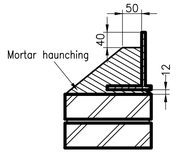
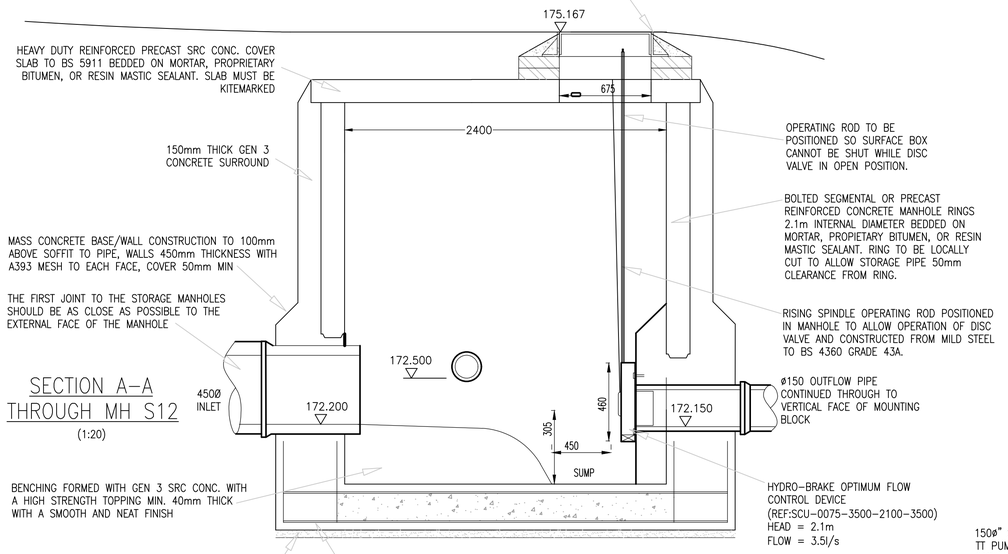
YW REF NO:
H-3-264-976



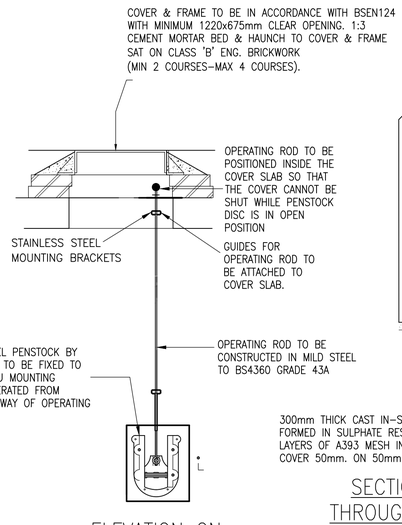
DETAIL A

MANHOLE COVERS TO BE HEAVY DUTY DOUBLE TWIN COVERS, WITH A CLEAR ACCESS OPENING OF 1220x675mm AND SHALL BE CLASS D400 TO BS EN 124 WITH WITH 150mm DEEP FRAMES IN HIGHWAYS AND A HINGED FALL ARREST GRILLE TO BE FITTED WITH A MINIMUM CLEAR OPENING (WHEN OPEN) OF 600mm.
1:3 CEMENT MORTAR BED & HAUNCH TO COVER & FRAME SAT ON CLASS 'B' ENG. BRICKWORK (MIN. 2 COURSES–MAX. 4 COURSES)



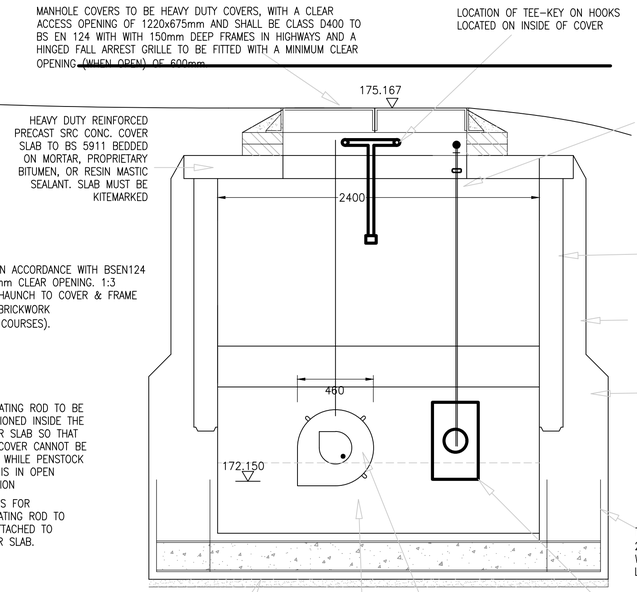
SECTION A–A
THROUGH MH S12
(1:20)

NOTE:
ALL CUSTOM BUILT IRONWORK TO BE HOT–DIPPED GALVANISED PRIOR TO FINAL FIXING



ELEVATION ON PENSTOCK

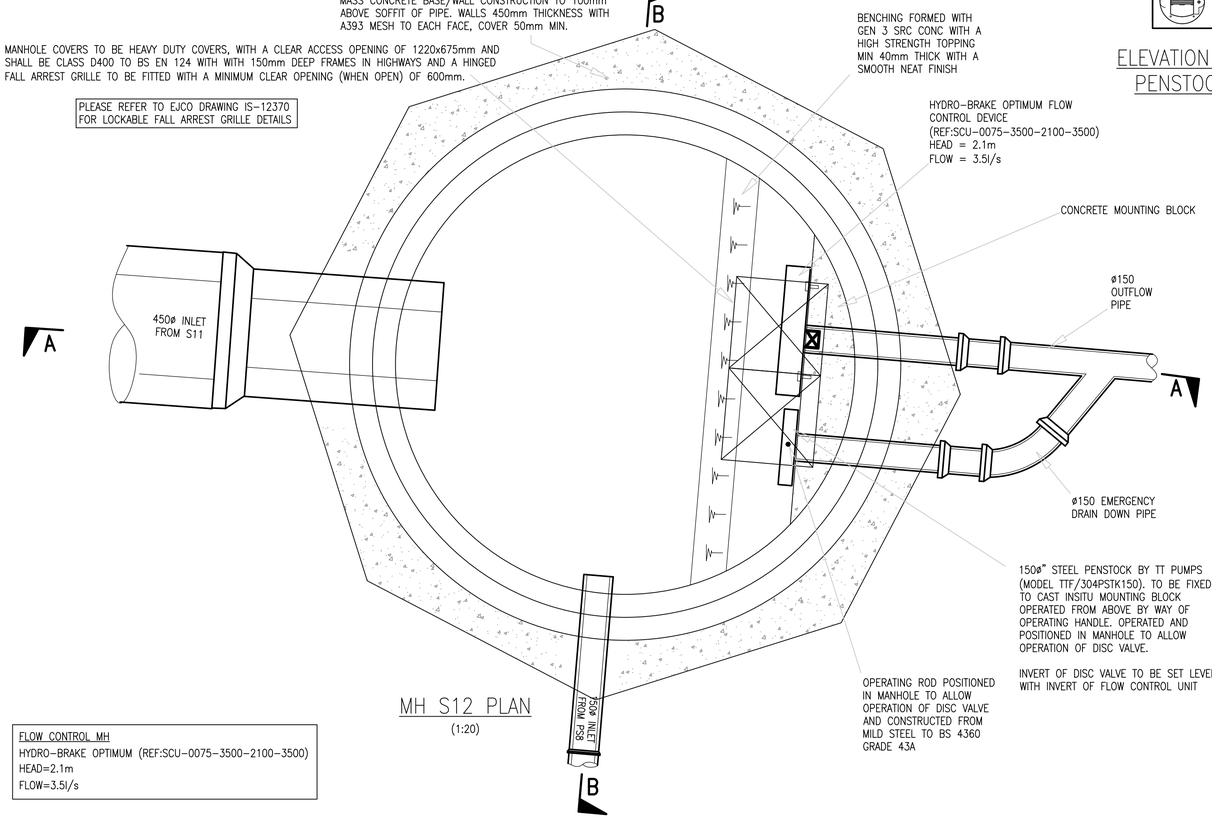
MANHOLE COVERS TO BE HEAVY DUTY COVERS, WITH A CLEAR ACCESS OPENING OF 1220x675mm AND SHALL BE CLASS D400 TO BS EN 124 WITH WITH 150mm DEEP FRAMES IN HIGHWAYS AND A HINGED FALL ARREST GRILLE TO BE FITTED WITH A MINIMUM CLEAR OPENING (WHEN OPEN) OF 600mm.



SECTION B–B
THROUGH MH S12
(1:20)

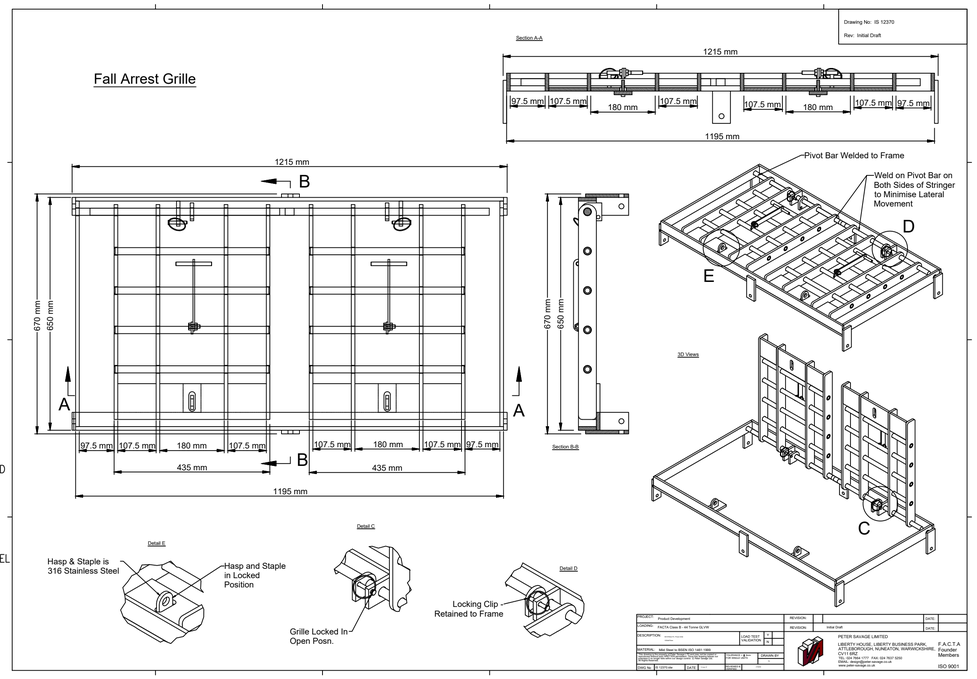
MASS CONCRETE BASE/WALL CONSTRUCTION TO 100mm ABOVE SOFFIT OF PIPE. WALLS 450mm THICKNESS WITH A393 MESH TO EACH FACE, COVER 50mm MIN.

PLEASE REFER TO EJCO DRAWING IS–12370 FOR LOCKABLE FALL ARREST GRILLE DETAILS



MH S12 PLAN
(1:20)

FLOW CONTROL MH
HYDRO–BRAKE OPTIMUM (REF:SCU–0075–3500–2100–3500)
HEAD=2.1m
FLOW=3.5l/s



NOTES

1. THIS DRAWING IS PRODUCED FOR USE IN THIS PROJECT ONLY AND MAY NOT BE USED FOR ANY OTHER PURPOSE. THE CONSULTING ENGINEERS ACCEPT NO LIABILITY FOR THE USE OF THIS DRAWING OTHER THAN THE PURPOSE FOR WHICH IT WAS INTENDED IN CONNECTION WITH THIS PROJECT AS RECORDED ON THE TITLE BLOCK FIELDS 'PURPOSE FOR ISSUE' AND 'FILE STATUS CODE'.
2. THIS DRAWING MAY NOT BE REPRODUCED IN ANY FORM WITHOUT PRIOR WRITTEN AGREEMENT FROM ADVANT ENGINEERS.
3. DO NOT SCALE FROM THE DRAWING, USE WRITTEN DIMENSIONS ONLY.
4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
5. DISCREPANCIES MUST BE REPORTED BACK TO THE ENGINEER PRIOR TO CONSTRUCTION.
6. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ADVANT ENGINEERS DRAWINGS AND SPECIFICATIONS.

YW NOTES:

1. ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH 'CODE FOR ADOPTION'. THE RELEVANT BRITISH/EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS/ADDENDUM TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED.
2. MANHOLE COVERS SHALL/MUST HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.
3. FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.
4. YORKSHIRE WATER IS NOT OBLIGED TO ACCEPT FILTER DRAIN/LAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (DIRECTLY OR INDIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY, LAND DRAINAGE SECTION REGARDING THE DISPOSAL OF THE FILTER/LAND DRAINAGE RUN-OFF.
5. THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1.0m AND MANHOLES 0.5m FROM KERB FACES AND SERVICE MARGINS.
6. SEWERS MUST HAVE A 5.0m CLEARANCE FROM TREES AND HEDGES OR THE WIDTH OF THE CANOPY AT MATURE HEIGHT.
7. SEWERS TO BE LAID IN CLASS 'S' BEDDING **(150mm GRANULAR BED AND SURROUND)**. WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS AND VERGES **(OR LESS THAN 0.9m IN NON VEHICULAR ACCESS AREAS)** THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE GRANULAR BED AND SURROUND.
8. BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 **(TABLE A2)**.
9. YORKSHIRE WATER POLICY IS THAT TYPE "C" BRICK MANHOLES AND 1050mm DIAMETER MANHOLES RINGS ARE NOT PREFERRED. INSTEAD, IT IS PREFERRED THAT YOU USE A TYPE "B" MANHOLE WITH 1200mm DIAMETER OR 1500mm DIAMETER RINGS, WITH THE OPENING SITED OVER THE CHANNEL WHERE THE DEPTH OF COVER TO THE PIPE IS 1.0m - 1.5m.
10. ADOPTABLE PLASTIC SEWER PIPES TO BE BS KITEMARKED **(CERTIFIED TO WIS 4-35-01** AND **BS EN 13476)**. ADOPTABLE PLASTIC SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS. PLASTIC CHANNEL SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND YORKSHIRE WATER WOULD REQUIRE CLAYWARE CHANNELS IN MANHOLES.
11. THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS: 100mm DIA 40kN/M, 150mm DIA 40kN/M, 225mm DIA 45kN/M, 300mm DIA 72kN/m. THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE - (CLASS 120 TO EN 1916 / BS 5911-1 2002). PLASTIC PIPES SHOULD CONFORM TO WIS 4-35-01 AND BS EN 13476.
12. WHERE A B125 COVER AND FRAME HAS BEEN APPROVED, THIS **MUST NOT** BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUITABLY SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREW DOWN COVERS ARE NOT ACCEPTABLE.
13. THERE MUST BE ENOUGH CLEARANCE AT CROSSOVERS TO ACCOMMODATE BEDDING TO BOTH PIPES, APPROX. 300mm : IF CROSSOVER IS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY NEED TO BE INCREASED.

REV	AMENDMENTS	BY	DATE
I	UPDATED TO LLFA COMMENTS	MJM	21.04.25
H	UPDATED TO YW COMMENTS	MJM	23.11.24
G	UPDATED TO YW COMMENTS	MJM	08.11.24
F	UPDATED TO YW COMMENTS	MJM	30.09.24
E	UPDATED TO YW COMMENTS	MJM	11.09.24
D	UPDATED TO YW COMMENTS	MJM	25.07.24
C	DRAINAGE UPDATED	MJM	24.05.24
B	UPDATED TO YW COMMENTS DATED 22.06.23	MJM	14.07.23
A	INITIAL ISSUE	MJM	26.05.23

FOR APPROVAL

STATUS		CHK'D
PRELIMINARY		MJM
FOR COMMENT		MJM
FOR APPROVAL		MJM
FOR CONSTRUCTION		
AS BUILT		

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CLIENT
NORTH PARK HOMES LTD

CONTRACT
YEW TREE ROAD
BIRCHENCLIFFE
HUDDERSFIELD

TITLE
S12 FLOW CONTROL MANHOLE DETAIL

DRAWN	MJM	CHK'D	MJM
SCALE	SEE DETAIL	DATE	26.05.23

JOB No	DRG No	REV
22046	106	I