

## भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

( सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार )

## National Highways Authority of India

(Ministry of Road Transport & Highways, Govt. of India)

क्षेत्रीय कार्यालय : एफ-120, जनपथ, श्याम नगर, जयपुर-302019

Regional Office : F-120, Janpath, Shyam Nagar, Jaipur-302019

Tel. (O) / फोन : (ऑ.) 0141-2292056, 2292049

E-mail / ई-मेल : rojaipur@nhai.org Web. / वेब : www.nhai.gov.in

No.: NHAI/18013/1/2021-ROJ/Permission-OH Crossing-132KV/RVPN/145/NH-148N, km 251.300/624 Date: 24.05.2022

### **INVITATION OF PUBLIC COMMENTS**

Sub.: Proposal for grant of permission for overhead crossing of 132 KV LILO from 132 KV S/C Bhadoti-Bagdi Line to 132 KV GSS Bonli Crossing near Ch. 251+300 of NH-148N (Delhi-Vadodara GF Expressway) in the state of Rajasthan by RVPNL – reg.

Ref.: (i) EE (T&C) RVPNL, Sawaimadhopur letter no.374 dated 31.01.2022. (ii) SE (T&C) RVPNL, Sawaimadhopur letter no.1370 dated 23.03.2022.

(iii) PD, PIU-Dausa letter no. 23011/22/PIU/DAUSA/NOC/RVPNL/12901 dt. 02.05.2022.

Sir,

It is to inform all concern that EE (T&C), RVPN, Sawaimadhopur vide letter under reference (i) above has submitted a proposal for the subjected work and PD, NHAI, PIU, Dausa has submitted the above proposal vide letter under reference (ii) for approval of the Competent Authority, Highway Administration.

- 2. The proposal is regarding grant of permission for NH overhead crossing of 132 KV LILO of 132 KV S/C Bhadoti-Bagdi Line to 132 KV GSS Bonli Crossing near Ch. 251+300 of NH-148N (Delhi-Vadodara GF Expressway) in the state of Rajasthan by RVPNL.
- 3. As per Para-4 of Ministry's Circular No. RW/NH-33044/29/2015S&R(R) dated 22.11.2016, the Highway Administration shall be put out in the public domain for 30 days for seeking claims and objections (on grounds of public inconvenience, safety and general public interest).
- 4. In view of the above, before approval of the competent authority, the comments/objections of affected public is hereby invited with reference to the Ministry's circular dated 22.11.2016 due to OH Crossing of 132KV EHV transmission line on the subjected stretch. The objections/comments may be addressed to the below mentioned address upto 23.06.2022, beyond due date, no comments/objections will be accepted.

The Regional Officer, Regional Office - Jaipur

National Highways Authority of India, F-120, Janpath, Shyam Nagar, Jaipur (Raj.)-302019, Tel: 0141-2292049, 2292054 Email: rojaipur@nhai.org

This is issued with the approval of the Regional Officer, NHAI, RO, Jaipur (Rajasthan).

Yours faithfully,

(K R Chouhan)

Dy. General Manager (T)

Copy to:

- (i) Web Admn., NHAI, HQ, New Delhi for uploading in NHAI's website [web-admin@nhai.org]
- (ii) Director, NIC, New Delhi for uploading in Ministry's website. [mansoor@nic.in]
- (iii) PD, PIU-Dausa: for information.
- (iv) SE (T&C), RVPN, Sawaimadhopur: for information.

प्रधान कार्यालय : जी—5 एवं 6, सेक्टर—10, द्वारका, नई दिल्ली—110075, दूरभाष: 011-25074100, 25074200 फैक्स: 011-25093507/25093514 वेब: www.nhai.gov.in Corporate Office: G-5 & 6, Sector-10, Dwarka, New Delhi – 110075, Tele.: 011-25074100, 25074200 Fax: 011-25093507/25093514 Web.: www.nhai.gov.in



## भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

( सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार ) National Highways Authority Of India

(Ministry of Road Transport & Highways, Govt. of India)

परियोजना कार्यान्वयन इकाई, दौसा 87, गंगा विहार कॉलोनी, होटल रावत पैलेस की पीछे, दौसा-303303 ( राज. )

दरभाष / Telephone : 01427-224918 ई-मेल / E-mail : dausa@nhai.org

Project Implementation Unit, Dausa 87, Ganga Vihar Colony, Behind Hotel Rawat Palace, Dausa-303303 (Raj.)





Date: 02.05.2022

No. 23011/22/PIU/DAUSA/NOC/RVPNL/12901

Chief General Manager (Tech.)

Regional Office,

National Highways Authority of India

F-120, JanPath, Shyam Nagar,

Jaipur (Raj.)

Sub: Permission for overhead crossing 132 KV LILO from 132 KV S/C Bhadoti - Bagdi line to 132 KV GSS Bonli Crossing near Chainage 251+300 NH-148N.

1. PIU Sawai Madhopur letter no. 4884 dated 31.03.2922.

2. SE (T&C) RVPNL Sawai Madhopur letter no. 1370 dated 23.03.2022.

Authority Engineer letter no. 209 dated 16.02.2022.

4. EE (T&C) RVPNL Sawai Madhopur letter no. 374 dated 31.01.2022.

Sir,

With reference to subject matter, kindly refer letter under ref. (4) vide which Executive Engineer (T&C), RVPNL, Sawai Madhopur submitted the subject proposal for permission for overhead crossing 132 KV LILO from 132 KV S/C Bhadoti-Bagdi line to 132 KV GSS Bonli Crossing near Chainage 251+300 NH-148N in the state of Rajasthan.

The said proposal was examined through Authority Engineer of the project in light of Ministry's Guideline issued vide no. RW/NH/33044/29/2015/S&S(R) dated 22.11.2016 & Ministry letter no. RW/JAI/RJ/PS/UTILITYGENL/1161-1189 dated 16.03.2017.

Authority Engineer vide ref. (3) has submitted that they have examine the proposal at site and the above proposal is found in order. AE has also submitted duly signed relevant document (Checklist) and Site Inspection Certificate.

The applicant SE (T&C), Sawai Madhopur vide their letter under ref. (2) has submitted the appropriate Bank Guarantee amounting to P.s. 1,00,000/- from State Bank of India, Church Road, Jaipur.

In view of above, the subject proposal is recommended for necessary approval of Competent Authority.

Encl: As above.

Yours sincerely

Project Director NHAI, PIU-Dausa

Copy to:-

1. Superintending Engineer (T&C), RVPNL, Sawai MaJhopur for information.

2. Executive Engineer (T&C), RVPNL, Sawai Madhpur for information.

3. Team Leader, M/s Dhruv Dhaitanya, AE, Sawaimadhpur for information and necessary action.

4. Project Manager, M/s HG Infrastructure Ltd. for information and necessary action.

# Guideline for Processing the Proposal for laying of Utility line in the land along National Highways vested with NHAI / PWD /BRO

Name of Transmission line-"132 KV Lilo Bonli line (To be charged on 132 KV Voltage level by RVPN) from 132KV S/C Bhadoti-Bagdi line to 132KV GSS Bonli"

	General Information	
1	Name and address of the Applicant/Agency	Office of The Executive Engineer, Rajasthan Rajya vidyut prasaran Nigam Ltd, Kota (State Transmission Utility Of Government of Rajasthan)
2	National Highway Number	148N
3	State	RAJASTHAN
4	Location	Bonli (SWM)
5	(Chainage in km)	251+30 (Approx.)
6	Length in meters	Crossing Span 200 meter (Total Line length 14.780 Km)
7	Width of available ROW	100 Meter from Centre of Line
	(a) Left side from center line towards increasing chainage/km direction.	No tower Foundation has been made in ROW
	(b) Right side from center line towards increasing chainage/km direction.	No tower Foundation has been made in ROW
8	Side of NH	NH Crossing by Overhead EHV Line
	(a) Left side from center line towards increasing chainage/km direction.	100 Meters (Tower type 132 KV D/C D+6 with Double Tension Hardware fitting will be located)
	(b) Right side from center line towards increasing chainage/km direction.	100 Meters (Tower type 132 KV D/C D+6 with Double Tension Hardware fitting will be located)
9	Name of Highway Authority of NHAI / PWD /BRO	NHAI-148N, SAWAI MADHOPUR
10	Highway Administration address	PD NHAI PIU , SAWAI MADHOPUR

(R.K. CRawla) Executive Engineer (T&C) RVPNL, Sawai Madhopur

DGM (T) NHAI, PIU-Dausa



As per MoRT&H/RO Jaipur circular No. RW/JAI/RJ/PS/2017/UTILITY/GENL/1162 Dated 16.03.2017

Name of Transmission Line-132 KV Lilo Bonli line (To be charged on 132 KV Voltage level by RVPN) from 132KV S/C
Bhadoti-Bagdi line to 132KV GSS Bonli

	Bhadoti-Bagdi line to 132KV GSS Bonli				
S.No.	Item	Measurement observation as per site condition	MORTH Norms	Whether Complying with MORTH Norms	
1	Details of already laid utility service, if any	NIL	NA	NA	
2	Whether up gradation of the strench in near future is proposed or not	NO	NA	NA	
	(a) if yes provision of utility adversely affect the plan of up gradation	МО	Will Not affect plan of upgradation	NA	
3	Laying of utility service along the National Highways.			NA	
3,1	Location of proposed utility service along the strench	by RVPN) from 132KV S/C	Laying of (Public Utility)132 KV D/C line (To be charged on 132 KV Voltage level by RVPN) from 132KV S/C Bhadoti-Bagdi line to 132KV GSS Bonli (SWM)	NA	
3.2	Depth of top of utility service from ground level	Overhead Power Line crossing	Above ground level	NA	
3.3	Mechanism for crossing water channel	NA	NA	NA	
3.4	Whether ROW is restricted in this strench?	NA	NA	NA	
3.4.1	if yes ,whether provision of land acquisition is required to lay utility	NA	NA	NA	
	(a) if yes whether undertaking for land acquition alongwith relevent L.A. details has been furnished	NA	NA	NA	
3.4.2	Width of concrete duct, if utility service are proposed to be laid in conrete ducts	NA	NA	NA	
4	Laying of utility service across the National Highways.	Overhead Power Line crossing		NA	
4.1	Whether Existing drainage structure is allowed to carry the utility lines.	NA	Not to be allowed	NA	
4.2	Proposed crossing of utility service	overhead power line crossing		NA	
4.3	Type of casing Pipe/conduit carring the utility line	Steel cast iron, reinforced cement concrete and have adequate strength	Steel cast iron, reinforced cement concrete and have adequate strength	NA	
4.4	whether ends of the Casing sealed from the outside	NA	sealed	NA	
4.5	Length of casing Pipe/conduit crossing NH	NA	Extend from drain in cuts and toe to toe of slope in the fills	NA	
4.6	Depth of casing Pipe/conduit crossing NH	NA	Atlest 1.2 Meter below the top of sub grade	NA	
4.7	Crossing method in case of CC pavement	NA	Only boring method (HDD)	NA	
4.8	Horizontal and vertical clerance in case utilities are allowed overhead	EHV lines structure i.e. towers are 100 metres from road center (LHS) and 100 Meter From road center (RHS)	in accordance with IRC codes	NÁ	
5	Cross section showing the size of trench foropen trenching method.	NA	Enclosed, if applicable.	NA	
5.1	(a) Trench width	NA	More then 30 cm and less than 60 cm wider than the outer diameter of the utility Pipe	NA	
	(b) Filling of Trench	NA	As per Ministry guidelines vide letter No. RW/NH- 34044/29/2015/S&R Dated 22.11.2016	NA	
	(c.) Location of Trench	NA	Extreme edge of the ROW	NA	
5.2	Cross section showing the size of pit and location of conduit for HDD method	NA	Enclosed, if applicable.	NA	

(R.K. Chawla)

Executive Engineer (T&C)

RVPNL, Sawai Madhopur





5.3	Strip plan/ route plan showing utility line, chainage, width of ROW, distanse of proposed cable from the edge of ROW, important mile stone, intersection, cross drainges works etc.	Enclosed	Enclosed	Enclosed
5.4	Plan and profile drawing of strench showing cross section of road at 20m distance along with ROW and proposed utility	Enclosed	Enclosed	Enclosed
6	Methodology for laying of showing utility.	NA(Overhead Power Line crossing)	Line Saction Profile Enclosed	Line Saction Profile Enclosed
7	Draft licensee agreement is as per Ministry guidelines vide letter no RW/NH-34044/29/2015/S&R Dated 22.11.2016 and signed by two wittness.	RVPN, Copy of Gazette Notification Enclosed	Enclosed	Enclosed
8	Licence fees in favour of MORTH RPAO , Jaipur	Will be paid as per Norms	As per Ministry guidelines vide letter No. RW/NH- 34044/29/2015/S&R Dated 22.11.2016	NA
9	Whether Bank Guarantee has been obtained	Will be paid as per Norms	As per Ministry guidelines vide letter No. RW/NH- 34044/29/2015/S&R Dated 22.11.2017	NA
10	(a) if yes, whether confirmation of BG has been obtain as per MORTH/ NHAI guidelines			
10.1	Undertaking for not to damage other existing utility, if damaged then to pay the losses to either to MORTH/NHAI or to the concrerned agency.	Enclosed	Enclosed	Enclosed
10.2	Undertaking for renewal of Bank guarantees and when asked by NHAI/MORTH	Enclosed	Enclosed	Enclosed
10.3	Undertaking for confirming all standard condition of MORTH/NHAI guidelines.	Enclosed	Enclosed	Enclosed
LO.4	Undertaking for shifting of utility as and when asked by MORTH/NHAI with in a month at their own cost.	Enclosed	Enclosed	Enclosed
10.5	Undertaking for idemnity against all damage and claims.	Enclosed	Enclosed	Enclosed
10.6	Undertaking for management of traffic movement during laying of utility line without hampering the traffic.	Enclosed	Enclosed	Enclosed
10.7	Undertaking that if any claim is raised by the concessionaire/contractor them the same has to be paid by the applicant.	Enclosed	Enclosed	Enclosed
10.8	Undertaking that the applicant has obtained various saftey clearances from the representative authorities such as directorate of electricity, Chief Controller of explosive saftey organisation, oil industry safteyDirectorate, state/central Pollution control Board and other statutory clerance applicable, before applying to Highway administration.	Enclosed	Enclosed	Enclosed

The Right of way (ROW) of the National Highways available at the proporsed location from divided carriageway is 100 Meters (from center of ROW to edge of ROW towards Proposed utility line.

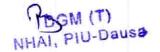
The above particulars alongwith the drawings and documents have been verified and certified prevailing site conditions.

Name Designation & Signature of the authorized representative of applicant

(R.K. Chawla)

Executive Engineer (T&C)

RVPNL, Sawai Madhopur





As per MoRT&H/RO Jaipur circular No. RW/JAI/RJ/PS/2017/UTILITY/GENL/1162 Dated 16.03.2017

# Guideline for Project Directors for processing the proposal for Laying of over head high Tension Transmission line in the land along National Highway vested with NHAI

.No.	item	Information Status	Remarks
1	General Information		
.1	Name and address of the Applicant/Agency	RVPNL	
1.2	National Highway Number	148N	(Delhi-Vadodara Expree way Bharatmala project)
.3	State	RAJASTHAN	
.4	Location	Bonii (SWM)	
1.5	(Chainage in km)	251+30 (Approx.)	
1.6	Length in meters	Crossing Span 200 meter (Total Line length 14.780 Km)	
1.7	Width of available ROW	100 Meter from Centre of Line	
	(a) Left side from center line towards increasing chainage/km direction.	No tower Foundation has been made in ROW	1
	(b) Right side from center line towards increasing chainage/km direction.	No tower Foundation has been made in ROW	
1.8	Proposal to lay 132 KV over Head electical Transmission line		
	(a) Left side from center line towards increasing chainage/km direction.	100 M	
	(b) Right side from center line towards increasing chainage/km direction.	100 M	
1.9	Proposal to acquire land		
	(a) Left side from center line	NA	(As no any land of NHAI will be occupied By RVPN for this overhead crossing
	(b) Right-side from center line	NA	(As no any land of NHAI will be occupied By RVPN for this overhead crossing
1.1	Whether proposal is in the same side where land is not to be acquired	NA	
1.11	Details of already laid services, if any, along the proposed route	NA	
1.12	Number of lanes (2/4/ 6/8 lanes	NA	
1.13	Proposed number of lanes (2 lane with paved shoulders/4/6/8 lanes)	NA	
1.14	Service road existing or not		
	If Yes then which side		
	(a) Left side from center line	NA	
	(b) Right side from centre line	NA	
1.15	Proposed service road	NA NA	
_	(a) Left side from center line	NA NA	
	(b) Right side from center line	100	
1.16	Whether proposal to lay 132 KV Over head EHV Transmission line is after the service road or between the service road and main carrigeway	NA	
1.17	The permission for laying of 132 KVOver head EHV Transmission line shall be considered for approval/rejection based on the Ministry Circulars mentioned as above	YES	
	(a) Carring of Over head EHV Transmission line on highway bridge shall not be permitted as farmes/gases pipe can accelerate the process of corrosion or may causes explosions, thus being much more injurious than leakage of water.	NA	
	(b) Carring of Over head EHV Transmission line on bridge shall also be discouraged. However, if the EHV Transmission line authorities seem to no have other viable alternative and approach the highway authority well in time before the designe of the bridge is finalized, they may be permitted to carry the pipeline on independent superstructure, supporated on extanded poration of piers and abutment in such a manner that in the final arrangement enough free spade arround the superstructure of the bridge remains available for inspection and repairs, etc	na na	
	(c ) Cost of required extension of the substructure as well as that of the supporting substructure shall be borne by the agency-in-charges of the utilities .	NA	
	(d) Service are not being allowed indiscriminately on the parpet/any part of the bridges, safety of the bridges has to be kept in view while permitting various services along bridge. Approval are to be accorded in this regard with the concurrence of the Ministry's project Chief Engineers only.	NA	
1 18	If Crossing of the road involved  If, Yes it shall be Over head EHV Transmission line through structure specially builty for that purpose at the expenses of the agency owning the line	YES	
	(a) Existing drainage structure shall not be allowed to the lines.	NA	
	(b) Is it on a line normal to NH	YES	
	(c ) Crossing shall not be too near the existing structure on the national highway, the minimum	NA	
	distance from the existing structures		







5.6	indemnity against all damages and claims clause (xxiv)	YES	
5.7	Traffic movement during laying of Transmission line to be managed by the applicant	YES	
5.8	If any claim raised by the concessionaire then the same has to be paid by the applicant	YES	
5:9	prior approval of the NHAI shall be obtained before under taking any work of insttalation, shifting or repairs, or alterations to the showing Transmission line located in the National Highway right-of-way	YES	
5.10	Expenditure, if any incurred by NHAI for reparing any damage caused to the National highway by the laying, maintenance of shifting of the Transmission line will be borne by the agency owning the line.	YES	
5.11	if the NHAI considers it nacessary in future to move the utility line for any work of imprtovment	YES	
5.12	Certifiacte from the applicant in the following format  Laying ofTransmission line will not have any deleterious effects on any of the bridge compnents and road way saftey for traffic.  (ii) for 6-lanning "we do undertake that i will relocate service road/approch road/ utilities at my own cost not with stanting the permission granted within such time as will be stipulated by NHAI" for future six- lanning or any other development.	YES	
6	who will sign the agreement on behalf of 132 KV Over head EHV Transmission line agency	XEN (T&C) RVPN, SWM	
7	Certificate from the Project Director		
7.1	Certifiacte for confirming of all standard condition issued vide Ministry circular No. NH-41(58)/68 dated 31.01.1969, Ministry circular No. NH-III/P/66/76 DATED 18/19.11.1976, Ministry circular No. RW/NH-III/P/66/76 DATED 11.05.1982, Ministry circular No. RW/NH-1037/1/86/DOI DATED 19.01.1995, Ministry circular No. RW/NH-34066/2/95 S&R DATED 25.10.1999 and Ministry circular No. RW/NH-34066/7/2003 S&R (B) DATED 17.09.2003	YES	
7.2	Certificate from PD in the following format  is certified that any other location of the Transmission line would be extremely difficult and unreasonable costly and the installation of Transmission line within ROW will not adversely affect the design, stability & traffic saftey of the highway nor the likely future improvment such as widening of the carrageway, easing of curve etc".  (ii) for-6 lanning (a) where feasibility is aviilable " i do certify that there will be no hindrance to proposed six lanning based on the feasibility report considering proposed structure at the said location". (b) in case feasibility report is not aviilable " i do certify that sufficient ROW is available at the site for accommodating proposed six-lanning".	YES	
8	If NH section proposed to be taken up by NHAI on BOT basis - a clause is 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 as a right of way to the concessionaire under the concession agreement for up-gradation of [	NL 26.3280667, EL 76.2443273	Near Bonli Tehsil, Sawai Madhopur
9	who will supervise the work of laying of Over head EHV Transmission line.	AEN/JEN (T&C), RVPN, SWM	
10	who will ensure that the defects in road portion after laying of Over head EHV Transmission line are corrected and if not corrected then what action will be taken	PD	
11	who will pay the claims for damages done / disruption in working of concessionaire if asked by the concessionaire.	RVPN	
12	A certificative from PD that he will enter the proposed permission in the register of records of the permissions in the prescribed proforma (copy enclosed)	NA	
13	If any previous approval is accorded for laying of Over head EHV Transmission line then photocpy of register of records of the permissions accorded as maintained by PD then copy be enclosed.	NA	

(R.K. Chawla)
Executive Engineer (T&C)
RVPNL, Sawai Madhopur

TEAM LEADER SWM

DGM (T) NHAI, PIU-Dausa

	(d) The Over head EHV Transmission linecarring the utility line shall be of steel, cast iron, or		
	rainforced cement concrete and have adequate strength and be large enough to permit ready	NA	
_	withdrawal of the carrier pipe/cable.		
-	(e) Ends of the Over head EHV Transmission line shall be sealed from the bothside.	YES	
	(f) The Over head EHV Transmission line should, as minimum extend from drain to drain in cuts and toe of slope in the fills.	YES	
	(g) The bottam conductor of the over head Transmission line should be at least 9.1 meter above the surface of the road.	YES	
	(h) Foundation shall be by boring method (HDD) specially where the existing road pavement is of cement concrete or dence bituminous concrete type.	YES	
	(i) The Over head EHV Transmission lineshall be installed with an even bering throughout its length.	NA	
2	Document/driwing enclosed with the proposal	YES	
2.1	Height showing the 9.1 Mtr above the Road surface	YES	
	(i) Should not greater than the Over head EHV Transmission line		
	(ii) Located as close to the extereme edge of the right of way as possible but not less than 15 m from the centers lines of the nearest carriageway.		
	(iii) Shall not be permitted to run along the national highway when the road formation is situeted in double cutting. Nor shall these be laid over the existing culverts and bridges.	TOWER DRAWING ENCLOSED	
	(iv) These should be so laid that their bottom conductor is at least 9.1 meter below the ground level so as not to obstruct drainge of the road land.		
2.2	Cross section showing the size of pit and location of cable for HDD method.	NA	
2.3	Strip plan/ route plan showing Over head EHV Transmission line, chainage, width of ROW, distanse of proposed cable from the edge of ROW, important mile stone, intersection, cross	Enclosed	
	drainges works etc.		
2.4	Methodology for laying of showing Over head EHV Transmission line.	Enclosed	
2.4.1	Open foundation method (may be allowed in utility corridor only where pavement is neither	NÁ	
	cement concrete nor dense bituminous concrete type. If, yes methodology of refilling of trench.  (a) The over Head Transmission Line crossing span shall be less than normal span	400	
-		YES	Crossing Span 200 Meter
	(b) For filling of the pits , bedding shall be to a depth of not less than 30 cm. It shall consist of		
	granular material free of lumps, clodes and cobbles and graded to yield a firm surface without	YES	
	sudden change in the bearing value unsuitable soil and rock as edged should be excavated and replaced by selected material.		
	(C) The backfill sall be completed in two stages (i) Side-fill to the level of the top of the foudation		
	and (ii) Overfill to the bottam of the road crust.	YES	
	(d) The sidefill shall consolidated by machanical tampering and controlled addition of moisture to	ura.	
	95% of the proctor's density. Overfill shall be compacted ti th same density as the material that	YES	
	had been removed. Consolidation by saturation or ponding will not be permitted.		
	(e)The road crust shall be built to the same strength as the existing crust on either side of the	N/A	
	trench. Care shall be taken to avoide the formation of a dip at the trench.	NA	
	(f) The excavation shall be protecated by flagman, signs and barricades, and red lights during night hours.	YES	
	(g) If required, a diversion shall be constructed at the expense of agency owining the utility line	NA	
2.4.2	Horizontal directional drilling (HDD) method	NA NA	
2.4.3	Laying of Over head EHV Transmission line through CD works and method of laying	NA NA	
	(a) On approtches, the Over head EHV Transmission line shall be carried along a line as close to	NA .	
	the edge of the right-of way as possible up to a distance 30m from the bridge and the subject to all other stipulation contained in this Ministry's guide lines issued with latter noNo.NH-HI/P/66/76 dated 19.11.1976.	NA	
3.	Draft licensee agreement signed by to witnesses	YES	
	Performance bank guarantee in favour of NHAI has to be obtained @ Rs.50/- per running meter		
	(parallel to NH) and Rs. 1,00,000/- per crossing of NH for a period of one year initially (extendable	NA (As no any land of NHAI will be	
4	if required till satisfactory completion of work) as a security for ensuring/making good the	occupied By RVPN for this	BG Shall be deposited agains
	excavated trench for laying the cables/ducts by proper filling and compaction, clearing	overhead crossing	demand raised by NHAI if an
	debris/loose earth produced due to execuation of trenching at least 50m away from the edge of		
	the right of way. No payment shall be the NHAI to the licensee for clearing debris/loose earth.		,
4.1	Performance BG as per above is to be obtained.	NA	
4.2	confermation of BG has been obtain as per NHAI guidelines	NA	
5	Affivadit / undertaking from the applicant for	Enclosed	
5.1	Not to damage to other utility, if damaged then to pay the losses either to concerned agency	YES	
5.2	Renewal of bank garantee	YES	
		175.4	
5.3	confirming all standard condition of NHAI'S guidlines	YES	
	confirming all standard condition of NHAI'S guidlines shifting of Transmission line as and when required by NHAI at their own coast	YES	



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### LILO of 132 KV S/C Bhadoti-Bagdi Line for 132 KV GSS Bonli **Crossing Details**

### Crossing Tower No 47 to 48

**Crossing Details:** 

1 Name & Details of the NH Crossing :

Bharat Mala.

Loc No 47 to centre of NH is 100 mtr. Loc No 48 to centre of NH is 100 mtr.

2 Clearance from NH Top of Surface :

Not less than 11.6 mtr.

3 Height of Crossing Towers

Loc no 47 220KV D/C (DD+6) = 41.00 Mtr

Loc no 48 220KV D/C (DD+6) = 41.00 Mtr

4 Situation of the Crossing

: Between loc No 47 and loc No 48

From Loc no 47= 100 Mtr From Loc no 48= 100 Mtr

5 Span at crossing

: 200 Mtr

6 Angle of Crossing

: 90.00 Degree

7 Structure used to cross the existing : Loc No 47 (DD+6) Angle 44°40'RT

power line and its deviation of angle

Loc No 48 (DD+6) Angle 47°30'RT

8 Conductor used to cross the power : ACSR Panther, weight of conductor 0.974 Kg/Mtr

line and its detail

30/3 MM AL+7/3 MM STEEL =0.974 kg/meter

9 Minimum Sag at -2.5°C, No wind

: 1.19 Mtr

10 Maximum Sag at 75°C, No wind

: 2.441 Mtr

11 Clearance Under Maximum sag condition between lowest conductor of the proposed line and Bharat

: Not less than 11.6 Mtr

Mala

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LOC, No 47 to LOC, No 48

**SAG Formula** 

 $WL^2$ 

ST

Where:

W = Unit Weight of Conductor in Kg/mtr

L = Span length in mtr

T = Tension of conductor at -2.5° C & 75° C temp.

Minimum "Sag"

(-2.5° C No wind)

Where:

W = 0.974 Kg/mtr

L = 200 mT = 4,094 Kg

Sag

 $= 0.974 \times 200 \times 200 / 8 \times 4094$ 

= 1.19 mtr

Maximum "Sag"

(75° C No wind)

Where:

W = 0.974 Kg/mtr

L = 200 mT = 1,995 Kg

Sag

 $= 0.974 \times 200 \times 200 / 8 \times 1995$ 

 $= 2.441 \, \text{mtr}$ 

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TEAM LEADER SWIM

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