



INSET 1  
CONNECTION INTO THE LLFA MANHOLE  
SCALE: 1:200

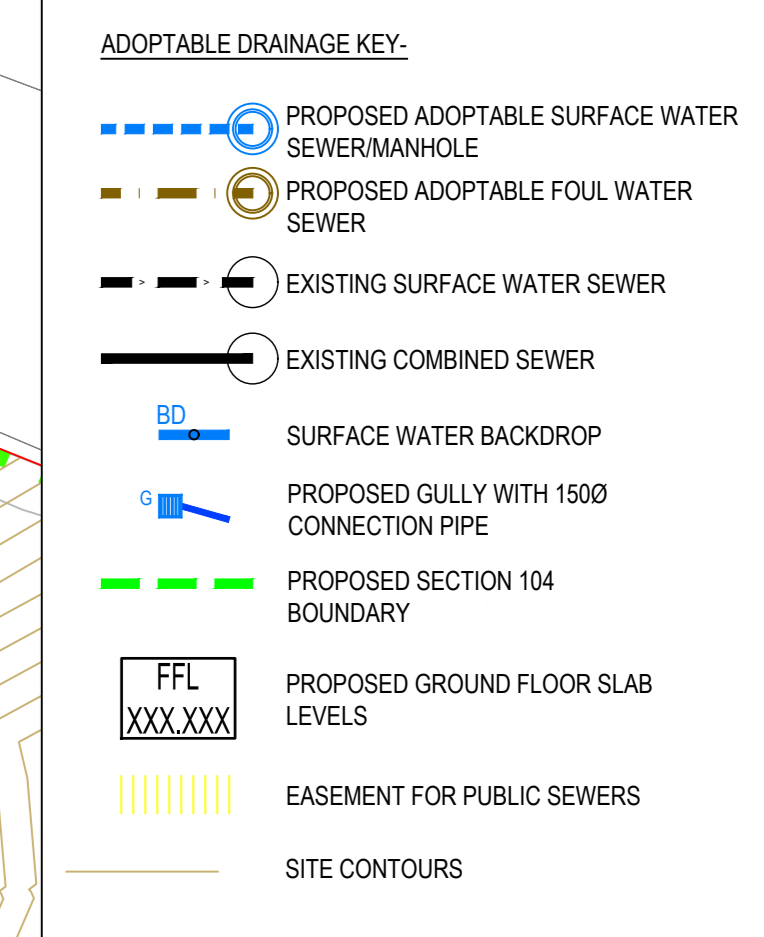
ALL SURFACE AND FOUL PLOT DRAINAGE  
CONNECTION LOCATIONS BE CONFIRMED  
BY ARCHITECT PRIOR TO CONSTRUCTION

Proposed  
Minimum  
The after  
30% clim  
Discharge  
Alternati  
points for  
Adoptabl  
Geotile A

Proposed attenuation tank  
Minimum volume required = 163.2m<sup>3</sup>  
The attenuation has been designed based on the 1 in 100 year +  
30% climate change allowance, agreed with LLFA.  
Discharge rate of 3.5L/s has been agreed with LLFA.  
Attenuation to be provided by PCC attenuation tank with access  
points for maintenance purposes.  
Adoptable Attenuation: 16m x 7.5m x 1.5m deep SDS Limited  
Geotile Attenuation tank.

Pipe length immediately downstream  
of Proposed Section 104 sewers and  
SW11 are to be adopted under Section  
102.

ATTENUATION TANK  
16m x 7.5m x 1.5m deep  
180m<sup>3</sup> Volume



**ADAPTABLE DRAINAGE KEY:**  
- PROPOSED ADAPTABLE SURFACE WATER SEWER  
- PROPOSED ADAPTABLE FOUL WATER SEWER  
- EXISTING SURFACE WATER SEWER  
- EXISTING COMBINED SEWER  
- SURFACE WATER BACKDROP  
- PROPOSED GULLY WITH 1500 CONNECTION PIPE  
- PROPOSED SECTION 104 BOUNDARY  
- PROPOSED GROUND FLOOR SLAB LEVELS  
- EASEMENT FOR PUBLIC SEWERS  
- SITE CONTOURS

**YORKSHIRE WATER STANDARDS/NOTES**  
An adoptable sewer works and material to be in accordance with Sewerage Sector Customer Energy and Environmental Standards (CESSES) Requirements. The relevant British Standards and Yorkshire Water's Standards/Requirements/Adaptation to the Minimum and Essential Specifications and Performance Requirements shall be used.  
Manhole covers shall have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 100mm deep frames in highways.  
Fitted ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water prior to sewer works and adopted.  
Yorkshire Water is obliged to accept filter drain discharge run-off into the public sewer network or adoptable drainage system (directly or indirectly). An alternative method of disposal of the final drainage run-off shall be provided and agreed with Yorkshire Water prior to construction.  
The adoptable sewers should be a minimum of 1m and 80mm from kerb face and service road.  
Sewers to be set in Class "D" Existing 150mm granular bed and surround. Where depth of cover to top of sewer is less than 1.2m in highways and less than 0.9m in non-highway areas then a concrete slab should be provided above ground level and surround.  
Bedding and backfill material to conform to the requirements of Water Industry Specification 4-08-02 (Table A2).  
Yorkshire Water policy is that Type "C" brick manholes and 150mm diameter manhole rings are not permitted. Instead, it is preferred that you use a type "B" manhole with 1200mm diameter or 1000mm diameter rings, with the opening sized over the channel where depth of cover to pipe soffit is 1-1.5m.  
Adoptable sewer pipes to be BS EN12456 (certified to BS EN12456 and BS EN12456-2). Adoptable sewer pipes to be 300mm diameter. 300mm diameter unless there is a specific operational need for longer lengths. Plastic channel sections in manholes are not acceptable and Yorkshire Water will require clay cover channels in manholes.  
The minimum crushing strength for clay pipes should be as follows: 100mm dia. 40N/mm<sup>2</sup> (min. dia. 225mm dia. 40N/mm<sup>2</sup> and 300mm dia. 70N/mm<sup>2</sup>). The minimum crushing strength for concrete pipes should be: Class 120 to BS EN 12050 (BS EN 12050-1:2002). Plastic pipes should conform to BS EN 12456-2.  
Where a B125 cover and frame has been approved, this must not be coated in plastic and must have 18kg eye subside tested to accommodate standard 18kg keys. Some cover covers are not acceptable.  
There must be enough clearance at manholes to accommodate bedding in both pipes approx. 300mm. If crossover is near the node then the clearance may need to be increased.  
**Highway Notes**  
Proposed concrete manhole units including their PCC cover slabs shall comply with the relevant provisions of BS EN 1917 and BS EN 1917-2 and shall be manufactured from concrete with a Compressive Class Class C35/45 unless otherwise specified. Soil analysis can be provided that a lower class will resist attack from soils and ground water.  
All manhole functional details should clearly show a rim cover depth of 300mm to PCC cover slabs in compliance with the requirements of BS EN 1917-2 (Table 7).  
Cover slabs shall comply with the requirements of BS EN 1917-2 (Table 5 and Figure 8).  
All PCC units in concrete manholes must have a design working life of 100 years (min) in accordance with BS EN 12050-1:2015-02 (Table A.3). This is intended to ensure that all circular overhead manholes with EN12456-2 (BS EN 12456-2) installed in the highway will comply with the same regulatory durability requirement as other highway structures).  
A Construction Compliance Certificate (CCC - see attached) in accordance with CC300: Technical Approval of Highway Structures (Appendix A) will need to be submitted following completion of construction of the adoptable drainage works. Please do not exceed the working life in this template. The CCC will need to be signed by a competent engineer and a principal of the contractor together with a competent engineer from the design organization or a Water Engineer and submitted to Yorkshire Water for approval. The CCC will need to be submitted to Yorkshire Water for approval prior to the start of the works.

ALL LEVELS OF THE EXISTING SEWERS HAVE BEEN CHECKED ON SITE AND ARE CORRECT AS SHOWN.

New connection into existing Yorkshire Water manhole.

EXMH8102  
CL 183.42  
IL 180.2

EXMH8102 will need to be inspected by a Yorkshire Water inspector to ensure it can accommodate the proposed connection and to check if any remedial works are required (it may be necessary to reconstruct the manhole).

THE TOTAL DISCHARGE INTO FW2 FROM PRIVATE PUMP STATIONS TO BE 2.5l/s.

**Control:**

STN	East	North	Level	Type
V1	414833.974	409120.237	183.299	Nail
V2	414870.338	409174.405	183.329	Nail

**Notes:**  
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All dimensions are in metres unless noted otherwise.  
DO NOT SCALE THIS DRAWING - IF IN DOUBT ASK.  
1. All dimensions & levels to be checked by the contractor prior to commencement of work, any discrepancy shall be reported immediately to Avie Consulting Ltd.  
2. All work shall be carried out in accordance with Local Authority, statutory authority, health & safety requirements and regulations.  
3. The drawings shall be read in accordance with all other contract documents relevant at that time of issue and during the period of the contract.  
4. The contractor must ensure the overall stability of the works is adequate at all stages of the construction.  
5. No allowance has been made for cutouts, holes, notches, etc. for services, all of these are to be agreed prior to the start of the works.

Client: GSM Developments Ltd  
Project: Residential Development, Pentlands, New Mill Road, Holmfrith  
Drawing Number: P3052-01  
Date: Oct 2023  
Scale: 1:100  
Sheet: P06

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