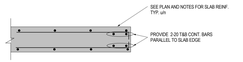
1 : 100



LEVEL 3 FRAMING PLAN WITH - BLL AND TUL

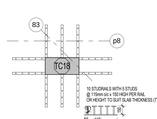
1 : 100





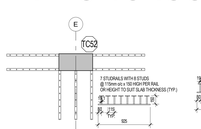
SLAB EDGE BARS DETAIL

1 : 10



D1 PLAN DETAIL

1 : 25



D2 PLAN DETAIL

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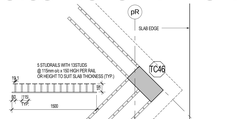

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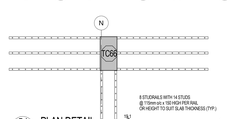

D4 PLAN DETAIL

1 : 25

SEE PLAN FOR ADDITIONAL REINFORCEMENT

NOTES:

1. TOP OF STRUCTURAL SLAB TO BE 0.0 mm BELOW FINISHED FLOOR DATUM ELEVATION EXCEPT AS NOTED AND NOTED. SEE ARCHITECTURAL DRAWINGS FOR DATUM ELEVATION.
2. THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) AND SUPERIMPOSED DEAD LOADS (SDL) IN ADDITION TO THE SELF WEIGHT:

	LL	SDL
SUITES	1.9 kPa	1.25 kPa
TERRACE	4.8 kPa*	5.7 kPa*
MECHANICAL/BBY	4.8 kPa	2.5 kPa
BALCONIES	4.8 kPa	1.0 kPa

* INCLUDES ALLOWANCE FOR SLOPES AND ROOFING MATERIALS
** 6th ALLOWANCE FOR SNOW LOAD OF 1.28 kPa HAS BEEN CONSIDERED.

3. CONCRETE COVER FOR TOP AND BOTTOM BARS IN SLABS TO BE 25 mm.
4. APPROVAL MUST BE OBTAINED FROM ENGINEER FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON PLAN.
5. THE PROJECT SUPERINTENDENT MUST CONTACT THIS OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE FOR A REVIEW OF PREPARATIONS.
6. SEE ALSO TYPICAL NOTES AND DETAILS.
7. SEE REBAR AND COLUMN SCHEDULES. WALL ELEVATIONS.
8. PROVIDE 2-20M CONT. BARS AT TOP AND BOTTOM, HOOKED AT EDGE OF SLAB AND OPENINGS, IN ADDITION TO REINFORCEMENT SHOWN ON PLAN.
9. PROVIDE T.O.S FOR ALL SLAB REINFORCEMENT.
10. ADD 2-20TAB CONT. AT PERIMETER BEND BARS TO SUIT SLAB EDGE. SEE SLAB EDGE BARS DETAIL.

Contractor Must Check And Verify All Dimensions On The Job.

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2550 Victoria Park Ave, Suite 402
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www.stephenson-eng.com | info@stephenson-eng.com

No	Revision	Date

7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY.22.2015
2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

No	Issued For	Date

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title:

LEVEL 3 FLOOR FRAMING PLAN

Project:

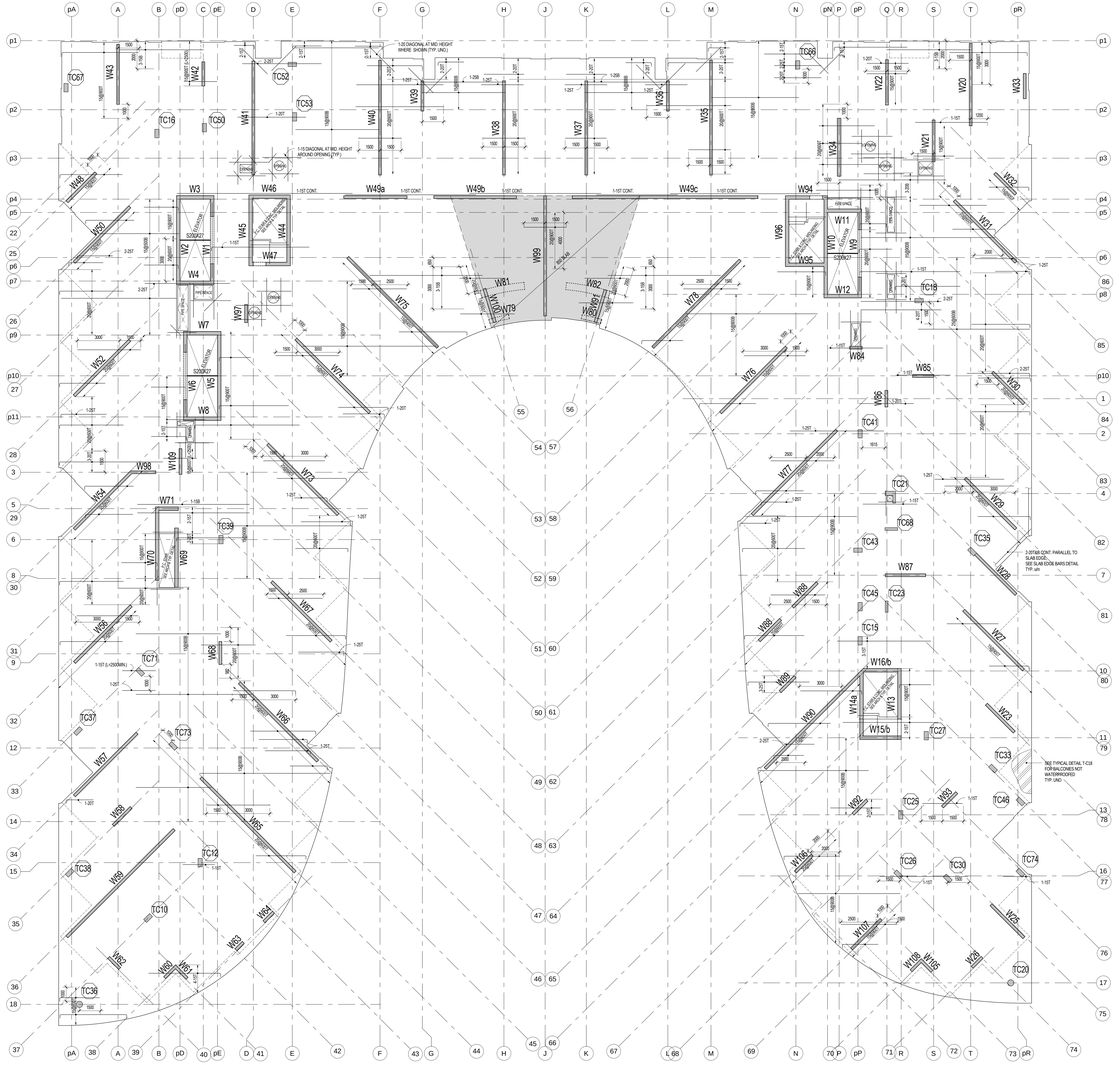
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale:	As indicated
Drawn by:	DC
Checked by:	IA/BBS
Project No:	2014003
Date:	DEC.18.2015
Drawing No:	S1-10

Plot Date: 12/18/2015 12:06:23 PM

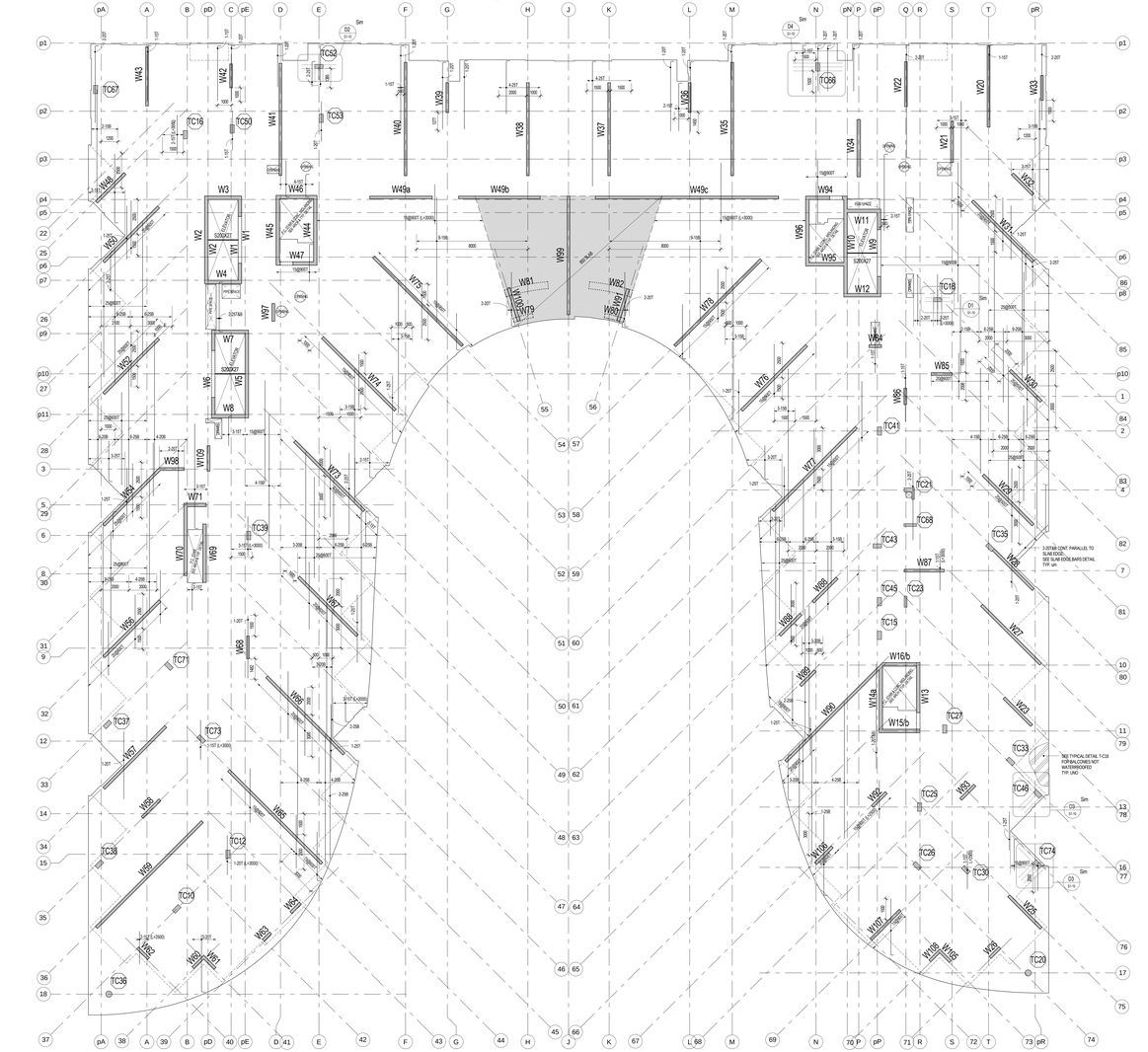
LEVEL 4 FRAMING PLAN - WITH BUL AND TLL

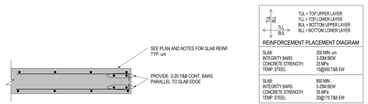
1 : 100



LEVEL 4 FRAMING PLAN - WITH BLL AND TUL

1 : 100





REINFORCEMENT PLACEMENT DIAGRAM

SLAB:	250 MIN. s/m
INTEGRITY BARS:	3-20M BBW
CONCRETE STRENGTH:	35 MPa
TEMP. STEEL:	15@300 T&B EW
SLAB:	300 MIN.
INTEGRITY BARS:	3-20M BBW
CONCRETE STRENGTH:	35 MPa
TEMP. STEEL:	20@175 T&B EW

SEE PLAN FOR ADDITIONAL REINFORCEMENT

SLAB EDGE BARS DETAIL

1 : 10

NOTES:

1. TOP OF STRUCTURAL SLAB TO BE 0.0 mm BELOW FINISHED FLOOR DATUM ELEVATION UNLESS NOTED OTHERWISED AND NOTED. SEE ARCHITECTURAL DRAWINGS FOR DATUM ELEVATION.
2. THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) AND SUPERIMPOSED DEAD LOADS (SDL) IN ADDITION TO THE SELF WEIGHT:

	LL	SDL
SUITES	1.9 kPa	1.50 kPa
TERRACE	4.8 kPa*	6.5 kPa
CORRIDORS	4.8 kPa	1.5 kPa
BALCONIES	4.8 kPa	13 kPa

* INCLUDES ALLOWANCE FOR SLOPE AND ROOFING MATERIALS
** 4kN ALLOWANCE FOR SNOW LOAD OF 1.2IN kPa HAS BEEN CONSIDERED.

3. CONCRETE COVER FOR TOP AND BOTTOM BARS IN SLABS TO BE 25 mm.
4. APPROVAL MUST BE OBTAINED FROM ENGINEER FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON PLAN.
5. THE PROJECT SUPERINTENDENT MUST CONTACT THE OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE FOR A REVIEW OF PREPARATIONS.
6. SEE ALSO TYPICAL NOTES AND DETAILS.
7. SEE BEAM AND COLUMN SCHEDULES. WALL ELEVATIONS.
8. PROVIDE CORNER BARS TO MATCH SLAB BARS (TOP AND BOTTOM, HOOKED AT EDGE OF SLAB AND OPENING) IN ADDITION TO NEW DESIGN BAR SHOWN ON PLAN.
9. PROVIDE TLS FOR ALL SLAB REINFORCEMENT.
10. ADD 3-20TBR CONT. AT PERIMETER BEYOND BARS TO SUIT SLAB EDGE. SEE SLAB EDGE BARS DETAIL.

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No	Revision	Date

No	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY 22.2015
4	BUILDING PERMIT SUBMISSION	JUNE 12.2015
3	ISSUED FOR MT REVIEW	MAY 01.2015

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title:
LEVEL 4 FLOOR FRAMING PLAN

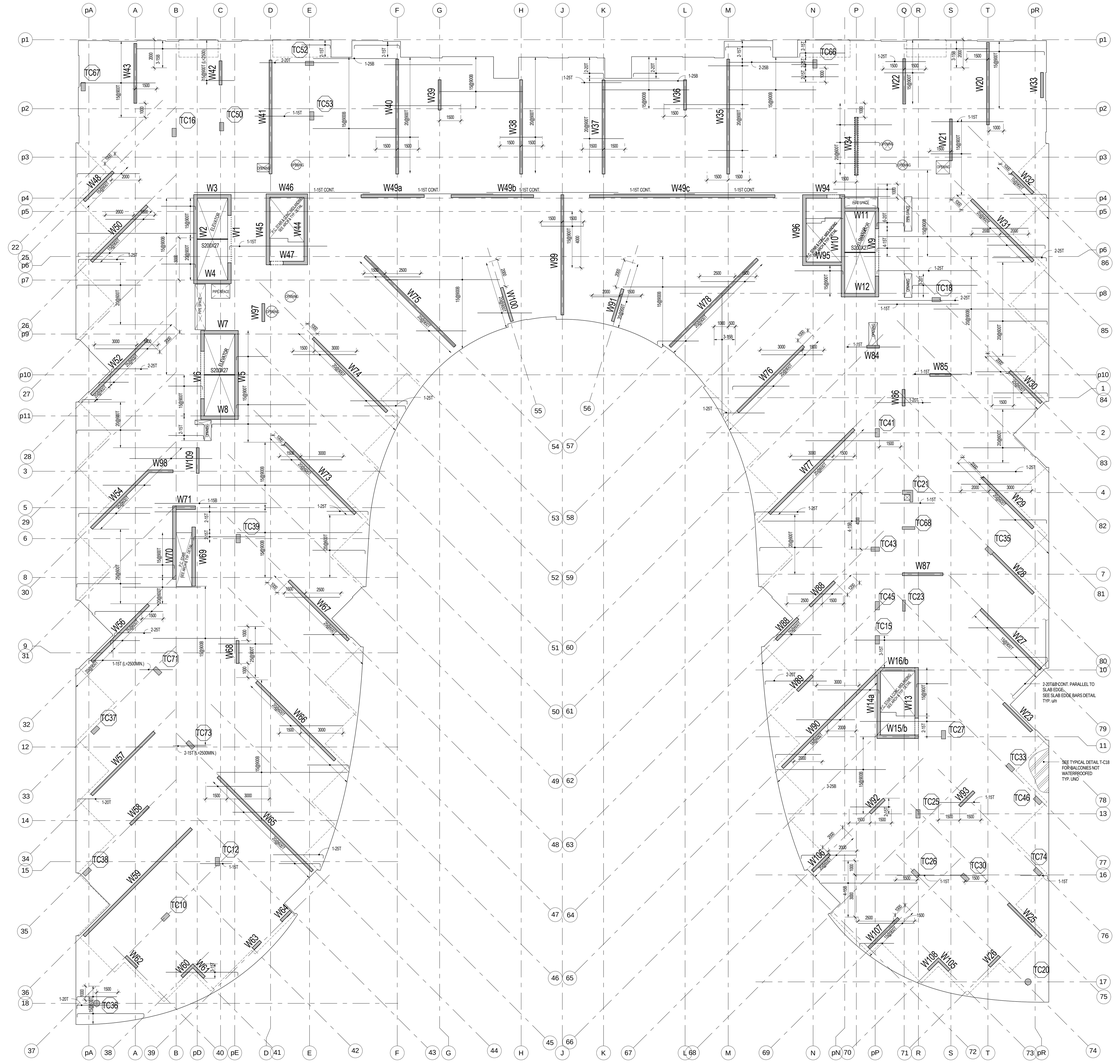
Project:
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale: As indicated
Drawn by: DC
Checked by: IA/BBS
Project No: 2014/0031
Date: DEC.18.2015
Drawing No: S1-11

Plot Date: 12/18/2015 12:06:29 PM

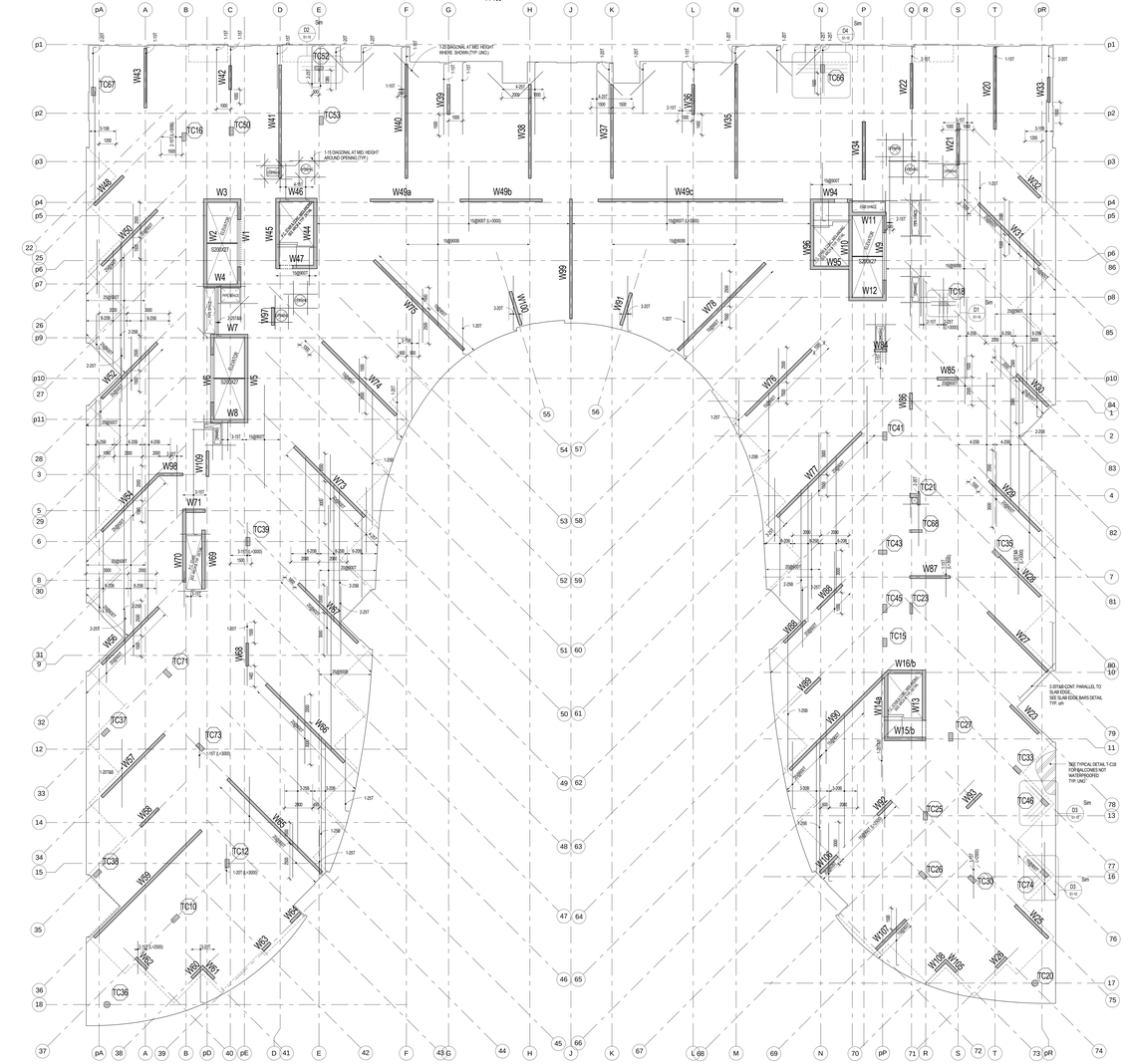
LEVEL 5 FRAMING PLAN - WITH BUL AND TLL

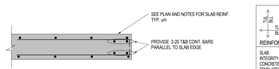
1 : 100



LEVEL 5 FRAMING PLAN WITH BLL AND TUL

1 : 100





SLAB EDGE BARS DETAIL

1 : 10

REINFORCEMENT PLACEMENT DIAGRAM

SEE PLAN FOR ADDITIONAL REINFORCEMENT

NOTES:

1. TOP OF STRUCTURAL SLAB TO BE 0.0 mm BELOW FINISHED FLOOR DATUM ELEVATION UNLESS CROSSED AND NOTED. SEE ARCHITECTURAL DRAWING FOR DATUM ELEVATION.
2. THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) AND SUPERIMPOSED DEAD LOADS (SDL) IN ADDITION TO THE SELF WEIGHT.

	LL	SDL
SUITES	1.9 kPa	1.0 kPa
TERRACE	4.8 kPa*	4.0 kPa
STAIRS/LOBBY	4.8 kPa	2.0 kPa
BALCONIES	4.8 kPa*	3.0 kPa

* INCLUDES ALLOWANCE FOR SLOPE AND ROOFING MATERIALS
** AN ALLOWANCE FOR SNOW LOAD OF 1.28 kPa HAS BEEN CONSIDERED.

3. CONCRETE COVER FOR TOP AND BOTTOM BARS IN SLABS TO BE 25 mm.
4. APPROVAL MUST BE OBTAINED FROM ENGINEER FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON PLAN.
5. THE PROJECT SUPERINTENDENT MUST CONTACT THE OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE FOR A REVIEW OF PREPARATIONS.
6. SEE ALSO TYPICAL NOTES AND DETAILS.
7. SEE BEAM AND COLUMN SCHEDULES, WALL ELEVATIONS.
8. ALL STIRRUPS AND TIES SHALL BE CLOSED WITH A 135° HOOK INTO HOOKED AT EDGE OF SLAB AND OVERHANGS. IN ADDITION TO NOMINAL REINFORCEMENT SHOWN ON PLAN, PROVIDE TLS FOR ALL SLAB REINFORCEMENT.
9. ADD 2-20TAB CONT. 5" FROM TOP BEND WHERE TLS SLIP SLAB EDGE. SEE SLAB EDGE BARS DETAIL.

Contractor Must Check And Verify All Dimensions On The Job.

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No	Revision	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY.22.2015
4	BUILDING PERMIT SUBMISSION	JUNE.12.2015
3	ISSUED FOR MT REVIEW	MAY.01.2015

No	Issued For	Date

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title:

LEVEL 5 FLOOR FRAMING PLAN

Project:

Hines TRIDEL

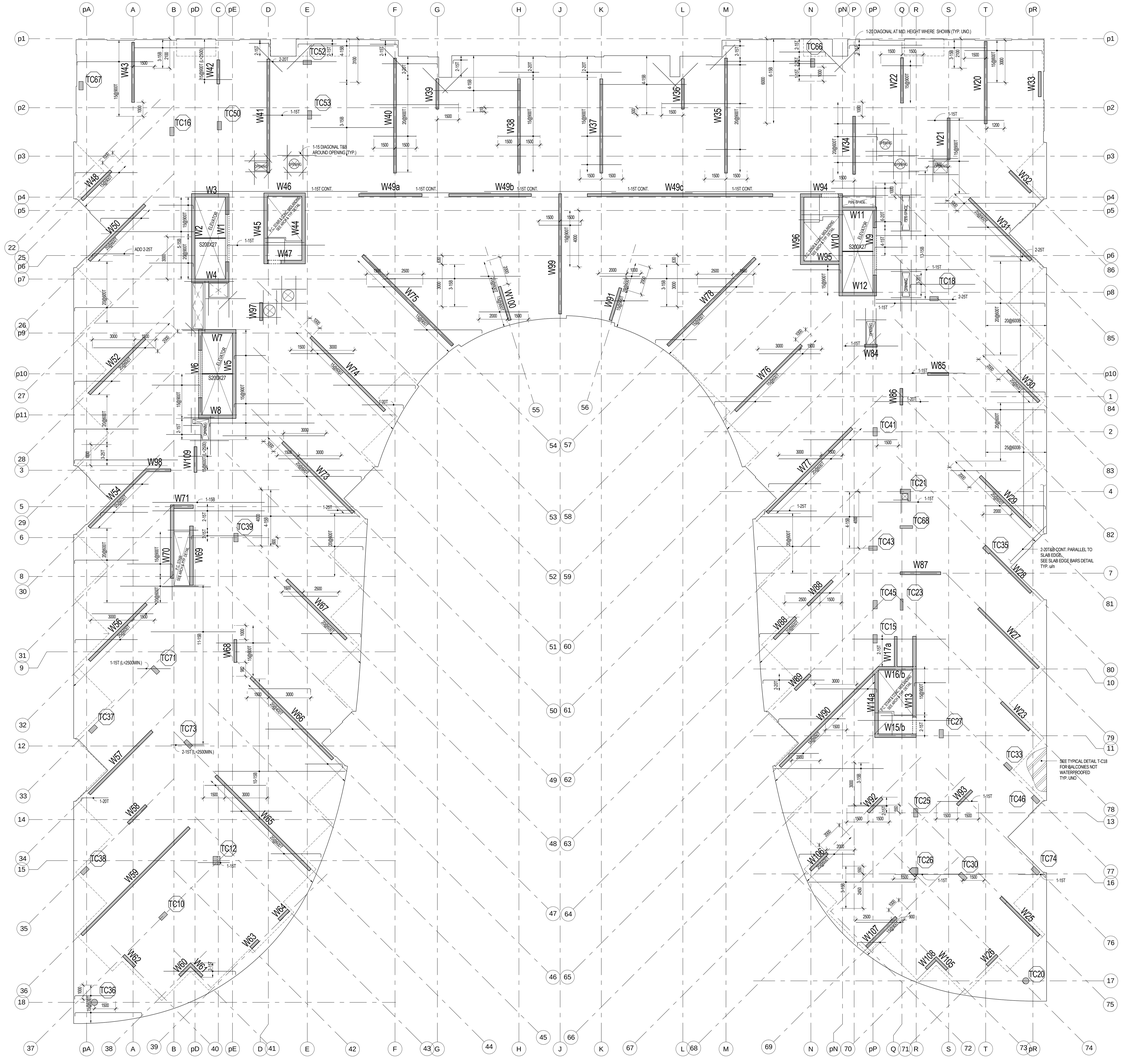
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale:	As indicated
Drawn by:	DC
Checked by:	IA/BBS
Project No:	2014/0031
Date:	DEC.18.2015
Drawing No:	S1-12

Plot Date: 12/18/2015 12:06:35 PM

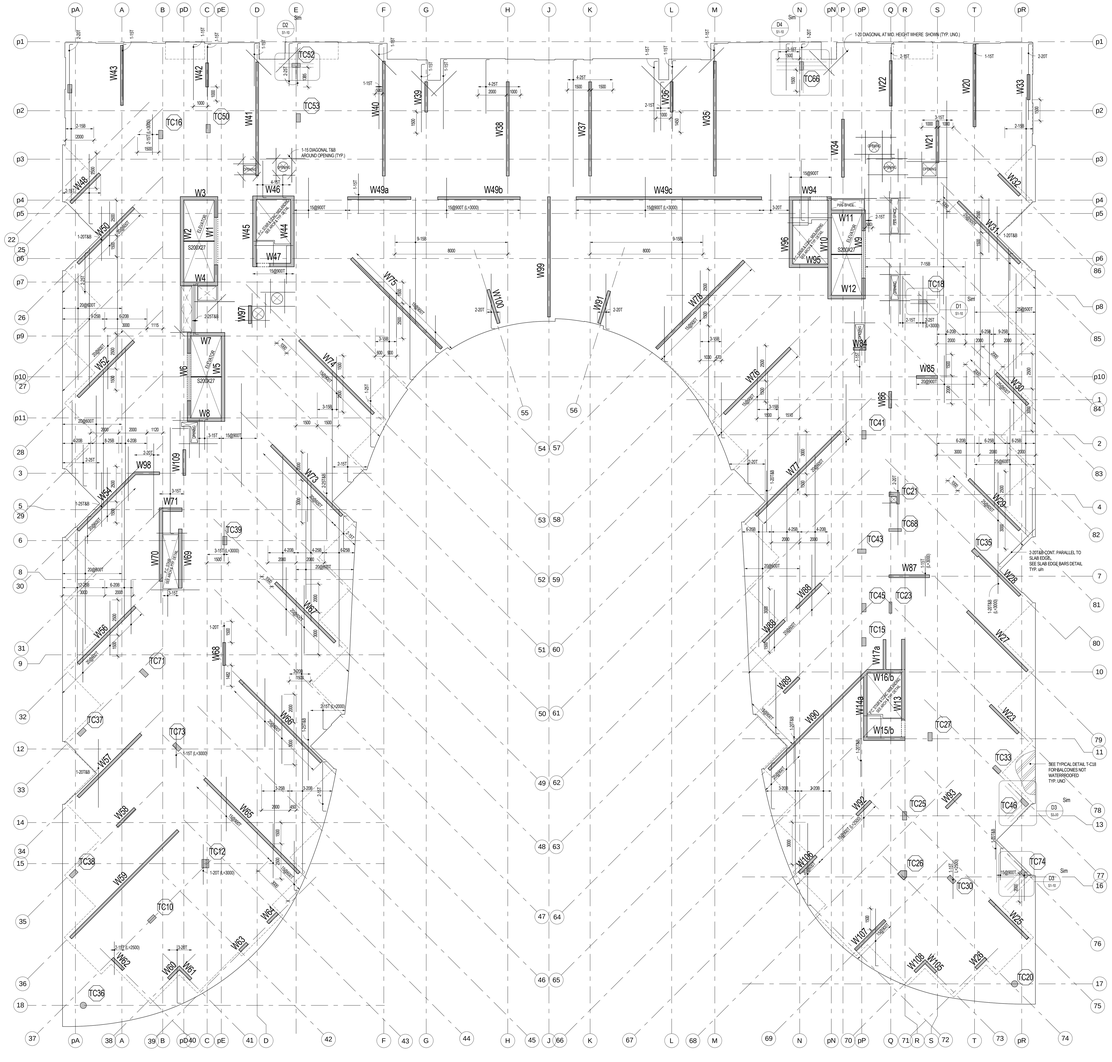
LEVEL 6 FRAMING PLAN - WITH BUL AND TLL

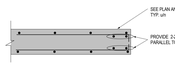
1 : 100



LEVEL 6 FRAMING PLAN - WITH BLL AND TUL

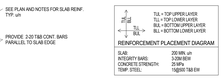
1 : 100





SLAB EDGE BARS DETAIL

1 : 10



REINFORCEMENT PLACEMENT DIAGRAM

SLAB:	200 MIN. uh
INTEGRITY BARS:	3-20M BEW
CONCRETE STRENGTH:	25 MPa
TEMP. STEEL:	1@300 T&B EW

SEE PLAN FOR ADDITIONAL REINFORCEMENT

NOTES:

1. TOP OF STRUCTURAL SLAB TO BE 0.0 mm BELOW FINISHED FLOOR DATUM ELEVATION EXCEPT AS CROSSED AND NOTED. SEE ARCHITECTURAL DRAWINGS FOR DATUM ELEVATION.
2. THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) AND SUPERIMPOSED DEAD LOADS (SDL) IN ADDITION TO THE SELF WEIGHT.

	LL	SDL
SUITES	1.9 kPa	1.25 kPa
CORRIDOR	4.8 kPa*	0.5 kPa
STAIRS/LOBBY	4.8 kPa	0.5 kPa
BALCONIES	5.8 kPa*	0.5 kPa

* INCLUDES ALLOWANCE FOR SLOPES AND ROOFING MATERIALS
** 4% ALLOWANCE FOR SNOW LOAD OF 1.28 kPa HAS BEEN CONSIDERED.

3. CONCRETE COVER FOR TOP AND BOTTOM BARS IN SLABS TO BE 25 mm.
4. DO NOT SCALE DRAWINGS. OBTAIN PRINTS FROM ENGINEER FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON PLAN.
5. THE PROJECT SUPERINTENDENT MUST CONTACT THIS OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE FOR A REVIEW OF REINFORCING.
6. SEE ALSO TYPICAL NOTES AND DETAILS.
7. SEE ARCHITECTURAL DRAWINGS FOR ALL ELEVATIONS.
8. PROVIDE CONTROLLED TEMPERATURE (CRE STEEL TOP AND BOTTOM, HOOKED AT EDGE OF SLAB AND OPENINGS, IN ADDITION TO REINFORCEMENT SHOWN ON PLAN.
9. PROVIDE TLS FOR ALL SLAB REINFORCEMENT.
10. ADD 2-20T&B CONT. AT PERIMETER BEND BARS TO SUIT SLAB EDGE. SEE SLAB EDGE BARS DETAIL.

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No	Revision	Date

7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY 22.2015
4	BUILDING PERMIT SUBMISSION	JUNE 12.2015
3	ISSUED FOR MT REVIEW	MAY 01.2015

No	Issued For	Date

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title:

LEVEL 6 FLOOR FRAMING PLAN

Project:

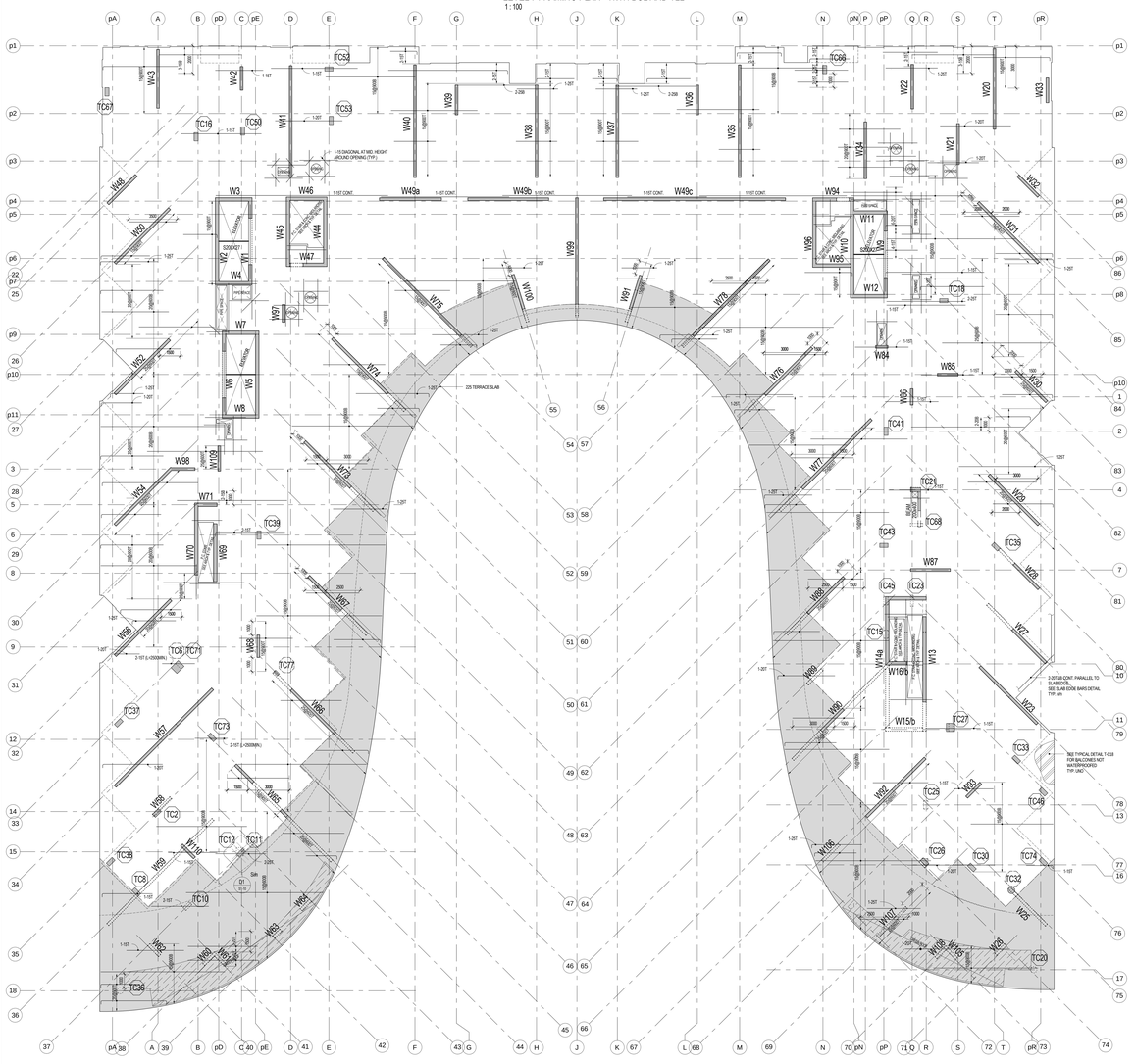
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale:	As indicated
Drawn by:	DC
Checked by:	IA/BBS
Project No:	2014/0031
Date:	DEC.18.2015
Drawing No:	S1-13

Plot Date: 12/18/2015 12:06:41 PM

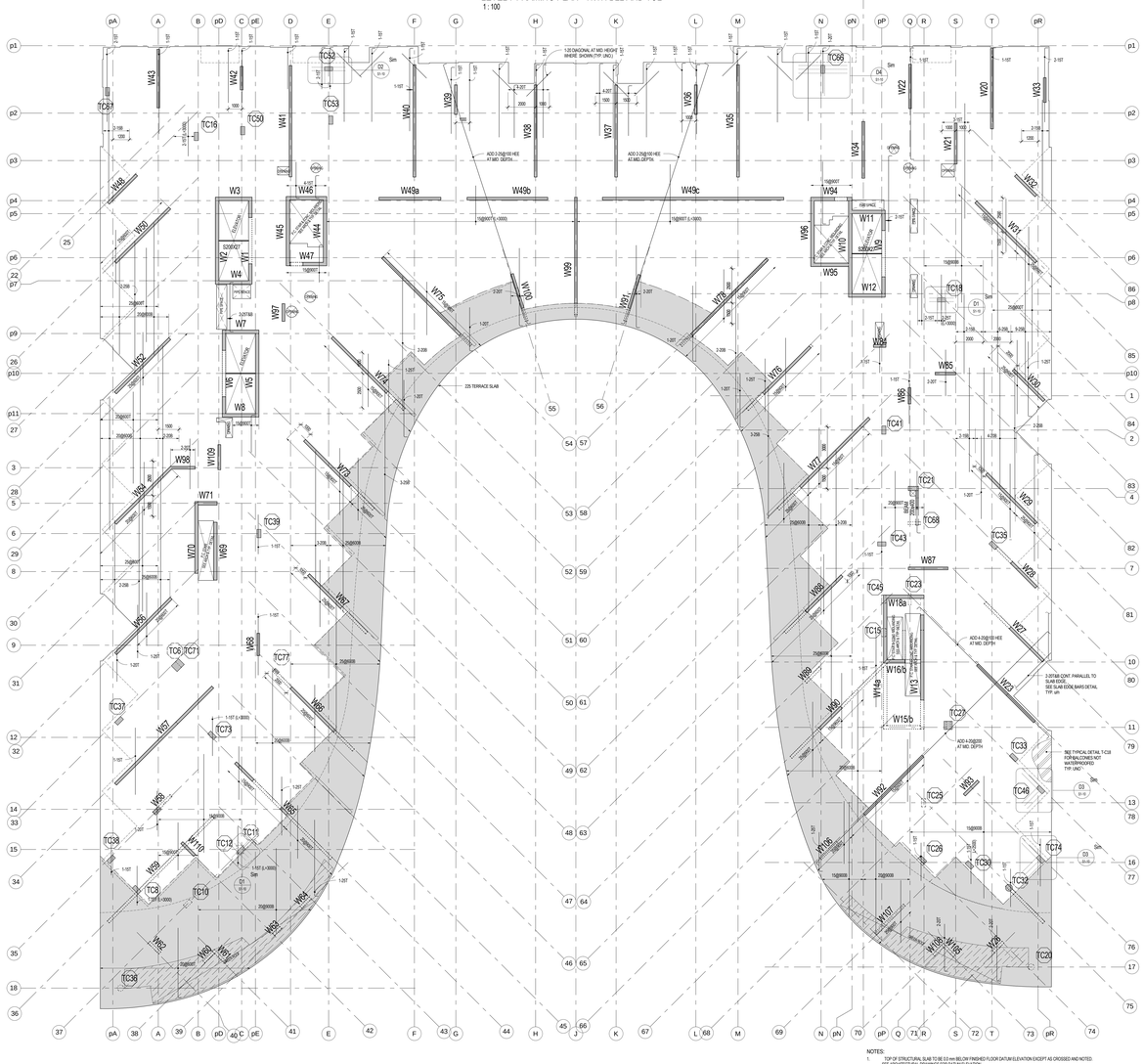
LEVEL 7 FRAMING PLAN - WITH BUL AND TLL

1 : 100



LEVEL 7 FRAMING PLAN - WITH BLL AND TUL

1 : 100



TLb = TOP LOWER LAYER
TLu = TOP UPPER LAYER
BLb = BOTTOM LOWER LAYER
BLu = BOTTOM UPPER LAYER

REINFORCEMENT PLACEMENT DIAGRAM

SLAB	200 MIN. u/n
INTEGRITY BARS	3-20M BEW
TERRACE SLAB	225 MIN. u/n
INTEGRITY BARS	3-20M BEW

SEE PLAN AND NOTES FOR SLAB REINF. TYP. u/n

PROVIDE 2-20 T&B CONT. BARS PARALLEL TO SLAB EDGE

SLAB EDGE BARS DETAIL

1 : 10

SEE PLAN FOR ADDITIONAL REINFORCEMENT

NOTES:

1. TOP OF STRUCTURAL SLAB TO BE 0.0 mm BELOW FINISHED FLOOR DATUM ELEVATION EXCEPT AS CROSSED AND NOTED.
2. SEE ARCHITECTURAL DRAWINGS FOR DATUM ELEVATION.
   THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) AND SUPERIMPOSED DEAD LOADS (SDL) IN ADDITION TO THE SELF WEIGHT.

	LL	SDL
SUITES	1.9 kPa	1.25 kPa
CORRIDOR	4.8 kPa	5.0 kPa
PENTHOUSES	4.8 kPa	2.0 kPa
AMENITY ROOM	4.8 kPa	1.5 kPa
GREEN ROOF*	4.8kPa	1.7 kPa

   * INCLUDES ALLOWANCE FOR SLOPES AND ROOFING MATERIALS
   ** AN ALLOWANCE FOR SNOW LOAD OF 1.28 kPa HAS BEEN CONSIDERED.
   INCLUDES ALLOWANCE FOR 3.3 kPa GREEN ROOF DEAD LOAD.
3. CONCRETE STRENGTH TO BE 40 MPa AT 56 DAYS UNO.
4. APPROVAL MUST BE OBTAINED FROM ENGINEER FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON PLAN.
5. THE PROJECT SUPERINTENDENT MUST CONTACT THIS OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE FOR A REVIEW OF PREPARATIONS.
6. SEE ALSO TYPICAL NOTES AND DETAILS.
7. SEE ARCHITECTURAL DRAWINGS FOR ALL ELEVATIONS.
8. PROVIDE CONTINUOUS TEMPERATURE STEEL TOP AND BOTTOM, HOOKED AT EDGE OF SLAB AND OPENINGS, IN ADDITION TO REINFORCEMENT SHOWN ON PLAN.
9. PROVIDE TLT FOR ALL SLAB REINFORCEMENT.
10. ADD 2-20 TAB CONT. AT PERIMETER BEND BARS TO SUIT SLAB EDGE. SEE SLAB EDGE BARS DETAIL.

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No.	Revision	Date
1	GREEN ROOF LOAD REVISION	NOV.16.2015

No.	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
4	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
3	BUILDING PERMIT RESUBMISSION	JULY.22.2015
2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title:

LEVEL 7 FLOOR FRAMING PLAN

Project:

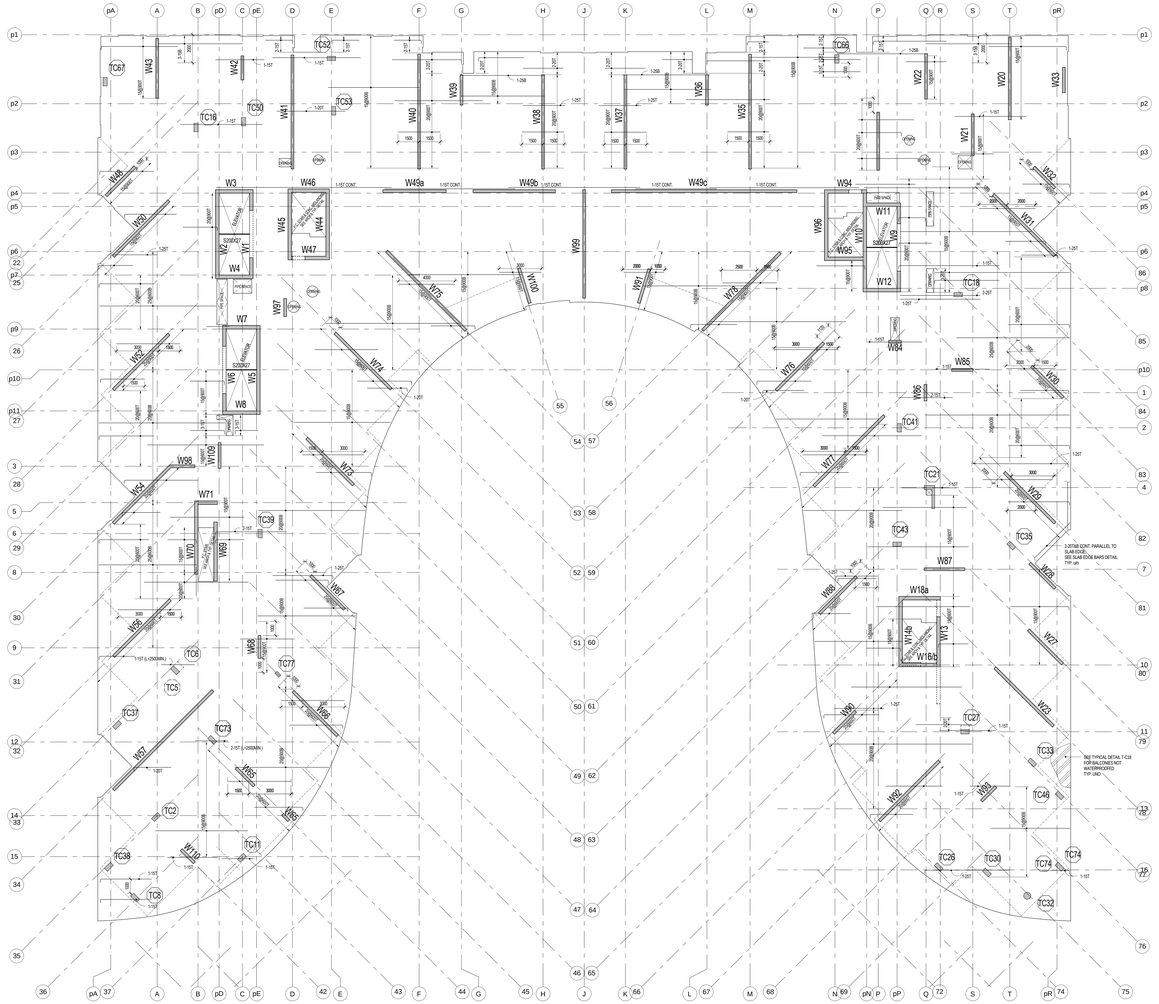
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale:	As indicated
Drawn by:	DC
Checked by:	IA/BBS
Project No:	2014-00031
Date:	DEC.18.2015
Drawing No:	S1-14

Plot Date: 12/18/2015 12:06:57 PM

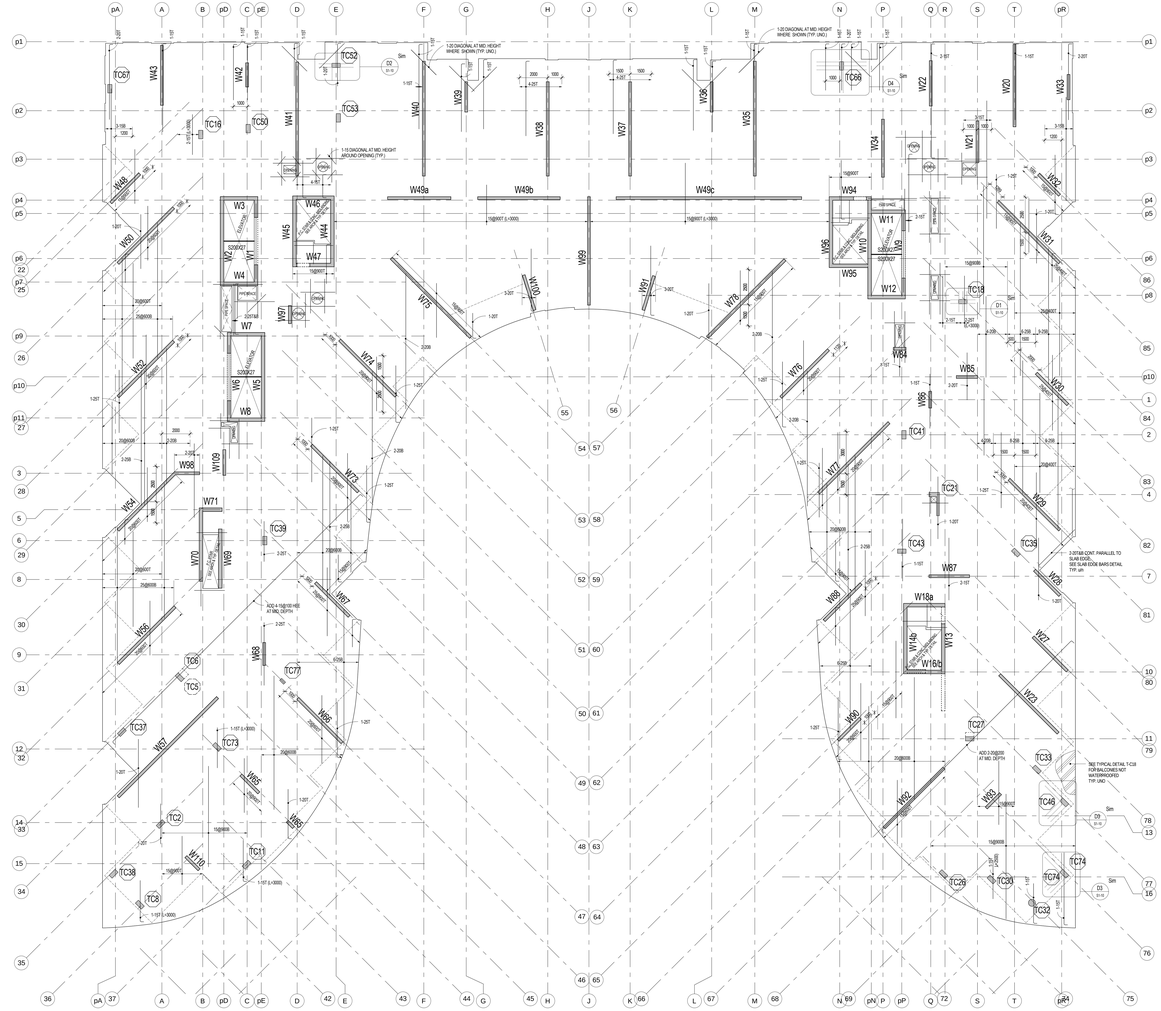
LEVEL 8 FRAMING PLAN - WITH BUL AND TLL

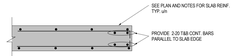
1 : 100



LEVEL 8 FRAMING PLAN - WITH BLL AND TUL

1 : 100





SLAB EDGE BARS DETAIL

1 : 10

REINFORCEMENT PLACEMENT DIAGRAM

SLAB:	200 MPa u/n
INTEGRITY BARS:	3-20M BEW
CONCRETE STRENGTH:	25 MPa
TEMP. STEEL:	15M@TAB EW

SEE PLAN FOR ADDITIONAL REINFORCEMENT

NOTES:

1. TOP OF STRUCTURAL SLAB TO BE 0.0 mm BELOW FINISHED FLOOR DATUM ELEVATION EXCEPT AS CROSSED AND NOTED. SEE ARCHITECTURAL DRAWINGS FOR DATUM ELEVATIONS.
2. THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) AND SUPERIMPOSED DEAD LOADS (SDL) IN ADDITION TO THE SELF WEIGHT:

	LL	SDL
SUITES	1.9 kPa	1.25 kPa
CORRIDOR	4.8 kPa*	0.5 kPa*
STAIRS/LOBBY	4.8 kPa	1.5 kPa
BALCONIES	4.8 kPa*	1.5 kPa

* INCLUDES ALLOWANCE FOR SLOPE AND ROOFING MEMBRANE
** AN ALLOWANCE FOR SHOW LOAD OF 1.28 kPa HAS BEEN CONSIDERED.

3. CONCRETE COVER FOR TOP AND BOTTOM BARS IN SLAB TO BE 25 mm.
4. APPROVAL MUST BE OBTAINED FROM ENGINEER FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON PLAN.
5. THE CONCRETE SUPPLIER / CONTRACTOR MUST CONTACT THIS OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE FOR A REVIEW OF PREPARATIONS.
6. SEE ALSO TYPICAL NOTES AND DETAILS.
7. SEE BEAM AND COLUMN SCHEDULES, WALL ELEVATIONS.
8. PROVIDE CONTINUOUS TEMPERATURE STEEL TOP AND BOTTOM, HOOKED AT EDGE OF SLAB AND OPENINGS AT 300 mm O/C UNLESS OTHERWISE SHOWN ON PLAN.
9. PROVIDE T&B EW ALL SLAB REINFORCEMENT.
10. ADD 2-20TAB CONT. AT PERIMETER BEND BARS TO BUT SLAB EDGE. SEE SLAB EDGE BARS DETAIL.

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No.	Revision	Date

No.	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY 22.2015
4	BUILDING PERMIT SUBMISSION	JUNE 12.2015
3	ISSUED FOR MT REVIEW	MAY 01.2015

AQUAVISTA
AT BAYSIDE TORONTO

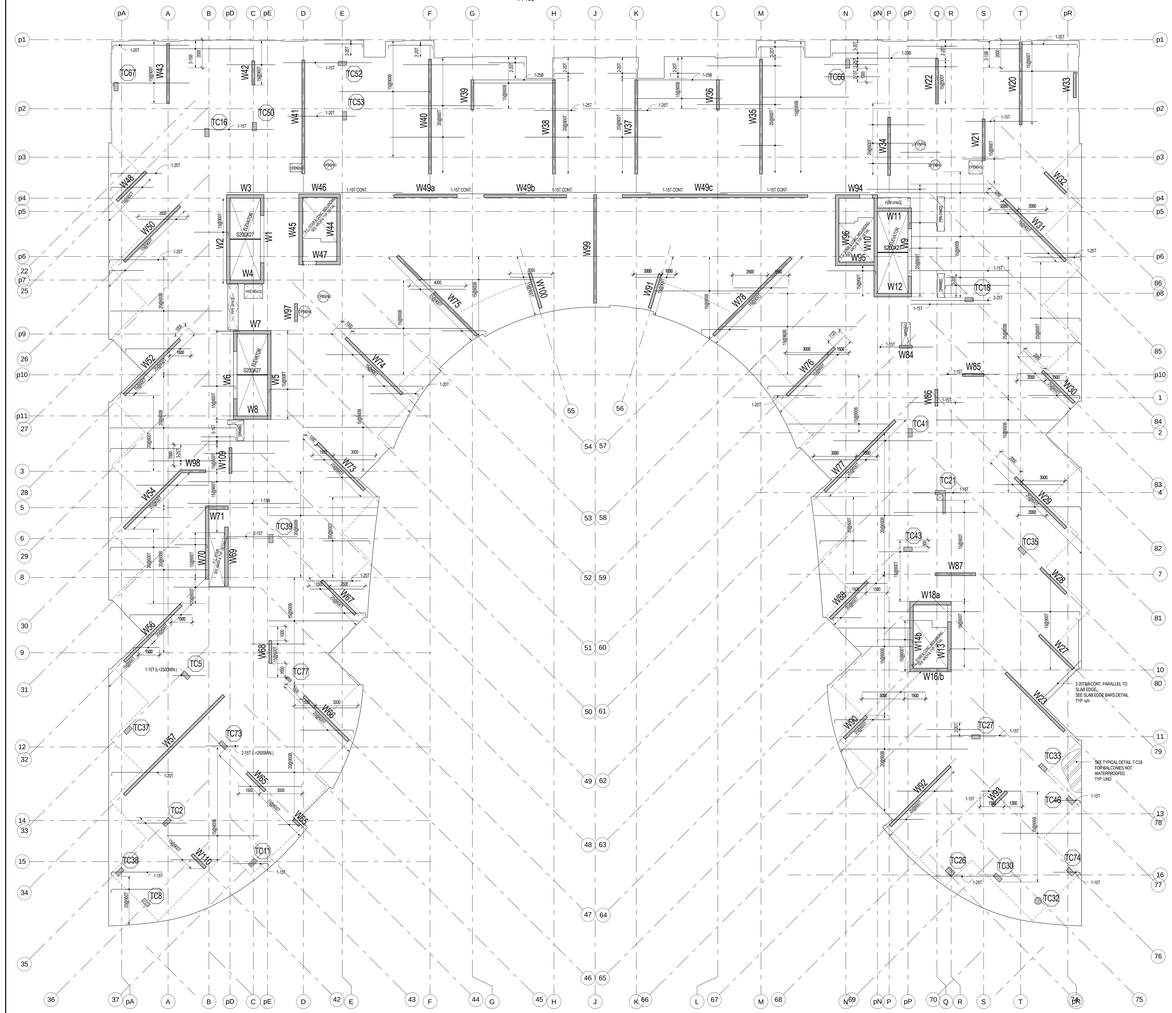
Drawing Title:
LEVEL 8 FLOOR FRAMING PLAN

Project:
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale:	As indicated
Drawn by:	DC
Checked by:	IA/BBS
Project No:	2014/0031
Date:	DEC.18.2015
Drawing No:	S1-15

LEVEL 9 FRAMING PLAN - WITH BUL AND TLL

1 : 100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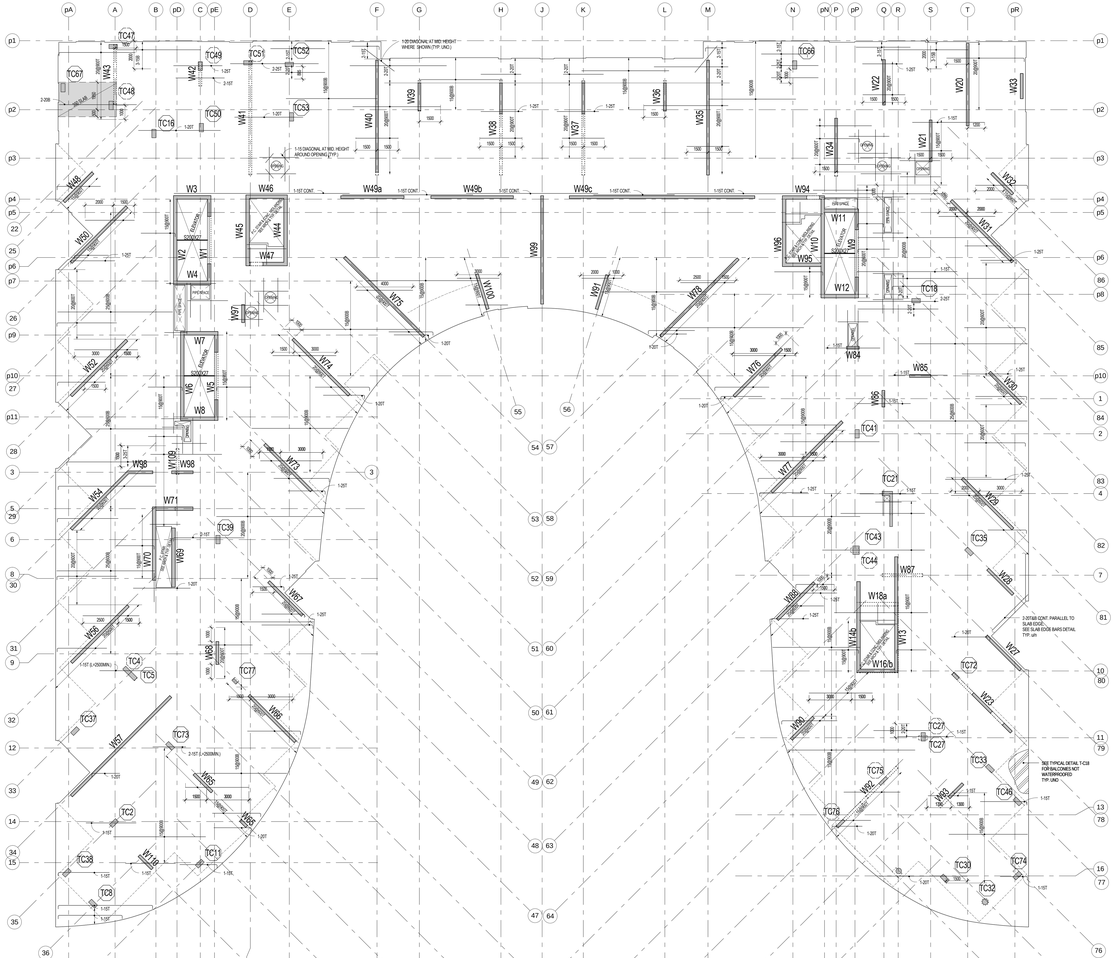
W20 W21 W22 W23 W25 W26 W27 W28 W29 W30 W31 W32 W33 W34 W35 W36 W37 W38 W39 W40 W41 W42 W43 W44 W45 W46 W47 W48 W49a W49b W49c W50 W51 W52 W53 W54 W55 W56 W57 W58 W59 W60 W61 W62 W63 W64 W65 W66 W67 W68 W69 W70 W71 W72 W73 W74 W75 W76 W77 W78 W79 W80 W81 W82 W83 W84 W85 W86 W87 W88 W89 W90 W91 W92 W93 W94 W95 W96 W97 W98 W99 W100 W101 W102 W103 W104 W105 W106 W107 W108 W109 W110
W14b W16b W18a
TC2 TC5 TC8 TC11 TC16 TC18 TC21 TC27 TC29 TC30 TC32 TC33 TC35 TC37 TC38 TC39 TC41 TC43 TC46 TC50 TC53 TC59 TC66 TC67 TC73 TC74 TC77
1-15T (L=3000)
1-15T (L=3000)
2-15T (L=3000)
1-15T (L=3000)
1-15T (L=3000)
1

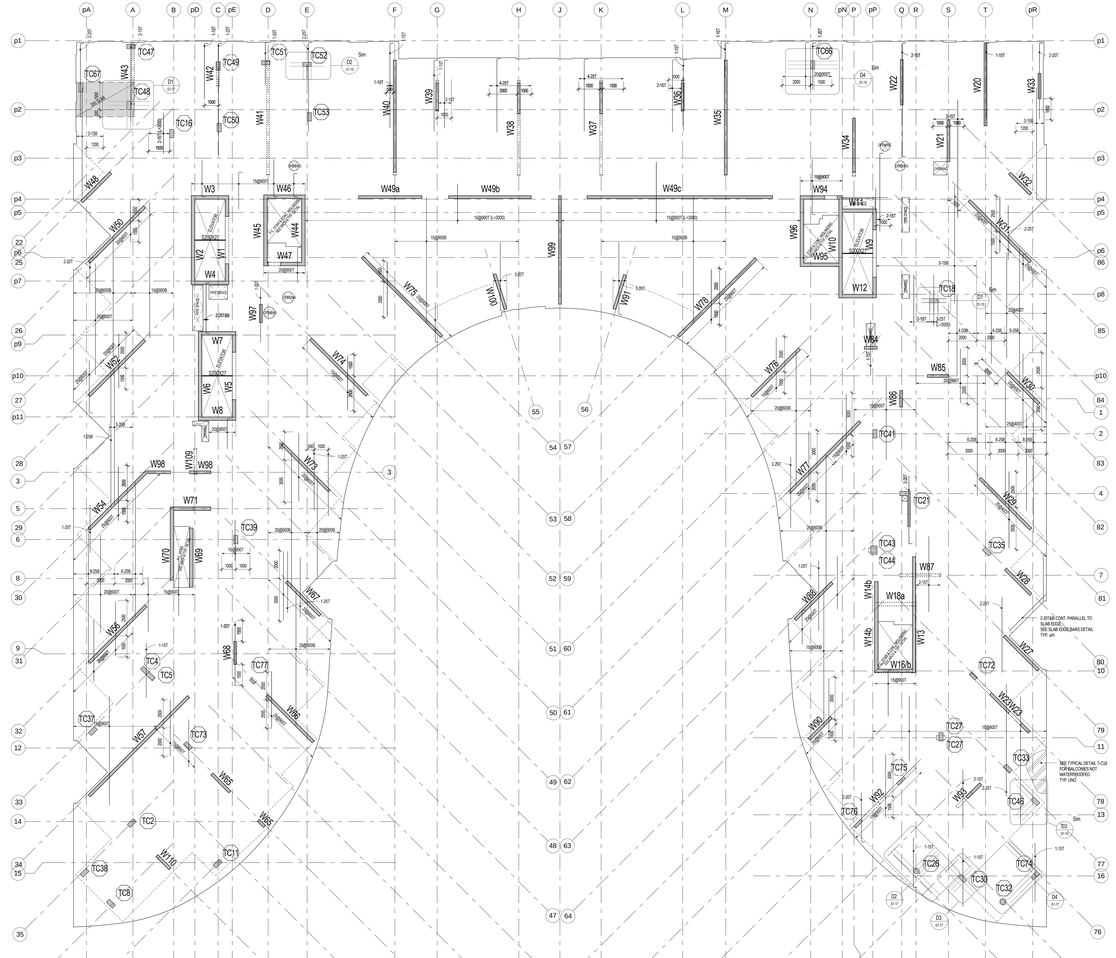
LEVEL 10 FRAMING PLAN - WITH BUL AND TLL

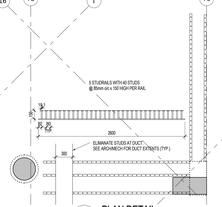
1 : 100



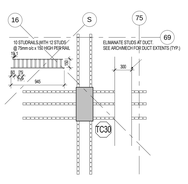
LEVEL 10 FRAMING PLAN - WITH BLL AND TUL

1 : 100

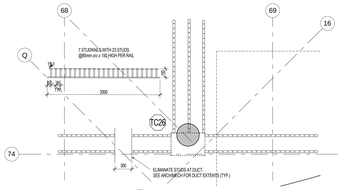




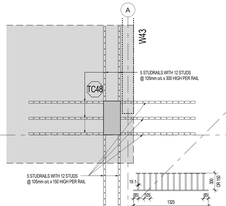
D4 PLAN DETAIL
S1-17 1 : 25



D3 PLAN DETAIL
S1-17 1 : 25

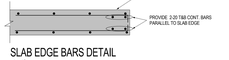


D2 PLAN DETAIL
S1-17 1 : 25



D1 PLAN DETAIL
S1-17 1 : 25

REINFORCEMENT PLACEMENT DIAGRAM		
SLAB INTEGRITY BARS: CONCRETE STRENGTH: TEMP. STEEL:	20D MIN. c/c 3.25N BEW 25 MPa 15@500 T&B EW	
SLAB: INTEGRITY BARS: CONCRETE STRENGTH: TEMP. STEEL:	35D MIN. 3.25N BEW 25 MPa 15@500 T&B EW	



SLAB EDGE BARS DETAIL
1 : 10

SEE PLAN FOR ADDITIONAL REINFORCEMENT

	SYMBOL	DL	LL
SUITES	TLL = TOP LOWER LAYER	1.8 kPa	1.92 kPa
TOPPING	TUL = TOP UPPER LAYER	0.8 kPa	0.5 kPa
CORRIDORS*	BLL = BOTTOM LOWER LAYER	4.0 kPa	4.8 kPa
BALCONIES	BUL = BOTTOM UPPER LAYER	3.8 kPa	2.9 kPa

* INCLUDES ALLOWANCE FOR SLOPES AND ROOFING MATERIALS
** 4% ALLOWANCE FOR SNOW DRIFTS CONSIDERED

NOTES:

1. TOP OF STRUCTURAL SLAB TO BE 0.0 mm BELOW FINISHED FLOOR DATUM ELEVATION EXCEPT AS INDICATED AND NOTED SEE ARCHITECTURAL DRAWINGS FOR DATUM ELEVATION.
2. THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) AND SUPERIMPOSED DEAD LOADS (SDL) IN ADDITION TO THE SELF WEIGHT
3. CONCRETE COVER FOR TOP AND BOTTOM BARS IN SLABS TO BE 25 mm.
4. ALL SLAB OPENINGS 300 mm AND LARGER NOT SHOWN ON THE DRAWINGS TO BE COORDINATED WITH THOSE SHOWN ON PLAN.
5. THE PROJECT SUPERINTENDENT MUST CONTACT THIS OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE FOR A REVIEW OF PREPARATIONS.
6. SEE ALSO TYPICAL NOTES AND DETAILS.
7. SEE ARCHITECTURAL DRAWINGS FOR ALL WALL ELEVATIONS.
8. PROVIDE CONTINUOUS TEMPERATURE STEEL TOP AND BOTTOM, HOOKED AT EDGE OF SLAB AND OPENINGS, IN ADDITION TO REINFORCEMENT SHOWN ON PLAN.
9. PROVIDE TLL FOR ALL SLAB REINFORCEMENT.
10. ADD 2-20TAB CONT. AT PERIMETER BEND BARS TO SUIT SLAB EDGE. SEE SLAB EDGE BARS DETAIL.

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No	Revision	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY.22.2015
2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

No	Issued For	Date

AQUAVISTA
AT BAYSIDE TORONTO

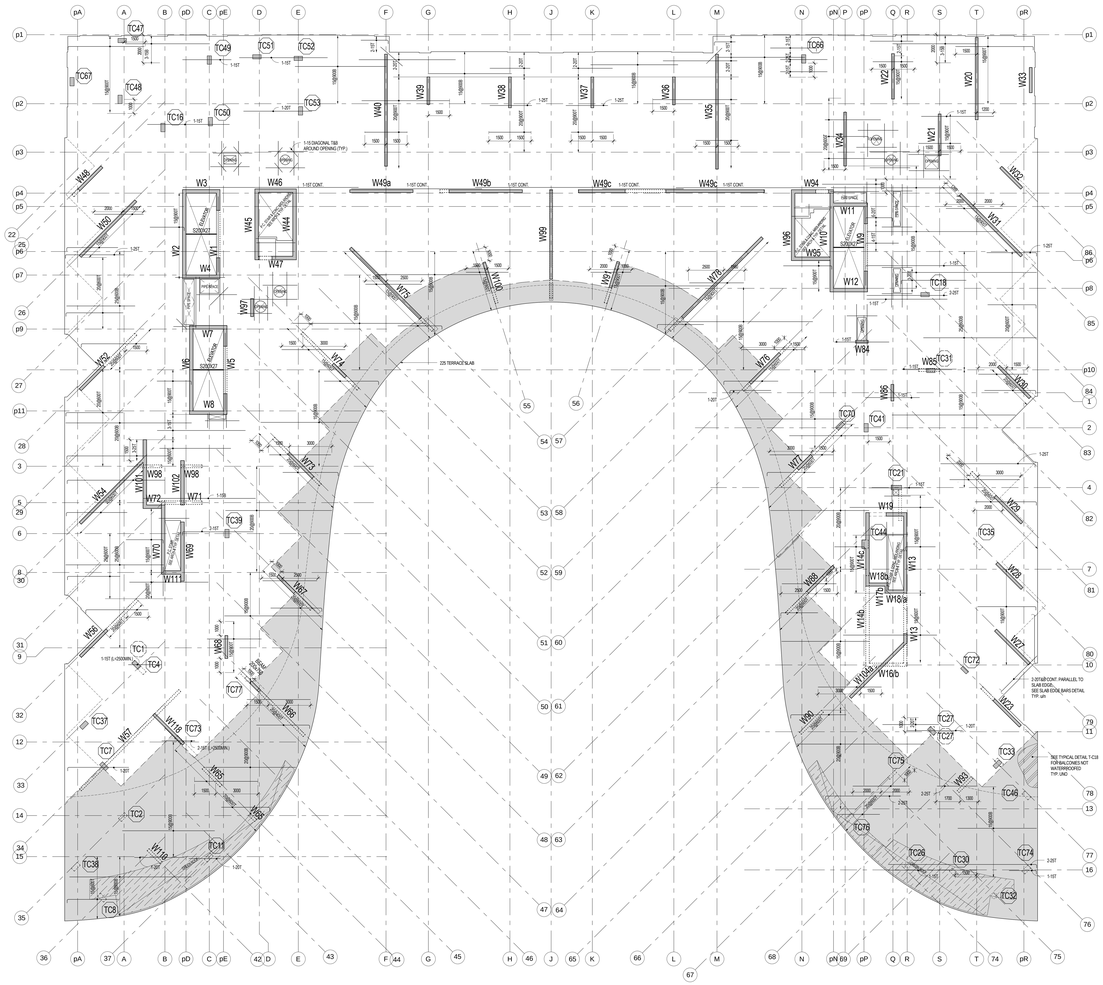
Drawing Title
LEVEL 10 FLOOR FRAMING PLAN

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale: As indicated
Drawn by: DC
Checked by: IA/BBS
Project No: 2014003I
Date: DEC.18.2015
Drawing No: S1-17

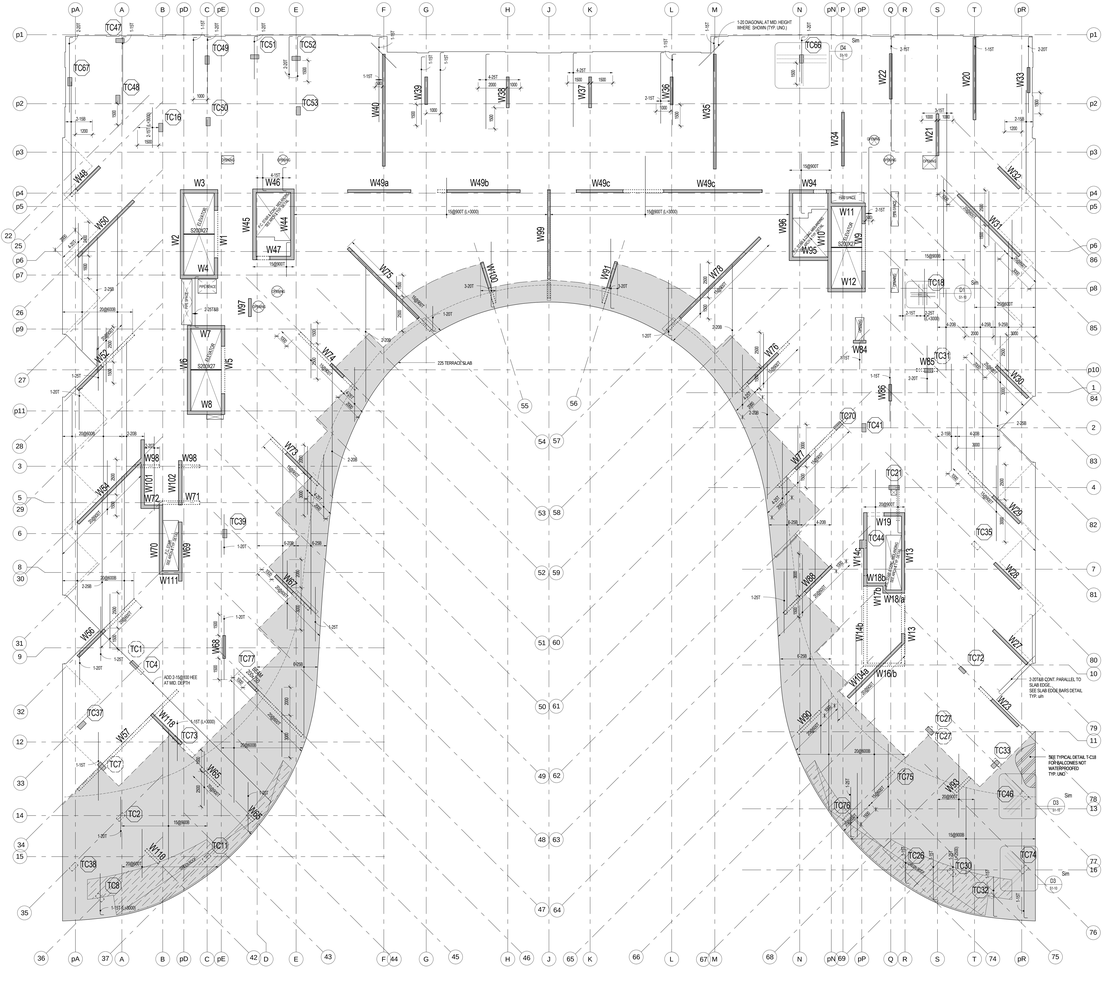
LEVEL 11 FRAMING PLAN - WITH BUL AND TLL

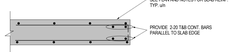
1 : 100



LEVEL 11 FRAMING PLAN WITH BLL AND TUL

1 : 100





SLAB EDGE BARS DETAIL

1 : 10

REINFORCEMENT PLACEMENT DIAGRAM

SLAB:	300 MPa u/n
ACCIDENTY BARS:	1/2M-SCW
CONCRETE STRENGTH:	35 MPa
TOMF STEEL:	1/g/m/d T&B EW
TERRACE SLAB:	300 MPa u/n
ACCIDENTY BARS:	1/2M-SCW
CONCRETE STRENGTH:	35 MPa C1
TOMF STEEL:	1/g/m/d T&B EW

SEE PLAN FOR ADDITIONAL REINFORCEMENT

NOTES:

1. TOP OF STRUCTURAL SLAB TO BE 0.0 mm BELOW FINISHED FLOOR DATUM ELEVATION EXCEPT AS CROSSED AND NOTED. SEE ARCHITECTURAL DRAWINGS FOR DATUM ELEVATION.
2. THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) AND SUPERIMPOSED DEAD LOADS (SDL) IN ADDITION TO THE SELF WEIGHT:

	LL	SDL
SUITES	1.9 kPa	1.25 kPa
PATIO	4.8 kPa *	2.0 kPa
CORRIDORS	4.8 kPa *	2.0 kPa
BALCONIES	4.8 kPa *	2.0 kPa
TERRACE SLAB	4.8 kPa *	2.0 kPa

* INCLUDES ALLOWANCE FOR SLOPE AND ROOFING MATERIALS
** AN ALLOWANCE FOR SNOW LOAD OF 1.28 kPa HAS BEEN CONSIDERED.
*** INCLUDES ALLOWANCE FOR 0.5 kPa GREEN ROOF DEAD LOAD.

3. CONCRETE COVER FOR TOP AND BOTTOM BARS IN SLABS TO BE 25 mm.
4. APPROVAL MUST BE OBTAINED FROM ENGINEER FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON PLAN.
5. THE CONCRETE CONTRACTOR/ERECTOR MUST CONTACT THIS OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE FOR A REVIEW OF PREPARATIONS.
6. SEE ALSO TYPICAL NOTES AND DETAILS.
7. SEE REAR AND COLUMN SCHEDULES, WALL ELEVATIONS.
8. PROVIDE CONTINUOUS TEMPERATURE STEEL TOP AND BOTTOM, HOOKED AT EDGE OF SLAB WHERE SLAB EDGE IS EXPOSED. SEE TYPICAL DETAILS FOR SHOWN ON PLAN.
9. PROVIDE T2.5 FOR ALL SLAB REINFORCEMENT.
10. ADD 2-20TAB CONT. AT PERIMETER BEND BARS TO SUIT SLAB EDGE. SEE SLAB EDGE BARS DETAIL.
11. AREAS NOTED THUS [▨] ON PLAN, INDICATE THICKENED SLAB. SEE PLAN FOR THICKNESS.
12. PROVIDE C1 CONCRETE WHERE EXPOSURE EXISTS.

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2500 Victoria Park Ave, Suite 402
Toronto ON M2J 5A9 | Tel.(416) 495 7676
www.stephenson-eng.com | info@stephenson-eng.com

No	Revision	Date
1	GREEN ROOF LOAD REVISION	NOV.16.2015

No	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
4	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
3	BUILDING PERMIT RESUBMISSION	JULY.22.2015
2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title

LEVEL 11 FLOOR FRAMING PLAN

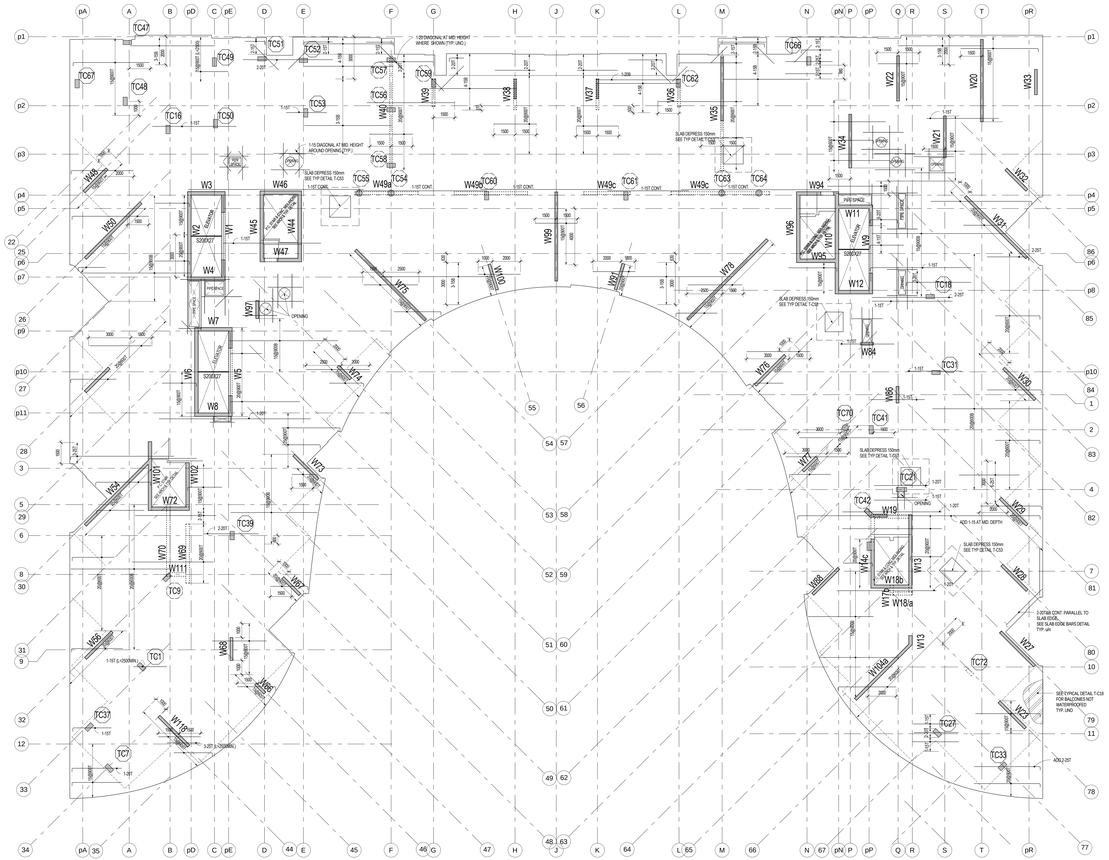
Project

Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	As indicated
Drawn by	DC
Checked by	IA/BBS
Project No.	2014/0031
Date	DEC.18.2015
Drawing No.	S1-18

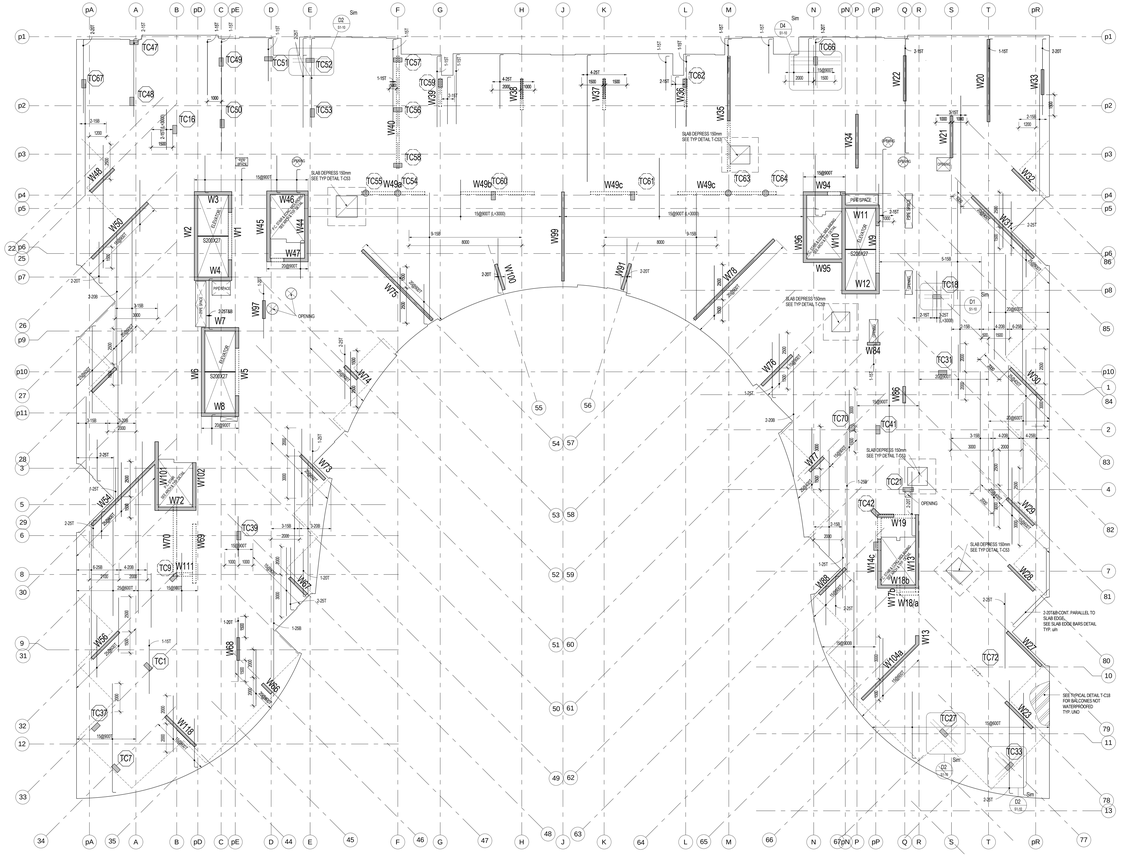
LEVEL 12 FRAMING PLAN - WITH BLL AND TUL

1 : 100



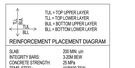
LEVEL 12 FRAMING PLAN - WITH BUL AND TLL

1 : 100



SLAB EDGE BARS DETAIL

1 : 10



REINFORCEMENT PLACEMENT DIAGRAM

SLAB:	200 MIN. u/n
INTEGRITY BARS:	3-20M BOX
CONCRETE STRENGTH:	25 MPa
TEMP. STEEL:	152X305 TEW 152X305 BOX

SEE PLAN FOR ADDITIONAL REINFORCEMENT

NOTES:

1. TOP OF STRUCTURAL SLAB TO BE 0.0 mm BELOW FINISHED FLOOR DATUM ELEVATION EXCEPT AS DROPPED AND NOTED. SEE ARCHITECTURAL DRAWINGS FOR DATUM ELEVATION.
2. THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) AND SUPERIMPOSED DEAD LOADS (SDL) IN ADDITION TO THE SELF WEIGHT:

	LL	SDL
SUITES	1.9 kPa	1.2 kPa
CORRIDORS	4.8 kPa	1.2 kPa
STAIRS/LOBBY	4.8 kPa	0.5 kPa
BALCONIES	4.8 kPa*	0.5 kPa

* INCLUDES ALLOWANCE FOR SLOPES AND ROOFING MATERIALS.

3. CONCRETE CLASS FOR TOP AND BOTTOM BARS IN SLABS TO BE 25 mm.
4. APPROVAL MUST BE OBTAINED FROM ENGINEER FOR ALL OPENINGS LOCATED OTHER THAN THOSE SHOWN ON PLAN.
5. THE PROJECT SUPERINTENDENT MUST CONTACT THE OFFICE 24 HOURS PRIOR TO PLACING CONCRETE IN ORDER FOR A REVIEW OF PREPARATIONS.
6. ALL ELECTRICAL BOXES ADJACENT TO FIRE RATED WALLS.
7. SEE REAR AND COLUMN SCHEDULES, WALL ELEVATIONS.
8. PROVIDE CONTINUOUS TEMPERATURE STEEL TOP AND BOTTOM, HOOKED AT EDGE OF SLAB AND OPENINGS, IN ADDITION TO REINFORCEMENT SHOWN ON PLAN.
9. PROVIDE TLS FOR ALL SLAB REINFORCEMENT.
10. ADD 2-20TAB CONT. AT PERIMETER BEND BARS TO SUIT SLAB EDGE. SEE SLAB EDGE BARS DETAIL.

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No	Revision	Date

7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY 22.2015
2	BUILDING PERMIT SUBMISSION	JUNE 12.2015
1	ISSUED FOR MT REVIEW	MAY 01.2015

No	Issued For	Date

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title

LEVEL 12 / PH1 FLOOR FRAMING PLAN

Project

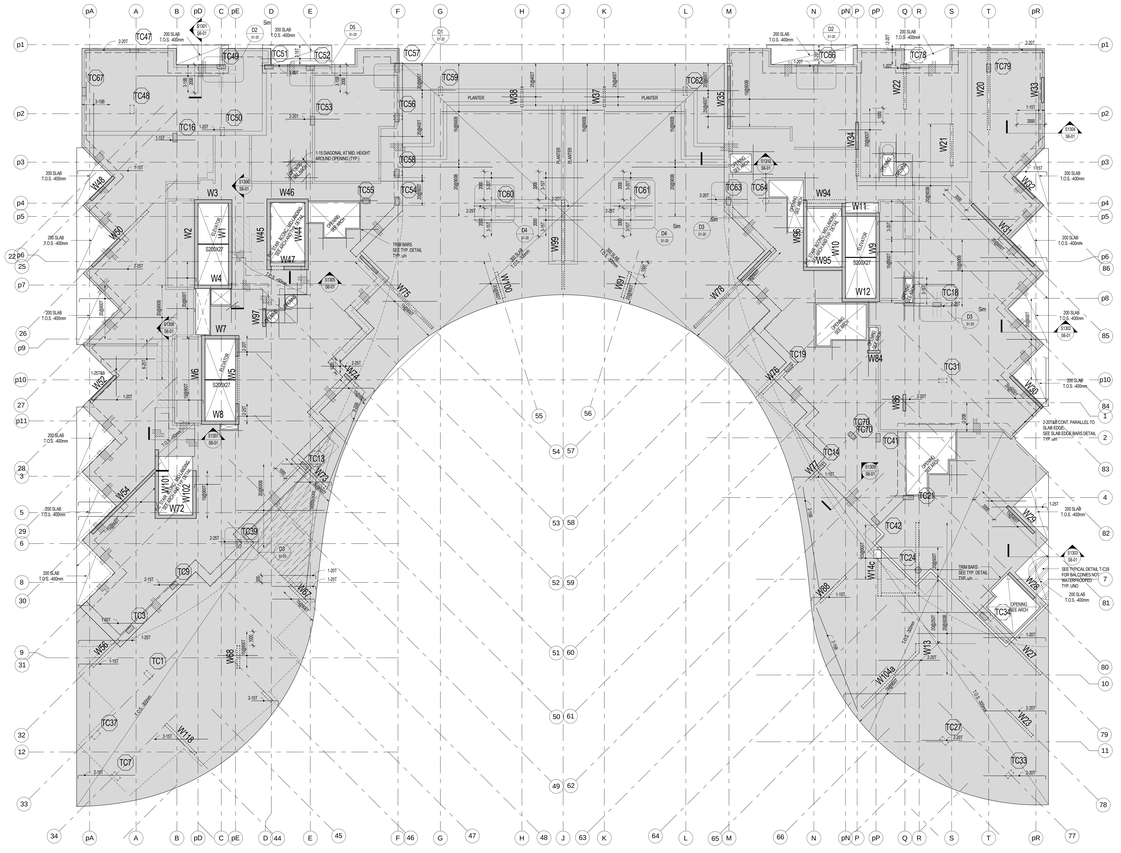
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	As indicated
Drawn by	DC
Checked by	IA/BBS
Project No.	2014-0031
Date	DEC.18.2015
Drawing No.	S1-19

Plot Date: 12/18/2015 12:07:32 PM

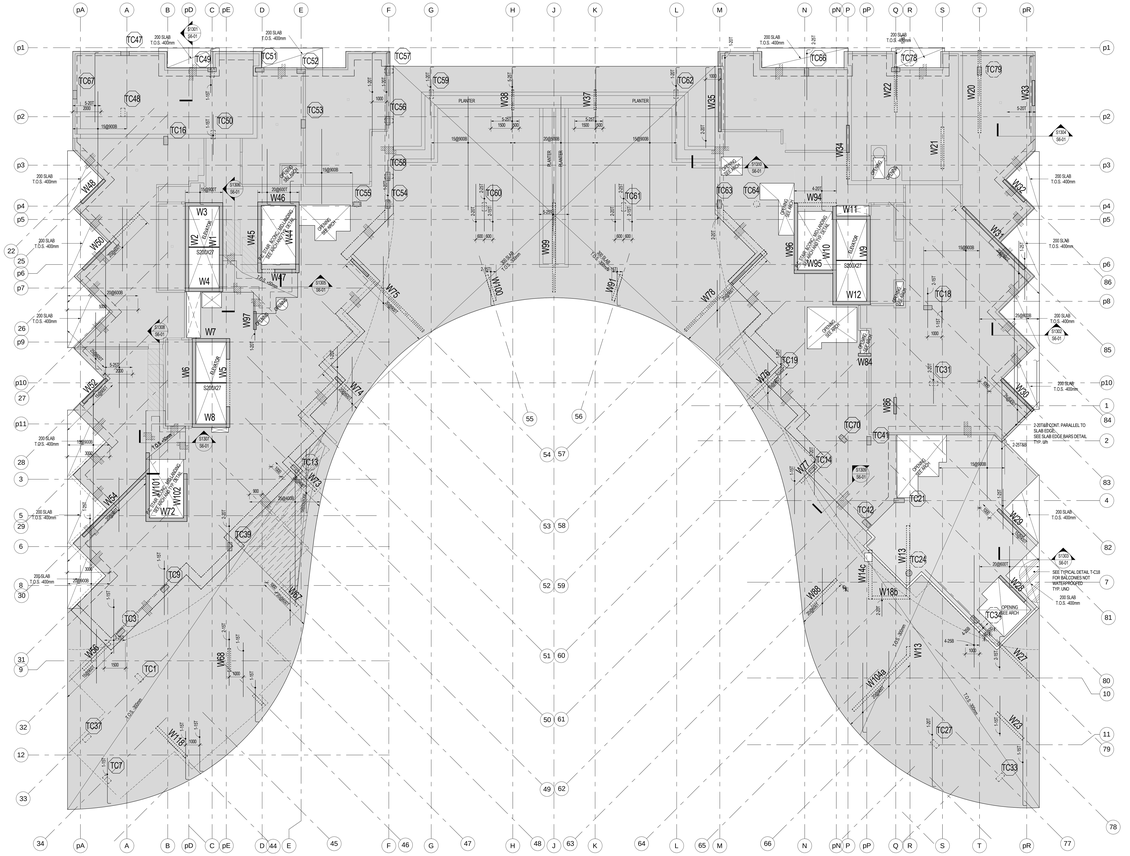
LEVEL 13 FRAMING PLAN - WITH BLL AND TUL

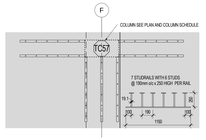
1 : 100



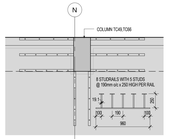
LEVEL 13 FRAMING PLAN - WITH BUL AND TLL

1 : 100





D1 PLAN DETAIL
S1-20 1 : 25



D2 PLAN DETAIL
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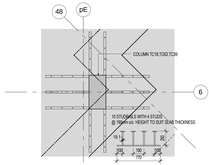

D3 PLAN DETAIL
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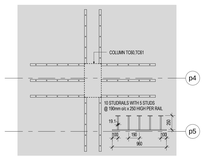
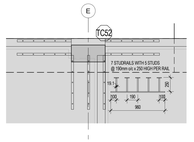


D4 PLAN DETAIL
S1-20 1 : 25



D5 PLAN DETAIL
S1-20 1 : 25

SLAB EDGE BARS DETAIL
1 : 10

REINFORCEMENT PLACEMENT DIAGRAM	
	TUL = TOP UPPER LAYER TLL = TOP LOWER LAYER BUL = BOTTOM UPPER LAYER BLL = BOTTOM LOWER LAYER
SLAB: INTEGRITY BARS: CONCRETE STRENGTH: BOTTOM STEEL: TOP STEEL:	300 MIN. TYP. u/n 3-20M BEW 25 MPa 15@300OEW u/n 15@300TOEW u/n
SLAB: INTEGRITY BARS: CONCRETE STRENGTH: BOTTOM STEEL: TOP STEEL:	200 MIN. 3-20M BEW 25 MPa 15@300OEW u/n 15@300TOEW u/n

SEE PLAN FOR ADDITIONAL REINFORCEMENT

NOTES

1. TOP OF STRUCTURAL SLAB TO BE 0.0 mm BELOW FINISHED FLOOR DATUM ELEVATION WITHIN THE MECHANICAL ROOM AND AT SLAB HIGH POINTS. TOP OF SLAB IS IS DEPED TO DRAINS AS SHOWN ON ARCHITECTURAL DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR DATUM ELEVATION.
2. TOP OF STRUCTURAL SLAB TO BE 0.0 mm BELOW FINISHED FLOOR DATUM ELEVATION WITHIN THE MECHANICAL ROOM AND AT SLAB HIGH POINTS. TOP OF SLAB IS IS DEPED TO DRAINS AS SHOWN ON ARCHITECTURAL DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR DATUM ELEVATION.
3. THE ROOF SLAB AND TERRACE ARE TO BE ACHIEVED BY SLOPING THE TOP OF THE SLAB. NOTE THAT THE ROOF OF SLAB IS FLAT.
4. THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) SUPERIMPOSED DEAD LOADS (SDL) AND SNOW LOADS (S) IN ADDITION TO THE SELF WEIGHT.

	LL	SDL
GENERATOR/COOLING TOWER/MECHANICAL PENTHOUSE	6.0 kPa	2.5 kPa
STAIRS/HALL/LOBBY	4.8 kPa	2.5 kPa
PENTHOUSE SUITES	1.9 kPa	1.25 kPa
ROOF*	1.0kPa	1.25 kPa
GREEN ROOF*	4.8kPa*	1.5 kPa
PLANTERS	1.15kPa	20 kPa*
MECHANICAL/ELECTRICAL ROOM	3.6 kPa	2.5 kPa
TERRACE	4.8 kPa**	6.0 kPa*

* INCLUDES ALLOWANCE FOR SLOPES AND ROOFING MATERIALS
** 4% ALLOWANCE FOR SNOW LOAD OF 1.0 kPa HAS BEEN CONSIDERED.
SEE PLAN FOR ADDITIONAL SNOW LOAD
* ALLOWANCE FOR 0.4% GREEN ROOF DEAD LOAD

5. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 25MPa REFER ALSO TO WALL SCHEDULE.
6. CONCRETE COVER FOR TOP AND BOTTOM BARS IN SLABS TO BE 25 mm.
7. APPROVAL MUST BE OBTAINED FROM ENGINEER FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON PLAN.
8. THE PROJECT ENVIRONMENT MUST CONTACT THE ENGR 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE FOR A REVIEW OF PREPARATIONS.
9. SEE TYPICAL DETAIL DRAWING FOR UNTIES IN NON-LOAD BEARING BLOCK WALLS.
10. SEE COLUMN AND BEAM SCHEDULES, WALL ELEVATIONS.
11. SEE ALSO TYPICAL NOTES AND DETAILS.
12. SEE ARCHITECTURAL DRAWINGS FOR EXTENT, SEE ARCHITECTURAL AND MECHANICAL DRAWINGS. REINFORCE ALL PER TYPICAL DETAIL.
13. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR LOCATION, EXTENT AND SIZE OF HOUSEKEEPING PADS. REINFORCE PADS WITH 6MAT 10@150 BOTH WAYS (MAIN STLL)@ 150 BOTH WAYS (MAIN STLL)@ 300 CENTRE DOWELS @ 300 LONG
14. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR LOCATION, EXTENT AND SIZE OF FLOATING FLOOR. REINFORCE SLABS WITH 15M@300 EW (C) EPOXY COATED
15. PROVIDE TLS FOR ALL SLAB REINFORCEMENT
16. PROVIDE CONTINUOUS TEMPERATURE STEEL TOP AND BOTTOM, HOOKED AT EDGE OF SLAB AND OPENINGS, IN ADDITION TO REINFORCEMENT SHOWN ON PLAN.
17. ADD 2-20TAB CONT. AT PERIMETER BEND BARS TO SUIT SLAB EDGE. SEE SLAB EDGE BARS DETAIL.

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No.	Revision	Date
1	GREEN ROOF LOAD REVISION	NOV 16,2015

7	ISSUED FOR STEEL TENDER	DEC 18,2015
6	BUILDING PERMIT RESUBMISSION	SEPT 23,2015
5	BUILDING PERMIT RESUBMISSION	JULY 22,2015
2	BUILDING PERMIT SUBMISSION	JUNE 12,2015
1	ISSUED FOR MT REVIEW	MAY 01,2015

No.	Issued For	Date

AQUAVISTA
AT BAYSIDE TORONTO

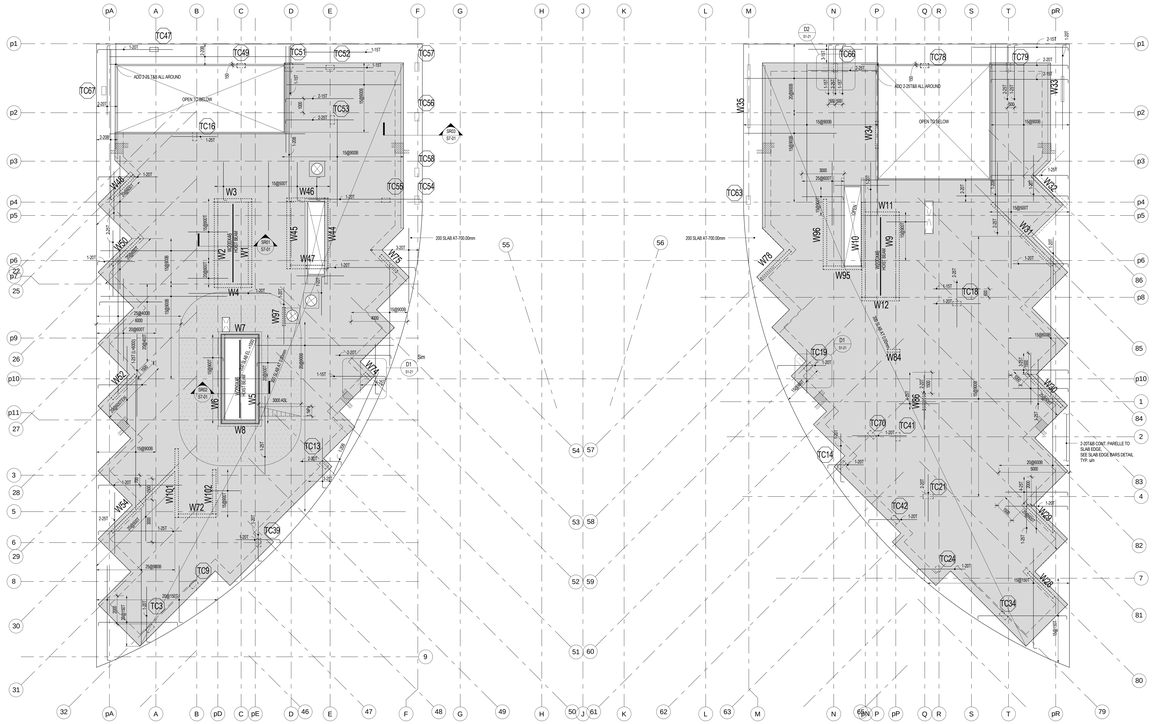
Drawing Title
LEVEL 13/PH2/ MECH. FLOOR FRAMING PLAN

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	As indicated
Drawn by	DC
Checked by	IA/BBS
Project No.	2014/0031
Date	DEC.18.2015
Drawing No.	S1-20

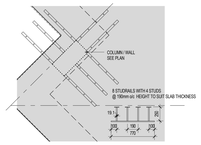
LEVEL 14 FRAMING PLAN

1 : 100



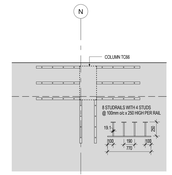
SLAB EDGE BARS DETAIL

1 : 10



D1 S1-21 PLAN DETAIL

1 : 25



D2 S1-21 PLAN DETAIL

1 : 25

1. TOP OF STRUCTURAL SLAB TO BE 0.0 mm ABOVE ROOF DATUM ELEVATION EXCEPT AS CROSSED AND NOTED AND AS SLOPED TO DRAINS AS SHOWN ON THE ARCHITECTURAL DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR DATUM ELEVATION.
2. ROOF DRAINAGE SLOPES ARE TO BE ACHIEVED BY SLOPING THE TOP OF THE SLAB. NOTE THAT THE SOFFIT OF SLAB IS FLAT.
3. THE STRUCTURAL SLAB HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS (LL) AND SUPERIMPOSED DEAD LOADS (SDL), AND SNOW LOADS (S) IN ADDITION TO THE SELF WEIGHT.

	LL	SDL
ROOF AREA	1.12 kPa=AL	2.2 kPa *
GREEN ROOF **	1.12 kPa=AL	1.7 kPa*
PLYWELL ROOF	1.12 kPa=AL	1.1 kPa*

* INCLUDES ALLOWANCE FOR SLOPES AND ROOFING MATERIALS

** INCLUDES ALLOWANCE FOR 0.2 kPa GREEN ROOF DEAD LOAD.

4. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25 MPa AT 28 DAYS. REFER ALSO TO COLUMN AND WALL ELEVATION DRAWINGS.
5. PROVIDE 2-20M TOP AND BOTTOM BARS IN SLABS TO BE 25 mm. REINFORCING TO BE CHAIRED TO MINIMUM PROPER COVER.
6. APPROVAL MUST BE OBTAINED FROM ENGINEER FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON PLAN.
7. THE PROJECT SUPERINTENDENT MUST CONTACT THIS OFFICE 24 HOURS PRIOR TO PLACING CONCRETE FOR REVIEW OF REINFORCING AND OPENINGS.
8. SEE ALSO TYPICAL NOTES AND DETAIL DRAWINGS.
9. REFER TO BEAM AND COLUMN SCHEDULES, WALL ELEVATIONS.
10. PROVIDE CONTINUOUS TEMPERATURE STEEL TOP AND BOTTOM, HOOKED AT EDGE OF SLAB AND OPENINGS, IN ADDITION TO REINFORCEMENT SHOWN ON PLAN.
11. PROVIDE TLS FOR ALL SLAB REINFORCEMENT.
12. ADD 2-20TAB CONT. AT PERIMETER BEND BARS TO SUIT SLAB EDGE. SEE SLAB EDGE BARS DETAIL.

TUL = TOP UPPER LAYER
TLL = TOP LOWER LAYER
BUL = BOTTOM UPPER LAYER
BLL = BOTTOM LOWER LAYER

REINFORCEMENT PLACEMENT DIAGRAM

SLAB	300 MIN.
INTEGRITY BARS:	3-20M BEW
CONCRETE STRENGTH:	25 MPa
BOTTOM STEEL:	15@400EW u/n
TOP STEEL:	15@400EW u/n

SLAB	300 MIN. BALCONY
INTEGRITY BARS:	3-20M BEW
CONCRETE STRENGTH:	25 MPa
BOTTOM STEEL:	15@400EW u/n
TOP STEEL:	15@400EW u/n

SEE PLAN FOR ADDITIONAL REINFORCEMENT

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No.	Revision	Date
9	GREEN ROOF LOAD REVISION	NOV 16.2015

No.	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
4	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
3	BUILDING PERMIT RESUBMISSION	JULY 22.2015
2	BUILDING PERMIT SUBMISSION	JUNE 12.2015
1	ISSUED FOR MT REVIEW	MAY 01.2015

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title

ROOF FRAMING PLANS

Project

Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	As indicated
Drawn by	DC
Checked by	IA/BBS
Project No.	2014/0031
Date	DEC.18.2015
Drawing No.	S1-21

Plot Date: 12/18/2015 12:07:53 PM

CONCRETE COLUMN SCHEDULE (LEVEL 2 AND BELOW)

| COLUMN NUMBER | | | GC1 | GC2 | GC3 | GC4 | GC5 | GC6 | GC7 | GC8 | GC10 | GC11 | GC12 | GC13 | GC14 | GC15 | GC16 | GC17 | GC18 | GC19 | GC21 | GC22 | GC23 | GC24 | GC25 | GC44 | GC27 | GC28 | GC29 | GC30 | | | | | | | | | | | | | GC31 | GC32 | GC33 | GC34 | GC35 | GC36 | | | | | | | | | | | | | | | | | | | GC37 | | GC38 | GC39 | | | | | | | | | | | | | | | | | | | | | | | | | | | | GC40 | COLUMN NUMBER |
|---|---|---

CONCRETE COLUMN SCHEDULE (LEVEL 2 ABOVE)

	TC1	TC2	TC3	TC4	TC5	TC6	TC7	TC8	TC9	TC10	TC11	TC12	TC13	TC14	TC15	TC16	TC17	TC18	TC19	TC20	TC21	TC23	TC24	TC25	TC26	TC27	TC30	TC31	TC32	TC34	TC35	TC36	TC37	TC38	TC39	TC41	TC42	TC43	TC45	TC44	TC46	TC47	TC48	TC50	TC49	TC51	TC52	TC53	TC54	TC55	TC56	TC57	TC58	TC59	TC60	TC61	TC62	TC63	TC64	TC65	TC66	TC67	TC68	TC70	TC71	TC72	TC73	TC74	TC75	TC76	TC77	TC78	TC79	
LEVEL 14																																																																																												LEVEL 14
124550			300x600 10-35M V. 10M@300 25 MPa						300x600 8-25M V. 10M@300 25 MPa			300x600 8-25M V. 10M@300 25 MPa	300x600 8-25M V. 10M@300 25 MPa			300x600 8-25M V. 10M@300 25 MPa		300x600 8-25M V. 10M@300 25 MPa	300x600 8-25M V. 10M@300 25 MPa		300x740 SEE SETAIL 10M@200 35 MPa			400D 8-20M V. 10M@300 25 MPa						300x600 8-25M V. 10M@300 25 MPa																		

LEVEL 1 BEAM SCHEDULE

BEAM NUMBER	SIZE	BOTTOM BARS								TOP BARS								STIRRUPS			REMARKS
		No.	T_1	T_2						No.	T_1	T_2						T_1	T_2	T_3	
BM101	2000X1290/1500	12	35				BLL			6	30			TLR				15		10@150 RE	TRIPLES
		10	15				SHEF			5	35			TLR	2000			15		@300 REM	DOUBLES
										5	35			2000	TLL						
BM102	2000X1500	22	35				BLL			9	30		2600	TLR				15		@125	FIVE SETS
		22	35				BLR			6	35		1400	TLR							
		10	15				SHEF			12	30			TLR	3600		4900				
										8	35			TLR	2000		2000				
										6	30			TLL	2000		2000				
BM103	2000X1500	12	35				BLL			12	30		FROM BM102		TLR			15		5@125 RE	TRIPLES
		12	35				BLR			8	35		FROM BM102		TLR			15		6@200 LE	TRIPLES
		10	15				SHEF			6	30		FROM BM102		TLL			15		@300 REM	DOUBLES
										8	30				TLR	2600					
										9	35				TLL	2000					
BM104	2000X1500	22	35				BLL			6	35		2600	TLR				15		@150	FIVE SETS
		12	35				BLR			7	35		1400	TLR							
		12	15				SHEF			12	35			TLR	3400		4300				
										5	35			TLR	2000		2000				
										5	35			TLL	2000		2000				
BM105	2000X1850	14	35				BLL			12	35		FROM BM104		TLR			15		10@100 RE	FIVE SETS
		14	35				BLR			5	35		FROM BM104		TLR			15		@200 REM	FIVE SETS
		16	15				SHEF			5	35		FROM BM104		TLL						
										5	35				TLR	4000					
										5	35				TLL	2700					
BM106	2000X800	6	35				BLL			6	35			TLR			1	15		@125	FOUR SETS
		12	30				BLL			3	30			TLR			1				
		16	35				BLR														
		4	15				2nEF														
BM107	2000X1500	7	30				BLL			6	30		3700	TLR				10		@300	TRIPLES
		12	15				SHEF			8	30			TLR	3300		4000				
										7	30			TLL	2100		2100				
BM108	2000X1500	16	30				BLL			8	30		FROM BM107		TLR			10		5@125 LE	TRIPLES
		12	15				SHEF			7	30		FROM BM103		TLL			10		@300 REM	TRIPLES
										17	35				TLR	4000		4300			
										17	35				TLL	2000		2000			
BM109	2000X1500	19	35				BLL			17	35		FROM BM108		TLR			15		@150	FIVE SETS
		14	35				BLR			17	35		FROM BM108		TLL						
		12	15				SHEF			11	35				TLR	4300		3100			
										8	30				TLL	2000		2000			
BM110	2000X1100	15	35				BLL			11	35		FROM BM108		TLR			10		@300	TRIPLES
		8	15				SHEF			8	35		FROM BM109		TLL						
										6	35				TLR	3100					
										5	35				TLL	1400		1400			
BM111	2000X1100	6	25				BLL			6	35		FROM BM105		TLR			10		@300	TRIPLES
		8	15				SHEF			5	35		FROM BM110		TLL						
										7	35				TLR	3100		4300			
										7	30				TLL	2000		2200			
BM112	2000X1100	10	30				BLL			7	35		FROM BM107		TLR			10		8@200 RE	TRIPLES
		10	30				BLR			7	30		FROM BM111		TLL			10		10@150 LE	TRIPLES
		8	15				SHEF			8	35				TLR	4300	3100	10		@300 REM	TRIPLES
										7	30				TLL	2000		2200			
BM113	2000X1100	10	30				BLL			8	35		FROM BM107		TLR			10		@300	TRIPLES
		10	30				BLR			7	30		FROM BM112		TLL						
		8	15				SHEF			9	35				TLR	2600					
BM114	2000X1500	18	35				BLL			6	35		2600	TLR				15		5@100 RE	FIVE SETS
		14	35				BLR			5	35		1400	TLR				15		@200 REM	TRIPLES
		10	15				SHEF			16	35				TLR	3400		4900			
										9	35				TLL	2000		2000			
BM115	2000X1500	16	35				BLL			16	35		FROM BM107		TLR			15		10@150 RE	FIVE SETS
		12	35				BLR			9	35		FROM BM114		TLL			15		@300 REM	TRIPLES
		12	15				SHEF			12	35				TLR	3600					
										8	35				TLL	2000					
BM116	2000X1500	15	35				BLL			12	30			4100	TLR				15	@150	FOUR SETS
		11	30				BLR			10	25			2000	TLR						
		12	15				SHEF			15	35				TLR	4100		4400			
										12	35				TLL	2100		2100			

LEVEL 1 BEAM SCHEDULE

BEAM NUMBER	SIZE	BOTTOM BARS								TOP BARS								STIRRUPS			REMARKS
		No.	T_1	T_2						No.	T_1	T_2						T_1	T_2	T_3	
BM117	2000X1000	15	35				BLL			15	35		FROM BM116		TLL			15		5@100 LE	FOUR SETS
		11	30				BLR			12	35		FROM BM114		TLL			15		@150 REM	TRIPLES
		12	15				SHEF			15	35				TLR	4400	3100				
										12	35				TLL	2100	2100				
BM118	2000X1100	13	30				BLL			15	35		FROM BM107		TLL			10		@200	DOUBLES
		8	15				SHEF			12	35		FROM BM117		TLL						
										8	30				TLR	3000	3100				
										7	30				TLL	1400	1400				
BM119	2000X1100	10	30				BLL			8	30		FROM BM118		TLR			10		@200	DOUBLES
		8	15				SHEF			7	30		FROM BM118		TLL						
										9	35				TLR	3100	4300				
										8	30				TLL	1400	1400				
BM120	2000X1100	10	35				BLL			9	35		FROM BM118		TLR			10		2@100 LE	TRIPLES
		10	30				BLR			8	30		FROM BM119		TLL			10		@200 REM	TRIPLES
		8	15				SHEF			10	35				TLR	FROM BM121					
										6	30				TLL	FROM BM121					
BM121	2000X1100	8	25				BLL			10	35	4200			TLR		5800	10		@200	DOUBLES
		8	15				SHEF			6	30	2600			TLL		2800				
BM122	2000X1500	18	35				BLL			10	35		FROM BM121		TLR			15		2N@125 RE	TRIPLES
		10	30				BLR			6	30		FROM BM121		TLL			15		3N@125 LE	TRIPLES
		8	15				SHEF			10	35				TLR	4800		15		@200 REM	TRIPLES
										4	30				TLL	2700					
BM123	2000X1970/1500	20	35				BLL			7	35		4400		TLR			15		2N@125 RE	DOUBLES
		17	35				BLR			5	30		2500		TLL			15		N@250 LE	DOUBLES
		10	15				SHEF			12	35				TLR	6400	5000	15		@300 REM	DOUBLES
										4	30				TLL	2800	2800				
BM124	2000X900	8	25				BLL			12	35		FROM BM123		TLR			15		5@200 RE	DOUBLES
		8	15				SHEF											15		N@250 LE	DOUBLES
										DELETED										@300 REM	DOUBLES
BM125	2000X1500	12	35				BLL			9	30		5000		TLR			10		11@200 RE	TRIPLES
		12	15				SHEF			12	35				TLR	4800	7200	10		10@200 LE	TRIPLES
										10	30				TLL	3000	3000	10		@300 REM	TRIPLES
BM126	2000X1500	14	35				BLL			12	35		FROM BM125		TLR			10		3N@150 RE	TRIPLES
		10	30				BLR			10	30		FROM BM125		TLL			10		7@200 LE	TRIPLES
		10	15				SHEF			12	35				TLR	4800	4400	10		@300 REM	TRIPLES
										10	30				TLL	2300	2300				
BM127	2000X1100	13	35				BLL			12	35		FROM BM125		TLR			10		7@300 RE	TRIPLES
		8	15				SHEF			10	30		FROM BM126		TLL			10		7@300 LE	TRIPLES
										8	35				TLR	4800	4400	10		@300 REM	TRIPLES
										8	30				TLL	2300	2300				
BM128	2000X1100	15	35				BLL			8	35		FROM BM125		TLR			10		4N@100 RE	TRIPLES
		8	15				SHEF			8	30		FROM BM127		TLL			10		7@200 LE	TRIPLES
										8	35				TLR	4800		10		@300 REM	TRIPLES
										8	30				TLL	2300					
BM129	4000X900	5	20				BLL			3	25		5000		TLR			10		@300	
		8	15				SHEF			2	15		2300		TLR						
										2	15		2300		TLL						
										3	25				TLR	5100	5800				
										2	25				TLR	2300	5300				
										5	25				TLL	2300	5300				
BM129A	4000X900	3	20				BLL			3	25		FROM BM125		TLR			10		@300	
		8	15				SHEF			2	25		FROM BM125		TLR						
										5	25		FROM BM125		TLL						
BM130	4000X900	3	20				BLL			3	25		FROM BM125		TLR			10		@300	
		2	25				BLL			2	25		FROM BM129		TLR						
		2	25				BLR			5	25		FROM BM129		TLL						
		8	15				SHEF			3	25				TLR	5800					
										3	25				TLR	4300	5100				
										2	25				TLR	3300	5800				
										5	25				TLL	3300	5800				
BM129A	4000X900	3	20				BLL			3	25		FROM BM125		TLR			10		@300	
		8	15				SHEF			2	25		FROM BM129		TLR						
										5	25		FROM BM129		TLL						

LEVEL 1 BEAM SCHEDULE

BEAM NUMBER	SIZE	BOTTOM BARS								TOP BARS								STIRRUPS			REMARKS
		No.	T_1	T_2						No.	T_1	T_2						T_1	T_2	T_3	
BM131	4000X900	3	20				BLL			3	25		FROM BM129		TLR			10		@300	
		2	25				BLR			2	25		FROM BM129		TLR						
		8	15				SHEF			5	25		FROM BM129		TLL						
										3	25				TLR	5200	7000				
										2	25				TLR	2700	5900				
										5	25				TLL	2700	5900				
BM131A	4000X900	3	20				BLL			3	25		FROM BM131		TLR			10		@300	
		8	15				SHEF			2	25		FROM BM131		TLR						
										5	25		FROM BM131		TLL						
BM132	4000X900	5	20				BLL			3	25		FROM BM125		TLR			10		@300	
		2	15				BLR			2	25		FROM BM125		TLR						
		8	15				SHEF			5	25		FROM BM125		TLL						
										3	25				TLR	6100					
										2	20				TLR	2500					
										2	20				TLL	2500					

LEVEL 2 BEAM SCHEDULE

BEAM NUMBER	SIZE	BOTTOM BARS								TOP BARS								STIRRUPS			REMARKS
		No.	T_1	T_2						No.	T_1	T_2						T_1	T_2	T_3	
BM201	700X600	6	40				BLL			6	25		5000	TLR				10		@125	IN TRIPLES
										6	45			TLR	3400		3700				
										6	45			TNL	1300		1300				
										2	45			TLL	1300		1300				
BM202	1100X600	8	35				BLL			6	45		FROM BM201		TLR			15		@100	IN TRIPLES
		8	30				BLR			6	45		FROM BM201		TNL						
										2	45		FROM BM201		TLL						
BM203	1100X600	8	30				BLL			5	45		FROM BM202		TLR			10		@150	IN DOUBLES
										3	45		FROM BM202		TNL						
										8	45		FROM BM202		TLL						
BM204	1100X600	8	35				BLL			5	45		FROM BM203		TLR			15		@100	IN TRIPLES
		8	30				BLR			3	45		FROM BM203		TNL						
										8	45		FROM BM203		TLL						
BM205	1600X600	5	35				BLL			5	45		FROM BM204		TLR			15		@100	IN TRIPLES
		5	30				BLL			3	45		FROM BM204		TNL						
		8	30				BLR			8	45		FROM BM204		TLL						
BM206	1600X400	7	35				BLL			7	30		7800	TLR				15		10@75RE	IN FOUR SETS
		10	30				BLL			6	35		2300	TLR				15		@300REM	IN DOUBLES
		8	30				BLR			16	30			TLR	3400						
										16	35			TLL	2200						
BM207	700X400	7	30				BLL			7	25		1500	TLR			1500	15		10@75LE	IN TRIPLES
		4	30				BLR			7	30			TLL				15		@150REM	IN TRIPLES
BM208	800X600	2	25				BLL			3	30		3100	TLR				10		@100	IN DOUBLES
		2	20				BLL			5	30			TLR	2900		2600				
										4	30			TLR	1700		1700				
										4	30			TLL	1700		1700				
BM209	800X600	8	35				BLL			5	30		FROM BM208		TLR			15		@100	IN TRIPLES
		8	35				BLR			2	35		FROM BM208		TNL						
										4	30		FROM BM208		TLL						
										4	35				TLR	4900	1				
										2	25				TLL	3300	1				
BM210	1200X600	6	35				BLL			4	35		3000	TLR				10		@100	IN TRIPLES
		4	30				BLL			2	35		2300	TLR							
										6	30			TLR	3900		2200				
										4	35			TLR	2300		1000				
										4	30			TLL	2300		1000				
BM211	1200X600	7	30				BLL			6	30		FROM BM210		TLR			10		@100	IN TRIPLES
										4	35		FROM BM210		TNL						
										4	30		FROM BM210		TLL						
										5	30				TLR	1900	1				
										3	30				TLR	1900	1				
BM212	1000X600	9	45				BLL			9	45		7000	TLR			1000	15		@100	IN FOUR SETS
		9	45				BLR			5	30		2000	TLL			3500				
										5	35			TLL	1900		1900				
BM213	1000X600	9	45				BLL			9	45		2000	TLR				15		@100	IN FOUR SETS
		6	35				BLR			9	45		2000	TLL							
BM214/BM216	1600X1000/600	10	30				BLL			6	30		4000	TLR				10		10@140RE	IN DOUBLES
										4	30		2300	TLR				10		10@140LE	IN TRIPLES
										8	30			TLR	5600		5600	10		@140REM	
										5	35			TLR	2300		2300				
										4	30			TLL	2300		2300				
BM215/BM217	1600X1000/600	10	30				BLL			8	30		FROM BM214/BM216		TLR			10		10@140LE	IN TRIPLES
										6	30		FROM BM214/BM216		TLR			10		10@140RE	IN DOUBLES
										4	30		FROM BM214/BM216		TNL			10		@140REM	
										6	30				TLR	4800	1				
										4	30				TLR	2300	1				
BM218	520X1500	6	30				BLL			3	30		7000	TLR				15		10@150 RE	IN DOUBLES
		4	30				BLR			2	25		2500	TLR				15		14@225 LE	
		10	15				SHEF			4	25		2500	TLR				15		@300 REM	
										3	30			TLL	5500		5500				
										3	30			TLR	2500		2500				
										6	30			TLL	2500		5500				
BM218a	520X1500	6	30							3	30		FROM BM218					10		@200	
		10	15				SHEF			3	30		FROM BM218								
										6	30		FROM BM218								

LEVEL 2 BEAM SCHEDULE

BEAM NUMBER	SIZE	BOTTOM BARS								TOP BARS								STIRRUPS			REMARKS
		No.	T_1	T_2						No.	T_1	T_2						T_1	T_2	T_3	
BM219	520X1500	6	30				BLL			3	30				TLR			15		@300	
		8	25				BLL			3	30		FROM BM218								
		10	15				SHEF			6	30		FROM BM218								
										3	30				TLR	4000	1				
										2	30				TLR	2300	1				
										7	25				TLL	2300	1				
BM220/BM224	600X1200	3	25				BLL			2	15		5000	TLR				10		@300	
		2	30				BLL			2	30			TLR	3200		4000				
		8	15				SHEF			2	30			TLR	2300		2300				
										2	15			TLL	2300		2300				
BM221/BM225	600X1200	3	25				BLL			2	30		FROM BM220/BM224					10		@300	
		8	15				SHEF			2	30		FROM BM220/BM224								
										2	15		FROM BM220/BM224								
										2	15				TLR	4000					
BM222	1500X600	5	30				BLL			7	30		3400					10		11@125LE	IN DOUBLES
		6	35				BLL			2	30		1900					10		2N@75RE	IN DOUBLES
										7	30				TLR	4600	5500	10		@275REM	IN DOUBLES
										4	35				TLR	2300	2300				
										3	35				TLL	1900	1900				
BM223	1500X600	7	30				BLL			7	30		FROM BM222					10		11@75LE	
										4	35		FROM BM222					10		@150REM	
										3	35		FROM BM222								
										4	30				TLR	2700					
										2	30				TLR	1500					
BM226	700X1500	5	30				CONT. BLL			9	20				CONT. TLR			10		@300	
		12	15				SHEF														

No	Revision	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
No	Issued For	Date

stephenson ENGINEERING
2500 Victoria Park Ave, Suite 402
Toronto ON M2J 5A9 T.tel.(416) 445 9975
www.stephenson-eng.com I info@stephenson-eng.com

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Project

Hines TRIDEL

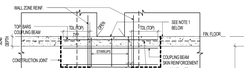
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Drawing Title

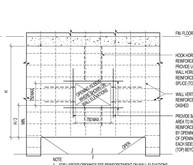
BEAM SCHEDULES

Scale	1 : 1
Drawn by	DC
Checked by	BK/BBS
Project No.	2014-00331
Date	DEC.18.2015
Drawing No.	S2-03

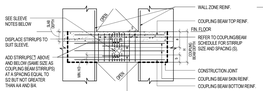
Plot Date: 12/18/2015 12:08:00 PM



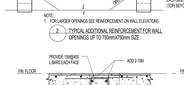
1 TYPICAL COUPLING BEAM REINFORCEMENT DETAIL



2 TYPICAL ADDITIONAL REINFORCEMENT FOR WALL OPENINGS UP TO 700mmX700mm SIZE



3 TYPICAL ADDITIONAL REINFORCEMENT COUPLING BEAM SLEEVES UP TO H/4



4 TYPICAL DETAIL AT TOP OF WALLS AND BELOW OPENINGS WHERE COUPLING BEAM IS NOT PROVIDED

SHEAR WALL NOTES:
1. SHEAR WALL ELEVATIONS SERVE THE PURPOSE OF DEFINING THE ZONE, DISTRIBUTED AND COUPLING BEAM REINFORCEMENT. ALONG WITH THE SIZE OF THE SHEAR WALLS, COUPLING BEAMS AND CONCRETE STRENGTH. THE ELEVATIONS DO NOT DEFINE THE ENTIRE STRUCTURE AND ARE TO BE USED IN CONJUNCTION WITH ALL DETAILS, THE STRUCTURAL ELEMENTS (CLG.BMS, SLAB) BOUND, FOUNDATION SYSTEM, ETC.) ARE SHOWN CONCEPTUALLY FOR CLARIFICATION ONLY. FOR SIZE, GEOMETRY, STEPS, ETC. OF THE GRAVITY ELEMENTS REFER TO THE APPROPRIATE PLANS, DETAILS AND SCHEDULES.
2. CONCRETE STRENGTHS TO BE NOTED IN WALL ELEVATIONS.
3. ALL REINFORCEMENT, DETAILING AND CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF CAN/CSA A23.3 AND MEET THE REQUIREMENTS FOR EXPOSURE CLASS AS DEFINED IN TABLE 1 OF CSA STANDARD CAN/CSA-A23.1 LATEST EDITION. REFER TO THE SPECIFICATIONS.
4. PROVIDE WALL REINFORCEMENT IN ACCORDANCE WITH THE VALUES INDICATED ON THE WALL ELEVATIONS OR PLANS. WHERE 10MR IS INDICATED PROVIDE THE NOMINAL WALL REINFORCEMENT, AS SHOWN IN TABLE 2.

TABLE 1: NOMINAL WALL REINFORCEMENT (10MR)

WALL THICKNESS	NOMINAL WALL REINFORCEMENT	
	HORIZONTAL	VERTICAL
150	10@300 (CENTER) (2) 10@450 (EXTERIOR)	
200	10@400 HEF	10@400 HEF
250	10@400 HEF	10@400 HEF
300	10@300 HEF	10@300 HEF
350	10@300 HEF	10@300 HEF
400	10@300 HEF	10@300 HEF

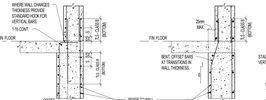
WALL THICKNESS	NOMINAL WALL REINFORCEMENT	
	HORIZONTAL	VERTICAL
450	10@400 HEF	10@300 HEF
500	10@400 HEF	10@300 HEF
550	10@300 HEF	10@300 HEF

5. WALL REINFORCEMENT IS VERTICAL AND HORIZONTAL EACH FACE (HEF) UNLESS NOTED OTHERWISE.
6. PROVIDE TIES FOR DISTRIBUTED VERTICAL REINFORCEMENT IF THE BAR SIZE IS LARGER THAN 20M OR IF BAR SPACING IS LESS THAN THAT OUTLINED IN TABLE 2. REFER TO DETAIL 7/S39 FOR ADDITIONAL INFORMATION.
7. UNLESS OTHERWISE SHOWN PROVIDE DOWELS FROM SHEAR WALL, CAPS, OR FOOTINGS INTO SHEAR WALLS TO MATCH VERTICALS IN FIRST LIFT OF WALLS. SEE DETAIL 13.
8. UNLESS NOTED OTHERWISE AT TOPS OF ALL SHEAR WALLS PROVIDE 15 @ 400 DOWELS FROM WALL TO SLAB.
9. WHERE WALL IS DISCONTINUOUS ABOVE SLAB SEE DETAIL 14.
10. REFER TO DETAIL 7/S39 FOR TIES IN WALLS THICKER THAN 300mm.
11. REFER TO DETAIL 7/S39 (t – 100MR) = 450MPa OR 7/S39 (t – 100MR) FOR LENGTHS.
12. PROVIDE 15.0 CLASS B (TOP) FOR ALL HORIZONTAL BARS FOR CLASS A23.3 R1.2.4
(REFER TO DETAIL 7/S39) (t – 100MR) = 450MPa OR 7/S39 (t – 100MR) FOR LENGTHS.
13. MINIMUM DOWEL LENGTH SHALL BE 24"LD BOTTOM.
14. ALL WALLS SHALL BE CONSTRUCTED WITH A MINIMUM OF 2 LAYERS OF WALL UNLESS NOTED OTHERWISE.
15. FOR WALLS THAT ARE UNPACKED FOR THE CYCORES OR MORE PROVIDE EITHER CONTINUOUS VERTICAL REINFORCEMENT FOR THE ENTIRE UNSUPPORTED HEIGHT OR USE MECHANICAL COUPLER AT THE LOCATION OF THE INTERMEDIATE SPLICE. PROVIDE TENSION LAP SPLICE (TOP) FOR ALL HORIZONTAL WALL REINFORCEMENT. IF BARS OF DIFFERENT DIAMETER ARE SPLICED, USE THE SPLICE LENGTH OF THE LARGER BAR.
16. THE CONTRACTOR SHALL REVIEW ALL ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS FOR EXACT DIMENSIONS AND LOCATIONS OF WALL OPENINGS. THE CONTRACTOR SHALL PROVIDE FOR THE ENGINEERS REVIEW, SLEEVING DRAWINGS SHOWING THE PROPOSED LOCATION AND INVERT (DIMENSIONED FROM THE SLAB DATUM) AND SIZES FOR ALL SLEEVES 75mm DIAMETER AND LARGER. NO OPENINGS OTHER THAN THOSE WHICH ARE INDICATED ON PLAN OR ELEVATION SHALL BE MADE WITHOUT THE APPROVAL OF THE ENGINEER.
17. PROVIDE 40mm CLEAR CONCRETE COVER FOR ALL ABOVE GRADE WALLS WHICH ARE EXPOSED TO FIRE ON BOTH SIDES SMULTANEOUSLY AS DEFINED BY NBCC APPENDIX D.

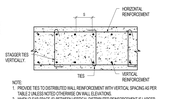
TABLE 2: TIES FOR DISTRIBUTED VERTICAL REINFORCEMENT

WALL THICKNESS (MM)	10M		TIE SPACING FOR DISTRIBUTED VERTICAL REINFORCEMENT IN 4 x 450MPa					
			15M		20M		25M	
	VERTICAL BARS SPACING (mm)	TIE VERTICAL SPACING (mm)	VERTICAL BARS SPACING (mm)	TIE VERTICAL SPACING (mm)	VERTICAL BARS SPACING (mm)	TIE VERTICAL SPACING (mm)	VERTICAL BARS SPACING (mm)	TIE VERTICAL SPACING (mm)
200	200	100	400	200	600	300		
250	250	100	400	200	600	300		
300	300	100	400	200	600	300	600	300
350	350	100	400	200	600	300	600	300
400	400	100	400	200	600	300	600	300
450	450	100	400	200	600	300	600	300
500	500	100	400	200	600	300	600	300
550	550	100	400	200	600	300	600	300

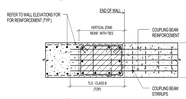
NOTES:
1. TIES FOR DISTRIBUTED VERTICAL REINFORCEMENT ARE 10M.
2. THE TABLE IS BASED ON 5 x 65MPa FOR 5 = 65MPa REDUCE TIE VERTICAL SPACING IN TABLE BY 44.37% ONLY 2 TS.
3. DISTRIBUTED VERTICAL REINFORCEMENT WITH BAR SPACINGS LESS THAN THAT INDICATED FOR 10M, 15M AND 20M BARS SHALL BE TIED WITH MINIMUM TIE VERTICAL SPACING AS INDICATED.
4. DISTRIBUTED VERTICAL REINFORCEMENT WITH BAR SIZE LARGER THAN 20M SHALL BE TIED AT MINIMUM TIE VERTICAL SPACING INDICATED.
5. SEE ALSO DETAIL 7.



6 TYPICAL DETAIL AT WALL THICKNESS TRANSITIONS

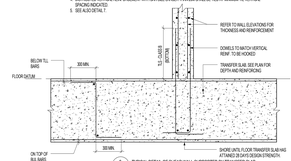


7 TYPICAL TIE DETAIL FOR DISTRIBUTED VERTICAL WALL REINFORCEMENT

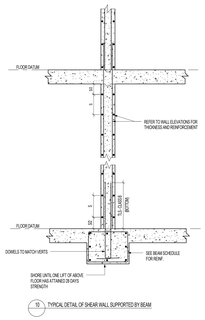


5 TYPICAL DETAIL AT BOTTOM OF WALLS AND ABOVE OPENINGS WHERE COUPLING BEAM IS NOT PROVIDED

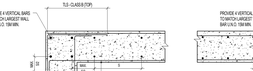
8 TYPICAL COUPLING BEAM DETAIL PLAN DETAIL



9 TYPICAL DETAIL OF SHEAR WALL SUPPORTED BY TRANSFER SLAB



10 TYPICAL DETAIL OF SHEAR WALL SUPPORTED BY BEAM

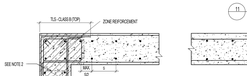


TYPE C - CORNER

TYPE T - INTERSECTION

NOTE:
S - SPACING OF VERTICAL DISTRIBUTED REINFORCEMENT. SEE WALL ELEVATIONS.
1. REFER TO TABLE 2 TO DETERMINE IF TIES FOR DISTRIBUTED VERTICAL REINFORCEMENT ARE REQUIRED. SEE DETAIL 7 WHEN TIES ARE REQUIRED

11 TYPICAL WALL DETAILS WITHOUT ZONE REINFORCEMENT



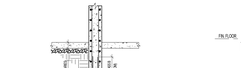
TYPE C - CORNER ZONE

TYPE T - INTERSECTION ZONE

NOTE:
S - SPACING OF VERTICAL DISTRIBUTED REINFORCEMENT. SEE WALL ELEVATIONS.
1. REFER TO TABLE 2 TO DETERMINE IF TIES FOR DISTRIBUTED VERTICAL REINFORCEMENT ARE REQUIRED. SEE DETAIL 7 WHEN TIES ARE REQUIRED
2. PROVIDE CLEAR SPACE BETWEEN ADJACENT VERTICAL ZONE BARS IS LARGER THAN 150mm. PROVIDE TIES AT EVERY VERTICAL ZONE BAR. WHEN THE CLEAR SPACE IS ≤ 150mm, TIES MAY BE PROVIDED AT EVERY OTHER VERTICAL ZONE BAR.

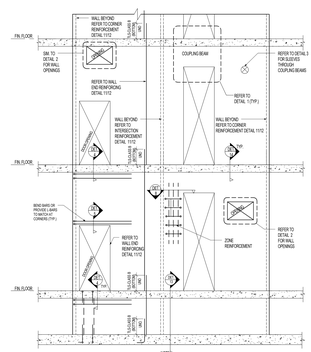
12 TYPICAL WALL DETAILS WITH ZONE REINFORCEMENT

TYPE E - END ZONE

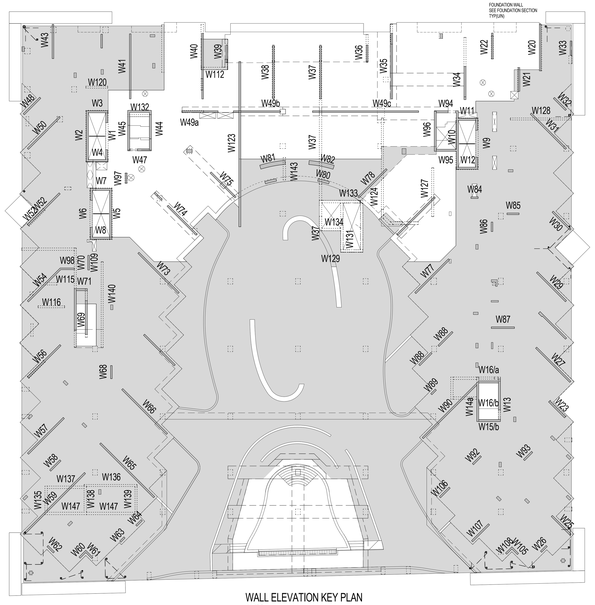


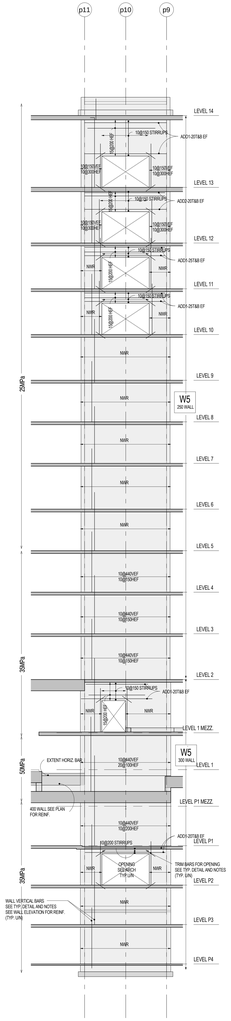
13 TYPICAL SHEAR WALL DOWELS AT FOUNDATION

14 TYPICAL SLAB TO SHEAR WALL CONNECTION WHERE SLAB IS BEARING ON ONE SIDE OF THE WALL ONLY

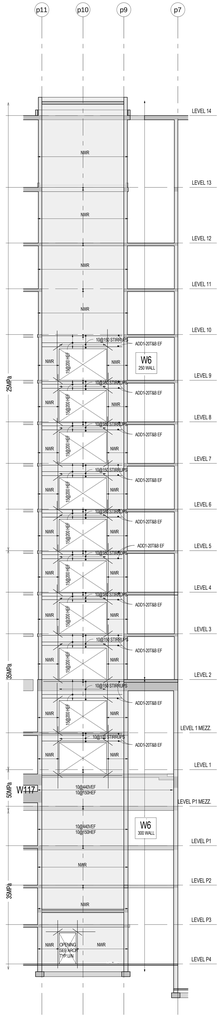


15 TYPICAL WALL ELEVATIONS NOTES:
1. REFER TO WALL DETAILS WITH OR WITHOUT ZONE REINFORCEMENT BASED ON WALL ELEVATIONS.





W5 WALL ELEVATION
S3-02 1 : 100



W6 WALL ELEVATION
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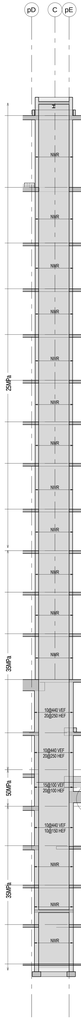

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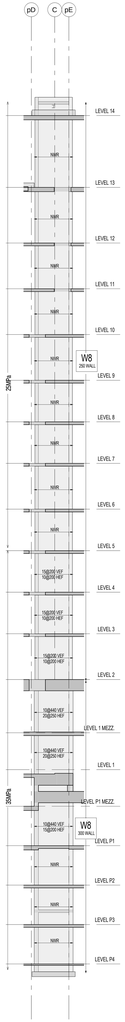

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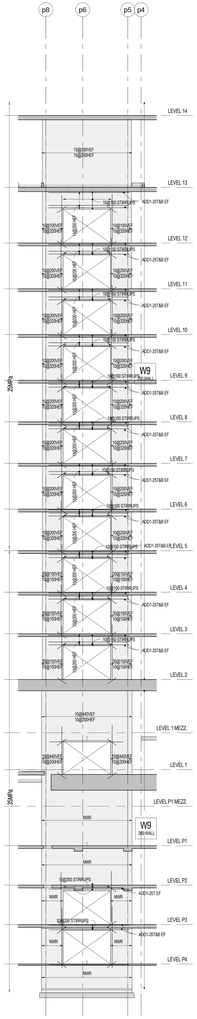
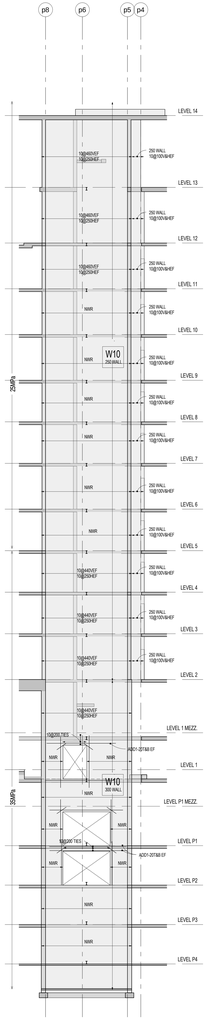


W9 WALL ELEVATION
S3-02 1 : 100



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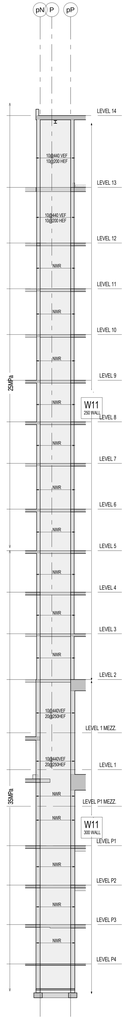

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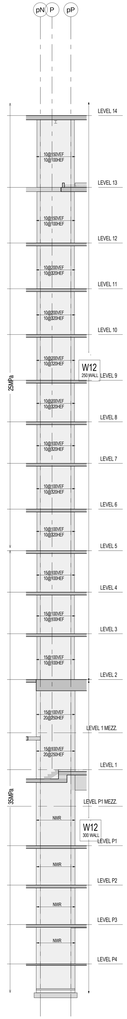

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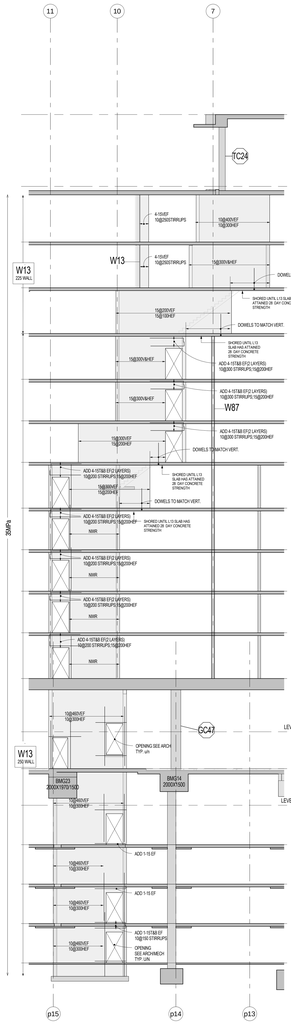

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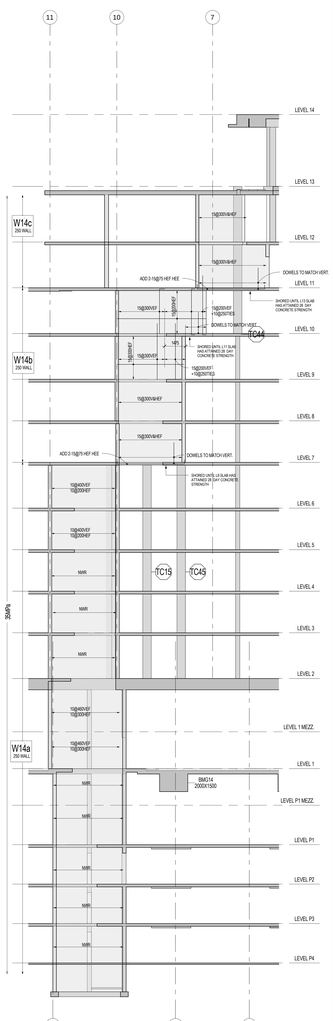

W14 WALL ELEVATION
S3-02 1 : 100

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Date:

stephenson ENGINEERING
2550 Victoria Park Ave, Suite 402
Toronto ON M2J 5A9 T 647.478.1675
www.stephenson-eng.com / info@stephenson-eng.com

No	Revision	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY.22.2015
2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

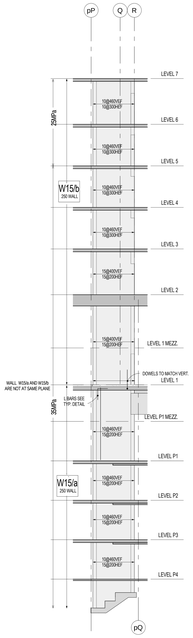
No	Issued For	Date

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
WALL ELEVATIONS

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	1 : 100
Drawn by	DC
Checked by	BK/BBS
Project No.	2014-00031
Date	DEC.18.2015
Drawing No.	S3-02



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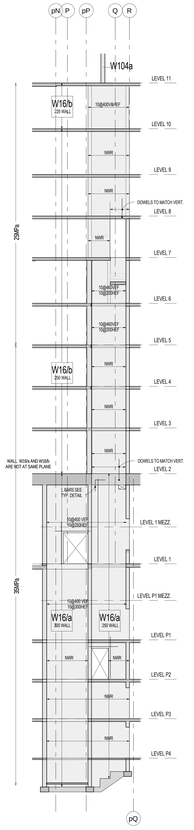

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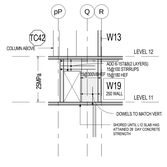

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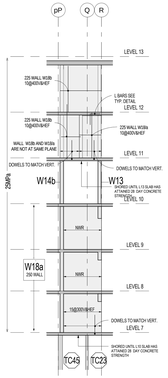

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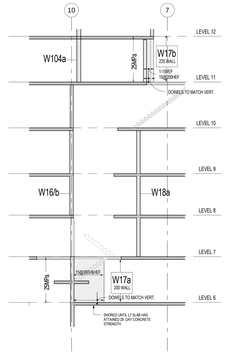

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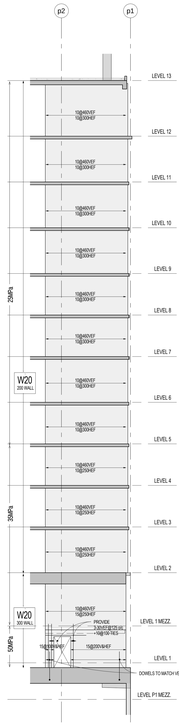

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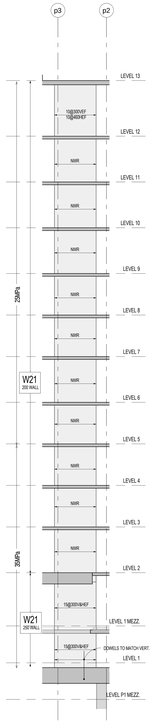

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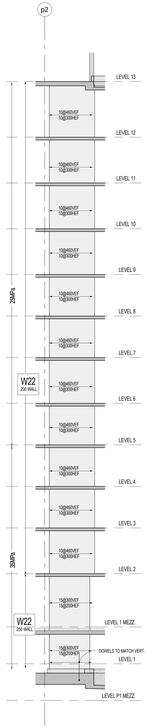

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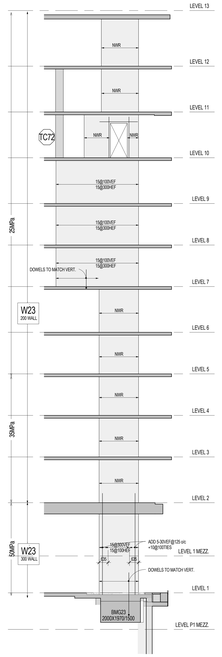

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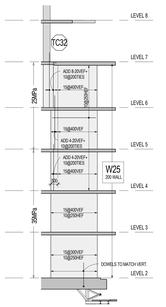

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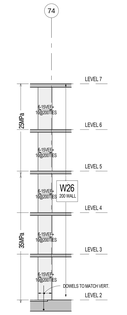

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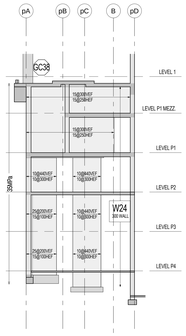

W24 WALL ELEVATION
S3-03 1 : 100

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Date:

stephenson ENGINEERING
2550 Victoria Park Ave, Suite 402
Toronto ON M2J 5A9 | Tel: (416) 426 7975
www.stephenson-eng.com | info@stephenson-eng.com

No	Revision	Date

7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY 22.2015
2	BUILDING PERMIT SUBMISSION	JUNE 12.2015
1	ISSUED FOR MT REVIEW	MAY 22.2015

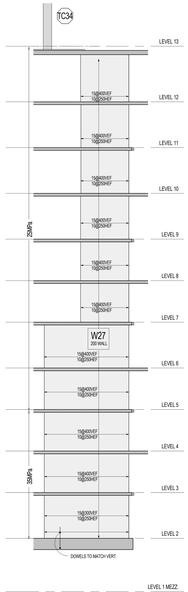
No	Issued For	Date

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
WALL ELEVATIONS

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	1 : 100
Drawn by	DC
Checked by	BK/BBS
Project No.	2014-0031
Date	DEC.18.2015
Drawing No.	S3-03



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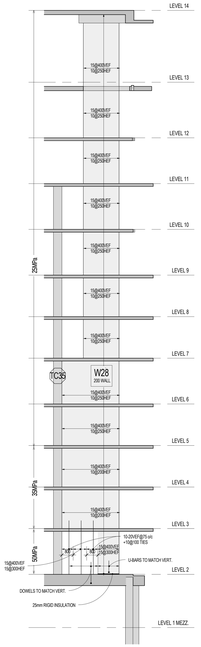
S3-04 1 : 100



W28 WALL ELEVATION
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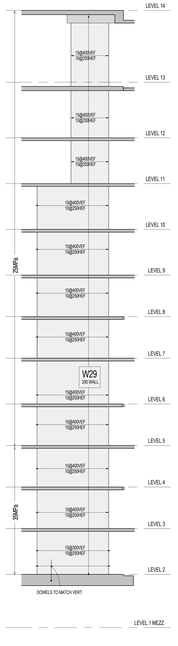

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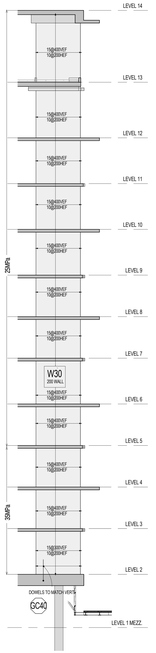

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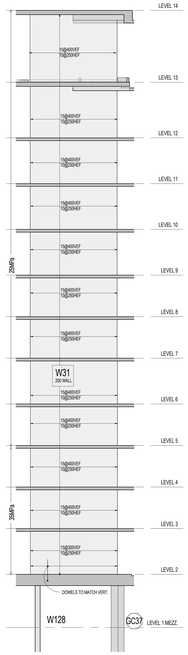

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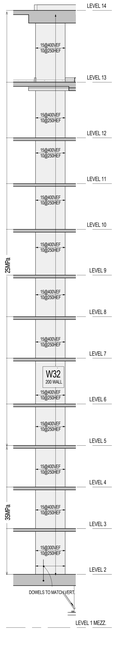
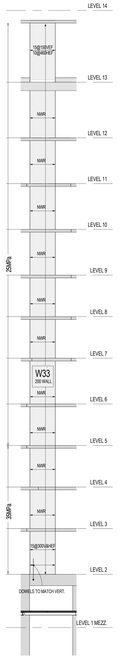
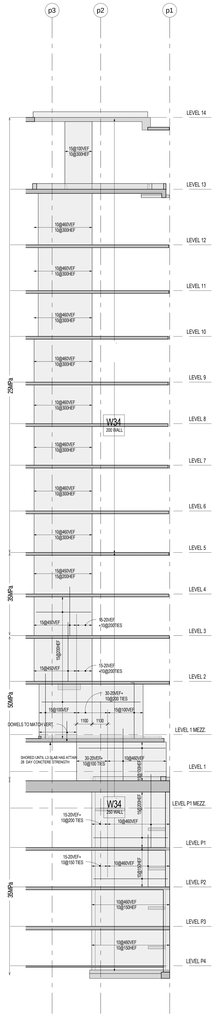


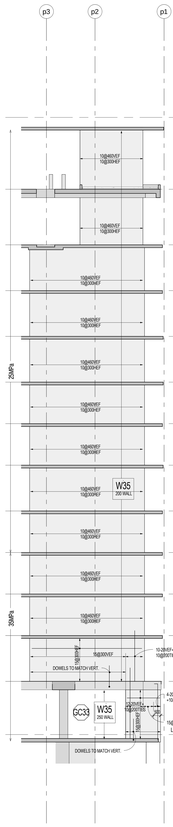
W32 WALL ELEVATION
S3-04 1 : 100



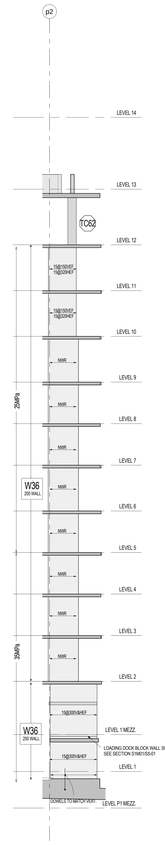
W33 WALL ELEVATION
S3-04 1 : 100



W34 WALL ELEVATION
S3-04 1 : 100



W35 WALL ELEVATION
S3-04 1 : 100



W36 WALL ELEVATION
S3-04 1 : 100

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stephenson ENGINEERING
2550 Victoria Park Ave, Suite 402
Toronto ON M2J 5A9 | Tel.:(416) 495 7976
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No	Revision	Date

No	Issued For	Date
3	ISSUED FOR STEEL TENDER	DEC.18,2015
4	BUILDING PERMIT RESUBMISSION	SEPT.23,2015
3	BUILDING PERMIT RESUBMISSION	JULY 22,2015
2	BUILDING PERMIT SUBMISSION	JUNE 12,2015
1	ISSUED FOR MT REVIEW	MAY 01,2015

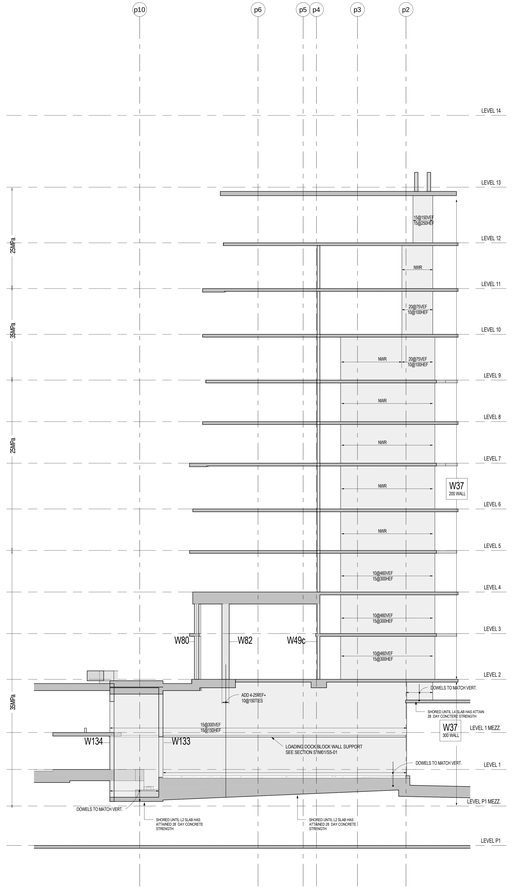
AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
WALL ELEVATIONS

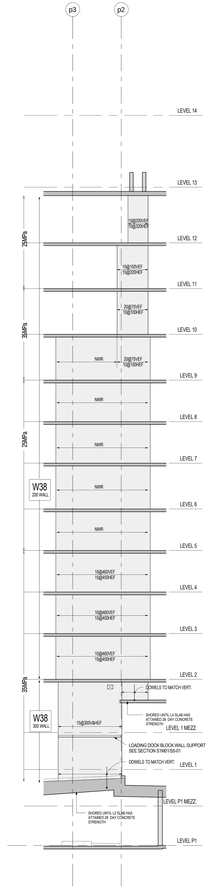
Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	1 : 100
Drawn by	DC
Checked by	BK/BBS
Project No.	2014-0031
Date	DEC.18,2015
Drawing No.	S3-04

Plot Date: 12/18/2015 12:23:22 PM



W37 WALL ELEVATION
S3-05 1 : 100



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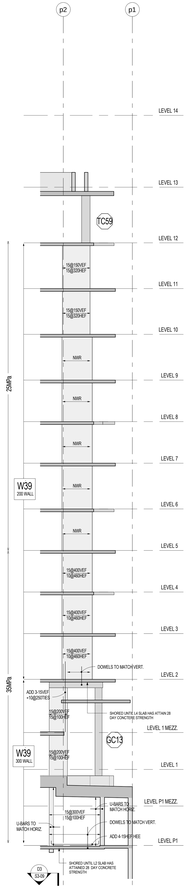
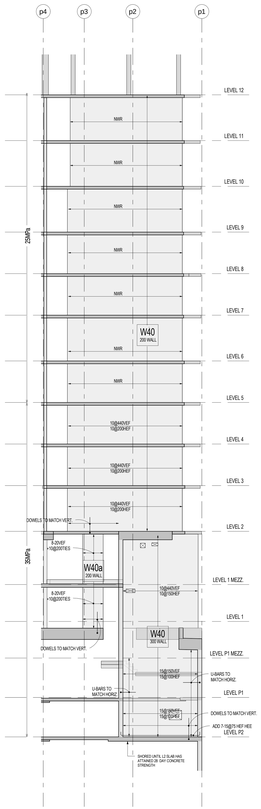
S3-05 1 : 100



W39 WALL ELEVATION
S3-05 1 : 100



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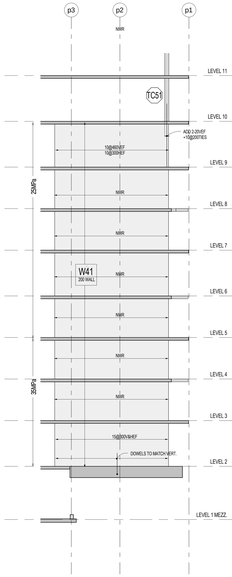
S3-05 1 : 100



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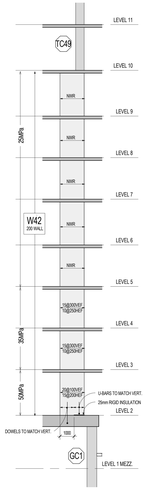
S3-05 1 : 100



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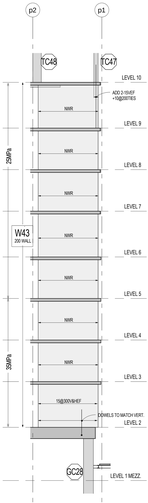
S3-05 1 : 100



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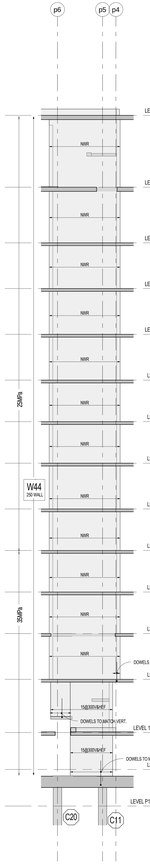
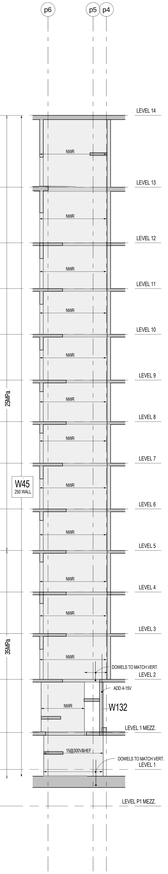
S3-05 1 : 100



W44 WALL ELEVATION
S3-05 1 : 100



W45 WALL ELEVATION
S3-05 1 : 100

W46 WALL ELEVATION
S3-05 1 : 100

REFER TO NOTES ON SHEET S3-01

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No	Revision	Date

No	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY.22.2015
2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

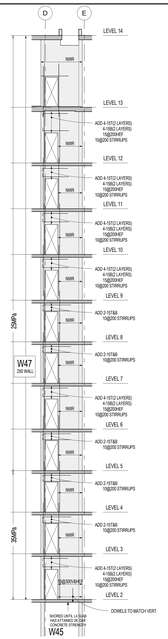
AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
WALL ELEVATIONS

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	1 : 100
Drawn by	DC
Checked by	BK/BBS
Project No.	2014/0031
Date	DEC.18.2015
Drawing No.	S3-05

Plot Date: 12/18/2015 12:23:28 PM



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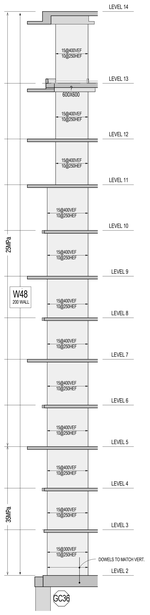
S3-06 1 : 100



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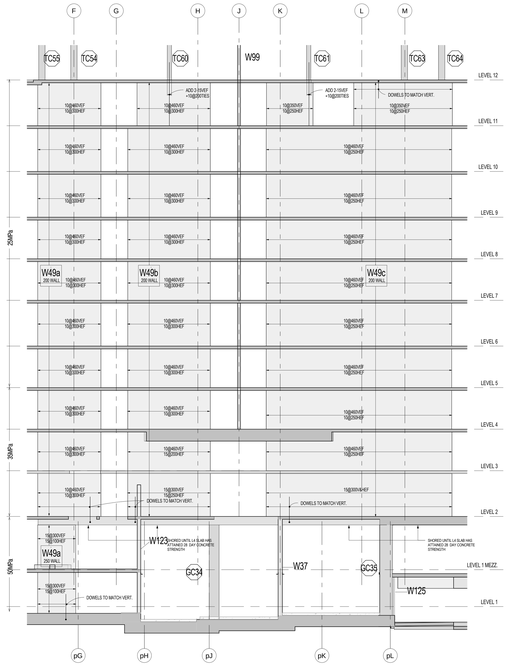
S3-06 1 : 100



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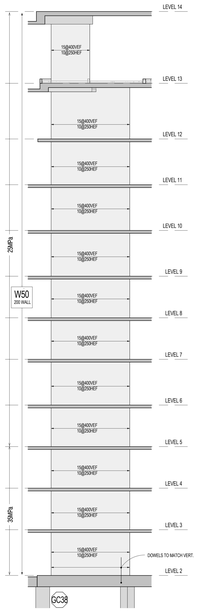
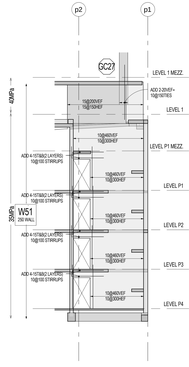
S3-06 1 : 100



W50 WALL ELEVATION
S3-06 1 : 100

C10



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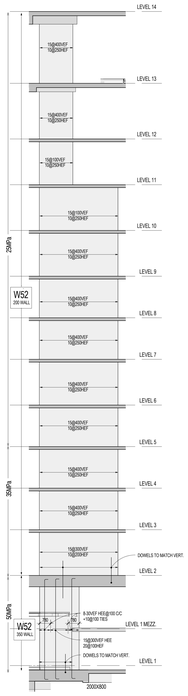
S3-06 1 : 100



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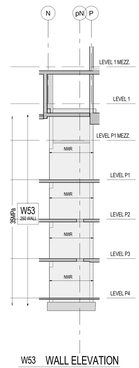
S3-06 1 : 100



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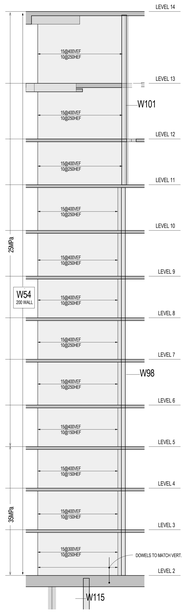
S3-06 1 : 100



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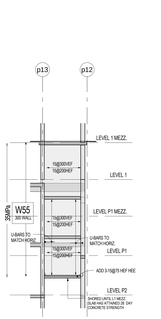

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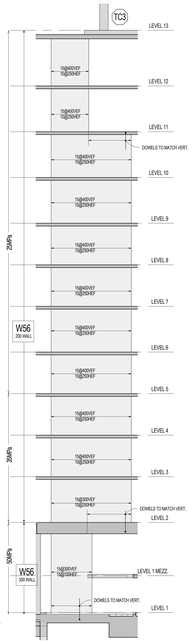
S3-06 1 : 100



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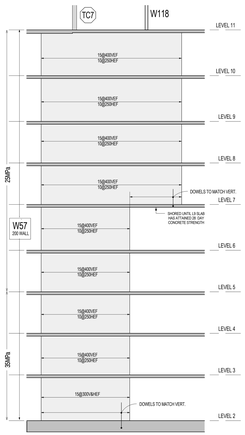

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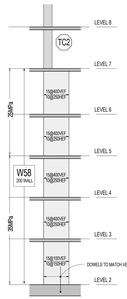

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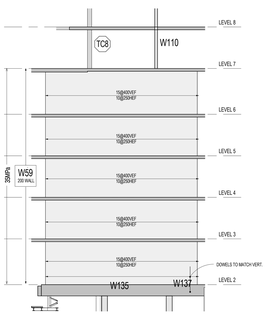

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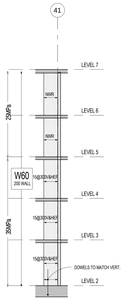
S3-06 1 : 100



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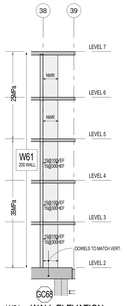
S3-06 1 : 100



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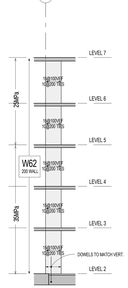
S3-06 1 : 100



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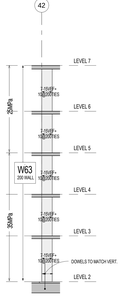
S3-06 1 : 100



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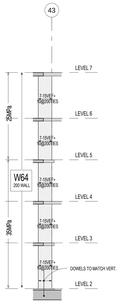
S3-06 1 : 100



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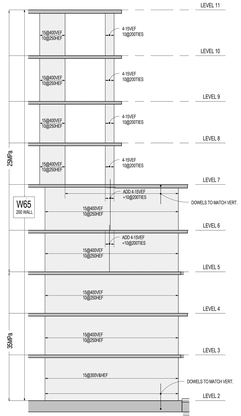

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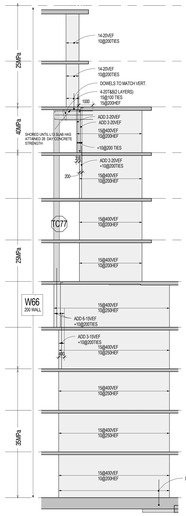
S3-06 1 : 100



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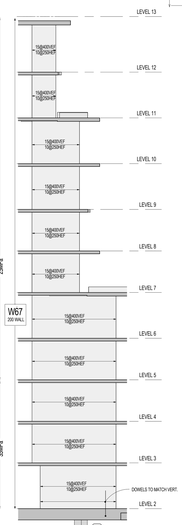
S3-06 1 : 100



W67 WALL ELEVATION
S3-06 1 : 100

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Date:

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No	Revision	Date

No	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY.22.2015
2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

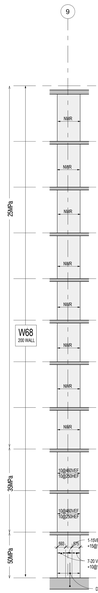
AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
WALL ELEVATIONS

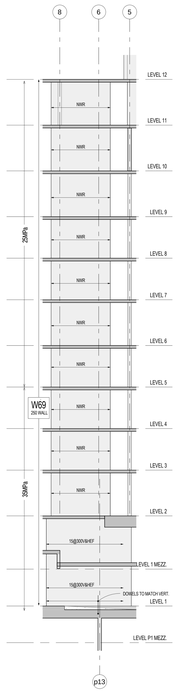
Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	1 : 100
Drawn by	DC
Checked by	BK/BBS
Project No.	2014/0031
Date	DEC.18.2015
Drawing No.	S3-06

Plot Date: 12/18/2015 12:23:37 PM



W68 WALL ELEVATION
S3-07 1 : 100



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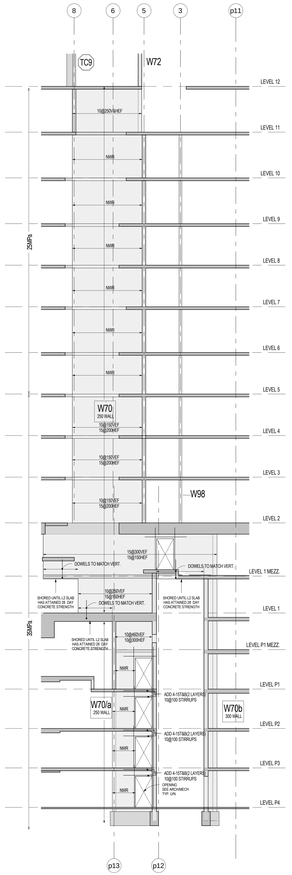
S3-07 1 : 100



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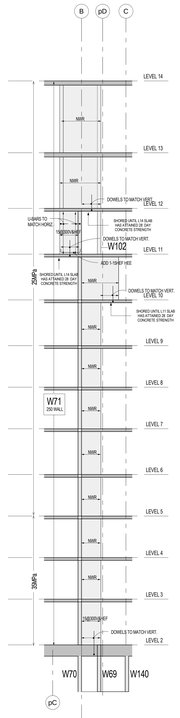
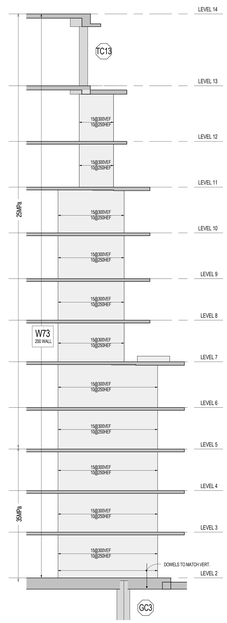
S3-07 1 : 100



W71,W72 WALL ELEVATION
S3-07 1 : 100



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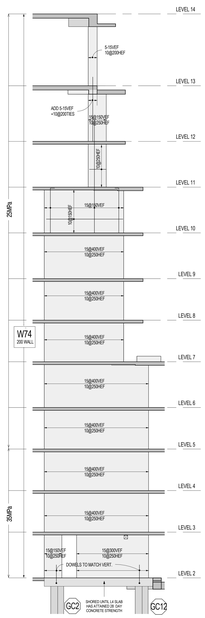
S3-07 1 : 100



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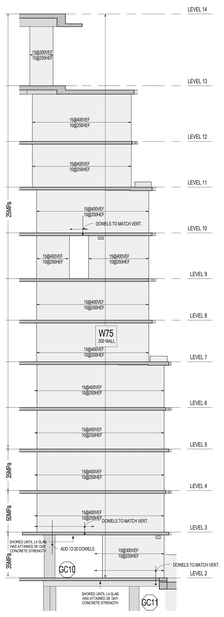
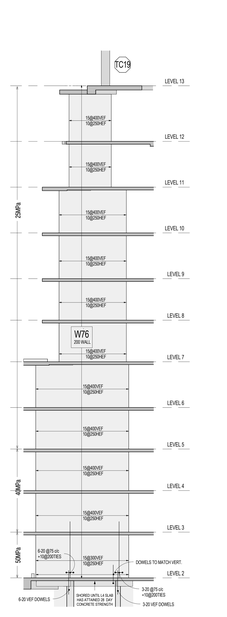
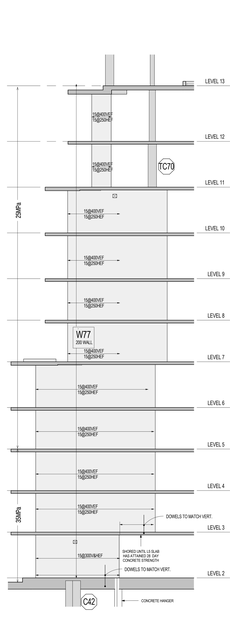
S3-07 1 : 100



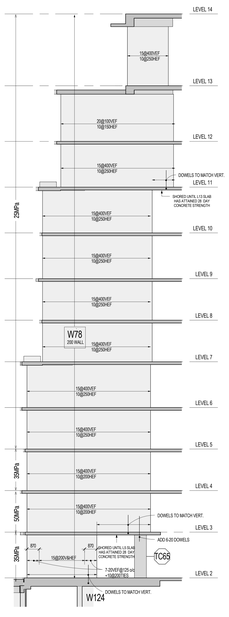
W75 WALL ELEVATION
S3-07 1 : 100



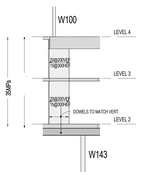
W76 WALL ELEVATION
S3-07 1 : 100



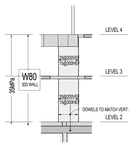
W77 WALL ELEVATION
S3-07 1 : 100



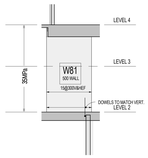
W78 WALL ELEVATION
S3-07 1 : 100



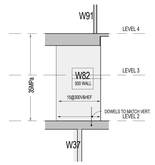
W79 WALL ELEVATION
S3-07 1 : 100



W80 WALL ELEVATION
S3-07 1 : 100



W81 WALL ELEVATION
S3-07 1 : 100



W82 WALL ELEVATION
S3-07 1 : 100

REFER TO NOTES ON SHEET S3-01

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stephenson ENGINEERING
2550 Victoria Park Ave, Suite 402
Toronto ON M2J 5A9 | Tel: (416) 426 7975
www.stephenson-eng.com | info@stephenson-eng.com

No	Revision	Date

No	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY.22.2015
2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

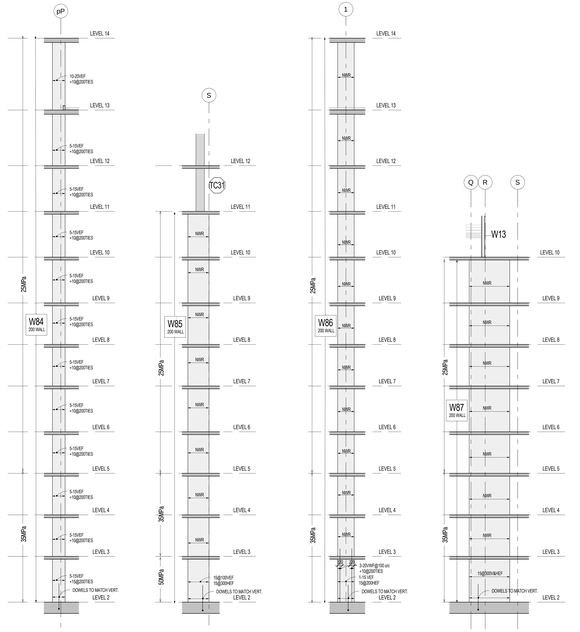
AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
WALL ELEVATIONS

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	1 : 100
Drawn by	DC
Checked by	BK/BBS
Project No.	2014-0033
Date	DEC.18.2015
Drawing No.	S3-07

Plot Date: 12/18/2015 12:23:44 PM

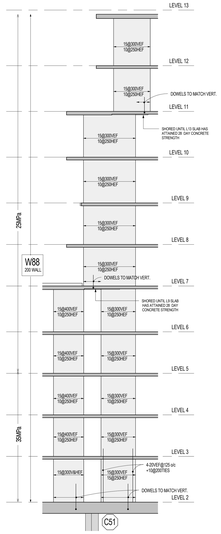


W84 WALL ELEVATION
S3-08 1 : 100

W85 WALL ELEVATION
S3-08 1 : 100

W86 WALL ELEVATION
S3-08 1 : 100

W87 WALL ELEVATION
S3-08 1 : 100



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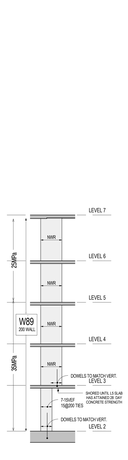
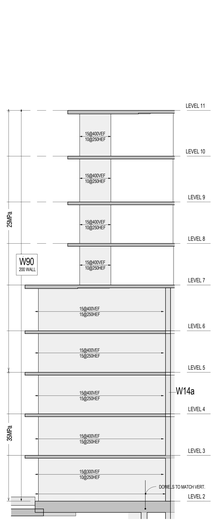
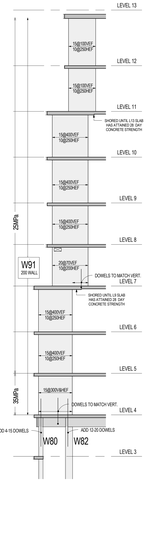
S3-08 1 : 100



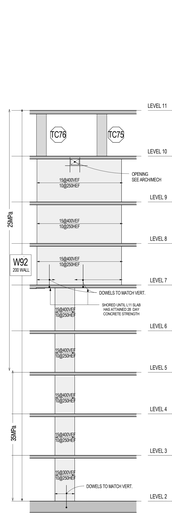
W89 WALL ELEVATION
S3-08 1 : 100



W90 WALL ELEVATION
S3-08 1 : 100



W91 WALL ELEVATION
S3-08 1 : 100



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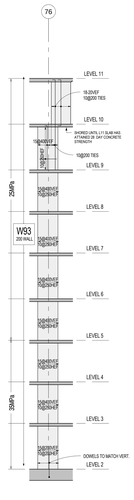
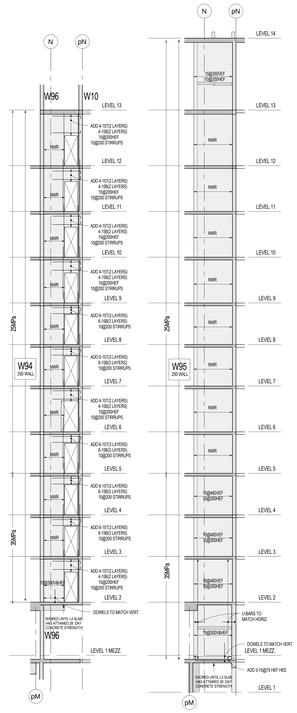
S3-08 1 : 100



W93 WALL ELEVATION
S3-08 1 : 100



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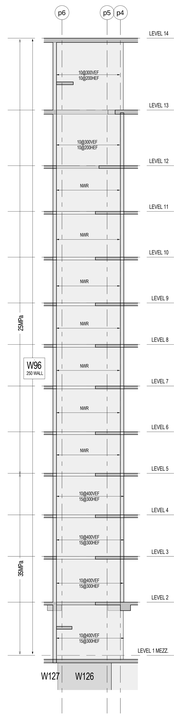
S3-08 1 : 100

W95 WALL ELEVATION
S3-08 1 : 100



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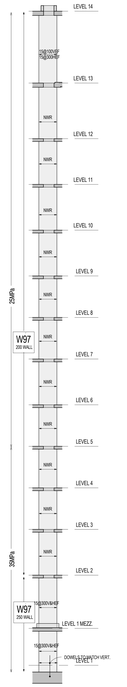
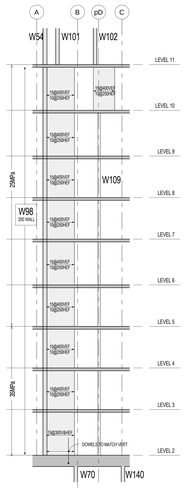
S3-08 1 : 100



W97 WALL ELEVATION
S3-08 1 : 100



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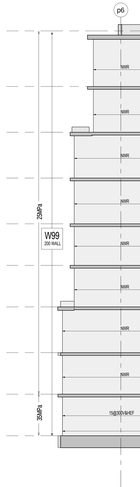
S3-08 1 : 100



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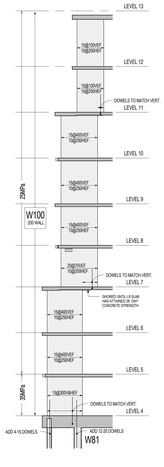
S3-08 1 : 100



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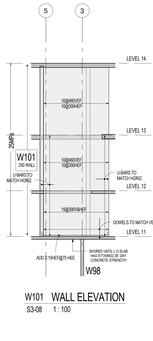
S3-08 1 : 100



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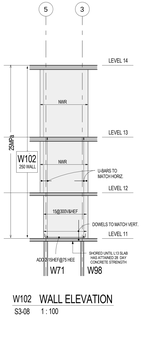
S3-08 1 : 100



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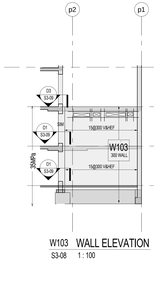
S3-08 1 : 100



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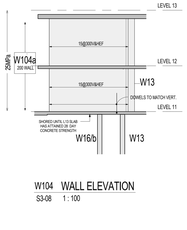
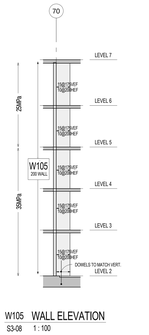
S3-08 1 : 100



W104 WALL ELEVATION
S3-08 1 : 100



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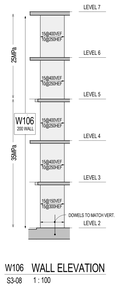
S3-08 1 : 100



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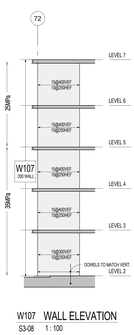
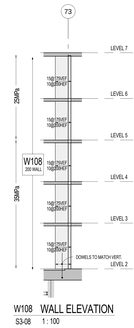


W107 WALL ELEVATION
S3-08 1 : 100



W108 WALL ELEVATION
S3-08 1 : 100

REFER TO NOTES ON SHEET S3-01

Contractor Must Check And Verify All Dimensions On The Job.
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Date:

stephenson ENGINEERING
2550 Victoria Park Ave, Suite 402
Toronto ON M2J 5A9 | Tel: (416) 495 7676
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No	Revision	Date

No	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY.22.2015
2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

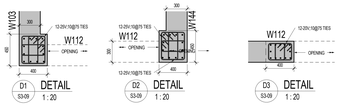
AQUAVISTA
AT BAYSIDE TORONTO

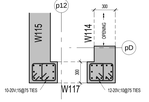
Drawing Title
WALL ELEVATIONS

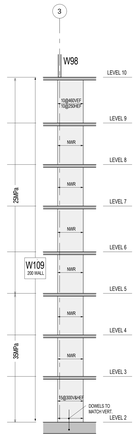
Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	1 : 100
Drawn by	DC
Checked by	BK/BBS
Project No	2014/0031
Date	DEC.18.2015
Drawing No	S3-08

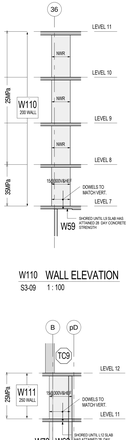
Plot Date: 12/18/2015 12:23:53 PM





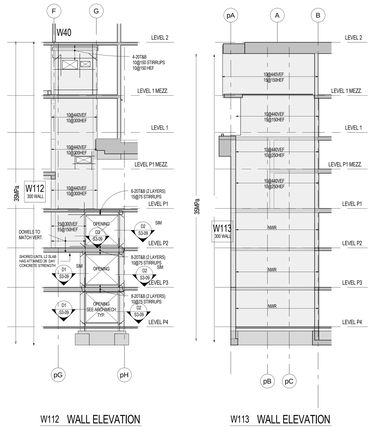


W109 WALL ELEVATION
S3-09 1 : 100



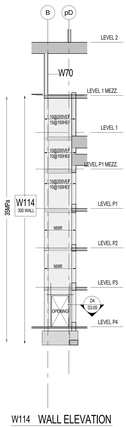
W110 WALL ELEVATION
S3-09 1 : 100

W111 WALL ELEVATION
S3-09 1 : 100



W112 WALL ELEVATION
S3-09 1 : 100

W113 WALL ELEVATION
S3-09 1 : 100



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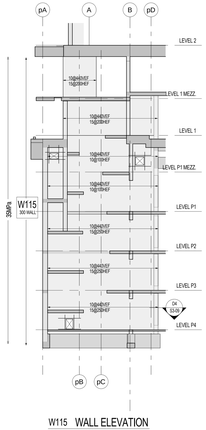
S3-09 1 : 100



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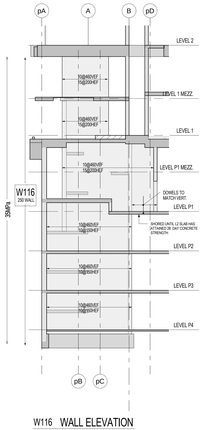
S3-09 1 : 100



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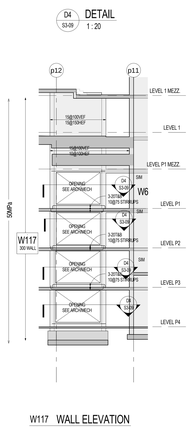
S3-09 1 : 100



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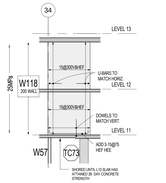
S3-09 1 : 100



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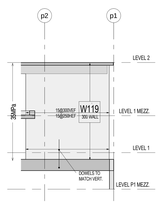

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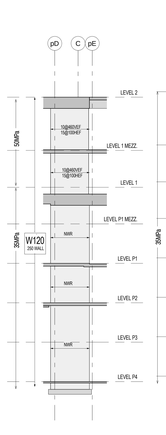
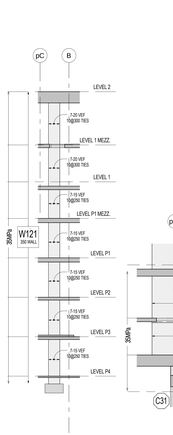
S3-09 1 : 100



W120 WALL ELEVATION
S3-09 1 : 100



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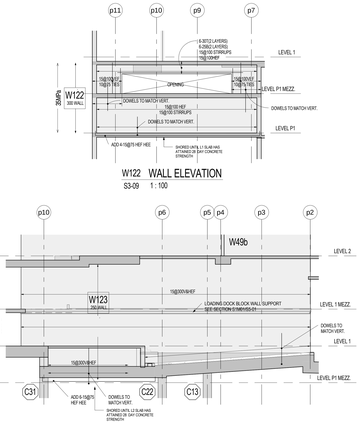
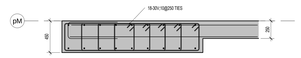
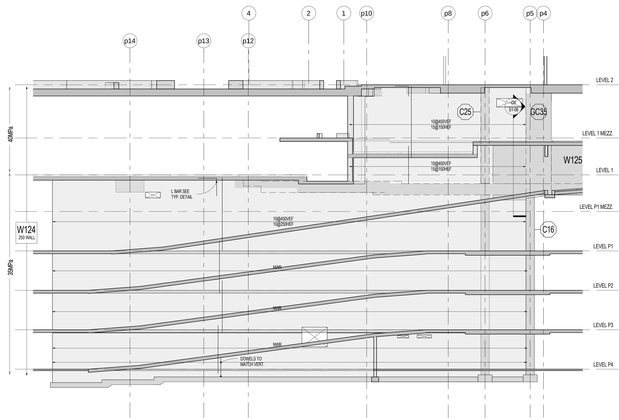
S3-09 1 : 100



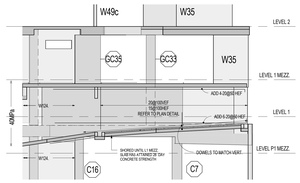
W122 WALL ELEVATION
S3-09 1 : 100

W123 WALL ELEVATION
S3-09 1 : 100





W124 WALL ELEVATION
S3-09 1 : 100



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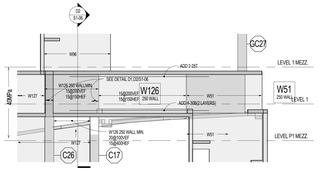
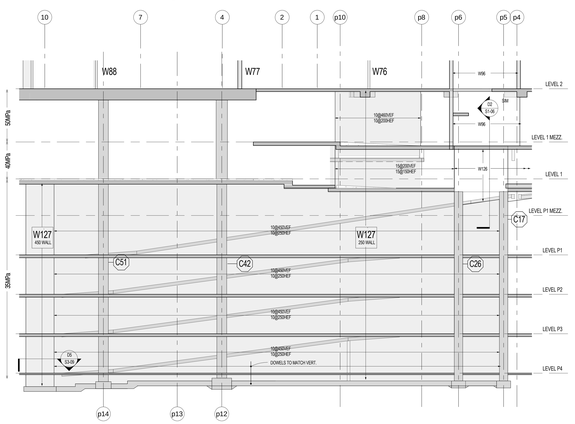
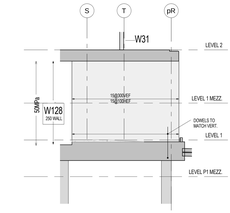
S3-09 1 : 100



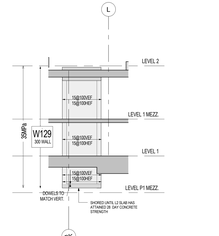
W126 WALL ELEVATION
S3-09 1 : 100



W127 WALL ELEVATION
S3-09 1 : 100



W128 WALL ELEVATION
S3-09 1 : 100



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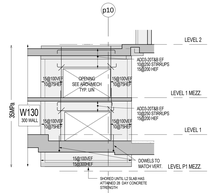
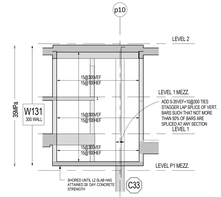
S3-09 1 : 100



W130 WALL ELEVATION
S3-09 1 : 100



W131 WALL ELEVATION
S3-09 1 : 100

REFER TO NOTES ON SHEET S3-01

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Date:

PROFESSIONAL ENGINEER ONTARIO J. ELZOUKI 7 TANSLEY 100150683 DEC 18, 2015

PROFESSIONAL ENGINEER ONTARIO J. BARDAWIL 2 BARDAWIL 100150683 DEC 18, 2015

stephenson ENGINEERING
2550 Victoria Park Ave, Suite 402
Toronto ON M2J 5A9 T 647.329.1426 TF 866.977.8566
www.stephenson-eng.com / info@stephenson-eng.com

No	Revision	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY.22.2015
2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

No	Issued For	Date

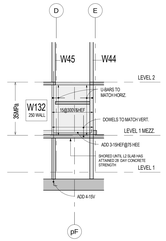
AQUAVISTA AT BAYSIDE TORONTO

Drawing Title
WALL ELEVATIONS

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

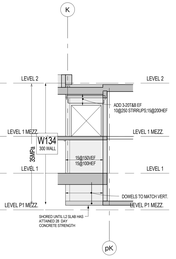
Scale	As indicated
Drawn by	DC
Checked by	BK/BBS
Project No	2014/0031
Date	DEC.18.2015
Drawing No	S3-09

Plot Date: 12/18/2015 12:24:02 PM

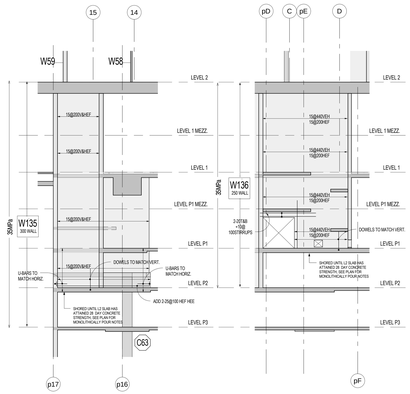


W132 WALL ELEVATION
S3-10 1 : 100

W133 WALL ELEVATION
S3-10 1 : 100



W134 WALL ELEVATION
S3-10 1 : 100



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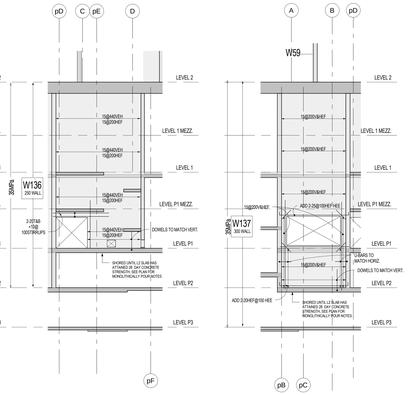
S3-10 1 : 100



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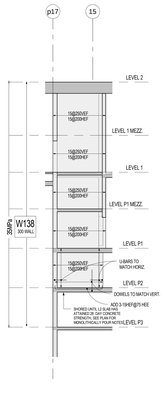
S3-10 1 : 100

W137 WALL ELEVATION
S3-10 1 : 100



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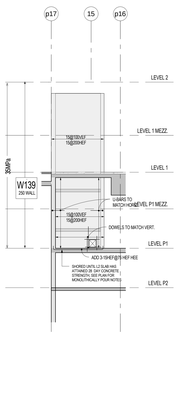
S3-10 1 : 100



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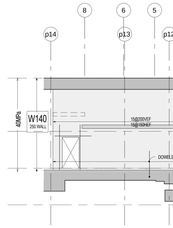
S3-10 1 : 100



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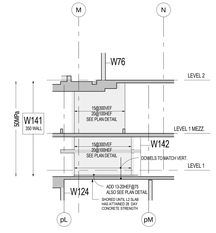
S3-10 1 : 100



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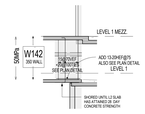

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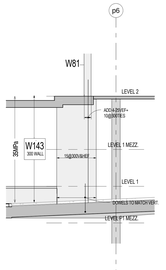

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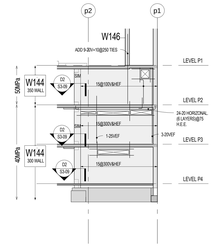
S3-10 1 : 100



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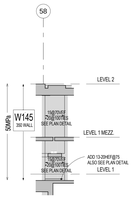

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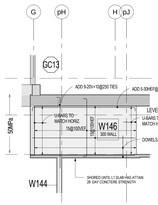

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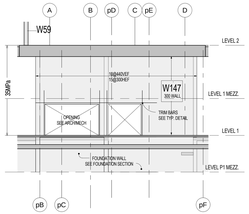
S3-10 1 : 100



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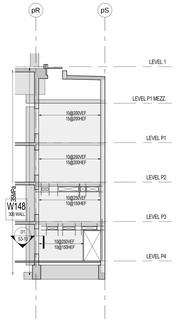
S3-10 1 : 100



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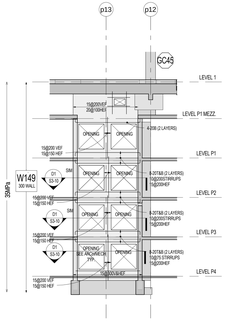
S3-10 1 : 100



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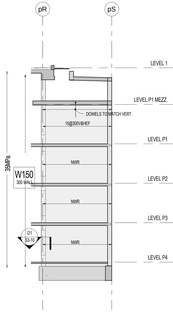
S3-10 1 : 100



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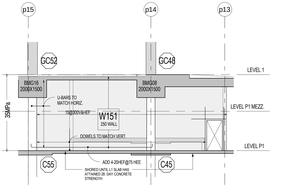
S3-10 1 : 100



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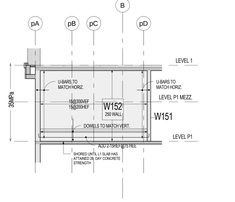
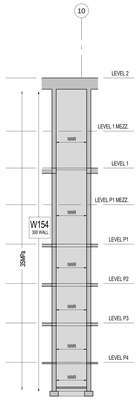
S3-10 1 : 100



W152 WALL ELEVATION
S3-10 1 : 100

W153 WALL ELEVATION
S3-10 1 : 100



W154 WALL ELEVATION
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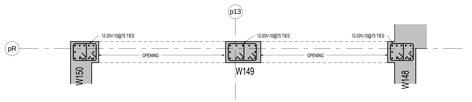

D1 DETAIL
S3-10 1 : 20

REFER TO NOTES ON SHEET S3-01

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No.	Revision	Date

7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY 22.2015
2	BUILDING PERMIT SUBMISSION	JUNE 12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

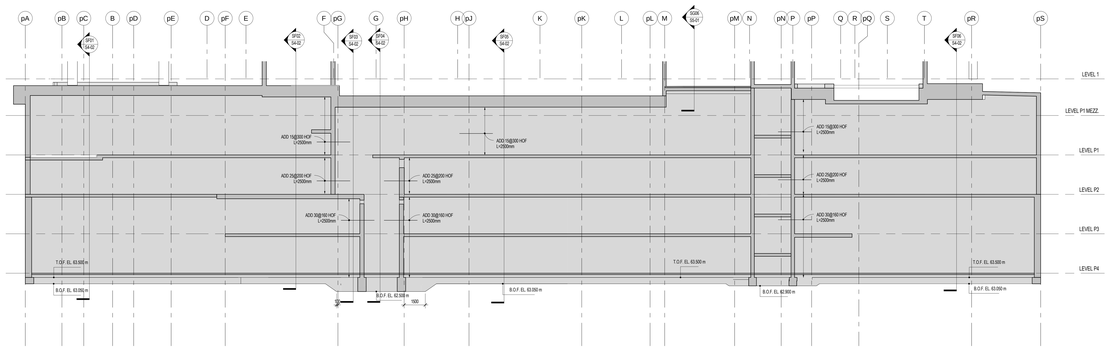
No.	Issued For	Date

AQUAVISTA
AT BAYSIDE TORONTO

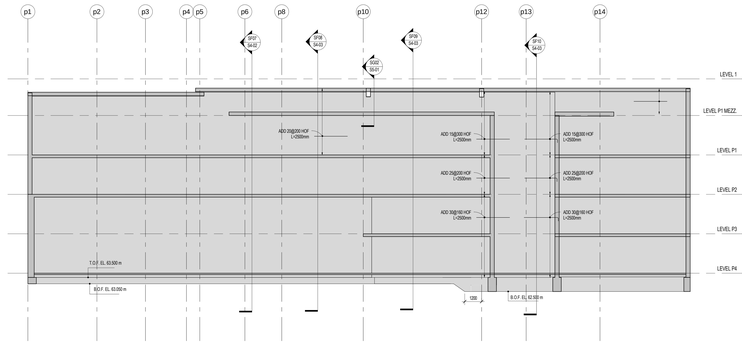
Drawing Title
WALL ELEVATIONS

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

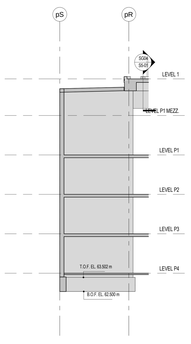
Scale	As indicated
Drawn by	DC
Checked by	BK/BBS
Project No.	2014-00031
Date	DEC.18.2015
Drawing No.	S3-10



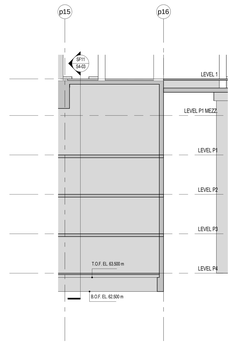
WEST FOUNDATION ELEVATION
1 : 100



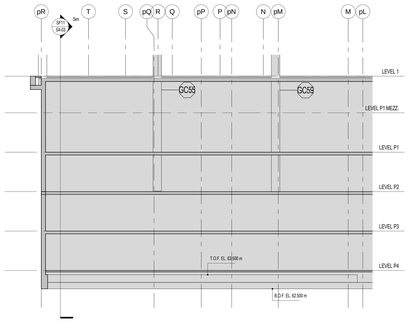
NORTH FOUNDATION ELEVATION 1
1 : 100



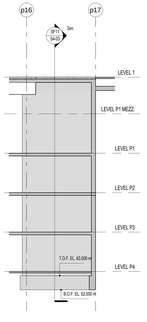
NORTH FOUNDATION ELEVATION 2
1 : 100



NORTH FOUNDATION ELEVATION 3
1 : 100



EAST FOUNDATION ELEVATION 1
1 : 100



EAST FOUNDATION ELEVATION 2
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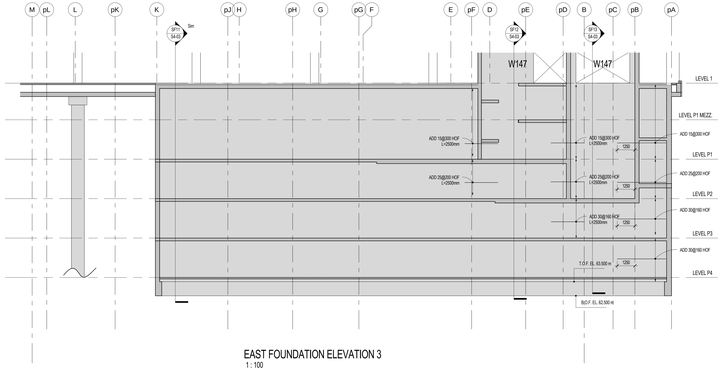
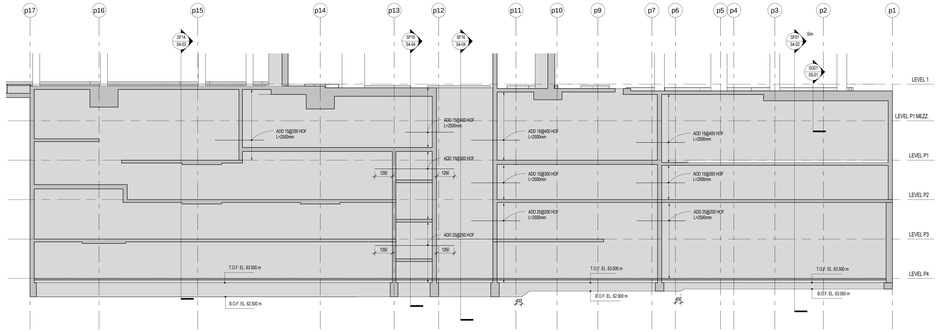


EAST FOUNDATION ELEVATION 3
1 : 100



SOUTH FOUNDATION ELEVATION
1 : 100

1. REFER TO TYPICAL DETAILS T-C56A AND TC56B FOR TLS (TENSION LAP SPLICE) AND CLS (COMPRESSION LAP SPLICE) LENGTHS.
2. OVERALL LENGTH OF REINFORCEMENT SHOULD ACCOUNT FOR VARIATIONS IN TOP OF FOOTING ELEVATION WHILE STILL MEETING THE MINIMUM LAP SPLICES INDICATED. VARIATIONS IN FOOTING ELEVATION DURING CONSTRUCTION WILL REQUIRE MODIFICATION TO REINFORCEMENT TO ACCOMMODATE ACCORDINGLY.

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Date

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No	Revision	Date
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2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

No	Issued For	Date

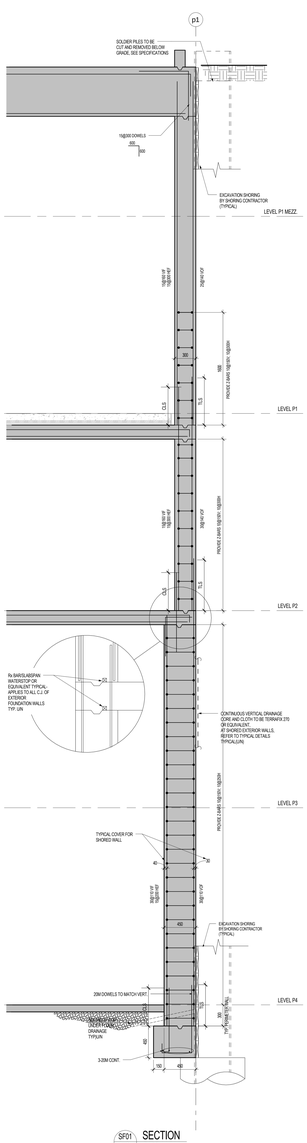
AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
FOUNDATION ELEVATIONS

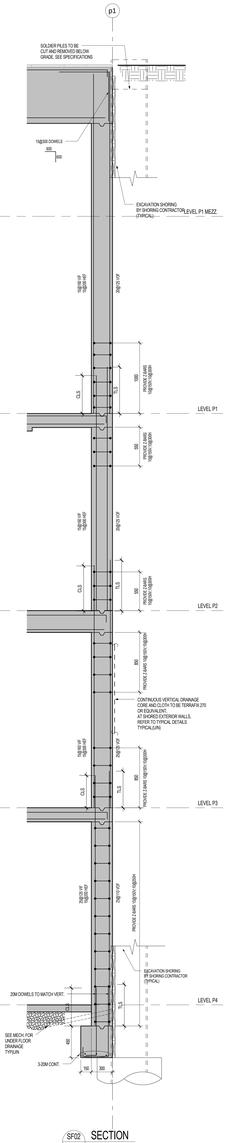
Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	As indicated
Drawn by	DC
Checked by	IA/BBS
Project No.	2014/0031
Date	DEC.18.2015
Drawing No.	S4-01

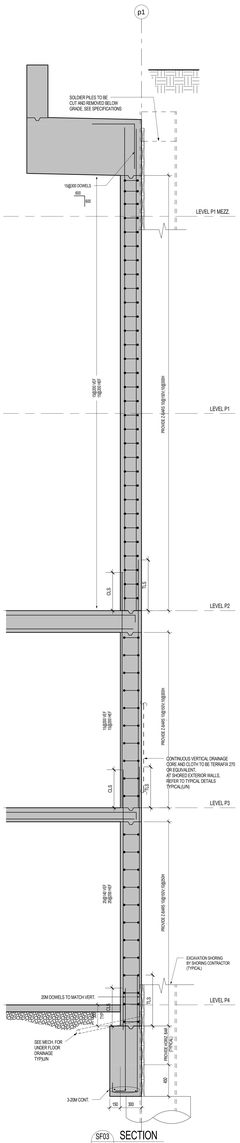
1. REFER TO TYPICAL DETAILS T-C66A AND TC66B FOR TLS (TENSION LAP SPLICE) AND CLS (COMPRESSION LAP SPLICE) LENGTHS.
2. OVERALL LENGTH OF REINFORCEMENT SHOULD ACCOUNT FOR VARIATIONS IN TOP OF FOOTING ELEVATION WHILE STILL MEETING THE MINIMUM LAP SPLICES INDICATED. VARIATIONS IN FOOTING ELEVATION DURING CONSTRUCTION WILL REQUIRE MODIFICATION TO REINFORCEMENT TO ACCOMMODATE ACCORDINGLY.



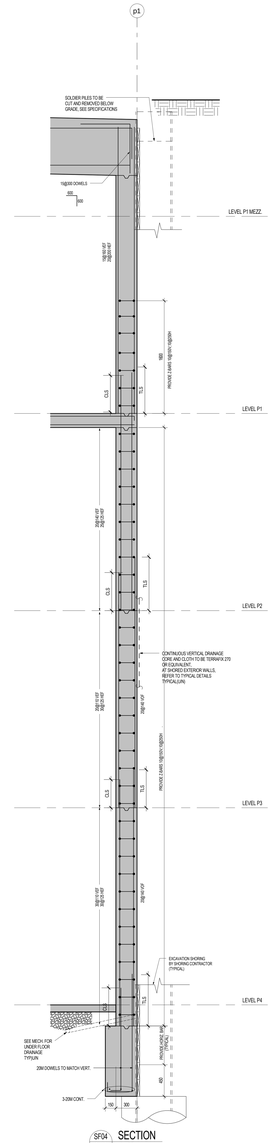
SF01 SECTION
S4-02 1 : 20



SF02 SECTION
S4-02 1 : 20



SF03 SECTION
S4-02 1 : 20



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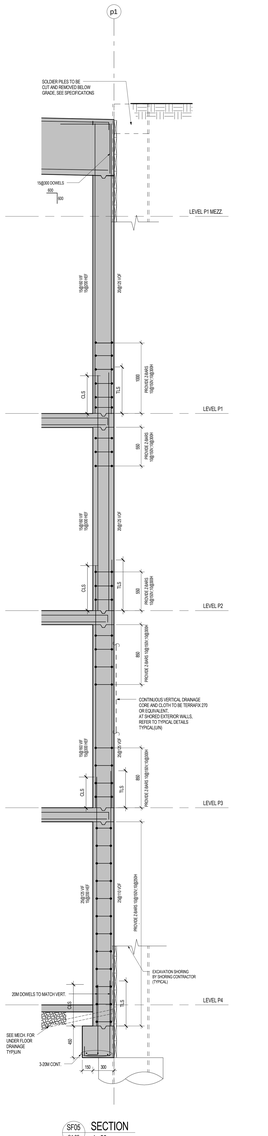

SF05 SECTION
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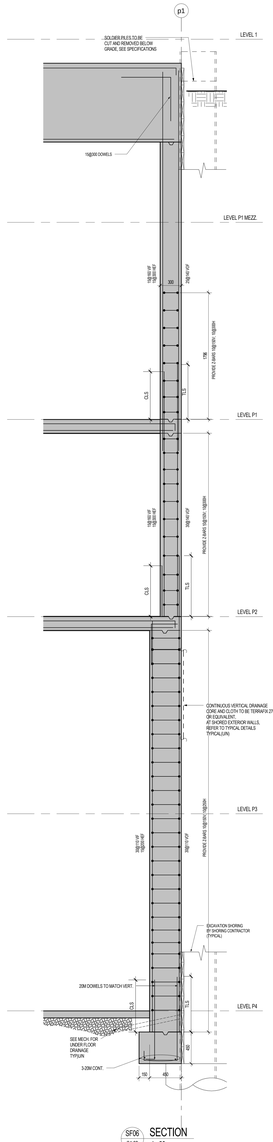

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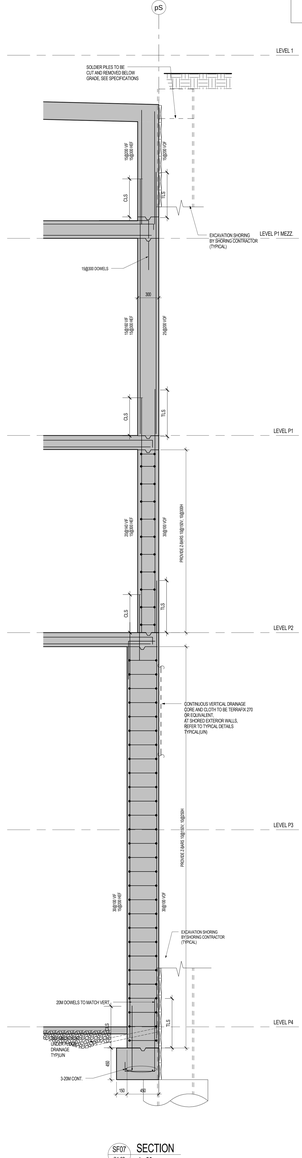

SF07 SECTION
S4-02 1 : 20

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No	Revision	Date

7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY 22.2015
2	BUILDING PERMIT SUBMISSION	JUNE 12.2015
1	ISSUED FOR MT REVIEW	MAY 01.2015

No	Issued For	Date

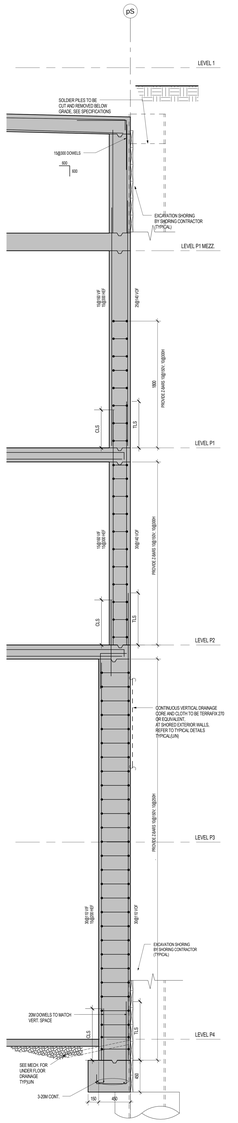
AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
FOUNDATION SECTIONS

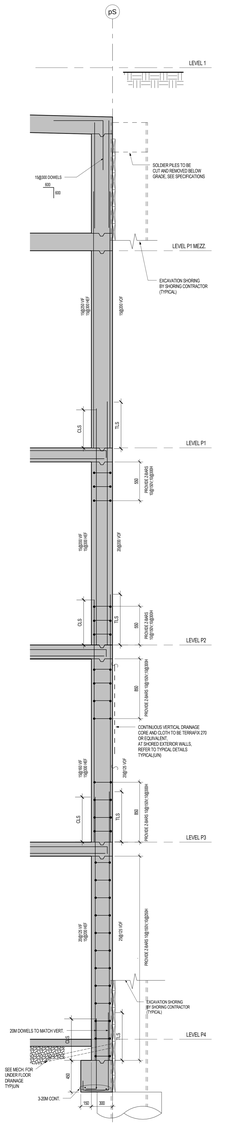
Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	As indicated
Drawn by	DC
Checked by	IA/BBS
Project No.	2014/0031
Date	DEC.18.2015
Drawing No.	S4-02

Plot Date: 12/18/2015 12:13:51 PM



SF08 SECTION
S4-03 1 : 20



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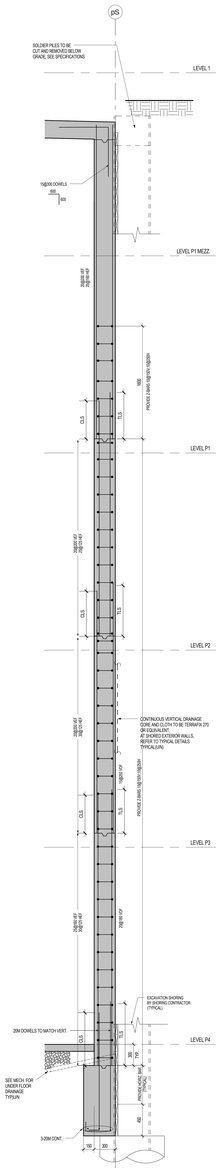
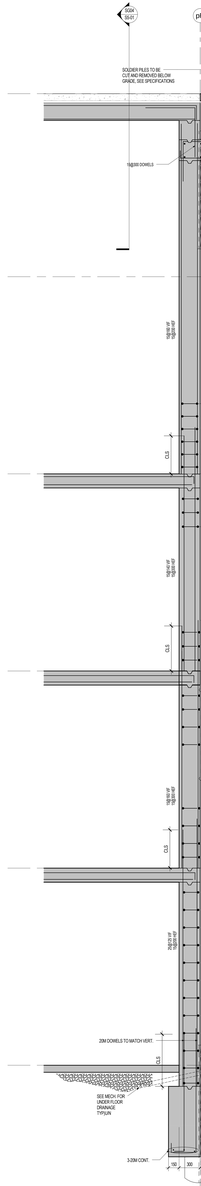
S4-03 1 : 20



SF10 SECTION
S4-03 1 : 20



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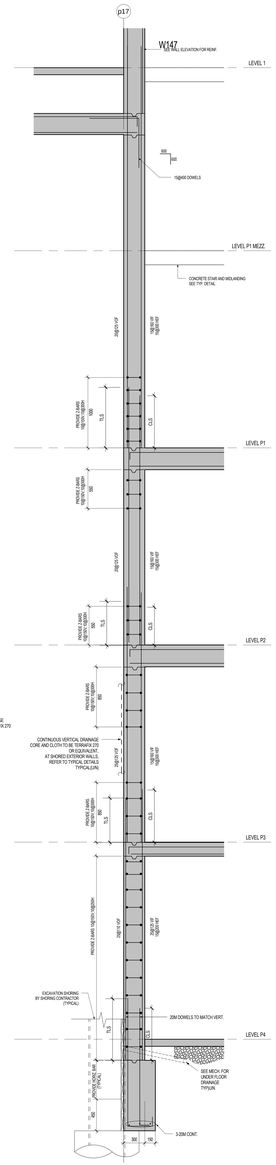
S4-03 1 : 20



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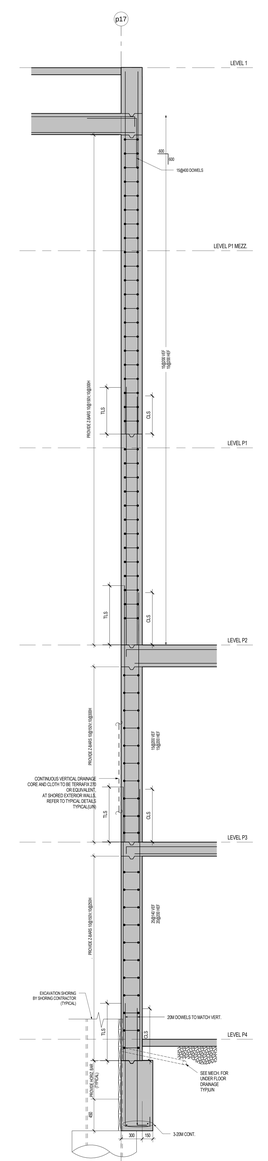
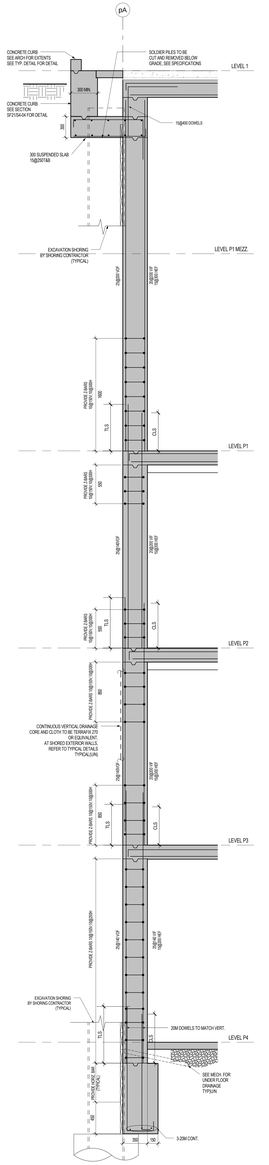
S4-03 1 : 20



SF13 SECTION
S4-03 1 : 20



SF14 SECTION
S4-03 1 : 20

1. REFER TO TYPICAL DETAILS T-C56A AND TC56B FOR TLS (TENSION LAP SPLICE) AND CLS (COMPRESSION LAP SPLICE) LENGTHS.
2. OVERALL LENGTH OF REINFORCEMENT SHOULD ACCOUNT FOR VARIATIONS IN TOP OF FOOTING ELEVATION WHILE STILL MEETING THE MINIMUM LAP SPLICES INDICATED. VARIATIONS IN FOOTING ELEVATION DURING CONSTRUCTION WILL REQUIRE MODIFICATION TO REINFORCEMENT TO ACCOMMODATE ACCORDINGLY.

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No	Revision	Date

7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	BUILDING PERMIT RESUBMISSION	SEPT.23.2015
5	BUILDING PERMIT RESUBMISSION	JULY.22.2015
2	BUILDING PERMIT SUBMISSION	JUNE.12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

No	Issued For	Date

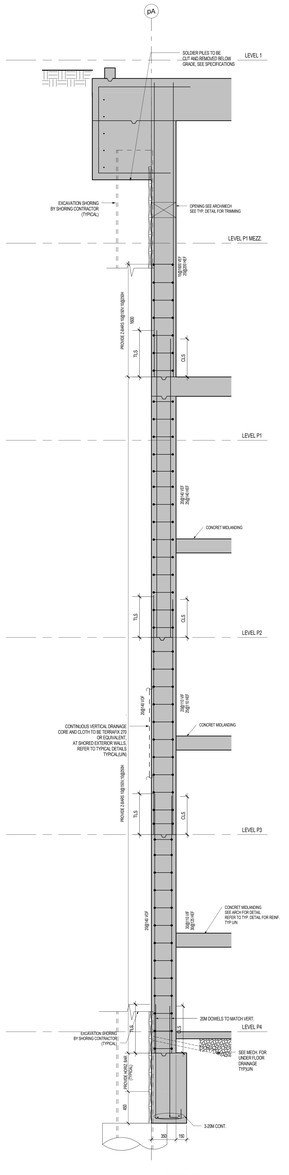
AQUAVISTA
AT BAYSIDE TORONTO

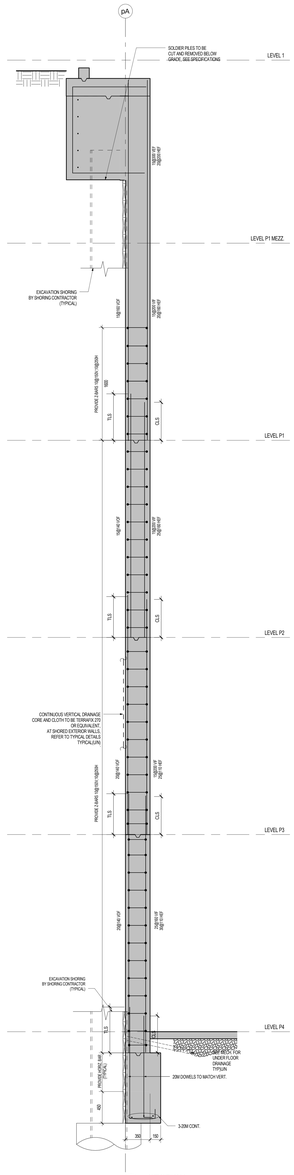
Drawing Title:
FOUNDATION SECTIONS

Project:
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

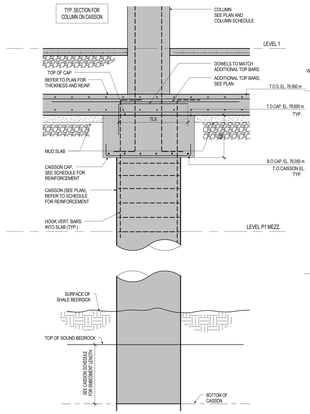
Scale:	As indicated
Drawn by:	DC
Checked by:	IA/BBS
Project No:	2014-00031
Date:	DEC.18.2015
Drawing No:	S4-03

Plot Date: 12/18/2015 12:13:57 PM

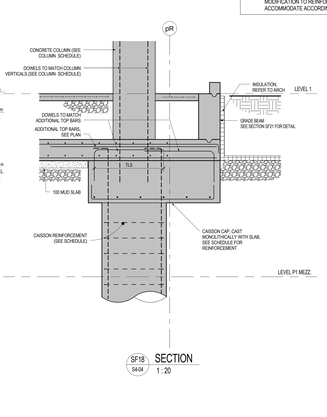




1. REFER TO TYPICAL DETAILS T-C56A AND TC56B FOR TLS (TENSION LAP SPLICE) AND CLS (COMPRESSION LAP SPLICE) LENGTHS.
2. OVERALL LENGTH OF REINFORCEMENT SHOULD ACCOUNT FOR VARIATIONS IN TOP OF FOOTING ELEVATION WHILE STILL MEETING THE MINIMUM LAP LENGTHS INDICATED. CONSTRUCTION IN FOOTING ELEVATION DURING CONSTRUCTION WILL REQUIRE MODIFICATION TO REINFORCEMENT TO ACCOMMODATE ACCORDINGLY.



SF17 S4-04 SECTION 1 : 20



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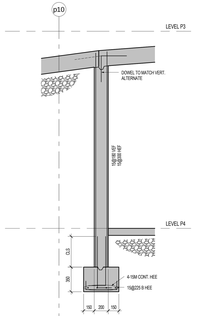

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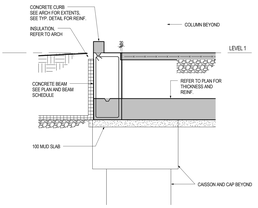

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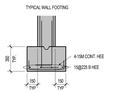
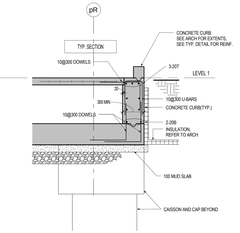


SF22 S4-04 SECTION 1 : 20



SF21 S4-04 SECTION 1 : 20

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No	Revision	Date

No	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015
6	ISSUED FOR CAISSONS TENDER/PERMIT ONLY	NOV.30.2015
4	BUILDING PERMIT - RESUBMISSION	SEPT.23.2015
3	BUILDING PERMIT RESUBMISSION	JULY 22.2015
2	BUILDING PERMIT SUBMISSION	JUNE 12.2015
1	ISSUED FOR MT REVIEW	MAY.01.2015

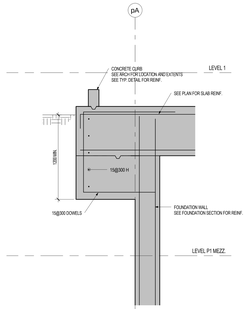
AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
FOUNDATION SECTIONS

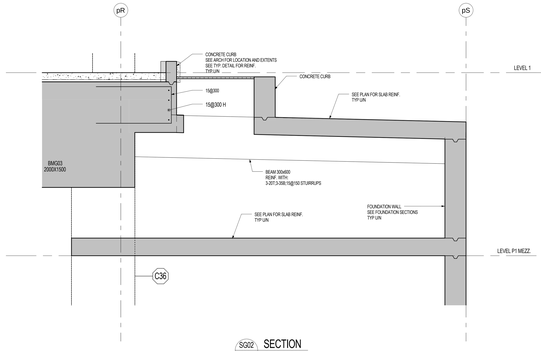
Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	As indicated
Drawn by	DC
Checked by	IA/BBS
Project No.	201400331
Date	DEC.18.2015
Drawing No.	S4-04

Plot Date: 12/18/2015 12:14:02 PM



SG01 SECTION
SS-01 1 : 20



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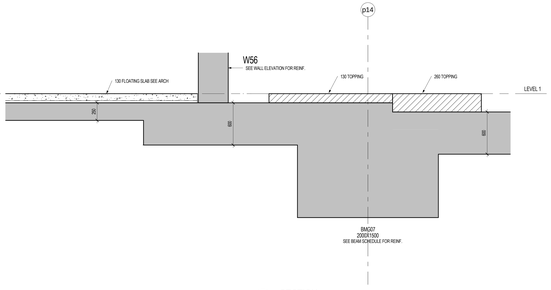
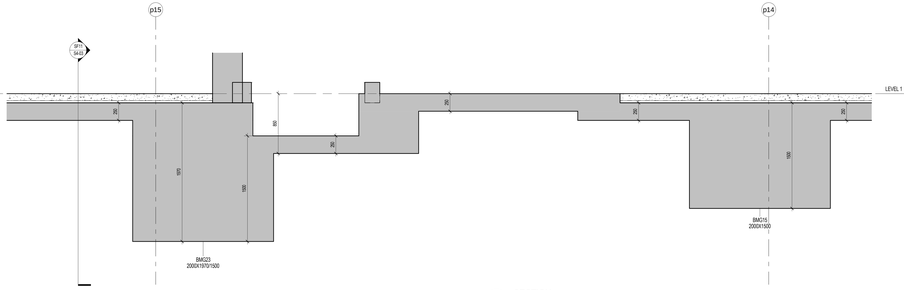
SS-01 1 : 20



SG03 SECTION
SS-01 1 : 20



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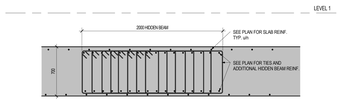

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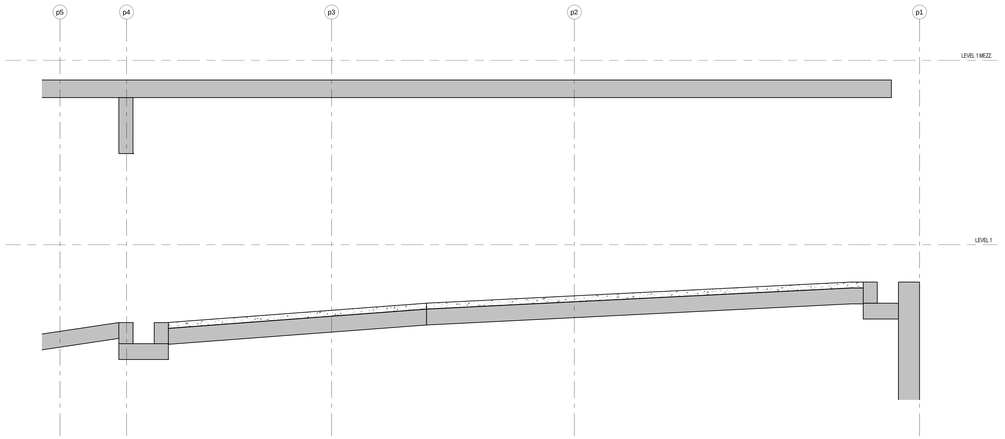

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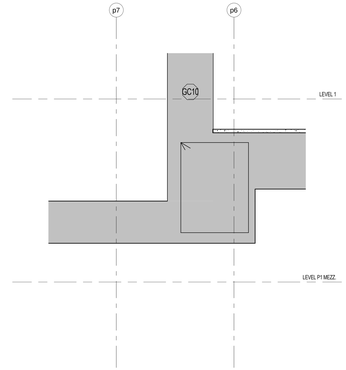

SG07 SECTION
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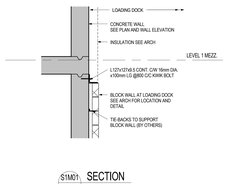
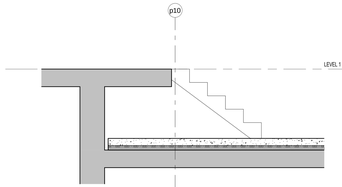


S1M01 SECTION
SS-01 1 : 20



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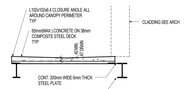

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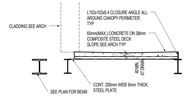

S1M04 SECTION
SS-01 1 : 20

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No	Revision	Date

No	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18,2015
4	BUILDING PERMIT RESUBMISSION	SEPT.21,2015
3	BUILDING PERMIT RESUBMISSION	JULY.22,2015
2	BUILDING PERMIT SUBMISSION	JUNE.12,2015

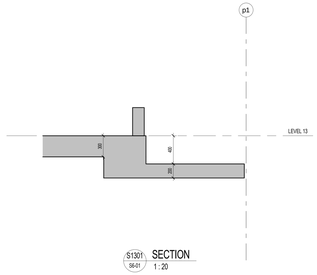
AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
PODIUM FLOOR SECTIONS

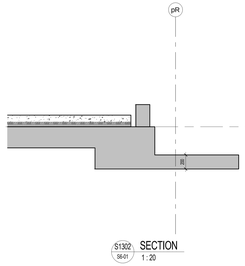
Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale	1 : 20
Drawn by	DC
Checked by	BK/BBS
Project No.	2014/0031
Date	DEC.18.2015
Drawing No.	S5-01

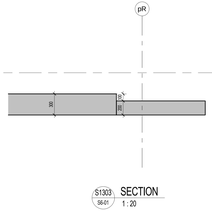
Plot Date: 12/18/2015 12:14:06 PM



S1301 SECTION
S6-01 1 : 20



S1302 SECTION
S6-01 1 : 20



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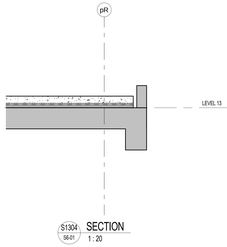
S6-01 1 : 20



S1304 SECTION
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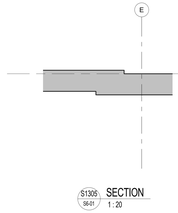

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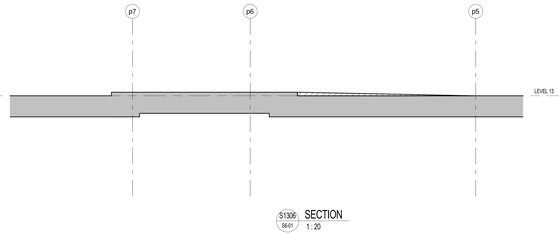
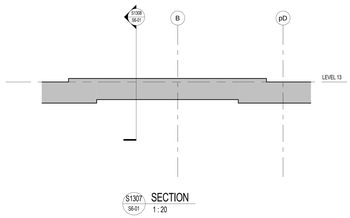
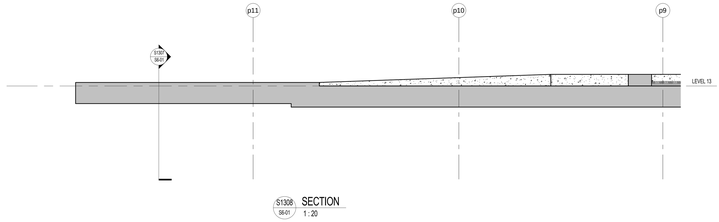


S1306 SECTION
S6-01 1 : 20



S1307 SECTION
S6-01 1 : 20



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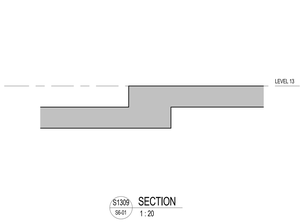

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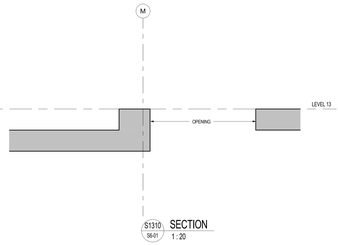

S1310 SECTION
S6-01 1 : 20

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PROFESSIONAL ENGINEER DEC. 18,2015 S. SHROWAH-SHAD 100149855 PROVINCE OF ONTARIO

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No	Revision	Date

7	ISSUED FOR STEEL TENDER	DEC.18,2015

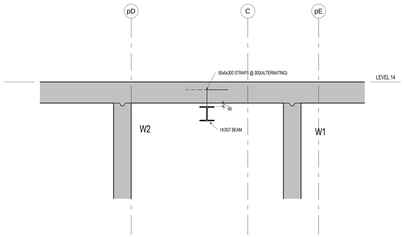
No	Issued For	Date

AQUAVISTA
AT BAYSIDE TORONTO

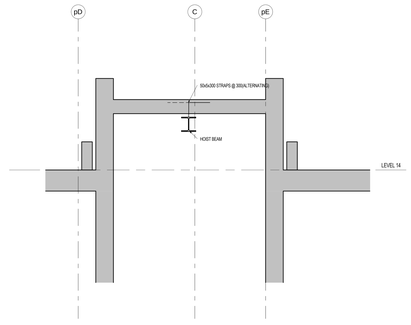
Drawing Title
FLOOR SECTIONS

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale: 1 : 20
Drawn by: DC
Checked by: BBS
Project No: 20140031
Date: DEC.18,2015
Drawing No: S6-01



SR01 ST-01 SECTION
1 : 20



SR02 ST-01 SECTION
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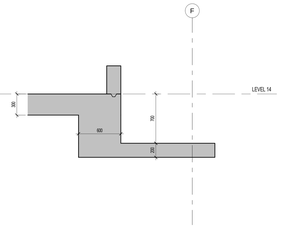

SR03 ST-01 SECTION
1 : 20

Contractor Must Check And Verify All Dimensions On The Job.

Do Not Scale The Drawings.

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Date:

stephenson ENGINEERING
2550 Victoria Park Ave, Suite 402
Toronto ON M2J 5A9 | Tel.(416) 428 7975
www.stephenson-eng.com | info@stephenson-eng.com

No	Revision	Date

No	Issued For	Date
7	ISSUED FOR STEEL TENDER	DEC.18.2015

AQUAVISTA
AT BAYSIDE TORONTO

Drawing Title
ROOF SECTIONS

Project
Hines TRIDEL
AQUAVISTA
Block 3 - R3 & R4
Merchant's Wharf
Toronto, ON

Scale: 1 : 20
Drawn by: DC
Checked by: BBS
Project No: 2014-0031
Date: DEC.18.2015
Drawing No: S7-01

Plot Date: 12/18/2015 12:14:11 PM

GENERAL NOTES — T-A01

1. GENERAL
1.1. DESIGN AND CONSTRUCTION IS TO CONFORM TO THE REQUIREMENTS OF THE ONTARIO BUILDING CODE. REFER ALSO TO TYPICAL DETAILS, NOTES UNDER PLANS AND SCHEDULES ON THE STRUCTURAL DRAWINGS, AND TO THE SPECIFICATION. ALL CODES, MANUALS, STANDARDS AND SPECIFICATIONS REFERRED TO SHALL BE THE LATEST EDITION INCLUDING ALL REVISIONS AND ADDENDA. ALL DIMENSIONS, OTHER THAN ELEVATIONS, ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. ELEVATIONS ARE IN METRES. IN THE CONTRACT, THE ARCHITECTURAL DRAWINGS AND ANY INSTRUCTIONS REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK, STRUCTURAL DRAWINGS MUST NOT BE SCALED.
1.2. REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS AND SIZES OF OPENINGS, TRENCHES, PITS, SUMPS, EQUIPMENT, SLEEVES, DEPRESSIONS, GROOVES AND CHAMFERS NOT SHOWN ON THE STRUCTURAL DRAWINGS. ALL OPENINGS IN CONCRETE SLABS AND WALLS NOT SHOWN WHERE SHOWN ON THE STRUCTURAL DRAWINGS ARE INDICATED ONLY APPROXIMATELY AS TO SIZE AND LOCATION.
1.3. UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS, NO PROVISION HAS BEEN MADE IN THE DESIGN FOR CONDITIONS OCCURRING DURING CONSTRUCTION. THE CONTRACTOR IS TO PROVIDE ALL NECESSARY BRACING, SHORING AND TEMPORARY SUPPORTS AS REQUIRED TO PREVENT ANY DAMAGE OR CAUSE DURING CONSTRUCTION. THE CONTRACTOR SHALL ACCEPT FULL RESPONSIBILITY FOR ALL SUCH MEASURES. IT SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL NECESSARY BRACING, SHORING, SHEET PILING OR OTHER TEMPORARY SUPPORTS TO EXCAVATIONS, ALL EXISTING OR ADJACENT STRUCTURES AFFECTED BY THIS WORK. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW.
2. SHOP DRAWINGS, PLACING DRAWINGS AND BAR LISTS
2.1. FOR ALL STRUCTURAL COMPONENTS SHOWN ON THE STRUCTURAL DRAWINGS, SUBMIT COPIES OF SHOP DRAWINGS AS DIRECTED FOR REVIEW BY THE STRUCTURAL CONSULTANT. SHOP DRAWINGS TO SHOW COMPLETE INFORMATION FOR THE FABRICATION AND ERECTION OF THE STRUCTURAL COMPONENTS.
2.2. SUBMISSION OF SHOP DRAWINGS BY THE CONTRACTOR OR ANY SUB-TRADE FOR REVIEW SHALL BE SUBMITTED SHOP DRAWINGS REFLECT THE INTENT OF THE STRUCTURAL DESIGN.
2.3. REVIEW BY THE STRUCTURAL CONSULTANT SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR SUBMITTING THAT IS COMPLETE, ACCURATE AND IN CONFORMITY WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS.
3. INSPECTION AND TESTING
3.1. A SOILS CONSULTANT AND AN INDEPENDENT INSPECTION AND TESTING COMPANY ARE TO BE ENGAGED TO CARRY OUT THE FOLLOWING SERVICES:
3.1.1. BEARING SOIL - REFER TO NOTES ON STRUCTURAL DRAWINGS AND ALSO TO THE SOIL REPORT.
3.1.2. FILL UNDER SLAB-ON-GRADE - CONFORM THAT FILL MATERIAL USED IS SATISFACTORY AND THAT COMPACTION IS TO 98% STANDARD PROCTOR DENSITY AT OPTIMUM MOISTURE.
3.1.3. CAST-IN-PLACE AND PRECAST CONCRETE - ROUTINE INSPECTION OF MATERIALS, INCLUDING CYLINDER AND AIR ENTRAINMENT TESTS AND REINFORCING ROD TESTS WHEN REQUIRED OR DIRECTED IN ACCORDANCE WITH CSA STANDARD A23.1.
3.1.4. THE PROJECT SUPERINTENDENT IS TO ADVISE THE STRUCTURAL CONSULTANT A MINIMUM OF 24 WORKING HOURS IN ADVANCE OF THE TIME FOR REVIEW OF REINFORCING.
3.1.5. STRUCTURAL STEEL AND CWSJ - ROUTINE SHOP AND FIELD INSPECTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS CSA S16.
3.1.6. STEEL DECK - SEE STEEL DECK NOTES.
3.1.7. MASONRY - WHEN REQUIRED OR DIRECTED, CONCRETE BLOCKS SHALL BE TESTED IN ACCORDANCE WITH CSA STANDARD A165.1 AND MORTAR AND GROUT SHALL BE TESTED AND MIXED IN ACCORDANCE WITH CSA A179.
3.2. ALL INSPECTION AND TESTING SERVICES ARE TO BE PERFORMED BY COMPANIES CERTIFIED BY THE CANADIAN STANDARDS ASSOCIATION (CSA) FOR WELDING, INSPECTIONS AND TESTS BY PERSONNEL CERTIFIED BY THE CANADIAN WELDING BUREAU.
4. FOUNDATIONS
4.1. REFER TO NOTES UNDER FOUNDATION PLANS, ALL EXTERIOR FOOTINGS OR OTHER FOOTINGS EXPOSED TO FREEZING IN THE FINISHED BUILDING SHALL BE FOUNDED AT A MINIMUM OF 1200mm (4'-0") BELOW FINISHED GRADE, UNLESS OTHERWISE NOTED. FOOTINGS EXPOSED TO FROST ACTION DURING CONSTRUCTION SHALL BE PROTECTED BY A MINIMUM OF 1200mm (4'-0") OF EARTH OR ITS EQUIVALENT UNLESS OTHERWISE NOTED.
4.2. THE LINE OF SLOPE BETWEEN HORIZONTAL FOOTINGS AND EXPOSED STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 1 IN A RUN OF 10, MAXIMUM STEP APPROX. 600mm (2'-0").
4.3. PIER DEPTHS AND FOOTING ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE BASED UPON INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THE STRUCTURAL DRAWINGS. FINAL PIER DEPTHS AND FOOTING ELEVATIONS SHALL BE DETERMINED AFTER EXCAVATIONS MUST BE OBTAINED FROM THE STRUCTURAL CONSULTANT BEFORE PROCEEDING WITH THE WORK.
4.4. KEEP EXCAVATIONS CONTINUOUSLY DRY BEFORE CONCRETE IS PLACED. IF THE SOIL IS SOFTENED BY WATER, THE EXCAVATION SHALL BE EXTENDED BELOW THE SOFTENED MATERIAL TO THE BOTTOM OF THE FOOTINGS LOWERED TO SUIT.
5. SLABS-ON-GRADE AND EARTHWORKS
5.1. SLABS-ON-GRADE AND ALL STRUCTURAL ELEMENTS FRAMING INTO WALLS WHICH RETAIN EARTH MUST BE IN PLACE BEFORE BACKFILLING.
5.2. AT FOUNDATION WALLS WITH GRADE BOTH SIDES, UNLESS ADEQUATELY SHORED, BACKFILL AND COMPACT EACH SIDE OF WALL SIMULTANEOUSLY.
5.3. UNDER SLABS-ON-GRADE, PLACE 10M (3/8") GRADE 20 CRUSHED STONE, OR EQUAL, OR FROST SPOTS, DRAINAGE AND ROCKING MATERIAL, UNLESS SPECIFICALLY NOTED OTHERWISE (REFER TO SPECIFICATIONS NOTES ON THE DRAWINGS).
5.4. BACKFILL UNDER SLAB-ON-GRADE, IN FOOTING EXCAVATIONS AND IN TRENCHES ONLY WITH APPROVED MATERIAL, UNLESS SPECIFICALLY NOTED OTHERWISE. BACKFILLING SHALL BE CARRIED OUT IN MAXIMUM OF 200mm (8") THICK LIFTS OF LOOSE FILL EACH COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.
5.5. UNLESS OTHERWISE NOTED, PROVIDE MINIMUM 25mm (1") GRANULAR M SLABS-ON-GRADE A MINIMUM OF 200mm (8") OF COMPACTED (MTO) GRANULAR M MATERIAL, COMPACTION TO ACHIEVE A MINIMUM OF 98% STANDARD PROCTOR MAXIMUM DRY DENSITY.

CAST-IN-PLACE CONCRETE NOTES — T-A02

1. GENERAL
1.1. PROVIDE ALL LABOUR, MATERIALS, TOOLS AND EQUIPMENT REQUIRED TO CARRY OUT THE WORK.
1.2. REFER ALSO TO GENERAL NOTES, NOTES UNDER PLANS AND SCHEDULES, TYPICAL DETAILS AND SPECIFICATION.
2. PRODUCTS
2.1. PORTLAND CEMENT, WATER AND AGGREGATES SHALL CONFORM TO CSA STANDARD A23.1.
2.2. PROVIDE AN APPROVED WATER-REDUCING ADMIXTURE IN ALL CONCRETE. PROVIDE AN APPROVED AIR ENTRAINING ADDITIVE IN ALL CONCRETE WHICH WILL BE EXPOSED TO A FREEZE/THAW CYCLE AND/OR DEICING SALTS. AIR CONTENT SHALL BE AS PER TABLE 1 OF CSA STANDARD A23.1.
2.3. FORMWORK SHALL CONFORM TO CSA STANDARD A23.1. CSA STANDARD S269.3 AND FALSEWORK SHALL CONFORM TO CSA S269.1.
2.4. IF SO INSTRUCTED, THE DESIGNS FOR THE FORMWORK SHALL BE SUBMITTED FOR REVIEW BEFORE CONSTRUCTION. FORMWORK DRAWINGS AND DESIGN SHALL BEAR THE STAMP OF A LICENSED PROFESSIONAL ENGINEER.
2.5. UNLESS OTHERWISE NOTED PROVIDE SLAB AND BEAM FORMS WITH AN UPWARD CAMBER OF 2 mm/1000 mm (1/4" PER 10'-0") OF SPAN, AND UPLIFT ENDS OF CANTILEVERED SLAB AND BEAM FORMS 3 mm/ 1000 mm (1/4" PER 8'-0") OF CANTILEVER LENGTH.
2.6. PROVIDE STANDARD ALKASTRALY MASONRY ANCHOR SLOTS FOR ALL MASONRY FACING OR MUTTING WALLS.
2.7. PROVIDE AND/OR INSTALL STANDARD ADJUSTABLE INSERTS FOR ALL OTHER CAST IN INSERTS AS REQUIRED BY THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATION.
2.8. REINFORCING STEEL SHALL CONFORM TO CSA SPECIFICATION G30.18 GRADE 400 R (WELDABLE) TO CSA CANCSA -G30.18-M (R)4 ASTM A615 GRADE 60 (68000 PSI).
2.9. WELDED WIRE FABRIC SHALL CONFORM TO CSA G30.5 SHEETS ONLY, UNLESS APPROVED OTHERWISE.
2.10 REINFORCING SHALL BE DETAILED, BENT, PLACED AND SUPPORTED TO CONFORM TO ACI DETAILING MANUAL AND THE MANUAL OF STANDARD PRACTICE PUBLISHED BY THE REINFORCING STEEL INSTITUTE OF CANADA.
2.11. DRY-PACK GROUT TO BE 1 PART PORTLAND CEMENT TO 1 1/2 PARTS SAND TO 2 PARTS OF 6 mm PEA GRAVEL, MIXED WITH ONLY ENOUGH WATER TO PERMIT PACKING. DO NOT USE RETEMPERED GROUT AFTER 30 DAYS.
2.12. NON-SHRINK GROUT TO BE: AN APPROVED PREMIXED PRODUCT.
2.13. PROVIDE APPROVED EXTRUDED PVC WATERSTOPS OF SIZE AND STYLE INDICATED, WITH PRE-RELIED CORNERS AND INTERSECTIONS. SEE ALSO TYPICAL DETAILS.
2.14. CURING AND SEALING COMPOUNDS WHERE APPROVED FOR USE TO CONFORM TO ASTM STANDARD C309. TYPE 1 WITH COLOUR ADDITIVE. COMPOUNDS SHALL BE COMPATIBLE WITH ANY SUBSEQUENT FINISHES. COMPOUNDS ARE TO BE COMPATIBLE WITH APPLIED FINISHES.
2.15. SHEAR REINFORCEMENT AT SLAB CONNECTION AS SHOWN ON DRAWINGS AND DETAILS, SHALL BE STUDRAIL(S) AS MANUFACTURED BY DECON®. THE COMPLETE AND FINISHED STUDRAIL® SHALL BE ICC ES EVALUATED AND WELDING SHALL TAKE PLACE IN A CC ES APPROVED AND AUDITED FACILITY. STUDRAIL® SHALL CONFORM TO THE LATEST UPDATE OF ASTM A1044.
3. EXECUTION
3.1. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE @ 28 DAYS SHALL BE AS NOTED ON THE DRAWINGS (MPA/PSI/MIL).
3.2. SLUMP AT THE POINT OF DISCHARGE SHALL BE CONSISTENT AT 80 mm ±20mm (3" ±1 1/8") UNLESS NOTED OTHERWISE. SLUMP TO BE TESTED AS PER CSA A23.2-5C.
3.3. CONCRETE MIXING, TRANSPORTATION, HANDLING AND PLACING SHALL CONFORM TO CSA STANDARD A23.1.
3.4. CONSTRUCTION JOINTS FOR WALLS ARE BASED UPON VERTICAL JOINTS AT A MAXIMUM SPACING OF 10000mm (30'-0") UNLESS CONTROL JOINTS ARE PROVIDED AS PER DETAILS. TO BE TOTAL LENGTH OF POUR TO BE DISCUSSED WITH ENGINEER PRIOR TO PROCEEDING.
3.5. ALL CONSTRUCTION JOINTS ARE TO BE LOCATED AS SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT BEFORE CONSTRUCTION. GENERALLY, JOINTS IN SLABS SHALL BE AT RIGHT ANGLES TO THE SPANS, AT MID-SPAN IF POSSIBLE AND BE CLEAR OF SUPPORTS AND POINT LOADS.
3.6. INSERTS, PANEL OUTLETS, SLEEVES, BRACKETS, CONDUITS AND FASTENING DEVICES, SHALL BE INSTALLED AS REQUIRED. THEY SHALL BE PLACED BEFORE CONCRETE IS POURED AND SHALL NOT IMPAIR THE STRUCTURAL STRENGTH OF THE SYSTEM, BE VISIBLE ON FINISHED SURFACES THAT THEY SHALL NOT REQUIRE THE CUTTING, REMOVAL OR DISPLACEMENT OF THE REINFORCING OTHER THAN AS SHOWN ON THE TYPICAL DETAILS.
3.7. ELECTRICAL CONDUIT SHALL NOT PASS THROUGH A COLUMN UNLESS SHALL NOT BE LARGER IN OUTSIDE DIAMETER THAN 1/3 SLAB THICKNESS OR WALL OR BEAM IN WHICH IT IS EMBEDDED. SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS ON CENTRE. CONDUIT SHALL NOT BE EMBEDDED IN CONCRETE TOPPING OVER SLABS, UNLESS SPECIFICALLY PERMITTED OTHERWISE. SHALL NOT RUN HORIZONTALLY IN A CONCRETE WALL.
3.8. OPENINGS AND DRIVEN FASTENERS REQUIRED IN THE CONCRETE AFTER THE CONCRETE IS PLACED SHALL BE APPROVED BY THE STRUCTURAL CONSULTANT BEFORE PROCEEDING.
3.9. FINISHING, REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIRED FINISH TO EXPOSED CONCRETE SURFACES. WHERE NOT SPECIFIED, FINISH SHALL BE AS PER CSA STANDARD A23.1 AS APPROVED BY THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS AND SHALL CONFORM TO CSA STANDARD A23.1 CLASS A CONVENTIONAL SMOOTH CLASSIFICATIONS.
3.10. TOLERANCES FOR PLACING CONCRETE, REINFORCING STEEL, CAST-IN HARDWARE AND FOR FLOOR AND ROOF FINISHES SHALL BE AS SPECIFIED IN CSA STANDARD A23.1.
3.11. MINIMUM REINFORCING FOR ANY CONCRETE SLAB TO BE AS SHOWN ON TYPICAL DETAIL FOR CONCRETE SLABS.
3.12. MINIMUM REINFORCING FOR ANY SUSPENDED SLAB SHALL BE TEMPERATURE BARS BOTTOM EACH WAY PLUS 10M @ 450 (15") CENTRES AS SHOWN (2'-6" x 2'-6") TOP AND BOTTOM PERIMETERS. REFER TO TYPICAL DETAIL OF ONE WAY SLABS.
3.13. CONCRETE CURING
4.1. FOR INSPECTION AND TESTING, SEE GENERAL NOTES AND/OR SPECIFICATION.

STRUCTURAL STEEL NOTES — T-A03A

1. GENERAL
1.1. STRUCTURAL STEEL DESIGN DETAILING AND CONSTRUCTION SHALL CONFORM TO CSA STANDARD S16 AND THE ONTARIO BUILDING CODE. THE STEEL FABRICATOR, ERECTOR, ENGINEERS EXPERIENCED IN THIS TYPE OF WORK.
1.2. REFER ALSO TO GENERAL NOTES, NOTES UNDER PLANS AND TO THE SPECIFICATION.
1.3. WELDING SHALL CONFORM TO CSA STANDARD W59 AND BE PERFORMED BY A FABRICATOR CERTIFIED TO CSA W47.1.
1.4. BEAM CONNECTIONS SHALL BE DESIGNED FOR A MINIMUM OF 50% OF THE BEAM SHEAR CAPACITY UNLESS OTHERWISE NOTED. AND IN NO CASE BE LESS THAN THE LOADS SHOWN ON OR IMPLIED BY THE DRAWINGS.
2. PRODUCTS
2.1. STRUCTURAL STEEL SECTIONS SHALL CONFORM TO CSA-G40.20/G40.21
2.1.1. WW SHAPES, S SHAPES, CHANNELS, ANGLES, PLATES AND HOSS - GRADE 300 W
2.1.2. HP SHAPES - GRADE 300W (CSA G40.21 GRADE 44W)
2.1.3. HI SHAPES - GRADE 350W
2.2. BOLTS FOR CONNECTIONS TO CONFORM TO ASTM A325 UNLESS NOTED.
2.3. ANCHOR RODS FOR BASE PLATES, BEARING PLATES AND WELD PLATES TO CONFORM TO ASTM F1554 UNLESS NOTED.
2.4. HEADED STUD ANCHORS TO CONFORM TO ASTM A583 AND ASTM F568.
2.5. SHEAR STUDS WHERE REQUIRED TO CONFORM TO ASTM A108, WELDING TO CONFORM TO CSA W59.
2.6. WELDING MATERIALS TO CONFORM TO CSA W48.
2.7. PRIMER PAINT TO CONFORM TO CAN/CGSB - 1.40 OR CISC/PPA 1 OR CISC/PPA 2.
2.8. HOT DIP GALVANIZING WITH A MINIMUM ZINC COATING OF 600g/sq.m
2.9. UNLESS OTHERWISE SPECIFIED.
3. EXECUTION
3.1. FABRICATION, HANDLING AND ERECTION TO CONFORM TO CAN - S16.
3.2. PROVIDE A MINIMUM OF 3-13 mm (1/2") DIAMETER (M12) BOLTS FOR ALL ANCHORS FOR ALL BEAM AND JOIST WALL PLATES ON MASONRY, OR AS APPROVED EQUAL, UNLESS OTHERWISE NOTED. BEAMS AND JOISTS ARE TO BE ANCHORED TO CONCRETE WALLS.
3.3. PROVIDE ADJUSTABLE ANCHORS TO ALL STEEL TO BE BUILT INTO ALTERATIONS OR EXISTING WORK (REFER ALSO TO TYPICAL DETAILS IF SHOWN). SPACING OF ANCHORS TO BE: VERTICAL SPACING ..... 600 (24") MAX. HORIZONTAL SPACING ..... 900 (36") MAX. 2000 (6'-6") CENTRES.
3.4. WHERE STEEL PROVIDES LATERAL BRACING ONLY TO MASONRY (I.E. DOES NOT SUPPORT MASONRY) ANCHORS SHALL PERMIT DIFFERENTIAL VERTICAL MOVEMENT BETWEEN STRUCTURAL MEMBERS AND MASONRY.
3.5. CONCRETE REPAIRS SURFACE PREPARATION FOR STRUCTURAL STEEL WITH ONE COAT OF EPOXY PRIMER AS SPECIFIED BY EPOXY MANUFACTURER. CONCRETE - 51% EXCEPT WHERE MEMBERS ARE TO BE ENCASED IN CONCRETE, OR TO RECEIVE SPRAY APPLIED FIRE PROOFING. FIELD TOUCH-UP BOLTS, WELDS, BURNED OR DOWNED SURFACES AFTER ERECTION.
3.6. PROVIDE ALL NECESSARY TEMPORARY BRACING TO KEEP STRUCTURE SAFE AND PLUMB. BRACING SHOWN ON THE DRAWINGS IS FOR THE COMPLETED STRUCTURE ONLY. BUILDING ONLY.
3.7. COORDINATE WITH MECHANICAL AND ELECTRICAL WORK FOR ALL SUB-TRADES WHOSE WORK MAY EFFECT DETAILING, FABRICATION AND ERECTION OF THE STEEL STRUCTURE.
3.8. TOLERANCES - VARIATION FROM PLUMB AND LEVEL, EXTERIOR COLUMNS, COLUMNS AT ELEVATOR SHAFTS, AND SPANDREL BEAMS INCLUDING ANGLES ..... 1:1000 MAX. 25 mm (1/8" IN 10'-0" MAX. 1"). ..... 1:500 (1/8" IN 10'-0").
3.9. NO HOLES OTHER THAN THOSE SHOWN ON REVIEWED SHOP DRAWINGS SHALL BE MADE IN ANY STEEL MEMBER WITHOUT WRITTEN PERMISSION OF THE STRUCTURAL CONSULTANT.
4. QUALITY CONTROL
4.1. SEE GENERAL NOTES, NOTES UNDER PLANS, AND/OR SPECIFICATION FOR INSPECTION AND TESTING REQUIREMENTS.

LINTEL NOTES — T-A06

UNLESS OTHERWISE SHOWN OR NOTED ON THE STRUCTURAL DRAWINGS. PROVIDE LINTELS OVER ALL OPENINGS IN MASONRY WALLS, AS FOLLOWS:
1.1. ONE 90x200 (3 1/2" x 8") LINTEL FOR UP TO CLEAR:
1.1.1. ONE MASONRY WYTHE: 1.8 M (6'-0") X 1.5M (5'-0") FOR EACH 100mm (4") OF WALL THICKNESS OR PORTION THEREOF.
OR
1.2. 200mm (8") MASONRY WYTHE, WHEN INCREASED WITH 1.15M BOTTOM FOR EACH 100mm (4") OF WALL THICKNESS OR PORTION THEREOF.
2.2. FOR OPENINGS FROM 920mm (4'-0") CLEAR TO 1800mm (6'-0") CLEAR:
2.1. ONE WIDE 120 x 80 X (LONG LEG) VERTICAL (5" x 3 1/2" x 5/16") FOR EACH 100mm (4") OF WALL THICKNESS OR PORTION THEREOF.
2.2. 200mm (8") DEEP MASONRY LINTEL BLOCK REINFORCED WITH 1-15M BOTTOM FOR EACH 100mm (4") OF WALL THICKNESS OR PORTION THEREOF.
3. ALL LINTELS TO BEAR 100mm (8") MINIMUM AT EACH END ON SOLID MASONRY, UNLESS SHOWN OTHERWISE.
4. PAIRS OF LINTEL ANGLES ARE TO BE BOLTED OR WELDED TOGETHER, PRIOR TO PAINTING, AT MAXIMUM 400mm (16") CENTRES.
5. LINTELS IN CONCRETE BLOCKS MAY ONLY BE USED IN LOAD-BEARING WALLS WITH PERMISSION AND MUST BE FILLED WITH 20 MPA CONCRETE. MORTAR SET IS UNACCEPTABLE AND WILL BE REJECTED.
6. STEEL LINTELS ARE TO BE SUPPLIED BY STEEL CONTRACTOR BUT PLACED BY GENERAL CONTRACTOR OR MASONRY SUB-CONTRACTOR.
7. STEEL CONTRACTOR TO SUPPLY ALL NECESSARY DIRECTIONS REQUIRED FOR PLACING STEEL LINTELS.
8. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS AND SIZES OF OPENINGS, SIZES OF STEEL LINTELS OVER DOORS, WINDOWS, AND ELECTRICAL ACCESS HOLES AND POCKET DETAILS, THROUGH LOAD-BEARING MASONRY WALLS. IF IS THE STRUCTURAL CONTRACTORS RESPONSIBILITY TO CO-ORDINATE AND SUPPLY ALL LINTELS REQUIRED THROUGH ALL WALLS (INCLUDING NON-LOAD BEARING WALLS) THROUGHOUT THE PROJECT. UNLESS OTHERWISE DIRECTED, LINTELS SHALL CONFORM TO THE ABOVE REQUIREMENTS.
9. REFER ALSO TO TYPICAL DETAILS.

STANDARD ABBREVIATIONS — T-A11

@	-At	H (HOR)	-Horizontal	S	-Standard Beam
ADJ	-Adjustable	HDG	-Horizontal Each Face	SDG	-Sloping Down Footing
APB	-Asphalt Impregnated Board	HF	-Horizontal Inside Face	SDL	-Superimposed Dead
	-Asphalt Tile	HSS	-Hollow Structural Section	SEC	
ARCH	-Architectural			SECT	-Section
A.R.(DIA.)	-Anchor Rod	I	-Inside Face	SL	-Slab
ASL	-Accumulated Snow	INT	-Interior	SQ	-Square
		INV	-Invert	SSD	-Slab on Grade
B (BOT)	-Bottom			SUSP	-Suspended
BDW	-Bottom Each Way	J	-Joint	SPEC	-Specifications
BLDG	-Building	JT	-Joint	STL	-Steel
BLW	-Bottom Lower Layer			STD	-Standard
BM	-Beam	K	-Kilogram	STR	-Straight
BML	-Bottom Middle Layer	KN.m	-Kilo Newton Metres	STRUCT	-Structural
BUS	-Bottom	KN/m	-Kilo Newton per Square		
Bottom/Thickness			Metre	T	-Tempature
BOF	-Bottom of Footing	KNm	-Kilo Newton per Metre	TEMP	-Factored Tension
BP	-Baseplate	KPa	-Kilo Pascals	TF	
BSMT	-Basement			TJ	-Top Lower Layer
BUL	-Bottom Upper Layer	L	-Angle	TM	-Top Middle Layer
		LL	-Pounds	TOC	-Top of Concrete
C	-Standard Channel	LLH	-Live Load	TOF	-Top of Footing
CANT	-Cantilever	LLH	-Live Load Horizontal	TOS	-Top of Steel
CC (cc)	-Centre to Centre	LLV	-Live Load Vertical	TOW	-Top of Wall
CJ	-Control Joint	LSG	-Long Span Steel Joists	TSS	-Top of Square Foot
CL	-Column Line	LW	-Laminated Veneer	TUL	-Top Upper Layer
COL	-Column		Lumber	TYP	-Typical
COMP	-Compressible				
CONC	-Concrete	M	-Metre		
CONST	-Construction Joint	MAX	-Maximum	UL	-Upper Layer
CONT (F.(C))	-Continuous	MECH	-Mechanical	UNO	-Unless Noted
CONT (CONTIN)	-Continue	MEZZ	-Mezzanine	U.N.O.	-Unless Noted Otherwise
CW	-Complete With	MIN	-Minimum		-Underside
		MISC	-Miscellaneous		-Underside of Deck
D FR	-Douglas Fir	MM	-Millimetre		
DET	-Detail	MOM	-Moment	V (VERT)	
DIAG	-Diagonal	MOM.,BM		VIF	-Vertical
D (DIA)	-Diameter		-Moment	Framing	-Vertical Each Face
DIM	-Dimension	MPa	-Mega Pascals	VSF	-Vertical Inside Face
DJ	-Double Joist	MUL	-Middle Upper Layer	VOF	-Vertical Outside Face
DL	-Dead Load			VSC	-Vertically Slotted
DWG	-Drawing	N	-Newton	Connection	
DWL	-Dowel	N.S	-North-South		
		N.F	-Near Face	W	-Wide Flange Beam
E	-Double Tee	NIC	-Not in Contract	WP	-Wall Plate
		NLWB	-Non-Load	WWF	-Welded Wide Flange
E-W	-East-West	NTS	-Not to Scale	Beam	
EA	-Each			WWF (WRM)	-Welded Wire Fabric)
EACH	-Each End	OWSJ	-Open Web Steel Joist	Mesh	
EF	-Each Face				
ELECT	-Electrical	Pa	-Pascal		
ELEV (EL)	-Elevation /	PC	-Precast		
Elevator		PL	-Plate		
EQ	-Equal	PLF	-Pounds per Lineal Foot		
ES	-Each Side	PREL	-Preliminary		
EW	-Each Way	PRCC	-Protection		
EXP	-Footing	PSF	-Pounds per Square Foot		
EXP. JT.	-Expansion Joint	PSI	-Pounds per Square Inch		
EXT	-Exterior	PVL	-Parallel Strand Lumber		
		PT	-Pressure Treated		
F	-Foundation				
FW	-Far Face	R	-Reaction		
FIN	-Finished	RAD	-Radius		
FL	-Floor	REINF	-Reinforcing		
FMC	-Full Moment	REINF	-Reinforcing	HEL	-Hook Embedment
CONNECTION		REQ'D	-Required	Length	
FT	-Foot / Feet	REV	-Revision/Revised	TLS	-Tension Lap Splice
FTG	-Footing	RF	-Reaction	TOL	-Tension Development
		RW	-Reinforced Wall	Length	
GA	-Gauge				
GALV	-Galvanized				
GEN	-General				

SHORING NOTES — T-A13

1.0 DESIGN
1.1. LATERAL EARTH PRESSURE EXERTED ON SHORING SYSTEM P = K (ß H+q)
1.1.1. WHERE K = 0.3 (FOR ß = 0.3 TIE BACKS)
K = 21.3/(44+ß)
q = 12.5kN/m²
h = DEPTH OF CUT
2. ALSO SEE SOILS REPORT BY ..... DATED .....
2.1. ALLOWANCE HAS BEEN MADE FOR AN ARCHIVOLVE COEFFICIENT KH 1.5 AND THE CANADIAN FOUNDATION ENGINEERING MANUAL 3rd EDITION.
2.2. ALTERNATIVE SECTIONS OR GRADES OF EQUIVALENT STRENGTH, MAY BE SUBSTITUTED SUBJECT TO APPROVAL OF ENGINEER.
2.3. CONCRETE STRENGTHS TO BE AS FOLLOWS:
a) PILE TOPS ..... 20 MPa
b) CONCRETE USED FILE TOES ..... 25 MPa
c) BACKFILL TO GRADE ..... MPa
d) FREE ZONES ..... BENTONITE GROUT
2.4 TIMBER LAGGING TO BE: Fir-rare MIN. (TRUE THICKNESS) AND PRESSURE TREATED UNLESS NOTED OTHERWISE.
2.5. WELDING SHALL CONFORM TO C.S.A. W59 AND BE PERFORMED BY QUALIFIED WELDERS.
3. EXECUTION
3.1. DRILL HOLES TO SIZE AND DEPTHS INDICATED. INSTALL PILES PLUMB AND TRUE.
3.2 POUR SPECIFIED CONCRETE TO PILES AND BACKFILL TO GRADE.
3.3 EXCAVATE IN 1000mm MAX. LIFTS AND INSTALL LAGGING AS EXCAVATION PROCEEDS. CUT SOIL FACES NEATLY TO ENSURE A TIGHT FIT FOR LAGGING. WEDGE AT PILES AS REQUIRED. FILL VOIDS BEHIND LAGGING WITH GRANULAR MATERIAL COMPACTED IN PLACE.
3.4 WHEN EXCAVATION REACHES 300mm ABOVE TIE BACK LOCATIONS INSTALL DRILL AND INSTALL TIE-BACKS. LOCK-IN LOAD BEFORE EXCAVATING BELOW.
3.5. PROVIDE 2 TEST TIE BACKS. TEST TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CANADIAN FOUNDATION ENGINEERING MANUAL - TEST ANCHORS TO THRICE THE DESIGN LOAD NOTED.
3.6. MAINTAIN LOAD FOR A MINIMUM OF 10 MINUTES. LOAD SHALL NOT CREEP MORE THAN 1mm IN 10 MINUTES. IF NO APPROVABLE CREEP OCCURS WITHIN 10 MINUTES LOAD TO 1 TIMES DESIGN LOAD AND LOCK-IN.
4.0 GENERAL CONTRACTOR
4.1 GENERAL CONTRACTOR TO PROVIDE THE FOLLOWING:
a) CHECK ALL DIMENSIONS WITH ARCH. & STRUCT. DWGS. PRIOR TO PILE INSTALLATION.
b) LOCATE ALL UTILITIES ON SITE.
c) ADEQUATE PROTECTION TO SHORING SYSTEM AND STRUCTURE THE EFFECTS OF WEATHER, WATER OR FREEZING.
d) MONITORING OF ALL PILES FOR ANY LATERAL MOVEMENTS. REPORT ANY MOVEMENT GREATER THAN 5mm IMMEDIATELY TO ENGINEER.
e) LOCATE AND IDENTIFY ALL SERVICES AND ABOVE GROUND SERVICES OR UTILITIES THAT MAY INTERFERE WITH PILE INSTALLATION. REMOVE OR RELOCATE AS NECESSARY.
f) DEWATER SITE AS NECESSARY.

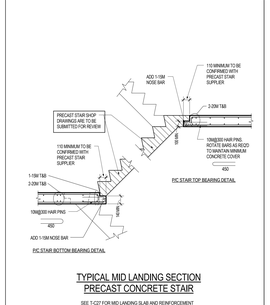
COLD WEATHER CONCRETING — T-A14

FOR FORECASTED AIR TEMPERATURES AT OR BELOW 5°C

1. ALL MATERIALS AND EQUIPMENT NEEDED FOR HEATED ENCLOSURE AND CONCRETE CURING PROTECTION SHALL BE ON HAND AND READY FOR USE BEFORE CONCRETE PLACING IS STARTED.
2. FORMS AND/OR STEEL DECK IS TO BE HEATED TO A MINIMUM OF 5°C. CONCRETE SHALL NOT BE PLACED ON FROZEN FORMS OR STEEL DECK.
3. FORMS AND/OR STEEL DECK MUST BE FREE OF SNOW AND ICE PRIOR TO PLACING CONCRETE. THE USE OF ANY DE-ICING CHEMICAL IS NOT PERMITTED ON THE FORMWORK OR STEEL DECK.
4. FOR SLABS LESS THAN 1000mm THICK THE MINIMUM CONCRETE TEMPERATURE AT TIME OF POURING IS TO BE 10°C. FOR SLABS GREATER THAN 1000mm THICK THE MINIMUM CONCRETE TEMPERATURE AT TIME OF POURING IS 5°C.
5. CONCRETE TEMPERATURE SHALL BE KEPT AT A MINIMUM OF 10°C FOR AT LEAST 3 DAYS OR UNTIL THE CONCRETE REACHES 40% OF THE SPECIFIED STRENGTH. ADDITIONAL CURING MAY BE REQUIRED IN WHICH CONCRETE SHALL BE KEPT AT A MINIMUM OF 10°C FOR AT LEAST 7 DAYS OR UNTIL THE CONCRETE REACHES 70% OF THE SPECIFIED STRENGTH.
6. FOR SLABS WHERE THE AIR TEMPERATURE IS TO FALL BELOW 0°C, THE TOP OF SLAB SHALL BE PROTECTED FROM FREEZING. TOP OF SLAB PROTECTION SHALL BE PLACED AS TO NOT AFFECT THE FINISH OF THE SLAB.
7. IF THE FORECASTED AIR TEMPERATURE IS TO FALL BELOW 0°C WITH REASONABLY HIGH WINDS THE CONCRETE MUST BE PROTECTED FROM FLASH FREEZING DURING PLACEMENT AND FINISHING. THIS PROTECTION MUST REMAIN IN PLACE UNTIL TOP OF SLAB PROTECTION HAS BEEN INSTALLED AS PER NOTE #6.

* SEE ALSO CSA-A23.1-09/A23.2-09 CLAUS

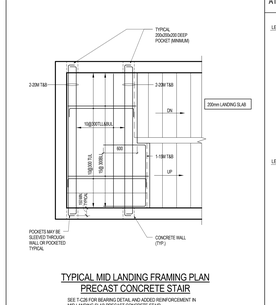
TYPICAL SECTION, PRECAST STAIR — T-C26



TYPICAL MID LANDING SECTION
PRECAST CONCRETE STAIR

SEE T-C27 FOR MID LANDING DETAIL AND ADDED REINFORCEMENT IN MID LANDING SLAB PRECAST CONCRETE STAIR.

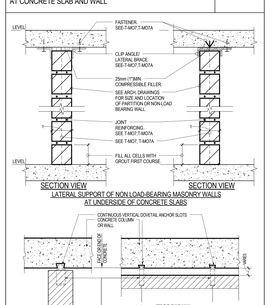
TYPICAL MID LANDING, PRECAST STAIR — T-C27



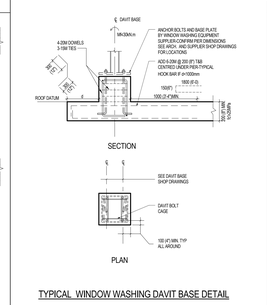
TYPICAL MID LANDING FRAMING PLAN
PRECAST CONCRETE STAIR

SEE T-C26 FOR BEARING DETAIL AND ADDED REINFORCEMENT IN MID LANDING SLAB PRECAST CONCRETE STAIR.

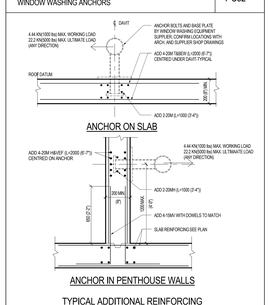
DETAILS OF NON LOAD-BEARING MASONRY WALLS AT CONCRETE SLAB AND WALL — T-C29



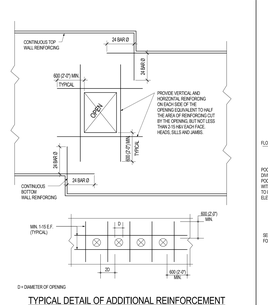
TYPICAL WINDOW WASHING DAVIT BASE DETAIL — T-C30



TYPICAL ADDITIONAL REINFORCING AT WINDOW WASHING ANCHORS — T-C32



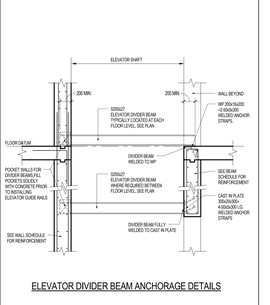
TYPICAL DETAIL OF OPENINGS IN CONCRETE WALL — T-C36



TYPICAL DETAIL OF ADDITIONAL REINFORCEMENT AT WALL OPENINGS

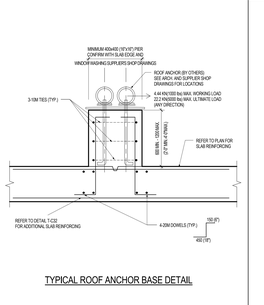
(TYPICAL UNLESS OTHERWISE SHOWN ON DRAWINGS)

TYPICAL ELEVATOR DIVIDER BEAM DETAIL — T-C37



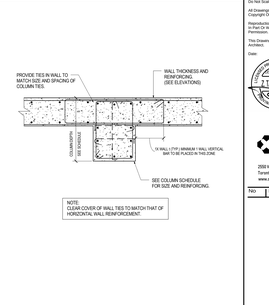
ELEVATOR DIVIDER BEAM ANCHORAGE DETAILS

TYPICAL ROOF ANCHOR BASE DETAIL — T-C38

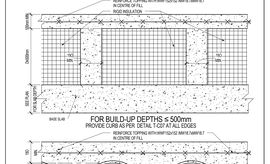


TYPICAL ROOF ANCHOR BASE DETAIL

COLUMN CAST INTEGRALLY WITH SHEAR WALLS — T-C41



TYPICAL CONCRETE BUILD-UP DETAIL (Ds500mm) — T-C42

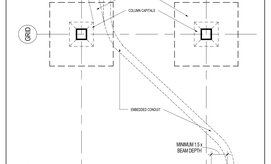


FOR BUILD-UP DEPTHS ≤ 150mm

FOR BUILD-UP DEPTHS ≤ 500mm
PROVIDE CURB AS PER DETAIL T-C07 AT ALL EDGES

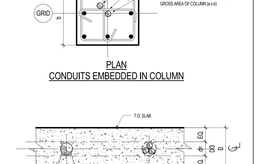
FOR BUILD-UP DEPTHS ≤ 500mm
PROVIDE CURB AS PER DETAIL T-C07 AT ALL EDGES

EMBEDDED CONDUITS IN SLAB — T-C43



PART PLAN

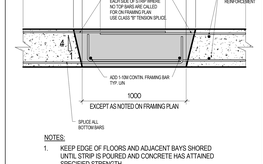
EMBEDDED CONDUITS AND PIPES — T-C44



SECTION
CONDUITS EMBEDDED IN SLAB

*EXCEPT AS NOTED ABOVE, REFER TO SECTION 6.7.5. OF A23.1-09 FOR ADDITIONAL REQUIREMENTS FOR CONDUITS IN CONCRETE.

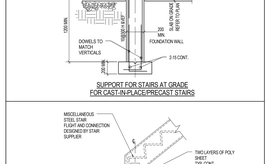
SHRINKAGE STRIP DETAIL — T-C45



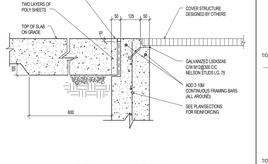
NOTES:

1. KEEP EDGE OF FLOORS AND ADJACENT BAYS SHORED UNTIL STRIP IS POURED AND CONCRETE HAS ATTAINED SPECIFIED STRENGTH.
2. POUR SHRINKAGE STRIP AT CONSULTANT SPECIFIED BAYS AFTER ALL THE ADJOINING SEGMENTS OF SLABS HAVE BEEN CONSTRUCTED OR AS OTHERWISE NOTED IN SPECIFICATION.
3. PROVIDE VERTICAL EXPANSION JOINTS IN WALLS THAT INTERSECT SEPARATION STRIP.

SUPPORT FOR EXTERIOR STAIRS AT GRADE — T-C50

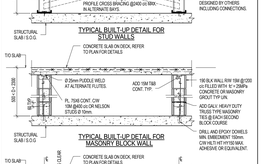


TYPICAL SUMP PIT DETAIL — T-C51

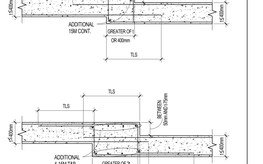


TYPICAL SUMP PIT DETAIL

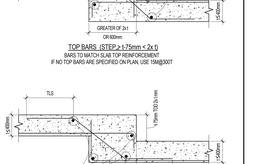
BUILT-UP FLOOR DETAILS - CONCRETE ON DECK (FILL DEPTH (D) > 500mm) — T-C52



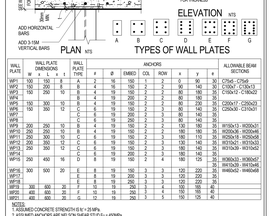
TYPICAL SLAB DEPRESSION REINFORCING DETAILS — T-C53A



TYPICAL STEP IN SLAB REINFORCING DETAILS — T-C53B



TYPICAL CAST IN PLACE SHEAR PLATE DETAIL — T-C55



COMPRESSION-TENSION DEVELOPMENT AND LAP LENGTHS Fy = 400 MPa — T-C56A

NOTES:
1. STANDARD ABBREVIATIONS ON PLANS AND SCHEDULES SHOULD BE AS FOLLOWS
CLS - COMPRESSION SPLICE
CDL - COMPRESSION DEVELOPMENT LENGTH
HEL - HOOK EMBEDMENT LENGTH

COMPRESSION LAP SPLICE AND DEVELOPMENT LENGTHS (Fy = 400 MPa)

CLS: COMPRESSION LAP SPLICE LENGTH

UNCOATED BLACK BAR						
10M	15M	20M	25M	30M	35M	45M
330	470	570	740	880	1050	1260

CDL: COMPRESSION DEVELOPMENT LENGTH

f'c	UNCOATED BLACK BAR								
	10M	15M	20M	25M	30M	35M	45M	55M	
20MPa	250	340	420	540	640	770	940	1210	
25MPa	220	310	380	480	570	690	840	1080	
30MPa	200	280	340	440	520	630	770	990	
35MPa	190	260	320	410	490	590	720	930	
40MPa	180	250	300	390	460	560	680	880	
≥ 45 MPa	SEE MINIMUM VALUES IN ROW ABOVE								

NOTES:
1. 'A' BAND/LEG BARS ARE USED THE VALUES IN THE TABLES MUST BE INCREASED.
a. MULTIPLY BY 1.1 (TWO BAR BUNDLES).
b. MULTIPLY BY 1.2 (THREE BAR BUNDLES).
c. MULTIPLY BY 1.33 (FOUR BAR BUNDLES).

HEL - STANDARD HOOK TENSION EMBEDMENT LENGTHS

f'c	UNCOATED BLACK BAR						
	10M	15M	20M	25M	30M	35M	45M
20MPa	260	360	440	570	670	810	990
25MPa	230	320	390	500	590	720	880
30MPa	210	300	360	470	550	660	810
35MPa	200	280	340	435	510	620	760
40MPa	190	260	310	400	480	575	
45MPa	175	240	300	385	450	545	
50MPa	160	230	280	360	430	510	
55MPa	150	220	270	345	410	490	

NOTES:
1. FOR EPOXY COATED BARS THE VALUES IN THE TABLES MUST BE INCREASED.
a. MULTIPLY BY 1.2 (WHEN CLEAR COVER GREATER THAN 1.5 BAR DIAMETER AND CLEAR SPACING GREATER THAN 6 X BAR DIAMETER)
b. MULTIPLY BY 1.5 (WHEN COVER OR SPACING ARE LESS THAN ABOVE)
2. VALUES PROVIDED ARE BASED ON NORMAL WEIGHT CONCRETE AND MUST BE INCREASED FOR LIGHTWEIGHT CONCRETES
a. MULTIPLY BY 1.3 (FOR SEMI-LOW DENSITY CONCRETE)
b. MULTIPLY BY 1.5 (FOR LOW DENSITY CONCRETE)

TENSION DEVELOPMENT AND LAP LENGTHS Fy = 400 MPa — T-C56B

NOTES
1. STANDARD ABBREVIATIONS ON PLANS AND SCHEDULES SHOULD BE AS FOLLOW
TLS - TENSION LAP SPLICE
TDL - TENSION DEVELOPMENT LENGTH

TENSION LAP SPLICE AND DEVELOPMENT LENGTHS (Fy = 400 MPa)

TLS: TENSION LAP SPLICE LENGTH (CLASS B)

f'c	UNCOATED BLACK BAR											
	10M		15M		20M		25M		30M		35M	
	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
20MPa	430	340	610	480	810	640	1010	800	1210	960	1410	1120
25MPa	390	310	550	430	730	570	910	710	1090	850	1270	990
30MPa	360	280	500	390	660	520	830	650	990	770	1150	900
35MPa	330	260	460	360	610	480	760	600	910	710	1060	830
40MPa	310	240	430	340	570	450	710	560	850	670	990	780
≥ 45 MPa	SEE MINIMUM VALUES IN ROW ABOVE											

NOTES:
1. 'A' BAND/LEG BARS ARE USED THE VALUES IN THE TABLES MUST BE INCREASED.
a. MULTIPLY BY 1.1 (TWO BAR BUNDLES).
b. MULTIPLY BY 1.2 (THREE BAR BUNDLES).
c. MULTIPLY BY 1.33 (FOUR BAR BUNDLES).

TDL: TENSION DEVELOPMENT LENGTH

f'c	UNCOATED BLACK BAR											
	10M		15M		20M		25M		30M		35M	
	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
20MPa	430	330	650	500	860	660	1080	830	1290	990	1510	1160
25MPa	430	330	650	470	740	570	1180	910	1400	1080	1660	1280
30MPa	390	300	590	430	670	520	1070	820	1280	980	1520	1180
35MPa	360	300	510	390	620	480	1000	770	1190	910	1420	1090
40MPa	340	300	480	370	580	450	940	730	1110	860	1320	1020
45MPa	320	300	450	350	550	420	890	690	1060	810	1260	960
50MPa	310	300	430	330	520	400	840	650	990	770	1180	910
55MPa	300	300	410	320	500	380	800	620	950	730	1130	870
60MPa	300	300	390	300	480	370	770	590	910	700	1080	830
65MPa	300	300	380	300	460	360	740	570	870	680	1040	800

NOTES:
1. FOR EPOXY COATED BARS THE VALUES IN THE TABLES MUST BE INCREASED.
a. MULTIPLY BY 1.2 (WHEN CLEAR COVER GREATER THAN 1.5 BAR DIAMETER AND CLEAR SPACING GREATER THAN 6 X BAR DIAMETER)
b. MULTIPLY BY 1.5 (WHEN COVER OR SPACING ARE LESS THAN ABOVE)
2. VALUES PROVIDED ARE BASED ON NORMAL WEIGHT CONCRETE AND MUST BE INCREASED FOR LIGHTWEIGHT CONCRETES
a. MULTIPLY BY 1.3 (FOR SEMI-LOW DENSITY CONCRETE)
b. MULTIPLY BY 1.5 (FOR LOW DENSITY CONCRETE)

TENSION AND COMPRESSION DEVELOPMENT AND LAP LENGTHS Fy = 500 MPa — T-C57A

NOTES
1. STANDARD ABBREVIATIONS ON PLANS AND SCHEDULES SHOULD BE AS FOLLOWS
CLS - COMPRESSION LAP SPLICE
CDL - COMPRESSION DEVELOPMENT LENGTH
HEL - HOOK EMBEDMENT LENGTH

COMPRESSION LAP SPLICE AND DEVELOPMENT LENGTHS (Fy = 500 MPa)

CLS: COMPRESSION LAP SPLICE LENGTH

UNCOATED BLACK BAR						
10M	15M	20M	25M	30M	35M	45M
400	580	690	900	1070	1280	1540

CDL: COMPRESSION DEVELOPMENT LENGTH

f'c	UNCOATED BLACK BAR								
	10M	15M	20M	25M	30M	35M	45M	55M	
20MPa	310	430	530	680	810	960	1180	1520	
25MPa	280	390	470	610	730	860	1060	1360	
30MPa	250	350	430	560	660	790	970	1250	
35MPa	240	330	400	520	620	740	910	1180	
40MPa	230	310	380	490	580	700	860	1110	
≥ 45 MPa	SEE MINIMUM VALUES IN ROW ABOVE								

NOTES:
1. 'A' BAND/LEG BARS ARE USED THE VALUES IN THE TABLES MUST BE INCREASED.
a. MULTIPLY BY 1.1 (TWO BAR BUNDLES).
b. MULTIPLY BY 1.2 (THREE BAR BUNDLES).
c. MULTIPLY BY 1.33 (FOUR BAR BUNDLES).

HEL - STANDARD HOOK TENSION EMBEDMENT LENGTHS

f'c	UNCOATED BLACK BAR						
	10M	15M	20M	25M	30M	35M	45M
20MPa	320	450	580	710	840	1000	
25MPa	290	410	520	640	750	900	
30MPa	260	370	460	560	660	790	
35MPa	250	350	440	540	630	750	
40MPa	240	330	420	520	600	720	
45MPa	230	320	390	500	600	710	
50MPa	220	310	370	470	560	670	
55MPa	210	290	350	450	530	640	
60MPa	200	270	330	430	510	610	

TENSION AND COMPRESSION DEVELOPMENT AND LAP LENGTHS Fy = 500 MPa — T-C57B

NOTES
1. STANDARD ABBREVIATIONS ON PLANS AND SCHEDULES SHOULD BE AS FOLLOW
TLS - TENSION LAP SPLICE
TDL - TENSION DEVELOPMENT LENGTH

TENSION LAP SPLICE AND DEVELOPMENT LENGTHS (Fy = 500 MPa)

TLS: TENSION LAP SPLICE LENGTH (CLASS B)

f'c	UNCOATED BLACK BAR											
	10M		15M		20M		25M		30M		35M	
	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
20MPa	430	330	650	500	860	660	1080	830	1290	990	1510	1160
25MPa	390	310	590	430	730	570	1070	820	1280	980	1520	1180
30MPa	360	280	540	390	670	520	970	740	1160	890	1380	1070
35MPa	330	260	500	360	620	480	900	690	1080	830	1280	990
40MPa	310	240	470	340	580	450	850	650	1010	780	1200	930
≥ 45 MPa	SEE MINIMUM VALUES IN ROW ABOVE											

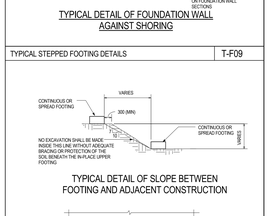
NOTES:
1. 'A' BAND/LEG BARS ARE USED THE VALUES IN THE TABLES MUST BE INCREASED.
a. MULTIPLY BY 1.1 (TWO BAR BUNDLES).
b. MULTIPLY BY 1.2 (THREE BAR BUNDLES).
c. MULTIPLY BY 1.33 (FOUR BAR BUNDLES).

TDL: TENSION DEVELOPMENT LENGTH

f'c	UNCOATED BLACK BAR											
	10M		15M		20M		25M		30M		35M	
	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom
20MPa	430	330	650	500	860	660	1080	830	1290	990	1510	1160
25MPa	410	330	650	500	750	710	1220	940	1440	1080	1700	1310
30MPa	390	300	590	430	670	520	1070	820	1280	980	1520	1180
35MPa	370	300	560	400	640	500	980	760	1200	1040	1400	1080
40MPa	350	300	530	380	600	470	920	720	1130	1070	1320	1020
45MPa	310	300	430	430	560	530	890	690	1060	1100	1310	1200
50MPa	300	300	410	410	530	500	850	660	1010	1050	1250	1140
55MPa	300	300	390	390	510	480	810	630	970	1000	1190	1090
60MPa	300	300	380	380	490	460	780	610	930	960	1150	1040
65MPa	300	300	360	360	470	440	750	580	890	920	1100	1000

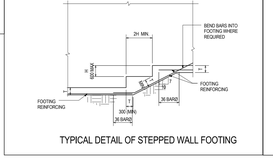
NOTES:
1. FOR EPOXY COATED BARS THE VALUES IN THE TABLES MUST BE INCREASED.
a. MULTIPLY BY 1.2 (WHEN CLEAR COVER GREATER THAN 1.5 BAR DIAMETER AND CLEAR SPACING GREATER THAN 6 X BAR DIAMETER)
b. MULTIPLY BY 1.5 (WHEN COVER OR SPACING ARE LESS THAN ABOVE)
2. VALUES PROVIDED ARE BASED ON NORMAL WEIGHT CONCRETE AND MUST BE INCREASED FOR LIGHTWEIGHT CONCRETES
a. MULTIPLY BY 1.3 (FOR SEMI-LOW DENSITY CONCRETE)
b. MULTIPLY BY 1.5 (FOR LOW DENSITY CONCRETE)

TYPICAL FOUNDATION WALL AGAINST SHORING — T-F02

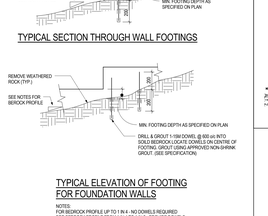


TYPICAL DETAIL OF FOUNDATION WALL AGAINST SHORING

TYPICAL STEPPED FOOTING DETAILS — T-F09



TYPICAL FOOTING ON BEDROCK — T-F10



NOTES:
FOR BEDROCK PROFILE UP TO 1 IN 4 - NO DOWELS REQUIRED
FOR BEDROCK PROFILE FROM 1 IN 4 TO 1 IN 2 - PROVIDE DOWELS
FOR BEDROCK PROFILE GREATER THAN 1 IN 2 - CUT ROCK TO MAX. 1 IN 2.

NON-LOAD BEARING BLOCK WALL LINTELS — T-M01

★ ALTERNATIVES WHERE EXPOSED FACE OF SINGLE REINFORCED MASONRY LINTEL BLOCKS (SEE LINTEL NOTES)
2 DOUBLE ANGLES (SEE BELOW)
(SLOT BLOCKS TO SUIT)

NON-LOAD BEARING