

Proposed Coal-Fired Power Station in the Witbank Area, Mpumalanga
Appendix B

Table B.1: Forecasted Traffic Volumes

Road	Phase	Year	ADT	HV%	Description	Growth	Growth HV
R 545	Present	2006	2856	29.4	Between D686 and N4	3.50%	5%
	Construction	2008	3059	30.2			
	Oper(2units)&Con	2012	3511	32.0			
	Oper(3units)&Con	2013	3634	32.5			
	Operation	2014	3761	33.0			
D686	Present	2006	2218	30.2	Between R545 and N12	3.50%	5%
	Construction	2008	2376	31.1			
	Oper(2units)&Con	2012	2726	22.2			
	Oper(3units)&Con	2013	2822	22.5			
	Operation	2014	2921	22.9			
P29/1(R555)	Present	2006	1563	21.0	Between Kendal and Delmas	3.50%	5%
	Construction	2008	1674	21.6			
	Oper(2units)&Con	2012	1921	26.7			
	Oper(3units)&Con	2013	1989	27.1			
	Operation	2014	2058	27.5			
P95/2(R42)	Present	2006	1277	21.1	Between N12 and R25	3.50%	5%
	Construction	2008	1368	21.8			
	Oper(2units)&Con	2012	1570	23.0			
	Oper(3units)&Con	2013	1625	23.4			
	Operation	2014	1682	23.7			
N4	Present	2006	11864	12.7	Western side of R545/Ogies I/C	3.17%	11.53%
	Construction	2008	12629	14.8			
	Oper(2units)&Con	2012	14311	20.2			
	Oper(3units)&Con	2013	14765	21.9			
	Operation	2014	15233	23.6			
N4	Present	2006	12034	10.6	6 km West of Highveld Steel/Clewer Interchange	3.17%	11.53%
	Construction	2008	12810	12.4			
	Oper(2units)&Con	2012	14516	16.9			
	Oper(3units)&Con	2013	14976	18.3			
	Operation	2014	15452	19.8			
N12	Present	2006	11478	15	Western side of R545/Ogies I/C	3.81%	4.65%
	Construction	2008	12369	15.3			
	Oper(2units)&Con	2012	14365	15.8			
	Oper(3units)&Con	2013	14913	15.9			
	Operation	2014	15481	16.1			
N12	Present	2006	10969	9.8	Close proximity to N4/N12 split	3.81%	4.65%
	Construction	2008	11821	9.9			
	Oper(2units)&Con	2012	13728	10.2			
	Oper(3units)&Con	2013	14251	10.3			
	Operation	2014	14794	10.4			

**Table B - 2 - Trip Assignment
SITE X**

Road Code	Road	Description of Section
A	N4	West of R545 (D686) intersection towards Bronkhorstspuit
B	N4	East of R545 (D686) intersection towards Witbank
C	R545 (D686)	Between N4 and site X main access road
D	D960	Between site X main access road and N12
E	N12	West of D960/ N12 intersection towards Johannesburg
F	N12	East of D960/N12 intersection towards Ogies
Access from North	Access	Main access road from R545 (D686) and R104 intersection
Access from South	Access	Main access road from D960

Road A

Phase	AADT	AADT+PS	HV %	Year
Present	12034	12034	10.6	2006
Operation	15452	15637	19.8	2014
Construction	12810	13603	11.7	2008
Oper(2units)& Cons	14516	15203	16.3	2012
Oper(4units)& Cons	14976	15511	17.9	2013

Vehicle type	Operation Veh/day	Construction Veh/day
Truck	49	1
Minibus	15	122
Bus	1	30
Car	120	640
Total	185	793

Road B

Phase	AADT	AADT+PS	HV %	Year
Present	12034	12034	10.6	2006
Operation	15452	15809	20.0	2014
Construction	12810	13730	12.3	2008
Oper(2units)& Cons	14516	15385	16.8	2012
Oper(4units)& Cons	14976	15704	18.2	2013

Vehicle type	Operation Veh/day	Construction Veh/day
Truck	103	100
Minibus	50	164
Bus	4	16
Car	200	640
Total	357	920

Road C

Phase	AADT	AADT+PS	HV %	Year
Present	2856	2856	29.4	2006
Operation		542	28.0	2014
Construction		1713	5.9	2008
Oper(2units)& Cons		1556	9.8	2012
Oper(4units)& Cons		1263	13.0	2013

Vehicle type	Operation		Construction	
	Veh/day		Veh/day	
Truck	152		101	
Minibus	65		286	
Bus	5		46	
Car	320		1280	
Total	542		1713	

Road D

Phase	AADT	AADT+PS	HV %	Year
Present				2006
Operation		226	47.8	2014
Construction		507	5.7	2008
Oper(2units)& Cons		493	15.4	2012
Oper(4units)& Cons		423	22.6	2013

Vehicle type	Operation		Construction	
	Veh/day		Veh/day	
Truck	108		29	
Minibus	35		124	
Bus	3		34	
Car	80		320	
Total	226		507	

Road E

Phase	AADT	AADT+PS	HV %	Year
Present	11478	11478	15.1	2006
Operation	15481	15685	16.6	2014
Construction	12369	12808	15.0	2008
Oper(2units)& Cons	14365	14796	15.9	2012
Oper(4units)& Cons	14913	15286	16.2	2013

Vehicle type	Operation		Construction	
	Veh/day		Veh/day	
Truck	108		29	
Minibus	15		62	
Bus	1		28	
Car	80		320	
Total	204		439	

Road F

Phase	AADT	AADT+PS	HV %	Year
Present	10969	10969	9.8	2006
Operation	14794	14816	10.4	2014
Construction	11821	11889	9.8	2008
Oper(2units)& Cons	13728	13790	10.2	2012
Oper(4units)& Cons	14251	14302	10.3	2013

Vehicle type	Operation		Construction	
	Veh/day		Veh/day	
Truck	0		0	
Minibus	20		62	
Bus	2		6	
Car	0		0	
Total	22		68	

Access Road from North

Phase	AADT	AADT+PS	HV %	Year
Present				2006
Operation		542	28.0	2014
Construction		1713	5.9	2008
Oper(2units)& Cons		1556	9.8	2012
Oper(4units)& Cons		1263	13.0	2013

Operation		Construction	
Vehicle type	Veh/day	Vehicle type	Veh/day
Truck	152	Truck	101
Minibus	65	Minibus	286
Bus	5	Bus	46
Car	320	Car	1280
Total	542	Total	1713

Access Road from South

Phase	AADT	AADT+PS	HV %	Year
Present				2006
Operation		226	47.8	2014
Construction		507	5.7	2008
Oper(2units)& Cons		493	15.4	2012
Oper(4units)& Cons		423	22.6	2013

Operation		Construction	
Vehicle type	Veh/day	Vehicle type	Veh/day
Truck	108	Truck	29
Minibus	35	Minibus	124
Bus	3	Bus	34
Car	80	Car	320
Total	226	Total	507

**Table B - 3 - Trip Assignment
SITE Y**

Road Code	Road	Description of Section
A	N4	West of proposed road intersection towards Bronkhorstspuit
B	N4	East of proposed road intersection towards Witbank
D	D960	Between proposed road intersection and N12
E	N12	West of D960/ N12 intersection towards Johannesburg
F	N12	East of D960/N12 intersection towards Ogies
G	D960	Between proposed road intersection and main access road to site Y
Proposed Road	Proposed	Proposed road alignment running between N4 intersection and D960 intersection

Road A

Phase	AADT	AADT+PS	HV %	Year
Present	12034	12034	10.6	2006
Operation	15452	15637	19.8	2014
Construction	12810	13603	11.7	2008
Oper(2units)& Cons	14516	15203	16.3	2012
Oper(4units)& Cons	14976	15511	17.9	2013

Operation		Construction	
Vehicle type	Veh/day	Veh/day	Veh/day
Truck	49		1
Minibus	15		122
Bus	1		30
Car	120		640
Total	185		793

Road B

Phase	AADT	AADT+PS	HV %	Year
Present	12034	12034	10.6	2006
Operation	15452	15809	20.0	2014
Construction	12810	13730	12.3	2008
Oper(2units)& Cons	14516	15385	16.8	2012
Oper(4units)& Cons	14976	15704	18.2	2013

Operation		Construction	
Vehicle type	Veh/day	Veh/day	Veh/day
Truck	103		100
Minibus	50		164
Bus	4		16
Car	200		640
Total	357		920

Road D

Phase	AADT	AADT+PS	HV %	Year
Present				2006
Operation		226	47.8	2014
Construction		507	5.7	2008
Oper(2units)&Cons		493	15.4	2012
Oper(4units)&Cons		423	22.6	2013

	Operation	Construction
Vehicle type	Veh/day	Veh/day
Truck	108	29
Minibus	35	124
Bus	3	34
Car	80	320
Total	226	507

Road F

Phase	AADT	AADT+PS	HV %	Year
Present	10969	10969	9.8	2006
Operation	14794	14816	10.4	2014
Construction	11821	11889	9.8	2008
Oper(2units)& Cons	13728	13790	10.2	2012
Oper(4units)& Cons	14251	14302	10.3	2013

	Operation	Construction
Vehicle type	Veh/day	Veh/day
Truck	0	0
Minibus	20	62
Bus	2	6
Car	0	0
Total	22	68

Road E

Phase	AADT	AADT+PS	HV %	Year
Present	11478	11478	15.1	2006
Operation	15481	15685	16.6	2014
Construction	12369	12808	15.0	2008
Oper(2units)& Cons	14365	14796	15.9	2012
Oper(4units)& Cons	14913	15286	16.2	2013

	Operation	Construction
Vehicle type	Veh/day	Veh/day
Truck	108	29
Minibus	15	62
Bus	1	28
Car	80	320
Total	204	439

Road G

Phase	AADT	AADT+PS	HV %	Year
Present				2006
Operation		768	33.9	2014
Construction		2220	5.9	2008
Oper(2units)& Cons		2049	11.1	2012
Oper(4units)& Cons		1686	15.4	2013

	Operation	Construction
Vehicle type	Veh/day	Veh/day
Truck	260	130
Minibus	100	410
Bus	8	80
Car	400	1600
Total	768	2220

Proposed Road

Phase	AADT	AADT+PS	HV %	Year
Present				2006
Operation		542	28.0	2014
Construction		1673	6.0	2008
Oper(2units)&Cons		1526	9.9	2012
Oper(4units)&Cons		1243	13.2	2013

Vehicle type	Operation Veh/day	Construction Veh/day
Truck	152	101
Minibus	65	246
Bus	5	46
Car	320	1280
Total	542	1673