

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

EXECUTIVE SUMMARY



PROJECT PROPONENT

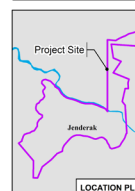
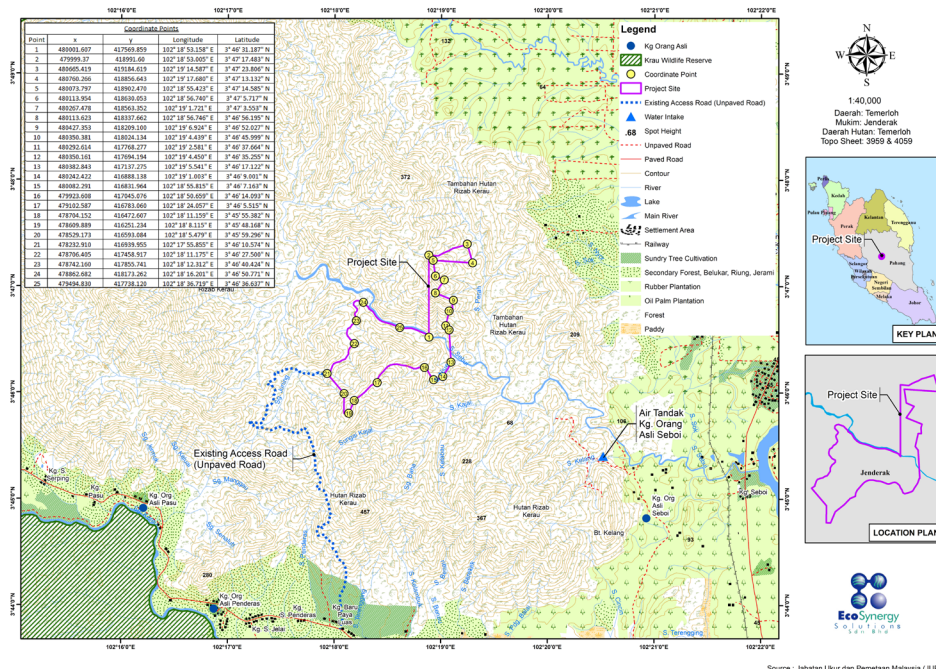
SOLID SAVINGS SDN BHD



EIA CONSULTANT

ECO SYNERGY SOLUTIONS SDN BHD

PROJECT LOCATION



THE PROPOSED OF FOREST PLANTATION DEVELOPMENT OF 223.36 HECTARES (551.92 ACRES) IN PART OF COMPARTMENT 19 AND PART OF COMPARTMENT 27 OF KRAU FOREST RESERVE, MUKIM JENDERAK, DISTRICT OF TEMERLOH, PAHANG DARUL MAKMUR BY SOLID SAVINGS SDN BHD



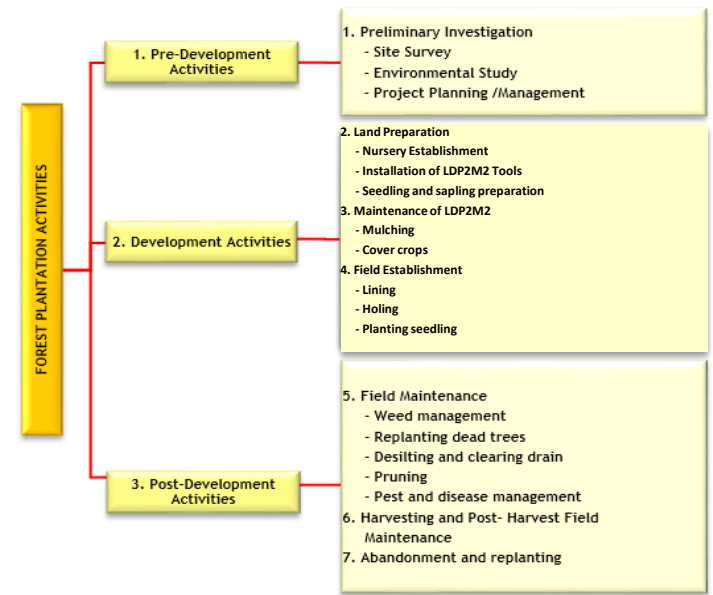
PROJECT DESCRIPTIONS

- 01** The Project site is located in Part of Compartment 19 and Part of Compartment 27 of Krau Forest Reserve, Mukim Jenderak, District of Temerloh, Pahang Darul
- 02** The nearest town is Temerloh Town, which is approximately ±43.05 km from the project site boundary
- 03** The Project will develop a Forest Plantation Development covering an area of about 223.36 hectares
- 04** The nearest settlements, which are Orang Asli (KOA) Pasu, Kampung Orang Asli (KOA) Penderas, Kampung Orang Asli (KOA) Seboi, Kampung Orang Asli (KOA) Mendoi, Kampung Orang Asli (KOA) Lubuk Wong, Kampung Orang Asli (KOA) Sg. Mai, Kampung Paya Luas, Kampung Paya Sok and Kampung Gong Halt.

LEGAL REQUIREMENT

Subject to Section 34A(1) of the Environmental Quality Act 1974 [127] and Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015, the project site fall under **First Schedule**;

"Activity 5(e) Forestry: Development of planted forest covering an area of 100 hectares or more but less than 500 hectares"



PERFORMANCE MONITORING (PM)

LD-P2M2 Tools	Parameters	Recommended
Sediment Basin/Trap	Silt Marker	2/3 depth from sediment trap After rain event (in-situ)
Perimeter Drain	Performance	Subjected to CoA
Earth Drain with Check Dam	Sediment Level	
Temporary or permanent waterway crossing (culvert/bridge)	Structure and Performance	

ACCESS ROAD



The project site is accessible via a 43.05 km route from Temerloh Town. From Temerloh, travel along Route 87 for approximately 4.3 km before turning right onto Jalan Temerloh-Jerantut and continuing for about 29.0 km

Next, turn left onto Route C141 and proceed for approximately 150 m, then turn right and continue for 9.1 km

From this point, turn right again to access an unpaved road leading directly to the project site

POTENTIAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANT POTENTIAL IMPACTS	MITIGATION MEASURES
<ol style="list-style-type: none"> Soil erosion and sedimentation Reduce river depth/drain capacity Declining water quality level 	<ul style="list-style-type: none"> Scheduling of the development. Plant cover crop. Prepare silt trap, and sediment basin. Retain buffer zone.
Waste Generation <ol style="list-style-type: none"> Biomass waste Solid waste Scheduled waste 	<ul style="list-style-type: none"> No open burning. Apply air curtain burner. Provide garbage bins. Composting waste approach. Proper storage area.
<ol style="list-style-type: none"> Habitat-Fragmentation. Human-wildlife Conflict 	<ul style="list-style-type: none"> Phasing/Directional clearing. Wildlife-Human conflict management strategies. Report incident. Prohibition of wildlife poaching Signage on prohibition of wildlife hunting or trapping.
Declining Air Quality Level	<ul style="list-style-type: none"> Spraying water on road (water bowser) Provide wash through Apply crusher run for unsealed road
Noise Pollution	<ul style="list-style-type: none"> Use quieter and/or silence machineries. Use proper personal protection equipment (PPE) on site with ear plug. Regularly servicing and maintaining vehicles and machineries
Nuisance During Project Abandonment	<ul style="list-style-type: none"> Preparing Project Abandonment Plan. Warning signage to be installed. Removes vehicles involved in the project development. Initiate environmental control measures. Regular inspections on site.

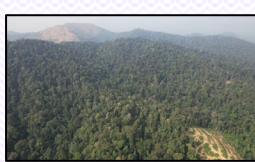
COMPLIANCE MONITORING (CM)

Component	Standard	Frequency
Noise (LAeq)	Day 60 dBA, Night 55 dBA	Subjected to CoA
Water Quality	50 mg/L TSS, 250 NTU	After 12.5 mm rainfall (using rain gauge)
Air Quality	Pm10 - 100 µg/m³, Pm2.5 - 35 µg/m³	Subjected to CoA

IMPACT MONITORING (IM)

Impact	Parameter	Limit	Standards	Frequency
Air Quality Level	PM ₁₀	100 µg/m³	Malaysia Ambient Air Quality Standard 2020	Subjected to CoA
Noise Quality Level	LAeq, Lmax, Lmin	Day 55 dBA, Night 50dBA	Guidelines for Environmental Noise Limits and Control, 2019	Subjected to CoA
Water Quality Level	TSS	50 mg/L	National Water Quality Standard (NWQS)	Subjected to CoA
	BOD	3 mg/L		
	pH	6.0~9.0		
	Turbidity	250 NTU		
	DO	5~7 mg/L		
	COD	25 mg/L		

EXISTING CONDITIONS



FLORA SPECIES FOUND	FAUNA SPECIES RECORDED
Rubroshorea leprosa Piper aduncum Dissochaeta sp. Antidea cuspidatum	Avian: 17 species Mammals: 12 species Herpetofauna: 7 species

EXISTING ENVIRONMENT

NOISE LEVEL RESULT		
N1	Daytime	47.4
	Nighttime	45.5
N2	Daytime	64.3
	Nighttime	59.7
N3	Daytime	62.0
	Nighttime	49.4
N4	Daytime	70.8
	Nighttime	64.4

AIR QUALITY RESULT (PM10)	PM 10	PM 2.5
A1	16.24	10.44
A2	36.13	21.79
A3	35.09	26.80
A4	31.22	19.15

Station	WQI	Class	Status
WQ1	92.23	II	Clean
WQ2	94.98	I	Clean
WQ3	92.53	II	Clean
WQ4	92.86	I	Clean
WQ5	92.80	I	Clean
WQ6	92.71	I	Clean
WQ7	91.54	II	Clean
WQ8	89.85	II	Clean
WQ9	88.09	II	Clean
WQ10	88.58	II	Clean
WQ11	87.43	II	Clean
WQ12	86.97	II	Clean
WQ13	87.50	II	Clean

LAPORAN PENILAIAN KESAN KEPADA ALAM SEKELING

RINGKASAN EKSEKUTIF

CADANGAN PEMBANGUNAN LADANG HUTAN SELUAS 223.36 HEKTAR (551.92 EKAR) DI SEBAHAGIAN KOMPATMEN 19 DAN SEBAHAGIAN KOMPATMEN 27 DI HUTAN SIMPAN KRAU, MUKIM JENDERAK, DAERAH TEMERLOH, PAHANG DARUL MAKMUR OLEH SOLID SAVINGS SDN. BHD



PENGERAK PROJEK

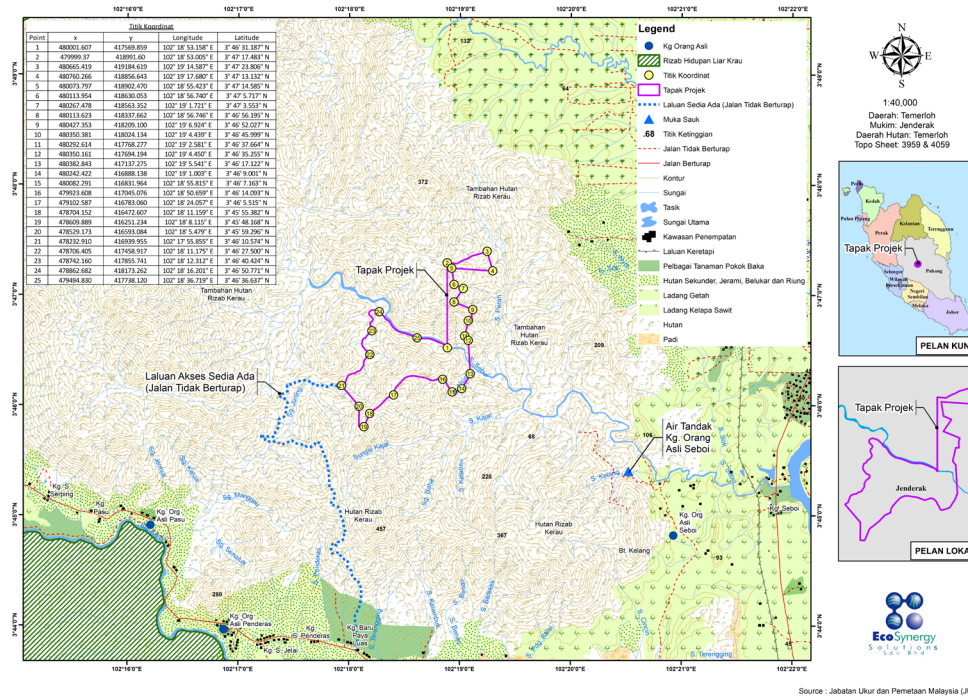
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PERUNDING EIA

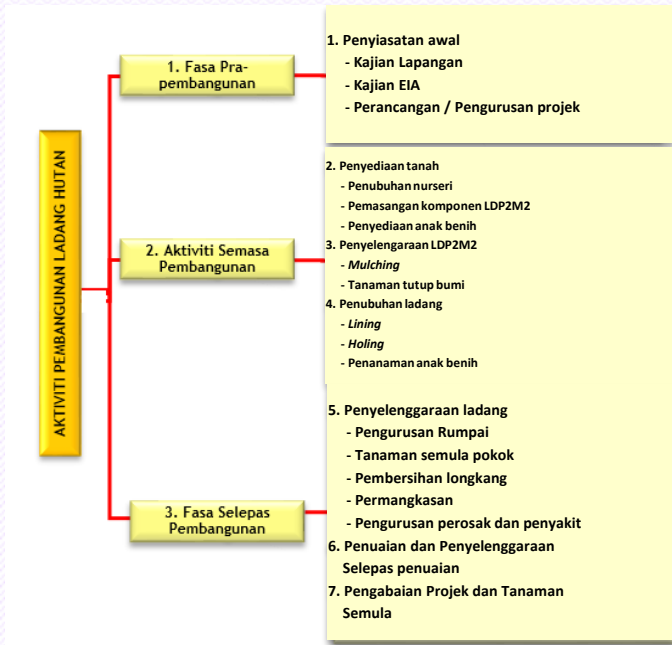
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LOKASI PROJEK



KEPERLUAN UNDANG-UNDANG

"Aktiviti 5(e) Perhutanan: Pembangunan ladang hutan yang meliputi kawasan seluas 100 hektar atau lebih tetapi kurang daripada 500 hektar."



IMPAK KETARA DAN LANGKAH KAWALAN

IMPAK KETARA	LANGKAH KAWALAN
1) Hakisan dan Pemendapan Tanah	➢ Penjadualan pembangunan
2) Mengurangkan Kedalaman Sungai dan Kapasiti Parit	➢ Tanaman tutup bumi
3) Menurunkan Tahap Kualiti Air	➢ Sediakan perangkap kelodak dan kolam perangkap mendapan
Penjanaan Sisa	➢ Kekalkan zon penampungan
a) Sisa biojisim	➢ Larangan pembakaran terbuka
b) Sisa pepejal	➢ Menyediakan tong sampah
c) Buangan terjadual	➢ Pendekatan pengkomposan sisa
1) Pemecahan habitat	➢ Sediakan tempat penyimpanan yang selamat
2) Konflik Manusia-Hidupan Liar	➢ Pembangunan berfasa dan terarah
	➢ Pengurusan strategi konflik manusia-hidupan liar
	➢ Laporan sebarang kejadian
	➢ Larangan pemburuan haram
	➢ Papan tanda larangan buru atau perangkap hidupan liar
Penurunan Tahap Kualiti Udara	➢ Menyembur air di atas jalan
	➢ Letakkan <i>crusher run</i> pada jalan tidak berturap
Pencemaran bunyi	➢ Penggunaan mesin senyap.
	➢ Penggunaan <i>Personal Protection Equipment</i> (PPE) di tapak projek.
	➢ Keperluan penyelenggaraan mesin.
Kacau Ganggu Ketika Pengabaian Projek	➢ Sediakan Pelan Pengabaian Projek
	➢ Pasang papan tanda amaran
	➢ Alihkan semua kenderaan di dalam tapak Projek
	➢ Mulakan langkah kawalan persekitaran
	➢ Pemeriksaan yang kerap

PEMANTAUAN PRESTASI (PM)

Komponen LD-P2M2	Parameter	Syor
Perangkap Kelodak/Kolam Perangkap Mendapan	Penanda Aras Mendapan Kelodak	2/3 kedalaman perangkap kelodak
Parit Perimeter	Prestasi	Selepas hujan (in-situ)
Parit tanah berserta <i>Check Dam</i>	Aras Mendapan	Mengikut syarat kelulusan
Laluan lintsan air sementara atau kekal (pembetung/jambatan)	Struktur & Prestasi	

PEMANTAUAN PEMATUHAN (CM)

Komponen	Piawaian	Kekerapan
Bunyi(LAeq)	Siang 60 dBA, Malam 55 dBA	Mengikut syarat kelulusan
Kualiti Air	50 mg/L	Mengikut syarat kelulusan
Jumlah Pepejal Terampai	250 NTU	Mengikut syarat kelulusan
Kekeruhan		
Kualiti Udara	Pm10 - 100 µg/m ³ , Pm2.5 - 35 µg/m ³	Mengikut syarat kelulusan

PEMANTAUAN IMPAK (IM)

Impak	Parameter	Had	Piawaian	Kekerapan
Tahap Kualiti Udara	PM ₁₀	100 µg/m ³	Malaysia Ambient Air Quality Standard 2020	Mengikut syarat kelulusan
Tahap Kualiti Bunyi	LAeq, Lmax, Lmin	Siang 55 dBA, Malam 50dBA	Guidelines for Environmental Noise Limits and Control, 2019	Mengikut syarat kelulusan
Tahap Kualiti Air	TSS, BOD, pH, Turbidity, DO, COD	50 mg/L, 3 mg/L, 6.0~9.0, 250 NTU, 5~7 mg/L, 25 mg/L	National Water Quality Standard (NWQS)	Mengikut syarat kelulusan

LALUAN AKSES



Tapak projek boleh diakses melalui laluan sejauh 43.05 km dari Bandar Temerloh. Dari Temerloh, perjalanan melalui Laluan 87 sejauh lebih kurang 4.3 km sebelum membelok ke kanan ke Jalan Temerloh-Jerantut dan meneruskan perjalanan sejauh kira-kira 29.0 km

Seterusnya, belok kiri ke Laluan C141 dan teruskan perjalanan lebih kurang 150 m, kemudian belok kanan dan teruskan sejauh 9.1 km

Dari titik ini, belok ke kanan sekali lagi untuk memasuki jalan tanah merah yang terus menuju ke tapak projek

KAWASAN PERSEKITARAN TAPAK PROJEK



- Burung: 17 spesies
- Mamalia: 12 spesies
- Amphibia / Reptilia: 7 spesies

PERSEKITARAN SEDIA ADA

KUALITI BUNYI			Stesen	WQI	Kelas	Status
N1	Siang	47.4	WQ1	92.23	II	Bersih
	Malam	45.5	WQ2	94.98	I	Bersih
N2	Siang	64.3	WQ3	92.53	II	Bersih
	Malam	59.7	WQ4	92.86	I	Bersih
N3	Siang	62.0	WQ5	92.80	I	Bersih
	Malam	49.4	WQ6	92.71	I	Bersih
N3	Siang	70.8	WQ7	91.54	II	Bersih
	Malam	54.4	WQ8	89.85	II	Bersih
KUALITI UDARA	PM 10	PM 2.5	WQ9	88.09	II	Bersih
			WQ10	88.58	II	Bersih
			WQ11	87.43	II	Bersih
			WQ12	86.97	II	Bersih
			WQ13	87.50	II	Bersih