भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सड़क परिवहन एव राजमार्ग मंत्रालय, भारत सरकार)
National Highways Authority of India
(Ministry of Road Transport & Highways, Govt. of India)
क्षेत्रीय कार्यालय (उत्तराखण्ड) - मकान नं-58/37, बलबीर रोड़, देहरादून- 248001
Regional Office (Uttarakhand) - House No.-58/37, Balbir Road, Dehradun- 248 001
Phone : 0135-2669752 & 62 E-mail : routtarakhand@nhai.org Website : www.nhai.gov.in

31073/NHAI/RO-UKD/2014/ 19186 August, 10, 2023

Invitation of Public Comments

Sub:-Four laning of NaginaKashipur section of NH-74 from Km.73.000 (Design Chainage Km.71.614) to Km.175.00 (Design Chainage Km.170.407) in the state of Uttar Pradesh under NHDP-IV on EPC mode.

S.H:- Application of M/s UPPTCL for crossing of 132KV S/C Nagina-Sherkot overhead transmission line over NH at Ch.79+700 to Ch.79+750 of NH-74 (New NH-744) in Nagina Tehsil, District-Bijnor in the State of Uttar Pradesh-reg.

It is to inform all concerned that the Executive Engineer, Electricity Transmission Division, UPPTCL, Dhampur has submitted the subject proposal to PIU-Najibabd for grant of permission towards the works of crossing of 132KV S/C Nagina-Sherkot overhead transmission line over NH at Ch.79+700 to Ch.79+750 of NH-74 (New NH-744) in Nagina Tehsil, District-Bijnor in the State of Uttar Pradesh.

2. The submitted proposal hasbeen recommended by PIU vide letterdt.02.06.2023&15.11.2022&following have been noted as per duly signed checklist &drawing **(copy enclosed)**

(i)	National Highway	NH-74 (New NH-734)
(ii)	Name of Crossing	132KV S/C Jagadhari-Tapri transmission line
(iii)	Crossing Chainage	Ch.79+700 to Ch.79+750of NH-74 (New NH-734)
(iv)	Position of towers	Outside to NH RoW (70m & 88m on either side from centre of tower)
(v)	Crossing Span	218m
(vi)	Clearance over the road level	15.20m
(vii)	Angle of crossing	90 Degree

3. As per the Guidelines issued by Ministry vide OM No. RW/NH-33044/29/2015S&R(R) dated 22.11.2016, the application is to put out in the public domain for 30 days for seeking public comments/objections (on the ground of public inconvenience, safety and general public interest).

In view of the above, comments/objections of the public on the above application are invited to the below mentioned address, which should reach by this office within 30days from the date of uploading beyond which no comments shall be entertained.

The Regional Officer,
National Highways Authority of India
(Ministry of Road, Transport &Highways)
Regional Office-Uttarakhand
House No.-58/37, Balbir Road, Dehradun-248001

This is being issued with the approval of C.G.M (Tech.) cum Regional Officer-Uttarakhand.

Yours faithfully,

10/8/2023

(S. K. Meena)
Manager (Tech.)
For Regional Officer-Uttarakhand

Encl: As above.
Copy to:1) Web Admin-NHAI HQ, New Delhi: - with request for uploading on NHAI website.
2) The Technical Director, NIC, Transport Bhawan, New Delhi: - with request for uploading on Ministry's Website.
3) PD, PIU-Najibabad- for information & suitable necessary action.

CHECK-LIST

FOR NH –734 ROAD CROSSING BY 132 S/C NAGINA-SHERKOT T/ LINE

S.NO.	DESCRIPTION	DETAILS
1.	National Highway Number	NH-734
2.	Name of Crossing Line	132 S/C NAGINA – SHERKOT T/ LINE
3.	SYSTEM OF SUPPLY (i.e VOLTAGE) FREQUENCY NO.OF PHASES,WHETHER NEUTRAL IS EARHTED OR NOT	132K V S/C 3 phase 50 cycles A.C. AND 1 Earth Wire
4.	Position of towers	BETWEEN LOC. NO.23(DB+5) AND LOC. 24(DC+5)
5.	NORMAL SPAN ATLAPWING CONDUCTOR	380 M.
6.	MAX.SAG AT NORMAL SPAN	10.475 M.
7.	CROSSING SPAN	218 M.
8.	Preceding span	262 M.
9.	Succeeding span	370 M.
10.	Height of structure above ground and below ground separately and details of foundation	A) Location No.23 (DB+5) height above GL 37.176 M depth below GL 3.00M. B) Location No. 24(DC+5) height above GL 47.176M depth below GL 3.00M
11.	Milestone NO.	79+700 KM & 70+750 KM
12.	CLEARANCE OVER ROAD	15.20 M.
13.	Height above ground level of (1) Lowest conductor on insulator and (2) guard wire on bracket above ground level	21.333M.
14.	Height of road level above ground level measured at the foot of the structure.	Location No. 23 DB+5 = 3.78M. Location No. 24 DC+5 = 2.68. M
15.	Angle of road crossing	90^0 00' 00"
16.	Distance from NH Boundary From center of tower	Loc. No. 23(DB+5) = 70 M. Loc. No. .24 (DC+5) = 88 M
17.	Perpendicular distance from center of tower to center of road	Loc. No. 23(DB+5) = 103 M. Loc. No. .24 (DC+5) = 115 M
18.	Protection of assembly to the line	Anti-Climbing devices provided
19.	No. of stay required	NO.
20.	Minimum Factor of Safety	2.
21.	Size of power conductor mm.	ACSR PANTHER(Conductor dia.21.00MM)

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22.	Size of EARTHWIRE	EARTH WIRE 7/10 SWG (OVERALL DIA-3.25MM)
23.	FOUNDATION TYPE	PS
24.	PLAN PAPER DIAGRAM	PROFILE(ENCLOSED)
25.	EARTHING	PIPE TYPE EARTHED

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Annexure-C

Condition for the agencies seeking permission for Crossing of 132KV S/C Nagina - Sherkot over Head High Tension Transmission Line Over NH-734.

1. The Over Head Transmission Line should cross the NH- 734 (Nagina-Dhampur) Section at normal to it.
2. Over Head Transmission Line should not be near the existing structure.
3. The Over Head Transmission Line shall be is laid over head in full lane width NH-734.
4. The top of Over Head Transmission Line should be at height 9m over the surface of the road.
5. Any damaging during the crossing of Over Head Transmission Line (Gas Pipeline, water supply line, Electricity agency other line) should be got repaired immediately at the agency's own risk and cost.
6. Necessary precaution should be taken to avoid accident during crossing work.
7. Cautionary board where required should be kept on site before starting the work of laying Transmission Line.
8. Prior approval of department shall be obtained before undertaking the work installation, shifting, repairs or alternating to the utility line location in the NHAI RIGHT-OF-WAY.
9. Before starting the work, prior written information by registration post AD should be given to NHAI.
10. If NHAI consider it necessary in future to remove the pipe line for any work of improvement/repair of road, it will be carried out desired by NHAI at the agency cost within a responsible time.
11. NHAI does not guarantee the preservation of agencies. Property from any type of damage that may occur due to road work carried out a later date.
12. If any accident is occur during the execution ot completion of work by the agency, the completed responsibility shall be fully on the head of agency.
13. In Future and the time of widening the road or any work of NHAI, lines shall have to be shifted by agency at their on cost without claim of compensation will 60 days.
14. An agreement in stamp paper of Rs. 100/- is required to be made between NHAI and agency before start of work. This shall also include No Claim Certificate.

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Check list for getting approval for laying of Overhead Electrical Line for 132KV/HT line on NH land

S.N	item	Information/Status	Remarks
1	General Information		
1.1	Name of Address of The Applicant	Executive Engineer Electricity Transmission Division, Dhampur, Bijnor	
1.2	National Highway Number	734	
1.3	State	Uttar Pradesh	
1.4	Location	Puraini Village	
1.5	(Change in KM)	79.700	
1.6	Length in Meters	N/A	
1.7	Width of available ROW	N/A	
	(a) Left side from centre line towards increasing chainage/km direction	79.700	
	(b) Right side from centre line toward increasing chainage/km direction	79.750	
1.8	Proposal to lay the cable	N/A	
	(a) Left side from centre line towards increasing chainage/km direction	N/A	
	(b) Right side from centre line toward increasing chainage/km direction	N/A	
1.9	Proposal to acquire land	N/A	
	(a) Left side from centre line	N/A	
	(b) Right side from centre line	N/A	
1.10	Whether proposal is in the same side where land is Nat to be acquired	N/A	
	If Nat than where to lay the cable	N/A	
1.11	Details of already laid services, if any, along the proposed route	N/A	
1.12	Number of lanes (2/4/6/8 lanes) existing	4 Lanes	
1.13	Proposed Number of lanes (2 lane with paved Shoulder/4/6/8 lanes)	N/A	
1.14	Service road existing or not	N/A	
	If yes then which side		
	(a) Left side from centre line	N/A	
	(b) Right side from centre line	N/A	
1.15	Proposed Service Road	N/A	
	(a) Left side from centre line	N/A	
	(b) Right side from centre line	N/A	
1.16	[Whether proposed to lay cable is after the service road or between the service road and man carriageway	N/A	
1.17	The permission for laying Underground Electrical cable for 132KV/HT lines shall be considered for approval/rejection	Overhead	
	(i) Where the ROW is more than 45m than the duct cable shall be laid at the edge of right of way within the	N/A	

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	utility corridor of 2m width, duly keeping in view the future widening.		
	(ii} Where land is yet to be acquired *for* 4 lanning and the position of new carriageway has been decided than the cable shall be laid at the edge of right of way within the utility corridor of 2m width, on that side of existing carriageway where extra land is not proposed to be acquired for 4-laning	N/A	
	(iii) Where the widening plan for 4laning is not yet decided and available ROW is around 30m or less, a judicious decision would need to be taken for permitting the laying of underground Electrical cable for 132KV/HT lines. This could be within 1.5 to 2m of utility corridor at edge of existing ROW, dully keeping in view the possible widening plans.	N/A	
	(iv) Where ROW is restricted and adequate only to accommodate the carriageway, central verge shoulders and drains (e.g. highways in cutting thought hilly/rolling terrain), the cable shall be laid clear of the drain.	N/A	
	(v) Where land strip for utility corridor cannot be conveniently earmarked (available ROW restricted to the toe of the embankment) for laying of Underground Electrical cable for 132KV/HT lines, the permission may be refused.	NA	
1.18	No. of applicants on the same stretch.	N/A	
1.19	Whether the case of multiple licenses	N/A	
1.20	If so furnish a joint implementation programmer to lay their respective ducts within stipulated time frame.	N/A	
1.21	If crossings of the road involved, If you it shall only be through trench less technology.	N/A	
2	Document/Drawing enclosed with the proposal	N/A	
2.1	Cross section showing the size of trench for open trenching method (Is it normal size of 1.2m deep X 1m wide). Should not be greater than 1.2m in width in multiple ducts.	N/A	
2.2	Cross section showing the size of pit and location of cable for HOO method	N/A	
2.3	Strip plan/Route Plan showing the Underground Electrical cable for llKV/LT lines, Chainage, width of ROW, distance of proposed, cable from the edge of ROW, important mile stone , intersection, cross drainage work etc.	N/A	
2.4	Methodology for laying of	N/A	

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	Underground Electrical cable for IIKV/LT lines.		
2.4.1	Open trenching method. If you, Methodology of refilling of trench.	N/A	
2.4.2	Horizontal Directional Drilling (HDD) Method	N/A	
2.4.3	Laying Underground Electrical cable for 11KV/LT fines Thought CD works and Method of Laying (Whether to be hung outside parapet)	N/A	
3	Draft license Agreement signed by two witnesses.	N/A	
4	Performance Bank Guarantee	N/A	
4.1	Performance Bank Guarantee as per ministry circular No. RW/NH/33044/27/2005 S&R(R) Dated 7/08/2013	N/A	
4.2	Confirmation of BG has been obtained as per NHAI guidelines	N/A	
5	Affidavit/ Undertaking from the Applicant		
5.1	Not to Damage to other utility, if damage than to pay the losses either to NHAI or to the concerned agency	N/A	
5.2	Renewal of Bank Guarantee	N/A	
5.3	Confirming all standard condition of NHAT's guideline	N/A	
5.4	Shifting of Underground Electrical cable for 33KV/LT line as and when required by NHAI	N/A	
5.5	Shifting due to 6 lanning /widening of NH	N/A	
5.6	Indemnity against all damage and claim clause (xxiv)	N/A	
5.7	Traffic movement during laying of Underground Electrical cable for 11KV/LT lines to be managed by the applicant	N/A	
5.8	If any claim is raised by the contractor then same has to be paid by the applicant	N/A	
5.9	Certificate for 6- Janning from the applicant in following format	N/A	
	"We do Undertake that I will relocate service road/approach road/utilities at my one cost notwithstanding the permission granted within such time as will be stipulated by NHAI" for future six-laying or any other development		

6	Power of Attorney in favor of authorized signatory.		
7	Copy of license.		
8	Certificate from the project Director.		
8.1	Certificate for confirming of all standard condition issued vide Ministry Circular No. RW/NH33044/		

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	29/2015/S&R(R) date 22/11/2016		
8.2	Certificate for 4- laning from PD in the following format.		
	(a) Where feasibility is available "I do certify that there will be no hindrance to proposed six -laning based on the feasibility report considering proposed structures at the said location		
	(b) In case feasibility report is not available "I do certify that sufficient ROW is available at site for accommodating proposed six-laning"		
9	The agreement fee of Rs.1 Shall be charged.		
10	If NH section proposed to be taken up by NHAI on BOT basis - a clasuse in para 17 to be inserted in the agreement."The permitted Highway on which Licensee has been granted the right to lay cable/duct has also been granted has a right of way to the concessionaire under the ' concession agreement for upgradation of development, maintenance and management of National Highway No. 58 from Km 131.000 to Km 218.200 (approx. 87.20 Km and therefore, the licensee shall honour the same		
11	Who will supervise the work of laying of Underground Electrical cable 11KV/LT lines.	N/A	
12	Who will ensure that the defects in road portion after laying of OFC are corrected and if not corrected then what action will be taken.	N/A	
13	Who will pay the claims for damages done/disruption in working of concessionaire if asked by the concessionaire.	N/A	
14	A certificate from PD that he will enter the proposed permission in the register of records of the permissions in the prescribed Performa (copy enclosed) issued vide Ministry Circular No. RW/NH/33044/17/2000 S&R (R)date 23/7/2003	N/A	Overhead Crossing
15	f any previous approval is accorded for laying of cable then photocopy of register of records of permission accorded as maintained by PD [as per Ministry circular No.RW/NH/33044/17/2000 S&R (R) date. 23/7/2003) as referred in para 13 above is enclosed or not.	N/A	Overhead Line

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Details Of National Highway Crossing

1	Name of voltage level of power line	:	132KV S/C NAGINA TO SHERKOT TRASMISSION LINE
2	Details of crossing with 132KV S/C NAGINA - SHERKOT TRASMISSION LINE	:	
(i)	National Highway No.	:	NH-734
(ii)	National Highway crossing location	:	AP-12 To AP-13
(iii)	Angle of crossing	:	90°
(iv)	National Highway Clearance between lowest power conductor and the power line.	:	15.20 Metre
3	Is the clearance indicating above according to code of practices issue by National Highway Authority?	:	Yes

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132 KV S/C NAGINA - SHERKOT TRANSMISSION LINE

SAG CALCULATION WITH CLEARANCE

BETWEEN LOC.NO. 23/0 TO 24/0 AT 75®

RL OF LOC NO. 23	=	236.45
RL OF LOC NO. 24	=	235.81
RL OF CROSSING POINT	= (238.35+0)	238.35
BOTTOM CROSS ARM RL OF LOC NO. 23	= (236.45+22.00)	258.45
BOTTOM CROSS ARM RL OF LOC NO. 24	= (238.35+22.00)	260.35
TENSION AT 75°C	=	1682 KG
CROSSING SPAN LENGTH(L)	=	218.00 M
CONDUCTOR WEIGHT(W) FOR ACSR PANTHER	=	0.976 KG/M

HEIGHT DIFFERENCE OF BOTTOM CROSS ARM BETWEEN LOC NO 23 AND 24

236.45 - 235.81 = -0.64

H = -0.64

NULL POINT = (TH/WL)+L/2

= (1682×-0.64)/(0.976×218)+218/2

= 103.94 Mtr

L1=2X NULL POINT = 2× 103.94 = 207.88

MAX. SAG AT NULL POINT = $WL^2/8T$

= $(0.976\times207.88^2)/(8\times1682)$

= 3.134 Mtr

RL OF NULL POINT = BOTTOM CROSS ARM RL OF LOC 23 – MAX . SAG AT NULL POINT OF BOTTOM CONDUCTOR

= 258.45 - 3.134

= 255.316 Mtr

DISTANCE OF CROSSING POINT TO NULL POINT = 100 - 103.94

= - 3.94

½ SAG = $(0.976\times-3.94^2)/(2\times1682)$

= -0.003 Mtr

MAX. SAG AT CROSSING POINT RESPECT TO LOC 27 = (-3.134) –(-0.003)

= -3.131 Mtr

RL OF BOTTOM CONDUCTOR AT CROSSING POINT = 258.45 + (-3.131)

= 255.319 Mtr

CLEARANCE BETWEEN BOTTOM CONDUCTOR TO CROSSING POINT=(255.319 – 238.35) = 16.969 Mtr

CLEARANCE UNDER MAX. SAG = 16.969 Mtr

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