

**DETAIL 3**  
LD-3219  
SCALE 1:25  
CAST-IN-PLACE OVERFLOW CHANNEL

**DETAIL 1**  
LD-3219  
SCALE 1:25  
MANHOLE OPENING REINFORCING

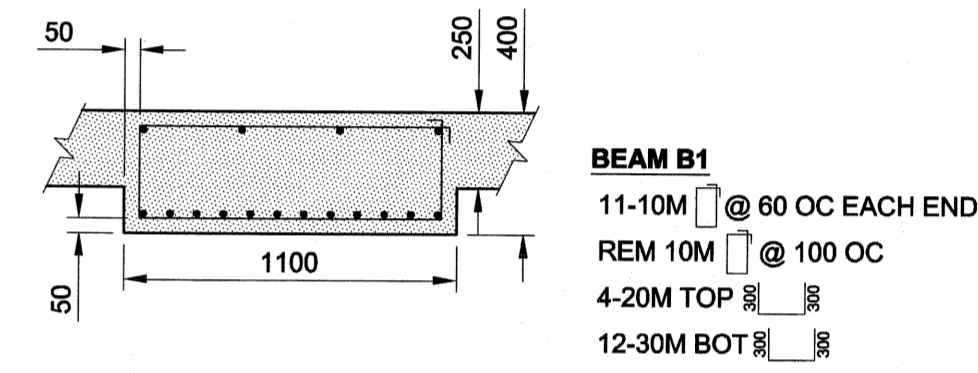
HYDRAULIC CEMENT GROUT	EXPOXY GROUT
d = BAR DIA. +20mm	d AND Le IN ACCORDANCE WITH MANUFACTURER'S PRINTED SPECIFICATIONS
Le: 10M - 150mm	
15M - 200mm	
20M - 250mm	
25M - 300mm	

d = REINFORCING BAR DIAMETER  
Le = LENGTH OF REINFORCING BAR

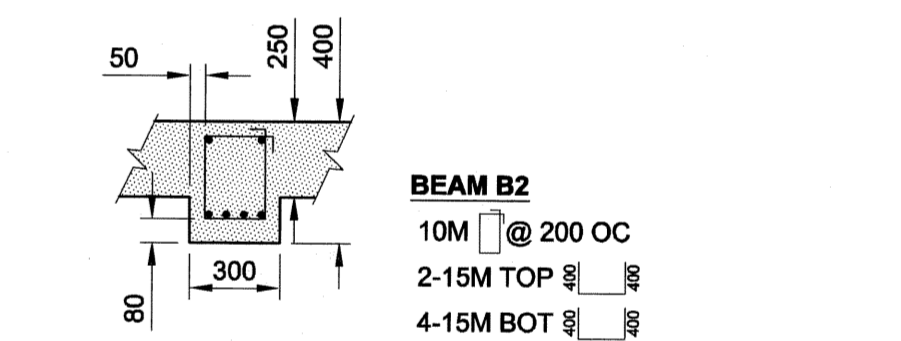
BAR	LAP
10M	500
15M	700
20M	870

**NOTES:**

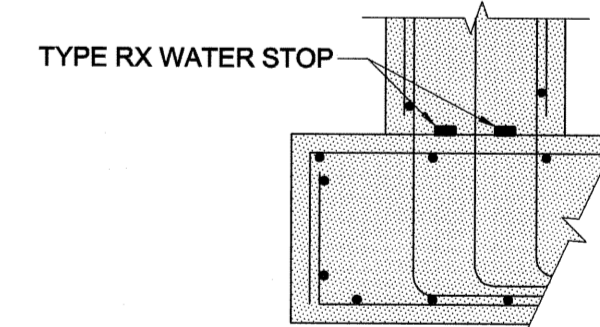
1. DRILL HOLE OF DIAMETER AND DEPTH AS REQUIRED.
2. CLEAN HOLE OF DUST & DEBRIS.
3. FILL HOLE WITH DOWELLING GROUT.
4. INSTALL REINFORCING BAR & WIPE AWAY GROUT.
5. SECURE DOWEL BAR FIRMLY IN POSITION & DO NOT DISTURB BAR FOR 3 HOURS AFTER INSTALLATION.



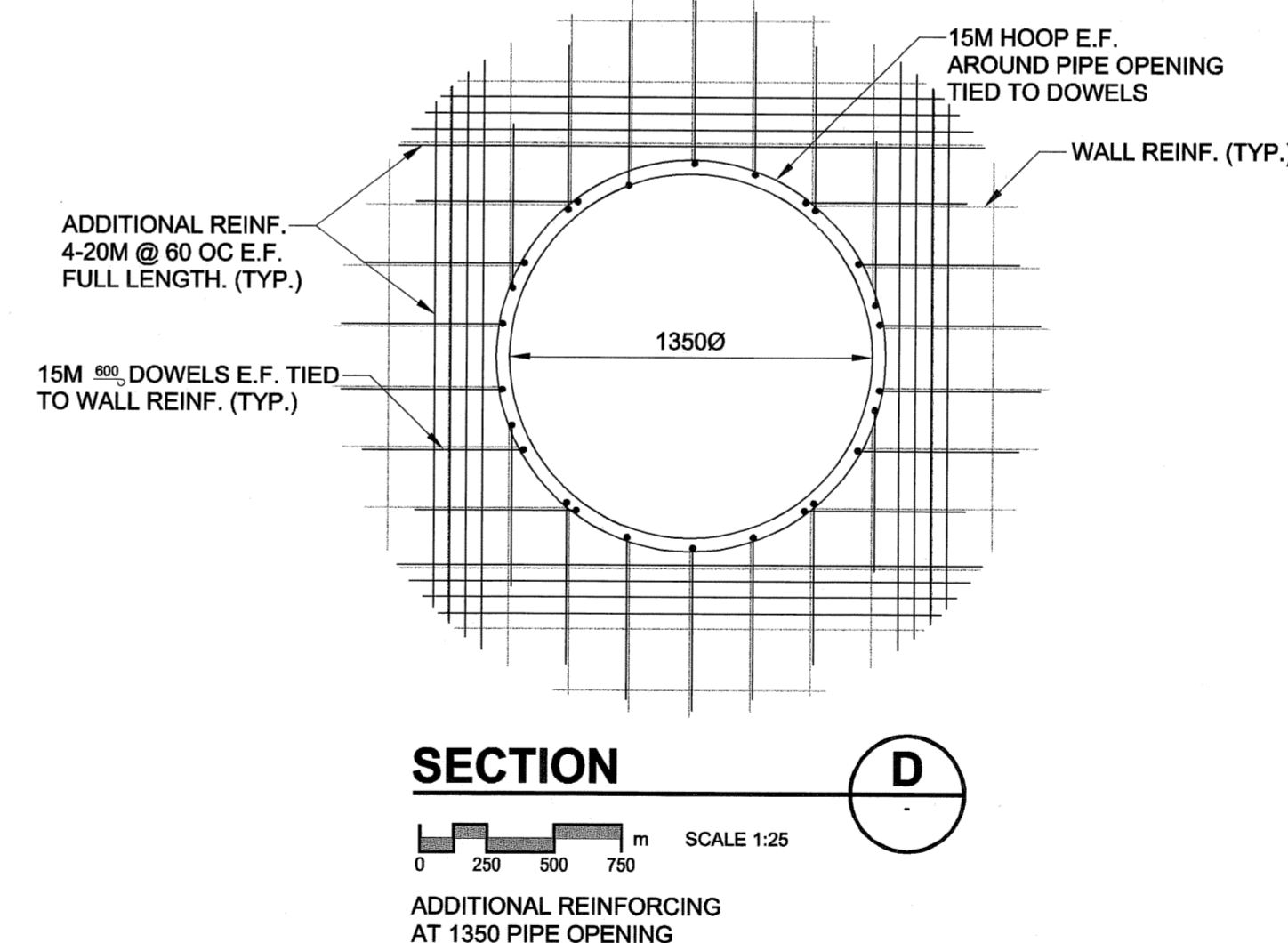
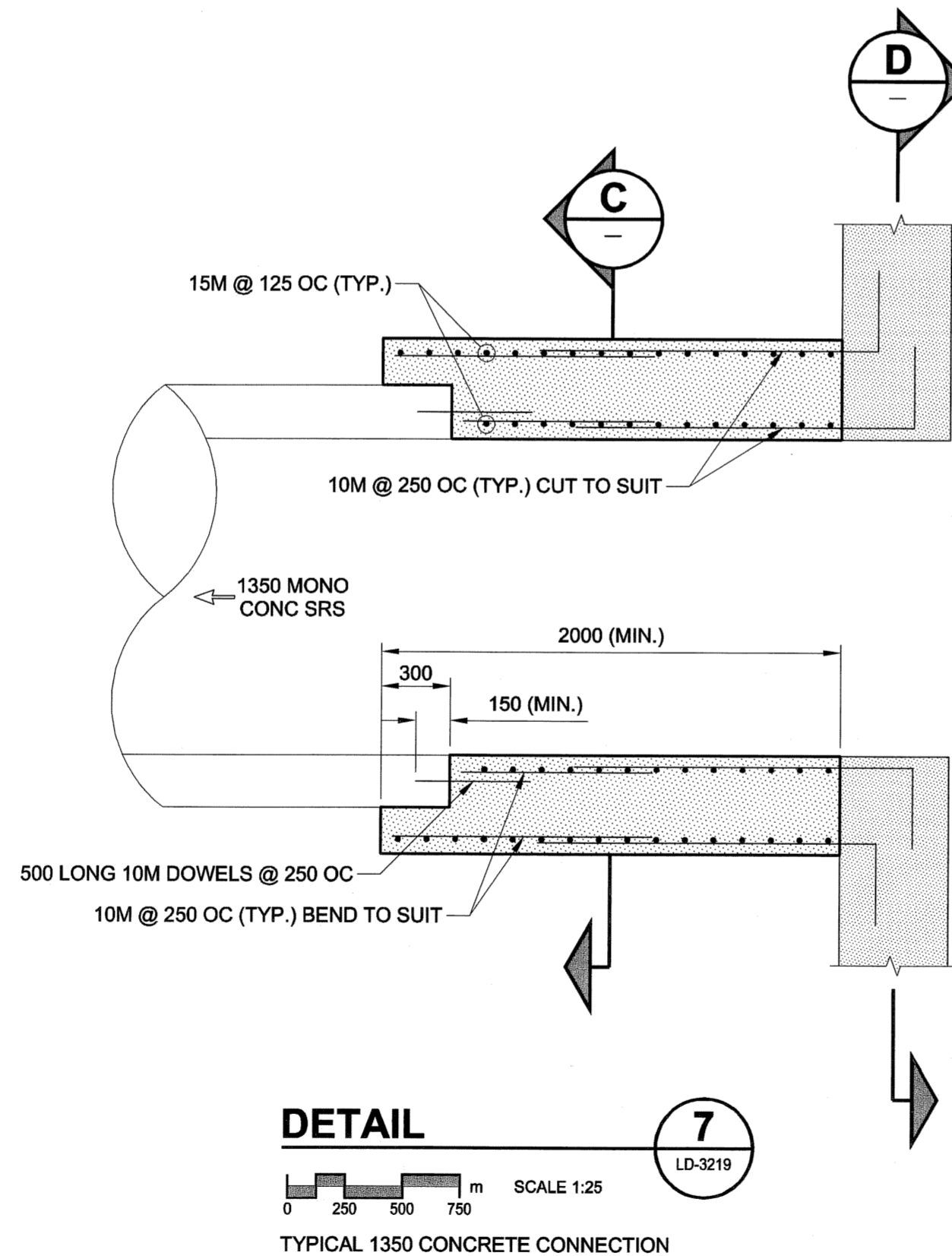
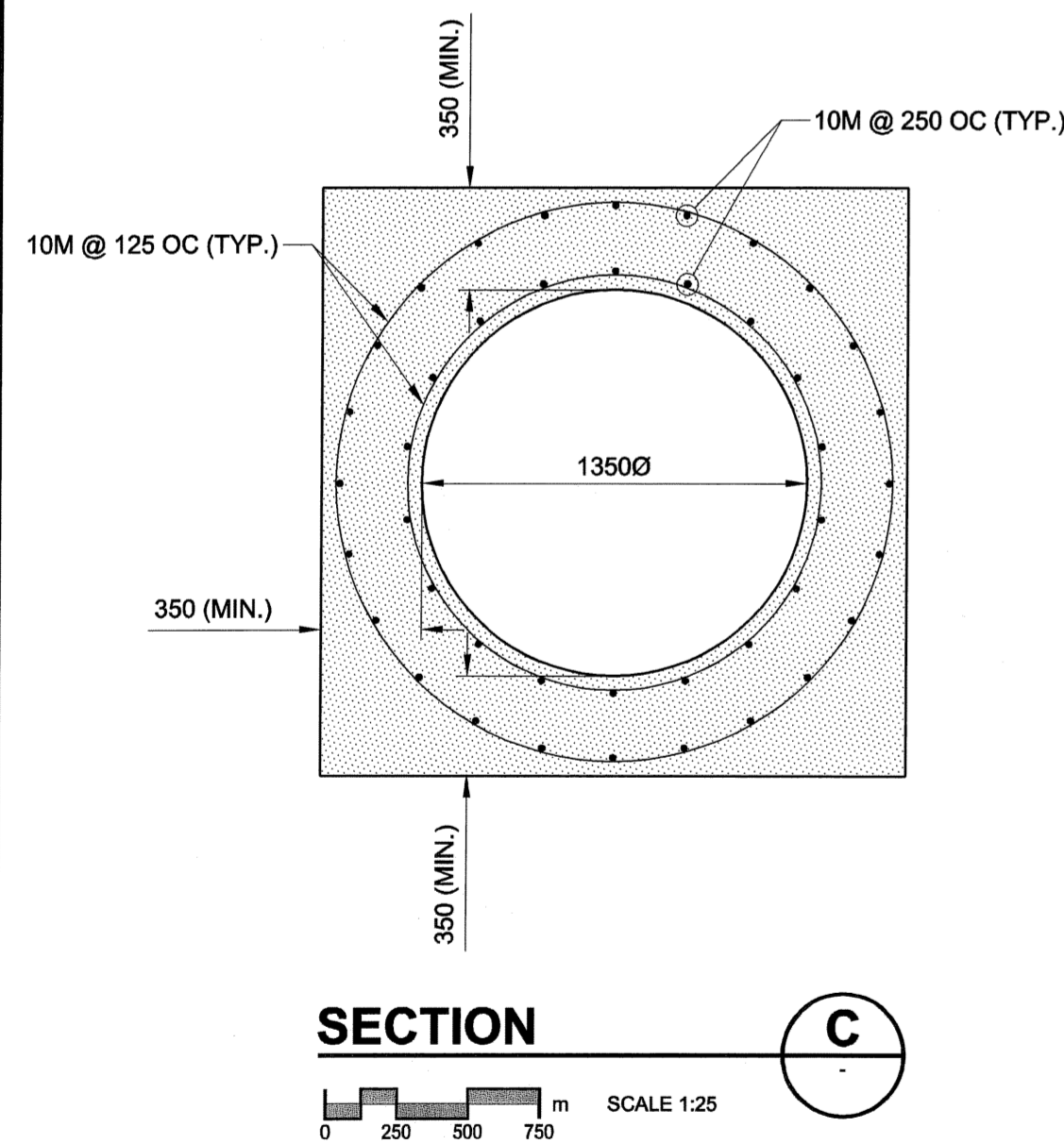
**DETAIL 2**  
LD-3219  
SCALE 1:25  
BEAM B1



**DETAIL 4**  
LD-3219  
SCALE 1:25  
BEAM B2



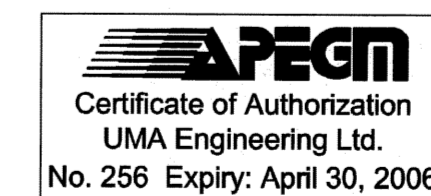
**DETAIL 5**  
LD-3219  
SCALE 1:20  
WATERTIGHT CONSTRUCTION JOINT DETAIL



**SECTION D**  
SCALE 1:25  
ADDITIONAL REINFORCING AT 1350 PIPE OPENING

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

**METRIC**  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES



**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.

BM 36-044	N. side Notre Dame Ave. Bl'n'n. Sherbrook St. & Pearl St. Tbl. in W. wing wall on production Sty. of W. wall of No. 677 Notre Dame Ave. (Health Sciences Power House), 0.2m E. & 0.25m below precast stone finish of wing wall.		
NO.	REVISIONS	YYMM/DD	BY
0	ISSUED FOR CONSTRUCTION	05/11/03	ADL

UMA   AECOM			
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DESIGNED BY	GEB	CHECKED BY	<i>[Signature]</i>
DRAWN BY	ADL	APPROVED BY	<i>[Signature]</i>
HOR. SCALE	AS NOTED	RELEASED FOR CONSTRUCTION	
VERT. SCALE	N/A		
DATE	05/11/03	DATE	Mar. 7, 05

PROFESSIONAL'S SEAL  
S.B. BISWANGER  
REGISTERED PROFESSIONAL ENGINEER  
CONSULTANT DRAWING NO. 17  
D265-177-02

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

ALEXANDER/BANNATYNE COMBINED SEWER RELIEF CONTRACT 2B  
OVERFLOW STRUCTURE  
STRUCTURAL SECTIONS & DETAILS

SHEET 17 OF 17  
CITY DRAWING NUMBER  
LD-3220  
REV 0

BID OPPORTUNITY NO. 584-2005