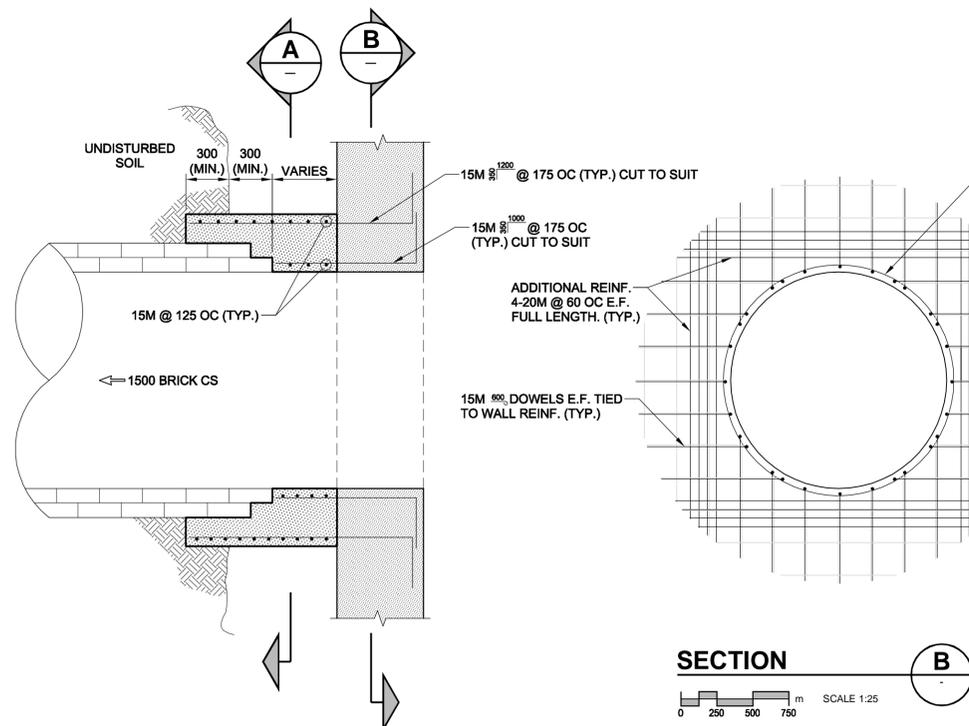
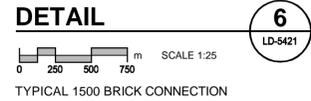


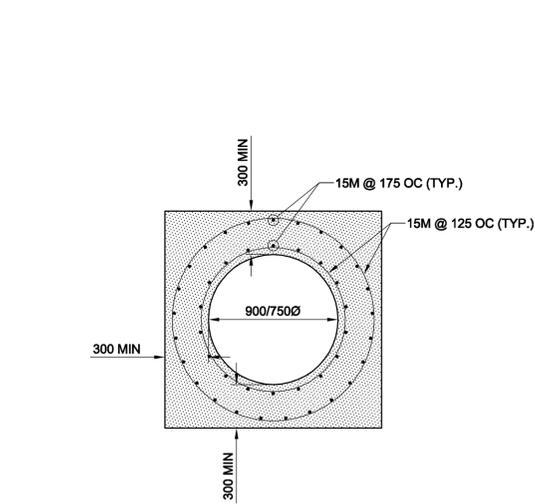
SECTION A
SCALE 1:25



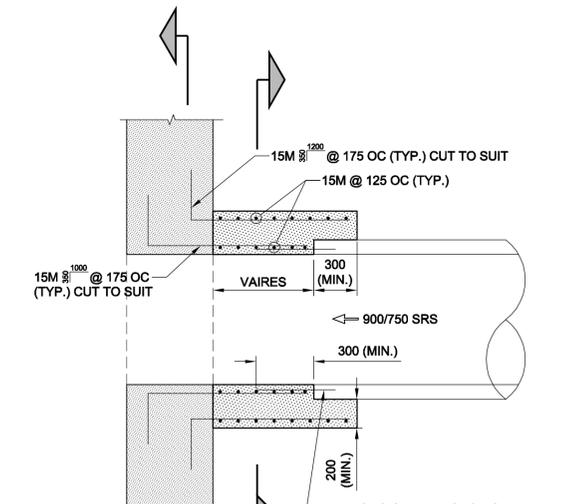
SECTION B
SCALE 1:25



DETAIL 6
SCALE 1:25
LD-5421

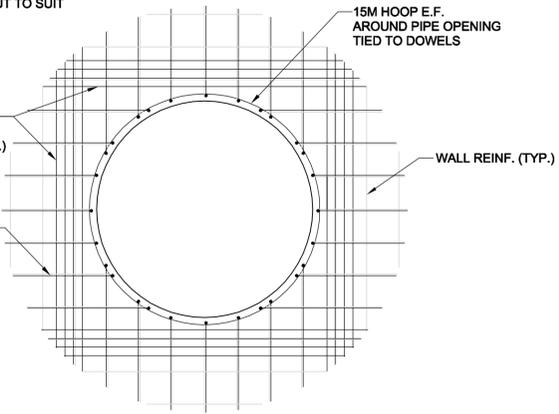


SECTION C
SCALE 1:25



DETAIL 7
SCALE 1:25
LD-5421

TYPICAL 900/750 CONCRETE CONNECTION



DETAIL 3
SCALE 1:25
LD-5421

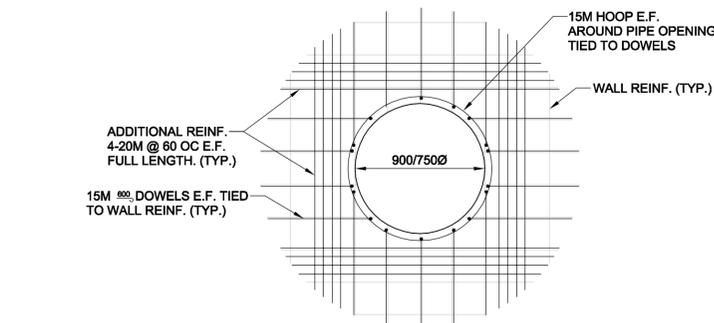
CAST-IN-PLACE OVERFLOW CHANNEL

HYDRAULIC CEMENT GROUT	EXPOXY GROUT
d = BAR DIA. +20mm	d AND Le IN ACCORDANCE
Le: 10M - 150mm	WITH MANUFACTURER'S
15M - 200mm	PRINTED SPECIFICATIONS
20M - 250mm	
25M - 300mm	

d = REINFORCING BAR DIAMETER
Le = LENGTH OF REINFORCING BAR

LAP TABLE	BAR	LAP
10M	500	
15M	700	
20M	870	

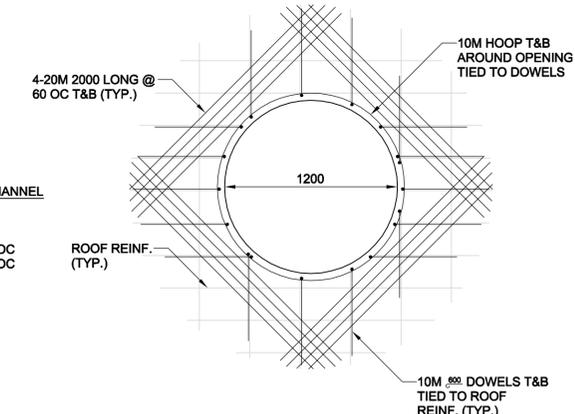
- NOTES:**
1. DRILL HOLE OF DIAMETER AND DEPTH AS REQUIRED.
 2. CLEAN HOLE OF DUST & DEBRIS.
 3. FILL HOLE WITH DOWELLING GROUT.
 4. INSTALL REINFORCING BAR & WIPE AWAY GROUT.
 5. SECURE DOWEL BAR FIRMLY IN POSITION & DO NOT DISTURB BAR FOR 3 HOURS AFTER INSTALLATION.



DETAIL 4
SCALE 1:25

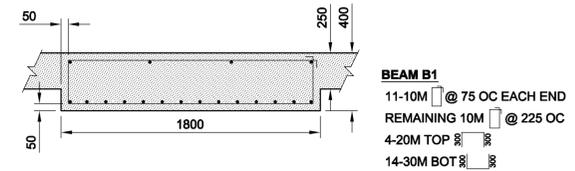
ADDITIONAL REINFORCING AT 900 & 750 PIPE OPENINGS

NOTE:
CLEAR COVER TO REINFORCING SHALL BE 50mm ±12mm FOR CAST-IN-PLACE SLABS AND CAST-IN-PLACE BEAMS AND WALLS.



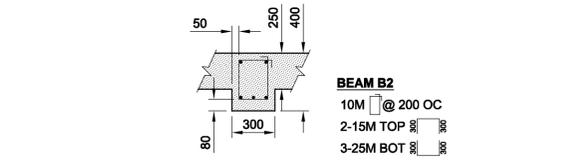
DETAIL 1
SCALE 1:25
LD-5421

MANHOLE OPENING REINFORCING



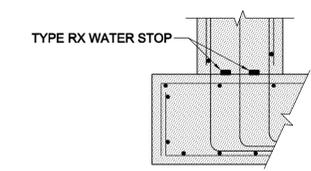
DETAIL 2
SCALE 1:25
LD-5421

MAIN BEAM B1



DETAIL 4
SCALE 1:25
LD-5421

SUPPORT BEAM B2



DETAIL 5
SCALE 1:25
LD-5421

WATERTIGHT CONSTRUCTION JOINT DETAIL

APEGM
Certificate of Authorization
AECOM Canada Ltd.
No. 4671 Date: July 7, 2009

BID OPPORTUNITY NO. 499-2009

LOCATION APPROVED UNDERGROUND STRUCTURES

SUPR. U/G STRUCTURES DATE COMMITTEE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE. BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

NO.	REVISIONS	YYMMDD	BY
0	ISSUED FOR CONSTRUCTION	09/07/06	KMB

DESIGNED BY		CHECKED BY	
GEB		AN	
DRAWN BY		APPROVED BY	
KMB		BTW	
HOR. SCALE		RELEASED FOR CONSTRUCTION	
1:250		C. Boulet	
VERT. SCALE		DATE	
1:50		July 7, 2009	

PROFESSIONAL'S SEAL

ISSUE / REVISION 0
ISSUED FOR CONSTRUCTION
WAS SEALED BY
G.E. BLAZEK
AND DATED
July 7, 2009

CONSULTANT DRAWING NO.
D265-177-05_01-C-4002_RX.dwg

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT

ALEXANDER/BANNATYNE COMBINED SEWER RELIEF CONTRACT 5

OVERFLOW STRUCTURE STRUCTURAL SECTIONS & DETAILS

SHEET 20 OF 20
CITY DRAWING NUMBER
LD-5422
REV 0