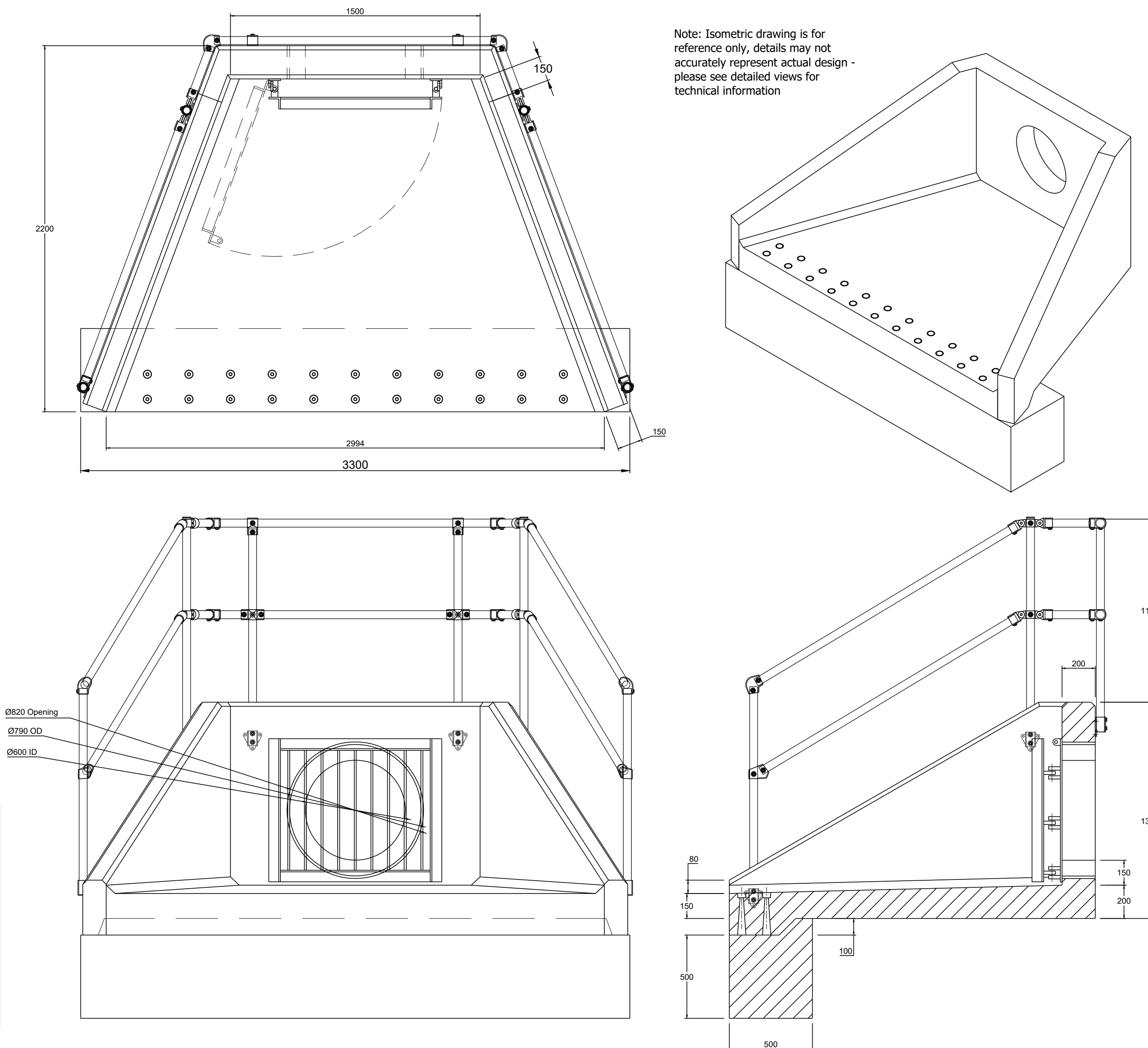


Adoptable Precast Headwall Details				
Headwall	PipeØ (mm)	Althon Headwall Reference	Invert Levels	Grill
HW15	600	SFA 15W	76.875	Yes
HW18	225	Swale Inlet Headwall	77.050	No
HW19	225	Swale Inlet Headwall	76.975	No
HW20	225	Swale Inlet Headwall	76.950	No
HW22	225	Swale Inlet Headwall	76.950	No



Note: Isometric drawing is for reference only, details may not accurately represent actual design - please see detailed views for technical information

- NOTES:
- D400 covers & frames with kitemark to be used on all adoptable manholes. All covers to be embossed with FW/SW as appropriate. 150mm deep, non rocking cover and frames to be used.
 - Cover and Reducing slabs, shaft and chamber rings to be bedded with mortar, proprietary bitumen or resin mastic sealant. All lifting holes to be painted.
 - Ensure all slab openings and step irons, ladders are properly aligned. At the foot of each ladder or set of step rungs, a minimum of 450 mm landing area should be provided from the outer edge of the step or rung. This may consist of:
a) a single area adjacent to the foot of the ladder or steps; or
b) where the channel is no more than DN450, one area of at least 225 mm adjacent to the foot of the ladder or steps with the remainder on the other side of the channel.
 - Chamber Diameters:

Dia. of largest pipe in M.H. (mm)	Dia. of chamber ring (mm)
Less than 375	1200
375-450	1500
500-700	1500
750-900	1800
1050-1200	2100
1350-1500	2400
1650-1800	2700
 - Above sizes are minimum and may need increasing for more than one incoming pipe to accommodate adequate benching.
 - Concrete mix to be in accordance with the chemical analysis report for buried concrete for the site concerned. High strength topping to BS EN 12620 and PD 6682-1 to be brought up to a dense smooth face neatly shaped and finished to all branch connections. Benching slope to be not flatter than 1 in 30.
 - Rocker/Short pipe lengths:

Pipe dia. (mm)	Rocker pipe length (m)
150-600	0.6
601-750	1.00
over 750	1.25

Short length pipes to be similar length to rocker pipe. Manhole to large diameter sewers. Chambers with outgoing pipes greater than 600mm dia. to be constructed as per detail. Toe holes to be provided in benching of sewers greater than 450mm dia. for access to invert.

- Bricks to be solid type and either Class B engineering bricks complying with the relevant provisions of BS EN 771-1, or special bricks shall comply with the relevant provisions of BS 4729 with Sulphate-resisting Portland cement binder. Brickwork to be in English bond.
- Brick Manhole Widths. Chamber widths to be increased for pipes larger than 225mm dia. to give 225mm benching each side with the brickwork corbelled down to suit cover.
- All pipes built into manhole invert should be installed with soffits level.
- PIPE BEDDING AND BACKFILL MATERIALS Granular bedding and sidefill Type A material shall be imported or selected as-dug material complying with the recommendations of W.A. Notes 4-08-02. Selected fill Type B shall consist of uniform, readily compactable material, free from vegetable matter, building rubbish and frozen materials, or materials susceptible to spontaneous combustion, and excluding clay of liquid limit greater than 80 and/or plastic limit greater than 55 and materials of excessively high moisture content. Clay lumps and stones retained on 75mm and 37.5mm sieves respectively shall be excluded from the fill material. Pipe bedding and fill materials to concrete pipes shall not contain more than 0.3% sulphate, expressed as sulphur trioxide.

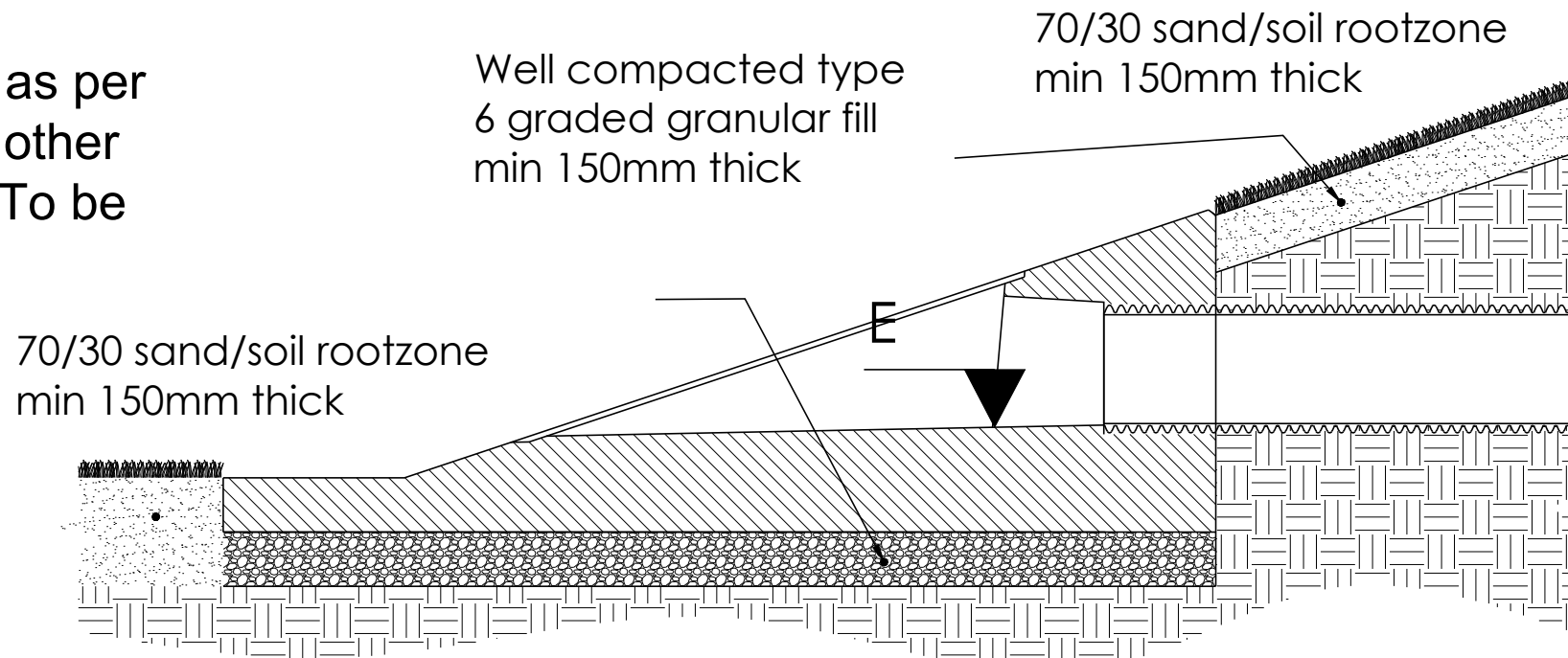
TRENCH WIDTHS		
Pipe dia. (mm)	BC(mm)	BD(mm)
150	190	600
225	280	700
300	380	750
375	500	1050
450	580	1150
525	670	1200
600	750	1350
750	960	1560
900	1160	1760
1350	1620	2220
1500	1740	2340
1800	2090	2690

- All Adoptable Drainage pipes to be of spigot & socket type connection.
- During construction all outfall manholes to be fitted with debris screen (mesh size 25mm), over the outgoing pipes
- All Adoptable Drainage Works shall comply with the requirements of Design and Construction Guidance for foul and surface water sewers offered for adoption under the Code for adoption agreements for water and sewerage companies operating wholly or mainly in England ("The Code") Approved Version 2.0

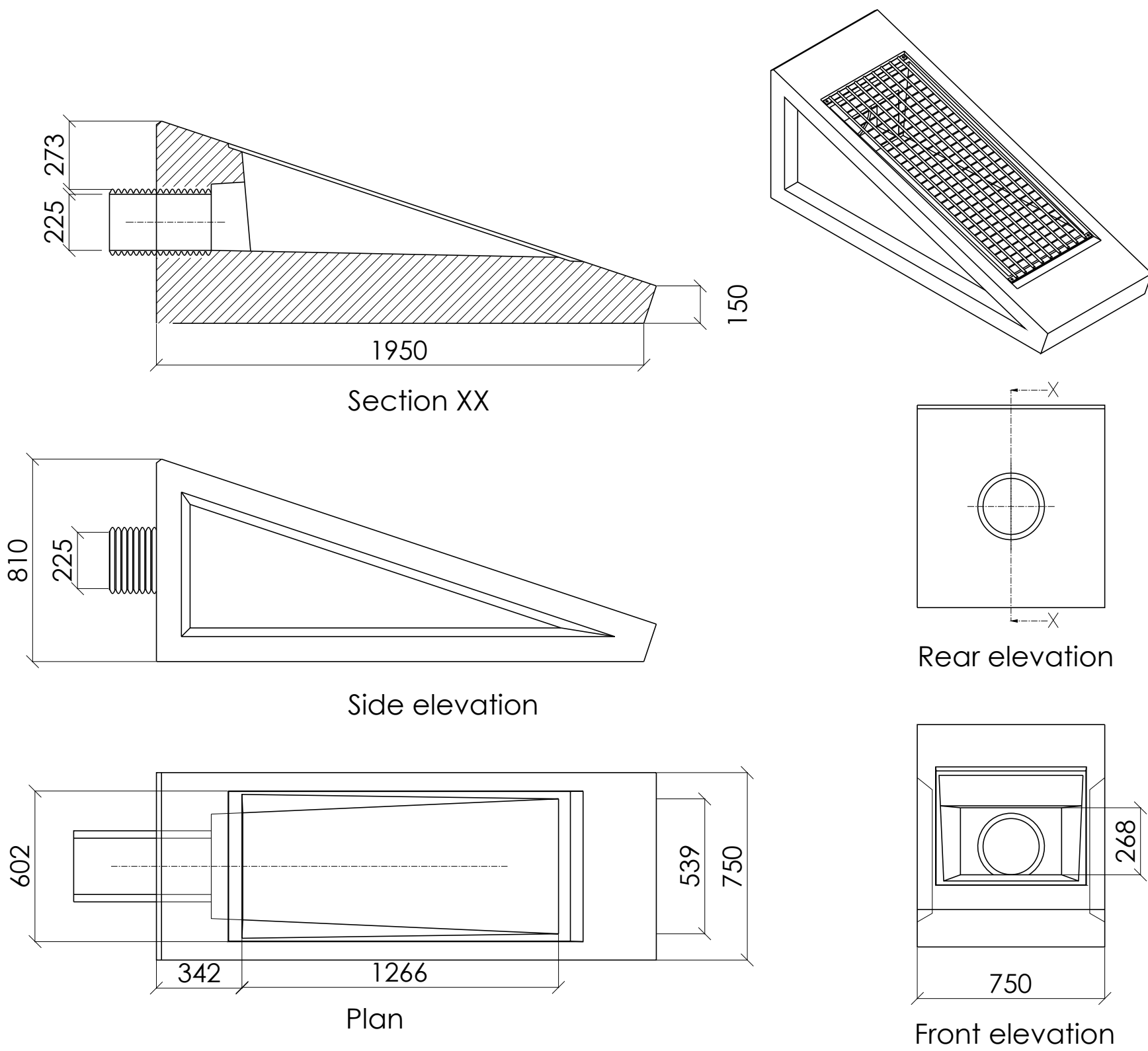
Installation

Dig out sufficiently to allow headwall flanges to finish flush with the batter. Take outfall pipe (minimum length 1.5m rigid impervious pipe) and slide it through headwall so it protrudes approximately 50mm. Make a good connection with the land drain and seal by returning approximately 150mm of soil into trench and consolidating. Unravel the string and draw the anchor back along the trench as the rest of the backfilling is completed. For full detailed installation instructions contact Althon Ltd. on Tel: 01603 488700

Swale inlet/Outlet as per messrs Althon, or other similar approved. To be installed as per manufacturers requirements.



SWALE INLET HEADWALL



Swale inlet Headwall
225Ø pipe

REV	DESCRIPTION	DATE
STATUS:		
PRELIMINARY		
SCALE : NTS @ A1		
DATE : Oct 2025		
DRAWN : IDL		
TITLE :		
Adoptable Drainage Details Sheet 5		
PROJECT :		
London Road, St Ippolyts		
DRG. No: 1331-03-08		
FILE REF: 1331-03-04_08		
		
INFRASTRUCTURE DESIGN LTD EST 2000		
Suite 44, Harborough Innovation Centre, Airfield Business Park, Leicester Road, Market Harborough, Leicestershire, LE16 7WB Tel 01858 411570		
working for		
CHARLES CHURCH CHARLES CHURCH DEVELOPMENTS LTD 3 Waterside Way Bedford Road Northampton NN4 7XD		
		
tcl: 01604 884600		