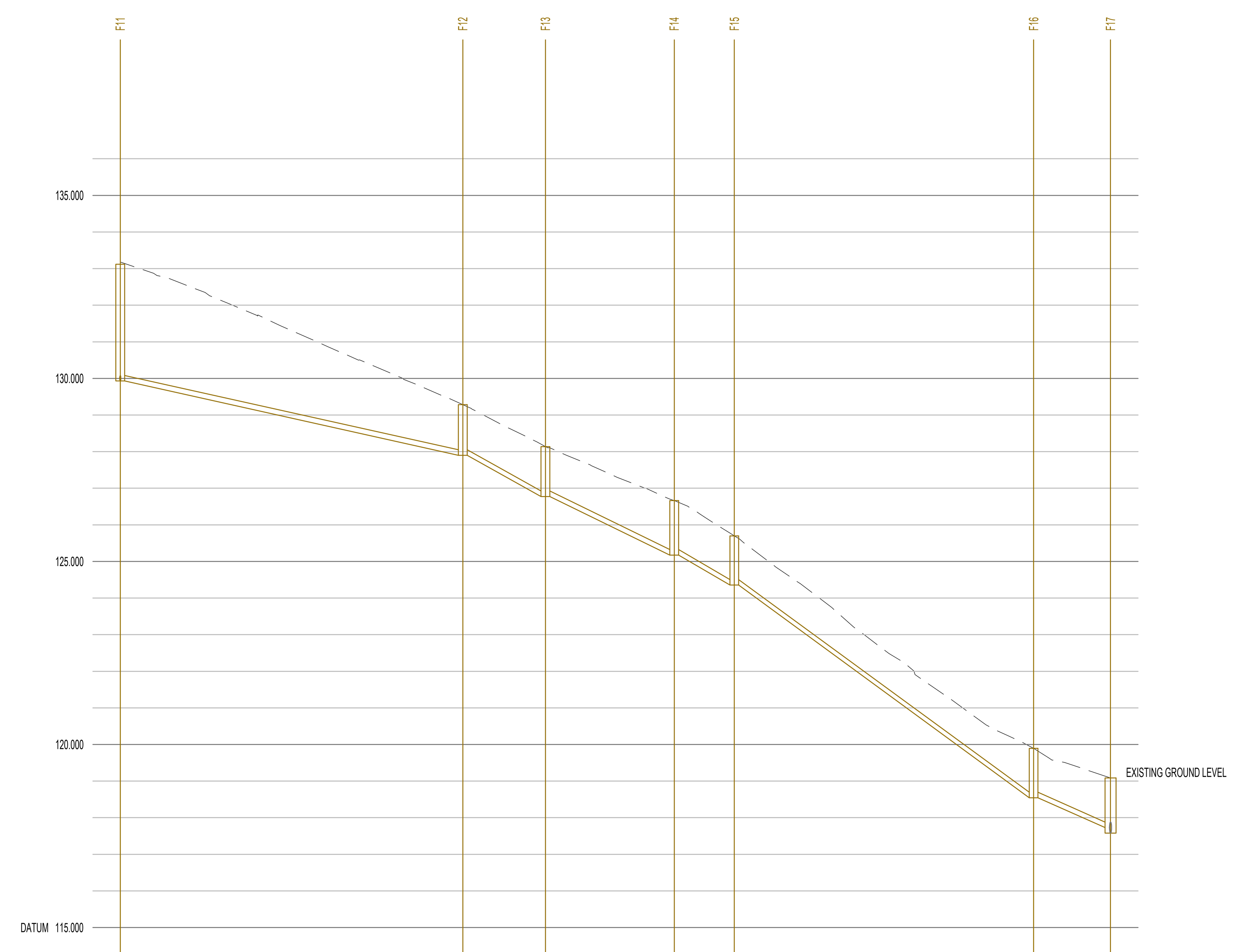
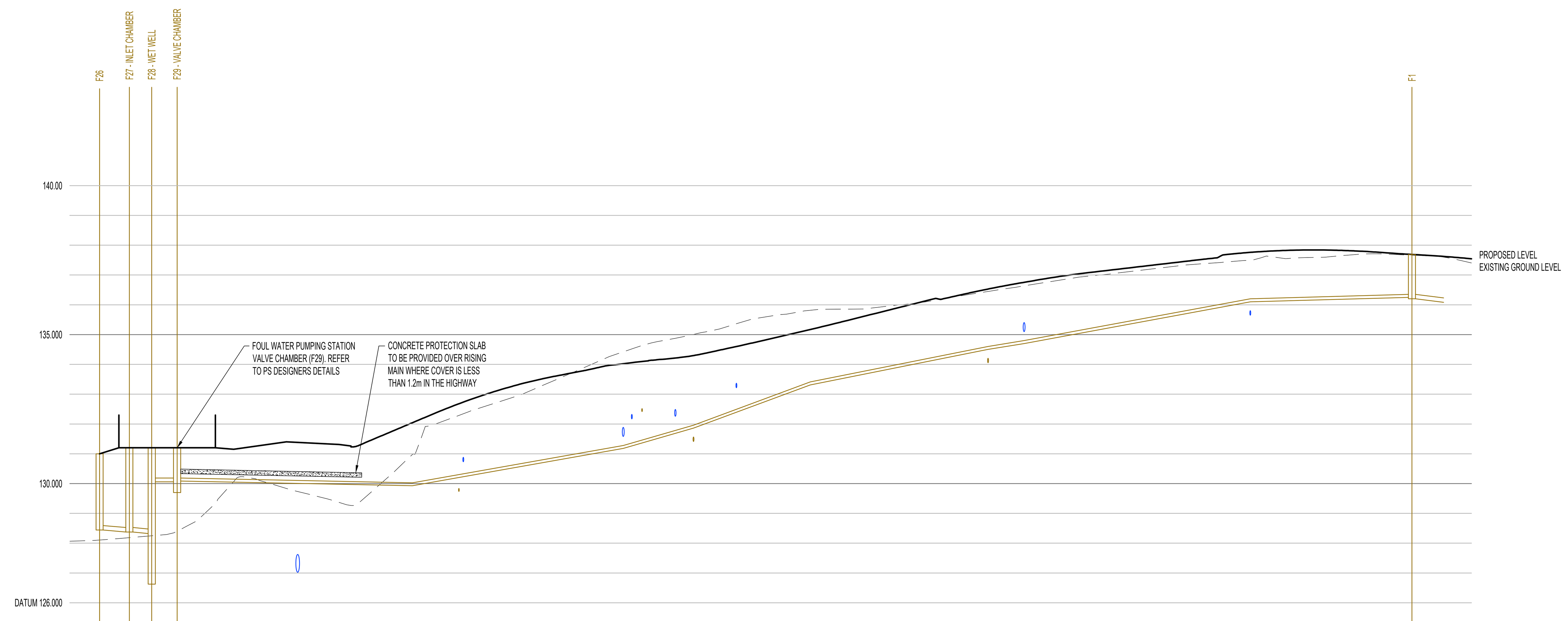


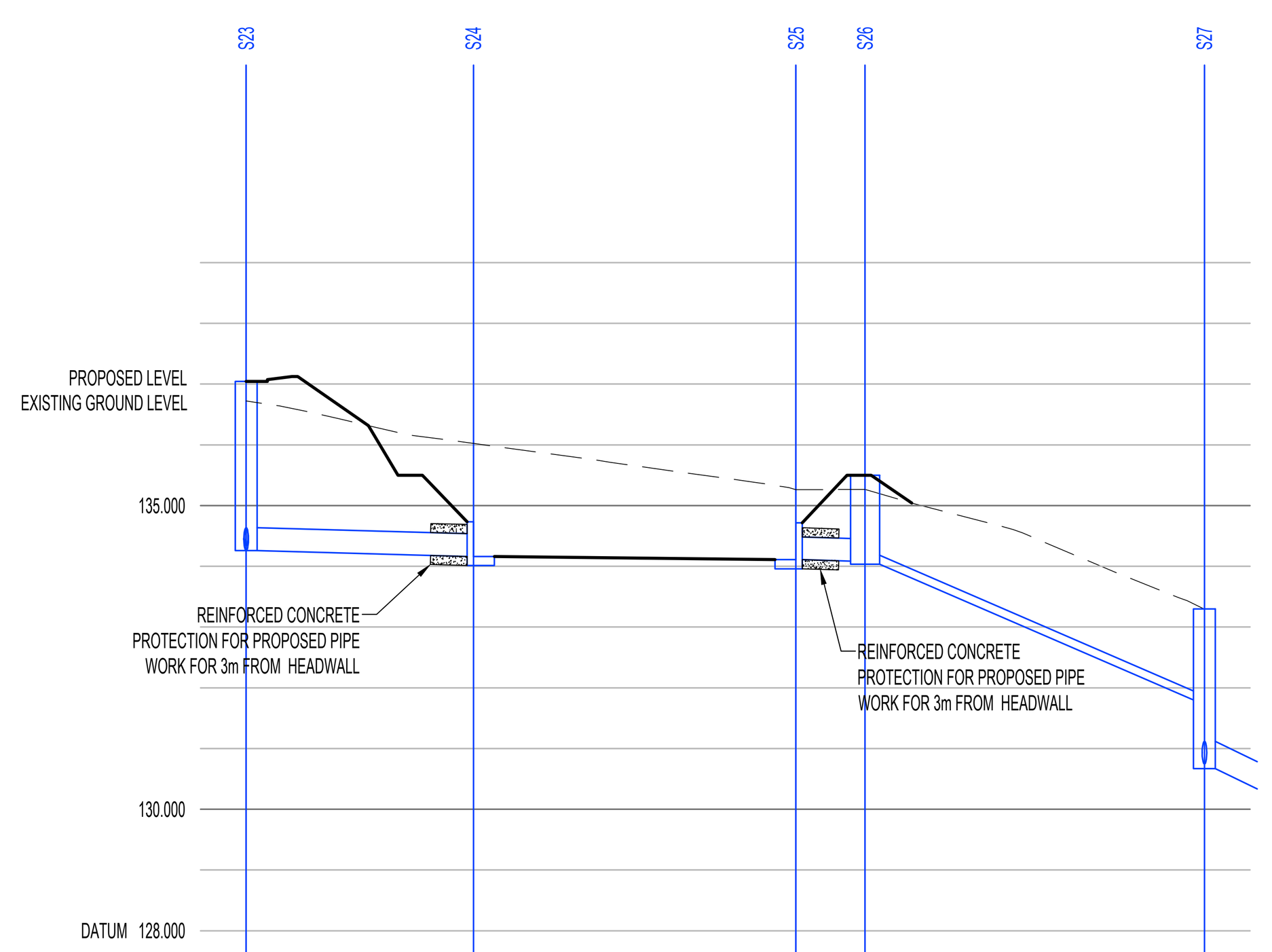
F11 - F17

EXISTING GROUND LEVEL	133.175, 132.956, 132.731, 132.474, 132.171, 128.956, 127.984, 127.132, 126.182, 124.775, 123.233, 121.707, 120.352, 119.439
FOULWATER COVER LEVEL	133.119, 129.282, 128.137, 126.661, 125.699, 119.895, 119.085
FOULWATER INVERT	129.930, 127.900, 127.900, 126.775, 126.775, 125.175, 125.175, 124.355, 124.355, 118.545, 118.545, 117.730
FOULWATER DETAILS	DIA 150 CIRCULAR CLAY 1 IN 23; DIA 150 CIRCULAR CLAY 1 IN 10; DIA 150 CIRCULAR CLAY 1 IN 11; DIA 150 CIRC CLAY 1 IN 10; DIA 150 CIRCULAR CLAY 1 IN 7; DIA 150 CIRCULAR CLAY 1 IN 13
FOULWATER LENGTHS	46.780, 11.278, 17.590, 8.203, 40.875, 10.505



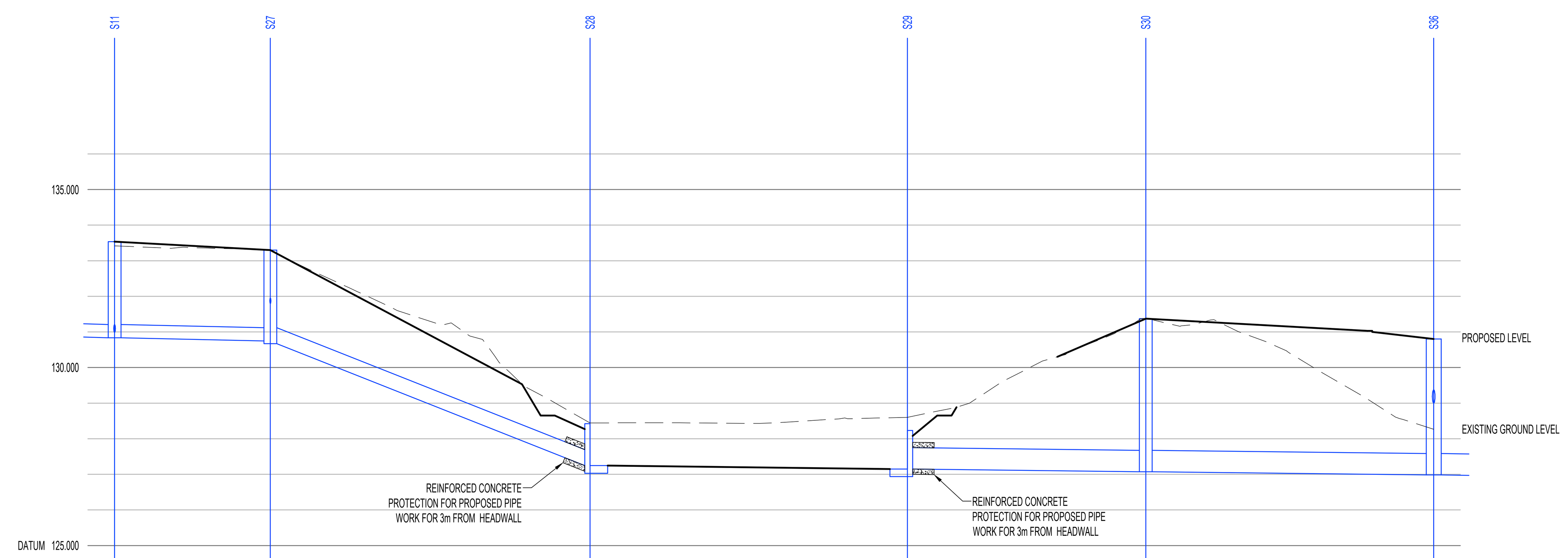
F26 - F1

CHAINAGE	0.000, 10.000, 20.000, 30.000, 40.000, 42.198, 50.000, 60.000, 70.000, 80.000, 86.503, 90.000, 92.101, 100.000, 110.000, 120.000, 130.000, 140.000, 150.000, 160.000, 170.000, 180.000, 190.000, 200.000, 210.000, 220.000
EXISTING GROUND LEVEL	128.064, 128.234, 129.506, 129.917, 129.379, 130.502, 132.266, 132.937, 133.778, 134.567, 135.019, 135.539, 135.831, 135.902, 136.147, 136.477, 136.791, 137.045, 137.283, 137.454, 137.563, 137.676, 137.667
PROPOSED GROUND LEVEL	131.000, 131.200, 131.200, 131.200, 131.230, 131.832, 132.657, 133.306, 133.741, 133.988, 134.075, 134.126, 134.309, 134.740, 135.205, 135.700, 136.200, 136.565, 136.918, 137.174, 137.406, 137.705, 137.831, 137.813, 137.691
FOULWATER INVERT	128.440, 128.375, 128.325, 130.060, 130.060, 130.060, 136.200
FOULWATER DETAILS	DIA 150 CIRC CLAY 1 IN 77
FOULWATER LENGTHS	5.000, 3.750, 4.265
FOULWATER RISING MAIN INVERT	130.060, 129.926, 131.180, 131.861, 133.310, 134.503, 134.700, 136.100, 136.240, 136.200
FOULWATER RISING MAIN DETAILS	110MM O.D. PE100 SDR11 (89.100MM BORE) COLOURED BLACK 1 IN 292 FALL; 110MM O.D. PE100 SDR11 (89.100MM BORE) COLOURED BLACK 1 IN 28 RISE; 110MM O.D. PE100 SDR11 (89.100MM BORE) COLOURED BLACK 1 IN 17 RISE; 110MM O.D. PE100 SDR11 (89.100MM BORE) COLOURED BLACK 1 IN 14 RISE; 110MM O.D. PE100 SDR11 (89.100MM BORE) COLOURED BLACK 1 IN 25 RISE; 1 IN 31 RISE; 110MM O.D. PE100 SDR11 (89.100MM BORE) COLOURED BLACK 1 IN 27 RISE; 110MM O.D. PE100 SDR11 (89.100MM BORE) COLOURED BLACK 1 IN 194 RISE
FOULWATER RISING MAIN LENGTHS	39.165, 35.387, 11.793, 19.585, 29.839, 6.052, 37.964, 27.106



S23 - S27

EXISTING GROUND LEVEL	136.722, 136.318, 135.989, 135.710, 135.435, 135.267, 134.772, 134.035
STORMWATER COVER LEVEL	137.044, 135.455, 135.415, 135.500, 133.300
STORMWATER INVERT	134.260, 134.165, 134.165, 134.110, 134.110, 134.085, 134.035, 131.800
STORMWATER DETAILS	DIA 375 CIRCULAR CONC 1 IN 197; ATTENUATION BASIN; DIA 375 CIRC CONC 1 IN 228; DIA 150 CIRCULAR CLAY 1 IN 13
STORMWATER LENGTHS	18.715, 5.699, 27.948



S11 - S36

EXISTING GROUND LEVEL	133.419, 133.376, 133.316, 132.512, 131.582, 130.883, 129.219, 128.446, 128.446, 128.431, 128.537, 128.595, 128.989, 130.141, 130.912, 131.173, 130.859, 129.821, 128.610
STORMWATER COVER LEVEL	133.535, 133.300, 128.795, 128.700, 131.375, 130.803
STORMWATER INVERT	130.835, 130.745, 130.670, 127.245, 127.245, 127.150, 127.150, 127.075, 127.075, 126.985
STORMWATER DETAILS	DIA 375 CIRCULAR CONC 1 IN 243; DIA 450 CIRCULAR CONC 1 IN 13; ATTENUATION BASIN; DIA 600 CIRCULAR CONC 1 IN 447; DIA 600 CIRCULAR CONC 1 IN 450
STORMWATER LENGTHS	21.891, 44.933, 33.504, 40.459

NOTES:

1. THIS DRAWING IS BASED UPON:
   - JRP SITE LAYOUT 22:5611:01R (FORTEM AMENDED);
   - HAYCOCK AND TODD SITE SURVEY DRAWING S10979 DATED OCTOBER 2024;
   - YORKSHIRE WATER RECORDS;
   - ORDNANCE SURVEY MAPS.
2. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH FORTEM SECTION 104 LAYOUT DRAWING 1223 - 102 AND SECTION 38 LAYOUT DRAWING 1223 - 130.

ADOPTABLE DRAINAGE NOTES:

(THESE NOTES APPLY TO ALL ADOPTABLE DRAINAGE WORKS)

ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH "DESIGN AND CONSTRUCTION GUIDANCE (DCG)/CODE FOR ADOPTION", THE RELEVANT BRITISH / EUROPEAN AND THE ADOPTING WATER AUTHORITIES' STANDARDS / REQUIREMENTS / ADDENDUM TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED.

MANHOLE COVERS MUST HAVE A CLEAR OPENING OF 675mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.

THE ADOPTING WATER AUTHORITY IS NOT OBLIGED TO ACCEPT FILTER DRAIN / LAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (DIRECTLY OR IN-DIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY, LAND DRAINAGE SECTION WITH REGARD TO THE DISPOSAL OF THE FILTER DRAIN / LAND DRAINAGE RUN-OFF.

COVER SLABS MUST CARRY THE BSI KITEMARK OR WILL BE REJECTED BY THE ADOPTING WATER AUTHORITY. WHERE THE CLEAR OPENING OF THE KITEMARKED PRODUCT IS DIFFERENT TO THAT OF THE COVER AND FRAME, A LOADING BEARING SLAB SHOULD BE FITTED ABOVE THE COVER SLAB TO BRING THE SIZE DOWN TO 675mm x 675mm FOR THE SPECIFIED COVER SIZE. PLEASE REFER TO CONCRETE PIPE SYSTEMS ASSOCIATION (CPSA), 'TECHNICAL BULLETIN' ISSUED AUTUMN 2004 FOR KITEMARKED COVER SLAB OPENING SIZES.

SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED PROVING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.

THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.5m FROM KERB FACES AND SERVICE MARGINS.

SEWERS MUST HAVE 5 METRES CLEARANCE FROM TREES AND HEDGES.

SEWERS TO BE LAID IN CLASS "S" BEDDING (150mm GRANULAR BED AND SURROUND). WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2m IN HIGHWAYS AND VERGES (OR LESS THAN 900mm IN NONE VEHICULAR ACCESS AREAS) THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE GRANULAR BED AND SURROUND.

BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2).

THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.

THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS: 100mm DIA 40kN/m, 150mm DIA 40kN/m, 225mm DIA 45kN/m AND 300mm DIA 72kN/m. THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE - (CLASS 120 TO EN 1916/BS5911-1 2002). PLASTIC PIPES SHOULD CONFORM TO WIS 4-35-01 AND BS EN 13476.

WHERE B125 COVER AND FRAMES HAVE BEEN APPROVED, THIS MUST NOT BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUITABLY SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREW DOWN COVERS ARE NOT ACCEPTABLE.

THE CLEARANCE OF THE CROSSOVER POINTS (MIN 300mm) BETWEEN THE SURFACE WATER SEWERS, FOUL WATERS SEWERS, RISING MAINS AND OTHER SERVICES SHOULD BE SUFFICIENT CLEARANCE TO PROVIDE 150mm GRANULAR BED AND SURROUND AROUND BOTH PIPES. THERE SHOULD BE ENOUGH CLEARANCE TO ACCOMMODATE THE BEDDING FOR BOTH PIPES, APPROX. 300mm: IF CROSSOVER IS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY BE INCREASED.

CLAY PIPE STRENGTH REQUIREMENTS

100mm DIA.	MINIMUM CRUSHING STRENGTH = 40kN/m
150mm DIA.	MINIMUM CRUSHING STRENGTH = 40kN/m
225mm DIA.	MINIMUM CRUSHING STRENGTH = 45kN/m
300mm DIA.	MINIMUM CRUSHING STRENGTH = 72kN/m

CONCRETE PIPE STRENGTH REQUIREMENTS
ALL CONCRETE PIPES SHOULD BE CLASS 120 (54kN/m)

THIS DRAWING IS SUBJECT TO THE APPROVAL OF: KIRKLEES COUNCIL

THIS DRAWING IS SUBJECT TO THE APPROVAL OF: THE WATER AUTHORITY

Rev	Date	Amendments	By
A	26.08.25	Amended to suit PDAS foul water pump station design received 08.08.25 and site layout updated.	JOH

Drawing Status.
TENDER PACK

FORTEM

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Client
MILLER HOMES

Project
HERMITAGE PARK, LEPTON

Drawing Title.
LONG SECTION SHEET 5

Drawn: JOH
Checked: RD
Scale: 1:100V 1:500H @ A0
Date: MAY 2025

Drawing No.
1223 - 109
Rev.
A