
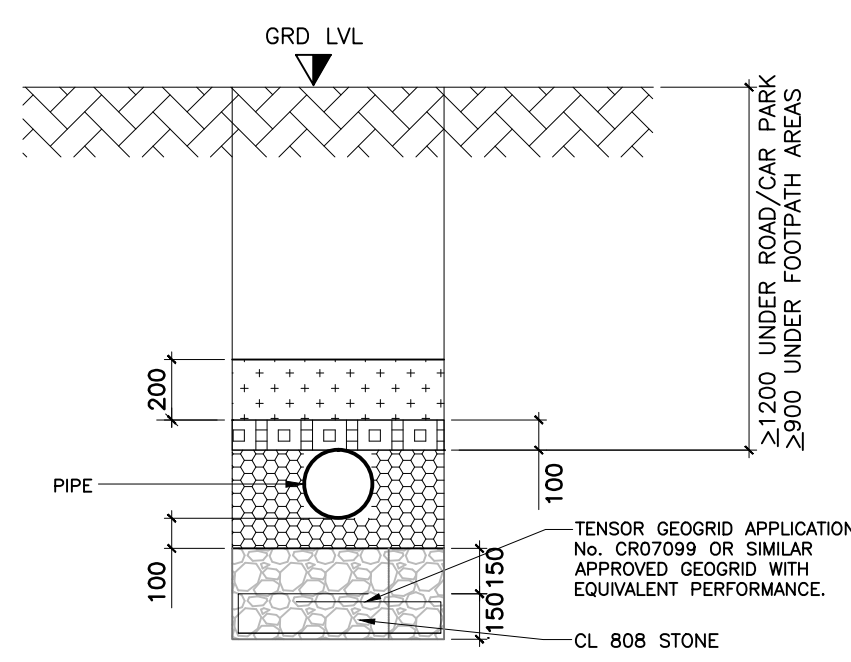


NOTE:
 HATCH INDICATES STRUCTURAL CONCRETE

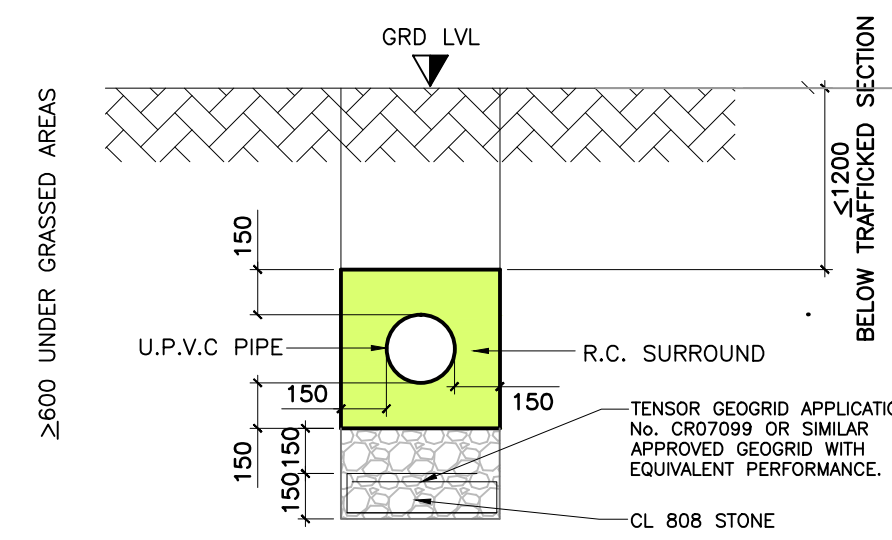
NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR STORED IN ANY RETRIEVAL SYSTEM OF ANY NATURE WITHOUT THE WRITTEN PERMISSION OF MALONE O'REGAN CONSULTING ENGINEERS AS COPYRIGHT HOLDER EXCEPT AS AGREED FOR USE ON THE PROJECT FOR WHICH THE DRAWING WAS ORIGINALLY ISSUED.

A. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS, ARCHITECTS AND SPECIALISTS DRAWINGS.
 B. ALL DIMENSIONS IN mm UNLESS NOTED.
 C. DO NOT SCALE DIMENSIONS.
 D. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. DISCREPANCIES SHALL BE REPORTED TO THIS OFFICE IN WRITING.

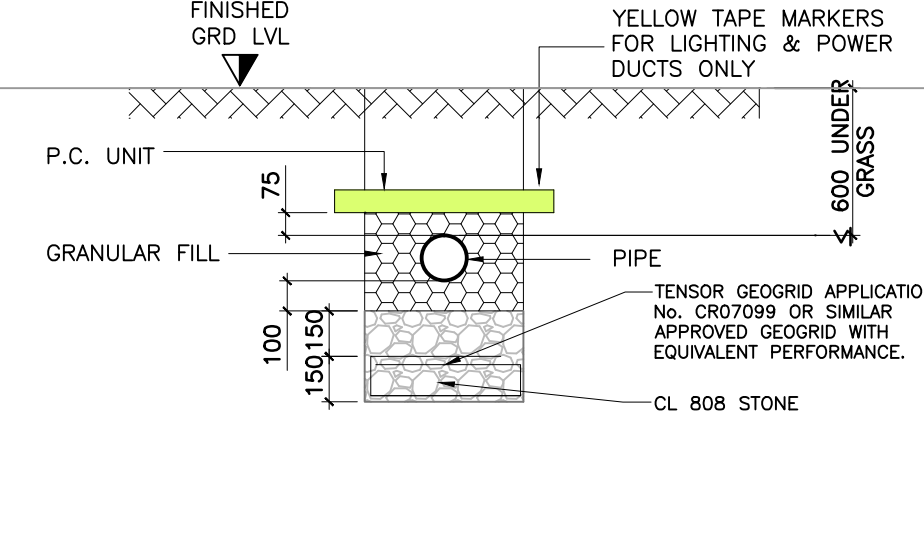
LOCAL AUTHORITY / COUNTY COUNCIL GUIDELINES FOR THE DESIGN AND CONSTRUCTION OF HOUSING MANUAL TO TAKE PRECEDENCE WHERE ANY CONFLICT OCCURS.



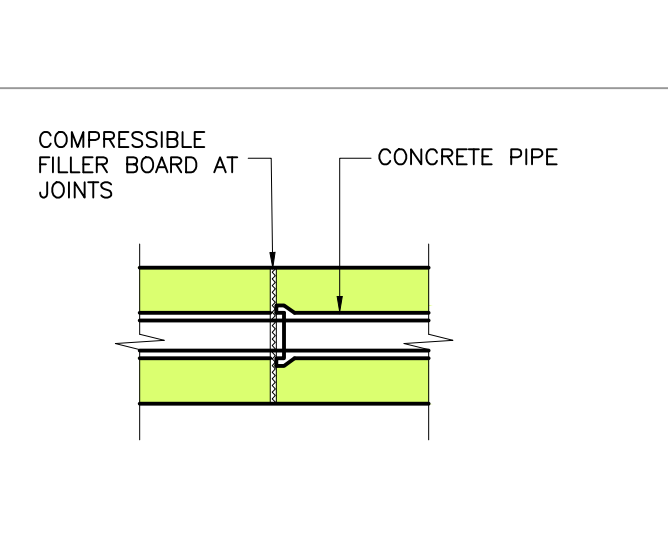
**PIPE PROTECTION
DETAIL 1.**
FLEXIBLE PIPES.
SCALE 1:25



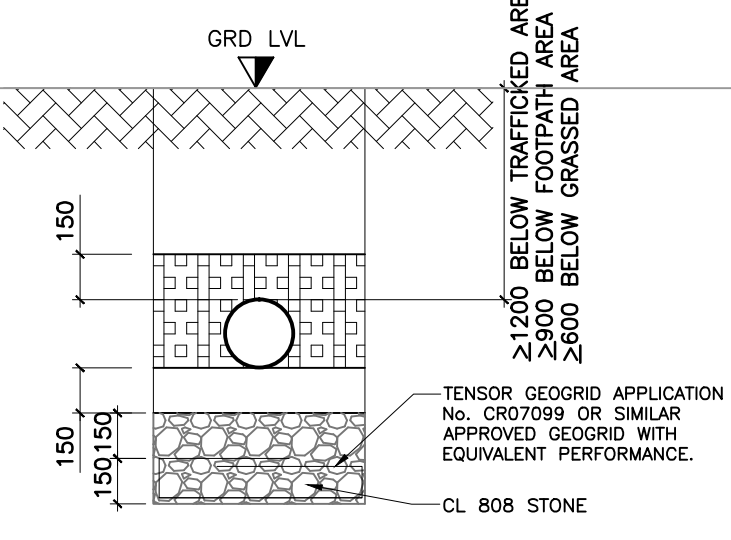
**PIPE PROTECTION
DETAIL 2.**
FLEXIBLE PIPES.
SCALE 1:25



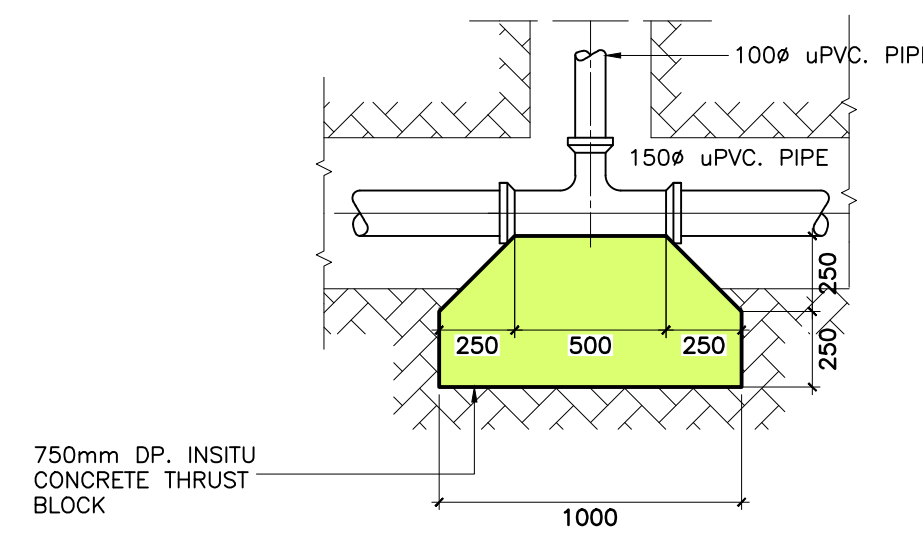
**PIPE PROTECTION
DETAIL 3.**
FLEXIBLE PIPES.
SCALE 1:25



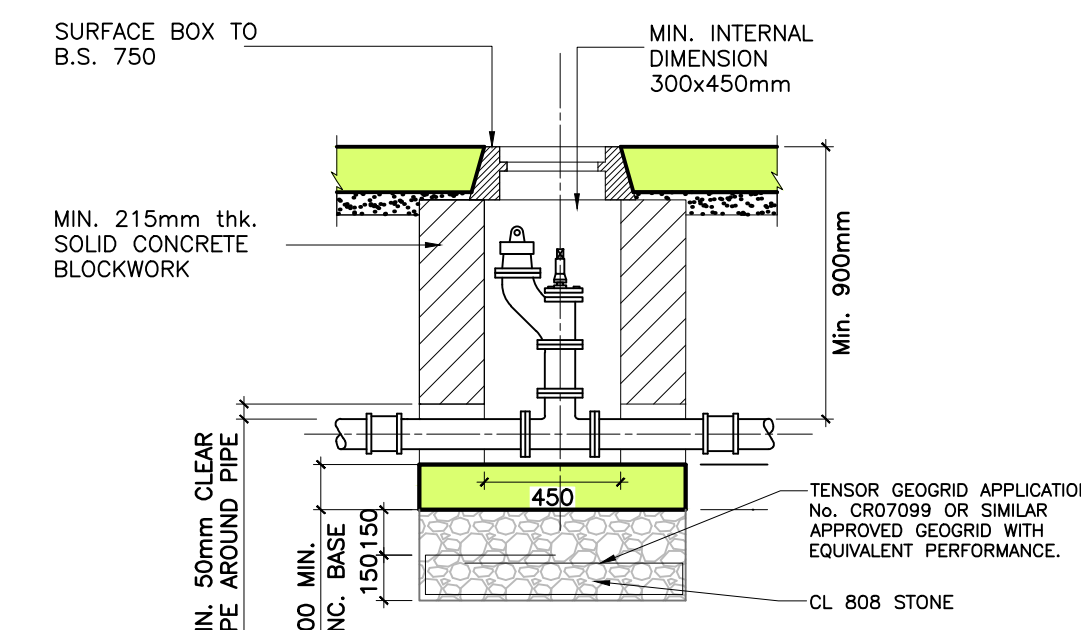
**PIPE PROTECTION.
DETAIL 4.**
RIGID PIPES.
SCALE 1:25



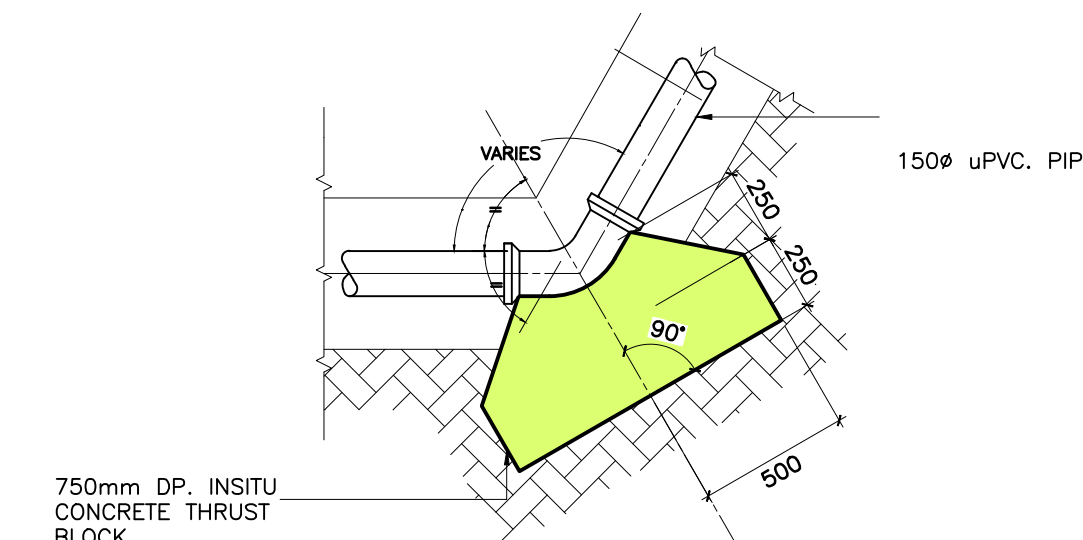
**PIPE PROTECTION.
DETAIL 5.**
RIGID PIPES.
SCALE 1:25



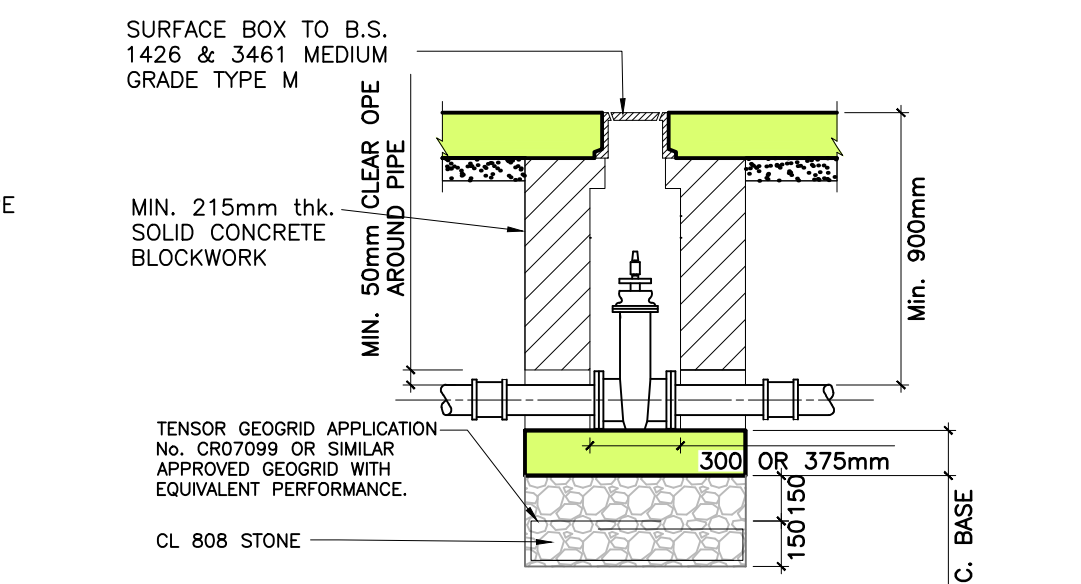
**THRUST BLOCK
TYPE 1.**
SCALE 1:25



HYDRANTS.
SCALE 1:25

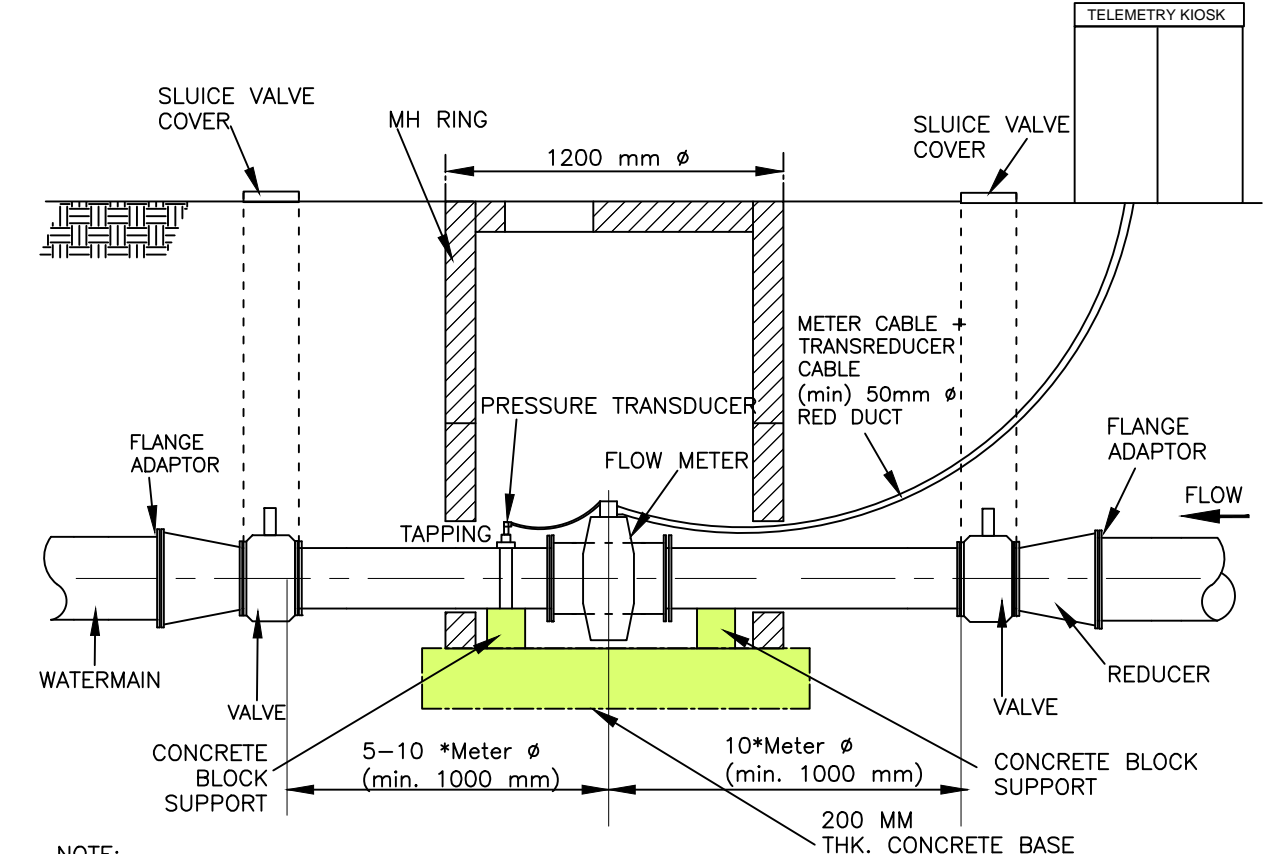


**THRUST BLOCK
TYPE 2.**
SCALE 1:25



SECTIONAL VALVES.
SCALE 1:25

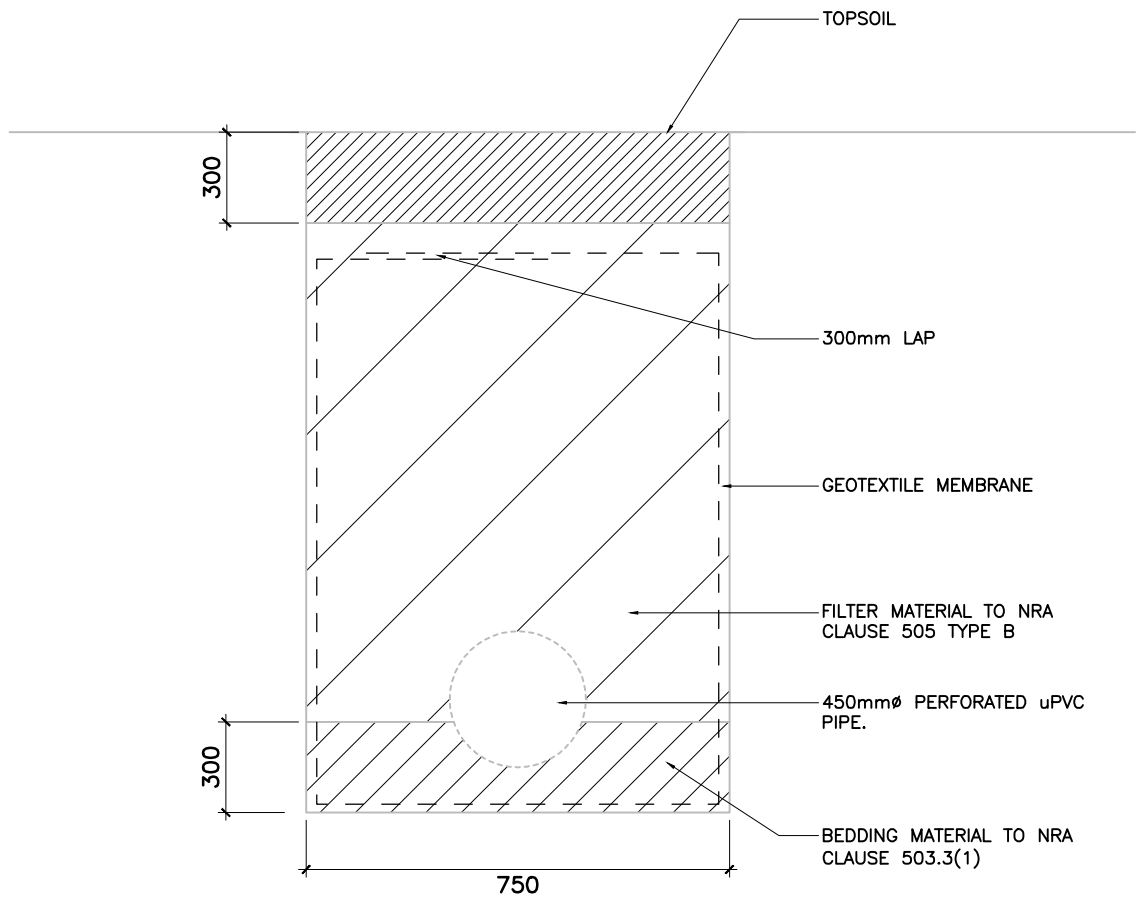
DIMENSIONS	
MINIMUM INTERNAL DIMENSIONS (MM)	PIPE SIZE
<150	385x450
150-225	



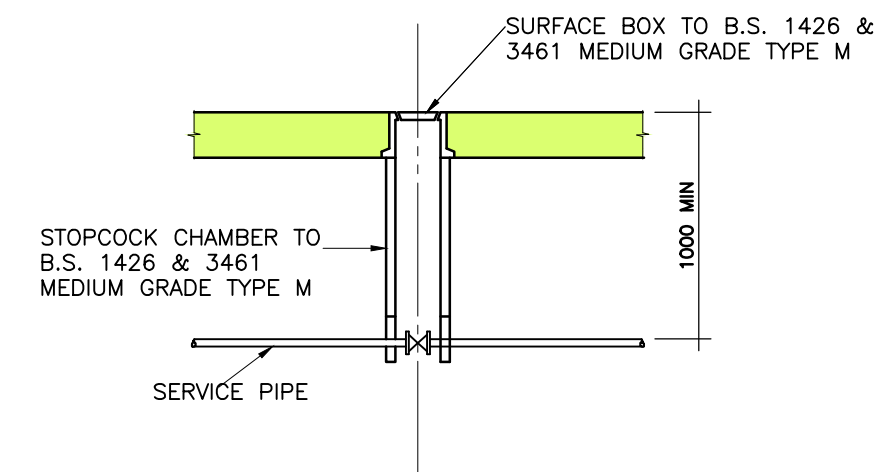
DETAILS OF WATERMETER CHAMBER
Scale 1:25

NOTE:

- SEE MANUFACTURER'S DETAILED INSTRUCTIONS PRIOR TO THE INSTALLATION OF FLOW METER.
- CHECK THAT FLOW ARROW DIRECTION IS POINTING IN THE SAME DIRECTION AS THE FLOW IN THE WATERMAIN.
- DRAW-WIRES TO BE LEFT IN ALL DUCTS.
- TYPICAL DETAILS FOR ALL PIPE MATERIAL TYPE EXCEPT ASBESTINE CEMENT. IN THE CASE OF AC A FULL 4.0 M LENGTH HAS TO BE REMOVED.
- 200mm THK. CONCRETE BASE
- DF SPACER AND S.V. TO BE THE SAME Ø AS METER.

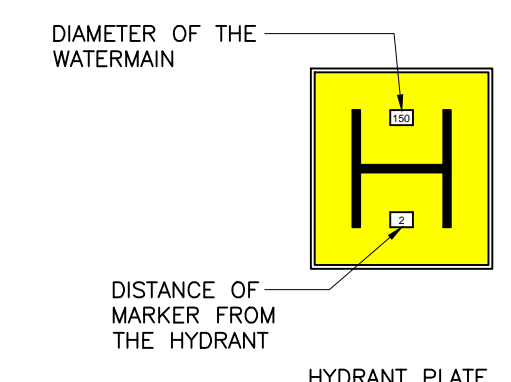


PERFORATED PIPE DETAIL
SCALE: 1:25



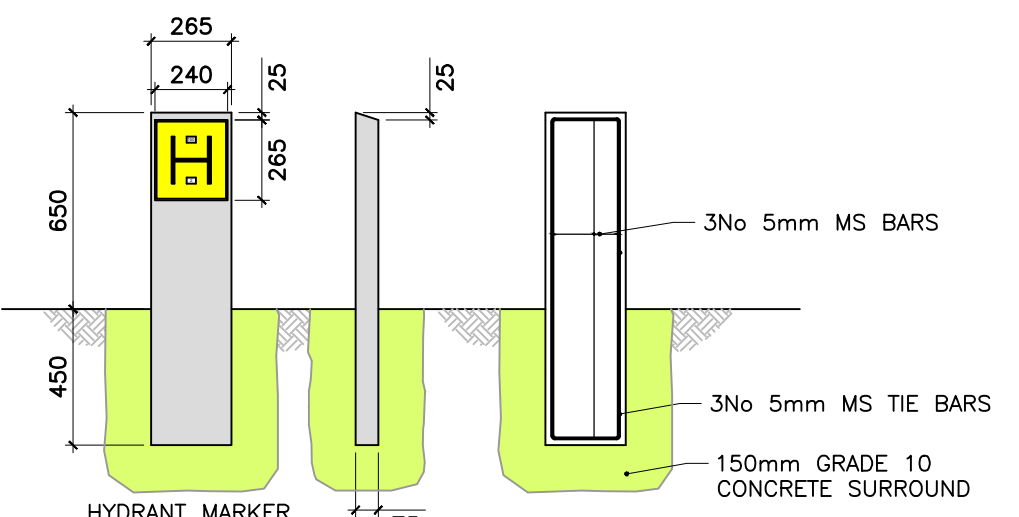
STOPCOCK CHAMBER
SCALE 1:25

NOTE:
 A HYDRANT INDICATOR PLATE TO BS 3251:1975 SHALL BE FITTED ON BOUNDARY WALL OR ON MARKER AGAINST ANY FENCE AT MIN. 450mm OVER FOOTPATH SURFACE LEVEL. THEY SHOULD SHOW THE DIAMETER OF THE WATERMAIN IN MILLIMETRES ON THE UPPER PART OF THE PLATE AND THE DISTANCE IN METRES OF THE MARKER FROM THE HYDRANT ON THE LOWER PART OF THE PLATE AS SHOWN BELOW.



FIRE HYDRANT DETAILS
SCALE 1:25

NOTE:
 WHERE REQUIRED A HYDRANT INDICATOR PLATE IS FIXED TO A MARKER POST. CONSTRUCTED AS SHOWN BELOW.



REV	DESCRIPTION	DATE	DRAWN BY	CHKD BY
P1	ISSUED FOR PART 8 PLANNING	13.04.17	KD	DW
P	PLANNING ISSUE	08.02.17	KD	DW

MALONE O'REGAN CONSULTING ENGINEERS

2B Richview Office Park, Clonskeagh, DUBLIN 14.
 Tel: +353 1 260 2655
 Fax: +353 1 260 2660
 Email: info@morce.ie

St. Catherine's House, Catherine Street, WATERFORD
 Tel: +353 51 876 855
 Fax: +353 51 876 828
 Email: info@waterford.morce.ie

CLIENT NAME	DRAWING NAME
RESPOND	SITE DEVELOPMENT DETAILS
JOB NAME	SHEET 3
JOB NUMBER	WATERMAIN & PIPE DETAILS
16036	

JOB NUMBER	DRAWING NUMBER	REVISION	SHEET SIZE	SCALE	DATE	DRAWN BY	ENGINEER
16036	122	P1	A1	SHOWN	DEC'16	KD	ND