



GOVERNMENT OF PAKISTAN
NATIONAL HIGHWAY AUTHORITY
ISLAMABAD

**CONSULTANCY SERVICES
FOR
FEASIBILITY STUDY AND DETAILED DESIGN
FOR
CONSTRUCTION OF 4 – LANE FLYOVER AT
BARA – KAHU (N-75)**



**ENVIRONMENTAL IMPACT ASSESSMENT
(EIA) REPORT**

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Submitted by :

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in association with

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EXECUTIVE SUMMARY

TITLE OF PROJECT

Construction of 4 – Lane Flyover at Bhara – Kahu N–75 (3.5 Km.)

LOCATION OF PROJECT

Bara – Kahu is situated in Islamabad, Pakistan; its geographical coordinates are 33°44'0" North, 73°11'0" East. The proposed site for construction of 04–lane of flyover located at Bara – Kahu on National Highway N–75 (Islamabad – Satra Mile – Lower Topa – Kohala) which is 8.6 Kms. from Zero Point of N–75. Bara – Kahu city is part of Islamabad Capital Territory.

The start point of flyover is at Km 6+500 near Jillani Town, Bara – Kahu and end point is at Km 10+000 near Qaziabad, Bara – Kahu. The length of overhead bridge is about 3.5 km (approximately). The proposed site for said flyover is located on N–75 having high traffic volume.

A BRIEF OUTLINE OF THE PROPOSAL

National Highway Islamabad – Satra Mile–Lower Topa Kohala (N–75) is a strategic road. Its length upto Kohala is about 90 km. It connects Azad, Jammu & Kashmir (AJ&K) with Pakistan at Kohala further it moves towards Muzaffarabad which is capital of Azad Jammu & Kashmir. NHA has upgraded it up to Lower Topa. Murree is famous city for tourism which is located on offset of this N–75 alignment at Km 55 (approx.) which attracts tourists in summer and winter seasons. Therefore, traffic volume on this road considerably increases during these seasons and especially on holidays. A great no. of times traffic blockage has been observed on this road due to high traffic volume. Bara – Kahu city is a well–populated and congested point on N–75 which is located at only 8.6 Kms from Islamabad. The Bara – Kahu is a bottle neck for smooth traffic flow. There is a built–up area having big shopping malls on both sides of this road at Bara – Kahu. Therefore, widening of National Highway at Bara – Kahu seems costlier and there will be a problem for resettlement due to commercial area.

Therefore, to resolve the traffic congestion problems appropriately and to ensure smooth traffic flow on N–75 and safety of people crossing the road and to avoid frequent accidents at this location, NHA intends to construct 4–lane flyover / overhead Bridge at Bara – Kahu on N–75 and that found economic viable after feasibility and details design study.

The objectives of the project are to :

- (a) To keep traffic flow smooth and uninterrupted from Islamabad to Murree and vice versa thus promoting tourism.
- (b) To remove all the existing congestion of the Bara – Kahu road.
- (c) To reduce Travel time.
- (d) Job Opportunities for local people would be created.
- (e) Safe movement of pedestrian across the road would be possible

THE MAJOR IMPACTS AND THEIR MITIGATION MEASURES DURING CONSTRUCTION PHASE

Impacts

- ❖ The main impact during the construction will be the clearing of ROW, cutting and filling of borrow pits including erosion of topsoil cover.
- ❖ Soil erosion due to Construction activities, earthwork, and cut and fill, stockpiles etc.
- ❖ Contamination of soil due to leakage / spillage of oil, bituminous and non-bituminous debris generated from demolition and road construction
- ❖ Dust Generation due to construction activities and transport, storage and handling of construction materials.
- ❖ Noise from construction activities and operation of equipment and heavy machinery
- ❖ Sourcing of water during Construction
- ❖ Construction waste and debris may affect local people.
- ❖ Safety of Workers and accident risk from construction activities
- ❖ Approach / hindrance problems for the local resident's / business owners and movement of the people will be disturbed during construction activities.
- ❖ Construction will pose burden on the existing natural resources

Mitigation

- ❖ Low embankments will be protected by planting vetiver grass that can flourish in relatively dry conditions.
- ❖ Soil contamination by asphalt will be minimized by placing all containers in caissons
- ❖ Construction vehicles and equipment will be maintained and refueled in such a fashion that oil / diesel spillage does not contaminate the soil.
- ❖ Unloading of loose and fine materials through covered vehicles.
- ❖ All equipment to be timely serviced and properly maintained
- ❖ Arrangements shall be made by contractor that the water availability and supply to nearby communities remain unaffected
- ❖ Dumping sites will be selected away from residential areas and water bodies
- ❖ Dumping sites must be having adequate capacity equal to the amount of debris generated.
- ❖ Safe work practices will be followed and applied by the contractor.
- ❖ At construction site fluorescent and retro refractory signage will be used
- ❖ Timely completion of the construction work and provision of alternate routes for the areas where the construction is being carried out
- ❖ One strategy for conserving aggregate resources and reducing the demand for virgin aggregate is to recycle and reuse materials in road construction

THE MAJOR IMPACTS AND THEIR MITIGATION MEASURES DURING OPERATIONAL PHASE

Impacts

- ❖ Accident risks associated with traffic movement

- ❖ Lack of maintenance during operational phase can cause harm
- ❖ Noise generation

Mitigation

- ❖ All safety features provided in the main approach roads such as guide rails, speed bumps, will be maintained and kept in good condition.
- ❖ Traffic control measures, including speed limits, will be forced strictly
- ❖ Implementation of HSE Plans during the maintenance period.
- ❖ Strict implementation of PPEs.
- ❖ Ban on use of pressure horns;
- ❖ Proper implementation of inspection and maintenance program for vehicles

POSITIVE IMPACTS DURING OPERATIONAL PHASE

- ❖ Air quality will improve due to smooth flow of traffic
- ❖ Noise level will decrease because of smooth traffic flow

PROPOSED MONITORING PLAN

The monitoring program is designed to assess effective implementation of the Environmental Impact Assessment (EMP). Monitoring Program (MP) provides important information that allows for more effective planning and an adaptive response based on the assessment of effectiveness of mitigation measures. The monitoring of various parameters will help to determine the extent to which project operation activities causes' environmental disturbance.

Sr. No.	Monitoring Parameter	Monitoring Location	Frequency
CONSTRUCTION PHASE			
1.	Ambient Air Monitoring for PM ₁₀ , CO, NO _x , SO ₂ , O ₂ , O ₃ , etc	Construction site	Quarterly
2.	Noise Levels	Construction site	Monthly
3.	Drinking Water Quality	Construction site	Quarterly
4.	Occupational health & safety	Construction site	Daily basis
OPERATIONAL PHASE			
1.	Ambient Air Monitoring	Bara Kahu flyover	Quarterly
2.	Water Quality	Bara Kahu flyover	Quarterly & End of summer before the onset of Monsoon every year
3.	Noise Level	Bara Kahu flyover	Quarterly