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IF IN DOUBT ASK

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The locations of utilities apparatus, if shown, have been reproduced from plans supplied to Bryan G Hall Limited. Although these have been taken where possible, the contractor's responsibility to check and verify all dimensions on site. Any discrepancies to be reported immediately.

- KEY:**
- Existing Surface Water Sewer and Manhole
 - Existing Foul Water Sewer and Manhole
 - Existing Combined Sewer and Manhole
 - Proposed Surface Water Sewer and Manhole
 - Proposed Surface Water Flow Control Manhole
 - Proposed Surface Water Lateral Drain and Demarcation Chamber
 - Proposed Surface Water Lateral Drain and Demarcation Chamber with Backdrop
 - Proposed Private Foul Water Drain and Inspection Chamber (100mm Ø at 1 in 80 unless otherwise specified)
 - Proposed Private Foul Water Drain and Inspection Chamber (100mm Ø at 1 in 40 at top of run and 1 in 80 minimum elsewhere unless specified otherwise)
 - Proposed Foul Water Muri Inspection Chamber
 - Proposed Foul Water Direct Connection
 - Proposed Highway Drain and 150mm Ø Connection
 - Proposed Easement
- NOTES:**
1. All statutory undertakers equipment in roadway and verges to be located and directed before work commences.
 2. A pedestrian route through the works shall be maintained at all times and clearly defined by safety barriers and night warning lights.
 3. The contractor is obliged to obtain necessary road opening and/or sewer connection licences prior to commencement of the works.
 4. All statutory undertakers cables and pipes shall be set up on all drainage drainage construction.
 5. All statutory undertakers cables and frames to be adjusted to suit new coverings where prior to surfacing.
 6. All existing gullies and drain runs to be cleaned of debris and high pressure water jetted prior to commencement of works.
 7. All excavation works shall be carried out in accordance with Sewer Section Guidelines (SSG) / CCG and the Water Authority's requirements and standards.
 8. All drainage works shall be adopted by the Water Authority to be approved prior to commencement on site.
 9. All road standing and impervious areas outside the adopted highway boundary to be excavated and adopted in accordance with the drainage system and discharged into the surface water sewer before water is returned to the public highway.
 10. Gullies should not be located in the area of dropped kerbs.
 11. The maximum size of manholes with more than one connection in them may need to be increased and inventory to be increased to 1000mm.
 12. Sewers to be laid in Class B bedding (100mm granular bed and amount). Where depth of cover to top of the sewer is less than 1000mm, the bedding shall be increased to 1000mm. Where the depth of cover is greater than 1000mm, a concrete slab should be provided above granular bed and amount. Refer to Sewer Section Guidelines (SSG) / CCG for protection measures.
 13. Gullies bedding for gullies shall consist of aggregate from natural sources complying with the requirements of BS 882 (used in accordance with BS 595).
 14. All pipes with a diameter larger or equal to 375mm shall be concrete. Pipes with a diameter less than 375mm shall be day to duct iron.
 15. Manholes may be cast in concrete for manholes shall have suitable mechanical parts. Pipes for foul sewers and surface water sewers shall comply with current requirements of BS EN205 and BS EN206 and BS EN 124 with 150mm Ø and 100mm Ø.
 16. Manhole covers shall have a clear opening of 375mm and shall be Class D205 to BS EN 124 with 150mm Ø and 100mm Ø.
 17. The ground must be filled and consolidated under the supervision and to the satisfaction of the Water Authority before any work is carried out.
 18. The Water Authority is not obliged to accept final drainage runoff into the public sewer network or acceptable drainage system (sewer or otherwise). An alternative method of disposal of the final drainage runoff shall be provided and approved by the Water Authority. Land Draining Services will report to the approval of the Water Authority drainage runoff.
 19. Cover plates over the 150mm Ø gullies shall be provided by the Water Authority. Where the cover plate of the manhole is to be offset to that of the cover and frame, a bedding bearing shall be provided above the cover plate to bring the cover to the level of the gully. The Water Authority shall be notified of any such cover plate offset.
 20. Single Resource consent (SRC) and/or sewer connection products must be used or a laboratory report provided showing test procedures are not necessary.
 21. The bedding shall be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
 22. Sewers must have 5m clearance from trees and hedges. Refer to Sewer Section Guidelines (SSG) / CCG for restrictions on tree planting adjacent to sewers.
 23. All pipe work to be in accordance with current building regulations.
 24. Drains passing through buildings to be protected with lead cover.
 25. No building to be placed within 3.0m of an adoptable sewer.
 26. Where adoptable pipes have 150mm concrete bed and surround provided, all pipes to be provided with 150mm concrete bed.
 27. No services to be laid over or within 1.0m of an adoptable sewer.
 28. Private drainage connections not direct to manholes are to be made via a 45 degree junction and not sockets.
 29. All bedding and backfill material to conform to the requirements of Water Industry Specification 4-02-02 (Table A2).
 30. Any proposed sewers located within 5 metres of the public sewer shall be ducts for pipe joint work.

DEMARCATION CHAMBERS SCHEDULES

Surface Water	Foul Water
Ref. (SWS)	Ref. (FWS)
Cover Level	Cover Level
Invert Level	Invert Level
Depth to Invert (m)	Depth to Invert (m)
Chamber Type	Chamber Type
Chamber Size	Chamber Size
Chamber Length (m)	Chamber Length (m)
Chamber Width (m)	Chamber Width (m)
Chamber Material	Chamber Material
Chamber Inlet	Chamber Inlet
Chamber Outlet	Chamber Outlet
Chamber Inlet Gradient	Chamber Inlet Gradient
Chamber Outlet Gradient	Chamber Outlet Gradient
01	01
02	02
03	03
04	04
05	05
06	06
07	07
08	08
09	09
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19

Demarcation Chambers to be WATSON OSMA ULTRABRIK POLYPROPYLENE Inspection Chambers
 Demarcation Chambers to be WATSON OSMA ULTRABRIK POLYPROPYLENE Inspection Chambers
 Lateral Drains to be WATSON OSMA ULTRABRIK UP Pipes
 Lateral Drains to be WATSON OSMA ULTRABRIK UP Pipes
 Demarcation chambers located in non-trunked areas less than 150mm granular bed and surround required
 Demarcation chambers located in single private drives to receive 150mm Gullies concrete bed and surround will be required
 Access Opening restricted to 300mmØ or 300 x 300mm if depth to surface is greater than 1.0m
 DEMARCATION CHAMBERS AND LATERAL DRAINS TO BE ADOPTED

ADDITIONAL INFORMATION:

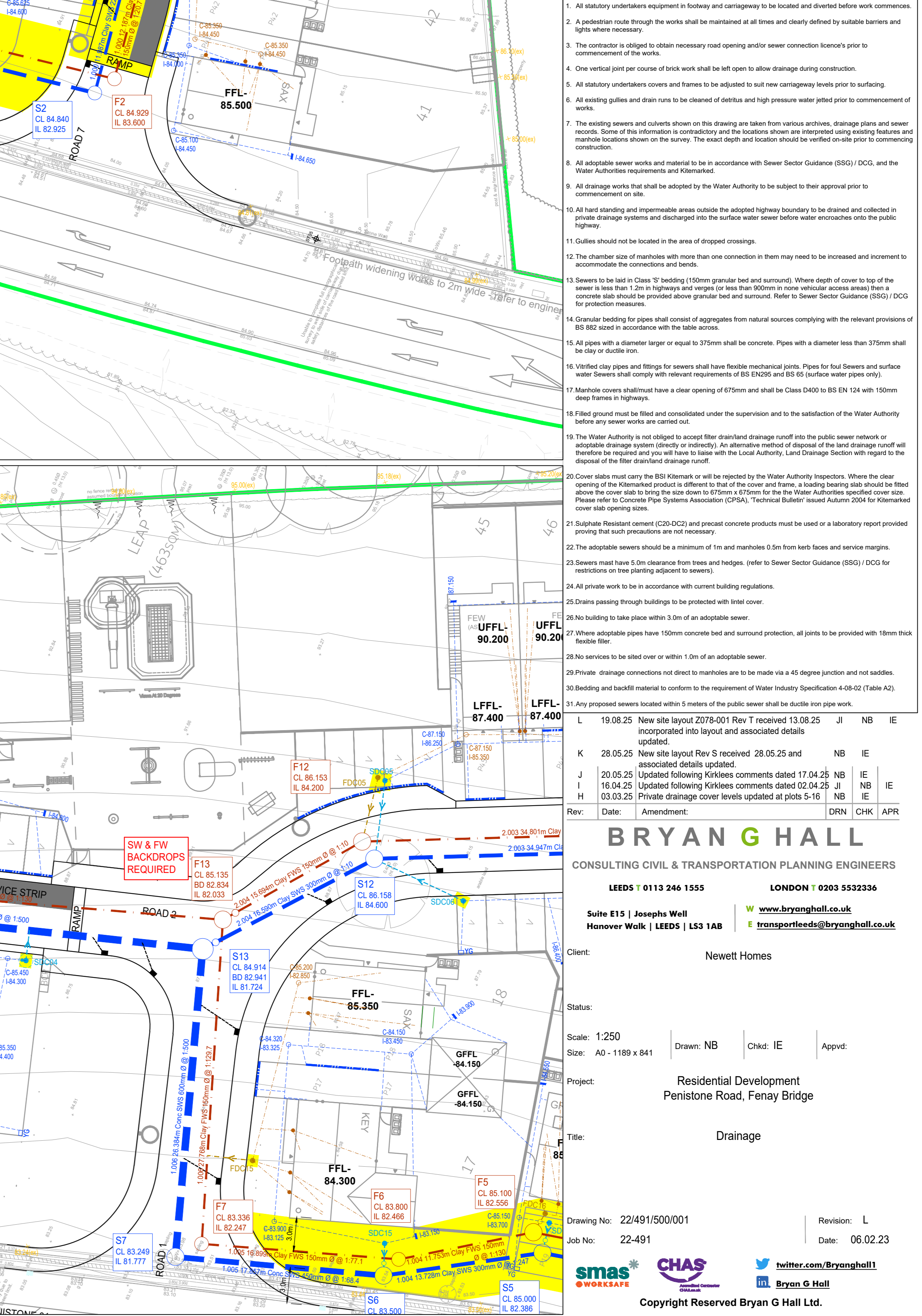
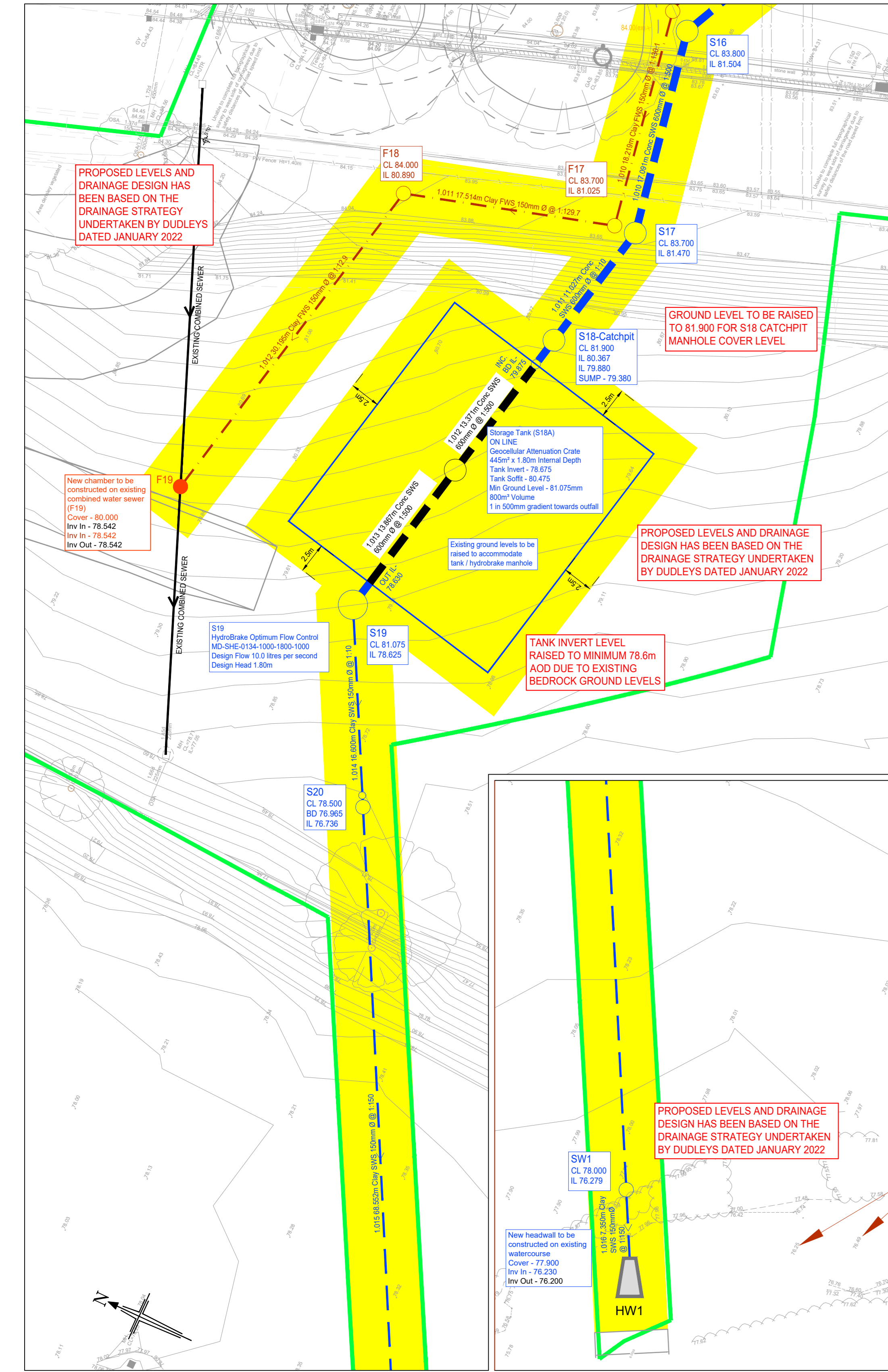
1. KIRKLEES COUNCIL REQUEST THAT A 'CONSTRUCTION COMPLIANCE CERTIFICATE' TOGETHER WITH 'AS BUILT' DRAWINGS ARE SUBMITTED UPON THE COMPLETION OF THE WORKS. IN ADDITION, ALL REFERENCES TO 'ITEM' MUST BE ACCOMPANIED WITH THE CORRESPONDING BRITISH STANDARD FOR THEM TO BE MEANINGFUL AND RELEVANT.
2. SPECIFICATION OF ALL COVERS PRECAST CONCRETE MANHOLE CIRCULAR VERTICAL UNITS AND COVER SLABS INCLUDING ALL ANCILLARY CONCRETE PRODUCTS ARE IN FULL COMPLIANCE WITH BS EN 1917 & BS 5913-1:1.
3. DESIGN CHEMICAL CLASS (DC-CLASS) OF CONCRETE IN THE PRECAST CONCRETE MANHOLE CIRCULAR VERTICAL UNITS AND COVER SLABS INCLUDING ALL ANCILLARY CONCRETE PRODUCTS FOR AN INTENDED WORKING LIFE OF 100 YEARS (M30) IN ACCORDANCE WITH BS 8001-2016-A2-2019 TABLE A.5. (THIS IS INTENDED TO ENSURE THAT ALL CIRCULAR COVERS MANHOLES WITH DC-CLASS AS 'STRUCTURES' INSTALLED IN THE HIGHWAY, WILL COMPLY WITH THE SAME MANDATORY DURABILITY REQUIREMENT AS OTHER HIGHWAY STRUCTURES).

KIRKLEES COUNCIL (LFA) NOTES:
 ALL UNAPPROVED WATER COURSES OR DRAINAGE FLOW ON SITE SHOULD BE IDENTIFIED TO KIRKLEES COUNCIL, post:land@kirklees.gov.uk IMMEDIATELY WITH PROPOSALS FOR THE MANAGEMENT INCLUDING THE COLLECTION OR DIVERSION OF SUCH FLOW.

THESE ARE NO LAND DRAINAGE FEATURES PRESENT ON SITE.

THERE ARE NO PRIVATE PIPES LOCATED CLOSE TO THE SECTION 38 HIGHWAY BOUNDARY IN CONNECTION WITH LAND DRAINAGE OR UNAPPROPRIATE SOILS FEATURES THAT REQUIRE MAINTAINING BY THIRD PARTIES.

A CONSTRUCTION PHASE SURFACE WATER MANAGEMENT STRATEGY WILL BE REQUIRED TO BE APPROVED BY KIRKLEES COUNCIL.



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Client: Newnet Homes

Status: Approved Issued Not Started

Scale: 1:250

Size: A2 - 1189 x 841 | Drawn: NB | Check: IBE | Approv: []

Project: Residential Development
 Penistone Road, Fenby Bridge

Title: Drainage

Drawing No: 22-491/000/01 | Revision: L
 Job No: 22-491 | Date: 06.02.23

smas | CHAS | Bryon G Hall

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