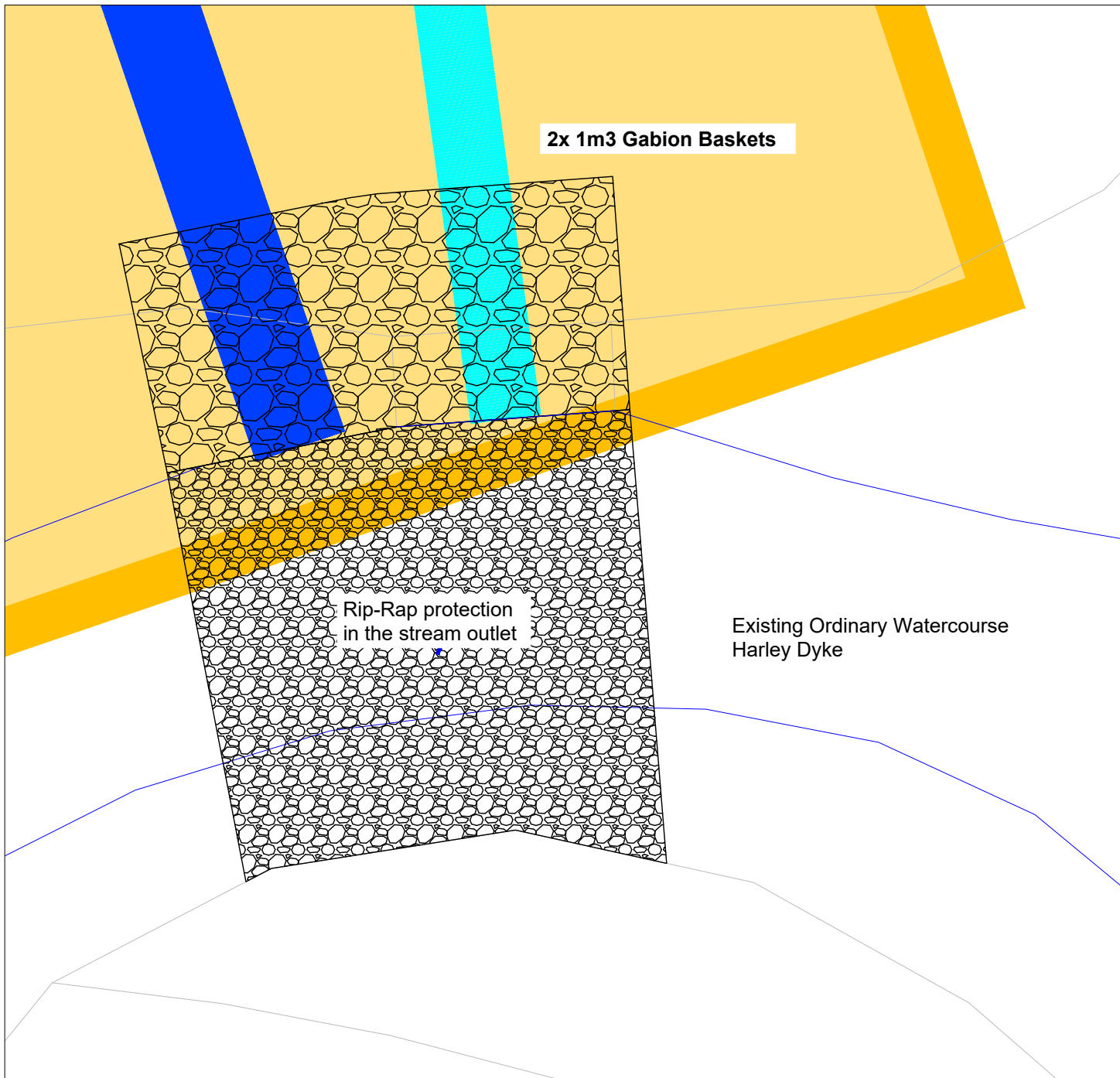
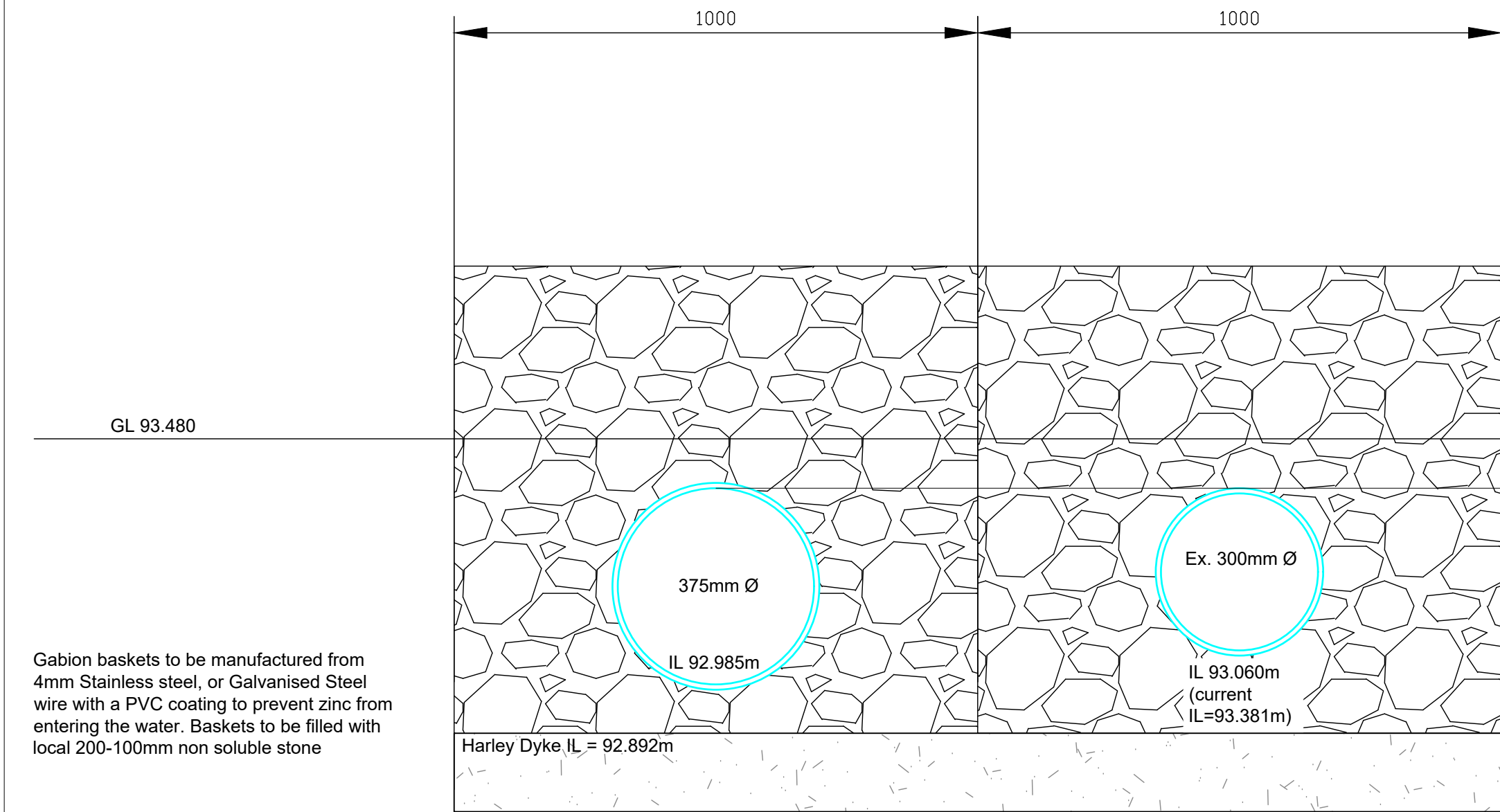
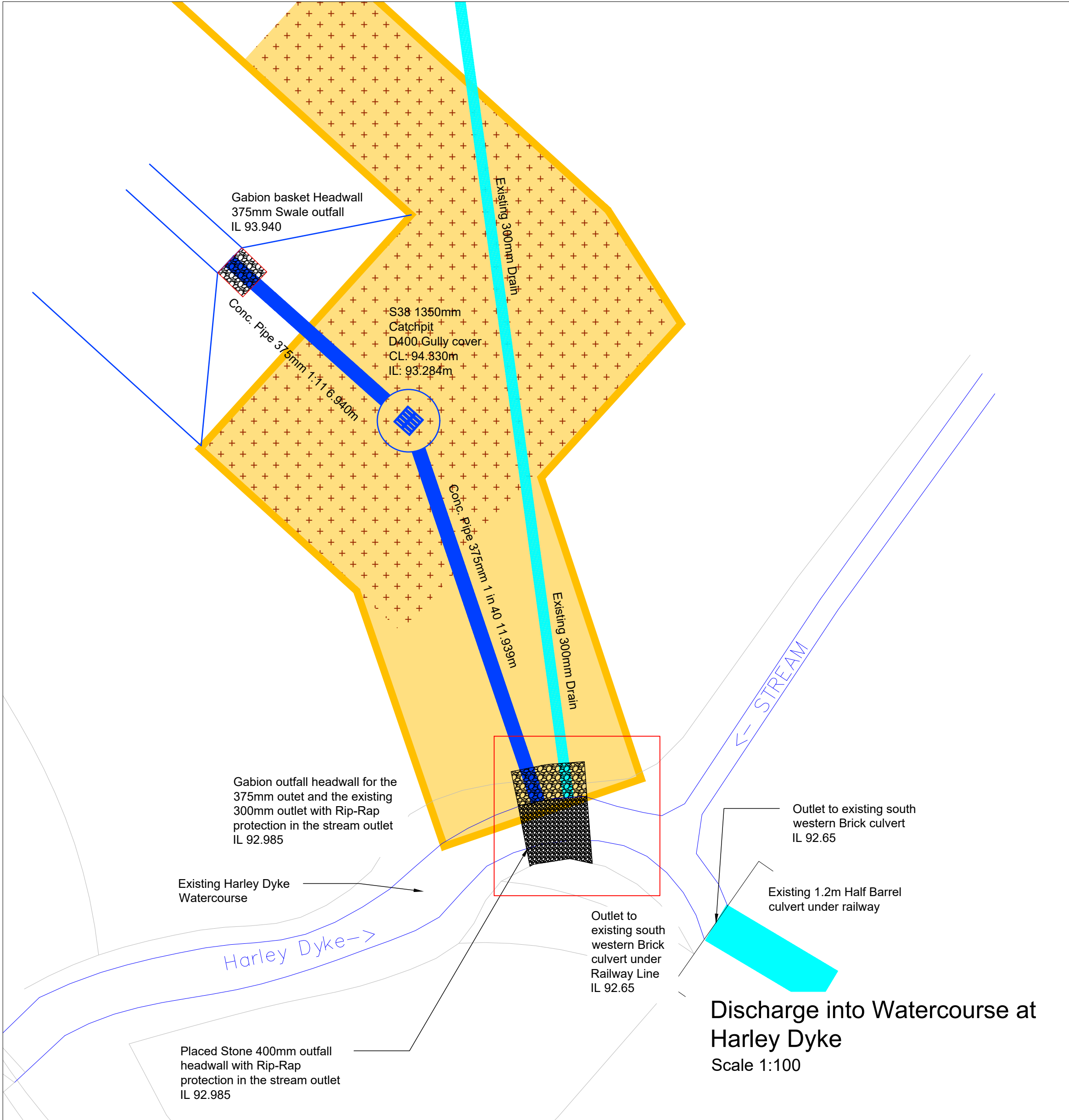
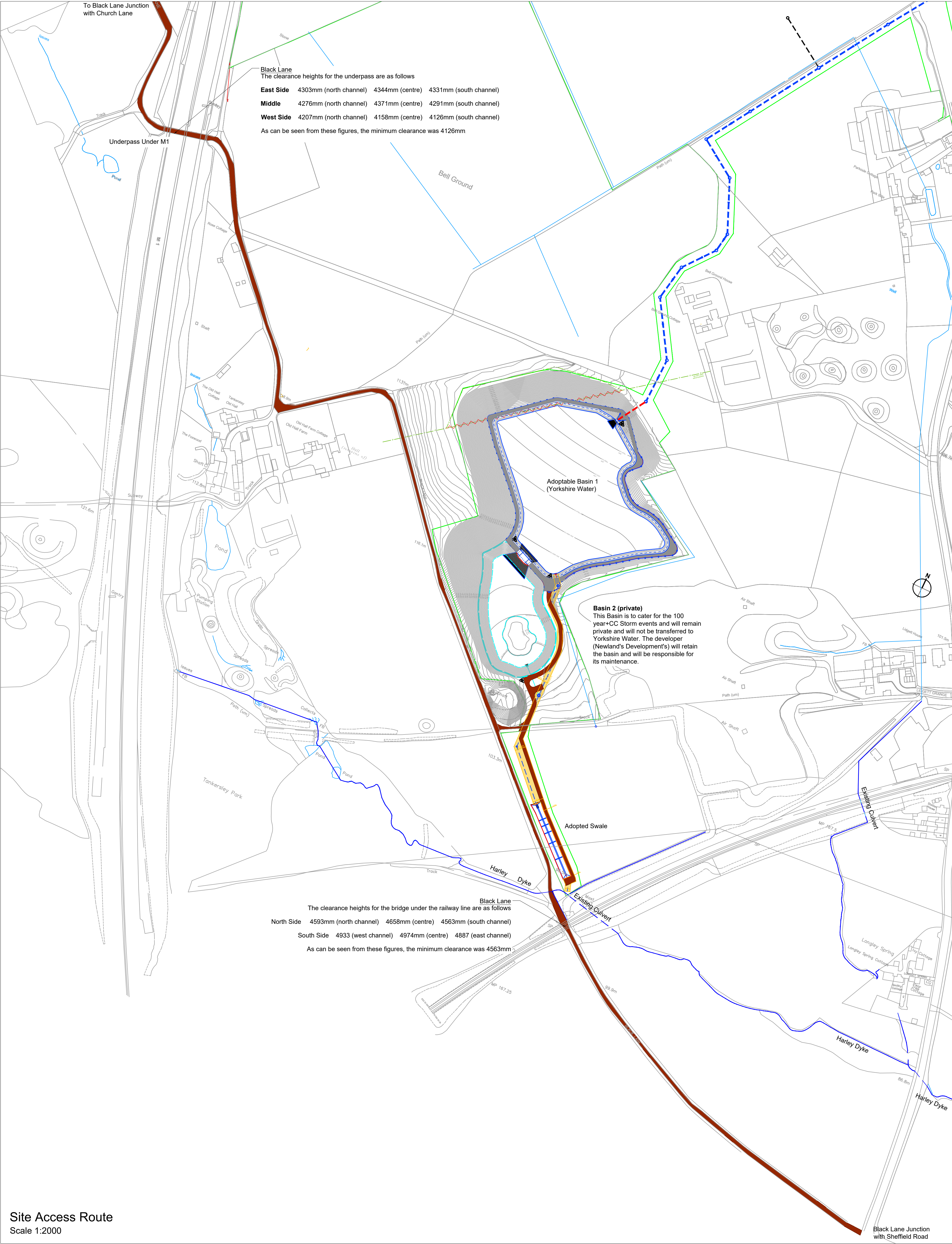


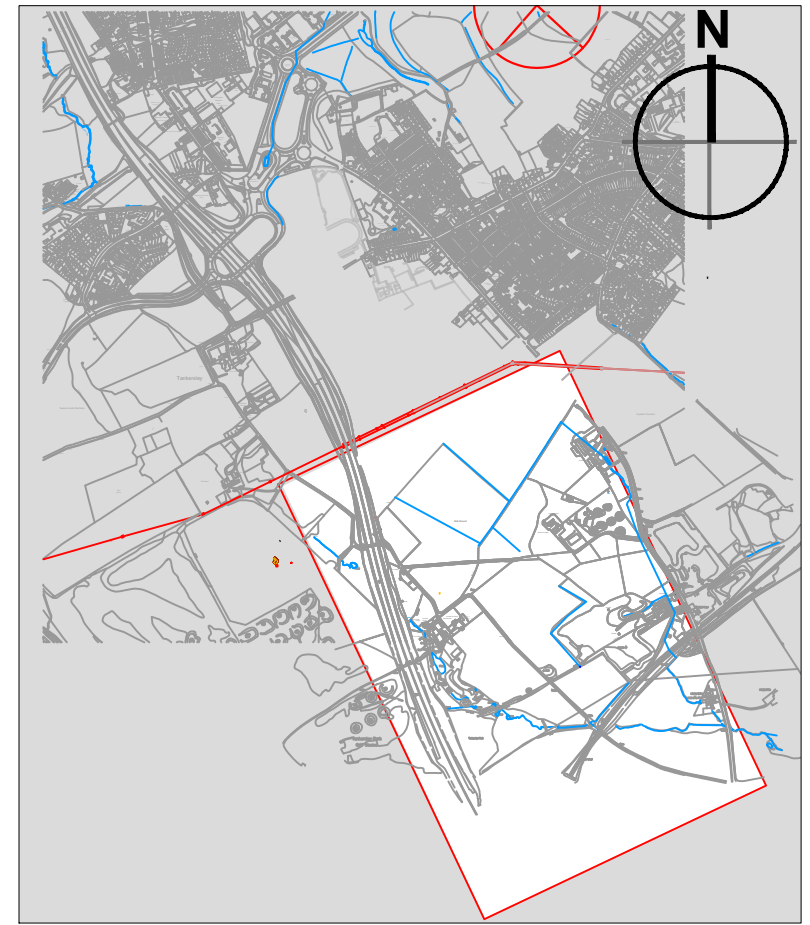


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 - If received electronically it is the recipient's responsibility to print to correct scale. Only written dimensions should be used.
 - The drawing should be read in conjunction with all other relevant drawings and specifications.
 - Masterplan taken from PHP drawing 4400-001 Rev P25, received 15/06/2020.
 - All works to be carried out in accordance with the Specification for Highway Works, the South Yorkshire Residential Design Guide and the requirements of Barnsley Metropolitan Borough Council and Sewer Sector Guidance.
 - All information shown on this drawing is subject to Technical Approval from BMBC and Yorkshire Water.
 - Foul water designed in line with Sewer Sector Guidance. Flows from:
 - Industrial plots based on 0.6litre/s
 - Residential plots based on 4000litre/day peak flow
 - Adopted Surface water designed in line with Sewer Sector Guidance. YWS Notes
 - All adoptable sewer works and material to be in accordance with "Code for Adoption". The relevant British Standards and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.
 - Manhole covers shall have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
 - Firm 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 drainland drainage run-off into the public sewer network or adoptable drainage system (directly or indirectly). An alternative method of disposal of the filter drainland 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 drainland run-off.
 - Cover slabs must carry the BS 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 slab. Please refer to Concrete Pipe Systems Association (CPSA) "Technical Bulletin" issued 2004 for Kitemarked cover slab opening sizes.
 - Sulphate resistant cement (C20/C22) 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 "B" bedding (150mm Granular bed and surround). Where depth of cover to top of sewer is less than 1.2m in highways and verges (or less than 300mm in zone vehicular access areas) then a concrete slab should be provided 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 offset above the channel where depth of cover to pipe soffits is 1.1-1.5m.
 - Adoptable plastic sewer pipes to be BS1 Kitemarked (certified to WIS 4-35-01 and BS EN 12476). 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: 150mm dia 400N/m², 150mm dia 400N/m², 225mm dia 450N/m² and 300mm dia 720N/m². The minimum crushing strength for concrete pipes should be: Class 120 to BS 1915(BS5911-1:2002). Plastic pipes should conform to WIS 4-35-01 and BS EN 12476.
 - 15.15 Where a B125 cover and frame has been approved, this must not be coated in plastic and must have lifting

- Key:**
- Planning Boundary
 - Proposed Surface Water Sewer
 - Adoption Easement Areas
 - Existing Surface Water Drains

Material Specification from Sewer Sector Guidance

- E2.44 Geotextiles**
Geotextiles for use in drainage systems shall comply with BS EN 12322 and the characteristics specified in the design. A declaration of performance for each product used shall be provided for approval prior to installation.
- E2.45 Geotextiles for use in erosion control** shall comply with BS EN 12322 and the characteristics specified in the design. A declaration of performance for each product used shall be provided for approval prior to installation.
- E2.46 Geotextiles**
1. Geotextiles shall:
1.1. in both machine and cross-machine directions, sustain a tensile load of not less than 8.0kN/m² at break and have a minimum failure strain of 40% when determined in accordance with BS EN ISO 13326;
1.2. have a minimum puncture resistance of 1500 N when determined in accordance with BS EN ISO 13326;
1.3. have a 50% distribution of pore opening sizes that shall have a minimum nominal opening size C90 when determined in accordance with BS EN ISO 12596 of 5µm; and
1.4. allow water to flow through it in either direction, normal to the principal plane at a flow rate less than that stated in the design under a constant head of water of 100 mm and a maximum breakthrough head of 20 mm when determined in accordance with BS EN ISO 11058.
- E2.46 Impervious Tapest**
1. Impervious Tapest shall comply with BS 3882 and be of light or medium texture, having a pH value of between 6.0 and 7.5. Impervious Tapest shall not contain stones greater than 20 mm in size nor have a total stone content exceeding 10% by mass.
2. Changes listed shall be reported from an originator and include listing a suit comparable item or similar suit cases. Details of the source and composition of the Tapest shall be provided, unless stated in the design.



PO5	Updated to suit Access routes	SMC	SH	17.01.22
PO4	Pond Layout Updated	SMC	SH	26.04.21
PO3	Pond Layout Changes	SMC	ANT	01.04.21
PO2	Gabion outlet detail added	AB	ANT	15.12.20
PO1	First Issue	AB	ANT	14.12.20
Rev	Description	By	Ckd	Date

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Client **newlands developments**

Project **Hoyland Common**

Title **Discharge into Watercourse at Harley Dyke**

RPS Project Number	Scale	Date Created
NK020040	As Shown	14.12.2020
Task Team Manager	Information Author	Task Information Manager
SG	AB	ANT

Subs: **S2 (Suitable for Information)**

Document Number	Revision
HOYLA-RPS-SI-XX-DR-CR-523	P05

Project Code - Originator - Zone - Level - Type - Role - Drawing Number

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