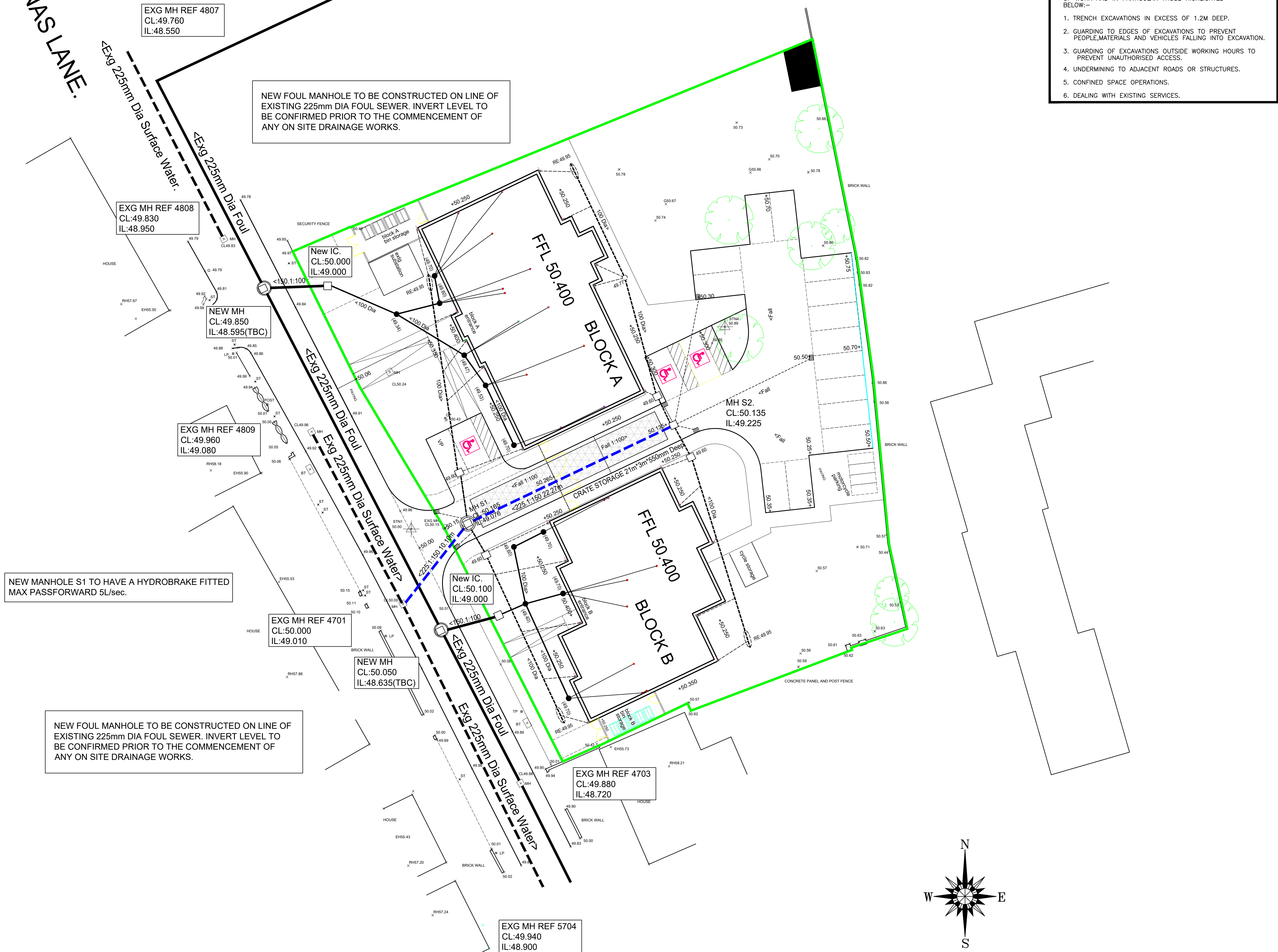


DINAS LANE.



G.D.M. REGULATIONS 2015

ALL DESIGN WORK HAS BEEN CARRIED OUT WITH HEALTH AND SAFETY ASPECTS GIVEN FULL CONSIDERATION. WHEREVER POSSIBLE RISKS HAVE BEEN ELIMINATED FROM THE DESIGN. HOWEVER DUE TO THE VERY NATURE OF THIS TYPE OF WORK IT IS NOT POSSIBLE TO REMOVE ALL THE RISKS FROM THE DESIGN.

ONLY COMPETENT CONTRACTORS WHO HAVE A VALID SAFETY POLICY ARE TO BE EMPLOYED. THEY SHOULD ALSO PROVIDE SATISFACTORY RESPONSES AT TENDER STAGE AS TO THE MANNER IN WHICH THEY WILL DEAL WITH THE ELEMENTS OF RISK INVOLVED IN THIS TYPE OF WORK AND IN PARTICULAR THOSE HIGHLIGHTED BELOW:-

1. TRENCH EXCAVATIONS IN EXCESS OF 1.2M DEEP.
2. GUARDING TO EDGES OF EXCAVATIONS TO PREVENT PEOPLE, MATERIALS AND VEHICLES FALLING INTO EXCAVATION.
3. GUARDING OF EXCAVATIONS OUTSIDE WORKING HOURS TO PREVENT UNAUTHORISED ACCESS.
4. UNDERMINING TO ADJACENT ROADS OR STRUCTURES.
5. CONFINED SPACE OPERATIONS.
6. DEALING WITH EXISTING SERVICES.

NOTES

All sewer works to comply with "Sewer Sector Guidance" (SSG).

All pipes to have class S granular bed and surround. For Gully's see LA details.

All sewer branches and branch connections to be backfilled with suitable material in 225mm layers and well compacted type of backfill material to be agreed with adopting Authority.

All manholes to be constructed in accordance with United Utilities standard details.

All adoptable sewers:

- 150 dia to be Hepeed or similar approved
- 225 dia to be Hepeed or similar approved
- 300 dia to be Hepeed or concrete class "M".

Connections from main sewers to first inspection chamber to be 150 dia Foul and 150 dia Surface Water. Ditto gully connections.

All connections to sewers to be junctions and not saddles.

Manhole covers and frames to be ductile iron 675 x 675 clear square opening BS497 Grade "A" with ISI watermark on cover.

Manhole covers in garden areas to be as above but grade "B".

First pipe out of manhole to be max. 600mm long connected to a short rocker pipe all as per "SSG".

All pipe diameters given are internal including rising mains.

All invert levels of existing Foul and Surface Water systems are to be confirmed prior to the commencement of any on site drainage works. Any discrepancy in levels is to be reported immediately to Stephen Johnson Ltd.

PRIVATE DRAINAGE NOTES

All house drains to be 100mm Superstave laid to a minimum gradient of 1:60 unless shown otherwise. All pipes laid on type "A" granular bedding.

All rainwater downspouts to discharge to trapped gullies. All foul gullies to be trapped back inlet type.

Should the contractor wish to use a plastic drainage system (this is to be checked if acceptable) it is to be installed in accordance with manufacturers recommendations and in compliance with the latest Building Regulations.

Inspection chambers in driveways to have grade "B" medium duty covers.

Connections to main sewers to be 150mm dia Foul and 150mm dia Surface Water.

Inspection chambers up to 600mm to be Polypropylene 315mm Dia.

Inspection chambers up to 1000mm to be Polypropylene 450mm Dia.

Inspection chambers over 1000mm but less than 1500mm to be PC concrete sections, 750x675

Inspection chambers over 1500mm to be 1200mm Dia PC concrete manhole rings

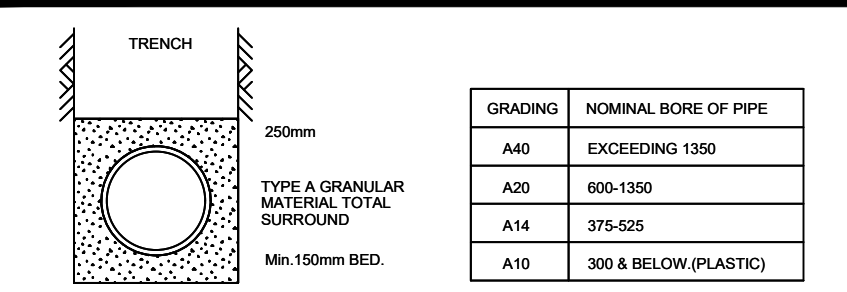
All drainage to comply with current Building Regulations Part H.

PRIVATE DRAINAGE KEY

- SOIL AND WASTE PIPE
- WASTE GULLY (BACK INLET TYPE)
- INSPECTION CHAMBER
- (1:60) COMBED INVERT LEVEL (METRES)
- RAINWATER PIPE
- RISING PIPE

FOR ALL RWP & SWP'S PLEASE REFER TO THE SPECIFIC HOUSE / APARTMENT BLOCK PLAN FOR INFORMATION

ALL MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH UNITED UTILITIES PLC. DEVELOPER SERVICE CONSTRUCTION DETAILS.



NEW SURFACE WATER SYSTEM TO BE DESIGNED TO ALLOW A PASSFORWARD OF 5L/sec AS PER THE FLOOD RISK ASSESSMENT (FRA).

THE SYSTEM TO BE DESIGNED TO ACCOMMODATE A RANGE OF STORMS FROM 1 IN 30 YEAR TO 1 IN 100 YEAR + 40% FOR CLIMATE CHANGE.

THE DRAINAGE SYSTEM WILL REMAIN PRIVATE AND MAINTAINED BY A MANAGEMENT COMPANY.

Rev	Description	Date
Stephen Johnson Ltd CIVIL & INFRASTRUCTURE ENGINEER 11 SANDYWAY CLOSE, WESTHOUGHTON, BOLTON, BL5 3LW. TEL:- 07714 844667 EMAIL:- stephen@sjohnson.one		
DINAS LANE LIVERPOOL. L36 2NL		
PRIMA GROUP.		
PROPOSED DRAINAGE LAYOUT.		
Dwg No	REV. ..	Drawn SMJ
126/21/D100		Date April 2021
		Scale 1:200 @ A1