

## **CONCEPTUAL PLAN FOR CONSTRUCTION OF 4 LANE AT GRADE/ ELEVATED GANGA PATH CONNECTING SULTANGANJ – BHAGALPUR – SABOUR ON HYBRID ANNUITY MODE (LENGTH: 41.258 KM, COMPRISING 30.518 KM OF AT-GRADE/EMBANKMENT SECTION AND 10.740 KM OF ELEVATED SECTION)**

1. Complete Postal address as mentioned in the application: Construction of 4 Lane at Grade/ Elevated Ganga Path connecting Sultanganj – Bhagalpur – Sabour on Hybrid Annuity Mode (Length: 41.258 km, comprising 30.518 km of at-grade/embankment section and 10.740 km of elevated section)
2. Brief description of the Proposal: The project comprises the development of a greenfield expressway with a total length of approximately 41.258 km, consisting of 30.518 km of at-grade section and 10.740 km of elevated section. The proposed Right of Way (ROW) varies from 30.0 m to 80.0 m, depending on the project requirements and site constraints. The expressway has been designed for a design speed of 100 km/h in accordance with the applicable IRC standards.  
The total land requirement for the project is estimated to be approximately 270.66 Ha, while the total estimated capital cost of the project is ₹4993 Crore.
3. Nature of project (New/ Expansion/ Amendment/ Extension etc.): New
4. Whether proposal is part of interlinked project: No
5. Address of project site:
  - Village: Sultanganj Wards 01, 02, 03, and 08; Nawada; Tilakpur; Kalyanpur; Chaturbhujpur (Shankarchak); Sankar Chowk; Tahawarnagar; Basantchak urf Basantpur; Baikatpur; Eusufpur; Mirzapur; Shahzadpur; Ajmeripur; Rattipur; Rasidpur; Serampur; Parnathpur; Darabpur; Barari; Fatehpur; Sabour; Kakan Kita; Nabipur; Bagder; Pharka; Habib Chowk; Meharban Chowk; Mathurapur; and Kalupur, along with Bhagalpur Municipal Corporation Wards 01, 03, 05, 18, 21, 22, and 24
  - Tehsil: Sultanganj, Narayanpur, Nathnagar, Jagdishpur, Sabour
  - District: Bhagalpur
  - State: Bihar
6. Geo-coordinates of project site:  
Starting Point: Ch. 0+000 (25°14'46.46" N, 86°43'39.91" E) at Sultanganj  
End Point: 41+258 (25°13'39.91" N, 87°04'49.79" E) at Sabour

The proposed road starts at NH-33 near Sultanganj and end at NH-33 near Sabour

7. Site alternatives under consideration: 2 Alternative KML submitted

8. Area (ha)/ Length (km) of the proposed project: 41.258 km

9. Connectivity to the site: Chainage 0+000 was connected to 41+258

|                                | <b>Aerial Distance (km)</b>                                                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Nearest Railway Station</b> | Sultanganj Railway Station ~ 1.09 km towards SE<br>Bhagalpur Railway Station ~ 1.66 km towards S<br>Sabour Railway Station ~ 1.50 km towards SW  |
| <b>Nearest Airport</b>         | Purnea Airport ~ 66.70 km towards NE                                                                                                             |
| <b>Nearest Village</b>         | Sultanganj – Adjacent to project site towards S<br>Bhagalpur – Adjacent to project site towards S<br>Sabour – Adjacent to project site towards S |
| <b>Nearest Highway/ Roads</b>  | NH - 33 – Adjacent to project site towards S<br>NH -131B – Crossing project site at Bhagalpur                                                    |

10. Investment/ Cost of the project (Rs. in Lakh): 499300 Lakhs

11. Item of Schedule to the EIA Notification, 2006:

As per the Environment Impact Assessment (EIA) Notification dated 14th September, 2006, as amended this is Category B project with type number '8 (b)' "Townships and Area Development", Category B1, which require preparation of EIA Report and requires Environmental Clearance from the State Environmental Impact Assessment Authority (SEIAA).

12. Whether project involves any violation under notification S.O 804(E) dated 14.03.2017: No

13. List to industries to be housed with the proposed project site, only for projects covered under 7(c) category of EIA Notification, 2006: NA

14. Right of Way (ROW), only for projects covered under 7(f) category of EIA Notification, 2006: Proposed Right of Way (ROW) varies from 30.0 m to 80.0 m, depending on the project requirements and site constraints.

15. Terrain and topographical features:

Geomorphologically, Bhagalpur district forms part of the Mid-Ganga Foreland Basin. The northern and central parts, lying to the north and south of the Ganga respectively, comprise flat Indo-Gangetic alluvial tracts—the northern section belonging to the North Bihar Plains and the southern to the Central Bihar Plains. The southern fringe transitions into a marginal alluvial tract. The general elevation of these alluvial areas remains within 45 m above mean sea level, with the master slope on both sides directed towards the Ganga River. Scattered across the plains are isolated Pre-Cambrian hard rock inliers, which rise prominently above the surrounding terrain; the highest of these is at Shahkund (143 m). This combination of fertile alluvial plains, low-lying flood-prone diara lands, and occasional rocky uplifts shapes the district's agricultural potential and settlement patterns.

The district's river network—dominated by the Ganga, along with tributaries like the Kosi, Chandan, Kadwa, Garha, and Bhadua—plays a critical role in shaping its topography, soil fertility, and flood patterns. Seasonal flooding replenishes soil nutrients but also poses challenges for infrastructure and settlement stability.

The preferred alignment is characterized by predominantly flat to gently sloping terrain with very low relief, typical of the Ganga floodplain. The ground elevation gradually decreases towards the River Ganga, with minor undulations caused by natural levees, abandoned channels, floodplain depressions, and agricultural fields.

The alignment runs broadly parallel to the southern bank of the River Ganga and passes through extensive agricultural lands, rural settlements, riverine floodplains, and peri-urban areas. The terrain is composed mainly of deep alluvial deposits of sand, silt, clay, and gravel, which have been deposited over time by the Ganga and its tributaries. Owing to the low-lying nature of the area, certain stretches are prone to seasonal flooding and waterlogging during the southwest monsoon.

The topography is favourable for highway development as it requires comparatively limited earthwork and facilitates the adoption of standard geometric design. However, the presence of flood-prone areas, natural drainage channels, irrigation canals, and river crossings has been carefully considered in the alignment planning. Elevated sections, bridges, culverts, and adequate cross-drainage structures have been incorporated at appropriate locations to maintain natural drainage patterns, ensure hydraulic continuity, minimize impacts on the Ganga floodplain, and enhance the resilience of the corridor against flood events. Overall, the relatively level topography provides suitable conditions for the construction and long-term operation of the proposed highway while enabling efficient connectivity with minimal engineering constraints.

There are 4 nos. of major bridges and 2 nos. of minor bridges. 67 no of Culverts are proposed on rivers and streams crossing the alignment.

16. Details of water bodies, impact on drainage:

Details of waterbody/drainage/canal to be diverted/demolished

- Length of linear structure in m: 5200 m
- Area covered by linear structure in Ha: 0.52 Ha

17. Water requirements, sources (during construction and operation phases) and  
NOC: During Construction stage-

- Ground water - 186 KLD  
During Operation Stage
- Ground water - 11 KLD  
NOC: Application yet to be submitted

18. Groundwater extraction/usage and NOC/ Clearance from CGWA/State Ground  
Water Department: Application yet to be submitted

19. Whether the project is in Critically Polluted area: No

20. Tree cutting, types, numbers, girth size etc.:

- Cutting (89 nos.), Translocation (15 nos.), Total (104 nos.)  
Detailed tree inventory will be provided in EIA

21. Whether the project involves diversion of forest land: No

- Forest land: NA
- Status of the forest clearance: NA

22. Whether the project is located within the Eco-Sensitive Zone (ESZ) or Eco-  
Sensitive Area (ESA) notified by the MoEF&CC: Yes

- Vikramshila Gangetic Dolphin Sanctuary - The project alignment is passing through ESZ of Vikramshila Gangetic Dolphin Sanctuary

23. Whether project site is in CRZ area: Not Applicable

24. CETP: NA

25. STP: NA

26. Land acquisition and R&R issues involved: In process, Details will be provided in EIA

- Land acquisition
- R&R

27. Employment potential, No. of people to be employed:

- Permanent employment 60
- Temporary / Contractual employment 1000 labourers

28. Benefits of the project:

- The proposed 4-lane Greenfield At-Grade/Elevated Ganga Path from Sultanganj to Sabour has been envisaged to cater to the increasing transportation demand in eastern Bihar by providing a high-speed, safe, and efficient corridor along the southern bank of the River Ganga. The existing road network connecting Sultanganj, Bhagalpur, Sabour is experiencing significant traffic congestion due to rapid urbanization, increasing commercial and industrial activities, and growing passenger and freight movement. As the existing roads pass through densely populated settlements with mixed traffic conditions, numerous intersections, and limited capacity, they are characterized by reduced travel speeds, longer travel times, higher vehicle operating costs, and increased road safety concerns.
- The proposed greenfield corridor is designed to overcome these limitations by providing seamless connectivity between major urban centres and intermediate settlements while improving access to railway stations, industrial areas, educational institutions, tourism destinations, river ghats, and future urban developments.
- The project will also divert through traffic, particularly heavy commercial vehicles, away from congested town centres such as Bariyarpur, Sultanganj, and Bhagalpur, thereby reducing traffic congestion, improving urban mobility, and enhancing road safety for local communities.
- In addition, the corridor will facilitate efficient movement of agricultural produce, industrial goods, and other commodities, thereby strengthening regional logistics, promoting industrial growth, and supporting economic development in the project influence area. Improved connectivity to important religious and tourist destinations, particularly Sultanganj, the origin of the internationally renowned Shravani Kanwar Yatra, is expected to promote tourism, pilgrimage, and associated economic activities.

29. Details of Court cases: No

