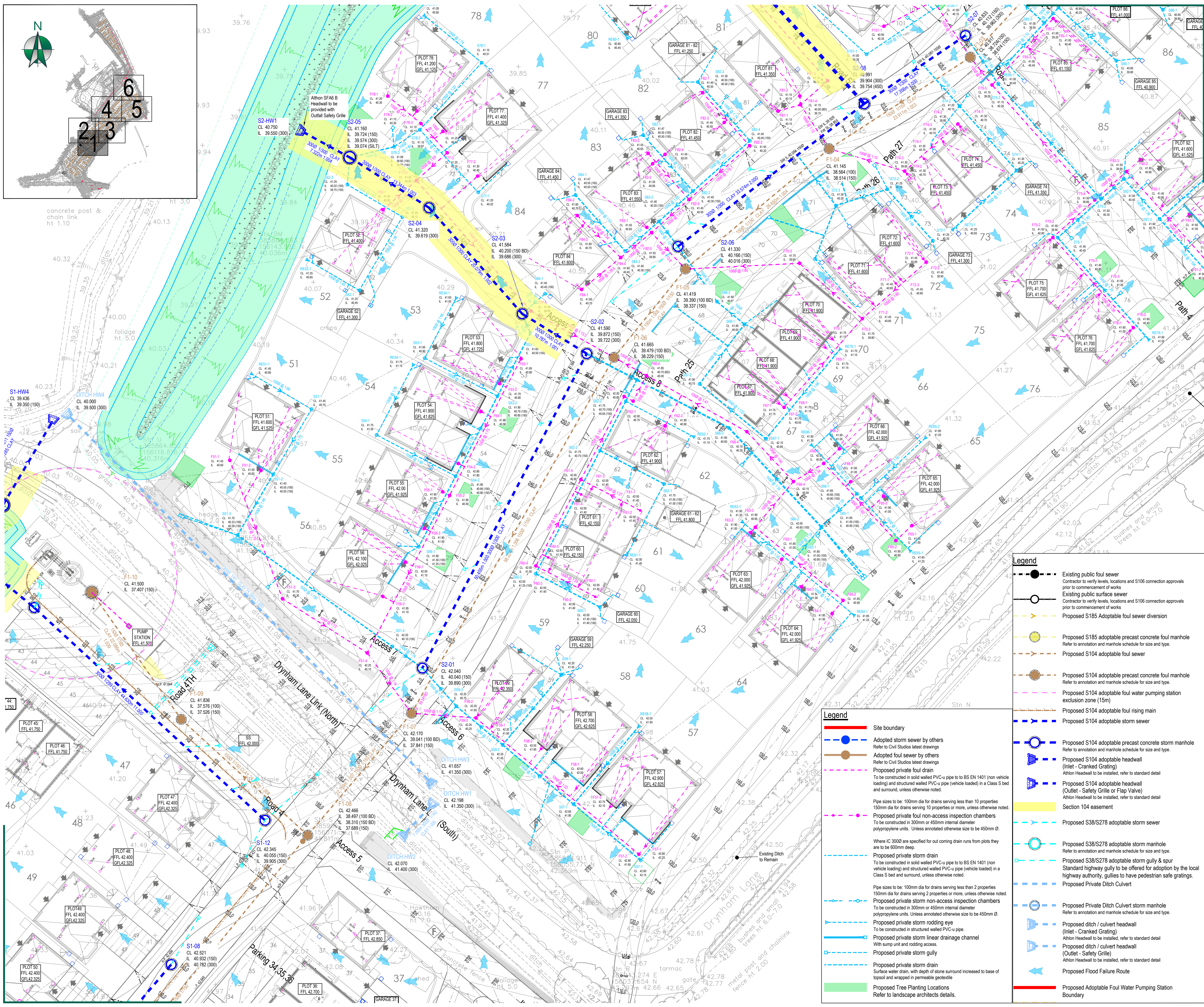




CDM: Significant Hazards

Health and Safety hazards are identified by the designer as abnormal in pursuance of the current Construction Design and Management regulations. It is assumed that all works will be carried out by competent & adequately resourced contractor(s) working to safe systems of work.

General Notes

- DO NOT SCALE FROM THIS DRAWING FOR CONSTRUCTION. Scaling from this drawing or obtaining dimensions electronically may not provide accurate information and should be avoided, therefore work only from figured dimensions and contact JRC Consulting Engineers.
- This drawing is to be read in conjunction with all other relevant Architect's, Engineers & Specialist drawings, details, Specification and the relevant Health and Safety Plan (as appropriate to the project). All discrepancies to be reported to the Engineer immediately for verification.

Drainage Notes

- The planning, design and construction of sewers shall be in accordance with Sewers Sector Guidance (SSG) a design and construction guide for developing sewerage systems.
- The minimum size of sewer where guide bars, safety chains, or other safety devices are required in manholes shall be 375mm diameter.
- All type A & B manholes should have a concrete surround. Concrete rings shall be sealed using 'bakspik' and lifting eyes pointed with resin modified mortar.
- 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 SSWW Ltd prior to the works commencing on any public sewerage system.
- 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 an application for sewer connection form to SSWW Ltd prior to works commencing.
- MH covers and frames shall be ductile iron with a minimum square opening of 675x675mm. Covers shall be double triangle for 675mm square openings and be provided with loose bolted connections. Frame depth shall be 150mm. Covers to PPIC'S shall be in accordance with SSG.
- Type C manholes to be provided with 1220 x 685mm covers and opening.
- The use of ladders 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 MH's of a greater depth than 1.0m. Steel plastic encapsulated double steps may be provided in MH's up to 3.0m deep. Ladders shall be provided in accordance with BS 4211 in MH's between 3.0m & 6.0m deep. MH's greater than 6.0m deep shall be specially designed and have intermediate landings. Access holes in intermediate landings shall be provided with galvanneal mild steel gratings to prevent persons falling through. The design of deep manholes 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 manholes will be acceptable.
- Proposed adoptable sewers are only permitted to have other sewerage connections and other services laid at an angle of between 45 degrees and 90 degrees across the line with a vertical clearance more than 300mm.
- All ironwork to be kited 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 'gravelly sewer' in bold capital letters throughout its length and at intervals not exceeding 700mm and shall incorporate a corrosion resistant tracing system for non-metallic pipes.
- Minimum backdrop height shall be 1m.
- On new drainage schemes, the first manhole upstream from the connection to the existing foul water sewer shall be fitted with a suitable screen, which will remain in place until the new sewer becomes live.

Drainage Notes - DCG

- Drawings to be read in conjunction with all design drawings and building regulations.
- All levels are to Ordnance Survey datum levels.
- All materials used in connection with this design must:
 - Not be detrimental to health & safety or adversely affect durability of the construction.
 - Where applicable, be compliant to current British/European Standards, Codes of Practice and good building practice.
- The planning, design and construction of sewers shall be in accordance with Design and Construction Guidance (DCG) for foul and surface water sewers offered for adoption under the Code for adoption agreements for water and sewerage companies in England.
- The minimum size of sewer where guide bars, safety chains, or other safety devices are required in manholes shall be 375mm diameter.
- All type A & B manholes should have a concrete surround. Concrete rings shall be sealed using 'bakspik' and lifting eyes pointed with resin modified mortar. PPIC'S should be installed in accordance with the DCG.
- 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 the local water company prior to the works commencing on any public sewerage system.
- 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 an application for sewer connection form to the local water company prior to works commencing.
- MH covers and frames shall be ductile iron with a minimum square opening of 675x675mm. Covers shall be double triangle for 675mm square openings and be provided with loose bolted connections. Frame depth shall be 150mm. Covers to PPIC'S shall be in accordance with the DCG.
- The use of ladders 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 MH's of a greater depth than 1.0m. Steel plastic encapsulated double steps may be provided in MH's up to 3.0m deep. Ladders shall be provided in accordance with BS 4211 in MH's between 3.0m & 6.0m deep. MH's greater than 6.0m deep shall be specially designed and have intermediate landings. Access holes in intermediate landings shall be provided with galvanneal mild steel gratings to prevent persons falling through. The design of deep manholes 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 manholes will be acceptable.
- Proposed adoptable sewers are only permitted to have other sewerage connections and other services laid at an angle of between 45 degrees and 90 degrees across the line with a vertical clearance more than 300mm.
- All ironwork to be kited 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 'gravelly sewer' in bold capital letters throughout its length and at intervals not exceeding 700mm and shall incorporate a corrosion resistant tracing system for non-metallic pipes.
- Minimum backdrop height shall be 1m.
- On new drainage schemes, the first manhole upstream from the connection to the existing foul water sewer shall be fitted with a suitable screen, which will remain in place until the new sewer becomes live. For type 3 manholes, outlet to be bunged with suitable stopper and chain which can be removed on completion of work.
- Adopted pipework beddown:
 - Vehicle access: <1200 cover Class Z concrete
 - >1200 cover Class S granular
 - Non-vehicular access: <900 Cover Class Z concrete
 - >900 Cover Class S granular

Legend

Site boundary

Adopted storm sewer by others

Adopted foul sewer by others

Proposed private foul drain

Proposed private foul non-access inspection chambers

Proposed private storm drain

Proposed private storm non-access inspection chambers

Proposed private storm rodding eye

Proposed private storm linear drainage channel

Proposed private storm gully

Proposed private storm drain

Proposed Tree Planting Locations

Proposed S104 adoptable foul sewer diversion

Proposed S185 adoptable precast concrete foul manhole

Proposed S104 adoptable precast concrete foul manhole

Proposed S104 adoptable foul water pumping station exclusion zone (15m)

Proposed S104 adoptable foul rising main

Proposed S104 adoptable storm sewer

Proposed S104 adoptable precast concrete storm manhole

Proposed S104 adoptable headwall (Inlet - Cranked Grating)

Proposed S104 adoptable headwall (Outlet - Safety Grille or Flap Valve)

Section 104 easement

Proposed S38/S278 adoptable storm sewer

Proposed S38/S278 adoptable storm manhole

Proposed S38/S278 adoptable storm gully & spur

Proposed Private Ditch Culvert

Proposed Private Ditch Culvert storm manhole

Proposed ditch / culvert headwall (Inlet - Cranked Grating)

Proposed ditch / culvert headwall (Outlet - Safety Grille)

Proposed Flood Failure Route

Proposed Adoptable Foul Water Pumping Station

Table with 4 columns: C3, C2, C1, REV. Rows include drawing update following client comments, suit landscaping areas, First Issue, and details.

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DRAWING STATUS

FOR CONSTRUCTION

PROJECT

ELM GROVE TROWBRIDGE

CLIENT

REDROW

DRAWING TITLE

DRAINAGE LAYOUT PHASE 2 SHEET 1

SCALE @ A1

0m 1:250 10m

SIZE A1

DATE SEP 25

PROJECT NUMBER 1960

DRAWING NUMBER 2501

REVISION C3

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