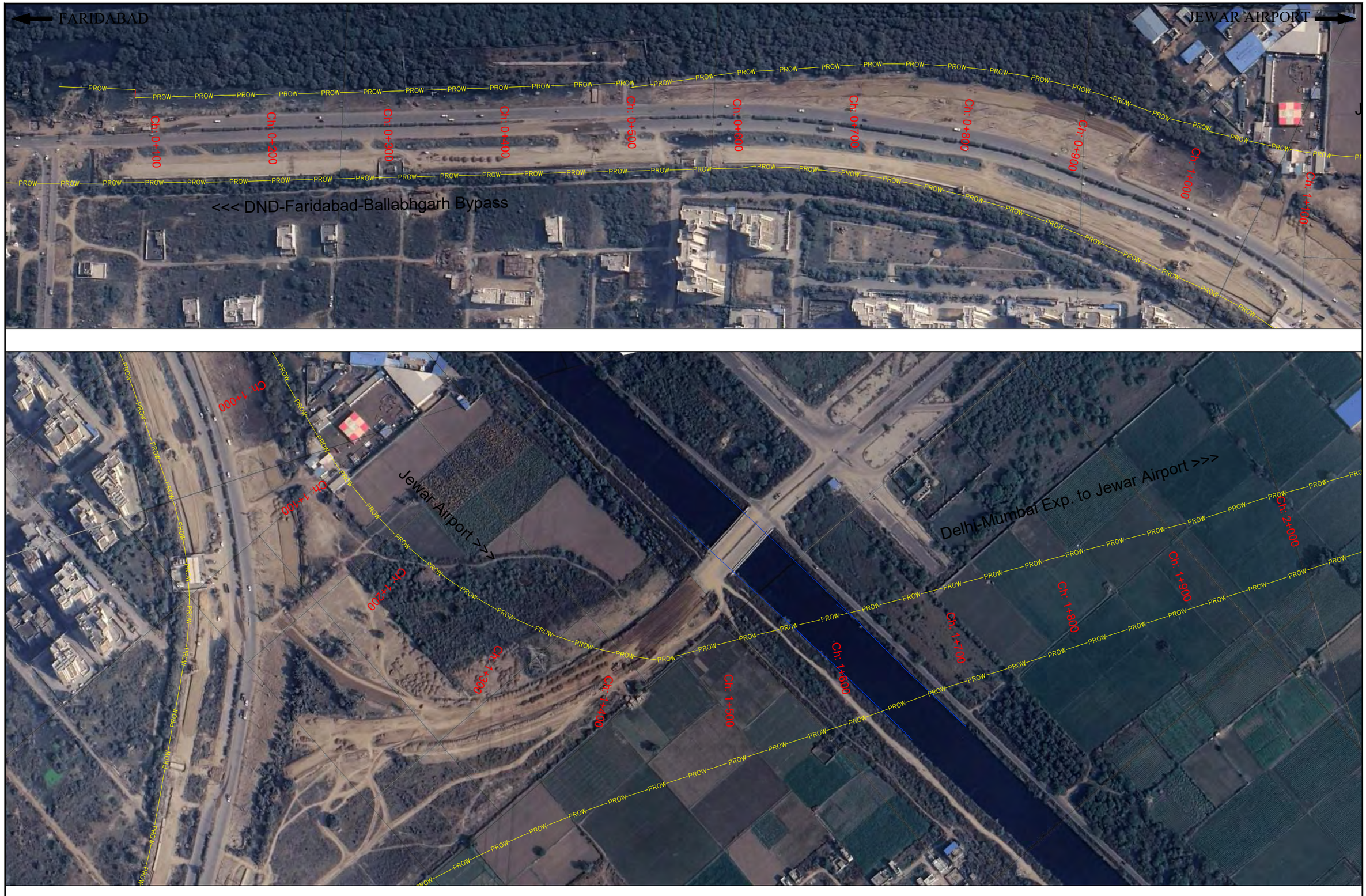
ANNEXURE V

Alignment Plan



REV	DATE	DESCRIPTION OF REVISIONS	INITIALS
R2	DEC. 2021	Detailed Project Report	
R1	NOV. 2021	Draft Detailed Project Report	
R0	OCT. 2021	Feasibility Report	

Consultant:

S.A. Infrastructure Consultants Pvt. Ltd.
1101A, 11 Floor Tower A-II, Ansal Corporate Park,
Plot No. 7A/1, Sector 142, Noida-201301 (Uttar Pradesh)
Phone No- 0120-6148000 Fax-0120-6148090

Client : **NATIONAL HIGHWAYS AUTHORITY OF INDIA**
(Ministry of Road, Transport & Highways, Govt. of India)

Project:
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Project Name-Jewar Air Port

Drawing Title :
Alignment Plan
0+000 to 2+000

DRAWING NO :Jewar/DPR/AP -
DATE : June -2022 Revision : R0
SCALE : NTS
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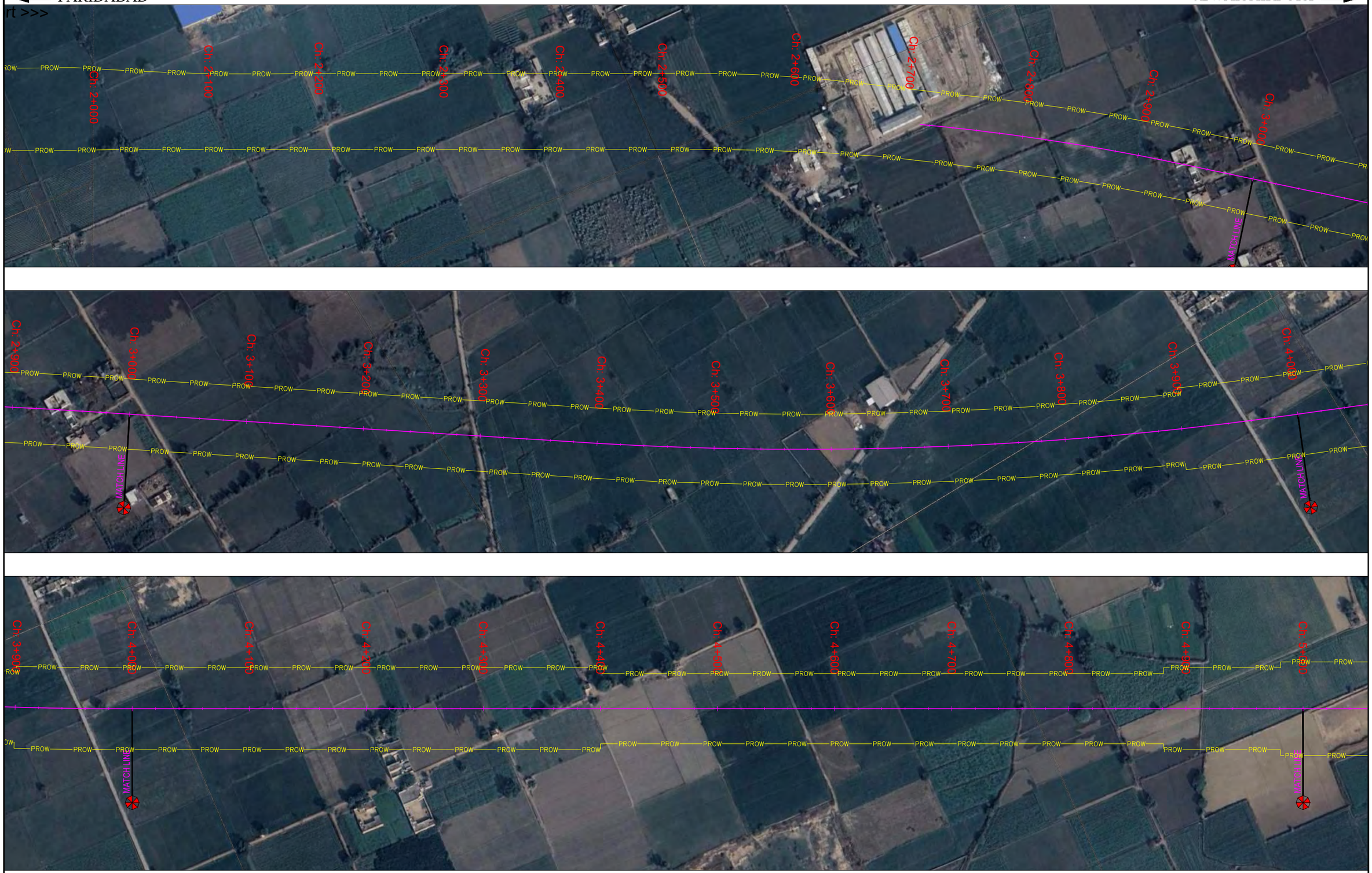
FARIDABAD

JEWAR AIRPORT



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Project Name-Jewar Air Port

Drawing Title :
Alignment Plan
2+000 to 5+000

DRAWING NO :Jewar/DPR/AP -

SCALE : NTS

DATE : June -2022 Revision : R0

Sheet : 02 of 12

DESIGNED (A)	DRAWN (B)	CHECKED (C)	APPROVED (D)
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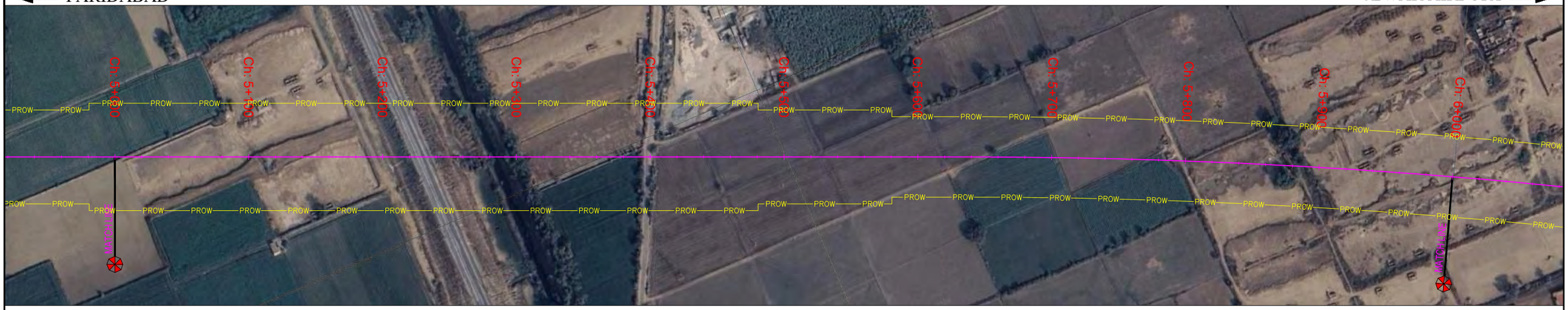

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Project Name-Jewar Air Port

Drawing Title :
Alignment Plan
5+000 to 8+000

DRAWING NO :Jewar/DPR/AP -

SCALE : NTS

DATE : June -2022

Revision : R0

Sheet : 03 of 12

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Paper Size A2

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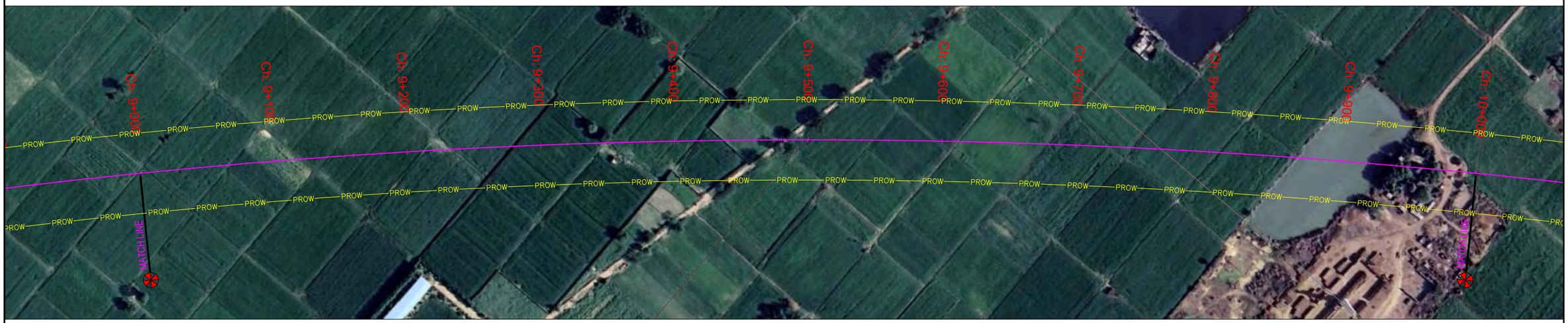
JEWAR AIRPORT



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Project Name-Jewar Air Port

Drawing Title :
Alignment Plan
8+000 to 11+000

DRAWING NO :Jewar/DPR/AP -

SCALE : NTS

DATE : June -2022

Revision : R0

Sheet : 04 of 12

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Project Name-Jewar Air Port

Drawing Title :
Alignment Plan
11+000 to 14+000

DRAWING NO :Jewar/DPR/AP -

SCALE : NTS

DATE : June -2022

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Sheet : 05 of 12

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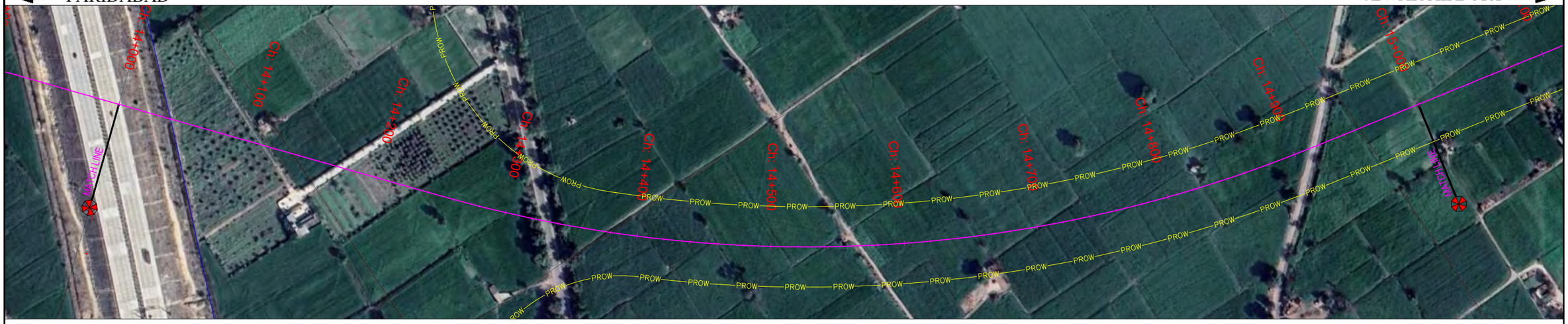

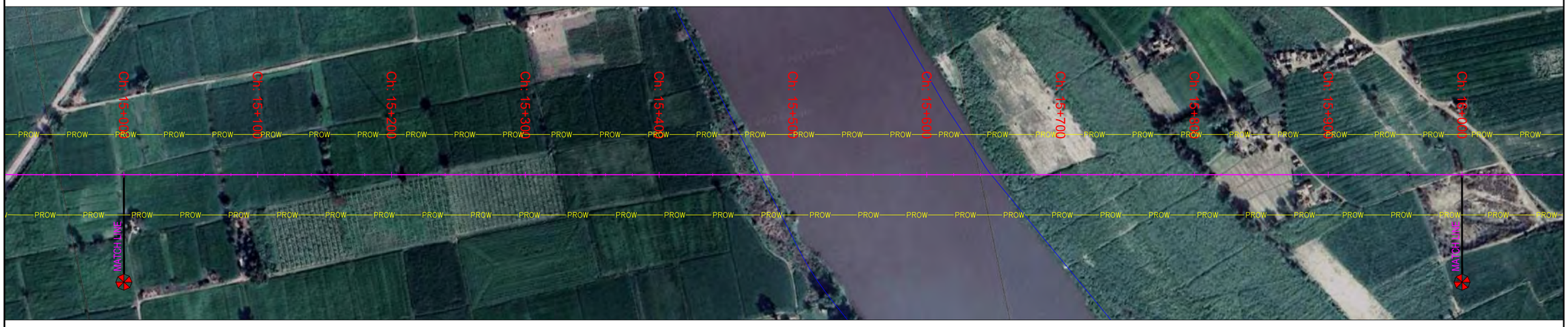

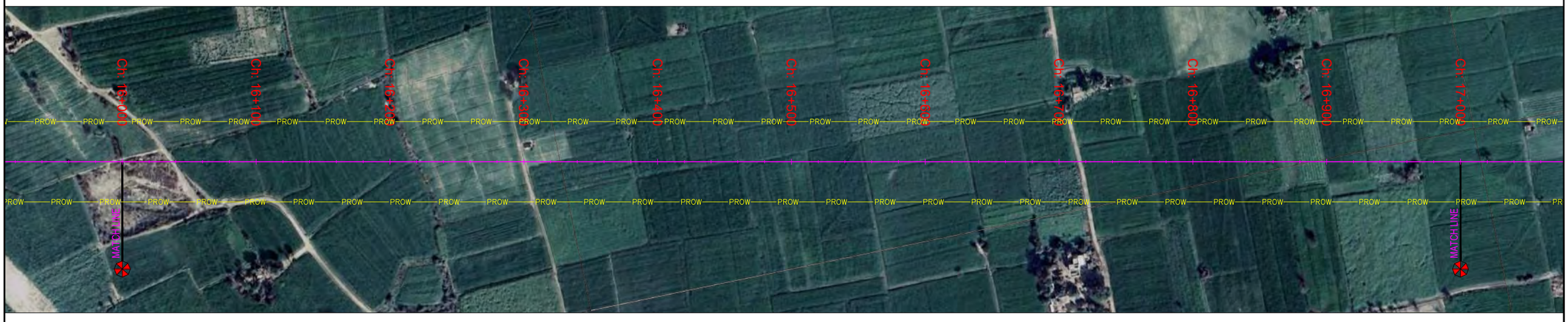

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Project Name-Jewar Air Port

Drawing Title :
Alignment Plan
14+000 to 17+000

DRAWING NO :Jewar/DPR/AP -

SCALE : NTS

DATE : June -2022

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Sheet : 06 of 12

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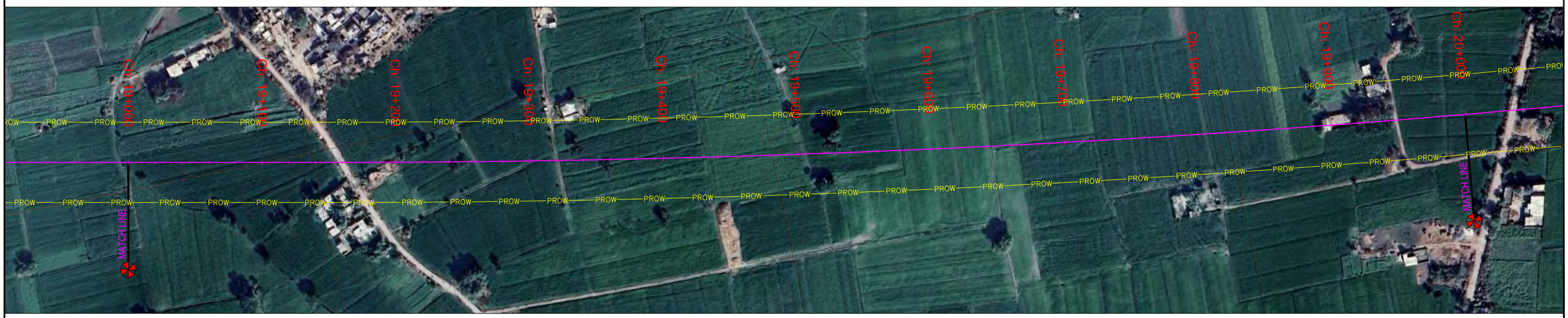

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Drawing Title :
Alignment Plan
17+000 to 20+000

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DATE : June -2022 Revision : R0

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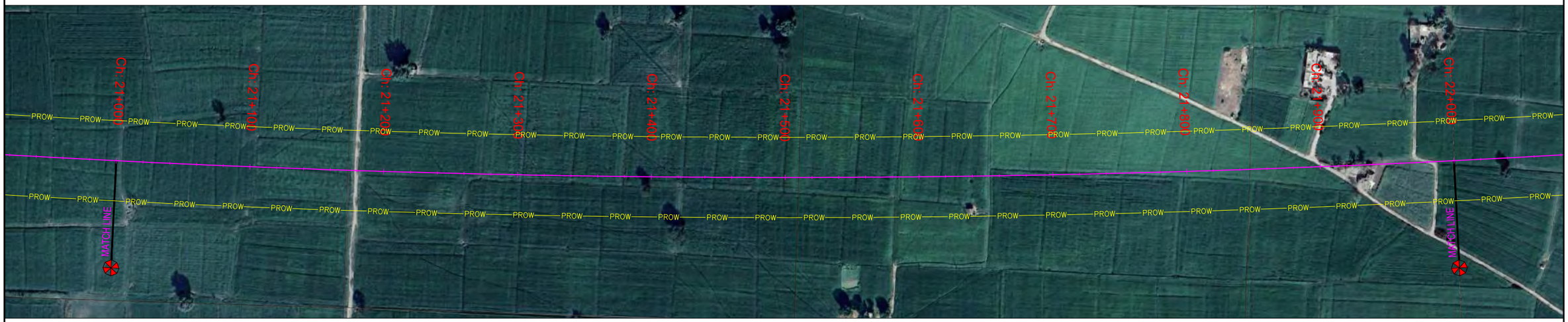

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Project Name-Jewar Air Port

Drawing Title :
Alignment Plan
20+000 to 23+000

DRAWING NO :Jewar/DPR/AP -

DATE : June -2022 Revision : R0

Sheet : 08 of 12

SCALE : NTS

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Project Name-Jewar Air Port

Drawing Title :
Alignment Plan
23+000 to 26+000

DRAWING NO :Jewar/DPR/AP -

SCALE : NTS

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Sheet : 09 of 12

DESIGNED (A)	DRAWN (B)	CHECKED (C)	APPROVED (D)
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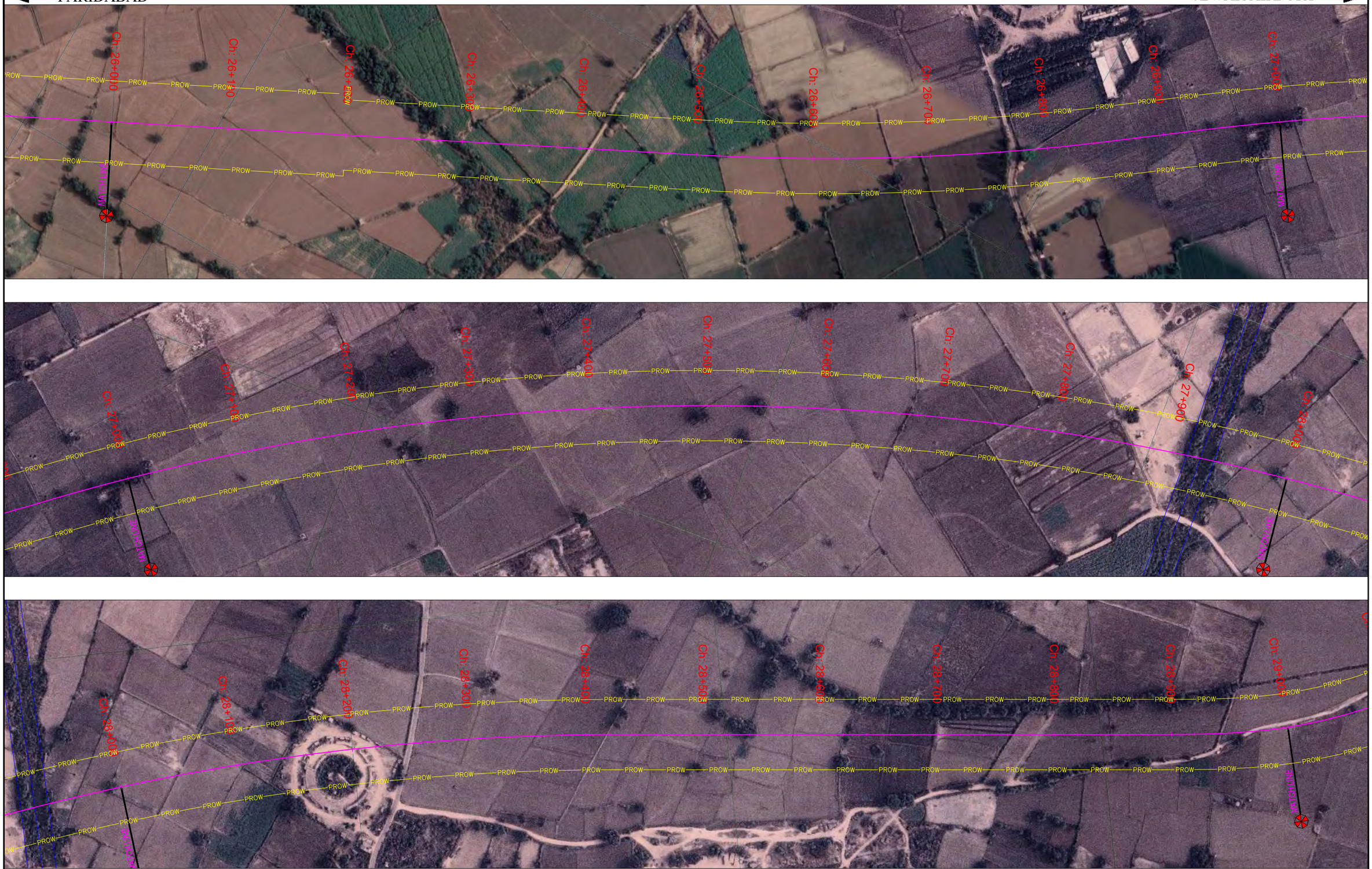
JEWAR AIRPORT



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Project Name-Jewar Air Port

Drawing Title :
Alignment Plan
26+000 to 29+000

DRAWING NO :Jewar/DPR/AP -

SCALE : NTS

DATE : June -2022

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Sheet : 10 of 12

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Project Name-Jewar Air Port

Drawing Title :
Alignment Plan
29+000 to 30+000

DRAWING NO :Jewar/DPR/AP -

SCALE : NTS

DATE : June -2022

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Sheet : 11 of 12

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Project Name-Jewar Air Port

Drawing Title :
Alignment Plan
30+000 to 31+000

DRAWING NO :Jewar/DPR/AP -

DATE : June -2022 Revision : R0

SCALE : NTS

Sheet : 12 of 12

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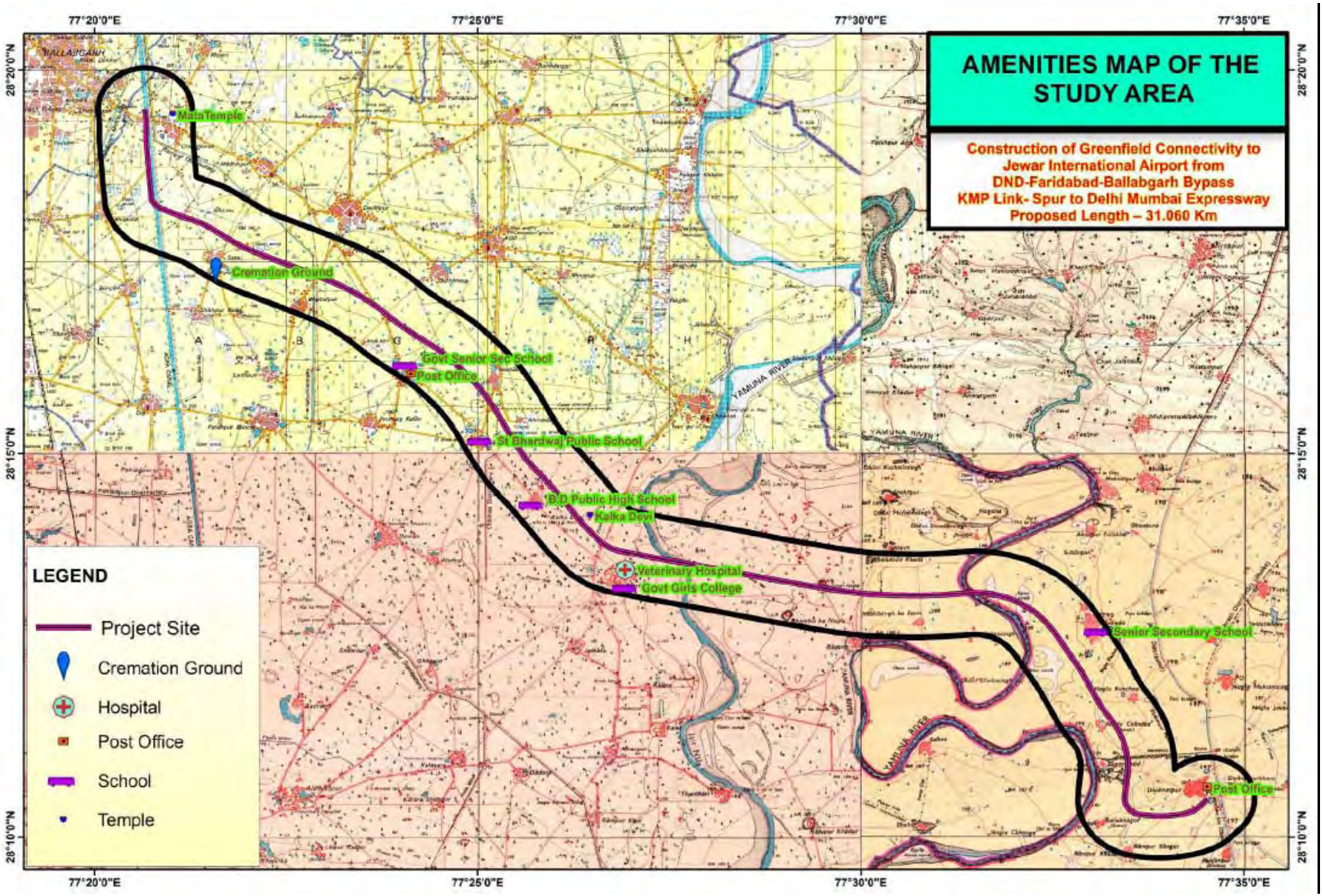
Vijay Gupta	Saju	Purshotam	S. Shukla

ANNEXURE VI

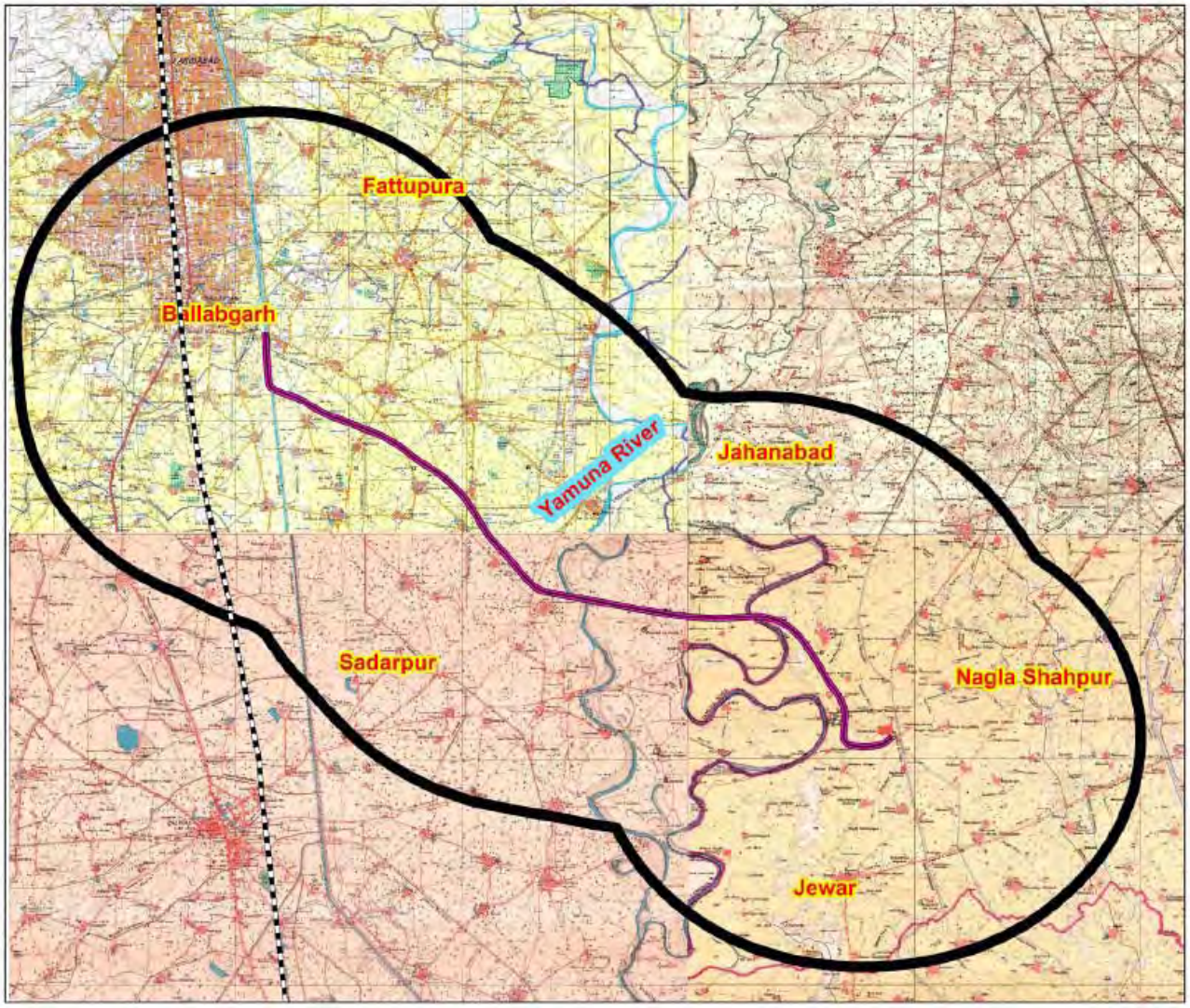
Environment Sensitivity Maps


AMENITIES MAP OF THE STUDY AREA
Construction of Greenfield Connectivity to Jewar International Airport from DND-Faridabad-Ballabgarh Bypass KMP Link- Spur to Delhi Mumbai Expressway
Proposed Length – 31.060 Km
77°20'0"E
77°25'0"E
77°30'0"E
77°35'0"E
28°20'0"N
28°15'0"N
28°10'0"N
MataTemple
Cremation Ground
Govt Senior Sec School
Post Office
St Bhardwaj Public School
B.D. Public High School
Kalka Devi
Veterinary Hospital
Govt Girls College
Senior Secondary School
Post Office
YAMUNA RIVER
LEGEND
Project Site
Cremation Ground
Hospital
Post Office
School
Temple

ANNEXURE VII

10 KM Buffer Map

10 KM BUFFER MAP OF THE STUDY AREA



N

PROJECT SITE

BUFFER BOUNDARY

RAILWAY LINE

Construction of Greenfield Connectivity to
Jewar International Airport from
DND-Faridabad-Ballabgarh Bypass
KMP Link- Spur to Delhi Mumbai Expressway
Proposed Length – 31.060 Km

0 1 2 4 6 8 10 Km

ANNEXURE VIII

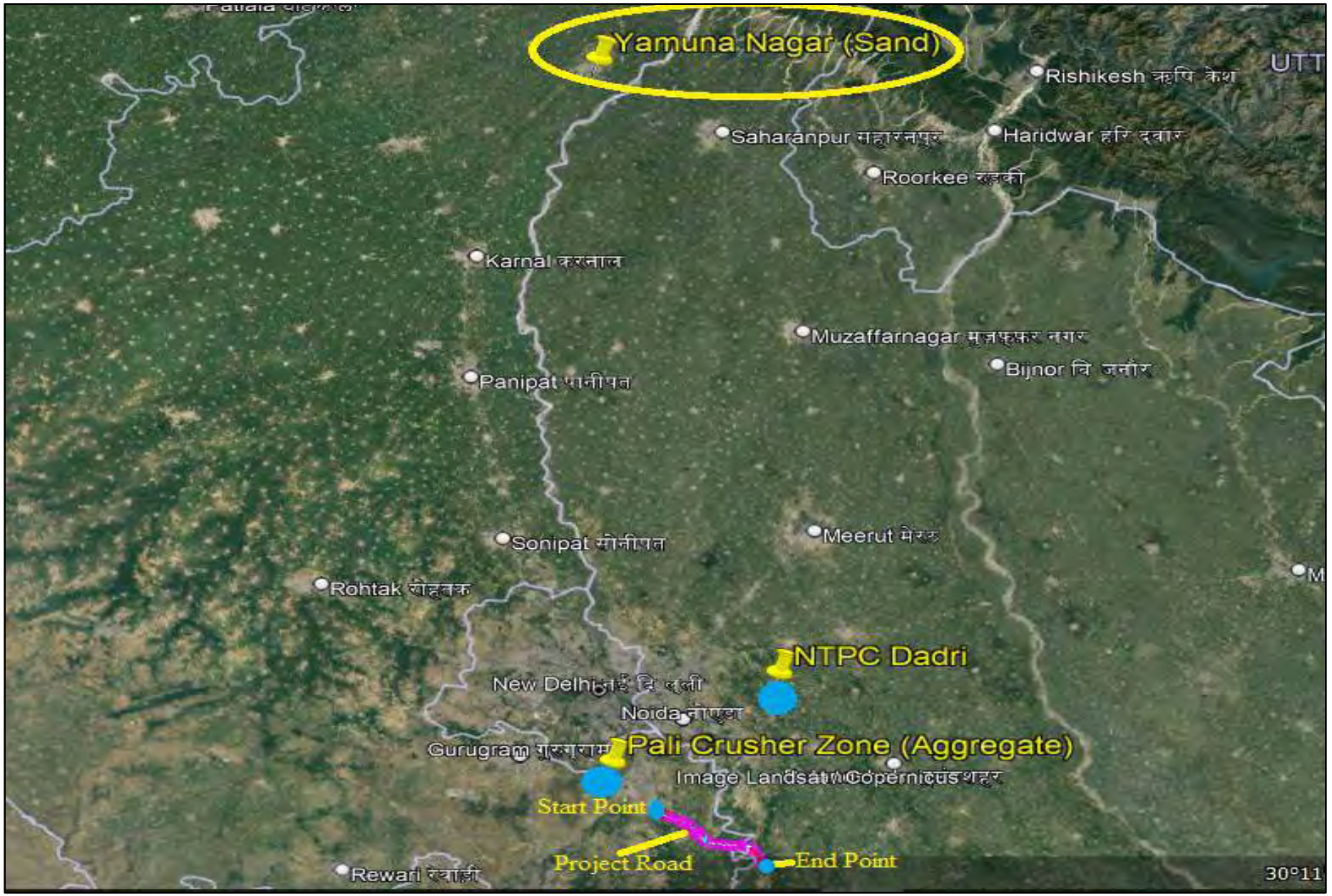
Quarry Area &

Borrow Area Details

Sand quarry site
From Yamuna Nagar
Average distance of quarry site from mid-point of project road252 km

Aggregates quarry site
From Pali crusher zone Haryana
Average distance of quarry site from mid-point of project road27 km

Fly Ash quarry site
From NTPC Dadri
Average distance of site from mid-point of project road60 km


Yamuna Nagar (Sand)
Rishikesh ऋषि केश
UTT
Saharanpur सहारनपुर
Haridwar हरि द्वार
Roorkee रुड़की
Karnal करनाल
Muzaffarnagar मुज़फ़्फ़र नगर
Bijnor बि जनौर
Panipat पानीपत
Sonipat सोनीपत
Meerut मेरठ
Rohtak रोहतक
NTPC Dadri
New Delhi नई दि ल्ली
Noida नोएडा
Gurugram गुरुग्राम
Pali Crusher Zone (Aggregate)
Image Landsat / Copernicus शहर
Start Point
Project Road
End Point
Rewari रेवाड़ी
30°11

GUIDELINES FOR REDEVELOPMENT OF BORROW AREAS

The following section provides the guidelines to the contractor for the identifying, siting of borrow areas and also the enhancement measures to redevelop the areas with community participation.

IDENTIFICATION OF THE BORROW AREAS

Specific locations of borrow areas will be identified by contractor. The selection and recommendations of borrow areas will be based on environmental as well as civil engineering considerations. Location of source of supply of material for embankment or sub-grade and the procedure for excavation or transport of material shall be in compliance with the environmental requirements of MoEFCC (OM No. L- 11011/47/2011-IA.II(M) dated 24 June, 2013), MoRTH and as specified in IRC:SP10-1961.

Certain precautions have to be taken to restrict unauthorized borrowing by the contractor. No borrow area shall be opened without permission of the Engineer. The borrowing shall not be carried out in cultivable lands, unless and until, it shall be agreed upon by the engineer that there is no suitable uncultivable land in the vicinity for borrowing or private landowners are willing to allow borrowing on their fields.

Borrow Area Identification:

- Identify areas having present land use as barren land, riverside land.
- Prefer areas of highland with respect to surroundings;
- Avoid locating borrow area close to any road (maintain at least 30m distance from ROW and 10m from toe of embankment, whichever is higher);
- Should be at least 1.0 km away from inhabited areas;
- Minimum distance of about 1.5 km from ecologically sensitive area i.e. Reserve Forest, ProtectedForest, Sanctuary, wetland etc.;
- Minimum distance of about 1.5 km from school, hospital and any archaeological sites;
- Having adequate approach road with minimum length of earthen road;
- Ensure that unsuitable soft rock is not prominent within the proposed depth of excavation whichwill render rehabilitation difficult;
- Controlled operation as per agreed / approved plan
- Prior approval of Rehabilitation Plan considering terrain, land use and local need;
- Restricting operation as agreed by landowner

OPERATION

No borrow area will be operational without written consent of the land owner. To avoid any embankment slippage, the borrow areas will not be dug continuously, and the size and shape of borrow pits will be decided by the engineer. The contractor shall evolve site-specific redevelopment plans for each borrowsarea location, which shall be implemented after the approval of the Supervision /Independent Consultant.

Precautionary measures as the covering of vehicles will be taken to avoid spillage during transport of borrow materials. To ensure that the spills, which might result from the transport of borrow and quarry materials do not impact the settlements, it will be ensured that the excavation and carrying of earth willbe done during day time only. The unpaved surfaces used for the haulage of borrow materials will be maintained properly.

Borrowing of earth shall be carried out at locations recommended as follows:

Non- Cultivable Lands: Borrowing of earth will be carried out up to a depth of 2.0 m from the existing ground level. Borrowing of earth shall not be done continuously. Ridges of not less than 8 m width shall be left at intervals not exceeding 300m.Small drains shall be cut through the ridges, if necessary, to facilitate drainage. Borrow pits shall have slopes not steeper than 1 vertical in 2 horizontal.

Productive Lands: Borrowing of earth shall be avoided on productive lands. However, in the event of borrowing from productive lands, under circumstances as described above, top soil shall be preserved in stockpiles. At such locations, the depth of borrow pits shall not exceed 45 cm and it may be dug out to a depth of not more than 30 cm after stripping the 15 cm top soil aside.

Elevated Lands: At locations where private owners desire their fields to be leveled, the borrowing shall be done to a depth of not more than 2m or upto the level of surrounding fields.

Borrow pits along Roadside: Borrow pits shall be located 5 m away from the toe of the embankment. Depth of the pit should be such that the bottom of the pit shall not fall within an imaginary line of slope 1vertical to 4 horizontal projected from the edge of the final section of the bank. Borrow pits should not be dug continuously. Ridges of not less than 8 m width should be left at intervals not exceeding 300m.Small drains should be cut through the ridges to facilitate drainage.

Borrow pits on the riverside: The borrow pit should be located not less than 15m from the toe of the bank, distance depending on the magnitude and duration of flood to be withstood. Community/ Private Ponds: Borrowing can be carried out at locations, where the private owners (or in some cases, the community) desire to develop lands (mostly low-lying areas) for pesciculture purposes and for use as fishponds.

Borrow Area near Settlements: Borrow pit location shall be located at least 0.8km from village and settlements. If unavoidable, they should not be dug for more than 30 cm and should be drained.

PRESERVATION OF TOP SOIL:

Before starts of extraction of borrow materials, top soil shall be stripped to a specified depth of 150 mm and stored in stockpiles at corners of the borrow area. The height of the stockpile will be restricted to 2m with minimum slope of 1:2 (vertical to horizontal). The stockpiles will be covered with gunny bags or tarpaulin. It will be ensured by the contractor that the topsoil will not be unnecessarily trafficked either before stripping or when in stockpiles. Top soil will be reused/re-laid as per agreed plan. Top soil will also be utilized for redevelopment of borrow areas, landscaping along slopes etc,

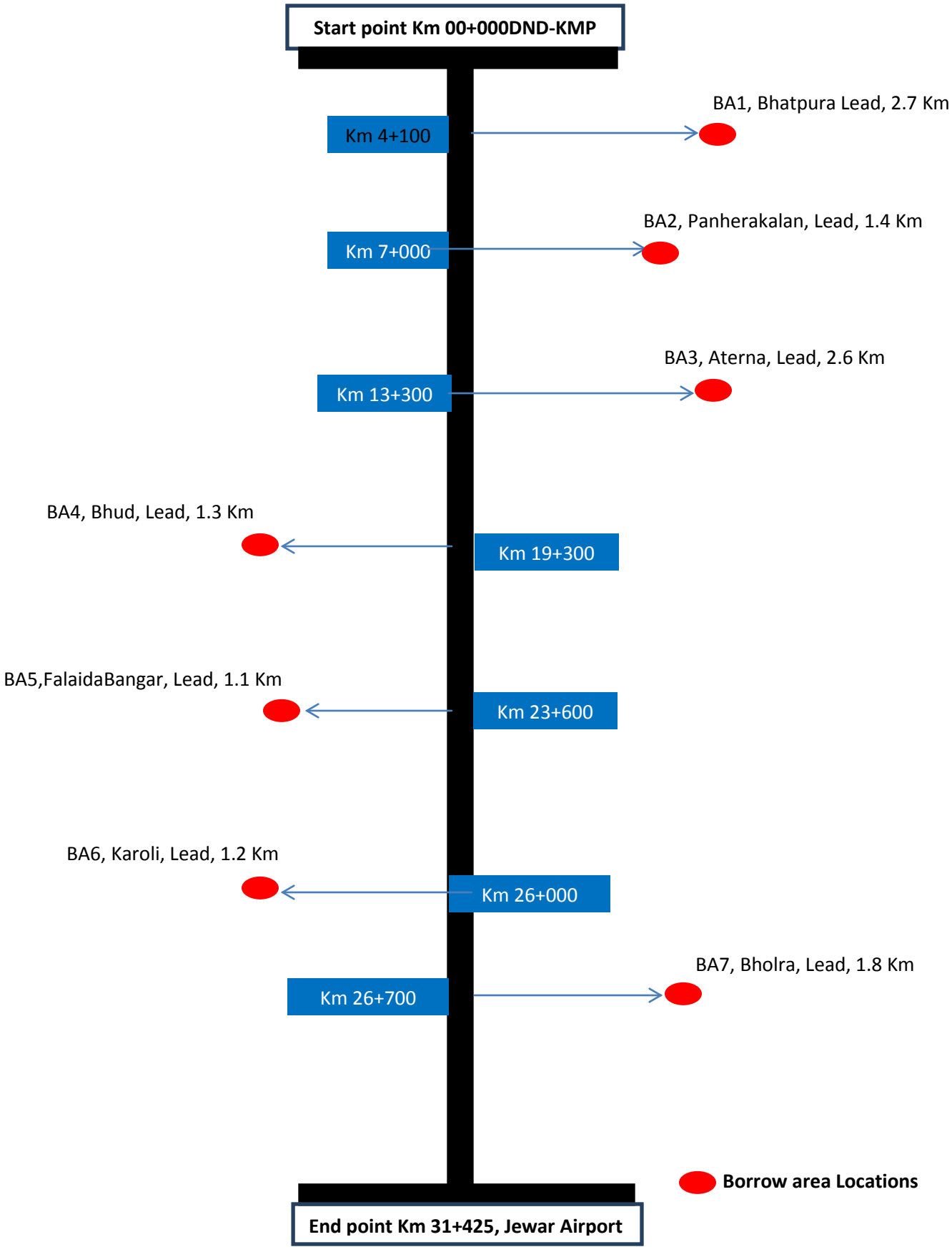
BORROW AREA REDEVELOPMENT:

Each borrow area should be rehabilitated immediately after completion of extraction of materials to the satisfactions of the land owner and the Engineer. The borrow area shall be redeveloped appropriately as per approved plan and landowner's requirement. The borrow pits may be developed into pond after leveling the bottom and slope maintenance. The borrow pits may be refilled with earth materials covered with fertile to soil. The upland used as borrow area shall be leveled matching with the level of surrounding area. No scare created due to borrowing of earth should be left unattended. The Contractor should provide completion certificate of redevelopment of each borrow pit issued by the land owner.

Borrow Areas

The soils to be used, as sub-grade, select sub-grade and shoulder materials need to be hauled from designated borrow areas. The borrow area along the project section with relevant consent/NOC from individual land owner will be obtained before operation of borrow area during construction stage. Location Chart from showing Borrow Areas between Km 00+000 to Km 31+425is given in below Table and shown in Figure.

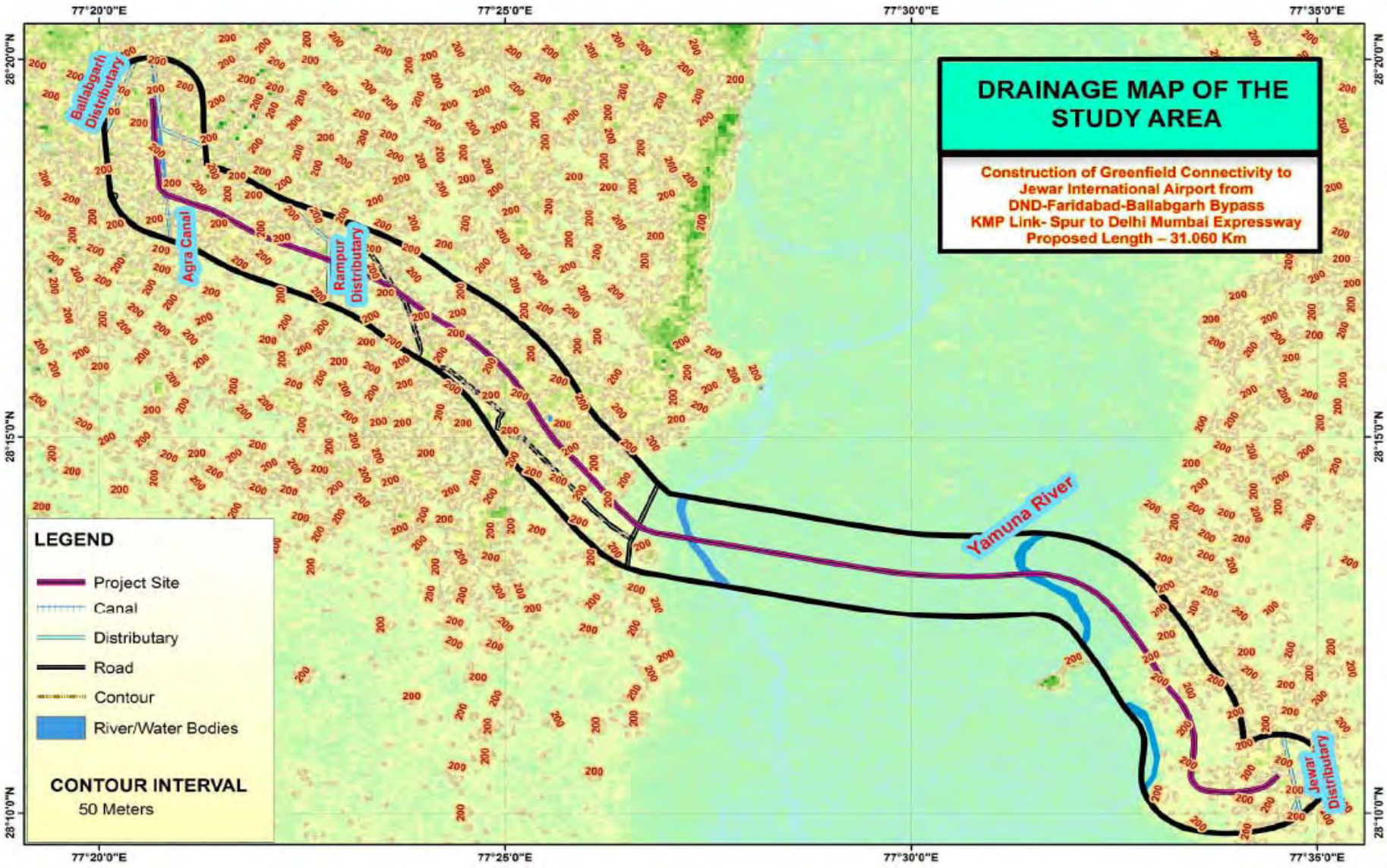
BA No.	Chainage	Side	Lead (Km)	Village
1	4+100	RHS	2.700	Bhatpura
2	7+000	RHS	1.400	Panherakalan
3	13+300	RHS	2.600	Aterna
4	19+300	LHS	1.300	Bhud
5	23+600	LHS	1.100	FalaidaBangar
6	26+000	LHS	1.200	Karoli
7	26+700	RHS	1.800	Bholra



Borrow Area Location Chart

ANNEXURE IX

Drainage Map


77°20'0"E
77°25'0"E
77°30'0"E
77°35'0"E
28°20'0"N
28°15'0"N
28°10'0"N
DRAINAGE MAP OF THE STUDY AREA
Construction of Greenfield Connectivity to Jewar International Airport from DND-Faridabad-Ballabgarh Bypass KMP Link- Spur to Delhi Mumbai Expressway
Proposed Length – 31.060 Km
Ballabgarh Distributary
Agra Canal
Rampur Distributary
Yamuna River
Jewar Distributary
LEGEND
Project Site
Canal
Distributary
Road
Contour
River/Water Bodies
CONTOUR INTERVAL
50 Meters

ANNEXURE X

Details regarding provision of speed breakers, safety signals e.t.c

Details regarding location of wayside amenities including petrol stations/service centers, rest area including public conveyance:-

Way side amenities/Rest Area is not proposed in this project.

Details regarding provision of speed breakers, safety signals, service lanes and foot paths:-

The project stretch is a completely Greenfieldhighway with access control facility. To remove the accidents possibility, access to the highway are proposed at only major cross road locations with provisions of **slip roads and entry-exit loops/ramps**which are designed for safe design speed.

Further, at interchange locations, At Grade Round About is proposed with speed breakers for smooth movement of traffic over cross road.

For traffic safety, Metal beam crash barriers are provided **in complete length of the project stretch**at median and also at earthen shoulder on either side of carriageway.

For safety and smooth traffic movement,Traffic signs shall be provided in whole stretch as per IRC 67, please refer the traffic signage plan.

Road Safety

1.1 Crash Barriers Metal Beam Crash Barriers is proposed at high embankment locations and at major bridge approaches. The barrier would be of “Thrie” beam type consisting of steel posts and a 3mm thick “Thrie” beam rail. There would be a steel spacer block between the post and the beam to prevent the vehicle from snagging on the post. The steel posts and the blocking out spacer would be channel section of 75mm x 150mm size and 5mm thick. The posts are spaced 2m centre to centre. All members of the system would be hot dipped galvanized. Crash barrier system absorbs impact of vehicle and laterally restrains a vehicle from veering off. This would ensure minimum damage to the vehicle and passengers.

1.2 TRAFFIC CONTROL DEVICES

Traffic control devices used to regulate the traffic in Road Construction Zones include,

1. Road Signs
2. Delineators
3. Barricades
4. Cones
5. Pylons
6. Pavement markings
7. Flashing lights

Average Speed (Km/h)	Distance of first sign in advance of the first channelizing device (m)	Size of Warning Sign (mm)	Minimum no of signs in advance of the hazard
Under 50	100	600	3
51 – 60	100 – 300	750	3
61 – 80	120 – 300	900	3 or 4
81 – 100	300 – 500	1200	4
Over 100	1000	1200 to 1500	4

Cautionary / Warning Signs

In case of divided carriageways, the signs should be provided both adjacent to the shoulder and on the central median so as to be visible from all lanes.

Delineators

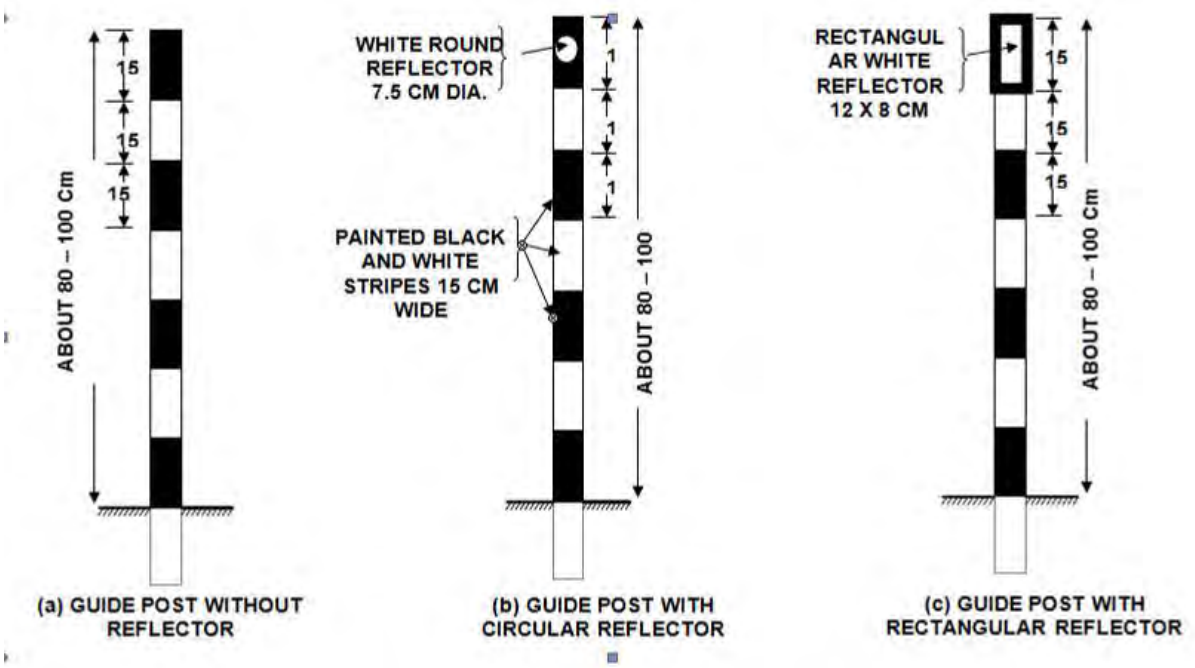
Delineators are devices or treatment which outlines the roadway or portion thereof. They include Safety Cones, Traffic Cylinders, Tapes, Drums, Painted lines, Raised Pavement Markers, Guide Posts, and Post-mounted Reflectors *etc*. They are used in or adjacent to the roadway to control the flow of traffic. Delineators are basically driving aids and should not be regarded as a substitute for warning signs or barriers for out-of-control vehicles.

Guide Post

They are intended to delineate the edges of the midway so as to guide driven about the alignment ahead, particularly where it might be confusing. Guideposts can be of metal, concrete, cut stone, amber or plastic. The posts can be made of Circular, Rectangular or Triangular Cross-section but the side facing traffic should be at least 10 cm wide.

Drums

Drums of height 800 mm to 1000 mm high and 300 mm in diameter can be used as either channelizing on warning devices. Both plastic and metallic drums (e.g. Bitumen drums) can be used for this purpose. Drums need to be filled up with earth or sand to increase its stability. Drums should be refectories and painted as shown in the **Figure 7.1**.



Drum Reflections

Safety Cones

Safety cones are 500 mm, 750 mm and 1000 mm high and 300 mm to 500 mm in diameter. They are usually made of plastic, rubber, HDPE, PVC and have retro refectories red and white bands. Safety cones would be displaced or blown unless their bases are anchored or loaded with ballast. This can be avoided by, using sand bag rings to provide increased stability. Using heavier weighted cones. Using cones with special weighted bases. Doubling the cones to provide added weight.

Barricades

CMRL prescribed standard barricades are used.

Flagmen

- An authorised personnel at least average intelligence, be mentally alert and good in physical condition be selected, since flagmen are responsible for public and workmen safety.

- Flagmen should be equipped with yellow helmet with green reflective sticker fixed around and reflective jacket along with hand signalling devices such as flags and sign paddles. The typical specification are given below,
- Flagmen need to maintain the flow of traffic continuous past a work zone at relatively reduced speeds by suitably regulating the traffic. He shall stop the traffic for a short while whenever required (e.g. for entry and exit of construction equipment in to work zone).
- Flagman should be positioned in a place where he is clearly visible to approaching traffic and at a sufficient distance to enable the drivers to respond for his flagging instructions. A flagman never leaves his post until properly relieved,
- The standard distance shall be maintained at 60 – 100 m but can be altered depending upon the approach speed and site conditions. In urban areas this distance shall be taken as 20 m to 50 m.

Traffic Management Practices

Definitions

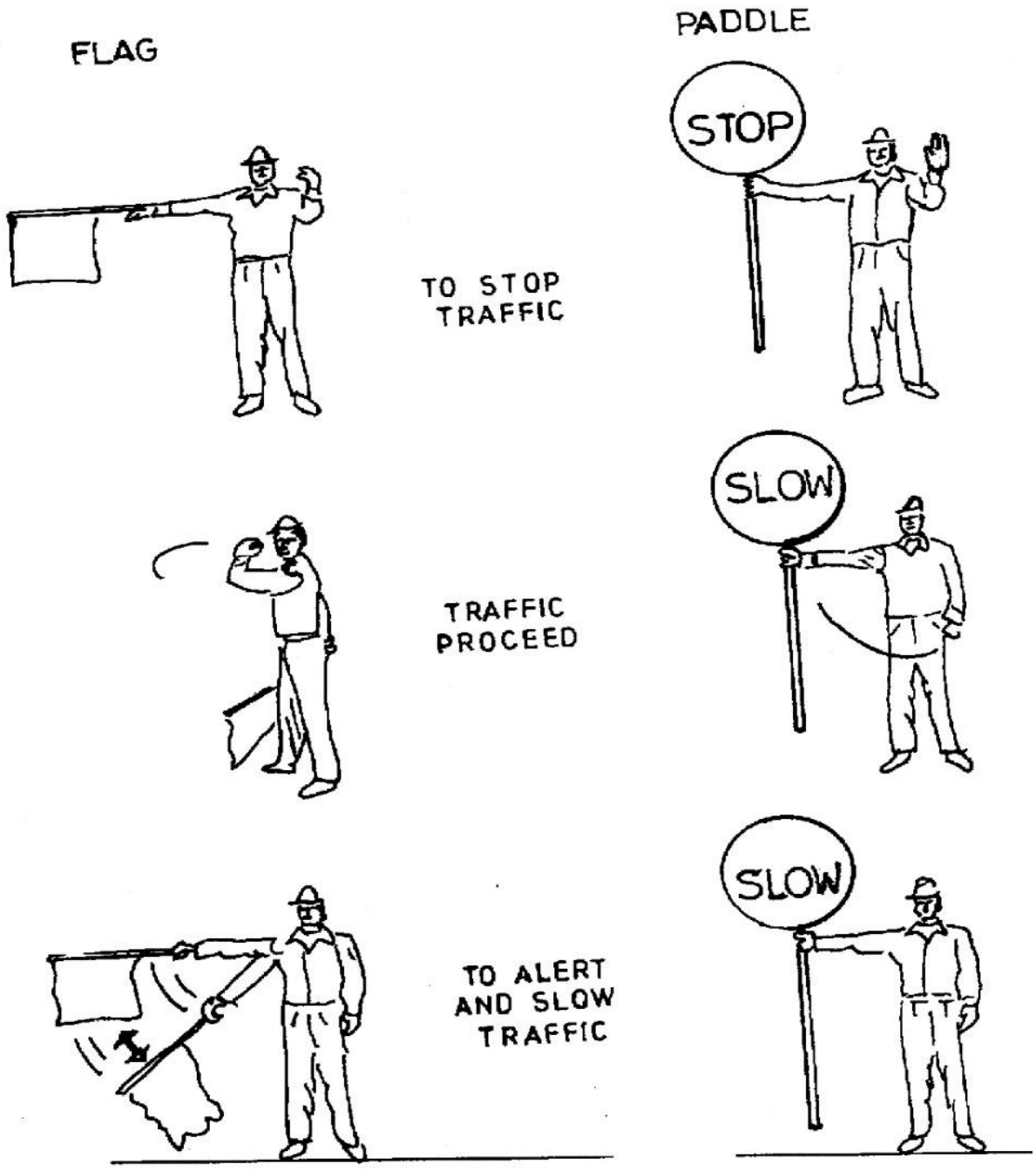
Road traffic control involves directing vehicular and pedestrian traffic around a construction zone, accident or other road disruption, thus ensuring the safety of emergency response teams, construction workers and the general public.

Working zone:

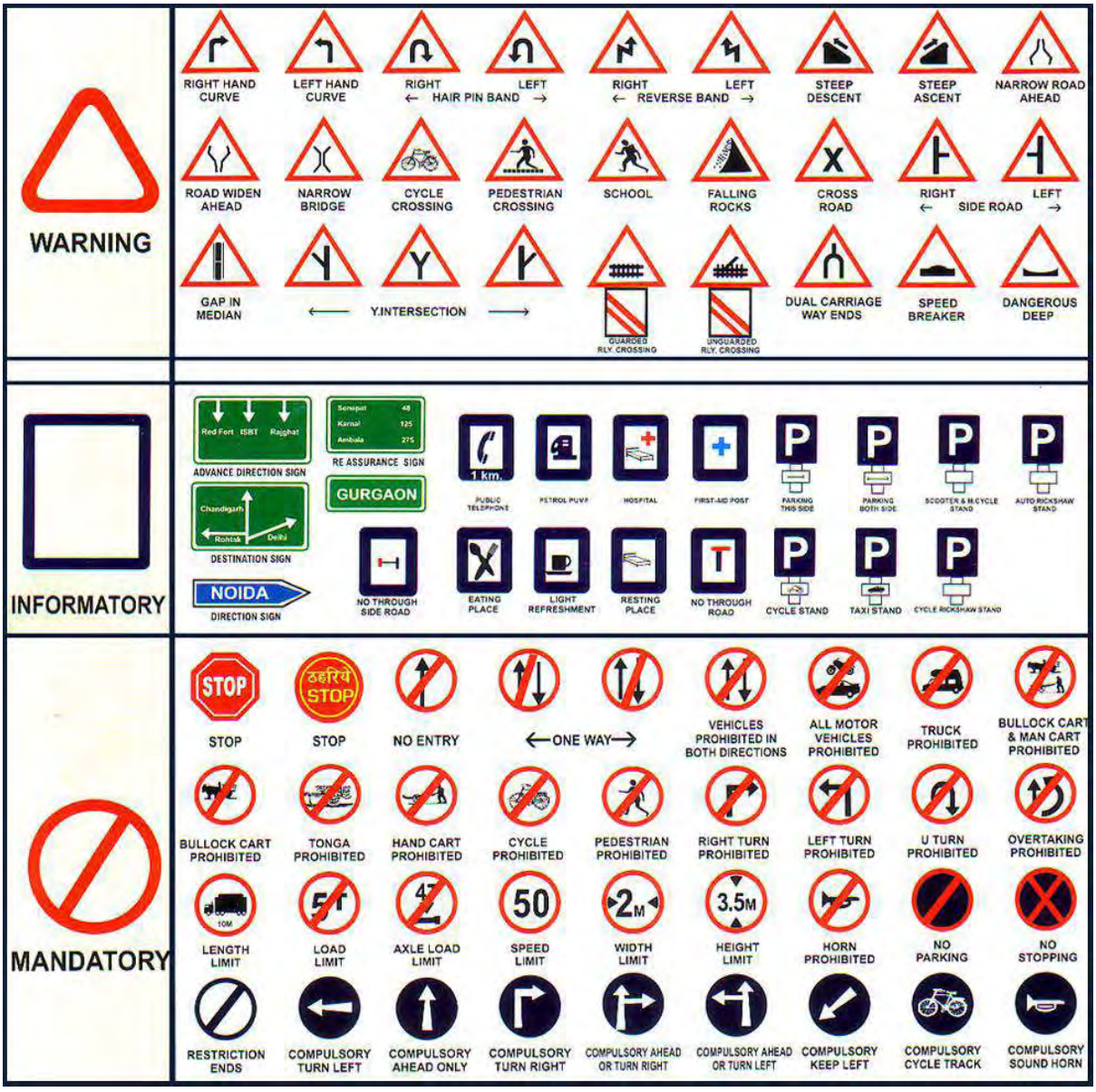
The Plant Site, construction zone of road *etc*. at which workmen will be working.

Working space:

The space around the works area that will require storing tools, excavated material and other equipment. It is also the space to allow workmen, movement and operation of plant, (e.g. swing of jibs, excavator arms) to move around to do the job. Materials and equipment must not be placed in the zone either. Workmen will only need to enter the zone to maintain cones and other road sign.



Road Signals Traffic Signals



Traffic Signals

Safety zone:

The zone that is provided to protect workmen from the traffic and to protect from them.

Approach Transition zone:

This will vary with the speed limit and the width of the works as given in (diag: Traffic Control zone)

Longitudinal buffer zone:

This is the length between the end of the lead-in taper of cones (T) and the working space. It will vary with the speed limit as given in table (Traffic Control zone).

Lateral buffer zone:

This is the width between the working space and moving traffic. It will vary with the speed as given in table (Traffic Control zone). The lateral buffer zone safety clearance is measured from the outside edge of the working space to the bottom of conical sections of the cones on the side nearest to the traffic.

Traffic Management onRoad Junction

Construction traffic meets live traffic from quarry/plant/borrow pit

- Where vehicles are more to the approach junction from the side road, permission shall be seek for providing speed breaker at junction from local traffic police and road-authority.
- The layout for signs and traffic control devices.
- Flag man shall be kept in the peak time provided with the traffic circle painted with red and white at the corner at a height of 500 mm, clearly visible to approaching traffic for a distance provided with while gloves and STOP, GO Paddle. And night time flagman should use LED Batons.
- All vehicles from approaching road should be STOP, LOOK and GO.
- Spillage of earth / Gravel / Aggregates / Bituminous mix from the tipper shall be cleaned on regular basis, if required 2 coolies permanently posted for booming.
- All Construction vehicles must follow lane discipline and road signs.

Activities inside Median / Island

- The traffic would discontinue from plying temporarily on the carriageway; for 2 min for reversing & dumping earth / stones / etc., , by the direction of helper and the flagman controls the traffic as shown in Picture- 01 and made continue the traffic and for the next trip repeating the same.
- The construction zone shall be barricaded with standard CMRL barricade.
- One Flagman (refer flag man clause) shall be appointed at traffic coming side of the transition zone.
- No personnel are allowed to come out of the safety zone, unless flagman guidance.

Sl. No.	Type of Sign	Nos.
1	One Way Object Hazard Marker (OHM)	20
2	Two Way Object Hazard Marker (OHM)	22
3	Height restriction (Regulatory Sign)	45
4	Speed Limit Signs (Regulatory Sign)	10
5	Merging Traffic Ahead (Cautionary Sign)	10
6	Compulsory Keep Left Sign (Regulatory Sign)	12
7	Compulsory Ahead Sign (Regulatory Sign)	15
8	U-Turn Prohibited Sign (Regulatory Sign)	12
9	Give way sign (Regulatory Sign)	16
10	Chevron Marker (At Curves)	180
11	Triple Chevron Marker (At roundabout)	110
12	Reassurance Sign (Direction & Place Identification Sign)	26
13	Roundabout Sign (Cautionary Sign)	06
14	Left/ Right Hand Curve (Cautionary Sign)	12
15	Expressway Route Marker Sign	10
16	Entry/ Exit Expressway Sign (Information Sign)	14
17	End of Expressway Sign	02
18	Map type Advance Direction Sign	04
19	Flag type Advance Direction Sign	06
20	Advance Directional Sign (Overhead Cantilever/ Gantry)	12
21	Rest Area Information Sign (Overhead Cantilever/ Gantry)	0
22	Slogan Gantry	12

Cost of Traffic Signs, Marking and Road Appurtenances =13.21 Cr.

ANNEXURE XI

Social Assessment Report

(R&R)

ANAXURE - 1 (A)

Consultancy Services for Preparation of Feasibility Study/Detailed Project Report of selected DPR for development of Econmic corridor inter corridors and feeder routs to improve the efficiency of freight movement in india under Bharatmala pariyojana (LOT-4/Package-1)- Work order for Valuation of effected structures of Spur of Delhi-Mumbai Expressway connecting Jewar International Airport (length 33 km)

Name of village - Ballabh nagar (Urf Karol Bangar) ,Tahesil - Jewar , Distt. - Gautam Budh Nagar.

S. No	Chainage	Compartment No.	Name of Beneficiary	STRU. ITEM NO.	TYPE OF STRU.	Position in ROW (side-R/L)	Structure Catg.	Unit	Length in M	Width in M	Height in M	stru. Total Plinth area/ qty	Age of structure	Age of design stru.	Approved Rate in Rs.	structure Valuation in Rs.	Depriciation amount in Rs.	Net Value Amount in Rs.	Total Valuation Amount	5 % Scrap Amount	Net Payable Amount in Rs	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Formula											(=1*5*3)				(=5*8)	(=9*6/100)	(=17-18)	-19	(20*5/100)	(=20-21)	
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	29+300	416	Hemraj S/O Dalbir	1	G	BY PASS	G	1	_	_	_	_	12	_	50000	50000	0	50000	50000	0	50000	Borewell
2	29+800	393	Sardar Singh	2	G	BY PASS	G	1	_	_	_	_	12	_	50000	50000	0	50000	50000	0	50000	Borewell
				PVT. VALUATION GRAND TOTAL =														100000	100000	0	100000	

ANAXURE - 1 (A)

Consultancy Services for Preparation of Feasibility Study/Detailed Project Report of selected DPR for development of Econmic corridor inter corridors and feeder routs to improve the efficiency o freight movement in india under Bharatmala pariyojana (LOT-4/Package-1)- Work order for Valuation of effected structures of Spur of Delhi-Mumbai Expressway connecting Jewar International Airport (length 33 km)

Name of village - Dayanatpur ,Tahesil - Jewar , Distt. - Gautam Budh Nagar.

S. No	Chainage	Compartment No.	Name of Beneficiary	STRU. ITEM NO.	TYPE OF STRU.	Position in ROW (side-R/L)	Structure Catg.	Unit	Length in M	Width in M	Height in M	stru. Total Plinth area/ qty	Age of structure	Age of design stru.	Approved Rate in Rs.	structure Valuation in Rs.	Depriciation amount in Rs.	Net Value Amount in Rs.	Total Valuation Amount	5 % Scrap Amount	Net Payable Amount in Rs	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Formula											(=1*5*3)				(=5*8)	(=9*6/100)	(=17-18)	-19	(20*5/100)	(=20-21)	
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	28+300	99	Babita W/O Karan Singh	1	A	BY PASS	C-II	1	14.250	9.700	3.000	138.225	2	60	12400	1713990	34280	1679710	2514132	125707	2438425	RCC. (GF)
				2	B	BY PASS	C-II	1	14.250	5.000	3.000	71.25	2	60	10000	712500	14250	712500				G.P. (FF)
						BY PASS	C-II	1	2.600	2.400	3.000	6.24	2	60	10000	62400	1248	61152				G.P. (FF)
				3	C	BY PASS	Y-I	1	5.850	1.200	0.900	7.02	2	60	2500	17550	351	17199				Stair
				4	D	BY PASS	K-I	1	23.400	_	_	_	2	_	1900	44460	889	43571				B. Wall
				5	E	BY PASS	G	1	_	_	_	_	2	_	50000	50000	0	50000	50000	0		Borewell
2	28+400	131	Shyam Singh S/O Bhola Singh	6	A	BY PASS	C-II	1	4.600	3.300	3.000	15.18	12	60	10000	151800	18216	133584	144811	7241	137570	G.P.
				7	B	BY PASS	Y	1	1.800	1.200	1.000	2.16	12	40	2036	4397.76	528	3870				W. Tank
				8	C	BY PASS	K-I	1	4.400	_	_	_	12	_	1900	8360	1003	7357				B. Wall

ANAXURE - 1 (A)

Consultancy Services for Preparation of Feasibility Study/Detailed Project Report of selected DPR for development of Econmic corridor inter corridors and feeder routs to improve the efficiency o freight movement in india under Bharatmala pariyojana (LOT-4/Package-1)- Work order for Valuation of effected structures of Spur of Delhi-Mumbai Expressway connecting Jewar International Airport (length 33 km)

Name of village - Dayanatpur ,Tahesil - Jewar , Distt. - Gautam Budh Nagar.

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Formula											(=1*5*3)				(=5*8)	(=9*6/100)	(=17-18)	-19	(20*5/100)	(=20-21)	
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	
3	28+200	98	Hans Bricks Pvt Ltd. (Narottam Singh)	9	A	BY PASS	D-II	1	7.800	5.200	3.000	40.56	20	40	7000	283920	56784	227136	1134368	56718	1077650	ASB (Tin Shade)
				10	B	BY PASS	Y	1	11.050	2.200	2.900	24.31	20	40	4000	97240	19448	97240				Foundation
				11	C	BY PASS	Y	1	26.850	4.050	2.900	108.7425	20	40	4000	434970	86994	347976				Foundation
				12	D	BY PASS	Y	1	15.650	2.200	2.900	34.43	20	40	4000	137720	27544	110176				Foundation
				13	E	BY PASS	Y	1	14.200	2.200	2.900	31.24	20	40	4000	124960	24992	99968				Foundation
				14	F	BY PASS	Y	1	9.100	2.200	2.900	20.02	20	40	4000	80080	16016	64064				Foundation
				15	G	BY PASS	Y	1	19.700	2.200	2.900	43.34	20	40	4000	173360	34672	138688				Foundation
				16	H	BY PASS	Y-I	1	4.800	0.950	2.900	4.56	20	40	2500	11400	2280	9120				Stair
				17	I	BY PASS	Y	1	_	_	3.000	_	20	60	50000	50000	10000	40000				Chimni
4	28+750	150	Dharmendar S/O Khem Singh	18	A	BY PASS	Y	1	2.300	1.700	0.900	3.91	5	40	2036	7960.76	398	7563	9304	465	8838	W. Tank
						BY PASS	Y	1	1.000	0.900	0.900	0.9	5	40	2036	1832.4	92	1741				W. Tank

ANAXURE - 1 (A)

Consultancy Services for Preparation of Feasibility Study/Detailed Project Report of selected DPR for development of Econmic corridor inter corridors and feeder routs to improve the efficiency o freight movement in india under Bharatmala pariyojana (LOT-4/Package-1)- Work order for Valuation of effected structures of Spur of Delhi-Mumbai Expressway connecting Jewar International Airport (length 33 km)

Name of village - Dayanatpur ,Tahesil - Jewar , Distt. - Gautam Budh Nagar.

S. No	Chainage	Compartment No.	Name of Beneficiary	STRU. ITEM NO.	TYPE OF STRU.	Position in ROW (side-R/L)	Structure Catg.	Unit	Length in M	Width in M	Height in M	stru. Total Plinth area/ qty	Age of structure	Age of design stru.	Approved Rate in Rs.	structure Valuation in Rs.	Depriciation amount in Rs.	Net Value Amount in Rs.	Total Valuation Amount	5 % Scrap Amount	Net Payable Amount in Rs	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Formula											(=1*5*3)				(=5*8)	(=9*6/100)	(=17-18)	-19	(20*5/100)	(=20-21)	
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	
5	29+800	364	Sarvodya Sikhan Prasarni Samiti	19	A	BY PASS	C-II	1	3.500	7.350	3.000	25.725	10	60	12400	318990	31899	287091	335297	16765	318532	RCC
				20	B	BY PASS	D-II	1	2.000	1.400	3.000	1.4	10	40	7000	9800	980	8820				ASB (Tin Shade)
				21	C	BY PASS	X	1	3.200	_	_	_	10	40	2335	7472	747	6725				Gate
				22	D	BY PASS	K-I	1	19.100	_	_	_	10	_	1900	36290	3629	32661				B. Wall
6	29+800	364	Mahendra Singh S/O Ghuriya Singh	23	A	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0	50000	Borewell
7	30+000			24	A	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0	50000	Borewell
8	30+000	689		25	A	BY PASS	C-II	1	3.400	2.900	3.000	4.93	10	60	10000	49300	4930	44370	44370	2219	92152	G.P.
				26	B	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0		Borewell
9	30+000	689		27	A	BY PASS	G	1	_	_	_	_	12	_	50000	50000	0	50000	50000	0	50000	Well
10	30+000	655		28	A	BY PASS	Y	1	2.700	2.500	1.000	6.75	5	40	2036	13743	687	13056	13056	653	12403	W. Tank
11	30+000	655		29	A	BY PASS	K-I	1	47.300	_	_	_	5	_	1900	89870	4494	85377	85377	4269	87746	B. Wall
				30	B	BY PASS	X	1	3.150	_	_	_	5	40	2335	7355.25	368	6987	6987	349		Gate
12	30+000	683		31	A	BY PASS	G	1	_	_	_	_	12	_	50000	50000	0	50000	50000	0	50000	Borewell
13	30+200	688		32	A	BY PASS	G	1	_	_	_	_	12	_	50000	50000	0	50000	50000	0	50000	Borewell

ANAXURE - 1 (A)

Consultancy Services for Preparation of Feasibility Study/Detailed Project Report of selected DPR for development of Econmic corridor inter corridors and feeder routs to improve the efficiency o freight movement in india under Bharatmala pariyojana (LOT-4/Package-1)- Work order for Valuation of effected structures of Spur of Delhi-Mumbai Expressway connecting Jewar International Airport (length 33 km)

Name of village - Dayanatpur ,Tahesil - Jewar , Distt. - Gautam Budh Nagar.

S. No	Chainage	Compartment No.	Name of Beneficiary	STRU. ITEM NO.	TYPE OF STRU.	Position in ROW (side-R/L)	Structure Catg.	Unit	Length in M	Width in M	Height in M	stru. Total Plinth area/ qty	Age of structure	Age of design stru.	Approved Rate in Rs.	structure Valuation in Rs.	Depriciation amount in Rs.	Net Value Amount in Rs.	Total Valuation Amount	5 % Scrap Amount	Net Payable Amount in Rs	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Formula											(=1*5*3)				(=5*8)	(=9*6/100)	(=17-18)	-19	(20*5/100)	(=20-21)	
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	
14	30+200	688		33	A	BY PASS	Y	1	1.700	1.350	0.500	2.295	5	40	2036	4672.62	234	4439	4439	222	54217	W. Tank
				34	B	BY PASS	G	1	_	_	_	_	5	_	50000	50000	0	50000	50000	0		Borewell
15	30+000	688		35	A	BY PASS	A-II	1	5.425	10.600	3.000	57.505	5	60	10000	575050	28753	546298	1194947	59747	1185200	G.P.
				36	B	BY PASS	K-I	1	355	_	_	_	5	_	1900	674500	33725	640775				B. Wall
				37	C	BY PASS	X	1	3.550	_	_	_	5	40	2335	8289.25	414	7875				Gate
				38	D	BY PASS	G	1	_	_	_	_	5	_	50000	50000	0	50000	50000	0		Borewell
16	30+000	683		39	A	BY PASS	Y	1	2.700	2.500	0.500	6.75	5	40	2036	13743	687	13056	13056	653	32403	Foundation
				40	B	BY PASS	G	1	_	_	_	_	5	_	20000	20000	0	20000	20000	0		Hand Pump
17 (A)	30+350	681	Gyanendra Devi W/O Satish Kumar	41	A	BY PASS	D-II	1	6.700	4.300	3.000	28.81	5	40	7000	201670	10084	191587	376058	18803	357255	ASB (Tin Shade)
				42	B	BY PASS	K-I	1	102.2	_	_	_	5	_	1900	194180	9709	184471				B. Wall
17 (B)	30+350	681	Ashok Kumar S/O Ram Sharan	43	A	BY PASS	K-I	1	60	_	_	_	5	_	1900	114000	5700	108300	108300	5415	102885	B. Wall

ANAXURE - 1 (A)

Consultancy Services for Preparation of Feasibility Study/Detailed Project Report of selected DPR for development of Econmic corridor inter corridors and feeder routs to improve the efficiency o freight movement in india under Bharatmala pariyojana (LOT-4/Package-1)- Work order for Valuation of effected structures of Spur of Delhi-Mumbai Expressway connecting Jewar International Airport (length 33 km)

Name of village - Dayanatpur ,Tahesil - Jewar , Distt. - Gautam Budh Nagar.

S. No	Chainage	Compartment No.	Name of Beneficiary	STRU. ITEM NO.	TYPE OF STRU.	Position in ROW (side-R/L)	Structure Catg.	Unit	Length in M	Width in M	Height in M	stru. Total Plinth area/ qty	Age of structure	Age of design stru.	Approved Rate in Rs.	structure Valuation in Rs.	Depriciation amount in Rs.	Net Value Amount in Rs.	Total Valuation Amount	5 % Scrap Amount	Net Payable Amount in Rs	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Formula											(=1*5*3)				(=5*8)	(=9*6/100)	(=17-18)	-19	(20*5/100)	(=20-21)	
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	
18	30+400	685	Jashwant S/o Padam, Pradeep Kumar S/O Bheem Singh	44	A	BY PASS	C-II	1	5.200	4.100	3.000	21.32	10	60	10000	213200	21320	191880	810236	40512	819724	G.P.
				45	B	BY PASS	Y	1	2.700	2.700	0.700	7.29	10	40	2036	14842.44	1484	13358				Foundation
				46	C	BY PASS	K-I	1	353.8	_	_	_	10	_	1900	672220	67222	604998				B. Wall
				47	D	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0		Borewell
19	30+600	743	Jaggi	48	A	BY PASS	G	1	_	_	_	_	12	_	50000	50000	0	50000	50000	0	50000	Borewell
20	27+850	307		49	A	BY PASS	G	1	_	_	_	_	12	_	50000	50000	0	50000	50000	0	50000	Borewell
				PVT. VALUATION GRAND TOTAL =														7414737	7414737	339737	7075000	

ANAXURE - 1 (A)

Consultancy Services for Preparation of Feasibility Study/Detailed Project Report of selected DPR for development of Econmic corridor inter corridors and feeder routs to improve the efficiency o freight movement in india under Bharatmala pariyojana (LOT-4/Package-1)- Work order for Valuation of effected structures of Spur of Delhi-Mumbai Expressway connecting Jewar International Airport (length 33 km)

Name of village - Falaida Bangar ,Tahesil - Jewar , Distt. - Gautam Budh Nagar.

S. No	Chainage	Compartment No.	Name of Beneficiary	STRU. ITEM NO.	TYPE OF STRU.	Position in ROW (side-R/L)	Structure Catg.	Unit	Length in M	Width in M	Height in M	stru. Total Plinth area/ qty	Age of structure	Age of design stru.	Approved Rate in Rs.	structure Valuation in Rs.	Depriciation amount in Rs.	Net Value Amount in Rs.	Total Valuation Amount	5 % Scrap Amount	Net Payable Amount in Rs	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Formula											(=1*5*3)				(=5*8)	(=9*6/100)	(=17-18)	-19	(20*5/100)	(=20-21)	
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	23+850	195		1	A	BY PASS	C-II	1	7.650	5.900	3.000	45.135	2	60	10000	451350	9027	442323	442323	8846	433477	G.P.
2	24+100	189		2	A	BY PASS	Y	1	6.000	6.000	0.900	36	2	60	2036	73296	1466	71830	71830	1437	70393	Foundation
3	24+400	207	Sanjay S/O Babu	3	A	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0	50000	Borewell
4	24+450	207	Meghraj S/O Hosiyar Singh	4	A	BY PASS	C-II	1	5.050	4.800	3.000	24.24	5	60	10000	242400	12120	230280	236856	11843	275013	G.P.
				5	B	BY PASS	Y	1	2.000	1.700	0.700	3.4	5	40	2036	6922.4	346	6576				Water Tank
				6	C	BY PASS	G	1	_	_	_	_	5	_	50000	50000	0	50000	50000	0		Borewell
5	24+500	880	Mangal S/O Fatti	7	A	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0	50000	Borewell
6	24+500	879	Dushyant S/O Kaushal	8	A	BY PASS	Y	1	2.800	2.500	0.900	7	2	60	2036	14252	285	13967	13967	279	13688	Foundation
7	24+550	875	Hansh Raj S/O Mahabir	9	A	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0	50000	Borewell
8	24+800	872		10	A	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0	50000	Borewell
9	25+400	1034		11	A	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0	50000	Borewell
10	25+400	1034		12	A	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0	50000	Borewell
				PVT. VALUATION GRAND TOTAL =														1114976	1114976	22405	1092571	

ANAXURE - 1 (A)

Consultancy Services for Preparation of Feasibility Study/Detailed Project Report of selected DPR for development of Econmic corridor inter corridors and feeder routs to improve the efficiency o freight movement in india under Bharatmala pariyojana (LOT-4/Package-1)- Work order for Valuation of effected structures of Spur of Delhi-Mumbai Expressway connecting Jewar International Airport (length 33 km)

Name of village - Karoli Bangar ,Tahesil - Jewar , Distt. - Gautam Budh Nagar.

S. No	Chainage	Compartment No.	Name of Beneficiary	STRU. ITEM NO.	TYPE OF STRU.	Position in ROW (side-R/L)	Structure Catg.	Unit	Length in M	Width in M	Height in M	stru. Total Plinth area/ qty	Age of structure	Age of design stru.	Approved Rate in Rs.	structure Valuation in Rs.	Depriciation amount in Rs.	Net Value Amount in Rs.	Total Valuation Amount	5 % Scrap Amount	Net Payable Amount in Rs	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Formula											(=1*5*3)				(=5*8)	(=9*6/100)	(=17-18)	-19	(20*5/100)	(=20-21)	
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	26+800	1024		1	A	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0	50000	Borewell
2	26+900	1202	Rambir S/O Hoshiyar Singh	2	A	BY PASS	K-I	1	117.2	_	1.700	117.2	5	40	1900	222680	11134	211546	218892	10945	207948	B. Wall
				3	A	BY PASS	X	1	3.8	_	_	_	5	_	2035	7733	387	7346				Borewell
3	27+000	1219		4	A	BY PASS	Y	1	2.500	2.000	1.000	5	10	60	10000	50000	5000	45000	215036	10752	254284	Foundation
				5	B	BY PASS	Y	1	2.300	1.800	0.700	4.14	10	40	2036	8429.04	843	7586				Water Tank
				6	C	BY PASS	K-I	1	95.000	_	_	_	10	40	1900	180500	18050	162450				B. Wall
				7	D	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0		Borewell
4	24+500	879	Suresh Singh S/O Vijay Pal Singfh	8	A	BY PASS	C-II	1	4.250	3.100	3.000	13.175	10	60	10000	131750	13175	118575	118575	11858	156718	GP
				9	A	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0		Borewell
				PVT. VALUATION GRAND TOTAL =														702503	702503	33554	668950	

HARYANA PWD B&R BRANCH
O/O Executive Engineer,
Provincial Division,
PWD B&R Br., Faridabad
Tel.No. 0129- 2288187 (O)
E.mail – pwd-eepd1-faridabad@hry.nic.in

To

The Competent Authority, Land Acquisition (NH)
Cum District Revenue Officer
Faridabad

Memo No. 3187 /DB Dated:- 07/06/2022

Subject :- **Verification of structure valuation falling under acquisition: Faridabad-Jewar Airport Road NH. Village Mohiyapur, Hirapur, Mahmadpur, Chhainsa, Mohna, Panhera Khurd, Fafunda, Narhawali, Shahupura, Sotai in District Faridabad**

Reference:- Your office letter No. 6 dated 02.05.2022

Please find enclosed herewith the valuation report of structures fall under this project & supplied by your office quoted under reference as per detail enclosed for taking further necessary action please.

DA/(i) valuation reports

Executive Engineer,
Provincial Division,
PWD B&R Br., Faridabad

Endst.No. /DB Dated:-

Copy is forwarded to the Sub Divisional Engineer, Provincial Sub Division, PWD B&R Branch, Ballabgarh. This is w.r.t his letter No. 394 dated 25.05.2022

DA/Nil

Executive Engineer,
Provincial Division,
PWD B&R Br., Faridabad

Valuation Report for development of Economic Corridors Inter Corridors and Feeder routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana- LOT-4/ Package-1) Work order for Valuation of effected structures of Spur of Delhi-Mumbai Expressway connecting Jewar International Airport (length 33 Km)

Sr.No.	Chainage	Name of village	Plot No.	Name of Beneficary	Structure Item No.	Type of structure	Structure valuation	Depriciation amount	Net valuation amount	Total valuation amount	5% Scrap amount	Net Payable amount	Remarks
Mohiyapur													
1	17+450	Mohiyapur	33//24	Kawar Singh S/o Mishri Lal	1	A	50000	0	50000	50000	0	50000	Borewell
2	17+600	Mohiyapur		Suresh S/o Heera Lal	2	A	146575	21986	124589	133675	6684	176991	G.P.
					3	B	10689	1603	9086				W Tank
					4	C	50000	0	50000	50000	0		Borewell
					VALUATION GRAND TOTAL =				233675	233675	6684	226991	
Narhawali													
1	8+800	Narhawali	40//10	Dayakishan, Surat Ram Sharma S/o Late Bohari Lal	1	A	108707.5	16306	92401.5	97247	4862	142385	G.P.
					2	B	5700.8	855	4845.8				W Tank
					3	C	50000	0	50000	50000	0		Borewell
2	9+450	Narhawali	43//20	Manjeet	4	A	138600	20790	117810	360867	18043	392824	G.P.
					5	B	285950	42893	243057				B.Wall
					6	C	50000	0	50000	50000	0		Borewell
3	9+500	Narhawali	54//3	Manjeet	7	A	166980	25047	141933	153874	7694	196181	G.P.
					8	B	3054	458	2596				Foundation
					9	C	10994	1649	9345				W.Tank
					10	D	50000	0	50000	50000	0		Borewell
4	10+050	Narhawali	60//20	M/s Nambardar Bhatta	11	A	178200	32076	146124	1293725	64686	1279039	G.P. (FF)
					12	B	297000	53460	243540				GP
							165880	29858	136022				GP
					13	C	267300	48114	219186				ASB
					14	D	64680	11642	53038				GP
					15	E	192500	34650	157850				GP
					16	F	8062.56	1451	6612				W Tank
					17	G	6515.2	1173	5342				W Tank
					18	H	380475	68486	311989				B Wall
					19	I	17100	3078	14022				Gate
					20	J	50000	0	50000	50000	0		Borewell
					21	K	50000	0	50000	50000	0		Well
5	10+300	Narhawali	67//13/1	Asha Thakural	22	A	276547	27655	248892	600027	30001	620026	G.P.
					23	B	364500	36450	328050				B Wall
					24	C	25650	2565	23085				Gate
					25	D	50000	0	50000	50000	0		Borewell
6	10+300	Narhawali			26	A	174195	52259	121936	121936	6097	115839	ASB
					VALUATION GRAND TOTAL =				2927676	2927676	131384	2746293	

Sr.No.	Chainage	Name of village	Plot No.	Name of Beneficary	Structure Item No.	Type of structure	Structure valuation	Depriciation amount	Net valuation amount	Total valuation amount	5% Scrap amount	Net Payable amount	Remarks
Mahamadpur													
1	11+450	Mahamadpur	15//16/1	Devi Charan S/o Sri Hari Ram	1	A	572880	68746	504134	752723	37636.15	781807	G.P.
					2	B	95452.5	11454	83998				G.P.
					3	C	98697.5	11844	86853				G.P.
					4	D	66960	8035	58925				ASB (Tin Shade)
					5	E	11605.2	1393	10212				Stair
					6	F	9772.8	1173	8600				W.Tank
					7	G	50000	0	50000	50000	0		Borewell
					8	H	20000	2400	17600	17600	880		Gobar Gas Plant
Panhera Khurd								VALUATION GRAND TOTAL =	820323	820323	38516	781807	
1	7+300	Panhera Khurd	2//10	Shankar Bricks Industries and Prop. Deepak Kumar Bhatiya	1	A	299700	29970	269730	1279889	63994	1315895	ASB (Tin Shade)
							245754	24575	221179				ASB (Tin Shade)
							153630	15363	138267				ASB (Tin Shade)
					2	B	186480	18648	167832				ASB (Tin Shade)
					3	C	133650	13365	120285				ASB (Tin Shade)
					4	D	366660	36666	329994				ASB (Tin Shade)
					5	E	36225	3623	32602				W.Tank
					6	D	50000	0	50000	50000	0		Borewell
					7	E	50000	0	50000	50000	0		Well
2	7+400	Panhera Khurd	2//12	Deepak Kumar Bhatiya S/o Late Shri Puranlal Bhatiya	8	A	13090	524	12566	12566	628	11938	G.P.
3	7+500	Panhera Khurd	2//23/1	Yogesh Kumar S/o Harbansh Vats	9	A	204930	16394	188536	214020	10701	253319	G.P.
					10	B	12475.59	998	11478				W.Tank
					11	C	2748.6	220	2529				W.Tank
					12	D	12475.59	998	11478				W.Tank
					13	E	50000	0	50000	50000	0		Borewell
4	7+900	Panhera Khurd	12//2	Tarachand S/o Late Dayanand S/o Charan Singh	14	A	87725	4386	83339	89838	4492	135346	G.P.
					15	B	6840.96	342	6499				W.Tank
					16	C	50000	0	50000	50000	0		Borewell
5	8+200	Panhera Khurd	12//6	Shivdutt S/o Niranjan	17	A	88660	7093	81567	85080	4254	130826	G.P.
					18	B	3817.5	305	3513				W.Tank
					19	C	50000	0	50000	50000	0		Borewell
								VALUATION GRAND TOTAL =	1931392	1931392	84070	1847323	

Sr.No.	Chainage	Name of village	Plot No.	Name of Beneficary	Structure Item No.	Type of structure	Structure valuation	Depriciation amount	Net valuation amount	Total valuation amount	5% Scrap amount	Net Payable amount	Remarks
Hirapur													
1	11+650	Hirapur	3//10/2/1	Ganga Ram, Sanjay Sharma S/o Bhodev Sharma	1	A	680680	54454	626226	1216186	60809.29	1155376	G.P.(GF)
					2	B	56430	4514	51916				G.P.(GF)
					3	C	186120	14890	171230				G.P.(FF)
					4	D	67320	5386	61934				G.P.(GF)
					5	E	243225	19458	223767				G.P.(GF)
					6	F	12765.72	1021	11745				Stair
					7	G	78525	14135	64390				B Wall
2	11+800	Hirapur	3//23/2/1	Kuldeep S/o Raja Ram	4	A	6071	1093	4978				Gate
					5	B	281875	14094	267781	274164	13708	310456	G.P.
3	12+500	Hirapur	17//2/2	Govt. Tubewell	6	C	6718.8	336	6383				W Tank
					7	A	50000	0	50000	50000	0		Borewell
					8	B	325350	16268	309082	309082	15454.1	343628	G.P.
Sotai							50000	0	50000	50000	0		Borewell
							VALUATION GRAND TOTAL =		1899432	1899432	89972	1809460	
1	1+900	Sotai	13//08		1	A	37400	3740	33660	33660	1683	81977	G.P.
2	2+250	Sotai	12//22	Mahendra Singh S/o Kawar Singh	2	B	50000	0	50000	50000	0		Borewell
3	2+400	Sotai	16//04	Kek Singh S/o Sarjeet Singh	3	A	207900	20790	187110	187110	9356	177755	ASB
					4	A	1973400	197340	1776060	3032183	151609	2988036	GP (GF)
					5	B	146520	14652	131868				GP (FF)
					6	C	94380	9438	84942				GP (FF)
					7	D	580800	58080	522720				GP (GF+1)
					8	E	135850	13585	122265				GP (GF)
					9	F	217800	21780	196020				GP (GF)
					10	G	41400	4140	37260				GP (GF)
					11	H	7492.48	749	6743				W Tank
					12	I	171450	17145	154305				B Wall
					13	J	100000	0	100000	100000	0		Borewell
					14	K	8144	814	7330	7330	366.5		Stair
					15	L	582.5	58	525	525	26		Gate
4	2+400	Sotai	16//04	Tejpal S/o Sarjeet	16	A	3415195.9	341520	3073676	4502639	225132	4277507	RCC (GF)
					17	B	271125	27113	244012				RCC (GF+1)
					18	C	160270	16027	144243				GP (GF)
					19	D	568700	56870	511830				GP (GF+1)
					20	E	46115.4	4612	41503				Foundation
					21	F	36648	3665	32983				Foundation
					22	G	431640	43164	388476				ASB
					23	H	63900	6390	57510				B Wall
					24	I	9340	934	8406				Gate
5	2+700	Sotai	17//20		25	A	643500	64350	579150	842400	42120	800280	ASB
					26	B	292500	29250	263250				ASB
6	3+050	Sotai	25//06	Ram Kumar	27	A	860310	17206	843104	1037299	51865	985434	G.P.
					28	B	160380	3208	157172				ASB
					29	C	9406.32	188	9218				Stair
					30	D	24300	486	23814				B Wall
					31	E	4072	81	3991				Gate

Sr.No.	Chainage	Name of village	Plot No.	Name of Beneficary	Structure Item No.	Type of structure	Structure valuation	Depriciation amount	Net valuation amount	Total valuation amount	5% Scrap amount	Net Payable amount	Remarks
7	3+050	Sotai	25//06	Laxmi	32	A	436480	8730	427750	529727	26486	503240	G.P.
					33	B	100800	2016	98784				B Wall
					34	C	3257.6	65	3193				Gate
8	3+050	Sotai	25//06	Gajendra S/o Late Krishan	35	A	323840	6477	317363	446549	22327	424221	G.P.
					36	B	50490	1010	49480				G.P.
9	3+050	Sotai	25//06	Krishan	37	C	78075	1562	76513				B Wall
					38	D	3257.6	65	3193				Gate
10	3+050	Sotai	24//10	Mahesh	39	A	303600	18216	285384	425926	21296.32	404630	G.P.
					40	B	143100	8586	134514				B Wall
11	3+050	Sotai	25//06	Sonvati W/o Bhavichand	41	C	6413.4	385	6028				Gate
					42	A	222750	13365	209385	215605	10780.25	204825	B Wall
					43	B	6617	397	6220				Gate
12	3+050	Sotai	25//06	Ram Kumar	44	A	132000	7920	124080	124080	6204	117876	G.P.
					45	A	456300	45630	410670	1381612	69081	1312531	ASB
					46		308000	30800	277200				GP
						B	338910	33891	305019				GP
					47	C	288805	28881	259924				GP
					48	D	68200	6820	61380				GP
13	3+750	Sotai	34//19/1	Niraj	49	E	5954.25	595	5359.25				Gate
					50	F	56250	5625	50625				B Wall
14	3+750	Sotai	34//20	Jawaharlal S/o Dharamveer	51	A	12704.64	1270	11435				Stair
							382095	76419	305676	389124	19456	369668	ASB
					52	A	104310	20862	83448				ASB
						B	595800	47664	548136	548136	27407	570729	B Wall
15	4+300	Sotai	38//23	Subhash Chand S/o Late Dhanpal	53	A	50000	0	50000	50000	0		Borewell
							33440	3344	30096	842927	42146	800781	GP
					54	B	6718.8	672	6047				W Tank
					55	C	177120	17712	159408				ASB
					56	D	198440	19844	178596				GP
					57	E	391050	39105	351945				GP
					58	F	7005	701	6304				Gate
					59	G	8062.56	806	7257				Stair
16	4+400	Sotai	38//24	Sunil S/o Dhanpal	60	H	114750	11475	103275				B Wall
					61	A	194012.5	19401	174612	174612	8731	165881	G.P.
17	4+480	Sotai	37//21	Om Pal S/o Sri Chand	62	A	170280	13622	156658				G.P.
					63	B	24513.44	1961	22552	197087	9854	237233	Foundation
					64	C	4581	366	4215				W Tank
					65	D	14850	1188	13662				B Wall
18	4+480	Sotai	51//01	Ram Karan, Manoj Hudda S/o Om Pal Hudda	66	E	50000	0	50000	50000	0		Borewell
					67	A	24750	1238	23512	23512	1176	22336	G.P.
19	4+500	Sotai	51//02	Sukhpal S/o Sri Chand	68	A	297000	23760	273240	315957	15798	400159	G.P.
					69	B	7024.2	562	6462				W Tank
							1832.4	147	1685				W Tank
					70	C	37575	3006	34569				B Wall
					71	D	100000	0	100000	100000	0		Borewell
								VALUATION GRAND TOTAL =	15608000	15608000	762900	14845100	

Sr.No.	Chainage	Name of village	Plot No.	Name of Beneficary	Structure Item No.	Type of structure	Structure valuation	Depriciation amount	Net valuation amount	Total valuation amount	5% Scrap amount	Net Payable amount	Remarks
Sahupura													
1	1+050	Sahupura	3//22/2	Jagbir	1	A	61655	4932	56723	91085	4554	136531	G.P.
					2	B	37350	2988	34362				B Wall
					3	C	50000	0	50000	50000	0		Borewell
2	1+100	Sahupura	12//2/2	Rajendra Sharma S/o Sri Puran Sharma	4	A	1373700	68685	1305015	1764581	88229	1676352	RCC
					5	B	166952	8348	158604				Foundation
					6	C	208575	10429	198146				B Wall
					7	D	108227.25	5411	102816				Gate
								VALUATION GRAND TOTAL =	1905666	1905666	92783	1812883	
Phaphunda													
1	5+200	Phaphunda	29//4	Sukhbir S/o Gaj Raj	1	A	141669	7083	134586	145727	7286	208441	GP (GF)
					2	B	11727.36	586	11141				W Tank
					3	C	50000	0	50000	50000	0		Borewell
					4	D	20000	0	20000	20000	0		Hand Pump
2	6+500	Phaphunda	43//1		1	A	82500	12375	70125	74901	3745	121156	GP
					2	B	5619.36	843	4776.36				W Tank
					3	C	50000	0	50000	50000	0		Borewell
3	7+000	Phaphunda	47//13/2	Roshanlal Brickes Company	1	A	353430	35343	318087	1276049	63802	1282247	G.P.
					2	B	179010	17901	161109				ASB (Tin Shade)
					3	C	191700	19170	172530				ASB (Tin Shade)
					4	D	288900	28890	260010				ASB (Tin Shade)
					5	E	23040	2304	20736				ASB (Tin Shade)
					6	F	124800	12480	112320				ASB (Tin Shade)
					7	G	6718.8	672	6047				Foundation
					8	H	236925	23693	213232				B Wall
					9	I	13309.5	1331	11979				Gate
					10	J	50000	0	50000	50000	0		Borewell
					11	K	20000	0	20000	20000	0		Hand Pump
4	7+000	Phaphunda	47//18/2	Subhash Chandra, Manoj Kumar, Satwindra Kumar S/o Brijpal Singh	1	A	129360	10349	119011	119011	5951	113060	G.P.
								VALUATION GRAND TOTAL =	1805689	1805689	80784	1724905	
Chhainsa													
1	18+500	Chhainsa	260//11/2/2	Banso Bai W/o Darshan Singh	1	A	493350	39468	453882	597690	29884	617805	GP
					2	B	51012.5	4081	46932				GP
					3	C	105300	8424	96876				ASB
					4	D	50000	0	50000	50000	0		Borewell
2	18+600	Chhainsa	260//23	Pahalwan Singh S/o Amar Singh	5	A	362780	36278	326502	610328	30516	649812	GP
							134640	13464	121176				GP
					6	B	155250	15525	139725				ASB
					7	C	21375	2138	19237				ASB

S.No.	Chainage	Name of village	Plot No.	Name of Beneficiary	Structure Item No.	Type of structure	Structure valuation	Depreciation amount	Net valuation amount	Total valuation amount	5% Scrap amount	Net Payable amount	Remarks
					8	D	[illegible]	[illegible]	[illegible]				
					9	E	[illegible]	0	[illegible]				
					10	F	50000	0	50000	50000	0		ASB
3	19+600	Chimansa	260/123	Kaushal S/o Awatar Singh	11	A	[illegible]	[illegible]	[illegible]				[illegible]
					12	A	[illegible]	[illegible]	[illegible]	350264	[illegible]		[illegible]
					12	B	[illegible]	[illegible]	[illegible]			[illegible]	E.P.
					13	C	50000	0	50000	50000	0		ASB
4	19+600	Chimansa	260/123	Mahendra Singh S/o Amar Singh	14	A	[illegible]	[illegible]	288677				[illegible]
					15	B	136620	10930	125690				[illegible]
					16	C	41470	3318	38152	468811	[illegible]		E.P.
					17	D	4886.4	391	4495			[illegible]	ASB
					18	E	12929.8	1126	11803				SP
					19	F	50000	0	50000	50000	0		[illegible]
5	19+600	Chimansa	260/123	Gian Singh S/o Amar Singh	20	A	291720	23338	268382				Borewell
					21	B	130680	10454	120226	478694	23935	454759	E.P.
					22	C	97920	7834	90086				ASB
6	19+600	Chimansa	260/123	Shito Bai W/o Amar Singh	23	A	269280	21542	247738	247738	12387	235351	ASB
7	19+600	Chimansa	260/123	Iqbal Singh S/o Amar Singh	24	A	199650	15972	183678	183678	9184	174494	E.P.
8	19+600	Chimansa	260/123	Gurdeep Singh S/o Awtar Singh	25	A	839800	52358	788942	1017700	50885	966815	E.P.
							162360	9742	152618				E.P.
					26	B	81000	4860	76140				E.P.
9	19+600	Chimansa	260/123	Kaushal Singh S/o Awtar Singh	27	A	228690	13721	214969				B wall
					28	B	364320	21859	342461				SP
					29	C	93967.5	5638	88329.5	775292	38765		SP
					30	D	74800	4488	70312			797913	SP
					31	E	63000	3780	59220				SP
					32	F	50000	0	50000	50000	0		B wall
					33	G	12750	765	11985	11985	599		Borewell
10	19+600	Chimansa	260/123	Gurmeet Singh S/o Awatar Singh	34	A	400400	40040	360360	360360	18018	342342	Stair
11	19+600	Chimansa	260/123	Kaushal, Gurdeep Singh S/o Awatar Singh	35	A	375100	30008	345092	462484	23124	439360	E.P.
					36	B	127600	10208	117392				E.P.
12	19+700	Chimansa	260/127	Darshan Singh S/o Ranjha Singh	37	A	2234650	223465	2011185	2997400	149870	2847530	E.P.
					38	B	297675	29768	267907				E.P.
					39	C	48600	4860	43740				ASB
					40	D	76500	7650	68850				ASB
					41	E	63250	6325	56925				ASB
					42	F	78100	7810	70290				E.P.
					43	G	397320	39732	357588				E.P.
					44	H	11500	1150	10350				E.P.
					45	I	122850	12285	110565				Stair
					46	J	50000	0	50000	50000	0		B wall
					47	K	50000	0	50000	50000	0		Borewell
													Borewell

Sr.No.	Chainage	Name of village	Plot No.	Name of Beneficary	Structure Item No.	Type of structure	Structure valuation	Depriciation amount	Net valuation amount	Total valuation amount	5% Scrap amount	Net Payable amount	Remarks
13	18+800	Chhainsa	260//25	Jitendra S/o Anand Swaroop	48	A	169785	33957	135828	146673	7334	239340	G.P.
					49	B	13556.25	2711	10845				W Tank
					50	C	50000	0	50000	50000	0		Borewell
					51	D	50000	0	50000	50000	0		Borewell
								VALUATION GRAND TOTAL =	9179099	9179099	435455	8743644	
Mohna													
1	13+400	Mohna	5//25	Water Supply	1	A	431100	12933	418167	418167	20908	397259	B Wall
2	13+700	Mohna		Pt. Dharmendra Kaushik	2	A	200640	38122	162518	165486.8	8274	177212	G.P.
					3	B	3664.8	696	2968.8				W Tank
					4	C	20000	0	20000	20000	0		Hand Pump
3	14+000	Mohna	30//12	Murari Lal S/o Patram	5	A	750750	75075	675675	683682.32	34184	699498	G.P.
					6	B	8897.32	890	8007				W Tank
					7	C	50000	0	50000	50000	0		Borewell
4	14+000	Mohna	30//13	Kangi, Gurdayal S/o Tej Singh	8	A	679250	54340	624910	633095	31655	651441	G.P.
					9	B	8897.32	712	8185.32				W Tank
					10	C	50000	0	50000	50000	0		Borewell
5	14+200	Mohna	30//24	Ruma Tomar W/o Kamal Singh Tomar	11	A	1275285	89270	1186015	2618476	130924	2537552	GP (GF)
							64625	4524	60101				GP (GF)
					12	B	284146.5	19890	264256.5				GP (GF+1)
							324500	22715	301785				GP (GF+1)
					13	C	51979.08	3639	48340.08				W Tank
					14	D	2611.17	183	2428.17				W Tank
					15	E	9772.8	684	9088.8				Stair
					16	F	7822.25	548	7274.25				Gate
					17	G	112725	7891	104834				B Wall
							682100	47747	634353				B Wall
					18	H	50000	0	50000	50000	0		Borewell
6	14+200	Mohna	30//16	Jitendra S/o Dhara Singh	19	A	170280	30650	139630	146542.04	7327.10	189215	G.P.
					20	B	8429.04	1517	6912.04				W Tank
					21	C	50000	0	50000	50000	0		Borewell
7	14+300	Mohna	29//22		22	A	182875	3658	179217	861067	43053	818013	G.P.
					23	B	608580	12172	596408				ASB
					24	C	20095.32	402	19693.32				W Tank
					25	D	2290.5	46	2244.5				W Tank
					26	E	64800	1296	63504				B Wall
8	14+300	Mohna	29//03/01	Satish Kumar Attri S/o Dharam Singh	27	A	717090	107564	609526	1319106	65955	1303151	G.P.
							429440	64416	365024				G.P.
					28	B	201960	30294	171666				ASB
					29	C	22500	3375	19125				ASB
					30	D	180900	27135	153765				B Wall
					31	E	50000	0	50000	50000	0		Borewell
9	14+300	Mohna	29//03/01	Randhir Singh S/o Dharam Singh	32	A	311872.5	46781	265092	559922	27996	531925	ASB
							316710	47507	269203				ASB
					33	B	30150	4523	25627				B Wall
				Jitender Kumar S/o	34	A	263670	39551	224119				G.P.

Sr.No.	Chainage	Name of village	Plot No.	Name of Beneficary	Structure Item No.	Type of structure	Structure valuation	Depriciation amount	Net valuation amount	Total valuation amount	5% Scrap amount	Net Payable amount	Remarks
10	14+300	Mohna	29//03/01	Dharam Singh	35	B	410440	61547	348761	603484	30174.1	573308	ASB
					36	C	50000	5400	44600				B Wall
11	14+600	Mohna	41//07/01	Biram Prakash S/o Shyam Singh	37	A	157850	15785	142065	149541	7477	192064	G.P.
					38	B	8306.88	831	7475				W Tank
					39	C	50000	0	50000	50000	0	253465	Borewell
12	14+750	Mohna	41//20/3	Radhelal S/o Harbhajan	40	A	296450	29645	266805	266805	13340.25		G.P.
13	14+900	Mohna	42//23		41	A	143550	21533	122017	129372	6469	172903	G.P.
					42	B	8653	1298	7355				W Tank
					43	C	50000	0	50000	50000	0		Borewell
14	17+000	Mohna	74//13	Dharamveer S/o Rupa	44	A	157850	15785	142065	149230	7461	241768	G.P
					45	B	7960.76	796	7165	50000	0		W tank
					46	C	50000	0	50000	50000	0		Borewell
					47	D	50000	0	50000				Well
15	17+100	Mohna	74//15	Mandir	48	A	191400	19140	172260	178178.28	8908.91	219269	G.P.
					49	B	6576.28	658	5918.28	50000	0		W Tank
					50	C	50000	0	50000				Borewell
16	17+450	Mohna	75//24	Mukesh Singh S/o Kawar Singh	51	A	42300	2115	40185	40185	2009.25	138176	B Wall
					52	B	50000	0	50000	50000	0		Borewell
					53	C	50000	0	50000	50000	0		Well
								VALUATION GRAND TOTAL =	9542337	9542337	446117	9096220	

Executive Engineer
Provincial Division
PWD B&R Br. Faridabad

ANAXURE - 1 (A)

Consultancy Services for Preparation of Feasibility Study/Detailed Project Report of selected DPR for development of Econmic corridor inter corridors and feeder routs to improve the efficiency of freight movement in india under Bharatmala pariyojana (LOT-4/Package-1)- Work order for Valuation of effected structures of Spur of Delhi-Mumbai Expressway connecting Jewar International Airport (length 33 km)

Name of village - Baghpur Kalan ,Tahesil - Palwal , Distt. - Palwal.

S. No	Chainage	Compartment No.	Name of Beneficiary	STRU. ITEM NO.	TYPE OF STRU.	Position in ROW (side-R/L)	Structure Catg.	Unit	Length in M	Width in M	Height in M	stru. Total Plinth area/ qty	Age of structure	Age of design stru.	Approved Rate in Rs.	structure Valuation in Rs.	Depriciation amount in Rs.	Net Value Amount in Rs.	Total Valuation Amount	5 % Scrap Amount	Net Payable Amount in Rs	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Formula											(=1*5*3)				(=5*8)	(=9*6/100)	(=17-18)	-19	(20*5/100)	(=20-21)	
								1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	19+250	14//06	Jitendra S/O Rambir Singh	1	A	BY PASS	C-II	1	15.000	6.000	3.000	90	12	60	11000	990000	118800	871200	2533942	126697	2457245	G.P.
				2	B	BY PASS	C-II	1	5.000	4.100	3.000	20.5	12	60	11000	225500	27060	225500				G.P.
				3	C	BY PASS	C-II	1	15.000	7.000	3.000	105	12	60	11000	1155000	138600	1016400				G.P.
				4	D	BY PASS	C-II	1	1.900	1.200	3.000	2.28	12	60	11000	25080	3010	22070				G.P.
				5	E	BY PASS	D-II	1	7.500	4.100	3.000	30.75	12	40	9000	276750	33210	243540				ASB (Tin Shade)
				6	F	BY PASS	K-III	1	39.200	_	_	_	12	_	4500	176400	21168	155232				B. Wall
				7	G	BY PASS	G	1	_	_	_	_	12	_	50000	50000	0	50000	50000	0		Borewell
2	19+250	14//06	Bishambhar S/O Sukhi Ram	8	A	BY PASS	C-II	1	2.400	1.650	3.000	3.96	15	60	11000	43560	6534	37026	280831	14042	266789	G.P.
				9	B	BY PASS	D-II	1	5.600	5.200	3.000	29.12	15	40	9000	262080	39312	222768				ASB (Tin Shade)
				10	C	BY PASS	K-III	1	3.600	_	_	_	12	_	4500	16200	1944	14256				B. Wall
				11	D	BY PASS	X	1	3.300	_	_	_	12	_	2335	7705.5	925	6781				Gate

ANAXURE - 1 (A)

Consultancy Services for Preparation of Feasibility Study/Detailed Project Report of selected DPR for development of Econmic corridor inter corridors and feeder routs to improve the efficiency of freight movement in india under Bharatmala pariyojana (LOT-4/Package-1)- Work order for Valuation of effected structures of Spur of Delhi-Mumbai Expressway connecting Jewar International Airport (length 33 km)

Name of village - Baghpur Kalan ,Tahesil - Palwal , Distt. - Palwal.

S. No	Chainage	Compartment No.	Name of Beneficiary	STRU. ITEM NO.	TYPE OF STRU.	Position in ROW (side-R/L)	Structure Catg.	Unit	Length in M	Width in M	Height in M	stru. Total Plinth area/ qty	Age of structure	Age of design stru.	Approved Rate in Rs.	structure Valuation in Rs.	Depriciation amount in Rs.	Net Value Amount in Rs.	Total Valuation Amount	5 % Scrap Amount	Net Payable Amount in Rs	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
3	19+600	15//15	Dharmabir S/O Het Lal	12	G	BY PASS	G	1	_	_	_	_	12	_	50000	50000	0	50000	50000	0	50000	Borewell
4	19+950	16//16/3	Dharmi S/O Deepa	13	A	BY PASS	C-II	1	10.000	3.500	3.000	35	15	60	11000	385000	57750	327250	985546	49277	986269	G.P.
				14	B	BY PASS	C-II	1	2.400	1.800	3.000	4.32	15	60	11000	47520	7128	47520				G.P.
				15	C	BY PASS	D-II	1	10.000	3.400	3.000	34	15	60	9000	306000	45900	260100				ASB (Tin Shade)
				16	D	BY PASS	D-II	1	6.400	4.600	3.000	29.44	15	60	9000	264960	39744	225216				ASB (Tin Shade)
				17	E	BY PASS	K-III	1	32.800	_	_	_	15	_	4500	147600	22140	125460				B. Wall
				18	F	BY PASS	G	1	_	_	_	_	15	_	50000	50000	0	50000	50000	0		Borewell
5	19+950	16//16/2	Puspa W/O Than Singh	19	A	BY PASS	C-II	1	13.100	8.500	3.000	111.35	10	60	11000	1224850	122485	1102365	1147509	57375	1140134	G.P.
				20	B	BY PASS	C-II	1	2.400	1.900	3.000	4.56	10	60	11000	50160	5016	45144				G.P.
				21	C	BY PASS	G	1	_	_	_	_	15	_	50000	50000	0	50000	50000	0		Borewell
6	20+100	17//21/3	Haranam S/O Sher Singh	22	A	BY PASS	C-II	1	9.600	4.250	3.000	40.8	15	40	11000	448800	67320	381480	692289	34614	657675	G.P.
				23	B	BY PASS	Y-II	1	5.000	1.100	3.000	2.75	15	40	2036	5599	840	4759				Stair
				24	C	BY PASS	Y-II	1	13.694	1.600	1.000	21.91	15	40	2036	44608.76	6691	37917				Foundation
				25	D	BY PASS	K-III	1	70.100	_	_	_	15	_	4500	315450	47318	268133				B. Wall

ANAXURE - 1 (A)

Consultancy Services for Preparation of Feasibility Study/Detailed Project Report of selected DPR for development of Econmic corridor inter corridors and feeder routs to improve the efficiency of freight movement in india under Bharatmala pariyojana (LOT-4/Package-1)- Work order for Valuation of effected structures of Spur of Delhi-Mumbai Expressway connecting Jewar International Airport (length 33 km)

Name of village - Baghpur Kalan ,Tahesil - Palwal , Distt. - Palwal.

S. No	Chainage	Compartment No.	Name of Beneficiary	STRU. ITEM NO.	TYPE OF STRU.	Position in ROW (side-R/L)	Structure Catg.	Unit	Length in M	Width in M	Height in M	stru. Total Plinth area/ qty	Age of structure	Age of design stru.	Approved Rate in Rs.	structure Valuation in Rs.	Depriciation amount in Rs.	Net Value Amount in Rs.	Total Valuation Amount	5 % Scrap Amount	Net Payable Amount in Rs	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
7	20+450	18//20	Giri Raj S/O Moti	26	A	BY PASS	C-II	1	10.100	6.800	3.000	34.34	15	60	11000	377740	56661	321079	413644	20682	392962	G.P.
							C-II	1	3.300	3.000	3.000	9.9	15	60	11000	108900	16335	92565				G.P.
8	20+850	19//26	Sunil, Santosh S/O Dharmabir	27	A	BY PASS	C-II	1	4.600	2.800	3.000	12.88	12	60	11000	141680	17002	124678	124678	6234	168444	G.P.
				28	B	BY PASS	G	1	_	_	_	_	15	_	50000	50000	0	50000	50000	0		Borewell
9	21+400	25//03	Kalu S/O Sri Chand	29	G	BY PASS	G	1	_	_	_	_	12	_	50000	50000	0	50000	50000	0	50000	Borewell
10	21+700	23//01	Mangat Singh S/O Mota Singh	30	A	BY PASS	C-II	1	4.000	3.200	3.000	12.8	10	60	11000	140800	14080	126720	137165	6858	180306	G.P.
				31	B	BY PASS	Y	1	2.300	2.000	0.700	4.6	10	40	2036	9365.6	937	8429				W. Tank
						BY PASS	Y	1	1.100	1.000	0.700	1.1	10	40	2036	2239.6	224	2016				W. Tank
				32	C	BY PASS	G	1	_	_	_	_	10	_	50000	50000	0	50000	50000	0		Borewell
				PVT. VALUATION GRAND TOTAL =														6665604	6665604	315780	6349824	

ANNEXURE XII

Details of Bridge

National Highways Authority Of India (Ministry of Road Transport and Highways, Government of India)

Construction of 6 lane Greenfield Connectivity to Jewar International Airport from DND-Faridabad-Ballabhgarh Bypass KMP Link - Spur to Delhi Mumbai Expressway on Hybrid Annuity mode in the State of Haryana and Uttar Pradesh under Bharatmala Pariyojana.

Hydrology Report

Detailed Project Report

December 2021

Submitted by

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Contents

1. Introduction

Flood estimation is one of the major aspects of hydrologic design and is the first step in planning for flood regulation and protection measures. An estimate of probable maximum flood and the corresponding stage are necessary for the hydraulic design of proposed bridge. Proper selection of the design flood is of utmost importance as it affects both the safety and cost of any structure. Too small a design flood for a major structure involves a high risk, not only of total failure of the structure and the services rendered by it but also to the safety of the persons and the property located downstream. An excessive design flood, on the other hand, will result in an unnecessarily costly structure which may adversely affect the economic feasibility of the project. Thus, in case where virtually no risk can be afforded, probable maximum flood is commonly adopted as the Design flood and in projects where the release of water due to structural failure or overtopping will not endanger life or cause disastrous damage downstream, design flood of lesser magnitude is adopted as it would be uneconomical to design such a structure to withstand the probable maximum flood.

The Yamuna is the second-largest tributary river of the Ganga by discharge and the longest tributary in India. Originating from the Yamunotri Glacier at a height of 6,387 metres (20,955 ft) on the southwestern slopes of Banderpooch peaks of the Lower Himalaya in Uttarakhand, it travels a total length of 1,376 kilometres (855 mi) and has a drainage system of 366,223 square kilometres (141,399 sq mi), 40.2% of the entire Ganga Basin. It merges with the Ganga at Triveni Sangam, Prayagraj, which is a site of the Kumbh Mela, a Hindu festival held every 12 years.

It crosses several states: Haryana and Uttar Pradesh, passing by Uttarakhand and later Delhi, and meeting its tributaries on the way, including Tons, Chambal, its longest tributary which has its own large basin, followed by Sindh, the Betwa, and Ken. From Uttarakhand, the river flows into the state of Himachal Pradesh. After passing Paonta Sahib, Yamuna flows along the boundary of Haryana and Uttar Pradesh and after exiting Haryana it continues to flow till it merges with the river Ganga at Sangam or Prayag in Allahbad (Uttar Pradesh). It helps create the highly fertile alluvial Yamuna-Ganga Doab region between itself and the Ganga in the Indo-Gangetic plain.

Nearly 57 million people depend on the Yamuna's waters, and the river accounts for more than 70 percent of Delhi's water supply. It has an annual flow of 97 billion cubic metres, and nearly 4 billion cubic metres are consumed every year (of which irrigation constitutes 96%). At the Hathni Kund Barrage, its waters are diverted into two large canals: the Western Yamuna Canal flowing towards Haryana and the Eastern Yamuna Canal towards Uttar Pradesh. Beyond that point the Yamuna is joined by the Somb, a seasonal rivulet from Haryana, and by the highly polluted Hindon River near Noida, by Najafgarh drain near Wazirabad and by various other drains, so that it continues only as a trickling sewage bearing drain before joining the Chambal at Pachnada in the Etawah District of Uttar Pradesh.

2. YAMUNA RIVER BASIN

River Yamuna (Figure 1) is the largest tributary of the River Ganga. The main stream of the river Yamuna originates from the Yamunotri glacier near Bandar Punch (38o 59' N 78o 27' E) in the Mussourie range of the lower Himalayas at an elevation of about 6320 meter above mean sea level in the district Uttarkashi (Uttaranchal). The catchment (Table 1&2) of the Yamuna River covers parts of the states of Uttaranchal, Uttar Pradesh, Himachal Pradesh, Haryana, Rajasthan, Madhya Pradesh

and the entire state of Delhi. The river Yamuna traverses a distance of about 1370 km in the plain from Saharanpur district of Uttar Pradesh to the confluence with river Ganga at Allahabad. The major tributaries of the river are Tons, Betwa, Chambal, Ken and Sindh and these together contribute 70.9% of the catchment area and balance 29.1% is the direct drainage of main River and smaller tributaries. On the basis of area, the catchment basin of Yamuna amounts to 40.2% of the Ganga Basin and 10.7% of the country.

The catchment area of Yamuna river with its tributaries are shown in Figure 2. The main stream of the river Yamuna originates from the Yamunotri glacier near Bandar Punch (38o 59' N 78o 27' E) in the Mussourie range of the lower Himalayas at an elevation of about 6320 meter above mean sea level in the district Uttarkashi (Uttranchal). The catchment of the Yamuna river system covers parts of the states of Uttaranchal, Uttar Pradesh (U.P.), Himachal Pradesh, Haryana, Rajasthan, Madhya Pradesh and the entire state of Delhi. The river Yamuna traverses a distance of about 1370 km in the plain from Saharanpur district of Uttar Pradesh to the confluence with river Ganga at Allahabad. The major tributaries of the river are Tons, Betwa, Chambal, Ken and Sindh and these together contribute 70.9% of the catchment area and balance 29.1% is the direct drainage of main River and smaller tributaries. On the basis of area, the catchment basin of Yamuna amounts to 40.2% of the Ganga Basin and 10.7% of the country.

Table 1: Sub-catchments

State/Territory	**Area (in Sq. Km.)**	**Area in the major sub-basin (in Sq. km.)**					
		River Hindon	**River Chambal**	**River Sind**	**River Betwa**	**River Ken**	**Other river Basin**
U.P.	3771						3771
Uttranchal	70437	7083	452	748	14438	3336	44380
Himachal Pradesh	5799						5799
Haryana	21265						21265
Rajasthan	102883		79495				23388
Madhya Pradesh	140208		59838	25131	33502	21090	647
Delhi	1485						1485
Total	345848 (100%)	7083 (2.0%)	139785 (40.5%)	25879 (7.5%)	47940 (13.9%)	24426 (7.1%)	100735 (29.1%)

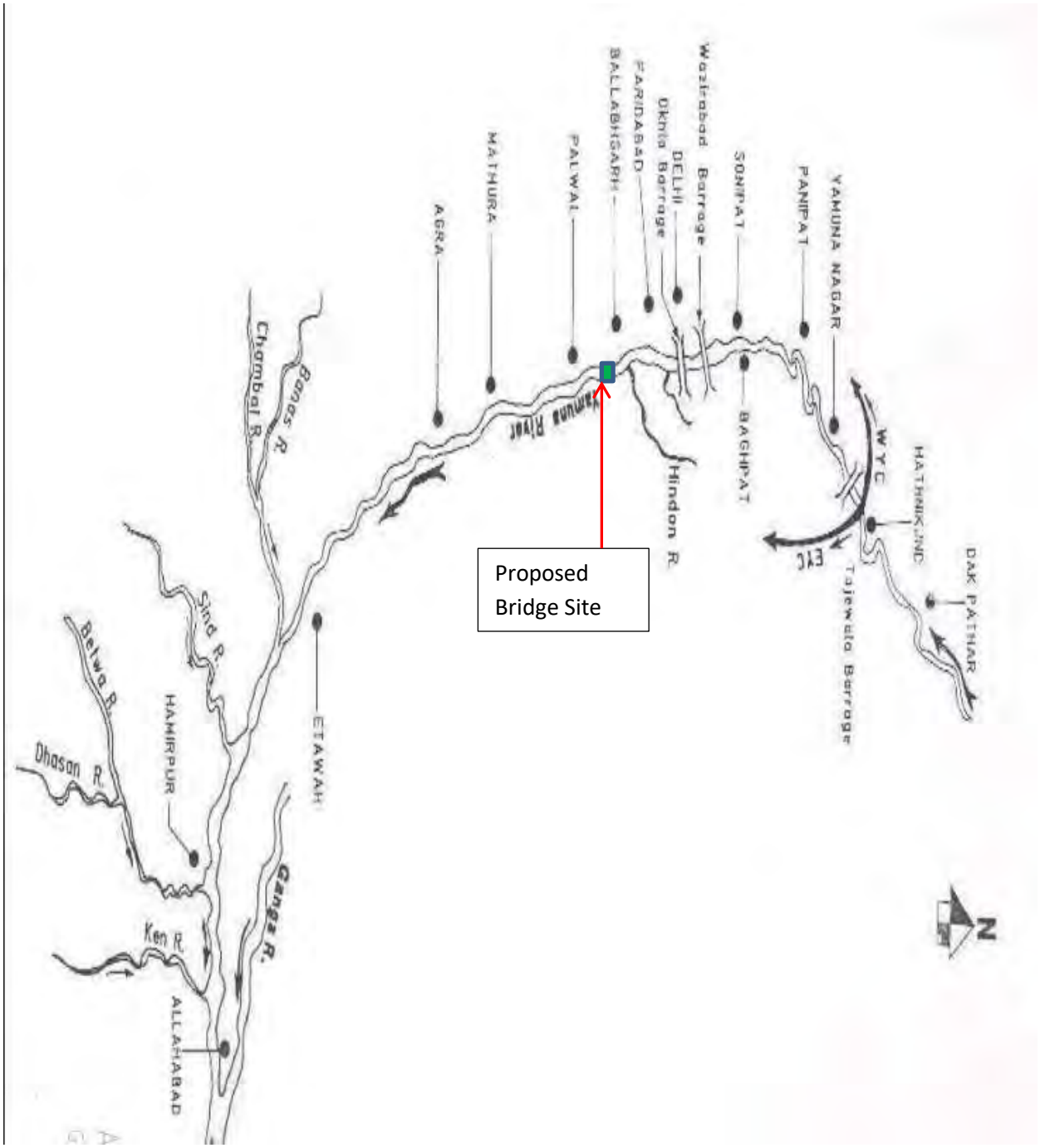

Figure 1 : Yamuna River Basin

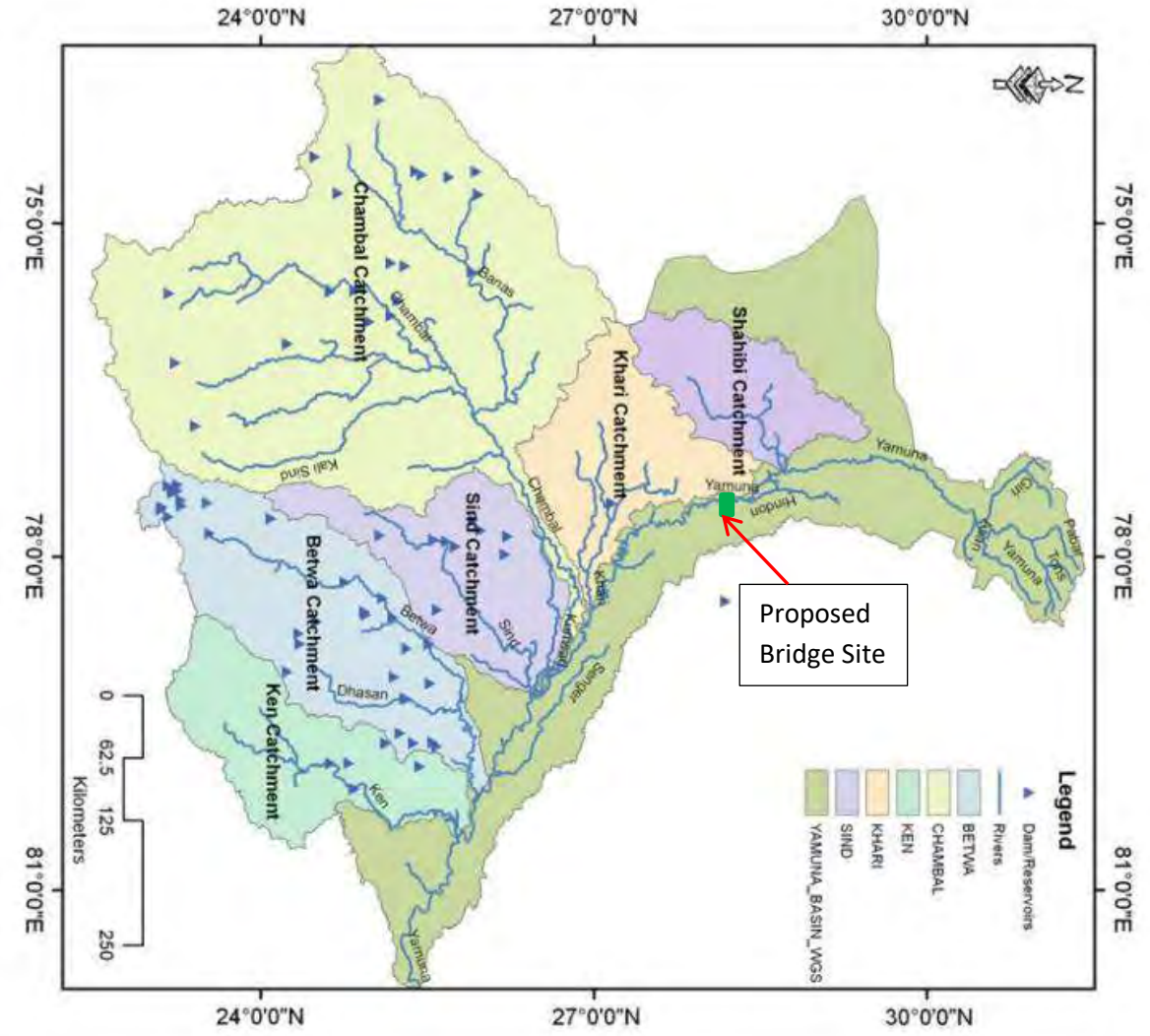

Figure 2 Catchment Area of River Yamuna including its tributaries

2.1. Flow Nature

The river has extremes of dry as well as flood conditions during a year. Due to high population density of the catchment, the river remains almost in dry state during January to June in many parts of its stretch and under flooded conditions during July-September. **Figure 3** shows the annual flow condition of river Yamuna. During the non-monsoon period (October to June), the river flow reduced significantly and some rivers stretches become totally dry, whereas, during monsoon period (July-September), the rivers receives significant amount of water, which is beyond its conveyance capacity resulting in flood (CPCB, 2006). The river is dissected at 5 barrages during its course i.e. at Dak Patthar (about 160 km from origin in Uttaranchal); at Hathnikund (172 km distance from origin, just at foothills in Haryana); at Wazirabad (in NCT Delhi, 396km distance from origin); at Okhla (in NCT – Delhi, 418 km distance from origin); and at Mathura (Near Gokul village in U.P. about 570 km distance from origin). These barrages are the major water abstraction locations on the river. The

water is contributed into the Yamuna River, not only through its tributaries but also by the canals and drains from various urban centers. The flow in Delhi is shown in **Figure 3**

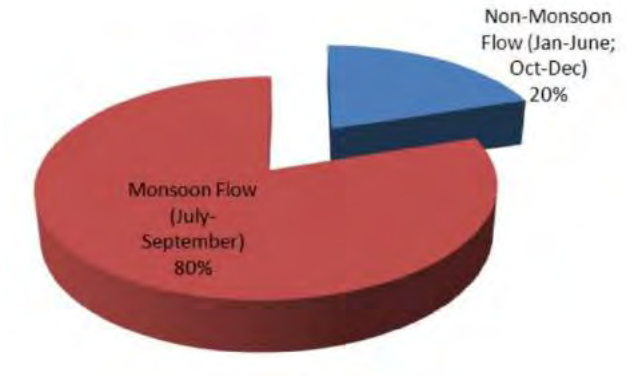

Figure 3: Water Flow Estimation in Yamuna River

Table 2 shows the gradient of the river. In the upper stretch, upto a distance of 200 Km, it draws water from several streams. The combined stream flows through the Shivalik range of Himachal Pradesh and Uttaranchal and enters into plains at the point called as Dak Pathar, located in Uttranchal. From this point onwards, the river water is regulated through weir and diverted into canal for power generation. From Dak Pathar it flows to the Poanta Sahib (a famous Sikh religious place). On the right side of the Yamuna basin is the hill station of Mussourie. Flowing through Poanta Sahib it reaches Hathnikund/Tajewala in Yamuna Nagar district of Haryana state, where the river water is again diverted into Western Yamuna canal and Eastern Yamuna canal for irrigation. During dry season, no water is allowed to flow in the river downstream to Tajewala barrage and the river remains dry in some stretches between Tajewala & Delhi. The river regains water because of groundwater recharge and contributions of feeding canal through Som nadi (seasonal stream) upstream of Kalanaur. It enters Delhi near Palla village after traversing a distance of about 224 Km. River is again tapped at Wazirabad through a barrage for drinking water supply to Delhi. Generally, no water is allowed to flow beyond Wazirabad barrage in dry season, as the available water in itself is not sufficient to fulfill the water demand of Delhi.

Table 2: Rate of fall in Yamuna River stretches

Stretch	Stretch Length of stretch (in km)	Rate of fall (m/km)
Upper Himalaya Stretch	25	59.0
Himalaya Stretch	152	19.1
Total Plain Stretch	1224	0.2
Lower Plain Stretch	768	0.08

2.2. Barrages on River Yamuna

Yamuna has the following six functional barrages (eight including old replaced barrages, nine including a new proposed barrage), from north-west to southeast:

- Dakpathar Barrage in Uttarakhand, managed by the Uttarakhand govt.
- Hathni Kund Barrage in Haryana, 172 km (107 mi) from the source of Yamuna, built in 1999 and managed by Haryana govt
  - Tajewala Barrage was built in 1873 and replaced by the Hathni Kund.
- Wazirabad barrage in north Delhi, 244 km (152 mi) from Hathni Kund barrage, managed by the Delhi govt.
  - "New Wazirabad barrage", proposed in 2013, to be built 8 km north of the Wazirabad barrage.
- ITO barrage (Indraparstha barrage) in central Delhi, managed by the Haryana govt.
- Okhla barrage is 22 km from Wazirabad to south Delhi, managed by the Uttar Pradesh (UP) government.
  - New Okhla Barrage, a new barrage, managed by the UP govt.
  - Palla barrage downstream on "Delhi-Faridabad canal" in Haryana, managed by the Haryana govt.
- Gokul barrage (Mathura barrage) is at Gokul in Uttar Pradesh, managed by the UP govt.

3. CALCULATION OF DISCHARGE FOR YAMUNA RIVER

In this study, a flood frequency analysis of Yamuna River basin in India was undertaken using Gumbel Distribution Method probability distribution method. The study was motivated by the need for safe and economic hydrologic design and assessments in the catchment area for proposed bridge location. Gumbel Distribution Method distribution was used to model the annual peak discharge for the river for the period **2001 to 2020 (20 years)**.The probability distribution function was applied to return periods **(T) for 5yrs, 10yrs, 25yrs, 50yrs and 100yrs** commonly used in for engineering design of hydraulic structures. The estimated discharges obtained for Yamuna at Okhla Barrage (58 km Upstream to bridge at Proposed alignment) are **4806.244 m3 /s, 6578.783m3 /s ,8818.309 m 3 /s, 10480 m3 /s and 12129.89 m3 /s** respectively at the proposed bridge location. These values are useful for the hydraulic design of proposed bridge in the catchment area.

3.1. **Discharge data required**

As Hindon river joins Yamuna river before reaching the project site (about 27km U/S of proposed bridge location), the annual discharge data for 20 years has been collected at Okhla barrage for Yamuna river and at hindon barrage for Hindon river. The data collection site for Yamuna is 58 km U/S to the project site and for Hindon river is at Hindon Barrage which 48km U/S to the Yamuna-Hindon Junction. The collected data is attached as **Annexure 1.**

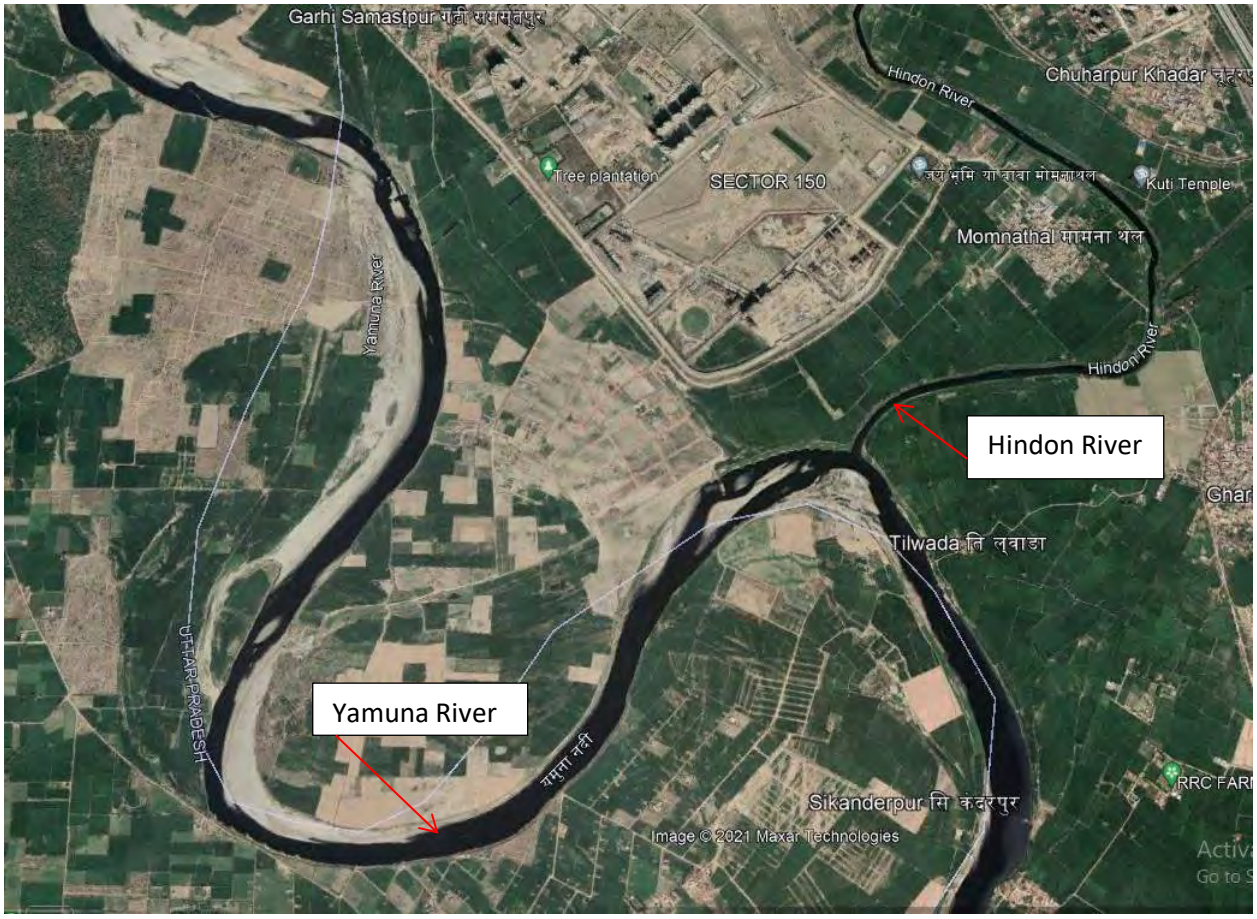

Figure 1 : Junction of Yamuna River and Hindon River 27 km U/S of project site

3.2. Discharge Analysis

The discharge calculations doesn't provide correct results through catchment analysis for major rivers. Statistical analysis of discharge levels along the bridge gives more accurate results. Hence, gumbel's analysis has been used to calculate discharge for Yamuna River at proposed calculations. The Yamuna river at project location collects discharge of two big rivers: Yamuna river and Hindon river. The discharge has been collected for Okhla barrage for river Yamuna and Hindon Barrage for river Hindon. The two discharge has been added together and increased by 10% to get the discharge at proposed location.

3.3. Methodology to flood frequency Analysis

Frequency based flood find their application in the estimation of design flood for almost all types of hydraulic structures and for the design of flood control structures, T- year design flood (T = 100 years, 50 years, 20 years, 10 years, or any desired year) is often required or calculated from the best fit distribution, hence probability distribution plays a vital role in designing and proper management of water resources. Flood Frequency Analysis (FFA) is used to predict design floods for sites along a river, the technique involves using observed annual peak flow discharge data to calculate statistical information such as mean value, standard deviation, skewness and recurrence interval. These

statistical data are used to construct frequency distributions which are graphs and tables that tell the likelihood of various discharges as a function of recurrence interval or exceedence probability.

Flood frequency analyses commonly focus on the estimation of return periods associated with annual maximum flood peaks of various magnitudes. Based on an assumed distribution, it is possible to make a probability statement of future flows of various magnitudes. The estimated value of the random variable is also estimated for a given probability. Flood frequency analysis can take on many forms depending on the equation used in carrying out statistical analysis. Flood frequency analysis is a viable method of flood flow estimation in most situations and provides reliable prediction in regions of relatively uniform climatic condition from year to year and it is now an established method of determining critical design discharge for small to moderately sized hydraulic structures. Therefore, flood frequency analysis of a river is vital. A random variable is a quantity that depends on chance the values or range of values can be predicted only with probability not with certainty. Examples of hydrologic random variables are mean monthly or annual stream discharge, precipitation etc. and a frequency relationship represents the likelihood of occurrence of values of a random variable. A distribution function provides a probabilistic model of phenomenon represented by a particular random variable.

Yamuna Basin: (Figure 1) Yamuna basin extends over states of Uttarakhand, Haryana and Uttar Pradesh till the proposed alignment.

3.4. Gumbel Distribution Method

This extreme value distribution was introduced by Gumbel (1941) and is commonly known as Gumbel's distribution. It is one of the most widely used probability function for extreme values in hydrologic and meteorological studies for prediction of flood peak, maximum rainfalls, maximum wind speed, etc. The following steps are necessary to apply the Gumbel Method:

1. Assemble the flood series ;
2. Calculate the mean $\overline{X}$ and standard deviations S of the flood series ;
3. Use Table and equation to determine the frequency factor and standard deviation S of the Gumbel a function of record length n ;
4. Select several return periods T and associated exceed probabilities P ; and (V) Calculate the Gumbel variant X and calculate the flood corresponding to the return periods T by using Equations discharge Q for each Gumbel variant (and associated return period)

The equation for fitting the Gumbel distribution to observed series of flood flows at different return periods

T is $X = \overline{X} + KS$

Where, X = the magnitude of the T-year event

K = frequency factor and

X = mean average

N = sample size-number of year 0 record

The flood frequency factor is expressed as or Using Table Where,

$$K_t = \frac{\sqrt{6}}{\pi}\left\{0.5772 + ln\left[ln\left(\frac{T}{T-1}\right)\right]\right\}$$

∏=3.14 In-natural logarithm,

T = Return period

Table 2: Frequency Factors for Gumbel Distribution

4. Analysis and results

The flood frequency analysis using annual peak discharge data of Yamuna River at **Okhla barrage site** for the period of record from 2001 to 2020 was carried out. The maximum flood discharge of 10352m3 /s was recorded in 2013 while lowest flood flow of 524.48m3 /s was recorded in 2004. The20 year mean flood discharge is 2498.9m3 /s. The predicted discharge of different return period (5 yr., 25 yr., 50 yr. and 100yr.) is represented in Table1 The detailed calculation are attached as **Annexure 2** for Yamuna river and Hindon river.

Table 1 Annual maximum flood discharge for Various Return Period at Okhala Barrage for Yamuna river

Return Period	y	K	S	X bar, mean	X
5	1.49994	0.919	2510.679	2498.931	4806.244
10	2.250367	1.625	2510.679	2498.931	6578.783
25	3.198534	2.517	2510.679	2498.931	8818.309
50	3.901939	3.179	2510.679	2498.931	10480.38
100	4.600149	3.836	2510.679	2498.931	12129.89

Table 2 Annual maximum flood discharge for Various Return Period at Hindon Barrage for Hindon River

Return Period	y	K	S	X bar, mean	X
5	1.49994	0.919	742.2889	753.2225	1435.386
10	2.250367	1.625	742.2889	753.2225	1959.442
50	3.901939	3.179	742.2889	753.2225	3112.959
100	4.600149	3.836	742.2889	753.2225	3600.643

The predicted annual flood discharge for 100 years return period using Gumbel Distribution Method is 12130m 3 /s for Yamuna and 3600.6m^3/s for Hindon river. The Total discharge at proposed bridge site is 17304 cumec. Further, discharge of Eastern Peripheral EXpressway bridge about 14.4 km up stream of proposed bridge location is 16675 cumecs. This justifies the discharge value obtained here through calculations.

5. CONCLUSION

Flood frequency analysis is one of the most challenging problems in hydrology. The hydrologic phenomena are often characterized by great variability and uncertainty precipitation, discharge. For this reason, a systematic approach to handling the problem is absolutely essential. From the flood frequency study carried out on Yamuna River basin catchment for 5yrs, 10yrs, 25yrs, 50yrs and 100 yrs. The estimated discharges obtained. It has been observed that design floods for return period of 5 year were flood to be almost same as the observed data and verified with historical data.

6. **GUIDE BUNDS:**

Guide bunds are provided for this purpose of guiding the river flow past the diversion structure without causing damage to it and its approaches. They are constructed on either or both on the upstream and downstream of the structure and on one or both the flanks as required.

We have considered elliptical guide bunds for the design. In the case of elliptical guide bunds, due to gradual change in the curvature, the flow is found to hug the bunds all along their lengths whereas in the case of straight guide bunds, separation of flow is found to occur after the curved head, leading to obliquity of flow. Elliptical guide bunds have also been found to provide better control on development and extension of meander loop towards the approach embankment.

6.1. Length of Guide Bunds

The length of the guide bund on the upstream is generally kept as 1.0 to 1.5L where L is the width between the abutments of the diversion structure. The length of the downstream guide bund is kept as 0.25L to 0.4L. For wide alluvial belt, the length of guide bunds is decided from two important considerations, viz. the maximum obliquity of the current and the permissible limit to which the main channel of the river can be allowed to flow near the approach embankment in the event of the river developing excessive embayment behind the training works.

6.2.**Curved head and tail of Guide Bunds**

In the case of elliptical guide bunds, the elliptical curve is provided upto the quadrant of the ellipse and is followed by multi-radii or single radius circular curve. In case of multiradii curved head, the larger radius adjacent to the apex of the ellipse is generally kept as 0.3 to 0.5 times the radius of the curved head for straight guide bund with the angle of sweep varying from 450 to 600 and the smaller radius equivalent to 0.25 times the radius of curve head for straight guide bund with sweep angle of 300 to 400.

6.3.**Design of guide bunds**

After fixing up the layout of the guide bunds in accordance with the guidelines mentioned in the foregoing paragraphs, the details of the guide bund sections have to be worked out. The various dimensions worked out are top width, free board, side slopes, size of stone for pitching, thickness of

pitching, filters and launching apron. The detailed calculations for design of guide bund are attached as **Annexure 3**.

6.4.**Top width of guide bund**

At the formation level, the width of the shank of guide bunds is generally kept 6 to 9 m to permit carriage of material and vehicles for inspection. At the nose of the guide bunds, the width is increased suitably in a bulb shape to enable the vehicles to take turn and also for stacking reserve of stone to be dumped in places whenever the bunds are threatened by the flow. In the design we have considered 6.0m top width of guide bund.

6.5.**Free board for Guide Bund**

A free board of 1 to 1.5 m above the following mentioned two water levels has to be provided and the higher value adopted as the top level of the upstream guide bund:

(i) Highest flood level for 1 in 500 years flood

(ii) Affluxed water level in the rear portion of the guide bank calculated after adding velocity head to HFL corresponding to the design flood (1in 100 year frequency) at the upstream nose of the guide bank. On the downstream side also, a free board of 1 to 1.5 m above the highest flood level for 1 in 500 years flood is to be adopted.

6.6.**Side slopes of guide bund**

The side slopes of guide bund have to be fixed from stability considerations of the bund which depend on the material of which the bund is made and also its height. Generally the side slopes of the guide bund vary from 2:1 to 3:1 (H:V). We have considered side slope of embankments as 2:1 (H:V).

6.7.**Size of stone for pitching**

The sloping surface of the guide bund on the water side has to withstand erosive action of flow. This is achieved by pitching the slope manually with stones. It is desirable to place the stones over filters so that fines do not escape through the interstices of the pitching. For average velocities up to 2 m/sec, burnt clay brick on edge can be used as pitching material. For an average velocity upto 3.5 m/sec, pitching of stone weighing from 40 to 70 kg (0.3 to 0.4 m in diameter) and for higher velocities, cement concrete blocks of depth equal to the thickness of pitching can be used. On the rear side, turfing of the slope is normally found to be adequate.

6.8. Thickness of Pitching

The thickness of pitching is to be kept equal to the size of the stone for pitching determined. However, it should not be less than 0.25m. wherever the velocities are high for which the size of stone is greater than 0.4 m, cement concrete blocks of thickness 0.4 to 0.5 or 0.6 m may be used. Thickness of pitching for design of guide bund has been considered as 1.6m.

6.9. **Provision of filter**

It is always desirable to provide an inverted (graded) filter below the pitching stones to avoid the finer bund materials getting out through the interstices. The thickness of the filter is considered 30 cm in the design.

6.10. **Launching apron**

Just as launching apron is provided for the main structure both on the upstream and downstream it has to be provided for guide bunds also in the bed in continuation of the pitching. The different aspects to be looked into are the size of the stones, depth of scour, thickness, slope of launched apron, shape and size of launching apron. The required size of stone for the apron can be obtained from the curves. In case of non-availability of required size of stones, cement concrete blocks or stone sausages, prepared with 4 mm GI wire in double knots and closely knit and securely tied, may be used. The scour depths to be adopted in the calculations for the launching apron would be different along the length of the guide bund from upstream to downstream. The value of dsm, that is the normal depth of scour below High Flood Level may be determined according to Lacey's scour relations. Maximum scour depth to be adopted Upstream curved head of Guide bund 2.5 dsm Straight reach of guide bund to nose of downstream Guide bund 1.5 dsm While calculating the scour values, the discharge corresponding to 50 to 100 years frequency may be adopted. However, after construction and operation of the diversion structure, the portions of the guide bund coming under attack of the river flow should be carefully inspected and strengthened as and when necessary. The thickness of apron of the guide bund should be about 25 to 50 percent more than that required for the pitching. While the slope of the launched apron for calculation of the quantity can be taken as 2:1 for loose boulders or stones, it may be taken as 1:5:1 for c.c blocks or stone sausages. From the behaviour of the guide bunds of previously constructed diversion structures, it has been observed that shallow and wide aprons launch evenly if the scour takes place rapidly. If the scour is gradual, the effect of the width on the launching of apron is marginal. Generally a width of 1.5 R has been found to be satisfactory. For the shank or straight portions of the guide bunds, the thickness of the apron may be kept uniform at 1.5 T where T is the thickness of the stone pitching. To cover a wider area, for the curved head, the thickness is increased from 1.5 to 2.25 T with suitable transition over a length of L1 equal to one fourth of the radius of the curved head and provided in the shank portion only. On the rear side of the curved head and nose of the guide bund, the apron should be turned and ended in a length equal to about one fourth of the respective radius.

In the design of guide bund we have considered, the width & thickness of Launching apron is 16m and 2.35m respectively.

HIGH FLOOD LEVEL (GAUGES) AND DISCHARGE IN CUSECS

Okhla Weir/Barrage/Yamuna River				Hindon Dam/Barrage			
Date	U.S. Gauge	D.S. Gauge	Discharge	Date	U.S. Gauge	D.S. Gauge	Discharge
1	2	3	4	5	6	7	8
14.07.1968	202.16M	200.88M	98084	23.07.1968	202.71M	201.83M	24704
09.08.1969	201.86M	200.79M	91658	12.09.1969	201.95M	201.16M	12092
16.08.1970	201.80M	200.37M	67752	15.08.1970	201.46M	200.52M	7001
11.08.1971	202.41M	200.52M	132862	12.08.1971	202.93M	202.62M	27091
18.09.1972	202.04M	200.43M	88127	08.07.1972	202.29M	201.16M	14213
23.07.1973	202.01M	200.52M	85327	18.07.1973	203.16M	202.26M	32368
07.08.1974	201.98M	200.46M	78564	07.08.1974	201.98M	200.76M	12820
12.09.1975	202.29M	201.13M	103714	10.09.1975	202.56M	201.55M	22088
22.08.1976	202.56M	201.71M	146569	23.08.1976	203.45M	202.71M	36986
07.08.1977	202.29M	201.40M	105849	05.08.1977	201.74M	201.28M	10213
06.09.1978	203.29M	202.56M	219302	05.09.1978	205.70M	205.06M	130000
24.07.1979	201.95M	200.73M	77048	26.07.1979	201.55M	201.16M	6177
04.08.1980	202.41M	201.16M	118264	11.08.1980	201.89M	200.92M	25112
05.08.1981	202.16M	201.07M	94808	31.07.1981	200.90M	200.90M	24840
22.08.1982	201.80M	200.55M	65028	9&10.08.1982	200.00M	199.60M	10664
30.08.1983	202.41M	201.46M	117450	31.08.1983	201.55M	201.35M	37520
07.09.1984	201.49M	200.88M	43326	09.09.1984	199.45M	199.20M	4292
13.10.1985	202.16M	201.13M	94621	08.08.1985	200.25M	200.05M	14154
15.08.1986	201.98M	200.91M	78906	23.08.1986	199.80M	199.60M	8158
28.08.1987	201.35M	198.35M	28275	10.09.1987	202.80M	197.70M	131
27.09.1988	203.88M	202.59M	233918	05.08.1988	201.60M	201.55M	38450
30.08.1989	202.80M	201.59M	161692	06.09.1989	201.10M	201.05M	28482
15.08.1990	201.05M	200.00M	96832	10.09.1990	200.05M	200.00M	11338
02.09.1991	201.25M	198.15M	21923	26.08.1991	200.05M	200.00M	11139
19.08.1992	200.65M	199.50M	112151	01.09.1992	200.70M	200.60M	19195
14.07.1993	201.05M	199.35M	73309	22.07.1993	202.00M	201.45M	45510
26.08.1994	202.38M	202.35M	92760	19.08.1994	201.50M	201.40M	35334
08.09.1995	200.80M	200.60M	259854	08.09.1995	201.00M	200.85M	23929
11.09.1996	200.80M	199.60M	136720	27.08.1996	200.65M	200.60M	20522
06.08.1997	199.80M	199.80M	176087	22.07.1997	200.50M	200.40M	18080
21.10.1998	200.60M	199.90M	165306	26.09.1998	200.35M	200.35M	15688
23.07.1999	201.35M	198.85M	73858	22.07.1999	199.90M	199.85M	9410
20.07.2000	201.35M	199.30M	100730	15.07.2000	200.80M	199.80M	7402
17.08.2001	201.35M	199.15M	75034	17&18.08.01	199.60M	199.50M	6402
13.09.2002	201.35M	199.00M	72940	14.09.2002	200.50M	200.40M	19238
06.08.2003	201.35M	198.25M	44195	13.07.2003	201.20M	200.65M	20156
27.08.2004	201.35M	196.90M	18522	25.08.2004	201.70M	199.55M	4982
18.07.2005	201.35M	198.30M	46417	07.07.2005	200.40M	200.10M	17584
25.07.2006	201.35M	197.60M	24823	27.07.2006	200.40M	199.60M	6069
06.08.2007	201.35M	197.50M	27627	15&16.08.07	199.50M	198.40M	3420
24.09.2008	199.95M	199.20M	105335	23/24.09.08	199.55M	195.75M	5956
15.09.2009	201.20M	198.85M	69206	15.09.2009	199.55M	195.75M	2197
23.09.2010	200.50M	200.00M	287885	28.09.2010	200.40M	200.20M	17594
19.08.2011	200.66M	199.85M	126520	16.08.2011	200.100M	199.350M	5884
28.08.2012	201.00M	197.80M	56007	29.08.2012	199.750M	198.800M	6310
20.06.2013	200.600M	200.400M	365573	16.08.2013	200.20M	199.200M	6180

Discharge Calculations for Hindon River

Year	Discharge (Cumec)
1978	3681.19
1979	174.9132
1980	711.0927
1981	703.3905
1982	301.9709
1983	1062.448
1984	121.5359
1985	400.7967
1986	231.0088
1987	370.9507
1988	1088.783
1989	806.5204
1990	490.9575
1991	315.4214
1992	543.5419
1993	1288.7
1994	1000.547
1995	677.5938
1996	581.1183
1997	511.9686

n = **20**

Year	Discharge	order no (m)	T = (n+1)/m	Probability P = m/(n+1) percent	x^2
1978	3681.19	1	21	4.761905	13551161
1993	1288.7	2	10.5	9.52381	1660747
1988	1088.783	3	7	14.28571	1185448
1983	1062.448	4	5.25	19.04762	1128796
1994	1000.547	5	4.2	23.80952	1001095
1989	806.5204	6	3.5	28.57143	650475.2
1980	711.0927	7	3	33.33333	505652.8
1981	703.3905	8	2.625	38.09524	494758.2
1995	677.5938	9	2.333333	42.85714	459133.4
1996	581.1183	10	2.1	47.61905	337698.5
1992	543.5419	11	1.909091	52.38095	295437.8
1997	511.9686	12	1.75	57.14286	262111.8
1990	490.9575	13	1.615385	61.90476	241039.3
1985	400.7967	14	1.5	66.66667	160638
1987	370.9507	15	1.4	71.42857	137604.4
1991	315.4214	16	1.3125	76.19048	99490.63
1982	301.9709	17	1.235294	80.95238	91186.4
1986	231.0088	18	1.166667	85.71429	53365.08

1979	174.9132	19	1.105263	90.47619	30594.61
1984	121.5359	20	1.05	95.2381	14770.98
	15064.45				**22361204**

Mean =		753.2225
squared mean =		567344.1
mean of squares =		1118060

Standard deviation = 742.2889

Return Period	**y**	**K**	**S**	**X bar, mean**	**X**
5	1.49994	0.919	742.2889	753.2225	1435.386
10	2.250367	1.625	742.2889	753.2225	1959.442
50	3.901939	3.179	742.2889	753.2225	3112.959
100	4.600149	3.836	742.2889	753.2225	3600.643

100year Design discharge for Hinon River = **3600.643 cumec**

Discharge Calculations for Yamuna River

Year	Discharge
2001	2124.726
2002	2065.431
2003	1251.463
2004	524.4846
2005	1314.383
2006	702.9091
2007	782.3095
2008	2982.755
2009	1959.696
2010	8151.995
2011	3582.647
2012	1585.942
2013	10351.87
2014	868.0529
2015	1257.381
2016	1416.097
2017	1128.823
2018	2248.074
2019	4954.542
2020	725.0246

n = **20**

Year	Discharge	order no (m	T = (n+1)/m	y P = m/(n+	x^2
2013	10351.87	1	21	4.761905	1.07E+08
2010	8151.995	2	10.5	9.52381	66455031
2019	4954.542	3	7	14.28571	24547487
2011	3582.647	4	5.25	19.04762	12835363
2008	2982.755	5	4.2	23.80952	8896828
2018	2248.074	6	3.5	28.57143	5053839
2001	2124.726	7	3	33.33333	4514462
2002	2065.431	8	2.625	38.09524	4266004
2009	1959.696	9	2.333333	42.85714	3840407
2012	1585.942	10	2.1	47.61905	2515211
2016	1416.097	11	1.909091	52.38095	2005331
2005	1314.383	12	1.75	57.14286	1727603
2015	1257.381	13	1.615385	61.90476	1581008
2003	1251.463	14	1.5	66.66667	1566160
2017	1128.823	15	1.4	71.42857	1274241
2014	868.0529	16	1.3125	76.19048	753515.9
2007	782.3095	17	1.235294	80.95238	612008.2
2020	725.0246	18	1.166667	85.71429	525660.6
2006	702.9091	19	1.105263	90.47619	494081.2
2004	524.4846	20	1.05	95.2381	275084.1
	49978.61				**2.51E+08**

Mean =		2498.931
squared mean =		6244654
mean of squares =		12545032
Standard deviation =		2510.679

Return Period	**y**	**K**	**S**	**X bar, mean**	**X**
5	1.49994	0.919	2510.679	2498.931	4806.244
10	2.250367	1.625	2510.679	2498.931	6578.783
25	3.198534	2.517	2510.679	2498.931	8818.309
50	3.901939	3.179	2510.679	2498.931	10480.38
100	4.600149	3.836	2510.679	2498.931	12129.89

100 year design discharge for Yamuna River =	12129.89	
100year Design discharge for Hinon River =	3600.643	cumec
Thus Discharge at Project site =	17303.59	cumec

Annexure 3: Calculations of guide bund parameters

Design discharge for foundation =	19033.95	cumecs
Laceys silt factor =	1	
Linear waterway =	750	m
Lacey's liner waterway=	662.2252	m
dsm =	12.57343	m

Length of Floor apron (Section 3-3)=	1.5 dsm	
	= 18.86014	
	= 19	m
Length of Floor apron (Section 1-1 and 2-2)=	1.25dsm	
	= 15.71678	
	= 16	m
Thickness of stone pitching, t =	0.06*Q^(1/3)	
	= 1.601994	
Thickness of stone pitching at the apron =	1.5*t	
	= 2.402991	
	= 2.4	m

ANNEXURE XIII

3(a) Schedule List

रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

भारत का राजपत्र
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सी.जी.-डी.एल.-अ.-02112021-230889
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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

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सं. 4202] नई दिल्ली, सोमवार, नवम्बर 1, 2021/कार्तिक 10, 1943
No. 4202] NEW DELHI, MONDAY, NOVEMBER 1, 2021/KARTIKA 10, 1943

सड़क परिवहन और राजमार्ग मंत्रालय

अधिसूचना

नई दिल्ली, 1 नवम्बर, 2021

का.आ. 4563(अ).—केन्द्रीय सरकार, राष्ट्रीय राजमार्ग अधिनियम, 1956 (1956 का 48) की धारा 3 के खंड (क) द्वारा प्रदत्त शक्तियों का प्रयोग में केन्द्रीय सरकार इस प्रकार संलग्न अनुसूची के कॉलम (2) में उल्लिखित अधिकारियों को अधिकृत करती है। अधिकारिक राजपत्र में इस अधिसूचना के प्रकाशन की तारीख से प्रभावी अधिनियम के तहत इस तरह के प्राधिकारी के कार्यो को करने के लिए सक्षम प्राधिकारी के रूप में, कॉलम (3) में इसी प्रविशिष्ट में निर्दिष्ट भूमि के संरेखण के संबंध में इकोनॉमिक कॉरिडोर, इंटर कॉरिडोर का विकास भारतमाला परियोजना के अन्तर्गत निर्धारित अनुसूची के क्रमशः (4), (5), (6) और (7) में उल्लिखित राज्य, जिला, तालुक और गांव से संबंधित कार्यक्रम के अन्तर्गत डीएनडी-फरीदाबाद-बल्लभगढ़ बाईपास केएमपी लिंक-स्पर से दिल्ली मुंबई एक्सप्रेसवे के जेवर अंतराष्ट्रीय हवाई अड्डे के लिए ग्रीनफील्ड कनेक्टिविटी का निर्माण जनपद गौतमबुद्ध नगर, उत्तर प्रदेश राज्य में।

अनुसूची

उत्तर प्रदेश राज्य में कि.मी. 23.100 से कि.मी. 31.195 तक, दिल्ली-मुम्बई एक्सप्रेसवे के डीएनडी-फरीदाबाद-बल्लभगढ़- बाईपास केएमपी लिंक-स्पर से जेवर अतंराष्ट्रीय हवाई अड्डे के लिए ग्रीनफील्ड कनेक्टिविटी का निर्माण।

क्रमिक संख्या	सक्षम प्राधिकारी	भूमि का विवरण	राज्य	जिले का नाम	तालुक का नाम	गांव का नाम
1	2	3	4	5	6	7
1	अपर जिलाधिकारी (भू0आ0)	राष्ट्रीय राजमार्ग संख्या Greenfield Highway के कि.मी. 23.1 से 31.195 तक	उत्तर प्रदेश	गौतम बुद्धा नगर	जेवर	1 अमरपुर पलाका

[फा. सं. NHAI/CMU/MTR/DND/Jewar International Airport/2021/D-3a-II]

राजेश गुप्ता, निदेशक

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

NOTIFICATION

New Delhi, the 1st November, 2021

S.O. 4563(E).— In exercise of the powers conferred by clause (a) of section 3 of the National Highways Act, 1956 (48 of 1956), the Central Government hereby authorises the officers mentioned in column (2) of the Schedule annexed hereto as the competent authorities to perform the functions of such authorities under the said Act with effect from the date of publication of this notification in the Official Gazette, in respect of the stretch of land specified in the corresponding entry in column (3) of the said Schedule relating to alignment in State, District, Taluk and village mentioned in column (4), (5), (6) and (7) respectively of the said Schedule for Construction of Greenfield Connectivity to Jewar International Airport from DND-Faridabad-Ballabhgarh Bypass KMP Link - Spur to Delhi Mumbai Expressway under Bharatmala Pariyojna in the Districts Gautam Budh Nagar in the state of Uttar Pradesh.

SCHEDULE

Land acquisition for Construction of Greenfield Connectivity to Jewar International Airport from DND-Faridabad-Ballabhgarh Bypass KMP Link - Spur to Delhi Mumbai Expressway from Km. 23.100 to Km. 31.195 in the State of Uttar Pradesh.

Sl. No.	CALA	Stretch	State	District	Taluk/Mandal	Name of the Village
1	2	3	4	5	6	7
1	Additional District Magistrate, (LA)	23.1KM To 31.195KM	UTTAR PRADESH	GAUTAM BUDDHA NAGAR	Jewar	1 Amarpur Palaka

[F. No. NHAI/CMU/MTR/DND/Jewar International Airport/2021/D-3a-II]

RAJESH GUPTA, Director

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रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

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No. 3377] NEW DELHI, MONDAY, SEPTEMBER 13, 2021/BHADRA 22, 1943

सड़क परिवहन और राजमार्ग मंत्रालय

अधिसूचना

नई दिल्ली, 13 सितम्बर, 2021

का.आ. 3689(अ).—केन्द्रीय सरकार, राष्ट्रीय राजमार्ग अधिनियम, 1956 (1956 का 48) की धारा 3 के खंड (क) द्वारा प्रदत्त शक्तियों का प्रयोग में केन्द्रीय सरकार इस प्रकार संलग्न अनुसूची के कॉलम (2) में उल्लिखित अधिकारियों को अधिकृत करती है। अधिकारिक राजपत्र में इस अधिसूचना के प्रकाशन की तारीख से प्रभावी अधिनियम के तहत इस तरह के प्राधिकारी के कार्यो को करने के लिए सक्षम प्राधिकारी के रूप में, कॉलम (3) में इसी प्रविशिष्ट में निर्दिष्ट भूमि के संरेखण के संबंध में इकोनॉमिक कॉरिडोर, इंटर कॉरिडोर का विकास भारतमाला परियोजना के अन्तर्गत निर्धारित अनुसूची के क्रमशः (4), (5), (6) और (7) में उल्लिखित जिला, तालुक, पुलिस स्टेशन और गांवों से संबंधित कार्यक्रम के अन्तर्गत डीएनडी-फरीदाबाद-बल्लभगढ़ बाईपास केएमपी लिंक-स्पर से दिल्ली मुंबई एक्सप्रेसवे के जेवर अंतराष्ट्रीय हवाई अड्डे के लिए ग्रीनफील्ड कनेक्टिविटी का निर्माण जनपद फरीदाबाद, पलवल एवं गौतमबुद्ध नगर, हरियाणा एवं उत्तर प्रदेश राज्य में।

अनुसूची

हरियाणा और उत्तर प्रदेश राज्य में कि.मी. 00.00 से कि.मी. 31.195 तक, दिल्ली-मुम्बई एक्सप्रेसवे के डीएनडी-फरीदाबाद-बल्लभगढ़- बाईपास केएमपी लिंक-स्पर से जेवर अतंराष्ट्रीय हवाई अड्डे के लिए ग्रीनफील्ड कनेक्टिविटी का निर्माण।

क्रमिक संख्या	सक्षम प्राधिकारी	भूमि का विवरण	राज्य	जिले का नाम	तालुक का नाम	गांव का नाम
1	2	3	4	5	6	7
1	अपर जिलाधिकारी (भू0आ0)	राष्ट्रीय राजमार्ग संख्या Greenfield Highway के कि.मी. 23.1 से 31.195 तक	उत्तर प्रदेश	गौतम बुद्धा नगर	जेवर	1 फलैदा खादर 2 फलैदा बांगर 3 करोली खादर 4 करोली बांगर 5 दयानतपुर 6 रामपुर बांगर 7 रामपुर खादर 8 झुप्पा 9 बल्लभनगर उर्फ करोल बांगर 10 बल्लभनगर उर्फ करोल खादर
2	जिला राजस्व अधिकारी पलवल	राष्ट्रीय राजमार्ग संख्या Greenfield Highway के कि.मी. 18.9 से 23.1 तक	हरियाणा	पलवल	पलवल	1 बागपुर कलां (191) 2 जैबाबाद खेरली(193) 3 झुप्पा(192) 4 बागपुर खुर्द (190)
3	जिला राजस्व अधिकारी, फरीदाबाद	राष्ट्रीय राजमार्ग संख्या Greenfield Highway के कि.मी. 0 से 18.9 तक	हरियाणा	फरीदाबाद	बल्लभगढ़	1 सुनपेड 2 मलेरना 3 शाहूपुरा(74) 4 चन्दावली 5 दयालपुर 6 मोहियापुर(203) 7 बहबलपुर(69) 8 सोतई(73)

						9 पन्हैड़ा कलां 10 नरहावली 11 हीरापुर 12 मोहना 13 फफुदाँ 14 गढ़खेड़ा 15 पन्हैड़ा खुर्द 16 नरियाला 17 मेहमदपुर 18 छायसा

[फा. सं. NHAI/CMU/MTR/DND/Jewar International Airport/2021/D-3a]

राजेश गुप्ता, निदेशक

MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

NOTIFICATION

New Delhi, the 13th September, 2021

S.O. 3689(E).— In exercise of the powers conferred by clause (a) of section 3 of the National Highways Act, 1956 (48 of 1956), the Central Government hereby authorises the officers mentioned in column (2) of the Schedule annexed hereto as the competent authorities to perform the functions of such authorities under the said Act with effect from the date of publication of this notification in the Official Gazette, in respect of the stretch of land specified in the corresponding entry in column (3) of the said Schedule relating to alignment in district, taluk, police station and villages mentioned in column (4), (5), (6) and (7) respectively of the said Schedule for Construction of Greenfield Connectivity to Jewar International Airport from DND-Faridabad-Ballabhgarh Bypass KMP Link - Spur to Delhi Mumbai Expressway under Bharatmala Pariyojna in the Districts Faridabad, Palwal & Gautam Budh Nagar in the state of Haryana and Uttar Pradesh.

SCHEDULE

Land acquisition for Construction of Greenfield Connectivity to Jewar International Airport from DND-Faridabad-Ballabhgarh Bypass KMP Link - Spur to Delhi Mumbai Expressway from Km. 00.00 to Km. 31.195 in the State of Haryana and Uttar Pradesh.

Sl. No.	CALA	Stretch	State	District	Taluk/Mandal	Name of the Village
1	2	3	4	5	6	7
1	Additional District Magistrate, (LA)	23.1KM To 31.195KM	UTTAR PRADESH	GAUTAM BUDDHA NAGAR	Jewar	1 Falaida Khadar 2 Falaida Bangar 3 Karoli Khadar 4 Karoli Bangar 5 Dayanatpur

						6 Rampur Bangar 7 Rampur Khadar 8 Jhuppa 9 Ballabhnagar Urf Karol Bangar 10 Ballabhnagar Urf Karol Khadar
2	District Revenue Officer, Palwal	18.9KM To 23.1KM	HARYANA	PALWAL	Palwal	1 Bagpur Kalan (191) 2 Zaibabad Kherli(193) 3 Jhuppa(192) 4 Bagpur Khurd (190)
3	District Revenue Officer, Faridabad	0KM To 18.9KM	HARYANA	FARIDABAD	Ballabgarh	1 Sunped 2 Malerna 3 Shahupura(74) 4 Chandawali 5 Dayalpur 6 Mohiapur(203) 7 Bahbalpur(69) 8 Sotai(73) 9 Panhera Kalan 10 Narhawali 11 Hirapur 12 Mohna 13 Fafunda 14 Gadkheda 15 Panhera Khurd 16 Nariyala 17 Mehmadpur 18 Chhainsa

[F. No. NHAI/CMU/MTR/DND/Jewar International Airport/2021/D-3a]

RAJESH GUPTA, Director

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and Published by the Controller of Publications, Delhi-110054.

ANNEXURE XIV

Lab Report

NOIDA TESTING LABORATORIES

(A Government of India Approved Testing Laboratory)

(An ISO : 9001 : 2015, ISO 45001 : 2018 (OH&S) Certified & NABL Accredited Laboratory)

MoEF & CC (Ministry of Environment, Forest & Climate Change), UPPCB Recognized Laboratory

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Ambient Noise	N-131021-01	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Drawn By	:	Laboratory (N.T.L)
Sample Drawn On	:	12/10/2021
Sample description	:	Ambient Noise
Sampling Location	:	Shahupura (N1)
Sampling Time	:	24 hrs
Weather Condition	:	Normal

RESULTS

S. No	Test Parameters	Results	Units	Requirement (as per CPCB Guidelines Limits in dB (A) Leq		
				Category of Area/ Zone	Day Time	Night Time
1.	L_{day} (6.0 AM TO 10.0 PM)	51.5	dB(A)	Industrial Area	75	70
2.	L_{night} (10.0 PM TO 6.0 AM)	38.7	dB(A)	Commercial Area	65	55
				Residential Area	55	45
				Silence Zone	50	40

Notes: -

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
4. The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.

Rity Sharma

CHECKED BY

AUTHORIZED BY

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Ambient Noise	N-131021-02	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Drawn By	:	Laboratory (N.T.L)
Sample Drawn On	:	12/10/2021
Sample description	:	Ambient Noise
Sampling Location	:	Panhera Khurd **(N2)**
Sampling Time	:	24 hrs
Weather Condition	:	Normal

RESULTS

S. No	Test Parameters	Results	Units	Requirement (as per CPCB Guidelines Limits in dB (A) Leq		
				Category of Area/ Zone	Day Time	Night Time
1.	L_{day} (6.0 AM TO 10.0 PM)	50.6	dB(A)	Industrial Area	75	70
2.	L_{night} (10.0 PM TO 6.0 AM)	41.8	dB(A)	Commercial Area	65	55
				Residential Area	55	45
				Silence Zone	50	40

Notes: -

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
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Ritu Sharma
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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Ambient Noise	N-131021-03	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Drawn By	:	Laboratory (N.T.L)
Sample Drawn On	:	12/10/2021
Sample description	:	Ambient Noise
Sampling Location	:	Mohna **(N3)**
Sampling Time	:	24 hrs
Weather Condition	:	Normal

RESULTS

S. No	Test Parameters	Results	Units	Requirement (as per CPCB Guidelines Limits in dB (A) Leq		
				Category of Area/ Zone	Day Time	Night Time
1.	L_{day} (6.0 AM TO 10.0 PM)	54.7	dB(A)	Industrial Area	75	70
2.	L_{night} (10.0 PM TO 6.0 AM)	38.2	dB(A)	Commercial Area	65	55
				Residential Area	55	45
				Silence Zone	50	40

Notes: -

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
4. The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer.

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Ambient Noise	N-131021-04	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Drawn By	:	Laboratory (N.T.L)
Sample Drawn On	:	12/10/2021
Sample description	:	Ambient Noise
Sampling Location	:	Failada Bangar **(N4)**
Sampling Time	:	24 hrs
Weather Condition	:	Normal

RESULTS

S. No	Test Parameters	Results	Units	Requirement (as per CPCB Guidelines Limits in dB (A) Leq		
				Category of Area/ Zone	Day Time	Night Time
1.	L_{day} (6.0 AM TO 10.0 PM)	51.0	dB(A)	Industrial Area	75	70
2.	L_{night} (10.0 PM TO 6.0 AM)	35.5	dB(A)	Commercial Area	65	55
				Residential Area	55	45
				Silence Zone	50	40

Notes: -

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Ambient Noise	N-131021-05	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Drawn By	:	Laboratory (N.T.L)
Sample Drawn On	:	12/10/2021
Sample description	:	Ambient Noise
Sampling Location	:	Dayant Pur **(N5)**
Sampling Time	:	24 hrs
Weather Condition	:	Normal

RESULTS

S. No	Test Parameters	Results	Units	Requirement (as per CPCB Guidelines Limits in dB (A) Leq		
				Category of Area/ Zone	Day Time	Night Time
1.	L_{day} (6.0 AM TO 10.0 PM)	50.2	dB(A)	Industrial Area	75	70
2.	L_{night} (10.0 PM TO 6.0 AM)	34.6	dB(A)	Commercial Area	65	55
				Residential Area	55	45
				Silence Zone	50	40

Notes: -

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Ambient Air Quality Analysis	AAQ-011021-021	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

Sampling & Analysis Data

Sample Drawn By	NTL Laboratory	:	**Monitoring Period**	Oct 2021 - Dec 2021
Sampling Location	Shahupura	:	**Protocol Used**	CPCB Guidelines
Sampling Plan &Procedure	SOP-AAQ/08	:	**Sampling Instrument Used**	Respirable Dust Sampler (PM_{10}), Fine Particulate ($PM_{2.5}$) Sampler

S. No.	Monitoring Date	PM10	PM2.5	SO_2	NO_2	CO
		IS:5182(Part-23)	IS:5182(Part-24)	IS:5182(Part-2)	IS:5182(Part-6)	IS:5182(Part-10)
1	01.10.2021	77.82	36.53	9.65	13.54	0.65
2	04.10.2021	70.14	37.56	10.35	12.48	1.36
3	09.10.2021	73.61	36.54	9.63	10.42	0.96
4	11.10.2021	77.17	31.78	12.48	13.63	0.75
5	16.10.2021	70.74	34.51	10.65	12.79	0.95
6	18.10.2021	68.8	37.81	9.60	15.56	1.47
7	23.10.2021	73.95	40.52	12.85	14.46	0.89
8	26.10.2021	77.4	41.9	11.21	12.50	0.69
9	01.11.2021	74.68	38.96	9.63	10.68	1.10
10	02.11.2021	77.62	35.69	10.69	15.63	1.66
11	06.11.2021	73.77	45.53	11.3	16.39	0.39
12	11.11.2021	69.69	41.52	12.69	15.53	1.66
13	15.11.2021	77.31	46.91	9.66	10.74	1.59
14	18.11.2021	80.18	39.88	10.68	12.68	0.47
15	22.11.2021	75.92	38.65	9.67	15.72	0.58
16	27.11.2021	81.82	44.76	12.54	14.66	0.69
17	02.12.2021	77.34	39.07	9.70	12.58	0.87
18	04.12.2021	80.34	34.52	9.72	10.55	1.47
19	08.12.2021	75.02	41.27	9.58	12.45	1.69
20	13.12.2021	72.84	48.84	10.67	15.86	0.96
21	20.12.2021	85.75	49.47	10.62	14.72	0.87
22	23.12.2021	78.96	39.97	11.24	12.52	1.63
23	27.12.2021	76.64	38.61	10.63	13.51	1.11
24	29.12.2021	69.94	42.75	9.62	12.73	0.89
Min		**68.80**	**31.78**	**9.58**	**10.42**	**0.39**
Max		**85.75**	**49.47**	**12.85**	**16.39**	**1.69**
Avg.		**75.73**	**40.15**	**10.63**	**13.43**	**1.06**
98 percentile		**83.94**	**49.18**	**12.78**	**16.15**	**1.68**
NAAQS, For 24 hourly monitoring (except CO for Eight hour)		**100 µg/m³**	**60 µg/m³**	**80 µg/m³**	**80 µg/m³**	**mg/m³**

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Ambient Air Quality Analysis	AAQ-011021-022	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

Sampling & Analysis Data

Sample Drawn By	NTL Laboratory	:	**Monitoring Period**	Oct 2021 - Dec 2021
Sampling Location	Panhera Khurd	:	**Protocol Used**	CPCB Guidelines
Sampling Plan &Procedure	SOP-AAQ/08	:	**Sampling Instrument Used**	Respirable Dust Sampler (PM_{10}), Fine Particulate ($PM_{2.5}$) Sampler

S. No.	Monitoring Date	PM10	PM2.5	SO_2	NO_2	CO
		IS:5182(Part-23)	IS:5182(Part-24)	IS:5182(Part-2)	IS:5182(Part-6)	IS:5182(Part-10)
1	01.10.2021	59.36	29.80	8.63	10.52	1.06
2	04.10.2021	71.45	29.77	12.69	16.36	1.05
3	09.10.2021	59.30	29.78	11.70	16.78	1.25
4	11.10.2021	78.45	38.14	8.45	10.63	1.45
5	16.10.2021	75..36	30.25	10.47	11.47	1.36
6	18.10.2021	78.42	29.86	11.72	16.72	1.78
7	23.10.2021	59.38	39.75	8.96	10.48	1.68
8	26.10.2021	71.00	29.53	11.73	16.72	1.52
9	01.11.2021	75.14	35.91	10.73	11.69	0.89
10	02.11.2021	72.15	32.02	8.59	11.47	0.78
11	06.11.2021	59.45	29.76	10.59	11.42	0.96
12	11.11.2021	73.69	39.64	11.70	16.76	0.56
13	15.11.2021	74.52	33.78	8.57	15.94	1.63
14	18.11.2021	71.56	30.22	9.86	16.37	1.48
15	22.11.2021	77.85	35.81	9.68	16.58	0.68
16	27.11.2021	79.62	39.85	8.25	15.91	1.75
17	02.12.2021	74.15	35.85	10.53	15.69	0.96
18	04.12.2021	79.95	26.47	9.47	16.74	1.47
19	08.12.2021	59.30	30.30	8.63	11.85	0.53
20	13.12.2021	65.38	39.58	10.42	15.83	1.47
21	20.12.2021	72.14	29.87	11.84	11.35	1.44
22	23.12.2021	60.23	29.94	12.77	15.91	0.89
23	27.12.2021	76.25	29.86	11.76	15.77	0.47
24	29.12.2021	71.41	29.73	11.55	15.67	1.67
Min		**59.30**	**26.47**	**8.25**	**10.48**	**0.47**
Max		**79.95**	**39.85**	**12.77**	**16.78**	**1.78**
Avg.		**70.44**	**32.73**	**10.39**	**14.36**	**1.20**
98 percentile		**79.80**	**39.80**	**12.73**	**16.77**	**1.77**
NAAQS, For 24 hourly monitoring (except CO for Eight hour)		**100 µg/m³**	**60 µg/m³**	**80 µg/m³**	**80 µg/m³**	**mg/m³**

Ritu Sharma

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Ambient Air Quality Analysis	AAQ-011021-023	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

Sampling & Analysis Data

Sample Drawn By	NTL Laboratory	:	**Monitoring Period**	Oct 2021 - Dec 2021
Sampling Location	Mohna	:	**Protocol Used**	CPCB Guidelines
Sampling Plan &Procedure	SOP-AAQ/08	:	**Sampling Instrument Used**	Respirable Dust Sampler (PM_{10}), Fine Particulate ($PM_{2.5}$) Sampler

S. No.	Monitoring Date	PM10	PM2.5	SO_2	NO_2	CO
		IS:5182(Part-23)	IS:5182(Part-24)	IS:5182(Part-2)	IS:5182(Part-6)	IS:5182(Part-10)
1	01.10.2021	73.54	26.73	8.62	12.96	1.22
2	04.10.2021	67.27	27.77	11.78	11.06	1.28
3	09.10.2021	73.28	26.01	12.28	15.28	1.47
4	11.10.2021	65.31	29.54	8.45	10.86	1.65
5	16.10.2021	67.19	27.96	11.79	13.85	1.66
6	18.10.2021	65.05	30.91	10.33	11.32	1.24
7	23.10.2021	73.41	31.9	8.52	14.63	0.35
8	26.10.2021	77.35	28.75	8.18	15.29	1.24
9	01.11.2021	72.57	32.41	10.47	12.45	1.18
10	02.11.2021	71.44	26.99	8.63	10.57	1.38
11	06.11.2021	65.89	33.54	10.23	11.24	0.52
12	11.11.2021	75.48	31.27	8.23	11.52	0.43
13	15.11.2021	77.87	36.93	8.48	14.63	0.59
14	18.11.2021	80.42	35.94	12.08	15.42	1.56
15	22.11.2021	70.13	31.24	8.18	10.66	1.4
16	27.11.2021	74.74	29.16	8.65	14.57	0.63
17	02.12.2021	71.23	33.45	10.42	11.47	0.53
18	04.12.2021	74.88	27.93	8.17	13.45	0.57
19	08.12.2021	70.42	32.66	8.75	12.53	1.47
20	13.12.2021	75.34	30.09	8.19	10.74	0.65
21	20.12.2021	72.2	28.41	11.97	14.25	1.68
22	23.12.2021	69.94	28.38	10.42	13.52	0.48
23	27.12.2021	72.4	29.14	12.02	13.65	1.7
24	29.12.2021	76.23	30.87	8.16	15.47	0.66
Min		**65.05**	**26.01**	**8.16**	**10.57**	**0.35**
Max		**80.42**	**36.93**	**12.28**	**15.47**	**1.70**
Avg.		**72.23**	**30.33**	**9.71**	**12.97**	**1.06**
98 percentile		**79.25**	**36.47**	**12.19**	**15.45**	**1.69**
NAAQS, For 24 hourly monitoring (except CO for Eight hour)		**100 µg/m³**	**60 µg/m³**	**80 µg/m³**	**80 µg/m³**	**mg/m³**

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Ambient Air Quality Analysis	AAQ-041021-024	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

Sampling & Analysis Data

Sample Drawn By	NTL Laboratory	:	**Monitoring Period**	Oct 2021 - Dec 2021
Sampling Location	Failada Bangar	:	**Protocol Used**	CPCB Guidelines
Sampling Plan &Procedure	SOP-AAQ/08	:	**Sampling Instrument Used**	Respirable Dust Sampler (PM_{10}), Fine Particulate ($PM_{2.5}$) Sampler

S. No.	Monitoring Date	PM10	PM2.5	SO_2	NO_2	CO
		IS:5182(Part-23)	IS:5182(Part-24)	IS:5182(Part-2)	IS:5182(Part-6)	IS:5182(Part-10)
1	04.10.2021	71.56	30.62	10.56	10.98	1.24
2	05.10.2021	80.64	42.85	9.75	10.98	0.86
3	12.10.2021	58.47	29.56	12.86	12.02	1.57
4	15.10.2021	80.65	43.65	10.36	11.12	1.48
5	19.10.2021	55.46	27.45	10.11	13.97	0.96
6	22.10.2021	53.42	27.05	13.14	10.99	1.72
7	26.10.2021	81.75	37.85	10.49	11.00	0.75
8	27.10.2021	74.58	44.58	10.31	11.14	1.38
9	03.11.2021	56.32	28.79	9.81	12.16	1.19
10	06.11.2021	82.59	31.78	10.21	14.03	0.96
11	11.11.2021	76.66	34.74	12.47	11.07	0.44
12	12.11.2021	65.85	44.63	10.65	15.4	0.86
13	18.11.2021	59.37	30.62	9.87	11.11	0.47
14	20.11.2021	84.56	34.52	10.24	13.08	0.58
15	25.11.2021	76.42	44.15	12.85	12.07	1.52
16	26.11.2021	65.35	34.21	13.05	11.10	1.48
17	04.12.2021	79.42	33.58	10.33	14.12	0.86
18	06.12.2021	82.42	38.42	10.59	11.01	1.36
19	13.12.2021	62.63	32.58	12.45	10.98	1.19
20	17.12.2021	53.56	40.25	9.93	10.97	0.86
21	20.12.2021	78.15	33.57	10.11	11.16	1.06
22	23.12.2021	81.63	35.96	9.83	11.14	1.08
23	27.12.2021	53.54	27.12	12.63	11.12	1.53
24	28.12.2021	53.4	27.04	9.74	10.96	0.56
Min		**53.40**	**27.04**	**9.74**	**10.96**	**0.44**
Max		**84.56**	**44.63**	**13.14**	**15.40**	**1.72**
Avg.		**69.52**	**34.82**	**10.93**	**11.82**	**1.08**
98 percentile		**83.65**	**44.61**	**13.10**	**14.81**	**1.65**
NAAQS, For 24 hourly monitoring (except CO for Eight hour)		**100 µg/m³**	**60 µg/m³**	**80 µg/m³**	**80 µg/m³**	**mg/m³**

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Ambient Air Quality Analysis	AAQ-041021-025	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

Sampling & Analysis Data

Sample Drawn By	NTL Laboratory	:	**Monitoring Period**	Oct 2021 - Dec 2021
Sampling Location	Dayant Pur	:	**Protocol Used**	CPCB Guidelines
Sampling Plan &Procedure	SOP-AAQ/08	:	**Sampling Instrument Used**	Respirable Dust Sampler (PM_{10}), Fine Particulate ($PM_{2.5}$) Sampler

S. No.	Monitoring Date	PM10	PM2.5	SO_2	NO_2	CO
		IS:5182(Part-23)	IS:5182(Part-24)	IS:5182(Part-2)	IS:5182(Part-6)	IS:5182(Part-10)
1	04.10.2021	62.78	30.54	12.47	11.73	0.55
2	05.10.2021	58.27	40.22	9.78	11.66	1.63
3	12.10.2021	59.30	30.61	12.18	11.99	1.47
4	15.10.2021	60.61	29.49	11.72	12.36	0.84
5	19.10.2021	65.43	30.50	9.49	11.78	1.47
6	22.10.2021	58.64	32.63	11.73	12.16	1.58
7	26.10.2021	80.21	40.19	12.94	14.03	0.96
8	27.10.2021	58.56	30.67	9.67	10.42	1.24
9	03.11.2021	60.72	32.53	12.69	13.98	1.66
10	06.11.2021	80.24	29.46	11.70	11.89	0.87
11	11.11.2021	74.39	28.53	9.58	13.08	1.32
12	12.11.2021	61.62	30.49	12.96	10.35	1.44
13	18.11.2021	75.21	40.58	12.47	16.46	0.86
14	20.11.2021	79.66	31.73	9.63	15.88	1.75
15	25.11.2021	69.37	33.76	12.94	11..65	1.48
16	26.11.2021	66.39	29.64	12.29	16.23	0.33
17	04.12.2021	80.36	40.35	9.75	11.74	1.47
18	06.12.2021	67.43	30.52	11.32	14.67	1.75
19	13.12.2021	60.42	29.67	10.33	15.81	1.38
20	17.12.2021	80.32	28.66	9.85	13.78	1.69
21	20.12.2021	74.29	40.12	11.73	10.24	1.58
22	23.12.2021	63.33	30.31	12.63	14.32	0.98
23	27.12.2021	80.07	28.43	10.12	11.63	1.18
24	28.12.2021	60.53	31.84	9.63	13.98	0.96
Min		**58.27**	**28.43**	**9.49**	**10.24**	**0.33**
Max		**80.36**	**40.58**	**12.96**	**16.46**	**1.75**
Avg.		**68.26**	**32.56**	**11.23**	**13.05**	**1.27**
98 percentile		**80.34**	**40.47**	**12.95**	**16.36**	**1.75**
NAAQS, For 24 hourly monitoring (except CO for Eight hour)		**100 µg/m³**	**60 µg/m³**	**80 µg/m³**	**80 µg/m³**	**mg/m³**

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Water Quality Analysis	W-081221-035	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Received On : 08/12/2021
Sample Description : **Surface Water**
Sample Collected By : Laboratory (NTL)
Sample Quantity : 2.0 Litre
Analysis Duration : 08/12/2021 to 15/12/2021
Sample Location : Collected from Shahpura **(SW1)**

RESULTS

S.No.	Parameter	Test Method	Results	Units
1.	pH (at 25^{0}C)	IS:3025(Part-11)	7.45	---
2.	Temperature	IS:3025(Part-9)	20.0	^{0}C
3.	Turbidity	IS:3025(Part-10)	48.0	NTU
4.	Electric Conductivity @25^{0}C	IS:3025(Part-14)	890	µS/cm
5.	Sulphate (SO_4)	IS:3025(Part-24)	54.2	mg/l
6.	Nitrate (NO_3)	IS:3025(Part-34)	46.8	mg/l
7.	Total Hardness (as CaCO3)	IS:3025(Part-21)	112	mg/l
8.	Chloride (as Cl)	IS:3025(Part-32)	78.5	mg/l
9.	Fluoride (as F)	APHA 4500F	1.02	mg/l
10.	COD (as O_2)	APHA-5220 B	41.0	mg/l
11.	Iron (as Fe)	IS:3025(Part-53)	2.02	mg/l
12.	Dissolve Oxygen	IS-3025(Part-38)	5.6	mg/l
13.	Total Dissolved Solid	IS:3025(Part-16)	520	mg/l
14.	BOD (3 days at 27^{0}C)	IS:3025 (P-44)	18.0	mg/l
15.	Calcium (as Ca)	IS:3025(Part-40)	41.5	mg/l
16.	Magnesium (as Mg)	IS:3025(Part-46)	8.99	mg/l
17.	Arsenic (as As)	IS:3025(Part-37)	BDL	mg/l
18.	Lead (as Pb)	IS:3025(Part-47)	BDL	mg/l
19.	Copper (as Cu)	IS:3025(Part-42)	0.12	mg/l

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20.	Zinc (as Zn)	IS:3025(Part-49)	1.08	mg/l
21.	Manganese (as Mn)	IS:3025(Part-59)	0.16	mg/l
22.	Total Chromium (as Cr)	IS:3025(Part-52)	<0.1	mg/l
23.	Sodium (as Na)	IS:3025(Part-45)	52.8	mg/l
24.	Potassium (as K)	IS:3025(Part-45)	1.2	mg/l
25.	Total Alkalinity (as $CaCO_3$)	IS:3025(Part-23)	98.0	mg/l
26.	Phosphate (as P)	IS:3025(Part-31)	0.165	mg/l
27.	Nitrite (as NO_2)	IS:3025(Part-34)	0.023	mg/l
28	Total Suspended Solid	IS:3025(Part-17)	45.0	mg/l
29.	Faecal Coliform	IS-1622	1.1×10^3	MPN/100 ml
30.	Total Coliform	IS-1622	2.5×10^3	MPN/100ML

Notes:

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Water Quality Analysis	W-081221-036	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Received On : 08/12/2021
Sample Description : **Surface Water**
Sample Collected By : Laboratory (NTL)
Sample Quantity : 2.0 Litre
Analysis Duration : 08/12/2021 to 15/12/2021
Sample Location : Collected from Mohna **(SW2)**

RESULTS

S.No.	Parameter	Test Method	Results	Units
1.	pH (at 25^{0}C)	IS:3025(Part-11)	7.36	---
2.	Temperature	IS:3025(Part-9)	20.0	^{0}C
3.	Turbidity	IS:3025(Part-10)	84.2	NTU
4.	Electric Conductivity @25^{0}C	IS:3025(Part-14)	1396	µS/cm
5.	Sulphate (SO_4)	IS:3025(Part-24)	84.2	mg/l
6.	Nitrate (NO_3)	IS:3025(Part-34)	63.18	mg/l
7.	Total Hardness (as CaCO3)	IS:3025(Part-21)	260	mg/l
8.	Chloride (as Cl)	IS:3025(Part-32)	126.85	mg/l
9.	Fluoride (as F)	APHA 4500F	2.14	mg/l
10.	COD (as O_2)	APHA-5220 B	172	mg/l
11.	Iron (as Fe)	IS:3025(Part-53)	6.18	mg/l
12.	Dissolve Oxygen	IS-3025(Part-38)	1.6	mg/l
13.	Total Dissolved Solid	IS:3025(Part-16)	938	mg/l
14.	BOD (3 days at 27^{0}C)	IS:3025 (P-44)	62.0	mg/l
15.	Calcium (as Ca)	IS:3025(Part-40)	65.73	mg/l
16.	Magnesium (as Mg)	IS:3025(Part-46)	23.33	mg/l
17.	Arsenic (as As)	IS:3025(Part-37)	BDL	mg/l
18.	Lead (as Pb)	IS:3025(Part-47)	BDL	mg/l
19.	Copper (as Cu)	IS:3025(Part-42)	0.54	mg/l

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20.	Zinc (as Zn)	IS:3025(Part-49)	1.86	mg/l
21.	Manganese (as Mn)	IS:3025(Part-59)	0.29	mg/l
22.	Total Chromium (as Cr)	IS:3025(Part-52)	0.18	mg/l
23.	Sodium (as Na)	IS:3025(Part-45)	81.74	mg/l
24.	Potassium (as K)	IS:3025(Part-45)	3.4	mg/l
25.	Total Alkalinity (as $CaCO_3$)	IS:3025(Part-23)	296	mg/l
26.	Phosphate (as P)	IS:3025(Part-31)	0.209	mg/l
27.	Nitrite (as NO_2)	IS:3025(Part-34)	0.096	mg/l
28	Total Suspended Solid	IS:3025(Part-17)	126.7	mg/l
29.	Faecal Coliform	IS-1622	0.62×10^3	MPN/100 ml
30.	Total Coliform	IS-1622	0.75×10^3	MPN/100ML

Notes:

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Water Quality Analysis	W-081221-037	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Received On : 08/12/2021
Sample Description : **Surface Water**
Sample Collected By : Laboratory (NTL)
Sample Quantity : 2.0 Litre
Analysis Duration : 08/12/2021 to 15/12/2021
Sample Location : Collected from Water Failada Bangar **(SW3)**

RESULTS

S.No.	Parameter	Test Method	Results	Units
1.	pH (at 25^{0}C)	IS:3025(Part-11)	7.36	---
2.	Temperature	IS:3025(Part-9)	18.0	^{0}C
3.	Turbidity	IS:3025(Part-10)	92.2	NTU
4.	Electric Conductivity @25^{0}C	IS:3025(Part-14)	1443	µS/cm
5.	Sulphate (SO_4)	IS:3025(Part-24)	104	mg/l
6.	Nitrate (NO_3)	IS:3025(Part-34)	66.0	mg/l
7.	Total Hardness (as CaCO3)	IS:3025(Part-21)	312	mg/l
8.	Chloride (as Cl)	IS:3025(Part-32)	225.31	mg/l
9.	Fluoride (as F)	APHA 4500F	2.29	mg/l
10.	COD (as O_2)	APHA-5220 B	296	mg/l
11.	Iron (as Fe)	IS:3025(Part-53)	7.09	mg/l
12.	Dissolve Oxygen	IS-3025(Part-38)	<1.0	mg/l
13.	Total Dissolved Solid	IS:3025(Part-16)	1063	mg/l
14.	BOD (3 days at 27^{0}C)	IS:3025 (P-44)	110	mg/l
15.	Calcium (as Ca)	IS:3025(Part-40)	70.54	mg/l
16.	Magnesium (as Mg)	IS:3025(Part-46)	33.05	mg/l
17.	Arsenic (as As)	IS:3025(Part-37)	BDL	mg/l
18.	Lead (as Pb)	IS:3025(Part-47)	BDL	mg/l
19.	Copper (as Cu)	IS:3025(Part-42)	0.72	mg/l

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20.	Zinc (as Zn)	IS:3025(Part-49)	2.18	mg/l
21.	Manganese (as Mn)	IS:3025(Part-59)	0.36	mg/l
22.	Total Chromium (as Cr)	IS:3025(Part-52)	0.27	mg/l
23.	Sodium (as Na)	IS:3025(Part-45)	146	mg/l
24.	Potassium (as K)	IS:3025(Part-45)	4.0	mg/l
25.	Total Alkalinity (as $CaCO_3$)	IS:3025(Part-23)	398	mg/l
26.	Phosphate (as P)	IS:3025(Part-31)	0.325	mg/l
27.	Nitrite (as NO_2)	IS:3025(Part-34)	0.106	mg/l
28	Total Suspended Solid	IS:3025(Part-17)	135.0	mg/l
29.	Faecal Coliform	IS-1622	0.58×10^3	MPN/100 ml
30.	Total Coliform	IS-1622	0.66×10^3	MPN/100ML

Notes:

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Water	W-081221-030	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Drawn on	:	07/12/2021
Sample Drawn By	:	**Laboratory**
Sample Received on	:	08/12/2021
Sample Quantity	:	3.0 Lt.
Analysis Duration	:	08/12/2021 to 15/12/2021
Sample Description	:	Ground Water Collected from Shahupura (GW1)

MICROBIOLOGICAL REQUIREMENT

RESULTS				
S.No.	Parameter	Test Method	Results	Required as per IS-10500:2012
1.	*Escherichia coli*	IS-15185	Absent	Absent/100ml
2.	*Coliform Bacteria*	IS-15185	Absent	Absent/100ml

ORGANOLEPTIC & PHYSICAL PARAMETERS

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Colour	IS-3025(P-04)	<1.0	Hazen	5	15
2.	Odour	IS-3025(P-05)	Agreeable	-	Agreeable	Agreeable
3.	Taste	IS-3025(P-07 & 08)	Agreeable	-	Agreeable	-
4.	Turbidity	IS-3025(P-10)	<1.0	NTU	1	5
5.	pH value	IS-3025(P-04)	7.18	-	6.5-8.5	-
6.	Total Dissolve Solid (TDS)	IS-3025(P-16)	1246	mg/l	500	2000

GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Aluminum (as Al)	IS: 3025 (P- 55)	<0.01	mg/l	0.03	0.2
2.	Total Ammonia	IS: 3025 (P- 34)	<0.10	mg/l	0.5	No Relaxation
3.	Anionic surface Detergents(as MBAS)	Annex K of IS-13428	<0.10	mg/l	0.2	1.0
4.	Barium (as Ba)	IS: 15302	<0.10	mg/l	0.7	No Relaxation
5.	Boron (as B)	IS: 3025 (P- 57)	<0.10	mg/l	0.5	2.4
6.	Calcium (as Ca)	IS: 3025 (P- 40)	80.35	mg/l	75	200
7.	Chloramines (as Cl_2)	IS: 3025 (P- 26)	<1.00	mg/l	4.0	No Relaxation
8.	Chloride (as Cl)	IS: 3025 (P- 32)	178.50	mg/l	250	1000

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S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
9.	Copper (as Cu)	IS: 3025 (P-42)	<0.05	mg/l	0.05	1.5
10.	Fluoride (as F)	IS: 3025 (P-60)	0.96	mg/l	1.0	1.5
11.	Free Residual Chlorine	IS: 3025 (P-26)	<0.1	mg/l	0.2	1.0
12.	Iron (as Fe)	IS: 3025(P-52)	0.234	mg/l	1.0	No Relaxation
13.	Magnesium (as Mg)	IS: 3025 (P-46)	51.09	mg/l	30	100
14.	Manganese (as Mn)	Clause 35 of IS 3025	<0.01	mg/l	0.1	0.3
15.	Mineral Oil	Clause 6 of IS: 3025	<0.50	mg/l	0.5	No Relaxation
16.	Nitrate (as NO_3)	IS: 3025 (P- 34)	15.23	mg/l	45	No Relaxation
17.	Selenium (as Se)	IS: 3025 (P- 56)	<0.01	mg/l	0.01	No Relaxation
18.	Silver (as Ag)	Annex J IS: 13428	<0.05	mg/l	0.1	No Relaxation
19.	Sulphate (as SO_4)	IS: 3025 (P- 24)	82.60	mg/l	200	400
20.	Sulphide(as H_2S)	IS-3025 (P-29)	<0.05	mg/l	0.05	No Relaxation
21.	Alkalinity (as Ca CO_3)	IS: 3025 (P- 23)	398.0	mg/l	200	600
22.	Total Hardness (as $CaCO_3$)	IS: 3025 (P- 23)	412.0	mg/l	200	600
23.	Zinc (as Zn)	IS: 3025 (P- 49)	0.215	mg/l	5.0	15

Parameters Concerning Toxic Substances:

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Cadmium (as Cd)	IS-3025(P-41)	<0.001	mg/l	0.003	No Relaxation
2.	Cyanide (as CN)	IS-3025(P-27)	<0.01	mg/l	0.05	No Relaxation
3.	Lead (as Pb)	IS-3025(P-47)	<0.01	mg/l	0.01	No Relaxation
4.	Mercury (as Hg)	IS-3025(P-48)	<0.001	mg/l	0.001	No Relaxation
5.	Molybdenum (Mo)	IS-3025(P-2)	<0.05	mg/l	0.07	No Relaxation
6.	Nickel (as Ni)	Annex L of IS-13428	<0.01	mg/l	0.02	No Relaxation
7.	Polynuclear Aromatic	APHA 6440	<0.0001	mg/l	0.0001	No Relaxation
8	Poly chlorinatedbiphenyl	APHA 6630	<0.0001	mg/l	0.0005	No Relaxation
9.	Arsenic (as As)	IS-3025(P-37)	<0.01	mg/l	0.01	No Relaxation
10.	Total Chromium (as Cr)	Annex J of IS-13428	<0.05	mg/l	0.05	No Relaxation

***Remark – BDL- Below Detection Limit.**

Notes:

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
2. Responsibility of the Laboratory is limited to the invoiced amount only.
3. This test report will not be generated again, either wholly or in part, without prior written permission of the laboratory.
4. The test samples will be disposed off after two weeks from the date of issue of test report, unless until specified by the customer

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Water	W-081221-031	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Drawn on : 07/12/2021
Sample Drawn By : **Laboratory**
Sample Received on : 08/12/2021
Sample Quantity : 3.0 Lt.
Analysis Duration : 08/12/2021 to 15/12/2021
Sample Description : Ground Water Collected from Panhera Khurd (GW2)

MICROBIOLOGICAL REQUIREMENT

RESULTS				
S.No.	Parameter	Test Method	Results	Required as per IS-10500:2012
1.	*Escherichia coli*	IS-15185	Absent	Absent/100ml
2.	*Coliform Bacteria*	IS-15185	Absent	Absent/100ml

ORGANOLEPTIC & PHYSICAL PARAMETERS

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Colour	IS-3025(P-04)	<1.0	Hazen	5	15
2.	Odour	IS-3025(P-05)	Agreeable	-	Agreeable	Agreeable
3.	Taste	IS-3025(P-07 & 08)	Agreeable	-	Agreeable	-
4.	Turbidity	IS-3025(P-10)	<1.0	NTU	1	5
5.	pH value	IS-3025(P-04)	7.46	-	6.5-8.5	-
6.	Total Dissolve Solid (TDS)	IS-3025(P-16)	1480	mg/l	500	2000

GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Aluminum (as Al)	IS: 3025 (P- 55)	<0.01	mg/l	0.03	0.2
2.	Total Ammonia	IS: 3025 (P- 34)	<0.10	mg/l	0.5	No Relaxation
3.	Anionic surface Detergents(as MBAS)	Annex K of IS-13428	<0.10	mg/l	0.2	1.0
4.	Barium (as Ba)	IS: 15302	<0.10	mg/l	0.7	No Relaxation
5.	Boron (as B)	IS: 3025 (P- 57)	<0.10	mg/l	0.5	2.4
6.	Calcium (as Ca)	IS: 3025 (P- 40)	98.21	mg/l	75	200
7.	Chloramines (as Cl_2)	IS: 3025 (P- 26)	<1.00	mg/l	4.0	No Relaxation
8.	Chloride (as Cl)	IS: 3025 (P- 32)	189.60	mg/l	250	1000

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S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
9.	Copper (as Cu)	IS: 3025 (P-42)	<0.05	mg/l	0.05	1.5
10.	Fluoride (as F)	IS: 3025 (P-60)	1.02	mg/l	1.0	1.5
11.	Free Residual Chlorine	IS: 3025 (P-26)	<0.1	mg/l	0.2	1.0
12.	Iron (as Fe)	IS: 3025(P-52)	0.256	mg/l	1.0	No Relaxation
13.	Magnesium (as Mg)	IS: 3025 (P-46)	65.28	mg/l	30	100
14.	Manganese (as Mn)	Clause 35 of IS 3025	<0.01	mg/l	0.1	0.3
15.	Mineral Oil	Clause 6 of IS: 3025	<0.50	mg/l	0.5	No Relaxation
16.	Nitrate (as NO_3)	IS: 3025 (P- 34)	19.80	mg/l	45	No Relaxation
17.	Selenium (as Se)	IS: 3025 (P- 56)	<0.01	mg/l	0.01	No Relaxation
18.	Silver (as Ag)	Annex J IS: 13428	<0.05	mg/l	0.1	No Relaxation
19.	Sulphate (as SO_4)	IS: 3025 (P- 24)	106.12	mg/l	200	400
20.	Sulphide(as H_2S)	IS-3025 (P-29)	<0.05	mg/l	0.05	No Relaxation
21.	Alkalinity (as Ca CO_3)	IS: 3025 (P- 23)	428.0	mg/l	200	600
22.	Total Hardness (as $CaCO_3$)	IS: 3025 (P- 23)	512.0	mg/l	200	600
23.	Zinc (as Zn)	IS: 3025 (P- 49)	0.265	mg/l	6.0	15

Parameters Concerning Toxic Substances:

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Cadmium (as Cd)	IS-3025(P-41)	<0.001	mg/l	0.003	No Relaxation
2.	Cyanide (as CN)	IS-3025(P-27)	<0.01	mg/l	0.05	No Relaxation
3.	Lead (as Pb)	IS-3025(P-47)	<0.01	mg/l	0.01	No Relaxation
4.	Mercury (as Hg)	IS-3025(P-48)	<0.001	mg/l	0.001	No Relaxation
5.	Molybdenum (Mo)	IS-3025(P-2)	<0.05	mg/l	0.07	No Relaxation
6.	Nickel (as Ni)	Annex L of IS-13428	<0.01	mg/l	0.02	No Relaxation
7.	Polynuclear Aromatic	APHA 6440	<0.0001	mg/l	0.0001	No Relaxation
8	Poly chlorinatedbiphenyl	APHA 6630	<0.0001	mg/l	0.0005	No Relaxation
9.	Arsenic (as As)	IS-3025(P-37)	<0.01	mg/l	0.01	No Relaxation
10.	Total Chromium (as Cr)	Annex J of IS-13428	<0.05	mg/l	0.05	No Relaxation

***Remark – BDL- Below Detection Limit.**

Notes:

1. The results given above are related to the tested sample, as received & mentioned parameters. The customer asked for the above tests only.
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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Water	W-081221-032	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Drawn on	:	07/12/2021
Sample Drawn By	:	**Laboratory**
Sample Received on	:	08/12/2021
Sample Quantity	:	3.0 Lt.
Analysis Duration	:	08/12/2021 to 15/12/2021
Sample Description	:	Ground Water Collected from Mohna (GW3)

MICROBIOLOGICAL REQUIREMENT

RESULTS				
S.No.	Parameter	Test Method	Results	Required as per IS-10500:2012
1.	*Escherichia coli*	IS-15185	Absent	Absent/100ml
2.	*Coliform Bacteria*	IS-15185	Absent	Absent/100ml

ORGANOLEPTIC & PHYSICAL PARAMETERS

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Colour	IS-3025(P-04)	<1.0	Hazen	5	15
2.	Odour	IS-3025(P-05)	Agreeable	-	Agreeable	Agreeable
3.	Taste	IS-3025(P-07 & 08)	Agreeable	-	Agreeable	-
4.	Turbidity	IS-3025(P-10)	<1.0	NTU	1	5
5.	pH value	IS-3025(P-04)	7.45	-	6.5-8.5	-
6.	Total Dissolve Solid (TDS)	IS-3025(P-16)	1566	mg/l	500	2000

GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Aluminum (as Al)	IS: 3025 (P- 55)	<0.01	mg/l	0.03	0.2
2.	Total Ammonia	IS: 3025 (P- 34)	<0.10	mg/l	0.5	No Relaxation
3.	Anionic surface Detergents(as MBAS)	Annex K of IS-13428	<0.10	mg/l	0.2	1.0
4.	Barium (as Ba)	IS: 15302	<0.10	mg/l	0.7	No Relaxation
5.	Boron (as B)	IS: 3025 (P- 57)	<0.10	mg/l	0.5	2.4
6.	Calcium (as Ca)	IS: 3025 (P- 40)	99.80	mg/l	75	200
7.	Chloramines (as Cl_2)	IS: 3025 (P- 26)	<1.00	mg/l	4.0	No Relaxation
8.	Chloride (as Cl)	IS: 3025 (P- 32)	215.36	mg/l	250	1000

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S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
9.	Copper (as Cu)	IS: 3025 (P-42)	<0.05	mg/l	0.05	1.5
10.	Fluoride (as F)	IS: 3025 (P-60)	1.08	mg/l	1.0	1.5
11.	Free Residual Chlorine	IS: 3025 (P-26)	<0.1	mg/l	0.2	1.0
12.	Iron (as Fe)	IS: 3025(P-52)	0.249	mg/l	1.0	No Relaxation
13.	Magnesium (as Mg)	IS: 3025 (P-46)	79.98	mg/l	30	100
14.	Manganese (as Mn)	Clause 35 of IS 3025	<0.01	mg/l	0.1	0.3
15.	Mineral Oil	Clause 6 of IS: 3025	<0.50	mg/l	0.5	No Relaxation
16.	Nitrate (as NO_3)	IS: 3025 (P- 34)	21.18	mg/l	45	No Relaxation
17.	Selenium (as Se)	IS: 3025 (P- 56)	<0.01	mg/l	0.01	No Relaxation
18.	Silver (as Ag)	Annex J IS: 13428	<0.05	mg/l	0.1	No Relaxation
19.	Sulphate (as SO_4)	IS: 3025 (P- 24)	114.10	mg/l	200	400
20.	Sulphide(as H_2S)	IS-3025 (P-29)	<0.05	mg/l	0.05	No Relaxation
21.	Alkalinity (as Ca CO_3)	IS: 3025 (P- 23)	456.0	mg/l	200	600
22.	Total Hardness (as $CaCO_3$)	IS: 3025 (P- 23)	580.0	mg/l	200	600
23.	Zinc (as Zn)	IS: 3025 (P- 49)	0.284	mg/l	7.0	15

Parameters Concerning Toxic Substances:

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Cadmium (as Cd)	IS-3025(P-41)	<0.001	mg/l	0.003	No Relaxation
2.	Cyanide (as CN)	IS-3025(P-27)	<0.01	mg/l	0.05	No Relaxation
3.	Lead (as Pb)	IS-3025(P-47)	<0.01	mg/l	0.01	No Relaxation
4.	Mercury (as Hg)	IS-3025(P-48)	<0.001	mg/l	0.001	No Relaxation
5.	Molybdenum (Mo)	IS-3025(P-2)	<0.05	mg/l	0.07	No Relaxation
6.	Nickel (as Ni)	Annex L of IS-13428	<0.01	mg/l	0.02	No Relaxation
7.	Polynuclear Aromatic	APHA 6440	<0.0001	mg/l	0.0001	No Relaxation
8	Poly chlorinatedbiphenyl	APHA 6630	<0.0001	mg/l	0.0005	No Relaxation
9.	Arsenic (as As)	IS-3025(P-37)	<0.01	mg/l	0.01	No Relaxation
10.	Total Chromium (as Cr)	Annex J of IS-13428	<0.05	mg/l	0.05	No Relaxation

***Remark – BDL- Below Detection Limit.**

Notes:

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Water	W-081221-033	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Drawn on	:	07/12/2021
Sample Drawn By	:	**Laboratory**
Sample Received on	:	08/12/2021
Sample Quantity	:	3.0 Lt.
Analysis Duration	:	08/12/2021 to 15/12/2021
Sample Description	:	Ground Water Collected from Failada Bangar (GW4)

MICROBIOLOGICAL REQUIREMENT

RESULTS				
S.No.	Parameter	Test Method	Results	Required as per IS-10500:2012
1.	*Escherichia coli*	IS-15185	Absent	Absent/100ml
2.	*Coliform Bacteria*	IS-15185	Absent	Absent/100ml

ORGANOLEPTIC & PHYSICAL PARAMETERS

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Colour	IS-3025(P-04)	<1.0	Hazen	5	15
2.	Odour	IS-3025(P-05)	Agreeable	-	Agreeable	Agreeable
3.	Taste	IS-3025(P-07 & 08)	Agreeable	-	Agreeable	-
4.	Turbidity	IS-3025(P-10)	<1.0	NTU	1	5
5.	pH value	IS-3025(P-04)	7.58	-	6.5-8.5	-
6.	Total Dissolve Solid (TDS)	IS-3025(P-16)	1312	mg/l	500	2000

GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Aluminum (as Al)	IS: 3025 (P- 55)	<0.01	mg/l	0.03	0.2
2.	Total Ammonia	IS: 3025 (P- 34)	<0.10	mg/l	0.5	No Relaxation
3.	Anionic surface Detergents(as MBAS)	Annex K of IS-13428	<0.10	mg/l	0.2	1.0
4.	Barium (as Ba)	IS: 15302	<0.10	mg/l	0.7	No Relaxation
5.	Boron (as B)	IS: 3025 (P- 57)	<0.10	mg/l	0.5	2.4
6.	Calcium (as Ca)	IS: 3025 (P- 40)	84.23	mg/l	75	200
7.	Chloramines (as Cl_2)	IS: 3025 (P- 26)	<1.00	mg/l	4.0	No Relaxation
8.	Chloride (as Cl)	IS: 3025 (P- 32)	186.60	mg/l	250	1000

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TEST CERTIFICATE

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
9.	Copper (as Cu)	IS: 3025 (P-42)	<0.05	mg/l	0.05	1.5
10.	Fluoride (as F)	IS: 3025 (P-60)	0.98	mg/l	1.0	1.5
11.	Free Residual Chlorine	IS: 3025 (P-26)	<0.1	mg/l	0.2	1.0
12.	Iron (as Fe)	IS: 3025(P-52)	0.216	mg/l	1.0	No Relaxation
13.	Magnesium (as Mg)	IS: 3025 (P-46)	61.57	mg/l	30	100
14.	Manganese (as Mn)	Clause 35 of IS 3025	<0.01	mg/l	0.1	0.3
15.	Mineral Oil	Clause 6 of IS: 3025	<0.50	mg/l	0.5	No Relaxation
16.	Nitrate (as NO_3)	IS: 3025 (P- 34)	18.30	mg/l	45	No Relaxation
17.	Selenium (as Se)	IS: 3025 (P- 56)	<0.01	mg/l	0.01	No Relaxation
18.	Silver (as Ag)	Annex J IS: 13428	<0.05	mg/l	0.1	No Relaxation
19.	Sulphate (as SO_4)	IS: 3025 (P- 24)	95.80	mg/l	200	400
20.	Sulphide(as H_2S)	IS-3025 (P-29)	<0.05	mg/l	0.05	No Relaxation
21.	Alkalinity (as Ca CO_3)	IS: 3025 (P- 23)	377.0	mg/l	200	600
22.	Total Hardness (as $CaCO_3$)	IS: 3025 (P- 23)	465.0	mg/l	200	600
23.	Zinc (as Zn)	IS: 3025 (P- 49)	0.212	mg/l	8.0	15

Parameters Concerning Toxic Substances:

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Cadmium (as Cd)	IS-3025(P-41)	<0.001	mg/l	0.003	No Relaxation
2.	Cyanide (as CN)	IS-3025(P-27)	<0.01	mg/l	0.05	No Relaxation
3.	Lead (as Pb)	IS-3025(P-47)	<0.01	mg/l	0.01	No Relaxation
4.	Mercury (as Hg)	IS-3025(P-48)	<0.001	mg/l	0.001	No Relaxation
5.	Molybdenum (Mo)	IS-3025(P-2)	<0.05	mg/l	0.07	No Relaxation
6.	Nickel (as Ni)	Annex L of IS-13428	<0.01	mg/l	0.02	No Relaxation
7.	Polynuclear Aromatic	APHA 6440	<0.0001	mg/l	0.0001	No Relaxation
8	Poly chlorinatedbiphenyl	APHA 6630	<0.0001	mg/l	0.0005	No Relaxation
9.	Arsenic (as As)	IS-3025(P-37)	<0.01	mg/l	0.01	No Relaxation
10.	Total Chromium (as Cr)	Annex J of IS-13428	<0.05	mg/l	0.05	No Relaxation

***Remark – BDL- Below Detection Limit.**

Notes:

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Water	W-081221-034	05/01/2022

Project Name: Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km

SAMPLING & ANALYSIS DATA

Sample Drawn on	:	07/12/2021
Sample Drawn By	:	**Laboratory**
Sample Received on	:	08/12/2021
Sample Quantity	:	3.0 Lt.
Analysis Duration	:	08/12/2021 to 15/12/2021
Sample Description	:	Ground Water Collected from Dayant Pur (GW5)

MICROBIOLOGICAL REQUIREMENT

RESULTS				
S.No.	Parameter	Test Method	Results	Required as per IS-10500:2012
1.	*Escherichia coli*	IS-15185	Absent	Absent/100ml
2.	*Coliform Bacteria*	IS-15185	Absent	Absent/100ml

ORGANOLEPTIC & PHYSICAL PARAMETERS

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Colour	IS-3025(P-04)	<1.0	Hazen	5	15
2.	Odour	IS-3025(P-05)	Agreeable	-	Agreeable	Agreeable
3.	Taste	IS-3025(P-07 & 08)	Agreeable	-	Agreeable	-
4.	Turbidity	IS-3025(P-10)	<1.0	NTU	1	5
5.	pH value	IS-3025(P-04)	7.47	-	6.5-8.5	-
6.	Total Dissolve Solid (TDS)	IS-3025(P-16)	1760	mg/l	500	2000

GENERAL PARAMETERS CONCERNING SUBSTANCES UNDESIRABLE IN EXCESSIVE AMOUNTS

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Aluminum (as Al)	IS: 3025 (P- 55)	<0.01	mg/l	0.03	0.2
2.	Total Ammonia	IS: 3025 (P- 34)	<0.10	mg/l	0.5	No Relaxation
3.	Anionic surface Detergents(as MBAS)	Annex K of IS-13428	<0.10	mg/l	0.2	1.0
4.	Barium (as Ba)	IS: 15302	<0.10	mg/l	0.7	No Relaxation
5.	Boron (as B)	IS: 3025 (P- 57)	<0.10	mg/l	0.5	2.4
6.	Calcium (as Ca)	IS: 3025 (P- 40)	112.60	mg/l	75	200
7.	Chloramines (as Cl_2)	IS: 3025 (P- 26)	<1.00	mg/l	4.0	No Relaxation
8.	Chloride (as Cl)	IS: 3025 (P- 32)	285.18	mg/l	250	1000

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S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
9.	Copper (as Cu)	IS: 3025 (P-42)	<0.05	mg/l	0.05	1.5
10.	Fluoride (as F)	IS: 3025 (P-60)	1.32	mg/l	1.0	1.5
11.	Free Residual Chlorine	IS: 3025 (P-26)	<0.1	mg/l	0.2	1.0
12.	Iron (as Fe)	IS: 3025(P-52)	0.272	mg/l	1.0	No Relaxation
13.	Magnesium (as Mg)	IS: 3025 (P-46)	77.56	mg/l	30	100
14.	Manganese (as Mn)	Clause 35 of IS 3025	<0.01	mg/l	0.1	0.3
15.	Mineral Oil	Clause 6 of IS: 3025	<0.50	mg/l	0.5	No Relaxation
16.	Nitrate (as NO_3)	IS: 3025 (P- 34)	23.80	mg/l	45	No Relaxation
17.	Selenium (as Se)	IS: 3025 (P- 56)	<0.01	mg/l	0.01	No Relaxation
18.	Silver (as Ag)	Annex J IS: 13428	<0.05	mg/l	0.1	No Relaxation
19.	Sulphate (as SO_4)	IS: 3025 (P- 24)	138.25	mg/l	200	400
20.	Sulphide(as H_2S)	IS-3025 (P-29)	<0.05	mg/l	0.05	No Relaxation
21.	Alkalinity (as Ca CO_3)	IS: 3025 (P- 23)	423.0	mg/l	200	600
22.	Total Hardness (as $CaCO_3$)	IS: 3025 (P- 23)	602.0	mg/l	200	600
23.	Zinc (as Zn)	IS: 3025 (P- 49)	0.258	mg/l	9.0	15

Parameters Concerning Toxic Substances:

S. No.	Parameter	Test method	Result	Unit	Requirement (Acceptable Limit)	Permissible Limit in absence of alternate source
1.	Cadmium (as Cd)	IS-3025(P-41)	<0.001	mg/l	0.003	No Relaxation
2.	Cyanide (as CN)	IS-3025(P-27)	<0.01	mg/l	0.05	No Relaxation
3.	Lead (as Pb)	IS-3025(P-47)	<0.01	mg/l	0.01	No Relaxation
4.	Mercury (as Hg)	IS-3025(P-48)	<0.001	mg/l	0.001	No Relaxation
5.	Molybdenum (Mo)	IS-3025(P-2)	<0.05	mg/l	0.07	No Relaxation
6.	Nickel (as Ni)	Annex L of IS-13428	<0.01	mg/l	0.02	No Relaxation
7.	Polynuclear Aromatic	APHA 6440	<0.0001	mg/l	0.0001	No Relaxation
8	Poly chlorinatedbiphenyl	APHA 6630	<0.0001	mg/l	0.0005	No Relaxation
9.	Arsenic (as As)	IS-3025(P-37)	<0.01	mg/l	0.01	No Relaxation
10.	Total Chromium (as Cr)	Annex J of IS-13428	<0.05	mg/l	0.05	No Relaxation

***Remark – BDL- Below Detection Limit.**

Notes:

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Soil	SS-081221-011	05/01/2022

Project Name: **Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km**

Sampling & Analysis Data

Sample Drawn On	:	07/12/2021
Sample Received On	:	08/12/2021
Sample Description	:	Soil Sample
Sample Quantity	:	2.0 Kg
Sampling Location	:	**Shahupura (S1)**
Sample Drawn By	:	**Laboratory**
Analysis Duration		08/12/2021 to 15/12/2021

Sl. No.	Parameters		Results	Test Method
1.	pH		7.62	IS:2720(Part-26)
2.	Conductivity (µmhos/cm)		378.00	IS:2720(Part-21)
3.	Sodium (as Na) (mg/kg)		52.37	STP/SOIL
4.	Water holding capacity (%)		35.21	STP/SOIL
5.	Potassium (as K) (Kg/ Hectare)		282.0	STP/SOIL
6.	Texture	Sand (% by mass)	68.00	STP/SOIL
		Clay (% by mass)	19.00	STP/SOIL
		Silt (% by mass)	13.00	STP/SOIL
7.	Calcium (as Ca) (mg/kg)		559.73	STP/SOIL
8.	Magnesium (as Mg) (mg/kg)		97.10	STP/SOIL
9.	SAR		4.98	STP/SOIL
10.	Available Phosphorus (as P) (Kg/ Hectare)		59.0	STP/SOIL
11.	Organic carbon (%)		0.53	STP/SOIL
12.	Porosity (% by mass)		45.21	STP/SOIL
13.	Bulk Density (kg/cm^3)		1.69	STP/SOIL
14.	Available Nitrogen (Kg/ Hectare)		362	STP/SOIL
15.	Total alkalinity (mg/l)		2.4	STP/SOIL
16.	Chlorides (mg/l)		11	STP/SOIL
17.	Available Potassium (Kg/ Hectare)		273	STP/SOIL
18.	Zinc (as Zn) (mg/kg)		68.15	STP/SOIL

Notes:

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Soil	SS-081221-012	05/01/2022

Project Name: **Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km**

Sampling & Analysis Data

Sample Drawn On	:	07/12/2021
Sample Received On	:	08/12/2021
Sample Description	:	Soil Sample
Sample Quantity	:	2.0 Kg
Sampling Location	:	**Panhera Khurd (S2)**
Sample Drawn By	:	**Laboratory**
Analysis Duration		08/12/2021 to 15/12/2021

Sl. No.	Parameters		Results	Test Method
1.	pH		7.27	IS:2720(Part-26)
2.	Conductivity (µmhos/cm)		465.00	IS:2720(Part-21)
3.	Sodium (as Na) (mg/kg)		51.95	STP/SOIL
4.	Water holding capacity (%)		34.87	STP/SOIL
5.	Potassium (as K) (Kg/ Hectare)		284.0	STP/SOIL
6.	Texture	Sand (% by mass)	68.00	STP/SOIL
		Clay (% by mass)	19.00	STP/SOIL
		Silt (% by mass)	13.00	STP/SOIL
7.	Calcium (as Ca) (mg/kg)		459.26	STP/SOIL
8.	Magnesium (as Mg) (mg/kg)		112.75	STP/SOIL
9.	SAR		4.96	STP/SOIL
10.	Available Phosphorus (as P) (Kg/ Hectare)		58.0	STP/SOIL
11.	Organic carbon (%)		0.52	STP/SOIL
12.	Porosity (% by mass)		44.91	STP/SOIL
13.	Bulk Density (kg/cm^3)		1.67	STP/SOIL
14.	Available Nitrogen (Kg/ Hectare)		460	STP/SOIL
15.	Total alkalinity (mg/l)		2.4	STP/SOIL
16.	Chlorides (mg/l)		11	STP/SOIL
17.	Available Potassium (Kg/ Hectare)		268	STP/SOIL
18.	Zinc (as Zn) (mg/kg)		80.16	STP/SOIL

Notes:

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Laboratory : GT-20, Sector-117, NOIDA, Gautam Budh Nagar - 201316

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Soil	SS-081221-013	05/01/2022

Project Name: **Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km**

Sampling & Analysis Data

Sample Drawn On	:	07/12/2021
Sample Received On	:	08/12/2021
Sample Description	:	Soil Sample
Sample Quantity	:	2.0 Kg
Sampling Location	:	**Mohna (S3)**
Sample Drawn By	:	**Laboratory**
Analysis Duration		08/12/2021 to 15/12/2021

Sl. No.	Parameters		Results	Test Method
1.	pH		7.52	IS:2720(Part-26)
2.	Conductivity (µmhos/cm)		518.00	IS:2720(Part-21)
3.	Sodium (as Na) (mg/kg)		51.95	STP/SOIL
4.	Water holding capacity (%)		32.86	STP/SOIL
5.	Potassium (as K) (Kg/ Hectare)		275.9	STP/SOIL
6.	Texture	Sand (% by mass)	69.00	STP/SOIL
		Clay (% by mass)	16.00	STP/SOIL
		Silt (% by mass)	15.00	STP/SOIL
7.	Calcium (as Ca) (mg/kg)		558.47	STP/SOIL
8.	Magnesium (as Mg) (mg/kg)		105.28	STP/SOIL
9.	SAR		4.53	STP/SOIL
10.	Available Phosphorus (as P) (Kg/ Hectare)		56.0	STP/SOIL
11.	Organic carbon (%)		0.48	STP/SOIL
12.	Porosity (% by mass)		40.89	STP/SOIL
13.	Bulk Density (kg/cm^3)		1.47	STP/SOIL
14.	Available Nitrogen (Kg/ Hectare)		425	STP/SOIL
15.	Total alkalinity (mg/l)		1.7	STP/SOIL
16.	Chlorides (mg/l)		9.8	STP/SOIL
17.	Available Potassium (Kg/ Hectare)		218	STP/SOIL
18.	Zinc (as Zn) (mg/kg)		85.20	STP/SOIL

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Soil	SS-081221-014	05/01/2022

Project Name: **Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km**

Sampling & Analysis Data

Sample Drawn On	:	07/12/2021
Sample Received On	:	08/12/2021
Sample Description	:	Soil Sample
Sample Quantity	:	2.0 Kg
Sampling Location	:	**Failada Bangar (S4)**
Sample Drawn By	:	**Laboratory**
Analysis Duration		08/12/2021 to 15/12/2021

Sl. No.	Parameters		Results	Test Method
1.	pH		7.36	IS:2720(Part-26)
2.	Conductivity (µmhos/cm)		415.00	IS:2720(Part-21)
3.	Sodium (as Na)(mg/kg)		54.21	STP/SOIL
4.	Water holding capacity (%)		35.98	STP/SOIL
5.	Potassium (as K) (Kg/ Hectare)		283.7	STP/SOIL
6.	Texture	Sand (% by mass)	68.00	STP/SOIL
		Clay (% by mass)	17.00	STP/SOIL
		Silt (% by mass)	15.00	STP/SOIL
7.	Calcium (as Ca)(mg/kg)		561.4	STP/SOIL
8.	Magnesium (as Mg) (mg/kg)		113.87	STP/SOIL
9.	SAR		4.73	STP/SOIL
10.	Available Phosphorus (as P) (Kg/ Hectare)		58.0	STP/SOIL
11.	Organic carbon (%)		0.53	STP/SOIL
12.	Porosity (% by mass)		42.85	STP/SOIL
13.	Bulk Density (kg/cm^3)		1.34	STP/SOIL
14.	Available Nitrogen (Kg/ Hectare)		270	STP/SOIL
15.	Total alkalinity (mg/l)		2.5	STP/SOIL
16.	Chlorides (mg/l)		6.9	STP/SOIL
17.	Available Potassium (Kg/ Hectare)		197	STP/SOIL
18.	Zinc (as Zn) (mg/kg)		75.10	STP/SOIL

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TEST CERTIFICATE

Test Report of	Report Code	Date of Issue
Soil	SS-081221-015	05/01/2022

Project Name: **Construction of 6 lane Greenfield connectivity from DND-Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)in the State of Haryana and Uttar Pradesh. Proposed Length – 31.060 Km**

Sampling & Analysis Data

Sample Drawn On	:	07/12/2021
Sample Received On	:	08/12/2021
Sample Description	:	Soil Sample
Sample Quantity	:	2.0 Kg
Sampling Location	:	**Dayant Pur (S5)**
Sample Drawn By	:	**Laboratory**
Analysis Duration		08/12/2021 to 15/12/2021

Sl. No.	Parameters		Results	Test Method
1.	pH		7.28	IS:2720(Part-26)
2.	Conductivity (µmhos/cm)		462.00	IS:2720(Part-21)
3.	Sodium (as Na)(mg/kg)		52.75	STP/SOIL
4.	Water holding capacity (%)		31.92	STP/SOIL
5.	Potassium (as K) (Kg/ Hectare)		282.4	STP/SOIL
6.	Texture	Sand (% by mass)	68.00	STP/SOIL
		Clay (% by mass)	19.00	STP/SOIL
		Silt (% by mass)	13.00	STP/SOIL
7.	Calcium (as Ca)(mg/kg)		657.23	STP/SOIL
8.	Magnesium (as Mg) (mg/kg)		122.57	STP/SOIL
9.	SAR		4.64	STP/SOIL
10.	Available Phosphorus (as P) (Kg/ Hectare)		58.0	STP/SOIL
11.	Organic carbon (%)		0.50	STP/SOIL
12.	Porosity (% by mass)		42.91	STP/SOIL
13.	Bulk Density (kg/cm^3)		1.32	STP/SOIL
14.	Available Nitrogen (Kg/ Hectare)		257	STP/SOIL
15.	Total alkalinity (mg/l)		2.8	STP/SOIL
16.	Chlorides (mg/l)		8.47	STP/SOIL
17.	Available Potassium (Kg/ Hectare)		268	STP/SOIL
18.	Zinc (as Zn) (mg/kg)		96.12	STP/SOIL

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ANNEXURE XV

Public Hearing
Proceedings

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उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, ग्रेटर नोएडा

ए–1, प्रथम तल, कॉमर्शियल काम्प्लेक्स, बीटा–2, ग्रेटर नोएडा, गौतमबुद्धनगर
ई–मेल : rogreaternoida@uppcb.in, फोन/फैक्स- 0120-2321024

सन्दर्भ संख्या : 67 / लोक सुनवाई 06/22 दिनांक : 23/04/22

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सदस्य सचिव,
उ0प्र0प्रदूषण नियंत्रण बोर्ड,
लखनऊ।

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2/5/22

02-5-22

विषयः भारतीय राष्ट्रीय राजमार्ग प्राधिकरण (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार), भारतमाला परियोजना 6 लेन ग्रीनफील्ड कनेक्टीविटी (डी0एन0डी0–फरीदाबाद–बल्लभगढ़ बाई–पास से जेवर इन्टरनेशनल एयरपोर्ट तक) के निर्माण हेतु उत्तर प्रदेश के जनपद गौतमबुद्धनगर में अपर जिलाधिकारी (प्रशासन), गौतमबुद्धनगर की अध्यक्षता में दिनांक 22.04.2022 को तहसील जेवर, गौतमबुद्धनगर पर सम्पन्न हुयी लोक सुनवाई के संबंध में।

महोदय,

कृपया उपरोक्त विषयक मुख्यालय के पत्रांक एफ72348/सी–1/एन0ओ0सी0–1338/लोक सुनवाई/2022 दिनांक 04.03.2022 का संदर्भ ग्रहण करने का कष्ट करें। तत्क्रम में अपर जिलाधिकारी (प्रशासन), गौतमबुद्धनगर की अध्यक्षता में दिनांक 22.04.2022 को तहसील जेवर, गौतमबुद्धनगर के सभाकक्ष में लोक सुनवाई की कार्यवाही सम्पन्न करायी गयी है।

लोक सुनवाई की कार्यवाही का कार्यवृत्त, फोटोग्राफ्स, वीडियोग्राफ्स सी0डी0, उपस्थिति पत्रक एवं समाचार पत्रों में प्रकाशित विज्ञापनों की छायाप्रतियाँ आपके अवलोकनार्थ एवं अग्रिम आवश्यक कार्यवाही हेतु सादर प्रेषित की जा रही है।

संलग्नकः यथोपरि।

P.H. Minutes

CEO (C-1)

02/5/22

भवदीय

BPYadav

(भुवन प्रकाश यादव)
क्षेत्रीय अधिकारी

EE/ BMW

04/05/22

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार), भारतमाला परियोजना 6 लेन ग्रीनफील्ड कनेक्टीविटी (डी0एन0डी0–फरीदाबाद–बल्लभगढ़ बाई–पास से जेवर इन्टरनेशनल एयरपोर्ट तक) के निर्माण हेतु उत्तर प्रदेश के जनपद गौतमबुद्धनगर में अपर जिलाधिकारी (प्रशासन), गौतमबुद्धनगर की अध्यक्षता में दिनांक 22.04.2022 को तहसील जेवर, गौतमबुद्धनगर पर सम्पन्न हुयी लोक सुनवाई का कार्यवृत्तः–

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार द्वारा जारी ई0आई0ए0 अधिसूचना संख्या– एस0ओ0–1533 दिनांक 14.09.2006 के प्राविधानों के तहत प्रस्तावित परियोजना को पर्यावरणीय स्वीकृति प्राप्त करने से पहले लोक सुनवाई कराने का प्राविधान है। उक्त परियोजना हेतु लोक सुनवाई के संबंध में जिलाधिकारी, गौतमबुद्धनगर को प्रेषित सदस्य सचिव, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, लखनऊ के पत्रांक एफ72348/सी–1/एन0ओ0सी0–1338/लोक सुनवाई/2022 दिनांक 04.03.2022 के परिप्रेक्ष्य में जिलाधिकारी गौतमबुद्धनगर के निर्देशानुसार निर्धारित तिथि पर लोक सुनवाई का आयोजन किया गया है।

उक्त लोक सुनवाई की सूचना राष्ट्रीय दैनिक समाचार पत्र (अमर उजाला, हिन्दी एवं द टाइम्स ऑफ इण्डिया, अंग्रेजी) में दिनांक 17.03.2022 को प्रकाशित कराया गया (पेपर कटिंग की प्रति संलग्न)।

दिनांक 22.04.2022 को तहसील जेवर परिसर मे पूर्व निर्धारित समयानुसार लोक सुनवाई की प्रकिया डॉ0 नितिन मदान, अपर जिलाधिकारी (प्रशासन), गौतमबुद्धनगर की अध्यक्षता में प्रारम्भ की गई। जिसमें श्री भुवन प्रकाश यादव, क्षेत्रीय अधिकारी, श्री विवेक कुमार, अवर अभियन्ता, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, ग्रेटर नोएडा, श्री धीरज सिंह, डी0जी0एम0, एन0एच0ए0आई0, (सी0एम0यू0), मथुरा, मेसर्स पी एण्ड एम सोल्यूशन, सी–88, सेक्टर–65, नोएडा के परामर्शदायी संस्था के डॉ विनय कुमार एवं श्री राजेश विश्वास, प्रतिनिधि के रूप में उपस्थित रहे। लोकसुनवाई की उपस्थिति संलग्न है।

लोक सुनवाई के प्रारम्भ में क्षेत्रीय अधिकारी, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, ग्रेटर नोएडा, गौतमबुद्धनगर द्वारा उपस्थित अधिकारियों एवं जन सामान्य का स्वागत करते हुये सभी उपस्थित जनों को अवगत कराया कि लोक सुनवाई का उद्देश्य क्षेत्र में स्थापित होने वाली परियोजना के सम्बन्ध में सभी को जानकारी हो एवं पर्यावरणीय प्रदूषण के सम्बन्ध में आपत्ति एवं सुझाव प्राप्त हों, जिससे कि उनका निराकरण किया जा सके। मेसर्स पी एण्ड एम सोल्यूशन के प्रतिनिधि श्री राजेश विश्वास से उक्त प्रस्तावित परियोजना के सम्बन्ध में विस्तार से उपस्थित जन समूह को अवगत कराने हेतु अनुरोध किया गया।

मेसर्स पी एण्ड एम सोल्यूशन के प्रतिनिधि द्वारा अवगत कराया गया कि परियोजना गलियारा इकाई–मथुरा फरीदाबाद एक्सप्रेस वे परियोजना के निर्माण हेतु हरियाणा के जनपद फरीदाबाद, पलवल एवं उत्तर प्रदेश के जनपद गौतमबुद्धनगर से होकर जाने वाली 6 लेन एक्सप्रेस वे की कुल लम्बाई 31.060 कि0मी0 की स्थापना/विकास कार्य किया जाना प्रस्तावित है। गौतमबुद्धनगर जिले के अन्तर्गत परियोजना का हिस्सा Ch.22.300 KM से Ch.31.060 KM है, जिसमें ग्राम फलैदा खादर, फलैदा बांगर, करोली बांगर, दयानतपुर, बल्लभनगर उर्फ करोल बांगर आच्छादित हैं। उक्त एक्सप्रेस वे की जनपद गौतमबुद्धनगर के अन्तर्गत लम्बाई लगभग 9.0 कि0मी0 है।

प्रस्तावित एक्सप्रेस वे परियोजना के सम्बन्ध में क्षेत्रीय अधिकारी, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, ग्रेटर नोएडा द्वारा उपस्थित जन समूह से इस परियोजना के सम्बन्ध में आपत्ति एवं सुझाव देने हेतु कहा गया। उनके द्वारा अवगत कराया गया कि समाचार पत्रों में लोक सुनवाई के लिये आम सूचना प्रकाशित होने के उपरान्त निर्धारित तिथि एवं समय तक इंगित कार्यालय पर कोई आपत्ति, सुझाव, टीका–टिप्पणी आदि प्राप्त नहीं हुई है।

लोक सुनवाई के दौरान निम्नलिखित आपत्तियां एवं सुझाव व्यक्त किये गये:

श्री गौरव सिंह पुत्र श्री दामोदर सिंह, निवासी ग्राम दयानतपुर द्वारा यह कहा गया कि जेवर एयरपोर्ट परियोजना के अन्तर्गत मेरी जमीन अधिगृहित की गयी थी, परन्तु इसके मुआवजे का भुगतान उचित ढंग से नहीं किया गया है। इनके द्वारा जमीन को अधिगृहित किये जाने के उपरान्त बेरोजगारी की समस्या के समाधान के सम्बन्ध में जानकारी चाही गयी एवं इस प्रस्तावित परियोजना के विकास के दौरान जो वृक्ष काटे जायेंगे, उनके भुगतान के सम्बन्ध में जानकारी चाही गयी। साथ ही इनके द्वारा बिना किसी नोटिस/सूचना के लोकसुनवाई कराये जाने के सम्बन्ध में आपत्ति जताई गयी एवं मुआवजा की दरों में वृद्धि हेतु अनुरोध किया गया।

परियोजना प्रस्तावक के परामर्शदाता डॉ0 विनय कुमार द्वारा अवगत कराया गया कि भूमि अधिगृहण का नियम सरकार द्वारा बनाया गया है, जिसका पूर्ण रूप से पालन किया जायेगा। क्षेत्रीय अधिकारी, उ0प्र0 प्रदूषण नियंत्रण बोर्ड, ग्रेटर नोएडा द्वारा अवगत कराया गया कि प्रस्तावित लोकसुनवाई की सूचना नियमानुसार एक माह पूर्व हिन्दी एवं अंग्रेजी दैनिक समाचार पत्रों मे विज्ञप्ति/सूचना दिनांक 17.03.2022 को प्रकाशित करायी गयी। अपर जिलाधिकारी (प्रशासन) द्वारा अवगत कराया गया कि लोकसुनवाई के दौरान मात्र पर्यावरण से सम्बन्धित प्रश्न ही किया जाना उचित होगा। परियोजना प्रस्तावक के परामर्शदाता डॉ0 विनय कुमार द्वारा वृक्षों को काटने के सम्बन्ध में अवगत कराया गया कि इस सम्बन्ध में सर्वे किया जाता है तथा संस्तुति के आधार पर भुगतान की कार्यवाही की जाती है।

श्री गौरव सिंह पुत्र श्री दामोदर सिंह, निवासी ग्राम दयानतपुर द्वारा पुनः यह कहा गया कि जो वृक्षों को काटनें के सम्बन्ध में सर्वे किया जाता है वह उचित ढंग से नहीं किया जाता है।

परियोजना प्रस्तावक के परामर्शदाता डॉ0 विनय कुमार द्वारा अवगत कराया गया कि इस समस्या पर ध्यान दिया जायेगा।

श्री गौरव सिंह पुत्र श्री दामोदर सिंह, निवासी ग्राम दयानतपुर द्वारा पुनः यह कहा गया कि प्रस्तावित परियोजना के निर्माण में अत्यधिक घरों को तोड़ा जाना है, इसलिए यह परियोजना उचित नहीं है।

श्री सुनील कुमार पुत्र श्री लक्ष्मण सिंह, निवासी ग्राम दयानतपुर, गौतमबुद्धनगर द्वारा यह कहा गया कि प्रस्तावित परियोजना मेरे घर एवं गाँव के तालाब के मध्य से होकर जा रही है, जिससे मेरे घर का रास्ता बंद हो जायेगा एवं ध्वनि प्रदूषण की समस्या उत्पन्न होगी।

परियोजना प्रस्तावक के परामर्शदाता डॉ0 विनय कुमार द्वारा अवगत कराया गया कि किसी रास्ते को बंद नहीं किया जायेगा। साथ ही ध्वनि प्रदूषण नियंत्रण हेतु ध्वनि अवरोधक व्यवस्था की जायेगी।

श्री सुनील कुमार द्वारा पुनः यह अनुरोध किया गया कि गाँव को बचाकर रोड का निर्माण किया जाये।

श्री रोहतास सिंह पुत्र श्री राजपाल सिंह, निवासी ग्राम दयानतपुर, गौतमबुद्धनगर द्वारा भी रास्ता बंद किये जाने के सम्बन्ध में कहा गया।

श्री संजीव कुमार पुत्र स्व0 मालिक चन्द, निवासी ग्राम रोही, गौतमबुद्धनगर द्वारा बेरोजगारी की समस्या के समाधान हेतु पौधों को सुचारू रूप से रखने एवं देख–रेख हेतु स्थानीय लोगों को कार्य दिया जाये, जिससे रोजगार की समस्या को कम किया जा सके। इनके द्वारा परियोजना की प्रशंसा की गयी एवं वृक्षों की प्रजाति के सम्बन्ध में भी अगवत कराया गया।

परियोजना प्रस्तावक के परामर्शदाता डॉ0 विनय कुमार द्वारा श्री संजीव कुमार की प्रशंसा की गयी एवं सुझावों पर अमल किया जायेगा।

श्री मनोज कुमार शर्मा, एडवोकेट पुत्र श्री कान्ति प्रकाश शर्मा, निवासी ग्राम दयानतपुर, गौतमबुद्धनगर द्वारा प्रस्तावित परियोजना में कितने वृक्ष काटे जायेंगे, के सम्बन्ध में जानकारी चाही गयी एवं यह भी कहा गया कि परियोजना में पर्यावरण की समस्या कम है, मुआवजा की समस्या अधिक है। अतः मुआवजा की समस्या के निदान हेतु पृथक से एक बैठक आयोजित की जाये, जिससे मुआवजा की समस्या का निदान हो सके।

परियोजना प्रस्तावक के परामर्शदाता डॉ0 विनय कुमार द्वारा अवगत कराया गया कि प्रस्तावित परियोजना में लगभग 3000 वृक्षों को काटा/हटाया जायेगा, जिसके एवज में 4 से 5 फीट के वृक्ष लगाये जायेंगे एवं आधुनिक मशीनों द्वारा पुराने बड़े वृक्षों को स्थानान्तरित भी किया जायेगा।

श्री धीरज सिंह, डी0जी0एम0, एन0एच0ए0आई0, सी0एम0यू0, मथुरा द्वारा अवगत कराया गया कि मुआवजे की सरकारी प्रक्रिया है, जिसे उचित ढंग से किया जायेगा। गाँव के लोगों को रोजगार मिलेगा, जो कि लाभकारी होगा।

अपर जिलाधिकारी (प्रशासन) द्वारा उपस्थित जनसमूह को अगवत कराया गया कि भूमि अधिग्रहण एवं मुआवजा से सम्बन्धित समस्याओं को एन0एच0ए0आई0 द्वारा अपर जिलाधिकारी (भू–अध्याप्ति) एवं सक्षम स्तर पर प्रस्तुत कर समस्या का निवारण कराया जायेगा।

लोक सुनवाई के अंत में उपस्थित जनों द्वारा दिये गये सुझाव एवं आपत्तियों को संज्ञान में लेते हुये भारतीय राष्ट्रीय राजमार्ग प्राधिकरण (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार), भारतमाला परियोजना 6 लेन ग्रीनफील्ड कनेक्टीविटी (डी0एन0डी0–फरीदाबाद–बल्लभगढ़ बाई–पास से जेवर इन्टरनेशनल एयरपोर्ट तक) के निर्माण हेतु उत्तर प्रदेश के जनपद गौतमबुद्धनगर में प्रस्तावित परियोजना के संचालन के दौरान पड़ने वाले कु प्रभावों को ध्यान में रखते हुये जल, वायु, ध्वनि एवं मृदा नियमानुसार व्यवस्था एवं आवश्यक कियान्वयन परियोजना प्रबन्धकों द्वारा कराया जायेगा।

परियोजना हेतु लोक सुनवाई की प्रकिया एवं कार्यवाही संतोषजनक रूप से सम्पन्न हुयी। अंत में अध्यक्ष महोदय द्वारा उपस्थित जन समूह का धन्यवाद करते हुये लोक सुनवाई की समाप्ति की घोषणा की गयी। लोक सुनवाई के दौरान फोटोग्राफी एवं विडियोग्राफी करायी गयी, जिसकी सी0डी0 संलग्न है।

23/4/22

(भुवन प्रकाश यादव)
क्षेत्रीय अधिकारी
उ0प्र0 प्रदूषण नियंत्रण बोर्ड,
ग्रेटर नोएडा

23.04.22

(डॉ0 नितिन मदान)
अपर जिलाधिकारी (प्रशासन)
गौतमबुद्धनगर।

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण (सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार), भारतमाला परियोजना 6 लेन ग्रीनफील्ड कनेक्टीविटी (डी0एन0डी0–फरीदाबाद–बल्लभगढ़ बाई–पास से जेवर इन्टरनेशनल एयरपोर्ट तक) के निर्माण हेतु जनपद गौतमबुद्धनगर के तहसील जेवर में दिनांक 22.04.2022 को आयोजित लोकसुनवाई में उपस्थिति का विवरण।

क्र0सं0	नाम	पता	मोबाइल नं0	हस्ताक्षर
1.	डॉ [illegible]	उ0प्र0प्र0नि0 (इं0)		[signature]
2.	DHIRAJ Singh DGM NHAI	डी0 जी0 एम0 NHAI CMU Mathura		[signature]
3.	Dr Vinay Kumar	SA Infra Noida		[signature]
4.	Rajesh Kumar Vithus	Environment Consultant P&M Solution		Rajesh
5.	—	—	—	—
6.	[illegible]	क्षेत्रीय [illegible] उ0प्र0प्र0नि0बोर्ड, ग्रेटर नोएडा	9919007161	[signature]
7.	विवेक कुमार	[illegible] उ0प्र0प्र0नि0बोर्ड ग्रेटर नोएडा	9628662200	Vivek
8.	राजेश कुमार [illegible]	[illegible] उ0प्र0प्र0नि0बोर्ड ग्रेटर नोएडा	9415601237	[signature]
9.	[illegible] कुमार	जेवर [illegible]	8979578473061	[signature]
10.	Rinky Kumar	जेवर	8433469374	Rinky
11.	Devraj	जेवर	9675957102	Devraj
12.	हरीपाल	जेवर	1675953102	हरीपाल

29.	जयवर्धन सिंह	9411925341	[illegible]	[illegible]
30.	Pran Singh	9811716604	Dewar Khadar	[illegible]
31.	Gul Mohammad	9917743529	Thora	Gulmohammad
32.	Rajjan Chauhan	9084193654	Thara	Chauhan
33.	M. P. Sharma Adv	9219199494	Jewar	[illegible]
34.	Manoj Sharma	7830095214	[illegible]	[illegible]
35.	Vikash Sharma	8859259734	[illegible]	[illegible]
36.	VINEET	7466071487	Jewar	[illegible]
37.	[illegible]	7895861215	[illegible]	[illegible]
38.	Yogendra Singh	8987571197	Jewar	[illegible]
39.	Mukesh Kumar	9536174516	B.S.R.	मुकेश कुमार
40.	[illegible]	9758708965	[illegible]	[illegible]
41.	Gaurav	8755347259	Dayanatpur	[illegible]
42.	PRAMOD KUMAR	9760619250	Dayanatpur	[illegible]
43.	Ravi Singh	9412857684	[illegible]	[illegible]
44.	Vasudev Singh	7528995401	Lakhpur	[illegible]

HARYANA STATE POLLUTION CONTROL BOARD
C-11, SECTOR-6, PANCHKULA
Ph-0172-577870-73, Fax No. 2581201

No. HSPCB/2022 **Dated:**

To

The Secretary,
Ministry of Environment, Forest and Climate Change,
Impact Assessment Division,
Jog Bagh Road, Aliganj,
New Delhi- 110003

Subject: Proceeding of the public hearing Conducted for the porposed construction of 6 lane greenfield connectivity from DND Faridabad Ballabgarh bypass from km 32+600 to jewar international airport under Bharatmala Pariyojana (Lot-4/pkg-1) in the state of Haryana and uttar pradesh total length 31.060 km Total Proposed length under faridabad district approx 19.070 km proposed by M/s National highway authority of india Ministry of Road Transport & Highways on 28.04.2022 at 10.00 Am in the kisan mandi in front of Mohna Tehsil office, District Faridabad Haryana.

Kindly refer to the subject noted above.

In this connection, I have been directed to enclosed herewith the proceeding of public hearing **(in original)** conducted on 28.04.2022 at 10:A.M at the project site under Environment Impact Assessment Notification dated 14.09.2006 for proposed construction of 6 lane greenfield connectivity from DND Faridabad Ballabgarh bypass from km 32+600 to jewar international airport under Bharatmala Pariyojana (Lot-4/pkg-1) in the state of Haryana and Uttar Pradesh total length 31.060 km Total Proposed length under faridabad district approx 19.070 km proposed by M/s National highway authority of india Ministry of Road Transport & Highways on 28.04.2022 at 10.00 Am in the Kisan Mandi in front of Mohna Tehsil office, District Faridabad Haryana alongwith CD of video recording photographs and attendance sheet etc. for information and further necessary action please.

Sr. Env. Engineer (HQ)
For Member Secretary

Endst No. HSPCB/2022/1231-1233 **Dated:-** 29.06.2022

A copy of above is forwarded to the following for information and further necessary action:-

1. Sr. EE (IT) HSPCB, for uploading the proceeding on website of the Board.
2. Regional Officer, Ballabgarh Region w.r.t. his letter dated No. 486 dated 30.05.2022 for information and further necessary action.
3. M/s National highway authority of Inida, Ministry of Road Transport & Highway

Sr. Env. Engineer (HQ)
For Member Secretary

PROCEEDING OF THE PUBLIC HEARING CONDUCTED FOR THE PROPOSED CONSTRUCTION OF 6 LANE GREENFIELD CONNECTIVITY FROM DND – FARIDABAD – BALLABGARH BYPASS (FROM KM 32+600) TO JEWAR INTERNATIONAL AIRPORT UNDER BHARATMALA PARIYOJANA (LOT-4/PKG-1) IN THE STATE OF HARYANA AND UTTAR PRADESH TOTAL LENGTH – 31.060 KM TOTAL PROPOSED LENGTH UNDER FARIDABAD DISTRICT APPROX 19.070 KM, PROPOSED BY M/S NATIONAL HIGHWAY AUTHORITY OF INDIA (MINISTRY OF ROAD TRANSPORT & HIGHWAYS) ON 28.04.2022 AT 10:00 AM IN THE KISAN MANDI IN FRONT OF MOHNA TEHSIL OFFICE, DISTRICT FARIDABAD, HARYANA.

VENUE: Kisan Mandi in front of Mohna Tehsil Office, District Faridabad, Haryana.

Date & Time: 28.04.2022 at 10.00 AM.

The following officers were present during the public hearing:-

1. Sh. Jitendar Yadav : Deputy Commissioner, Faridabad
2. Sh. Dinesh Kumar : Regional Officer, Ballabgarh Region, Haryana State Pollution Control Board
3. Sh. Bijender Singh Rana : DRO, Faridabad
4. Sh. Ujjwal Kumar : AEE, Regional Office, Ballabgarh Region, Haryana State Pollution Control Board
5. Sh. Ajay Kumar : Tehsildar, Mohna, Faridabad

The following Project representatives are also present during the Public Hearing:-

1. Sh. Dheeraj Singh : DGM, NHAI CMU Mathura.
2. Sh. Devendar Kumar : Site Engineer, NHAI CMU, Mathura
3. Sh. Rajesh Kumar Vishwa : M/s P.M. Solution Consulting Pvt. Ltd.
4. Sh. Sundarman Pandey : DPR Consultant, Noida,
5. Dr. R.S.Gangwar : Environment Specialist DPR Consultant SA Infra Noida

Public attended – 56 Nos. (List of Attendees enclosed)

At the outset the Regional Officer, Haryana State Pollution Control Board, Ballabgarh welcomed the Deputy Commissioner, Faridabad, District Revenue

Officer, Faridabad, Tehsildar, Sarpanch, Panch, Nambardar, other Officials & Public and the purpose of the public hearing to be conducted for the project.

After that, Mr. Rajesh Kumar Vishwa M/s P.M. Solution Consulting Pvt. Ltd., explained the project and the proposed environmental management plans through a powerpoint presentation on behalf of National Highway Authority of India for the proposed project of development of construction of 6 lane greenfield connectivity from DND – Faridabad – Ballabgarh bypass (From km 32+600) to Jewar International Airport under Bharatmala Pariyojana (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh which has a total proposed Length of 31.060 KM and out of which approx. 19.070 km is under Faridabad District

Followed by the presentation, the public consultation was started.

The questions and reply given by NHAI / District Administrative along with proceeding of the public hearing will be sent to the concerned authority.

Details of comments/suggestions/objections/ views/ ideas raised during public hearing are enclosed as **Annexure-A.** Copy of CD containing Video recorded during Public Hearing are enclosed for reference as **Annexure-B.** The attendance of officers present from various departments and residents of nearby villages given as per **Annexure-C**.

At the end few residents showed resentment and walked away without signing the attendance register though they were attending the public hearing as evident from the Videography.

The public hearing ended with a vote of thanks to the Chair and general public for attending the public hearing.

Regional Officer,
HSPCB, Ballabgarh Region

Deputy Commissioner,
Faridabad

2070062/2022/Estt.Br

Annexure-A

Public Hearing was conducted on 28th April 2022, at 10:00AM in Kisaan Mandi in front of Mohna Tehsil Office District Faridabad, Haryana.

Sr.no	Questions in English	Answer in English
1	**Name: Mr. Hariprashad Singh S/o: Sh. Maan Singh, Village: Hirapur**	
	The Farmers had a complaint with the market that they didn't get the right price.	Dr. RS Gangwar Environment Specialist DPR Consultant SA Infra Noida has said that please ask questions related to road and environment.
	That farmer is left with nothing after acquisition of land, will he get compensation or not?	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida explained that the Compensation will be given for whatever land that has been acquired and the remaining land belongs to the farmer.
	The expressway needs to be cut to get down from Mohana.	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida explained that it is not possible to give access everywhere along the proposed alignment of Road.
2	**Name: Mr. Prem Chand S/o: Sh. Ram, Village: Panhera Khurd**	
	The land has not been divided; we are plowing the field for 80 years, who will get its compensation and how to tell.	The Deputy Commissioner, Faridabad Sh. Jitendar Yadav explained that all the land owners of the acquired land will get compensation and requested them to ask only environment related questions.
	Compensation should be given for the entire land and no one listens to our complaints	The Deputy Commissioner, Faridabad Sh. Jitendar Yadav submitted that all their issues will be resolved within 3 weeks, everyone whose land is acquired

		will get their due compensation.
	The expressway needs to have direct access from Mohana.	The Deputy Commissioner, Faridabad Sh. Jitendar Yadav submitted that this road has been constructed to reach Jewar Airport and earlier there was not even a single access point in it but now we have been able to convince them to give access to this road by suggesting that you will all reach Jewar airport within 15 minutes. Further it is not possible to get access points everywhere in such expressways.
3	**Name: Mr. D.K.Sharma S/o: Sh. Dayalal Sharma, Village: Panhera Khurd**	
	What will be the height of the expressway, how much will it be above the ground level, whether there will be a cut from the sub-village or not to go on the road?	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida explained that it is not possible to give access everywhere along the proposed alignment of expressway and it will not be completely closed. Due to the high speed limit on the expressway, NHAI has designed it at some height from the ground level.
	20 villages come; all the villages need to be cut to go on the road.	The Deputy Commissioner, Faridabad Sh. Jitendar Yadav explained that it is not possible to give access everywhere along the proposed alignment of expressway.
	If Forest area is used then Wild animals will come to our farms, so as much as possible, the least possible forest area should be used while constructing the expressway.	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida explained that this proposed expressway road is not passing through any wildlife sanctuary and only Protected forest that is coming along the

		alignment is on the side of canal road measuring 4 ha.
	Herbal plantation should be done on the median while fruit trees should be planted on the sides of the road.	The Deputy Commissioner, Faridabad Sh. Jitendar Yadav submitted that herbal and fruit plants will be planted in the median and the sides of this road. Further he advised that Bel trees may also be planted on the side of this road for its juice. He also emphasized on the importance of trees which were planted by our ancestors like Neem, Peepal trees etc whose benefits we are reaping today.
	There is no implementation of anything that is discussed in these meetings.	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida submitted everything being pledged here will be implemented and the same will also be written in the Minutes of this Meeting.
	There should be a display board on the road side with contact numbers for complaints and for calling in case of an accident.	The Deputy Commissioner, Faridabad Sh. Jitendar Yadav also agreed with them and submitted that yes, there should be a display board with the contact number of concerned persons in case of accidents and for complaints during construction phase by NHAI.
	The field is being acquired, the circle rate is not growing, the rest of the villages have increased by 200%, ours has not increased, one road should get one rate, when will the compensation be received.	The Regional Officer, Ballabgarh HSPCB Sh. Dinesh kumar requested them to ask environment related question only and everyone will get money according to circle rates for rural and urban area
	Will farmers get 4 times the compensation or not?	The Deputy Commissioner, Faridabad Sh. Jitendar Yadav explained that everyone will get

		money according to circle rates for rural and urban area
	Instead of circle rate, market rate should be given, why less or more. Since this is one Road so there should be one rate for all.	The Deputy Commissioner, Faridabad Sh. Jitendar Yadav explained that the rate of all lands is not the same so compensation is given according to the circle rates for that particular land only.
	Compensation should be given under the Haryana Act 2013. Possession only after compensation.	The Deputy Commissioner, Faridabad Sh. Jitendar Yadav explained that circle rate is decided based on the registry rate of the last 1 - 3 years and the act will be followed before buying of land and there will be no injustice to anyone.
4	**Name: Mr. Ishwar Singh S/o: Sh. Hridey Ram Singh** **Village: Mohna**	
	Farmers have not yet received the money for KLP Road, tell how long will he get the money, stop harassing the farmers.	The DGM, NHAI CMU Mathura Sh. Dheeraj singh explained that it does not come under us but under the second PIU but still NHAI will see to it and NHAI does not want to disturb any farmer
	The expressway needs to be cut to get down from Mohana for direct access.	The DGM, NHAI CMU Mathura Sh. Dheeraj singh has explained that it is not possible to give access everywhere along the proposed Expressway.
5	**Name: Mr. Surendra Singh S/o: Sh. Kirorimal Singh** **Village: Mohna**	
	Farmers never receive the money; he should take money first and then give the land.	The DGM, NHAI CMU Mathura Sh. Dheeraj singh explained that before taking the land for the proposed expressway, the due compensation will be given to the farmers.
	Framers have filed court cases which have cost them around 10 lakhs till now. So for those people	The DGM, NHAI CMU Mathura Sh. Dheeraj singh explained that the said matter relates to PIU

	who do not give money to us- no money no possession	Ghaziabad and does not come under him but still he will check it. Further they are only looking at Delhi – Agra Road & Jewar Expressway Road.
	After acquisition of land, farmer's land will fall on both sides of the expressway but he has 1 boring which would be on one side of the road. Please do something to provide a boring pipe under the road for irrigation on both sides.	The Deputy Commissioner, Faridabad Sh. Jitendar Yadav assured that the administration pipes of the farmer will be installed on both sides for irrigation and he will ensure that farmers get their due compensation as per order of the Hon'ble Supreme Court.
6	**Question by Sh Dinesh Kumar, Regional Officer, HSPCB, Ballabgarh Region:**	
	What is the management doing for the total 3000 trees being cut?	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida explained that there is a provision to plant 10 trees for every 1 tree that is cut and plantation will be done as per the Forest Conservation Act. Green road will be built. The Deputy Commissioner, Faridabad Sh. Jitendar Yadav further requested that Bel trees may be planted from Panehra to Mohana which also requires support & cooperation from the villagers and only then the plantation will survive.
	What will the NHAI do to abate pollution during the construction phase?	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida explained that construction material will be covered and all the rules of HSPCB will be followed. Water sprinkling will be done.

Yadav

	Will Anti-smog guns be used or not?.	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida explained that anti-smog guns will be used during the construction phase.
	NHAI may assure proper handling of C & D Waste as per guidelines.	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida explained that they will comply.
7	**Name: Mr. Mukesh Singh S/o: Sh. Giriraj Singh Village: Mohna**	
	I had planted trees along the KGP but the plants died as there is no one to tend to them, so plantation may be done during monsoon season.	The DGM, NHAI CMU Mathura Sh. Dheeraj singh agreed that Monsoon season is good for plantation and plantation will be done in the same season and they also require the support and cooperation from villagers as well.
	During construction in Village Panehra, dust and sand on the roads used to make the roads slippery after rainy season which led to accidents so same should be lifted from the roads to avoid slippery roads and accidents during construction of this expressway	The DGM NHAI, CMU Mathura, Sh. Dheeraj singh explained that during construction phase all measures will be taken to and it will not happen again in this project
	Tree Guards are required to protect the new plantation. Save trees, Save the environment.	The DGM, NHAI CMU Mathura Sh. Dheeraj singh has explained that during plantation We will also keep guard at the time of planting trees and the villagers will also have to take care.
8	**Question by Mr. D.K.Sharma S/o: Sh. Dayalal Sharma Village: Panhera Khurd**	
	There is a Bhandara(function) on 03/06/2022 where Hon'ble Chief Minister, Uttar Pradesh Sh. Yogi Adityanath Ji & Hon'ble Chief Minister, Haryana, Sh. Manohar Lal Khattar Ji is coming- It is requested	The Deputy Commissioner, Faridabad Sh. Jitendar Yadav stated that the same is in their knowledge and remaining work will be completed soon. Moreover, all villagers should also

Yadav

	to prepare adequate roads so that it will be a good impression from Govt. of Haryana.	come forward to save the environment.
	How will the water requirement be managed for those farmers whose land will be bisected by Highway. NHAI may provide the facility for laying pipelines during construction.	The Deputy Commissioner, Faridabad Sh. Jitendar Yadav stated that the farmers may bring their pipes and NHAI will lay the same.
9	**Question by Sh. Ujjwal Kumar, AEE, Regional Office, HSPCB, Ballabgarh Region.**	
	Wherever tree plantation will be done, it would be better if plantation is carried out as per Miyawaki Afforestation technique to have better long term effects.	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida explained that the same will be considered.
	During Construction what will be the source of water for construction and sprinkling? If any groundwater is used or if its sourced through Tankers then the permission from CGWA/HWRA should be taken first before using Ground water. If tankers are bringing water then CGWA/HWRA permission for extraction of Ground Water should be checked of these tankers. Further before using any other water source, treated water from Government STPs & CETPs should be used in sprinkling and construction phase and where TDS of treated water from Government STPs/CETPs is more than desired then this treated water may be used partially after dilution with other water.	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida submitted that they will use surface water only after taking permission from CGWA/ HWRA and use treated water from Government STPs & CETP during the construction phase for sprinkling and Construction.
	What measures are being taken for movement of Animals and if there are any dedicated Animal passages	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida explained that there are 57

	or not	box culverts and many under passes so no animals will have any problem during the construction period.
	Sometimes there are wildlife & cattle accidents on the road because of the wide 6 lane road and high speed limits for vehicles so what measures will be taken?	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida explained that there will be fencing on both sides of the road; no animal will come on the road.
	Will any ash from Thermal Power Plants be used in construction? If yes then it should be covered to prevent air pollution.	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida submitted that they will be using Fly ash and definitely follow all guidelines to prevent air pollution
10	**Question by DRO Faridabad. Sh. Virendar Singh Rana**	
	Will Solar power be used or not?	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida informed that they will be using Solar power.
	There should be access from Khadar village because 44 acres of land is near Palwal district and by not giving access at Khadar, it will be quite far for 20-25 villages and it won't be that beneficial for them.	Dr. R.S.Gangwar Environment Specialist DPR Consultant SA Infra Noida explained that it is not possible to give access everywhere along the proposed alignment. The Deputy Commissioner, Faridabad Sh. Jitendar Yadav stated that a survey may be conducted if required and needful may be done.
11	**Name: Mr. Pandit ji S/o: Sh. Om Prakash ji** **Village: Hirapur**	
	I have not received any notice whether my land has been acquired or not so if I have missed it please let me know so that I can get due compensation for my acquired land.	The DGM, NHAI CMU Mathura Sh. Dheeraj singh explained that they will reverify if the notice has been issued to you and no one will be left out
	Due to the pit/depression under	The DGM, NHAI CMU Mathura Sh.

	the culvert, water gets accumulated in it during the time of construction because of which the villagers face problems so some solutions have to be found.	Dheeraj singh assured that during construction phase everything will be taken care of, it will not happen in this project.
12	**Name: Mr. Tara Chand Ji S/o: Sh. Sammwalia** **Village: Hirapur**	
	The demarcating pole has been installed in the ground but the due compensation has not been received.	The DGM, NHAI CMU Mathura Sh. Dheeraj singh assured that all farmers whose land will be acquired will get their due compensation.
13	**Name: Mr. Satish Kr. S/o: Sh. Dharam Singh** **Village: Mohna**	
	The pipelines have been laid in the ground, will its compensation be given or not.	The DGM, NHAI CMU Mathura, Sh. Dheeraj Singh explained that if NHAI acquires farmer's land or if they do anything to their land then due compensation will be given to the farmers.

2070062/2022/Estt.Br

Page No:
Date: / /

Sr.No	Name	Father's Name	Address	Signature
1	Sh. Jitender Yadav	Deputy Commissioner, Faridabad		Yadav
2	Dinesh Kumar,	R.O., HSPCB	Ballabgarh Region	
3	DHIRAJ Singh	DGM VHAI	Faridabad	
4	BIJENDER RANA	D.R.O Fbd		
5	AJAY KUMAR	M.T. Mohna	Tehsildar	Mohna
6	DHEERAJ KUMAR	R.C. Mohna	Sub Tehsil Mohna	
7	Sanjeev Sharma	Patwari	Mohna	
8	Ujjwal Kumar	AEE HSPCB, Ballabgarh Regio		
9	Ranjeet Singh	Sarpanch Mohna	Mohna	Ranjeet Sgh
10	[illegible]	[illegible]	MOHNA	CHAYRMAN
11	Sundaram Pandey	DLR Consultant	Noida	
12	Nand Kishor Sharma	Sitaram Sharma	Hiraplur	
13	Hukam	Amar Singh	11	
14	Vishnu dutt	Premraj	Mohna	
15	Hukam	Shubh	Mohna	
16	Subhash	Shri meharchand	Pachhera Khurd	
17	Shri Krishan Sharma	Meharchand	Pachhera Khurd	
18	Premchand	Bhagwan Lal	Mohna	
19	Shankar	Jadhuram	Mohna	
20	Premchand	Khemchand	Mohna	
21	Rajkatri	Bishan Singh	Mohna	
22	Hukam chand	Ganga Lal	Hiraplur	
23	Lakhmi chand	B Gayasi Ram	Hiraplur	
24	Jeet Ram	Simichand	Hiraplur	
25	Harkesh	Chiriraj	Mohna	
26	Indar Jeet	Bahal Singh	Mohna	
27	Babu chokidar	Tularam	Chhaya	

Page No:
Date: / /

Sr.No	Name	Father's Name	Address	Signature
28	Omprakash	Akhe Singh	Chhayba	
29	Lakshman	Sheshram	Gopi Kheda	
30	Devraj	Chasu	Mirapur	
31	Mangeram	Balla	Mirapur	
32	Akash	Jagnarayan	Mirapur	
33	Nawalchand	Chhanni	Mirapur	
34	Gopal	Bhagan Lal	Mirapur	
35	Kuldeep	Bishan Singh	Mohna	
36	Sonu	Dinesh	Heerapur	
37	Premchand	Khemchand	Mohna	
38	Mohar Ram	Chhaju Ram	Heerapur	
39	Sanjeev sharma	s/o Sh. Sukhdev	Heerapur	
40	Tuki	Suki	Heerapur	
41	[illegible]	[illegible]	[illegible]	
42	Pramod	Kasheer	Mohna	
43	Giriraj Sharma	Kishan Sharma	Mohna	
44	Jaypal Singh	Jagmant Singh	Mohna	
45	Mahendra Singh	Shivlal	Mohna	
46	Basant	Badan Singh	Mohna	
47	Hukamchand	S/o Sh. Sukhram	Mohna	
48	Surender	Chajir	Mohna	
49	Ashok Kumar	Shyam singh	Mohna	
50	Brandutt	Raghuveer	Mohna	
51	Govind Ram Sharma	S/o Late Sh. Jagni	Mehmedpur	
52	[illegible]	[illegible]	[illegible]	
53	Bir Singh	S/o Sh. Rupa	Mohna	
54	[illegible]	[illegible]	[illegible]	
55	Rajbala	Bhudutt	Mirapur	

/Estt.Br

Page No:
Date: / /

Sr.No.	Name	Father's Name	Address	Signature
56	Chanchal Bhan	Babu Ram	Hisar	
57	Vinod		Sirsa	Vinod
58	[illegible]	[illegible]	[illegible]	[illegible]
59	D K Sharma	Gayalal Sharma	[illegible]	
59.	Surender Tanwar	Kanwari	Mohna	
60.	Ishwar Singh		Mohna	
61	Bagichan	Shrichand	Hisar	
62	[illegible]	[illegible]	[illegible]	
63	[illegible]	S/o [illegible]	[illegible]	
64		[illegible]	mohna	
66	Surender Singh	Rato Ram	Mohna	
66	Nitin	S/. Parma	Mohna	
67	Balkishan	S/. Harishanker	Mohna	Balsingh
68	Bajmohan	Kamal	Mahand	Bajmohan
69	Devender	Kamal Dutt	Mahendra	Devendra
	Rajesh Kumar Vishnu	Sukhant	PGM Solution	Rajesh

HARYANA STATE POLLUTION CONTROL BOARD
C-11, SECTOR-6, PANCHKULA
Website -- www.hspcb.gov.in E-Mail :hspcbho@gmail.com
Ph:0172-2577870-873

To

The Secretary,
Ministry of Environment, Forest and Climate Change Government of India, Paryavaran Bhawan, Jor Bagh Road, Aliganj
New Delhi-110003.

Subject: **Proceeding of the consultation (Hearing) held on 29.04.2022 under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND- Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and uttar Pradesh by M/s National Highway Authority of India (NHIA), Corridor Management Unit- Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad**

Kindly refer to the subject noted above.

In this connection, I have been directed to enclosed herewith the procedding of public hearing **(in original)** conducted on 29.04.2022 at 11 A.M at the project site under Environment Impact Assessment Notification dated 14.09.2006 for Construction of 6 lane Greenfield connectivity from DND- Faridabad-Ballabgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and uttar Pradesh by M/s National Highway Authority of India (NHIA), Corridor Management Unit- Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad Haryana for information and further necessary action please.

Sr. Env. Engineer (HQ)
For Member Secretary

Endst. HSPCB/2022/3184-86 Dated: 28/06/2022

A copy of above is forwarded to the following for informaiton and further necessary action:-

1. Sr. EE (IT) HSPCB, for uploading the proceeding on website of the Board.
2. Rgional Officer, Palwal w.r.t. his letter No.443 dated 08.06.2022. Further, He is advised to not to repeat the delay in future for sending the proceeding of public hearing, as in this case the time schedule of 08 days as prescribed in EIA notification dated 14.09.2006 has not been followed by you.
3. M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai, Toll Plaza Building, Mathura Road, Faridabad.

Sr. Env. Engineer (HQ)
For Member Secretary

E-2/000026
10/06/22

Regional Office, Palwal Region
Haryana State Pollution Control Board
Phagna Tower, Ward No. 10, NH-02,
Near Red Rocks Cinema, Palwal
Website - www.hspcb.gov.in E-Mail - hspcbropal@gmail.com

No. HSPCB/PAL/2022/ 443 Dated: 08/06/2022

10/6/2022
SCB Clerk

To

The Chairman,
Haryana State Pollution Control Board,
Panchkula.

Sub: Proceeding of the public consultation (Hearing) held on 29.04.2022 under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad

In this connection, please find enclosed herewith the Proceeding of the public consultation (Hearing) held on 29.04.2022 under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabadat Playing ground near Bagpur Police Chowki, Tehsil and District Palwal, Haryana in original duly signed by the Additional Deputy Commissioner, Faridabad along with the following documents:

Sr. No.	Particular	Quantity
1.	Proceeding of Public Hearing	One number in original duly signed by Additional Deputy Commissioner, Palwal.
2.	Photographs of Public Hearing	Two set
3.	CDs of Public Hearing	Two set
4.	Attendance register of Officers & Public attended the Public Hearing	One number in original
5.	Copy of project report	One number

It is submitted for you information & further necessary action please.

DA/ as above

Regional Officer
Palwal Region

Sub: Proceeding of the public consultation (Hearing) under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad.

Ref:- Public hearing held on dated 29.04.2022 at 11:00 AM at Playing ground near Bagpur Police Chowki, Tehsil and District Palwal.

The copy of proceeding of the public consultation (Hearing) under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad is attached for kind approval please.

19/05

Regional Officer
HSPCB, Palwal

Additional Deputy Commissioner
Palwal, Haryana

To
The Chairman,
Haryana State Pollution Control Board,
Panchkula, Haryana

Kind Attention: Sr. Environment Engineer- Coordination Cell (HQ)

Sub: Proceeding of the public consultation (Hearing) under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad.

Kindly refer to the subject noted above.

In this regard, please find enclosed herewith the duly signed proceeding of the Public Hearing under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad, under chairmanship of Shri Uttam Singh, Additional Deputy Commissioner, Palwal on 29.04.2022 at 11:00 AM. The original proceedings with two photo copies, three sets video recording (DVDs), two sets of Photo albums, copies of attendance register of officers & public and Annexures are also attached for further submission to Competent Authority for approval.

It is for kind information, and further necessary action, please.

Regional Officer
Palwal Region

DA: As Above

Sub: Proceeding of the public consultation (Hearing) under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad.

Ref:- Public hearing held on dated 29.04.2022 at 11:00 AM at Playing ground near Bagpur Police Chowki, Tehsil and District Palwal.

In this connection, please find enclosed herewith the duly singed proceeding of the Public Hearing under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad, under chairmanship of Shri Uttam Singh, Additional Deputy Commissioner, palwal on 29.04.2022 at 11:00 AM.

It is for kind information, and further necessary action, please.

Regional Officer
HSPCB, Palwal

Additional Deputy Commissioner
Palwal, Haryana

Proceeding of the public consultation (Hearing) under the provision of EIA notification 2006 (amended to date) for Construction of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1) in the State of Haryana and Uttar Pradesh by M/s National Highway Authority of India (NHAI), Corridor Management Unit-Mathura (at Faridabad), Plot No. 8 Near Sarai Toll Plaza Building, Mathura Road, Faridabad.

The public consultation (hearing) was held as a mandatory requirement under EIA notification dated 14.09.2006 amended thereof. Public information was published by Haryana State Pollution Control Board (HSPCB) Panchkula on Date 25.03.2022 in newspapers such as The Tribune & Danik Bhaskar for the conduct of public hearing for environmental clearanceof the project scheduled on 16.03.2022.

PROJECT- 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)

Date & Time: 29.04.2022, 11:00 AM

Venue: Playing ground near Bagpur Police Chowki, Tehsil and District Palwal.

Officer/Official present:

1. Sh. Uttam Singh, Additional Deputy Commissioner, Palwal
2. Sh. Vijay Chaudhary, Regional Officer, HSPCB, Palwal
3. Sh. Randeep Sindhu, AEE, HSPCB, Palwal
4. Sh. Dheeraj Singh DGM (NHAI), Faridabad
5. Sh. Dinesh Kumar, Naib Tehsildar, Palwal
6. Sh. Nanak Chand, Patwari

All the people of the area were informed through Public announcement to attend this hearing.

Sh. Uttam Singh, Additional Deputy Commissioner, Palwal presided over this hearing held on 16.03.2022. Besides Govt. Officers/ officials of the District Administration, approx. 21 persons from Palwal and other nearby villages attended the hearing at Playing ground near Bagpur Police Chowki, Tehsil and District Palwal. The hearing was also attended by the NHAI officials and other representatives of NHAI and the residents of nearby villages given as per **Annexure-"B'**.

Copy of the attendance Sheet, CD and Photographs prepared during hearing are enclosed for reference as **Annexure-'C'**.

Copy of the executive summary of the EIA for **"Development of 6 lane Greenfield connectivity from DND-Faridbad-Ballabhgarh bypass (from km 32+600) to Jewar International Airport under Bharatmala Pariyojna (Lot-4/Pkg-1)"** were distributed to the audience present in the hearing.

Mr. Vijay Chaudhary, Regional Officer, HSPCB, Palwal Region, welcomed Additional Deputy Commissioner, Palwal, other officers of the District Administration and public present in the hearing. He briefed about the project and necessity of the public hearing being held under provision of EIA Notification of 2006, amended thereof .Further, formal permission to inaugurate the process of public hearing was granted by the Chairman Shri Uttam Singh, Additional Deputy Commissioner, Palwal.

Thereafter Mr. Vijay Chaudhary, Regional Officer, HSPCB, Palwal requested to Environment Consultant to give the presentation of the project in detail and remedies taken by the project proponent to control the environmental impacts which may arise after expansion of the existing project.

DR Radhey Shyam Gangwar (Environment Consultant) welcomed the officials and began the presentation with their due permission. He explained about the development of 6 lane Greenfield connectivity from DND- Faridbad - Ballabhgarh bypass (from km 32+600) at Palwal. The Environment Consultant also briefed in details about the project:

- Project Location
- Environmental settings of 10km radius study area
- Description of the project
- Baseline monitoring results of air, water, noise and soil
- Air and noise quality control
- Greenbelt/ planation development
- CSR/ESC activities will be carried out

After the presentation, **Mr. Vijay Chaudhary**, Regional Officer, HSPCB, Palwal requested to the public to raise their suggestions, objections, views, queries and doubts about any problem which may rise during **construction.**

Sr. No	Name and Address of Persons	Details of query/statement /information /clarification sought by the person present	Reply of query/statement /information /clarification given by the project proponent

	श्री रविंद्र सिंह मान सिंह फार्म बागपुर कलां	हमारी जो ज़मीन जा ही है २४ मुसतील के ५ नंबर है उसमे मेरा कुछ हिस्सा बच रहा है तो उसका हम क्या करे दूसरी बात जो भूमि ली जा रही हैं उसका मुआवज़ा क्या दे रहे हैं मीटर के हिसाब से दे रहे हैं ? UP. में कुछ जानकरी मिली है की ५०००-5100 मीटर दी जा रही.है सर मैं यह बताना चाहता हु की पहले ये ज़मीन गुडगाँव जिले इ थी फिर फरीदाबाद में आ गयी और अब पलवल में जिसका सर्किल रेट २५ लाख रूपये है मोहना का ५५ लाख रूपये है हमारी ज़मीन की पैदावार भी वह से अच्छा है	श्री धीरज जी द्वारा बताया गया की जैसा की आपको बताया गया है की जो मीटिंग राखी गयी है पर्यावरण से सम्बंधित रखी गयी है लेकिन अगर कोई छोटी मोटी बातों ा जवाब दे देइया जायेगा अतः आपसे हाथ जोड़कर निवेदन है की पर्यावरण से सम्बंधित प्रश्न पूछे। अगर आपको रेट जानना है तो अपने सर्किल ऑफिस जाकर पूछ सकते हैं आप जो रेट बता रहे हैं उसका डिसिशन DRO के दफ्तर से लिया जाता है आपका कलक्ट्रेट रेट और ३ साल में रजिस्टरी होती है उसके हायर साइड लिया जाता है इसमें कलक्ट्रेट रेट ज्यादा है या रजिस्ट्री रेट को एनालाइज करके जो ज्यादा होता है उसे लेते हैं
2.	श्री राजबीर सिंह बागपुर कलां	नमस्कार जी मैं राजबीर सिंह बागपुर से यह क्षेत्र 18-22 गांव में है जिसकी लगभग आबादी 50-55 हज़ार है इसमें अगर क्षेत्र के लिए एक ट्रैक बन जाता तो ठीक है वर्ण खेत्र के लोगो को समस्याएं आएँगी अगर ऐसा नहीं है तो हम लोग इसका प्रयास करें	श्री धीरज जी द्वारा बताया गया कीयह एक एक्सेस कंट्रोल हाईवे बनाया जा रहा जो फरीदाबाद को जेवर एयरपोर्ट को कनेक्ट करता है अगर आप ेल्ही एयरपोर्ट जातें ऐन तो 3-4 घंटे लगते हैं यह जो कनेक्टिविटी दी जा रही है छैसा के पास एक लूप दे रहे हैं जिसे इस पर चढ़ सकते हैं जो ताज एक्सप्रेस वे , KMP और जेवर एयरपोर्ट को जोड़ती हैं तो इसमें ऐसा नहीं है की हर जगह इंटरचेंज देना पॉसिबल नहीं है इसकी स्पीड को १२० kmph पर डिज़ाइन किया गया है इसमें यह भी ध्यान रखा गया है की सेफ्टी के बिच कोई बाँधा ना आये जगह जगह रास्ता देना पॉसिबल नहीं है। श्री धीरज जी द्वारा बताया गया की जो भी आपकी ज़मीन बच रही है वो आपकी है सरकार को जितनी

			आवश्यकता है उतना ही लेगी जो ज़मीन आपकी बचती हैं वो आपकी है आने वाले समय में आप खुद इसका आभास करेंगे इस परियोजना से आपके क्षेत्र में बहुत अच्छा डेवलपमेंट होने जा है जो आपके क्षेत्र के लिए मील का पत्थर साबित होगा जैसे गुडगाँव का डेवलपमेंट हुआ है एक्साक्ट्ली एयरपोर्ट से १५ किमी के रेडियस में वैसे ही इस क्षेत्र का विकास होने जा रहा थोड़ा सा धैर्य रखेंगे तो यह ज़मीन आपके ही काम आने वाली है कमर्शियल एक्टिविटी को बढ़ावा मिलेगा शायद उस समय आभाष होगा की जो ज़मीन बच रही उसकी या क़ीमत है
3	श्री राजबीर सिंह बागपुर कलां	श्री रजबीर सिंह द्वारा फिर कहा गया की जो बातें की गयी बहुत अच्छी हैं फिर भी एक प्रश्न ले आया हु की इसकी उचाई कितनी होगी जिसकी ज़मीन आ ही क्या वह इस सीजन फसल लगा सकते हैं	श्री धीरज जी द्वारा बताया गया की इसमें नोटिफिकेशन होते है इसमें 3A से 3G तक होता है जिसमे 3A और 3D हो चूका है 3G अवार्ड आपके DRO के पास वेरिफिकेशन क लिए गया हुआ है अवार्ड के बाद आपके पैसे देने का कार्य शुरू हो जायेगा तब तक आप कुछ भी कर लीजिये अवार्ड के बाद आप कुछ ना करें जिससे आपको नुकसान हो मात्र २ महीने बाद पैसे बटने की प्रक्रिया स्टार्ट हो जाएगी इसमें ज्यादा समय नहीं लगेगा कुकी आपके दो ही गांव हैं
4.	**श्री राजबीर सिंह** **बागपुर कलां**	श्री रजबीर सिंह द्वारा बताया गया की कुछ किसान भाइयों के प्रस्तावित परियोजना में वृक्ष आ रहे क्या उन वृक्षों के बारे में या प्रक्रिया के बारे में या आपके कोई सुझाव हमें बताने की कृपा करें|	श्री धीरज जी द्वारा बताया गया की प्रस्तावित alignment में कुछ भी आता है तो वो आपकी सम्पति है और रही बात प्लांट्स की तो हम एक के बदले १० लगाते हैं कोशिश यही होती है जितना भी प्रस्तावित परियोजना जा रहा है उसमे प्लांटेशन किया जायेगा उसमे आपको भी सहयोग कर सकते हैं जिससे आपको रोजगार के अवसर मिलेंगे

		श्री द्वारा बताया गया की जो मकान आ रहा है एक आदमी के दो कमरे आ रहे हैं और एक कमरा बच रहा है तो उस एक कमरे का क्या किया जायेगा या क्या किया जा सकता है	जो हमारे एलाइनमेंट में २ कमरे आ रहे उसका वैल्यूएशन करके मुआवजा दिया जायेगा और एक बचा हुआ कमरा आपकी ही है अगर उसमे भी कोई पॉसिबिलिटीज बनती है तो उसका भी वैल्यूएशन कराया जा सकता है और बेस्ट पॉसिबल दिया जायेगा
	श्री रणदीप सिन्धु	श्री रणदीप सिन्धु ने पूछाकी किस प्रकार के पेड़ लगाये जायेंगे	बताया की यहाँ के वातावरण के अनुसार स्थानीय पोधे शीशम, नीम तथा फूलदार पोधे लगाये जायेंगे

As there were no further questions, Mrs. Vijay Chaudhary, RO, HSPCB, Palwal closed the ceremony of public hearing with the permission of Shri Uttam Singh, Additional Deputy Commissioner, Palwal.

During Public hearing, it was observed that participants from nearby villages were satisfied with the answers given by the representatives of the project proponent regarding questions raised by the participants.

The public hearing was conducted with the vote of thanks to the chair.

DA/ as above

Vijay Chaudhary, RO
HSPCB, Palwal

Uttam Singh, IAS
Additional Deputy Commissioner
Palwal

Public hearing for "Construction of 6 Lane Greenfield Connectivity from DND Faridabad - Ballabgarh by Pass (from Km 32+600) to Jewar International Air Port under Bharatmala Pariyojna (Lot-4/Pkg-1) in Haryana

Sr. No.	Name with Father Name	Addresses	email with Phone No	sign.
1	पारसैल स्व. रामवीर	सुनहरी नगला	9813801128	पारसैल
2	रमेश स्व. गफूरा	"	7011701572	रमेश
3	Bhim Singh S/o Bhagwan Singh	"	9813296945	Bhim
4	Ratan Singh	माला सिंह फार्म	9050766485	रतन
5	Sundar Singh S/o Puran Singh	"	9813315760	Sundar
6	Jabbir Khan S/o Alimuddin	"	9671773786	[illegible]
7	Payar Singh	कुम्हार बस्ती "		
8	Satvinder Singh	माला सिंह फार्म	9813203213	[illegible]
9	Gurnam Singh	Malla Singh Farm	9812367659	[illegible]
10	Krishan S/o Bisambar	[illegible]	9813203906	[illegible]
11	Bisambar S/o Sukki	"	9991538252	[illegible]
12	Lakshman S/o Ramsilal	"	9813478093	Lam
13	Bijendar Singh S/o Udal Singh	"	9813062771	[illegible]
14	Puran Sharma S/o Sawant	"	983499249	—
15	Gurmeet S/o Subhe Singh	नगला सिंह फार्म	—	[illegible]
16	Prempal S/o Lakhmi	नागपुर कॉलोनी	9813202449	प्रेम
	Dheeraj Singh.	NHAI (DGM (Tech))	9968214030	DS.
17	Vijay Chaudhary	R.O., HSPCB, Palwal	9810960264	[illegible]
	Ankit Yadav	SA Infra, NHAI consultant	9540684106	[illegible]
18	Dinesh Kumar	N.T. Palwal	9813168877	[illegible]
19	Balwant Singh	F.Kgo	9812898497	[illegible]
20	Nanak Chand	Patwari	9416932686	[illegible]
21	Randeep Sindhu	AEE, HSPCB	9350000035	[illegible]
22	Uttam Singh	ADC, Palwal	9460123210	[illegible]