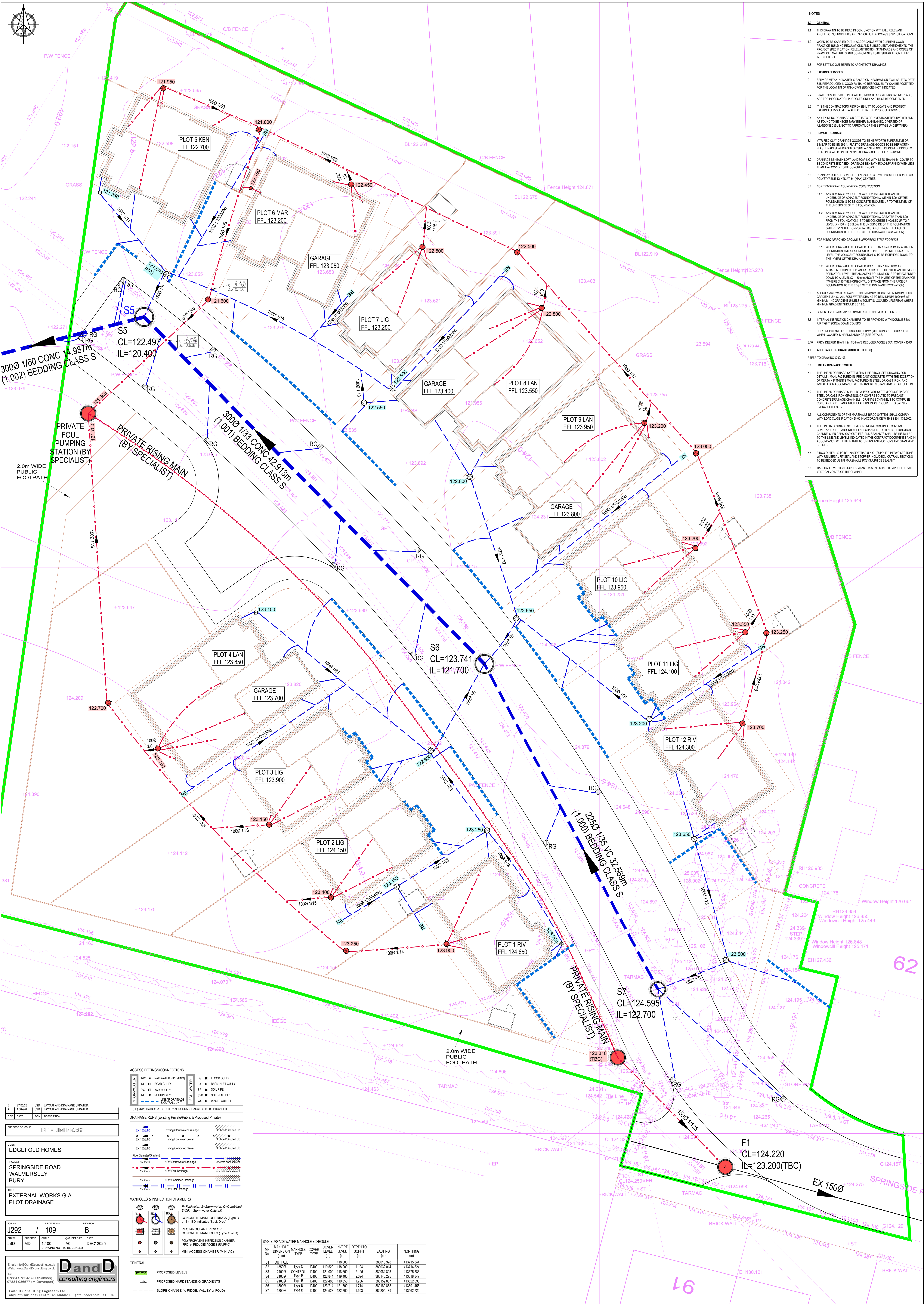


- NOTES -
- 1.0 GENERAL
- 1.1 THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALIST DRAWINGS & SPECIFICATIONS.
- 1.2 WORK TO BE CARRIED OUT IN ACCORDANCE WITH CURRENT GOOD PRACTICE, BUILDING REGULATIONS AND SUBSEQUENT AMENDMENTS, THE PROJECT SPECIFICATION, RELEVANT BRITISH STANDARDS AND CODES OF PRACTICE. MATERIALS AND COMPONENTS TO BE SUITABLE FOR THEIR INTENDED USE.
- 1.3 FOR SETTING OUT REFER TO ARCHITECTS DRAWINGS.
- 2.0 EXISTING SERVICES
- 2.1 SERVICE MEDIA INDICATED IS BASED ON INFORMATION AVAILABLE TO DATE & IS REPRODUCED IN GOOD FAITH. NO RESPONSIBILITY CAN BE ACCEPTED FOR THE LOCATION OF UNKNOWN SERVICES NOT INDICATED.
- 2.2 STATUTORY SERVICES INDICATED (PRIOR TO ANY WORKS TAKING PLACE) ARE FOR INFORMATION PURPOSES ONLY AND MUST BE CONFIRMED.
- 2.3 IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND PROTECT EXISTING SERVICE MEDIA AFFECTED BY THE PROPOSED WORKS.
- 2.4 ANY EXISTING DRAINAGE ON SITE IS TO BE INVESTIGATED/SURVEYED AND AS FOUND TO BE NECESSARY EITHER MAINTAINED, DIVERTED OR ABANDONED (SUBJECT TO APPROVAL OF THE SEWAGE UNDERTAKER).
- 3.0 PRIVATE DRAINAGE
- 3.1 VITRIFIED CLAY DRAINAGE GOODS TO BE NEWPORT SUPERSLAVE OR SIMILAR TO BS 6911. PLASTIC DRAINAGE GOODS TO BE NEWPORT PLASTIDRAIN SUPERSEVERAN OR SIMILAR, STRENGTH CLASS 3 ACCORDING TO BE AS INDICATED ON THE TYPICAL DRAINAGE DETAILS DRAWING.
- 3.2 DRAINAGE BENEATH SOFT LANDSCAPING WITH LESS THAN 6m COVER TO BE CONCRETE ENCASED. DRAINAGE BENEATH ROADS/PARKING WITH LESS THAN 1m COVER TO BE CONCRETE ENCASED.
- 3.3 DRAINS WHICH ARE CONCRETE ENCASED TO HAVE 18mm FIBREBOARD OR POLYSTYRENE JOINTS AT 5m (MAX) CENTRES.
- 3.4 FOR TRADITIONAL FOUNDATION CONSTRUCTION
- 3.4.1 ANY DRAINAGE WHOSE EXCAVATION IS LOWER THAN THE UNDERSIDE OF ADJACENT FOUNDATION IS TO BE CONCRETE ENCASED UP TO THE LEVEL OF THE UNDERSIDE OF THE FOUNDATION.
- 3.4.2 ANY DRAINAGE WHOSE EXCAVATION IS LOWER THAN THE UNDERSIDE OF ADJACENT FOUNDATION IS TO BE CONCRETE ENCASED UP TO A LEVEL 100mm BELOW THE UNDERSIDE OF THE FOUNDATION (WHERE X IS THE HORIZONTAL DISTANCE FROM THE FACE OF FOUNDATION TO THE EDGE OF THE DRAINAGE EXCAVATION).
- 3.5 FOR VIBRO IMPROVED GROUND SUPPORTING STRAP FOOTINGS
- 3.5.1 WHERE DRAINAGE IS LOCATED LESS THAN 1m FROM AN ADJACENT FOUNDATION AND AT A GREATER DEPTH THAN THE VIBRO FORMATION LEVEL, THE ADJACENT FOUNDATION IS TO BE EXTENDED DOWN TO A LEVEL 100mm ABOVE THE INVERT OF THE DRAINAGE (WHERE X IS THE HORIZONTAL DISTANCE FROM THE FACE OF FOUNDATION TO THE EDGE OF THE DRAINAGE EXCAVATION).
- 3.5.2 WHERE DRAINAGE IS LOCATED MORE THAN 1m FROM AN ADJACENT FOUNDATION AND AT A GREATER DEPTH THAN THE VIBRO FORMATION LEVEL, THE ADJACENT FOUNDATION IS TO BE EXTENDED DOWN TO A LEVEL 100mm ABOVE THE INVERT OF THE DRAINAGE (WHERE X IS THE HORIZONTAL DISTANCE FROM THE FACE OF FOUNDATION TO THE EDGE OF THE DRAINAGE EXCAVATION).
- 3.6 ALL SURFACE WATER DRAINS TO BE MINIMUM 100mm AT MINIMUM 1:100 GRADIENT UNLESS ALL FLOOR WATER DRAINS TO BE MINIMUM 100mm AT MINIMUM 1:40 GRADIENT UNLESS A TOILET IS LOCATED UPSTREAM WHERE MINIMUM GRADIENT SHOULD BE 1:80.
- 3.7 COVER LEVELS ARE APPROXIMATE AND TO BE VERIFIED ON SITE.
- 3.8 INTERNAL INSPECTION CHAMBERS TO BE PROVIDED WITH DOUBLE SEAL AIR TIGHT SCREW DOWN COVERS.
- 3.9 POLYPROPYLENE ICES TO INCLUDE 100mm (MIN) CONCRETE BURROUND WHEN LOCATED IN WASTEDRAINS (SEE DETAILS).
- 3.10 PIPES DEEPER THAN 1.2m TO HAVE REDUCED ACCESS (RA) COVER -SS500.
- 4.0 ADOPTABLE DRAINAGE (UNITED UTILITIES)
- REFER TO DRAWING 220103.
- 5.0 LINEAR DRAINAGE SYSTEM
- 5.1 THE LINEAR DRAINAGE SYSTEM SHALL BE BRICD (SEE DRAWING FOR DETAILS). MANUFACTURED IN PRE-CAST CONCRETE, WITH THE EXCEPTION OF CERTAIN FITMENTS MANUFACTURED IN STEEL OR CAST IRON, AND INSTALLED IN ACCORDANCE WITH MARSHALLS STANDARD DETAIL SHEETS.
- 5.2 THE LINEAR DRAINAGE SHALL BE A TWO PART SYSTEM CONSISTING OF STEEL OR CAST IRON GRATE/GRIDS OR COVERS BOLTED TO PRE-CAST CONCRETE DRAINAGE CHANNELS. DRAINAGE CHANNELS TO COMPILE CONSTANT DEPTH AND INBUILT FALL UNITS AS REQUIRED TO SATISFY THE WORKABLE DESIGN.
- 5.3 ALL COMPONENTS OF THE MARSHALLS BRICD SYSTEM SHALL COMPLY WITH LOAD CLASSIFICATION D400 IN ACCORDANCE WITH BS EN 1433:2002.
- 5.4 THE LINEAR DRAINAGE SYSTEM COMPRISING GRATE/GRIDS, COVERS, CONSTANT DEPTH AND INBUILT FALL CHANNELS, OUTFALLS, JUNCTION CHANNELS, END CAPS, GAP OUTLETS, AND SEALANTS SHALL BE INSTALLED TO THE LINE AND LEVELS INDICATED IN THE CONTRACT DOCUMENTS AND IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS AND STANDARD DETAILS.
- 5.5 BRICD OUTFALLS TO BE NO SKEWTRAP U.N.O. (SUPPLIED IN TWO SECTIONS WITH UNDERBUTT SEAL AND STOPPER INCLUDED). OUTFALL SECTIONS TO BE BEDDED USING MARSHALLS POLYURETHANE SEALANT.
- 5.6 MARSHALLS VERTICAL JOINT SEALANT: M-SEAL SHALL BE APPLIED TO ALL VERTICAL JOINTS OF THE CHANNEL.



ACCESS FITTINGS/CONNECTIONS

STORMWATER	RW	RAINWATER PIPE (LINO)	FG	FLOOR GULLY
	RG	ROAD GULLY	BIG	BACK INLET GULLY
	YD	YARD GULLY	SP	SOL PIPE
	RE	ROOFING EYE	SVP	SOL VENT PIPE
	WC	WASTE OUTLET	WO	WASTE OUTLET

FOULWATER

RG, RE, WC, YD, SP, SVP, WO

DRAINAGE RUNS (Existing Private/Public & Proposed Private)

EX 1500/90 Existing Stormwater Drainage

EX 1500/75 Existing Combined Sewer

EX 1500/90 Existing Combined Sewer

Pipe Diameter/Gradient

1500/90 NEW Stormwater Drainage

1500/75 NEW Foul Drainage

1500/75 NEW Combined Drainage

1500/75 NEW Foul Drainage

MANHOLES & INSPECTION CHAMBERS

F=Foulwater, S=Stormwater, C=Combined

RG=Rainwater Gully, SP=Stormwater Gully

CONCRETE MANHOLE RINGS (Type B or E) - BD indicates 'Back Drop'

RECTANGULAR BRICK OR CONCRETE MANHOLES (Type C or D)

POLYPROPYLENE INSPECTION CHAMBER (PPIC) - REDUCED ACCESS (RA) PIPES

MINI ACCESS CHAMBER (MINI AC)

GENERAL

PROPOSED LEVELS

PROPOSED HARDSTANDING GRADIENTS

SLOPE CHANGE (in RIDGE, VALLEY or FOLD)

ST04 SURFACE WATER MANHOLE SCHEDULE	MANHOLE TYPE	COVER LEVEL (m)	INVERT LEVEL (m)	DEPTH TO SOFFIT (m)	EASTING (m)	NORTHING (m)
S1	OUTFALL	118.00	118.00	0.00	419715.944	419715.944
S2	1500	118.00	118.00	0.00	419715.944	419715.944
S3	2400	121.00	118.65	2.35	380094.895	419675.583
S4	2100	122.84	119.40	3.44	380145.285	419615.947
S5	2100	122.48	119.65	2.83	380158.807	419620.080
S6	1500	123.74	121.70	2.04	380189.858	419591.455
S7	1200	124.52	122.70	1.82	380205.189	419592.720