



# TECHNICAL PROPOSAL

## FTK New 1W Underground Civil & 1x144F Cable Pulling Infrastructure From Kulim-Pdg Rengas Ph2 (Package 1)

**TABLE OF CONTENTS:****TP CHECKLIST****1. PROPOSAL FOR FIXED NETWORK ACCESS**

1.1 TP CHECKLIST CONSTRUCTION DETAILS

1.2 CONSTRUCTION DETAILS

1.3 LOCATION MAP (WITH GPS COORDINATE)

1.4 PRODUCT PORTFOLIO

**2. APPENDIX A**

2.1 DRAWING

2.2 SITE PHOTO

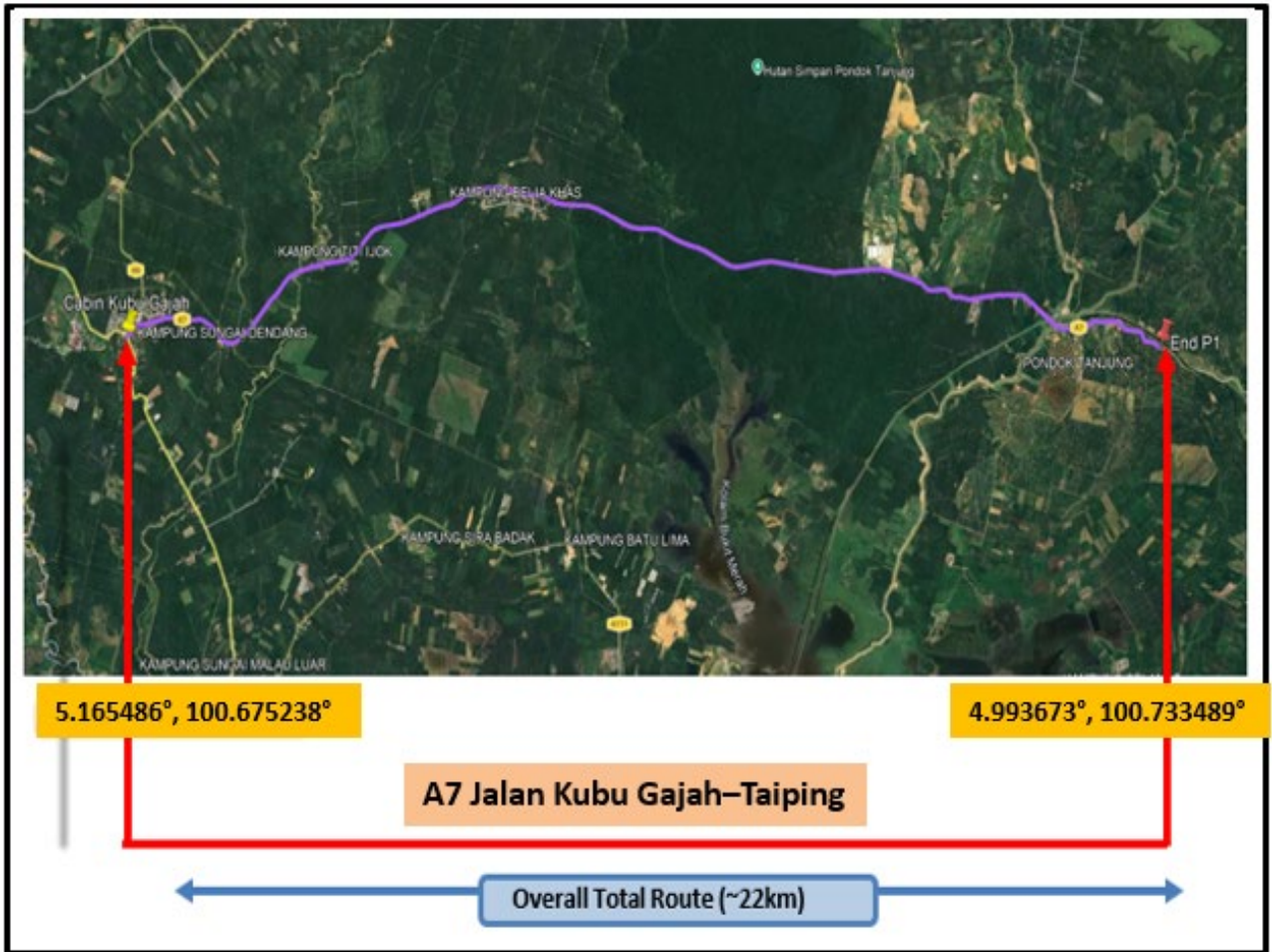
**L1 TP CHECKLIST**

|    |   | YES | NO | Remarks                         |
|----|---|-----|----|---------------------------------|
| 1  | TDC existing manhole coordinate   |     | /  |                                 |
| 2  | Existing building manhole coordinate  |     | /  |                                 |
| 3  | Any Gas pipe signage seen at site? If YES, attach photo.  |     | /  |                                 |
| 4  | Any TNB cable signage seen at site? If YES, attach photo  |     | /  |                                 |
| 5  | Any crossing drainage? If YES, attach photo & width of the drainage   |     | /  |                                 |
| 6  | Any INDAH WATER manhole seen at site? If YES, attach photo  |     | /  |                                 |
| 7  | Any crossing traffic light? If YES, attach photo & measurement of the traffic light box   | /   |    |                                 |
| 8  | Has identified Local Authority? Kindly indicate.  | /   |    | JKR LARUT<br>MATANG &<br>SELAMA |
| 9  | Drawing for outside plant (OSP) survey - Building Access & civil work up to last TIME manhole (.dwg format - autocad & .pdf format) *   | /   |    |                                 |
| 10 | Drawing for inside plant (ISP) survey - MDF up to riser (.dwg format - AutoCAD & .pdf format) *   |     | /  |                                 |
| 11 | Prepare the complete 1 copy of Technical Proposal (.pdf format & Word Format) - of softcopy - 1 copy  | /   |    |                                 |
| 12 | Bill of Quantity for civil, fibre pulling, splicing & termination   |     | /  |                                 |
| 13 | The latitude & longitude of the building location, last TIME manhole and building manhole in 6 decimal points (xxxxxxx,xxxxxxx) in TP Location Map.   |     | /  |                                 |
| 14 | Open up the manhole at any spot of joint/ring cut & provide duct space record for this project (photo required). Please make sure that there is TIME cable in the manhole (photo required).<br><b>if unable to open up the manhole, photo of manhole surrounding is required.</b> |     | /  |                                 |
| 15 | Survey Acknowledgement Form signed & attached.  |     | /  |                                 |
| 16 | Others  |     |    |                                 |

**1.2 CONSTRUCTION DETAILS**

| <b>Constructions Details</b> |                      |          |          |
|------------------------------|----------------------|----------|----------|
| Descriptions                 | Method               | Unit (s) | Quantity |
| Civil                        | 1W HDD               | meter    | 22,000 m |
|                              | 1W OPCW              | meter    | 0 m      |
|                              | Install Manhole JRC7 | each     | 91 ea    |
|                              | Coring               | each     | N/A      |
| Fiber pulling:               | 144F                 | meter    | 23,000m  |
|                              | Exst duct            | meter    | N/A      |
|                              | Clip on wall         | meter    | N/A      |
|                              | New trunking         | meter    | N/A      |
|                              | New GI pipe          | meter    | N/A      |
| Connector 1C                 | Exst duct & pit      | meter    | N/A      |
|                              | Clip on wall         | meter    | N/A      |
|                              | New trunking         | meter    | N/A      |
| Others (Please Specify)      |                      |          |          |

**1.3 LOCATION MAP**



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FTK New 1W Underground Civil &  
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From  
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## **1.4 PRODUCT PORTFOLIO**

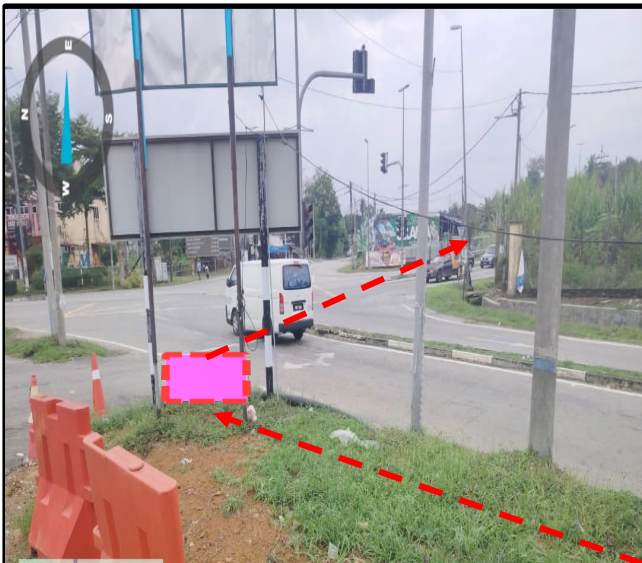
### **TIME DOT COM CONNECTIONS FOR COMMERCIAL**

|                                    |  |
|------------------------------------|--|
| <p><b>Private Data Network</b></p> | <p>Our Virtual Private Network (VPN) is designed to deliver you an efficient, secured and reliable service. We provide point-to-point technology that directly connects you to your clients and employees. We ensure complete privacy and security, while at the same time, maximizing your speed and bandwidth;</p> <ul style="list-style-type: none"> <li>⇒ Channelized Leased Circuit</li> <li>⇒ Ethernet Leased Circuit</li> <li>⇒ International Private Leased</li> <li>⇒ Circuit (IPLC)</li> <li>⇒ Metro LAN</li> <li>⇒ International Ethernet Private Leased Circuit (IEPLC)</li> </ul> |
| <p><b>Internet</b></p>             | <p>TIME Internet services allow you to connect to the world speedily with high scalability, reliability and security. Choose the best solution that suits your need and TIME will take care of the rest;</p> <ul style="list-style-type: none"> <li>⇒ Channelized Direct</li> <li>⇒ Ethernet Direct</li> <li>⇒ Business Broadband</li> <li>⇒ Satellite Broadband</li> <li>⇒ Home Broadband</li> </ul>  |
| <p><b>Voice</b></p>                | <p>We've got a wide range of services from basic phone line with crystal clear voice quality to our account based postpaid Virtual Call service. We also provide local and International toll free services, and even business or individual calling cards. With TIME, it's so easy to stay in touch;</p> <ul style="list-style-type: none"> <li>⇒ Business Voice Line</li> <li>⇒ ISDN PRI</li> <li>⇒ International Toll Free</li> <li>⇒ Toll Free 1300</li> <li>⇒ Toll Free 1800</li> <li>⇒ Audio Conferencing</li> <li>⇒ Home Fixed Line</li> </ul>  |
| <p><b>Managed Services</b></p>     | <p>TIME Managed Services deliver end-to-end networking solutions. Focus on your productivity while we provide you with support possible to take your business to the next level;</p> <ul style="list-style-type: none"> <li>⇒ IPVPN</li> <li>⇒ SAN Extension</li> </ul>  |
| <p><b>Wholesale Service</b></p>    | <p>We are able to offer you unmatched capacity and network resiliency. We aim to ensure seamless connectivity and high availability, thus maximizing your operational capabilities;</p> <ul style="list-style-type: none"> <li>⇒ Wholesale bandwidth</li> <li>⇒ Wholesale Voice (Transit Premium, Transit CLR)</li> <li>⇒ Cross Peninsular Cable System (CPCS)</li> </ul>  |

## 2.2 Site Photos



Prop New TIME MH 1 (Jln Selama Kubu Gajah)  
(5.165486°, 100.675238°)



Prop New TIME MH 2 (Jln Selama Kubu Gajah)  
(5.165801°, 100.675527°)



Prop New TIME MH 3 (Jln Kubu Gajah-Taiping)  
(5.164585°, 100.677274°)

## 2.2 Site Photos



Prop New TIME MH 4 (Jln Kubu Gajah-Taiping)( $5.162621^{\circ}$ ,  $100.678392^{\circ}$ )



Prop New TIME MH 5 (Jln Kubu Gajah-Taiping)  
( $5.160719^{\circ}$ ,  $100.679621^{\circ}$ )



Prop New TIME MH 6 (Jln Kubu Gajah-Taiping)  
( $5.158666^{\circ}$ ,  $100.680520^{\circ}$ )



Prop New TIME MH 7 (Jln Kubu Gajah) -Taiping  
( $5.156439^{\circ}$ ,  $100.680988^{\circ}$ )

## 2.2 Site Photos



Prop New TIME MH 8 (Jln Kubu Gajah-Taiping)( $5.154350^{\circ}$ ,  $100.681866^{\circ}$ )



Prop New TIME MH 9 (Jln Kubu Gajah-Taiping) ( $5.152114^{\circ}$ ,  $100.681605^{\circ}$ )



Prop New TIME MH 10 (Jln Kubu Gajah-Taiping)( $5.150089^{\circ}$ ,  $100.680635^{\circ}$ )



Prop New TIME MH 11 (Jln Kubu Gajah-Taiping)( $5.147923^{\circ}$ ,  $100.680485^{\circ}$ )

## 2.2 Site Photos



Prop New TIME MH 12 (Jln Kubu Gajah-Taiping)( $5.146468^{\circ}$ ,  $100.682198^{\circ}$ )



Prop New TIME MH 13 (Jln Kubu Gajah-Taiping) ( $5.145289^{\circ}$ ,  $100.684116^{\circ}$ )



Prop New TIME MH 14 (Jln Kubu Gajah-Taiping)( $5.144449^{\circ}$ ,  $100.686188^{\circ}$ )



Prop New TIME MH 15 (Jln Kubu Gajah-Taiping)( $5.143618^{\circ}$ ,  $100.688271^{\circ}$ )

## 2.2 Site Photos



Prop New TIME MH 16 (Jln Kubu Gajah-Taiping)( $5.142530^{\circ}$ ,  $100.690230^{\circ}$ )



Prop New TIME MH 17 (Jln Kubu Gajah-Taiping) ( $5.141665^{\circ}$ ,  $100.692304^{\circ}$ )



Prop New TIME MH 18 (Jln Kubu Gajah-Taiping)( $5.140100^{\circ}$ ,  $100.693936^{\circ}$ )



Prop New TIME MH 19 (Jln Kubu Gajah-Taiping)( $5.138608^{\circ}$ ,  $100.694914^{\circ}$ )

## 2.2 Site Photos



Prop New TIME MH 20 (Jln Kubu Gajah-Taiping)( $5.136712^\circ$ ,  $100.696191^\circ$ )



Prop New TIME MH 21 (Jln Kubu Gajah-Taiping) ( $5.134723^\circ$ ,  $100.697243^\circ$ )



Prop New TIME MH 22 (Jln Kubu Gajah-Taiping)( $5.132725^\circ$ ,  $100.698298^\circ$ )



Prop New TIME MH 23 (Jln Kubu Gajah-Taiping)( $5.131352^\circ$ ,  $100.700057^\circ$ )

## 2.2 Site Photos



Prop New TIME MH 24 (Jln Kubu Gajah-Taiping)( $5.130485^{\circ}$ ,  $100.702147^{\circ}$ )



Prop New TIME MH 25 (Jln Kubu Gajah-Taiping)( $5.129336^{\circ}$ ,  $100.704064^{\circ}$ )



Prop New TIME MH 26 (Jln Kubu Gajah-Taiping)( $5.127437^{\circ}$ ,  $100.705261^{\circ}$ )



Prop New TIME MH 27 (Jln Kubu Gajah-Taiping)( $5.125430^{\circ}$ ,  $100.706258^{\circ}$ )

## 2.2 Site Photos



Prop New TIME MH 28 (Jln Kubu Gajah-Taiping)( $5.123608^\circ$ ,  $100.707610^\circ$ )



Prop New TIME MH 29 (Jln Kubu Gajah-Taiping) ( $5.121843^\circ$ ,  $100.709032^\circ$ )



Prop New TIME MH 30 (Jln Kubu Gajah-Taiping)( $5.120079^\circ$ ,  $100.710429^\circ$ )



Prop New TIME MH 31 (Jln Kubu Gajah-Taiping)( $5.118132^\circ$ ,  $100.711540^\circ$ )

**2.2 Site Photos**



Prop New TIME MH 32 (Jln Kubu Gajah-Taiping)(**5.116607°**, **100.713162°**)



Prop New TIME MH 33 (Jln Kubu Gajah-Taiping) (**5.115129°**, **100.714866°**)



Prop New TIME MH 34 (Jln Kubu Gajah-Taiping)(**5.113198°**, **100.715836°**)



Prop New TIME MH 35 (Jln Kubu Gajah-Taiping)(**5.111094°**, **100.716663°**)

**2.2 Site Photos**



**Prop New TIME MH 36 (Jln Kubu Gajah-Taiping)(5.108885°, 100.717146°)**



**Prop New TIME MH 37 (Jln Kubu Gajah-Taiping)(5.106637°, 100.717440°)**



**Prop New TIME MH 38 (Jln Kubu Gajah-Taiping)(5.104420°, 100.717840°)**



**Prop New TIME MH 39 (Jln Kubu Gajah-Taiping)(5.102192°, 100.718079°)**

## 2.2 Site Photos



Prop New TIME MH 40 (Jln Kubu Gajah-Taiping)(**5.099941, 100.718041°**)



Prop New TIME MH 41 (Jln Kubu Gajah-Taiping) (**5.097762°, 100.718636°**)



Prop New TIME MH 42 (Jln Kubu Gajah-Taiping)(**5.095618°, 100.719326°**)



Prop New TIME MH 43 (Jln Kubu Gajah-Taiping)(**5.093391°, 100.719567°**)

**2.2 Site Photos**



**Prop New TIME MH 44 (Jln Kubu Gajah-Taiping)(5.091141°, 100.719356°)**



**Prop New TIME MH 45 (Jln Kubu Gajah-Taiping) (5.088875°, 100.719156°)**



**Prop New TIME MH 46 (Jln Kubu Gajah-Taiping)(5.086606°, 100.719119°)**



**Prop New TIME MH 47 (Jln Kubu Gajah-Taiping)(5.084441°, 100.719728°)**

**2.2 Site Photos**



Prop New TIME MH 48 (Jln Kubu Gajah-Taiping)(**5.082261°**, **100.720261°**)



Prop New TIME MH 49 (Jln Kubu Gajah-Taiping) (**5.080013°**, **100.720073°**)



Prop New TIME MH 50 (Jln Kubu Gajah-Taiping)(**5.077761°**, **100.719957°**)



Prop New TIME MH51 (Jln Kubu Gajah-Taiping)(**5.075503°**, **100.720095°**)

## 2.2 Site Photos



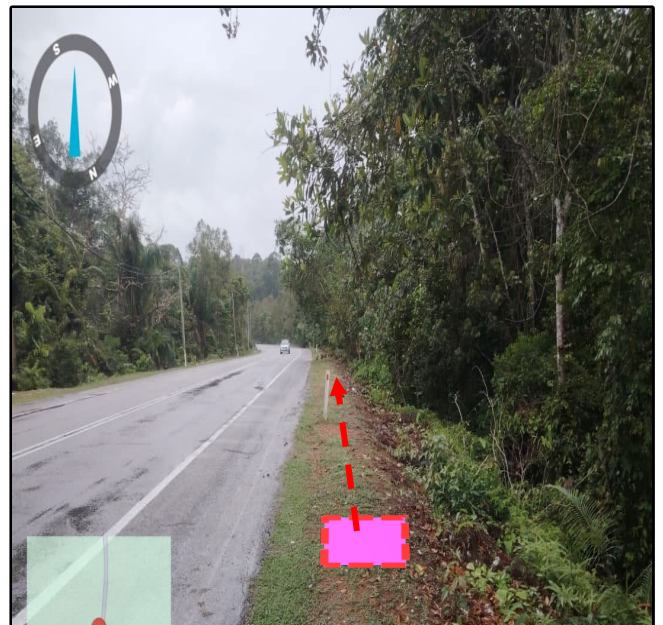
Prop New TIME MH 52 (Jln Kubu Gajah-Taiping)( $5.073245^{\circ}$ ,  $100.720086^{\circ}$ )



Prop New TIME MH 53 (Jln Kubu Gajah-Taiping) ( $5.071007^{\circ}$ ,  $100.719794^{\circ}$ )



Prop New TIME MH 54 (Jln Kubu Gajah-Taiping)( $5.068757^{\circ}$ ,  $100.719609^{\circ}$ )



Prop New TIME MH55 (Jln Kubu Gajah-Taiping)( $5.066648^{\circ}$ ,  $100.720324^{\circ}$ )

## 2.2 Site Photos



Prop New TIME MH 56 (Jln Kubu Gajah-Taiping)( $5.064671^{\circ}$ ,  $100.721379^{\circ}$ )



Prop New TIME MH 57 (Jln Kubu Gajah-Taiping)( $5.062623^{\circ}$ ,  $100.722390^{\circ}$ )



Prop New TIME MH 58 (Jln Kubu Gajah-Taiping)( $5.060436^{\circ}$ ,  $100.722964^{\circ}$ )



Prop New TIME MH 59 (Jln Kubu Gajah-Taiping)( $5.058205^{\circ}$ ,  $100.723375^{\circ}$ )

**2.2 Site Photos**



**Prop New TIME MH 60 (Jln Kubu Gajah-Taiping)(5.055983°, 100.723785°)**



**Prop New TIME MH 61 (Jln Kubu Gajah-Taiping)(5.053773°, 100.724191°)**



**Prop New TIME MH 62 (Jln Kubu Gajah-Taiping)(5.051558°, 100.724649°)**



**Prop New TIME MH 63 (Jln Kubu Gajah-Taiping)(5.049427°, 100.725503°)**

## 2.2 Site Photos



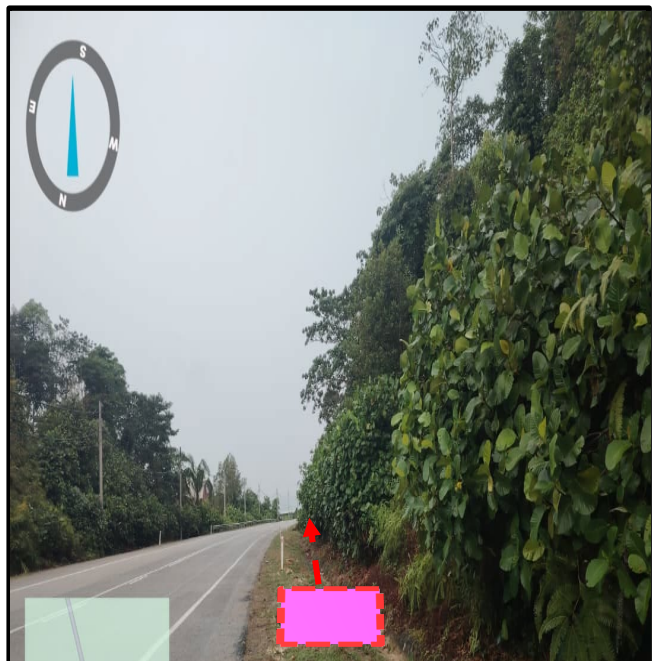
Prop New TIME MH 64 (Jln Kubu Gajah-Taiping)( $5.047361^{\circ}$ ,  $100.726387^{\circ}$ )



Prop New TIME MH 65 (Jln Kubu Gajah-Taiping)( $5.045286^{\circ}$ ,  $100.727273^{\circ}$ )



Prop New TIME MH 66 (Jln Kubu Gajah-Taiping)( $5.043139^{\circ}$ ,  $100.727945^{\circ}$ )



Prop New TIME MH 67 (Jln Kubu Gajah-Taiping)( $5.040894^{\circ}$ ,  $100.728123^{\circ}$ )

## 2.2 Site Photos



Prop New TIME MH 68 (Jln Kubu Gajah-Taiping)( $5.038639^\circ$ ,  $100.728241^\circ$ )



Prop New TIME MH 69 (Jln Kubu Gajah-Taiping)( $5.036382^\circ$ ,  $100.728274^\circ$ )



Prop New TIME MH 70 (Jln Kubu Gajah-Taiping)( $5.034251^\circ$ ,  $100.727983^\circ$ )



Prop New TIME MH 71 (Jln Kubu Gajah-Taiping)( $5.032173^\circ$ ,  $100.728858^\circ$ )

**2.2 Site Photos**



Prop New TIME MH 72 (Jln Kubu Gajah-Taiping)(**5.030040° , 100.728413°**)



Prop New TIME MH 73 (Jln Kubu Gajah-Taiping)(**5.027828° , 100.728874°**)



Prop New TIME MH 74 (Jln Kubu Gajah-Taiping)(**5.025777° , 100.729849°**)



Prop New TIME MH 75 (Jln Kubu Gajah-Taiping)(**5.023753° , 100.730846°**)

**2.2 Site Photos**



Prop New TIME MH 76 (Jln Kubu Gajah-Taiping)(**5.021654° , 100.731684°**)



Prop New TIME MH 77 (Jln Kubu Gajah-Taiping)(**5.019518° , 100.732423°**)



Prop New TIME MH 78 (Jln Kubu Gajah-Taiping)(**5.017560° , 100.732221°**)

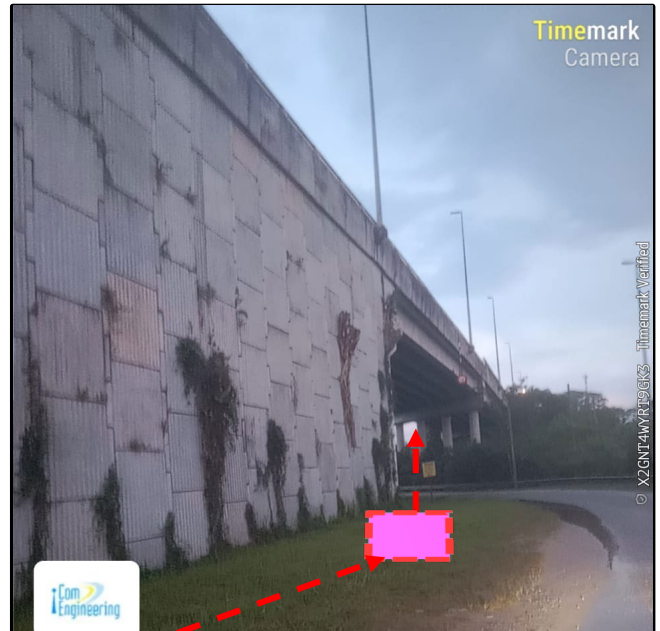


Prop New TIME MH 79 (Jln Kubu Gajah-Taiping)(**5.015426° , 100.731498°**)

## 2.2 Site Photos



Prop New TIME MH 80 (Jln Kubu Gajah-Taiping)(**5.013784°**, **100.730925°**)



Prop New TIME MH 81 (Jln Kubu Gajah-Taiping)(**5.012757°**, **100.730539°**)



Prop New TIME MH 82 (Jln Kubu Gajah-Taiping)(**5.011412°**, **100.730349°**)



Prop New TIME MH 83 (Jln Kubu Gajah-Taiping)(**5.009828°**, **100.730843°**)

## 2.2 Site Photos



Prop New TIME MH 84 (Jln Kubu Gajah-Taiping)(**5.007955°**, **100.731701°**)



Prop New TIME MH 85 (Jln Kubu Gajah-Taiping)(**5.005989°**, **100.733152°**)



Prop New TIME MH 86 (Jln Kubu Gajah-Taiping)(**5.003975°**, **100.733817°**)



Prop New TIME MH 87 (Jln Kubu Gajah-Taiping)(**5.001457°**, **100.734510°**)

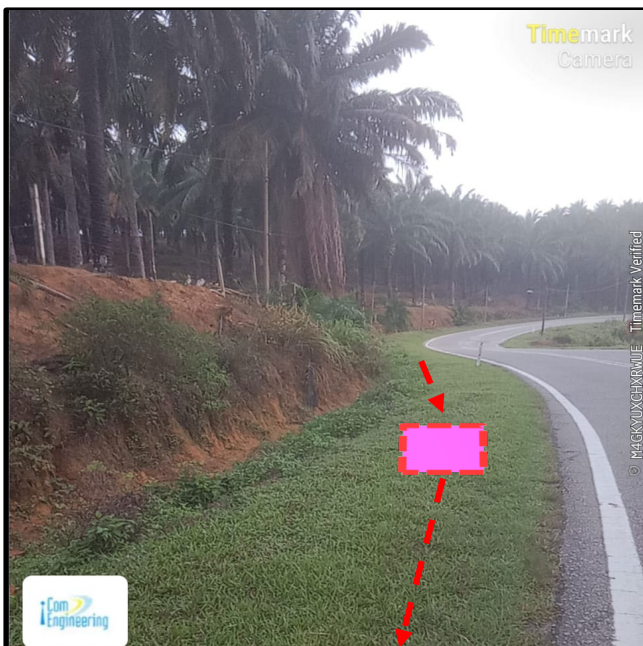
## 2.2 Site Photos



Prop New TIME MH 88 (Jln Kubu Gajah-Taiping)( $4.999466^{\circ}$ ,  $100.734135^{\circ}$ )



Prop New TIME MH 89 (Jln Kubu Gajah-Taiping)( $4.997423^{\circ}$ ,  $100.734366^{\circ}$ )



Prop New TIME MH 90 (Jln Kubu Gajah-Taiping)( $4.995406^{\circ}$ ,  $100.733729^{\circ}$ )



Prop New TIME MH 91(Jln Kubu Gajah-Taiping)( $4.993673^{\circ}$ ,  $100.733489^{\circ}$ )