



**TECHNICAL PROPOSAL FOR CONSTRUCTION AND IMPLEMENTATION OF CIVIL
INFRASTRUCTURE, FIBER OPTIC CABLING SYSTEM AND ALL ASSOCIATED WORKS
FOR THE FOLLOWING PACKAGES
NL05C : KM268.28 – KM275.3 (JKR)**

POLARIS 3

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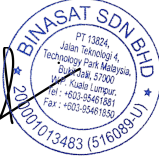




CONTRACTOR		MSAR
Prepared by:	Verified by:	Approved by:
 	 	 
Name: Nur Fatima Yusran	Name: Asmahadi Tahir	Name: Nazif Yusoff
Date: 11.05.2026	Date: 11.05.2026	Date: 12/5/26

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1.0 OBJECTIVES

The objective of the proposed KM268.28 - KM275.3, North-South Expressway(NSE) Northern Route is to establish a reliable and efficient permanent pathway that ensures the continuity of essential operations, enhances network stability, and supports long-term project goals. The route is planned to maintain safety, accessibility, and performance efficiency, while accommodating future expansion and operational requirements. This proposed alignment connects from **KM268.28, Ipoh** to the **KM275.3, Jelapang** forming a strategic link within the overall POLARIS 3 infrastructure network.

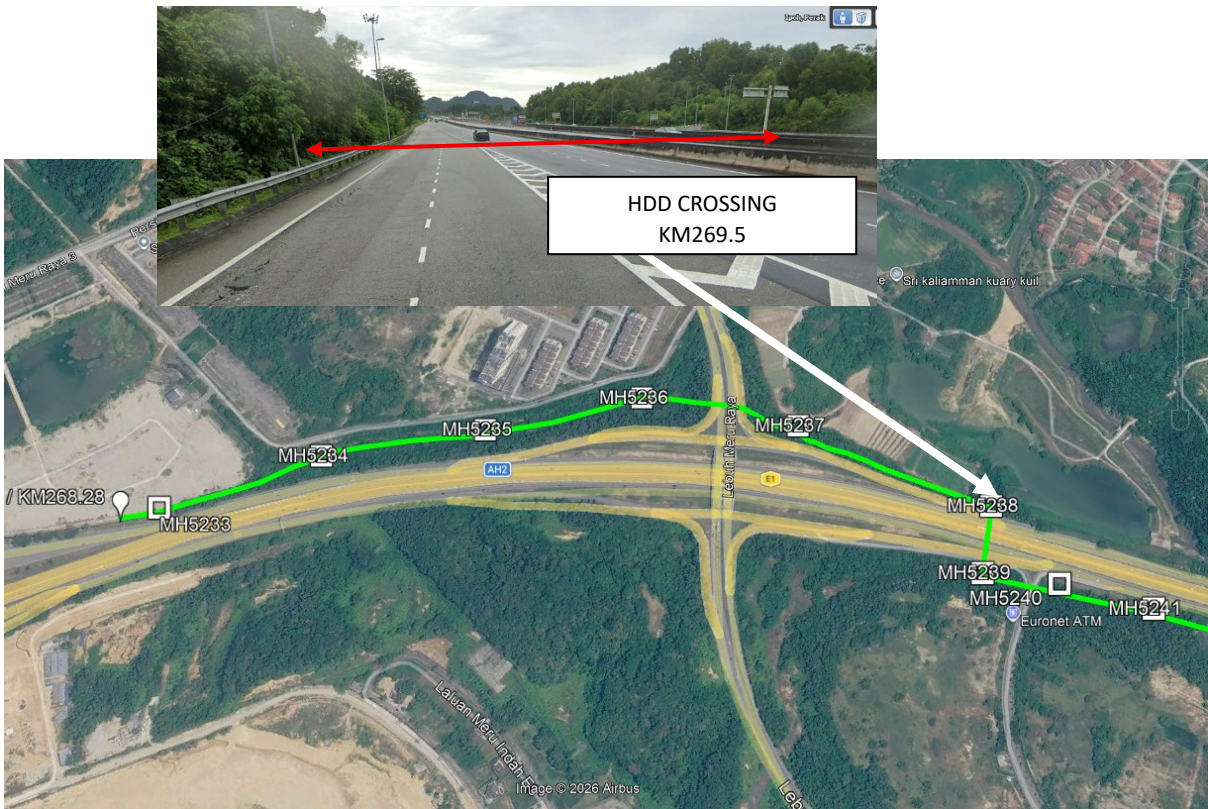
2.0 LOCATIONS / SITE INFORMATION

Details of Site Information as per below:

Package	Start	End	Total Distance (m)
NL05C	KM268.28 (4.661099°,101.082600°)	KM275.3 (4.618341°,101.121232°)	7625

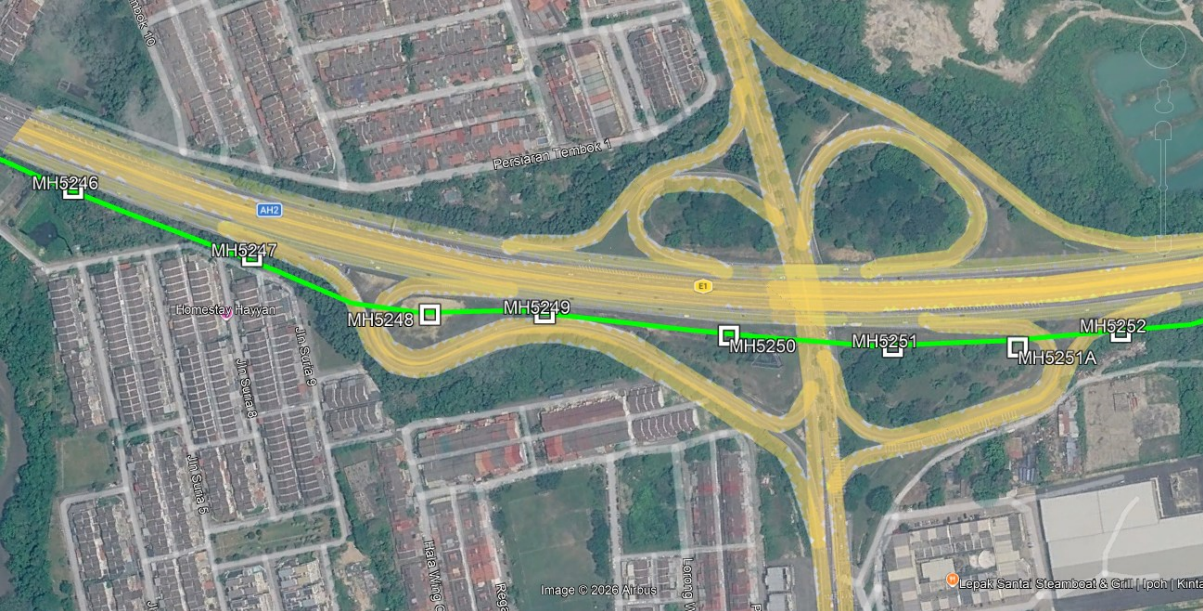
3.0 FIBER OPTIC INFRASTRUCTURE COVERAGE DEVELOPMENT PLAN

NL05C : KM268.28 – KM275.3 (JKR PORTION – 7625m)





HDD CROSSING SG. PARI
200M





HDD CROSSING KTM FIBERAIL (KM272.7)
200M



HDD CROSSING SG.KINTA (KM273.3)
240M







4.0 Proposed Method

PACKAGE	METHOD	DISTANCE / UNIT	TOTAL DISTANCE	REMARKS
NLO 5C	CONCRETE ENCASED - EXPOSED	559	7625	
	CONCRETE ENCASED - BURIED	0		
	HDD	6866		
	OPEN TRENCH - MACHINE	200		
	OPEN TRENCH - MANUAL	0		
	BRIDGE ATTACHMENT - UNDER BRIDGE	0		
	BRIDGE ATTACHMENT - SIDE BRIDGE	0		
	PERPENDICULAR CROSSING HIGHWAY	0		
	MANHOLE & MARKER POST	38		
	FEDB	0		

5.0 FRAME AGREEMENT FOR THE SURVEY, DESIGN AND IMPLEMENTATION OF CIVIL INFRASTRUCTURE, FIBER OPTIC CABLING SYTEM AND ALL RELATED WORKS (FOR HIGHWAY PROJECT)



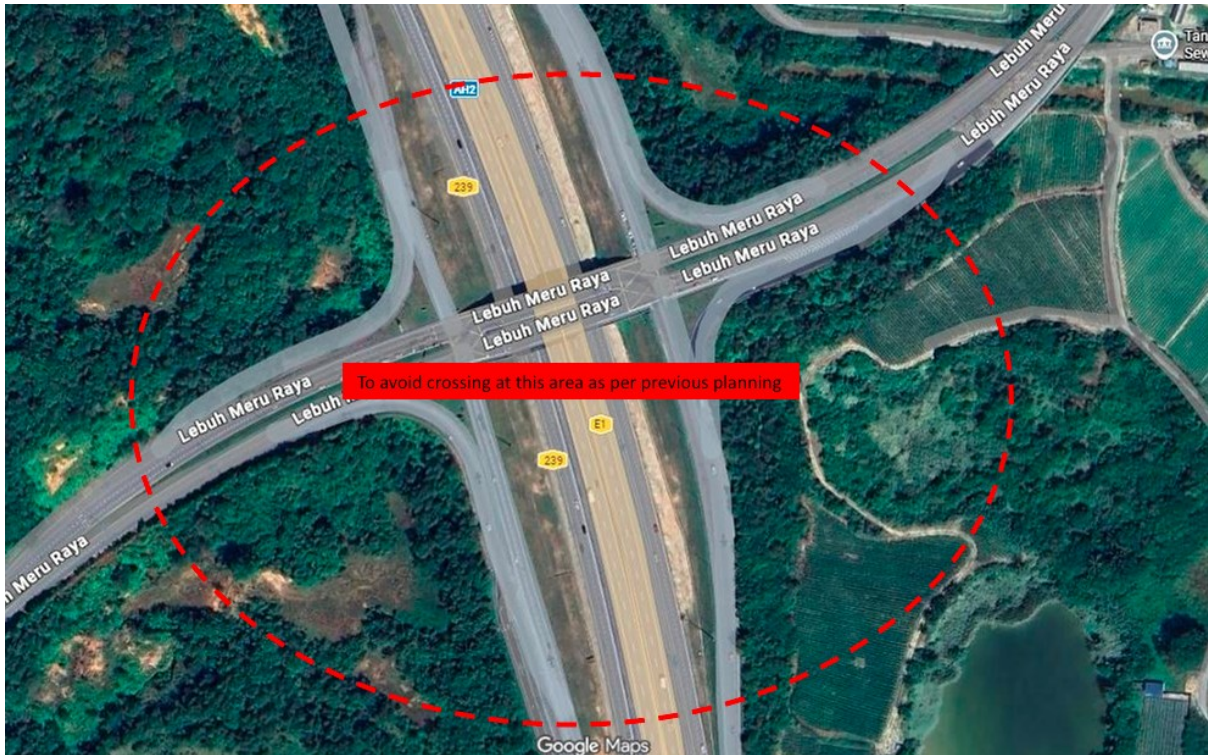


5.0 HICCUPS TO RESOLVE

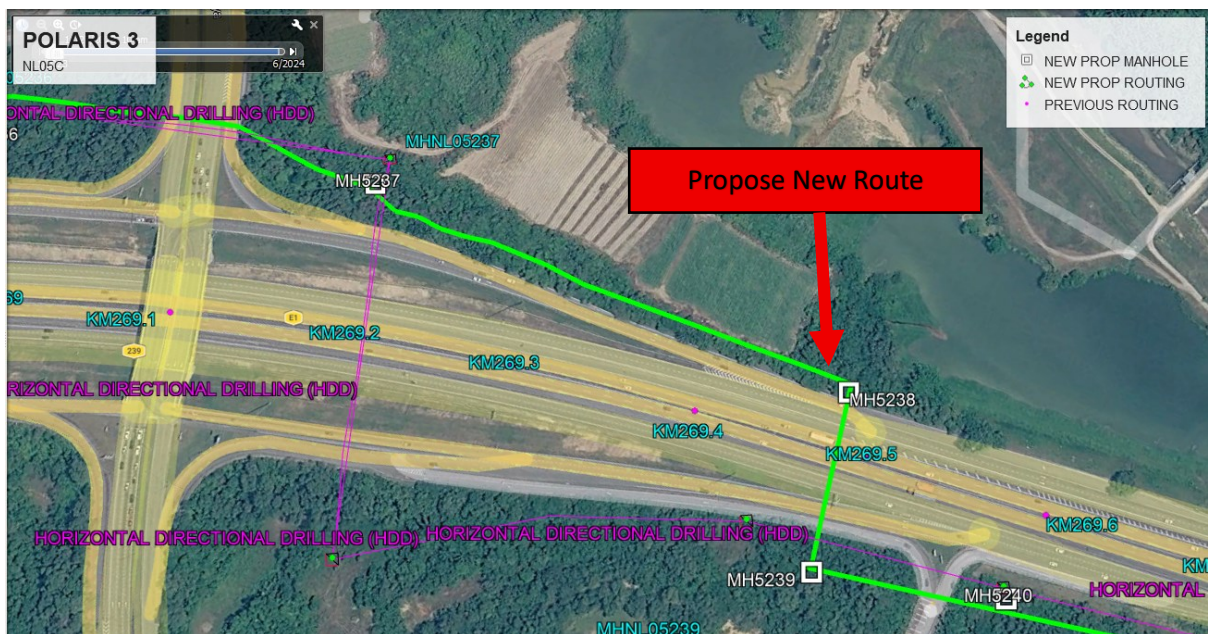
	Description	KM	Remarks
1	HDD interchange	KM269.2 to KM269.5	Change HDD road crossing
2	Crossing Interchange	KM270.7 to KM271.1	Change crossing route onsite
3	NL05C, Crossing Ktm, Kilang Simen Tasek	KM272.8	Permitting issue with KTM
4	To avoid crossing road onsite	KM274.8	To do same alignment as previous way
5	To remain Northbound route	KM275-KM275.3	To do same alignment as previous way
6	NL05C, PERMITTING JKR 7.625KM	KM268.28 - KM275.0	Permit didn't get yet

1) Propose to change crossing HDD from KM269.1 to KM268.3

a) Previous Route



b) New Route



2) Propose to change route of crossing HDD from KM270.7 to KM271.1

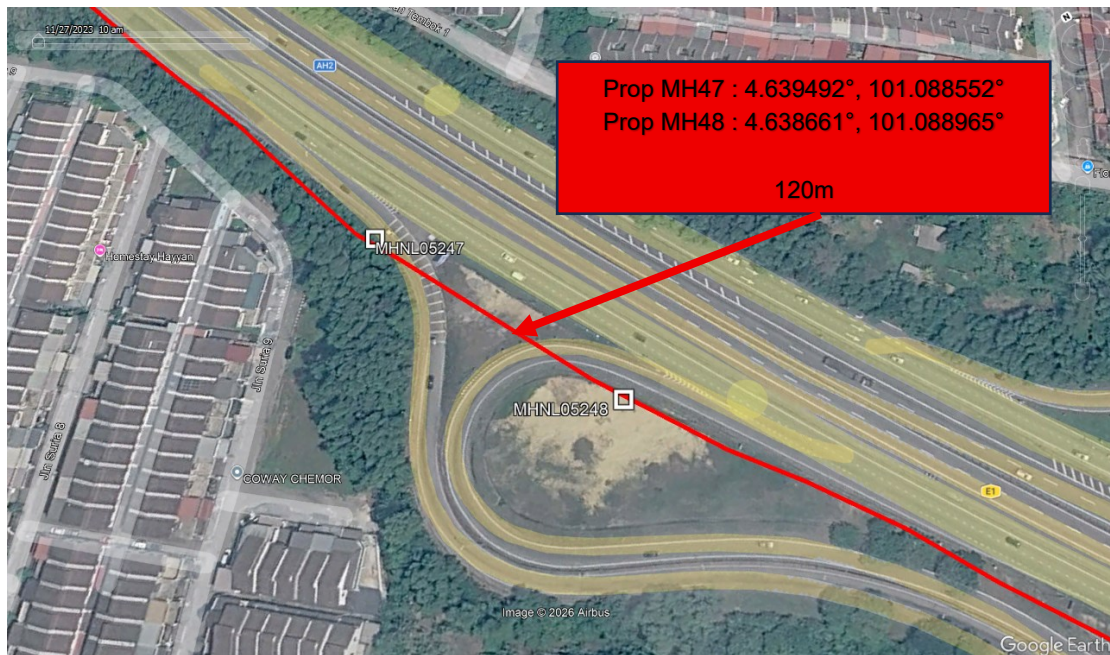
a) Previous Route



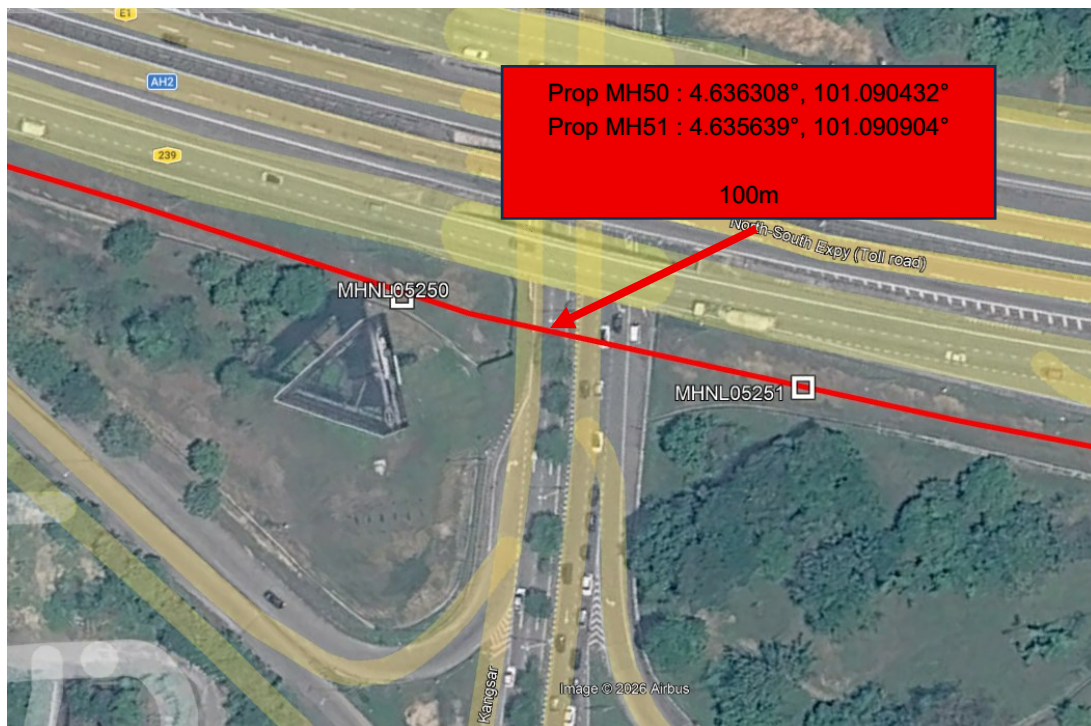
b) New Route



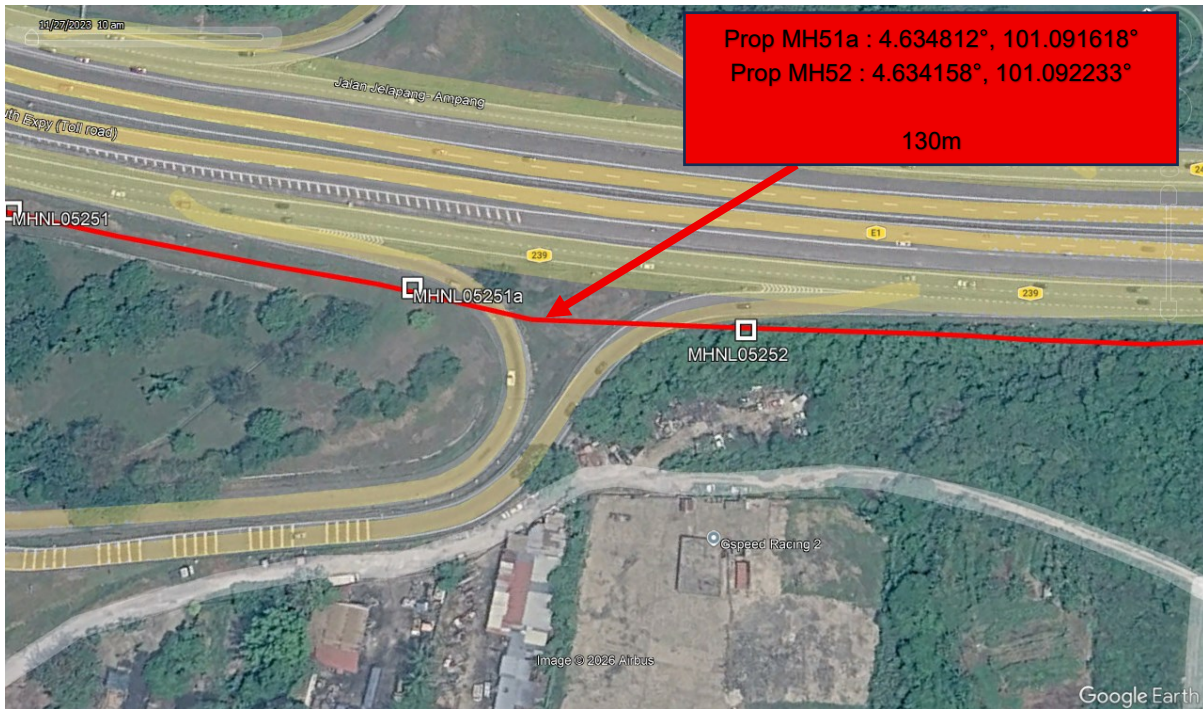
(a) 1st road crossing



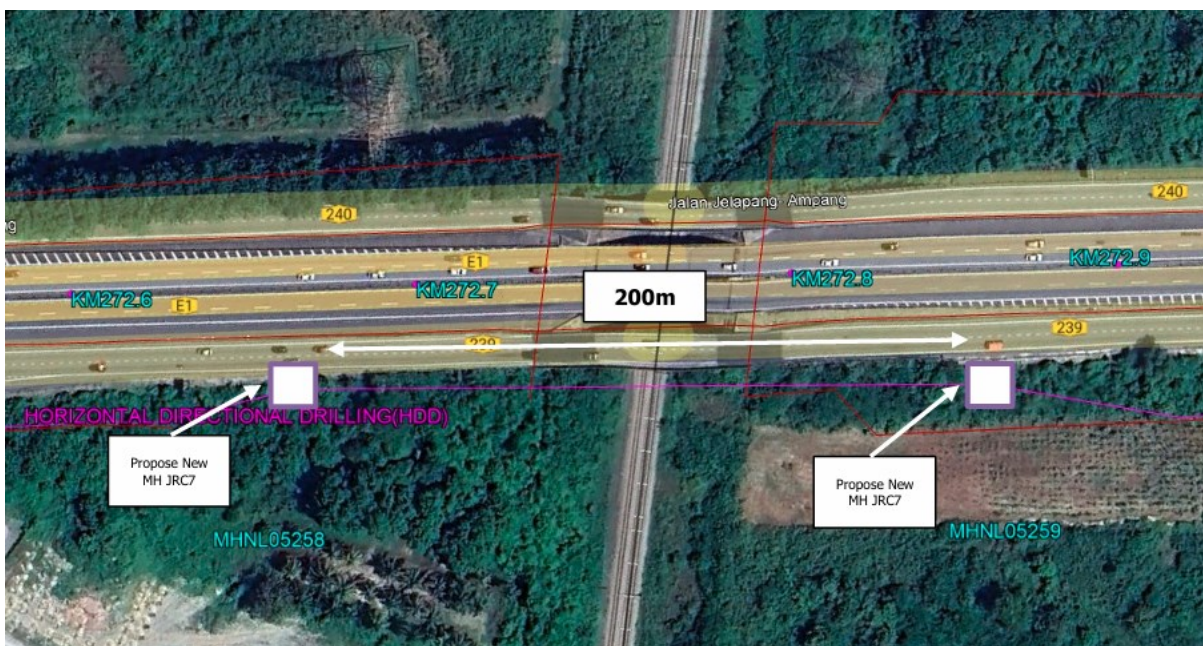
(b) 2nd road crossing



(c) 3rd road crossing

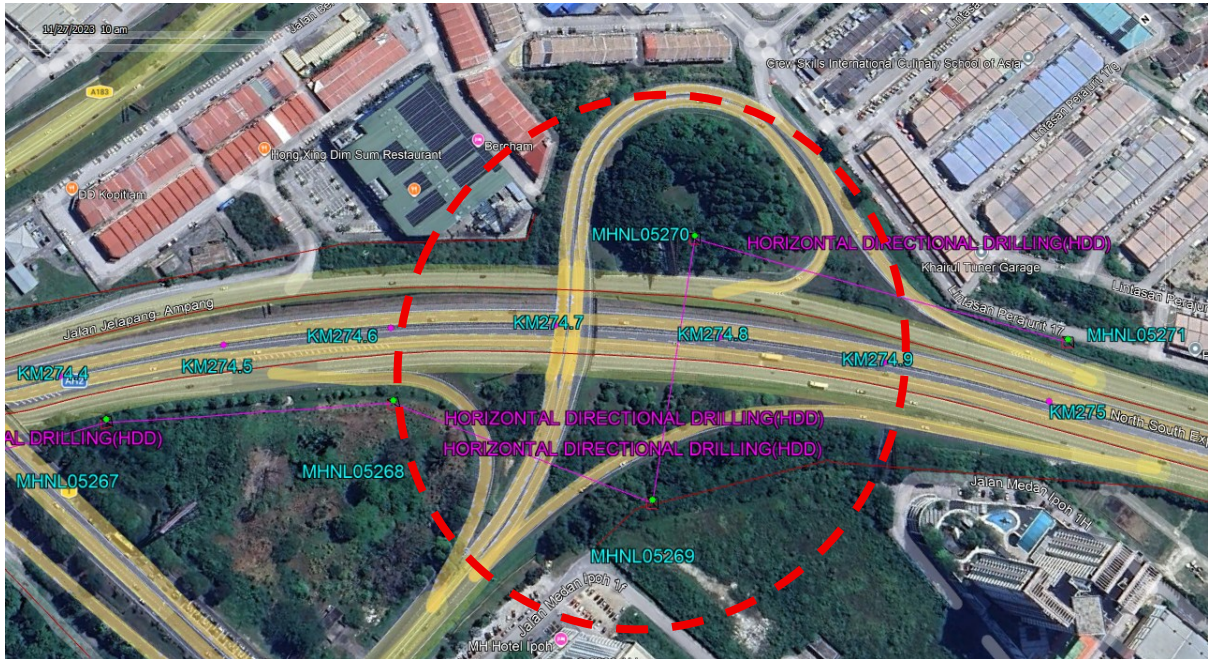


3) Crossing KTM Kilang Simen Tasek

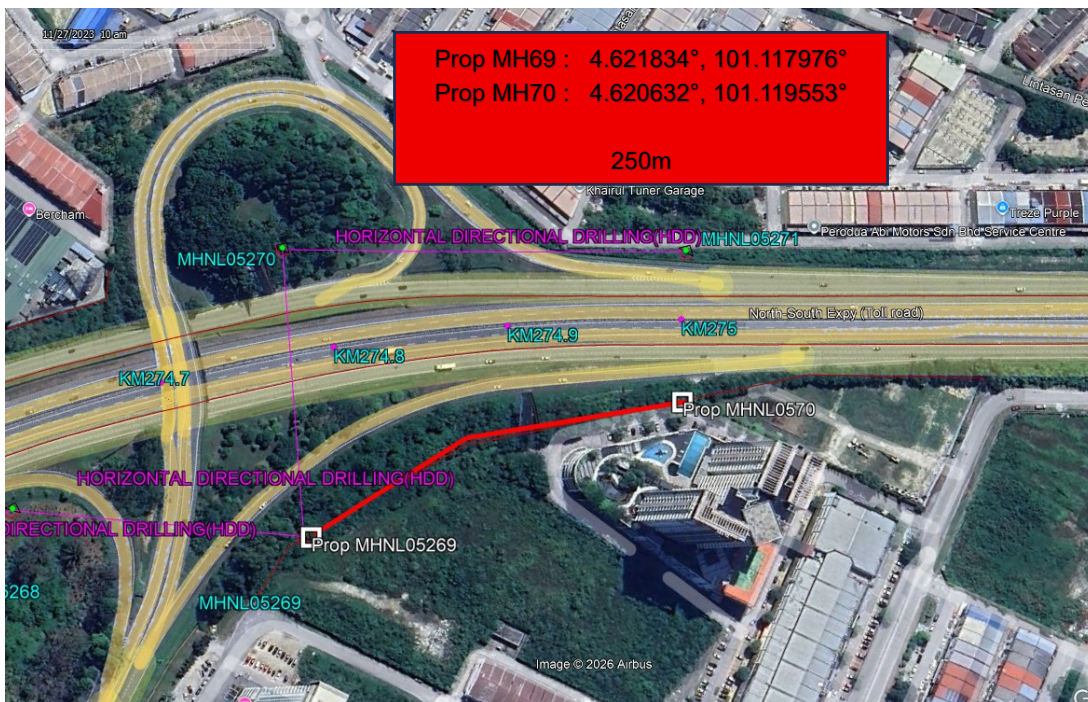


4) To avoid doing crossing at KM274.8

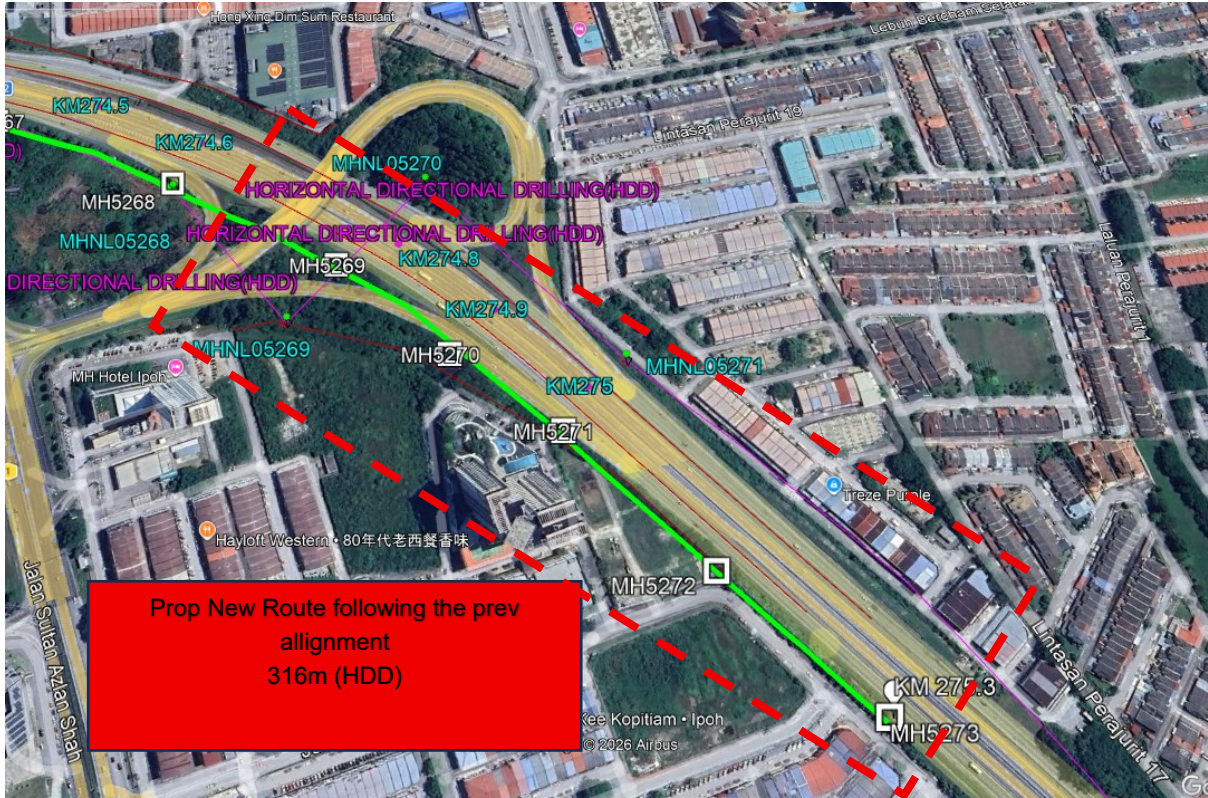
(a) Previous Route



(b) New Route



5) To remain route unchanged following the previous way (Northbound KM275-KM275.3)



6.0 SURVEY REFERENCES

- i. List local council and local authority

	Local Council / Authority	Remark
1	KTMB / FIBERAIL	
2	JKR Ipoh	