



| | |
|------------|----------------------------------|
| Contractor | PURNAMA SOLUTION (M) SDN. BHD |
| SOW Ref | OSP Construction & Commissioning |
| LRD | JMBU -SERA |
| Subject | Fiber Technical Proposal |



| | | | |
|--------------------|--|---------|--------------------------|
| Region | Eastern | | |
| KV/OKV | OKV | | |
| Point A | JMBU | Point B | T-ST003-0105-000M |
| Address | LALUAN PERSEKUTUAN 3, 21610, MARANG, TERENGGANU | | |
| Site A Lat Long | 4.940593, 103.347477 | | |
| Site B Lat Long | 4.941240, 103.348714 | | |
| Structure Owner | MAXIS | | |

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- Section 8: Outside Plant Site Snapshot
- Section 9: Cabin Information & Floor Plan
- Bill of Quantities (BoQ)



Section 1: Proposal Sign-off Sheet

This proposal is contains the civil design proposal for MAXIS SITE "JMBU - T-ST003-0105-000M"
LALUAN PERSEKUTUAN 3, 21610, MARANG, TERENGGANU

All the information presented complied with Maxis Outside Plan technical specification & guidelines:

- Last Mile Telecommunication Systems Design and Survey (GLD/TNE/005)
- GLD/CATE/002 (Outside Plant Design and Build Guideline)
- OSPE GLD/TNE/003(Horizontal Directional Drilling Procedure & Guideline)
- OSPE GLD/TNE/004 (Road Reinstatement Work Guideline)

The proposed construction methodologies, material and Bill of Quantity are verified to be correct.

PURNAMA SOLUTION (M) SDN. BHD

Name: _____

Designation: _____

Signature: _____

Check & Approved by: _____

Signature: _____

Submission Date: _____

Maxis OSP Detail Design

Name: _____

Designation: _____

Signature: _____

Approval Date: _____

Section 2: Outside Plant Civil Infra Design Summary

| | | |
|---|-----|-------|
| Overall proposed OSP Civil Infrastructure Design Distance | 170 | meter |
| a. Horizontal directional drilling | 90 | meter |
| b. Carriage way open cut trenching | 0 | meter |
| c. Grass verge open cut trenching | 0 | meter |
| d. Micro-trenching (mT) | 30 | meter |
| e. Prop Pole | 6 | ea |
| f. Aerial | 50 | meter |
| g. GI Pipes Crossing/Riser | 0 | meter |
| h. Cable Ladder | 0 | meter |
| i. Duct GI | 0 | meter |

| | | |
|--|---|-------|
| ITP trunking/riser length | 0 | meter |
| ITP cable length from Maxis fiber tapping point to new termination point at building/cabin | 0 | meter |
| No. of proposed manhole | 2 | pc |
| Area of miling work required | 0 | meter |

| | | |
|--|-----|-------|
| Local council & authority approval requirement | 170 | meter |
| a. MAJLIS DAERAH MARANG | 80 | meter |
| b. JKR | 90 | meter |
| c. | | meter |

| | | |
|--------------------------------------|-------------|----|
| Estimated Cost of the Scheme/Project | 0.00 | RM |
|--------------------------------------|-------------|----|

| | |
|-------------------|--|
| Type of building: | TOWER |
| Address: | LALUAN PERSEKUTUAN 3, 21610, MARANG, TERENGGANU |
| Contact person: | |
| Contact no.: | |



Existing Infrastructure Information

| | |
|-----------------------------------|-----|
| Preceding duct/sub-duct space | N/A |
| Preceding duct/sub-duct condition | N/A |
| Existing cable/fiber condition | N/A |
| Existing sites power & space | N/A |

Tenaga Pole Option

| | |
|---------------------------|-----|
| TNB pole availability | N/A |
| Distance of the TNB poles | N/A |
| Constraint | N/A |

Other Highlights/Remarks

| |
|--|
| |
|--|

SLA

Date Survey Triggered

| | |
|--------------------|----------------------|
| Survey Done (Days) | TP Submission (Days) |
| 1 | 7 |

Implementation

| Method | Distance (m) | CW (Days) |
|--------------|--------------|-----------|
| Underground | 47 | |
| Pole | 6 | |
| Total | 53 | 0 |

Date TP Submission
Date CW Completed



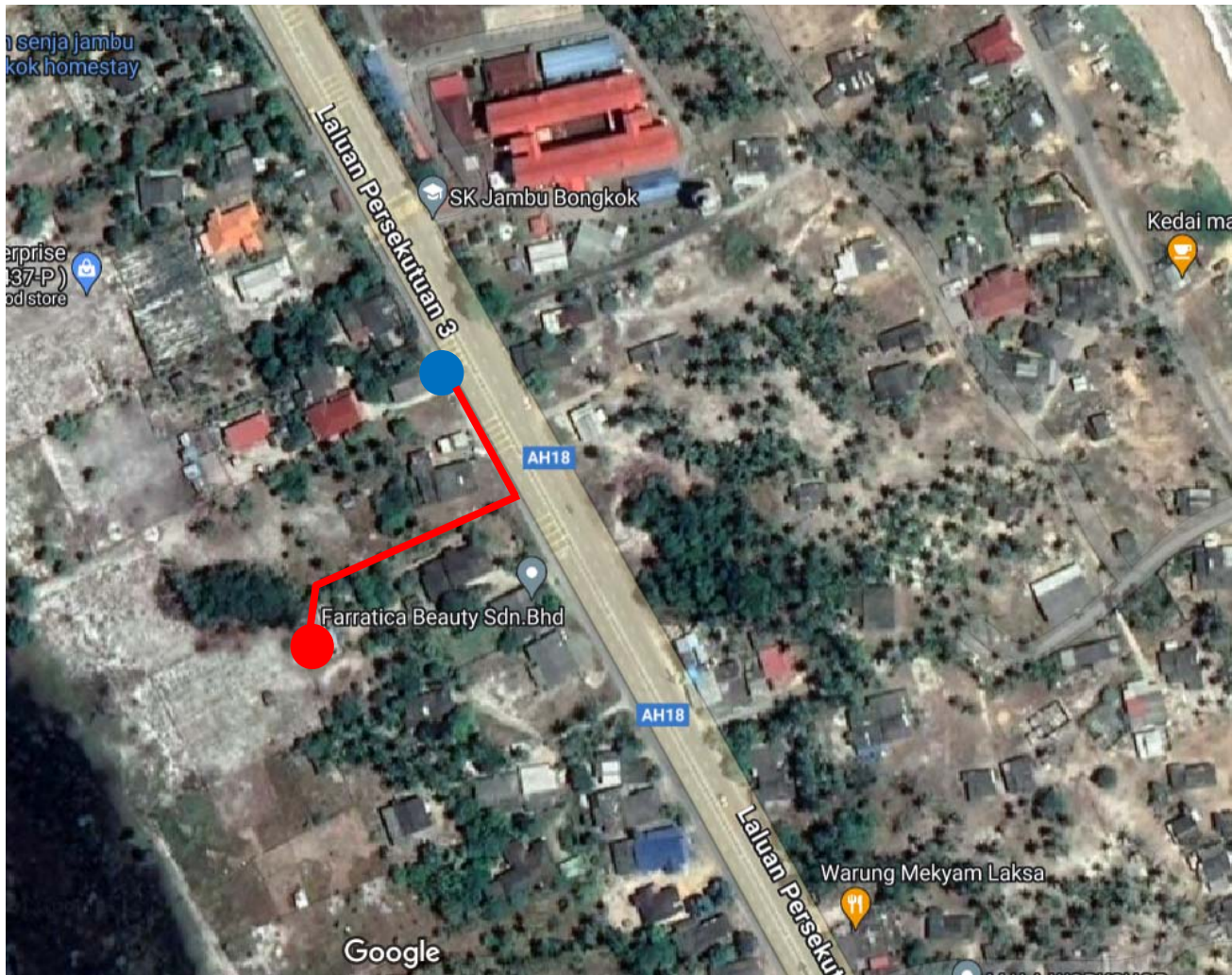
PURNAMA SOLUTION (M) SDN. BHD



Section 3

Vicidnity Map





Proposed MH



Existing MH



Proposed duct



Existing duct



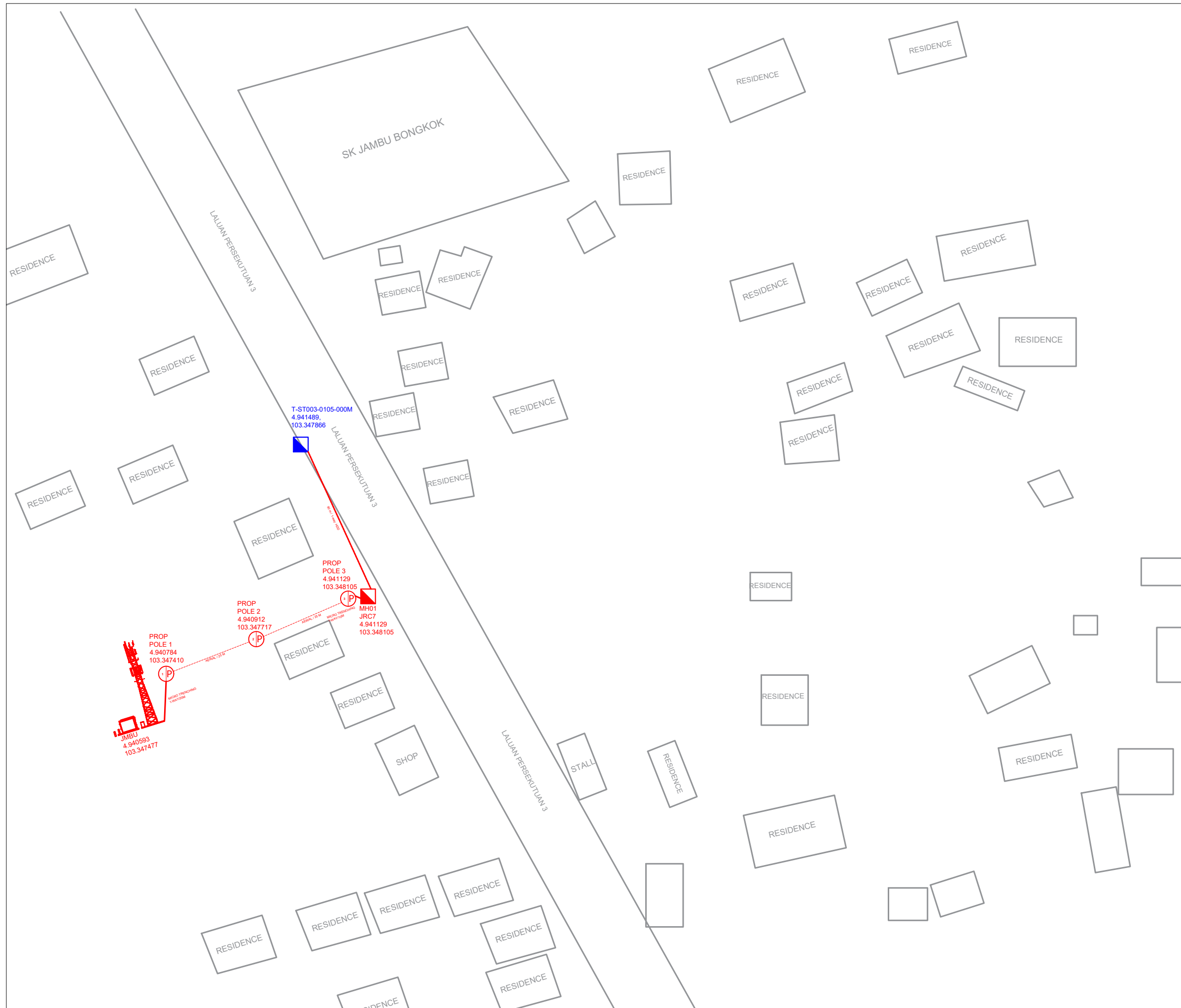
PURNAMA SOLUTION (M) SDN. BHD



Section 4

Civil Infrastructure Route Plan & Permit Boundary





| OSP Schematic Design | |
|--------------------------------------|-------------------|
| Site Name | T-ST003-0105-000M |
| Project Title | OSP MOBOLE |
| DWG ID. | OCK/OSP/001 |
| Revision No. | |
| Date | 4/4/2024 |
| Sheet | 2 / 5 |
| Summary Note | |
| Total HP/PP | |
| Total FDC | |
| Total FDP | |
| Total Propose Joint | |
| Total Propose MH | 1 |
| Total Propose Pole | 2 |
| Total Prop UG Cable (m) | 120 |
| Total Prop OH Cable (m) | 50 |
| Legends | |
| Propose FDC / FDF | |
| Existing FDC / FDF | |
| Propose FDP | |
| Existing FDP | |
| Propose Manhole | |
| Existing Manhole | |
| Propose Pit / Handhole | |
| Existing Pit / Handhole | |
| Propose G.i / Duct Riser | |
| Existing G.i / Duct Riser | |
| Propose Pole | |
| Existing Pole | |
| Existing UG Duct Way | |
| Propose UG Trenching | |
| Existing Aerial Cable | |
| Propose Aerial Cable | |
| FDC Boundary | |
| FDP Boundary | |
| PURNAMA SOLUTION (M) SDN BHD | |
| Design By | |
| Maxis Broadband Sdn. Bhd. | |
| Checked By | |
| Checked Date | |
| Approved / Rejected By | |
| Approved / Rejected Date | |



PURNAMA SOLUTION (M) SDN. BHD



Section 5: Proposed Manhole & Pole GPS Coordinate

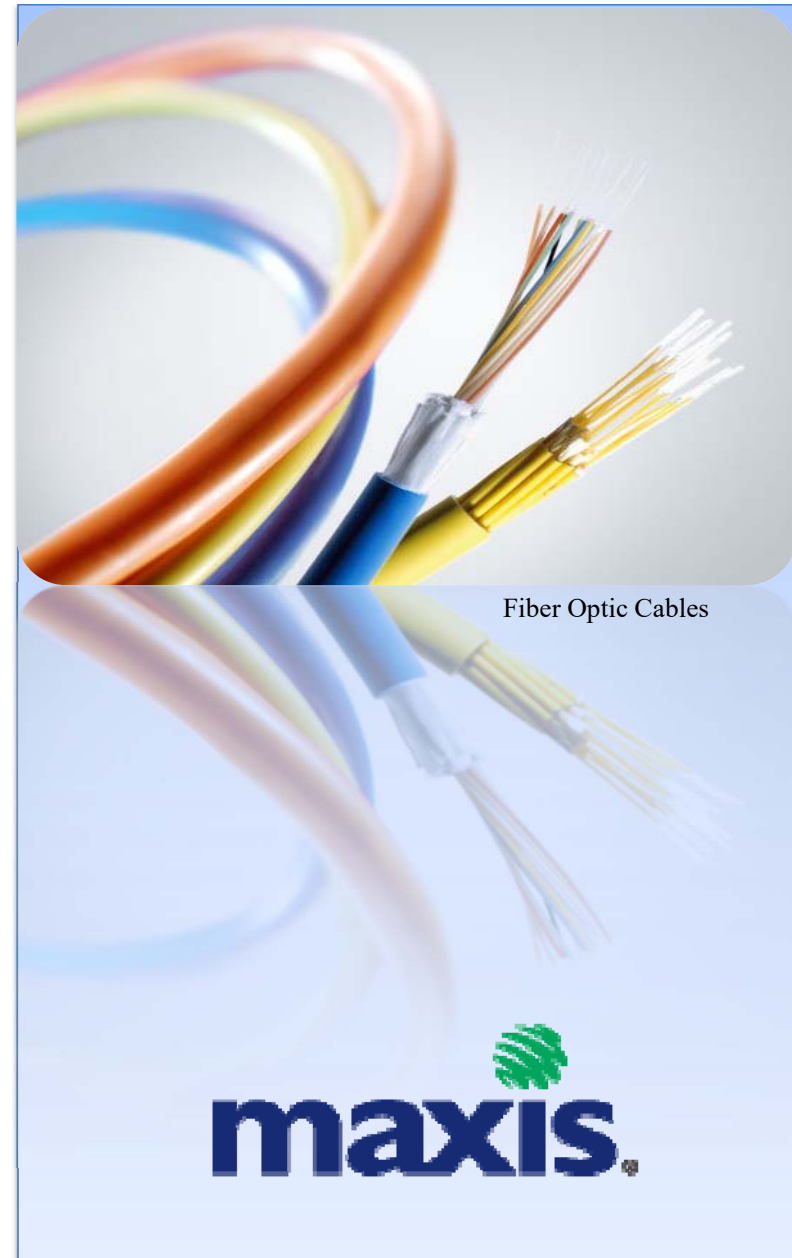
| Structure A | Structure B | Lat. A (Dec) | Long. A (Dec) | Proposed Method | Distance Breakdown (m) |
|--------------------|--------------------|--------------|---------------|-----------------|------------------------|
| JMBU | PROP MAXIS POLE 01 | 4.94059 | 103.34747 | MT 3W | 20 |
| PROP MAXIS POLE 01 | PROP MAXIS POLE 02 | 4.94078 | 103.34741 | AERIAL | 25 |
| PROP MAXIS POLE 02 | PROP MAXIS POLE 03 | 4.94091 | 103.34771 | AERIAL | 25 |
| PROP MAXIS POLE 03 | PROP JRC07/01 | 4.94112 | 103.34810 | MT 3W | 10 |
| PROP JRC07/01 | T-ST003-0105-000M | 4.94112 | 103.34810 | HDD 1-W | 90 |

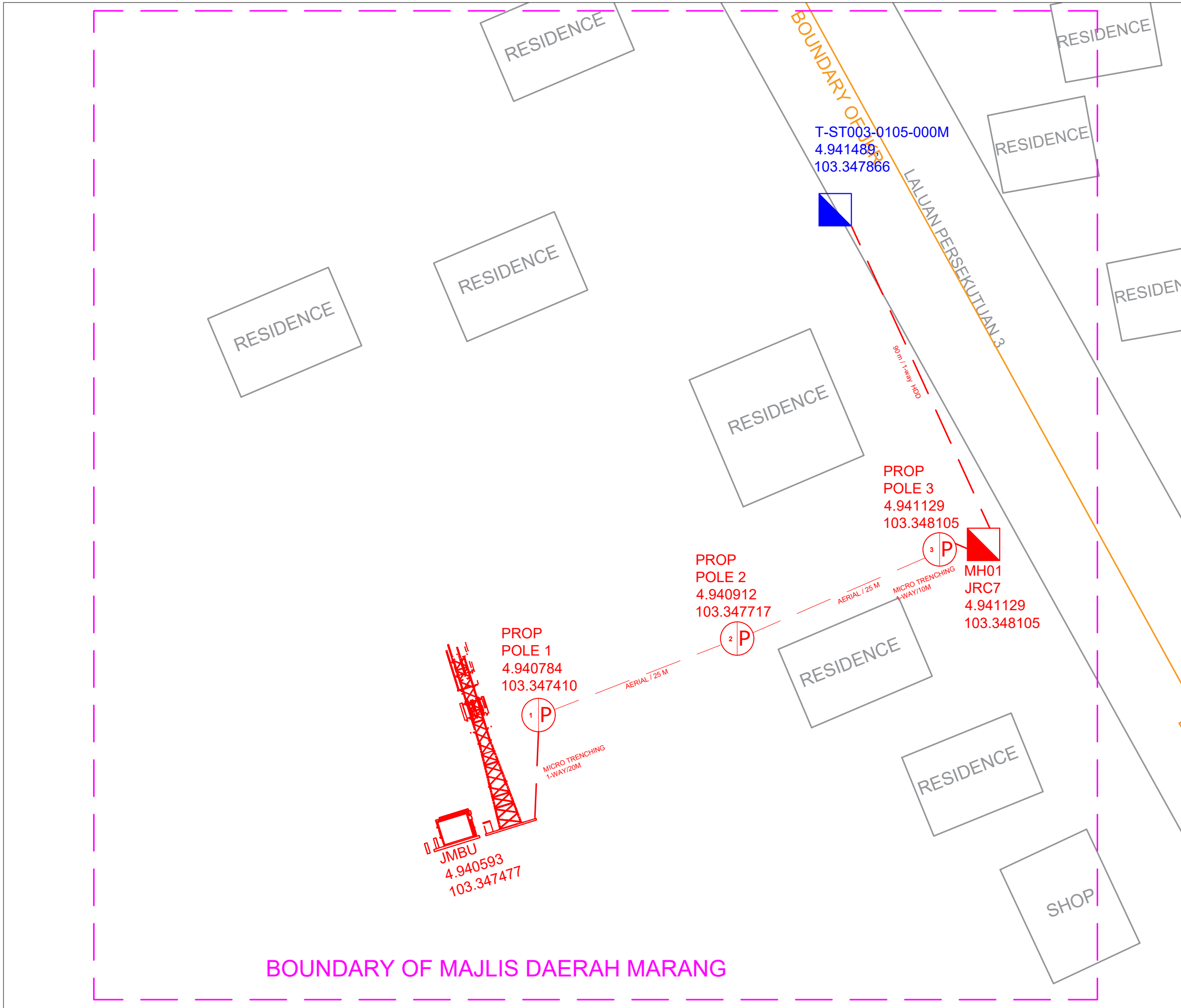


PURNAMA SOLUTION (M) SDN. BHD

Section 6

Cable Infrastructure Route Plan & Proposed Cable Plan





| OSP Schematic Design | |
|--------------------------------------|------------------------------|
| Site Name | T-ST003-0105-000M |
| Project Title | OSP MOBILE |
| DWG ID. | OCK/SLD/001 |
| Revision No. | |
| Date | 4/4/2024 |
| Sheet | 3 / 5 |
| Summary Note | |
| Total HP/PP | |
| Total FDC | |
| Total FDP | |
| Total Propose Joint | |
| Total Propose MH | 1 |
| Total Propose Pole | 2 |
| Total Prop UG Cable (m) | 120 |
| Total Prop OH Cable (m) | 50 |
| Legends | |
| Propose FDC / FDF | |
| Existing FDC / FDF | |
| Propose FDP | |
| Existing FDP | |
| Propose Manhole | |
| Existing Manhole | |
| Propose Pit / Handhole | |
| Existing Pit / Handhole | |
| Propose G.i / Duct Riser | |
| Existing G.i / Duct Riser | |
| Propose Pole | |
| Existing Pole | |
| Existing OF Cable | |
| Propose 144 C OF Cable | |
| Propose 96 C OF Cable | |
| Propose 48 C OF Cable | |
| FDC Boundary | |
| FDP Boundary | |
| Propose Joint / Closure | |
| | PURNAMA SOLUTION (M) SDN BHD |
| Design By | |
| Maxis Broadband Sdn. Bhd. | |
| Checked By | |
| Checked Date | |
| Approved / Rejected By | |
| Approved / Rejected Date | |

BOUNDARY OF MAJLIS DAERAH MARANG

MAXIS BROADBAND SDN BHD.

CABLE CUTTING PLAN

| | | |
|----------------------|---|---|
| PROJECT DETAIL (OSP) | : | |
| PROJECT NAME | : | PROPOSED NEW CABLE FIBRE 144 CORES TO MAXIS SITE "JMBU - T-ST003-0105-000M" |
| PROJECT TYPE | : | |
| TITLE | : | |
| PROJECT CADE | : | |
| CONTRACTOR | : | Purnama Solution (M) Sdn.Bhd. |
| PROJECT MANAGER | : | |
| LOCATION | : | |
| QUANTITY REQUESTED | : | |
| REQUIRED DATE | : | |

| NO | SECTION | | CABLE SIZE | ROUTE DISTANCE (METER) | CABLE ALLOWONES (METER) | ACTUAL CABLE LENGTH | SPLICING/ TERMINATION POINT | REMARKS |
|----|--------------------|----|--------------------|------------------------|-------------------------|---------------------|-----------------------------|---------|
| 1 | JMBU | TO | PROP MAXIS POLE 01 | 144C | 20 | | | |
| 2 | PROP MAXIS POLE 01 | TO | PROP MAXIS POLE 02 | 144C | 25 | | | |
| 3 | PROP MAXIS POLE 02 | TO | PROP MAXIS POLE 03 | 144C | 25 | | | |
| 4 | PROP MAXIS POLE 03 | TO | PROP JRC07/01 | 144C | 10 | | | |
| 5 | PROP JRC07/01 | TO | T-ST003-0105-000M | 144C | 90 | | SPLICING POINT | |



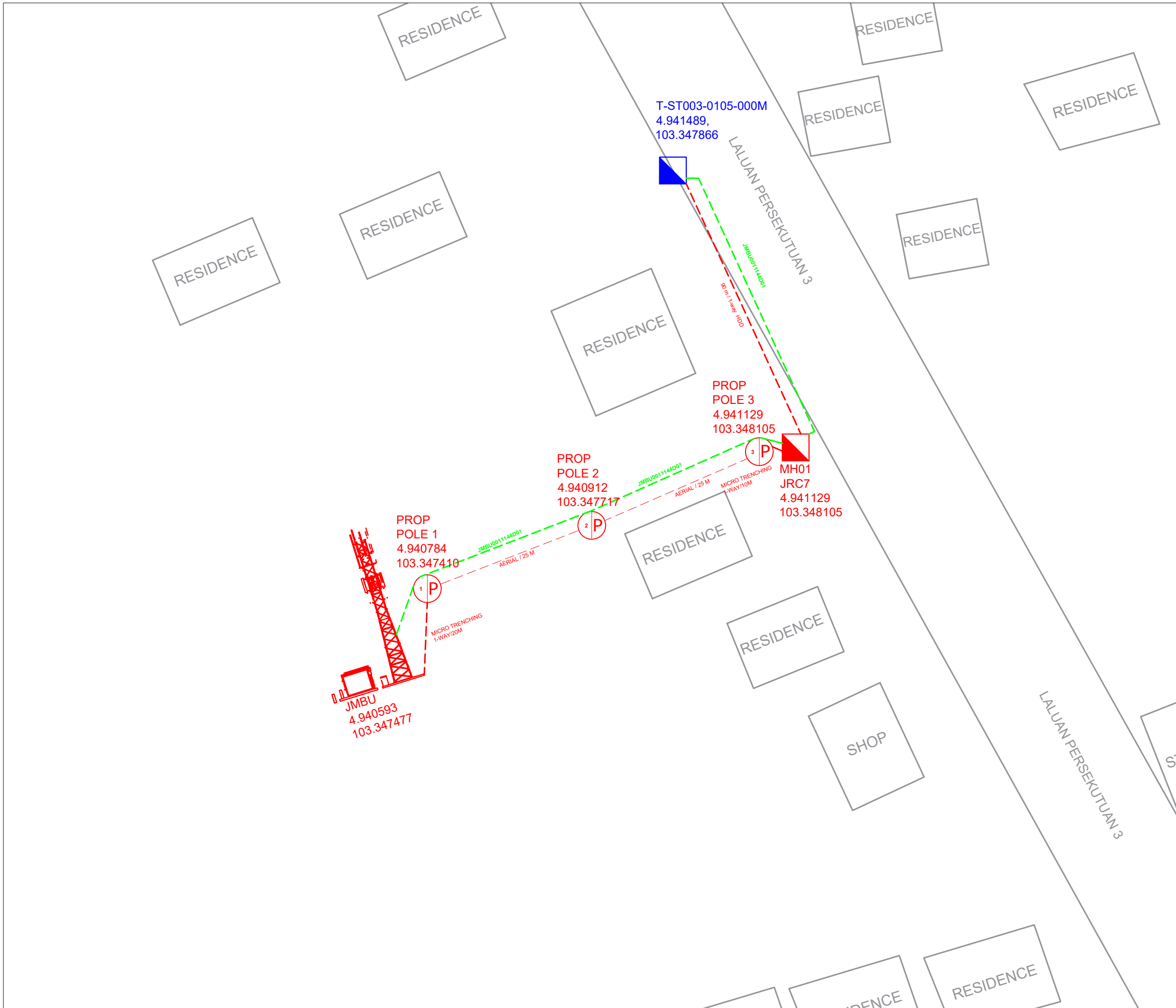
PURNAMA SOLUTION (M) SDN. BHD



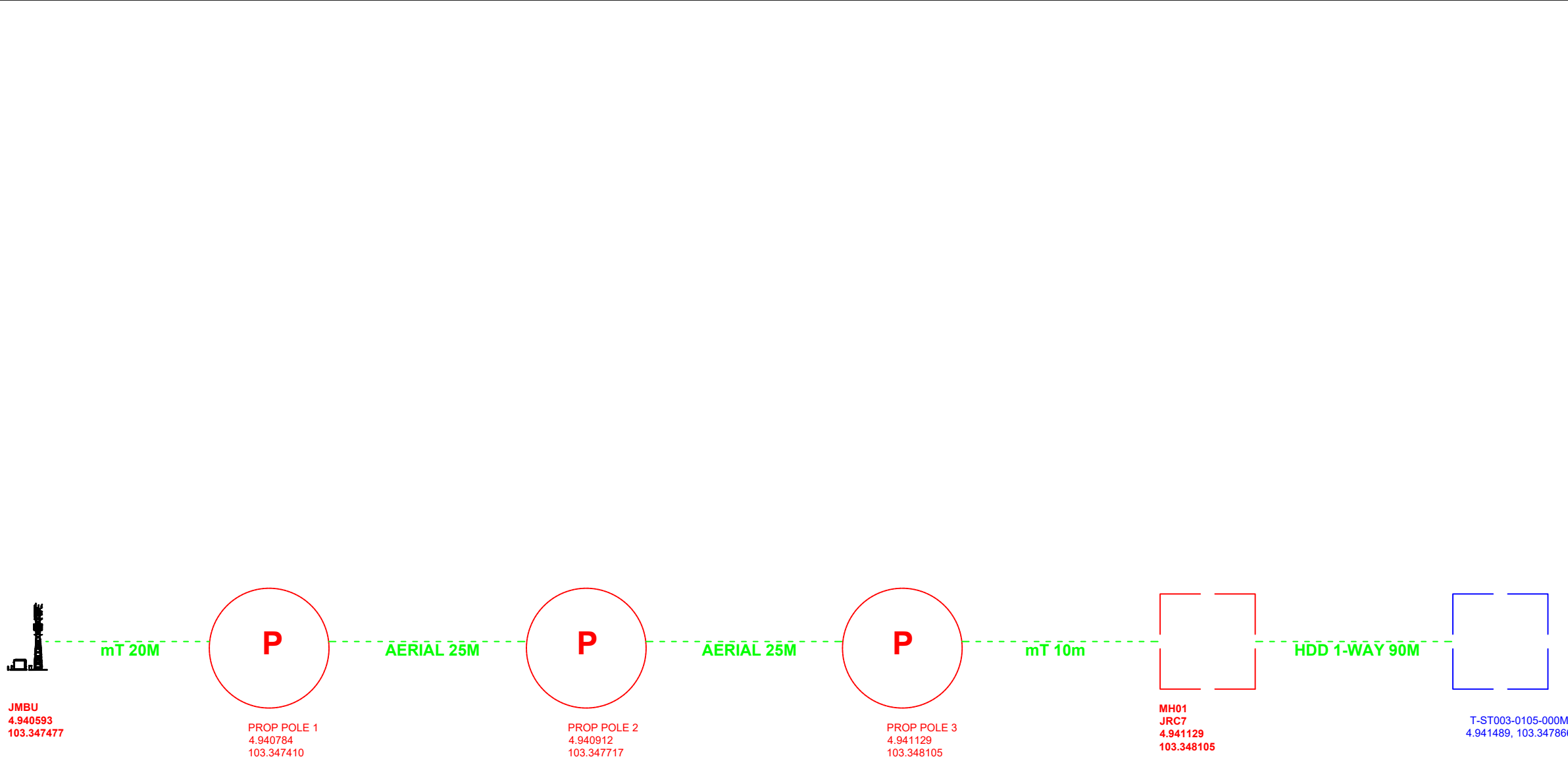
Section 7

Core Assignment Plan





| OSP Schematic Design | |
|--------------------------------------|-------------------|
| Site Name | T-ST003-0105-000M |
| Project Title | OSP MOBILE |
| DWG ID. | OCC/SLD/001 |
| Revision No. | |
| Date | 4/4/2024 |
| Sheet | 4 / 5 |
| Summary Note | |
| Total HP/PP | |
| Total FDC | |
| Total FDP | |
| Total Propose Joint | |
| Total Propose MH | 1 |
| Total Propose Pole | 2 |
| Total Prop UG Cable (m) | 120 |
| Total Prop OH Cable (m) | 50 |
| Legends | |
| Propose FDC / FDF | |
| Existing FDC / FDF | |
| Propose FDP | |
| Existing FDP | |
| Propose Manhole | |
| Existing Manhole | |
| Propose Pit / Handhole | |
| Existing Pit / Handhole | |
| Propose G.i / Duct Riser | |
| Existing G.i / Duct Riser | |
| Propose Pole | |
| Existing Pole | |
| Existing OF Cable | |
| Propose 144 C OF Cable | |
| Propose 96 C OF Cable | |
| Propose 48 C OF Cable | |
| FDC Boundary | |
| FDP Boundary | |
| Propose Joint / Closure | |
| PURNAMA SOLUTION (M) SDN BHD | |
| Design By | |
| Maxis Broadband Sdn. Bhd. | |
| Checked By | |
| Checked Date | |
| Approved / Rejected By | |
| Approved / Rejected Date | |



JMBU
4.940593
103.347477

PROP POLE 1
4.940784
103.347410

PROP POLE 2
4.940912
103.347717

PROP POLE 3
4.941129
103.348105

MH01
JRC7
4.941129
103.348105

T-ST003-0105-000M
4.941489, 103.347866

OSP Schematic Design

| | |
|---------------|-------------------|
| Site Name | T-ST003-0105-000M |
| Project Title | OSP MOBILE |
| DWG ID. | OCK/SLD/001 |
| Revision No. | |
| Date | 4/4/2024 |
| Sheet | 4 / 5 |

Summary Note

| | |
|-------------------------|-----|
| Total HP/PP | |
| Total FDC | |
| Total FDP | |
| Total Propose Joint | |
| Total Propose MH | 1 |
| Total Propose Pole | 2 |
| Total Prop UG Cable (m) | 120 |
| Total Prop OH Cable (m) | 50 |

Legends

| | |
|---------------------------|--|
| Propose FDC / FDF | |
| Existing FDC / FDF | |
| Propose FDP | |
| Existing FDP | |
| Propose Manhole | |
| Existing Manhole | |
| Propose Pit / Handhole | |
| Existing Pit / Handhole | |
| Propose G.i / Duct Riser | |
| Existing G.i / Duct Riser | |
| Propose Pole | |
| Existing Pole | |
| Existing OF Cable | |
| Propose 144 C OF Cable | |
| Propose 96 C OF Cable | |
| Propose 48 C OF Cable | |
| FDC Boundary | |
| FDP Boundary | |
| Propose Joint / Closure | |

PURNAMA SOLUTION
(M) SDN BHD

Design By



Maxis Broadband Sdn. Bhd.

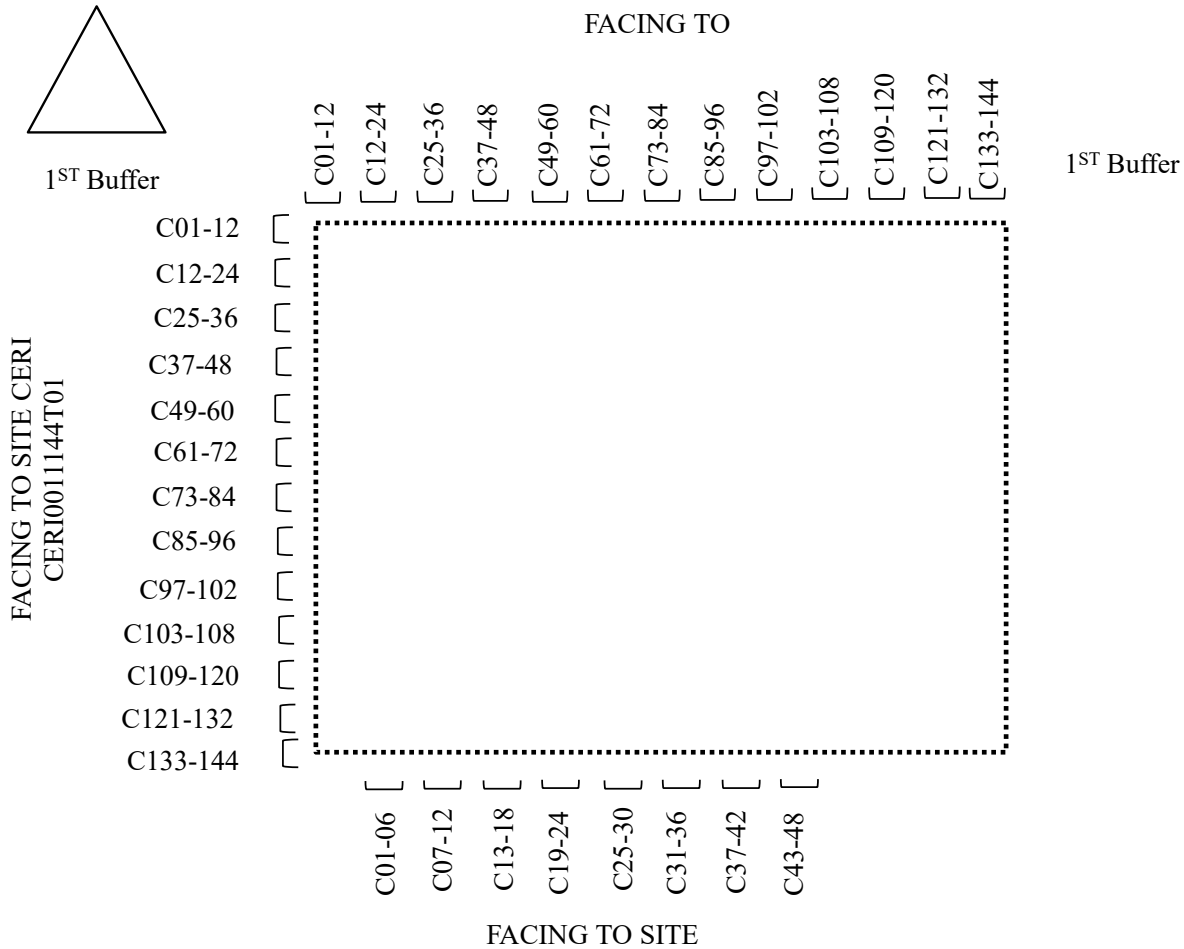
| | |
|--------------------------|--|
| Checked By | |
| Checked Date | |
| Approved / Rejected By | |
| Approved / Rejected Date | |



PURNAMA SOLUTION (M) SDN. BHD



*Legend: *Blue* - existing (black line change to blue), *Red* - Proposed



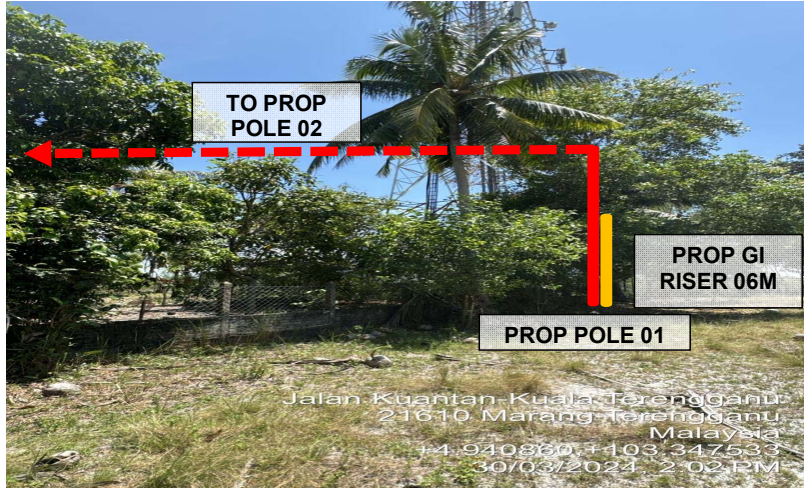
ACTUAL SPLICE CONFIGURATION NEED TO CONFIRM DURING IMPLEMENTATION AND TEAM NEED TO CONFIRM WITH CPC GROUP "INSERT PIC NAME"

LEGEND



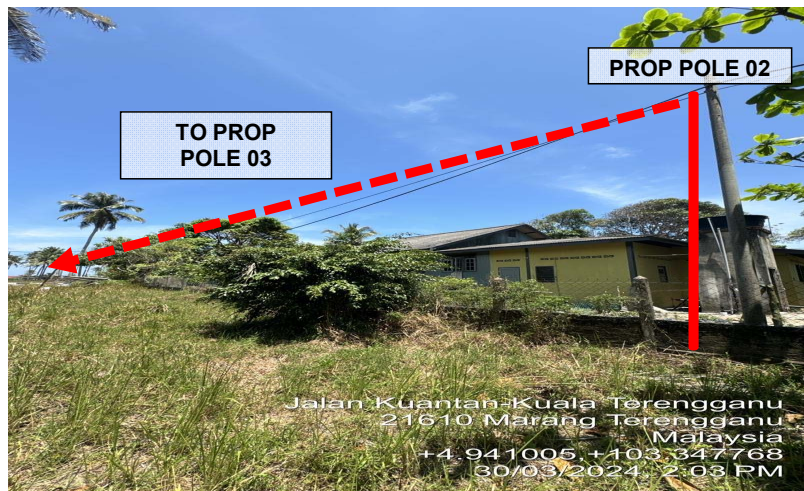
Section 8: Outside Plant Site Snapshot

Photo 1



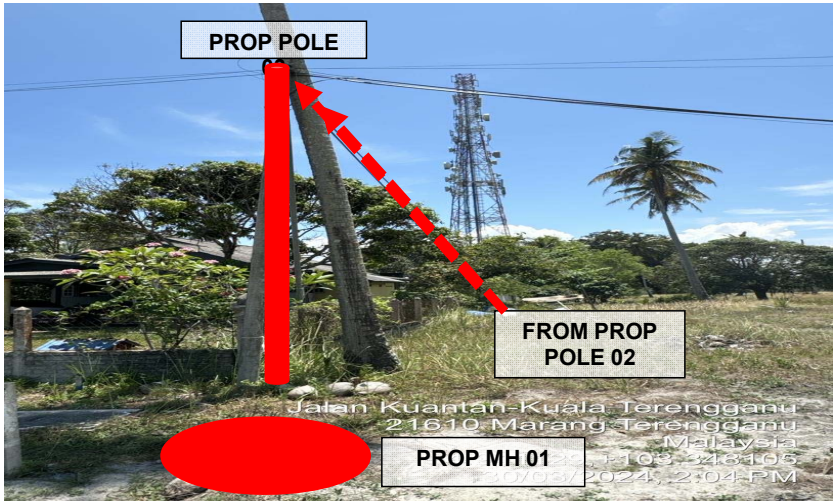
LOCATION AT JALAN MARANG TERENGGANU

Photo 2



LOCATION AT MARANG TERENGGANU

Photo 3



LOCATION AT KUALA TERENGGANU

Photo 4



LOCATION AT KUALA TERENGGANU

Photo 5



LOCATION AT KUALA TERENGGANU



PURNAMA SOLUTION (M) SDN. BHD



Section 9: Cabin Snapshot & Floor Plan Schematic Plan

Photo 1



LOCATION AT "JMBU"



LOCATION AT "JMBU"



LOCATION AT "JMBU"