COLUMN & WALL SCHEDULE (BELOW GROUND FLOOR)

COL. No. / DATA	Ax.Pa–Ax.Pb	C.Pa–C.Pb	A.PB–C.Pb	P1 Pb	P2 Pb	P3 Pb	P4 Pb	P5 Pb	P6 Pb	P7 Pb	P8 Pb	P9.Pa–P9.Pb	P11.Pa–P11.Pb	P12.Pa–P12.Pb	P13.Pa–P13.Pb	P.2–Q.2	P9.Pb–Q.Pb	C 6	P1 6	P2 6	P3 6	P4 6	P5 6	H 6	J.7–J.8	J.7–Kx.7	Kx.7–Kx.8	J–8	K–8	Kx–8
GROUND FLOOR																														
P1 LEVEL (4000)	300 WALL 10@270 HEF 10@200 VEF; ADD 2–20 AROUND OPENING; ADD 4–25 VEE ▲	200 WALL 10@400 HEF 10@200 VEF; ADD 4–25 VEE ▲	300 WALL 10@270 HEF 10@200 VEF; ADD 2–20 AROUND OPENING; ADD 4–25 VEE ▲	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	300 WALL 10@200 HEF 10@200 VEF; ADD 4–25 VEE ▲	1000x300 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300 WALL 10@270 HEF 10@200 VEF; ADD 8–25 VEE ▲	300 WALL 10@270 HEF 10@200 VEF; ADD 8–25 VEE ▲	300 WALL 10@270 HEF 10@200 VEF; ADD 8–25 VEE ▲	300 WALL 10@270 HEF 10@200 VEF; ADD 8–25 VEE ▲	300 WALL 10@270 HEF 10@200 VEF; ADD 8–25 VEE ▲	300 WALL 10@270 HEF 10@200 VEF; ADD 8–25 VEE ▲
P2 LEVEL (4575) (fc=35 MPa)	300 WALL 10@270 HEF 10@200 VEF; ADD 4–25 VEE ▲	200 WALL 10@400 HEF 10@200 VEF; ADD 4–25 VEE ▲	300 WALL 10@270 HEF 10@200 VEF; ADD 2–20 AROUND OPENING; ADD 4–25 VEE ▲	300x1000 12–35	350x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	250 WALL 10@320 HEF 10@200 VEF; ADD 2–20 AROUND OPENING; ADD 4–25 VEE ▲	300 WALL 10@200 HEF 10@200 VEF; ADD 2–20 ALL AROUND THE OPENINGS; ADD 4–25 VEE ▲	1000x300 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300 WALL 10@270 HEF 10@200 VEF; ADD 8–25 VEE ▲	300 WALL 10@270 HEF 10@200 VEF; ADD 8–25 VEE ▲	300 WALL 10@270 HEF 10@200 VEF; ADD 8–25 VEE ▲	300 WALL 10@270 HEF 10@200 VEF; ADD 8–25 VEE ▲	300 WALL 10@270 HEF 10@200 VEF; ADD 8–25 VEE ▲	300 WALL 10@270 HEF 10@200 VEF; ADD 8–25 VEE ▲
	STAIRS																								ELEV. CORE					
DATA / COL. No.	Ax.Pa–Ax.Pb	C.Pa–C.Pb	A.PB–C.Pb	P1 Pb	P2 Pb	P3 Pb	P4 Pb	P5 Pb	P6 Pb	P7 Pb	P8 Pb	P9.Pa–P9.Pb	P11.Pa–P11.Pb	P12.Pa–P12.Pb	P13.Pa–P13.Pb	P.2–Q.2	P9.Pb–Q.Pb	C 6	P1 6	P2 6	P3 6	P4 6	P5 6	H 6	J.7–J.8	J.7–Kx.7	Kx.7–Kx.8	J–8	K–8	Kx–8

COL. No. / DATA	Kx.7–Q.7	P.3x–P.7	C 10	D 10	D.10–Q.10	A/Ax.Pe–C.Pe	A/Ax.13–C.13	C.Pe–C.13	P1 Pe	P2 Pe	P3 Pe	P4 Pe	P5 Pe	P6 Pe	P7 Pe	P8 Pe	P8/P9–Pd X P8/P9–Pe	P8/P9.Pe–L.Pe	L.Pd–L.Pe	P10 Pe	P11 Pe	P12x Pe	C.15–C.16
GROUND FLOOR																							
P1 LEVEL (4000)	300 WALL 10@200 HEF 10@200 VEF; ADD 2–20 ALL AROUND OPENING; ADD 4–25 VEE ▲	250 WALL 10@200 HEF 10@300 VEF; ADD 4–25 VEE ▲	1000x300 12–35	1000x300 14–35	300 WALL 10@200 HEF 10@200 VEF; ADD 2–20 ALL AROUND THE OPENINGS; ADD 4–25 VEE ▲	200 WALL 10@400 HEF 10@300 VEF; ADD 2–20 VEE ▲	200 WALL 10@400 HEF 10@300 VEF; ADD 2–20 VEE ▲; ADD 2–20 ALL AROUND THE OPENING	200 WALL 10@400 HEF 10@300 VEF; ADD 2–20 VEE ▲; ADD 2–20 ALL AROUND THE OPENING	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲				300 WALL; ADD 2–20 VEE ▲
P2 LEVEL (4575) (fc=35 MPa)	BEAM: 300x1000 12–35; 300x1000 12–35; 300x1000 12–35; 1000x300 12–35; 1000x300 (IN WALL) 12–35	SLAB	1000x300 12–35	300x1300 14–35	300 WALL 10@200 HEF 10@200 VEF; ADD 2–20 ALL AROUND THE OPENINGS; ADD 4–25 VEE ▲	200 WALL 10@400 HEF 10@300 VEF; ADD 2–20 VEE ▲	200 WALL 10@400 HEF 10@300 VEF; ADD 2–20 VEE ▲	200 WALL 10@400 HEF 10@300 VEF; ADD 2–20 VEE ▲; ADD 2–20 ALL AROUND THE OPENING	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	250 WALL 10@320 HEF 10@200 VEF; ADD 4–25 VEE ▲	300x1000 12–35	300x1000 12–35	1000x300 12–35	300 WALL; ADD 2–20 VEE ▲
	1000x300 12–35; 1000x300 (IN WALL) 12–35					AIR SHAFT											STAIRS						
DATA / COL. No.	L 6; M 6; My/N 6; Ny/P 6; Q 6	P.3x–P.7	C 10	D 10	D.10–N.10; P 10; Q 10	A/Ax.Pe–C.Pe	A/Ax.13–C.13	C.Pe–C.13	P1 Pe	P2 Pe	P3 Pe	P4 Pe	P5 Pe	P6 Pe	P7 Pe	P8 Pe	P8/P9–Pd X P8/P9–Pe	P8/P9.Pe–L.Pe	L.Pd–L.Pe	P10 Pe	P11 Pe	P12x Pe	C.15–C.16

COL. No. / DATA	P1 15	P2 15	P3 15	P4 15	P5 15	P6 15	P7 15	P8 15	P9 15	P10 15	P11 15	P12x 15
GROUND FLOOR												
P1 LEVEL (4000)	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35			
P2 LEVEL (4575) (fc=35 MPa)	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35	300x1000 12–35
DATA / COL. No.	P1 15	P2 15	P3 15	P4 15	P5 15	P6 15	P7 15	P8 15	P9 15	P10 15	P11 15	P12x 15

COLUMN AND WALL SCHEDULE NOTES :

1. COLUMN SIZE GIVEN FIRST IN THE SCHEDULE IS IN THE NORTH–SOUTH DIRECTION.
2. COLUMN LOADS ARE GIVEN IN SPECIFIED KILONEWTONS.
3. CONCRETE STRENGTH AT 28 DAYS SHALL BE AS SPECIFIED IN SCHEDULE.
4. MINIMUM YIELD STRESS FOR REINFORCING STEEL SHALL BE 400 MPa.
5. PROVIDE TENSION LAP SPLICE (CLASS 'B') FOR ALL VERTICAL BARS MARKED THUS " ▲" IN SCHEDULE.
6. PROVIDE COLUMN TIES IN WALLS THAT HAVE VERTICAL REINFORCING STEEL OF SIZE 20 OR GREATER. FOR ALL THE COLUMNS LOCATED AT THE GROUND FLOOR AND BELOW, PROVIDE 15@200 TIES.
7. FOR ALL WALLS GREATER THAN 2000MM IN LENGTH PROVIDE SHEAR WALL REINFORCING AS PER TABLE 2, FOR ALL OTHER WALLS PROVIDE TEMPERATURE REINFORCING AS PER TABLE 1
8. H.E.F. – DENOTES HORIZONTAL EACH FACE
   H.T.B.E.F. – DENOTES HORIZONTAL TOP&BOTTOM EACH FACE
   H.T.E.F. – DENOTES HORIZONTAL TOP EACH FACE
   V.EAST E. – DENOTES VERTICAL EAST END
   V.E.F. – DENOTES VERTICAL EACH FACE
   V.E.E. – DENOTES VERTICAL EACH END
   V.N.E. – DENOTES VERTICAL NORTH END
   V.S.E. – DENOTES VERTICAL SOUTH END
   V.W.E. – DENOTES VERTICAL WEST END
9. REFER TO MECHANICAL DWGS. FOR MECHANICAL WALL OPENINGS.
10. REFER TO ARCHITECTURAL DRAWINGS FOR WALL LENGTHS.
11. REFER TO TYPICAL DETAILS ON DRAWINGS S–001 TO S–004.
12. REFER TO GENERAL NOTES ON DRAWING S–001.
13. UNLESS NOTED OTHERWISE, PROVIDE COLUMN OR WALL DOWELS TO MATCH VERTICAL REINFORCING GIVEN IN SCHEDULE.
14. CONCRETE EXPOSED TO VEHICULAR TRAFFIC SHALL HAVE 6% TO 8% ENTRAINED AIR AND SHALL BE PROPORTIONED FOR C–1 EXPOSURE CONDITIONS.

COLUMN, WALL & FOOTING DOWEL SCHEDULE

LAP SPLICE IN WALL OR COLUMN AND DEVELOPMENT LENGTH IN CAP OR FOOTING

DATA		BAR SIZE	10	15	20	25	30	35
Fy = 400 < Fc = 25 <	TENSION	LAP SPLICE	490	740	980	1530	1830	2130
		DEVELOPMENT LENGTH	380	570	750	1170	1410	1640
	COMPRESSION	LAP SPLICE	300	440	590	730	880	1030
		DEVELOPMENT LENGTH	220	310	370	480	570	690
Fy = 400 < Fc = 30 <	TENSION	LAP SPLICE	450	670	890	1390	1670	1950
		DEVELOPMENT LENGTH	350	520	690	1070	1290	1500
	COMPRESSION	LAP SPLICE	300	440	590	730	880	1030
		DEVELOPMENT LENGTH	200	280	340	440	530	630
Fy = 400 < Fc = 35 <	TENSION	LAP SPLICE	420	620	830	1290	1550	1800
		DEVELOPMENT LENGTH	320	480	640	990	1190	1390
	COMPRESSION	LAP SPLICE	300	440	590	730	880	1030
		DEVELOPMENT LENGTH	200	280	340	440	530	630
Fy = 400 < Fc = 40 <	TENSION	LAP SPLICE	390	580	770	1210	1450	1690
		DEVELOPMENT LENGTH	300	450	600	930	1110	1300
	COMPRESSION	LAP SPLICE	300	440	590	730	880	1030
		DEVELOPMENT LENGTH	200	280	340	440	530	630

TABLE 1 — TEMPERATURE WALL REINFORCING

WALL THICKNES	DIRECTION	WALL EXPOSED OR ENCLOSED BOTH SIDES	WALL EXPOSED ONE SIDE: EXPOSED SIDE	WALL EXPOSED ONE SIDE: ENCLOSED SIDE
150mm	HORIZ.	10 @ 330 (1 LAYER)	10 @ 330 (1 LAYER)	
	VERT.	10 @ 450 (1 LAYER)	10 @ 450 (1 LAYER)	
200mm	HORIZ.	10 @ 450 EA. FACE	10 @ 420	10 @ 450
	VERT.	10 @ 450 EA. FACE	10 @ 450	10 @ 450
250mm	HORIZ.	10 @ 400 EA. FACE	10 @ 330	10 @ 450
	VERT.	10 @ 450 EA. FACE	10 @ 450	10 @ 450
300mm	HORIZ.	10 @ 330 EA. FACE	10 @ 250	10 @ 450
	VERT.	10 @ 440 EA. FACE	10 @ 400	10 @ 450
350mm	HORIZ.	10 @ 280 EA. FACE	10 @ 210	10 @ 430
	VERT.	10 @ 380 EA. FACE	10 @ 300	10 @ 450
400mm	HORIZ.	10 @ 250 EA. FACE	15 @ 380	10 @ 370
	VERT.	10 @ 330 EA. FACE	10 @ 250	10 @ 450

NOTE: SIZE AND SPACING OF DOWELS TO BE SAME AS VERTICAL REINF. IN WALL

TABLE 2 — SHEAR WALL REINFORCING

WALL THICKNES	DIRECTION	WALL EXPOSED OR ENCLOSED BOTH SIDES	WALL EXPOSED ONE SIDE: EXPOSED SIDE	WALL EXPOSED ONE SIDE: ENCLOSED SIDE
150mm	HORIZ.	10 @ 270 (1 LAYER)	10 @ 270 (1 LAYER)	
	VERT.	10 @ 270 (1 LAYER)	10 @ 270 (1 LAYER)	
200mm	HORIZ.	10 @ 400 EA. FACE	10 @ 300	10 @ 450
	VERT.	10 @ 400 EA. FACE	10 @ 300	10 @ 450
250mm	HORIZ.	10 @ 320 EA. FACE	10 @ 240	10 @ 450
	VERT.	10 @ 320 EA. FACE	10 @ 240	10 @ 450
300mm	HORIZ.	10 @ 270 EA. FACE	10 @ 200	10 @ 400
	VERT.	10 @ 270 EA. FACE	10 @ 200	10 @ 400
350mm	HORIZ.	15 @ 450 EA. FACE	15 @ 340	15 @ 450
	VERT.	15 @ 450 EA. FACE	15 @ 340	15 @ 450
400mm	HORIZ.	15 @ 400 EA. FACE	15 @ 300	15 @ 450
	VERT.	15 @ 400 EA. FACE	15 @ 300	15 @ 450
450mm	HORIZ.	15 @ 350 EA. FACE	15 @ 260	15 @ 450
	VERT.	15 @ 350 EA. FACE	15 @ 260	15 @ 450

NOTE: SIZE AND SPACING OF DOWELS TO BE SAME AS VERTICAL REINF. IN WALL

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FIRST FLOOR ELEV. 93.60m

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ALEXANDRA PARK - BLOCK 11
TORONTO, ONTARIO

project no:	13015
scale:	AS NOTED
drawn by:	H.W.
reviewed by:	HOUMAN
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COLUMN AND WALL SCHEDULE (BELOW GRD. FLOOR)

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