

ANNEXURE A.

Power of Attorney

SPECIAL POWER OF ATTORNEY

We, Michelle Leonie Riley

the undersigned,

do hereby nominate, constitute and appoint
THE AUTHORISED AGENTS OF MARIKE VREKEN TOWN & REGIONAL PLANNERS CC
with power of Substitution to be *my/our lawful representatives in *my/our application for:

REZONING

on

PLETTENBERG BAY ERF 8212

In addition to apply for such amendments of any zoning schemes / structure plans as may be deemed necessary and to make other necessary application and further to represent *me/us at any inquiry in relation to the abovementioned matters and generally do whatever may be necessary or desirable to procure the approval of the application, by virtue of those present and whatever our said representative have to date done herein.

Signed at Plettenberg bay on this ... 20 ... day of ... May ... 2015

SIGNED: M Riley

SIGNED:

SIGNED:

In the presence of the undersigned witnesses:

AS WITNESSES:

1. [Signature]

2. [Signature]

ANNEXURE B.

Application Form



munisipaliteit umasipala municipality

to be the best together

Private Bag X1002 Plettenberg Bay 6600
Tel+27 (0)44 501 3000 Fax +27(0)44 533 3485

LAND DEVELOPMENT APPLICATION FORM

FILE / APPLICATION REFERENCE NUMBER (To be completed by an official)

_____ Zoning Scheme: _____

SECTION A: APPLICANT / AGENT'S DETAILS

Applicant: **Marike Vreken Town Planners CC**

Postal Address: **PO Box 2180, Knysna**

Postal Code: **6570**

Email: **info@vreken.co.za**

Tel: **044 382 0420**

Fax: **044 382 0438**

Cell: **082 957 5310**

SECTION B: PROPERTY DETAILS

Erf / Erven / Farm no. **Erf 8212**.....

Portion no. (farm).....

Farm name (title deed)

Allotment area: **Plettenberg Bay**

Street Address: **Piesang Valley Road**

.....
.....
.....

.....
Extent **7,3237Ha (seven comma three two three seven hectares)**

Area to be rezoned: **7,3237Ha (seven comma three two three seven hectares)**

Current Zoning: **The northern portion of the property is zoned as Residential Zone V, while the southern portion is zoned Agricultural Zone I.**.....

Title deed no: **T647/2003**

Approximate age of existing buildings, if any: **less than 60 years,**

Does the title deed contain restrictive title deed conditions? **No – see Section 3 of the attached Motivation report for further information**

If yes, please specify:

N/A

.....

.....

Is the Property encumbered by a bond? If yes, please attach bondholder's consent.

SECTION C: OWNER DETAILS (If different from Section A above)

Registered Owner: **MICHELLE LEONIE RILEY**

Postal Address:

.....

.....

Postal Code:

Email:

Tel:

Fax:

Cell:

SECTION D: TYPE OF APPLICATION BEING SUBMITTED

Please indicate by means of insertion of a cross on the left and completion of the information required in the appropriate box, which of the following applications are applicable (complete Section E of the application form where required):

X		FEE PAID
X	REZONING: Section 17 or 18 of Ordinance 15 of 1985 From Agricultural Zone To Business Zone in order to Allow for a Grocery Store, Offices, Line Shops and associated services	
	SPECIAL / CONSENT USE: Section of Zoning Scheme Regulations	
	TEMPORARY LAND USE DEPARTURE: Section 15(1)(a)(ii) of Ordinance 15 of 1985	
x	DEPARTURE: Section 15(1)(a)(i) of Ordinance 15 of 1985 (Building lines, coverage, bulk, height, etc)	
	SUBDIVISION: Section 24(1) of Ordinance 15 of 1985	
	SUBDIVISION EXEMPTION: Section 23(1) of Ordinance 15 of 1985	
	AMENDMENT / CANCELLATION OF PLAN OF SUBDIVISION : Section 30(1) of Ordinance 15 of 1985	
	AMENDMENT / WAIVING OF CONDITIONS OF APPROVAL / SCHEDULE CONDITIONS: Sections 42(3)(a) of Ordinance 15 of 1985	
	EXTENSION OF VALIDITY PERIOD OF LUPO APPROVAL: In terms of Section 15(5) for Departure Applications and/or 27(1) for Subdivision Applications and/or 16(2)(a)(i) for Rezoning Applications in terms of Ordinance 15 of 1985 (cross out whichever is not applicable)	
	APPROVAL / AMENDMENT OF SITE DEVELOPMENT PLAN: Section 15(1)(a)(i) of Ordinance 15 of 1985	
	SPECIAL DEVELOPMENT / ZONE	
	OUTENIQUA SENSITIVE COASTAL AREA EXTENSION: Regulation R1528 of 28 Nov 1998	
	REMOVAL / RELAXATION / AMENDMENT OF TITLE DEED CONDITIONS: Section 3(1) of Removal of Restrictions Act 84 of 1967	
	APPLICATION IN TERMS OF ANY OTHER LEGISLATION (other than removal of restrictions) Specify	
	IS APPLICATION FOR OR SUBMISSION OF EIA / WASTE MANAGEMENT LICENCE / WATER USE LICENCE / HERITAGE IMPACT ASSESSMENT / TRAFFIC IMPACT ASSESSMENT / TRAFFIC IMPACT STATEMENT NECESSARY? Comment on applicability or not.....	

	Advertising / Notification fee	
	TOTAL Application fee:	

SECTION E: TYPE & DETAIL OF APPLICATION BEING SUBMITTED

DEPARTURE / CONSENT / SPECIAL DEVELOPMENT REQUIRED

Please indicate by means of an “X” in the appropriate box on the left, which of the following applications are being applied for

	Building line encroachment	Street		From	m	To	m
		Street		From	m	To	m
		Side		From	10 m	To	2.5 m
		Side		From	m	To	m
		Aggregate side		From	m	To	m
		Rear		From	m	To	m
	Exceeding permissible site coverage			From	%	To	%
	Exceeding maximum permitted bulk / floor factor / no of habitable rooms			From		To	
	Exceeding height restriction			From	m	To	m
	Exceeding maximum storey height			From	m	To	m
x	Consent/Conditional Use/Special Development						
	To permit the operation of a wine tasting and wine sales facility.						
							
							
	Other (please specify)						

Brief description of proposed development / use / purpose of application.

The rezoning of the southern portion of Erf 8212 from Agricultural Zone I to Institutional Zone I in terms of the Section 8 Zoning Scheme Regulations, in terms of section 17 of the Land Use Planning Ordinance 1985 (15 of 1985);

The rezoning of the northern portion of Erf 8212 from Residential Zone V to Institutional Zone I in terms of the Section 8 Zoning Scheme Regulations, in terms of section 17 of the Land Use Planning Ordinance 1985 (15 of 1985);

The relaxation of the south eastern building line of Erf 8212 from 10m to 2,5m in terms of the Section 8 Zoning Scheme Regulations, in terms of section 15 of the Land Use Planning Ordinance 1985 (15 of 1985);

SECTION F: LIST OF ATTACHMENTS AND SUPPORTING INFORMATION REQUIRED / SUBMITTED

Please indicate by means of an "X" in the appropriate box, which of the following supporting documentation accompanies the application.

Power of attorney/Resolution (Company/Trust owned property)	X	Site Development Plan (Site layout/Sketch plan & elevations (A4 or A3 format only))	X
Bondholder's consent/Mortgagees consent		Landscaping plan (A3)	
Other application forms (removal of restrictions)		Copy of EIA/HIA/TIA/TIS/WUL/WML or relevant decision	
Conveyancer's certificate		Completed abutting owner's consent forms	
List of Title deed conditions to be removed/amended		Home Owner's Association consent in writing & stamp of approval on all plan pages	
Motivation report/letter (Must be attached)	X	Application fee / receipt	
Land Use Map	X	Locality plan (Must be attached)	X
Proposed Plan of Subdivision, Building plans or Site plan (Must be attached for subdivision application)	X	Required no of documentation copies (min 2 hard copy and one CD) / to be confirmed with Strategic Services prior to submission of application	X
Copy of Title deed (Must be attached)	X	Other	

NOTE: If application made by a person other than owner, power of attorney is required. If property is owned by more than one person, signature of each owner is required. Where owned by company / trust / other juristic person, certified copy of board of directors' / trustees' resolution is required.

The following legislation is applicable to land development and no application can be considered by the Bitou Municipality prior to a decision on the proposed development in terms of the legislation, when applicable. By signing this, the applicant warrants that (delete which are not applicable):

- no prior approval is required in terms of the legislation; or
- prior approval as required in terms of the legislation has been granted and a copy/copies of the approval(s) is/are attached; or
- application(s) in terms of the legislation has/have been submitted and decision is/are pending.

National Environmental Management Act, 1998, Act 107 of 1998 (NEMA)

National Environmental Management: Integrated Coastal Management Act, 2008, Act 24 of 2008 (NEM:ICMA)

National Environmental Management: Biodiversity Act, 2004, Act 10 of 2004 (NEM:BA)

National Environmental Management: Protected Areas Act, 2003, Act 57 of 2003 (NEM:PAA)

National Environmental Management: Air Quality Act, 2004, Act 39 of 2004 (NEM:AQMA)

National Environmental Management: Waste Act, 2008, Act 59 of 2008 (NEM:WM)

National Heritage Resources Act, 1999, Act 25 of 1999 (NHRA)

National Water Act, 1998, Act 36 of 1998 (NWA)

Local Government: Municipal Finance Management Act, Act 56 of 2003 (MFMA)

Removal of Restrictions Act, 1984, Act 84 of 1967 (ROR)

Subdivision of Agricultural Land Act, 1970, Act 70 of 1970 (Act 70 of 70)

Sea-Shore Act, 1935, Act 21 of 1935 (Sea-Shore Act)

Noise Control Regulations of the Provincial Government of the Western Cape (PG:WC), made in terms of Section 25 of the Environment Conservation Act, 1989, Act 73 of 1989 (ECA) (Noise Regulations)

I, **Gemma Pogodin**..... (full names) hereby certify the information supplied in this application form is true and correct and that I take full personal responsibility for all information contained herein. I am properly authorised to make this application.

I also agree to the immediate administrative nullification / withdrawal / cancellation of any approval granted as a result of this application, if any of the information contained herein is false and/or misleading, e.g. relevance of other legislation that needs to be considered in coming to a decision in the terms of LUPO, the Zoning Scheme Regulations or the Removal of Restrictions Act.

Applicant's / Owner's signature:



.....

Date: 2015-08-20

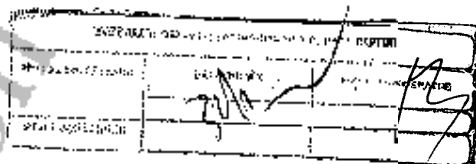
ANNEXURE C.

Title Deed



12 Jan S de Villiers en Scun
Jan S. de Villiers and Son

Prepared by me
Conveyancer
H A KOTZE
KENNY A



WIR VERBODEN ENDOOSSEMENTE BIED
FOR FURTHER ENDORSEMENTS BEE

T 000647 / 2003

CERTIFICATE OF CONSOLIDATED TITLE

issued under the provisions of Section 40 of the Deeds Registries Act 1937
(No. 47 of 1937)

WHEREAS

MICHELLE LEONIE RILEY
Identity Number . 630731 0041 00 2
Married out of community of property

has applied for the issue to her of a Certificate of Consolidated Title under Section 40 of
the Deeds Registries Act 1937;

1. R.O. Hester Catharina Aletha Minnaar

ENDOSSEMENT KRAGTENS ART 60 (1) VAN WET 47 VAN 1937	ENDORSEMENT BY VIRTUE OF SECT 43 (1) OF ACT 47 OF 1937
PERSOONLIKE SERWTUIT IN VOOR- WAARDE F OF SLAGSY S	THE PERSONAL SERVITUDE IN CON- DITION F OR PAGE S
ENDORSEMENT GEDATEER HET VERVAL	ENDORSEMENT DATED BY DATE due to death
BC 15635 / 2012	
17 APR 2012	<i>[Signature]</i> REGISTRAR / REGISTRAR

2
dek 00326 / 2012 S

By Notarial deed of Cancellation, dated
8/3/2012 the usufruct on page 5
in favour of Cristian Edward Minnaar
Idno. 231031 5018 083. Widower is now
cancelled.

As will more fully appear from said
Notarial deed.

Deeds Office
Cape Town

[Signature]
Registrar of deeds

17 APR 2012

AND WHEREAS

MICHELLE LEONIE RILEY
Identity Number : 630731 0041 00 2
Married out of community of property

is the registered owner of:

1. ERF 6805 ~~(a Portion of Erf 2116)~~ PLETTENBERG BAY
in the Municipality of Plettenberg Bay, Division of Knysna, Western Cape
Province;

In extent: ~~2,5002 (Two comma Five Nought Nought Two) Hectares~~

Held by Deed of Transfer No 064188/2000

AND

2. ERF 2125 PLETTENBERG BAY
in the Municipality of Plettenberg Bay, Division of Knysna, Western Cape
Province;

In extent: ~~4,1368 (Four comma One Three Six Eight) Hectares~~

Held by Deed of Transfer No T 000646 / 2003

which properties have been consolidated into the land hereinafter described;

NOW THEREFORE in pursuance of the provisions of the said Act, I, the Registrar of Deeds at Cape Town, do hereby certify that the said

MICHELLE LEONE RILEY
Identity Number : 630731 0041 00 2
Married out of community of property

Her Heirs, Executors, Administrators or Assigns, is the registered owner of

ERF 8212 PLETTENBERG BAY, in the Municipality of Plettenberg Bay, Division of Knysna, Western Cape Province;

In Extent: 7,3237 (Seven comma Three Two Three Seven) Hectares

AS WILL more fully appear from diagram S G No S460/2001 annexed hereto.

1. In respect of the figure e middle of Piesang River zyd on diagram S G No 5460/2001 annexed:

A. **SUBJECT** to the conditions referred to in Certificate of Registered Title No 3538/1942.

B. **SUBJECT** to the conditions referred to in the endorsement dated 22 November 1978 on Deed of Transfer No. 8848/1947 dated 22 May 1947, which endorsement reads as follows:-

"By Notarial Deed of Servitude K905/78S dated 21 September 1978:-

1. Subject to a servitude right of way 4m wide in favour of Erf 2125 held by Deed of Transfer 13055/1977 along the line EF on diagram 435/41 annexed to Deed of Transfer 3538 dated 1st April 1942.

AK

2. Entitled to a servitude right of way 13m wide over Erf 2123 held by Deed of Transfer 15757/78 along the line as on Diagram 564/1910 annexed to Deed of Transfer No. 252/1911.

As will more fully appear from said Notarial Deed.

Which servitudes are indicated by the line y D on Diagram S G No 5460/2001 which represent the Eastern boundary of the servitudes.

- C. **SUBJECT FURTHER** to the conditions referred to in the endorsement dated 10 June 1992 on Deed of Transfer No 8248/1947 dated 22 May 1947, which endorsement reads as follows:-

"By Notarial Deed of Pipeline Servitude No. K520S/92 dated 8 November 1991 the within property is subject to a pipeline servitude denoted by the line AB on servitude diagram S.G. No. 7717/91 annexed to the said Notarial Deed in favour of the Municipality of Plettenberg Bay, together with ancillary rights.

As will more fully appear from said Notarial Deed and on annexed Diagram S G No 5460/2001, the figure bj represents a water pipeline servitude, the extent of which is 3,50 meter to the West and 1,50 meter to the East.

- II. In respect of the figure a middle of Pissang River h C y z middle of Pissang River FG represents Erf 2125 Plettenberg Bay on Diagram S G 5460/2001 annexed;

- A. **SUBJECT** to such conditions as are referred to in said Deed of Transfer No. 10168 dated 13th October 1926.

- B. **SUBJECT** or **ENTITLED** as the case may be to the benefits of the conditions mentioned in Deed of Transfer No. 282 dated the 2nd January 1911 relating to:

1. Roads; and
2. Rights to the use of the water from the Pissang River.

- C. **SUBJECT** to the terms of the servitude referred to in the Servitude Endorsement dated the 21st March 1966 on Deed of Transfer No. 11837 dated the 2nd December 1940 which Servitude Endorsement reads as follows:

u

A

"By Notarial Deed No. 194/66 d.d. 28/1/66 the farm Weltevrede, part of Brakkloof, held hereunder, is subject to a servitude relating to the drawing of any quantity of water from the river on the boundary of the land held hereunder, the erection of a pump and pump house and the construction of a pipeline along a route to be determined (subject to certain restrictions) and rights of egress and ingress in favour of the Remainder of Erf 2120 Plettenberg Bay, in extent 1,5722 Hectares, held by Deed of Transfer 1303 J.d. 19/1/65. As will more fully appear from said Notarial Deed."

- D. ENTITLED to the benefits of the right of way referred to in the Servitude endorsement dated the 22nd November 1978 on said Deed of Transfer No. 13055/1977 which reads as follows:

"By Notarial Deed of Servitude K.905/785 dated 21 Sept. 1978 and registered this day the within property is entitled to (1) A Servitude Right of Way 13m. wide over Erf 2123 the western boundary of which Right of Way runs along the entire length of the boundary marked ad on Diag 564/1910 annexed to Deed of Transfer No. 252 dated 21st January 1911.

(2) A Servitude Right of Way 13m. wide over Erf 2116 the western boundary of which right of way runs along the entire length of the boundary marked EF on Diag. No. 435/1941 annexed to Deed of Transfer No. 3538 dated 1st April 1942 as will more fully appear from said Notarial Deed. and indicate by the line yD on Diagram SG No 5460/2001 which represents the Eastern Boundary thereof.

- E. By Notarial Deed of Pipeline servitude No K447/94S dated 8/11/91 the within property is subject to a pipeline servitude depicted by the line ABCDE on servitude diagram S.G. No 7720/91 in favour of the Municipality of Plettenberg Bay, together with ancillary rights. As will more fully appear from the said notarial deed and further indicated on Diagram SG No 5460/2001, as follows:

1. The broken line hs represents a water pipeline servitude the extent of which is 3,50m to the west and 1,50m to the east;
2. The broken lines st and tu represent a water pipeline servitude the extent of which is 3,50m to the north and 1,50 m to the south;
3. The broken line uv represents a water pipeline servitude the extent of which is 3,50m to the northwest and 1,50m to the southeast;

- F. SUBJECT FURTHER to the life-long usufruct in favour of Christian Edward Minnaar, Identity Number - 231031 5048 00 0 and Hester Catharina Aletta Minnaar, Identity Number : 260106 0033 08 4, Married in community of property to each other, as contained in Deed of Transfer no. T

5

A

AND that by virtue of these present the said

MICHELLE LEONIE RILEY
Identity Number ; 630731 0041 00 2
Married out of community of property

Her Heirs, Executors, Administrators or Assigns, now is and henceforth shall be entitled thereto conformably to local custom, the State, however, reserving its rights;

IN WITNESS WHEREOF, I, the said Registrar, have subscribed to these present and have caused the seal of office to be affixed thereto.

THUS DONE AND EXECUTED at the Office of the Registrar of Deeds at CAPE TOWN on this 8 day of January in the year of our Lord, Two Thousand and Two (2002). Then (2003)

REGISTRAR OF DEEDS

ANNEXURE D.

SG Diagrams

VPM SURVEYS PLETT

SIDES		ANGLES OF		CO-ORDINATES		SG No.
metres		DIRECTION		Y	System: WG23 X	
				Constants-30 000,00	+3 760 000,00	
A B	462,50	272.27.40	A	-3 122,72	+10 306,20	5460/2001 Approved <i>T. Luman.</i> for SURVEYOR- GENERAL 2001/11/01
B C	300,42	91.25.20	B	-3 584,80	+10 326,66	
C D	194,29	1.29.40	C	-3 284,47	+10 318,61	
D E	351,84	91.25.20	D	-3 279,40	+10 512,63	
E F	269,46	225.16.50	E	-2 927,67	+10 504,10	
F G	37,78	271.25.20	F	-3 119,14	+10 314,50	
G A	35,42	105.07.20	G	-3 156,91	+10 315,44	
A a		105.07.20				
B b		271.25.20				
E e		271.25.20				
F f		91.25.20				
50AB8		⊕		-3 766,33	+9 968,18	
51AB8		⊕		-3 573,30	+10 000,30	

SERVITUDE NOTES:

1. The line De represents the southern boundary of a Servitude right of Way 4 metres wide, as shown; Vide Diagram No. 4879/1998; Deed of Servitude No. 2000. 64188
2. The broken line hj represents a water pipeline servitude the extent of which is 3,50m to the west and 1,50 to the east; Vide Diagram No. 7717/91; Deed of Servitude No. K520/925
3. The line yD represents the eastern boundary of a Servitude right of Way 13 metres wide; Vide Diagram No. 4879/1998; Deed of Servitude No. K905/785
4. The broken line hs represents a water pipeline servitude the extent of which is 3,50m to the west and 1,50m to the east; Vide Diagram No. 7720/91; Deed of Servitude No. K447/94^s
5. The broken lines st and tu represent a water pipeline servitude the extent of which is 3,50m to the north and 1,50m to the south; Vide Diagram No. 7720/91; Deed of Servitude No. K 447/94^s
6. The broken line uv represents a water pipeline servitude the extent of which is 3,50m to the northwest and 1,50m to the southeast; Vide Diagram No. 7720/91; Deed of Servitude No. K 447/94^s

The figure a middle of Piesang River b C D e middle of Piesang River f G

represents 7,3237 hectares of land being

ERF 8212 PLETTENBERG BAY

(and comprises the properties specified on Sheet 2)

Situate in the Municipality of Plettenberg Bay, Administrative District of Knysna, Province of the Western Cape Surveyed in August and September 2001

by me Professional Land Surveyor (P.G. TEGGIN - PLS 1118)

This diagram is annexed to No. d.d. CCT 647/2003 i.f.o. Registrar of deeds	The original diagrams are as quoted on Sheet 2.	File Knys 443 S.R. No. E2141/2001 T.D. Comp. AM-1BA (3605) AM-1BA/254 (734) AM-1BA2 (3606)
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SG No.

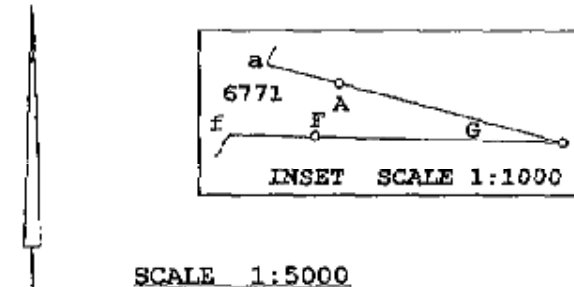
5460/2001

Approved

T. Luman

for
SURVEYOR-
GENERAL
2001.11.02Note:

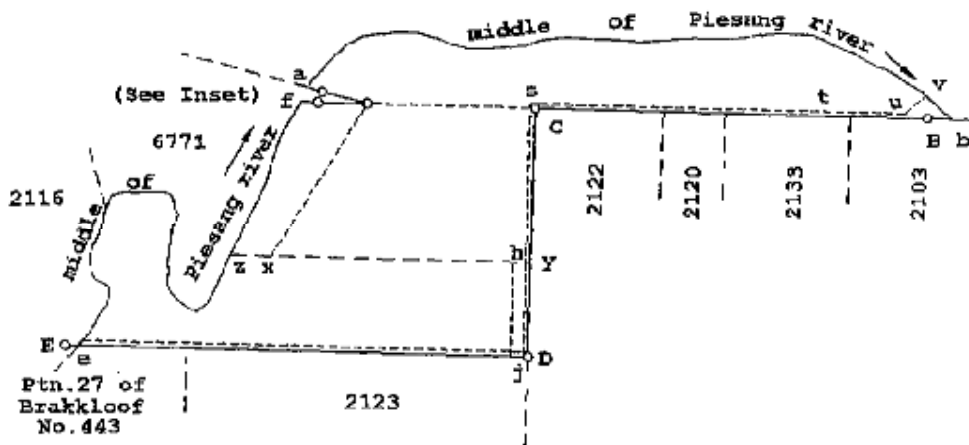
The figure GCyx represents Freehold.



SCALE 1:5000

T N

2124

SHEET 2 OF
2 SHEETSCOMPONENTS:

1. The figure a middle of Piesang River bCyz middle of Piesang River fG represents Erf 2125 Plettenberg Bay
Vide Diagram No. A4714/1925; Deed of Transfer No. 1926.218.10168
2. The figure e middle of Piesang River zyD represents Erf 6805 Plettenberg Bay
Vide Diagram No. 4879/1998; Deed of Transfer No. 2000. 64188

DESCRIPTION OF BEACONS

A, E, F, G 20 mm iron peg
B Planted stone
D 16 mm iron peg

ERF 8212 PLETTENBERG BAY

(and comprises the properties specified above)

Situate in the Municipality of Plettenberg Bay,
Administrative District of Knysna, Province of the Western Cape
Surveyed in August and September 2001

by me Professional Land Surveyor (P.G. TEGGIN - PLS 1118)

ANNEXURE E.

Environmental Decision Letters

Verwysing
Reference
Isalathiso

EG12/2/1 - 284 ERF 8212, PLETTENBERG BAY (3756)

Naurae
Enquiries
Imibuzo

S. DU TOIT

Datum
Date
Umhla

19/01/2005

Departement van Omgewingsake en Ontwikkelingsbeplanning
Department of Environmental Affairs and Development Planning
ISEBE leMicimbi yeNdalo esiNgqongileyo noCwangciso loPl



P.O. Box 191
Plettenberg Bay
6600

Attention: Mr. C. Minnaar

Tel : (044) 533 3033

Fax: (044) 533 2016

Dear Sir

APPLICATION: CHANGE OF LAND USE AND UPGRADE OF A RESORT ON ERF 8212, PLETTENBERG BAY (CRESCENT COUNTRY HOUSE)

With reference to your application, find below the Record of Decision in respect of this application.

RECORD OF DECISION

A. DESCRIPTION OF ACTIVITY:

The upgrade of private resorts and associated infrastructure, and the change in land use from agricultural or zoned undetermined use or an equivalent zoning, to any other land use are activities identified in Schedule 1 of Government Notice No R 1182 of 5 September 1997, ("the Regulations" as amended) as activity 1(m) and 2(c) respectively.

The activity entails the construction of two buildings consisting of seven en-suite hotel rooms each, a staff flatlet, and a garage block of six single garages (as outlined in Figure 2 of the Scoping Report by Grant Johnston Ass. dated September 2002) hereinafter referred to as "the activity".

*Department of Environmental Affairs and Development Planning
Directorate: Integrated Environmental Management (Region A)*

B. LOCATION:

Erf 8212 (consolidated erven 6805 and 2125, hereinafter referred to as "the property") lies between the Piesang Valley Road and the Piesang River, Plettenberg Bay. Adjacent properties include erven 2122, 2123 and portion 27 of Brakkloof 443 and the Piesang River.

C. APPLICANT:

Mr. C. Minnaar
P.O. Box 191
Plettenberg Bay
6600
Tel: (044) 533 3033
Fax: (044) 533 2016

D. CONSULTANT:

For scoping phase:
Grant Johnston Assoc.
P.O. Box 1026
Plettenberg Bay
6600
Tel: (044) 533 0728
Fax: (044) 533 2379

For environmental impact assessment phase:

Dr. Colleen Ebersohn
Eco-Route cc Environmental Consultancy
P.O. Box 3511
Knysna
6570
Tel & fax: (044) 381 0515

E. SITE VISIT:

Date: 28 October 2002

Persons present: Mr. C. Minnaar, applicant; Mrs. D. Grant, environmental consultant; and Dr. S. du Toit of the Department of Environmental Affairs and Development Planning.

Date: 28 June 2004

Persons present: Ms. A. Gee of the Department of Environmental Affairs and Development Planning, and Mr. C. Minnaar, applicant

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Department of Environmental Affairs and Development Planning
Directorate: Integrated Environmental Management (Region A)

F. **DECISION:**

In terms of Sections 22 and by virtue of powers delegated by the Minister in terms of Sections 28 & 33 of the Environment Conservation Act, 1989 (Act No. 73 of 1989), the relevant authority (as defined in GN No R1183 of 5 September 1997, as amended), hereby grants **authorisation with the conditions** contained in this Record of Decision, for the execution of the activity described above. ✓

This Authorisation has been granted in terms of section 22 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) solely for the purposes of undertaking the activity referred to above, and does not exempt the holder thereof from compliance with any other relevant legislation.

G. **CONDITIONS OF AUTHORISATION:**

~~1.1 The activity, including site preparation, may not commence before the statutory 30 day appeal period expires. In the case of an appeal submitted to the competent authority, the effect of this Record of Decision will be suspended until such time as the appeal is decided.~~ ✓

amended 2. One week's notice, in writing, must be given to the *Ministry* ~~Directorate: Environmental Management, (hereinafter referred to as "this Directorate")~~, before commencement of construction activities. ✓

2.1 Such notice shall make clear reference to the site location details and reference number given above. ✓

2.2 The said notice must also include proof of compliance with the following conditions described herein:

Conditions: ~~1, 4, 5, 6, 7, 8, and 9.~~

3. An integrated waste management approach must be used that is based on waste minimisation and should incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste shall be disposed of at a landfill licensed in terms of section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989).

4. Proposed new building footprints must not substantially deviate from Figure 2: Proposed Layout Plan, as detailed in the Scoping Report. ✓

5. Sewage disposal must take place through the existing municipal sewage network. ✓

6. The mitigation and rehabilitation measures and recommendations as detailed in the Scoping Report, and in the Environmental Impact Report (by Dr. Colleen Ebersohn of Eco-Route cc Environmental Consultancy dated 9 ✓
10)

Department of Environmental Affairs and Development Planning
Directorate: Integrated Environmental Management (Region A)

July 2004, hereinafter referred to as "the EIR") must be adopted and complied with. Said measures must include, *inter alia*:

6.1 A program to increase the indigenous content of the flora on the property; ✓

6.2 A plan for the complete removal of all alien invasive plants on the property within a 3 (three) year period from the date of this authorisation; ✓

6.3 Measures to minimise light pollution; and ✓

6.4 Measures to reduce noise pollution by large vehicles (such as limiting access of large vehicles to daylight hours, and preventing any vehicles larger than a passenger car access onto the former erf 5805) ?

Ministry
7. The applicant must compile and submit an Environmental Management Plan ("EMP"), addressing (*inter alia*) the measures outlined in Condition 6 to this Directorate for approval three weeks prior to any further construction. The EMP must: ?

Ministry
7.1 Be submitted to, and approved by the Directorate at least three weeks prior to the commencement of any further construction activities. ✓

7.2 Describe the level and type of competency required of the Environmental Control Officer, ("ECO"); ?

7.3 Define and allocate the roles and responsibilities of the ECO referred to in Condition 8, below;

7.4 Determine the frequency of site visits;

7.5 Be included in all contract documentation for the construction phase of the development.

7.6 Be included in all contract documentation for the construction phase of the development.

8. The applicant must appoint a suitably experienced Environment Control Officer to undertake the mitigating/rehabilitation measures and recommendations referred to in this Record of Decision and to ensure compliance with the provisions of the EMP.

~~9. The applicant must, within five calendar days of receipt of this Record of Decision.~~

Department of Environmental Affairs and Development Planning
Directorate: Integrated Environmental Management (Region A)

- Inform the relevant local authority as well as all interested and affected parties, ("I & AP's") registered during the Scoping and Impact Assessment processes, of the outcome of this application and, if requested, provide copies of this Record of Decision;
 - Include in such information the provisions of Regulation 11 of Government Notice No. R 1183 of 5 September 1997, as amended, which reads as follows:
 - (1) An appeal to the Minister or provincial authority under section 35(3) of the Act must be done in writing within 30 days from the date on which the record of decision was issued to the applicant in terms of regulation 10(1);
 - (2) An appeal must set out all the facts as well as the grounds of appeal, and must be accompanied by all relevant documents or copies of them, which are certified as true by a commissioner of oaths.
 - Include the date on which the record of decision was issued to the applicant in terms of regulation 10(1) and the date by which appeals must reach the Minister.
 - Inform all I & AP's that a signed and certified Appeal Questionnaire, is obtainable from the Minister's office at tel. (021) 483 3915, e-mail jedevill@pgwc.gov.za, or URL <http://www.capegateway.gov.za/Text/2003/eiaappeal> must accompany the appeal.
 - If the applicant should appeal against this Record of Decision, he must inform all interested and affected persons that such an appeal is being lodged with the Minister and if requested, the applicant/appellant must provide those persons with reasonable access to a full copy of the appeal within a reasonable time before expiry of the thirty day appeal period.
10. This Directorate must be notified, within 30 days thereof, of any change of ownership and/or project developer, as well as any change of address of the owner and/or project developer.

~~All outdoor advertising associated with this activity, whether on or off the property concerned, must comply with the applicable Local Authority By-Law for the control of Outdoor Advertising or in the absence of local legislative controls, must comply with the South African Manual for Outdoor Advertising Control (SAMOAC) available from:~~

The Director: Environmental Impact Management

*Department of Environmental Affairs and Development Planning
Directorate: Integrated Environmental Management (Region A)*

Department of Environmental Affairs and Tourism
Private Bag X447
Pretoria
0001.

12. The applicant shall be responsible for ensuring compliance with the conditions contained in the Record of Decision by any person acting on his behalf, including but not limited to, an agent, servant, employee or any person rendering a service to the applicant in respect of the activity, including but not limited to contractors and consultants. ✓
13. The owner and/or developer must notify the Directorate and any other relevant authority, in writing, within 24 hours thereof if any condition of this authorisation is not adhered to. ✓
14. Departmental officials shall be given access to the property referred to in B above for the purpose of assessing and/or monitoring compliance with the conditions contained in this Record of Decision, at all reasonable times. ✓

H. RECOMMENDATIONS:

It is recommended that the applicant contact his neighbours who are affected by the changes in drainage patterns on the property (as referred to in the Scoping Report and various correspondences) with the aim of resolving said concerns. ✓

I. KEY FACTORS AFFECTING THE DECISION:

Biophysically, there are no limiting factors that would justify this Directorate refusing authorisation of the activity. The independent environmental consultant for the EIA phase was of the opinion that:

- The impact of the proposed change of land use on the bio-physical environment is negligible; in fact with the proper rehabilitation of indigenous vegetation the rural character of the Piesang Valley can be enhanced. ✓
- The impact of the proposed change of land use on the rural character of the area is minimal compared to other high density residential developments that are currently undertaken in the Piesang Valley. ✓

Socio-economic/Cultural historic

The Scoping Report states that "(I)n common with many other properties in the Piesang Valley, the consolidated erf 8212 is too small to be a sustainable agricultural unit" and concluded that "(T)he proposed development would attract ✓

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Directorate: Integrated Environmental Management (Region A)*

steady year-round upper income tourism and be an asset to the valley and to the town as a whole." ✓

The Scoping Report goes on to state that, "(F)rom a neighbour's perspective however the nature of activities in the valley is changing from agricultural to commercial uses and attracts more traffic. In order to realise the benefit of the enhanced tourist attraction of the proposed development, it will be necessary to modify the site layout and ensure that the management of the hotel and its landscaped setting are geared to minimising the existing and potential impacts identified during scoping." ?

The measures identified in Condition 6 above must address such issues.

Policy: Regional/planning context

In terms of the draft Structure Plan for Larger Plettenberg Bay, development along the Piesang River Valley should constitute low-key rural occupation or related uses, at a low density, within generous open areas. Guest houses and horse riding facilities would be permissible. ✓

As is clear from the Draft Structure Plan for Larger Plettenberg Bay, the consolidated property is situated in an area which is considered suitable for guest house facilities and horse riding, provided the density is kept low. Because the consolidated property is ±7,3 ha in extent, the coverage is presently still low, and a good percentage of open space has remained. ✓

The property was inspected on 28 June 2004 and found to be in a very neat and attractive condition. From a town planning point of view, the provision of facilities for tourism is supported. The position of the property, for tourist facilities, can also be considered to be suitable, as:

- It has a long river frontage.
 - It is situated within the town of Plettenberg Bay, giving access to all its facilities.
 - Piesang Valley Road is a suitable access route off the N2.
 - It is in a tranquil area, as it is not directly adjacent to the Piesang Valley Road.
- ✓

Consideration should be given to the fact that generally a servitude across a property, to another property, makes provision for access for the other owner, his friends and family and any successors in title only. In the case at hand, the servitude across Erf 2123 is additionally used for the staff and patrons of the hotel and the B&B, conference goers, tour busses, delivery trucks and even removal trucks. In all fairness, it cannot be expected from the owners of Erf 2123 to agree to ?

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Directorate: Integrated Environmental Management (Region A)*

this, particularly as they were apparently not even asked to comment on the original approval. It is suggested that this matter is addressed by the Plettenberg Bay Municipality and resolved with the different parties. ||

The mitigating measures suggested by the applicant are supported, as these would contribute to reducing some of the impact. These suggested measures are included as conditions of approval.

It is clear that the owners of consolidated Erf 8212 should be effectively restricted from undertaking any further development. It appears, that the Plettenberg Bay Municipality has just recently approved more building plans for the addition of more kitchen facilities, linked to both the main building and the conference facility. As this property has now been consolidated, it is possible to impose a new set of conditions for Erf 8212. This Directorate concurs with the Municipality that a final site development plan should be submitted, which should show in detail the final layout of the development of Erf 8212. 7

In terms of planning principles, the rezoning of Erf 6805, Plettenberg Bay, from Agricultural Zone I to Residential V is considered acceptable.

Alternatives

Various alternatives were considered during the scoping process, including an alternative layout and alternate activities, such as agricultural activities.

Public Participation

An extensive public participation phase resulted in a number of responses, including six objections. The objections related primarily to the commercial development of the properties, with the resultant associated increase in anthropogenic impacts on the area. ✓

While numerous concerns have been raised by interested and affected parties, these issues can be resolved through co-operation and good neighbourliness. Further, the applicant is required to address the issue of access by large vehicles to the property (Condition 6). The concern relating to the drainage of the property is addressed under "Recommendations" above. 7

The Plettenberg Bay Community Environmental Forum, representing numerous interest groups in the area, made the following statement: ✓
D

*Department of Environmental Affairs and Development Planning
Directorate: Integrated Environmental Management (Region A)*

"We are aware of the fact that there is a fair amount of controversy in the history of development on these properties. We have disregarded this and seek to deal only with the merits of the proposed change of land use in the context of the immediate environmental issues dealt with in your draft Impact Report. We have studied the above mentioned together with the Scoping Report (Grant Johnston Associates – September 2002). ✓

We agree that there do not seem to be any significant environmental factors that would justify opposition to the proposed change of land use. ✓

We also agree that the existing Agricultural zoning applicable to the majority of the properties lying within the area bounded by the Piesangs River and the main road, as well as adjacent and related land, should be considered for rezoning to a "higher" use than "agricultural". ✓

During the public participation process, concerns relating to the change of ambience and loss of the tranquil, rural atmosphere were raised. However, in a letter from the applicant to Dr P. Matlou of the Department of Environmental Affairs and Tourism from (Appendix 4 of the Scoping Report), the various land uses of properties adjoining the Piesang Valley Road were listed and include, *inter alia*, workshops, storage facilities, accommodation, township development, hotel, business centre, auto workshop, riding school and proposed (residential) development. ✓

J. DURATION AND DATE OF EXPIRY:

This authorisation shall lapse if the activity does not commence within two (2) years of the date of issue of this authorisation. ✓

K. APPEAL:

In terms of Section 35 of the Environment Conservation Act, 1989 (Act No. 73 of 1989), formal, motivated appeals **must be directed within thirty (30) days** of the date of the issuing of this Record of Decision, to:

The Minister of Environmental Affairs and Development Planning
Western Cape Province
PO Box 15653
Vlaeberg
8018
Fax: (021) 483-6081

SUID-AFRIKAANSE POLISIEDIENS
BEVELYDERING
SPEURDIENS: PLETTENBERG BAY
2005-02-23
COMMANDER
DETECTIVE SERVICE: PLETTENBERG BAY
SOUTH AFRICAN POLICE SERVICE

138144-8
T. Windvogel
CIO
Plettenberg Bay.

*Department of Environmental Affairs and Development Planning
Directorate: Integrated Environmental Management (Region A)*

Appeals must comply with the provisions of regulation 11 of Government Notice No. R. 1183 of 5 September 1997, as amended.

If the appellant is not the applicant, the latter must be informed of the appeal within the appeal period referred to above and must provide the applicant with reasonable access to a full copy of the appeal, if requested.

A signed and certified Appeal Questionnaire, obtainable from the Minister's office at tel. (021) 483 3915, email lvdborg@edgewood.gov.za or URL <http://www.capegateway.gov.za/Text/2003/eiaappeal> must accompany the appeal.

If any condition imposed in terms of this authorisation is not being complied with, the authorisation may be withdrawn after 30 days written notice to the applicant in terms of Section 22(4). Failure to comply with any of these conditions is also an offence and may be dealt with in terms of Sections 29, 30 and 31 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) as well as any other appropriate legal mechanisms.

Provincial Government, Local Authority or committees appointed in terms of the conditions of the application or any other public authority or organisation shall not be held responsible for any damages or losses suffered by the developer or his successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the developer with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Your interest in the future of our environment is greatly appreciated.

Yours faithfully



CHRIS RABIE

DIRECTOR: INTEGRATED ENVIRONMENTAL MANAGEMENT (REGION A)

DATE OF DECISION:

19/1/2005

Copies to:

1. Senior Town Planner, Plettenberg Bay Municipality
2. Grant Johnston Ass.
3. ECO Route cc

Fax: 044 - 533 3487
Fax: 044 - 533 2379
Fax: 044 - 381 0515



M 3/6/5

REGISTERED MAIL

Mr C E Minnaar
Crescent Country House
P O Box 191
PLETTENBERG BAY
6600

Fax 044 533 2016

Dear Mr Minnaar

**APPEALS LODGED IN TERMS OF SECTION 35 OF THE ENVIRONMENT CONSERVATION ACT, 1989
AGAINST THE RECORD OF DECISION GRANTED FOR THE CHANGE OF LAND USE AND UPGRADE
OF A RESORT ON ERF NO. 8212, COUNTRY CRESCENT HOUSE, PLETTENBERG BAY**

The appeals lodged against your Record of Decision granted on 19 January 2005, refer.
After careful consideration of the appeals, as well as supporting documentation received, I have decided to uphold your appeal by amending Condition G6, dismissed the other appeals lodged against your Record of Decision and vary the decision of the delegated officer.

The Department's Record of Decision granted on 19 January 2005 and the conditions under which the authorisation was granted is therefore still valid and must be complied with. However, Conditions G1, G9, G11 and Section J are excluded from this appeal Record of Decision and Conditions G2, G6, G7, G10, G13 and Section K are amended as follows:-

Condition G2

One week's notice, in writing, must be given to the Ministry before commencement of the construction activities.

2.1. Such notice shall make clear reference to the site location details and reference number given above.

2.2. The said notice must also include proof of compliance with the following conditions described herein:

Conditions: 4,5,6,7 and 8.

Condition G6

The mitigation and rehabilitation measures and recommendations as detailed in the Scoping Report, and in the Environmental Impact Report [by Dr. Colleen Ebersohn of Eco-Route cc Environmental

Consultancy dated 9 July 2004, hereinafter referred to as "the EIR") must be adopted and complied with. Said measures must include, *inter alia*:

- 6.1 A program to increase the indigenous content of the flora on the property;
- 6.2 A plan for the complete removal of all alien invasive plants on the property within a 3 (three) year period from the date of this authorisation;
- 6.3 Measures to minimise light pollution; and
- 6.4 Measures to reduce noise pollution by large vehicles.

Condition G7

The applicant must compile and submit an Environmental Management Plan ("EMP"), addressing (*inter alia*) the measures outlined in Condition 6 to the Ministry for approval three weeks prior to any further construction. The EMP must:

- 7.1 Be submitted to, and approved by the Ministry at least three weeks prior to the commencement of any further construction activities.
- 7.2 Describe the level and type of competency required of the Environmental Control Officer, ("ECO");
- 7.3 Define and allocate the roles and responsibilities of the ECO referred to in Condition 8, below;
- 7.4 Determine the frequency of site visits;
- 7.5 Be included in all contract documentation for the construction phase of the development.
- 7.6 Be included in all contract documentation for the construction phase of the development.

Condition G10

The Ministry must be notified in writing, within 30 days thereof, of any change of ownership and/or project developer, as well as any change of the postal address and/ or telephonic and/or fax details of the owner and/or project developer.

Condition G13

The owner and/or developer must notify the Ministry and any other relevant authority, in writing, within 24 hours thereof if any condition of this authorisation is not adhered to.

K. APPEAL

The Provincial Government, Local Authority or committees appointed in terms of the conditions of the application or any other public authority or organisation shall not be held responsible for any damages or losses suffered by the developer or his successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the developer with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

The following conditions are added to the Department's Record of Decision granted on 19 January

2005 and must be complied with:

Condition G15:

"The holder of the authorisation must submit an application for amendment of the environmental authorisation to the Minister where any detail with respect to the environmental authorisation must be amended, added, substituted, corrected, removed or updated. Save that such application for amendment shall not include the personal details of the holder of the environmental authorisation as provided for in Condition G 10 above.

Further, the rights granted by this environmental authorisation are personal rights (i.e. not attached to a property, but granted to a natural or juristic person). As such, only the holder may undertake the activity authorised by the Minister. Permission to transfer the rights and obligations contained herein must be applied for in the following manner:

- 15.1 The holder of the authorisation must submit an originally signed and dated application for amendment of the authorisation to the holder of the authorisation stating that he/she wishes the rights and obligations contained herein to be transferred, and including (a) confirmation that the environmental authorisation is still in force (i.e. that the validity period has not yet expired or the activity was lawfully commenced with); (b) the contact details of the person who will be the new holder; (c) the reasons for the transfer; (d) an originally signed letter from the proposed new holder acknowledging the rights and obligations contained in the environmental authorisation and indicating that he/she has the ability to implement the mitigation and management measures and to comply with the stipulated conditions.
- 15.2 The Minister will issue an amendment to the new holder either by way of a new authorisation or an addendum to the existing authorisation if the transfer is found to be appropriate."

Condition G16:

"This authorisation is valid for a period of **5 years** from the date of issue. The holder must commence with the listed activities within the said period or this authorisation lapses and a new application for authorisation must be submitted to the competent authority, unless the holder has lodged a valid application for the amendment of the validity period of this authorisation (i.e. the application must be submitted to the Ministry responsible for environmental affairs in the Western Cape Province), before the expiry of this authorisation. In such instances, the validity period will be automatically be extended ("the period of administrative extension") from the day before this authorisation would otherwise have lapsed, until the amendment application for the extension of the validity period is decided. The listed activity, including site preparation, may not commence during the period of administrative extension."

Condition G17:

"A copy of the authorisation and the EMP must be kept at the site where the listed activities will be undertaken. Access to the site referred to in section B must be granted and, the authorisation and EMP must be produced to any authorised official representing the competent authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein. The authorisation and EMP must also be made available for inspection by any employee or agent of the applicant who works or undertakes work at the site."

Condition G18:

"Non-compliance with a condition of this environmental authorisation or EMP may result in the withdrawal/suspension of this environmental authorisation and may render the applicant liable for criminal prosecution."

Condition G19:

"Notwithstanding this environmental authorisation, the applicant must comply with any other statutory requirements that may be applicable to the undertaking of the listed activities."

Condition G20:

"The applicable requirements with respect to relevant legislation pertaining to occupational health and safety must be adhered to."

Condition G21:

"Should any heritage remains be exposed during excavations, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape (in terms of the National Heritage Resources Act, 1999). Heritage remains uncovered or disturbed during earthworks must not be disturbed further until the necessary approval has been obtained from Heritage Western Cape."

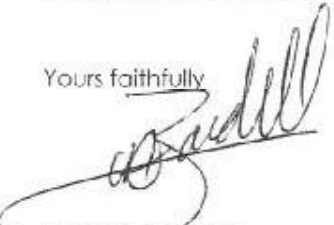
- 21.1 If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, marine shell heaps, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape and must not be disturbed further until the necessary approval has been obtained from Heritage Western Cape.
- 21.2 If any graves or unmarked human burials are discovered, they must be treated with respect and the South African Heritage Resources Agency ("SAHRA") must be notified immediately and the burials must not be disturbed further until the necessary approval has been obtained from SAHRA. An archaeologist must be contracted to remove the remains at the expense of the developer."

The reasons for varying the aforementioned decision of the delegated officer are contained in the aforementioned Record of Decision granted on 19 January 2005. Additional reasons for upholding the applicant's appeal are as follows:-

- o The title deed of Erf 8212, Plettenberg Bay states that the appellant has a right of a way in this 13m wide servitude Road and such a title deed does not have restrictions in terms of what vehicles can travel on the servitude road.
- o The impact of the proposed development on the environment particularly in terms of traffic impacts will be negligible.
- o A detailed public participation process was undertaken and the issues raised have been addressed satisfactorily.
- o The environmental management plan that must be submitted before the commencement of the activities must adequately address potential impacts on the servitude road.

Your interest in the future of our environment is appreciated.

Yours faithfully


ANTON BREDELL
MINISTER OF LOCAL GOVERNMENT,
ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

DATE: 22/4/2013

ANNEXURE F.

Traffic Report

GREENWOOD INDEPENDENT SCHOOL

**PLETTENBERG BAY ERF 8212 (COUNTRY
CRESCENT HOTEL)**

TRAFFIC IMPACT ASSESSMENT

AUGUST 2015

K&T PROJECT REFERENCE: 14781R

REVISION 0



KANTEY & TEMPLER (PTY) LTD
CONSULTING ENGINEERS
REG. NO. 1966/09839/07

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Engineering African Development



Details of this report

Client Name	Greenwood Independent School
Document Title	Traffic Impact Statement (TIA)
K&T Project Reference	14781R
File Name	GREENWOOD INDEPENDENT SCHOOL TIA Report - August 2015
Prepared by	Dana Hagins and Hoosain Cassoo

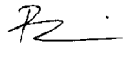
Report Revision Record

Revision	Date	Description
0	August 2015	Draft Report

This report has been prepared by Kantey & Templer (Pty) Ltd, with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

For and on behalf of	
Kantey & Templer (Pty) Ltd	
Approved by:	<u>B A PHILLIPS</u>
Signed:	
Position:	<u>Executive Associate</u>
Date:	<u>20 August 2015</u>

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EXECUTIVE SUMMARY

This report documents the traffic impacts of the proposed residential development to be situated on Erf 8212 in Plettenberg Bay.

PROJECT DESCRIPTION

The proposed development will be located South West on Piesang valley Road from the N2 Highway west of Plettenberg Bay. The client, Greenwood Independent School intends on developing the property for residential and commercial purposes. The development will consist of a total area of 3230m² which includes 20 classrooms, 5 admin staff offices and sports facilities on 7.3237Ha of land.

This Traffic Impact Assessment Report forms part of the engineering and built environment planning. The objective of this project is to provide better educational opportunities for the Plettenberg Bay area.

STUDY AREA AND ANALYSIS SCENARIOS

The study intersection listed below was selected in consultation with the Bitou Municipality namely for the entrance Piesang Valley Road and the school access road T-intersection for the TIS study for the AM and MIDDAY peak hour traffic operations evaluation as it would be the only major intersection affected by traffic generated by the proposed development.

1. Piesang Valley Road / Site Access

For this study, the following scenarios were evaluated:

- **Existing** – Existing Conditions (2015)
- **Future** – Future Conditions with implementation (2016)
- **Future** – Future Conditions with five year horizon (2021)

SIGNIFICANT IMPACTS

The study found that the implementation of the proposed project is expected to have a significant impact on the traffic operations at the above mentioned key intersection. The site traffic is expected to be well absorbed within the road network.

1. INTRODUCTION

This chapter discusses the purpose of the traffic impact assessment, identifies the study area and criteria used to identify significant project impacts.

Kantey & Templer was appointed by Greenwood Independent School (herein referred to as “the Client”) to prepare a Traffic Impact Statement Report in respect of the proposed residential development Plettenberg Bay Erf 8212 (herein referred to as “the site”).

Refer to Figure 1 for the locality plan.

The additional traffic resulting from the proposed development is the subject of this Traffic Impact Assessment (TIA), which pertains to developments generating more than 186 trips during peak hours.

This TIA is prepared in accordance with standards set by the South African Committee of Transport Officials¹ (COTO) and the Road Access Guidelines. The specific objectives of the report are to:

- (i) Describe the extent of the proposed development
- (ii) Assess the existing traffic operations on the road network in the vicinity of the site
- (iii) Predict the extent of the traffic generated by the new development and estimate the distribution of that new traffic
- (iv) Assess the effect that this generated traffic is likely to have on the existing road network
- (v) Make recommendations for improvements to the existing road network and intersections affected by the generated traffic.

¹ COTO, TMH17 Vol 1, South African Trip Data Manual, Sep 2012.

2. LANDUSE & TRANSPORTATION

The site is located just off Piesang Valley Road on the Western side of Roggerberg. The N2 Highway is located North West of the school and the beach located in the East:

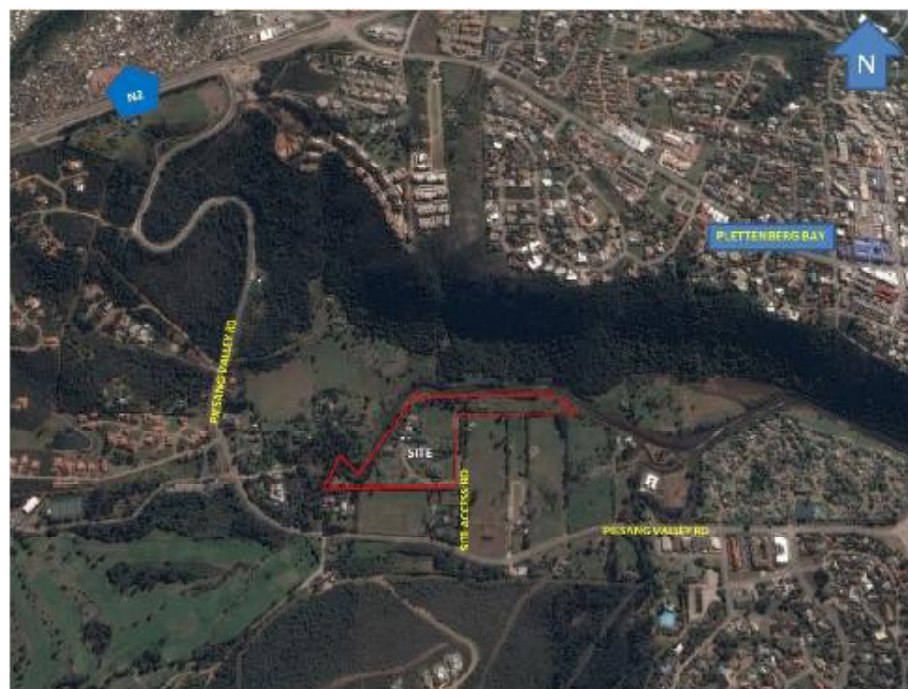
- Private School: Number of Students – 480 pupils

3. ROAD NETWORK

The site is well served by an existing road infrastructure. The access to the development is via Piesang Valley Road.

Piesang Valley Road has a single-lane dual carriage way which meets up with T-junction which is the turn off into the school. Direct access to Piesang Valley Road is achievable via the N2 Highway on the West and from the Plettenberg Bay residential area which the Piesang Valley road serves as well..

Figure 1: Site Locality Sketch



4. EXISTING TRAFFIC CONDITIONS

Existing background traffic information was obtained from traffic counts conducted by Kantey and Templer (Pty) Ltd on the road network taken on Thursday, 13 August 2015. The key intersection in the study area was analysed in order to assess the existing traffic operations during the typical weekday AM and Midday peak commuter periods.

The existing traffic data is illustrated in the traffic diagrams at the back of the TIA report. The details of the traffic count are contained in Appendix A.

The key intersection in the study area is as follows:

1. Piesang Valley Road / Site Access

According to the results of the SIDRA analysis it appears that the traffic operations at the existing intersections are currently operating at a LOS A in the AM and MIDDAY peak hours, respectively.

5. TRIP GENERATION

The trip generation requires an estimation of the additional traffic to be generated by the additional land uses. This estimation was based on the COTO TMH 17 Trip Data Manual.

The development will consist of the following land use(s):

- Private School: Number of Students – 480 pupils

The expected additional trip generation for the development is estimated as follows:

Table 1: Trip generation rates

1. Private				
Number of Students (No)	480			
Trip Generation Rate (TGR) / DU	Weekday AM		Weekday MIDDAY	
	0.8		0.35	
Trips Generated (TG)	192		84	
Directional Split & Vehicular Trips	Weekday AM		Weekday MIDDAY	
	IN	OUT	IN	OUT
	50%	50%	50%	50%
	71	69	28	28

1. COTO [Code: 536]

Definitions of the Private School according to COTO (TMH17) are as follows:

536 Private Schools

This land use includes schools for all ages of students.

The additional traffic is to be superimposed on the existing background traffic on the road network during the weekday AM and MIDDAY peak hours. It can be seen that 71 inbound trips and 69 outbound trips is expected during the weekday AM peak period; as well as 28 inbound trips and 28 outbound trips is expected during the weekday MIDDAY peak period. Therefore a total of 140 and 56 trip ends occur during the AM and MIDDAY peak hours, respectively.

6. SITE TRAFFIC DISTRIBUTION

Traffic that is expected to be generated by a development project must be distributed and assigned to the road network so that the impact of the proposed project on the roadway links and intersections within the study area can be analysed.

The gravity model is used to distribute the trips manually based on the likelihood that the number of trips between two zones is proportional to the magnitude of each zone, and inversely proportionate to the distance between the two zones.

The site traffic will be distributed 70% towards the N2 Highway west and 30% towards Robberg east.

The trip distribution patterns are illustrated in Figure 4 at the back of the report.

7. POTENTIAL IMPACT

The traffic operations were analysed using Signalised and Unsignalised Intersection Design and Research Aid software package² (SIDRA). The software package determines the existing and future operational Levels of Service (LOS) and expected average delays at the key intersections in the study area with the additional traffic from the proposed development.

ANALYSIS METHODOLOGY

Level of Service

Traffic operations at intersections are typically described in terms of "Level of Service" (LOS). LOS is a qualitative measure of the effect of several factors on traffic operating conditions, including speed, travel time, traffic interruptions, freedom to manoeuvre, safety, driving comfort, and convenience. It is generally measured quantitatively in terms of vehicular delay and described using a scale that ranges from LOS A to F, with LOS A representing essentially free-flow conditions and LOS F indicating over-capacity conditions with substantial congestion and delay.

Table 2 summarizes the relationships between the average control delay per vehicle and LOS for signalized intersections, roundabouts and stop and yield controls.

Table 2: Level-of-Service definitions based on delay (HCM method)

Level of Service		Control delay per vehicle in seconds (d) (including geometric delay)	
		Signals and Roundabouts	Stop Signs and Give Way (Yield) Signs
A	Good progression, few stops, short cycle lengths	$d \leq 10$	$d \leq 10$
B	Good progression and/or short cycle lengths, more vehicle stops	$10 < d \leq 20$	$10 < d \leq 15$
C	Fair progression, significant proportion of vehicles must stop	$20 < d \leq 35$	$15 < d \leq 25$
D	Congestion becomes noticeable; longer delays, high v/c ratio	$35 < d \leq 55$	$25 < d \leq 35$
E	At or beyond acceptable delay, poor progression, long queues	$55 < d \leq 80$	$35 < d \leq 50$
F	Unacceptable to drivers. Arrival volumes greater than discharge capacity, unstable unpredictable flows	$80 < d$	$50 < d$

² SIDRA Version 5 Software, SidraSolutions, Australia, 2010.

The traffic generated by the site can be expected to influence the key intersection of the study area, namely:

1. Piesang Valley Road / Site Access

Figure 2: Existing Road Geometry

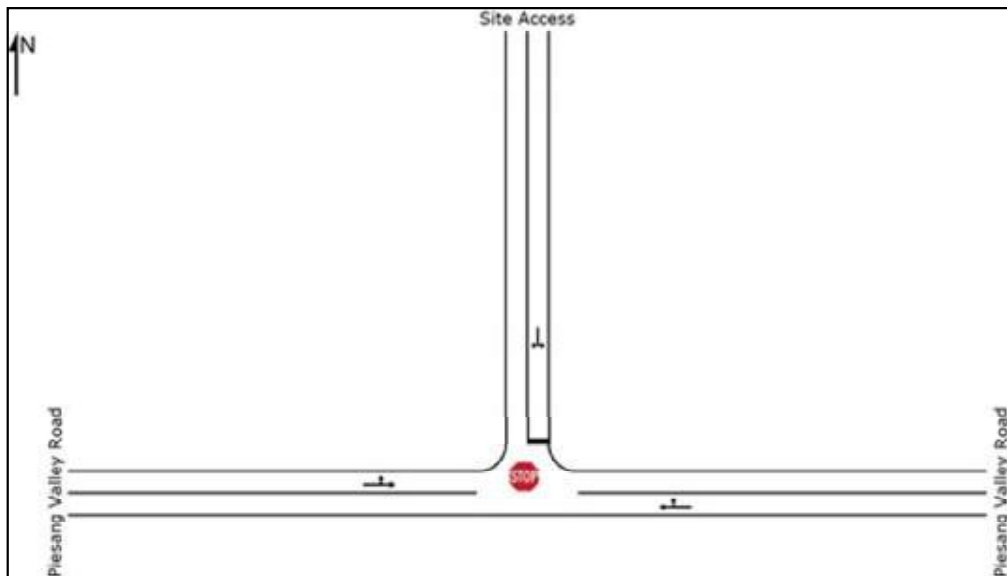


Table 3: Traffic Operations at intersection of Piesang Valley Road / Site Access Road

Intersection of Piesang Valley Road / Site Access Road						
Measures of Effectiveness	Intersection Type					
	Stop Controlled					
	Existing 2015 Scenario		Future 2016 Scenario		Future 2021 Scenario	
	Peak Hour		Peak Hour		Peak Hour	
	AM	MIDDAY	AM	MIDDAY	AM	MIDDAY
Levels of Service (LOS)	N/A	N/A	N/A	N/A	N/A	N/A
Delay (Sec) Overall	0.3	3.5	2.9	1.3	3.5	1.3
V/C Ratio	0.070	0.116	0.084	0.119	0.150	0.138

8. ACCESS TO SITE

The development will gain access from the existing road that extends from the Piesang Valley Road, which originates from the N2 on the western side and from the Plettenberg Bay residential area on the eastern side which joins up at the T-intersection going northward into the school access road.

9. PARKING REQUIREMENTS

The parking requirements for residential development of this nature are in accordance with the local authority Town Planning scheme and the minimum parking required is as follows:

Independent School:	20 classes	@ 1 bay / classes	=	20 bays
Independent School:	5 Offices	@ 1 bay / offices	=	5 bays
Total parking required:				= 25 bays

According to the Road Access Guidelines, 1 parking bay is required per classroom and office. However, the school already has an existing parking bay providing space for 50 vehicles. Therefore the calculated 25 bays would not be needed since 50 bays are already in existence as well as 1 bus parking bay.

10. PEDESTRIANS

It would be preferable for the project to be pedestrian friendly with adequate sidewalks internally.

11. PUBLIC TRANSPORT

Minibus taxis are the main mode of public transport travelling on the Piesang Valley Road.

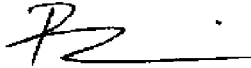
12. CONCLUSIONS AND RECOMMENDATIONS

It can be concluded that:

1. The site development plan consists of 20 classrooms, 5 offices with a total area of 3230m² and various sports facilities on a plot of 7.3237Ha. It will be located at the site South West of Plettenberg Bay.
2. Access to the development will originate from the existing Piesang valley Road by which from the West will come from the N2 Highway and from the East coming out of Roggerberg.
3. This school consists of 20 class rooms and 5 offices by which 1 bay space is needed per class and office according to the Road Access Guidelines. Since the school already has 50 parking bays with 1 bus parking bay, no additional parking space will be needed.
4. The key intersection were studied in detail and analysed in terms of the LOS, Delay and V/C ratios. The Level of Service (LOS) for the current traffic operations at the key intersection is operating at favourable levels of service during peak hours.
5. The traffic generation of the project is approximately 71 inbound and 69 outbound vehicular trips in the weekday AM peak hour and 28 inbound and 28 outbound in the weekday MIDDAY peak hour.
6. The 4% per annum growth rate was used to estimate the 2016 and 2021 traffic scenarios.
7. The trip distribution adopted in this study is based on the anticipated pattern of travel to and from the site. The assumptions are 70% of all the trips originating from The east side From Plettenberg Bay, 30% from the West coming from the N2 Highway.
8. The additional traffic generated by the proposed development is expected to have a significant impact on the road network during the peak hours. This is verified by the traffic analysis of the key intersection of Piesang Valley Road / Site Access T-Intersection.
9. The project will therefore have no significant traffic impact on the surrounding network traffic operations.
10. Access to the site has been carefully considered and the proposed access is the existing access road from the Piesang valley Road.
11. Internal sidewalks for the scholars along the site access travelling path.

Accordingly it is recommended that: -

- (i) A possible mini-bus taxi bay to be implemented on either side of the site access road in the direction of traffic movement, since mini-bus taxis are the main form of public transport used on Piesang Valley Road.



B A PHILLIPS (Pr Tech Eng)
(Pr No. 200770081)

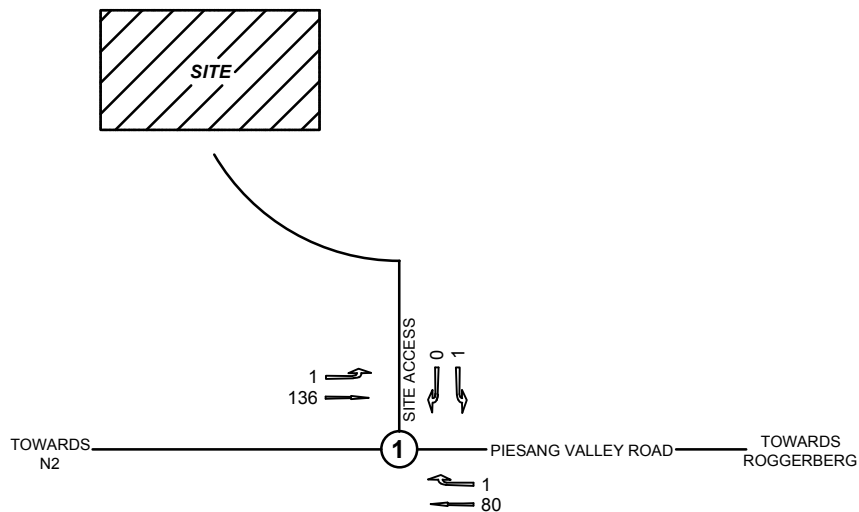
20 August 2015

13. REFERENCES

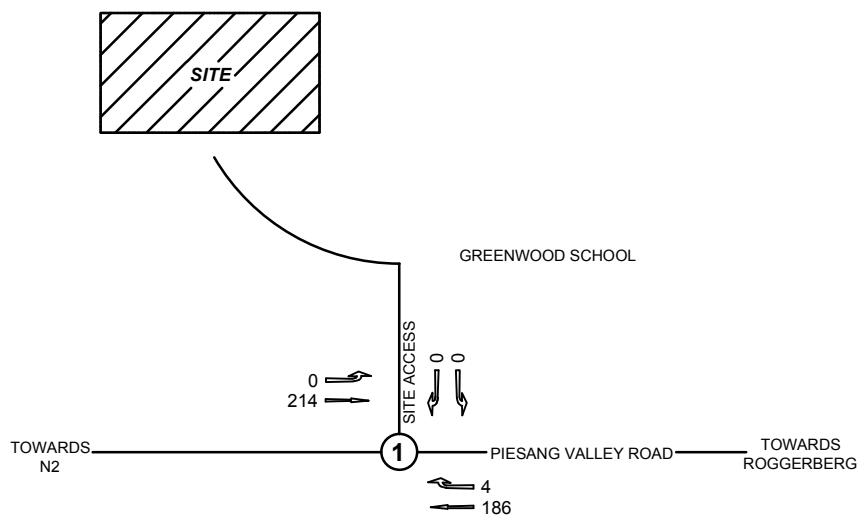
NDOT, Manual for Traffic Impact Studies RR93/635, 1995

COTO, TMH17 Vol 1, "South African Trip Data Manual", Sep 2012

PAWC, Road Access Guidelines, Second Edition and Second Print, September 2002



WEEKDAY AM PEAK HOUR
13 AUGUST 2015, 07:00 - 09:00am



WEEKDAY MIDDAY PEAK HOUR
13 AUGUST 2015, 12:00 - 14:00

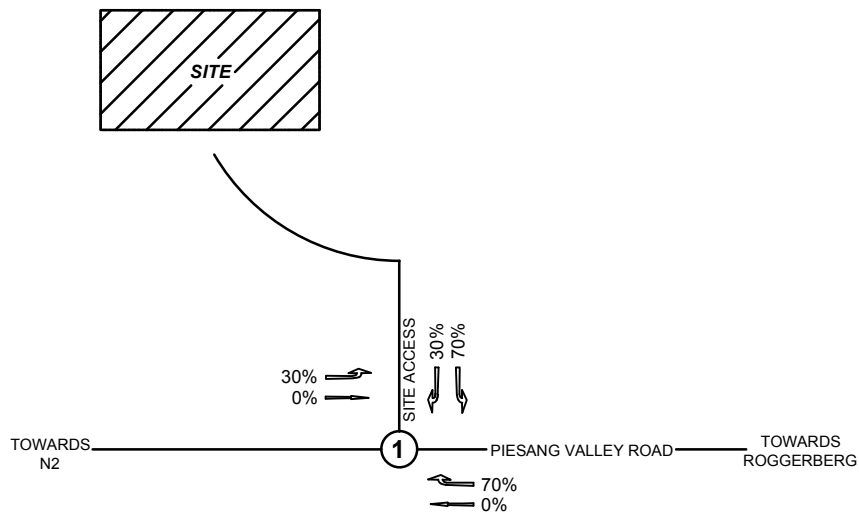
LEGEND	
 10	TRAFFIC MOVEMENT
①	INTERSECTION NO.



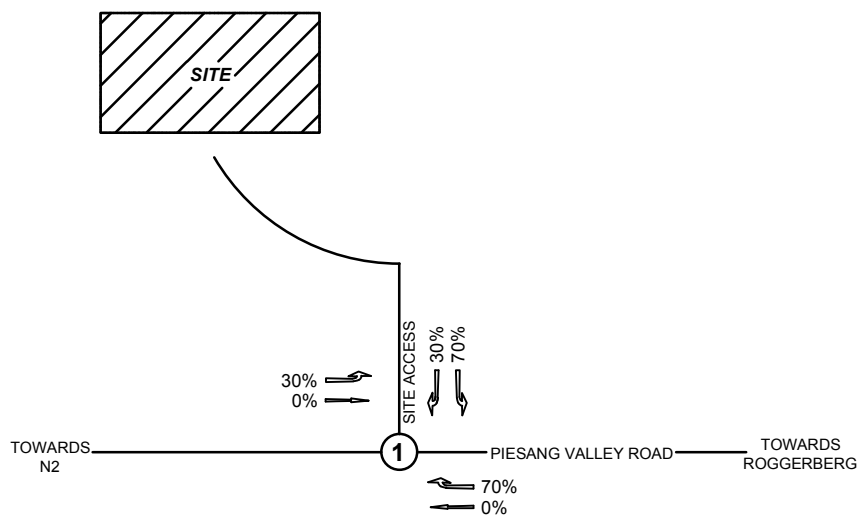
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CHECKED	BAP	18 - 08 - 15
APPROVED	BAP	18 - 08 - 15

PROJECT	GREENWOOD INDEPENDENT SCHOOL
TITLE	EXISTING 2015 TRAFFIC

PROJECT NO.	SCALE	FIGURE
14781R	N.T.S	2



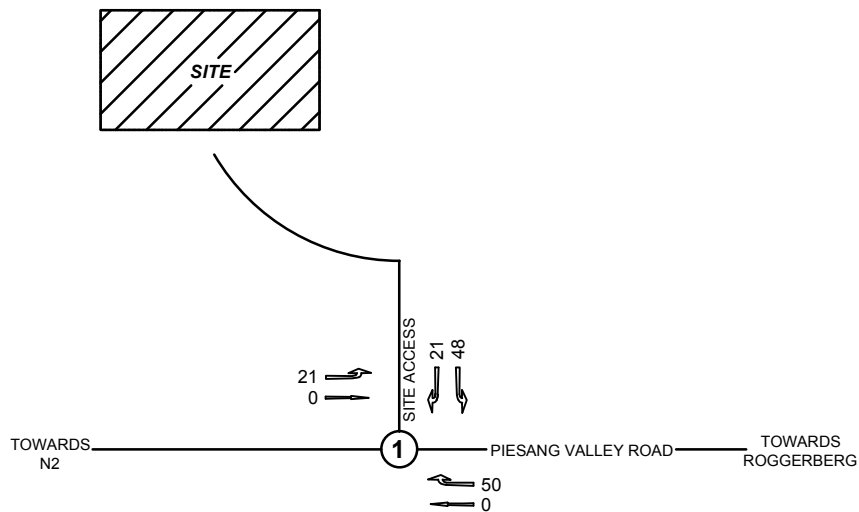
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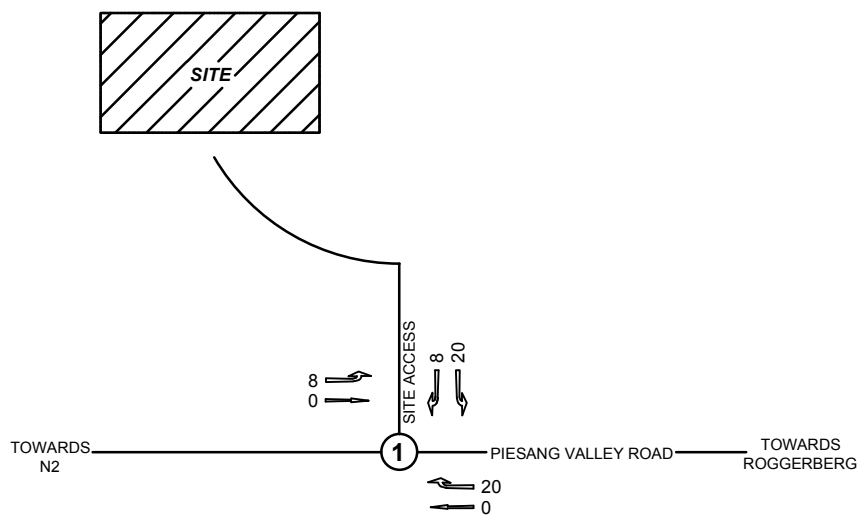
WEEKDAY MIDDAY PEAK HOUR

L E G E N D	
	TRAFFIC MOVEMENT
	INTERSECTION NO.
	ACCESS ROAD

 KANT & TEMPLER CONSULTING ENGINEERS	DRAWN	DH	18 - 08 - 15	PROJECT GREENWOOD INDEPENDENT SCHOOL		PROJECT NO. 14781R	SCALE N.T.S	FIGURE 3
	CHECKED	BAP	18 - 08 - 15	TITLE				
	APPROVED	BAP	18 - 08 - 15	PERCENTAGE DISTRIBUTION				



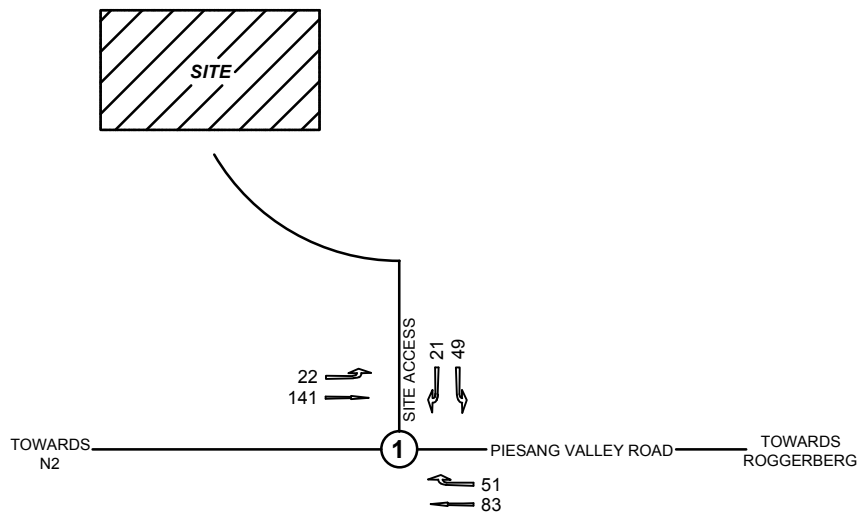
WEEKDAY AM PEAK HOUR



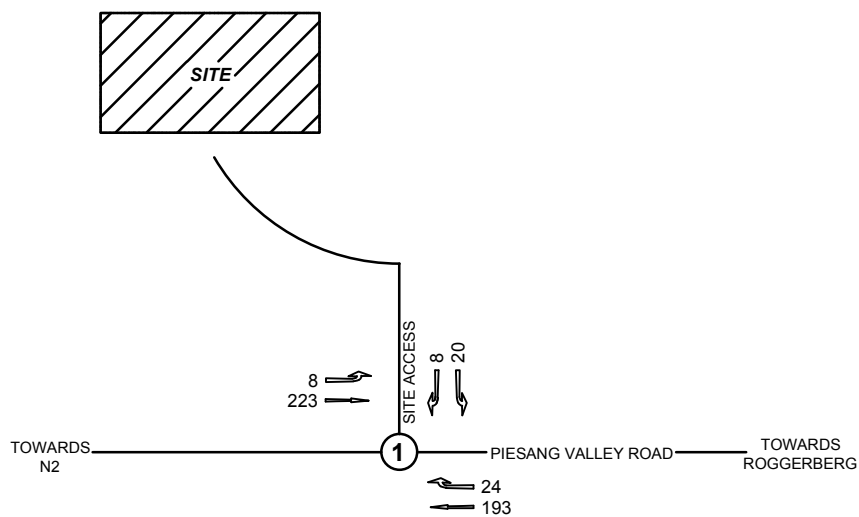
WEEKDAY MIDDAY PEAK HOUR

L E G E N D	
10	TRAFFIC MOVEMENT
	INTERSECTION NO.
	ACCESS ROAD

 KANTAY & TEMPLER CONSULTING ENGINEERS	DRAWN	DH	18 - 08 - 15	PROJECT GREENWOOD INDEPENDENT SCHOOL		PROJECT NO. 14781R	SCALE N.T.S	FIGURE 4
	CHECKED	BAP	18 - 08 - 15	TITLE				
	APPROVED	BAP	18 - 08 - 15	SITE TRAFFIC				



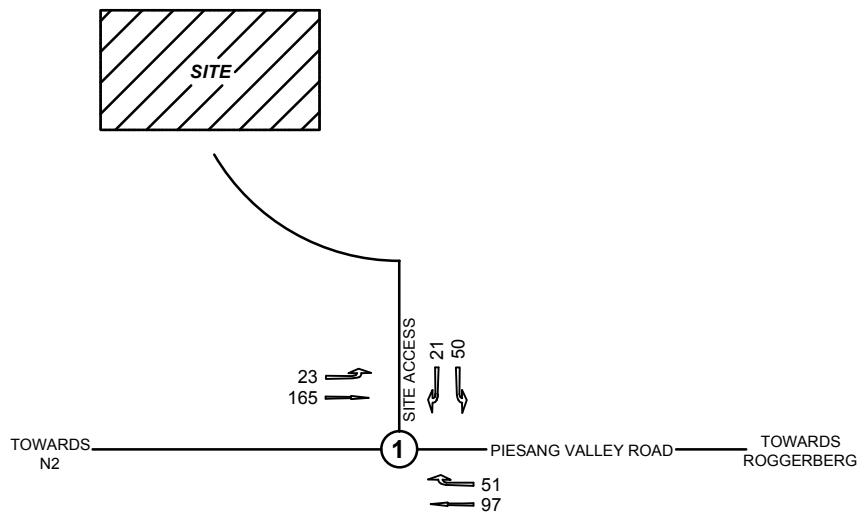
WEEKDAY AM PEAK HOUR



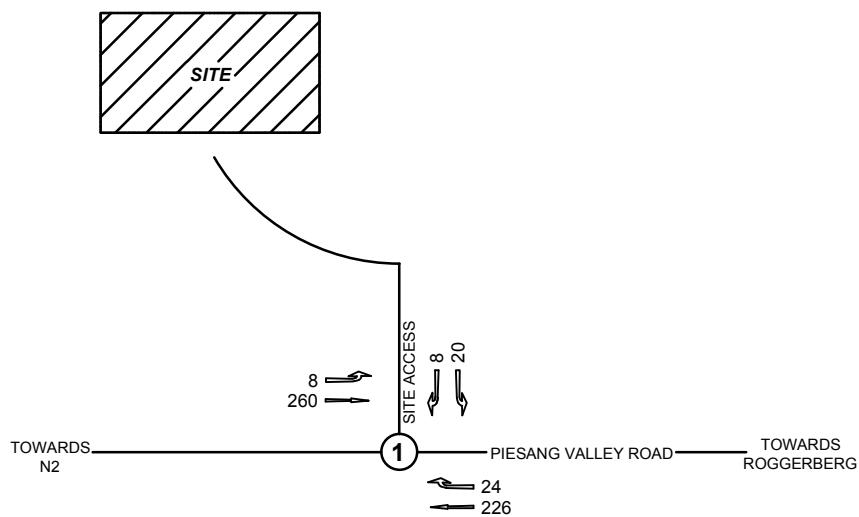
WEEKDAY MIDDAY PEAK HOUR

L E G E N D	
 10	TRAFFIC MOVEMENT
	INTERSECTION NO.
	ACCESS ROAD

 KANTAY & TEMPLER CONSULTING ENGINEERS	DRAWN	DH	18 - 08 - 15	PROJECT GREENWOOD INDEPENDENT SCHOOL		PROJECT NO. 14781R	SCALE N.T.S	FIGURE 5
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	APPROVED	BAP	18 - 08 - 15	FUTURE 2016 TRAFFIC				



WEEKDAY AM PEAK HOUR



WEEKDAY MIDDAY PEAK HOUR

L E G E N D	
 10	TRAFFIC MOVEMENT
	INTERSECTION NO.
	ACCESS ROAD

 KANTHEY & TEMPLER CONSULTING ENGINEERS	DRAWN	DH	18 - 08 - 15	PROJECT GREENWOOD INDEPENDENT SCHOOL		PROJECT NO. 14781R	SCALE N.T.S	FIGURE 6
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	APPROVED	BAP	18 - 08 - 15	FUTURE 2021 TRAFFIC				

APPENDIX A

TRAFFIC COUNT DATA

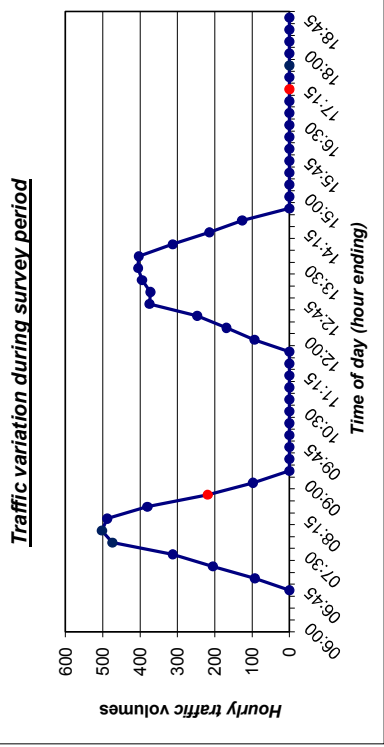
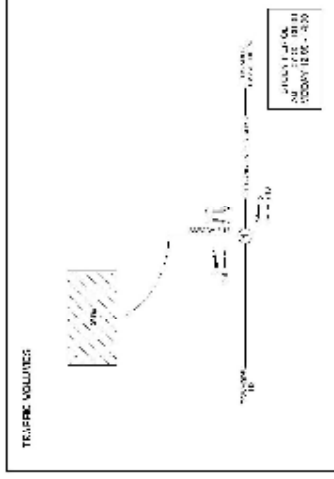
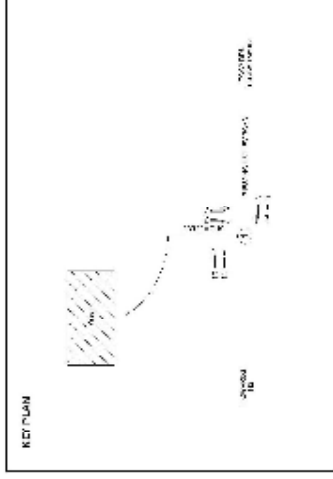
TRAFFIC COUNT: GREENWOOD

INTERSECTION: T-INTERSECTION OF PIESANG VALLEY ROAD AND ROAD ENTRANCE TO SCHOOL

PERIOD: 4 HRS

DATE: THURSDAY, 13 AUGUST 2015

TIME		TOTAL TRAFFIC												HOURLY TOTALS
		TRAFFIC MOVEMENTS												
START	END	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
06:00	06:15													0
06:15	06:30													0
06:30	06:45													0
06:45	07:00													0
07:00	07:15	0	0	0	0	53	0	0	0	1	0	40	0	93
07:15	07:30	0	0	0	0	57	0	0	0	0	0	56	0	112
07:30	07:45	0	0	0	0	62	0	0	0	0	0	46	0	108
07:45	08:00	0	0	0	0	87	0	0	0	0	0	75	0	162
08:00	08:15	0	0	0	0	34	1	1	0	0	1	85	0	122
08:15	08:30	0	0	0	0	46	0	0	0	0	0	52	0	98
08:30	08:45	0	0	0	0	0	0	0	0	0	0	0	0	488
08:45	09:00	0	0	0	0	0	0	0	0	0	0	0	0	381
09:00	09:15													219
09:15	09:30													98
09:30	09:45													0
09:45	10:00													0
10:00	10:15													0
10:15	10:30													0
10:30	10:45													0
10:45	11:00													0
11:00	11:15													0
11:15	11:30													0
11:30	11:45													0
11:45	12:00													0
12:00	12:15	0	0	0	0	42	0	1	0	0	0	51	0	94
12:15	12:30	0	0	0	0	31	0	0	0	0	0	45	0	76
12:30	12:45	0	0	0	0	47	0	0	0	0	0	32	0	169
12:45	13:00	0	0	0	0	70	0	0	0	0	0	59	0	247
13:00	13:15	0	0	0	0	41	3	0	0	0	0	48	0	128
13:15	13:30	0	0	0	0	46	1	0	0	0	0	51	0	98
13:30	13:45	0	0	0	0	48	0	0	0	0	0	41	0	88
13:45	14:00	0	0	0	0	52	0	0	0	0	0	75	0	404
14:00	14:15													127
14:15	14:30													313
14:30	14:45													215
14:45	15:00													127
15:00	15:15													0
15:15	15:30													0
15:30	15:45													0
15:45	16:00													0
16:00	16:15													0
16:15	16:30													0
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16:45	17:00													0
17:00	17:15													0
17:15	17:30													0
17:30	17:45													0
17:45	18:00													0
18:00	18:15													0
18:15	18:30													0
18:30	18:45													0
18:45	19:00													0
TOTAL		0	0	0	0	713	5	2	0	1	1	750	0	1472
AM PEAK HOUR		0	0	0	0	80	1	1	0	0	1	136	0	219
MIDDAY PEAK HOUR		0	0	0	0	186	4	0	0	0	0	214	0	404
EST. 24 HR		0	0	0	0	1425	10	4	0	2	2	1500	0	2943



APPENDIX B

SIDRA MOVEMENT SUMMARIES

(COPIES AVAILABLE ON REQUEST)

MOVEMENT SUMMARY

 Site: 01AM2021FU

Piesang Valley Road / Site Access
AM Peak Hour
2021
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Piesang Valley Road											
5	T1	97	0.0	0.150	0.7	LOS A	0.8	5.6	0.32	0.36	55.8
6	R2	151	0.0	0.150	6.1	LOS A	0.8	5.6	0.32	0.36	52.9
Approach		248	0.0	0.150	4.0	NA	0.8	5.6	0.32	0.36	54.1
North: Site Access											
7	L2	50	0.0	0.069	9.1	LOS A	0.3	1.8	0.29	0.89	50.2
9	R2	21	0.0	0.069	8.6	LOS A	0.3	1.8	0.29	0.89	49.7
Approach		71	0.0	0.069	9.0	LOS A	0.3	1.8	0.29	0.89	50.1
West: Piesang Valley Road											
10	L2	23	0.0	0.097	5.5	LOS A	0.0	0.0	0.00	0.07	57.3
11	T1	165	0.0	0.097	0.0	LOS A	0.0	0.0	0.00	0.07	59.3
Approach		188	0.0	0.097	0.7	NA	0.0	0.0	0.00	0.07	59.1
All Vehicles		507	0.0	0.150	3.5	NA	0.8	5.6	0.20	0.33	55.4

Level of Service (LOS) Method: Delay (HCM 2000).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Processed: 19 August 2015 02:36:28 PM

SIDRA INTERSECTION 6.0.24.4877

Project: Z:\ADMIN\Jobs-R\14781R Greenwood School TIA\5. Traffic\SIDRA\Greenwood.sip6
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SIDRA
INTERSECTION 6

MOVEMENT SUMMARY

 Site: 01MID2015EX

Piesang Valley Road / Site Access
Midday Peak Hour
2015
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Piesang Valley Road											
5	T1	186	0.0	0.098	0.7	LOS A	0.6	4.2	0.33	0.01	58.5
6	R2	4	0.0	0.098	6.2	LOS A	0.6	4.2	0.33	0.01	55.7
Approach		190	0.0	0.098	0.8	NA	0.6	4.2	0.33	0.01	58.4
North: Site Access											
7	L2	1	0.0	0.012	9.2	LOS A	0.0	0.3	0.02	0.99	50.0
9	R2	10	0.0	0.012	8.7	LOS A	0.0	0.3	0.02	0.99	49.4
Approach		11	0.0	0.012	8.7	LOS A	0.0	0.3	0.02	0.99	49.5
West: Piesang Valley Road											
10	L2	214	0.0	0.116	5.6	LOS A	0.0	0.0	0.00	0.57	52.7
11	T1	1	0.0	0.116	0.0	LOS A	0.0	0.0	0.00	0.57	55.0
Approach		215	0.0	0.116	5.5	NA	0.0	0.0	0.00	0.57	52.7
All Vehicles		416	0.0	0.116	3.5	NA	0.6	4.2	0.15	0.33	55.3

Level of Service (LOS) Method: Delay (HCM 2000).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Processed: 19 August 2015 02:40:27 PM

SIDRA INTERSECTION 6.0.24.4877

Project: Z:\ADMIN\Jobs-R\14781R Greenwood School TIA\5. Traffic\SIDRA\Greenwood.sip6

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SIDRA
INTERSECTION 6

MOVEMENT SUMMARY

 Site: 01MID2016FU

Piesang Valley Road / Site Access
 Midday Peak Hour
 2016
 Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Piesang Valley Road											
5	T1	193	0.0	0.116	0.8	LOS A	0.7	4.9	0.35	0.07	57.9
6	R2	24	0.0	0.116	6.3	LOS A	0.7	4.9	0.35	0.07	55.2
Approach		217	0.0	0.116	1.4	NA	0.7	4.9	0.35	0.07	57.7
North: Site Access											
7	L2	20	0.0	0.028	9.3	LOS A	0.1	0.7	0.33	0.87	50.2
9	R2	8	0.0	0.028	8.7	LOS A	0.1	0.7	0.33	0.87	49.6
Approach		28	0.0	0.028	9.1	LOS A	0.1	0.7	0.33	0.87	50.0
West: Piesang Valley Road											
10	L2	8	0.0	0.119	5.6	LOS A	0.0	0.0	0.00	0.02	57.9
11	T1	223	0.0	0.119	0.0	LOS A	0.0	0.0	0.00	0.02	59.8
Approach		231	0.0	0.119	0.2	NA	0.0	0.0	0.00	0.02	59.7
All Vehicles		476	0.0	0.119	1.3	NA	0.7	4.9	0.18	0.09	58.2

Level of Service (LOS) Method: Delay (HCM 2000).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Processed: 19 August 2015 02:42:12 PM

SIDRA INTERSECTION 6.0.24.4877

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SIDRA
INTERSECTION 6

MOVEMENT SUMMARY

 Site: 01MID2021FU

Piesang Valley Road / Site Access
Midday Peak Hour
2021
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Piesang Valley Road											
5	T1	226	0.0	0.134	1.0	LOS A	0.9	6.0	0.39	0.06	57.9
6	R2	24	0.0	0.134	6.4	LOS A	0.9	6.0	0.39	0.06	55.1
Approach		250	0.0	0.134	1.5	NA	0.9	6.0	0.39	0.06	57.6
North: Site Access											
7	L2	20	0.0	0.030	9.5	LOS A	0.1	0.7	0.37	0.87	50.0
9	R2	8	0.0	0.030	9.0	LOS A	0.1	0.7	0.37	0.87	49.5
Approach		28	0.0	0.030	9.4	LOS A	0.1	0.7	0.37	0.87	49.9
West: Piesang Valley Road											
10	L2	8	0.0	0.138	5.6	LOS A	0.0	0.0	0.00	0.02	57.9
11	T1	260	0.0	0.138	0.0	LOS A	0.0	0.0	0.00	0.02	59.8
Approach		268	0.0	0.138	0.2	NA	0.0	0.0	0.00	0.02	59.8
All Vehicles		546	0.0	0.138	1.3	NA	0.9	6.0	0.20	0.08	58.3

Level of Service (LOS) Method: Delay (HCM 2000).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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SIDRA INTERSECTION 6.0.24.4877

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INTERSECTION 6

MOVEMENT SUMMARY

 Site: 01AM2015EX

Piesang Valley Road / Site Access
AM Peak Hour
2015
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Piesang Valley Road											
5	T1	80	0.0	0.042	0.4	LOS A	0.2	1.6	0.24	0.01	58.9
6	R2	1	0.0	0.042	5.8	LOS A	0.2	1.6	0.24	0.01	56.1
Approach		81	0.0	0.042	0.5	NA	0.2	1.6	0.24	0.01	58.8
North: Site Access											
7	L2	1	0.0	0.002	8.7	LOS A	0.0	0.0	0.25	0.85	50.6
9	R2	1	0.0	0.002	8.1	LOS A	0.0	0.0	0.25	0.85	50.1
Approach		2	0.0	0.002	8.4	LOS A	0.0	0.0	0.25	0.85	50.3
West: Piesang Valley Road											
10	L2	1	0.0	0.070	5.5	LOS A	0.0	0.0	0.00	0.00	58.0
11	T1	136	0.0	0.070	0.0	LOS A	0.0	0.0	0.00	0.00	59.9
Approach		137	0.0	0.070	0.0	NA	0.0	0.0	0.00	0.00	59.9
All Vehicles		220	0.0	0.070	0.3	NA	0.2	1.6	0.09	0.01	59.4

Level of Service (LOS) Method: Delay (HCM 2000).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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INTERSECTION 6

MOVEMENT SUMMARY

 Site: 01AM2016FU

Piesang Valley Road / Site Access
AM Peak Hour
2016
Stop (Two-Way)

Movement Performance - Vehicles											
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East: Piesang Valley Road											
5	T1	83	0.0	0.076	0.5	LOS A	0.4	2.8	0.28	0.22	57.0
6	R2	51	0.0	0.076	6.0	LOS A	0.4	2.8	0.28	0.22	54.1
Approach		134	0.0	0.076	2.6	NA	0.4	2.8	0.28	0.22	56.0
North: Site Access											
7	L2	49	0.0	0.063	8.8	LOS A	0.2	1.6	0.26	0.88	50.5
9	R2	21	0.0	0.063	8.2	LOS A	0.2	1.6	0.26	0.88	49.9
Approach		70	0.0	0.063	8.6	LOS A	0.2	1.6	0.26	0.88	50.3
West: Piesang Valley Road											
10	L2	22	0.0	0.084	5.5	LOS A	0.0	0.0	0.00	0.08	57.3
11	T1	141	0.0	0.084	0.0	LOS A	0.0	0.0	0.00	0.08	59.3
Approach		163	0.0	0.084	0.8	NA	0.0	0.0	0.00	0.08	59.0
All Vehicles		367	0.0	0.084	2.9	NA	0.4	2.8	0.15	0.28	56.2

Level of Service (LOS) Method: Delay (HCM 2000).

Vehicle movement LOS values are based on average delay per movement

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akcelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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INTERSECTION 6

APPENDIX C

SITE DEVELOPMENT PLAN



LEGEND	
	THE PROPERTY 7,3237Ha
	ROADS & PARKING 50 parking bays & 1 bus parking bay
	STRUCTURES Pre School Building area = 270m ² Classrooms = 3
	Foundation Phase Building area = 300m ² Classrooms = 3
	Grade 4-7 Building area = 500m ² Classrooms = 4
	High School Building area = 1370m ² Classrooms = 10
	Reception & Principle's Office Building area = 450m ²
	Storage Building area = 340m ²
	SPORTS FACILITIES Multipurpose Sports Swimming Pool Tennis Court Sport Pergola Valley/hall / Badminton

NOTE: ALL DIMENSIONS ARE APPROXIMATE AND FOR INDICATIVE PURPOSES ONLY. DETAIL SURVEYS SHOULD BE UNDERTAKEN TO DETERMINE EXACT DIMENSIONS.

Projection: Transverse Mercator
Centre Lon: 23°21'37" E
Centre Lat: 34°03'39" S
Created: 2015/05/06
Scale: 1:1700
Plan Ref: P11533_8212SDP/REVO
Stored: 21\GIS\Approved Projects\P11533 Plan ERF 8212\8212 SDP.map

N

SITE DEVELOPMENT PLAN

PLEITENBERG BAY ERF 8212

Marikie Vreken
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