

## Appendix 13.3

## Summary Impact Assessment (Nodes M-N) - Soils, Geology and Hydrogeology

---

**TABLE 13.3 - NODES M-N - SUMMARY IMPACT ASSESSMENT**

Node	Qualitative	Quantitative	Proximity	Impact Assessment			Measures to reduce impacts	Residual Impact Assessment	
				Quality	Significance	Duration			
M-N (red)	<b>Bedrock Geology:</b>								
	Cut :								
		2m- 10m	3600m		N	Slight	Perm	Reduce height and length of cut where possible, Landscaping	Low Mod
		10m- 15m	300m			Med	Perm		
		15m- 20m	0m						
		20m- 30m	0m						
		Total Cut	3900m						
	Fill:								
		2m- 10m	4500m		N	Slight	Perm	Reduce height and length of fill where possible, Landscaping	Low
		10m- 15m	0m						
	15m- 20m	0m							
	20m- 30m	0m							
	Total Fill	4500m							
<b>Soils:</b>									
Cut Peat		500m		N	Slight	Perm	Engineering Consideration	Low	
<b>Economic Geology:</b>									
Pits and Quarries		None Recorded							
<b>Geological Heritage:</b>		None Recorded							
<b>Landfills &amp; contaminated Sites:</b>		None Recorded							
<b>Geomorphology:</b>		None Recorded							
<b>Karst Features:</b>		None Recorded							
<b>Aquifer Type:</b>									
Rkd: Regionally Important Aquifers which are Karstified and demonstrate diffuse flow		Total length: 2950m Cut 2-5 m: 100 m Cut 5-10 m: 0 m Cut 10-15m: 0m		-ve	Slight	Perm	Reduce height and length of cut where possible	Low	
<b>Aquifer Vulnerability:</b>									
Extreme									
<b>Ecology:</b>		5100 m		-ve	Slight	Perm	Engineering, Drainage and Construction Considerations	Low	
<b>Groundwater resources:</b>		None Recorded							
		Patrickswell GWS (6-S-07)	300m	-ve	Slight	Perm	Engineering, Drainage and Construction, Accuate Soure Protection Area Required Engineering, Drainage and Construction, Accuate Soure Protection Area Required	Low	
		Chaerass GWS (6-S-06)	350m	-ve	Slight	Perm			

Node	Qualitative	Quantitative	Proximity	Impact Assessment			Measures to reduce impacts	Residual Impact Assessment
				Quality	Significance	Duration		
M-N (purple)	<b>Bedrock Geology:</b> Cut :							
	2m- 10m	1400m		N	Slight	Perm	Reduce height and length of cut where possible, Landscaping	Low
	10m- 15m	0m						
	15m- 20m	0m						
	20m- 30m	0m						
	Total Cut	1400m						
	Fill:							
	2m- 10m	7050m		N	Slight	Perm	Reduce height and length of fill where possible, Landscaping	Low Mod
	10m- 15m	550m		N	Mod	Perm		
	15m- 20m	0m						
20m- 30m	0m							
Total Fill	4500m							
<b>Soils:</b> Cut Peat	500m			N	Slight	Perm	Engineering Consideration	Low
<b>Economic Geology:</b> Pits and Quarries	None Recorded							
<b>Geological Heritage:</b>	None Recorded							
<b>Landfills &amp; contaminated Sites:</b>	None Recorded							
<b>Geomorphology:</b>	None Recorded							
<b>Karst Features:</b>	None Recorded							
<b>Aquifer Type:</b>	None Recorded							
Rkd: Regionally Important Aquifers which are Karstified and demonstrate diffuse flow	Total length: 2100m Cut 2-5 m: 1100 m Cut 5-10 m: 50 m Cut 10-15m: 0m			-ve -ve	Slight Mod	Perm Perm	Reduce height and length of cut where possible	Low Mod
<b>Aquifer Vulnerability:</b> Extreme								
<b>Ecology:</b>	5700 m			-ve	Slight	Perm	Engineering, Drainage and Construction Considerations	Low
<b>Groundwater resources:</b>	None Recorded							
	Patrickswell GWS (6-S-07)		300m	-ve	Slight	Perm	Engineering, Drainage and Construction, Accuate Soure Protection Area Required Engineering, Drainage and Construction, Accuate Soure Protection Area Required	Low
	Chaerass GWS (6-S-06)		350m	-ve	Slight	Perm		Low

Node	Qualitative	Quantitative	Proximity	Impact Assessment			Measures to reduce impacts	Residual Impact Assessment
				Quality	Significance	Duration		
M-N (Yellow)	<b>Geology:</b>	Visean Limestone, Waulsortian Lst						
	<b>Soils:</b> Soft Deposits	Cut Peat	500m	N	Slight	Perm	Engineering Considerations	
	<b>Economic Geology:</b> Pits and Quarries	None Recorded						
	<b>Geological Heritage:</b>	None Recorded						
	<b>Landfills &amp; contaminated Sites:</b>	None Recorded						
	<b>Geomorphology:</b>	None Recorded						
	<b>Karst Features:</b>	None Recorded						
<b>Aquifer Type:</b> Rkd: Regionally Important Aquifers which are Karstified and demonstrate diffuse flow	Total Length 3500m			N	Slight	Perm	Ensure road drainage is not allowed to percolate into aquifer	
<b>Aquifer Vulnerability:</b> Extreme Surface	4000m			-ve	Slight	Perm	Ensure road drainage is not allowed to percolate into aquifer	Low
<b>Ecology:</b>	None Present							
<b>Groundwater resources:</b>	Patrickswell GWS (6-S-07) Chaerass GWS (6-S-06)	Outer Zone Outer Zone		-ve -ve	Loe Low	Long Long	Ensure road drainage is not allowed to percolate into aquifer. Detailed Source Protection Area of supply required.	Low Low