

**LEGEND**

**Combined Engineering Appraisal**

- Major Adverse
- Moderate Adverse
- Slight Adverse
- Neutral

First Fix Appraisal				
JSE	RO	FM	GW	CH
10/04/18	18/04/18	18/04/18	18/04/18	18/04/18

Revision details				
Created	Checked	Reviewed	Approved	Authorised
dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer  
Precision House  
McNeill Drive  
Motherwell  
ML1 4UR



Client  
58 Port Dundas Road  
Glasgow  
G4 0HF



Project Name  
**A96 Dualling: East of Huntly to Aberdeen**

Drawing Title  
**D02 - Engineering Appraisal**

Project Ref. No. 250002-92	Stage Stage 2	Scale : 1:20,000	@A1
		Dimensions :	

Drawing Number Project <b>A96PEA -AMAR - HGN - CD</b>	Originator <b>-DR-CH-002001</b>	Volume <b>-DR-CH-002001</b>	Location <b>-DR-CH-002001</b>	Type <b>-DR-CH-002001</b>	Role <b>-DR-CH-002001</b>	Number <b>-DR-CH-002001</b>
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Suitability S2	Suitability Description For Information	Revision P01.01
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0	Neutral	Criteria
-1	Slight Adverse	
-2	Moderate Adverse	
-3	Major Adverse	

**Rules**

**Total Score**  
 = Alignment Score (Average of E, F, G, H and I) + Geo Score + Structures Score + Flooding Score (Average of L, M and N) + Utilities score + Constructability Score  
 (Minimum value of P&Q) = Total of 6 scores for 6 categories

Then if total < or equal to -9 then should be coloured red because this represents possibility of 3 reds or 4 ambers

If total is between -6 and -8 should be coloured amber since this could represent 2 reds or 3/4 ambers.

Chainage	Start Chainage	End Chainage	Alignment					Geotechnics	Structures	Flooding and Drainage			Utilities	Constructability	Temp disruption	Construction access	Utilities	Attenuation requirement	Watercourse Crossings	Flood Plain	Structures	Geotechnics	Earthworks	Hilliness	Bendiness	Level Difference	Alignment Length	Score	Adjusted	Total	Comments
			E	F	G	H	I			L	M	N																			
0	50		0	-1	-1	-2	0	-1	-1	0	0	0	0	0	-1	-4	-4												Structure likely to be required for tie in to existing A96		
50	100		0	-1	-1	-2	0	-1	0	0	0	0	0	0	-1	-3	-3														
100	150		0	-1	-1	-2	0	0	0	0	0	0	0	0	-1	-2	-2														
150	200		0	0	-1	-2	0	0	0	0	0	0	0	0	-1	-2	-2														
200	250		0	-1	-1	-2	0	0	0	0	0	0	0	0	-1	-2	-2														
250	300		0	-1	-1	-2	0	-2	-3	0	0	0	0	0	-1	-7	-9												Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.		
300	350		0	-2	-1	-2	0	-2	-3	0	0	0	0	0	-1	-7	-9													Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.	
350	400		0	-2	-1	-2	0	-2	-3	-3	0	0	0	0	-1	-8	-9													Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.	
400	450		0	-3	-1	-2	0	-2	-3	-3	0	0	0	0	-1	-8	-9														Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.
450	500		0	-3	-1	-2	0	-2	-3	-3	0	0	0	0	-1	-8	-9														Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.
500	550		0	-3	-1	-2	0	-2	-3	-3	0	0	0	0	-1	-8	-9														Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.
550	600		0	-3	-1	-2	0	-2	-3	-3	0	0	0	0	-1	-8	-9														Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.
600	650		0	-2	-1	-2	0	-2	-3	-3	0	0	0	0	-1	-8	-9														Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.
650	700		0	-2	-1	-2	0	-2	-3	-3	0	0	0	0	-1	-8	-9														Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.
700	750		0	-2	-1	-2	0	-2	-3	-3	0	0	0	0	-1	-8	-9														Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.
750	800		0	-2	-1	-2	0	-1	-3	-3	0	0	0	0	-1	-7	-9														Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.
800	850		0	-2	-1	-2	0	-1	-3	0	0	0	0	0	-1	-6	-9														Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.
850	900		0	-2	-1	-2	0	0	-3	0	0	0	0	0	-1	-5	-9														Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.
900	950		0	-1	-1	-2	0	0	-3	0	0	0	0	0	-1	-5	-9														Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.
950	1000		0	-1	-1	-2	0	0	0	0	0	0	0	0	-1	-2	-2														Structure over River Urie and Wood Burn. Area of compressible ground Impact assessed as Major for the structure (700m) and associated geotechnical engineering works. Impact assessed in combination of hilliness and bendiness of route.
1000	1050		0	-1	-1	-2	0	-1	0	0	0	0	0	0	-1	-3	-3														Cutting up to 16.4m (greater than 10m) high in non-identified geotechnical constraint. Impact assessed in combination with hilliness and bendiness of route.
1050	1100		0	-2	-1	-2	0	-1	0	0	0	0	0	0	-1	-3	-3														Cutting up to 16.4m (greater than 10m) high in non-identified geotechnical constraint. Impact assessed in combination with hilliness and bendiness of route.
1100	1150		0	-2	-1	-2	0	-1	0	0	0	0	0	0	-1	-3	-3														Cutting up to 16.4m (greater than 10m) high in non-identified geotechnical constraint. Impact assessed in combination with hilliness and bendiness of route.
1150	1200		0	-2	-1	-2	0	-1	0	0	0	0	0	0	-1	-3	-3														Cutting up to 16.4m (greater than 10m) high in non-identified geotechnical constraint. Impact assessed in combination with hilliness and bendiness of route.
1200	1250		0	-2	-1	-2	0	-1	0	0	0	0	0	0	-1	-3	-3														Cutting up to 16.4m (greater than 10m) high in non-identified geotechnical constraint. Impact assessed in combination with hilliness and bendiness of route.
1250	1300		0	-2	-1	-2	0	0	0	0	0	0	0	0	-1	-2	-2														Cutting up to 16.4m (greater than 10m) high in non-identified geotechnical constraint. Impact assessed in combination with hilliness and bendiness of route.
1300	1350		0	-1	-1	-2	0	0	0	0	0	0	0	0	-1	-2	-2														Cutting up to 16.4m (greater than 10m) high in non-identified geotechnical constraint. Impact assessed in combination with hilliness and bendiness of route.
1350	1400		0	-1	-1	-2	0	0	0	0	0	0	0	0	-1	-2	-2														Cutting up to 16.4m (greater than 10m) high in non-identified geotechnical constraint. Impact assessed in combination with hilliness and bendiness of route.



3600	3650	0	0	-1	-2	0	-1	0	0	0	0	0	0	0	-1	0	-3	-3	Minor embankment on area of potential compressible ground. Assess in combination with hilliness and bendiness. Minor construction access impact
3650	3700	0	0	-1	-2	0	-1	0	0	0	0	0	0	0	-1	0	-3	-3	Minor embankment on area of potential compressible ground. Assess in combination with hilliness and bendiness. Minor construction access impact
3700	3750	0	0	-1	-2	0	-1	-1	0	0	0	0	0	0	-1	0	-4	-4	Structure for Bonnyton Burn Crossing. Area of compressible ground. Assessed in combination with hilliness and bendiness. Minor construction access impact
3750	3800	0	0	-1	-2	0	-1	-1	-3	0	0	0	0	0	-1	0	-5	-5	Structure for Bonnyton Burn Crossing. Area of compressible ground. Assessed in combination with hilliness and bendiness. Minor construction access impact
3800	3850	0	0	-1	-2	0	-1	-1	-3	0	0	0	0	0	-1	0	-5	-5	Structure for Bonnyton Burn Crossing. Area of compressible ground. Assessed in combination with hilliness and bendiness. Minor construction access impact
3850	3900	0	0	-1	-2	0	0	-1	-1	0	0	0	0	0	-1	0	-3	-3	Structure for Bonnyton Burn Crossing. Area of compressible ground. Assessed in combination with hilliness and bendiness. Minor construction access impact
3900	3950	0	0	-1	-2	0	0	0	-1	0	0	0	0	0	-1	0	-2	-2	
3950	4000	0	0	-1	-2	0	0	0	-1	0	0	0	0	0	-1	0	-2	-2	
4000	4050	0	-1	-1	-2	0	0	0	-1	0	0	0	0	0	-1	0	-2	-2	
4050	4100	0	0	-1	-2	0	0	0	-1	0	0	0	0	0	-1	0	-2	-2	
4100	4150	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4150	4200	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4200	4250	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4250	4300	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4300	4350	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4350	4400	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4400	4450	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4450	4500	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4500	4550	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4550	4600	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4600	4650	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4650	4700	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4700	4750	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4750	4800	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4800	4850	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4850	4900	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4900	4950	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
4950	5000	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5000	5050	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5050	5100	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5100	5150	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5150	5200	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5200	5250	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5250	5300	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5300	5350	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5350	5400	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5400	5450	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5450	5500	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5500	5550	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5550	5600	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5600	5650	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5650	5700	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5700	5750	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5750	5800	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5800	5850	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5850	5900	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5900	5950	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
5950	6000	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
6000	6050	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
6050	6100	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
6100	6150	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
6150	6200	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
6200	6250	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
6250	6300	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
6300	6350	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
6350	6400	0	-1	-1	-2	0	0	0	0	0	0	0	0	-1	-1	0	-3	-3	SW Distribution Mains. Impact assessed in combination with hilliness and bendiness. Minor construction access impact
6400	6450	0	-1	-1	-2	0	0	0	0	0	0	0	0	-1	-1	0	-3	-3	SW Distribution Mains. Impact assessed in combination with hilliness and bendiness. Minor construction access impact
6450	6500	0	-1	-1	-2	0	0	0	0	0	0	0	0	-1	-1	0	-3	-3	SW Distribution Mains. Impact assessed in combination with hilliness and bendiness. Minor construction access impact
6500	6550	0	-1	-1	-2	0	0	0	0	0	0	0	0	-1	-1	0	-3	-3	SW Distribution Mains. Impact assessed in combination with hilliness and bendiness. Minor construction access impact
6550	6600	0	-1	-1	-2	0	0	0	0	0	0	0	0	-1	0	0	-2	-2	
6600	6650	0	-1	-1	-2	0	0	0	0	0	0	0	0	-1	0	0	-2	-2	
6650	6700	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
6700	6750	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-1	0	-2	-2	
6750	6800	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-3	0	-4	-4	Very difficult construction access in combination with Hilliness and Bendiness
6800	6850	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-3	0	-4	-4	Very difficult construction access in combination with Hilliness and Bendiness
6850	6900	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-3	0	-4	-4	Very difficult construction access in combination with Hilliness and Bendiness
6900	6950	0	0	-1	-2	0	0	0	0	0	0	0	0	0	-3	0	-4	-4	Very difficult construction access in combination with Hilliness and Bendiness
6950	7000	0	0	-1	-2	0	0	0	0	0	0	0	0	-3	-3	0	-6	-6	SSE 275kV crossing. Pylon within 100m alignment at ch 6986 Pylon within 100m of edge of alignment at ch 7257. Combination of hilliness and bendiness. Farm access structure at ch7250 - to be reviewed at 2nd fix in relation to proximity of pylon. Very difficult construction access
7000	7050	0	-1	-1	-2	0	0	0	0	0	0	0	0	-2	-3	0	-6	-6	SSE 275kV crossing. Pylon within 100m alignment at ch 6986 Pylon within 100m of edge of alignment at ch 7257. Combination of hilliness and bendiness. Farm access structure at ch7250 - to be reviewed at 2nd fix in relation to proximity of pylon. Very difficult construction access
7050	7100	0	-1	-1	-2	0	0	0	0	0	0	0	0	-2	-3	0	-6	-6	SSE 275kV crossing. Pylon within 100m alignment at ch 6986 Pylon within 100m of edge of alignment at ch 7257. Combination of hilliness and bendiness. Farm access structure at ch7250 - to be reviewed at 2nd fix in relation to proximity of pylon. Very difficult construction access
7100	7150	0	-1	-1	-2	0	0	0	0	0	0	0	0	-2	-3	0	-6	-6	SSE 275kV crossing. Pylon within 100m alignment at ch 6986 Pylon within 100m of edge of alignment at ch 7257. Combination of hilliness and bendiness. Farm access structure at ch7250 - to be reviewed at 2nd fix in relation to proximity of pylon. Very difficult construction access











0	Neutral	Criteria
-1	Slight Adverse	
-2	Moderate Adverse	
-3	Major Adverse	

**Rules**

Total Score = Alignment Score (Average of E, F, G, H and I) + Geo Score + Structures Score + Flooding Score (Average of L, M and N) + Utilities score + Constructability Score (Minimum value of P&Q) = Total of 6 scores for 6 categories

Then if total < or equal to -9 then should be coloured red because this represents possibility of 3 reds or 4 ambers  
 If total is between -6 and -8 should be coloured amber since this could represent 2 reds or 3/4 ambers.

Channage	Start Channage	End Channage	Alignment					Geotechnics	Structures	Flooding and Drainage			Utilities	Constructability	Temp disruption	Score		Comments
			Level Difference	Bendiness	Hilliness	Earthworks	Geotechnics			Flood Plain	Watercourse Crossings	Attenuation requirement				Construction access	Total	
	0	50	0	-1	-1	-1	-1	-1	0	0	0	0	0	0	-1	-4	-4	Structure for tie in to existing A86
	50	100	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-2	-2	
	100	150	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-2	-2	
	150	200	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	-2	-2	
	200	250	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-2	-2	
	250	300	0	-1	-1	-1	-1	-2	-3	0	0	0	0	0	-1	-7	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	300	350	0	-2	-1	-1	-1	-2	-3	0	0	0	0	0	-1	-7	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	350	400	0	-2	-1	-1	-1	-2	-3	0	0	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	400	450	0	-3	-1	-1	-1	-2	-3	-3	0	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	450	500	0	-3	-1	-1	-1	-2	-3	-3	0	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	500	550	0	-3	-1	-1	-1	-2	-3	-3	0	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	550	600	0	-2	-1	-1	-1	-2	-3	-3	0	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	600	650	0	-2	-1	-1	-1	-2	-3	-3	0	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	650	700	0	-2	-1	-1	-1	-2	-3	-3	0	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	700	750	0	-2	-1	-1	-1	-1	-3	-3	0	0	0	0	-1	-7	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	750	800	0	-2	-1	-1	-1	-1	-3	-3	0	0	0	0	-1	-7	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	800	850	0	-2	-1	-1	-1	-1	-3	-3	0	0	0	0	-1	-6	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	850	900	0	-2	-1	-1	-1	0	-3	0	0	0	0	0	-1	-5	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	900	950	0	-1	-1	-1	-1	0	-3	0	0	0	0	0	-1	-5	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness
	950	1000	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-2	-2	Cutting up to 15.4m high in non-identified geotechnical constraint.
	1000	1050	0	-1	-1	-1	-1	-1	0	0	0	0	0	0	-1	-3	-3	combination of hilliness and bendiness
	1050	1100	0	-2	-1	-1	-1	-1	0	0	0	0	0	0	-1	-3	-3	Cutting up to 15.4m high in non-identified geotechnical constraint.
	1100	1150	0	-2	-1	-1	-1	-1	0	0	0	0	0	0	-1	-3	-3	combination of hilliness and bendiness
	1150	1200	0	-2	-1	-1	-1	-1	0	0	0	0	0	0	-1	-3	-3	Cutting up to 15.4m high in non-identified geotechnical constraint.
	1200	1250	0	-2	-1	-1	-1	-1	0	0	0	0	0	0	-1	-3	-3	combination of hilliness and bendiness
	1250	1300	0	-2	-1	-1	-1	-1	0	0	0	0	0	0	-1	-2	-2	Cutting up to 15.4m high in non-identified geotechnical constraint.
	1300	1350	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-2	-2	combination of hilliness and bendiness
	1350	1400	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-2	-2	Structure over River Urie and Wood Burn. Area of compressible ground.
	1400	1450	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	-2	-2	Structure over River Urie and Wood Burn. Area of compressible ground.
	1450	1500	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	-2	-2	Structure over River Urie and Wood Burn. Area of compressible ground.
	1500	1550	0	0	-1	-1	-1	0	0	0	0	0	0	0	-2	-3	-3	Minor embankment on non-identified ground. Combination of hilliness and bendiness and earthworks/m. local disruption due to construction
	1550	1600	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-2	-3	-3	Minor embankment on non-identified ground. Combination of hilliness and bendiness and earthworks/m. local disruption due to construction
	1600	1650	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-2	-3	-3	Minor embankment on non-identified ground. Combination of hilliness and bendiness and earthworks/m. local disruption due to construction







3450	3500	0	-1	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	-3	-3	Minor embankment on area of potential compressible ground. combination of hilliness and bendiness and earthworks/m. minor construction access impact.
3500	3550	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	-3	-3	Minor embankment on area of potential compressible ground. combination of hilliness and bendiness and earthworks/m. minor construction access impact.
3550	3600	0	-1	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	-3	-3	Minor embankment on area of potential compressible ground. combination of hilliness and bendiness and earthworks/m. minor construction access impact.
3600	3650	0	-1	-1	-1	-1	-1	-1	0	0	0	0	0	-1	0	-4	-4	Structure for Bonnyton Burn Crossing. Area of compressible ground. combination of hilliness and bendiness and earthworks/m. minor construction access impact.
3650	3700	0	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	-1	0	-4	-4	Structure for Bonnyton Burn Crossing. Area of compressible ground. combination of hilliness and bendiness and earthworks/m. minor construction access impact.
3700	3750	0	-1	-1	-1	-1	0	-1	-1	0	0	0	0	-1	0	-3	-3	Structure for Bonnyton Burn Crossing. Area of compressible ground. combination of hilliness and bendiness and earthworks/m. minor construction access impact.
3750	3800	0	0	-1	-1	-1	0	0	-1	0	0	0	0	-1	0	-2	-2	
3800	3850	0	0	-1	-1	-1	0	0	-1	0	0	0	0	-1	0	-2	-2	
3850	3900	0	0	-1	-1	-1	-1	0	-1	0	0	0	0	-1	0	-3	-3	Area of compressible ground. alignment within 100m of floodplain. combination of hilliness and bendiness and earthworks/m. minor construction access impact.
3900	3950	0	0	-1	-1	-1	-1	0	-1	0	0	0	0	-1	0	-3	-3	Area of compressible ground. alignment within 100m of floodplain. combination of hilliness and bendiness and earthworks/m. minor construction access impact.
3950	4000	0	0	-1	-1	-1	-1	0	-1	0	0	0	0	-1	0	-3	-3	Area of compressible ground. alignment within 100m of floodplain. combination of hilliness and bendiness and earthworks/m. minor construction access impact.
4000	4050	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4050	4100	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4100	4150	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4150	4200	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4200	4250	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4250	4300	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4300	4350	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4350	4400	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4400	4450	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4450	4500	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4500	4550	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4550	4600	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4600	4650	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4650	4700	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4700	4750	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4750	4800	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4800	4850	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4850	4900	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4900	4950	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4950	5000	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5000	5050	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5050	5100	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5100	5150	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5150	5200	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5200	5250	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5250	5300	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5300	5350	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5350	5400	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5400	5450	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5450	5500	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5500	5550	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5550	5600	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5600	5650	0	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5650	5700	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5700	5750	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5750	5800	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5800	5850	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5850	5900	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5900	5950	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5950	6000	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
6000	6050	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
6050	6100	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
6100	6150	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
6150	6200	0	0	-1	-1	-1	0	0	0	0	0	0	-1	-1	0	-3	-3	SW Distribution Main. Combination of hilliness, bendiness and earthworks/m. Minor construction access impact.
6200	6250	0	0	-1	-1	-1	0	0	0	0	0	0	-1	-1	0	-3	-3	SW Distribution Main. Combination of hilliness, bendiness and earthworks/m. Minor construction access impact.
6250	6300	0	0	-1	-1	-1	0	0	0	0	0	0	-1	-1	0	-3	-3	SW Distribution Main. Combination of hilliness, bendiness and earthworks/m. Minor construction access impact.
6300	6350	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
6350	6400	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
6400	6450	0	0	-1	-1	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
6450	6500	0	0	-1	-1	-1	0	0	0	0	0	0	0	-3	0	-4	-4	Combination of hilliness, bendiness and earthworks/m. Very difficult construction access.
6500	6550	0	0	-1	-1	-1	0	0	0	0	0	0	0	-3	0	-4	-4	Combination of hilliness, bendiness and earthworks/m. Very difficult construction access.
6550	6600	0	0	-1	-1	-1	0	0	0	0	0	0	0	-3	0	-4	-4	Combination of hilliness, bendiness and earthworks/m. Very difficult construction access.
6600	6650	0	0	-1	-1	-1	0	0	0	0	0	0	0	-3	0	-4	-4	Combination of hilliness, bendiness and earthworks/m. Very difficult construction access.
6650	6700	0	0	-1	-1	-1	0	0	0	0	0	0	0	-3	0	-4	-4	Combination of hilliness, bendiness and earthworks/m. Very difficult construction access.
6700	6750	0	0	-1	-1	-1	0	0	0	0	0	0	0	-3	0	-4	-4	Combination of hilliness, bendiness and earthworks/m. Very difficult construction access.
6750	6800	0	0	-1	-1	-1	0	0	0	0	0	0	0	-3	0	-4	-4	Combination of hilliness, bendiness and earthworks/m. Very difficult construction access.
6800	6850	0	0	-1	-1	-1	0	0	0	0	0	0	-2	-3	0	-6	-6	275kV Crossing - Proposed road level between 2m and 3m lower than existing. Pylon within 100m alignment at ch 6770. Combination of hilliness, bendiness and earthworks/m. Very difficult construction access.



















13350	13400	0	-2	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-3	-3	Cutting up to 16.1m (but greater than 10m) high in rock. Combination of hilliness, bendiness and earthworks/m. Local disruption due to construction
13400	13450	0	-2	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-3	-3	Cutting up to 16.1m (but greater than 10m) high in rock. Combination of hilliness, bendiness and earthworks/m. Local disruption due to construction
13450	13500	0	-2	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-3	-3	Cutting up to 16.1m (but greater than 10m) high in rock. Combination of hilliness, bendiness and earthworks/m. Local disruption due to construction
13500	13550	0	-2	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-2	-3	Cutting up to 16.1m (but greater than 10m) high in rock. Combination of hilliness, bendiness and earthworks/m. Local disruption due to construction Manually amended (RO)
13550	13600	0	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
13600	13650	0	-1	-1	-1	-1	0	0	0	0	0	0	-1	0	-1	-3	-3	SW Distribution Main
13650	13700	0	-2	-1	-1	-1	-2	-3	0	0	0	0	-1	0	-1	-8	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
13700	13750	0	-2	-1	-1	-1	-2	-3	0	0	0	0	0	0	-1	-7	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
13750	13800	0	-2	-1	-1	-1	-2	-3	-3	0	0	0	0	0	-1	-8	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
13800	13850	0	-2	-1	-1	-1	-2	-3	-3	0	0	0	0	0	-1	-8	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
13850	13900	0	-2	-1	-1	-1	-2	-3	-3	0	0	0	0	0	-1	-8	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
13900	13950	0	-2	-1	-1	-1	-2	-3	-3	0	0	0	0	0	-1	-8	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
13950	14000	0	-2	-1	-1	-1	-2	-3	-3	0	0	0	0	0	-1	-8	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
14000	14050	0	-2	-1	-1	-1	-2	-3	-3	0	0	0	0	0	-1	-8	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
14050	14100	0	-2	-1	-1	-1	-2	-3	-3	0	0	0	0	0	-1	-8	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
14100	14150	0	-2	-1	-1	-1	-2	-3	-3	0	0	0	0	0	-1	-8	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
14150	14200	0	-2	-1	-1	-1	-1	-3	-3	0	0	0	0	0	-1	-7	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
14200	14250	0	-1	-1	-1	-1	-1	-3	-2	0	0	0	0	0	-1	-6	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
14250	14300	0	-1	-1	-1	-1	-1	-3	-2	0	-3	0	0	0	-1	-7	-9	Structure over River Urie and floodplain Area of compressible ground Impact assessed as Major for the structure (650m) and associated engineering works Combination of hilliness and bendiness Local disruption due to construction Potential attenuation impact due to floodplain
14300	14350	0	0	-1	-1	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
14350	14400																	



0	Neutral	Criteria
-1	Slight Adverse	
-2	Moderate Adverse	
-3	Major Adverse	

**Rules**

**Total Score**  
 = Alignment Score (Average of E, F, G, H and I) + Geo Score + Structures Score + Flooding Score (Average of L, M and N) + Utilities score + Constructability Score  
 (Minimum value of P&Q) = Total of 6 scores for 6 categories

Then if total < or equal to -9 then should be coloured red because this represents possibility of 3 reds or 4 ambers

If total is between -6 and -8 should be coloured amber since this could represent 2 reds or 3/4 ambers.

Channage	Start Channage	End Channage	Alignment					Geotechnics	Structures			Flooding and Drainage			Utilities	Constructability	Temp disruption	Construction access	Utilities	Score	Comments
			Level Difference	Bendiness	Hilliness	Earthworks	Geotechnics		Structures	Flood Plain	Watercourse Crossings	Attenuation requirement	Utilities	Total							
	0	50	-1	-1	-1	0	-1	-1	0	0	0	0	0	0	0	-1	-4	-4		Structure for tie in to existing A86	
	50	100	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-2	-2			
	100	150	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-2	-2			
	150	200	-1	0	-1	-1	0	0	0	0	0	0	0	0	0	-1	-2	-2			
	200	250	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	-1	-2	-2			
	250	300	-1	-1	-1	-1	0	-2	-3	0	0	0	0	0	0	-1	-7	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	300	350	-1	-2	-1	-1	0	-2	-3	0	0	0	0	0	0	-1	-7	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	350	400	-1	-2	-1	-1	0	-2	-3	-3	0	0	0	0	0	-1	-8	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	400	450	-1	-3	-1	-1	0	-2	-3	-3	0	0	0	0	0	-1	-8	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	450	500	-1	-2	-1	-1	0	-2	-3	-3	0	0	0	0	0	-1	-8	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	500	550	-1	-2	-1	-1	0	-2	-3	-3	0	0	0	0	0	-1	-8	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	550	600	-1	-2	-1	-1	0	-2	-3	-3	0	0	0	0	0	-1	-8	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	600	650	-1	-2	-1	-1	0	-2	-3	-3	0	0	0	0	0	-1	-8	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	650	700	-1	-2	-1	-1	0	-2	-3	-3	0	0	0	0	0	-1	-8	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	700	750	-1	-2	-1	-1	0	-1	-3	-3	0	0	0	0	0	-1	-7	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	750	800	-1	-2	-1	-1	0	-1	-3	-3	0	0	0	0	0	-1	-7	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	800	850	-1	-2	-1	-1	0	-1	-3	-3	0	0	0	0	0	-1	-7	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	850	900	-1	-2	-1	-1	0	-1	-3	0	0	0	0	0	0	-1	-6	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	900	950	-1	-2	-1	-1	0	0	-3	0	0	0	0	0	0	-1	-5	-9		Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. Combination of hilliness and bendiness	
	950	1000	-1	-1	-1	-1	0	0	-3	0	0	0	0	0	0	-1	-5	-9		Cutting up to 19m high in non-identified geotechnical constraint. Combination of hilliness and bendiness	
	1000	1050	-1	-2	-1	-1	0	-1	0	0	0	0	0	0	0	-1	-3	-3		Cutting up to 19m high in non-identified geotechnical constraint. Combination of hilliness and bendiness	
	1050	1100	-1	-2	-1	-1	0	-1	0	0	0	0	0	0	0	-1	-3	-3		Cutting up to 19m high in non-identified geotechnical constraint. Combination of hilliness and bendiness	
	1100	1150	-1	-2	-1	-1	0	-1	0	0	0	0	0	0	0	-1	-3	-3		Cutting up to 19m high in non-identified geotechnical constraint. Combination of hilliness and bendiness	
	1150	1200	-1	-2	-1	-1	0	-1	0	0	0	0	0	0	0	-1	-3	-3		Cutting up to 19m high in non-identified geotechnical constraint. Combination of hilliness and bendiness	
	1200	1250	-1	-2	-1	-1	0	-1	0	0	0	0	0	0	0	-1	-3	-3		Cutting up to 19m high in non-identified geotechnical constraint. Combination of hilliness and bendiness	
	1250	1300	-1	-2	-1	-1	0	-1	0	0	0	0	0	0	0	-1	-3	-3		Cutting up to 19m high in non-identified geotechnical constraint. Combination of hilliness and bendiness	
	1300	1350	-1	-2	-1	-1	0	0	0	0	0	0	0	0	0	-1	-2	-2			
	1350	1400	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	-1	-2	-2			
	1400	1450	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	-1	-2	-2			
	1450	1500	-1	0	-1	-1	0	0	0	0	0	0	0	0	0	-1	-2	-2			
	1500	1550	-1	0	-1	-1	0	0	0	0	0	0	0	0	0	-2	-3	-3		Minor embankment. Combination of hilliness and bendiness and earthworks/m. Local disruption due to construction	
	1550	1600	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	-2	-3	-3		Minor embankment. Combination of hilliness and bendiness and earthworks/m. Local disruption due to construction	
	1600	1650	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	-2	-3	-3		Minor embankment. Combination of hilliness and bendiness and earthworks/m. Local disruption due to construction	



























14000	14050																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-1	-1	-1	0	-1	-3	0	0	0	-1	0	-1	-7	-9			
14050	14100																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-2	-1	-1	0	-1	-3	0	0	0	-1	0	-1	-7	-9			
14100	14150																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-2	-1	-1	0	-2	-3	0	0	0	0	0	-1	-7	-9			
14150	14200																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-3	-1	-1	0	-2	-3	-3	0	0	0	0	-1	-8	-9			
14200	14250																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-2	-1	-1	0	-2	-3	-3	0	0	0	0	-1	-8	-9			
14250	14300																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-2	-1	-1	0	-2	-3	-3	0	0	0	0	-1	-8	-9			
14300	14350																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-2	-1	-1	0	-2	-3	-3	0	0	0	0	-1	-8	-9			
14350	14400																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-2	-1	-1	0	-2	-3	-3	0	0	0	0	-1	-8	-9			
14400	14450																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-2	-1	-1	0	-2	-3	-3	0	0	0	0	-1	-8	-9			
14450	14500																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-2	-1	-1	0	-2	-3	-3	0	0	0	0	-1	-8	-9			
14500	14550																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-2	-1	-1	0	-1	-3	-3	0	0	0	0	-1	-7	-9			
14550	14600																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-1	-1	-1	0	-1	-3	-3	0	0	0	0	-1	-7	-9			
14600	14650																		Structure over River Urie and floodplain. Area of compressible ground. Impact assessed as Major for the structure (650m) and associated engineering works. Combination of hilliness and bendiness. Local disruption due to construction
		-1	-1	-1	-1	0	-1	-3	-2	0	0	0	0	-1	-6	-9			
14650	14700																		Potential attenuation impact due to floodplain
14700	14750																		
14750	14800																		

0	Neutral
-1	Slight Adverse
-2	Moderate Adverse
-3	Major Adverse

**Rules**

**Total Score**  
 = Alignment Score (Average of E, F, G, H and I) + Geo Score + Structures Score + Flooding Score (Average of L, M and N) + Utilities Score + Constructability Score  
 (Minimum value of P&Q) = Total of 6 scores for 6 categories

Then if total < or equal to -9 then should be coloured red because this represents possibility of 3 reds or 4 ambers  
 If total is between -6 and -8 should be coloured amber since this could represent 2 reds or 3/4 ambers.

Chainage	Start Chainage	End Chainage	Alignment					Structures	Flooding and Drainage			Utilities	Constructability	Score	Comments		
			Level Difference	Bendiness	Hilliness	Earthworks	Geotechnics		Geotechnics	Structures	Flood Plain					Watercourse Crossings	Attenuation requirement
0	50		-1	-1	0	0	-1	-1	0	0	0	0	0	-1	-4	-4	Structure for tie in to existing A86
50	100		-1	-1	0	0	-1	0	0	0	0	0	0	-1	-2	-2	
100	150		-1	-1	0	0	-1	0	0	0	0	0	0	-1	-2	-2	
150	200		-1	0	0	0	-1	0	0	0	0	0	0	-1	-1	-1	
200	250		-1	-1	0	0	-1	0	0	0	0	0	0	-1	-2	-2	
250	300		-1	-1	0	0	-1	-2	-3	0	0	0	0	-1	-7	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
300	350		-1	-2	0	0	-1	-2	-3	0	0	0	0	-1	-7	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
350	400		-1	-2	0	0	-1	-2	-3	0	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
400	450		-1	-3	0	0	-1	-2	-3	-3	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
450	500		-1	-3	0	0	-1	-2	-3	-3	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
500	550		-1	-3	0	0	-1	-2	-3	-3	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
550	600		-1	-3	0	0	-1	-2	-3	-3	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
600	650		-1	-2	0	0	-1	-2	-3	-3	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
650	700		-1	-2	0	0	-1	-2	-3	-3	0	0	0	-1	-8	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
700	750		-1	-2	0	0	-1	-1	-3	-3	0	0	0	-1	-7	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
750	800		-1	-2	0	0	-1	-1	-3	-3	0	0	0	-1	-7	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
800	850		-1	-2	0	0	-1	-1	-3	-3	0	0	0	-1	-7	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
850	900		-1	-2	0	0	-1	-1	-3	0	0	0	0	-1	-6	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
900	950		-1	-2	0	0	-1	0	-3	0	0	0	0	-1	-5	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
950	1000		-1	-1	0	0	-1	0	-3	0	0	0	0	-1	-5	-9	Structure over River Urie and Wood Burn. Area of compressible ground. Impact assessed as Major for the structure (700m) and associated engineering works. level differences and earthworks/m
1000	1050		-1	-1	0	0	-1	-1	0	0	0	0	0	-1	-3	-3	Cutting up to 18.9m high in non-identified geotechnical constraint combination of level differences and earthworks/m
1050	1100		-1	-2	0	0	-1	-1	0	0	0	0	0	-1	-3	-3	Cutting up to 18.9m high in non-identified geotechnical constraint combination of level differences and earthworks/m
1100	1150		-1	-2	0	0	-1	-1	0	0	0	0	0	-1	-3	-3	Cutting up to 18.9m high in non-identified geotechnical constraint combination of level differences and earthworks/m
1150	1200		-1	-2	0	0	-1	-1	0	0	0	0	0	-1	-3	-3	Cutting up to 18.9m high in non-identified geotechnical constraint combination of level differences and earthworks/m
1200	1250		-1	-2	0	0	-1	-1	0	0	0	0	0	-1	-3	-3	Cutting up to 18.9m high in non-identified geotechnical constraint combination of level differences and earthworks/m
1250	1300		-1	-2	0	0	-1	-1	0	0	0	0	0	-1	-3	-3	Cutting up to 18.9m high in non-identified geotechnical constraint combination of level differences and earthworks/m
1300	1350		-1	-2	0	0	-1	0	0	0	0	0	0	-1	-2	-2	
1350	1400		-1	-1	0	0	-1	0	0	0	0	0	0	-1	-2	-2	
1400	1450		-1	-1	0	0	-1	0	0	0	0	0	0	-1	-2	-2	
1450	1500		-1	-1	0	0	-1	0	0	0	0	0	0	-1	-2	-2	
1500	1550		-1	-1	0	0	-1	0	0	0	0	0	0	-2	-3	-3	Minor embankment. Combination of level differences and earthworks/m. Local disruption due to construction
1550	1600		-1	0	0	0	-1	0	0	0	0	0	0	-2	-2	-2	
1600	1650		-1	0	0	0	-1	0	0	0	0	0	0	-2	-2	-2	
1650	1700		-1	0	0	0	-1	0	0	0	0	0	0	-2	-2	-2	
1700	1750		-1	0	0	0	-1	0	0	0	0	0	0	-2	-2	-2	
1750	1800		-1	0	0	0	-1	0	0	0	0	0	0	-2	-2	-2	
1800	1850		-1	0	0	0	-1	0	0	0	0	0	0	-2	-2	-2	





4450	4500	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4500	4550	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4550	4600	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4600	4650	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4650	4700	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4700	4750	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4750	4800	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4800	4850	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4850	4900	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4900	4950	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
4950	5000	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5000	5050	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5050	5100	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5100	5150	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5150	5200	-1	-1	0	0	-1	0	0	0	0	0	0	0	-1	0	-2	-2	
5200	5250	-1	0	0	0	-1	0	0	0	0	0	0	-1	-1	0	-2	-3	
5250	5300	-1	0	0	0	-1	0	0	0	0	0	0	-1	0	-1	-1	-1	
5300	5350	-1	0	0	0	-1	0	0	0	0	0	0	-1	0	-1	-1	-1	
5350	5400	-1	0	0	0	-1	0	0	0	0	0	0	-1	0	-1	-1	-1	
5400	5450	-1	0	0	0	-1	0	0	0	0	0	0	-1	0	-1	-1	-1	
5450	5500	-1	0	0	0	-1	0	0	0	0	0	0	-1	0	-1	-1	-1	
5500	5550	-1	-1	0	0	-1	0	0	0	0	0	0	-1	0	-2	-2	-2	
5550	5600	-1	-1	0	0	-1	0	0	0	0	0	0	-1	0	-2	-2	-2	
5600	5650	-1	-1	0	0	-1	0	0	0	0	0	0	-1	0	-2	-2	-2	
5650	5700	-1	-1	0	0	-1	0	0	0	0	0	0	-1	0	-2	-2	-2	
5700	5750	-1	-1	0	0	-1	0	0	0	0	0	0	-1	0	-2	-2	-2	
5750	5800	-1	-1	0	0	-1	0	0	0	0	0	0	-1	0	-2	-2	-2	
5800	5850	-1	-1	0	0	-1	0	0	0	0	0	0	-1	0	-2	-2	-2	
5850	5900	-1	-1	0	0	-1	0	0	0	0	0	0	-1	0	-2	-2	-2	
5900	5950	-1	-1	0	0	-1	0	0	0	0	0	0	-1	-1	0	-3	-3	SW Distribution Main
5950	6000	-1	-1	0	0	-1	0	-2	0	0	0	0	-1	-1	0	-5	-6	Structure for side road crossing
6000	6050	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	
6050	6100	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	Difficult construction access.
6100	6150	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	
6150	6200	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	
6200	6250	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	SSE 275kV crossing. SSE Pylon within 100m of edge of alignment ch 6271. Combination of level differences and earthworks/m difficult construction access
6250	6300	-1	-1	0	0	-1	0	0	0	0	0	0	-2	-2	0	-5	-5	SSE 275kV crossing. SSE Pylon within 100m of edge of alignment ch 6271. Combination of level differences and earthworks/m difficult construction access
6300	6350	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
6350	6400	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
6400	6450	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
6450	6500	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
6500	6550	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
6550	6600	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access.
6600	6650	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access.
6650	6700	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access.
6700	6750	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access.
6750	6800	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access.
6800	6850	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access.
6850	6900	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access.
6900	6950	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access.
6950	7000	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access.
7000	7050	-1	-1	0	0	-1	0	-2	0	0	0	0	-2	0	-5	-6	-6	Structure for side road crossing
7050	7100	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7100	7150	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7150	7200	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7200	7250	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7250	7300	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7300	7350	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7350	7400	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7400	7450	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7450	7500	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7500	7550	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7550	7600	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7600	7650	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7650	7700	-1	0	0	0	-1	0	0	0	0	0	0	-2	0	-2	-2	-2	
7700	7750	-1	-1	0	0	-1	0	0	0	0	0	0	-2	0	-3	-3	-3	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access



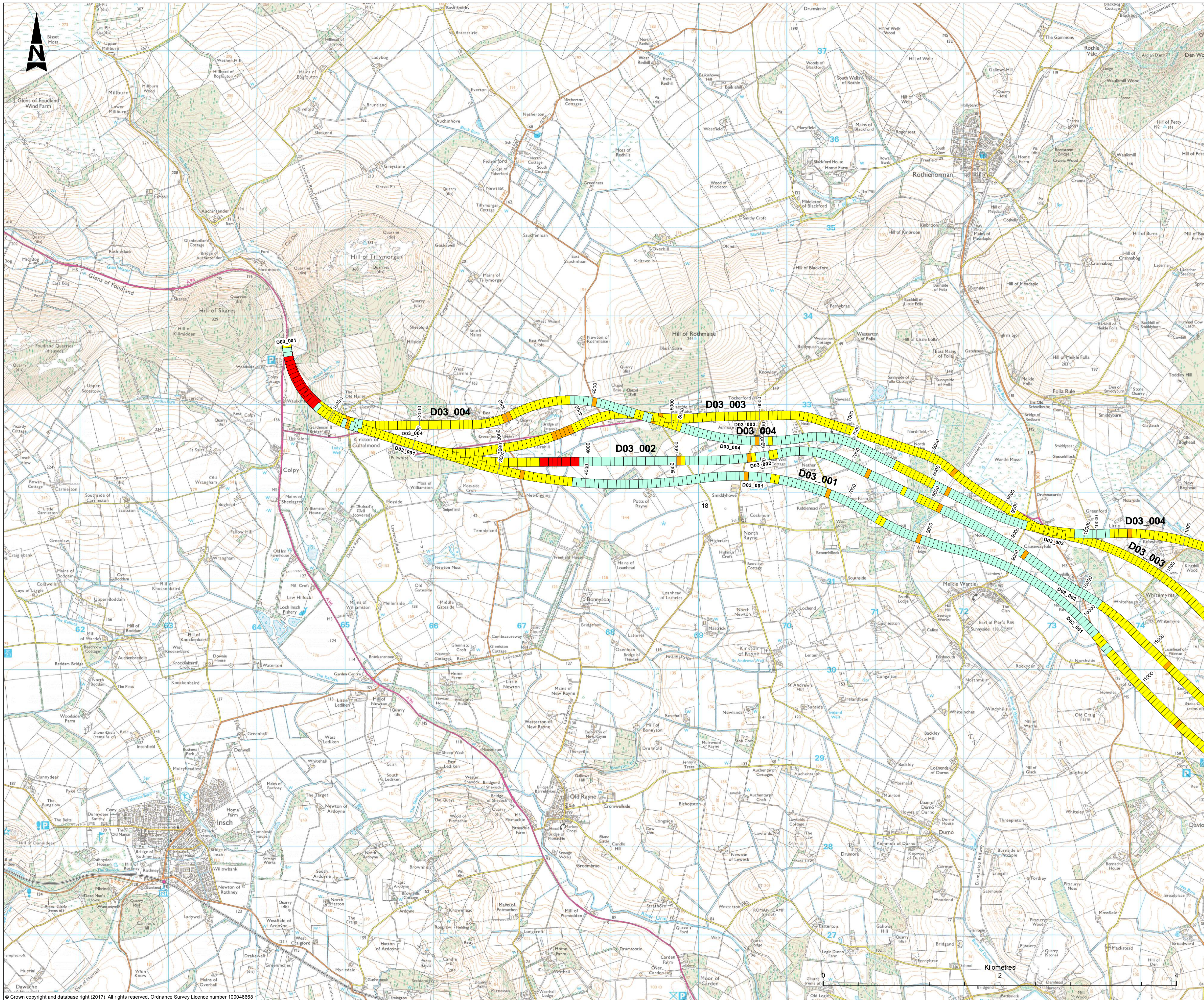
7750	7800																			Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access
7800	7850	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access
7850	7900	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access
7900	7950	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access
7950	8000	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access
8000	8050	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access
8050	8100	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access
8100	8150	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	Combination of at grade construction on non-identified geotechnical constraint and cuttings and embankments less than 10m high on/through non-identified geotechnical constraint. Combination of level differences and earthworks/m. Difficult construction access
8150	8200	-1	-1	0	0	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	Structure for farm access. Note potential compressible ground and geotech / contamination associated with former railway
8200	8250	-1	-1	0	0	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	Dismantled railway - potential for made ground. Also potential for pedestrian/cycle/equestrian route?
8250	8300	-1	-1	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	Potential longer structure to accommodate route of existing watercourse and associated geotechnical works. Potential watercourse diversion as alternative to structure. Adjacent earthworks in potentially compressible material.
8300	8350	-1	0	0	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	0	0	Potential longer structure to accommodate route of existing watercourse and associated geotechnical works. Potential watercourse diversion as alternative to structure. Adjacent earthworks in potentially compressible material.
8350	8400	-1	0	0	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	0	0	Potential longer structure to accommodate route of existing watercourse and associated geotechnical works. Potential watercourse diversion as alternative to structure. Adjacent earthworks in potentially compressible material.
8400	8450	-1	0	0	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	0	0	Potential longer structure to accommodate route of existing watercourse and associated geotechnical works. Potential watercourse diversion as alternative to structure. Adjacent earthworks in potentially compressible material.
8450	8500	-1	0	0	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	0	0	Potential longer structure to accommodate route of existing watercourse and associated geotechnical works. Potential watercourse diversion as alternative to structure. Adjacent earthworks in potentially compressible material.
8500	8550	-1	0	0	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	0	0	Potential longer structure to accommodate route of existing watercourse and associated geotechnical works. Potential watercourse diversion as alternative to structure. Adjacent earthworks in potentially compressible material.
8550	8600	-1	0	0	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	0	0	Potential longer structure to accommodate route of existing watercourse and associated geotechnical works. Potential watercourse diversion as alternative to structure. Adjacent earthworks in potentially compressible material.
8600	8650	-1	0	0	0	-1	-1	-2	0	0	0	0	0	0	0	0	0	0	0	Potential longer structure to accommodate route of existing watercourse and associated geotechnical works. Potential watercourse diversion as alternative to structure. Adjacent earthworks in potentially compressible material.
8650	8700	-1	-1	0	0	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	Cutting up to 12.3m (but greater than 5m) high in potentially compressible material (former sewage works present at chainage 8700-8750 - possible made ground and contamination source)
8700	8750	-1	-1	0	0	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	Structure for side road crossing, Melkide Wattle WWTW (1957) within alignment at this location. Possible contamination at WWTW
8750	8800	-1	-2	0	0	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	Earthworks cutting in slope above up to 12.3m (but greater than 5m) high in/near to potentially compressible material.
8800	8850	-1	-2	0	0	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	Earthworks cutting in slope above up to 12.3m (but greater than 5m) high in/near to potentially compressible material.
8850	8900	-1	-2	0	0	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	Earthworks cutting in slope above up to 12.3m (but greater than 5m) high in/near to potentially compressible material.
8900	8950	-1	-2	0	0	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	Earthworks cutting in slope above up to 12.3m (but greater than 5m) high in/near to potentially compressible material.
8950	9000	-1	-1	0	0	-1	-2	0	0	0	0	0	0	0	0	0	0	0	0	Earthworks cutting in slope above up to 12.3m (but greater than 5m) high in/near to potentially compressible material.
9000	9050	-1	-1	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	Combination of cuttings up to 4.5m high and embankments up to 2.5m high in potentially compressible material. Combination of level differences and earthworks/m. Difficult construction access
9050	9100	-1	-1	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	Combination of cuttings up to 4.5m high and embankments up to 2.5m high in potentially compressible material. Combination of level differences and earthworks/m. Difficult construction access
9100	9150	-1	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	Combination of cuttings up to 4.5m high and embankments up to 2.5m high in potentially compressible material. Combination of level differences and earthworks/m. Difficult construction access
9150	9200	-1	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	Combination of cuttings up to 4.5m high and embankments up to 2.5m high in potentially compressible material. Combination of level differences and earthworks/m. Difficult construction access
9200	9250	-1	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	Combination of cuttings up to 4.5m high and embankments up to 2.5m high in potentially compressible material. Combination of level differences and earthworks/m. Difficult construction access
9250	9300	-1	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	Combination of cuttings up to 4.5m high and embankments up to 2.5m high in potentially compressible material. Combination of level differences and earthworks/m. Difficult construction access
9300	9350	-1	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	Combination of cuttings up to 4.5m high and embankments up to 2.5m high in potentially compressible material. Combination of level differences and earthworks/m. Difficult construction access
9350	9400	-1	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	Combination of cuttings up to 4.5m high and embankments up to 2.5m high in potentially compressible material. Combination of level differences and earthworks/m. Difficult construction access
9400	9450	-1	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	Combination of cuttings up to 4.5m high and embankments up to 2.5m high in potentially compressible material. Combination of level differences and earthworks/m. Difficult construction access
9450	9500	-1	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	Combination of cuttings up to 4.5m high and embankments up to 2.5m high in potentially compressible material. Combination of level differences and earthworks/m. Difficult construction access





13350	13400	-1	-1	0	0	-1	0	0	0	0	0	0	0	-2	0	-3	-3	combination of level differences and earthworks/m difficult construction access
13400	13450	-1	-1	0	0	-1	0	0	0	0	0	0	0	-2	0	-3	-3	combination of level differences and earthworks/m difficult construction access
13450	13500	-1	0	0	0	-1	0	0	0	0	0	0	0	-2	0	-2	-2	
13500	13550	-1	0	0	0	-1	0	0	0	0	0	0	0	-2	0	-2	-2	
13550	13600	-1	0	0	0	-1	0	0	0	0	0	0	0	-2	0	-2	-2	
13600	13650	-1	0	0	0	-1	0	0	0	0	0	0	0	-2	0	-2	-2	
13650	13700	-1	0	0	0	-1	0	0	0	0	0	0	0	-2	0	-2	-2	
13700	13750	-1	0	0	0	-1	0	0	0	0	0	0	0	-2	0	-2	-2	
13750	13800	-1	-1	0	0	-1	0	0	0	0	0	0	0	-2	0	-3	-3	combination of level differences and earthworks/m difficult construction access
13800	13850	-1	-1	0	0	-1	0	0	0	0	0	0	0	-2	0	-3	-3	combination of level differences and earthworks/m difficult construction access
13850	13900	-1	0	0	0	-1	0	0	0	0	0	0	0	-2	0	-2	-2	
13900	13950	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
13950	14000	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
14000	14050	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
14050	14100	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
14100	14150	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
14150	14200	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
14200	14250	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
14250	14300	-1	0	0	0	-1	0	0	0	0	0	0	0	0	-1	-1	-1	
14300	14350	-1	-1	0	0	-1	0	0	0	0	0	0	0	0	-1	-2	-2	
14350	14400	-1	-2	0	0	-1	-2	-3	0	0	0	0	-1	0	-1	-8	-9	Structure over River Urte and floodplain Area of compressible ground impact assessed as Major for the structure (500m) and associated engineering works combination of hilliness and bendiness local disruption due to construction
14400	14450	-1	-2	0	0	-1	-2	-3	0	0	0	0	0	0	-1	-7	-9	
14450	14500	-1	-2	0	0	-1	-2	-3	0	0	0	0	0	0	-1	-8	-9	
14500	14550	-1	-2	0	0	-1	-2	-3	0	0	0	0	0	0	-1	-8	-9	
14550	14600	-1	-2	0	0	-1	-2	-3	0	0	0	0	0	0	-1	-8	-9	
14600	14650	-1	-2	0	0	-1	-2	-3	0	0	0	0	0	0	-1	-8	-9	
14650	14700	-1	-2	0	0	-1	-1	-3	0	0	0	0	0	0	-1	-7	-9	
14700	14750	-1	-1	0	0	-1	-1	-3	0	0	0	0	0	0	-1	-7	-9	
14750	14800	-1	-1	0	0	-1	-1	-3	0	0	0	0	0	0	-1	-7	-9	
14800	14850	-1	-1	0	0	-1	-1	-3	0	0	0	0	0	0	-1	-7	-9	
14850	14900	-1	-1	0	0	-1	-1	-3	0	0	0	0	0	0	-1	-6	-9	
14900	14950	-1	0	0	0	-1	-1	0	-1	0	0	0	0	0	-1	-3	-9	
14950	15000	-1	0	0	0	-1	-1	0	-1	0	0	0	0	0	-1	-4	-9	Tie in to existing A96 due to proximity to new and existing structures
15000	15050																	
15050	15100																	





**LEGEND**

**Combined Engineering Appraisal**

- Major Adverse
- Moderate Adverse
- Slight Adverse
- Neutral

P01	First Fix Appraisal				
	JSE	RO	FM	GW	GH
	10/04/18	18/04/18	18/04/18	18/04/18	18/04/18

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer  
 Precision House  
 McNeil Drive  
 Motherwell  
 ML1 4UR



Client  
 58 Port Dundas Road  
 Glasgow  
 G4 0HF



Project Name  
**A96 Dualling: East of Huntly to Aberdeen**

Drawing Title  
**D03 - Engineering Appraisal Sheet 2 of 2**

Project Ref. No.	Stage	Scale	@A1
250002-92	Stage 2	1:20,000	
Dimensions :			

Drawing Number	Project	Originator	Volume
A96PEA - AMAR - HGN - CD			
Location	Type	Role	Number

Suitability	Suitability Description	Revision
S2	For Information	P01.01