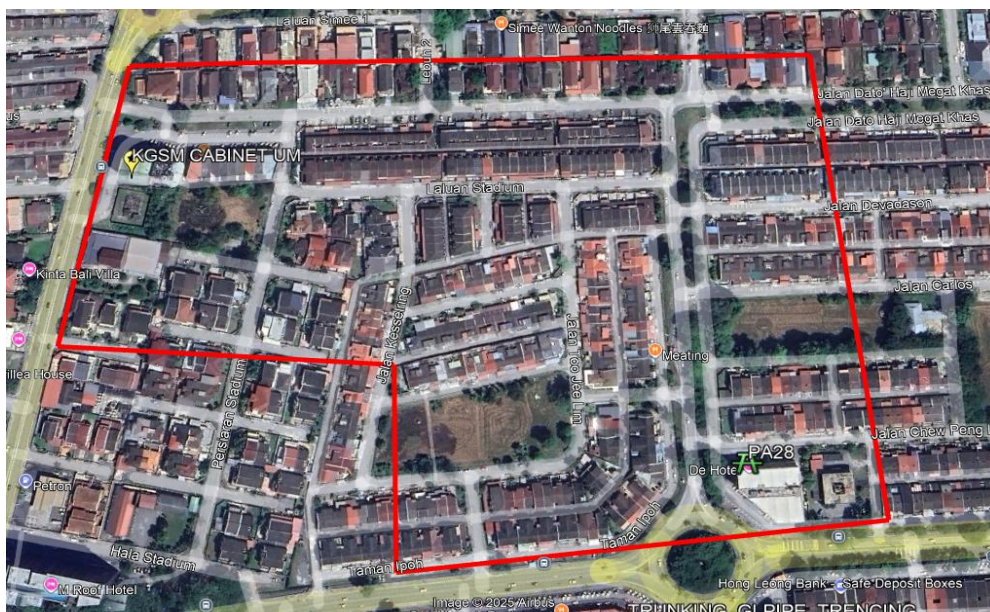


# Maxis UMobile 5G Project – Technical Proposal

Company Name	:	MAXIS BROADBAND SDN BHD
Company Address	:	Level 9, Menara Maxis, Kuala Lumpur City Center, 50088, Kuala Lumpur
Date	:	1/08/2025



Project & Site Name	:	UMOBILE KGSM
Site LRD	:	KGSM
Address	:	PARAGON CITY HOTEL JALAN DATO HAJI MEGAT
District	:	IPOH
Postcode & State	:	31400, PERAK
GPS Coordinate	:	4.615019043190423, 101.1053169236163
FTTx LRD	:	N/A
Home pass / Premise pass	:	N/A

UG Build (m)	440
Aerial Build (m)	110
<b>Total Civil Build (m)</b>	<b>550</b>

UG Cable (m)	440
Aerial CABLE (m)	110
Coil at MH(m)	20
<b>Total Cable (m)</b>	<b>570</b>



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# 1. POC3 Summary & Details

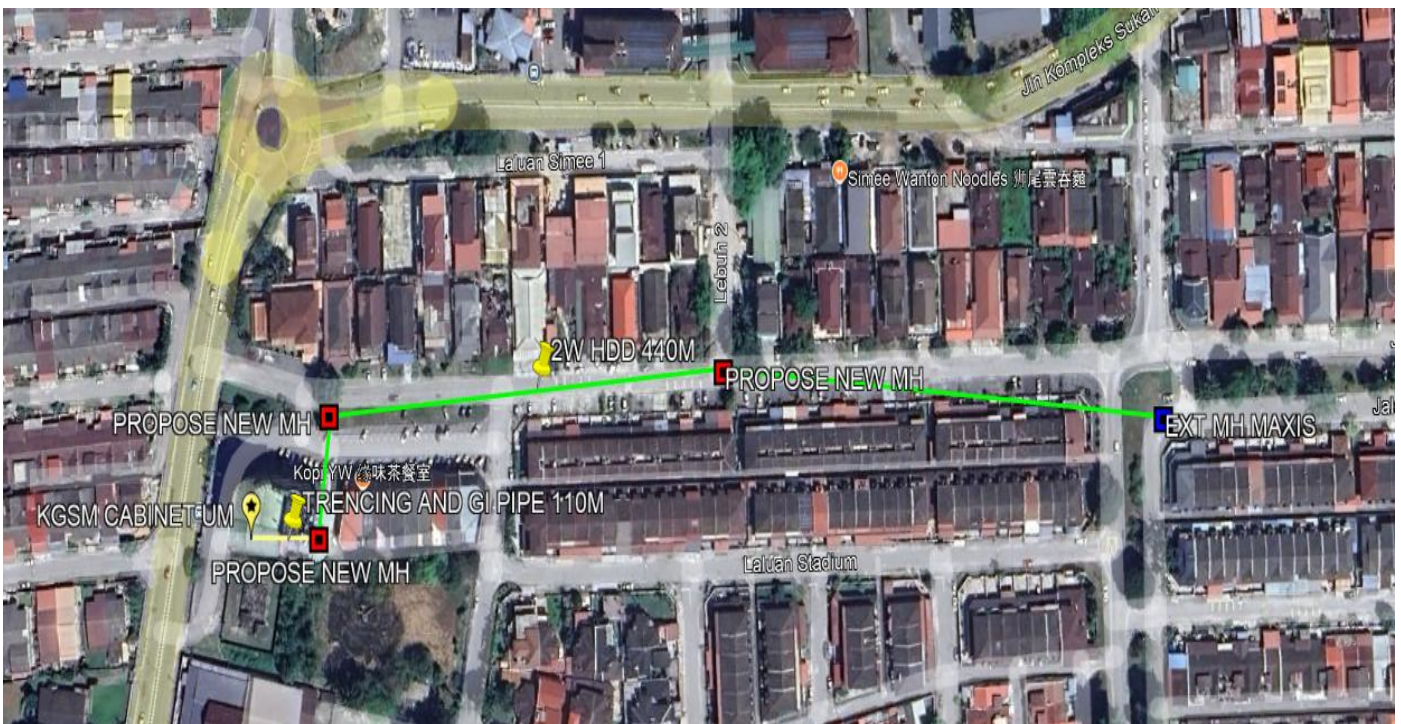
## 1.1. POC3 Summary



Site LRD	:	PHLI - PA28
Structure Type	:	CABIN
GPS Coordinate	:	4.612771,101.109371
Site / Building Name	:	DE HOTEL
Address	:	86, Jln Dato Lau Pak Khuan, Ipoh Garden, 31400 Ipoh, Perak
POC3 Model	:	

## 2. OSP / ISP Summary & Details (OSP 2)

### 2.1. Propose Route Details & Site Map



<b>LRD Point A</b>	CABINET UM	<b>LRD Point B</b>	EXISTING MH MAXIS
<b>Address</b>	PARAGON CITY HOTEL	<b>Address</b>	Jalan Dato Haji Megat Khas, Taman Bandaraya Utama, Ipoh, 31400, Ipoh, Perak, 31400
<b>GPS Coordinates</b>	4.61492, 101.105301	<b>GPS Coordinates</b>	4.615057, 101.108864
<b>New Civil Build (M)</b>	550	<b>Existing Civil Build (M)</b>	-
<b>New Build Cable (M)</b>	570	<b>Existing Cable (M)</b>	-

**Local Council & Authority approval Requirement** : MAJLIS BANDARAYA IPOH : 450m

## 2.2. OSP & ISP BOQ

<b>Overall Proposed OSP Civil Infrastructure Design Distance</b>		<b>Unit</b>	<b>Quantity</b>
1	Horizontal Directional Drilling with 1-way duct	M	N/A
2	Horizontal Directional Drilling with 2-way duct	M	440
3	Open trench on grass verge (GV) with 1-way duct	M	N/A
4	Open trench on grass verge (GV) with 2-way duct	M	N/A
5	Open trench on carriage way (CW) with 1-way duct	M	N/A
6	Open trench on carriage way (CW) with 2-way duct	M	N/A
7	Micro trenching 1-way (3-way x 40 mm HDPE sub-duct)	M	10
8	Micro trenching 1-way (2-way x 25 mm GI Pipe for main road crossing)	M	N/A

<b>Overall Propose Manhole / Handhole</b>		<b>Unit</b>	<b>Quantity</b>
1	Manhole JB30	Ea	3
2	Manhole JB30 Modified	Ea	N/A
3	Manhole JRC7	Ea	N/A
4	PIT/Cheezy PIT	Ea	N/A

<b>Overall Propose Pole / Overhead</b>		<b>Unit</b>	<b>Quantity</b>
1	7.5 m Pole – Concrete/Iron	Ea	N/A
2	9 m Pole – Concrete/Iron	Ea	N/A
3	G.I Riser	Ea	10
4	Trunking	M	100

<b>Overall Cable Infrastructure Design Distance</b>		<b>Unit</b>	<b>Quantity</b>
1	1 Core Optical Fiber Cable	M	N/A
2	48 Core Optical Fiber Cable UG/IB/ID	M	N/A
3	96 Core Optical Fiber Cable UG/IB	M	N/A
4	144 Core Optical Fiber Cable UG/IB/ID	M	570

<b>Overall Optic Splice Design</b>		<b>Unit</b>	<b>Quantity</b>
1	Total Joint Closure	Ea	1

### 2.3. Civil Work's Detail (Manhole & Pole)

Overall Existing Manhole & Pole		GPS Coordinate		Distance
No.	Manhole & Pole ID	Latitude	Longitude	Meter
1	A-LJDMK-0002-000T	4°36'55.0" N	101°6'32.0" E	
2				
3				

Overall Propose Manhole & Pole		GPS Coordinate		Distance
No.	Manhole & Pole ID	Latitude	Longitude	Meter
1	MH01 JB30	4.615198	101.107169	
2	MH02 JB30	4.615167	101.105511	
3	MH03 JB30	4.614750	101.105583	

### 2.4. OSP/ISP Photo Illustration.



PICTURE 1 : CABINET UMOBILE



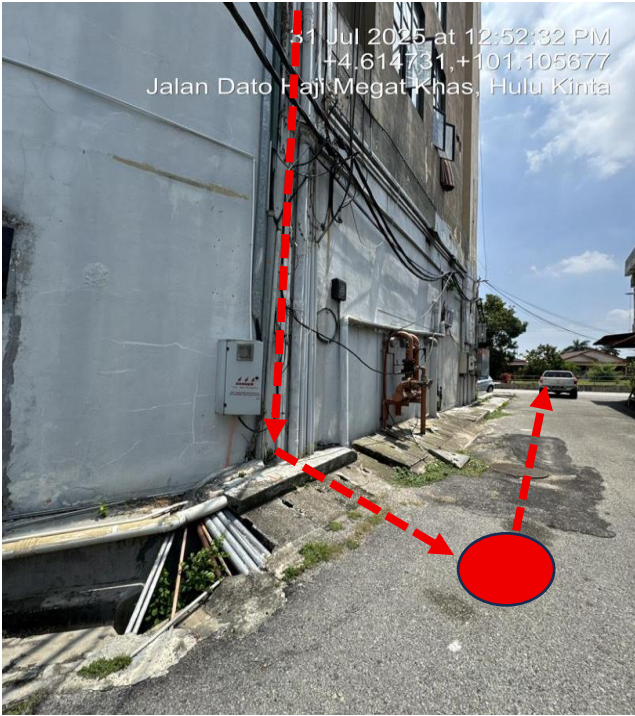
Picture 2 – CABLE WAY TRUNKING



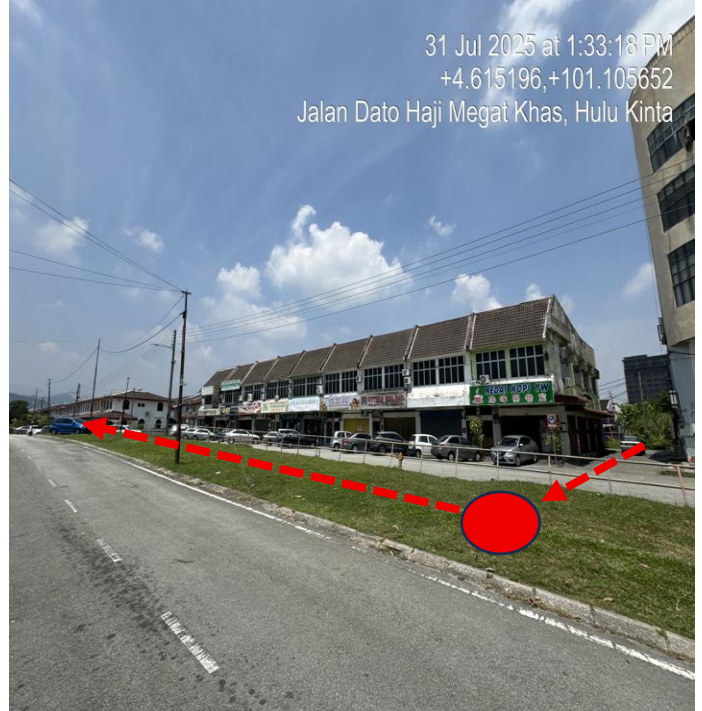
**Picture 3 – CABLE WAY TRUNKING**



**Picture 4 – CABLE WAY TRUNKING AND TRENCING**



Picture 5 – PROPOSE 1W HDD



Picture 6 – PROPOSE 1W HDD



**Picture 7 – PROPOSE 1 WAY HDD**



**Picture 8 – PROPOSE 1 WAY HDD**



### 3. Link Attenuation Calculation Reference

S = Total splice count in a single link

L = Total length of cable in a single link

C = Total connector count in a single link.

#### A) FIBER LOSS FOR 1310 nm WAVELENGTH

$$\text{TOTAL LOSS} = 0.15 (S) + 0.35 (L) + (C)$$

#### B) FIBER LOSS FOR 1550 nm WAVELENGTH

$$\text{TOTAL LOSS} = 0.10 (S) + 0.25 (L) + 0.5 (C)$$

MAXIMUM END TO END VALUE FOR 1310 nm = \*\*\*\* dBm

MAXIMUM END TO END VALUE FOR 1550 nm = \*\*\*\* dBm

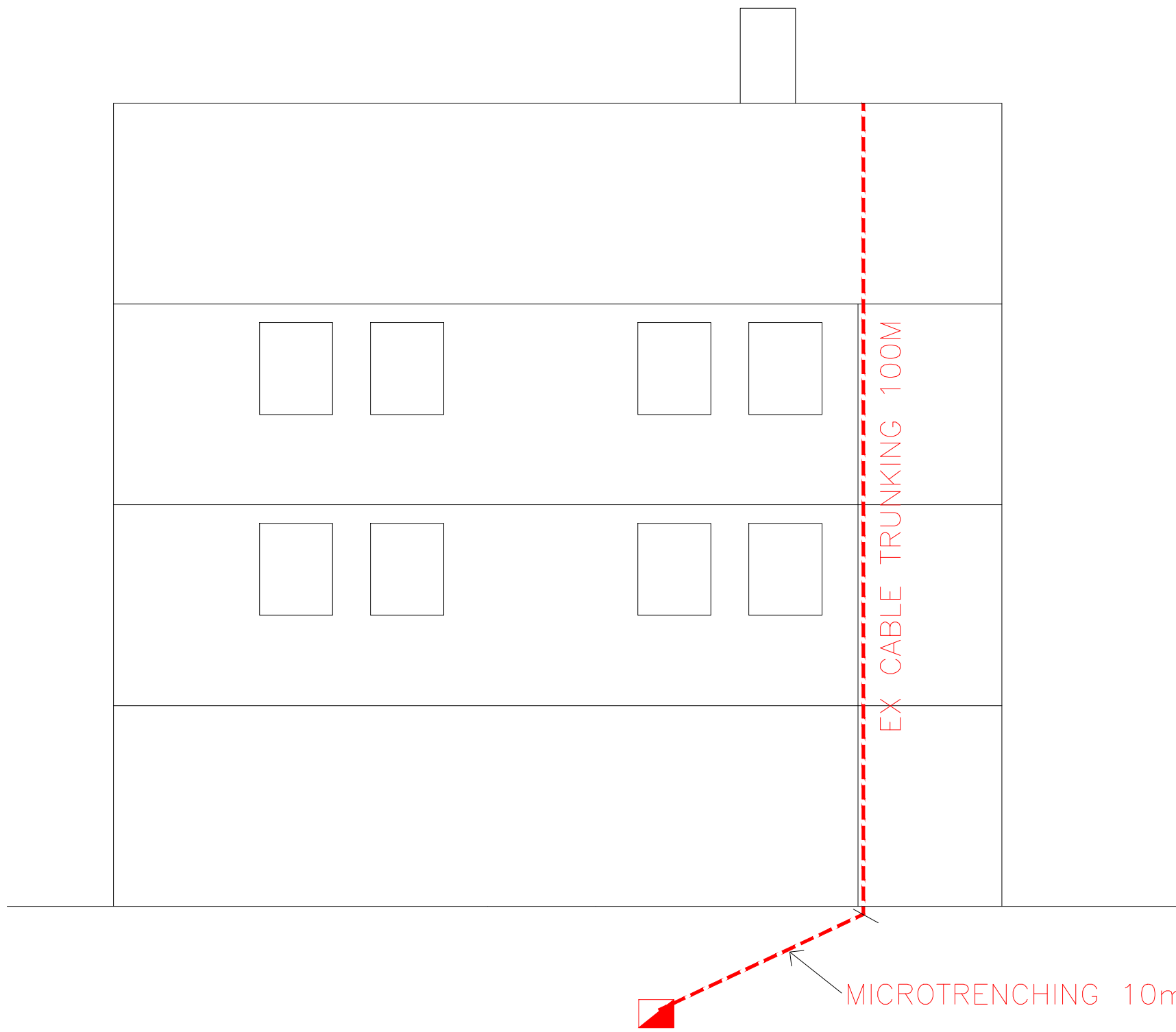


#### **4. Appendices**

4.1. OSP Civil Design

4.2. OSP SLD Design

4.3. Costing BOQ



PROP NEW MAXIS MH03  
4.614750, 101.105583

**SITE MAPS DESIGN**

<b>SITE NAME:</b>	KGSM
<b>PROJECT TITLE:</b>	UM5G - KGSM
<b>DWG ID:</b>	UM5G/KGSM/01
<b>DATE:</b>	05/08/2025
<b>SHEET:</b>	1/1

**SUMMARY NOTES**

<b>TOTAL CUSTOMER :</b>	1
<b>TOTAL FDC :</b>	N/A
<b>TOTAL FDP:</b>	N/A
<b>TOTAL PROPOSED JOINT:</b>	1
<b>TOTAL PROPOSED MH:</b>	3
<b>TOTAL PROPOSED POLE:</b>	N/A
<b>TOTAL PROPOSED UG CABLE (m):</b>	440
<b>TOTAL PROPOSED OH CABLE (m):</b>	N/A

**LEGENDS**

<b>EXISTING FDC</b>	
<b>PROPOSED FDP</b>	
<b>EXISTING FDP</b>	
<b>PROPOSED MANHOLE</b>	
<b>EXISTING MANHOLE</b>	
<b>PROPOSED PIT/HANDHOLE</b>	
<b>EXISTING PIT/HANDHOLE</b>	
<b>PROPOSED G.i / DUCT RISER</b>	
<b>EXISTING G.i / DUCT RISER</b>	
<b>PROPOSED POLE</b>	
<b>EXISTING POLE</b>	
<b>PROPOSED CLOSURE / JOINT</b>	
<b>EXISTING PEDESTAL</b>	
<b>EXISTING UG DUCTWAY</b>	
<b>PROPOSED UG TRENCHING</b>	
<b>EXISTING AERIALCABLE</b>	
<b>PROPOSED AERIAL CABLE</b>	
<b>JKR BOUNDARY</b>	
<b>LOCAL COUNCIL BOUNDARY</b>	

DESIGN BY: BINASAT SDN BHD



<b>CHECKED BY :</b>	
<b>CHECKED DATE :</b>	
<b>APPROVED/REJECTED BY :</b>	
<b>APPROVED/REJECTED BY :</b>	

# SITE MAPS DESIGN

SITE NAME:	KGSM
PROJECT TITLE:	UM5G - KGSM
DWG ID:	UM5G/KGSM/01
DATE:	05/08/2025
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## LEGENDS

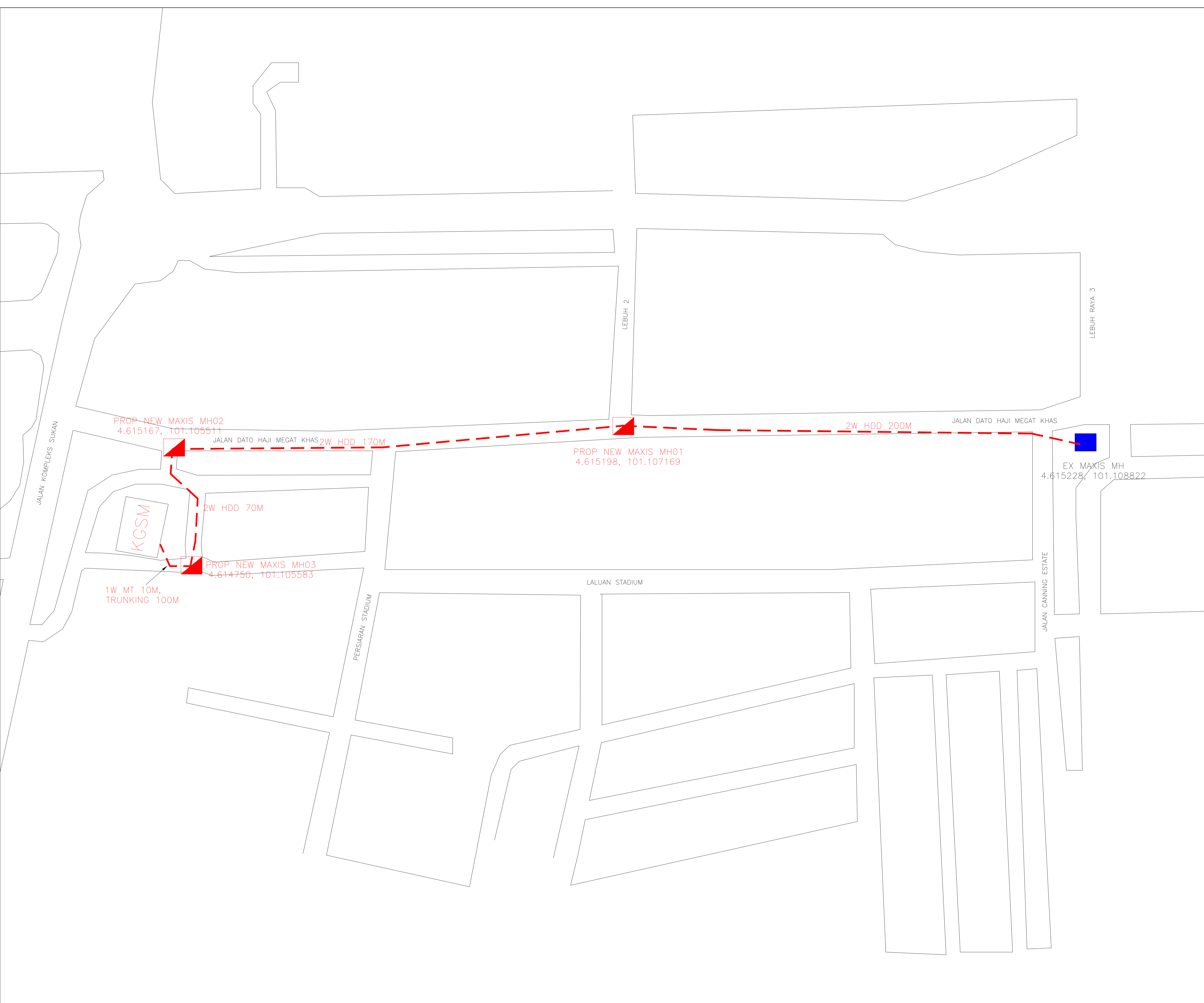
EXISTING FDC	
PROPOSED FDP	
EXISTING FDP	
PROPOSED MANHOLE	
EXISTING MANHOLE	
PROPOSED PIT/HANDHOLE	
EXISTING PIT/HANDHOLE	
PROPOSED G.i / DUCT RISER	
EXISTING G.i / DUCT RISER	
PROPOSED POLE	
EXISTING POLE	
PROPOSED CLOSURE / JOINT	
EXISTING PEDESTAL	
EXISTING UG DUCTWAY	
PROPOSED UG TRENCHING	
EXISTING AERIALCABLE	
PROPOSED AERIAL CABLE	
JKR BOUNDARY	
LOCAL COUNCIL BOUNDARY	

DESIGN BY: BINASAT SDN BHD



MAXISBROADBAND SDN BHD

CHECKED BY :	
CHECKED DATE :	
APPROVED/REJECTED BY :	
APPROVED/REJECTED BY :	






















## SITE MAPS DESIGN

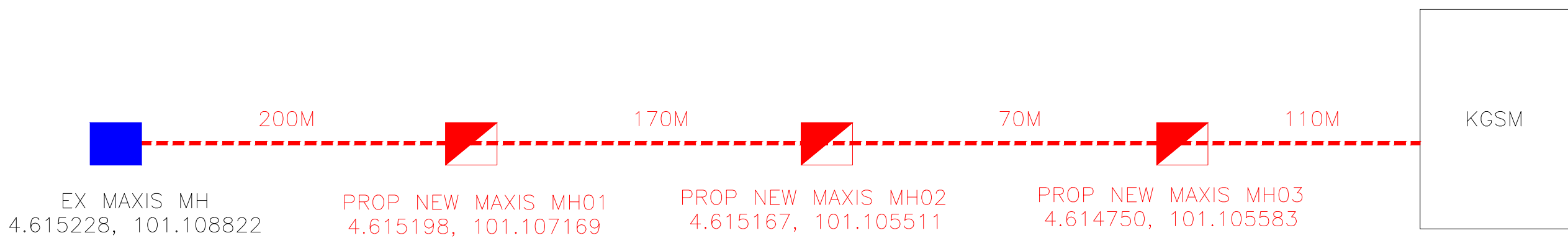
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### LEGENDS

EXISTING FDC	
PROPOSED FDP	
EXISTING FDP	
PROPOSED MANHOLE	
EXISTING MANHOLE	
PROPOSED PIT/HANDHOLE	
EXISTING PIT/HANDHOLE	
PROPOSED G.i / DUCT RISER	
EXISTING G.i / DUCT RISER	
PROPOSED POLE	
EXISTING POLE	
PROPOSED CLOSURE / JOINT	
EXISTING PEDESTAL	
EXISTING UG DUCTWAY	
PROPOSED UG TRENCHING	
EXISTING AERIALCABLE	
PROPOSED AERIAL CABLE	
JKR BOUNDARY	
LOCAL COUNCIL BOUNDARY	

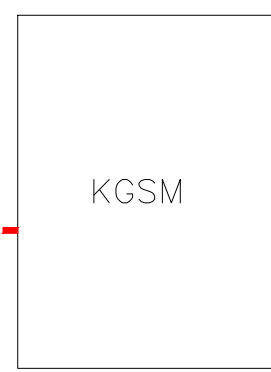


EX MAXIS MH  
4.615228, 101.108822

PROP NEW MAXIS MH01  
4.615198, 101.107169

PROP NEW MAXIS MH02  
4.615167, 101.105511

PROP NEW MAXIS MH03  
4.614750, 101.105583



DESIGN BY: BINASAT SDN BHD



MAXIS BROADBAND SDN BHD

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