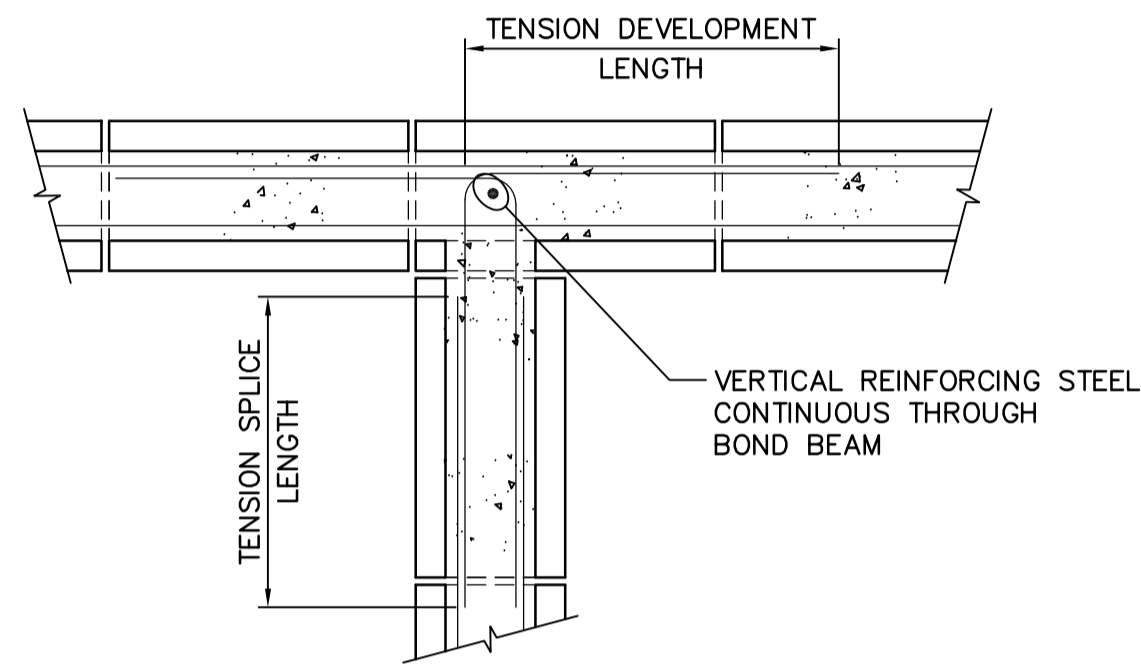


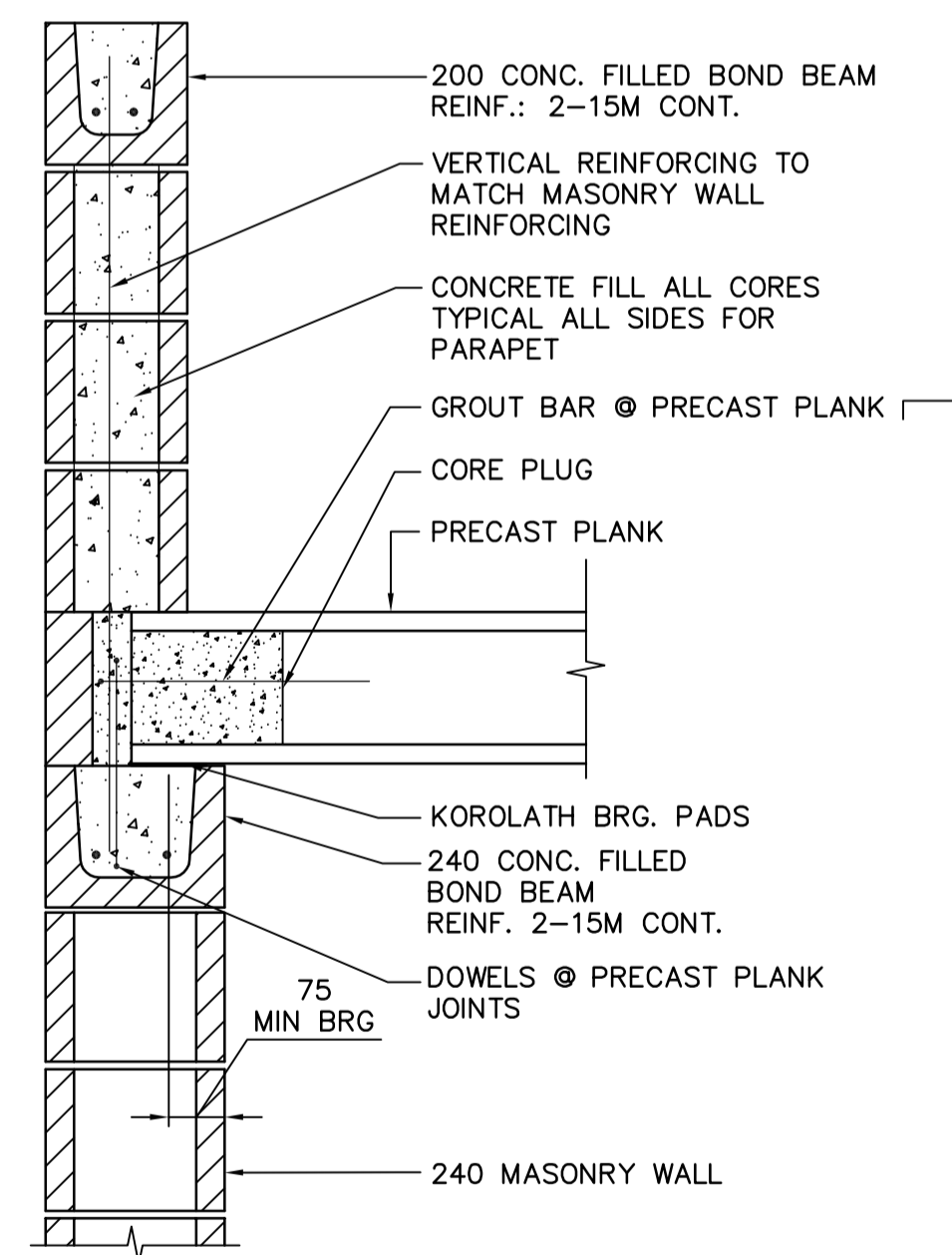
CORNER BOND BEAMS



INTERSECTING BOND BEAMS

TYPICAL BOND BEAM DETAILS  
SCALE N.T.S.

NOTES:  
1. VERT. REINFORCING STEEL IN 190, 240 MASONRY WALL TO BE MIN. 15M UNLESS OTHERWISE NOTED.

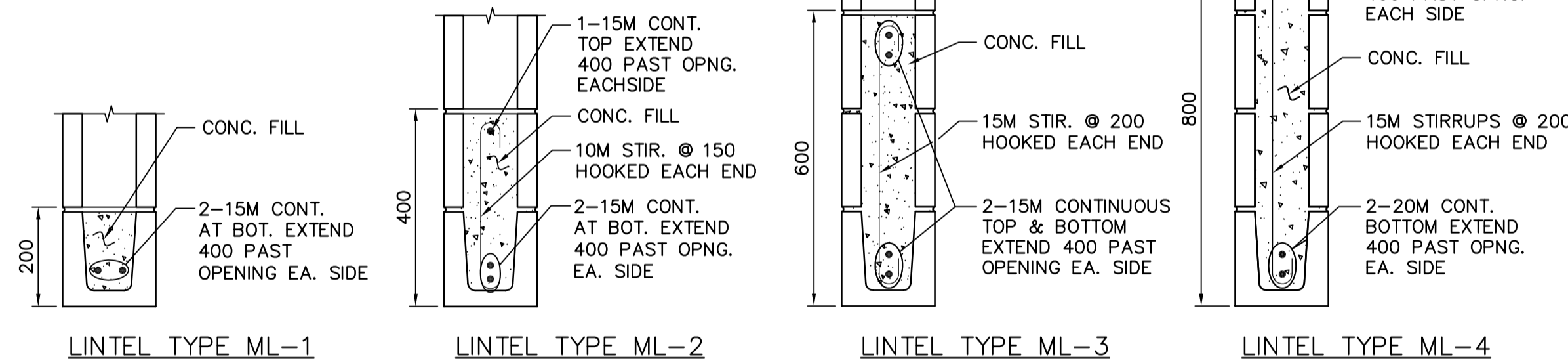


PRECAST PLANK BRG ON MASONRY WALL

PRE-CAST CONCRETE PILE SCHEDULE					
MARK	DIAMETER	CUT-OFF	REMARKS	COMMENT	
1 to 259	400	222.685	PRECAST PILE PROJECTED INTO FOOTING 75mm		
260 to 352	400	222.985	PRECAST PILE PROJECTED INTO FOOTING 75mm	NOS. 305a & 305b ADDED	
353 to 477	400	223.385	PRECAST PILE PROJECTED INTO SLAB 75mm	NOS. 379 NOT USED	
478 to 481	400	223.035	PRECAST PILE PROJECTED INTO SLAB 75mm		
482 to 538	400	223.385	PRECAST PILE PROJECTED INTO SLAB 75mm	NOS. 539 NOT USED NOS. 508a & 508b ADDED	
540 & 541	400	223.385	PRECAST PILE PROJECTED INTO SLAB 75mm		
542 to 544	400	223.035	PRECAST PILE PROJECTED INTO SLAB 75mm		
545 to 549	400	223.385	PRECAST PILE PROJECTED INTO SLAB 75mm		
550 to 619	400	223.385	PRECAST PILE PROJECTED INTO SLAB 75mm		
620, 621, 622 624, 626, 627	400	229.045	PRECAST PILE PROJECTED INTO PILECAP 75mm PRE-BORE 10M		
623 & 625	400	229.745	PRECAST PILE PROJECTED INTO PILECAP 75mm PRE-BORE 10M		
628 & 629 631, 633, 635 638, 640, 642 644, 646, 647	400	229.675	PRECAST PILE PROJECTED INTO PILECAP 75mm PRE-BORE 10M		
630, 632 634, 636	400	230.375	PRECAST PILE PROJECTED INTO PILECAP 75mm PRE-BORE 10M		
637, 639, 641 643, 645, 679 680 to 683	400	231.575	PRECAST PILE PROJECTED INTO SLAB 75mm PRE-BORE 10M		
684 to 693	400	222.685	PRECAST PILE PROJECTED INTO FOOTING 75mm		
648	400	222.985	PRECAST PILE PROJECTED INTO FOOTING 75mm		
654 to 678	400	223.035	PRECAST PILE PROJECTED INTO SLAB 75mm		
684 to 693	400	222.685	PRECAST PILE PROJECTED INTO FOOTING 75mm		
694 to 699	400	223.035	PRECAST PILE PROJECTED INTO SLAB 75mm		
700 to 707	400	223.185	PRECAST PILE PROJECTED INTO SLAB 75mm		

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NOTE:  
K.O. TYPE BLOCKS MAY BE USED FOR LINTELS AT LOCATIONS WHERE UNDERSIDE OF BLOCK WILL NOT BE VISIBLE.

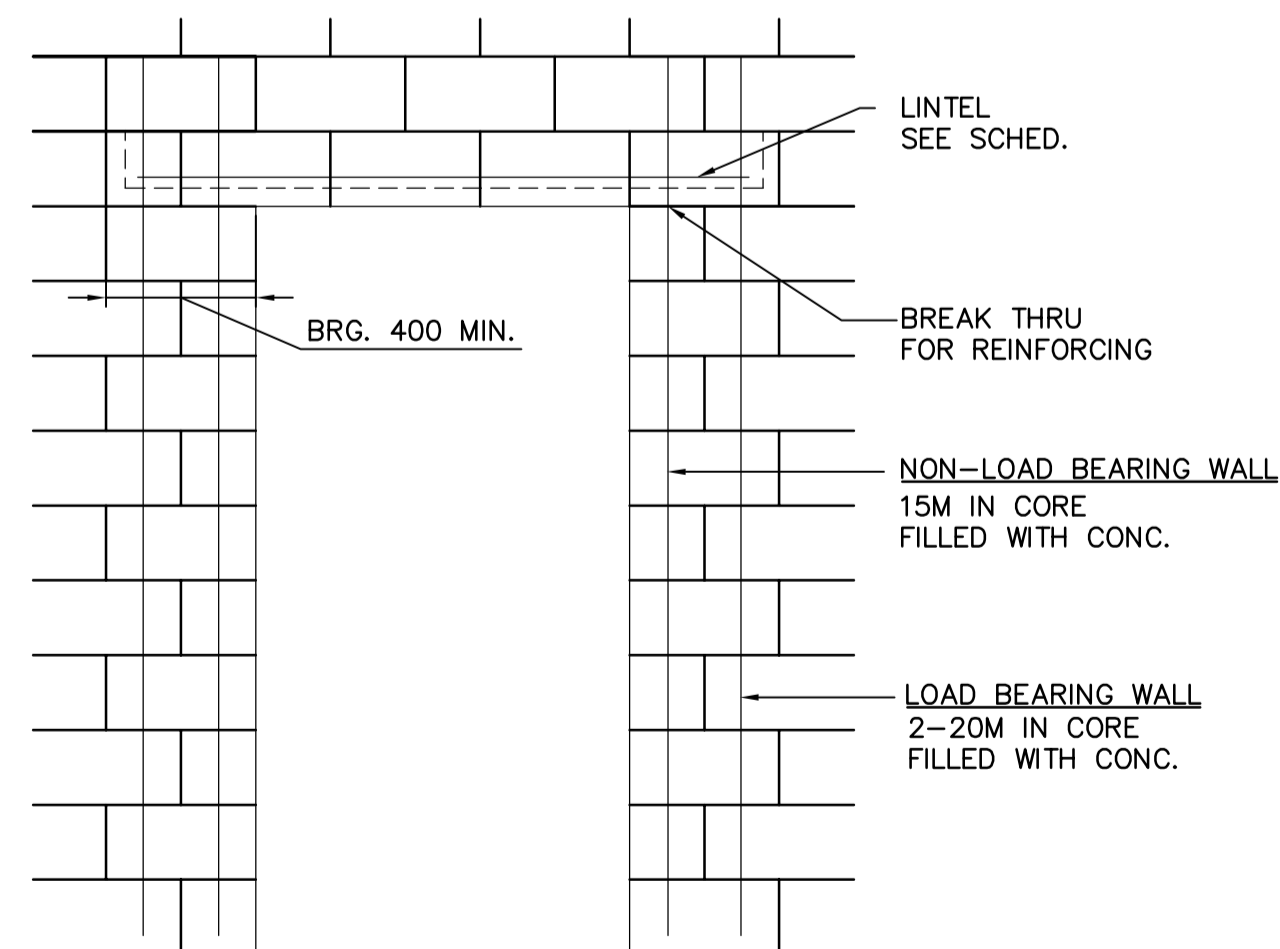


LINTEL TYPE ML-1

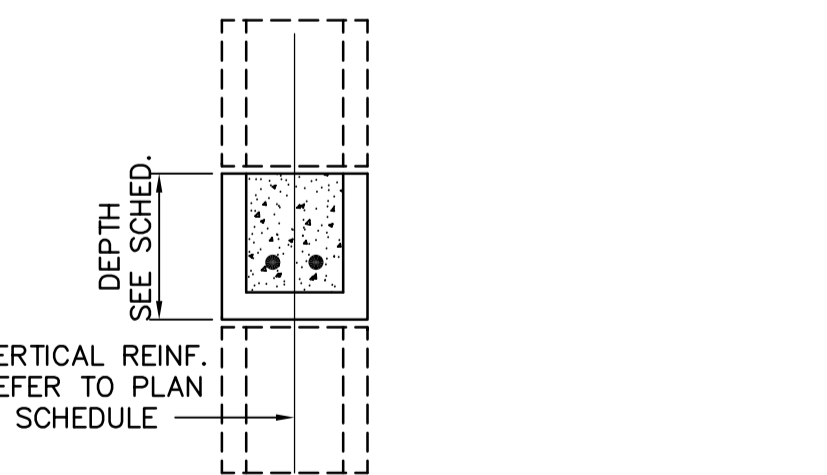
LINTEL TYPE ML-2

LINTEL TYPE ML-3

LINTEL TYPE ML-4



TYPICAL BEARING FOR CONCRETE BLOCK LINTELS  
SCALE N.T.S.



TYPICAL BOND BEAM

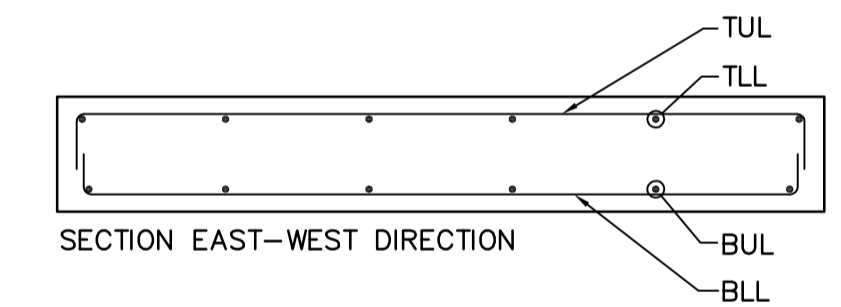
CONCRETE GRADE BEAM SCHEDULE							EQUALIZATION TANK, SBR 1, SBR 2, EXHAUST FAN BUILDING, BLOWER BUILDING	
MARK	WIDTH	DEPTH	REINFORCING				REMARKS	
			TOP	MIDDLE	BOTTOM	STIRRUPS		
GB-1	500	1500	6-25M	15M E.F. @ 300	6-25M	15M @ 175 o/c	300Wx500H UPSTAND CURB R/W 3-25M CONT. TOP, 1-15M MIDDLE E.F. c/w 10M U-BARS @ 175 o/c.	
GB-2	500	1100	6-25M	15M E.F. @ 300	6-25M	15M @ 200 o/c		
GB-3	400	1100	4-25M	15M E.F. @ 300	4-25M	15M @ 200 o/c		
GB-4	500	1300	6-25M	15M E.F. @ 300	6-25M	15M @ 175 o/c	300Wx700H UPSTAND CURB R/W 3-25M CONT. TOP, 2-15M MIDDLE E.F. c/w 10M U-BARS @ 200 o/c.	

CONCRETE BEAM SCHEDULE							EQUALIZATION TANK, SBR 1, SBR 2, EXHAUST FAN BUILDING, BLOWER BUILDING	
MARK	WIDTH	DEPTH	REINFORCING				REMARKS	
			TOP	MIDDLE	BOTTOM	STIRRUPS		
CB-1	600	1200	6-30M	15M E.F. @ 300	6-30M	15M @ 250 o/c	300Wx1500H UPSTAND CURB R/W 3-25M CONT. TOP, 15M @ 300 o/c MIDDLE E.F. c/w 15M STIRRUPS @ 250 o/c FULL HT. (2.7m)	
CB-2	350	1200	3-30M	15M E.F. @ 300	3-30M	15M @ 250 o/c		
CB-3	500	2000	12-25M 6-IN 2 ROWS	6 ROWS 1-20M E.F. @ 300	12-25M 6 IN 2 ROWS	15M @ 125 o/c		
CB-4	500	900	5-25M	15M E.F. @ 300	5-25M	15M @ 300 o/c	300Wx900H UPSTAND CURB R/W 3-25M CONT. TOP, 15M @ 300 o/c MIDDLE E.F. c/w 15M STIRRUPS @ 300 o/c FULL HT. (1.8m)	

CONCRETE WALL SCHEDULE							EQUALIZATION TANK, SBR 1, SBR 2, EXHAUST FAN BUILDING, BLOWER BUILDING	
MARK	WIDTH	HEIGHT	REINFORCING				REMARKS	
			VERTICAL	HORIZONTAL	ADDITIONAL			
CW-1	500/1400	VARIABLES	25M @ 300 o/c E.F.	20M @ 200 o/c E.F.	25M DLS @ 150 o/c	SEE SECTION FOR UPSTAND		
CW-2	500/1000	VARIABLES	25M @ 300 o/c E.F.	20M @ 200 o/c E.F.	30M DLS @ 150 o/c	SEE SECTION FOR UPSTAND		
CW-3	350	VARIABLES	20M @ 200 o/c E.F.	20M @ 200 o/c E.F.	20M DLS @ 200 o/c			
CW-4	500	VARIABLES	25M @ 200 o/c E.F.	20M @ 150 o/c E.F.	25M DLS @ 200 o/c			

CONCRETE SLAB SCHEDULE						EQUALIZATION TANK, SBR 1, SBR 2, EXHAUST FAN BUILDING, BLOWER BUILDING	
MARK	DEPTH	REINFORCING			REMARKS		
		TOP	BOTTOM	ADDITIONAL			
SL-1	600	20M @ 200 o/c E.W.	20M @ 200 o/c E.W.				
SL-2	300	20M @ 180 o/c E.W.	20M @ 180 o/c E.W.	20M DOWELS @ 180 o/c			
SL-3	300	20M @ 180 o/c E.W.	20M @ 180 o/c E.W.	20M DOWELS @ 180 o/c			
SL-4	300	20M @ 200 o/c E.W.	20M @ 200 o/c E.W.	20M DOWELS @ 200 o/c			
SL-5	300	20M @ 200 o/c E.W.	20M @ 200 o/c E.W.	20M DOWELS @ 200 o/c			
SL-6	500	20M @ 180 o/c E.W.	20M @ 180 o/c E.W.				
SL-7	400	20M @ 200 o/c E.W.	20M @ 200 o/c E.W.				

LEGEND:  
TUL - TOP UPPER LAYER  
TLL - TOP LOWER LAYER  
BUL - BOTTOM UPPER LAYER  
BLL - BOTTOM LOWER LAYER



MASONRY WALL SCHEDULE						EQUALIZATION TANK, SBR 1, SBR 2, EXHAUST FAN BUILDING, BLOWER BUILDING	
MARK	SIZE	REINFORCING	TYPE	CORE FILL	REMARKS		
MW-1	240	20M VERT @ 800 o/c	CONCRETE	FILL ALL REINF CORES w/ 20MPA CONC	STRUCTURAL SOUND BLOCK		
MW-2	190	15M VERT @ 800 o/c	CONCRETE	FILL ALL REINF CORES w/ 20MPA CONC			

CONCRETE COLUMN SCHEDULE						EQUALIZATION TANK, SBR 1, SBR 2, EXHAUST FAN BUILDING, BLOWER BUILDING	
MARK	SIZE	REINFORCING			REMARKS		
		VERT.	STIRRUPS	ADDITIONAL			
CC-1	1000x600	30-25M	10M @ 300 o/c QUAD	25M DOWELS	SEE DETAIL		
CC-2	700x500	24-25M	10M @ 300 o/c TRIPLES	25M DOWELS	SEE DETAIL		

CONCRETE EQUIPMENT PEDESTAL SCHEDULE						EQUALIZATION TANK, SBR 1, SBR 2, EXHAUST FAN BUILDING, BLOWER BUILDING	
MARK	SIZE	REINFORCING			REMARKS		
		VERT.	STIRRUPS	ADDITIONAL			
EP-1	900x900	32-25M	15M @ 300 o/c TRIPLES	25M DOWELS			
EP-2	900x900	32-25M	15M @ 300 o/c TRIPLES	25M DOWELS			

**APEGM**  
Certificate of Authorization  
Earth Tech Canada Inc.  
No. 730 Expiry: April 30, 2007

B.M. ELEV.	DESIGNED BY	CHECKED BY	SCALE	RELEASED FOR CONSTRUCTION BY
	LLR	GGP	N.T.S.	K. MARTENS
	WDB	JEH		
01	291-2006 ADDENDUM 6	06/07/26	CMF	
00	ISSUED FOR TENDER	06/05/15	WDB	
NO.	REVISIONS	DATE	BY	DATE

**EarthTech**  
A Tyco International Ltd. Company

ENGINEER'S SEAL

ORIGINAL SIGNED BY  
L.L. RIDING  
2006/05/15

CONSULTANT DRAWING NO.  
S0.03

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT  
ENGINEERING DIVISION

NEWPCC CENTRATE NUTRIENT TREATMENT  
NITROGEN REMOVAL FACILITY

STRUCTURAL  
SBR BUILDING  
STANDARD DETAILS & SCHEDULES

CITY FILE NUMBER

SHEET OF

CITY DRAWING NUMBER

1-0101C-D-S0003-001-01D