

Appendix F: Impact Assessment

Operational Phase Impacts

Impact Ratings Before Mitigation														Impact Ratings After Mitigation													
	Alt	Impact	Significance	Extent	Duration	Probability	Degree of Certainty	Impact Risk	Intensity / Severity	Reversibility		Significance	Extent	Duration	Probability	Degree of Certainty	Impact Risk										
Soils and Land Capability	Alt 1	Direct Impact	LOW	2 Isolated Sites / proposed site	1 Long term	4 Very Likely	4 Probable	1.87	Low	Low	Reversible over time	3	LOW	2 Isolated Sites / proposed site	1 Long term	4 Could occur	3 Possible	1.40	Low								
	Alt 2		LOW	2 Isolated Sites / proposed site	1 Long term	4 Very Likely	4 Probable	1.87	Low	Low	Reversible over time	3	LOW	2 Isolated Sites / proposed site	1 Long term	4 Could occur	3 Possible	1.40	Low								
	Alt 3		LOW	2 Isolated Sites / proposed site	1 Long term	4 Very Likely	4 Probable	1.87	Low	Low	Reversible over time	3	LOW	2 Isolated Sites / proposed site	1 Long term	4 Could occur	3 Possible	1.40	Low								
Land Use	Alt 1	Direct Impact	MODERATE	3 Study Area	2 Medium term	3 Very Likely	4 Possible	2.13	Moderate	Medium	Reversible over time	3	LOW	2 Study Area	2 Medium term	3 Very Likely	4 Possible	1.87	Low								
	Alt 2		MODERATE	3 Study Area	2 Medium term	3 Very Likely	4 Possible	2.13	Moderate	Medium	Reversible over time	3	LOW	2 Study Area	2 Medium term	3 Very Likely	4 Possible	1.87	Low								
	Alt 3		HIGH	4 Study Area	2 Long term	4 Will / Has occurred	5 Possible	3.33	High	High	Reversible over time	3	MODERATE	3 Study Area	2 Medium term	3 Very Likely	4 Possible	2.13	Moderate								
Surface Water & Groundwater	Alt 1	Direct Impact	LOW	2 Local	3 Incidental	1 Will / Has occurred	5 Possible	2.00	Low	Low	Reversible over time	3	LOW	2 Isolated Sites / proposed site	1 Incidental	1 Could occur	3 Possible	0.80	Very Low								
	Alt 2		LOW	2 Local	3 Incidental	1 Will / Has occurred	5 Possible	2.00	Low	Low	Reversible over time	3	LOW	2 Isolated Sites / proposed site	1 Incidental	1 Could occur	3 Possible	0.80	Very Low								
	Alt 3		HIGH	4 Local	3 Short-term	2 Will / Has occurred	5 Probable	3.00	Moderate	Medium	Reversible over time	3	MODERATE	3 Isolated Sites / proposed site	1 Incidental	1 Very Likely	4 Possible	1.33	Low								
Fauna, Flora and Avifauna	Alt 1	Direct Impact	HIGH	4 Study Area	2 Long term	4 Will / Has occurred	5 Possible	3.33	High	Low	Reversible over the long term	4	MODERATE	3 Study Area	2 Medium term	3 Very Likely	4 Possible	2.13	Moderate								
	Alt 2		HIGH	4 Study Area	2 Long term	4 Will / Has occurred	5 Possible	3.33	High	Low	Reversible over time	3	MODERATE	3 Study Area	2 Medium term	3 Very Likely	4 Possible	2.13	Moderate								
	Alt 3		MODERATE	3 Study Area	2 Long term	4 Will / Has occurred	5 Possible	3.00	Moderate	Low	Reversible over the long term	4	LOW	2 Study Area	2 Medium term	3 Very Likely	4 Possible	1.87	Low								
	Alt 1	Indirect Impact	HIGH	4 Local	3 Long term	4 Will / Has occurred	5 Definite	3.67	High	Medium	Reversible over time	3	MODERATE	3 Local	3 Medium term	3 Very Likely	4 Possible	2.40	Moderate								
	Alt 2		HIGH	4 Local	3 Long term	4 Will / Has occurred	5 Possible	3.67	High	Medium	Reversible over time	3	MODERATE	3 Local	3 Medium term	3 Very Likely	4 Possible	2.40	Moderate								
	Alt 3		MODERATE	3 Study Area	2 Long term	4 Will / Has occurred	5 Possible	3.00	Moderate	Medium	Reversible over time	3	LOW	2 Isolated Sites / proposed site	1 Medium term	3 Could occur	3 Possible	1.20	Low								
Visual	Alt 1	Direct Impact	MODERATE	3 Study Area	2 Medium term	3 Could occur	3 Possible	1.60	Low	Low	Quickly reversible	2	LOW	2 Isolated Sites / proposed site	1 Medium term	3 Could occur	3 Possible	1.20	Low								
	Alt 2		MODERATE	3 Study Area	2 Medium term	3 Could occur	3 Possible	1.60	Low	Low	Quickly reversible	2	LOW	2 Isolated Sites / proposed site	1 Medium term	3 Could occur	3 Possible	1.20	Low								
	Alt 3		MODERATE	3 Study Area	2 Medium term	3 Could occur	3 Probable	1.60	Low	Low	Quickly reversible	2	LOW	2 Isolated Sites / proposed site	1 Medium term	3 Could occur	3 Possible	1.20	Low								
Socio-Economic	Alt 1	Direct Impact	MODERATE	3 Study Area	2 Short-term	2 Very Likely	4 Possible	1.87	Low	Low	Quickly reversible	2	LOW	2 Study Area	2 Incidental	1 Could occur	3 Possible	1.00	Very Low								
	Alt 2		MODERATE	3 Study Area	2 Short-term	2 Very Likely	4 Possible	1.87	Low	Low	Quickly reversible	2	LOW	2 Study Area	2 Incidental	1 Could occur	3 Possible	1.00	Very Low								
	Alt 3		MODERATE	3 Study Area	2 Short-term	2 Very Likely	4 Probable	1.87	Low	Low	Quickly reversible	2	LOW	2 Study Area	2 Incidental	1 Could occur	3 Possible	1.00	Very Low								

Pre-Construction and Construction Phase Impacts

		Impact Ratings Before Mitigation											Impact Ratings After Mitigation							
		Significance	Extent	Duration	Probability	Degree of Certainty	Impact Risk	Intensity / Severity	Reversibility	Significance	Extent	Duration	Probability	Degree of Certainty	Impact Risk					
Geology	Alt 1	Direct Impact	LOW	2 Isolated Sites / proposed site	1 Permanent	5 Could occur	3 Possible	1.60	Low	Low	Irreversible, impact permanent	is	5	LOW	2 Isolated Sites / proposed site	1 Permanent	5 Unlikely	2 Possible	1.07	Very Low
	Alt 2		LOW	2 Isolated Sites / proposed site	1 Permanent	5 Could occur	3 Possible	1.60	Low	Low	Irreversible, impact permanent	is	5	LOW	2 Isolated Sites / proposed site	1 Permanent	5 Unlikely	2 Possible	1.07	Very Low
	Alt 3		LOW	2 Isolated Sites / proposed site	1 Permanent	5 Could occur	3 Probable	1.60	Low	Low	Irreversible, impact permanent	is	5	LOW	2 Isolated Sites / proposed site	1 Permanent	5 Unlikely	2 Possible	1.07	Very Low
Topography	Alt 1	Direct Impact	LOW	2 Isolated Sites / proposed site	1 Short-term	2 Very Likely	4 Possible	1.33	Low	Low	Reversible over time		3	LOW	2 Isolated Sites / proposed site	1 Short-term	2 Unlikely	2 Possible	0.67	Very Low
	Alt 2		LOW	2 Isolated Sites / proposed site	1 Short-term	2 Very Likely	4 Possible	1.33	Low	Low	Reversible over time		3	LOW	2 Isolated Sites / proposed site	1 Short-term	2 Unlikely	2 Possible	0.67	Very Low
	Alt 3		LOW	2 Isolated Sites / proposed site	1 Medium term	3 Very Likely	4 Probable	1.60	Low	Low	Reversible over time		3	LOW	2 Study Area	2 Medium term	3 Could occur	3 Possible	1.40	Low
Soils and Land Capability	Alt 1	Direct Impact	MODERATE	3 Study Area	2 Medium term	3 Very Likely	4 Probable	2.13	Moderate	Low	Reversible over time		3	LOW	2 Study Area	2 Medium term	3 Could occur	3 Possible	1.40	Low
	Alt 2		MODERATE	3 Study Area	2 Medium term	3 Very Likely	4 Probable	2.13	Moderate	Low	Reversible over time		3	LOW	2 Study Area	2 Medium term	3 Could occur	3 Possible	1.40	Low
	Alt 3		LOW	2 Isolated Sites / proposed site	1 Medium term	3 Could occur	3 Probable	1.20	Low	Low	Reversible over time		3	LOW	2 Isolated Sites / proposed site	1 Medium term	3 Could occur	3 Possible	1.20	Low
Land Use	Alt 1	Direct Impact	MODERATE	3 Study Area	2 Short-term	2 Will / Has occurred	5 Probable	2.33	Moderate	Medium	Quickly reversible		2	LOW	2 Isolated Sites / proposed site	1 Short-term	2 Could occur	3 Possible	1.00	Very Low
	Alt 2		MODERATE	3 Study Area	2 Short-term	2 Will / Has occurred	5 Probable	2.33	Moderate	Medium	Quickly reversible		2	LOW	2 Isolated Sites / proposed site	1 Short-term	2 Could occur	3 Possible	1.00	Very Low
	Alt 3		MODERATE	3 Study Area	2 Short-term	2 Could occur	3 Probable	1.40	Low	Medium	Quickly reversible		2	LOW	2 Isolated Sites / proposed site	1 Short-term	2 Could occur	3 Possible	1.00	Very Low
	Alt 1	Indirect Impact	HIGH	4 Local	3 Short-term	2 Very Likely	4 Possible	2.40	Moderate	Medium	Reversible over time		3	LOW	2 Local	3 Short-term	2 Could occur	3 Possible	1.40	Low
	Alt 2		HIGH	4 Local	3 Short-term	2 Very Likely	4 Possible	2.40	Moderate	Medium	Reversible over time		3	LOW	2 Local	3 Short-term	2 Could occur	3 Possible	1.40	Low
	Alt 3		HIGH	4 Local	3 Short-term	2 Very Likely	4 Possible	2.40	Moderate	Medium	Reversible over time		3	LOW	2 Local	3 Short-term	2 Could occur	3 Possible	1.40	Low
Surface and Ground Water	Alt 1	Direct Impact	MODERATE	3 Study Area	2 Short-term	2 Very Likely	4 Probable	1.87	Low	Medium	Reversible over time		3	LOW	2 Isolated Sites / proposed site	1 Incidental	1 Could occur	3 Possible	0.80	Very Low
	Alt 2		MODERATE	3 Study Area	2 Short-term	2 Very Likely	4 Probable	1.87	Low	Medium	Reversible over time		3	LOW	2 Isolated Sites / proposed site	1 Incidental	1 Could occur	3 Possible	0.80	Very Low
	Alt 3		MODERATE	3 Study Area	2 Short-term	2 Very Likely	4 Probable	1.87	Low	Medium	Reversible over time		3	LOW	2 Isolated Sites / proposed site	1 Short-term	2 Could occur	3 Possible	1.00	Very Low
	Alt 1	Indirect Impact	LOW	2 Isolated Sites / proposed site	1 Permanent	5 Could occur	3 Possible	1.60	Low	Medium	Reversible over time		3	LOW	2 Isolated Sites / proposed site	1 Short-term	2 Unlikely	2 Possible	0.67	Very Low
	Alt 2		LOW	2 Isolated Sites / proposed site	1 Long term	4 Could occur	3 Possible	1.40	Low	Medium	Reversible over time		3	LOW	2 Isolated Sites / proposed site	1 Short-term	2 Unlikely	2 Possible	0.67	Very Low
	Alt 3		LOW	2 Isolated Sites / proposed site	1 Permanent	5 Could occur	3 Possible	1.60	Low	Medium	Reversible over time		3	LOW	2 Isolated Sites / proposed site	1 Short-term	2 Unlikely	2 Possible	0.67	Very Low

Fauna, Flora & Avifauna	Alt 1	Direct Impact	HIGH	4	Study Area	2	Long term	4	Will / Has occurred	5	Probable	3.33	High	Medium	Reversible over the long term	4
	Alt 2		HIGH	4	Study Area	2	Long term	4	Will / Has occurred	5	Probable	3.33	High	Medium	Reversible over the long term	4
	Alt 3		MODERATE	3	Study Area	2	Long term	4	Will / Has occurred	5	Probable	3.00	Moderate	Medium	Reversible over the long term	4
	Alt 1	Indirect Impact	HIGH	4	Local	3	Medium term	3	Will / Has occurred	5	Possible	3.33	High	Medium	Reversible over time	3
	Alt 2		HIGH	4	Local	3	Medium term	3	Will / Has occurred	5	Possible	3.33	High	Medium	Reversible over time	3
	Alt 3		HIGH	4	Local	3	Medium term	3	Very Likely	4	Possible	2.67	Moderate	Medium	Reversible over time	3
Archaeological or Cultural	Alt 1	Direct Impact	LOW	2	Isolated Sites / proposed site	1	Permanent	5	Very Likely	4	Possible	2.13	Moderate	High	Irreversible, impact permanent	5
	Alt 2		LOW	2	Isolated Sites / proposed site	1	Permanent	5	Very Likely	4	Possible	2.13	Moderate	High	Irreversible, impact permanent	5
	Alt 3		LOW	2	Isolated Sites / proposed site	1	Permanent	5	Could occur	3	Probable	1.60	Low	Medium	Irreversible, impact permanent	5
Socio-Economic	Alt 1	Direct Impact	MODERATE	3	Local	3	Short-term	2	Very Likely	4	Possible	2.13	Moderate	Medium	Reversible over time	3
	Alt 2		MODERATE	3	Local	3	Short-term	2	Very Likely	4	Possible	2.13	Moderate	Medium	Reversible over time	3
	Alt 3		MODERATE	3	Local	3	Short-term	2	Very Likely	4	Probable	2.13	Moderate	Medium	Reversible over time	3
Noise	Alt 1	Direct Impact	LOW	2	Local	3	Medium term	3	Could occur	3	Possible	1.60	Low	Low	Quickly reversible	2
	Alt 2		LOW	2	Local	3	Medium term	3	Could occur	3	Possible	1.60	Low	Low	Quickly reversible	2
	Alt 3		LOW	2	Local	3	Medium term	3	Could occur	3	Probable	1.60	Low	Low	Quickly reversible	2
Traffic	Alt 1	Direct Impact	MODERATE	3	Local	3	Medium term	3	Very Likely	4	Possible	2.40	Moderate	Medium	Quickly reversible	2
	Alt 2		MODERATE	3	Local	3	Medium term	3	Very Likely	4	Possible	2.40	Moderate	Medium	Quickly reversible	2
	Alt 3		MODERATE	3	Local	3	Medium term	3	Very Likely	4	Possible	2.40	Moderate	Medium	Quickly reversible	2
	Alt 1	Indirect Impact	MODERATE	3	Regional/Provincial	4	Medium term	3	Very Likely	4	Possible	2.67	Moderate	Medium	Quickly reversible	2
	Alt 2		MODERATE	3	Regional/Provincial	4	Medium term	3	Very Likely	4	Possible	2.67	Moderate	Medium	Quickly reversible	2
	Alt 3		MODERATE	3	Regional/Provincial	4	Medium term	3	Very Likely	4	Possible	2.67	Moderate	Medium	Quickly reversible	2
Visual	Alt 1	Direct Impact	MODERATE	3	Study Area	2	Medium term	3	Could occur	3	Possible	1.60	Low	Low	Reversible over time	3
	Alt 2		MODERATE	3	Study Area	2	Medium term	3	Could occur	3	Possible	1.60	Low	Low	Reversible over time	3
	Alt 3		MODERATE	3	Study Area	2	Medium term	3	Could occur	3	Probable	1.60	Low	Low	Reversible over time	3
Air Quality	Alt 1	Direct Impact	LOW	2	Local	3	Short-term	2	Very Likely	4	Possible	1.87	Low	Low	Reversible over time	3
	Alt 2		LOW	2	Local	3	Short-term	2	Very Likely	4	Possible	1.87	Low	Low	Reversible over time	3
	Alt 3		LOW	2	Local	3	Short-term	2	Very Likely	4	Probable	1.87	Low	Low	Reversible over time	3
			MODERATE	3	Study Area	2	Medium term	3	Very Likely	4	Possible	2.13	Moderate	Medium	Reversible over the long term	4
			MODERATE	3	Study Area	2	Medium term	3	Very Likely	4	Possible	2.13	Moderate	Medium	Reversible over the long term	4
			MODERATE	3	Study Area	2	Medium term	3	Could occur	3	Possible	1.60	Low	Medium	Reversible over the long term	4
			MODERATE	3	Local	3	Medium term	3	Very Likely	4	Possible	2.40	Moderate	Medium	Reversible over time	3
			MODERATE	3	Local	3	Medium term	3	Very Likely	4	Possible	2.40	Moderate	Medium	Reversible over time	3
			MODERATE	3	Local	3	Medium term	3	Could occur	3	Possible	1.80	Low	Medium	Reversible over time	3
			LOW	2	Isolated Sites / proposed site	1	Incidental	1	Unlikely	2	Possible	0.53	Very Low	High	Irreversible, impact permanent	5
			LOW	2	Isolated Sites / proposed site	1	Incidental	1	Unlikely	2	Possible	0.53	Very Low	High	Irreversible, impact permanent	5
			LOW	2	Isolated Sites / proposed site	1	Incidental	1	Unlikely	2	Possible	0.53	Very Low	Medium	Irreversible, impact permanent	5
			LOW	2	Local	3	Short-term	2	Could occur	3	Possible	1.40	Low	Medium	Reversible over time	3
			LOW	2	Local	3	Short-term	2	Could occur	3	Possible	1.40	Low	Medium	Reversible over time	3
			LOW	2	Local	3	Short-term	2	Could occur	3	Possible	1.40	Low	Medium	Reversible over time	3
			LOW	2	Local	3	Incidental	1	Could occur	3	Possible	1.20	Low	Low	Quickly reversible	2
			LOW	2	Local	3	Incidental	1	Could occur	3	Possible	1.20	Low	Low	Quickly reversible	2
			LOW	2	Local	3	Incidental	1	Could occur	3	Possible	1.20	Low	Low	Quickly reversible	2
			LOW	2	Local	3	Incidental	1	Could occur	3	Possible	1.20	Low	Low	Quickly reversible	2
			LOW	2	Regional/Provincial	4	Incidental	1	Could occur	3	Possible	1.40	Low	Medium	Quickly reversible	2
			LOW	2	Regional/Provincial	4	Incidental	1	Could occur	3	Possible	1.40	Low	Medium	Quickly reversible	2
			LOW	2	Regional/Provincial	4	Incidental	1	Could occur	3	Possible	1.40	Low	Medium	Quickly reversible	2
			LOW	2	Isolated Sites / proposed site	1	Medium term	3	Could occur	3	Possible	1.20	Low	Low	Reversible over time	3
			LOW	2	Isolated Sites / proposed site	1	Medium term	3	Could occur	3	Possible	1.20	Low	Low	Reversible over time	3
			LOW	2	Isolated Sites / proposed site	1	Medium term	3	Could occur	3	Possible	1.20	Low	Low	Reversible over time	3
			LOW	2	Study Area	2	Short-term	2	Could occur	3	Possible	1.20	Low	Low	Reversible over time	3
			LOW	2	Study Area	2	Short-term	2	Could occur	3	Possible	1.20	Low	Low	Reversible over time	3
			LOW	2	Study Area	2	Short-term	2	Could occur	3	Possible	1.20	Low	Low	Reversible over time	3