

H-3-264-976



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

LOCATION OF TEE-KEY ON HOOKS
LOCATED ON INSIDE OF COVER

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 ENGINEERING.
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 ADOPTEE 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 HIGHWAY AND STREET LIGHTING (HSL) SPECIFICATION SHALL BE USED.
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. SEWERAGE LATERALS MUST BE ACCEPTED FILTER DRAIN/LAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTEABLE DRAINAGE SYSTEM (DIRECTLY OR INDIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF WILL THEREFORE BE PROVIDED BY YOU TO THE SATISFACTION OF YORKSHIRE WATER. THE LAND DRAINAGE SECTION REGARDING THE DISPOSAL OF THE FILTER/LAND DRAINAGE RUN-OFF.
5. ALL ADOPTEE 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 AND MANHOLES MUST BE COVERED BY GRANULAR BED (**TOP 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 TO THE GROUND SURFACE.
8. BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (**TABLE A2**).
9. YORKSHIRE WATER POLICY IS TO TYPE R1 (**BRICK MANHOLE**) OR TYPE R2 (**1000mm DIAMETER**) PLASTIC SEWER PIPE TO BS1 KITEMARKED. INSTEAD, IF IT IS PREFERRED THAT YOU USE A TYPE 'B' MANHOLE WITH 1200mm DIAMETER OR 1500mm DIAMETER MATERIAL, WITH THE OPENING STAY OVER THE SEWER WHERE THE COVER IS TO BE LOCATED.
10. ADOPTEABLE PLASTIC SEWER PIPE TO BE BS1 KITEMARKED (**CERTIFIED TO WS 4-35-01 AND BS EN 13476**). ADOPTEABLE PLASTIC SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE LENGTHS UNLESS THERE IS A SPECIFIC CIRCUMSTANCE WHERE LONGER LENGTHS ARE REQUIRED. LONGER SEWER SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND YORKSHIRE WATER WILL REQUIRE CLAYWARE CHANNELS IN MANHOLES.
11. AS THE SEWER CREEP CRACK RATE IS 1mm PER YEAR, THERE SHOULD BE A FOLLOW-UP: 100mm DIA 40K/M, 150mm DIA 40K/M, 225mm DIA 45K/M, 300mm DIA 72N/M. THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE - (CLASS 120 TO EN 1916 / BS 5911-1:2002).
12. WHERE A B215 COVER AND FRAME HAS BEEN APPLIED, THIS **MUST** NOT BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUITABLY SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREW DOWN COVERS MUST BE ACCEPTABLE.
13. THERE MUST BE ENOUGH CLEARANCE AT CROSSOVERS TO ACCOMMODATE BEDDING TO BOTH PIPES, APPROX. 300mm. IF CROSSOVERS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY NOT BE INCREASED.

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
REV	AMENDMENTS	BY	DATE

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 22046	DRG No 106	REV I
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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.

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

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

BENCHING FORMED WITH
GEN 3 SRC CONC WITH A
HIGH STRENGTH TOPPING
MIN 40mm THICK WITH A
SMOOTH NEAT FINISH

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

STOCK BY
E FIXED TO
NTING
FROM
OF OPERATING

OPERATING ROD TO BE
CONSTRUCTED IN MILD STEEL
TO BS4360 GRADE 43A

300mm THICK CAST IN-SITU REINFORCED CONCRETE BASE SLAB FORMED IN SULPHATE RESISTANT RC40 CONCRETE WITH TWO LAYERS OF A393 MESH IN BOTH TOP AND BOTTOM FACES. MIN. COVER 50mm. ON 50mm CONCRETE BLINDING. BENCHING FOR

BENCHING FORMED WITH GEN 3 SRC CONC.
WITH A HIGH STRENGTH TOPPING MIN. 40mm
THICK WITH A SMOOTH AND NEAT FINISH

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

150Ø" STEEL PENSTOCK BY TT PUMPS
(MODEL TTF/304PSTK150). TO BE FIXED
TO CAST INSITU MOUNTING BLOCK
OPERATED FROM ABOVE BY WAY OF
OPERATING HANDLE. OPERATED AND
POSITIONED IN MANHOLE TO ALLOW
OPERATION OF DISC VALVE.

INVERT OF DISC VALVE TO BE SET LEVEL
WITH INVERT OF FLOW CONTROL UNIT

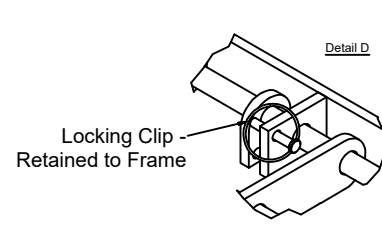
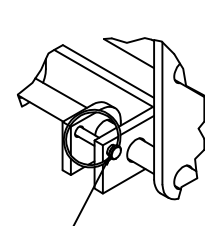
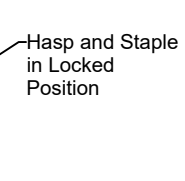
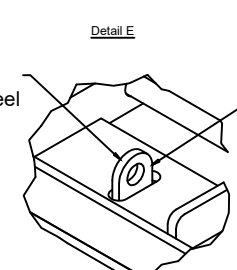
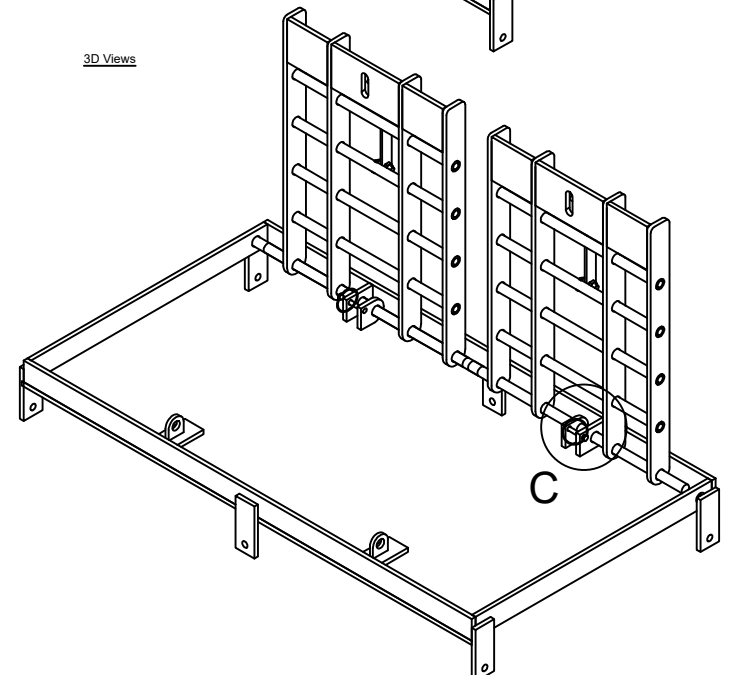
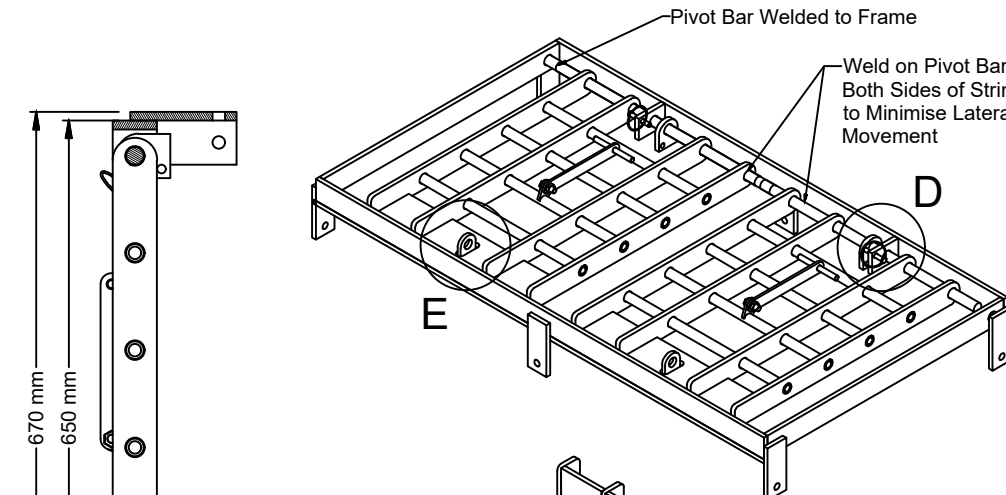
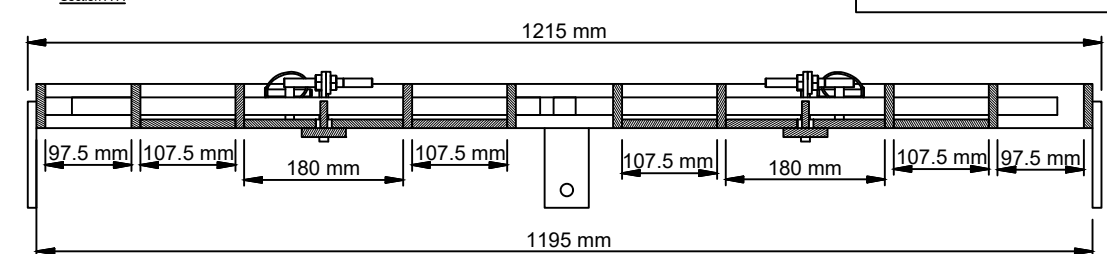
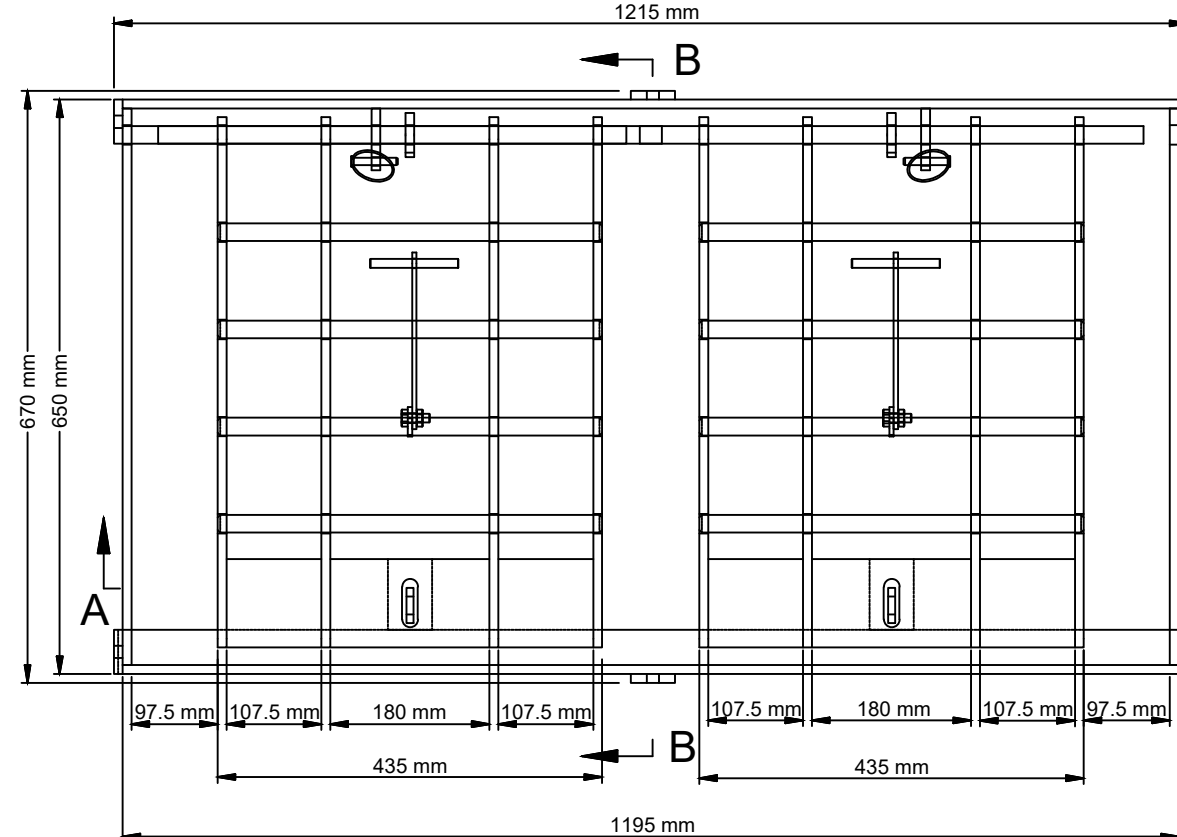
MH S12 PLAN
(1:20)

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

SECTION B-B
THROUGH MH S12

ELEVATION ON
PENSTOCK

Fall Arrest Grille



PROJECT: Product Development				REVISION:		DATE:	
CONTRACT: FACTA Class B - 44 Tonne GVM				REVISION: Initial Draft		DATE:	
DESCRIPTION: LEAD TEST VALIDATION: ☐ YES ☒ NO				 PETER SAVAGE LIMITED LIBERTY HOUSE, LIBERTY BUSINESS PARK, ATTLEBOROUGH, NUNETON, WARWICKSHIRE, CV11 1BQ TEL: 024 7664 1777 FAX: 024 7667 5026 EMAIL: design@peter-savage.co.uk www.peter-savage.co.uk			
MATERIALS: Mild Steel to BS595 1401 1989							
DRAWING NO:		DATE:		DESIGNED BY:		F.A.C.T.A. Founder Members	
ENG:		CUST:		CUST:		ISO 9001	