JOURNEY RISK MANAGEMENT (JRM) STUDY

Salem Terminal TO COCO BHAVANI BKLOA UNIT II

Objective of the JRM Report

This JRM report is designed to ensure compliance with the Central Motor Vehicle Rules, 1989 (CMVR), AIS 140 standards, and the Road Transport Safety Policy (RTSP). It provides a comprehensive risk assessment for the transportation of hazardous materials along specified routes. By integrating these legal frameworks, the report offers a broad strategy for identifying and mitigating route-specific risks.

Regulatory Compliance

The report complies with the Central Motor Vehicles (Eleventh Amendment) Rules, 2022, mandating safe transportation practices for N2 and N3 category vehicles carrying hazardous materials. These rules require detailed route assessments, especially regarding road conditions, speed limits, and risk areas, to ensure safety compliance.

Risk Management Strategy

This report categorizes transportation routes into high-risk and medium-risk areas, with a focus on factors such as sharp turns, accident-prone regions, and elevation changes. The goal is to provide actionable

recommendations to minimize these risks, including speed regulations, driver warnings for hazardous zones, and the option of alternate routes.

Compliance with the Road Transport Safety Policy (RTSP)

The report integrates RTSP provisions, including mandatory driving hours, rest periods, and nighttime driving restrictions. It ensures that drivers follow official guidelines, such as taking prescribed rest breaks and avoiding dangerous road conditions like poor visibility, heavy crowds, or high-traffic areas during peak hours.

Emergency Preparedness and Response

The report highlights the significance of predetermined emergency stops for refueling, rest, and overnight stays. It includes protocols for safe responses to road hazards, alternative routes, and rerouting processes if roads are closed or severe weather arises. This aligns with the RTSP emphasis on driver safety and rapid emergency response.

Environmental Considerations

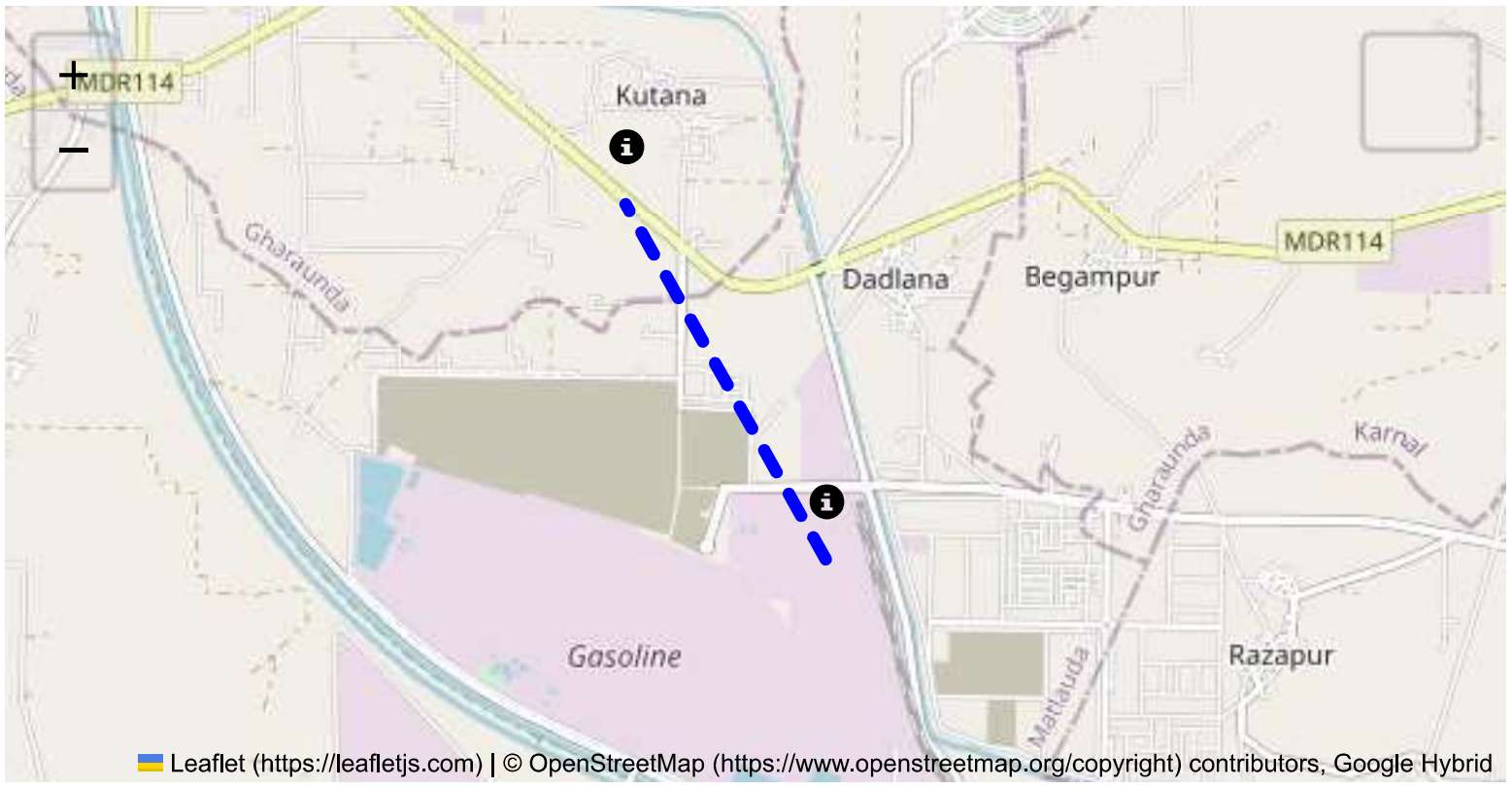
The JRM report addresses environmental risks along the route, ensuring compliance with environmental protection laws in ecologically sensitive zones. It suggests strategies such as identifying areas near water bodies, forests, or populated regions and implementing safety measures to minimize environmental impacts during transport.

Journey Risk Mitigation

The report includes route-specific risk assessments, detailed journey charts, and defensive driving guidelines for each transport route. Integration with vehicle tracking systems guarantees real-time warnings on hazardous areas, speed limits, and mandatory stops, consistent with RTSP and CMVR safety norms.

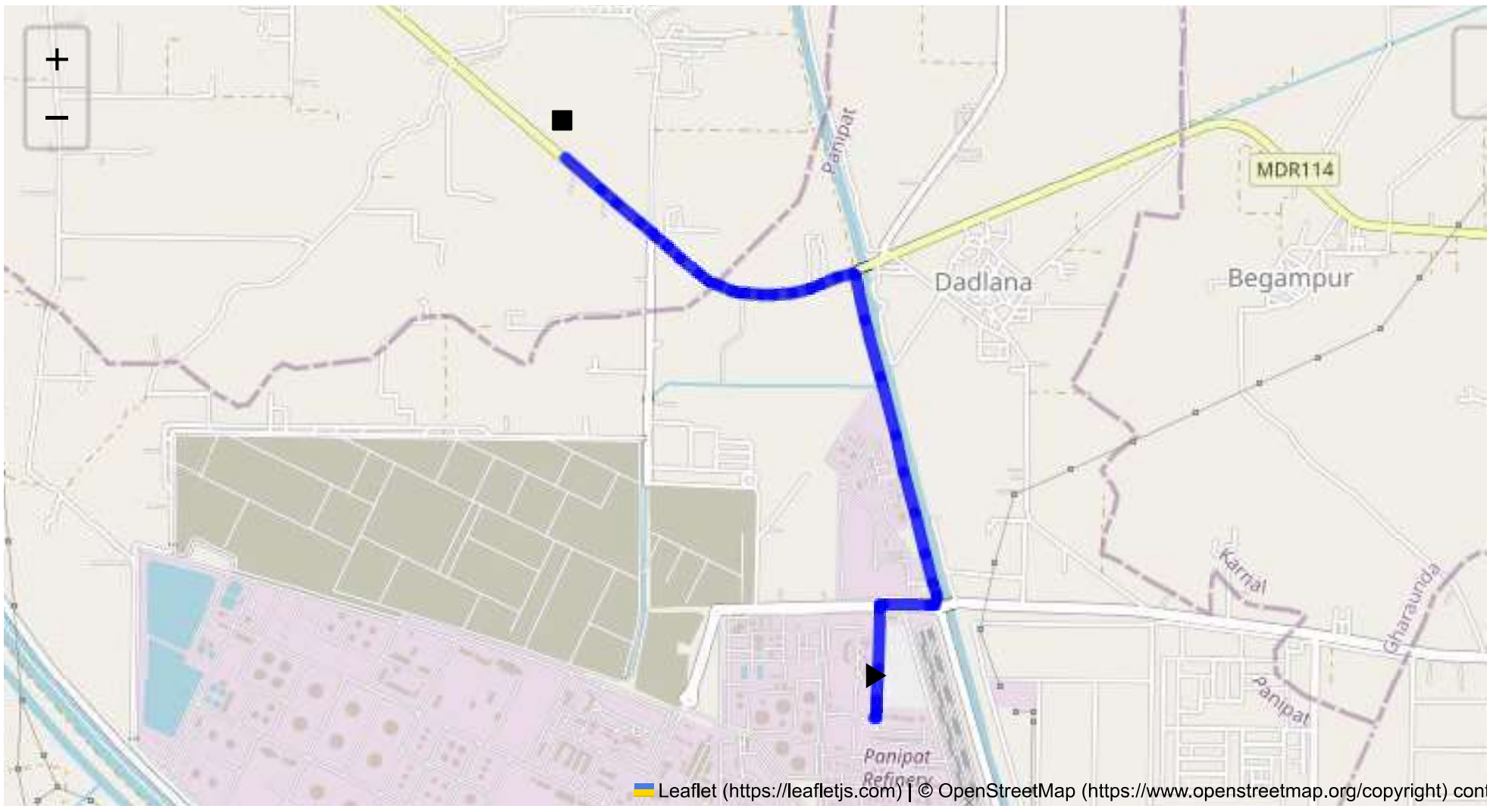
Compliance with Government Directives

This report fully adheres to governmental directives regarding hazardous material transportation, implementing mandatory speed limits, nighttime driving restrictions, and comprehensive driver briefings and real-time alerts about route-related risks.



Route Summary:

Total Distance: 3.63 km
Estimated Duration: 0.1 hours
Adjusted Duration (Heavy Vehicle): 0.2 hours
Start: (29.4764, 76.8895)
End: (29.497643, 76.875729)



Risk Spots

	RiskSpotType	Coordinates	Speed Limit	Distance from Start
4	Descent	29.47668, 76.88963	15 KM/Hr	0.04 km
5	Ascent	29.48062, 76.88982	15 KM/Hr	0.35 km
0	Roundabout	29.48076, 76.89217	15 KM/Hr	0.71 km

	RiskSpotType	Coordinates	Speed Limit	Distance from Start
8	Descent	29.48564, 76.89091	15 KM/Hr	1.22 km
3	Turn	29.49351, 76.88856	15 KM/Hr	2.18 km
9	Ascent	29.49264, 76.88521	15 KM/Hr	2.50 km

Emergency Services

No emergency services found along the route.

Rest Stops

No rest stops found along the route.

Welcome to the Journey Risk Management Study

1. Overview of the Route Map

The route from FVGR+H65, Dadlana to FVXG+28X, Asandh Rd, Kutana, in Haryana, India, extends approximately 3.63 kilometers. This short route primarily involves local roads that connect the village areas of Dadlana and Kutana. The journey typically takes about 8 to 10 minutes under average driving conditions for heavy vehicles.

2. Typical Weather Conditions and Potential Weather-Related Hazards

- **Weather Patterns**: The typical weather in this region features hot summers, with temperatures frequently exceeding 40°C, and cool winters, where temperatures can drop to around 5-10°C.
- **Monsoon Season**: During the monsoon season (July to September), heavy rainfall can occur, leading to waterlogged roads and reduced visibility.
- **Potential Hazards**: The primary weather-related hazards include fog in winter and waterlogging during monsoon, impacting visibility and traction.

3. Traffic Patterns

- **Peak Hours and Congestion-Prone Areas**:
  - Traffic is generally moderate but can experience local congestion during school start and end times, and around local market areas.
  - Morning (8-10 AM) and evening (5-7 PM) times coincide with local commuting, increasing traffic volumes.

4. Assessment of Road Quality and Infrastructure

- **Road Condition**: The roads are generally in moderate condition with some narrow areas. Potholes and uneven surfaces can be encountered, especially after the monsoon season.
- **Infrastructure**: Lack of designated truck lanes or modern road infrastructure implies reduced maneuverability for large vehicles.

5. Suggestions for Alternative Routes for Emergencies

- **Alternative Route**: In cases of roadblock or difficulty, consider taking the regional connecting paths through adjacent villages which roads often parallel this main route but might involve longer detours.

6. Summary of Local Regulations Affecting Hazardous Material Transport

- **Local Regulations**: Transporting hazardous materials typically involves restrictions, such as prohibition during school hours and at night. Permits are required for vehicles carrying hazardous cargo.

7. Overview of Historical Incidents Involving Heavy Vehicles or Hazardous Materials

- **Historical Incidents**: There have been instances of road accidents involving heavy vehicles in the region, often attributed to poor visibility and road conditions but no major recorded hazardous material incidents in recent years.

8. Environmental Considerations and Sensitive Areas

- **Sensitive Areas**: Proximity to residential zones and local schools requires cautious driving. Ensure that materials are sealed and secure to prevent any air or soil contamination.

9. Analysis of Communication Coverage

- **Communication Coverage**: Cellular network coverage is generally stable in this region, but minor dead zones can occur, particularly in more rural segments of the route.

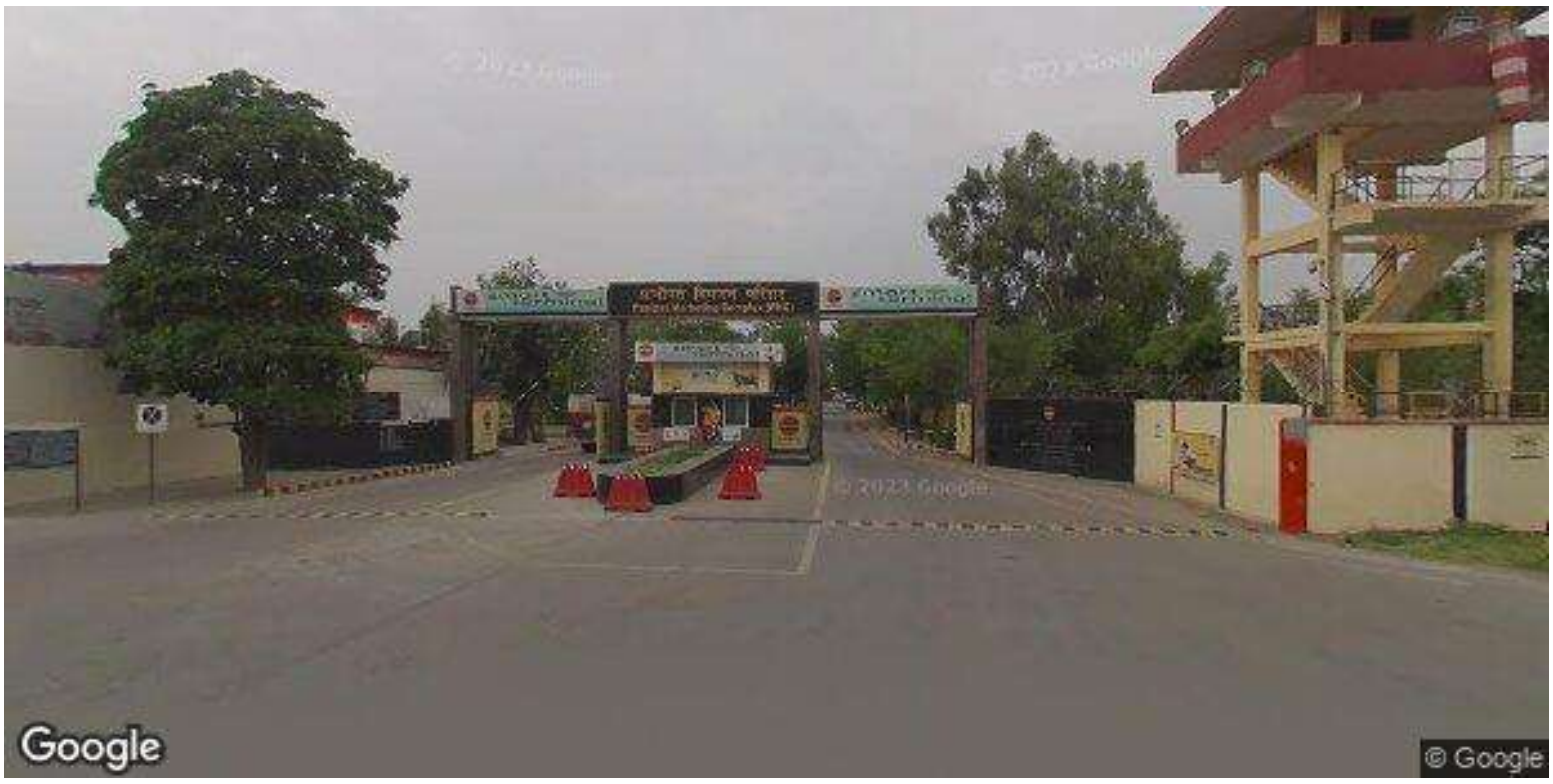
10. Estimated Emergency Response Times for Different Route Segments

- **Emergency Response**: Estimated emergency response times range from 15 to 30 minutes, depending on the proximity to local healthcare facilities and police stations.

12. Overall Summary of Risk Assessment

The route from FVGR+H65, Dadlana to FVXG+28X, Asandh Rd, Kutana, while short, presents several potential hazards mostly related to weather and road conditions. Key risks include adverse weather impacts, such as fog and waterlogging, alongside infrastructure that may not fully accommodate heavy vehicles. Traffic can be moderate to high during peak hours, influenced mainly by local commuting. Transport regulations and environmental sensitivities must be adhered to, especially when conveying hazardous materials. Emergency response in this rural setting is limited but generally reasonable. Overall, caution is advisable, particularly under adverse weather conditions and when traversing residential zones.

Route Photos of Risky Spots

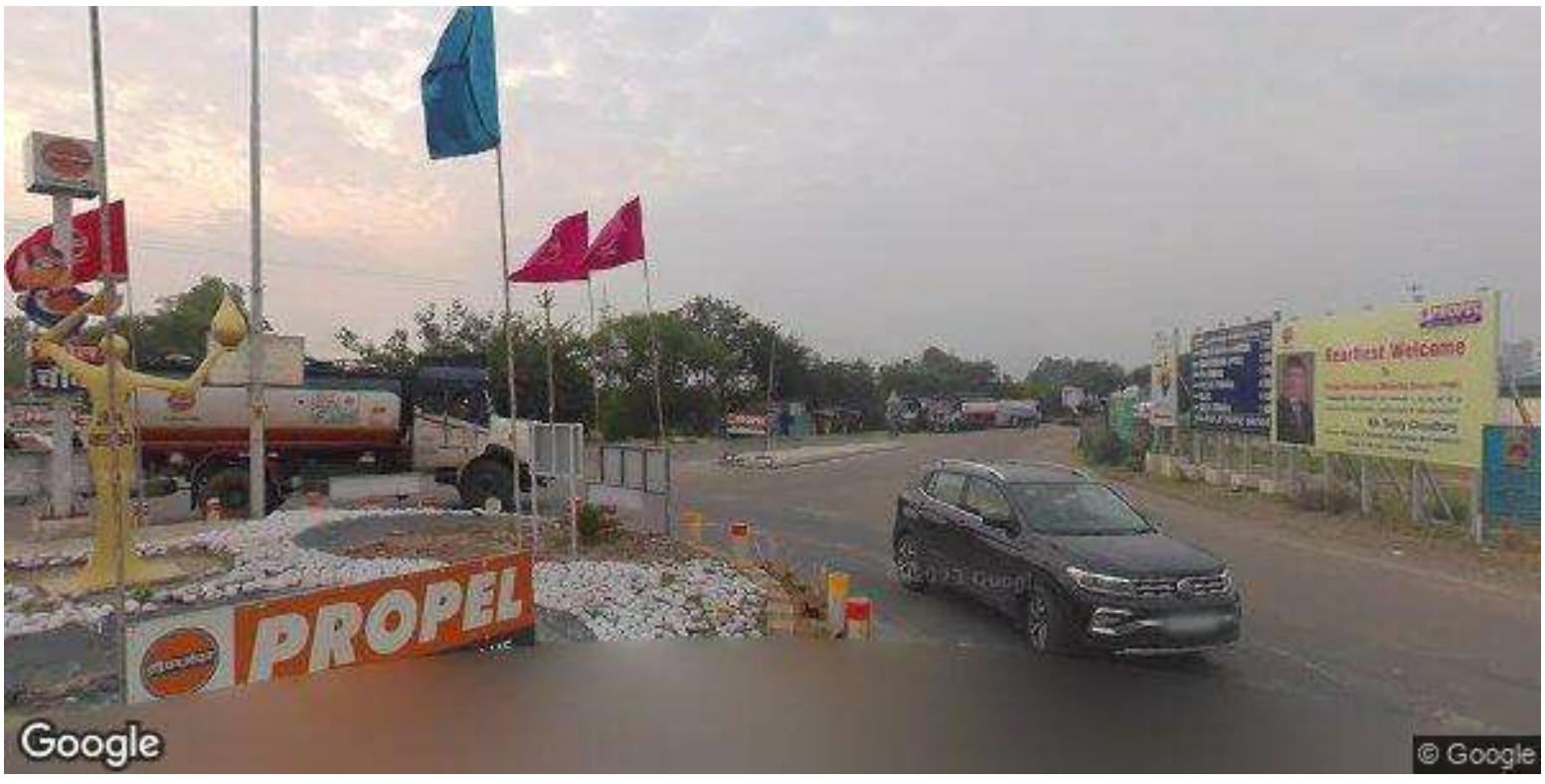


Risk Type: Ascent

Speed Limit: 15 KM/Hr

Distance from Start: 0.35 km

Coordinates: 29.48062, 76.88982

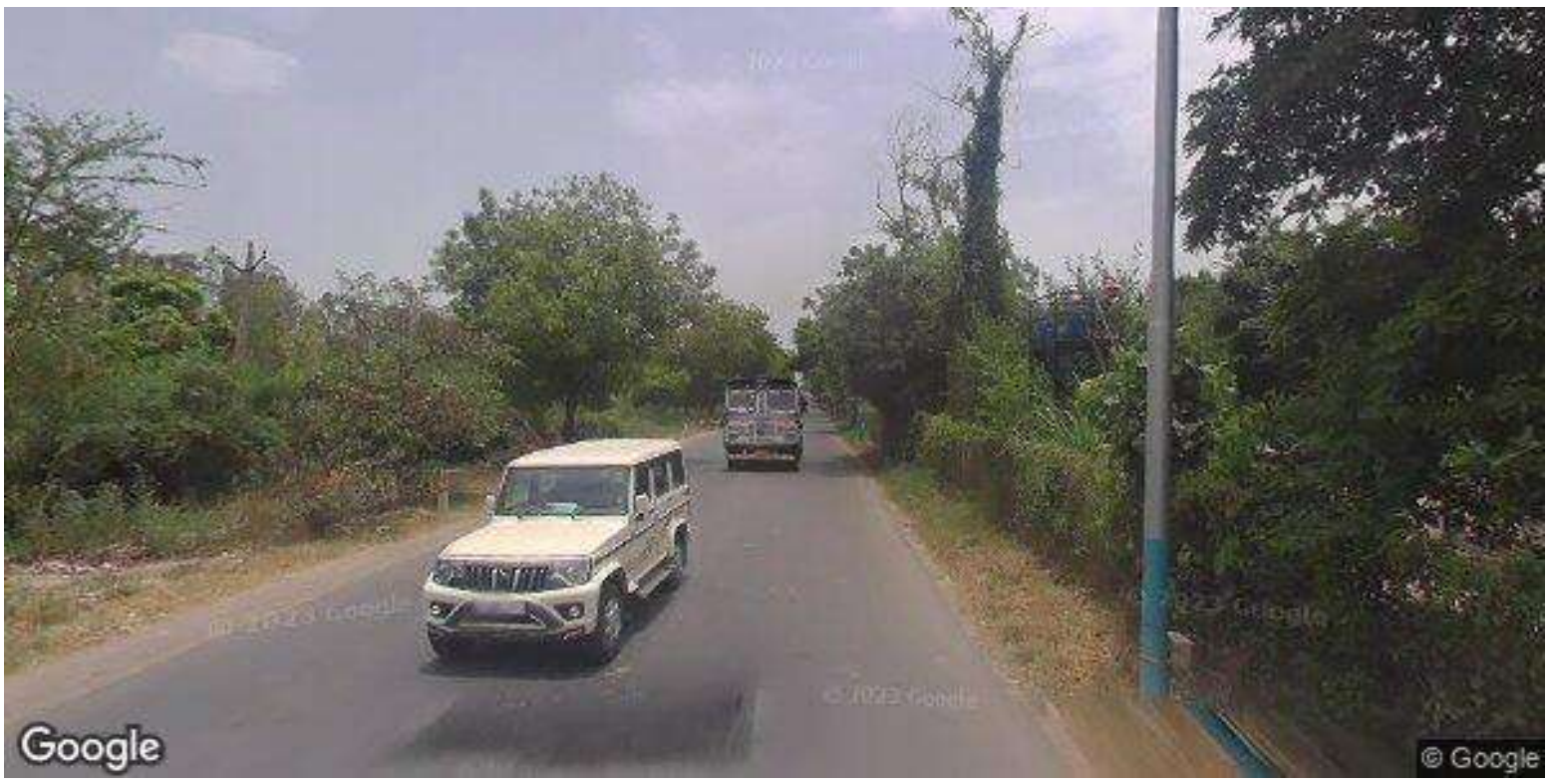


Risk Type: Roundabout

Speed Limit: 15 KM/Hr

Distance from Start: 0.71 km

Coordinates: 29.48076, 76.89217

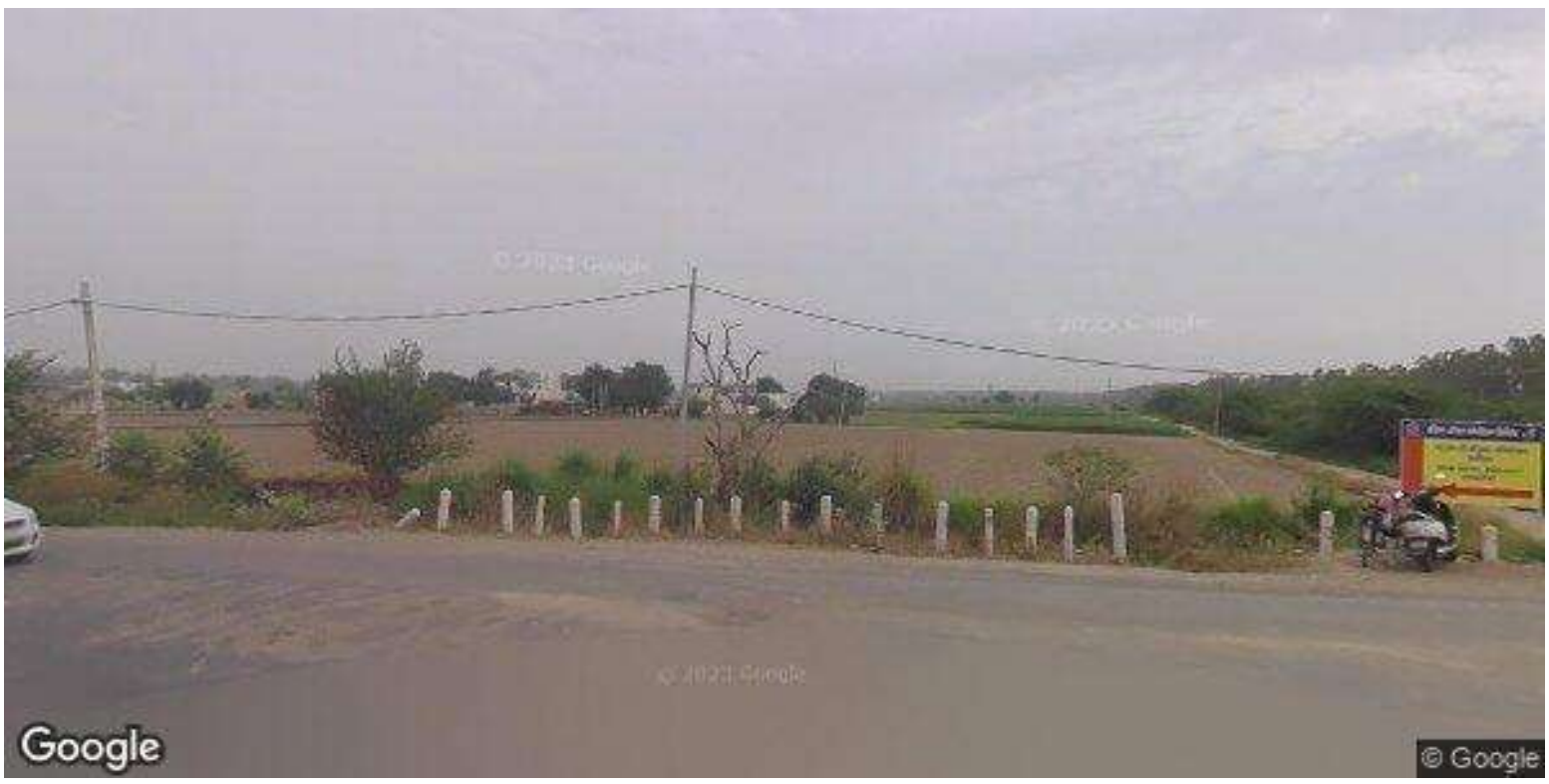


Risk Type: Descent

Speed Limit: 15 KM/Hr

Distance from Start: 1.22 km

Coordinates: 29.48564, 76.89091

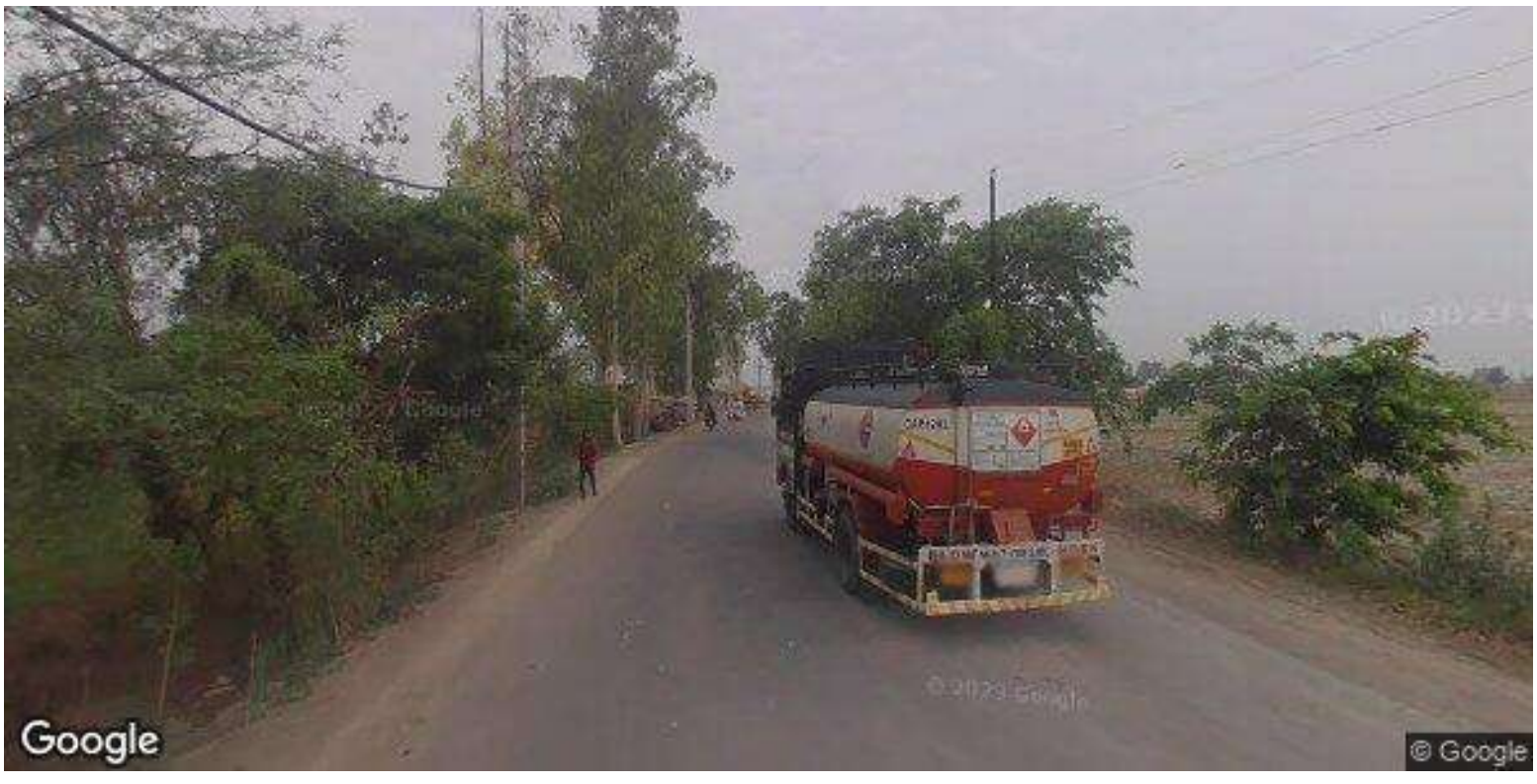


Risk Type: Turn

Speed Limit: 15 KM/Hr

Distance from Start: 2.18 km

Coordinates: 29.49351, 76.88856



Risk Type: Ascent

Speed Limit: 15 KM/Hr

Distance from Start: 2.50 km

Coordinates: 29.49264, 76.88521

Download Interactive Map