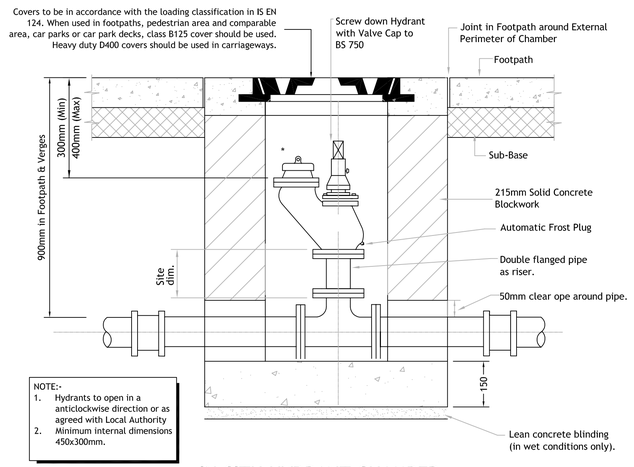
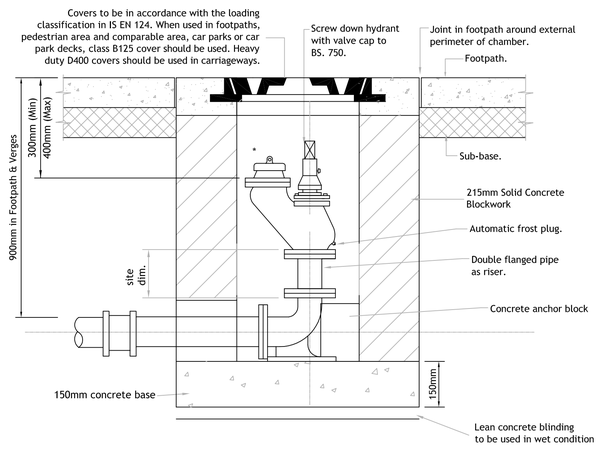
IF IN DOUBT ASK!



NOTE:-
1. Hydrants to open in a anticlockwise direction or as agreed with Local Authority
2. Minimum internal dimensions 450x300mm.

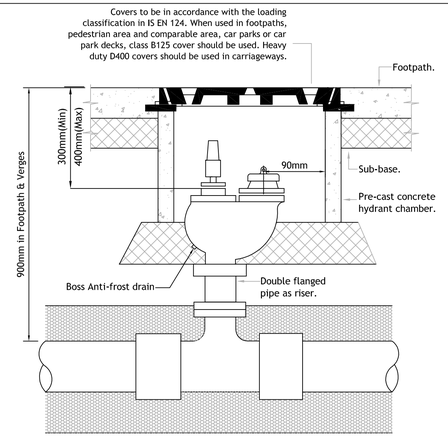
IN-SITU HYDRANT CHAMBER

SCALE 1:10



DUCK FOOT HYDRANT CHAMBER

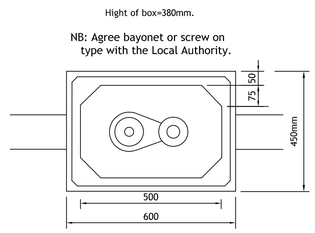
SCALE 1:10



PRECAST HYDRANT CHAMBER

SCALE 1:10

*Contractor must get confirmation in writing from the Local Authority that precast chamber are allowed on this site.



PLAN PRE-CAST CONCRETE HYDRANT CHAMBER

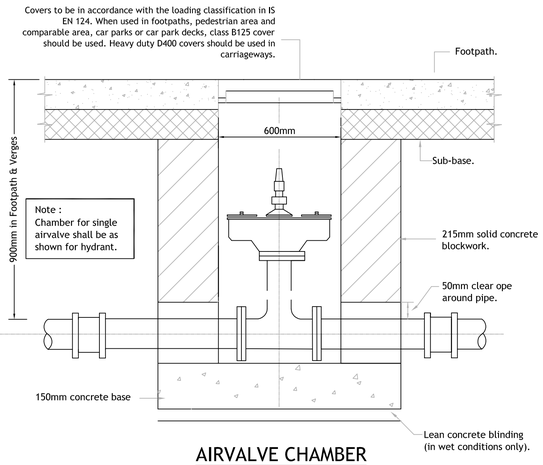
SCALE 1:10

NOTES

1. The contractor shall agree the exact make, model and closing direction of sluice valves and hydrants with the Local Authority & Local inspector.
2. All boxes shall be approved Local Authority type and to their standard pattern.
3. Watermains shall be tested in conjunction with the Local Authority to a minimum pressure of 10 Bars(150psi).
4. Anchor blocks of grade C20/25 Type F concrete shall be provided on watermains at dead ends, tees, bends of greater curvature than 11.25° and at both sides of sluice valve chambers.
5. All pipework shall be thoroughly flushed out, sterilised with chlorine and then scoured and flushed out again in conjunction with Local Authority.
6. Hydrant covers shall be painted canary yellow (BS 381C) and be in paved non-vehicular areas.
7. Air valves shall be provided at all summits on pipelines of 150mm(ID) Ø or greater.
8. Pipes should be jointed strictly in accordance with manufacturer's requirements.
9. Watermains pipe type(s) to be PVC-A, MDPE, HPPE or DI to POGA Specification, Cl 6.2. Acceptable pipe diameter for each pipe type is as follows:
   a) PVC-A, max 160mm (OD)
   b) MDPE and HDPE, max 315mm(OD)
   c) DI, between 100-600mm (ID)

   For pipes greater than 600mm refer to Engineer for approval.
10. All watermain pipes to have minimum 9 bar working pressure rating and should be blue in color.
11. Cover to watermains in roadways to be advised by the Local Authority.
12. All changes in both vertical and horizontal alignment greater than 4° to be supported by a concrete anchor block.
13. Distribution Watermains shall be laid in public areas and be kept a minimum distance from existing structures. Distance to be specified by the engineer.
14. Air valve locations to be accurately set out at summit points on site.
15. The watermains are to have rounded single sized pebble of 10mm nominal diameter surround. Backfill the trenches with NRA/SRW clause 804 compacted in layers not exceeding 225mm. It shall be suitable for the end use & in compliance with the properties set out in Annex C of S.R.21, with the exception with the sulphate content which should be in accordance with TRL
16. Depth of finished ground to the outlet of the Hydrant not to be greater than 400mm.
17. Boundary Box should be located in pedestrian areas not accessible by vehicular traffic, locations to be agreed with Local Authority prior to installation.

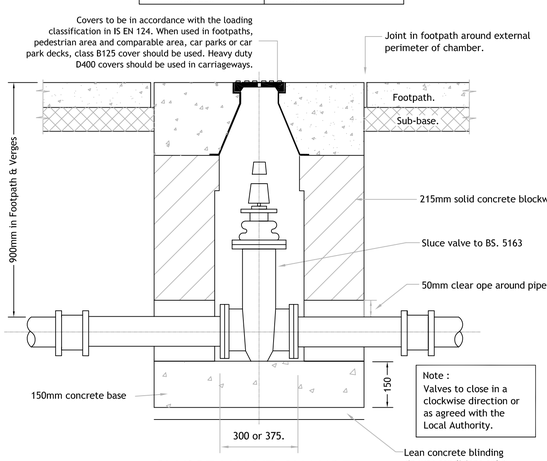
Notes on Markers :
1. When a suitable wall is available the sign shall be fixed to it, at a location to be agreed with the Architect.
2. Indicator posts shall be constructed with 10mm grade C30/35 concrete, reinforced with 6mmØ galvanised bars.
3. Hydrant indicator plates shall be canary yellow (BS 381 C) with black lettering to BS 3251.
4. Plates shall be bolted to posts/walls with non-corrosive metal bolts, which shall be compatible with the plate metal.



AIRVALVE CHAMBER

SCALE 1:10

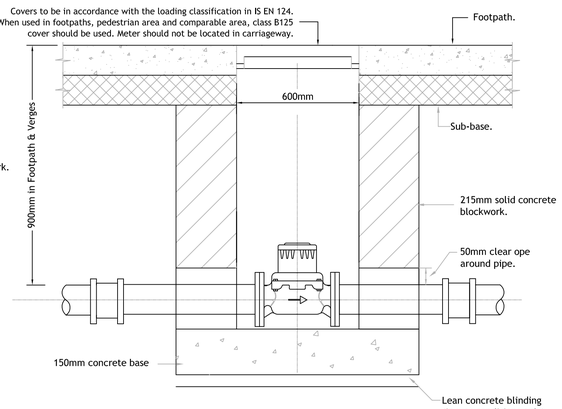
Minimum internal dimensions (mm).	
Pipe DN size	Dimensions.
<150 150-225	300x300 375x450



SLUICE VALVE CHAMBER

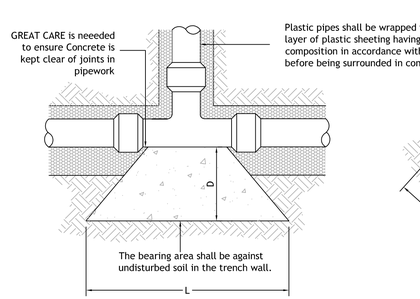
SCALE 1:10

NOTES:-
1. All flow meters must be compatible with Local Authority AMR Metering System. The contractor /Developer must check with the Local Authority for approved meter types and telemetry requirements before use.
2. A battery or mains powered Magnetic flow meter must be installed on a ring main, the type and power source to be confirmed by the Local Authority before use. Note mains powered units need separate duct and be wired back to landlords ESB metering point.
3. The location of this meter is to be agreed with the Local Authority.



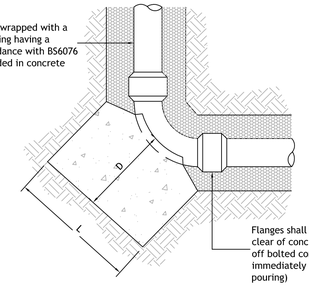
BULK WATER METER

SCALE 1:10



THRUST BLOCK AT TEE (END BLOCK SIMILAR)

Scale 1:10

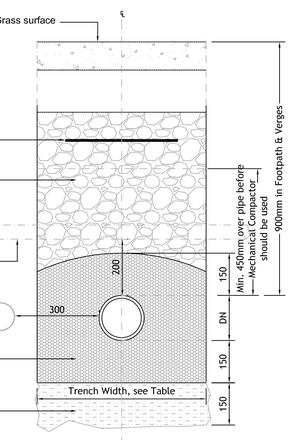


THRUST BLOCK AT 90° BEND

Scale 1:10

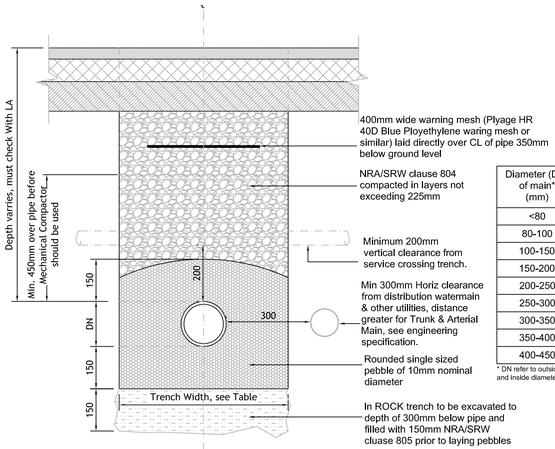
ANCHOR BLOCK SIZES LxD (mm).					
Pipe (diameter) :	100	150	200	225	300
Bend (degrees):					
90°	600x600	1000x600	1200x800	1500x800	2000x1000
45°	600x600	600x600	800x800	1000x800	1500x800
22½°	600x600	600x600	600x600	600x600	1000x800
11¼°	-	-	600x600	600x600	600x600

The above anchor block sizes are designed on the basis of average ground conditions. If better ground is encountered on site, then reductions in size may be instructed by the engineers only.



WATERMAIN TRENCH IN GRASS/FOOTPATH

Scale 1:10



Diameter (DN) of main* (mm)	Trench Width (mm)
<80	500
80-100	500
100-150	600
150-200	600
200-250	750
250-300	750
300-350	750
350-400	900
400-450	900

* DN refer to outside diameter for Plastic Pipes and Inside diameters for Ductile Iron pipes

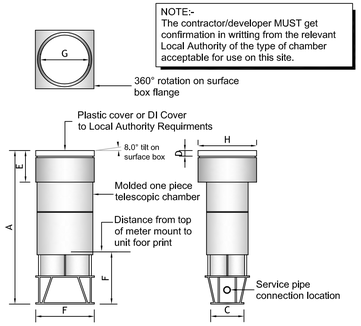
WATERMAIN TRENCH IN ROADS

Scale 1:10

Box Type	A(min) mm	A(max) mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm
Standard Unit (20, 25 & 32mm connection OD)	499	870	208	151	20	112	170	173	225
Short Unit	310	545	208	151	20	112	170	173	225

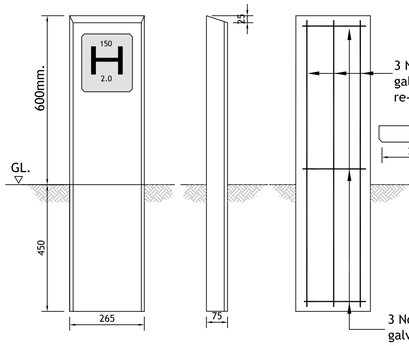
* Dims are for a Talbot Matrix unit, these may varry if a different chamber is approved for use by the Local Authority on this site.

NOTE:-
The contractor/developer MUST get confirmation in writting from the relevant Local Authority of the type of chamber acceptable for use on this site.



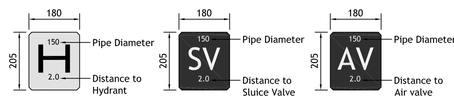
TELESCOPIC METER AND STOPCOCK BOUNDARY BOX

Scale 1:10



CONCRETE INDICATOR POSTS

SCALE 1:10



MARKER PLATES

Scale 1:10

REV.	DATE	DESCRIPTION	BY

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PROJECT
PROSPEROUS

DRAWING TITLE
STANDARD WATERMAIN DETAILS

ARCHITECT				STAGE	
MCORM				PART 8	
DATE	CHECKED	DRAWN	SCALES	DWG NO.	REV.
FEB 2017	PM	CB	AS SHOWN	1642-104	0