



# 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



क्रमांक:NHAI/18013/1/2021-ROJ/Permission-UG Crossing 11 KV Electric Cable/JVVNL/245/NH-48 km 302.695/767 दिनांक: 16.06.2023

### INVITATION OF PUBLIC COMMENTS

- विषय: Proposal for grant of permission for underground crossing of 11 KV Electric Cable (3 Core 185 Sqmm XLPE Cable) on Chittorgarh-Udaipur road section of NH-48 (old NH-27) at Km. 302+695, Village-Tulsidas Ji Ki Sarai in the state of Rajasthan by AVVNL - reg.
- सन्दर्भ: 1. XEN (Rural-I), AVVNL, Pratapnagar letter no. AVVNL/XEN(R-1)/O&M/Works/F/2022-23/D.658 dt. 14.11.2022 and letter no. D.05 dated 05.04.2023.  
2. PD, PIU-Udaipur letter no. NHAI/UDR/UG Cable Crossing/NH-48/302+695/239 dated 24.05.2023 (received on 30.05.2023).

Sir,

It is to inform all concern XEN (Rural-I), AVVNL, Pratapnagar vide letter cited under ref. (1) above has submitted a proposal for the subjected work and PD, NHAI, PIU, Udaipur has submitted the above proposal vide letter under reference (2) for approval of the Competent Authority, Highway Administration.

2. The proposal is for grant of permission for underground crossing of 11 KV Electric Cable (3 Core 185 Sqmm XLPE Cable) on Chittorgarh-Udaipur road section of NH-48 (old NH-27) at Km. 302+695, Village-Tulsidas Ji Ki Sarai in the state of Rajasthan by AVVNL.

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 UG crossing of 11KV Electric Cable on the subjected stretch. The objections/comments may be addressed to the below mentioned address upto 15.07.2023, 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).

भवदीय,  
(मनोज खोड़ा)  
प्रबन्धक (तकनीकी)

- 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-Udaipur: for information and with the request to review the license fee and BG amount as per abended guidelines of MoRTH issued vide no. **No. NH-36094/01/2022 S&R (P&B) dated 17.04.2023** and get deposited the same from the applicant within 30 days period for further processing the proposal.  
(iv) XEN (Rural-I), AVVNL, Pratapnagar: for information and with the request to deposit revised charges required as per amended guidelines dated 17.04.2023 within 30 days period.





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## National Highways Authority of India

(Ministry of Road Transport and Highways, Government of India)

परियोजना कार्यान्वयन इकाई, उदयपुर, प्लॉट सं. 465, सरस डेयरी के पास, गोवर्धन विलास, उदयपुर (राज.) 313001  
Project Implementation Unit, Udaipur, Plot No. 465, Near Saras Dairy, Goverdhan Villas, Udaipur (Raj.) 313001  
दूरभाष/Phone : (0294) 2980801, 2980802 ई-मेल/Email: uda@nhai.org



NHAI/UDR/UG Cable Crossing/ NH-48/302+695/ 239

**The Regional Officer,**  
National Highways Authority of India,  
Regional Office,  
F-120 - Janpath, Shyam Nagar  
JAIPUR – 302019



24.05.2023

Sh. Manglik  
31/5

**Sub:** Permission for Crossing of Electric Cable (3 core 185 sqmm, 11 KV XLPE Cable) on National Highway for proposed public utilities on NH-48 (old NH-27) at Km 302+695, Village Tulsida ji ki sarai on Chittorgarh-Udaipur section in the state of Rajasthan.

- Ref:**
1. XEN (Rural-I), AVVNL, Pratapnagr letter No. AVVNL/XEN(R-1)/O&M/Works/F/2022-23/D.658 dated 14.11.2022.
  2. M/s. Aarvee Associates letter No. AA/UC/22-23/NHAI/1291 dated 24.11.2022
  3. This office letter No. NHAI/UDR/ UG Cable crossing/NH-48/302+695/1651 dt. 21.12.2022
  4. XEN (Rural), AVVNL, Udaipur letter No. AVVNL/XEN/o7M/3STT/f./2023-24/D.05 dated 05.04.2023

Sir,

The subjected proposal submitted by Executive Engineer (Rural), AVVNL, Udaipur has been examined by the Independent Engineer M/s. Aarvee Associates and they have submitted the report vide letter No. AA/UC/22-23/NHAI/1291 dated 24.11.2022 along with calculation details of rental fee payable amounting to Rs. 8315/-. This office vide letter cited (3) above dated 21.12.2022 has requested to the applicant for depositing the License Fee/Lease rentals applicable i.e. Rs. 8315/- and also Bank Guarantee if of Rs. 1,00,000/- as per Ministry guideline No.RW/NH-33044/29/2015/S&R(R) dated 22.11.2016 & dated 09.08.2018 through Bharatkosh Portal ([www.Bharatkosh.gov.in](http://www.Bharatkosh.gov.in)) in the name of RPAO (Regional Pay account Officer) MoRTH, Subsequently, the applicant has submitted the following:

- Licensee fee:** The applicant (AVVNL) has submitted the copy of transaction Ref No. 2203230029151 dated 22.03.2023 amounting to Rs. 8,315/- through Bharatkosh. gov.in. towards the deposition of License Fee.
- Bank Guarantee:** The applicant has submitted B.G. No. 2437igp000844723 dated 21.03.2023 amounting to Rs. 1,00,000/- valid upto 17.03.2024 issued by bank of baroda S.S.i, branch, Sukher, udaipur, towards execution of subjected Electric cable crossing in favour of Project Director, NHAI, Udaipur (copy enclosed).

The proposal has been examined by the undersigned in line with MoRTH Circular N° RW/NH-33044/29/2015/S&R (R) dated 22.11.2016 and MoRTH RO letter No. RW/JAI/RJ. -S/2017/UTILITY/GENL dated 16.03.2017 and found in order.

In view of the above, it is recommended to accord necessary permission to Executive Engineer (Rural), AVVNL, Udaipur against their aforementioned proposal.

Yours faithfully,

*(Signature)*  
(Kuldeep Songara)  
Project Director

**Encl:** two copies of proposal & copy of BG.

**Copy to :** (i) Team Leader M/s. Aarvee Associates, Udaipur – for information  
(ii) M/s. UCHIT Expressway, Narayanpura - for information





# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

## (सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

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Project Implementation Unit, Udaipur, Plot No. 465, Near Saras Dairy, Goverdhan Villas, Udaipur (Raj.) 313001

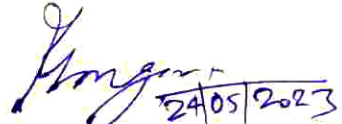
दूरभाष/Phone : (0294) 2980801, 2980802 ई-मेल/Email: uda@nhai.org



#### CERTIFICATE

**Sub:** Permission for Crossing of Electric Cable (3 core 185 sqmm, 11 KV XLPE Cable) on National Highway for proposed public utilities on NH-48 (old NH-27) at Km 302+695, Village Tulsida ji ki sarai on Chittorgarh-Udaipur section in the state of Rajasthan - reg.

- (i) Undersigned has examined the proposal of the applicant for Road crossing of 11 KV XLPE Electric Cable at Design Ch. 302+695 on NH-48 at Village Tulsida ji ki sarai on Chittorgarh-Udaipur section in the state of Rajasthan and confirm that the standard conditions issued vide Ministry Circular No. RW/NH-33044/29/2015/S&R (R) dated 22.11.2016 has been followed.
- (ii) It is certified that any other location of utility line would be extremely difficult and unreasonable costly and crossing of utility line will not adversely affect the design, stability & traffic safety of the highway nor the likely future improvement such as widening of the carriageway, easing of curve etc.
- (iii) I will ensure supervision of the work of crossing of utility and ensure that the defects in road portion after laying of utility are corrected.
- (iv) I will notify/forfeit the BG for claims for damages done/disruption in working, if any.
- (v) I will ensure that proposed permission is entered in the register of records.
- (vi) The record of previous approval, if any has been considered and copy of same is enclosed with the proposal.

  
(Kuldeep Songara)  
Project Director

### CHECK LIST

Enclosure to Ministry of Road Transport & Highways letter no.  
RW/NH-33044/29/2015/S&R(R) Dated 22th November, 2016

Check list for processing the proposal for Laying / Crossing of utility line in the land along National Highway vested with NHAI/PWD/BRO

**General Information.**

1	Name and Address of the Applicant/ Agency	:	<b>Exacutive Engineer, (O &amp; M), Pratapnagar</b>
		:	<b>Ajmer Vidyut Vitran Nigam Limited</b>
2	National Highway Number	:	<b>N.H.- 48</b>
			<b>(Old N.H.-27)</b>
		:	<b>CHITTORGARH/ KOTA - DEBARI/ UDAIPUR</b>
3	State	:	<b>RAJASTHAN</b>
4	Location	:	<b>Vill.- TULSIDAS JI KI SARERI, Teh.- MAVLI, Dist.- UDAIPUR</b>
5	(Chainage in km.)	:	<b>Crossing Ch. 302/695.00</b>
			<b>LAYING &amp; CROSSING AT ROAD CH. 302/695.00 (L.H.S. TO R.H.S.)</b>
6	Length in Meters	:	<b>80m</b>
7	Width of available ROW in both side (Mtr.)	:	<b>60.0m (30m + 30m)</b>
8	[Side of NH (Left or right side of NH towards increasing Chainage/ Km. direction)]	:	<b>Left Hand Side - Right Hand Side of Chittorgarh/ Kota - Debari/ Udaipur Road towards Udaipur in crossing of Km. 302</b>
9	Name of Highway/ Authority (NHAI/PWD/BRO)	:	<b>NATIONAL HIGHWAY AUTHORITES OF INDIA</b>
			<b>Project Director, NHAI, PIU-Udaipur</b>

  
**Project Director**  
**National Highways Authority of India**  
**Project Implementation Unit, Udaipur**


  
**Rakesh Kumar Karn**  
**Executive Engineer (Rural-I)**  
**A.V.V.N.L., Distt. Udaipur**

Enclosure to Ministry of Road Transport & Highways letter no.  
RW/NH-33044/29/2015/S&R(R) Dated 22th November, 2016

Check list for processing the proposal for Laying / Crossing of utility line in the land along National Highway

Sr. No.	Item	Measurement Observations as per site condition	Morth Norms	Whether complying with MORTH Norms**
1	Details of already laid utility service, if any	No	Enclosed	Yes/No
2	Whether up gradation of the stretch in near future is proposed or not	No	Yes	Yes/No
	(a) If yes, provision of utility adversely affect the plan of up- gradation	N.A.	Not affect plan of up- gradation	Yes/No
3	Laying of the utility service along the National Highways.			
3.1	Location of proposed utility service along the stretch	0.75m	Utility Duct/ beyond the toe line of the embankment and drains, and close to the extreme edge of the RoW	Yes/No
3.2	Depth of top of utility service from ground level	1.50m	0.60 meter	Yes/No
3.3	Mechanism for crossing water channel	N.A.	Through utility duct (if provision exists) or beneath the bed of water channel	Yes/No
3.4	Whether ROW is restricted in this stretch?	N.A.		Yes/No
3.4.1	If yes, whether provision of land acquisition is required to lay utility	N.A.		Yes/No
	(a) If yes, whether undertaking for land acquisition along with relevant L.A. details has been furnished	N.A.		Yes/No
3.4.2	Width of concrete duct, if utility services are proposed to be laid in concrete ducts	N.A.	Not less than one lane	Yes/No

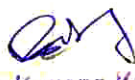
  
Project Director  
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Rakesh Kumar Karn  
Executive Engineer (Rural-I)  
A.V.V.N.L., Distt. Udaipur

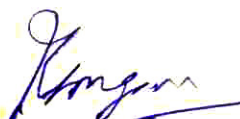


4	Laying of utility services across the NH			
4.1	Whether Existing drainage structures is allowed to carry the utility lines.	No	Not to be allowed	
4.2	Proposed crossing of utility service	Road Crossing	Perpendicular to NH	Complying
4.3	Type of casing pipe/conduit carrying the utility line.	HDPE (Have adequate strength)	Steel, cast iron, or NA reinforced cement concrete and have adequate strength	Yes/No
4.4	Whether ends of the casing/conduit pipe are sealed from the outside	Sealed	Sealed	Yes/No
4.5	Length of casing/conduit pipe crossing NH	Crossing	Extend from drain to drain in cuts and toe to toe of slope in the fills	Yes/No
4.6	Depth of top of the casing/conduit pipe.	1.50m	At least 1.2 m below the top of subgrade	Yes/No
4.7	Crossing method in case of CC pavement.	H.D.D.	Only boring method (HDD)	Yes/No
4.8	Horizontal and vertical clearances in case utilities are allowed overhead	N.A. (Underground Only)	In accordance with IRC codes	Yes/No
5	Document I Drawings enclosed with the proposal			
5.1	Cross-Section showing the size of trench for open trenching method	N.A.	Enclosed, if applicable	Yes/No
	(a) Trench width	N.A.	More than 30 cm and less than 60 Cm. wider than the outer diameter of the utility pipe	Yes/No
	(b) Filling of trench	N.A.	as per Ministry guidelines vide letter No. RW/ NH-34044/29/2 015/ S&R (R) dated 22.11.2016	Yes/No
	(c) Location of trench	N.A.	extreme edge of the ROW	Yes/No
5.2	Cross section showing the size of pit and location of conduit for HDD method	Enclosed	Enclosed, if applicable	Yes/No
5.3	Strip plan/ Route plan showing utility line, chainage, width of ROW, distance of proposed utility from the edge of ROW, important mile stone, intersections, cross drainage works etc	Enclosed	Enclosed	Complying
5.4	Plan and profile drawing of stretch showing cross section of road at 20m distance alongwith ROW and proposed utility	Enclosed	Enclosed	Yes/No

  
**Project Director**  
 National Highways Authority of India  
 Project Implementation Unit, Udaipur

  
**Akesh Kumar Karn**  
 Executive Engineer (Rural-I)  
 A.V.V.N.L., Distt. Udaipur

6	Methodology for laying of utility line	H.D.D.	Enclosed	Yes/No
7	Draft License Agreement is as per Ministry guidelines vide letter No. RW/NH-34044/29/2015/5&R (R) dated 22.11.2016 and signed by two witnesses	Yes, As per MoRTH Guidelines	Enclosed	Yes/No
8	License fees in Favor of MoRTH RPAO Jaipur	Yes, As per MoRTH Guidelines	as per Ministry guidelines vide letter No. RW/ NH-34044/29/2 015/ S&R (R) dated 22.11.2016	Yes/No
9	Whether Bank Guarantee has been obtained	Yes, As per MoRTH Guidelines	as per Ministry guidelines vide letter No. RW/ NH-34044/29/2 015/ S&R (R) dated 22.11.2016	Yes/No
	(a) If yes, whether Confirmation as per of BG has been obtained as per MORTH/ NHAI guidelines	Yes, As per MoRTH Guidelines		Yes/No
10	Affidavit / Undertaking from the Applicant for			
10.1	Undertaking for net to damage other existing utility, if damaged then to pay the losses to either to MoRTH/NHAI or to the concerned agency.	Yes	Enclosed	Yes/No
10.2	Undertaking for renewal of Bank Guarantees and when asked by NHAI/ MoRTH	Yes	Enclosed	Yes/No
10.3	Undertaking for confirming all standard condition of MORTH/NHAI guidelines.	Yes	Enclosed	Yes/No
10.4	Undertaking for shifting of utility as and when asked by MoRTH/ NHAI within a month at their own cost.	Yes	Enclosed	Yes/No
10.5	Undertaking for indemnity against all damages and claims.	Yes	Enclosed	Yes/No
10.6	Undertaking for management of traffic movement during laying of utility line without hampering the traffic.	Yes	Enclosed	Yes/No
10.7	Undertaking that If any claim is raised by the Concessionaire/ contractor then the same has to be paid by the applicant	Yes	Enclosed	Yes/No
10.8	Undertaking that the applicant has obtained various safety clearances from the representative authorities such as directorate of Electricity, Chief controller of Explosives, Petroleum and Explosive Safety Organization, Oil Industry Safety Directorate, State/Central Pollution Control Board and any other statutory clearances applicable, before applying to Highway Administration	Yes	Enclosed	Yes/No

  
**Project Director**  
 National Highway Authority of India  
 Project Implementation Unit, Udaipur

  
**Rakesh Kumar Karn**  
 Executive Engineer (Rural-I)  
 Executive Engineer, (O & M), Pratapnagar  
 Ajmer Vidut Vitran Nigam Limited  
 [Name, Designation and Signature of the authorized representative]



## Methodology of Crossing of H.T. Electric Line - Open Trenching / Trenchless (HDD)

### Trenching Method:

Laying of H.T. Electric Line along N.H.-48 (Old N.H. - 27) (Over Head Inside owner's own land) will be done by conventional method/manual and Machine Trenching method. The Cable laying (Overhead inside the owner's own land) work will be carried out in phased manner in such a way that after the HDPE / Protection ducts are laid for H.T. Electric Line, (Overhead inside the owner's own land) will be reinstated to its original surface.

### Trench Filling Method:

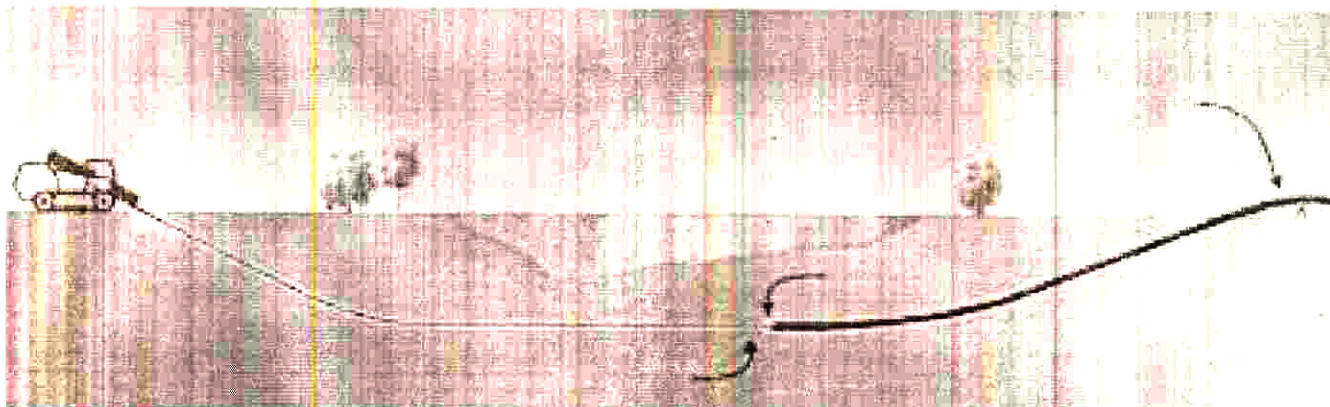
As a measure of abundant precaution against future settlement and other allied problems, only selected granular material will be used in filling reinstatement of trenches. The entire depth of cutting will be filled with coarse sand or the excavated material, compacted in layers not exceeding 75 mm when compacted by ordinary power roller /plate compacter. Special Compaction equipment like plate compacter, frog hammer will be utilized besides ordinary power roller.

### Trenchless Crossing: HDD Method

Horizontal Directional Drilling (HDD) is a technique for installing product pipes, including utility lines. Below ground using a surface-mounted drill rig that launches and places a drill string at a shallow angle to the surface and has tracking and steering capabilities. In recent years HDD has been the preferred methodology due to several government policies conducive to infrastructure growth.

All crossing on the Route will be done by Horizontal Directional Drilling method without disturbing the road surface.

A Typical HDD Methodology is shown below:



**Rakesh Kumar Karn**  
Executive Engineer (Rural-I)  
A.V.V.N.L., Distt. Udaipur