

		Option 1 - Orange	Option 2 - Orange West	Option 3 - Orange East	Option 4 - Red	Option 5 - Purple	Option 6 - Red / Orange East	Option 7 - Orange / Red	Option 8 - Purple / Red
Engineering Issues	Length								
	(km)	7.02	7.18	6.84	6.84	7.19	6.89	6.85	6.94
	Junctions								
	At-grade roundabout	1	1	1	1	1	1	1	1
	Grade-sep junction	0	0	0	0	0	0	0	0
	Horizontal Alignment								
	Sub-standard elements	None	None	None	None	None	None	None	None
	Vertical Alignment								
	Sub-standard elements	6% grade on mainline for 328m	6% grade on mainline for 328m	6% grade on mainline for 328m	6% grade on mainline for 310m	6% grade on mainline for 325m	6% grade on mainline for 314m	6% grade on mainline for 329m	6% grade on mainline for 321m
	Earthworks								
	Acceptable Cut	1,682,658 m ³	1,639,914 m ³	1,654,813 m ³	1,732,335 m ³	2,195,754 m ³	1,832,361 m ³	1,784,570 m ³	1,742,963 m ³
	Bulk Fill	581,004 m ³	1,178,800 m ³	523,853 m ³	922,865 m ³	393,121 m ³	497,254 m ³	733,112 m ³	750,471 m ³
	Balance	1,101,654 m ³	461,114 m ³	1,130,960 m ³	809,469 m ³	1,802,633 m ³	1,335,107 m ³	1,051,459 m ³	992,492 m ³
	Structures								
	No of overbridges	4	3	4	3	5	4	3	3
	No of underbridges	6	7	6	7	5	6	7	7
	No of known culverts	3	4	3	3	3	3	3	3
	Utilities								
	Significant impacts on:								
	BP Oil Pipelines	0	0	0	0	0	0	0	0
Shell Natural Gas Pipelines	0	0	0	0	0	0	0	0	
High Voltage O/H Elec	1	1	1	1	1	1	1	1	
High Pressure Gas	0	0	0	0	0	0	0	0	
Fibreoptics	1	1	1	1	1	1	1	1	
Trunk Water Main	0	0	0	0	0	0	0	0	
Proximity to (within 120m):									
BP Oil Pipelines	0.25km	1.25km							
Economic Issues	Scheme Cost								
		+ 0.4%	+ 2.2%	+ 0.0%	+ 3.7%	+ 15.7%	+ 3.5%	+ 4.1%	+ 3.7%
Note:	The cost of each option is presented as a percentage greater than the lowest cost option within the section.								

		Option 17 - Orange	Option 18 - Blue	Option 19 - Purple	Option 20 - Orange / Purple	Option 21 - Orange / Blue	Option 22 - Blue / Orange	Option 23 - Blue / Purple	Option 24 - Purple / Orange	
		Potential for Mitigation: Tree planting could be provided within severed field boundaries to tie-in with that to the north and to provide screening. Grading out could be implemented where practicable to tie-in with the existing landform.	Potential for Mitigation: Tree planting could be provided within severed field boundaries to tie-in with that to the north and to provide screening. Grading out could be implemented where practicable to tie-in with the existing landform.	Potential for Mitigation: Tree planting could be provided within severed field boundaries to tie-in with that to the north and to provide screening. Grading out could be implemented where practicable to tie-in with the existing landform.	Potential for Mitigation: Tree planting could be provided within severed field boundaries to tie-in with that to the north and to provide screening. Grading out could be implemented where practicable to tie-in with the existing landform.	Potential for Mitigation: Tree planting could be provided within severed field boundaries to tie-in with that to the north and to provide screening. Grading out could be implemented where practicable to tie-in with the existing landform.	Potential for Mitigation: Tree planting could be provided within severed field boundaries to tie-in with that to the north and to provide screening. Grading out could be implemented where practicable to tie-in with the existing landform.	Potential for Mitigation: Tree planting could be provided within severed field boundaries to tie-in with that to the north and to provide screening. Grading out could be implemented where practicable to tie-in with the existing landform.	Potential for Mitigation: Tree planting could be provided within severed field boundaries to tie-in with that to the north and to provide screening. Grading out could be implemented where practicable to tie-in with the existing landform.	
		8. Kingswells Wooded Farmland (Low to medium sensitivity)	8. Kingswells Wooded Farmland (Low to medium sensitivity)	8. Kingswells Wooded Farmland (Low to medium sensitivity)	8. Kingswells Wooded Farmland (Low to medium sensitivity)	8. Kingswells Wooded Farmland (Low to medium sensitivity)	8. Kingswells Wooded Farmland (Low to medium sensitivity)	8. Kingswells Wooded Farmland (Low to medium sensitivity)	8. Kingswells Wooded Farmland (Low to medium sensitivity)	
		Impact: Substantial adverse.	Impact: Substantial adverse.	Impact: Substantial adverse.	Impact: Substantial adverse.	Impact: Substantial adverse.	Impact: Substantial adverse.	Impact: Substantial adverse.	Impact: Substantial adverse.	
		Potential for Mitigation: Woodland planting could be provided to replace that lost and to help filter views of the route and earthworks from Kingswells. Scope for grading out would be limited.	Potential for Mitigation: Woodland planting could be provided to replace that lost and to help filter views of the route and earthworks from Kingswells. Scope for grading out would be limited.	Potential for Mitigation: Woodland planting could be provided to replace that lost and to help filter views of the route and earthworks from Kingswells. Scope for grading out would be limited.	Potential for Mitigation: Woodland planting could be provided to replace that lost and to help filter views of the route and earthworks from Kingswells. Scope for grading out would be limited.	Potential for Mitigation: Woodland planting could be provided to replace that lost and to help filter views of the route and earthworks from Kingswells. Scope for grading out would be limited.	Potential for Mitigation: Woodland planting could be provided to replace that lost and to help filter views of the route and earthworks from Kingswells. Scope for grading out would be limited.	Potential for Mitigation: Woodland planting could be provided to replace that lost and to help filter views of the route and earthworks from Kingswells. Scope for grading out would be limited.	Potential for Mitigation: Woodland planting could be provided to replace that lost and to help filter views of the route and earthworks from Kingswells. Scope for grading out would be limited.	
		Route Summary: Route would have increased visual impacts on the setting of both Milltimber and Peterculter.	Route Summary: Impacts on the setting of Milltimber would largely be contained by local topography and screening woodland.	Route Summary: Impacts on the setting of Milltimber would largely be contained by local topography and screening woodland.	Route Summary: Route would have increased visual impacts on the setting of both Milltimber and Peterculter.	Route Summary: Route would have increased visual impacts on the setting of both Milltimber and Peterculter.	Route Summary: Impacts on the setting of Milltimber would largely be contained by local topography and screening woodland.	Route Summary: Impacts on the setting of Milltimber would largely be contained by local topography and screening woodland.	Route Summary: Impacts on the setting of Milltimber would largely be contained by local topography and screening woodland.	
		The alignment through the intimate wooded area at Silverburn would have a significant adverse impact.	The alignment through the intimate wooded area at Silverburn would have a significant adverse impact.	This option would have lower impacts in the vicinity of Beanshill due to its positioning on the lower slopes and subsequent reduced visibility.	This option would have lower impacts in the vicinity of Beanshill due to its positioning on the lower slopes and subsequent reduced visibility.	The alignment through the intimate wooded area at Silverburn would have a significant adverse impact.	The alignment through the intimate wooded area at Silverburn would have a significant adverse impact.	This option would have lower impacts in the vicinity of Beanshill due to its positioning on the lower slopes and subsequent reduced visibility.	This option would have lower impacts in the vicinity of Beanshill due to its positioning on the lower slopes and subsequent reduced visibility.	
		The distance between the proposed route and the bulk of visual receptors in the area west of Gairnhill Woods would result in lower impacts compared to other routes in this area.	The proximity of the proposed route to visual receptors in the area west of Gairnhill Woods would result in significant impacts.	The alignment avoids the intimate wooded area at Silverburn.	The alignment avoids the intimate wooded area at Silverburn.	The proximity of the proposed route to visual receptors in the area west of Gairnhill Woods would result in significant impacts.	The distance between the proposed route and the bulk of visual receptors in the area west of Gairnhill Woods would result in lower impacts compared to other routes in this area.	The alignment avoids the intimate wooded area at Silverburn.	The alignment through the intimate wooded area at Silverburn would have a significant adverse impact.	
				The proximity of the proposed route to the bulk of visual receptors in the area west of Gairnhill Woods and the woodland paths there would result in the greatest impacts in this area.	The proximity of the proposed route to the bulk of visual receptors in the area west of Gairnhill Woods and the woodland paths there would result in the greatest impacts in this area.			The proximity of the proposed route to the bulk of visual receptors in the area west of Gairnhill Woods and the woodland paths there would result in the greatest impacts in this area.	The distance between the proposed route and the bulk of visual receptors in the area west of Gairnhill Woods would result in lower impacts compared to other routes in this area.	
		Cultural Heritage Note: under 'Direct' impacts, the category 'None' refers to sites of local status with the potential for negligible impact or site of negligible status with the potential for negligible to moderate impacts (as agreed with HS).	Direct - Direct impact on 12 sites in total. Significance of Impact assessed as: 1 Significant (Site 360 (North Westfield House, Boundary Marke)), 4 Not Significant (Sites 277, 285, 348, 349), 5 Minor (Sites 246, 441, 443, 450, 462), 2 None (Sites 387, 429) Proximity - 46 sites within 150m of the option. 2 High Visual Sensitivity (Sites 431, 458 (Friends' Burial Ground, Cloghill House)), 7 Medium Visual Sensitivity (Sites 214, 309, 345, 360, 457, 459, 460), 34 Low Visual Sensitivity.	Direct - Direct impact on 8 sites in total. Significance of Impact assessed as: 2 Not Significant (Sites 348, 349), 5 Minor (Sites 246, 441, 443, 450, 462), 1 None (Site 387) Proximity - 43 sites within 150m of the option. 2 High Visual Sensitivity (Site 431, 458 (Friends' Burial Ground, Cloghill House)), 7 Medium Visual Sensitivity (Sites 214, 309, 345, 360, 457, 459, 460), 31 Sites Low Visual Sensitivity.	Direct - Direct impact on 8 sites in total. Significance of Impact assessed as: 2 Not Significant (Sites 281, 349), 6 Minor (Sites 246, 346, 441, 443, 450, 462) Proximity - 38 sites within 150m of the option. 2 High Visual Sensitivity (Sites 431, 458 (Friends' Burial Ground, Cloghill House)), 5 Sites Medium Visual Sensitivity (Sites 214, 334, 457, 459, 460), 31 Sites Low Visual Sensitivity.	Direct - Direct impact on 12 sites in total. Significance of Impact assessed as: 1 Significant (Site 347 (Westfield Farm Flints)), 4 Not Significant (Sites 270, 285, 346, 349), 5 Minor (Sites 246, 441, 443, 450, 462), 2 None (Sites 277, 429) Proximity - 44 sites within 150m of the option. 2 High Visual Sensitivity (Site 431, 458 (Friends' Burial Ground, Cloghill House)), 6 Sites Medium Visual Sensitivity (Sites 214, 279, 360, 457, 459, 460), 36 Site Low Visual Sensitivity.	Direct - Direct impact on 9 sites in total. Significance of Impact assessed as: 2 Not Significant (Sites 285, 348), 6 Minor (Site 246, 349, 441, 443, 450, 462), 1 None (Site 277) Proximity - 44 sites within 150m of the option. 2 High Visual Sensitivity (Site 431, 458 (Friends' Burial Ground, Cloghill House)), 8 Sites Medium Visual Sensitivity (Sites 214, 279, 309, 345, 360, 457, 459, 460), 34 Sites Low Visual Sensitivity.	Direct - Direct impact on 11 sites in total. Significance of Impact assessed as: 1 Significant (Site 360 (North Westfield House, Boundary Marker)), 3 Not Significant (Sites 281, 348, 353), 6 Minor (Sites 246, 349, 441, 443, 450, 462), 1 None (Site 387) Proximity - 37 sites within 150m of the option. 2 High Visual Sensitivity (Site 431, 458 (Friends' Burial Ground, Cloghill House)), 6 Medium Visual Sensitivity (Sites 214, 309, 345, 457, 459, 460), 29 Low Visual Sensitivity.	Direct - Direct impact on 8 sites in total. Significance of Impact assessed as: 2 Not Significant (Sites 281, 346), 6 Minor (Site 246, 349, 441, 443, 450, 462) Proximity - 32 sites within 150m of the option. 2 High Visual Sensitivity (Site 431, 458 (Friends' Burial Ground, Cloghill House)), 4 Medium Visual Sensitivity (Sites 214, 457, 459, 460), 26 Low Visual Sensitivity.	Direct - Direct impact on 8 sites in total. Significance of Impact assessed as: 3 Not Significant (Sites 281, 346, 349), 5 Minor (Sites 246, 441, 443, 450, 462) Proximity - 36 sites within 150m of the option. 2 High Visual Sensitivity (Site 431, 458 (Friends' Burial Ground, Cloghill House)), 5 Medium Visual Sensitivity (Sites 214, 360, 457, 459, 460), 29 Low Visual Sensitivity.

