



1. All work to be in accordance with the current Building Regulations
2. Only written dimensions to be used
3. Discrepancies and abnormalities to be reported.
4. If in doubt Ask.

General notes :

All work to be in accordance with the current building regulations. Drains passing through buildings to be protected with lintel over. No building to take pipe within 3.000M of an adoptable sewer. Minimum pipe size for adoptable purposes to be 150mm with flexible mechanical joints. Highway construction to be in accordance with Barnsley MBC Highways Department. Private drainage to be in 100mm dia. plastic pipe with granular bed & surround to the satisfaction of the building control officer. Minimum gradient 1/80. Road gullies to be in accordance with road construction details drawing. Levels marked on drawings refer to ground floor level. --- surface water drain

Where adoptable pipes have concrete slab protection, all joints to be provided with 18mm thick flexible filler. Private drainage connections not direct to a manhole are to be made via a 45 degree junction and not saddles. Maximum gradient of private drainage to be in accordance with Planning Approval. NOTE THAT ALL FENCING AND SCREEN WALLING/FENCING DETAILS TO BE AS DEFINED ON PLANNING DRAWING

Sewers must have 5m minimum clearance from trees and hedges, otherwise they must be provided with concrete slab protection over. All filled ground to be filled and consolidated under supervision and to the satisfaction of the adopting Company prior to any sewer works being carried out.

Sewers to be laid in Class 5 bedding (150mm granular bed and surround). Where depth of cover to top of sewer is less than 1.20m in highways and verges, then 150mm concrete slab protection is to be provided. Lengths that require such protection are identified on Long Sections drawing.

Note that adopting policy is not to accept Type C brick manholes and 1050 dia concrete manhole rings. It is preferred to use Type B1 1200 or 1500mm dia concrete manholes with the opening sit centrally over the channel where depth to pipe soffit is between 1.0-1.5m. Main sewers to be laid in accordance with Design & Construction Guidance and to the satisfaction of the Water Company and be kitemarked. All adoptable sewers to be in Class 120 concrete or 400K/m (150K/45KN/m (225k) with class S bedding as specified on Long Sections drawing.

Adoptable manholes to be concrete ring type size as specified in schedules. Manhole covers shall have a clear opening of 675mm and shall be Class D400 to BS EN 124. Covers in highways to have 150mm deep frames. All filled ground to be filled and consolidated under supervision and to the satisfaction of the Adopting Company prior to any sewer works being carried out.

The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins wherever possible. Sewers must have 5m minimum clearance from trees and hedges, otherwise they must be provided with concrete slab protection.

The chamber size of manholes with more than one connection in them may need to be increased by an increment to accommodate connections and bends. General Policy is not to accept filter drain/land drainage run-off into public sewers or adoptable drainage systems (directly or indirectly). An alternative method of disposal of the land drainage run-off will be required to be agreed with the Local Drainage Section. Cover slabs must carry the BS1 kitemark or will be rejected by the Adopting Company inspector. Where the clear opening of the kitemarked product is different to that of the cover and frame, a load bearing slab should be fitted above the cover slab to bring the size down to 675mm x 675mm for the relevant specified cover size. Please refer to Concrete Pipe Systems Association (CPSA) Technical Bulletin issued Autumn 2004 for kitemarked cover slab opening sizes. Sulphate resistance cement (C20-D2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.

NOTE THAT ALL TREES LOCATED CLOSE TO THE ADOPTABLE ESTATE ROADS TO BE PROVIDED WITH ROOT BARRIER PROTECTION (BY MESSRS GREENLEAF OR SIMILAR)

NOTE THAT IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL WORKS ARE CARRIED OUT TO THE REQUIRED STANDARD STIPULATED BY GLEESON HOMES INCLUDING CURRENT EDITIONS OF THE BUILDING REGULATIONS, DCG, RELEVANT BRITISH STANDARDS, EUROCODES AND GOOD BUILDING PRACTICE. IF IN DOUBT, REFER TO GLEESON HOMES TECHNICAL DEPARTMENT FOR CLARIFICATION.

NOTES TO MEET ADOPTION STANDARDS

1. All adoptable sewer works and material to be in accordance with the Design and Construction Guidance, the Relevant British/European and Adopting Company Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.
2. Manhole covers shall have a clear opening of 675mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
3. Filled ground must be filled and consolidated under the supervision and to the satisfaction of the adopting Authority before any sewer works are carried out.
4. The Water Company 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 agree with the Local Authority, Land Drainage Section with regard to the disposal of the filter drain/land drainage run-off.
5. Cover slabs must carry the BS1 Kitemark or will be rejected by the Inspector. Where the clear opening of the kitemarked product is different to that of the cover and frame, a load bearing slab should be fitted above the cover slab to bring the size down to 675mm x 675mm cover size. Please refer to Concrete Pipe Systems Association (CPSA) Technical Bulletin issued Autumn 2004 for kitemarked cover slab opening sizes.
6. Sulphate resistant cement (C20-D2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
7. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
8. Sewers must have 5 metres clearance from trees and hedges (please also refer to Design & Construction Guidance and Sewers for Adoption 6th Edition for restrictions on tree planting adjacent to sewers).
9. Sewers to be laid in Class 5 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 non vehicular access areas) then a concrete slab should be provided above granular bed and surround.
10. Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
11. 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.
12. General policy is not to accept brick manholes and 1050mm dia manhole rings. It is preferred that use is made of Concrete Type C manhole with 1200mm dia or 1500mm dia rings, with the opening sit over the channel where depth of cover to pipe soffit is 1-1.5m.
13. Adoptable plastic sewer pipes to be BS1 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 preference is to use clayware channels in manholes.
14. Plastic pipes should conform to WIS 4-35-01 and BS EN13476.
15. 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. Screen down covers are not acceptable.
16. Plastic demarcation chambers that are located within driveways must be provided with 150mm thick concrete surround.

FLOW CONTROL DATA - MANHOLE S21A

DEVICE ORIFICE	76MM
DEVICE MANUFACTURER	F P MCCANN
DEVICE MODEL NO	FPM-SB1
DEVICE DESIGN HEAD	2.465M
DEVICE DESIGN DISCHARGE	3.5L/S

G. 08/04/26 Plots 217-221 layout amended
 F. 16/03/28 amended to Gleeson Homes instructions, discharge rate to 3.5/s & BMC R2 2 comments
 E. 23/11/25 BMC Highways/Last Mile Rd 1/5278 comments & basin amendments to suit 04 Poles/Stays
 D. 21/03/25 notational amendments/corrections
 C. 15/03/25 adoptable manhole riser layer thowed
 B. 29/01/25 existing watercourse from the north east added and indicative diversion route
 A. 17/01/25 updated to new site layout/amended SW outfall revision.

NOTE THAT ALL HIGHWAY DRAINAGE INCLUDING GULLY CONNECTIONS ARE TO BE CCTV SURVEYED AND PRESENT TO BARNSELY MBC HIGHWAYS TO REVIEW/APPROVE PRIOR TO THE ISSUE OF THE PART 1 AND 2 CERTIFICATE

RISK ASSESSMENT - SIGNIFICANT RISKS THAT CANNOT BE DESIGNED OUT	LEVEL OF RISK	SUGGESTED ACTION
DEEP EXCAVATIONS ASSOCIATED WITH NEW DRAINAGE WORKS	HIGH	ENSURE ALL EXCAVATIONS HAVE ADEQUATE TRENCH SUPPORTS.
WINDING LANE CHANGING MANHOLE RINGS & PIPES	HIGH	USE CORRECT LIFTING EQUIPMENT AND ENSURE OPERATORS WEAR APPROPRIATE PROTECTIVE CLOTHING/HAZARD WEAR.
CONTACT WITH SERVICES	MED	OPERATIONS TO USE CORRECT WARNING EQUIPMENT.
WALLS	HIGH	OPERATIONS TO USE CORRECT SHIELD PROTECTION.
DRAINAGE EXCAVATIONS ADJACENT EXISTING BOUNDARY STRUCTURES	HIGH	ENSURE CORRECT SUPPORTS ARE PROVIDED TO TRENCHES AND BUILDINGS WHERE REQUIRED.
EXCAVATIONS IN HIGHWAYS AND CLOSE TO SERVICES	HIGH	ENSURE CORRECT USE OF TRENCH SUPPORTS & BARRIERS AND SCREEN BARRIERS TO PROTECT MEMBERS OF THE PUBLIC.
MAINTAIN ACCESS TO ADJACENT PROPERTIES AND OCCUPIERS	HIGH	ENSURE WORKS ARE PROTECTED WITH BARRIERS AND SIGNS TO MAINTAIN ACCESS TO ADJACENT PROPERTIES AND OCCUPIERS.
EARTHWORKS ASSOCIATED WITH PROPOSED DRAINAGE SYSTEMS	HIGH	ENSURE ALL EXCAVATIONS HAVE ADEQUATE TRENCH SUPPORTS AND APPROPRIATE WARNING SIGNS ARE DISPLAYED.
EARTHWORKS ASSOCIATED WITH WATER FEATURES	HIGH	ENSURE ALL EXCAVATIONS HAVE ADEQUATE TRENCH SUPPORTS AND APPROPRIATE WARNING SIGNS ARE DISPLAYED. WORKS TO BE CARRIED OUT IN ACCORDANCE WITH RECOMMENDATIONS.
WORKING IN AREAS WHERE HIGH WATER TABLE HAS BEEN RECORDED	HIGH	ENSURE CORRECT USE OF TRENCH SUPPORTS AND IF REQUIRED USE OF SUPPORTIVE EQUIPMENT TO MAINTAIN STABLE WATER FROM EXCAVATION.

RECOMMENDED DETENTION BASIN TO ACCOMMODATE ALL FLOWS FROM STORMS UP TO AND INCLUDING THE 100YR + 4% CLIMATE CHANGE EVENT. BASIN TO BE PROVIDED WITH SLAY LINER SHOULD GROUNDWATER BE WITHIN OF PROPOSED BASIN. PNEUMATIC TESTING RECOMMENDED AS IS RECOMMENDED BACK TO BACK TO THE SEWERS. ADVISE TO BE PROVIDED BY MANUFACTURER IN RESPECT TO THICKNESS OF PROPOSED RUBBERISED LINER. A LINER IS PROVIDED TO BE REQUIRED.

MANHOLE: WHERE BASIN ARE ABOVE EXISTING GROUND LEVEL AND FALL AWAY FROM PROPOSED BASIN, SPECIALIST GEOTECHNICAL ADVISE TO BE OBTAINED TO ENSURE THAT THEY ARE FORMED IN COMPACTED ENGINEERED FILL TO REMOVE THE POSSIBILITY OF FAILURE.

BASEIN SHAPED TO AVOID PROPOSED OVERHEAD CABLE STAYS AND EXTENSIONS FOR REQUIRED EQUIPMENTS.

FROM CONTROL MANHOLE S21A FITTED WITH STORMWATER MODEL REF SB1 AS DETAILED ELSEWHERE WITH FORWARD FLOW RESTRICTED TO 2 L/S WITH 150MM DIAMETER AT MANHOLE 7501

EXTENT OF EXISTING WET AREA - OUTLINE NEXCESS CURRENTLY UNKNOWN AND TO BE INVESTIGATED HOWEVER PROPOSED DEVELOPMENT IS MOST INCREASING THE VOLUME OF SURFACE WATER CURRENTLY FLOWING THERETO

PROPOSED SURFACE WATER CONNECTION ONTO MAIN DRAINAGE TO BE MADE IN EXTERNAL MANHOLE OR PIPE ON EXISTING SURFACE WATER COURSE. WATER EXTENTED WORKS THERETO TO BE AGREED ON SITE WITH THE INSPECTOR.

NOTE THAT MANHOLE COVERS CURRENTLY UNDER SPASER AND MARKED THEREFORE BEEN ESTIMATED ONLY TO BE CONFIRMED ON SITE PRIOR TO UNDERSTANDING UPSTREAM WORKS

EXISTING CULVERT PIPE TO BE IDENTIFIED BY PARTNER CONTRACTOR AND TO BE CLEANED OUT TO ALLOW FREE FLOW OF SURFACE WATER FROM THE EXISTING WET AREA ON SITE.

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 Site: Wakefield Road, Smithills.

Title:
Engineering Layout
 Sheet 1.

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