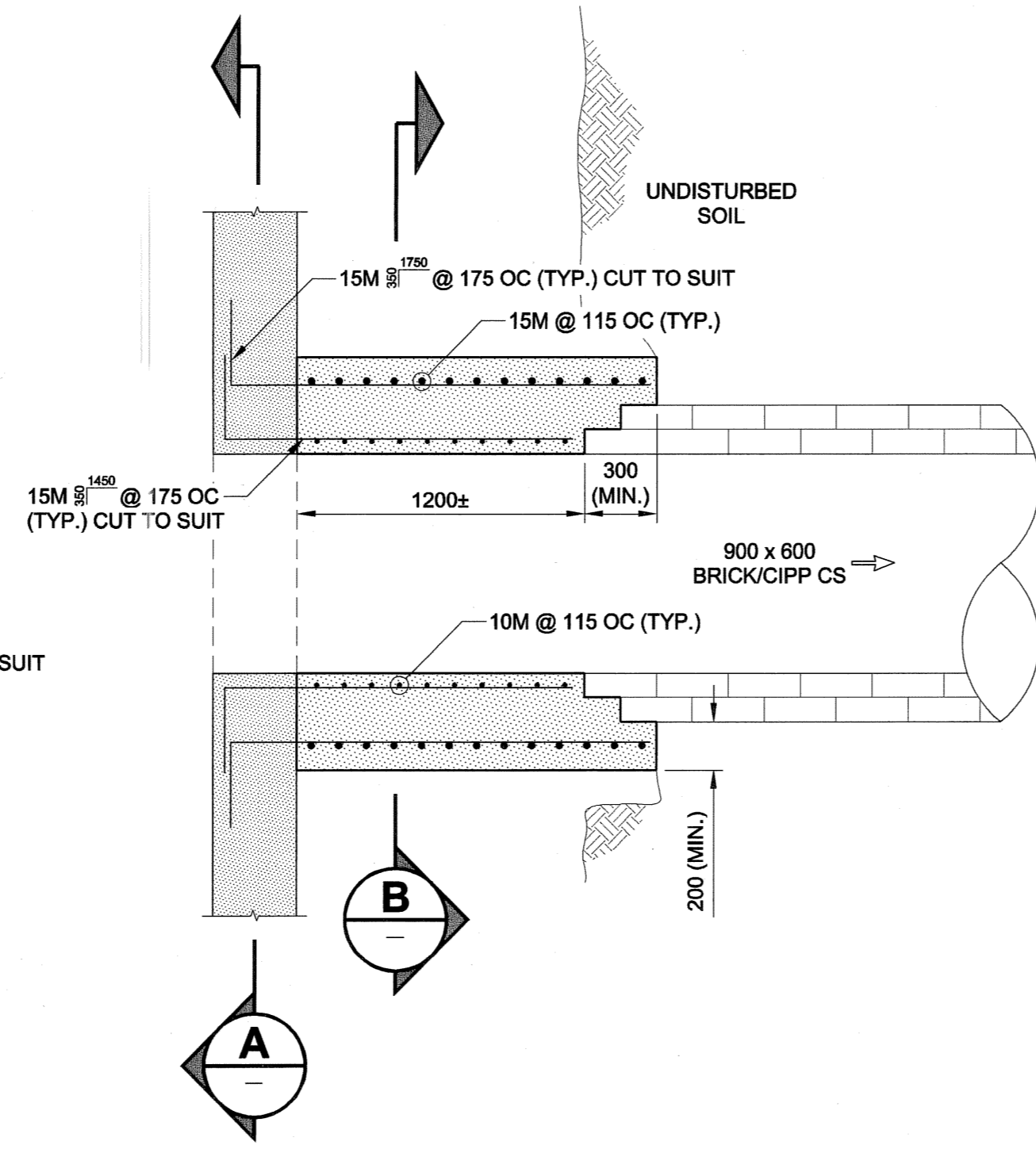
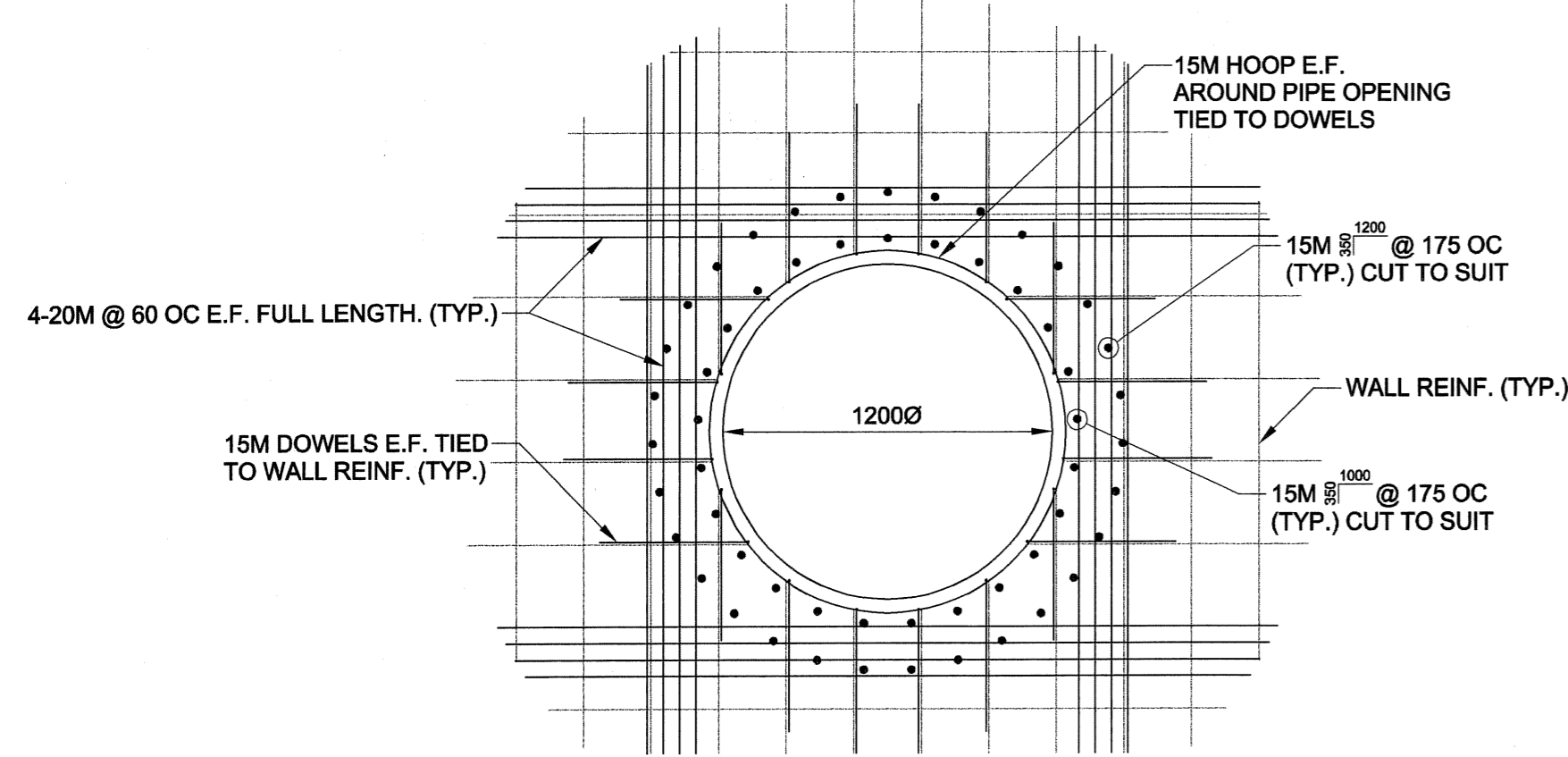


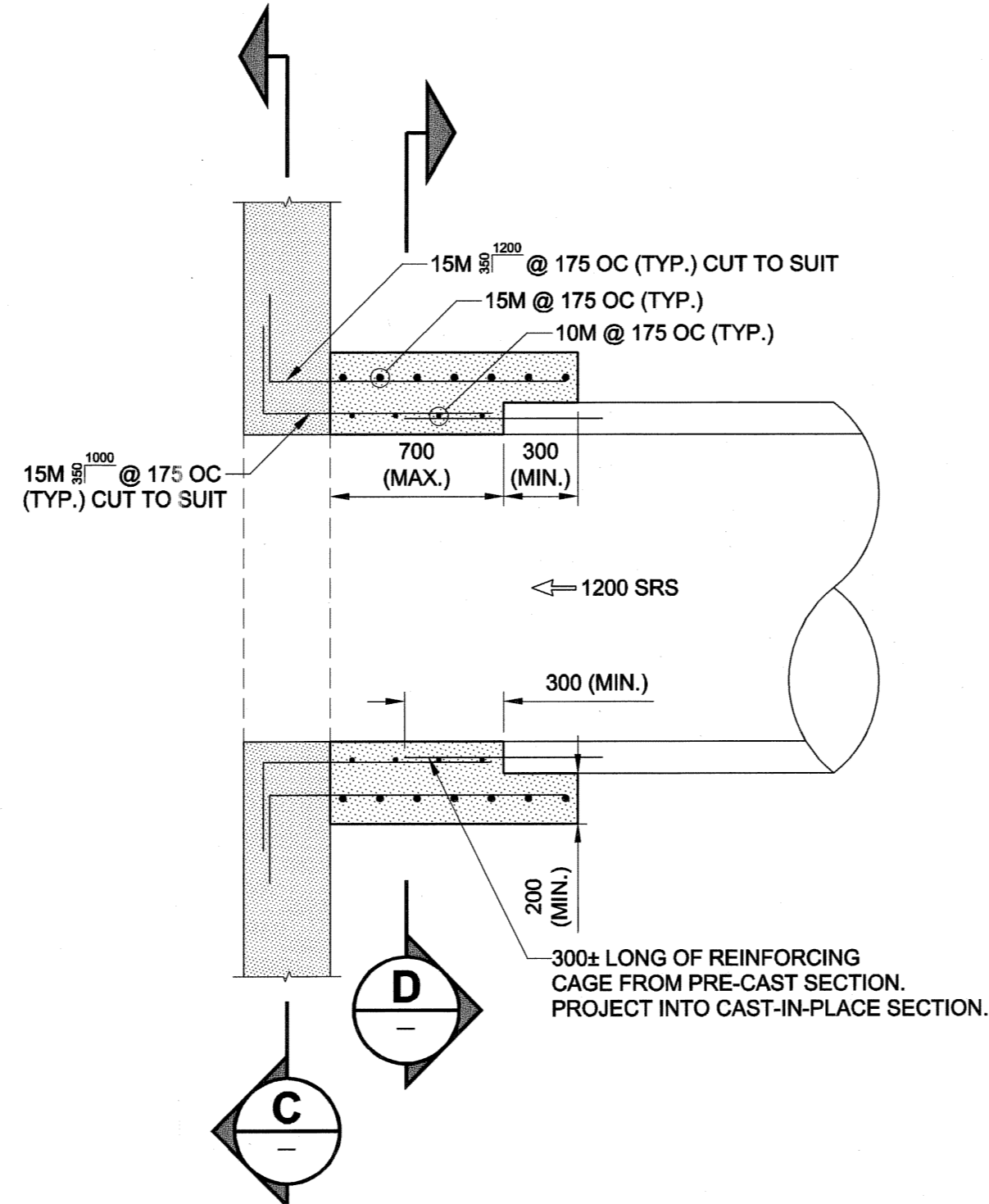
**SECTION A**  
 0 250 500 750 mm SCALE 1:25  
 ADDITIONAL REINFORCING AT 900 x 600 PIPE OPENINGS



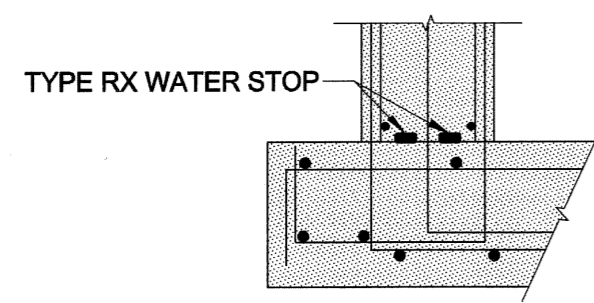
**DETAIL 1**  
 0 250 500 750 mm SCALE 1:25  
 TYPICAL 900 x 600 BRICK CONNECTION



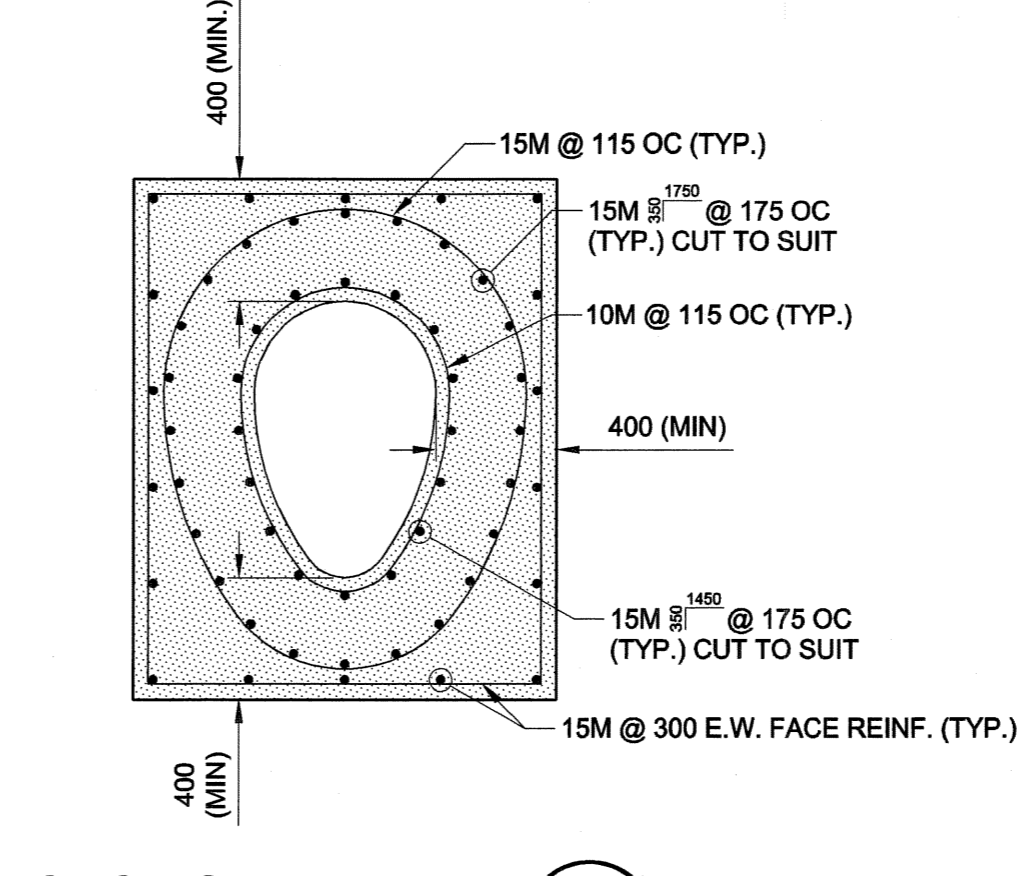
**SECTION C**  
 0 250 500 750 mm SCALE 1:25  
 ADDITIONAL REINFORCING AT 1200 PIPE OPENINGS



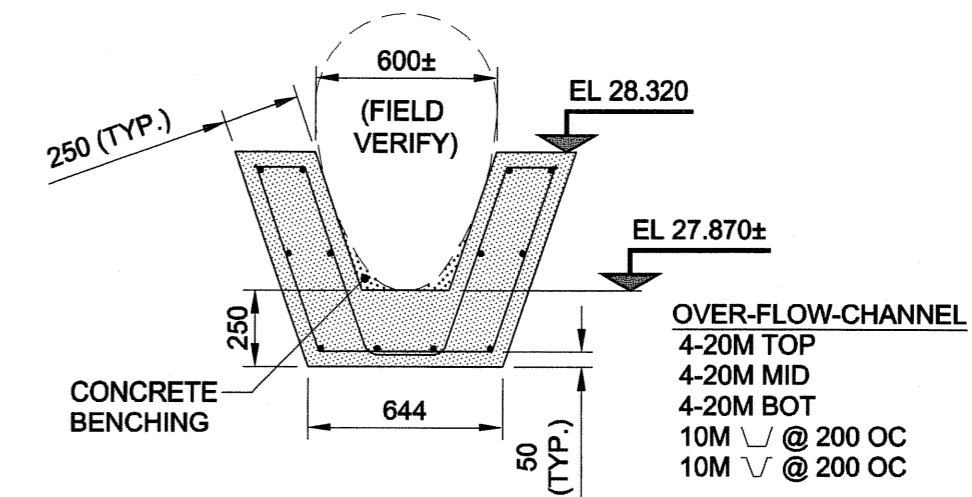
**DETAIL 4**  
 0 250 500 750 mm SCALE 1:25  
 TYPICAL 1200 CONNECTION



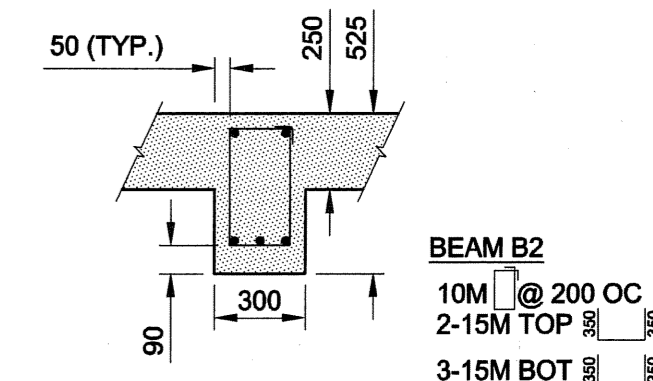
**DETAIL 3**  
 0 200 400 600 mm SCALE 1:20  
 WATERTIGHT CONSTRUCTION JOINT DETAIL



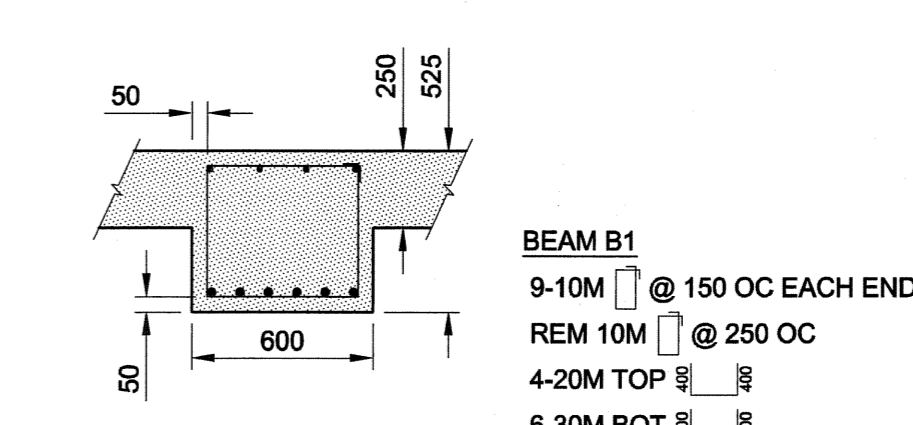
**SECTION B**  
 0 250 500 750 mm SCALE 1:25



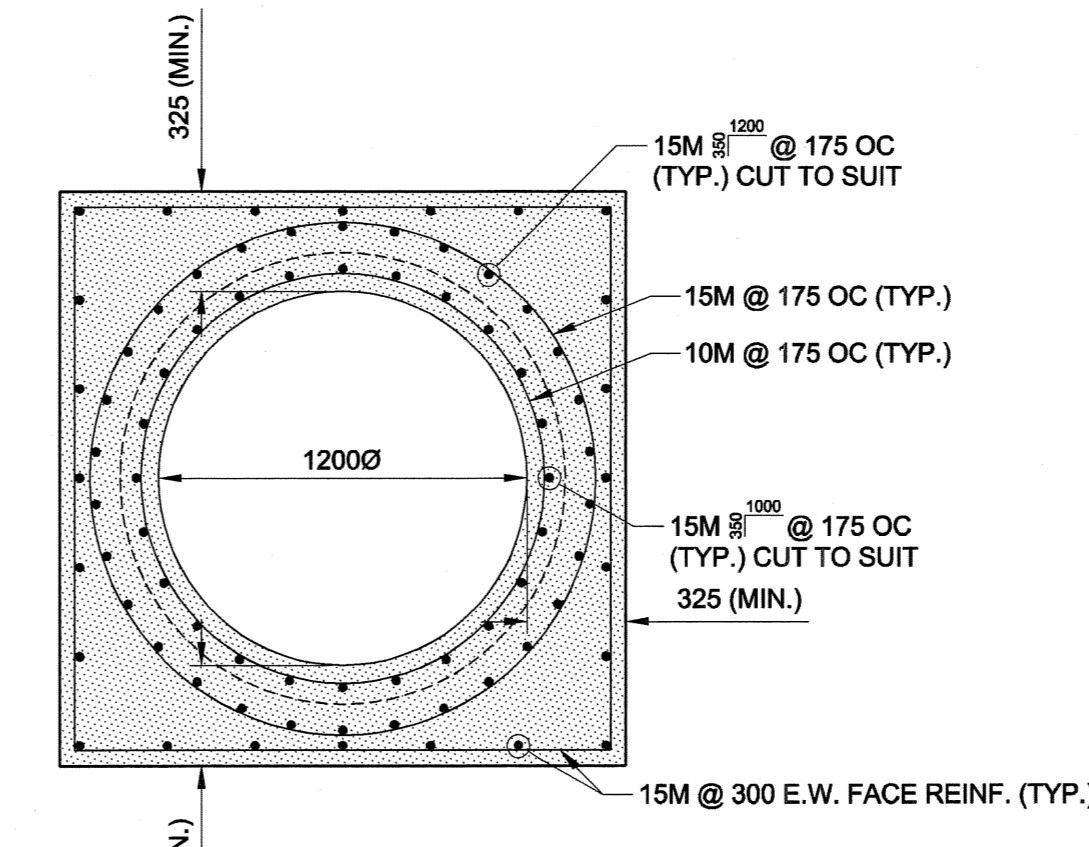
**DETAIL 5**  
 0 250 500 750 mm SCALE 1:25  
 CAST-IN-PLACE OVERFLOW CHANNEL



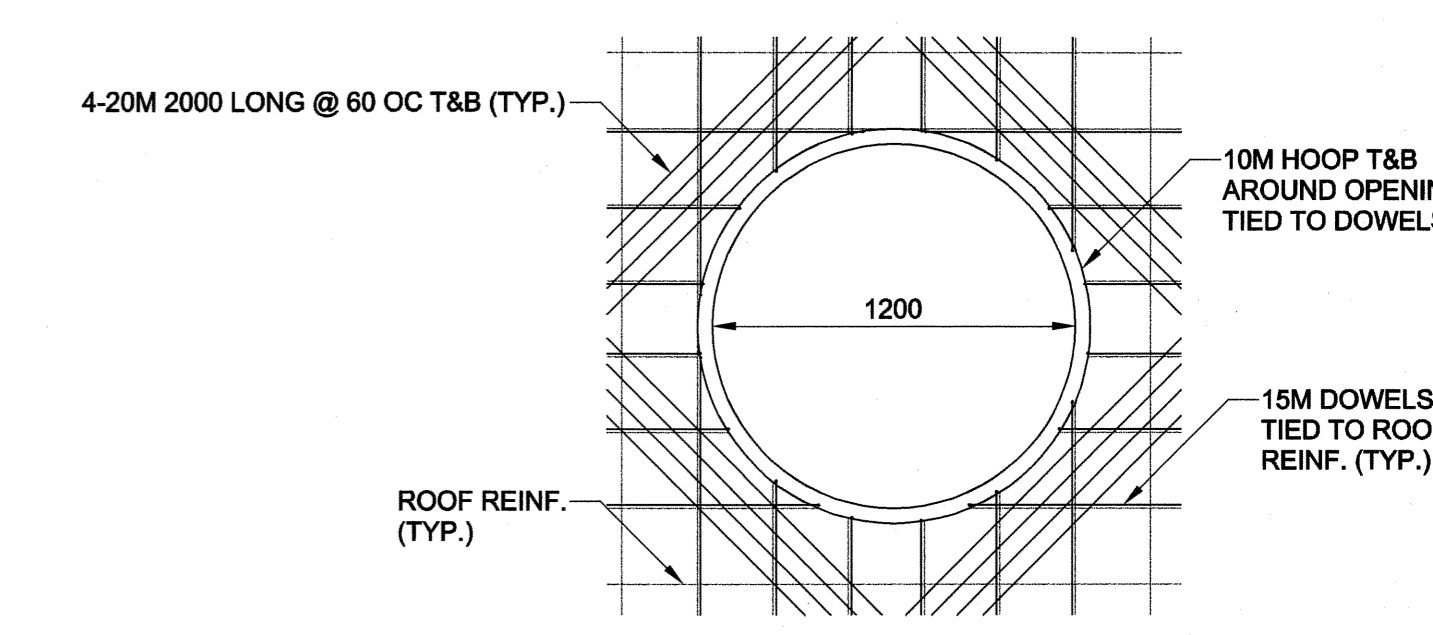
**DETAIL 2**  
 0 250 500 750 mm SCALE 1:25  
**BEAM B2**



**DETAIL 6**  
 0 250 500 750 mm SCALE 1:25  
**BEAM B1**



**SECTION D**  
 0 250 500 750 mm SCALE 1:25



**DETAIL 7**  
 0 250 500 750 mm SCALE 1:25  
 MANHOLE OPENING REINFORCING

LAP TABLE

| BAR | LAP |
|-----|-----|
| 10M | 500 |
| 15M | 700 |
| 20M | 870 |

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

| LOCATION APPROVED UNDERGROUND STRUCTURES  |                         |          |     |
|---|-------------------------|----------|-----|
| SUPR. U/G STRUCTURES  | DATE                    |          |     |
| COMMITTEE   |                         |          |     |
| NOTE:<br>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. |                         |          |     |
| 0   | ISSUED FOR CONSTRUCTION | 05/05/26 | ADL |
| NO.   | REVISIONS               | YY/MM/DD | BY  |

| METRIC  |                   |
|---|-------------------|
| WHOLE NUMBERS INDICATE MILLIMETRES<br>DECIMALIZED NUMBERS INDICATE METRES |                   |
| DESIGNED BY   | GEB               |
| CHECKED BY  | <i>Am</i>         |
| DRAWN BY  | ADL               |
| APPROVED BY   | <i>Suzanne</i>    |
| HOR. SCALE  | AS NOTED          |
| VERT. SCALE   | N/A               |
| RELEASED FOR CONSTRUCTION   | <i>Will Watts</i> |
| DATE  | 05/05/27          |
| DATE  | May 27/05         |

**APEGM**  
 Certificate of Authorization  
 UMA Engineering Ltd.  
 No. 256 Expiry: April 30, 2006

PROFESSIONAL'S SEAL  
 PROVINCE OF MANITOBA  
 S.B. BISWANGER  
 050626  
 REGISTERED PROFESSIONAL ENGINEER  
 CONSULTANT DRAWING NO. 17  
 D265-177-01-02

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

**ALEXANDER/BANNATYNE COMBINED SEWER RELIEF CONTRACT 1B**

**OVERFLOW STRUCTURE**

STRUCTURAL SECTIONS & DETAILS

SHEET 17 OF 18  
 CITY DRAWING NUMBER  
 REV  
**LD-3131** 0

BID OPPORTUNITY NO. 137-2005