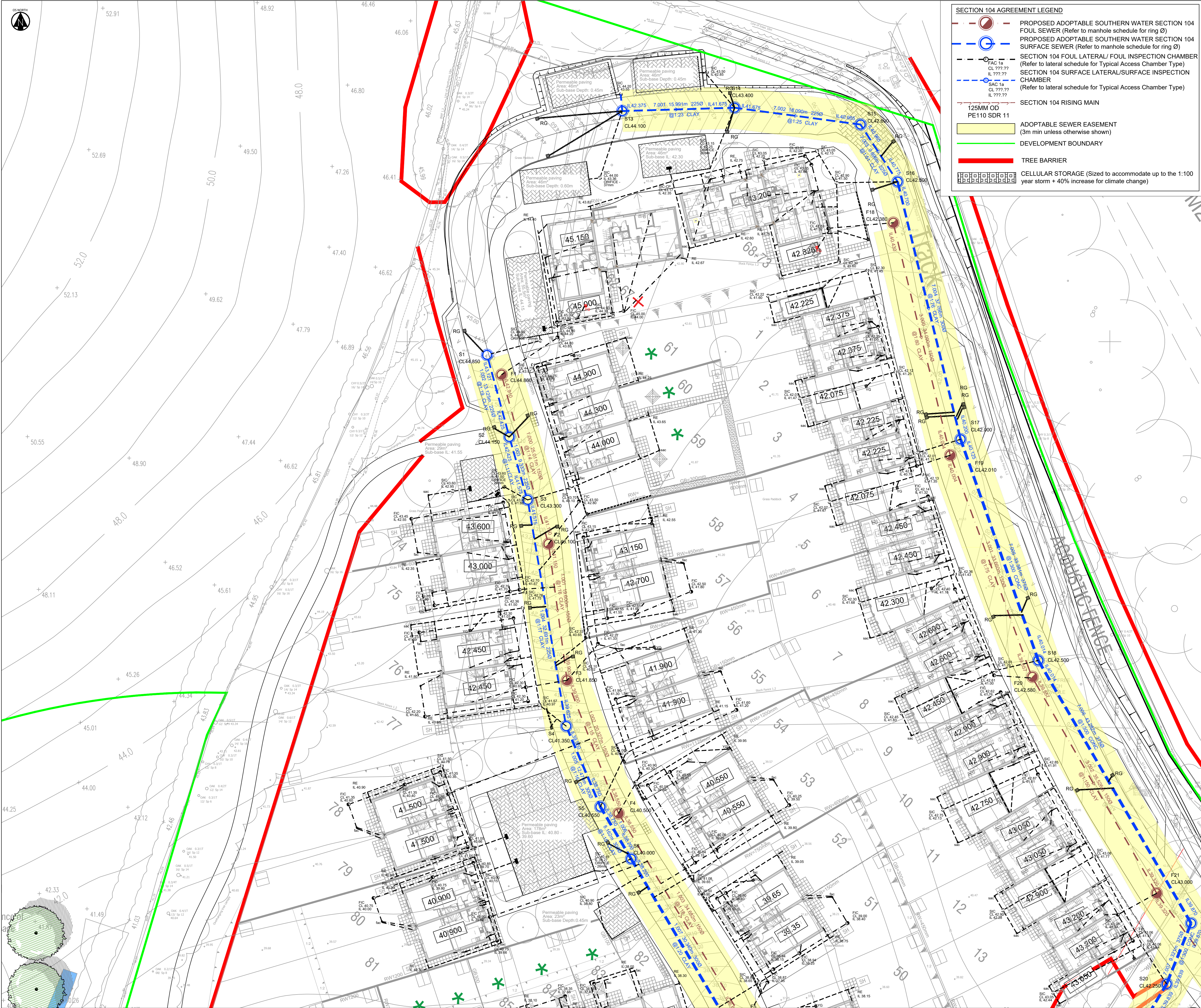




SECTION 104 AGREEMENT LEGEND

- PROPOSED ADOPTABLE SOUTHERN WATER SECTION 104 FOUL SEWER (Refer to manhole schedule for ring Ø)
- PROPOSED ADOPTABLE SOUTHERN WATER SECTION 104 SURFACE SEWER (Refer to manhole schedule for ring Ø)
- SECTION 104 FOUL LATERAL/ FOUL INSPECTION CHAMBER (Refer to lateral schedule for Typical Access Chamber Type)
- SECTION 104 SURFACE LATERAL/SURFACE INSPECTION CHAMBER (Refer to lateral schedule for Typical Access Chamber Type)
- SECTION 104 RISING MAIN
- ADOPTABLE SEWER EASEMENT (3m min unless otherwise shown)
- DEVELOPMENT BOUNDARY
- TREE BARRIER
- CELLULAR STORAGE (Sized to accommodate up to the 1:100 year storm + 40% increase for climate change)

KEY PLAN

SHEET 1

SHEET 2

SHEET 3

SHEET 4

Section 104 Specification Notes:

- The planning, design and construction of sewers shall be in accordance with Sewers Sector Guidance Appendix C: Design and Construction Guidance, the Civil Engineering Specification for the Water Industry 7th Edition and Southern Water amendments to CESWI.
- All Adoptable sewers within adoptable highway with less than 1.2m cover to have reinforced concrete slab protection. All Adoptable sewers within grassed areas with cover less than 0.9m to have reinforced concrete slab protection. All areas with greater cover than the minimum required to have type S bed and surround.
- MH covers & frames shall be ductile iron with a minimum square opening of 600/600mm. Covers shall be double triangle for 600mm square openings and be provided with loose bolted connections. Frame depths shall be 150mm but in any case all frames shall comply with DCG clause E2.32 & Table 6 (page 107).
- Sealed and lockable covers to be supplied where specified on manhole schedule.
- Use of this drawing does not absolve the client from his responsibilities under the Health and Safety: The Construction Design and Management Regulations 2015. The Principal Designer is required to contact Hydrock Consultants prior to permitting this drawing to be used in connection with any construction works.
- All private drainage to comply with current Building Regulations, BS EN-752 Drain and Sewer systems outside Buildings and other relevant British Standards and Codes of Practices.
- The minimum size of sewer where guide bars, safety chains, or other safety devices are required in Manholes shall be 600mm diameter.
- All sewers to be laid soffit to soffit unless otherwise shown.
- Prior to laying any material the subgrade must be inspected and any soft spots removed and filled with Type 1 material to SHW Clause 803.
- It is the Contractors responsibility to locate existing services on site accurately.
- The Contractor should comply with h(s) 47 "Avoiding Danger from Underground Services" when excavating around existing services.
- The Contractor is to verify the line, level and diameter of existing sewers before commencing drainage works.
- Contractor to provide temporary screens in each of the down stream manholes during the construction period of the development in accordance with DCG BS.2.23.
- All in-situ concrete and precast concrete components to be manufactured using Sulphate Resisting Portland Cement, (SRPC) to BS 4027, if required, subject to soil conditions.
- All manholes should have a concrete surround. Concrete rings shall be sealed using "Tokstap" and lifting eyes pointed with resin modified mortar.
- Clay pipes to be vitrified clay to bs en 295-1:1991
- Crushing strength of clay pipes to be as follows:

Crushing strength	40	45
150		
225		
- Manhole components to be to bs en 1917:2002
- All levels are to OS datum.
- Compliance with Health & Safety matters on any trench/manhole is obligatory and a permit to enter a confined space is required when connecting site drainage to the existing public sewerage system. A permit to enter a confined space will be obtained from Southern Water Ltd prior to the works commencing on any public sewerage system.
- The use of adders or steps in manholes, wet wells and valve chambers shall comply with the following: Steel plastic encapsulated MH single steps shall not be used in MHs of a greater depth than 1.0m. Steel plastic encapsulated double steps shall be provided in MHs up to 3.0m in depth. Ladders shall be provided in accordance with BS 4211 in MHs between 3.0 & 6.0m deep. MHs greater than 6.0m deep shall be specially designed and have intermediate landings. Access holes in intermediate landings shall be provided with galvanised mild steel gratings to prevent persons falling through. The design of deep MHs shall permit the use of a winch or lifting gear mounted at ground level in case of emergencies.
- Only low carbon steel or stainless steel ladders for vertical fixing to MHs will be acceptable.
- Proposed adoptable sewers are only permitted to have other sewer/gully connections and other services laid at an angle of between 45° and 90° across the line with a vertical clearance in excess of 300mm.
- All ironwork to be kite marked by BSI or certified by equal inspection authority.
- Red coloured plastic marker tape at least 150mm wide shall be laid at a minimum of 200mm above the soffit of the pipe. The tape shall be printed with the words GRAVITY SEWER in bold capital letters throughout its length and at intervals not exceeding 700mm and shall incorporate a corrosion resistant tracing system for no-metallic pipes.
- Where the proposed site drainage connects to the public sewerage system either by new junction, new manhole or at an existing manhole, it will require the submission of a S106 application for sewer connection form to Southern Water Ltd prior to works commencing.
- Where sewers are to be constructed inside the restricted tree root zone a suitable tree root protection barrier is to be installed to Southern Water's specification.

REVISIONS				
P02	17/10/22	Updated easements and added tree protection barriers.	JL	NJ JC
P01	07/10/22	First Issue.	JL	JT JC
Rev	Date	Description	By	Ckd App

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CLIENT
FOREMAN HOMES

PROJECT
LAND OFF MISERY LANE
PROVIDENCE HILL, BURSLEDON
SOUTHAMPTON

TITLE
SECTION 104 PLAN
SHEET 1 OF 4

HYDROCK PROJECT NO.	SCALE @ A1	
C-21627-C	1 : 250	
STATUS DESCRIPTION		STATUS
TENDER		D2
DRAWING NO. (PROJECT CODE-ORIGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)		REVISION
21627-HYD-XX-XX-DR-C-0100		P02