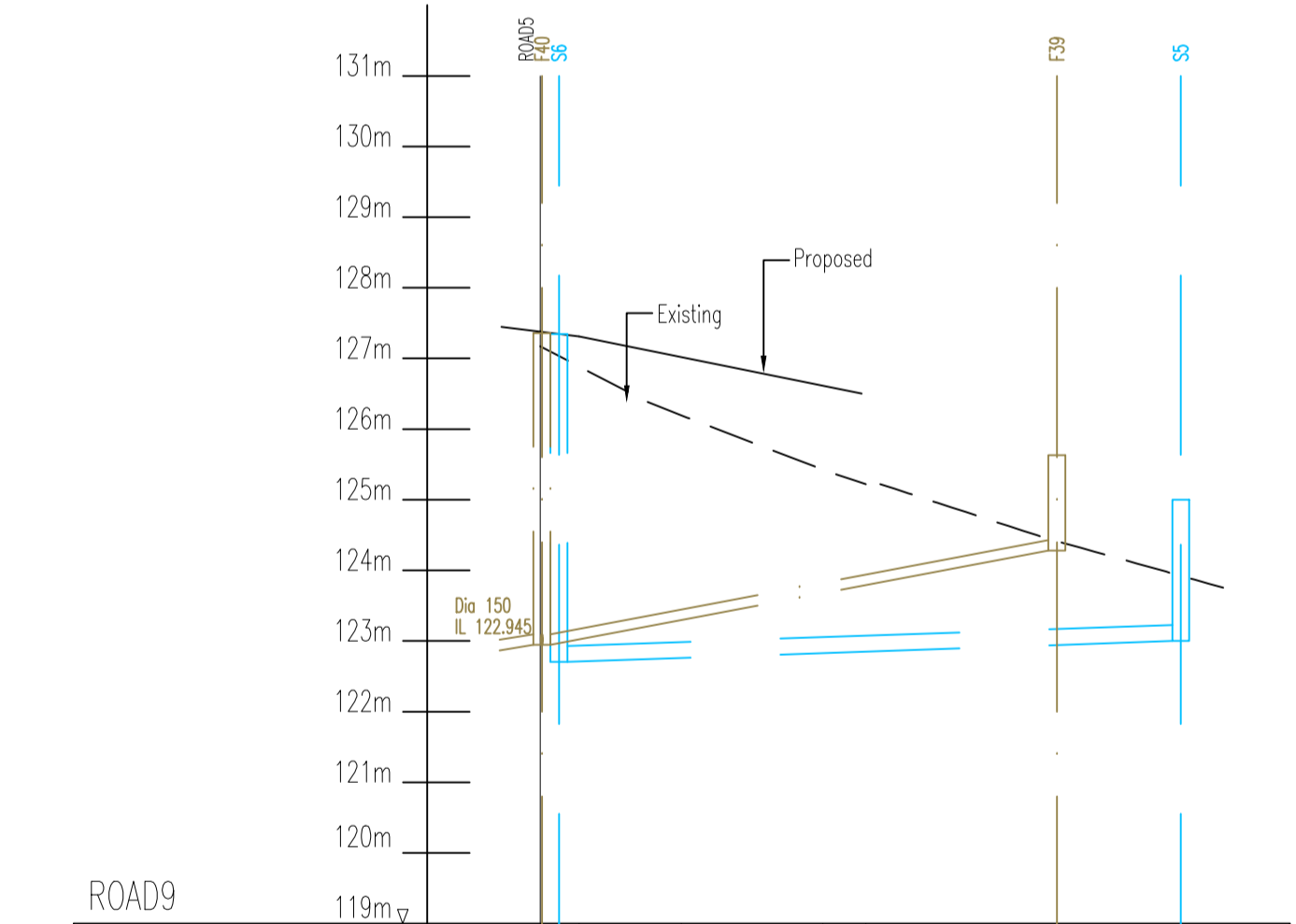
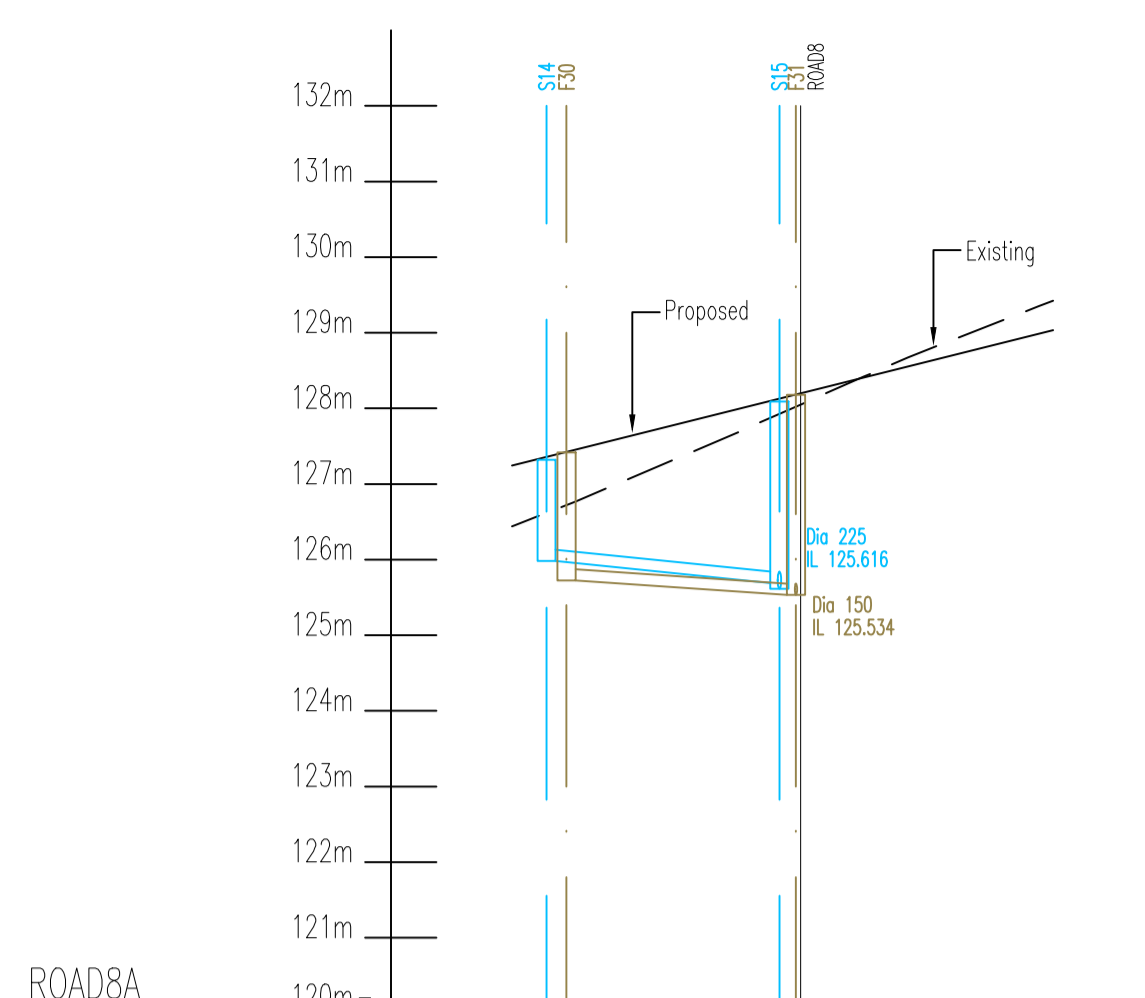


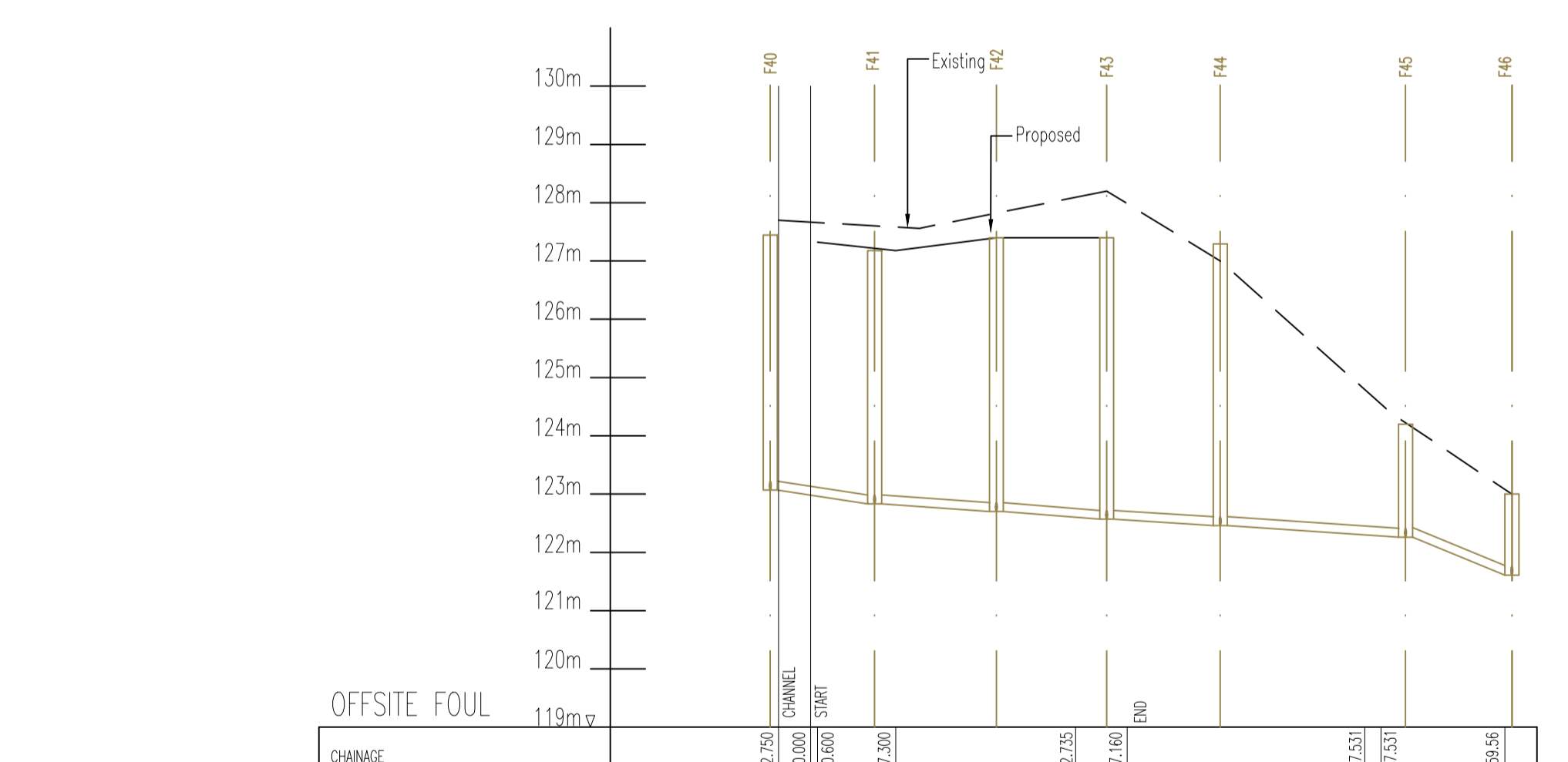
CHANGING	120.00	121.00	122.00	123.00	124.00	125.00	126.00	127.00	128.00	129.00	130.00	131.00	132.00
EXISTING GROUND LEVEL	128.919	128.919	128.919	128.919	128.919	128.919	128.919	128.919	128.919	128.919	128.919	128.919	128.919
ALIGNMENT LEVEL	127.138	127.138	127.138	127.138	127.138	127.138	127.138	127.138	127.138	127.138	127.138	127.138	127.138
HORIZONTAL ALIGNMENT	G = 2.130%												
VERTICAL ALIGNMENT	1: 46.9												
STORMWATER COVER LEVEL	128.075	128.075	128.075	128.075	128.075	128.075	128.075	128.075	128.075	128.075	128.075	128.075	128.075
STORMWATER INVERT	123.600	123.600	123.600	123.600	123.600	123.600	123.600	123.600	123.600	123.600	123.600	123.600	123.600
FOULWATER COVER LEVEL	127.072	127.072	127.072	127.072	127.072	127.072	127.072	127.072	127.072	127.072	127.072	127.072	127.072
FOULWATER INVERT	124.288	124.288	124.288	124.288	124.288	124.288	124.288	124.288	124.288	124.288	124.288	124.288	124.288



CHANGING	119.00	120.00	121.00	122.00	123.00	124.00	125.00	126.00	127.00	128.00	129.00	130.00	131.00
EXISTING GROUND LEVEL	127.172	127.172	127.172	127.172	127.172	127.172	127.172	127.172	127.172	127.172	127.172	127.172	127.172
ALIGNMENT LEVEL	127.259	127.259	127.259	127.259	127.259	127.259	127.259	127.259	127.259	127.259	127.259	127.259	127.259
HORIZONTAL ALIGNMENT	G = -4.044%												
VERTICAL ALIGNMENT	1: -24.7												
STORMWATER COVER LEVEL	127.346	127.346	127.346	127.346	127.346	127.346	127.346	127.346	127.346	127.346	127.346	127.346	127.346
STORMWATER INVERT	122.256	122.256	122.256	122.256	122.256	122.256	122.256	122.256	122.256	122.256	122.256	122.256	122.256
FOULWATER COVER LEVEL	127.845	127.845	127.845	127.845	127.845	127.845	127.845	127.845	127.845	127.845	127.845	127.845	127.845
FOULWATER INVERT	122.845	122.845	122.845	122.845	122.845	122.845	122.845	122.845	122.845	122.845	122.845	122.845	122.845



CHANGING	120.00	121.00	122.00	123.00	124.00	125.00	126.00	127.00	128.00	129.00	130.00	131.00	132.00
EXISTING GROUND LEVEL	127.246	127.246	127.246	127.246	127.246	127.246	127.246	127.246	127.246	127.246	127.246	127.246	127.246
ALIGNMENT LEVEL	127.246	127.246	127.246	127.246	127.246	127.246	127.246	127.246	127.246	127.246	127.246	127.246	127.246
HORIZONTAL ALIGNMENT	G = 5.000%												
VERTICAL ALIGNMENT	1: 20.0												
STORMWATER COVER LEVEL	127.321	127.321	127.321	127.321	127.321	127.321	127.321	127.321	127.321	127.321	127.321	127.321	127.321
STORMWATER INVERT	125.381	125.381	125.381	125.381	125.381	125.381	125.381	125.381	125.381	125.381	125.381	125.381	125.381
FOULWATER COVER LEVEL	127.418	127.418	127.418	127.418	127.418	127.418	127.418	127.418	127.418	127.418	127.418	127.418	127.418
FOULWATER INVERT	125.724	125.724	125.724	125.724	125.724	125.724	125.724	125.724	125.724	125.724	125.724	125.724	125.724



CHANGING	119.00	120.00	121.00	122.00	123.00	124.00	125.00	126.00	127.00	128.00	129.00	130.00
EXISTING GROUND LEVEL	127.660	127.660	127.660	127.660	127.660	127.660	127.660	127.660	127.660	127.660	127.660	127.660
ALIGNMENT LEVEL	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320
HORIZONTAL ALIGNMENT	G = -0.000%											
VERTICAL ALIGNMENT	1: 0.0											
STORMWATER COVER LEVEL	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320
STORMWATER INVERT	122.370	122.370	122.370	122.370	122.370	122.370	122.370	122.370	122.370	122.370	122.370	122.370
FOULWATER COVER LEVEL	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320	127.320
FOULWATER INVERT	122.370	122.370	122.370	122.370	122.370	122.370	122.370	122.370	122.370	122.370	122.370	122.370

REFER TO 425-58-03.01, 425-58-03.02 CROSSOVER LOCATIONS

SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES

- ### N O T E S
- All adoptable sewer works and material to be in accordance with "Code for Adoption". The relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.
 - Manhole covers shall/must have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
 - Filled ground must be filled and consolidated under the supervision, and to the satisfaction, of Yorkshire Water before any sewer works are carried out.
 - Cover slabs must carry the BSI Kitemark or will be rejected by the Yorkshire Water inspector. 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 600x600mm for the Yorkshire Water specified cover size. Please refer to the Concrete Pipe Systems Association (CPSA), "Technical Bulletin" issued autumn 2004 for kitemarked cover slab opening sizes. 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, (please also refer to Figure 2.3 on page 33 in "Sewers for Adoption" 6th Edition for restrictions on tree planting adjacent to Sewers).
 - 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 non-vehicular access areas) then a concrete slab should be provided above the granular bed and surround.
 - Adoptable plastic sewer pipes to be BSI Kitemarked (Certified to WS 4-35-01 and BS/EN13476). Adoptable sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer lengths.
 - Plastic channel sections in manholes are not acceptable and clayware is preferable. Plastic channels are difficult to set in concrete and a satisfactory finish cannot be obtained on the bedding.
 - 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.
 - Yorkshire Water policy is not to accept type "C" brick manhole and 1050mm dia manhole rings. Instead it is preferred that you use a type "B" manhole with 1200mm dia or 1500mm dia. rings, with the opening sited over the channel where depth of cover to pipe soffit is 1-1.5m.
 - Surface water and foul rising mains to be provided with marker tape above the rising mains.
 - If plastic pipes are to be used then the following should apply-
 - All adoptable sewers to be BSI Kitemark (certified to WS 4-35-01).
 - Bedding and backfill material to conform to the requirements of Water Industry Specification 4-08-02 (Table A2)
 - Where plastic pipes are proposed for adoptable sewers, structural calculations for the plastic pipes and a site investigation report to prove that the ground condition is suitable for the plastic pipes are to be produced.
 - Where plastic pipes are installed into the ground prior to getting full technical approval, the developer must provide a CCTV survey of the prospectively adoptable sewers and a deformation test (Light-Line test) of the plastic pipes.
 - Demarcation chambers to be a min. 450mm dia chamber for 100mm dia foul & 150mm dia surface water pipes up to 1.2m deep. For depths greater than 1.2m, restricted access opening to 350mm is required for safety reasons.
 - Maximum depth of demarcation chamber to be 2m, where depth exceeds 2m, manhole to be constructed as type B manhole.
 - Where a B125 cover and frame has 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.
 - Yorkshire Water is not obliged to accept filter drain/land drainage runoff into the public sewer network or adoptable drainage system (directly or in-directly). An alternative method of disposal of the land drainage runoff will therefore be required and you will have to liaise with the Land Drainage Authority/Land Drainage Section with regard to the disposal of the filter drain/land drainage runoff is required.
 - Sulphate resisting cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
 - 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 WS 4-35-01 and BS EN13476.
 - All levels of existing drainage to be confirmed prior to work commencing on site.
 - The contractor must allow for any fee's required for road and sewer opening permits, sewer connections and make the appropriate applications.
 - Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).

Rev	By	Date	Revision	Chk	Apvd
J	RJ	07.09.23	Drawing revised to new outfall alignment	RJ	MI
I	MD	23.11.22	Drawing revised to S104 comments	RJ	MI
H	RJ	15.08.22	Drawing revised to S104 comments	RJ	MI
G	RJ	27.07.22	Drawing revised to updated layout/comments	RJ	MI
F	RJ	06.06.22	Drawing revised to suit new layout	RJ	MI
E	RJ	28.03.22	Drawing revised following client comments	RJ	MI
D	RJ	22.03.22	Drawing revised following client comments	RJ	MI
C	JMG	04.03.22	Drawing revised to suit new layout	RJ	MI
B	RJ	27.01.22	Drawing revised following client comments	RJ	MI
A	RJ	23.12.21	Drawing revised to suit new layout	RJ	MI
/	RJ	06.08.21	issued for approval	MI	MI

ARP ASSOCIATES
Chartered Consulting Engineers

Northwest House • 5 & 6 Northwest Business Park • Servia Hill, Leeds • LS6 2QH
0113 245 6498 • 0113 244 3864 • leeds@arpassociates.co.uk • www.arpassociates.co.uk
ARP Associates is a trading division of ARP Geotechnical Ltd, a company registered in England and Wales with company number 377831, whose registered office is at 56 Northwest Business Park, Servia Hill, Leeds LS6 2QH

TITLE
LONGITUDINAL SECTIONS SHEET 6 OF 7

PROJECT
WOODHEAD ROAD, BROCKHOLES

CLIENT
MILLER HOMES (YORKSHIRE) LTD

DRAWING STATUS
PRELIMINARY

Scale: 1:200 @ A1 | Date: AUG 21 | Drawn: RJ | Chk: MI

Org. No. 425/58/06.06 | Rev J