

Technical Appendix 8.1: NBIA ESIA Traffic Analysis

Baseline traffic						
RN15 Volumes	2015	2020	2030	2035	2040	2045
Light vehicles	800	1021	2595	3228	4117	5363
Heavy vehicles	200	255	649	807	1029	1341
Total vehicles	1000	1276	3243	4035	5146	6704
Peak hour	120	153	389	484	618	804
Peak hour (heavy vehicles)	24	31	78	97	124	161

Airport operations traffic						
Expressway volumes	2020	2030	2035	2040	2045	
AADT	4661	9961	13495	17706	22563	
Peak hour	559	1195	1619	2125	2708	

Construction material quantities						
Activity	Unit	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Tree Root Clearance	tonnes	2672934	0	64512	28080	21024
Granular backfill	m3	285182	13011	17869	31145	14811
Sub-course	tonnes	468327	24580	34915	57564	24931
Asphalt Base-course	tonnes	420678	17745	370243	153003	21094
Asphalt Binder-course	tonnes					
Asphalt Surface-course	tonnes					
Concrete	m3	123306	9170	20541	8941	6694
Cement	tonnes	49322	3668	8216	3576	2678
Aggregate	tonnes	234281	17423	39028	16988	12719

Construction traffic on Expressway (Phase 1 on existing roads)																							
Activity	Phase 1 (Using existing roads)					Phase 2				Phase 3				Phase 4				Phase 5					
	Truck loads	2-way	Per day	Peak hour		Truck loads	2-way	Per day	Peak hour		Truck loads	2-way	Per day	Peak hour		Truck loads	2-way	Per day	Peak hour				
Tree Root Clearance	267293	534587	742	74	74	0	0	0	0	0	6451	12902	18	2	2	2808	5616	8	1	2102	4205	6	1
Granular backfill	21125	42249	59	6	6	964	1928	3	0	0	1324	2647	4	0	0	2307	4614	6	1	1097	2194	3	0
Sub-course	34691	69382	96	10	10	1821	3641	5	1	1	2586	5173	7	1	1	4264	8528	12	1	1847	3693	5	1
Cement	1787	3574	5	0	0	133	266	0	0	0	298	595	1	0	0	130	259	0	0	97	194	0	0
Total	324896	649792	902	90	90	2917	5835	8	1	1	10659	21318	30	3	3	9509	19017	26	3	5143	10287	14	1