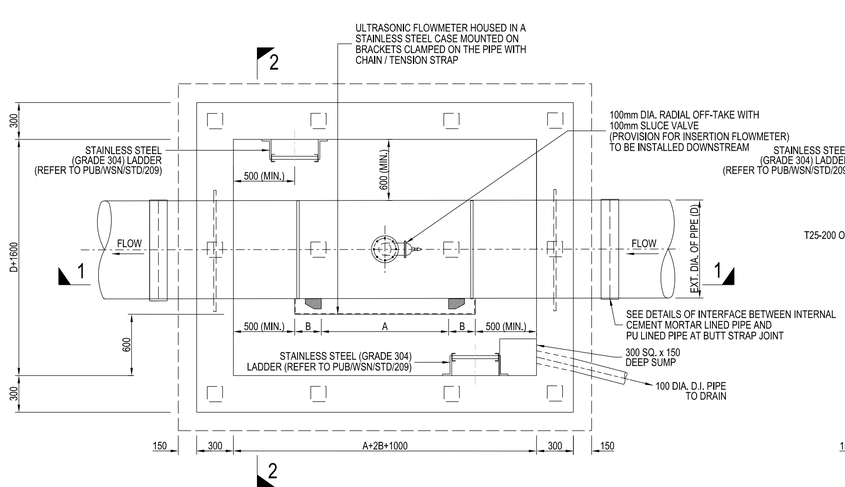
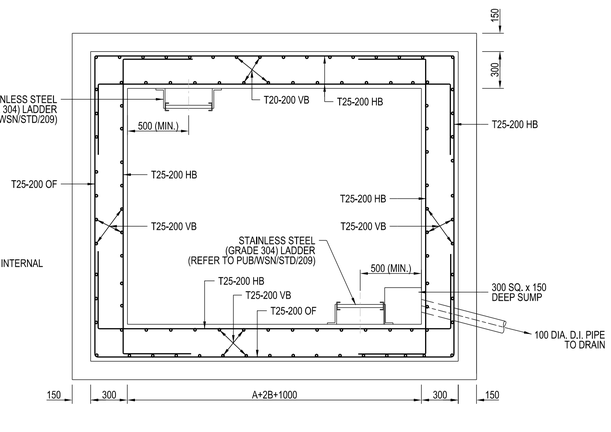
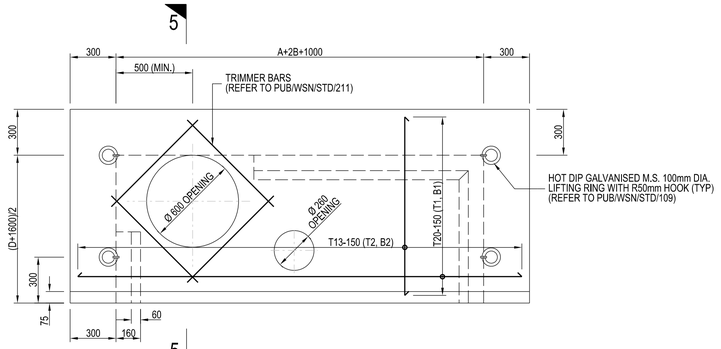


PLAN
FLOWMETER CHAMBER
SCALE 1 : 25



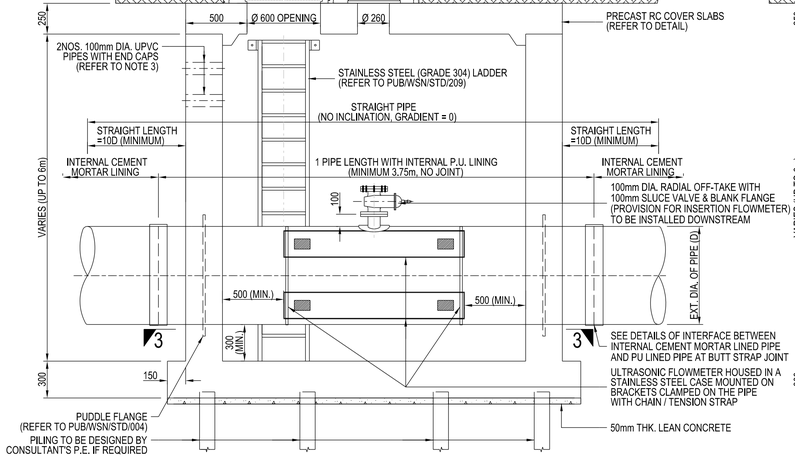
SECTION 3 - 3
SCALE 1 : 25



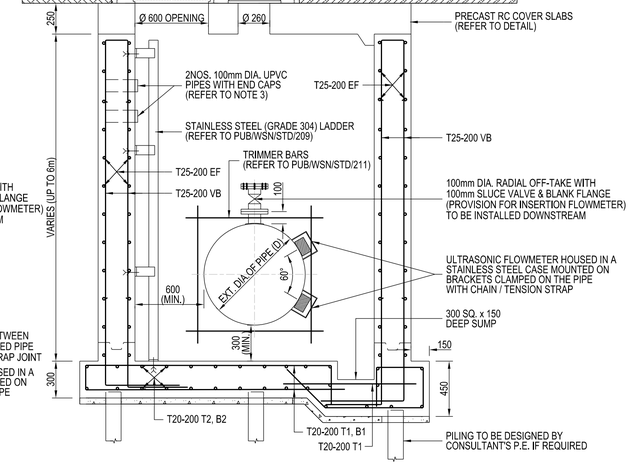
PLAN
DETAILS OF PRECAST R.C. COVER SLABS
SCALE 1 : 20

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
2. REFER TO THE GENERAL NOTES IN DRAWING NO. PUB/WSN/GN/001.
3. PROVIDE 2 NOS 100MM DIA UPVC PIPES WITH PROTRUDING END CAPS IN CHAMBER WALL BESIDE ACCESS LADDER FOR ENTRY OF POWER AND SIGNAL CABLES. LOCATION OF WALL OPENINGS AND UPVC PIPES ARE INDICATIVE AND TO BE CONFIRMED ON SITE.
4. 'tw' SHALL NOT BE LESS THAN THE PIPE WALL THICKNESS.
5. THICKNESS OF M.S PLATE SHALL BE EQUIVALENT TO THICKNESS OF INTERNAL CEMENT MORTAR LINING.
6. SAFETY CAGES SHALL BE INSTALLED FOR ALL STAINLESS STEEL LADDERS EXCEEDING 3M HEIGHT.
7. THE DETAILS OF REINFORCEMENT SHOWN IN THE DRAWINGS ARE FOR REFERENCE ONLY. THE PROFESSIONAL ENGINEER (P.E) SHALL UNDERTAKE DETAILED DESIGN CALCULATIONS ON THE REINFORCEMENT NECESSARY AND SUBMIT THE DESIGN TO BCA FOR APPROVAL AS QP(DESIGN).
8. THE CONSULTANT SHALL UNDERTAKE GEOTECHNICAL ANALYSIS TO ASSESS THE ALLOWABLE BEARING CAPACITY OF THE SOIL AND EXPECTED SETTLEMENT OF THE CHAMBER AND SUBMIT A REPORT TO THE BOARD. IN ADDITION, THE CONTRACTOR SHALL UNDERTAKE PLATE LOAD TESTS TO VERIFY THE IN-SITU SOIL BEARING CAPACITY IN ACCORDANCE WITH BS EN ISO 22476-13. WHERE THE BEARING CAPACITY IS DEEMED INADEQUATE AND/OR SETTLEMENT IS EXCESSIVE, THE CHAMBER SHALL BE SUPPORTED ON PILES. THE CONSULTANT SHALL DESIGN ALL PILING WORKS AND SUBMIT (IN CONJUNCTION WITH THE ACCREDITED CHECKER APPOINTED BY THE BOARD), TO THE BUILDING AND CONSTRUCTION AUTHORITY (BCA) FOR APPROVAL.

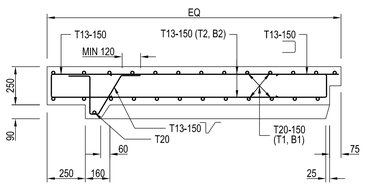


SECTION 1 - 1
SCALE 1 : 25

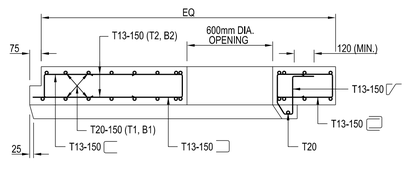


SECTION 2 - 2
SCALE 1 : 25

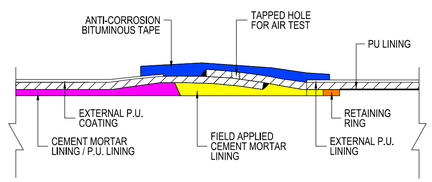
NOMINAL PIPE DIAMETER 'D' (mm)	PIPE WALL THICKNESS (mm)	DISTANCE BETWEEN SENSORS 'A' (mm)	DISTANCE FROM SENSORS TO OUTER EDGE OF STAINLESS STEEL CASING 'B' (mm)
500	6.3	262	AS PER MANUFACTURER'S DETAIL
700	6.3	390	
700	9.5	394	
800	8	517	
800	9.5	519	
800	12.7	522	
900	9.5	605	
900	12.7	609	
1000	12.7	685	
1200	12.7	858	
1200	15.9	861	
1400	12.7	998	
1400	15.9	1002	
1600	12.7	1100	
1600	15.9	1103	
1800	12.7	1258	
1800	15.9	1261	
1900	12.7	1390	
1900	15.9	1393	
2000	15.9	1515	
2000	19	1519	
2200	15.9	1637	
2200	19	1641	



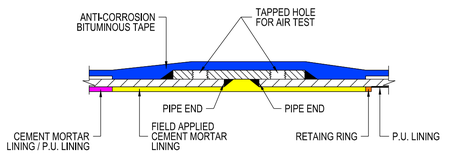
SECTION 4 - 4
SCALE 1 : 20



SECTION 5 - 5
SCALE 1 : 20



INTERFACE BETWEEN INTERNAL CEMENT MORTAR LINED PIPE AND PU LINED PIPE AT SPIGOT / SOCKET JOINT
SCALE 1 : 20
NOTE: REFER TO DRAWING NO.: PUB/WSN/STD/003 FOR DETAILS



INTERFACE BETWEEN INTERNAL CEMENT MORTAR LINED PIPE AND PU LINED PIPE AT BUTT STRAP JOINT
SCALE 1 : 20
NOTE: REFER TO DRAWING NO.: PUB/WSN/STD/003 FOR DETAILS

ISSUED : NOV 2020	SCALE: AS SHOWN	**TYPICAL USFM CHAMBER (DEPTH UP TO 6m)**
LAST REVIEWED : NOV 2020		PUB SINGAPORE'S NATIONAL WATER AGENCY WATER SUPPLY(NETWORK) DEPARTMENT DRAWING NO. PUB/WSN/STD/104