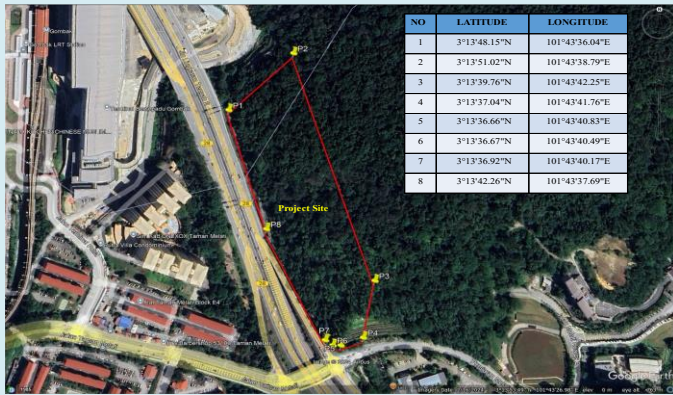


## “CADANGAN PEMBANGUNAN KEDIAMAN DAN KEMUDAHAN BERKAITAN DI ATAS LOT 201985, JALAN MELATI KUARZA 2 OFF JALAN LINGKARAN TENGAH 2 (MRR 2), MUKIM SETAPAK, DAERAH KUALA LUMPUR, WILAYAH PERSEKUTUAN KUALA LUMPUR”

### PROJECT BACKGROUND

#### PROJECT OVERVIEW

SINARAN ERAT SDN. BHD intends to develop a mixed commercial-residential township development on 9.735 acres of land (3.94 hectare) will provide six (6) towers of apartment (2896 units) and related facilities and amenities on Lot 201985, Jalan Melati Kuarza 2 Off Jalan Lingkaran Tengah 2 (MRR 2), Mukim Setapak, Daerah Kuala Lumpur, Wilayah Persekutuan Kuala Lumpur known as KLEO @ KL EAST (hereafter referred to as Proposed Development).



### LEGAL REQUIREMENT

#### First Schedule

- **Prescribed Activity 13 – Development in Slope Area**  
*Development of land clearing less than 50% of an area with slope greater than or equal to 25° but less than 35°*
- **Prescribed Activity 18 - New Township**  
*Construction of new township consisting of 2,000 housing accommodation units or more or covering an area of 100 hectares or more*

### ZONING

#### Kuala Lumpur City Plan (KLCP 2020)

- The site is located within the **Wangsa Maju-Maluri Strategic Zone**

#### Kuala Lumpur Local Plan 2040 (KLLP 2040)

- The project site is designated as a **Residential Zone (Residential R3)**

### PROJECT COMPONENTS

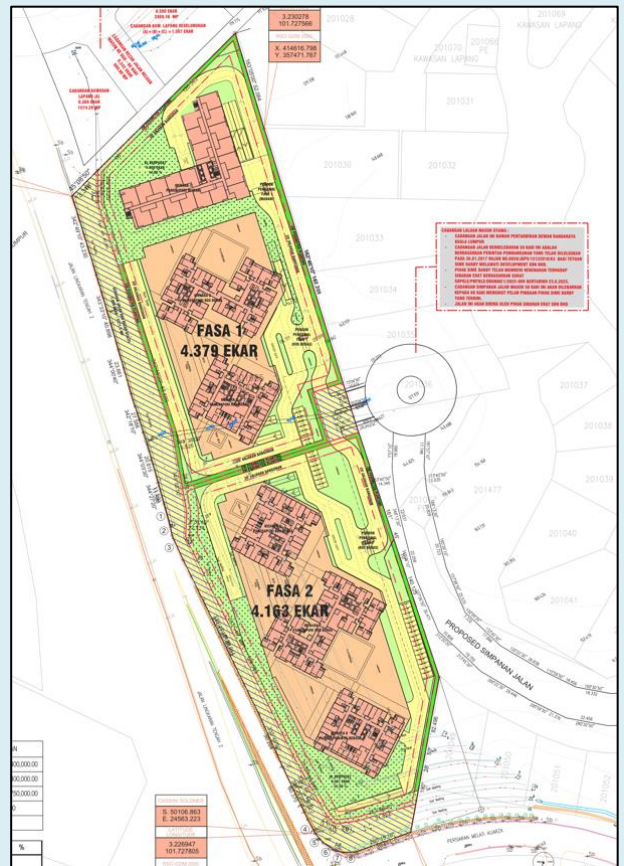
PERINCIAN UNIT KOMPONEN PEMBANGUNAN						
	TYPE	SAIZ (KFP)	JENIS	BIL. UNIT	UNIT %	HARGA JUJALAN
PANGSAPURI KOS BEBAS	A	650	1 Bathroom + 1 Bedroom (deck)	1110	38.33	RM 300,000.00 - RM 400,000.00
	B	650	2 Bathroom + 2 Bedroom	892	30.80	RM 300,000.00 - RM 400,000.00
	C	850	2 Bathroom + 3 Bedroom	522	18.02	RM 400,000.00 - RM 750,000.00
PANGSAPURI MADANI	D	750	3 Bathroom + 3 Bedroom	372	12.85	RM 200,000.00
	JUMLAH			2896	100	

KOMPONEN GUNATANAH FASA 1			
	UNIT	EKAR	%
FASA 1 - MENARA 1 : PANGSAPURI MADANI	372		
FASA 1 - MENARA 2 : PANGSAPURI KOS BEBAS	608	2.088	47.68
FASA 1 - MENARA 3 : PANGSAPURI KOS BEBAS	432		
JUMLAH KECIL	1412	2.088	47.68
KAWASAN LAPANG BERPUSAT & KAWASAN HUIJU		0.866	19.78
PERIMETER PLANTING 2M		0.244	5.57
PONDOK PENGAWAL		0.005	0.11
JALAN DALAMAN & TEMPAT LETAK KENDERAAN		1.176	26.86
<b>LUAS BERSIH FASA 1</b>		<b>4.379</b>	<b>100.00</b>

KOMPONEN GUNATANAH FASA 2			
	UNIT	EKAR	%
FASA 2 - MENARA 4 : PANGSAPURI KOS BEBAS	432		
FASA 2 - MENARA 5 : PANGSAPURI KOS BEBAS	608	2.064	49.58
FASA 2 - MENARA 6 : PANGSAPURI KOS BEBAS	444		
JUMLAH KECIL	1484	2.064	49.58
KAWASAN LAPANG BERPUSAT & KAWASAN HUIJU		1.078	25.89
PERIMETER PLANTING 2M		0.134	3.22
PONDOK PENGAWAL		0.003	0.07
JALAN DALAMAN & TEMPAT LETAK KENDERAAN		0.884	21.23
<b>LUAS BERSIH FASA 2</b>		<b>4.163</b>	<b>100.00</b>

LUAS SERAHAN JALAN DAN UTILITI		1.193	
<b>LUAS KESELURUHAN</b>		<b>9.735</b>	

### PROJECT LAYOUT



# EXECUTIVE SUMMARY

## GEOLOGICAL TERRAIN MAPPING

FIGURE 6.6  
DEVELOPMENT SUITABILITY MAP  
OF DISTURBED CUT SLOPE

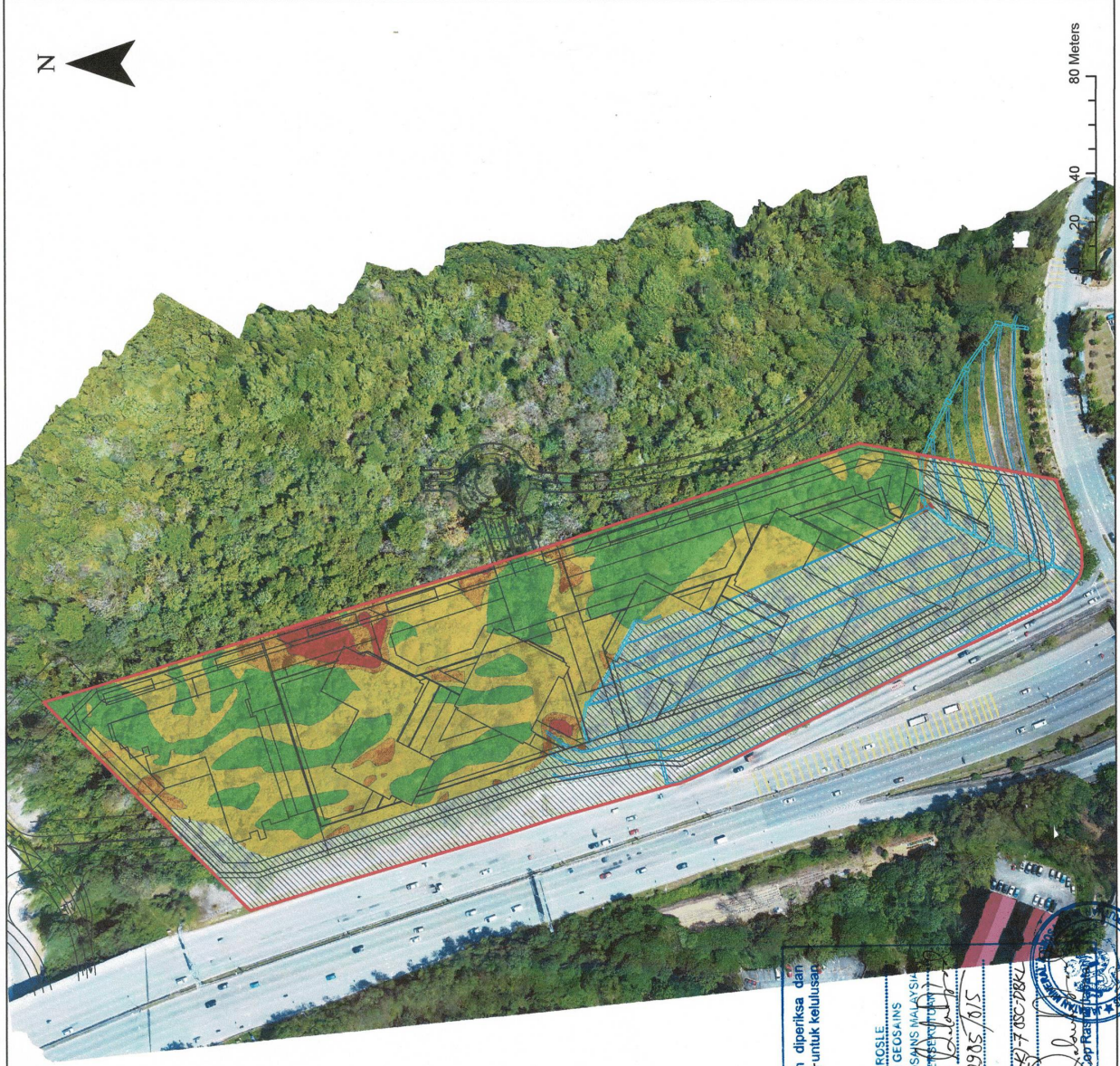
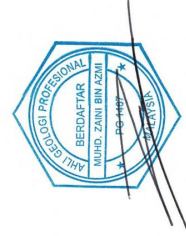
**PROJECT'S TITLE**  
GEOLOGICAL TERRAIN MAPPING  
REPORT FOR PROPOSED  
RESIDENTIAL DEVELOPMENT ON  
LOT 201985, JALAN MELATI KUARZA  
2 OFF JALAN LINGKARAN TENGAH  
2 (MRR 2), MUKIM SETAPAK, DAERAH  
KUALA LUMPUR, WILAYAH  
PERSEKUTUAN KUALA LUMPUR.

**CLIENT**  
SINARAN ERAT SDN. BHD.

**CONSULTANT**  
SENVIRO RESOURCES

**LEGEND**

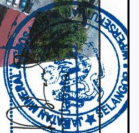
- Class I (24.6%)
- Class II (27.4%)
- Class III (4.2%)
- Class IV (1.8%)
- Disturbed cut slope (42.0%)
- Concrete drain
- Cascade drain
- Site Boundary



...sahkan iaitu pelan ini telah diperiksa dan  
disokong/dibenarkan/diakurahkan untuk kelulusan  
merancang/kerja tanah.

Disahkan untuk sokongan:

Nama: QALAM AZAID BIN ROSLE  
(Cop rasmi TIRAI dan PENGARAH GEOSAINS  
JABATAN MINERAL DAN GEOSAINS MALAYSIA  
Jawatan: SENIOR GEOLOGIST/PELAKSANA TEKNIK  
Tarikh: 20/05/2024 T. Tangan  
Rujukan Fail PBT: MSS/24/2935/015  
Tarikh: 29/05/2024  
Rujukan Fail JMG: 214/2/2024  
Tarikh: 25/05/2024



# EXECUTIVE SUMMARY

## PHYSICO-CHEMICAL ENVIRONMENT

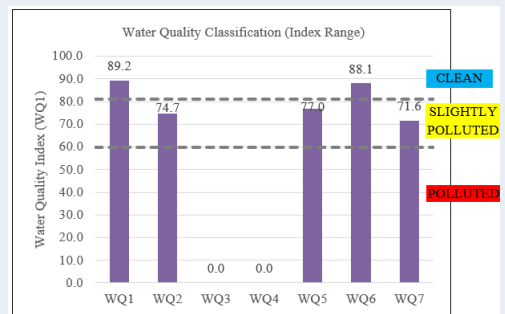
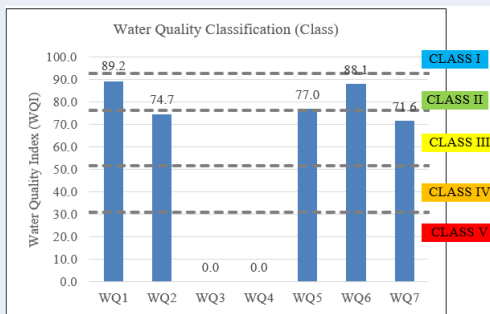
EXISTING ENVIRONMENT	DESCRIPTION																																																																		
TOPOGRAPHY	<ul style="list-style-type: none"> <li><b>Topography</b> : undulating to hilly terrain.</li> <li><b>Highest elevation</b>: 140m toward southeast</li> <li><b>Lowest elevation</b>: 94m toward south</li> <li><b>Slope gradients</b>: typically ranges from 5° to 25°, with significant portions of the area having slopes exceeding 35°. The steep terrain within the proposed site is dominated by disturbed slope, with slope gradient predominantly more than 35°.</li> </ul>																																																																		
SOIL & GEOLOGY	<ul style="list-style-type: none"> <li>Based on geological map, there are <b>two (2) lithologies</b> encountered within proposed site which is <b>granite &amp; schist</b>. The granite rock within the proposed site is Kuala Lumpur Granite, part of Main Range Triassic granite. The weathering grade is ranging between Grade III to Grade VI.</li> <li>The soil type encountered within granite lithology is <b>brownish orange sandy SILT</b></li> </ul>																																																																		
HYDROLOGY	<ul style="list-style-type: none"> <li>The proposed project is located within the <b>Sungai Belongkong catchment area</b>. Sungai Belongkong is a tributary of Sungai Gombak. A very small perennial first order brook traverses at the mid center of site flowing from the east to the west with the ultimate discharge point being the cascading drains which were connected to 2 numbers 0.8m culvert crossings at the MRR2</li> <li>Additionally, the site is equipped with <b>series of berm drainage systems</b> and <b>cascading drains</b> primarily along the cut slopes on the southern and southwestern areas</li> <li>The drainage network is designed to manage the runoff generated within the project site and is integrated with the same stream path at the center of the site.</li> </ul>																																																																		
<b>ENVIRONMENTAL SAMPLING</b> <ul style="list-style-type: none"> <li>Air Quality</li> </ul>	<ul style="list-style-type: none"> <li>Air quality sampling works was carried out at <b>five (5) locations</b></li> <li>The results shows that all the tested parameters <b>complied</b> with the permissible level as per <b>New Malaysia Ambient Air Quality Standard (MAAQS 2020)</b> at all sampling stations.</li> </ul> <table border="1"> <thead> <tr> <th rowspan="2">Test Parameter</th> <th rowspan="2">Unit</th> <th rowspan="2">Compliance Limit</th> <th colspan="2">A1</th> <th colspan="2">A2</th> <th colspan="2">A3</th> <th colspan="2">A4</th> <th colspan="2">A5</th> </tr> <tr> <th>Result</th> <th>Compliance Status</th> <th>Result</th> <th>Compliance Status</th> <th>Result</th> <th>Compliance Status</th> <th>Result</th> <th>Compliance Status</th> <th>Result</th> <th>Compliance Status</th> </tr> </thead> <tbody> <tr> <td colspan="3"></td> <td colspan="6">BASELINE SAMPLING DATE: 29-30 JULY 2024</td> <td colspan="6">BASELINE SAMPLING DATE: 28-29 MAY 2025</td> </tr> <tr> <td>Particulate Matter 10 (PM<sub>10</sub>)</td> <td>µg/m<sup>3</sup></td> <td>&lt;100</td> <td>65</td> <td>Complied</td> <td>56</td> <td>Complied</td> <td>53</td> <td>Complied</td> <td>49</td> <td>Complied</td> <td>52</td> <td>Complied</td> </tr> <tr> <td>Particulate Matter 2.5 (PM<sub>2.5</sub>)</td> <td>µg/m<sup>3</sup></td> <td>&lt;35</td> <td>21</td> <td>Complied</td> <td>16</td> <td>Complied</td> <td>12</td> <td>Complied</td> <td>22</td> <td>Complied</td> <td>25</td> <td>Complied</td> </tr> </tbody> </table>	Test Parameter	Unit	Compliance Limit	A1		A2		A3		A4		A5		Result	Compliance Status	Result	Compliance Status	Result	Compliance Status	Result	Compliance Status	Result	Compliance Status				BASELINE SAMPLING DATE: 29-30 JULY 2024						BASELINE SAMPLING DATE: 28-29 MAY 2025						Particulate Matter 10 (PM <sub>10</sub> )	µg/m <sup>3</sup>	<100	65	Complied	56	Complied	53	Complied	49	Complied	52	Complied	Particulate Matter 2.5 (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	<35	21	Complied	16	Complied	12	Complied	22	Complied	25	Complied		
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<b>ENVIRONMENTAL SAMPLING</b> <ul style="list-style-type: none"> <li>Noise Level</li> </ul>	<ul style="list-style-type: none"> <li>Noise level sampling works was carried out at <b>five (5) locations</b></li> <li>The results below shows that all the tested parameters <b>complied</b> with the standard guidelines of <b>“Guidelines for Environmental Noise Limits and Control, Third Edition 2019 (Reprint 2021)”</b></li> </ul> <table border="1"> <thead> <tr> <th colspan="2">Day Time</th> <th>N1</th> <th>N2</th> <th>N3</th> <th>N4</th> <th>N5</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Permissible Level</td> <td>Land Use Category</td> <td>Urban Residential</td> <td>Urban Residential</td> <td>Urban Residential</td> <td>Urban Residential</td> <td>Urban Residential</td> </tr> <tr> <td>(dBA)</td> <td>65</td> <td>65</td> <td>65</td> <td>65</td> <td>65</td> </tr> <tr> <td rowspan="2">BASELINE</td> <td>Result (dBA)</td> <td>63.5</td> <td>61.2</td> <td>60.9</td> <td>57</td> <td>59.5</td> </tr> <tr> <td>Compliance</td> <td>Complied</td> <td>Complied</td> <td>Complied</td> <td>Complied</td> <td>Complied</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="2">Night Time</th> <th>N1</th> <th>N2</th> <th>N3</th> <th>N4</th> <th>N5</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Permissible Level</td> <td>Land Use Category</td> <td>Urban Residential</td> <td>Urban Residential</td> <td>Urban Residential</td> <td>Urban Residential</td> <td>Urban Residential</td> </tr> <tr> <td>(dBA)</td> <td>60</td> <td>60</td> <td>60</td> <td>60</td> <td>60</td> </tr> <tr> <td rowspan="2">BASELINE</td> <td>Result (dBA)</td> <td>50.8</td> <td>49.7</td> <td>47.6</td> <td>44.2</td> <td>47.4</td> </tr> <tr> <td>Compliance</td> <td>Complied</td> <td>Complied</td> <td>Complied</td> <td>Complied</td> <td>Complied</td> </tr> </tbody> </table>	Day Time		N1	N2	N3	N4	N5	Permissible Level	Land Use Category	Urban Residential	Urban Residential	Urban Residential	Urban Residential	Urban Residential	(dBA)	65	65	65	65	65	BASELINE	Result (dBA)	63.5	61.2	60.9	57	59.5	Compliance	Complied	Complied	Complied	Complied	Complied	Night Time		N1	N2	N3	N4	N5	Permissible Level	Land Use Category	Urban Residential	Urban Residential	Urban Residential	Urban Residential	Urban Residential	(dBA)	60	60	60	60	60	BASELINE	Result (dBA)	50.8	49.7	47.6	44.2	47.4	Compliance	Complied	Complied	Complied	Complied	Complied
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# EXECUTIVE SUMMARY

## PHYSICO-CHEMICAL ENVIRONMENT

EXISTING ENVIRONMENT	DESCRIPTION																																																																										
<b>ENVIRONMENTAL SAMPLING</b> • Vibration	<ul style="list-style-type: none"> <li>Vibration level sampling works was carried out at <b>three (3) locations</b>.</li> <li>The findings indicate that the existing ground vibration levels are <b>complied during day time</b></li> <li>The <b>exceedance during night time</b> is most likely due to continuous traffic movement on the highway (MRR11) and main road can generate ground vibration exceeding the residential threshold</li> </ul> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="5">DAY TIME</th> </tr> <tr> <th colspan="2">Monitoring Station</th> <th>V1</th> <th>V2</th> <th>V5</th> </tr> </thead> <tbody> <tr> <td colspan="2">Receiving Land Use Category</td> <td>Residential</td> <td>Residential</td> <td>Residential</td> </tr> <tr> <td colspan="2">Recommended Limit</td> <td>0.8 mm/s to 1.6 mm/s</td> <td>0.8 mm/s to 1.6 mm/s</td> <td>0.8 mm/s to 1.6 mm/s</td> </tr> <tr> <td rowspan="4">BASELINE</td> <td>Peak Particle Velocity (mm/s)</td> <td>0.536</td> <td>0.543</td> <td>0.679</td> </tr> <tr> <td>Compliance Status</td> <td>Complied</td> <td>Complied</td> <td>Complied</td> </tr> <tr> <td>Degree of Perception</td> <td>Barely noticeable</td> <td>Barely noticeable</td> <td>Barely noticeable</td> </tr> <tr> <td>Environmental Impact</td> <td>Little</td> <td>Little</td> <td>Little</td> </tr> </tbody> </table> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="5">NIGHT TIME</th> </tr> <tr> <th colspan="2">Monitoring Station</th> <th>V1</th> <th>V2</th> <th>V5</th> </tr> </thead> <tbody> <tr> <td colspan="2">Receiving Land Use Category</td> <td>Residential</td> <td>Residential</td> <td>Residential</td> </tr> <tr> <td colspan="2">Recommended Limit</td> <td>0.4 mm/s</td> <td>0.4 mm/s</td> <td>0.4 mm/s</td> </tr> <tr> <td rowspan="4">BASELINE</td> <td>Peak Particle Velocity (mm/s)</td> <td>0.516</td> <td>0.518</td> <td>0.450</td> </tr> <tr> <td>Compliance Status</td> <td>Not Complied</td> <td>Not Complied</td> <td>Not Complied</td> </tr> <tr> <td>Degree of Perception</td> <td>Barely noticeable</td> <td>Barely noticeable</td> <td>Barely noticeable</td> </tr> <tr> <td>Environmental Impact</td> <td>Little</td> <td>Little</td> <td>Little</td> </tr> </tbody> </table>	DAY TIME					Monitoring Station		V1	V2	V5	Receiving Land Use Category		Residential	Residential	Residential	Recommended Limit		0.8 mm/s to 1.6 mm/s	0.8 mm/s to 1.6 mm/s	0.8 mm/s to 1.6 mm/s	BASELINE	Peak Particle Velocity (mm/s)	0.536	0.543	0.679	Compliance Status	Complied	Complied	Complied	Degree of Perception	Barely noticeable	Barely noticeable	Barely noticeable	Environmental Impact	Little	Little	Little	NIGHT TIME					Monitoring Station		V1	V2	V5	Receiving Land Use Category		Residential	Residential	Residential	Recommended Limit		0.4 mm/s	0.4 mm/s	0.4 mm/s	BASELINE	Peak Particle Velocity (mm/s)	0.516	0.518	0.450	Compliance Status	Not Complied	Not Complied	Not Complied	Degree of Perception	Barely noticeable	Barely noticeable	Barely noticeable	Environmental Impact	Little	Little	Little
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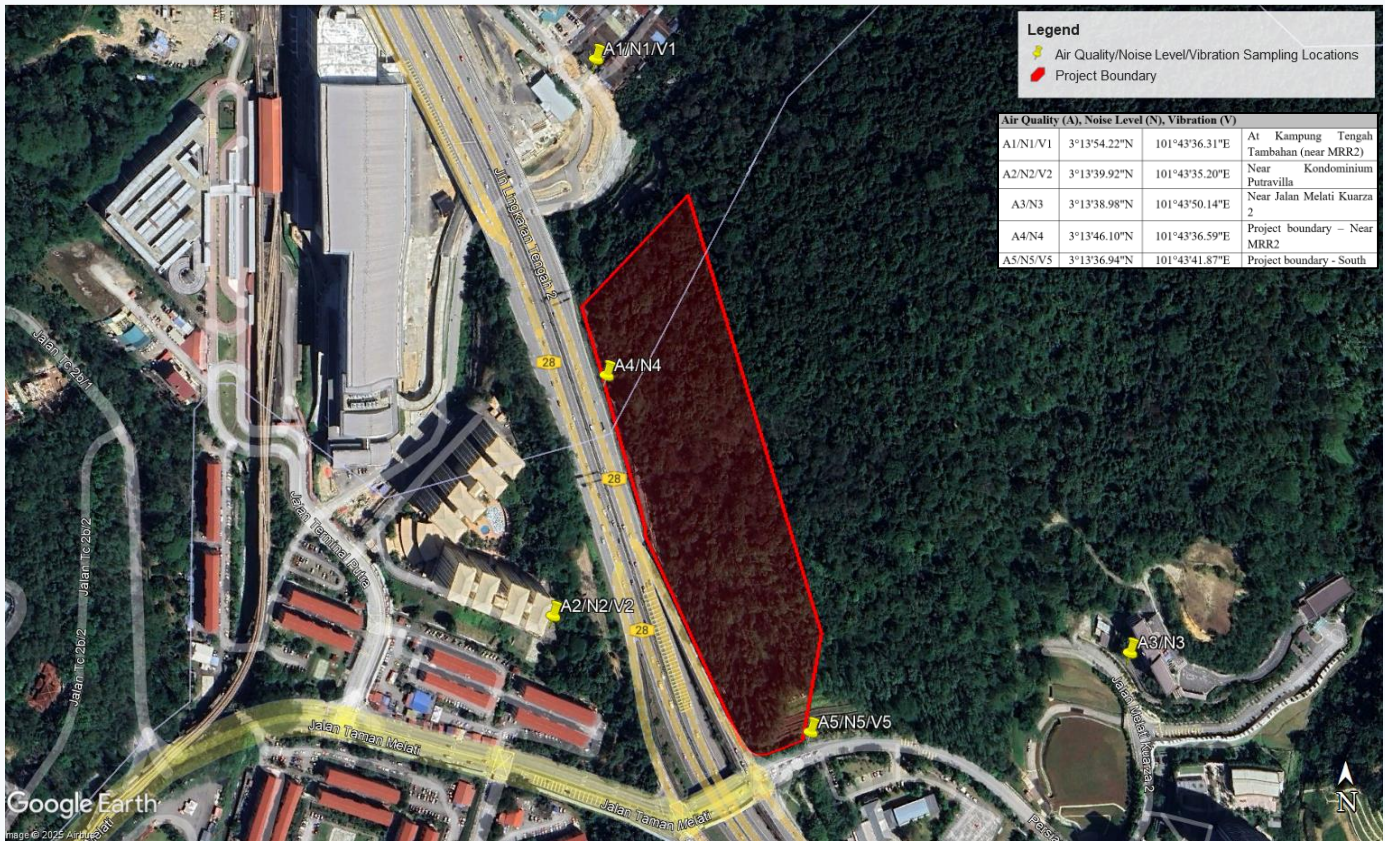
<b>ENVIRONMENTAL SAMPLING</b> • Water Quality	<ul style="list-style-type: none"> <li>Water quality sampling works was carried out at <b>seven (7) locations which additional sampling at Sungai Belongkong</b></li> <li><b>No water discharge was detected at WQ3 &amp; WQ4 during the sampling period.</b></li> </ul> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th rowspan="3">Parameters</th> <th rowspan="3">Unit</th> <th rowspan="3">NWQS Class IIB</th> <th colspan="14">BASELINE</th> </tr> <tr> <th colspan="2">WQ1</th> <th colspan="2">WQ2</th> <th colspan="2">WQ3</th> <th colspan="2">WQ4</th> <th colspan="2">WQ5</th> <th colspan="2">WQ6</th> <th colspan="2">WQ7</th> </tr> <tr> <th>Result</th> <th>Class</th> <th>Result</th> <th>Class</th> <th>Result</th> <th>Class</th> <th>Result</th> <th>Class</th> <th>Result</th> <th>Class</th> <th>Result</th> <th>Class</th> <th>Result</th> <th>Class</th> </tr> </thead> <tbody> <tr> <td>pH Value</td> <td>unitless</td> <td>6-9</td> <td>6.6</td> <td>Class IIA</td> <td>6.9</td> <td>Class IIA</td> <td>NWD</td> <td>-</td> <td>NWD</td> <td>-</td> <td>6.9</td> <td>Class IIA</td> <td>6.2</td> <td>Class IIA</td> <td>6.3</td> <td>Class IIA</td> </tr> <tr> <td>BOD- 5 days test @ 20°C</td> <td>mg/L</td> <td>3</td> <td>4.0</td> <td>Class III</td> <td>13.0</td> <td>Class V</td> <td>NWD</td> <td>-</td> <td>NWD</td> <td>-</td> <td>7.0</td> <td>Class IV</td> <td>4</td> <td>Class III</td> <td>7</td> <td>Class IV</td> </tr> <tr> <td>COD</td> <td>mg/L</td> <td>25</td> <td>12.3</td> <td>Class IIA</td> <td>40.1</td> <td>Class III</td> <td>NWD</td> <td>-</td> <td>NWD</td> <td>-</td> <td>22.4</td> <td>Class IIA</td> <td>12.9</td> <td>Class IIA</td> <td>22.9</td> <td>Class IIA</td> </tr> <tr> <td>Total Suspended Solids</td> <td>mg/L</td> <td>50</td> <td>12.0</td> <td>Class I</td> <td>63.0</td> <td>Class III</td> <td>NWD</td> <td>-</td> <td>NWD</td> <td>-</td> <td>3.0</td> <td>Class I</td> <td>13</td> <td>Class I</td> <td>5</td> <td>Class I</td> </tr> <tr> <td>Ammoniacal Nitrogen</td> <td>mg/L</td> <td>0.3</td> <td>ND</td> <td>-</td> <td>ND</td> <td>-</td> <td>NWD</td> <td>-</td> <td>NWD</td> <td>-</td> <td>1.6</td> <td>Class IV</td> <td>ND</td> <td>-</td> <td>3.2</td> <td>Class V</td> </tr> <tr> <td>Dissolved Oxygen (DO)</td> <td>mg/L</td> <td>5-7</td> <td>6.8</td> <td>Class IIA</td> <td>6.8</td> <td>Class IIA</td> <td>NWD</td> <td>-</td> <td>NWD</td> <td>-</td> <td>6.9</td> <td>Class IIA</td> <td>6.68</td> <td>Class IIA</td> <td>6.75</td> <td>Class IIA</td> </tr> <tr> <td>Conductivity</td> <td>µS/cm</td> <td>1000</td> <td>26.9</td> <td>Class I</td> <td>38.5</td> <td>Class I</td> <td>NWD</td> <td>-</td> <td>NWD</td> <td>-</td> <td>408</td> <td>Class I</td> <td>220</td> <td>Class I</td> <td>275</td> <td>Class I</td> </tr> <tr> <td>Temperature</td> <td>°C</td> <td>-</td> <td>20.8</td> <td>Class II</td> <td>20.9</td> <td>Class II</td> <td>NWD</td> <td>-</td> <td>NWD</td> <td>-</td> <td>20.8</td> <td>Class II</td> <td>20.7</td> <td>Class II</td> <td>20.7</td> <td>Class II</td> </tr> <tr> <td>Turbidity</td> <td>NTU</td> <td>50</td> <td>2.2</td> <td>Class I</td> <td>1.3</td> <td>Class I</td> <td>NWD</td> <td>-</td> <td>NWD</td> <td>-</td> <td>2.4</td> <td>Class I</td> <td>5.1</td> <td>Class IIA</td> <td>3.8</td> <td>Class I</td> </tr> <tr> <td>Oil &amp; 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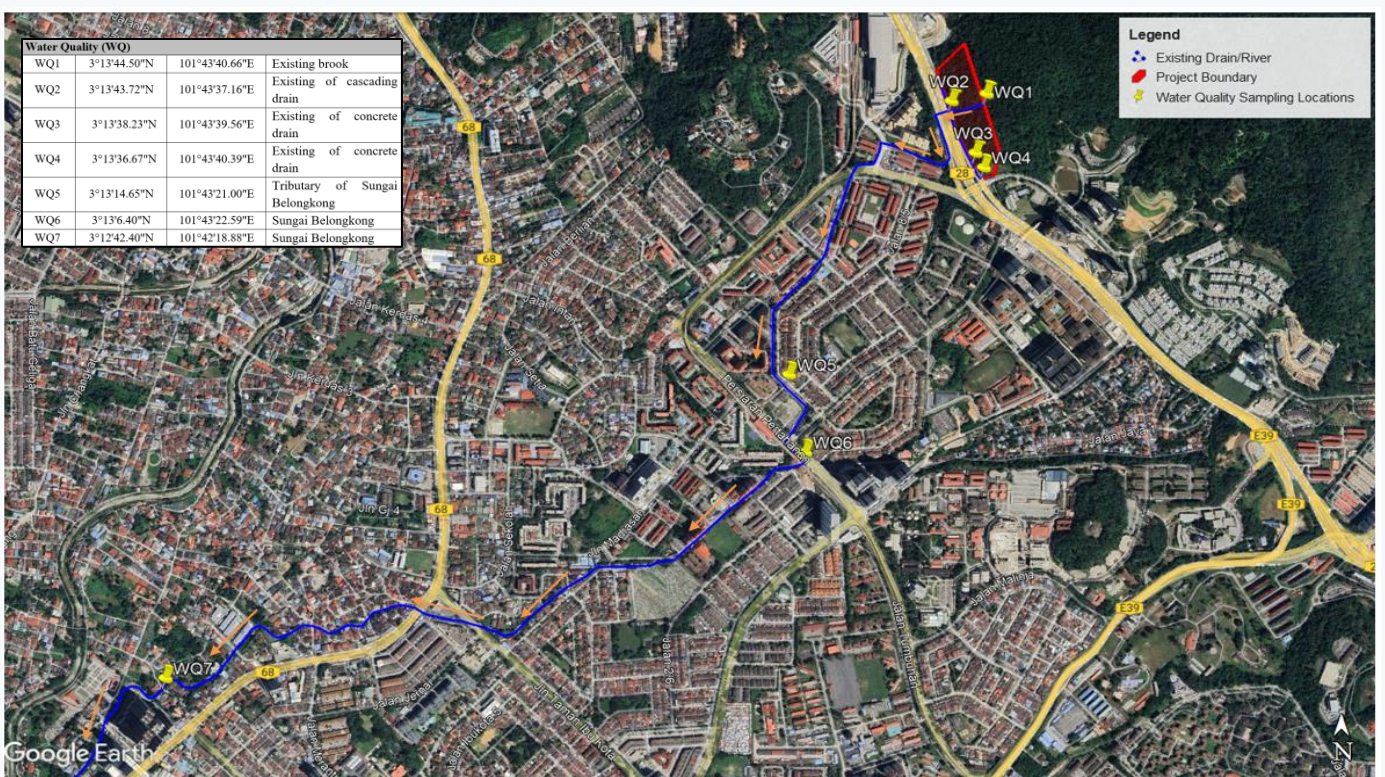
# EXECUTIVE SUMMARY

## PHYSICO-CHEMICAL ENVIRONMENT

### PROPOSED BASELINE SAMPLING LOCATIONS - AIR QUALITY, NOISE LEVEL & VIBRATION -



### PROPOSED BASELINE SAMPLING LOCATIONS - WATER QUALITY -



# EXECUTIVE SUMMARY

## BIOLOGICAL ENVIRONMENT

### FLORA

- A total of **44 trees** with girths greater than 0.8m were recorded within the project area, representing 12 different species. The tree inventory indicates a moderately diverse range of common species, with ***Pokok Getah (Hevea brasiliensis)*** being the most frequently occurring

### FAUNA

- In term of fauna, the project site is currently inhabited by several species including **mammals (most prominent mammals are wild boars)**, **herpetofauna (such as common skinks & lizards)**, and **avifauna (such as ruak-ruak)**.
- However, there were **no endangered, vulnerable or threatened species** recorded within the site.

## HUMAN ENVIRONMENT

### SURROUNDING LANDUSE



### SOCIO- ECONOMY

- Kuala Lumpur had a stable population growth with 1.98 million people in year 2020, a growth rate of 2.2% from year 2010 when the population was 1.59 million (KLSP 2040).
- There were no human settlement observed within the project site.
- There is a residential and commercial area surrounding the project site
- A socio-economic study was conducted within a 1km radius, with a total of **363 respondents**.

### TRAFFIC

- A **Traffic Impact Assessment (TIA)** study has been conducted by **Runding Trafik MZK Sdn Bhd**.
- Based on HPU trip rates and the proposed development component, it is estimated that the development will generate **714 pcu/hour & attract 281 pcu/hour during the morning peak period**.
- During the evening peak, it is **expected to generate 354 pcu/hour & attract 582 pcu/hour**

# EXECUTIVE SUMMARY

## POTENTIAL IMPACT & MITIGATION MEASURES

### CONSTRUCTION PHASE

POTENTIAL IMPACTS	MITIGATION MEASURES
<b>AIR QUALITY</b> <ul style="list-style-type: none"> <li>Dust from vehicle &amp; equipment use</li> <li>Dust from exposed area</li> <li>Dust from earthwork activities</li> </ul>	<ul style="list-style-type: none"> <li>Ensure access and internal roads are kept smooth, well-graded, and clean.</li> <li>Air pollution control/ dust control (construct of wash through, provide hoarding, water jet spray,)</li> <li>Machinery &amp; vehicle regularly service and maintained</li> <li>Ambient air quality impact monitoring to be conducted on periodical basis to assess &amp; monitor the ambient air quality at the project area</li> </ul>
<b>NOISE LEVEL &amp; VIBRATION</b> <ul style="list-style-type: none"> <li>Noise from equipment &amp; plants</li> <li>Noise from vehicle movements</li> <li>Vibration from piling work</li> </ul>	<ul style="list-style-type: none"> <li>Construction work scheduling during daytime. No works take place at nighttime and on weekends</li> <li>Employ noise control measures (install of perimeter hoarding, used noise barriers, PPE for workers)</li> <li>Machinery &amp; vehicle regularly service and maintained</li> <li>Ambient noise level &amp; vibration limit monitoring to be conducted on periodical basis to assess &amp; monitor the ambient air quality at the project area</li> </ul>
<b>WATER QUALITY</b> <ul style="list-style-type: none"> <li>Land clearing and earthworks activities;</li> <li>Untreated sewage discharge;</li> <li>Uncontrolled surface runoff</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of LD-P2M2 tools prior to commencement of earthwork</li> <li>Any surface water runoff discharge from the project site to the offsite area of the project site during the earthwork &amp; construction work shall contain TSS&lt;50mg/L &amp; turbidity&lt;250NTU</li> <li>Any discharge of wastewater into the watercourses direct or indirectly must be avoided</li> </ul>
<b>EROSION &amp; SEDIMENTATION</b> <ul style="list-style-type: none"> <li>Soil erosion and sedimentation</li> <li>Site clearing and earthwork activities</li> <li>Land disturbing activities on-site;</li> </ul>	<ul style="list-style-type: none"> <li>The LD-P2M2 tools at the project site shall be constructed before land-disturbing activities</li> <li>Runoff &amp; stormwater management on site</li> <li>Erosion and sediment control</li> <li>Temporary covers of exposed areas</li> <li>Regular site inspection, maintenance and monitoring of BMPs on-site.</li> <li>The existing cascading drain will be retained, &amp; a cutoff drain will be constructed along the proposed service road to channel any runoff from the forested site boundary. This is important to prevent any overflow that may disrupt the project site.</li> </ul>
<b>WASTE MANAGEMENT</b> <ul style="list-style-type: none"> <li>Biomass Waste &amp; Unsuitable Material</li> <li>Overburden Materials</li> <li>Solid Waste</li> <li>Sewage</li> <li>Scheduled Waste</li> </ul>	<ul style="list-style-type: none"> <li>Biomass generated during site clearing needs to be properly managed and dispose off.</li> <li>The handling and deposal of sewage should be in accordance with Environmental Quality (Sewage) Regulations, 2009.</li> <li>The handling and disposal of scheduled waste should be in accordance with Environmental Quality (Scheduled Wastes) Regulations 2005.</li> </ul>
<b>TRAFFIC</b> <ul style="list-style-type: none"> <li>Movement of vehicle passing by via the main access road</li> </ul>	<ul style="list-style-type: none"> <li>Scheduled heavy vehicle transport during off peak hour periods</li> <li>Vehicles for carrying building materials, debris and excavated materials should be clean, well maintained and in good running condition</li> <li>Vehicle speeds should be limited within the project site.</li> </ul>
<b>SAFETY AND HEALTH</b> <ul style="list-style-type: none"> <li>Safety to the construction workers</li> </ul>	<ul style="list-style-type: none"> <li>Prepare Emergency Response Plan (ERP) in case of emergencies on site</li> <li>Provide Personal Protective Equipment (PPE) to construction workers</li> </ul>
<b>ECOLOGICAL MANAGEMENT</b> <ul style="list-style-type: none"> <li>Flora &amp; fauna</li> </ul>	<ul style="list-style-type: none"> <li>Clearly demarcate site-clearing boundaries and no-go areas</li> <li>Install fencing in active construction zones</li> </ul>
<b>SOCIO-ECONOMIC</b> <ul style="list-style-type: none"> <li>Potential job opportunities to the locals</li> <li>Boosting local economy</li> </ul>	<ul style="list-style-type: none"> <li>The project proponent should advertise to the surrounding community for encouraging locals to participate in jobs that are suitable to their skill;</li> <li>The contractor shall make sure the foreign workers recruited have a work permit to enter the construction site</li> </ul>
<b>GEOTECHNICAL</b> <ul style="list-style-type: none"> <li>Potential geological hazard</li> <li>Groundwater table effect</li> </ul>	<ul style="list-style-type: none"> <li>Adhere to all the proposed recommendation by geotechnical engineer &amp; accredited checker (ICE)</li> </ul>

# EXECUTIVE SUMMARY

## POTENTIAL IMPACT & MITIGATION MEASURES

### OPERATIONAL PHASE

POTENTIAL IMPACTS	MITIGATION MEASURES
<b>AIR QUALITY</b> <ul style="list-style-type: none"> <li>Fugitive emissions from mobile vehicles</li> </ul>	<ul style="list-style-type: none"> <li>Regularly serviced &amp; maintained the vehicles</li> <li>Avoid running engines for long periods of time when in a stationary position</li> <li>Observed vehicle speed limit</li> </ul>
<b>NOISE LEVEL &amp; VIBRATION</b> <ul style="list-style-type: none"> <li>Noise from vehicle movement &amp; machines</li> </ul>	<ul style="list-style-type: none"> <li>Landscaping and natural buffers can help soften the noise from human activities;</li> <li>Regularly serviced &amp; maintained the vehicles</li> <li>Avoid running engines for long periods of time when in a stationary position</li> <li>Observed vehicle speed limit</li> </ul>
<b>WATER QUALITY</b> <ul style="list-style-type: none"> <li>Surface runoff discharge</li> <li>Sewage discharge</li> </ul>	<ul style="list-style-type: none"> <li>Permanent drainage system &amp; OSD tank will be provided to controls water runoff</li> <li>The treated sewage within the project site shall comply with Environmental Quality (Sewage) Regulation 2009.</li> </ul>
<b>EROSION &amp; SEDIMENTATION</b> <ul style="list-style-type: none"> <li>No significant impact</li> </ul>	<ul style="list-style-type: none"> <li>Erosion and sedimentation will not be major impacts and no mitigation measures are necessary with the exception of rehabilitation works take place.</li> <li>Permanent drainage network and on-site detention tank to be installed at-site to capture runoff from the site</li> </ul>
<b>WASTE GENERATION</b> <ul style="list-style-type: none"> <li>Solid waste/domestic waste</li> <li>Sewage</li> </ul>	<ul style="list-style-type: none"> <li>The waste generated shall be deposited at the approved disposal site.</li> <li>All sewage generated will be channeled to the existing KLR411 sewage treatment plant (STP) located at Taman Melati.</li> </ul>
<b>TRAFFIC</b> <ul style="list-style-type: none"> <li>Additional vehicles trip generated</li> <li>Movement of vehicle passing by the main access road</li> </ul>	<ul style="list-style-type: none"> <li>Shall abide by local authorities and JKR requirements for traffic management and transportation requirements.</li> <li>Adhere to all the proposed recommendation in Traffic Impact Assessment (TIA)</li> </ul>
<b>ECOLOGICAL MANAGEMENT</b> <ul style="list-style-type: none"> <li>Flora &amp; fauna</li> </ul>	<ul style="list-style-type: none"> <li>Proper perimeter fencing is suggested to hinder encroachment of wild animals especially monkeys &amp; wild boars which may cause nuisance to the resident</li> <li>Provide buffer/green corridors along project boundaries where possible</li> </ul>
<b>SOCIO-ECONOMIC</b> <ul style="list-style-type: none"> <li>Employment opportunities</li> <li>Business opportunities</li> </ul>	<ul style="list-style-type: none"> <li>The project proponent should advertise to the surrounding community for encouraging locals to participate in jobs that are suitable to their skill</li> </ul>
<b>GEOTECHNICAL</b> <ul style="list-style-type: none"> <li>Potential geological hazard</li> </ul>	<ul style="list-style-type: none"> <li>Adhere to all the proposed recommendation by geotechnical engineer &amp; accredited checker (ICE) based on site condition</li> </ul>

# EXECUTIVE SUMMARY

## IMPACT & COMPLIANCE MONITORING



**AIR QUALITY**



**NOISE LEVEL**



**WATER QUALITY**



**VIBRATION**

**PARAMETER**

PM10, PM2.5,

Laeq, Lmin, Lmax,  
L10, L50, L90

pH, BOD, COD,  
TSS, AN, DO,  
Conductivity,  
Turbidity, Oil &  
Grease, Fecal  
Coliform, Total  
Coliform, E-Coli

Peak particles,  
velocity, ppv

**STANDARD**

New Malaysia  
Ambient Air Quality  
Standard 2020

Guidelines for  
Environmental  
Noise Limit &  
Control, 2019  
(Reprint 2021)

National Water Quality  
Standards (NWQS) –  
Class IIB

Guidelines for  
Environmental Vibration  
Limits and Control Third  
Edition (DOE, 2021)

**FREQUENCY**

Monthly

Monthly

Monthly

Monthly

**NO OF  
STATIONS**

5

5

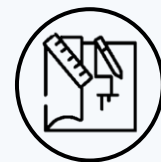
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## PERFORMANCE MONITORING



**SEDIMENTATION POND**



**BMPs in ESCP/LD-P2M2**

**PARAMETER**

TSS  
Turbidity

Structural integrity, practicality, functionality  
and frequency of maintenance for all P2M2

**STANDARD**

TSS: 50 mg/L  
Turbidity: 250 NTU

-

**MONITORING**

Monthly  
Biweekly  
Per rainfall event

Monthly  
Biweekly  
Per rainfall event

**NO OF  
STATIONS**

Discharge from all sediment basins

All BMPs proposed within the project site

# EXECUTIVE SUMMARY

## STUDY FINDINGS

- ❖ **SINARAN ERAT SDN BHD intends to develop a mixed commercial-residential township area on 9.735 acres of land (3.94 hectare) which will provide 6 tower apartment (2,896 units) and related facilities on Lot 201985, Jalan Melati Kuarza 2 Off Jalan Lingkaran Tengah 2 (MRR 2), Mukim Setapak, Daerah Kuala Lumpur, Wilayah Persekutuan Kuala Lumpur known as KLEO @ KL EAST**
- ❖ **The preliminary existing environmental studies was conducted which include site survey, soil investigations, site geology, geological terrain mapping, geotechnical study, as well as environmental baseline assessment, etc.**
- ❖ **Overall findings shows that the potential impact from the project site to the surrounding areas could be in minimal & in the short term period.**
- ❖ **With the assumption all proposed ESCP/LD-P2M2 components implemented on site, the impacts could be mitigate accordingly.**
- ❖ **As such, to ensure that the P2M2s are effective on-site, an Environmental Management Plan with Environmental Auditing & Monitoring Programme are recommended to the project proponent**
- ❖ **Once fully developed, the project will offer a total of 2,896 apartment units along with related facilities within a mixed commercial-residential township. Spanning 9.735 acres and implemented in two phases, KLEO is designed to be highly connected and efficient, providing a unique mountainside living experience for the discerning urbanite.**