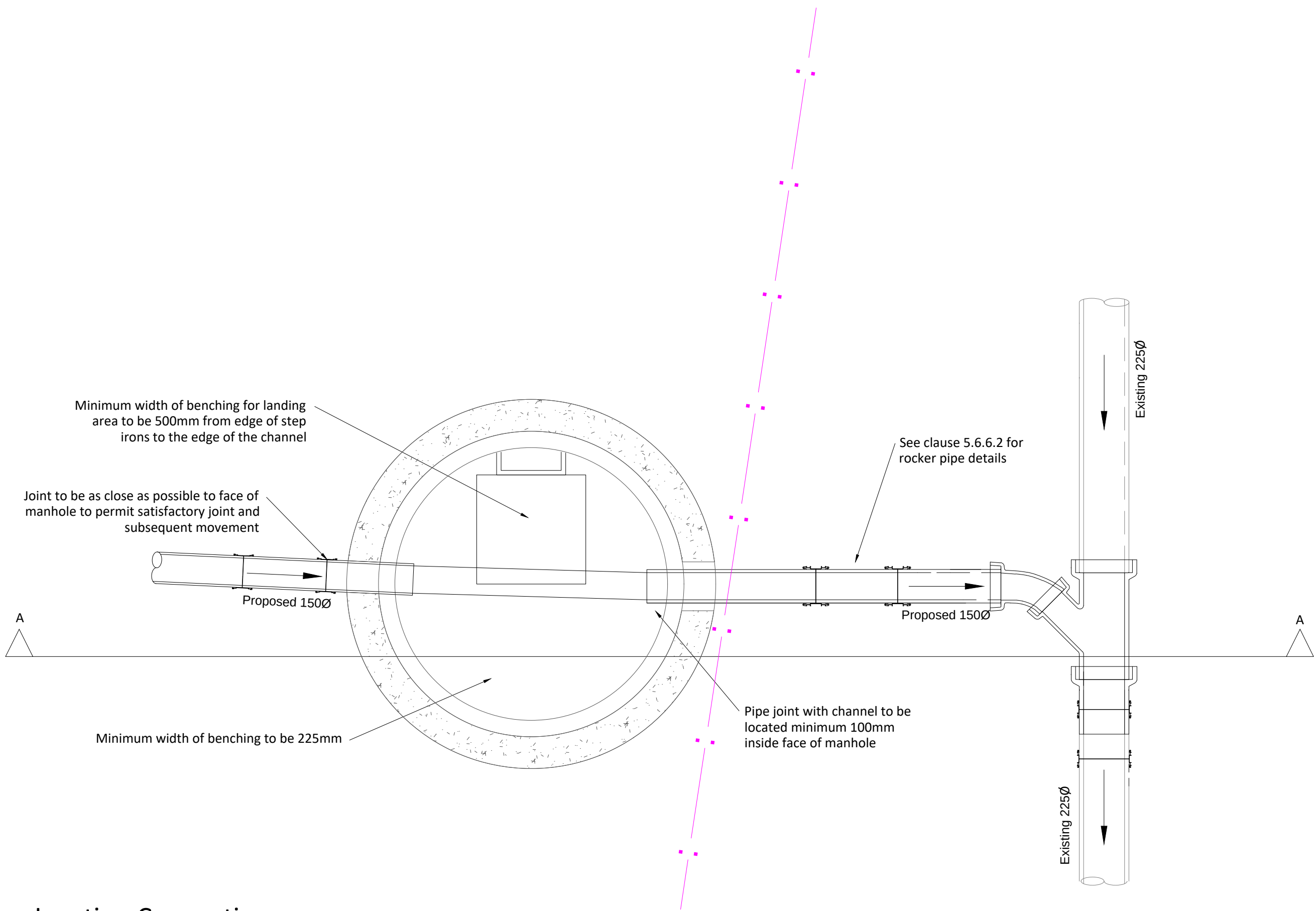
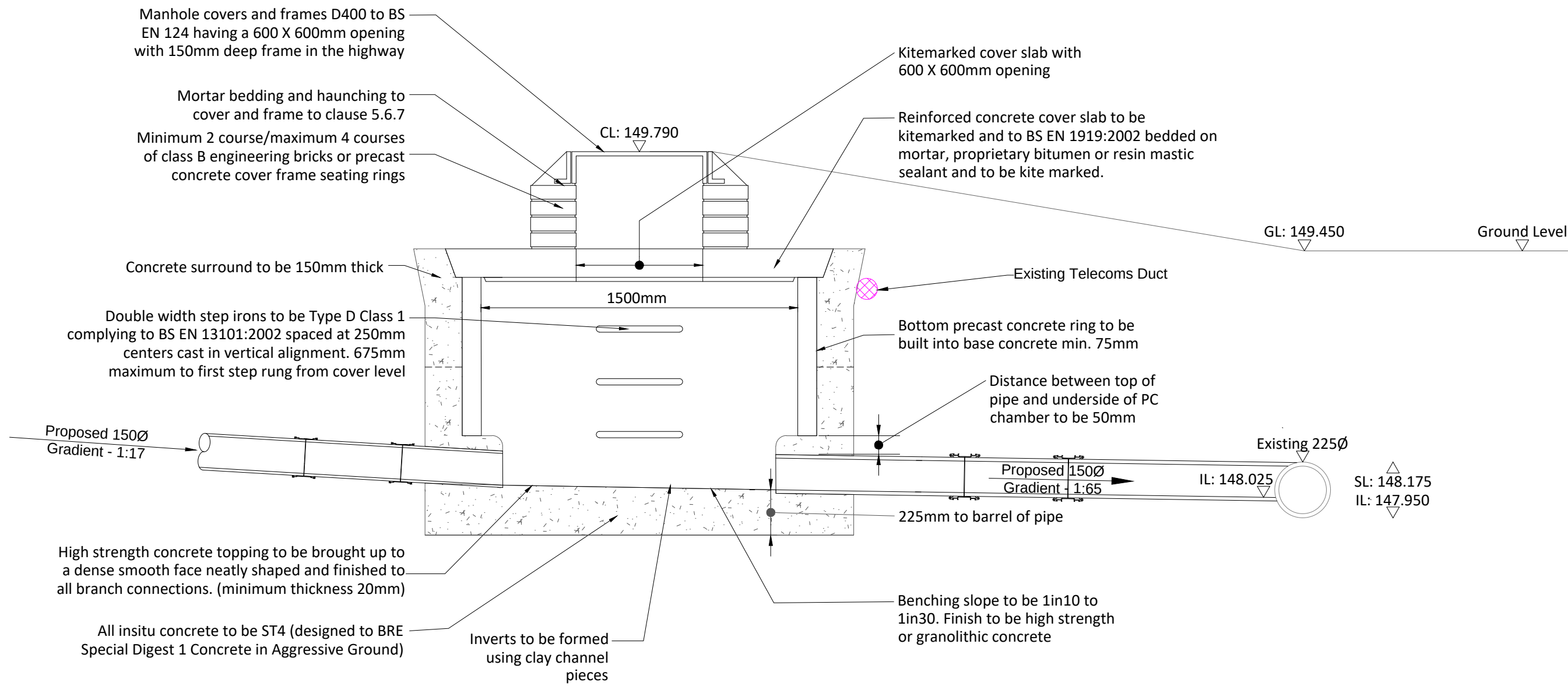




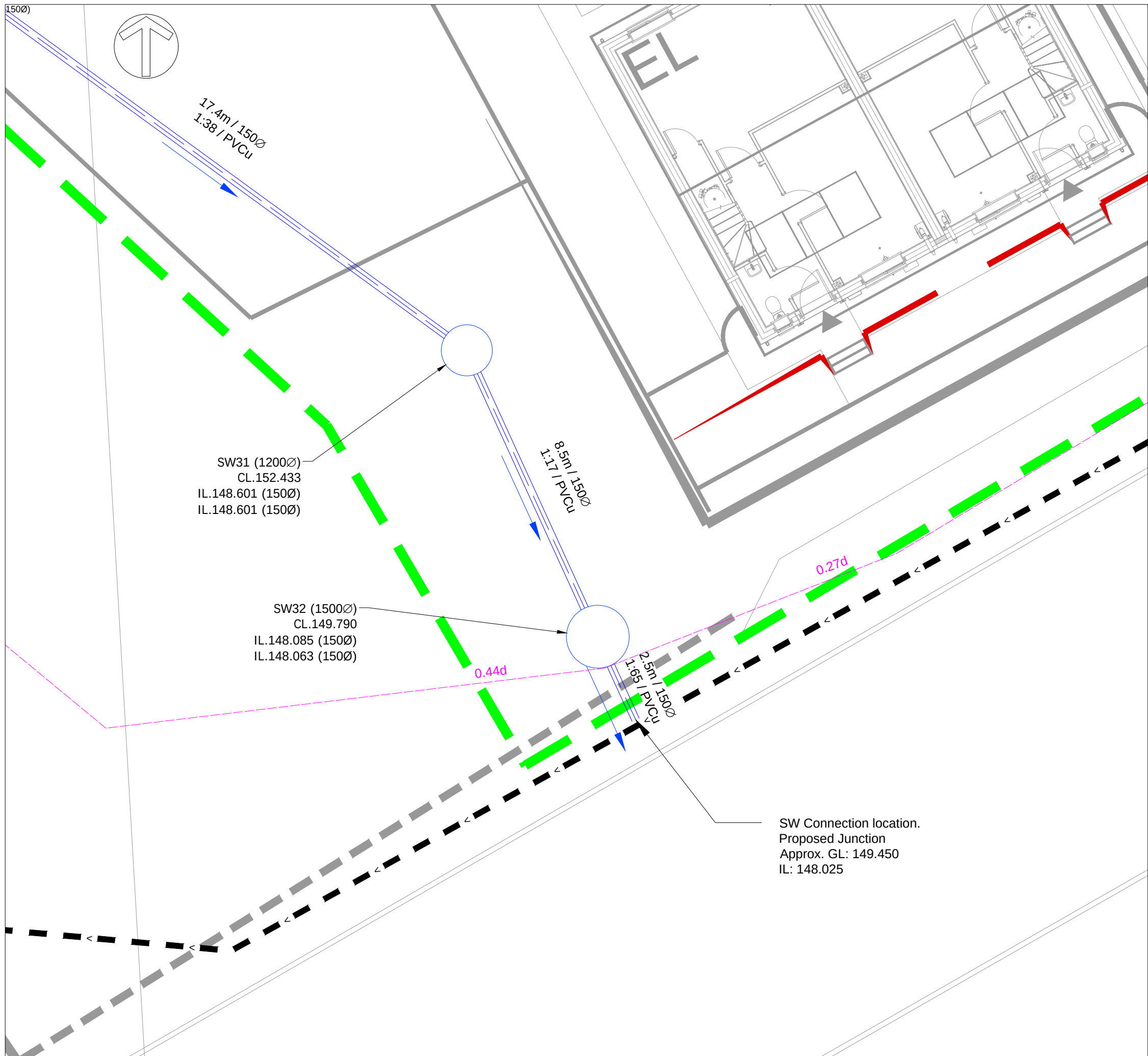
Junction Connection

(Scale 1:20)



Junction Connection - SECTION A-A

(Scale 1:20)



Drainage Notes:

- All adoptable sewer works and material to be in accordance with Design and Construction Guidance (DCG)/"Code for Adoption". The Relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.
- 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.
- Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out.
- Yorkshire Water is not obliged to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (directly or in-directly). 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 with regard to the disposal of the filter drain/land drainage run-off.
- Cover slabs must carry the BSI Kitemark or will be rejected by Yorkshire Water Inspector. Where the clear opening of the Kitemarked product is different to that of the cover and frame, a loading bearing slab should be fitted above the cover slab to bring the size down to 600mm x 600mm for the Yorkshire Water specified cover size. Please refer to Concrete Pipe Systems Association (CPSA), 'Technical Bulletin' issued Autumn 2004 for Kitemarked cover slab opening sizes.
- Sulphate resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
- The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
- Sewers must have 5 metres clearance from trees and hedges.
- 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 900mm in none vehicular access areas) then a concrete slab should be provide above granular bed and surround.
- Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
- The chamber size of manholes with more than one connection in them may need to be increased an increment to accommodate the connections and bends.
- Yorkshire Water policy is that Type "C" brick manholes and 1050mm dia manhole rings are not preferred. Instead it is preferred that you use a type "B" manhole with 1200mm dia or 1500mm dia rings, with the opening sited over the channel where depth of cover to pipe soffit is 1 - 1.5m.
- Adoptable plastic sewer pipes to be BSI Kitemarked (certified to WIS 4-35-01 and BS/EN13476). 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 prefer clayware channel in manholes. We have found that plastic channels are difficult to set in concrete because they float and a satisfactory finish cannot be obtained on the benching.
- 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/BS5911-1 2002). Plastic pipes should conform to WIS4-35-01 and BS EN13476.
- 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.
- 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".
-

Drainage systems connected to Public Sewers

Public sewer networks (foul, surface water and combined) are maintained by the statutory sewer authority for the region. These are private companies who are responsible for giving or refusing consent for any and all new connections to their network. The provisions of the Water Industry Act set out performance criteria for these sewers. The sewer authority when consenting to a new connection will limit flows and require calculations indicating that these parameters are being met. These parameters hold for events up to and including 30 years (unmodified by climate change or similar additions). Beyond this the sewer authority is not liable for performance. A new pipe can potentially exceed the agreed flow beyond 30 years but the sewer may not be able to accommodate even the agreed flow. The public sewer system could then be surcharging with flood flows across the surface. The drainage network indicated will therefore only deal with flows subject to the public sewer network being able to satisfactorily accommodate them. Surcharging of the public sewer will have a detrimental effect on our pipe network upstream of it, possibly leading to surcharging with flood flows and ponding at the surface.

Do Not Scale				
DESIGN REVIEW				
Design review by:	**	Checked by:	**	
Residual hazards:				
Health, Safety & Environmental Notes				
NOTES				
General Notes				
Architectural Site Plan - Acanthus WSM 4035.20.105 P20 - Site Layout				
Existing Topographical Survey Blue Hills topo survey 3D				
1. All Coordinates relate to Topographical survey coordination				
2. All Dimension in mm unless notified otherwise				
3. All Levels in mAOD in relation to Topographical survey coordination unless notified otherwise				
Key:				
Site Boundary	=			
Proposed Surface Water	=			
Existing Highway Drain	=			
Existing Telecoms Duct	=			
25.06.25	Drawing updated following as built survey	OCB	TT	C3
15.04.25	Drawing Title Updated	OCB	TT	C2
14.02.23	Connection type changed to junction - Construction issue	OCB	TT	C1
28.06.23	Cover Level updated	OCB	JS	P2
20.06.23	Initial Issue	OCB	JS	P1
Date	Description	By	Chk	Rev
ADEPT CIVIL AND STRUCTURAL CONSULTING ENGINEERS				
Web: www.adeptcsce.com Email: inbox@adeptcsce.com Tel: 0113 239 4518 (Head Office)				
Originating Office: Leeds 1912 Mills, Sunny Bank Mills, Farsley, Leeds, LS28 5UJ Tel: 0113 239 4518				
Project Blue Hills Farm, Birkenshaw				
Title S115 SW Manhole Base Plan				
Client Vistry Partnerships				
Scale @ A1	Initial author	Initial checker	Approver	Initial Date
AS SHOWN	OCB	JS	RP	Jun 23
Status	Purpose	Construction		Adopt Ref
A		09.21011		
Project Number	Originator	Volume	Level	Type
09.21011-ACE-00-ZZ-DR-C-1281				
Role	Org. No.	Rev.		
		C3		