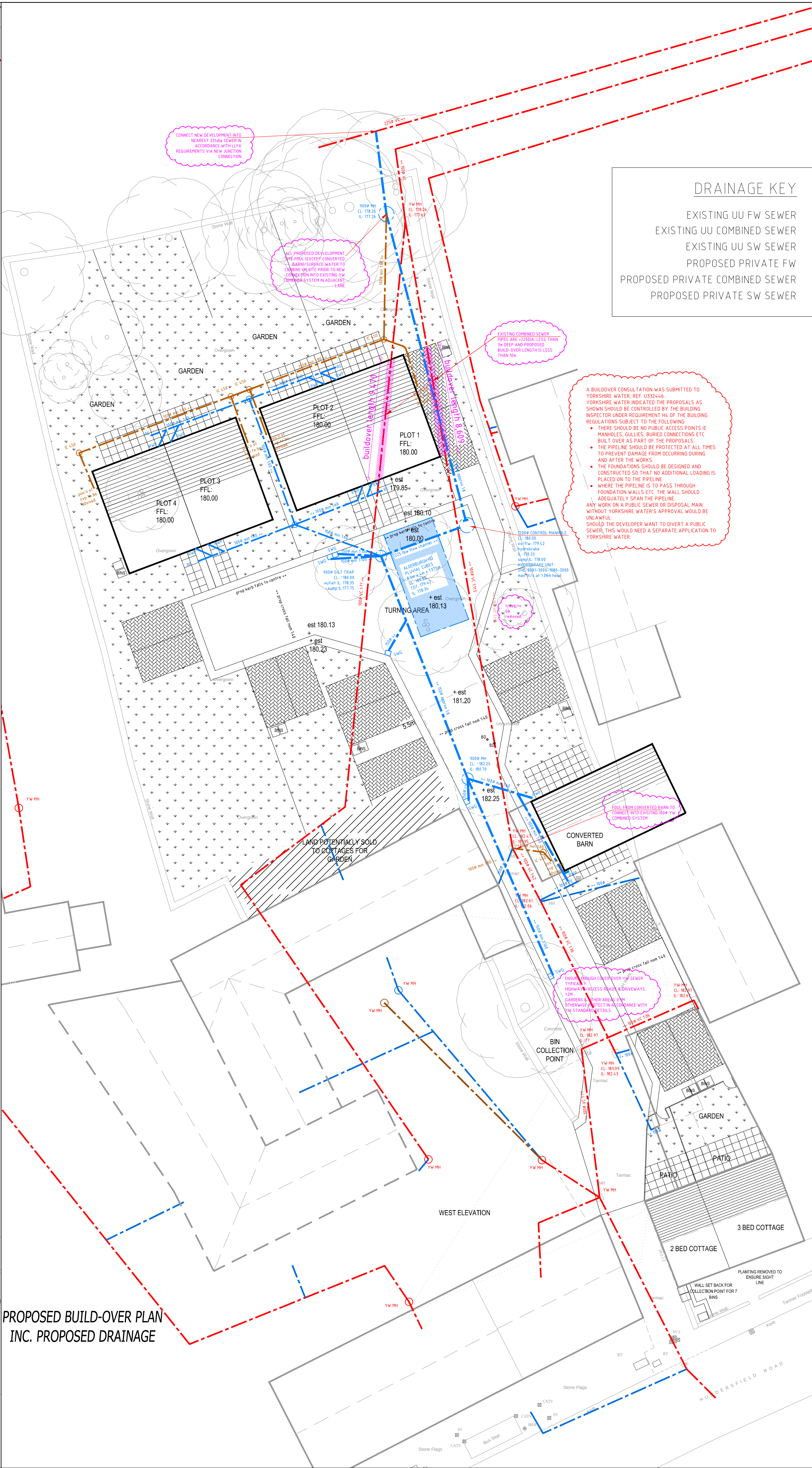
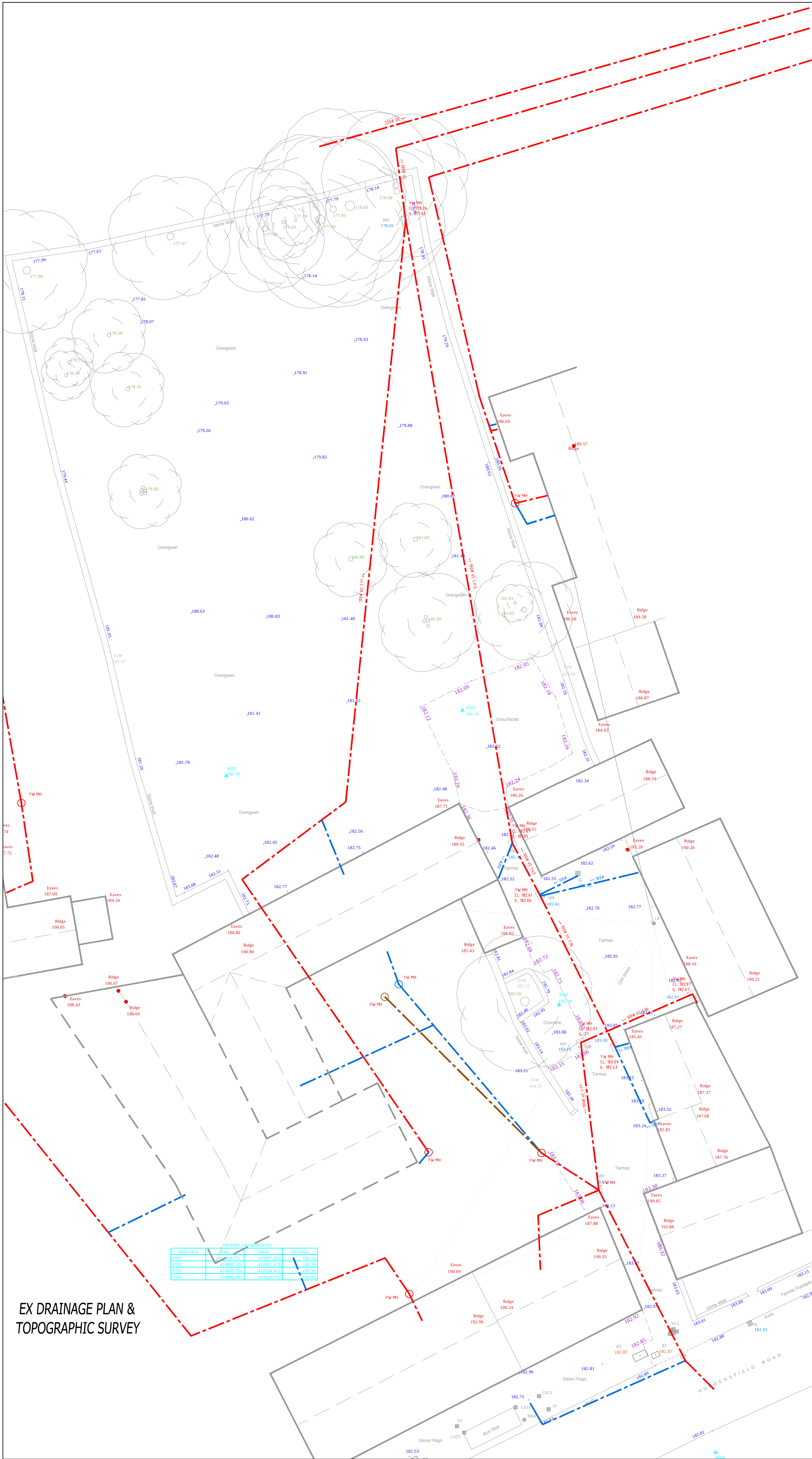




GENERAL NOTES

0.0 THIS DRAWING IS COPYRIGHT & IS SENT TO YOU IN CONFIDENCE IF IT MUST NOT BE COPIED, USED OR DISCLOSED, IN WHOLE OR IN PART, TO THIRD PARTIES WITHOUT WRITTEN PERMISSION. IF REMAINING THE PROPERTY OF TJBAA AND MUST BE RETURNED ON REQUEST.

0.1 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACTUAL DOCUMENTS.

0.2 All dimensions in mm unless s/w stated.

0.3 All levels to SITE DATUM.

0.4 Refer to architects details for SBN.

0.5 Contractor to confirm SBN/SPL prior to ordering materials/ construction.

0.6 Do not scale. The contractor must verify all dimensions prior to commencing shop drawings or work on site.

0.7 All work to be carried out in accordance with CDM 2015.

0.8 HIGHWAY/ROADS EXTERNAL WORKS.

1.0 N/A.

2.0 DRAINAGE

2.1 To be read in conjunction with TJB Associates drainage calculations.

2.2 Manhole cover levels indicative only. To be adjusted to suit final finish site levels.

2.3 Private Sewers/manholes to be constructed in accordance with the water authorities sewers for adoption (as applicable). S. Regs. Approved Doc. H, and BS EN 752-4.

2.4 Class 5 granular bed and surround to all new sewers.

2.5 Adoptable Sewers to be constructed in strict accordance with Yorkshire Water DEVELOPER CONSTRUCTION DETAILS (DESIGN & CONSTRUCTION GUIDANCE).

2.6 New sewers must be protected to Yorkshire Water standard details if:

- adoptable assets with less than 12m of cover under highways or driveways;
- private assets with less than 100mm of cover under private driveways.

2.7 All cover including pipes and manholes to be sulphate resisting unless otherwise agreed in writing by eng.

3.0 FLOOD WATER DRAINAGE

3.1 Foul water falls must follow the following in accordance with b.regs and Sewers For Adoption

- 1000 at gradients not less than 180 where at least 1 WC is connected and not less than 140 where no WC is connected.
- 1500 foul gradients to be not less than 150 with at least 5 WCs connected.

4.0 SURFACE WATER DRAINAGE

4.1 SW falls must follow the following in accordance with b.regs and Sewers For Adoption:

- 100 at gradients not less than 180.
- 1500 foul gradients to be not less than 100.

4.2 Alderburgh pluvial cubes to be heavy duty, and constructed in strict accordance with manufacturers details & requirements.

5.0 MANHOLES

5.1 Manhole diameters to be in accordance with SFA Clause 2.9.3, and according to largest manhole pipe diameter:

Pipe dia	MH dia
375	1200
375-700	1500
750-900	1800

5.2 Breaker pipes for use 5.6.2.1 to be the following lengths:

Length	Length
150-6000 0.6m	400-1000 1.0m
1500-125m	

5.3 Inspection chambers/manholes to have min 150mm granular surround in soft landscaping areas and not less than 150mm surround to driveways/car parks.

5.4 Manhole covers and frames shall comply with the relevant provisions of BS EN 124 and shall be of non-rising design which does not rely on the use of cushion mats.

5.5 Cover sizes and access in accord with SFA Table 2.3.3 adoptable manholes specifically in accordance with YW requirements.

5.6 Cover strength (clause 5.7.1.1) comprising minimum strength for location as follows:

Location	Class
Roads/Highways	D400 Vehicle Impact
Car Parks	C250 Light Vehicle Loading
Footway/Driveway	B125 Occasional vehicle loading
Gardens	A15 Pedestrian & cycle ONLY

5.7 All manhole covers shall be the non-venting type (unless indicated otherwise) and shall have closed keyways.

5.8 Manhole frames (clause 5.7.2) to be set to level, bedded and haunched externally over the base and sides of the frame in mortar, in accordance with the manufacturers instructions. The frames shall be sealed on not less than 2 courses of class B engineering brick, on precast concrete masonry units or on precast concrete cover frame sealing rings to regulate the distance between the top of the cover and the top ring to be greater than 475mm. A mortar filler shall be provided where the corners to an opening in a slab are chamfered and the brickwork is not flush with the edges of the opening.

DRAINAGE KEY

EXISTING UU FW SEWER

EXISTING UU COMBINED SEWER

EXISTING UU SW SEWER

PROPOSED PRIVATE FW

PROPOSED PRIVATE COMBINED SEWER

PROPOSED PRIVATE SW SEWER

EX DRAINAGE PLAN & TOPOGRAPHIC SURVEY

Reference	Area	North	Eastings
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