



LANDS AND SURVEYS DEPARTMENT SABAH MALAYSIA



Data Integration for Land Acquisition of Pan Borneo Highway

DATUK HJ SAFAR B UNTONG
Director of Lands and Surveys
Sabah, Malaysia

SABAH : LAND PROFILE

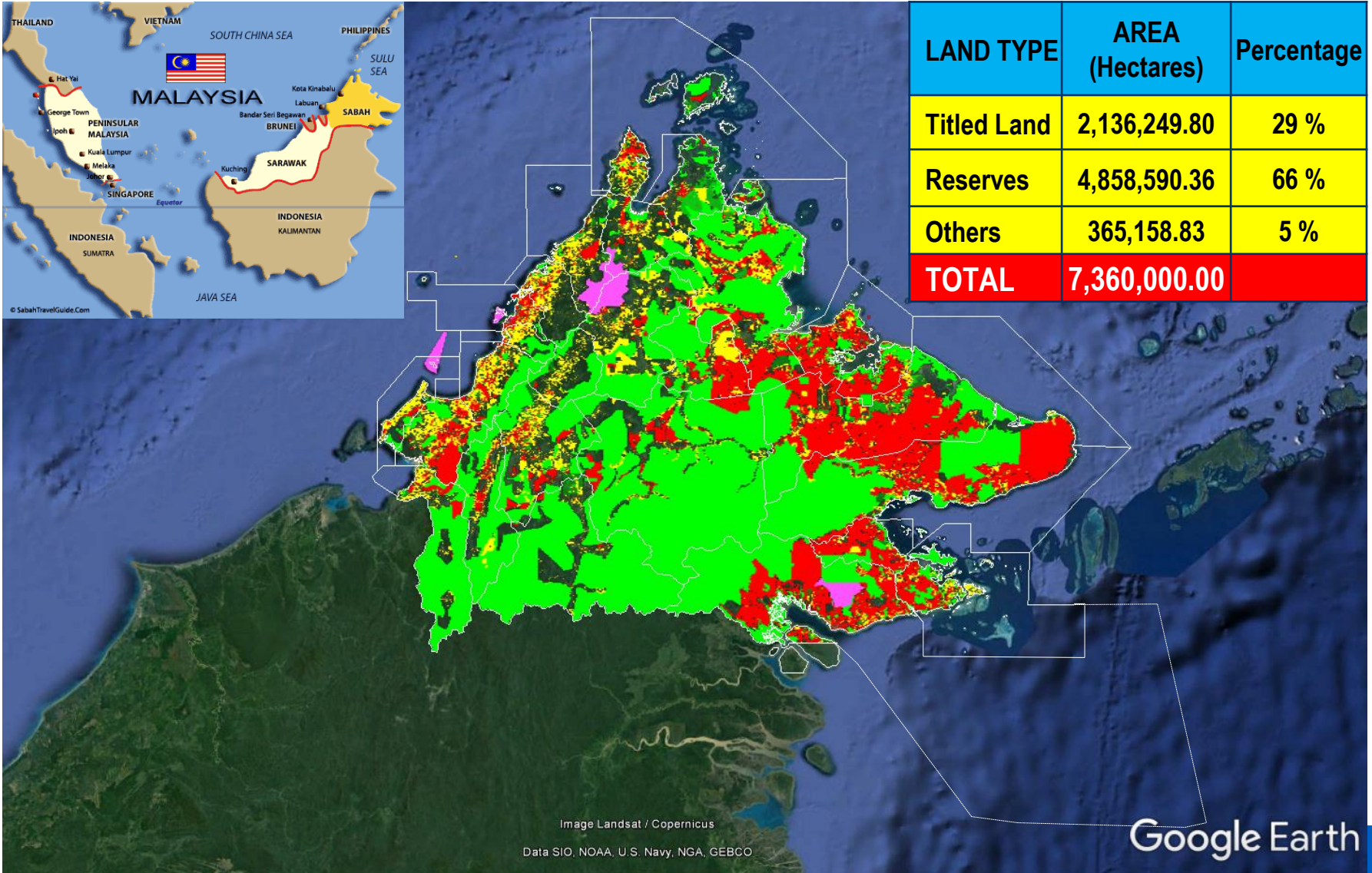


Image Landsat / Copernicus

Data SIO, NOAA, U.S. Navy, NGA, GEBCO



DIGITAL LAND RELATED RECORDS

LAND TITLE INFORMATION SYSTEM

Land Title records
Subsidiary title records
Land owners records
Land Dealings records
Quit Rent payment & outstanding records
Title conditions

SURVEY OFFICE MIS

Survey Papers(SP)
Registered SP
Survey Plans
Land Applications

LAND ACQ PARCEL DEV SYSTEM

Land Acquisition parcels
Land offer records
Payment vouchers
Land Acquisition amount

GAZMIS

Reserved Land Parcels
Gazette Notification records

LAND REVENUE INFORMATION SYSTEM

Receipt transactions
Quit rent transactions
Title records

LAND APPLICATION MIS

Land Application
Land applicants
Approval records
Land status

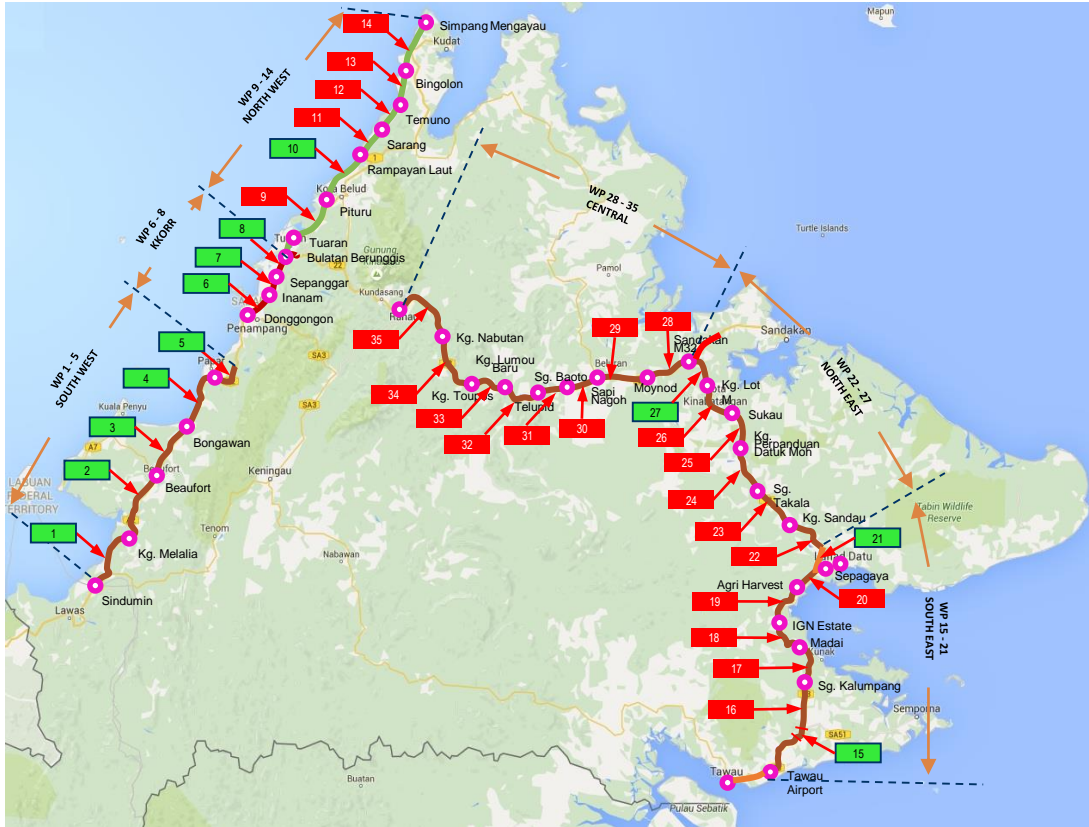
DIGITAL CADESTRAL DATABASE

Cadastral Parcels
Boundary Marks
Boundary Lines
Survey Plan information

LAND DEALING E-SUBMISSION SYSTEM

Land Dealings Records
Transactions records
Legal Firms

PAN BORNEO HIGHWAY PROJECT - PHASE 1



LEGEND :

	Widening of Existing Road		Already tendered / awarded
	New Expressway/Bypass		Remaining Tender Via Pre-Qualification No. 2
	Inclusion Is Pending Confirmation From KKR		

PAN BORNEO HIGHWAY PROJECT - PHASE 1

PACKAGE	SECTION	DIST.* (KM)
WP 1	Sindumin - Kg Melalia	28.49
WP 2	Kg Melalia - Beaufort	34.7
WP 3	Beaufort - Bongawan	22.4
WP 4	Bongawan - Papar	22.72
WP 5	Papar - Donggongan	11.7
WP 6	Putatan - Inanam	19.6
WP 7	Inanam - Sepangar	9.9
WP 8	Sepangar - Bulatan Berungis	11.7
WP 9	Serusup - Pituru	20.8
WP 10	Pituru - Rampayan Laut	32.2
WP 11	Rampayan Laut - Sarang	7.3
WP 12	Sarang - Temuno	14.7
WP 13	Temuno - Bingolon	20.3
WP 14	Bingolon - Simpang Mengayau	28.1
WP 15	Tawau - Semporna Package 1 - Phase 2	5
WP 16	Kampung Checkpoint - Sg Kalumpang	19.1
WP 17	Sg Kalumpang - Madai	19.0
WP 18	Madai - IGN Estate	13.8
WP 19	IGN Estate - Agri Harvest	18.5
WP 20	Agri Harvest - Sapagaya	17.9
WP 21	Lahad Datu Bypass	7
WP 22	Lahad Datu Bypass - Kg Sandau	23.8
WP 23	Kg Sandau - Sg Takala	25.0
WP 24	Sg Takala - Kg Perpaduan Datuk Moh	15.9
WP 25	Kg Perpaduan Datuk Moh - Sukau	15.0
WP 26	Sukau - Kg. Lot M	18.1
WP 27	Kg Lot M - Sandakan Mile 32	18.13
WP 28	Sandakan Mile 32 - Moynod	21.7
WP 29	Moynod - Sapi Nangoh	20.4
WP 30	Sapi Nangoh - Sg Baoto	22.1
WP 31	Sg Baoto - Telupid	14.3
WP 32	Telupid - Kg Lumou Baru	18.4
WP 33	Kg Lumou Baru - Kg Toupos	17.6
WP 34	Kg Toupos - Kg Nabutan	26.0
WP 35	Kg Nabutan - Ranau	31.0

**Project cost:
RM12.86 B**

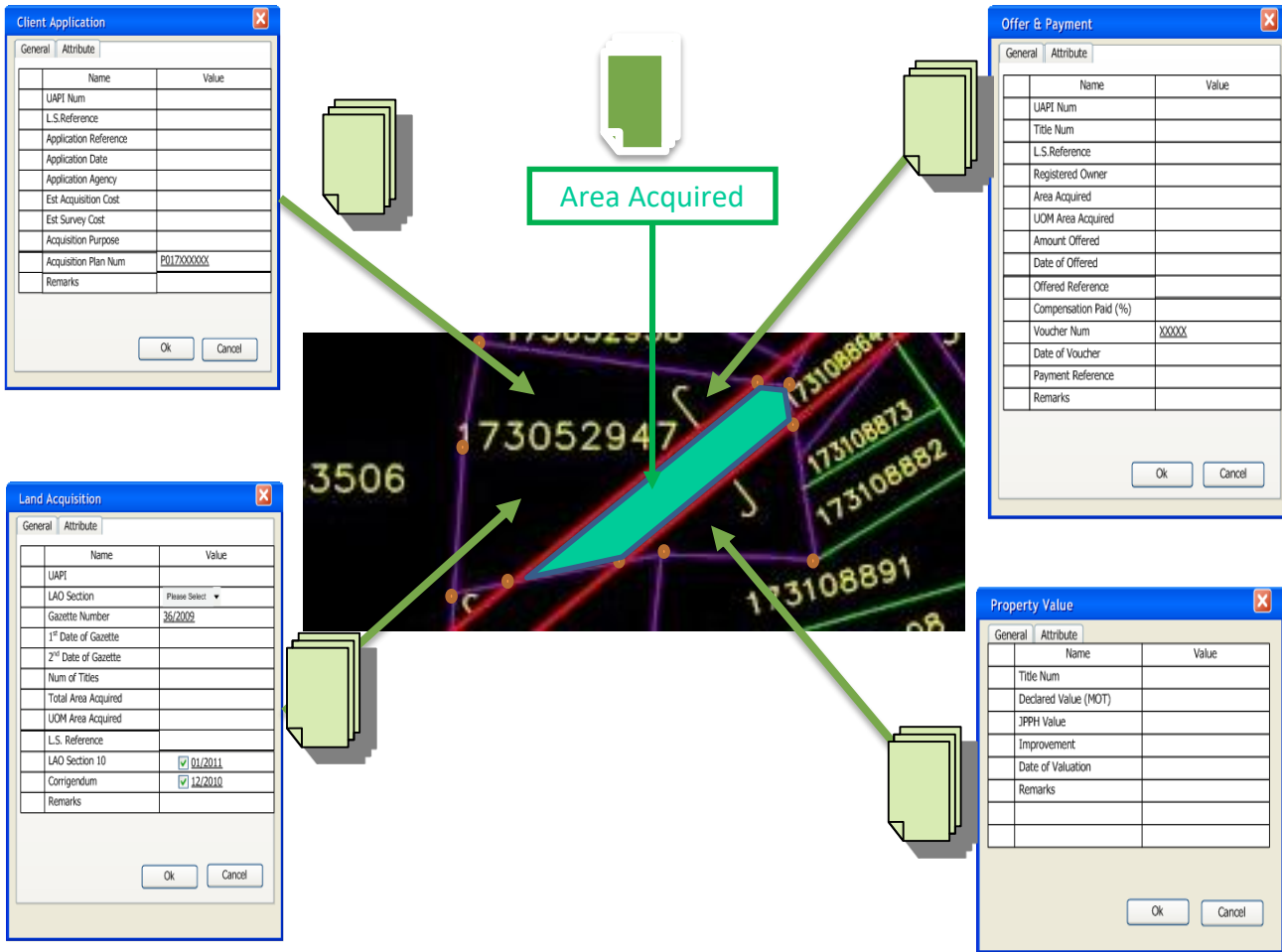
**Land Acq
Cost:
RM 2.5B**

**Total length:
704 Km**

**Duration:
2016 - 2021**

**Divided into:
35 packages**

Land Acq Parcel Database



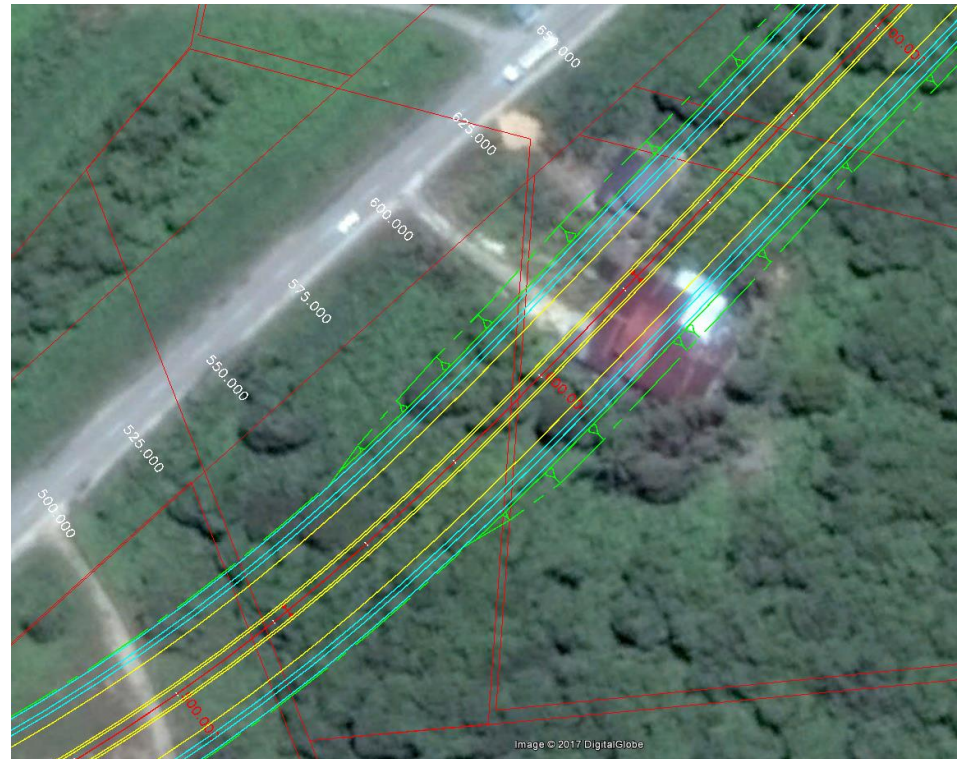
Selection of Road Alignment – Lidar Survey

- Carried out by Licensed Surveyor
- 800 m to 1 km corridor
- **Digital Terrain Model** - at 0.5m resolution in ECW format.
- **Digital Elevation Model/Digital Surface Model** - Consist of a pre-set grid interval of ground points which represent the earth surface and include all objects in it.
- **Digital Orthophotos** - must be corrected (ortho-rectified) and repositioned (Geo Referenced) to the actual WGS 84 coordinate and GDM 2000. Digital Orthophotos files delivered in GEOTIFF or ECW Format with suitable image resolution.
- All digitized features and contour shall be converted in Moss Genio Format



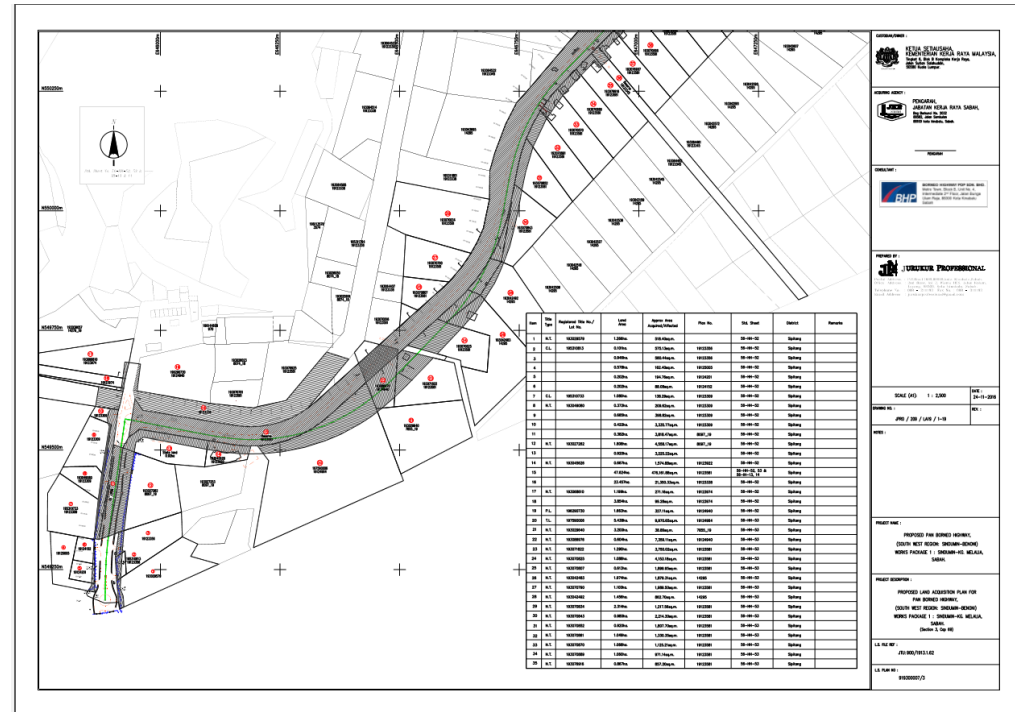
Detail Engineering Survey (long & cross section)

- Divided into 35 packages
- Surveyed by 20 registered licensed surveyor
- Detail Surveys information given to PDP
- Consulting Engineers prepare alignment plan and engineering design plan



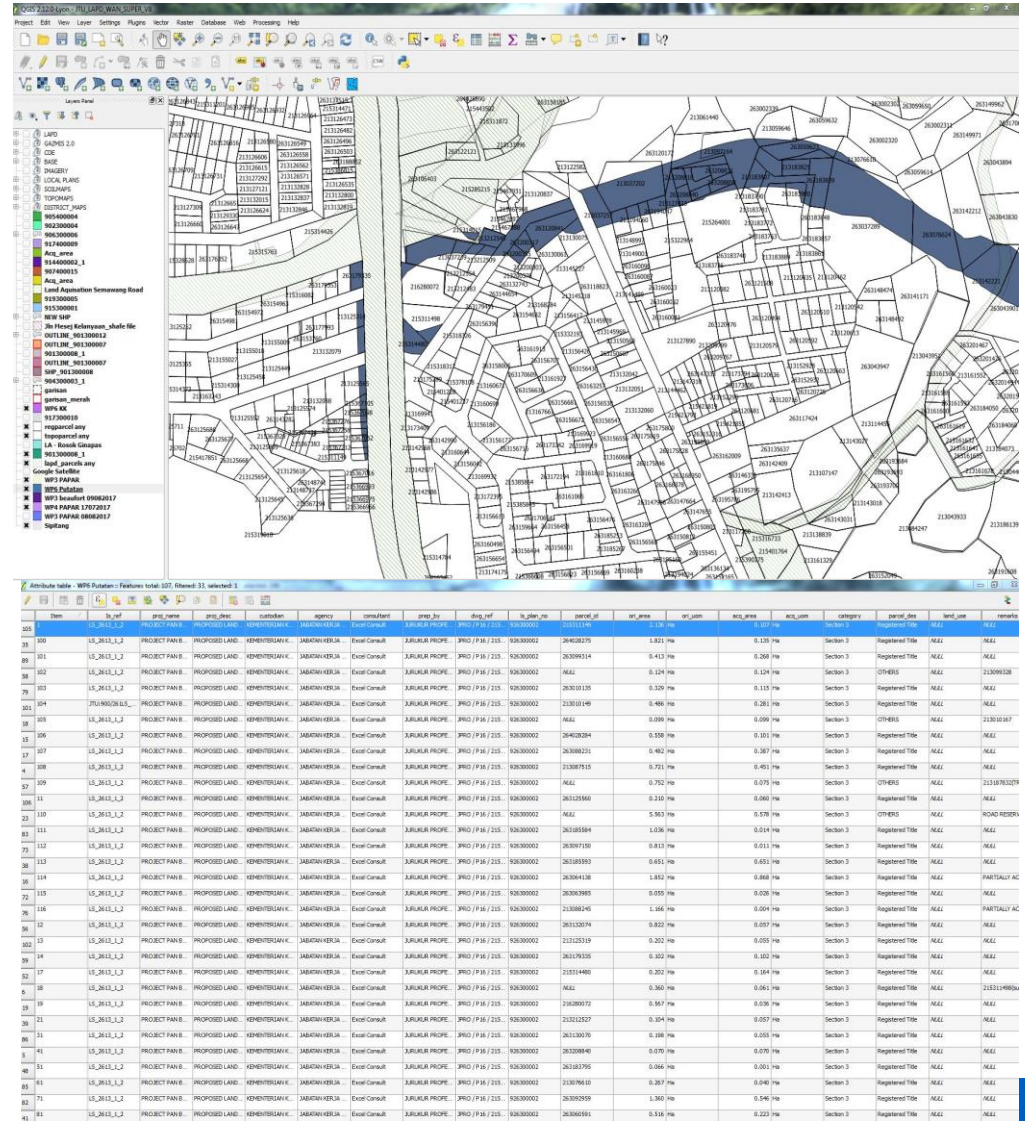
Acquisition Proposal by Licensed Surveyor

- Alignment plan and engineering design plan given to Licensed Surveyor.
- Licensed Surveyors (LS) purchase Digital Cadastral Data and Land Title Information's.
- LS prepare proposed acquisition plans in the digital form (DCDB & LTIS)
- LS submit digital plan (*.shape file) to Lands & Surveys Department



Automated Plan Checking

- Digital plan checking by LSD
- Overlay with Cadastral Data Base
- If everything in order, LSD advise LS to print proposed plans to be sign by Director of JKR as client department.
- Proposed Acquisition Plans submitted to LSD and to be approved Director/Deputy Director.
- Approved Acquisition Plans dan Draft Gazette Notification sent to Chief Minister Office for approval.
- Gazette Notification publish at government gazette.
- Lands officially acquired



Land Acq Parcel Development Database

Land Acquisition Parcel Development Database V3
User: sylvia
Includes APAMS and Digital Workflow Modules

Table Lists | Workflow | APAMS | **SLOI** | Reports | LTIS | Utilities | Security

Check In To Geo Acquired Parcels | Upload Shapefile | Check In To Geo Acquired Parcels | Check In To LAPD DB | List Uploaded Shapefiles | List Geo Acquired Parcels | List All Shapefiles Import Parcels

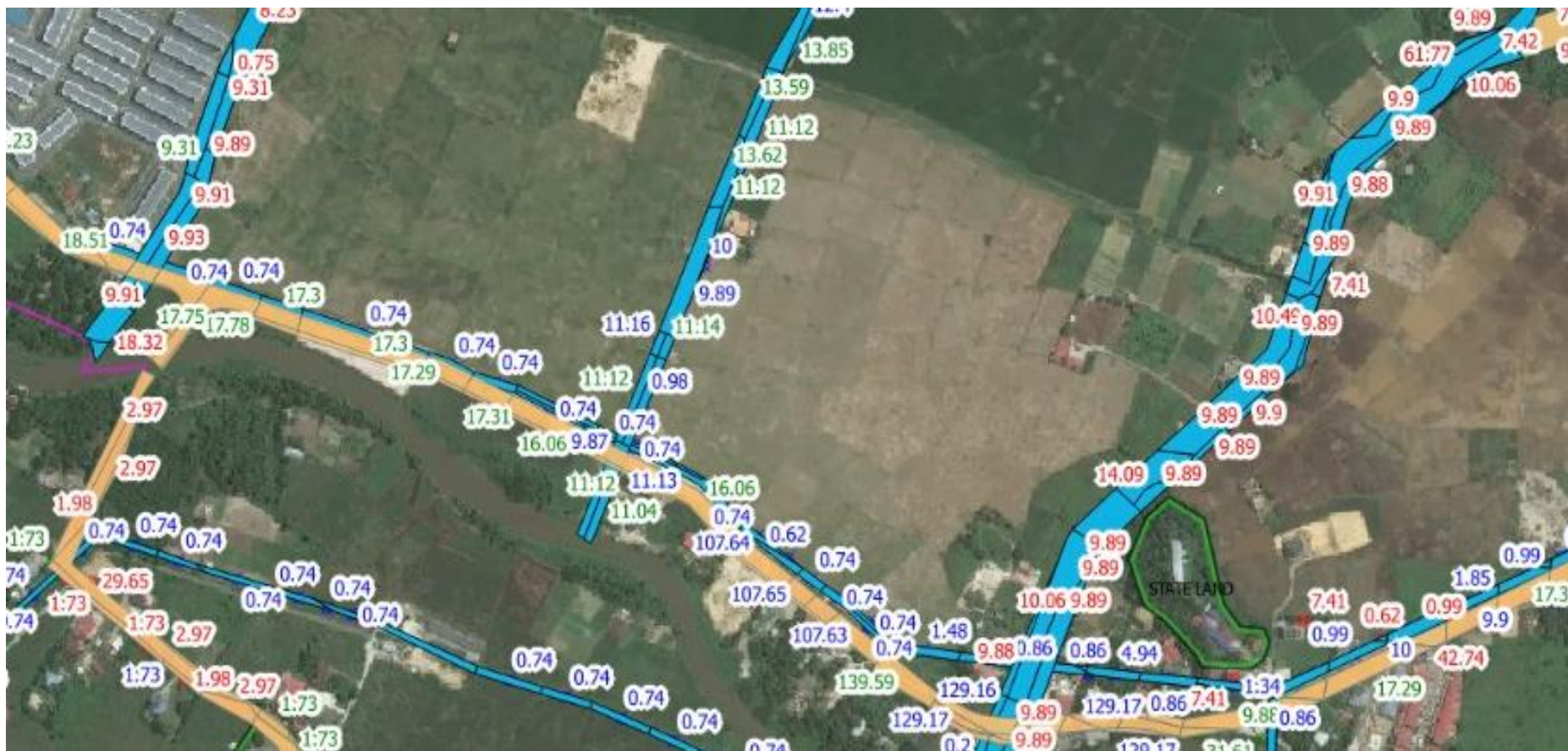
List - LAPD Parcels

Quick search

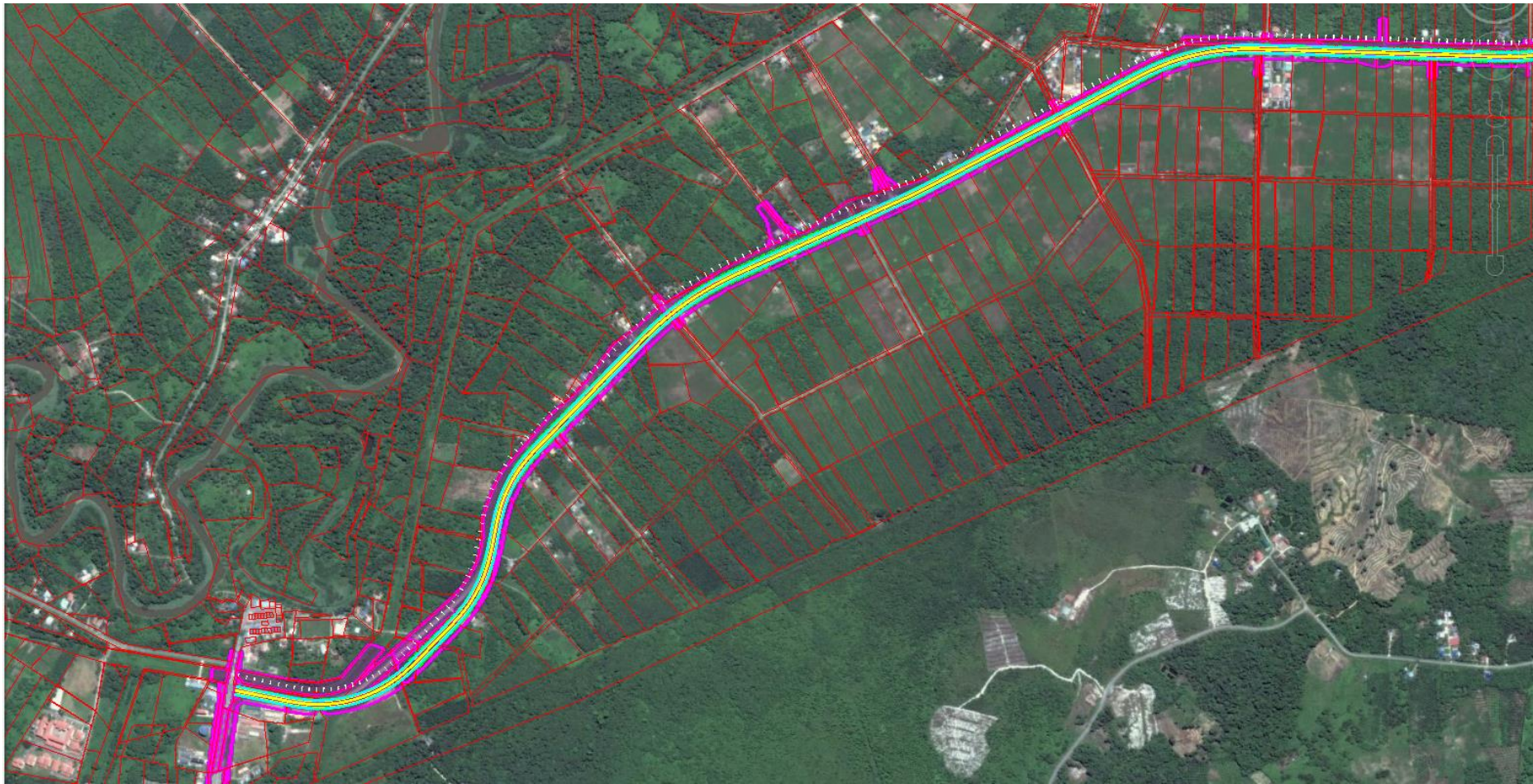
Columns | Sorting | Export | Advanced Search | View Parcels

Gid	Ls Ref	Parcel Id	Ls Plan No	Proj Name	Proj Desc	Ori Area	Ori Uom	Acq Area	Acq Uom	Gaz Num	Custodian	Agency	Consultant	Prep By	Dwg Ref	Category
86,860	LS_113_1_255	013053962	901300016.000000000	PROJECT PAN BORNEO HIGHWAY SABAH WORKS PACKAGE 7 : DISTRICT KOTA KINABALU SABAH	Proposed Land Acquisition for PROJECT PAN BORNEO HIGHWAY SABAH WORKS PACKAGE 7 : DISTRICT KOTA KINABALU SABAH	0.539	Ha	0.501	Ha		KEMENTERIAN KERJA RAYA	JABATAN KERJA RAYA SABAH	Excel Consult	Jurukur Professional	JPRO / P16 / 215 / SA01(01-10) / WP7-01	Section 3
86,859	LS_113_1_255	013022118	901300016.000000000	PROJECT PAN	Proposed Land	0.483	Ha	0.056	Ha		KEMENTERIAN KERJA RAYA	JABATAN KERJA	Excel Consult	Jurukur Professional	JPRO / P16 / 215	Section 3

Compensation Value @ Land Acq Parcel Database



Pan Borneo Alignment Plan



New Image on top of Google Earth

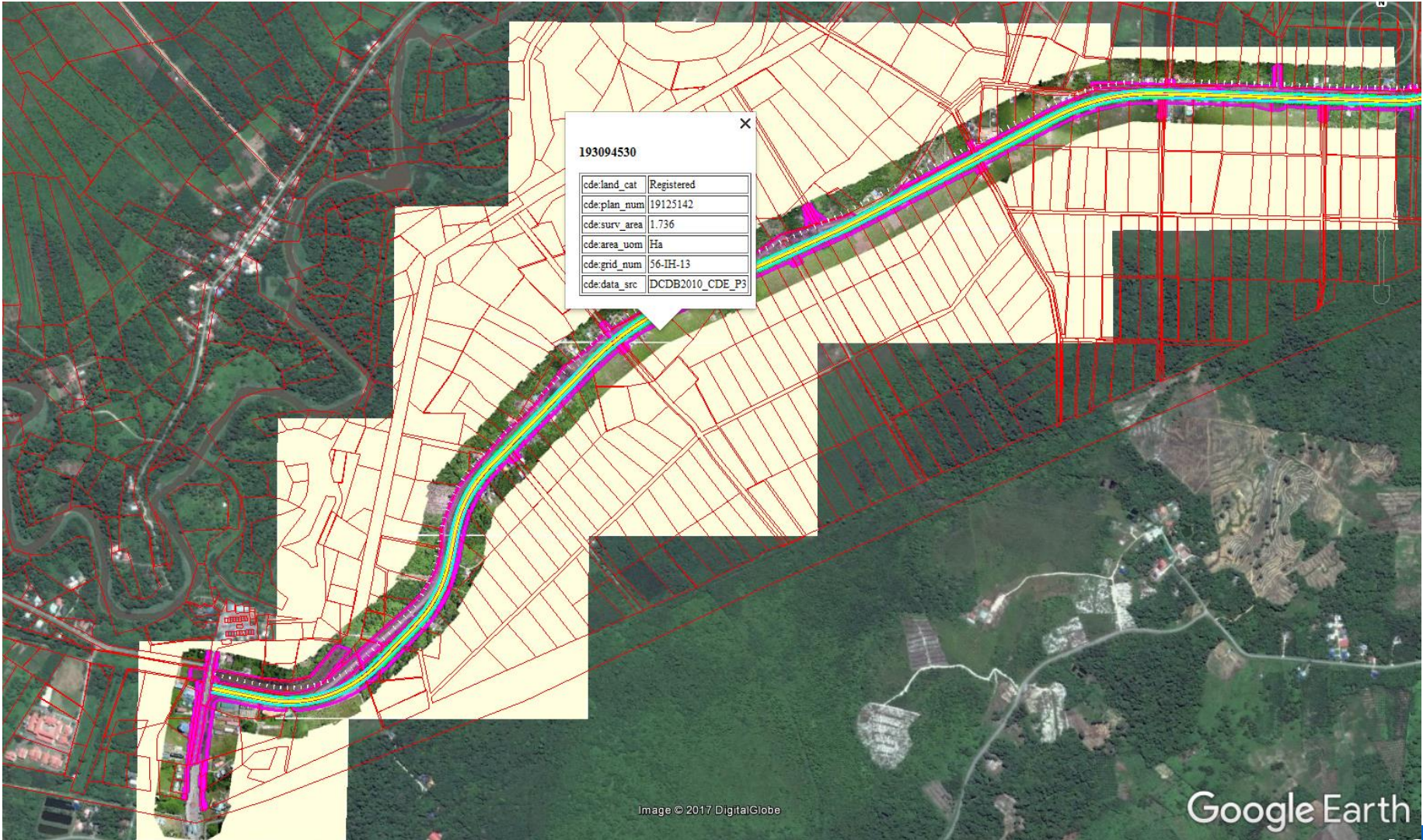
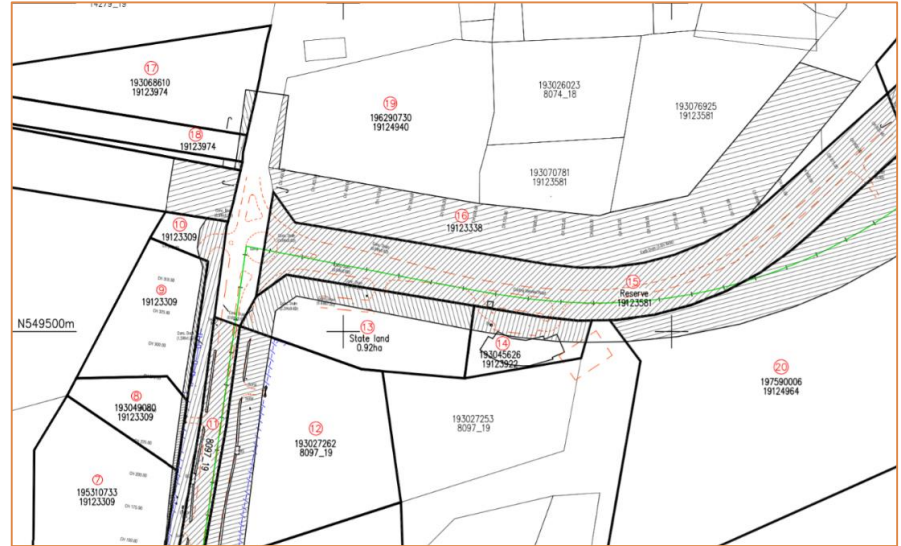
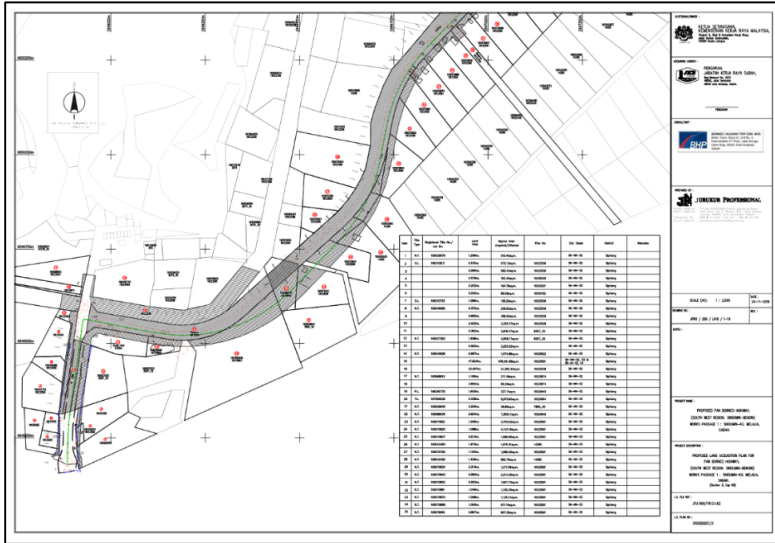


Image © 2017 DigitalGlobe

Google Earth

Land Acquisition Gazette Plan



Item	Title Type	Registered Title No./ Lot No.	Land Area	Approx Area Acquired/Affected	Plan No.	Std. Sheet	District	Remarks
1	N.T.	193029579	1.266ha.	518.40sq.m.		56-HH-52	Sipitang	
2	C.L.	195310813	0.101ha.	575.13sq.m.	19123356	56-HH-52	Sipitang	
3			0.946ha.	580.44sq.m.	19123356	56-HH-52	Sipitang	
4			0.578ha.	162.40sq.m.	19125005	56-HH-52	Sipitang	
5			0.202ha.	194.76sq.m.	19124201	56-HH-52	Sipitang	
6			0.202ha.	88.08sq.m.	19124152	56-HH-52	Sipitang	
7	C.L.	195310733	1.080ha.	138.29sq.m.	19123309	56-HH-52	Sipitang	
8	N.T.	193049080	0.372ha.	209.62sq.m.	19123309	56-HH-52	Sipitang	
9			0.685ha.	398.82sq.m.	19123309	56-HH-52	Sipitang	

Land Acquisition Gazette Notification

706 WARTA KERAJAAN NEGERI SABAH 1 Jun 2017

REPEATED NOTIFICATIONS - (cont.)

[No. JKM. PHB. 600-2/1/526(99)]

LAND ACQUISITION ORDINANCE

Cap. 69

DECLARATION UNDER SECTION 3

In exercise of the powers conferred upon him by subsection 3(1) of the Land Acquisition Ordinance, the Yang di-Pertua Negeri hereby declares that he considers that the land set out in the Schedule hereto should be acquired for a public purpose, that is to say for the Construction of Pan Borneo Highway Sabah (Package WPO1) Upgrading Road from Sindumin to Kg. Melalia, Sipitang.

Plan No. 919300007 showing the area to be acquired may be inspected at the office of the Director of Lands and Surveys, Kota Kinabalu, or the office of the Assistant Collector of Land Revenue, Sipitang, during normal office hours.

SCHEDULE

No.	Owner(s)	Title No.	Area on Title in Hectare(s)	Locality	Area to be Acquired in Sq. Metre(s)
1.	Bani bt. Tamat	NT. 193029579	1.266	Sipitang	518.40
2.	Pesuruhjaya Tanah Persekutuan	CL. 195310813	0.101	..	575.13
3.	Pesuruhjaya Tanah Persekutuan	CL. 195310733	1.08	..	138.29
4.	Amsah bt. Ismail Alim b. Ismail Apong b. Ismail Lokman bin Ag. Ali Pasah bt. Gun Md. Sirat b. Ag. Ali	NT. 193045635	1.199	..	271.16
5.	Lembaga Pembangunan Perumahan dan Bandar	TL. 197590006	5.438	..	9,970.65
6.	Ramlee b. Jaapar Ag. Adi b. Jaapar Siput bt. Jaapar Latifah bt. Jaapar Hassan b. Jaapar Rafiah bt. Jaapar	NT. 193029640	1.294	..	38.86
7.	Jamilah bt. Hj. Taba Mohd. Manan @ Shahminan bin Taba	NT. 193029659	1.29	..	3,750.02
8.	Murni bt. Yusop Halimah bt. Yusop Yusof b. Bongsu	NT. 193029668	1.553	..	4,153.18

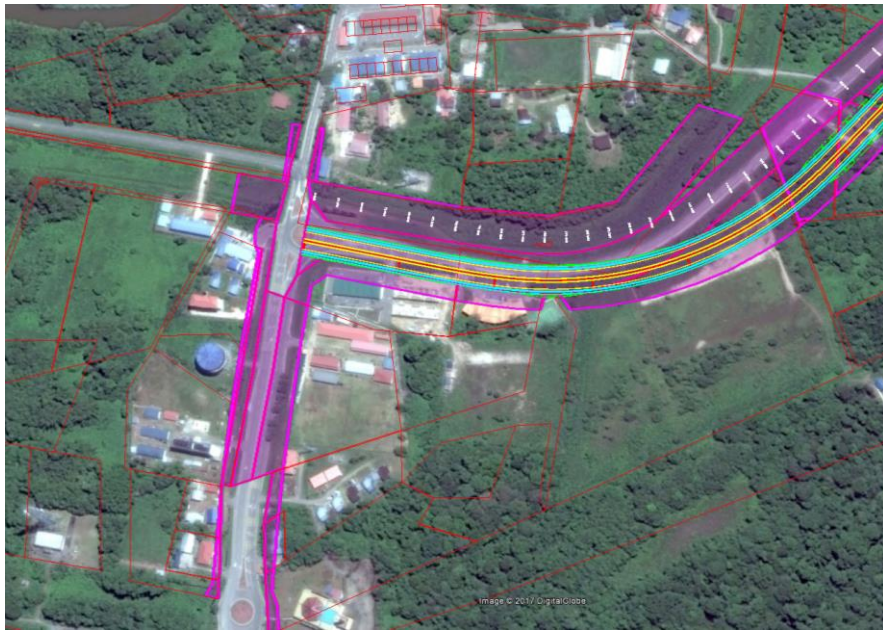
1 Jun 2017 WARTA KERAJAAN NEGERI SABAH 707

SCHEDULE - (cont.)

No.	Owner(s)	Title No.	Area on Title in Hectare(s)	Locality	Area to be Acquired in Sq. Metre(s)
9.	Siput bt. Jaapar Hassan b. Japar Latipah bt. Jaapar Ag. Adi bin Jaapar Ramleh bin Jaapar Rafiah bt. Jaapar	NT. 193036681	0.613	Sipitang	1,899.95
10.	Aisah bt. Maidin Sarudin b. Maidin	NT. 193042483	1.974	..	1,879.31
11.	Mohammad b. Hj. Nurden	NT. 193040916	1.974	..	1,989.50
12.	Dayang bt. Puasa Sapar b. Manggau @ Sapar Abd. Hamid Normah bt. Md. Noor Liauw Eng Hui	NT. 193042492	1.456	..	862.70
13.	Miri bt. Sambus Azis b. Sambus Sabli b. Sambus Sambas b. Daud Hasnah bt. Sambus	NT. 193045546	2.314	..	1,217.56
14.	Yusof b. Adok	NT. 193042929	0.98	..	2,214.30
15.	Lisah bt. Ahim Helen binti Ahim Hamzah bin Ahim Salina @ Salinah binti Ahim Siti @ Limah binti Ahim Ahim bin Hassim	NT. 193042910	0.92	..	1,807.70
16.	Jamaah binti Matusin	NT. 193070861	1.049	..	1,330.35
17.	Johar b. Yunus	NT. 193070870	1.068	..	1,125.21
18.	Luseh bt. Nasir Hadis b. Nasir Aisah bt. Nasir Atin bt. Nasir Simon bt. Nasir	NT. 193070889	1.06	..	971.14
19.	Ag. Damit bin Lajim Kassum bt. Md. Daud Saidi b. Yunus	NT. 193042885	0.867	..	857.20



New Images – for ground inspection to determine Land and Building Compensations



Google Earth



New Image on top of Google Earth

Historical Land Value Records to value land acquisition

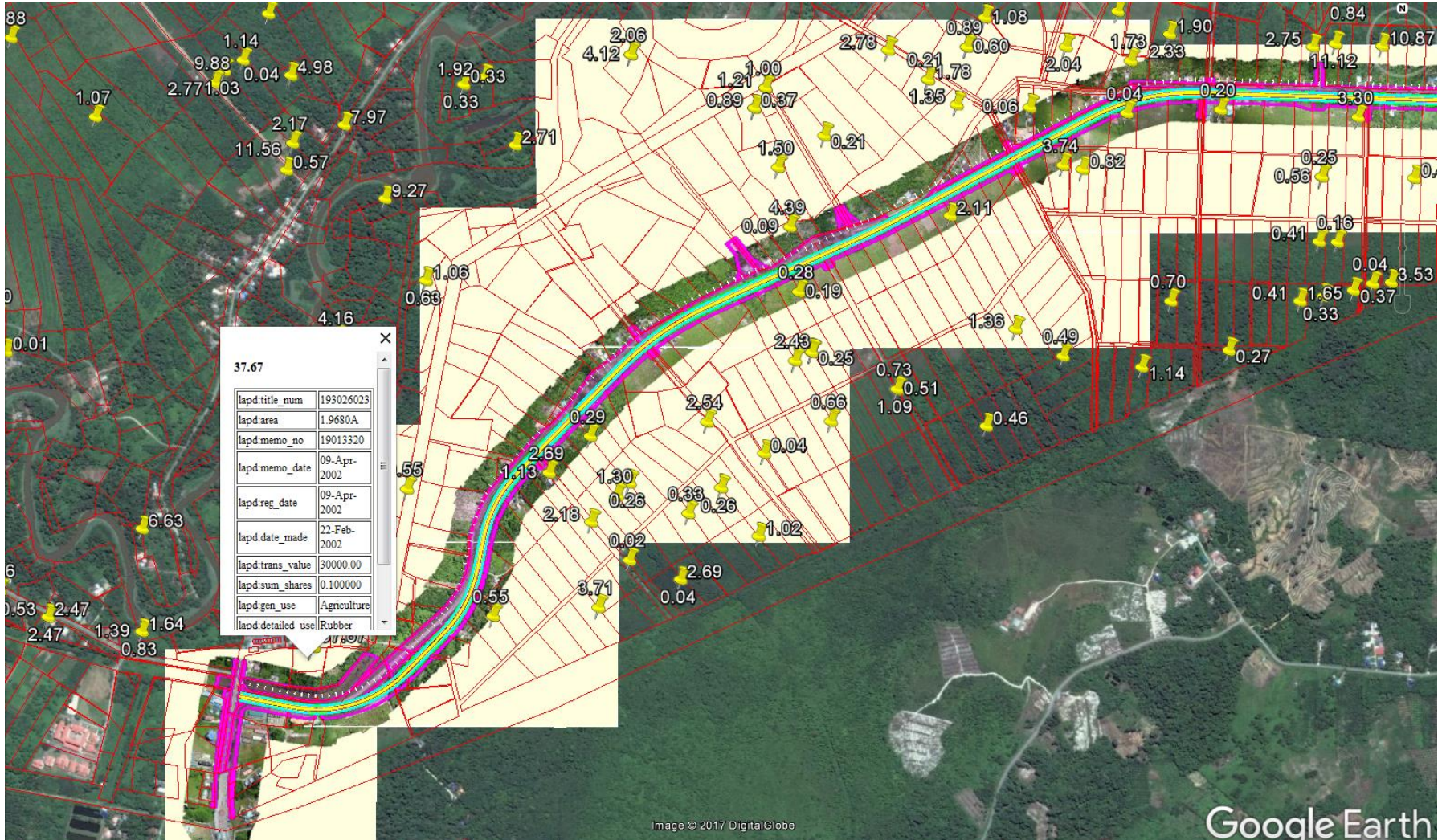


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Google Earth



Thank you