सत्यमेव जयते

# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

( सड़क परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार )

## NATIONAL HIGHWAYS AUTHORITY OF INDIA

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

**क्षेत्रीय कार्यालय / REGIONAL OFFICE**

ई-6/47, स्मृति परिसर, सांईबोर्ड के पास, अरेरा कॉलोनी, भोपाल ( म.प्र. )-462016

E-6/47, Smriti Parisar, Near Sai Board, Arera Colony, Bhopal (M.P.)-462016

दूरभाष/Phone: 0755-2426638, फैक्स/Fax: 0755-2426698, ई-मेल/E-mail ID: robhopal@nhai.org

NHAI/RO-Bhopal/PIU-BPL/Electric line/Bansapur/2025/54986 Date - 12.08.2025

**Invitation of Public Comments**

**Sub:** Permission for laying of electrical line/cable in NHAI ROW underground electric line crossing and laying of electrical line at NH-46 Ch. 461.642 (design Ch. 27.595) near village Bansapur Tehsil Budhni District Sehore in the state of MP - Public Comment- Reg.

Ref: PD, PIU Bhopal e-file no. 290452 dated 08.08.2025

1. PD, PIU Bhopal, NHAI vide e-file note dated 08.08.2025 has submitted the proposal for laying of 33KV electrical line/cable in NHAI ROW underground electric line crossing and laying at NH-46 Ch. 461.642 (design Ch. 27.595) near village Bansapur Tehsil Budhni District Sehore in the state of MP.

2. As per Ministry vide OM No. RW/NH-33044 S&R (R) dated 22.11.2016, the application shall be put out in public domain for 30 days for seeking claims and objections (on ground of public inconvenience, safety and general public interest).

3. Accordingly, the public comments are hereby invited on the above proposal (copy of application enclosed) for seeking claims and objections within 30 days (i.e. by 12.09.2025) on public portal {i.e. website of MoRTH (www.morth.nic.in)} beyond which no comments will be considered. The address of comments inviting authority is as under:

**The Highway Administrator**
**O/o Regional Officer,**
**National Highways Authority of India**
**E-6/47, Smriti Parisar, Near Sai Board**
**Arera Colony, Bhopal (MP) - 462016**
**E-mail ID: robhopal@nhai.org**

4. This is being issued with the approval of Regional Officer cum Highway Administration.

12/08/2025
**(Paras Bansal)**
Manager (T)

Copy to:

(i) Web Admin, NHAI-HQ-with request for uploading on the NHAI website.
(ii) The Senior Technical Director, NIC, Transport Bhawan, New Delhi-110001 for uploading on Ministry's Website.
(iii) The Project Director, NHAI, PIU- Bhopal (M.P.) for information.
(iv) Surplus Resource Enterprises, Bhopal (MP).

## CHECKLIST

Guidelines for project Directors for processing the proposal for laying of underground cable pipeline in the land along National Highways vested with NHAI.

### Relevant circulars of Ministry of Road Transport and Highways

1) Circular No. NH-III/P/66/76 dated 18/19.11.1976.
2) Circular No. RW/NH-III/P/66/76 dated 11.5.1982.
3) Circular No. RW/NH-11037/1/86/DOI (ii) dated 28.7.1993.
4) Circular No. RW/NH-11037/1/86/DOI dated 19.1.1995.
5) Circular No. RW/NH-34066/2/95/S&R dated 25.10.1999.
6) Circular No. RW/NH-34066/7/2003 S&R(B) dated 17.9.2003.
7) NHAI's circular No. NHAI/OEC/2k/Vol II dated 7.11.2000, which includes the comprehensive guidelines and draft license agreement by private party in the land along National Highway vested with NHAI.
8) Circular No. RW/NH-33044/27/2000-S&R (R) dated 21.3.2006. It is regarding the modification of previous Ministry circular enhancing the amount of performance bank Guarantee @ Rs 50/- per route meter in place of earlier rate of Rs 25/- per route meter.
9) Circular No. RW/NH-33044/29/2015/S&R (R) dated 22.11.2016.

| S.NO | Item | Information/Status | Remarks |
|---|---|---|---|
| 1 | **General Information** | | |
| 1.1 | Name and Address of the Applicant/ Agency | MADHYA PRADESH BUILDING DEVELOPMENT CORPORATION LIMITED Address: MPBDC, 16- A, Arera Hills, Bhopal, Madhya Pradesh 462011<br><br>Name CONTRACTOR<br><br>M/s Surplus Resource Enterprises<br><br>Add:- 2154, Paras Nagar, Berasia Road Karond Bhopal (MP)-462038, Email:- Surplusworkplace@gmail.com | Yes |
| 1.2 | National Highway Number | NH-46 (old NH-69) | Yes |
| 1.3 | State | Madhya Pradesh | Yes |
| 1.4 | Location | *Village-Bansapur, Tehsil/taluka-Budni & District-Sehore in ths State of Madhya Pradesh.* | Yes |
| 1.5 | (Chainage in KM) | *KM stone CH.* 461.612<br>Design CH. 27+595 | Yes |
| 1.6 | Length in Meters | 60m in NH ROW total 100m | Yes |

| | | | |
|---|---|---|---|
| 1.7 | Width of available ROW | 60 M total | Yes |
| | (a) Left side from center line towards increasing chainage/Km direction | 30M | Yes |
| | (b) Right side from center line towards increasing chainage/Km direction | 30M | Yes |
| 1.8 | Proposal to lay underground utility. | Yes | Yes |
| | (a) Left side from center line towards increasing chainage/Km direction | Yes | Yes |
| | (b)Right side from center line towards increasing chainage/Km direction | Yes | Yes |
| 1.9 | Proposal to acquire land | Not required beyond available ROW | Yes |
| | (a) Left side from center line. | Not required beyond available ROW | Yes |
| | (b) Right side from center line. | Not required beyond available ROW | Yes |
| 1.10 | Whether Proposal is in the same side where land is not to be acquired | Both Side ROW of NHAI is sufficient | Yes |
| | If not then where to lay the cable. | NA | Yes |
| 1.11 | Details of already laid services , if any, along the proposed route | Yes approximate 60M | Yes |
| 1.12 | Number of existing lanes (2/4/6/8 lanes) | Existing 4 lane | Yes |
| 1.13 | Proposed Number of lanes (2 lanes with paved shoulders/4/6/8 lanes) | Presently 4 lane (May be 6 lane in future) | Yes |
| 1.14 | Services road existing or not If yes then which side | Service road exist at this location. | Yes |
| | (a) Left side from center line. | Yes | Yes |
| | (b) Right side from center line. | Yes | Yes |
| 1.15 | Proposed service road | NA | NA |
| | (a) Left side from center line. | NA | NA |
| | (b) Right side from center line. | NA | NA |
| 1.16 | Whether proposal to lay underground cable pipeline is after the service road or between the service road and main carriageway. | After the service road | Yes |
| 1.17 | Whether carrying underground cable pipe line has been proposed on highway bridges. If yes then mention the methodology proposed for the same. | The same shall be done u/g through the bridge by HDD methodology | Yes |
| 1.18 | Whether carrying of underground cable pipeline has been proposed on parapet/any part of the bridges. If yes then mention the methodology proposed for the same. | Not through parapet nor through any part of bridge | Yes |
| 1.19 | **If crossing of the road involved** | | NA |
| | If yes, it shall be either encased in pipes or through structure or conduits specially built for that purpose at the expenses of the agency owning the line. | Yes it shall be either encased in pipes or through structure or conduits specially built for that purpose at the expenses of the agency owning the line. | Yes |
| | (a) Whether existing drainage structures are allowed to carry underground cable pipeline. | NA | NA |
| | (b) Is it on a line normal to NH, if No Mention angle of crossing | Yes | Yes |

| | | | |
|---|---|---|---|
| | (c) What is the distance of crossing the underground cable pipeline pipelines from the existing structures. Crossings shall not be too near the existing structures on the National Highway, the minimum distance being 15 meter. | 15m distance shall be maintained | Yes |
| | (d) The casing pipe (or conduit pipe in the case of electric cable) carrying the utility line shall be of steel , cast iron, or reinforced cement concrete and have adequate strength and be large enough to permit ready withdrawal of the carrier pie/cable. Mention type of casing. | conduit pipe is of cast iron of sufficient strength shall be provided (If required) Only for underground crossing. | Yes |
| | (e) Ends of the casing/conduit pipe shall be sealed from the outside, so that it does not act as a drainage path. | Yes proper restriction in this regard shall be taken during completion of work | Yes |
| | (f) The casing/ conduit pipe should, as minimum extend from the drain to drain in cuts and toe of slope in the fills. | Yes | Yes |
| | (g) The top of the casing/conduit pipe should be at least 1.2 meter below the surface of the road subject to being at least 0.3 meter below the drain inverts. Mention the proposed details. | Yes | Yes |
| | (h) Mention the methodology proposed for the crossing of road for the proposed underground cable pipe line. Crossing shall be by boring method (HDD)[ Trench -less Technology] especially where the existing road pavement is of cement concrete or dense bituminous concrete type. | HDD method | Yes |
| | (i) The casing /conduit pipe shall be installed with an even bearing throughout its length and in such a manner as to prevent the formation of a waterway along it. | Yes | Yes |
| **2** | **Document/ Drawings to be enclosed with the proposal.** | | |
| 2.1 | Cross section showing the size of trench for open trenching method (Is it normal size of 1.2m deep x0.3m wide) | NA | NA |
| | (i) Should not be greater than 60 cm wider than the outer diameter of the pipe. | Yes | Yes |
| | (ii) Located as close to the extreme edge of the right-of-way as possible but not less than 15 meter from the centre-lines of the nearest carriageway. | Yes | Yes |
| | (iii) Shall not be permitted to run along the National Highways when the road formation is situated in double cutting. Nor shall these be laid over the existing culverts and bridges. | Yes | Yes |
| | (iv) These should be so laid that their top is at least 0.6 meter below the ground level so as not to obstruct drainage of the road land. | Yes | Yes |
| 2.2 | Cross section showing the size of pit and location of cable for HDD method. | | |

| | | | |
|---|---|---|---|
| 2.3 | Alignment plan of project plan & profile showing underground cable pipeline, chainage, width of ROW, distance of proposed underground cable pipeline from the edge of ROW, important mile stone, intersections, cross drainage works etc. | May be enclosed by AE of the Project | Yes |
| 2.4 | Methodology for laying of underground cable pipeline. | Yes encloed | Yes |
| 2.4.1 | Open Trenching method. (May be allowed in utility corridor only where pavement is neither cement concrete nor dense bituminous concrete type. IF yes, What is the Methodology of refilling of trench? | NA | NA |
| | (a) The trench width should be at least 30 cm, but not more than 60cm wider than the outer diameter of the pipe. | NA | NA |
| | (b) For filling of the trench, bedding shall be to a depth of not less than 30 cms. It shall consist of granular material free of lumps, clods and cobbles and graded to yield a firm surface without sudden change in the bearing value. Unsuitable soil and rock edged should be excavated and replaced by selected material. | NA | NA |
| | (c) The backfill shall be completed in two steps (i) side fill to the level of the top to the pipe and (ii) overfill to the bottom of the road crust. | NA | NA |
| | (d) The side fill shall consist of granular material laid in 15 cm layers each consolidated by mechanical tampering and controlled addition of moisture to 95% of the Proctors' density. Over fill shall be compacted to the same density as the material that had been removed. Consolidation my saturation or pending will not be permitted. | NA | NA |
| | (e) The road crust shall be built to the same strength as the existing crust on either side of the trench. Care shall be taken to avoid the formation of a dip at the trench. | NA | NA |
| | (f) The excavation shall be protected by flagman, signs and barricades, and red lights during night hours. | NA | NA |
| | (g) If required, a diversion shall be constructed at the expenses of agency owning the utility line. | | NA |
| 2.4.2 | Horizontal Directional Drilling (HDD ) Method | Yes | Yes |
| 2.4.3 | Methodology for laying of underground cable pipeline through CD works and method of laying. In cases where the carrying of underground cable pipeline on the bridge becomes inescapable. | NA | NA |
| 3 | **Draft License Agreement signed by two** | Yes | Yes |

| | | | |
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| | witnesses. | | |
| 4 | 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 if required till satisfactory completion of work)as a security for ensuring/making good the excavated trench for laying the underground cable Pipeline ducts by proper filling and compaction, clearing Debris/loose earth produced due to execution of trenching at least 50m away from the edge of the right of way. No payment shall be payable by the NHAI to the license for clearing debris/loose earth. Performance BG as per above is to be obtained. | Yes same shall be paid by applicant and required bank guarantee in favor of Highway administration shall be provided by the applicant. | Yes |
| 4.1 | Confirmation of BG has been obtained or not as per NHAI guidelines. | Yes (Same shall be provided by concerned bank) | Yes |
| 5 | **Affidavit/ Undertaking from the Applicant for the following are to be furnished.** | | |
| 5.1 | Not to Damage to other utility, if damaged then pay the losses either to NHAI or to the concerned agency. | Enclosed on 50 Rs stamp | Yes |
| 5.2 | For renewal of bank Guarantee | Enclosed | Yes |
| 5.3 | For confirming all standard condition of Ministry Circulars and NHAI's guidelines. | Enclosed | Yes |
| 5.4 | For shifting of underground cable Pipeline as and when required by NHAI at their own cost. | Enclosed | Yes |
| 5.5 | For shifting of underground cable Pipeline due to 4/6 lanning. Widening of NH | | Yes |
| 5.6 | For indemnity against all damages and claims. | Enclosed | Yes |
| 5.7 | For traffic movement during laying offfor shifting of underground cable Pipeline due to 4/6 lanning. Widening of NH pipe line to be managed by the applicant. | Enclosed | Yes |
| 5.8 | If any claim is raised by the Concessionaire the same has to be paid by the applicant. | Enclosed | Yes |
| 5.9 | Prior approval of the NHAI shall be obtained before undertaking any work if installation, shifting or repairs, or alterations to the For shifting of underground cable Pipeline due to 4/6 lanning. Widening of NH line/ any other utility located in the national highway right-of-ways. | Enclosed | Yes |
| 5.10 | Expenditure, if any, incurred by NHAI for repairing any damage caused to the national Highway by the laying, maintenance or shifting of the For shifting of underground cable Pipeline due to 4/ 6 lanning. Widening of line at NH will be borne by the applicant agency owning the line. | Enclosed | Yes |
| 5.11 | If the NHAI considers it necessary in future to move the utility line for any work of | Enclosed | Yes |

| | | | |
|---|---|---|---|
| | improvement or repairs to the road, it will be carried out as desired by the NHAI at the cost of the agency owning the utility line within a reasonable time (not exceeding 60 days) of the intimation given. | | |
| 5.12 | Certificate from the applicant in the following format | | |
| | (i)Laying of Underground cable pipe line will not have any deleterious effects on any of the bridge components and roadway safety for traffic. | Yes enclosed | |
| | (ii)"We do undertake that I will relocate service road/approach road/utilities at my own cost notwithstanding the permission granted within such time as will be stipulated by NHAI" for future four/ six-lanning or any other development. | Yes enclosed | |
| 6 | Who will sign the agreement on behalf of Underground cable pipe line agency? | M/s Surplus Resource Enterprises | Yes |
| | Power of Attorney to sign the agreement is available or not. | Authorization is provided by agency. | Yes |
| **7** | **The project director, will submit the following Certificates.** | | |
| 7.1 | Certificate for proposal for confirming of all standard condition issued vide Ministry of road transport and highways circular No. RWINH-33044/29/201S/S&R(R) dated 22.11.2016 | In purview of NHAI PIU Bhopal | Yes |
| 7.2 | Certificate from PD in the following format | | |
| | (i)" it is certified that any other location of the underground cable pipeline would be extremely difficult and unreasonable costly and the installation of underground cable pipeline within ROW will not adversely affect the design, stability & traffic safety of the highway nor likely future improvement such as widening of the carriageway, easing of curve etc." | NA | NA |
| | (ii)For 4/6-lanning | NA | NA |
| | (a)Where feasibility is available "I do certify that there will be no hindrance to proposed four/six-lanning based on the feasibility report considering proposed structure at the said location". | In purview of NHAI PIU Bhopal | Yes |
| | (b)In case feasibility report is not available "I do certify that sufficient ROW is available at site for accommodating proposed four/ six-lanning". | In purview of NHAI PIU Bhopal | 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 pipeline duct has also been granted as a right of way to the concessionaire under the [----------Section from Km----------to Km----------of NH No: ---------- | In purview of NHAI PIU Bhopal | Yes |

| | | | |
|---|---|---|---|
| | build, operate and transfer basis] and therefore, the licensee shall honor the same." | | |
| 9 | Who will supervise the work of laying of underground cable line | | Yes |
| | (a) On behalf of the Applicant | M/s Surplus Resource Enterprises | Yes |
| | (b) On behalf of NHAI | In purview of NHAI PIU Bhopal | Yes |
| 10 | Who will ensure that the defects in road portion after laying of underground cable pipeline are corrected and if not corrected then what action will be taken | | Yes |
| | (a) On behalf of the Applicant | M/s Surplus Resource Enterprises | Yes |
| | (b) On behalf of NHAI | In purview of NHAI PIU Bhopal | Yes |
| 11 | Who will pay the claims for damages done/disruption in working of concessionaire if asked by the Concessionaire? | | Yes |
| | On behalf of the Applicant | | Yes |
| 12 | 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) | In purview of NHAI PIU Bhopal | Yes |
| 13 | If any previous approval is accorded for laying of underground cable pipeline then photocopy of register of records of permissions accorded as maintained by PD then copy is enclosed. | In purview of NHAI PIU Bhopal | Yes |
| 14 | Name of Highway authority of NHAI/PWD/BRO | NHAI PIU Bhopal | Yes |
| 15 | Highway Administration address | Regional Officer National Highways authority of Indian (RO) Regional Office Bhopal | Yes |

Manager (Tech.)
NHAI, PIU-Bhopal

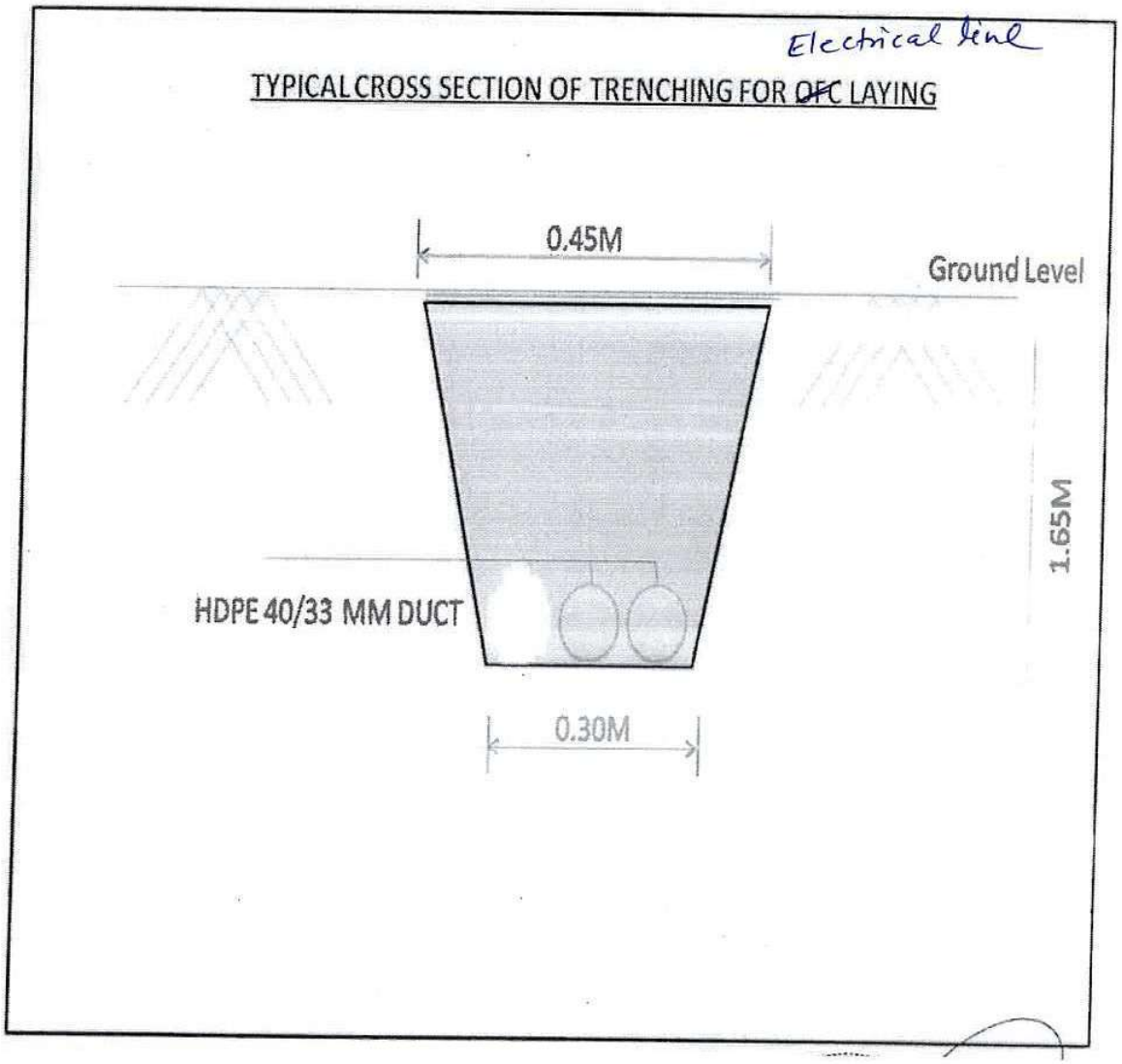
LION ENGINEERING CONSULTANTS PVT. LTD. * UJJED-ITARSI * NH-46

Verified by
Surplus Resource Enterprises
Proprietor
Authorized Signatory
*For* M/s Surplus Resource Enterprises

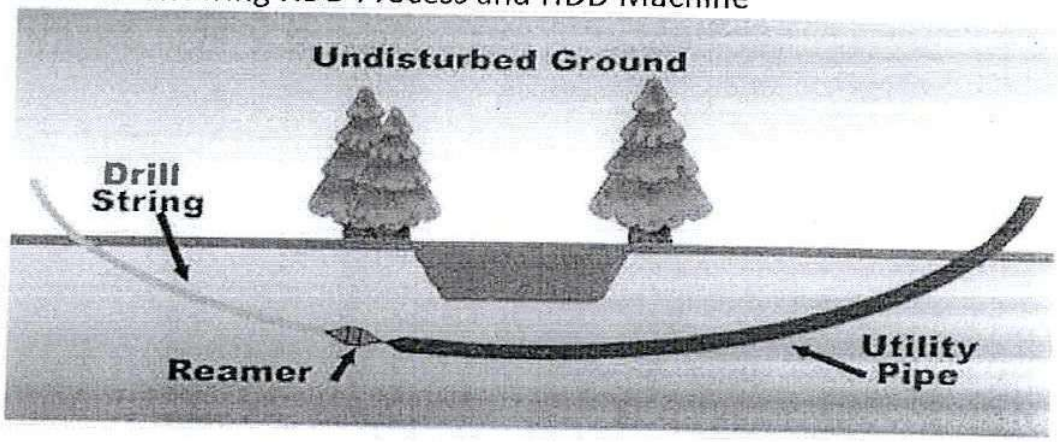
Verified by

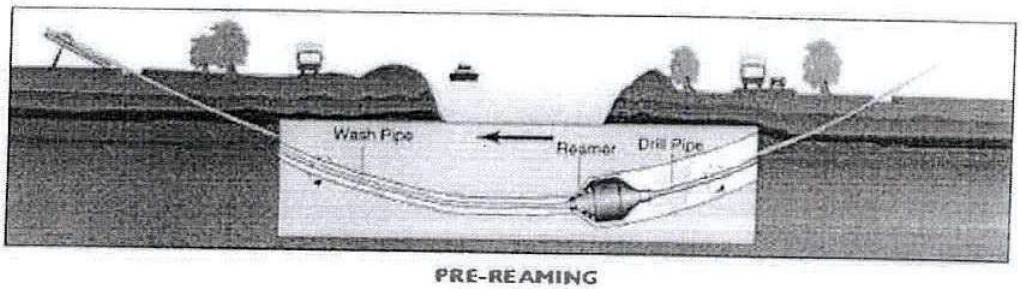
Project Director NHAI PIU Bhopal
National Highway Authority of India
परियोजना निदेशक
Project Director
भा रा रा.प्रा परि.क्रिया स्काई भोपाल
NHAI PIU-Bhopal (M.P.)

**ANNEXURE NO-7**

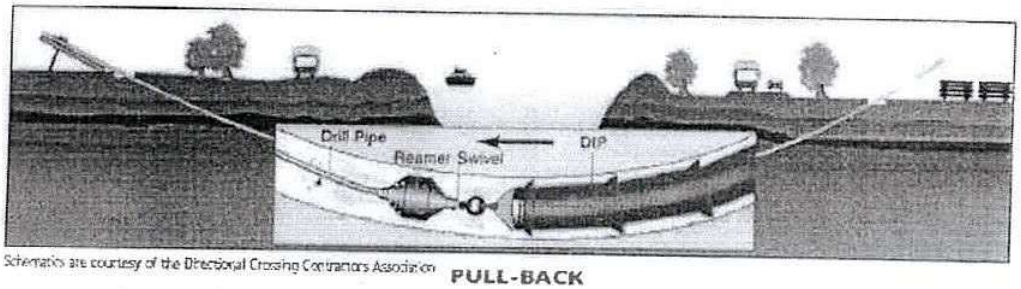


## Pictures Showing HDD Process and HDD Machine



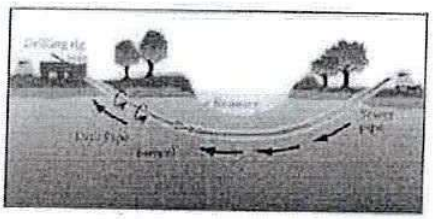



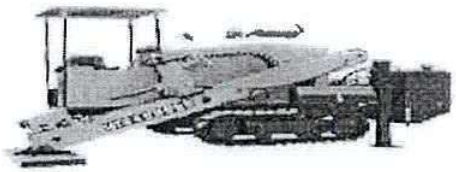

PRE-REAMING

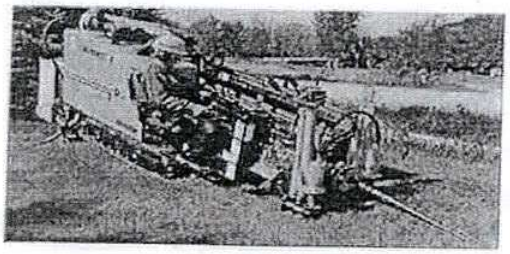



Schematics are courtesy of the Directional Crossing Contractors Association

PULL-BACK







**Annexure 8**

## Methodology of Laying of OFC - Open Trenching & Trenchless ( HDD )

**Trenching Method :**

Laying of Optical Fiber Cable along SH------along the mentioned route will be done by conventional method/manual and Machine Trenching method. The dimension of the trench will be 165 cms in depth and 45 cms in width. The Cable laying work will be carried out in phased manner in such a way that after the HDPE / Protection ducts are laid for Optical Fiber Cable, the trench will be reinstated to its original surface.

**Trench Filling Method:**

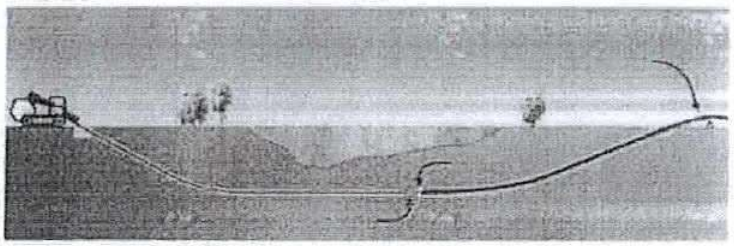
As a measure of abundant precaution against future settlement and other allied problems, only selected granular material will be used in filling reinstatement of trenches. The entire depth of cutting will be filled either with coarse sand or the excavated material, compacted in layers not exceeding 75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



Enclosure to Ministry of Road Transport & Highways letter No.RW/NH-33044/27/2005/S&R(R) (Pt.) dated 06.08.2013.

Annexure-IV

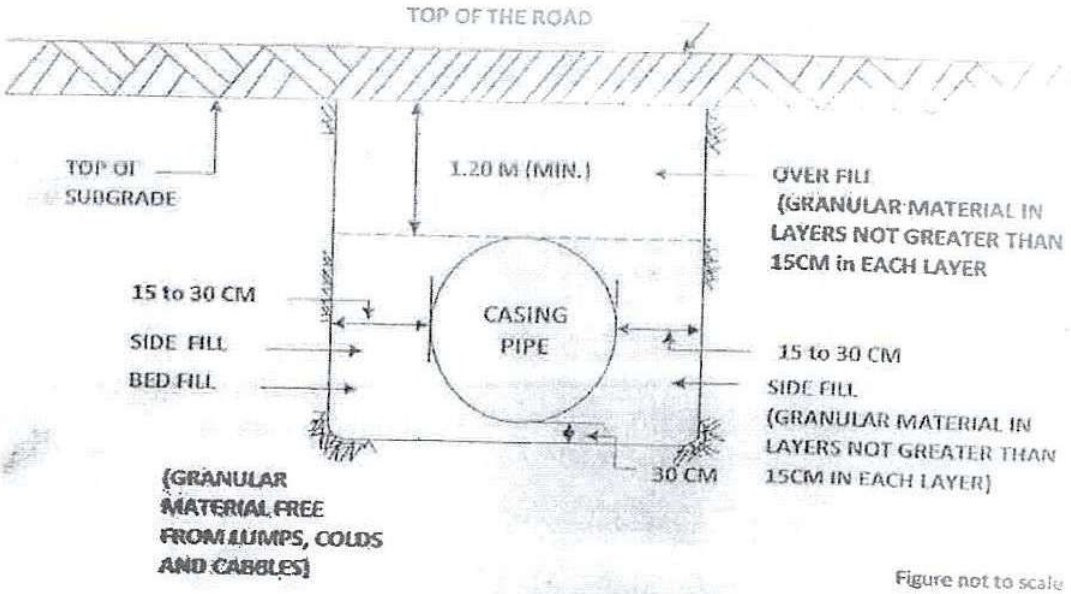



Figure not to scale

**FIGURE-1** INSTALLATION OF CASING PIPE FOR CROSSING THE ROAD

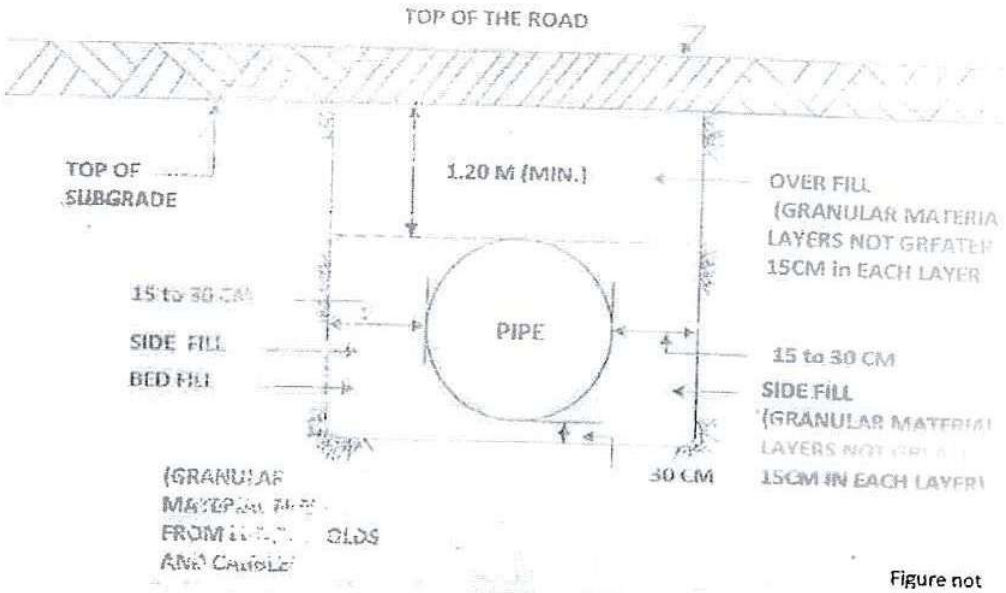
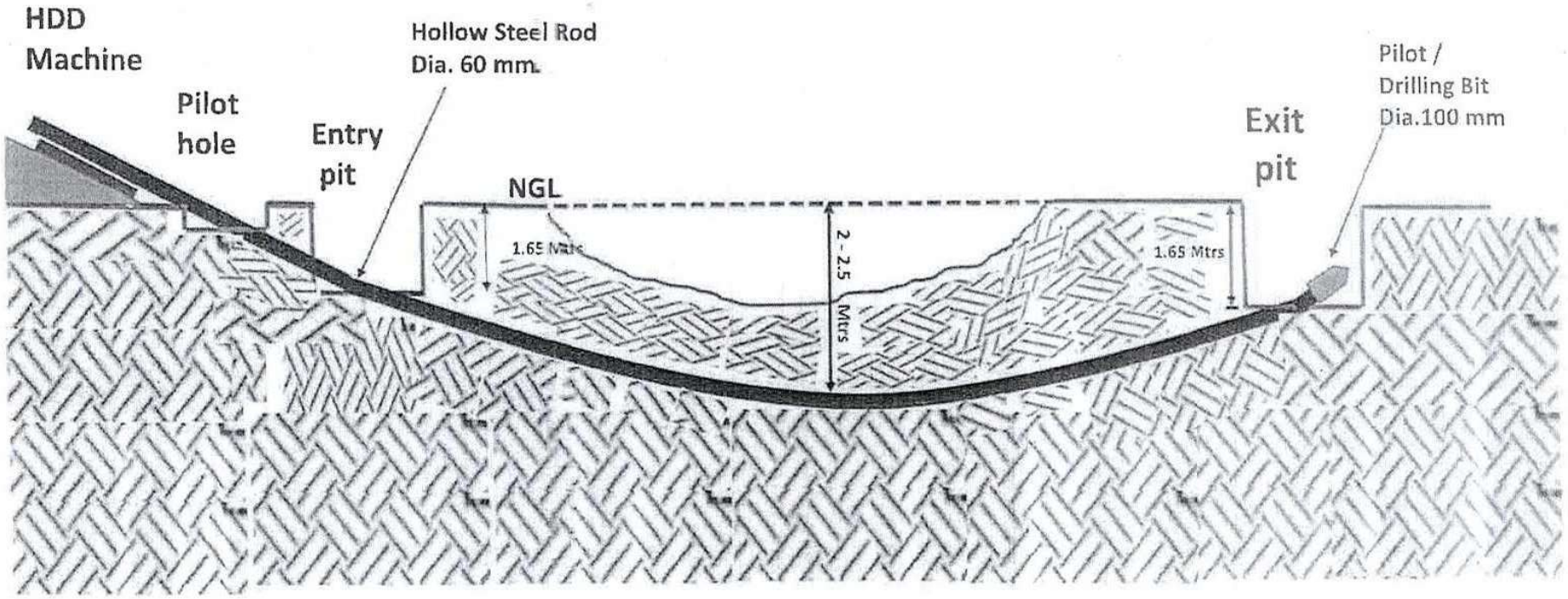



Figure not

FIGURE-2 INSTALLATION OF PIPE FOR
ALONG THE ROAD




TYPICAL CROSS SECTION SHOWING HORIZONTAL DIRECTIONAL DRILLING