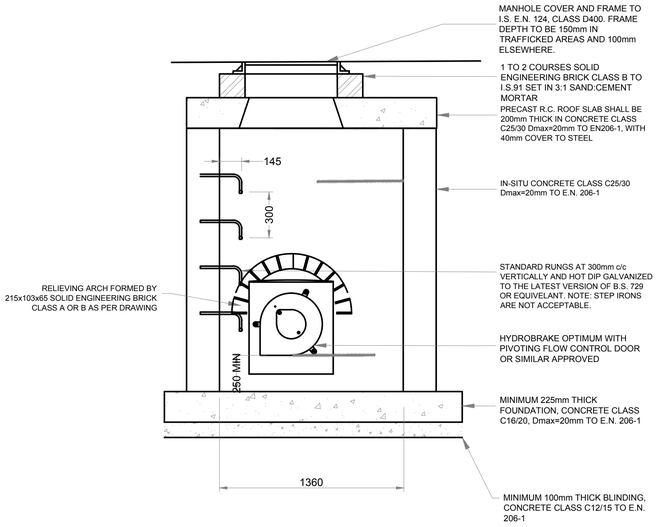
NOTES:

1. DO NOT SCALE FROM THIS DRAWING. USE STATED DIMENSIONS ONLY. IF IN DOUBT, CONSULT THE ENGINEER.
2. LEVELS REFER TO O.S. DATUM MALIN HEAD.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
4. FOR ALL INLETS, OUTLETS AND BRANCHES MATCH CROWN LEVELS UNLESS INDICATED OTHERWISE ELSEWHERE.
5. BLINDING CONCRETE SHALL BE CLASS C12/15 TO E.N. 206-1. BLINDING SHALL BE A MINIMUM THICKNESS OF 100mm.
6. FOUNDATION CONCRETE SHALL BE CLASS C32/40 Dmax=20mm TO E.N. 206-1. FOUNDATIONS SHALL BE A MINIMUM THICKNESS OF 225mm.
7. PRECAST MANHOLE SIZES TO BE IN ACCORDANCE WITH TABLE 1.
8. PRECAST MANHOLE CHAMBER WALLS, COVER SLABS AND REDUCING SLABS TO BE CONSTRUCTED TO I.S. E.N. 1917 AND I.S. 420 2004
9. FOR BEDDING AND SEALING OF CHAMBER RINGS, THE TOP RING (TO PRE CAST COVER SLAB) AND BOTTOM RING TO BE BEDDED WITH CEMENT MORTAR. FOR INTERMEDIATE RINGS, JOINTS TO BE SEALED WITH TYPE 2 RUBBER GASKETS AND JOINTING RINGS TO BS 2494.
10. PRE CAST MANHOLES TO BE SURROUNDED WITH A MINIMUM OF 150mm THICK CONCRETE CLASS C32/40 Dmax=40mm TO E.N. 206-1
11. BENCHING AND PIPE CHANNEL PIPE SURROUND - CONCRETE CLASS C16/20 Dmax=20mm TO E.N. 206-1.
12. BENCHING FINISHED IN MINIMUM 25mm THICK 2:1 SAND:CEMENT MORTAR WITH A SMOOTH TROWEL FINISH, AT 1 IN 30 SLOPE TOWARDS CHANNEL.
13. 1 TO 2 COURSES OF SOLID ENGINEERING BRICKS CLASS B TO I.S.91:1983 SET IN 3:1 SAND: CEMENT MORTAR.
14. MANHOLE COVERS AND FRAMES TO BE CLASS D400 OR E600 TO I.S. E.N. 124. 150mm DEEP FRAME FOR ROADS AND 100mm DEEP FOR FOOTPATHS AND GREEN AREAS. NON-ROCK DESIGN, CLOSED KEYWAYS, MANUFACTURED FROM SPHEROIDAL GRAPHITE CAST IRON (DUCTILE CAST IRON), COVER AND FRAME COATED IN BITUMEN OR OTHER APPROVED MATERIAL, COVER TO HAVE A MINIMUM MASS OF 140kg/m^2, FRAME BEARING AREA SHALL BE 80,000mm^2 MINIMUM, FRAMES SHALL BE DESIGNED TO PREVENT COVERS FALLING INTO MANHOLE. FRAMES SHALL BE BEDDED ON APPROVED MORTAR TO MANUFACTURER'S INSTRUCTIONS.
15. MANHOLE COVERS, FRAMES, REGULATING COURSES AND SLAB OPES TO PROVIDE CLEAR OPENING OF 600mmX600mm (OR 600mm DIAMETER).
16. SAFETY CHAINS TO BE PROVIDED ON PIPES THAT EXCEED 450mm IN DIAMETER. MILD STEEL SAFETY CHAIN SHALL BE 10mm NOMINAL SIZE GRADE M(H) NON-CALIBRATED CHAIN, TYPE 1, COMPLYING WITH BS4942 PART 2 OR EQUIVALENT.
17. STANDARD RUNGS AT 300mm c/c VERTICALLY AND GALVANIZED TO THE LATEST VERSION OF BS 729 OR EQUIVALENT. NOTE: STEPS IRONS ARE NOT ACCEPTABLE.
18. LADDER STRINGERS SHOULD BE ADEQUATELY SUPPORTED FROM THE MANHOLE WALL AT INTERVALS OF NOT MORE THAN 2.0m STRINGERS SHOULD BE BOLTED TO CLEATS TO FACILITATE RENEWAL.
19. DISTANCE FROM THE TOP RUNG OF THE LADDER TO GROUND LEVEL MUST BE A MAXIMUM OF 675mm.
20. ALL LADDERS, RUNGS, SAFETY CHAINS ETC SHALL BE HOT DIP GALVANIZED TO BS729 OR EQUIVALENT.
21. MANHOLE OPENINGS TO BE SITUATED FURTHEST FROM THE NEAREST CARRIAGEWAY. MANHOLE STEPS / ACCESS TO BE POSITIONED TO ALLOW VIEWING OF ONCOMING TRAFFIC.
22. SHORT LENGTH PIPE AND PIPE JOINT EXTERNAL TO MANHOLE SHALL NOT EXCEED 600mm FROM THE INNER FACE OF MANHOLE WALL.
23. BLOCK WORK SHALL BE BEDDED AND JOINTED USING MORTAR TO I.S. 406. BEDS AND VERTICAL JOINTS SHALL BE COMPLETELY FILLED WITH MORTAR AS THE BLOCKS ARE LAID. JOINTS SHALL BE FLUSH POINTED AS THE WORK PROCEEDS.
24. RELIEVING ARCH FORMED BY 215x103x65 SOLID ENGINEERING BRICK CLASS A OR B AS PER DRAWING. RELIEVING ARCHES USED IN BRICK OR BLOCK WORK MANHOLES EXTEND OVER FULL THICKNESS OF WALL. A DOUBLE ARCH IS TO BE FORMED FOR PIPE DIAMETERS GREATER THAN 600mm.
25. ALL MANHOLES TO BE WATERTIGHT TO THE SATISFACTION OF THE ENGINEER.

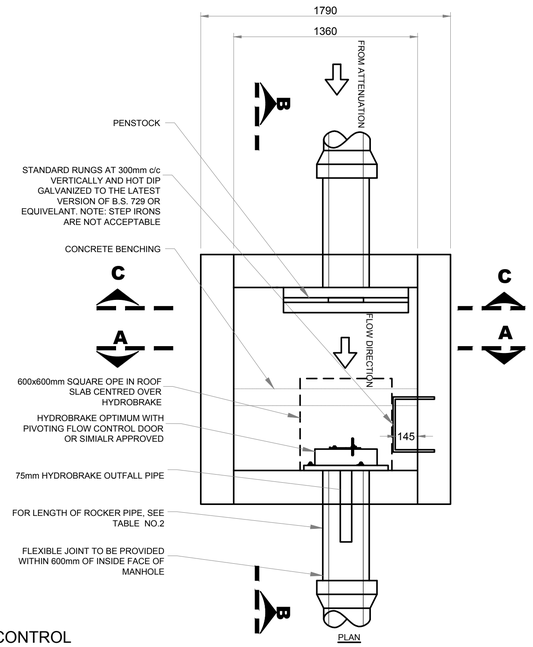
TABLE NO. 1			
DIA. OF LARGEST PIPE IN MH (mm)	MINIMUM INTERNAL DIAMETER OF MH (mm)		
	TYPE J	TYPE K	TYPE L
LESS THAN 600	1200	1200	1500
600	1200	1200	1500
675	1350	1350	1500
750	1350	1500	1500
900	1500	1500	1500
1050	2100	2100	2100
1200	2100	2100	2100

TABLE NO. 2	
DIA. OF PIPE (mm)	LENGTH OF ROCKER PIPE (mm)
150-600	600
675-750	1000
>750	1250



SECTION A-A

FLOW CONTROL CHAMBER

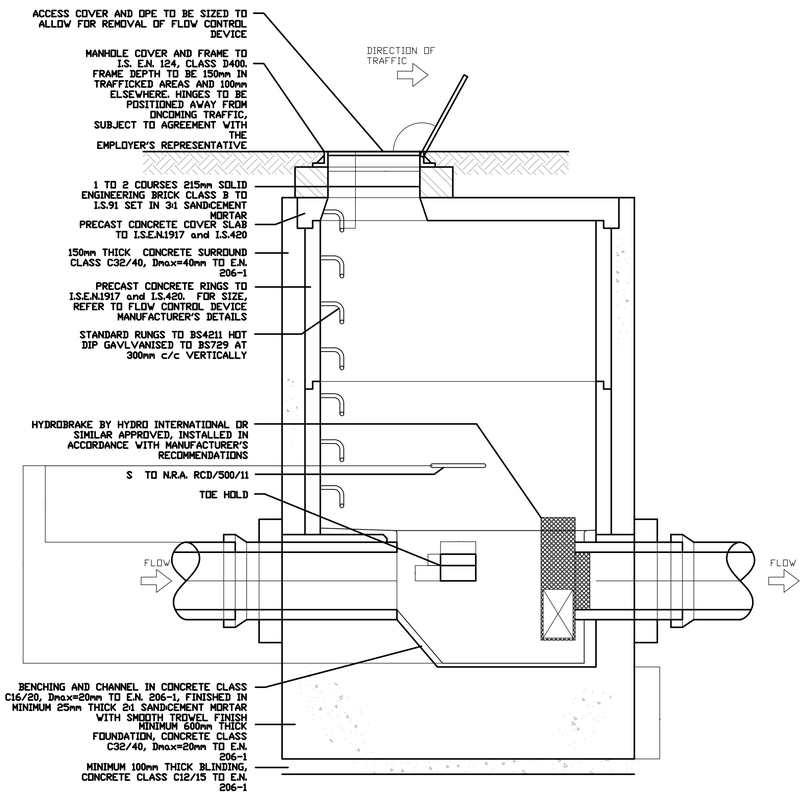


PLAN

VORTEX FLOW CONTROL
DESIGN SPECIFICATION:
MAX FLOW = 11.2 l/s
DESIGN HEAD = 1.775m
MIN. PIPE SIZE = 150mm

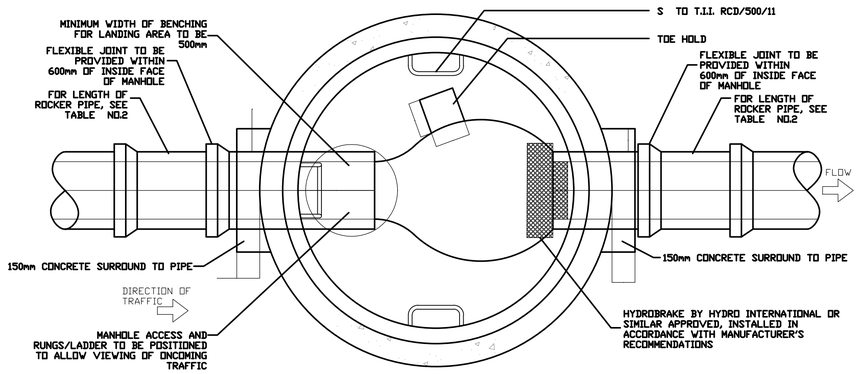
FLOW CONTROL CHAMBER

INLET FROM ATTENUATION.



FLOW CONTROL CHAMBER

DEPTH OF COVER TO CROWN 1.0m MIN TO 3.0m MAX
CROSS SECTION

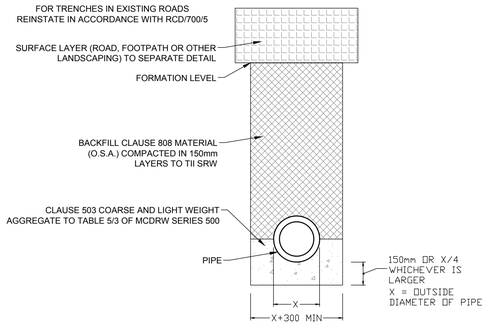


FLOW CONTROL CHAMBER

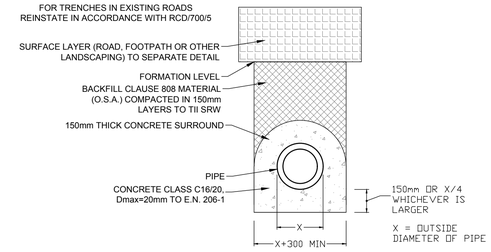
DEPTH OF COVER TO CROWN 1.0m MIN TO 3.0m MAX
SECTIONAL PLAN

NOTES FOR TRENCH DETAILS:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS AND DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCEMENT OF ANY WORKS.
3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS, SCHEDULES AND WORKS REQUIREMENTS.
4. DO NOT SCALE FROM THIS DRAWING. USE STATED DIMENSIONS ONLY. IF IN DOUBT, CONSULT THE ENGINEER.
5. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATION.
6. TRACER TAPE SHALL BE LAID AT A DEPTH OF 450mm BELOW GROUND LEVEL. THIS DIMENSION MAY BE INCREASED TO AVOID DAMAGE OR DISLOCATION OF TAPE BY OTHERS.
7. PIPES SHALL BE BEDDED AND SURROUNDED IN CONCRETE WHERE MINIMUM COVER OF 1.2m IN TRAFFICKED AREAS, OR 0.9m IN UNTRAFFICKED AREAS, CANNOT BE ACHIEVED.
8. ALL PIPES TO BE IDENTIFIED IN ACCORDANCE WITH BRITISH STANDARD BS1710:2014 SPECIFICATION FOR THE IDENTIFICATION OF PIPELINES AND SERVICES.



TYPE 3
PUBLIC SEWERS AND PRIVATE DRAINAGE IN PUBLIC ROADS WHERE COVER TO PIPE CROWN IS AT LEAST 1.2m IN TRAFFICKED AREAS OR AT LEAST 0.9m IN NON-TRAFFICKED AREAS



TYPE 4
PUBLIC SEWERS AND PRIVATE DRAINAGE IN PUBLIC ROADS WHERE COVER TO PIPE CROWN IS LESS THAN 1.2m IN TRAFFICKED AREAS OR LESS THAN 0.9m IN NON-TRAFFICKED AREAS

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- FOR SETTING OUT REFER TO ARCHITECT'S DRAWINGS.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER ARCHITECTURAL AND ENGINEERING DRAWINGS AND ALL OTHER RELEVANT DRAWINGS AND SPECIFICATIONS.
- DO NOT SCALE THIS DRAWING. USE FIGURED DIMENSIONS ONLY.
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Rev No.	Date	Revision Note	Drn by	Chkd by
C01	25.04.19	SUITABLE FOR PLANNING	DOM	MK
C02	22.10.2019	STAGE COMPLETE - PLANNING	MK	PR

Rev No.	Date	Revision Note	Drn by	Chkd by

PLANNING DRAWING.
NOT FOR CONSTRUCTION.
ALL LEVELS GIVEN ARE RELATIVE TO ORDNANCE DATUM.
THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES ONLY AND MUST NOT BE USED FOR CONSTRUCTION UNDER ANY CIRCUMSTANCES

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QUALITY ISO 9001:2008 NSAI Certified
HEALTH & SAFETY OHSAS 18001:2007 NSAI Certified
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Client:	GLENVEAGH HOMES LIMITED
Project:	RESIDENTIAL DEVELOPMENT CARPENTERSTOWN ROAD
Title:	PROPOSED DRAINAGE STANDARD DETAILS 3

Code	Originator	Zone	Level	Type	Role	Number	Status	Revision
G451	OCSC	XX	XX	DR	C	0522	A1	C02

Date: 25.04.19 Scale: SHOWN @ A1 Drn by:DOM Chkd by:MK Aprvd by:AOB