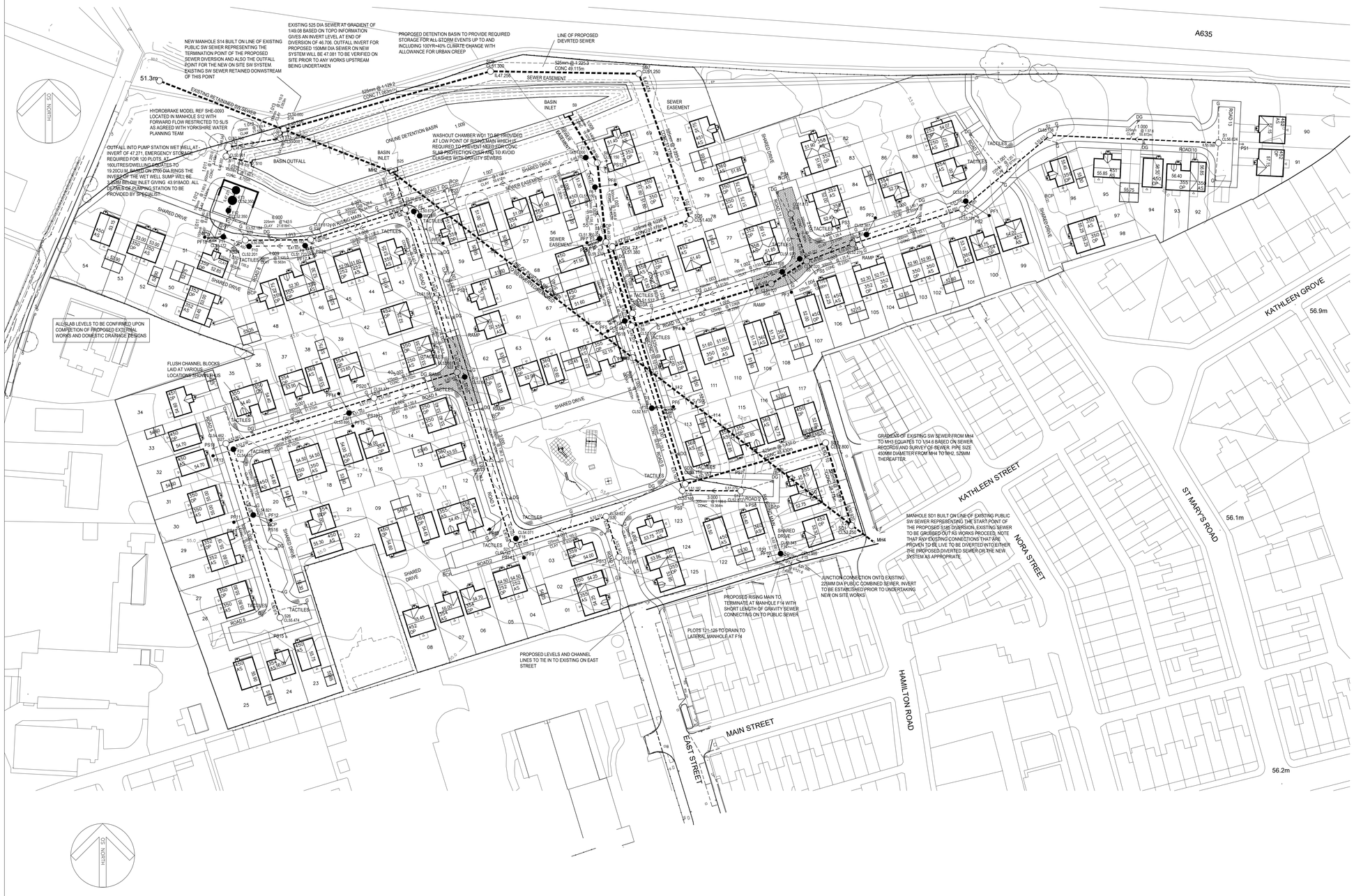
1. All work to be in accordance with the current Building Regulations
2. Only written dimensions to be used
3. Discrepancies and abnormalities to be reported.
4. If in doubt Ask.



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 place 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 dwellings refer to ground floor level.

---------- foul drain

- - - - - - - - - - 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 driveways to be 1 in 10.

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 S 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 sited 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 40KN/m (150ø)/45KN/m (225ø) with class S bedding as specified on Long Sections drawing.

Adoptable manholes to be concrete ring type size as specified in schedules. Manhole covers must/shall have a clear opening of 600mm 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.

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 BSI 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 600mm x 600mm 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-DC2) 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.

THE STREET WORKS ARE TO BE COMPLETED IN ACCORDANCE WITH THE COUNCIL'S SPECIFICATION (ESTATE ROADS CONSTRUCTION GUIDE) OR ANY AMENDMENTS THEREOF. EACH STAGE OF THE CONSTRUCTION WORKS ARE TO BE INSPECTED BY THE BMBC REPRESENTATIVE.
MAIN SEWERS TO BE LAID IN ACCORDANCE WITH THE DESIGN & CONSTRUCTION GUIDANCE AND TO THE SATISFACTION OF THE WATER COMPANY

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/must have a clear opening of 600mm 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 liaise 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 BSI 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 loading bearing slab should be fitted above the cover slab to bring the size down to 600mm x 600mm 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-DC2) 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 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 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 sited over the channel where depth of cover to pipe soffit is 1-1.5m.
13. 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 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. Screw 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 S12

DEVICE DIAMETER	93MM
DEVICE MANUFACTURER	HYDRO
DEVICE MODEL NO	SHE-0093
DEVICE DESIGN HEAD	1.851M
DEVICE DESIGN DISCHARGE	5L/S

RISK ASSESSMENT SIGNIFICANT RISKS THAT CANNOT BE DESIGNED OUT		
RISK	LEVEL OF RISK (H/M)	SUGGESTED ACTION
DEEP EXCAVATIONS ASSOCIATED WITH NEW DRAINAGE WORKS.	HIGH	ENSURE ALL EXCAVATIONS HAVE ADEQUATE TRENCH SUPPORTS.
HANDLING LARGE DIAMETER MANHOLE RINGS & PIPES	HIGH	USE CORRECT LIFTING EQUIPMENT AND ENSURE OPERATIVES WEAR APPROPRIATE PROTECTIVE CLOTHING/HARD HATS.
CONTACT WITH SEWAGE.	MED	OPERATIVES TO USE CORRECT BREATHING EQUIPMENT.
NOISE.	MED	OPERATIVES TO USE CORRECT EAR 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 IN EXCAVATION 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 GUIDE THE PUBLIC AWAY FROM THE WORKS.
EARTHWORKS ASSOCIATED WITH PROPOSED DRAINAGE SYSTEMS	HIGH	ENSURE ALL EXCAVATIONS HAVE ADEQUATE TRENCH SUPPORTS AND APPROPRIATE WARNING SIGNS ARE ERECTED.
EARTHWORKS ASSOCIATED WITH WATER FEATURES	HIGH	ENSURE ALL EXCAVATIONS HAVE ADEQUATE TRENCH SUPPORTS AND APPROPRIATE WARNING SIGNS ARE ERECTED. WORKS TO BE CARRIED OUT IN ACCORDANCE WITH RECOMMENDATIONS AND REQYIREMENTS OF IOE/LUX
IT IS ASSUMED THAT WORKS ASSOCIATED WITH THIS DESIGN WILL BE UNDERTAKEN BY A PERSON OR PERSONS WHO ARE COMPETENT AND HAVE THE REQUIRED LEVEL OF EXPERIENCE AND EXPERTISE		

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B. 26/06/23 slab level adjustments to suit ExtWorks
A. 23/05/23 design updated to suit Rev J1 Site Layout
Revision.

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AO

Client. Gleeson Homes

Site. Lockwood Road, Goldthorpe.

Title. Engineering Layout

Date:	Scales.	Drawing No.
April 2023	1/500	23/773/10514B