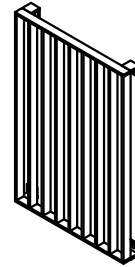
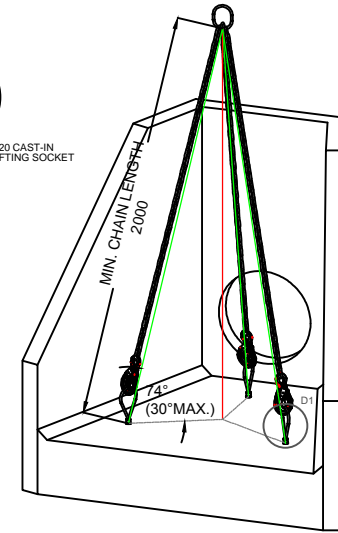
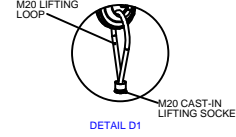
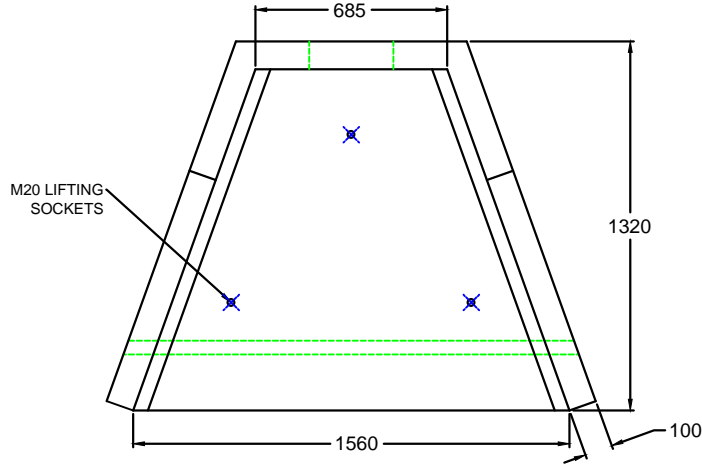
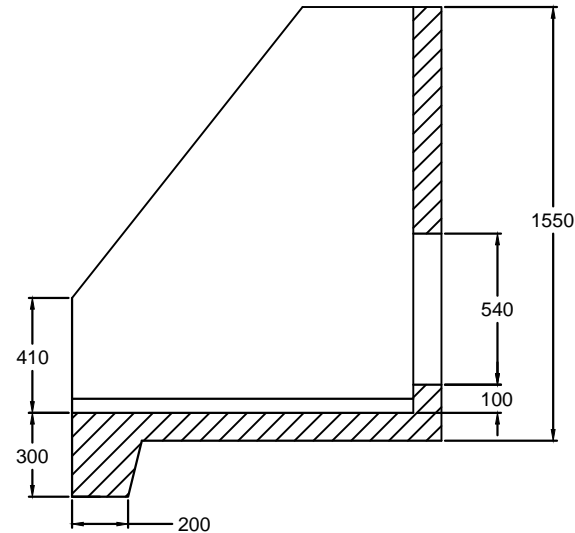
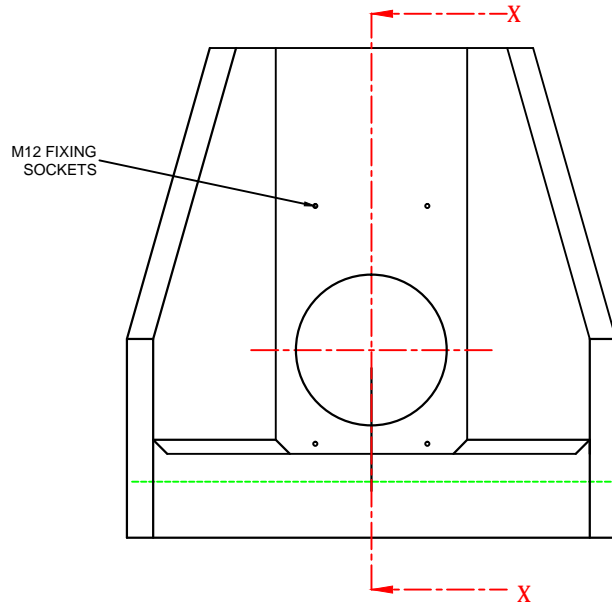


Opening in back wall cast to suit the outside diameter of the pipe at invert height required.



Grating manufactured from 40 x 10 flat at 75mm centres. Fully welded and hot dip galvanised.



SECTION X-X

DO NOT SCALE DRAWING

NOTES:

- * All dimensions in mm U.O.S
- * All measurements ± 1mm

Specification Information

- * Opening in back wall cast to suit outside diameter of the pipework.
- * Invert level of pipe can be set to your specification.

Headwall Installation

- Units should be bedded on minimum 100mm thick well compacted Class 6A* selected well graded granular material
- *Manual of contract documents for Highway Works: Volume (MCHW1) specification for Highway Works, Series 600 (Nov.09).
- Sit the headwall level or with a slight fall 1:50 from pipe to spill mouth.

Handling

- A. Weight of concrete is based on 2.4 tonne/m³+5% is recommended for sizing lifting equipment.
- B. All lifting points shall be used as specified below.
- C. Unit to be lifted as per lifting diagram.

Concrete

- A. Mix ref: Self-Compacting DC4/D54 Mix
- B. Lifting strength based on 2 cubes = 20N/mm²
- C. Characteristic 28 day cube strength = 50N/mm²
- D. Concrete provides Design Chemical Class 4 (DC4) to special Digest 1, Table F2.

Reinforcement

- A. Reinforcement to BS EN 13369.
- B. Scheduling, dimensioning, bending & cutting to BS8666.
- C. Cage to be machine tied with steel wire.

Manufacture

- A. Manufacture to BS EN 15258:2008 precast concrete products - Retaining wall elements, Factory Production Control Certificate number: 0036-CPR-650445 & BS EN 13369.
- B. Tolerances to BS EN 13369 clause 4.3.1.1

Finishing

- C. Tolerances to BS EN 13369 clause 4.3.1.1

Marking: Units shall be indelibly marked show:

- * Mould Reference code.
- * De-mould date.
- * Job reference number & unique product number.
- * Unit weight (kg)

Design

- A. Concrete design to EC2.
- B. JKH have designed the concrete units only, the site conditions should be assessed for suitability by the scheme designer.
- C. Units are designed to withstand a vertical live load surcharge of 10kN/M².
- D. Weight of soil = 18kN/M².
- E. Angle of internal friction = 30°.
- F. Design Life: >50 years

Exposure Classification	Exposure Index by Carbonation		Exposure Index by Chloride		Freeze/Thaw Area	Chemical Area
	W	X	W	X		
All Faces	X3	X2	X3	X2	X3	X3

Fabrication Specification

- A. Manufacture IAW EN 1090-2 EXC CLASS 1
- B. Material grade is to be: BS EN 10025 S275
- C. Welding carried out IAW EN 1090-2 PARA 7.5.4 - 7.5.18
- D. All fillet and butt welds to have a minimum throat thickness of 6mm & joints to be fully welded where possible.
- E. Ensure vertical flats are fully welded both sides where possible.
- F. All sharp edges and burrs are to be removed.
- G. Remove all weld spatter.
- H. Holes by punching are permitted without reaming.
- I. Galvanising is carried out after fabrication to BS EN: ISO 1461.

Handrail Specification

- A. Knee Klange Galvanised Size 8 Fittings.
- B. Size 8 48.3mm OD 3.2mm Wall Thickness Galvanised Medium Duty Tube to BS EN 10255.
- C. 360Nm Design Load as stated in BS 8118, BS 6180, BS 6399 & BS 7118, Civil Engineering Specification for the Water Industry (CESWI).
- D. Other design loads available on request
- E. GRP/FRP Handrails also available.



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DRAWING TITLE / PROJECT:

600 SERIES SPILLWAY
HEADWALL

CLIENT:	N/A		
SCALE:	NTS	DRAWING DATE:	03/04/2019
HEADWALL WEIGHT:	1400kg	GRATING WEIGHT:	30kg
TOTAL WEIGHT:	1430kg		
DRAWN BY:	DH	CHECKED BY:	JP
DRAWING No:	600-1550		

