भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन एवं राजमार्ग मंत्रालय)

National Highways Authority of India

(Ministry of Road Transport & Highways)

परियोजना क्रियान्वयन इकाई छिन्दवाड़ा / Project Implementation Unit Chhindwara

एच.नं. 84, पॉलीथिन फैक्ट्री के बाजू में, स्वर्ण जयन्ती नगर, खजरी रोड, फ्रेन्ड्स कॉलोनी, छिन्दवाड़ा म.प्र. 480001

H.No. 84, Beside Polythene Factory, Swarna Jayanti Nagar, Khajri Road, Near Friends Colony, Chhindwara (M.P.) 480001

दूरभाष/Phone : 07162-292880

फैक्स/Fax : 07162-292880

ई-मेल/E-MAIL chhindwara@nhai.org

वेबसाईट/Website : www.nhai.org

CHW/Water Pipeline_Crossing/NH-547/2022/6233 Date: 11.05.2023

INVITATION OF PUBLIC COMMENTS

Sub:- Application for Permission for the 2 Nos. of Crossing Proposal for Laying of Water Pipeline for Construction of Pench Micro Complex-2 Section of NH-547 **(1)** Km.- 99.900 Near Village-Jhirri Towards Narsinghpur **(2)** Km.- 98.400 Near Bangaon Circle, Towards Narsinghpur, District-Chhindwara in the State of MP-reg.

Ref:- 1. Regional office Lt. No. NHAI/RO-MP/Permission/2022/204 Dated 28.09.2022
2. M/s Madhya Pradesh PDPCD Chhindwara office Lt. No. 1760 Dated 12.09.2022

With reference to subject matter, M/s Madhya Pradesh Pench Diversion Project Canal Division Chhindwara has submitted the 2 Nos. of Crossing Proposal for Laying of Water Pipeline for Construction of Pench Micro Complex-2 Section of NH-547 **(1)** Km.- 99.900 Near Village-Jhirri Towards Narsinghpur **(2)** Km.- 98.400 Near Bangaon Circle, Towards Narsinghpur, District-Chhindwara in the State of Madhya Pradesh in as per Ministry Circular RW/NH-33044/29/2015/S&R(R) dated 22.11.2016.

As per para-4 of MoRTH Circular No. RW/NH-33044/29/2015/S&R (R) dated 22.11.2016, the Highway Administrative shall put out in the Public Domain for 30 days for seeking claims and objection (on ground of public inconvenience, safety, and general public interest).

In view of the above, the comments/objection of the affected public is hereby invited with reference to Ministry's Circular dated 22.11.2016 for the above mentioned proposal.

The comments/objection may be addressed to the below-mentioned address, which should reach to this office, within 30 days from the date of publication; beyond which no comments shall be entertained.

PROJECT DIRECTOR,
NATIONAL HIGHWAYS AUTHORITY OF INDIA,
PROJECT IMPLEMENTAION UNIT-CHHINDWARA,
HOUSE NO. 84, BESIDE POLYTHENE FACTORY,
SWARNA JAYANTI NAGAR, KHAJARI ROAD, NEAR FRIENDS COLONY,
CHHINDWARA-480001, MADHYA PRADESH
E-MAIL-chhindwara@nhai.org,
chhindwarapd@gamil.com

11/5/2023

(Sanjeev Sharma)
Project Director,
PIU-Chhindwara, (M.P.)

Copy to:-

1. **Web Admin,** NHAI HQ, New Delhi-for Uploading on NHAI Website.
2. **Sr. Technical Director,** NIC, Transport Bhawan, New Delhi-for Uploading on Ministry's Website.
3. **Executive Engineer,** M/s MP Pench Diversion Project Canal Division Chhindwara for information.

कार्यालय कार्यपालन यंत्री
पेंच व्यपवर्तन परियोजना नहर संभाग, सिंगना तह. चौरई जिला छिंदवाडा (म.प्र.)
Email : eepenchcanal@rediffmail.com

ज्ञापन क्रमांक 1760 /कार्य/2022–23/सिंगना, दिनांक 12/09/2022

प्रति,

परियोजना निदेशक
भारतीय रास्ट्रीय राजमार्ग प्राधिकरण
परियोजना, क्रियान्वयन इकाई
छिंदवाड़ा (म.प्र.)

विषय :– निर्माणाधीन पेंच माईक्रो काम्पलेक्स–2 के निर्माण हेतु आ रही भारतीय राष्ट्रीय मार्ग को क्रास करने की अनुमति बावत्।

संदर्भ :– इस कार्यालय का पत्र क्र.–1276/कार्य/2022–23/सिंगना, दि. 07.06.2022

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उपरोक्त विषयांतर्गत म.प्र. शासन जल संसाधन विभाग के आधीन निर्माणाधीन पेंच व्यपवर्तन परियोजना जिला छिंदवाड़ा अंतर्गत पेंच माईक्रो काम्पलेक्स–2 का निर्माण छिंदवाड़ा जिले के ग्रामों को सिंचाई सुविधा प्रदाय करने हेतु किया जा रहा है, जिसमें विभिन्न व्यास के एम.एस., डी.ई एवं एच.डी.पी.ई. पाईप की (Laying) लेइंग की जा रही है। संलग्न सूची अनुसार भारतीय राष्ट्रीय मार्ग को विभिन्न जगह पाईप क्रासिंग किया जाना प्रस्तावित है। इस हेतु उक्त संदर्भित पत्र द्वारा प्रकरण आपके कार्यालय में प्रस्तुत किया गया था। आपके द्वारा प्रकरण की जांच पश्चात पायी गयी कमियों का निराकरण कर पुनः प्रकरण आपकी ओर प्रस्तुत है। कृपया अनुरोध है, कि संलग्न सूचि में दिये अनुसार रोड क्रासिंग की अनुमति प्रदान करने का कष्ट करें।

सहपत्र :– उपरोक्तानुसार।

(आर.के. भलावी)
कार्यपालन यंत्री
पेंच व्यपवर्तन परियोजना नहर संभाग,
सिंगना तह. चौरई, जिला छिंदवाड़ा (म.प्र.)

पृष्ठा. क्रमांक /कार्य/2022–23/सिंगना, दिनांक /09/2022

प्रतिलिपिः– अनुविभागीय अधिकारी पेंच व्यपवर्तन मिट्टी बांध उपसंभाग क्रमांक–02 सिंगना की ओर आवश्यक कार्यवाही हेतु प्रेषित।

सहपत्र :– शून्य।

(आर.के. भलावी)
कार्यपालन यंत्री
पेंच व्यपवर्तन परियोजना नहर संभाग,
सिंगना तह. चौरई, जिला छिंदवाड़ा (म.प्र.)

14646
16.09.22

GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
AN ISO 9001:2008 CERTIFIED MINISTRY

S&R(R) ZONE

IAHE Campus,
A-5, Sector-62,
Noida-201301.

F. No. RW/NH-33044/29/2015/S&R(R) **Dated: 22nd November, 2016**

To,

1. The Chief Secretaries of all the State Governments/ UTs
2. The Principal Secretaries/ Secretaries of all States/ UTs Public Works Department dealing with National Highways, other centrally sponsored schemes.
3. All Engineers-in-Chief and Chief Engineers of Public Works Department of States/ UTs dealing with National Highways, other centrally sponsored schemes.
4. The Director General (Border Roads), Seema Sadak Bhawan, Ring Road, New Delhi-110 010.
5. The Chairman, National Highways Authority of India, G-5 & 6, Sector-10, Dwarka, New Delhi-110 075.
6. The Managing Director, NHIDCL, PTI Building, New Delhi-110001

Subject: Accommodation of Public and Industrial Utility Services along and across National Highways – Policy guidelines regarding.

Sir,

The Government has realized that development of infrastructure across the Country on a sustainable and integrated manner continues to be an imperative for improving the state of economy, enhancing quality of life of the citizens and ensuring equitable development throughout the country.

Land being among the most precious of natural resources available, optimum utilization of land shall play a critical role in integrated development of infrastructure. One of the ways to effect such optimum utilization is leveraging land within National Highway (NH) Right of Way (ROW) for laying utility services. This may be achieved through granting permissions for laying utility services along and /or across the ROW. However, environment and safety of the road users are the prime factors in deciding permission for utility services. Permission may be denied, if it is not feasible to ensure safety and environment through requisite safeguards. The Administration of ROW, has been defined in the National Highway Land and traffic Control Act 2002 and relevant Rules 2004.

Keeping in view the need for consistency and clarity, in supersession of all the instructions contained in the earlier previous circulars on the subject, following guidelines shall apply for accommodation of Utility Services along and across National Highways.

2. Laying of Utility Services along the National Highways:

2.1 There shall be a provision for utility ducts for appropriate categories/combination of utilities in the construction of new/4-6 laning of National Highways. The ducts shall be located at appropriate location preferably as close to the extreme edge of ROW.

2.2 Utility services shall be laid in the utility ducts, if provided for the purpose.

2.3 In stretches where utility ducts have not been provided, the utility services shall be located, beyond the toe line of the embankment and drains, as close to the extreme edge of the RoW as possible. While granting permission, requirement of up-gradation also needs to be kept in view.

Manoj Kumar

2.4 It is to be ensured that at no time there is interference with the drainage of the road land and maintenance of the National Highways. Towards this, the top of the utility services shall be at least 0.6 metre below the ground level.
2.5 No utility service shall be laid over existing culverts and bridges except through the utility ducts where such provision exists. In case of absence of such provisions, the Licensee shall make his own arrangement for crossing of cross drainage structure, rivers, etc. below the bed.
2.6 In exceptional cases, where ROW is restricted the utility services can be allowed beneath the carriageway of service road, subject to the condition that the utility services be laid in concrete ducts, which will be designed to carry traffic on top. The width of the duct in such case shall not be less than one lane. In such cases, it also needs to be ensured that maintenance of the utility services shall not interfere with the safe and smooth flow of traffic. The cost of operation and maintenance will have to be borne by the Licensee as per the agreement.

3. Laying of Utility Services across the National Highway:
3.1 The utility services shall be permitted to cross the National Highway either through structure or conduits specially built for that purpose. The casing / conduit pipe should, as minimum, extend from drain to drain in cuts and toe of slope to toe of slope in the fills and shall be designed in accordance with the provision of IRC and executed following the Specifications of the Ministry.
3.2 Existing drainage structures shall not be allowed to carry the lines across.
3.3 The utility services shall cross the National Highway preferably on a line normal to it or as nearly so as practicable.
3.4 The casing/conduit pipe may be installed under the road embankment either by boring or digging a trench. Installation by boring method shall be preferred.

3.5 In case of trenching, the sides of the trench should be done as nearly vertical as possible. The trench width should be at least 30 cm wider, (but not more than 60 cm wider), than the outer diameter of the utility pipe. Filling of the trench shall conform to the specifications contained here-in-below or as supplied by the Highway Authority.
3.5.1 Bedding shall be to a depth not less than 30 cm. 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 edges should be excavated and replaced by selected material.
3.5.2 The backfill shall be completed in two stages (i) Side-fill to the level of the top of the pipe (ii) Overfill to the bottom of the road crust.
3.5.3 The side fill shall consist of granular material laid in 15 cm. Layers each consolidated by mechanical tamping and controlled addition of moisture to 95% of the modified Proctor's density. Overfill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or ponding will not be permitted.
3.5.4 The road crust shall be built to the same strength as the existing crust on either side of the trench or to thickness and specifications stipulated by the Highway Authority.
3.6 When utilities are allowed overhead, the horizontal and vertical clearance in accordance with the IRC shall be maintained.

4. Procedure for processing application for granting permission for use of highway land: Any person who intends to obtain permission shall make an application online in the prescribed form to Highway Administration or an officer authorized by Highway Administration on his behalf. The application must mention details the various safety clearances from the respective authorities such as Directorate of Electricity, Chief Controller of Explosives, Petroleum and Explosives Safety Organization, Oil Industry Safety

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Directorate, State/Central Pollution Control Board and any other statutory clearances as applicable, which must be obtained by the Applicant before applying to the Highway Administration.

The application 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). The permission for laying utility services is to be normally granted within 30 days from the day of closure of public objections and claims. If no communication is received from the Highway Administration within 30 days from the day of closure of public objections and claims, the permission shall be deemed to be granted. The initial permission would be valid for a maximum of 5 years at a time, which can thereafter be considered for renewal. On payment of additional fee at the time of renewal, the permission shall automatically be renewed, unless defaults exist. In case of renewal, rate prevailing at the time of renewal shall be charged.

5. Charges for granting licence for use of highway land: For the purpose of license fee/lease rentals, the utilities have been divided into two categories; i) Public utilities and b) Industrial utilities as per the details given in **Annexure I**.

License Fee/lease rentals described below is for Industrial utilities. The license fee for Public utilities shall be 33% of the fee prescribed for Industrial utilities.

5.1 The following methodology shall be followed for license fees/lease rental determination for utility service lines other than localized infrastructure facilities like towers, repeaters and junction boxes).

License Fees (Rs/sq m/ month) = (Utilized NH land area X prevailing Circle Rate of land per unit area) / (10 x 12) where,

Utilized NH land area = Outer diameter/width of the concerned utility line X length

5.2 The following methodology shall be followed for license fees/lease rental determination for utility services such as towers/repeaters/ junction boxes etc.

License Fees (Rs/sq m/ month) = (Utilized NH land area X prevailing Circle Rate of land per unit area) / (10 x 12) where,

Utilized NH land area = Projection of utility on the ground including area of support system/tower

However, for public utilities, area below the support system/tower shall only be charged.

5.3 Fee shall have to be paid in advance for the period for which permission is granted. In case of renewal, rate prevailing at the time of renewal shall be charged. Delay in deposition of fee shall attract interest @ 15% per annum compounded annually.

5.4 A system to redress grievances and to consider relaxation from the guidelines, in exceptional cases, shall be notified separately and shall be effective from the date of notification.

6. All required restoration, maintenance work subsequent to laying of utility services shall be required to be undertaken by the Licensee at its cost either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards. To process for the granting of permission and prior to signing of Lease agreement, a Performance Bank Guarantee for an amount based on per route metre with a validity of one year initially, in the prescribed format (extendable if required till satisfactory completion of work) shall have to be furnished by the utility service provider/ Licencee, as a security against improper restoration of ground in terms of

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filling/unsatisfactory compaction damages caused to other underground installations/utility services & interference, interruption, disruption or failure caused thereof to any services etc.;

Utility services such as pipes etc (rate in per m)	
provided in the ducts already provided	Rs 50
<= 300 mm dia/width	Rs 100
> 300 mm dia/width but < =1000 mm	Rs 250
> 1000 mm	Rs 500
Utility services such as towers etc (rate in Rs per sq m)	Rs 100

In case the Licensee fails to discharge the obligation of making good of the excavated trench/other restoration work, the Authority shall have a right to make good the damages caused by excavation, at the cost of the Licensee and recover the amount by forfeiture of the Bank Guarantee. In case, the Performance Bank Guarantee is invoked as mentioned above, the Licensee shall be required to replenish and reinstate the required Performance Bank Guarantee within one month of such invoking.

Notwithstanding this, the Licensee shall be liable to pay full compensation to the aggrieved Authority/ its designated agency for any damage sustained by them by reason of the exercise of the RoW facility.

7. The Authority shall enter into a License Agreement with the respective utility service provider in the format enclosed (**Appendix**) including any other conditions imposed by Highway Administration, to ensure safe and uninterrupted flow of traffic. Post signing of the agreement, the utility service provider shall be designated as 'Licensee' for the purpose of this project and will be authorized to install and operate utility services within the NH RoW. However, utility services shall be made operational by the Licensee only after a completion certificate to the effect is issued by the Highway Administration.

Encls: As above.

Manoj Kumar.

(Manoj Kumar)
Executive Engineer(NFSG) (S,R&T) (Roads)
For Director General (Road Development) & SS

Copy to:

1. All Technical Officers in the Ministry of Road Transport & Highways
2. All ROs and ELOs of the Ministry
3. The Secretary General, Indian Roads Congress
4. The Director, IAHE
5. Technical circular file of S&R (R) Section
6. NIC-for uploading on Ministry's website under "What's new"

Copy for kind information to:

7. PS to Hon'ble Minister (RTH&S)
8. PS to Hon'ble MOS (RTH&S)
9. Sr. PPS to Secretary (RT&H)
10. PPS to DG (RD) & SS
11. PPS to SS&FA
12. PS to ADG-I/ ADG-II
13. PS to JS (T)/ JS (H)/ JS (LA&C)/ JS (EIC)

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Appendix

Draft

Enclosure to Ministry of Road Transport & Highways letter No. 33044 / 29 / 2015 /S&R(R) dated 22.11.2016.

AGREEMENT REGARDING GRANTING OF RIGHT OF WAY PERMISSIONS

FOR LAYING UTILITY SERVICES ON NATIONAL HIGHWAYS

Agreement to lay Telecom cable / OFC cable / electrical cable / pipe line/ ducts etc. from to Km of land.

This Agreement made this _____ day of_____ (month) ____ of (year) between _____ acting in his executive capacity through _____ (hereinafter referred to as the "Authority" which expression shall unless excluded by or repugnant to the context, include his successors in office and assigns) on the one part, and M/s , a company registered under the Companies Act, 1956 and having its Registered Office at (hereinafter called the "Licensee") which expression shall unless excluded by repugnant to the context, include his successors/administrator assignees on the second part.

Whereas the Authority is responsible, inter-alia, for development and maintenance of lands in Km ..... to .....of NH No.....RoW.

Whereas the Licensee proposes to lay Telecom cable / OFC cable / electrical cable / pipe line / ducts etc. referred to as utility services in subsequent paras.

Whereas the Licensee has applied to the Authority for permission to lay utility services from Km _____ to Km _____ of road/route up to _____ and from km _____ to km _____ of road/route up to _____ .

And whereas the Authority has agreed to grant such permission for way leave on the NH RoW as per terms and conditions hereinafter mentioned.

Now this agreement witnesseth that in consideration of the conditions hereinafter contained and on the part of the Licensee to be observed and performed, the Authority hereby grants to the Licensee permission to lay utility services as per the approved drawing attached hereto subject to the following conditions, namely.

1. RoW permissions are only enabling in nature. The purpose of extending the way leave facility on the National Highway RoW is not for enhancing the scope of activity of a utility service provider, either by content or by intent. Further, enforceability of the permission so granted shall be restricted only to the extent of provisions/scope of activities defined in the license agreement & for the purpose for which it is granted.

Annexure I

Public Utility provider and Industrial infrastructure

A. Public Utility Provider

A **Public Utility Provider** in context of this Guideline shall mean any organization that provides and maintains the infrastructure for a public service like electricity, gas, water supply, telecom cables and sewage disposal subject to applicable regulation.

B. Eligible activities for Industrial Units or 'Industrial Infrastructure'

Industrial Infrastructure in context of this Guideline shall mean any physical infrastructure that is required to facilitate industrial operations and is constructed, operated and maintained along/across Right of Way of National Highways. Such infrastructure shall include the following:

a. Underground & above ground pipelines including provisions for booster pumping facilities, maintenance bays and other required support infrastructure for transport of legally permitted materials for industrial usage by a business entity having valid license for industrial operations.

b. Conveyor Belts including provisions for maintenance bays and other required support infrastructure for transport of legally permitted materials, by a business entity having valid license for industrial operations.

c. Power cables/wires etc. meant for industrial usage by a business entity having valid license for industrial operations.

d. Any other such associated industrial infrastructure facility.

2. No Licensee shall claim exclusive right on the RoW and any subsequent user will be permitted to use the RoW, either above or below, or by the side of the utilities laid by the first user, subject to technical requirements being fulfilled. Decision of the Authority in relation to fulfilment of technical requirements shall be final and binding on all concerned parties. In case any disruption/damage is caused to any existing user by the subsequent user, the Authority shall not be held accountable or liable in any manner.

3. The Licensee shall be responsible for undertaking all activities including, but not limited to site identification, survey, design, engineering, arranging finance, project management, obtaining regulatory approvals & necessary clearances, supply of equipment, material, construction, erection, testing and commissioning, maintenance and operation and all other activities essential or required for efficient functioning of their own utility/ industrial infrastructure facilities.

4. The Licensee shall pay license fees @ Rs ...../sq m/month to the Authority. The License fee shall become payable from the date of handing over of RoW land to the Licensee, for laying of utilities/cables/conduits/pipelines for infrastructure/ service provider. As regards Tariff and Terms and conditions for providing common utility ducts along National Highways, there shall be a separate agreement regime.

5. Fee shall have to be paid in advance for the period for which permission is granted for entering into a license agreement. In case of renewal, rate prevailing at the time of renewal shall be charged. Delay in deposition of fee shall attract interest @ 15% per annum compounded annually.

6. Present policy of the MoRT&H is to provide a 2.00 m wide utility corridor on either side of the extreme edge of RoW. In cases where utility ducts with sufficient space are already available along NH, the utility services shall be laid in such ducts subject to technical requirements being fulfilled.

7. The utility services shall be laid at the edge of the RoW. In case of restricted width of RoW, which may be adequate only to accommodate the carriageway, central verge, shoulders, slopes of embankment, drains, other road side furniture etc; the utility services shall be laid beyond the toe line of the embankments and clear of the drain.

8. The Licensee shall make his own arrangement for crossing of cross drainage structure, rivers, etc. below the bed. In case, this is not feasible, the utility services may be carried outside the railings/parapets and the bridge superstructure. The fixing and supporting arrangement with all details shall be required to be approved in advance from the concerned Highway Administration. Additional cost on account of fixing and supporting arrangement as assessed by the Authority shall be payable by the Licensee.

9. In exceptional cases, where RoW is restricted the utility services can be allowed beneath the carriageway of service road, if available, subject to the condition that the utility services be laid in concrete ducts, which will be designed to carry traffic on top. The width of the duct shall not be less than one lane. In such cases, it also needs to ensure that maintenance of the utility services shall not interfere with the safe and smooth flow of traffic. The cost of operation and maintenance will have to be borne by the Licensee.

10. It is to be ensured that at no time there is interference with the drainage of the road land and maintenance of the National Highways. Towards this, the top of the utility services shall be at least 0.6 metre below the ground level. However, any structure above ground shall be aesthetically provided for / landscaped with required safety measures as directed by the concerned Authority;

11. The utility services shall be permitted to cross the National Highway either through structure or conduits specially built for that purpose. The casing / conduit pipe should, as minimum, extend from drain to drain in cuts and toe of slope to toe of slope in the fills and shall be designed in accordance with the provision of IRC and executed following the Specifications of the Ministry.

12. Existing drainage structures shall not be allowed to carry the lines across.

13. The top of the casing/conduit pipe containing the utility services to cross the road shall be at least 1.2m below the top of the sub grade or the existing ground level whichever is lower, subject to being at lease 0.3m below the drain inverts. A typical sketch showing the clearances is given in Attachment-I.

14. The utility services shall cross the National Highway preferable on a line normal to it or as nearly so as practicable.

15. The casing/conduit pipe for crossing the road may be installed under the road embankment either by boring or digging a trench. Installation by boring method shall be preferred.

16. In case of trenching, the sides of the trench should be done as nearly vertical as possible. The trench width should be at least 30 cm. but not more than 60 cms wider than the outer diameter of the pipe. Filling of the trench shall conform to the specifications contained here-in-below or as supplied by the Highway Authority.

    a. Bedding shall be to a depth not less than 30 cm. 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 edges should be excavated and replaced by selected material.

b. The backfill shall be completed in two stages (i) Side-fill to the level of the top of the pipe (ii) Overfill to the bottom of the road crust.

c. The side fill shall consist of granular material laid in 15 cm. Layers each consolidated by mechanical tamping and controlled addition of moisture to 95% of the Proctor's Density. Overfill shall be compacted to the same density as the material that had been removed. Consolidation by saturation or ponding will not be permitted.

d. The road crust shall be built to the same strength as the existing crust on either side of the trench or to thickness and specifications stipulated by the Highway Authority.

17. The Licensee shall ensure making good the excavated trench for laying utility services by proper filling and compaction, so as to restore the land in to the same condition as it was before digging the trench, clearing debris/loose earth produced due to execution of trenching at least 50m away from the edge of the right of way;

18. All required restoration work subsequent to laying of the cable shall be required to be undertaken by the Licensee at its cost either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards.

19. Prior to commencement of any work on the ground, a performance Bank Guarantee @ Rs. per route metre / Rs per sq m with a validity of one year initially (extendable if required till satisfactory completion of work) shall have to be furnished by the Licensee to the Authority/its designated agency as a security against improper restoration of ground in terms of filling/unsatisfactory compaction damages caused to other underground installations/utility services & interference, interruption, disruption or failure caused thereof to any services etc. In case of the Licensee failing to discharge the obligation of making good of the excavated trench/other restoration work, the Authority shall have a right to make good the damages caused by excavation, at the cost of the Licensee and recover the amount by forfeiture of the Bank Guarantee.

20. In case, the Performance Bank Guarantee is invoked as mentioned above, the Licensee shall be required to replenish and reinstate the required Performance Bank Guarantee within one month of such invoking. In case the work contemplated herein is not completed to the satisfaction of the Authority, which has granted the permission, within a period of 11 months from the date of issue of the Bank Guarantee, the Licensee shall either furnish a fresh guarantee or extend the guarantee for a further period of one year. Notwithstanding this, the Licensee shall be liable to pay full compensation to the aggrieved Authority/ its designated agency for any damage sustained by them by reason of the exercise of the RoW facility;

21. The Licensee shall shift the utility services within 90 days (or as specified by the respective Authority) from the date of issue of the notice by the concerned Authority to shift/relocate the utility services, in case it is so required for the purpose of improvement/widening of the road/route/highway or construction of flyover/bridge and restore the road/land to its original condition at his own cost and risk.

22. The Licensee shall be responsible to ascertain from the respective agency in co-ordination with Authority, regarding the location of other utilities /underground installations/ facilities etc. The Licensee shall ensure the safety and security of already existing underground installations/utilities/facilities etc. before commencement of the excavation/using the existing cable ducts. The Licensee shall procure insurance from a reputed insurance company against damages to already existing underground installations/utilities/facilities etc.

23. The Licensee shall be solely responsible/ liable for full compensation/indemnification of concerned agency / aggrieved Authority for any direct, indirect or consequential damage caused to them/claims or replacements sought for, at the cost and risk of the Licensee. The concerned agency in co-ordination with Authority shall also have a right make good such damages/ recover the claims by forfeiture of Bank Guarantee.

24. If the Licensee fails to comply with any condition to the satisfaction of the Authority, the same shall be executed by the Authority at the cost and risk of the Licensee.

25. Grant of License is subject to the Licensee satisfying (a) minimum disruption of traffic and (b) no damage to the highways. As far as possible, the Licensee should avoid cutting of the road for crossing highway, and other roads and try to carry out the work by trenchless technology. In case any damage is caused to the road pavement in this process, the Licensee will be required to restore the road to the original condition at its cost. If due to unavoidable reasons the road needs to be cut for crossing or laying utility services, the Licensee has to execute the restoration work in a time bound manner at its cost either by itself or through its authorized representative in consultation with the Authority as per predetermined time schedule and quality standards. In case of the Licensee failing to discharge the obligation of making good of the excavated trench/other restoration work, the Authority shall have a right to make good the damages caused by excavation, at the cost of the Licensee and recover the amount by forfeiture of the Bank Guarantee.

26. The Licensee shall inform/give a notice to the concerned agency designated by the Authority at least 15 day in advance with route details prior to digging trenches,

for fresh or maintenance/repair works. A separate performance Bank Guarantee for maintenance/repair works shall have to be furnished by the Licensee.

27. Each day, the extent of digging the trenches should be strictly regulated so that utility services is laid and trenches filled up before the close of the work that day. Filling should be completed to the satisfaction of the concerned agency designated by the Authority.

28. The licensee shall indemnify the concerned agency in co-ordination with Authority, against all damages and claims, if any due to the digging of trenches for laying cables/ducts.

29. The permission for laying utility services is granted maximum for 5 years at a time, which can thereafter be considered for renewal. On payment of additional fee at the time of renewal, the permission shall automatically be renewed, unless defaults exist. In case of renewal, rate prevailing at the time of renewal shall be charged. Delay in deposition of fee shall attract interest @ 15% per annum compounded annually.

30. The permission shall be valid only for the period it is issued and fee deposited. However, the Authority also has a right to terminate the permission or to extend the period of Agreement.

31. That the Licensee shall not undertake any work of shifting, repairs or alterations to the utility services without prior written permission of the concerned agency in co-ordination with the Authority.

32. The permission granted shall not in any way be deemed to convey to the Licensee any ownership right or any interest in route/road/highway land /property, other than what is herein expressly granted. No use of NH RoW will be permitted for any purpose other than that specified in the Agreement.

33. During the subsistence of this Agreement, the utility services located in highway land / property shall be deemed to have been constructed and continued only by the consent and permission of the Authority so that the right of the Licensee to the use thereof shall not become absolute and indefeasible by lapse of time.

34. The Licensee shall bear the Stamp Duty charged on this Agreement.

35. Three copies of 'as laid drawings' of utilities (hard and soft copies) with geo-tagged photographs and geo-tagged video recordings of laying of cables in the trench (with respect to the NH) and after complete restoration shall be submitted to the Authority for verification and record within a month of completion of works.

36. The Licensee shall allow free access to the Site at all times to the authorised representatives of Authority to inspect the Project Facilities and to investigate any

matter within their Authority, and upon reasonable notice, shall provide reasonable assistance necessary to carry out their respective duties and functions.

37. The utility services shall not be made operational by the Licensee unless a completion certificate to the effect that the utility services has been laid in accordance with the approved specifications and drawings and the trenches have been filled up to the satisfaction of the concerned agency in co-ordination with the Authority has been obtained. Notwithstanding anything contained herein, this Agreement may be cancelled at any time by Authority for breach of any condition of the same and the Licensee shall neither be entitled to any compensation for any loss caused to it by such cancellation not shall it be absolved from any liability already incurred.

38. The Licensee shall ensure adherence to relevant Indian standards and follow best industry practices, methods and standards for the purpose of ensuring the safe, efficient and economic design, construction, commissioning, operation, repair and maintenance of any part of the utility lines/industrial infrastructure facilities and which practices, methods and standards shall be adjusted as necessary, to take account of:

    a. operation, repair and maintenance guidelines given by the manufacturers,
    b. the requirements of Law,
    c. the physical conditions at the Site, and
    d. The safety of operating personnel and human beings.

39. The Licensee shall have to provide safety measures like barricading, danger lighting and other necessary caution boards while executing the work.

40. While laying utility services, at least one lane of road shall be kept open to traffic at all times. In case of single lane roads, a diversion shall be constructed. If any traffic diversion works are found necessary during the working period such diversion shall be provided at the cost of Licensee.

41. After the termination/expiry of the agreement, the Licensee shall remove the utility services within 90 days and the site shall be brought back to the original condition failing which the Licensee will lose the right to remove the utility services. However before taking up the work of removal of utility services the Licensee shall furnish a Bank Guarantee to the Authority for a period of one year for an amount assessed by the Authority as a security for making good the excavated trench by proper filling and compaction, clearing debris, loose earth produced due to excavation of trenching at least 50m away from the edge of the RoW.

42. Any disputes in interpretation of the terms and conditions of this Agreement or their implementation shall be referred to the redress mechanism prevailing in the Ministry and the decision of the redress mechanism shall be final and binding on all.

43. For PPP Projects, in case of any financial loss incurred by the respective project concessionaires due to such laying/shifting of utility services by the Licensee, compensation for the same shall be required to be borne by the Licensee in mutual agreement with the respective project concessionaires. MoRT&H/ NHAI/ implementing authorities for the project shall not be liable to the concessionaire in any way in this regard.

This agreement has been made in duplicate, each on a Stamp Paper, Each party to this Agreement has retained one stamped copy each.

IN WITNESS WHEREOF THE PARTIES HERETO HAVE CAUSED THIS AGREEMENT TO BE EXECUTED THROUGH THEIR RESPECTIVE AUTHORISED REPRESENTATIVES THE DAY AND THE YEAR FIRST ABOVE WRITTEN.

SIGNED SEALED AND DELIVERED FOR AND ON BEHALF OF AUTHORITY.

BY SHRI_____

(Signature, name & address with stamp)

SIGNED ON BEHALF OF M/S _____ (LICENSEE)

BY SHRI_____

(Signature, name & address with stamp)

HOLDER OF GENERAL POWER OF ATTORNEY DATED _____
EXECUTED IN ACCORDANCE WITH THE RESOLUTION NO. _____
DATED PASSED BY HTE BOARD OF DIRECTORS IN THE MEETING HELD ON

IN THE PRESENCE OF (WITNESSES):

1.

2.

Attachment-I

Enclosure to Ministry of Road Transport & Highways letter No RW/NH-33044/29/2015)-S&R(R) dated 22.11.16.

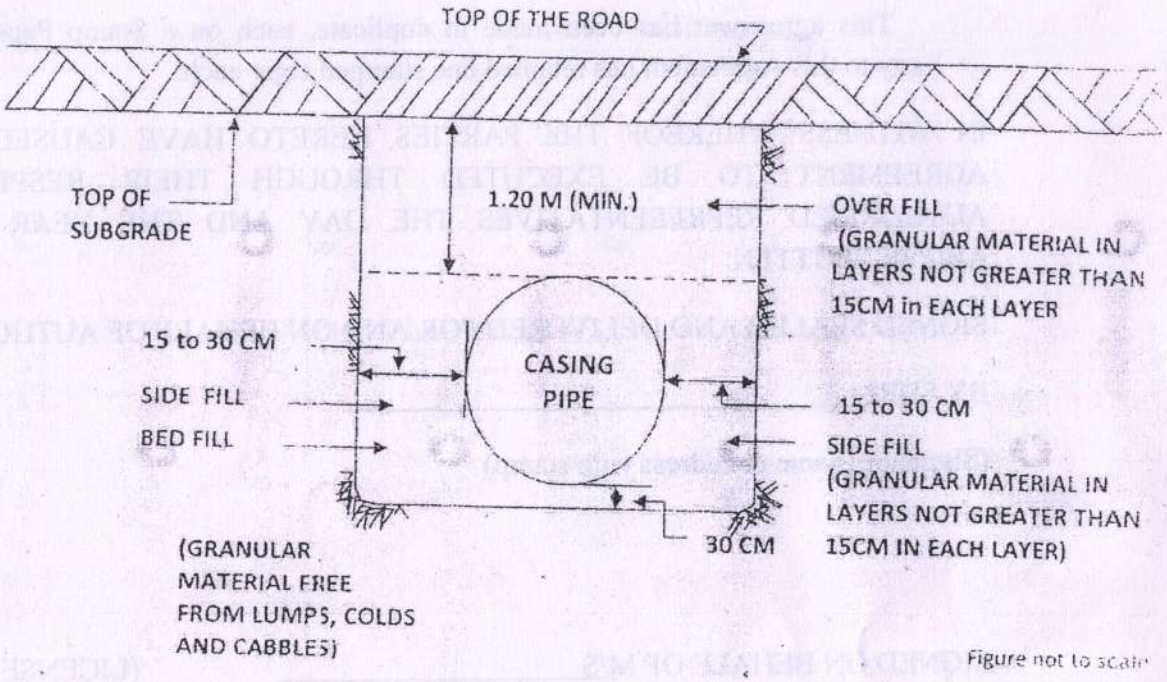


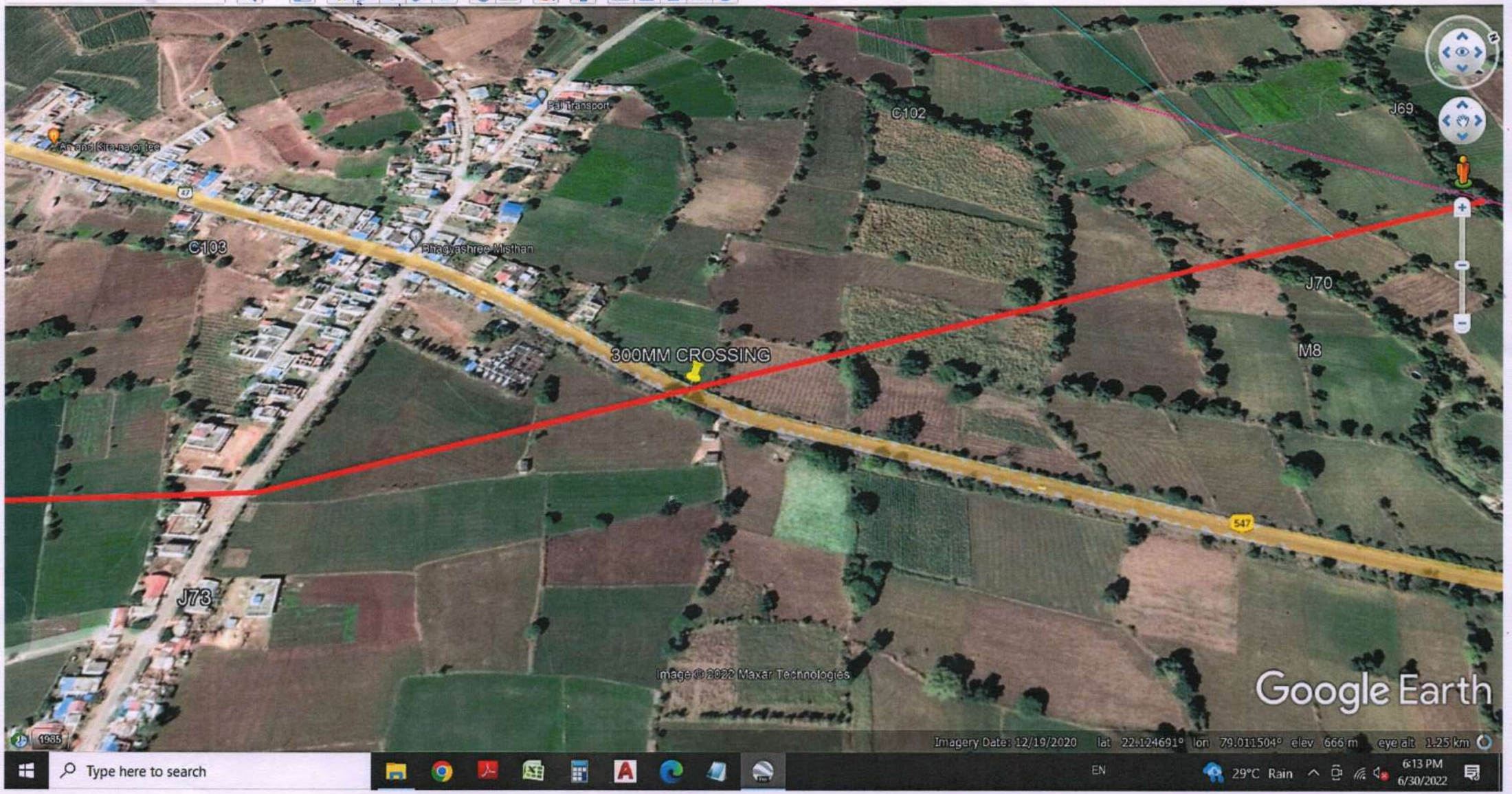
Figure not to scale

FIGURE-1 INSTALLATION OF CASING PIPE FOR CROSSING THE ROAD

PC - 2_NH CROSSING DETAILS

S.NO	Type of Pipe	Dia of pipe	CMD	Node	Center Rd (M)	Road Name	Department	Road Ch . (KM)	Remark	Latitude	Longitude
1	2	3	4	5	6	7	8	9	10	11	12
1	MS	1200	1	J1- J2	4784	Banagaon to Narasingapur	NH 547	99.90	NH 547	22.134169°	79.020329°
2	DI	300	1	J70-J73	438	Banagaon to Narasingapur	NH 547	98.40	NH 547	22.124061°	79.010403°
3	HDPE	280	1	J74-J75	292	Saoner to Narasinghpur	NH 547	97.10	NH 547	22.115497°	79.005887°
4	DI	600	1	J124-J134	722	Saoner to Narasinghpur	NH 547	94.90	NH 547 NEAR AJANIYA & PIPARIYA BIRSA VILLAGE	22.095295°	79.001944°
5	MS	1000	2	J290-J291	2007	Saoner to Narasinghpur	NH 547	86.00	NH 547 UNDER CULVERT (NEAR VILLARGE MALHANWADA)	22.007377°	78.983953°
6	DI	450	3	J521- J525	709	Saoner to Narasinghpur	NH 547	80.70	NH 547	21.966077°	78.971065°
7	MS	1000	1	J69-J78	1174	CHHINDWARA RING ROAD	NH	0.40	RING ROAD	22.122502°	79.002267°
8	HDPE	280	1	J88-J91	10	CHHINDWARA RING ROAD	NH CULVERT	5.00	RING ROAD Culvert (Near Khajri Junction.)	22.125134°	78.963916°
9	DI	600	2	J352-J357	2067	RING ROAD	NH	3.35	NH RING ROAD (UNDER KULBEHRA BRIDGE, Near Rohna kala)	22.024142°	78.880156°

Executive Engineer
Pench Diversion Canal Division
Simana Th. Chourai Distt. Chhindwara (M.P.)


Google Earth Pro
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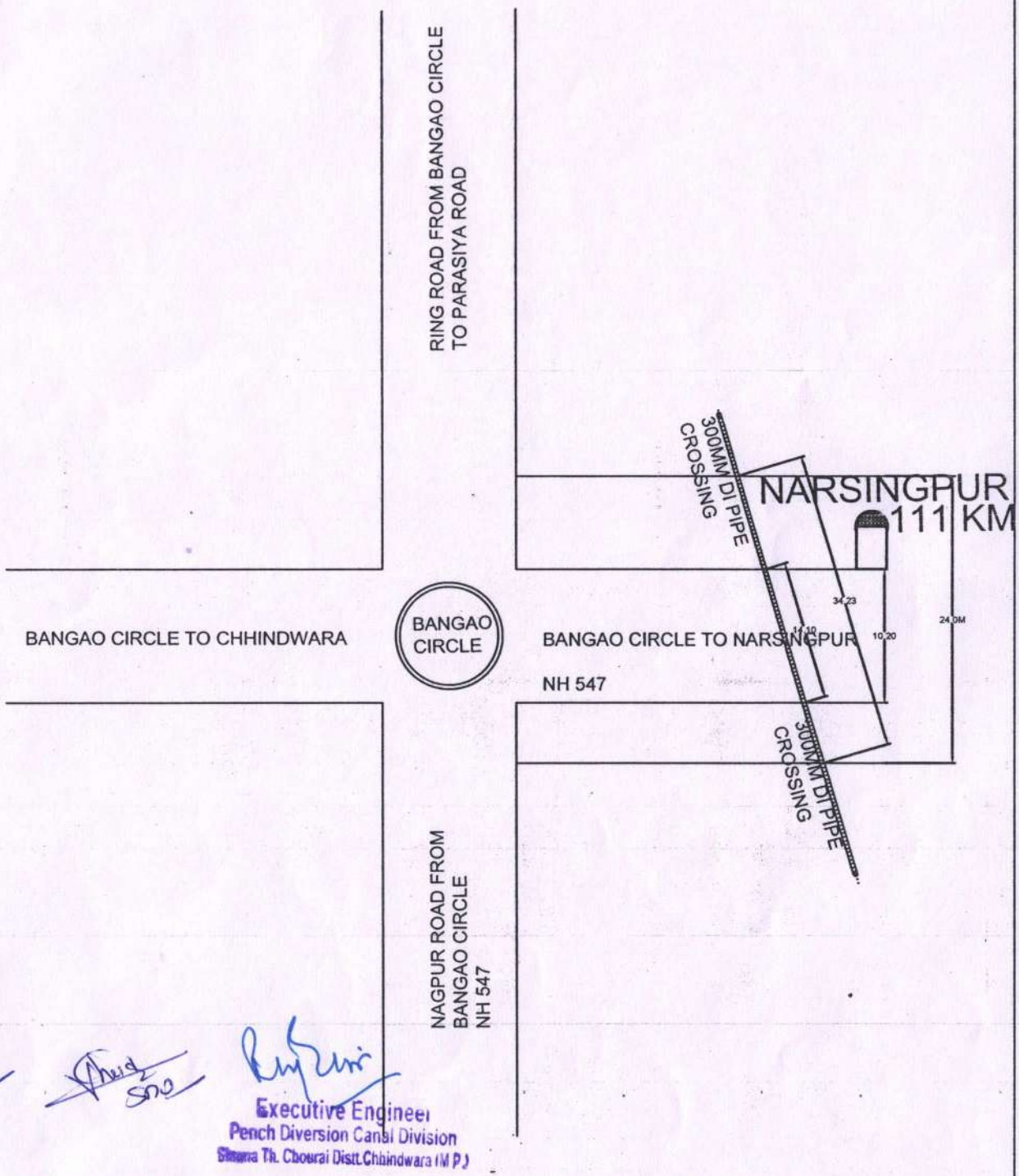
Pal Transport
C102
J69
C103
Bhagyashree Misthan
J70
300MM CROSSING
M8
547
J73
Image © 2022 Maxar Technologies
Google Earth
Imagery Date: 12/19/2020 lat 22.124691° lon 79.011504° elev 666 m eye alt 1.25 km
Type here to search
EN
29°C Rain
6:13 PM
6/30/2022

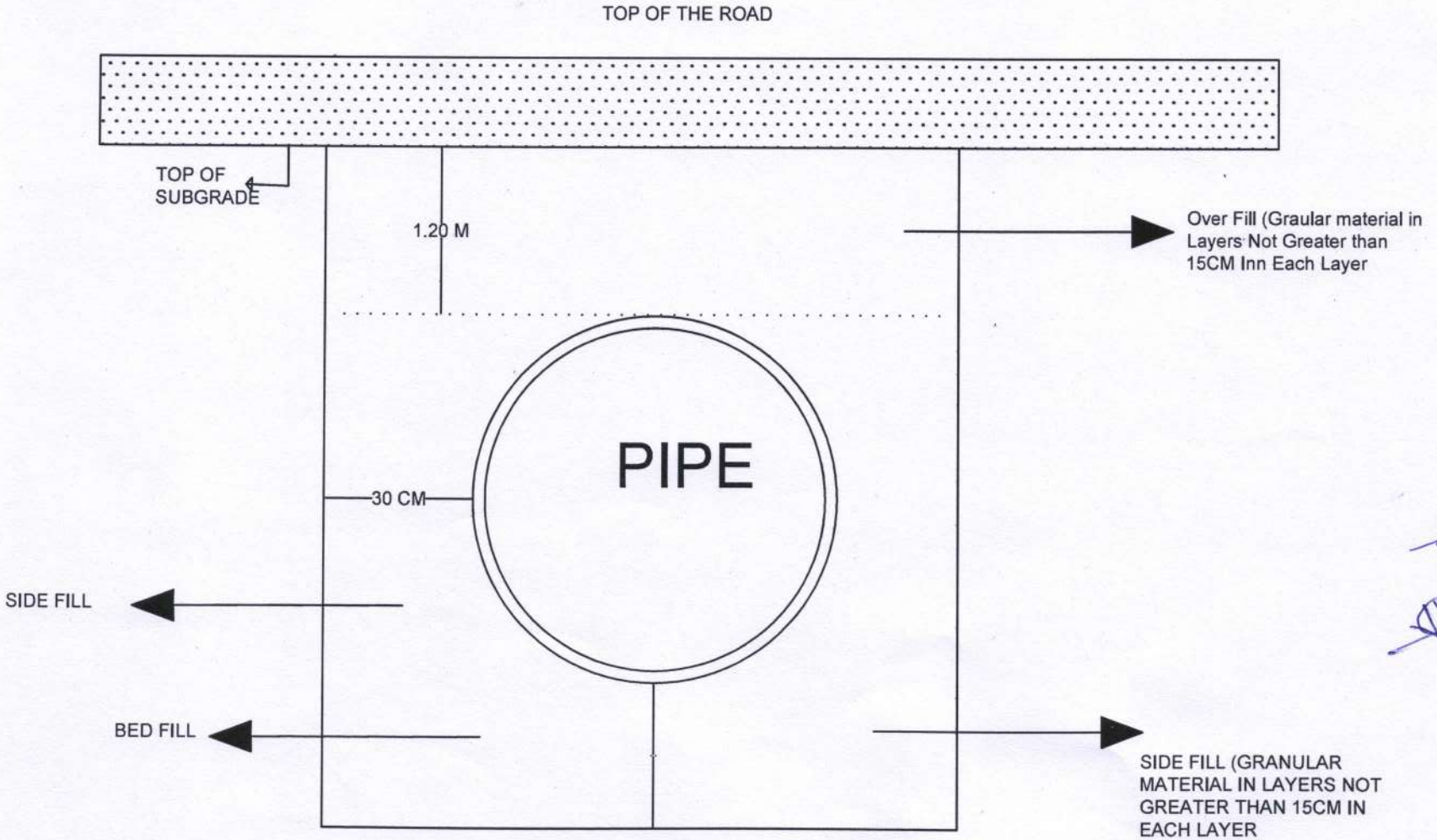
Name of work : Laying of irrigation pipe line of Pench micro irrigation complex - 02 of Pench Diversion Project crossing NH 547 at 98.40 km village Bangaon



Executive Engineer
Pench Diversion Canal Division
Sitarma Th. Chourai Distt.Chhindwara (M.P.)

SKETCH SHOWING THE PIPE LAYING OF PENCH MICRO COMPLEX -02 OF PENCH PROJECT

CROSS SECTION OF DI PIPE DN300,



Executive Engineer
Pench Diversion Canal Division
Singna Th. Chourai Distt.Chhindwara (M.P.)

CHECK-LIST

As per the guidelines of processing the proposal for laying of utility line in the land along national Highways ministry circular RW/NH-33044/29/2001/S&R(R) dated 22-11-2016

Sl. No.	Item	Information/Status	Remarks
1	General information	Laying of irrigation water pipeline (DI Pipe) of dia300 mm across NH 547 at 99.40 km in Chhindwara Distt. (M.P.)	
1.1	Name and Address of the Applicant/Agency	**The Executive Engineer, Pench Diversion Project, Canal Division, Signa, Teh. ChauraiDistt. Chhindwara**	
1.2	National Highway Number	**NH-547**	
1.3	State	**Madhya Pradesh**	
1.4	Location	**Near village Bangaon**	
1.5	(Chainage in km)	**98.40 km**	
1.6	Length in Meters		
1.7	Width of available ROW	**34.23 m**	Skew Crossing
	(a) Left side from center line towards increasing chainage/ km direction	**17.11 m**	
	(b) Right side form center line towards increasing chainage/ km direction	**17.12 m**	
1.8	Proposal to lay the utility		
	(a)Left side from center line towards increasing chainage/km direction	**As per drawing attached**	
	(b)Right side from center line towards increasing/km direction	**As per drawing attached**	
1.9	Proposal to acquire land	**NA**	
1.10	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	**No utilities/services along the proposed route**	
1.12	Number of existing lanes (2/4/6/8 lanes)	**4 lanes**	
1.11	Details of already laid services, if any, along the proposed route	**No utilities/services along the proposed route**	
1.12	Number of existing lanes)	**4 lanes**	
1.13	Proposed Number of lanes)	**NA**	
1.14	Service road existing or not	**No**	
	If yes the which side		
	(a) Left side from center line		
	(b) Right side from center line		
1.15	Proposed Service road	**No**	
1.16	Whether proposal to lay pipe line is after the service road or between the service road and main carriageway	**NA**	

Executive Engineer
Pench Diversion Canal Division
Signa Th. Chourai Distt. Chhindwara (M.P.)

CHECK-LIST

1.17	Whether carrying of sewage/gas pipeline has been proposed on highway/bridges?		
	If Yes then mention the methodology proposed for the same	**Trenchless HDD Method**	
1.18	Whether carrying of sewage/gas pipeline has been proposed on the parapet/any part of the bridges? If Yes then mention the methodology proposed for the same	**No**	
1.19	If Crossing of the Road involved If Yes, it shall be either encased in pipes of through structure or conduits specially built for that purpose at the expense of the agency owning the line	**Yes**	
	(a) Whether the existing drainage structures are allowed to carry the utility pipeline	**NA**	
	(b) Is it on a line normal to NH	**No**	
	(c) What is the distance of crossing the utility pipelines from the existing structures? Crossings shall not be too near the existing structures on the National Highway, the minimum distance being 15 meter.	**NA**	
	(d) The casing pipe (or conduit pipe in the case of electric cable) line carrying the utility line shall be of steel, cast iron or reinforced concrete and have adequate strength and be large enough to permit ready withdrawal of carried pipe/cable Mention type of casing.		
	(e) Ends of the casing/conduit pipe shall be sealed from outside, so that it does not act as a drainage path		
	(f) The casing/conduit pipe should be as minimum extend from drain to drain in cuts and toe of slope in fills		
	(g) The top of the casing/conduit pipe should be at least 1.2meter below the surface of the road subject to being at least 10.3 m below the drain inverts. Mention the proposed details		
	(h) Mention the methodology proposed for crossing of road for the proposed sewage/Gas pipeline. Crossing shall be by boring method (HDD) (Trenchless Technology), specially where the existing road pavement is of cement concrete or dense bituminous concrete type	**Horizontal Directional Drilling (HDD) method**	

Executive Engineer
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Singna Th. Chourai Dist. Chhindwara (M.P.)

CHECK-LIST

	(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 water way along it		
2	Documents/drawings to be enclosed with the proposal		
2.1	Cross section showing the size of trench of open trenching	**NA**	
	Is it normal size of 1.2m deep , 0.3 m wide	—	
	(i)Should not be greater than 60 cm wider than the outer diameter of the pipe	—	
	(ii) located as close to the extreme edge of the Right of Way as possible but not less than 15m from the center line of the nearest carriageway	—	
	(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	—	
	(iv) These should be so laid that their top is at least 0.6m below the ground level so as not to obstruct drainage of the road land	—	
2.2	Cross section showing the size of pit and location of Pipe for HDD method		
2.3	Strip plan/Route Plan showing utility/Gas pipeline chainage, width of Row, distance of proposed pipe line from the edge of ROW, important mile stone, intersections, cross drainage works etc.	**Strip plan showing all the details is enclosed**	
2.4	Methodology for laying of the Utility pipeline	**Enclosed**	
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 the trench	**NA**	
	(a) The trench width should be at least 30 cm, but not more than 60 cm. Wider than the outer diameter of the pipe	—	
	(b) For filling of the trench, Bedding shall be to depth of not less than 30 cm. It shall consist of granular material, free of lumps, clode, cobbles and graded to yield firm surface without sudden change in the bearing value.	—	

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Sinona Th. Chourai Distt.Chhindwara (M.P.)

CHECK-LIST

	Unsuitable soil and rock edges should be excavated and replaces by selected material.		
	(c) The backfill shall be completed in two stages-i) side fill to the level of the top of the pipe and ii) Overfill to the bottom of the road crust	—	
	(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 proctor density. Overfill shall be compacted to the same density and the material that has been removed. 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 trench. Care shall be taken to avoid the formation of a dip at the trench.	—	
	(f) The excavation shall be protected by flagman, Signs and barricades and red lights during night hours.	—	
	(g) If required a diversion shall be constructed at the expense of agency owing the utility line.	—	
2.4.2.	Horizontal Directional Drilling (HDD) Method	**Yes**	
2.4.3.	Methodology for laying of the pipeline through CD works and method of laying in cases where the carrying of gas pipeline on the bridge becomes inescapable	NA	
3	Draft License Agreement signed by two witnesses		
3.1	The License fee estimate as per Ministry's guidelines issued vide circular No. RW/NH/33044/29/2015/S&R dated 22-11-2016		
4	Whether Performance Bank Guarantee as per Ministry guidelines issued vide circular No. RW/NH/33044/29/2015/S&R dated 22-11-2016 is obtained	**Undertaking for submission of BG form Executive Engineer**	
4.12	Confirmation of BG has been obtained or not as per MoRTH/NHAI guidelines		
5	**Affidavit/Undertaking form the Applicant for following is to be furnished**		
5.1	Undertaking for not to damage any other utility, if damaged then to pay the losses either to NHAIor to the concerned agency	**Enclosed**	

Executive Engineer
Pench Diversion Canal Division
Simona Th. Chhindwara (M.P.)

CHECK-LIST

5.2	Undertaking for renewal of bank Guarantee as and when asked by MoRTH/NHAI	Enclosed	
5.3	Undertaking for confirming all standard conditions of Ministry/NHAI's guidelines	Enclosed	
5.4	Undertaking for indemnity against all damages and claims	Enclosed	
5.5	Undertaking for management for traffic movement during laying of utility line without hampering the traffic	Enclosed	
5.6	Undertaking that if any claim is raised by the Concessionaire/contractor then the same has the be paid by the applicant	Enclosed	
5.7	Undertaking that expenditure if any incurred by NHAI for repairing any damage caused to the NH by laying, maintenance or shifting of the utility line will be borne by the applicant agency owning the line.	Enclosed	
5.8	Undertaking that expenditure if any incurred by NHAI for repairing any damage caused to the NH by laying, maintenance or shifting of the utility line will be borne by the applicant agency owning the line.	Enclosed	
5.9	Undertaking that text of the License deal is as per verbatim of format issued by MoRTH vide circular No. RW/NH/33044/29/2015/S&R dated 22-11-2016	Enclosed	
5.10	Undertaking that the applicant has obtained various safety clearances from the respective authorities such as Directorate of Electricity, Chief Controlled of Explosives, Petroleum and Explosive safety Organization, Oil Industry Safety Directorate, state/central pollution control board and any other statutory clearances and applicable, beforeapplying to Highway Administration	Enclosed	
5.11s	IF THE MoRTH/ NHAI considers it necessary in future to move the utility line for any work of improvement or repairs to the road, it will be carried out as desired by the MoRTH/NHAI at the cost of the Agency owning the utility line within a reasonable intimation given.	Enclosed	
5.12	Certificate from the applicant in the following format I)Laying of Gas pipeline will not have any deleterious effects on any of the bridge components and road way safety for traffic II) We do undertake that I/we will relocate service road/approach rad/utilities at my/our own cost notwithstanding the permission granted	Enclosed	

Executive Engineer
Pench Diversion Canal Division
Singna Th. Chourai Distt.Chhindwara (M.P.)

CHECK-LIST

	within such time as will be stipulated by NHAI for future six lining or/any other development.		
6	Who will sign the agreement on behalf of Gas pipe line agency? Power of attorney to sign the Agreement is available or not		
7	The Project Director shall submit the following Certificates		
7.1	Certificate that the proposal is confirming to all standard conditions issued vide MoRTH circular No. RW/NH/33044/29/2015/S&R dated 22-11-2016		
7.2	Certificate Form the PH in the following format I)" it is certified that any other location of the utility pipeline would be extremely difficult and unreasonably costly and the installation of utility pipeline within RoW will not adversely affect the design, stability and traffic safety of the highway nor the likely future improvement such as widening of the carriage way, easing of curve" II) for six laning 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"		
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 of way to lay cable/duct has also been granted as a right of way concessionaire under the concession agreement for up gradation of..... section from Km. ..... to km ..... of NH no. ..... on Build, Operate and Transfer basis and therefore the licensee shall honor same.		
9	Who will supervise the work of laying of Utility Pipe line		
	a) On behalf of the applicant	**The Executive Engineer, Pench Diversion Project, Canal Division, Signa, Teh. Chaurai Distt. Chhindwara**	
	b) On behalf of MoRTH/NHAI		

Executive Engineer
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Singna Th. Chaurai Distt.Chhindwara (M.P.)

CHECK-LIST

10	Who will ensure that the defects in road portion after laying of utility pipeline are corrected and if not corrected than what action will be taken.		
	c) On behalf of the applicant	**The Executive Engineer, Pench Diversion Project, Canal Division, Signa, Teh. ChauraiDistt. Chhindwara**	
	d) On behalf of MoRTH/NHAI		
11	Who will pay the claims for damages done/disruption in working of Concessionaire if asked by the Concessionaire ?	**The Executive Engineer, Pench Diversion Project, Canal Division, Signa, Teh. ChauraiDistt. Chhindwara**	
12	A Certificate from PD that he will enter the proposed permission in the register of records of the permissions in the prescribed profarma (copy enclosed)		
13	If any previous approval is accorded for laying cable line then Photocopy of register of records of permissions accorded (as maintained by PD) to be enclosed	**No previous approvals accorded at the proposed location.**	

Executive Engineer
Pench Diversion Canal Division
Signa Th. Chourai Distt.Chhindwara (M.P.)

Registration and Stamp Department
Madhya Pradesh

Certificate of Stamp Duty

E-Stamp Details

E-Stamp Code	0101070309202200072 8		
Total E-Stamp Amount	100		
Govt. Stamp Duty (Rs.)	100	Municipality Duty (Rs.)	0
Janpad Duty (Rs.)	0	Upkar Amount (Rs.)	0
Exempted Amount(Rs.)	0		
E-Stamp Type	NON-JUDICIAL		
Issue Date & Time	03/09/2022 11:32:14		
Service Provider or Issuer Details	Modit Yadav/SP010740509202000054		
SP/SRO/DRO/HO Details	SHOP NO 4 STADIUM COMPLEX IN FRONT OF JAIN BARTAN BHANDAR CHHINDWARA CHHINDWARA		

Deed Details

Deed Type	Copy or Extract
Deed Instrument	Copy or Extract, certified to be a true copy or extract by or order of an public officer under section 76 of the Indian Evidence Act 1872 (1 of 1872) and not chargeable under the law for the time being in force relating to court fees- One hundred rupees.
Purpose	AFFIDVAIT

First Party Details

Organization Name	कार्यपालन यंत्री
Address	पेंच व्यपवर्तन परियोजना नहर संभाग सिंगना तह0 चौरई जिला छिन्दवाडा CHHINDWARA Madhya Pradesh INDIA
Number of Persons	1

Second Party Details

Organization Name	परियोजना निदेशक एन एच ए आई छिन्दवाडा
Address	छिन्दवाडा CHHINDWARA Madhya Pradesh INDIA
Number of Persons	1

UNDERTAKING

(As per S. No. 5.1 to 5.11 of checklist providing with pipeline crossing application to NHAI)

Executive Engineer, Pench Diversion Project (Water Resource Department) Singna,Chourai Distt-Chhindwara seeking approval for pipeline laying across National Highway-547 at chainage 98.40 KM by HDD (Pushing method). I (applicant) hereby undertake that :-

1. Will take care all utilities without damaging them.ifany damage or loss will occur during laying work, Undersigned will pay all expenses to restore the same to its original condition to NHAI or to the concerned agency.
2. Renewal of Bank Guarantee as and when asked by MoRTH/NHAI will be done.
3. Laying work will be executed confirming all standard condition of Ministry/NHAI guidelines.

Digitally signed by Modit Yadav
Date: 2022.09.03 11:32:15 IST

4. Applicant department will bear indemnity against all damages and claims.
5. Applicant department maintain management for traffic movement during laying of utility line without hampering the traffic.
6. if any claim is raised by the concessionaire/contractor then the same has the be paid by the applicant department.
7. Traffic movement during laying of pipeline will be managed by Agency in supervision of department (of Applicant) under the direction of NHAI.
8. If any claim raised by the MoRTH during laying the same has to be paid by the Applicant department.
9. If any condition arises for any work installation shifting or repairs alternation in future in the pipeline at the said crossing department (or Applicant) will consider for prior approvals of the MoRTH before execution of above work.
10. Expenditures if any incurred by the MoRTH by reparing any damages caused to the NHAI by laying or maintenance of shifting of the utility line will be borne by applicant Agency undersigned.
11. If the MoRTH/ NHAI considers if necessary in future to move the pipeline for any work of improvement repairs to the road. it will carried out as desired by the MoRTH/NHAI at the cost of applicant Agency within reasonable time (not exceeding 60 days)of the intimation given by the MoRTH.

Executive Engineer
Pench Diversion Project, Canal Division
Singna, The-Chourai, Distt-Chhindwara(M.P.)

CERTIFICATE

(As per S. No. 5.12 of checklist with application)

(i) It is certified that laying of pipe line across NH 547 at Chainage 98.40 km by department will not have any deleterious effect on any of the bridge components and roadway safety for traffic in future.

(ii) We do undertake that applicant department will relocate service road/approach road/utilities related to the pipeline in the vicinity of NH at own cost notwithstanding the permission granted within such time as will be stipulated by MORT&H for future six laning or any other developments.

Executive Engineer
Pench Diversion Project, Canal Division,
Singna, Teh. Chuarai, Dist. Chhindwara (M.P.)

CROSSING METHODOLOGY TO BE ADOPTED FOR TRENCHLESS (HDD) METHOD

The laying of pipeline across the National Highway / State Highway shall be carried out byTrench Less Technique i.e. either by Boring or Ramming of carrier pipe or by Micro-Tunnelling or by Horizontal Directional Drilling without disturbing the normal traffic on the Highway. All the safety measures shall be taken during execution of pipeline laying work across the National Highway/State highway.

The actual procedure shall be decided best on the Geo Technical report conformingthe soilstrata and ascertaining the correct profile of the watercourse or other obstacles to be crossed.

Boring

Boring is the most popular and simplest procedure for crossing of highways and majorroads with heavy traffic. Similar to a directional drill for river crossings, the road bore is accomplished with a horizontal drill rig, or boring machine. The boring machine drills a hole under the road to allow insertion of the pipe. In most of the cases, a casing is first installed in the hole, and the carrier pipeline is inserted inside the casing. The benefit of the road boring is that it allows installation of the pipeline without disrupting traffic. Carrier pipe shall be laid inside the casing pipe. Generally, diameter of casing will be 150mm higher than the carrier pipe. The casing pipe shall be made of approved steel with epoxy coating (Internal and External) or approved reinforced concrete pipe. The thickness of casing nipe shall he decided spag to take all the external lgqq during construction and after completion of work, 1: 100 slopes will be provided towards drain during installation of the casing pipe. The casing pipe will be extended a minimum of 600 mm beyond the toe of the slope or base grade or 90 mm beyond the bottom of the drainage ditch whichever is greater.

Inserting the Casing

The inserting of casing pipe will start only after the working pits have been constructed andfinished completely and the assembly between the wall and the driving unit has been carried out. During the driving process a cutting head will be pushed gradually into the virgin soil.As the insertion progresses, the soil excavated by the cutting head will be removed using a soil transportation device. The excavation face will under no circumstances go beyond the cutting head. Where necessary, the work will be carried out by exercising a counter - pressure at excavation face to prevent any water from bursting through. The front face will be at all times be sealed tight against water and soil. The cutting head will be manageable by itself and provide with the necessary guiding jacks which will be able to be driven independently. In case of driving with pressurized air as front support, the air pressure will be constantly maintained where there is a danger of water seepage and /or collapse.

The casing will have a sufficient number of injection openings to enable lubrication of thecasing, during driving, between the soil and the outside wall with thixotropic or equivalent fluids in order to reduce soil friction. After the insertion operations, the injection openings will be sealed to air -and-water-tightness.

Following measurements shall be taken during the driving operation.

- Measurement of the number of meters casing inserted, including the cutting head in each work shift of 8 hours.
- Measurement of the peak pressure of the main jacks and that of any intermediate driving stations required to start moving the casing at the commencement of the work of each work shift.

- Measurement of the center of the cutting head in X, Y and Z co-ordinates after driving each pipe with an accuracy of 5 mm and comparison with a fixed center line system independent of the driving wall and casing train;
- The automatic recording of the front face support pressure (drilling fluid, air, soil,water)

The maximum permitted deviation throughout the entire duration of the driving process in10 cm both vertically and horizontally measured in relation to the connection line of the centers of the bore holes in the entry and exit working pit walls.

Inserting Carrier pipe through the casing

When the pipe is insert into the casing, the presence of the Owner and/or itsrepresentative is required. The insertion will be carried out with a sufficient number of suitable machines.

The pipeline will be kept completely in line with the casing. Damage to the coating will beexcluded altogether. The progress of the pipeline in the casing will be gradual and under control. The front end of the pipe will be equipped with a slider-shoe and drawn by a cable through the casing.

The casing pipe will be filled by sand / bentonite slurry filling (by pumps). Both extremitiesof casing will be sealed in an appropriate manner.

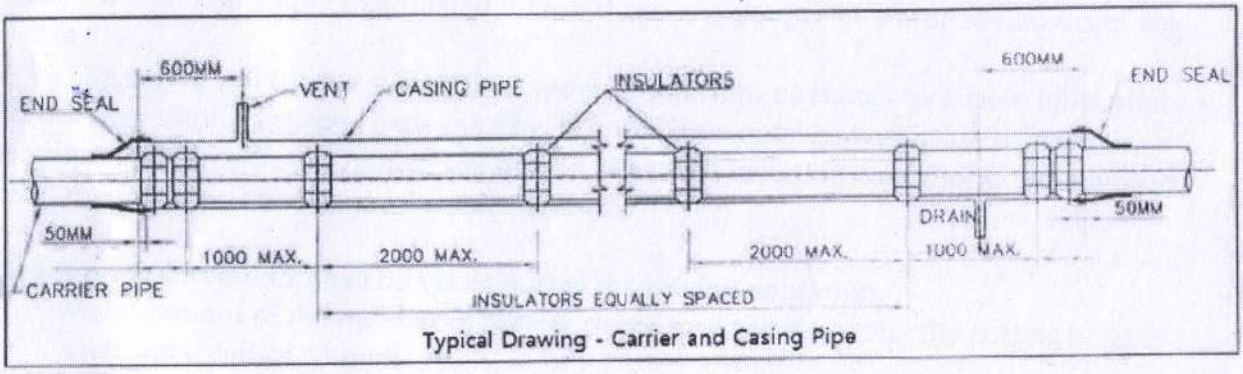
Installing Space Collars/tnsulators

The spacer collars will be placed at 2.00m from each other. At the extremities of the casing,two spacer collars will be placed whereby the outer spacer collars will be located at least 30cm inside the casing.

The support points of the successive spacer collars may not be located in one line but willbe regularly staggered. The spacer collars will be made completely of HDPE material with a minimum height of 25cm. Electrical insulation between the casing and carrier pipe shall be checked with megger time to time.

Site Restoration and Installation of Vent, Drain and Warning Sign Board

After installation of casing and carrier pipe the road shall be restored to the satisfaction ofconcern authorities. The installation of vent and drain shall be installed at both the ends of crossing. Warning sign boards indicating the warning about flowing of high pressure natural gas and telephone numbers of the concern maintenance office shall be installed on both side of the high way as per drawing.

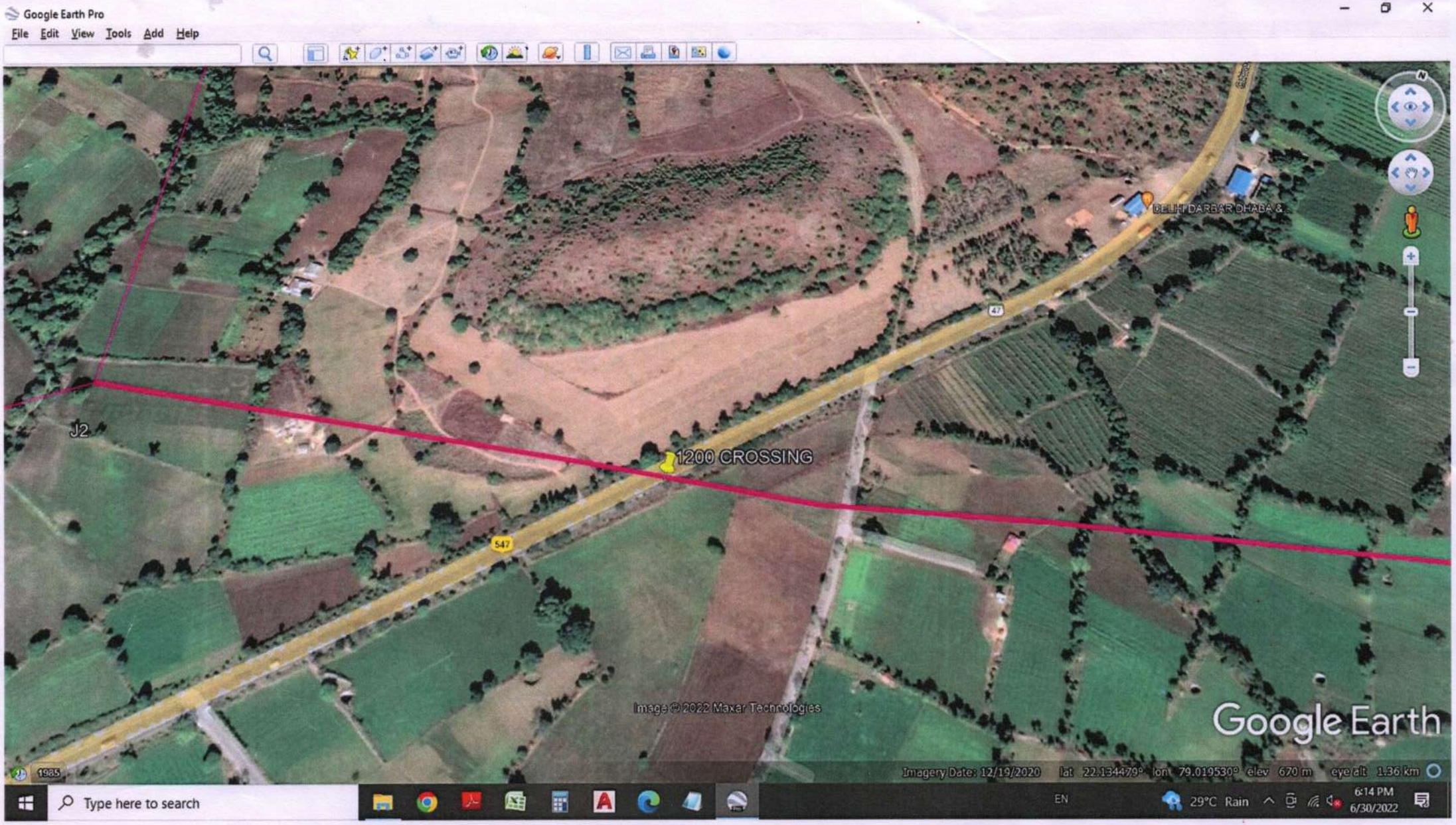


Typical Drawing - Carrier and Casing Pipe

PC - 2_NH CROSSING DETAILS

S.NO	Type of Pipe	Dia of pipe	CMD	Node	Center Rd (M)	Road Name	Department	Road Ch . (KM)	Remark	Latitude	Longitude
1	2	3	4	5	6	7	8	9	10	11	12
1	MS	1200	1	J1- J2	4784	Banagaon to Narasingapur	NH 547	99.90	NH 547	22.134169°	79.020329°
2	DI	300	1	J70-J73	438	Banagaon to Narasingapur	NH 547	98.40	NH 547	22.124061°	79.010403°
3	HDPE	280	1	J74-J75	292	Saoner to Narasinghpur	NH 547	97.10	NH 547	22.115497°	79.005887°
4	DI	600	1	J124-J134	722	Saoner to Narasinghpur	NH 547	94.90	NH 547 NEAR AJANIYA & PIPARIYA BIRSA VILLAGE	22.095295°	79.001944°
5	MS	1000	2	J290-J291	2007	Saoner to Narasinghpur	NH 547	86.00	NH 547 UNDER CULVERT (NEAR VILLARGE MALHANWADA)	22.007377°	78.983953°
6	DI	450	3	J521- J525	709	Saoner to Narasinghpur	NH 547	80.70	NH 547	21.966077°	78.971065°
7	MS	1000	1	J69-J78	1174	CHHINDWARA RING ROAD	NH	0.40	RING ROAD	22.122502°	79.002267°
8	HDPE	280	1	J88-J91	10	CHHINDWARA RING ROAD	NH CULVERT	5.00	RING ROAD Culvert (Near Khajri Junction.)	22.125134°	78.963916°
9	DI	600	2	J352-J357	2067	RING ROAD	NH	3.35	NH RING ROAD (UNDER KULBEHRA BRIDGE, Near Rohna kala)	22.024142°	78.880156°

Executive Engineer
Pench Diversion Canal Division
Sinona Th. Chourai Distt.Chhindwara (M.P.)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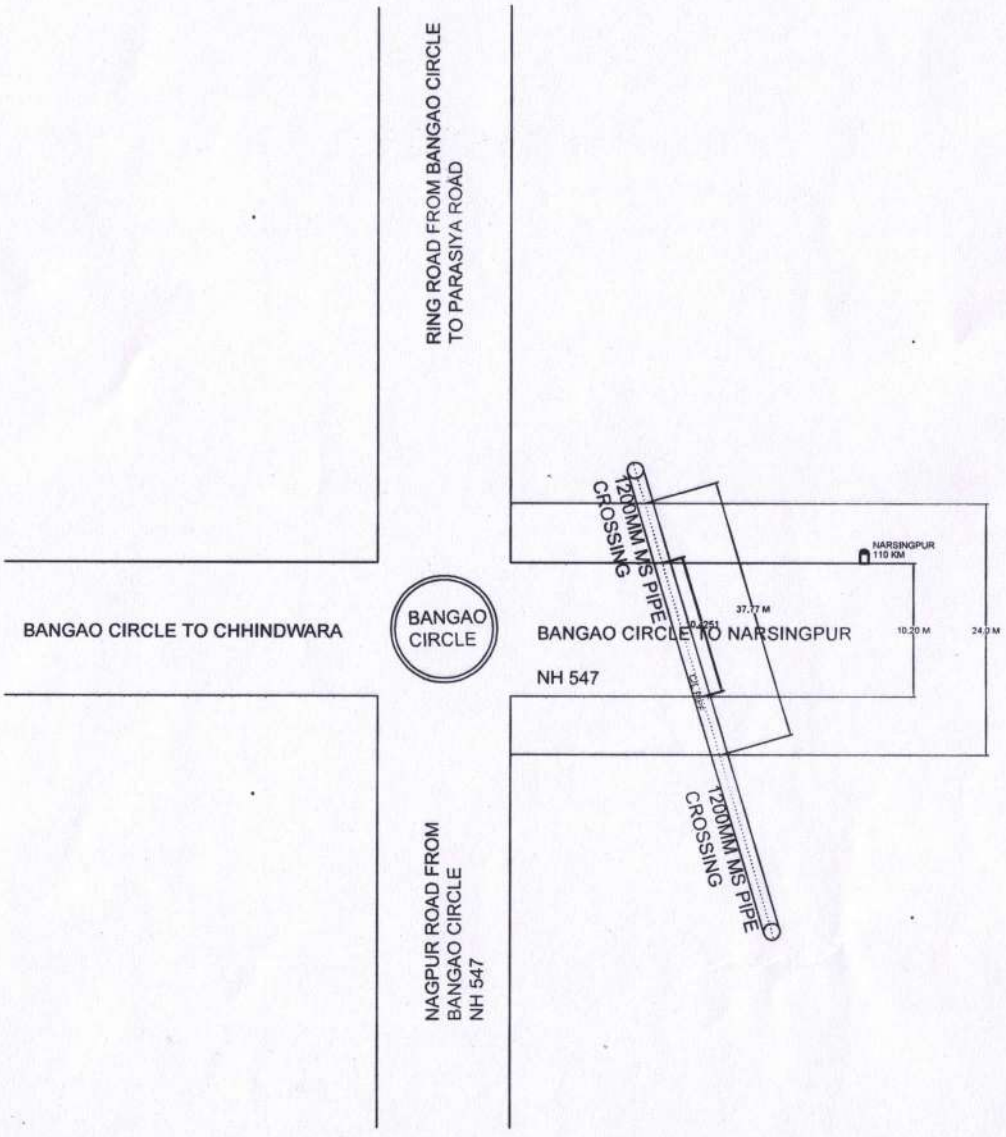
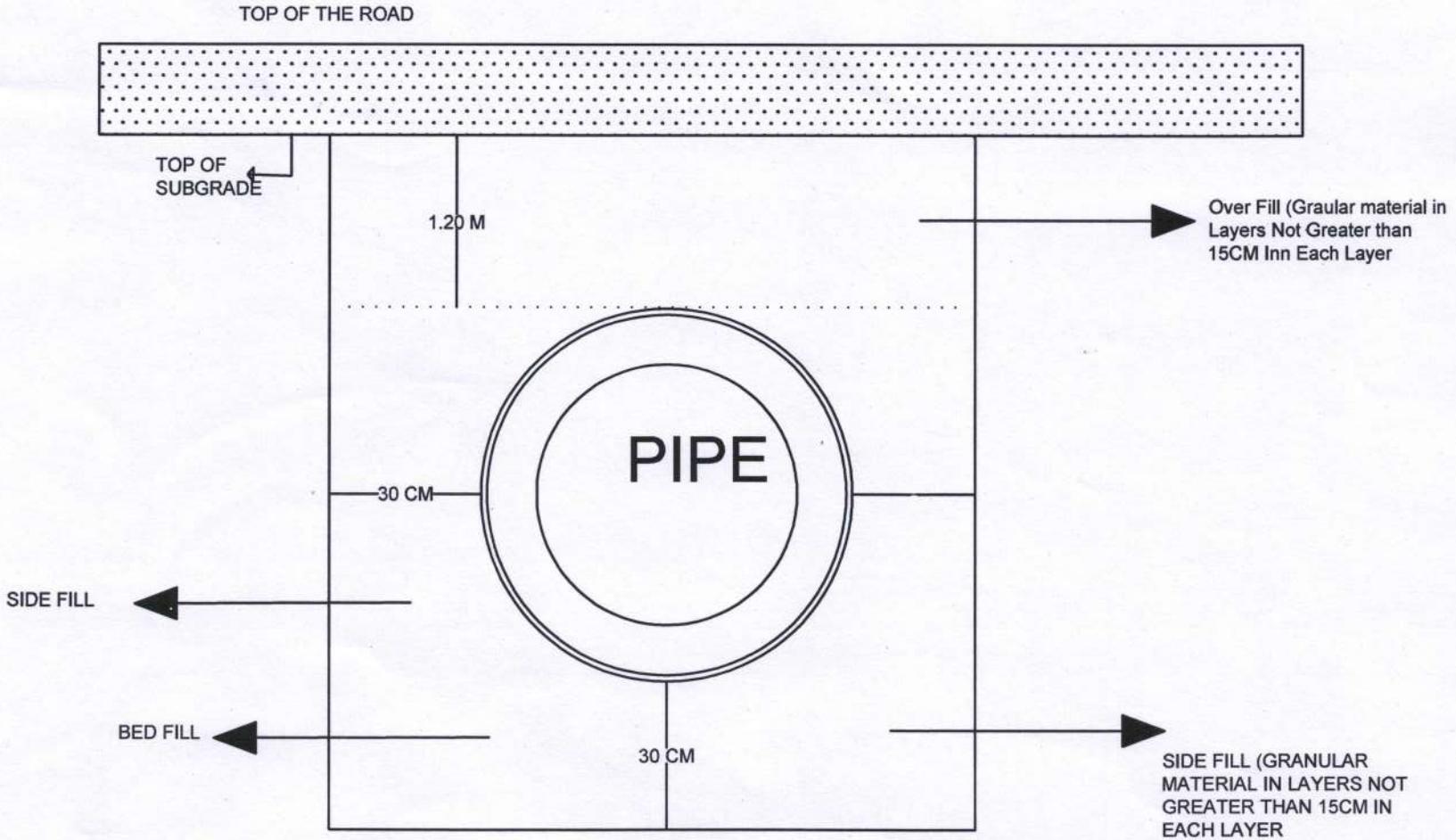
Name of work : Laying of Irrigation water pipe line (Pench micro irrigation complex - 02 of Pench Dieversion Project , crossing NH 547 at 99.90 km Near Village Jhirri



SKETCH SHOWING THE PIPE LAYING OF PENCH MICRO COMPLEX -02 OF PENCH PROJECT

Executive Engineer
Pench Diversion Canal Division
Singna Th. Chourai Distt Chhindwara (M.P.)

CROSS SECTION OF MS PIPE DIA1200



Executive Engineer
Pench Diversion Canal Division
Singna Th. Chourai Distt Chhindwara (M P)

CHECK-LIST

As per the guidelines of processing the proposal for laying of utility line in the land along national Highways ministry circular RW/NH-33044/29/2001/S&R(R) dated 22-11-2016

Sl. No.	Item	Information/Status	Remarks
1	General information	Laying of irrigation water pipeline of dia 1200 mm across NH 547 at 99.90 km in Chhindwara Distt. (M.P.)	
1.1	Name and Address of the Applicant/Agency	**The Executive Engineer, Pench Diversion Project, Canal Division, Signa, Teh. ChauraiDistt. Chhindwara**	
1.2	National Highway Number	**NH-547**	
1.3	State	**Madhya Pradesh**	
1.4	Location	**Near village Jhirri**	
1.5	(Chainage in km)	**99.90 km**	
1.6	Length in Meters		
1.7	Width of available ROW	**37.77 m**	Skew Crossing
	(a) Left side from center line towards increasing chainage/ km direction	**18.88 m**	
	(b) Right side form center line towards increasing chainage/ km direction	**18.89 m**	
1.8	Proposal to lay the utility		
	(a)Left side from center line towards increasing chainage/km direction	**As per drawing attached**	
	(b)Right side from center line towards increasing/km direction	**As per drawing attached**	
1.9	Proposal to acquire land	**NA**	
1.10	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	**No utilities/services along the proposed route**	
1.12	Number of existing lanes (2/4/6/8 lanes)	**4lanes**	
1.11	Details of already laid services, if any, along the proposed route	**No utilities/services along the proposed route**	
1.12	Number of existing lanes)	**4 lanes**	
1.13	Proposed Number of lanes)	**NA**	
1.14	Service road existing or not	**No**	
	If yes the which side		
	(a) Left side from center line		
	(b) Right side from center line		
1.15	Proposed Service road	**No**	
1.16	Whether proposal to lay pipe line is after the service road or between the service road and main carriageway	**NA**	

Executive Engineer
Pench Diversion Canal Division
Signa Th. Chourai Distt.Chhindwara (M.P.)

CHECK-LIST

1.17	Whether carrying of sewage/gas pipelinehas been proposed on highway/bridges?		
	If Yes then mention the methodology proposed for the same	**HDD Method**	
1.18	Whether carrying of sewage/gas pipeline has been proposed on the parapet/any part of the bridges? If Yes then mention the methodology proposed for the same	**No**	
1.19	If Crossing of the Road involved If Yes, it shall be either encased in pipes of through structure or conduits specially built for that purpose at the expense of the agency owning the line	**Yes**	
	(a) Whether the existing drainage structures are allowed to carry the utility pipeline	**NA**	
	(b) Is it on a line normal to NH	**No**	
	(c) What is the distance of crossing the utility pipelines from the existing structures? Crossings shall not be too near the existing structures on the National Highway, the minimum distance being 15 meter.	**NA**	
	(d) The casing pipe (or conduit pipe in the case of electric cable) line carrying the utility line shall be of steel, cast iron or reinforced concrete and have adequate strength and be large enough to permit ready withdrawal of carried pipe/cable Mention type of casing.		
	(e) Ends of the casing/conduit pipe shall be sealed from outside, so that it does not act as a drainage path		
	(f) The casing/conduit pipe should be as minimum extend from drain to drain in cuts and toe of slope in fills		
	(g) The top of the casing/conduit pipe should be at least 1.2meter below the surface of the road subject to being at least 10.3 m below the drain inverts. Mention the proposed details		
	(h) Mention the methodology proposed for crossing of road for the proposed sewage/Gas pipeline. Crossing shall be by boring method (HDD) (Trenchless Technology), specially where the existing road pavement is of cement concrete or dense bituminous concrete type	**Horizontal Directional Drilling (HDD) method**	

Executive Engineer
Pench Diversion Canal Division
Sinana Th. Chourai Distt Chhindwara (M.P.)

CHECK-LIST

	(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 water way along it		
2	Documents/drawings to be enclosed with the proposal		
2.1	Cross section showing the size of trench of open trenching	**NA**	
	Is it normal size of 1.2m deep , 0.3 m wide		
	(i)Should not be greater than 60 cm wider than the outer diameter of the pipe		
	(ii) located as close to the extreme edge of the Right of Way as possible but not less than 15m from the center line of the nearest carriageway		
	(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		
	(iv) These should be so laid that their top is at least 0.6m below the ground level so as not to obstruct drainage of the road land		
2.2	Cross section showing the size of pit and location of Pipe for HDD method		
2.3	Strip plan/Route Plan showing utility/Gas pipeline chainage, width of Row, distance of proposed pipe line from the edge of ROW, important mile stone, intersections, cross drainage works etc.	**Strip plan showing all the details is enclosed**	
2.4	Methodology for laying of the Utility pipeline	**Enclosed**	
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 the trench	**NA**	
	(a) The trench width should be at least 30 cm, but not more than 60 cm. Wider than the outer diameter of the pipe	**NA**	
	(b) For filling of the trench, Bedding shall be to depth of not less than 30 cm. It shall consist of granular material, free of lumps, clode, cobbles and graded to yield firm surface without sudden change in the bearing value.	**NA**	

Executive Engineer
Pench Diversion Canal Division
Sinona Th. Chourai Distt Chhindwara (M.P.)

CHECK-LIST

	Unsuitable soil and rock edges should be excavated and replaces by selected material.		
	(c) The backfill shall be completed in two stages-i) side fill to the level of the top of the pipe and ii) Overfill to the bottom of the road crust	**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 proctor density. Overfill shall be compacted to the same density and the material that has been removed. Ponding will not be permitted.	**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**	
	(f) The excavation shall be protected by flagman, Signs and barricades and red lights during night hours.	**NA**	
	(g) If required a diversion shall be constructed at the expense of agency owing the utility line.	**NA**	
2.4.2.	Horizontal Directional Drilling (HDD) Method	**Yes**	
2.4.3.	Methodology for laying of the pipeline through CD works and method of laying in cases where the carrying of gas pipeline on the bridge becomes inescapable		
3	Draft License Agreement signed by two witnesses		
3.1	The License fee estimate as per Ministry's guidelines issued vide circular No. RW/NH/33044/29/2015/S&R dated 22-11-2016		
4	Whether Performance Bank Guarantee as per Ministry guidelines issued vide circular No. RW/NH/33044/29/2015/S&R dated 22-11-2016 is obtained	**Undertaking for submission of BG from Executive Engineer(Applicant)**	
4.12	Confirmation of BG has been obtained or not as per MoRTH/NHAI guidelines		
5	**Affidavit/Undertaking form the Applicant for following is to be furnished**		
5.1	Undertaking for not to damage any other utility, if damaged then to pay the losses either to	**Enclosed**	

Executive Engineer
Pench Diversion Canal Division
Singna Th. Chourai Distt Chhindwara (M.P.)

CHECK-LIST

	NHAIor to the concerned agency		
5.2	Undertaking for renewal of bank Guarantee as and when asked by MoRTH/NHAI	**Enclosed**	
5.3	Undertaking for confirming all standard conditions of Ministry/NHAI's guidelines	**Enclosed**	
5.4	Undertaking for indemnity against all damages and claims	**Enclosed**	
5.5	Undertaking for management for traffic movement during laying of utility line without hampering the traffic	**Enclosed**	
5.6	Undertaking that if any claim is raised by the Concessionaire/contractor then the same has the be paid by the applicant	**Enclosed**	
5.7	Undertaking that expenditure if any incurred by NHAI for repairing any damage caused to the NH by laying, maintenance or shifting of the utility line will be borne by the applicant agency owning the line.	**Enclosed**	
5.8	Undertaking that expenditure if any incurred by NHAI for repairing any damage caused to the NH by laying, maintenance or shifting of the utility line will be borne by the applicant agency owning the line.	**Enclosed**	
5.9	Undertaking that text of the License deal is as per verbatim of format issued by MoRTH vide circular No. RW/NH/33044/29/2015/S&R dated 22-11-2016	**Enclosed**	
5.10	Undertaking that the applicant has obtained various safety clearances from the respective authorities such as Directorate of Electricity, Chief Controlled of Explosives, Petroleum and Explosive safety Organization, Oil Industry Safety Directorate, state/central pollution control board and any other statutory clearances and applicable, beforeapplying to Highway Administration	**Enclosed**	
5.11s	IF THE MoRTH/ NHAI considers it necessary in future to move the utility line for any work of improvement or repairs to the road, it will be carried out as desired by the MoRTH/NHAI at the cost of the Agency owning the utility line within a reasonable intimation given.	**Enclosed**	
5.12	Certificate from the applicant in the following format I)Laying of Gas pipeline will not have any deleterious effects on any of the bridge components and road way safety for traffic II) We do undertake that I/we will relocate	**Enclosed**	

Executive Engineer
Pench Diversion Canal Division
Singna Th. Chourai Distt Chhindwara (M.P.)

CHECK-LIST

	service road/approach rad/utilities at my/our own cost notwithstanding the permission granted within such time as will be stipulated by NHAI for future six lining or/any other development.		
6	Who will sign the agreement on behalf of Gas pipe line agency? Power of attorney to sign the Agreement is available or not		
7	The Project Director shall submit the following Certificates		
7.1	Certificate that the proposal is confirming to all standard conditions issued vide MoRTH circular No. RW/NH/33044/29/2015/S&R dated 22-11-2016		
7.2	Certificate Form the PH in the following format I)" it is certified that any other location of the utility pipeline would be extremely difficult and unreasonably costly and the installation of utility pipeline within RoW will not adversely affect the design, stability and traffic safety of the highway nor the likely future improvement such as widening of the carriage way, easing of curve" II) for six laning 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"		
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 of way to lay cable/duct has also been granted as a right of way concessionaire under the concession agreement for up gradation of..... section from Km. ..... to km ..... of NH no. ..... on Build, Operate and Transfer basis and therefore the licensee shall honor same.	**NA**	
9	Who will supervise the work of laying of Utility Pipe line		
	a) On behalf of the applicant	**The Executive Engineer, Pench Diversion Project, Canal Division, Signa, Teh. ChauraiDistt. Chhindwara**	

Executive Engineer
Pench Diversion Canal Division
Singna Th. Chourai Distt Chhindwara (M.P.)

CHECK-LIST

	b) On behalf of MoRTH/NHAI		
10	Who will ensure that the defects in road portion after laying of utility pipeline are corrected and if not corrected than what action will be taken.		
	c) On behalf of the applicant	**The Executive Engineer, Pench Diversion Project, Canal Division, Signa, Teh. ChauraiDistt. Chhindwara**	
	d) On behalf of MoRTH/NHAI		
11	Who will pay the claims for damages done/disruption in working of Concessionaire if asked by the Concessionaire ?	**Water Resources Department**	
12	A Certificate from PD that he will enter the proposed permission in the register of records of the permissions in the prescribed profarma (copy enclosed)		
13	If any previous approval is accorded for laying cable line then Photocopy of register of records of permissions accorded (as maintained by PD) to be enclosed	**No previous approvals accorded at the proposed location.**	

Executive Engineer
Pench Diversion Canal Division
Signana Th. Chaurai Distt. Chhindwara (M.P.)

Registration and Stamp Department
Madhya Pradesh

Certificate of Stamp Duty

E-Stamp Details

E-Stamp Code	0101070309202200760		
Total E-Stamp Amount	100		
Govt. Stamp Duty (Rs.)	100	Municipality Duty (Rs.)	0
Janpad Duty (Rs.)	0	Upkar Amount (Rs.)	0
Exempted Amount(Rs.)	0		
E-Stamp Type	NON-JUDICIAL		
Issue Date & Time	03/09/2022 11:34:29		
Service Provider or Issuer Details	Modit Yadav/SP010740509202000054		
SP/SRO/DRO/HO Details	SHOP NO 4 STADIUM COMPLEX IN FRONT OF JAIN BARTAN BHANDAR CHHINDWARA CHHINDWARA		

Deed Details

Deed Type	Copy or Extract
Deed Instrument	Copy or Extract, certified to be a true copy or extract by or order of an public officer under section 76 of the Indian Evidence Act 1872 (1 of 1872) and not chargeable under the law for the time being in force relating to court fees- One hundred rupees.
Purpose	AFFIDVAIT

First Party Details

Organization Name	कार्यपालन यंत्री
Address	पेंच व्यपवर्तन परियोजना नहर संभाग सिंगना तह0 चौरई जिला छिन्दवाडा CHHINDWARA Madhya Pradesh INDIA
Number of Persons	1

Second Party Details

Organization Name	परियोजना निदेशक एन एच ए आई छिन्दवाडा
Address	छिन्दवाडा CHHINDWARA Madhya Pradesh INDIA
Number of Persons	1

UNDERTAKING

(As per S. No. 5.1 to 5.11 of checklist providing with pipeline crossing application to NHAI)

· Executive Engineer, Pench Diversion Project (Water Resource Department) Singna,Chourai Distt-Chhindwara seeking approval for pipeline laying across National Highway-547 at chainage 99.90 KM by HDD (Pushing method). I (applicant) hereby undertake that :

1. Will take care all utilities without damaging them.ifany damage or loss will occur during laying work, Undersigned will pay all expenses to restore the same to its original condition to NHAI or to the concerned agency.
2. Renewal of Bank Guarantee as and when asked by MoRTH/NHAI will be done.
3. Laying work will be executed confirming all standard condition of Ministry/NHAI guidelines.

Digitally signed by Modit Yadav
Date: 2022.09.03 11:34:30 IST

4. Applicant department will bear indemnity against all damages and claims.
5. Applicant department maintain management for traffic movement during laying of utility line without hampering the traffic.
6. if any claim is raised by the concessionaire/contractor then the same has the be paid by the applicant department.
7. Traffic movement during laying of pipeline will be managed by Agency in supervision of department (of Applicant) under the direction of NHAI.
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11. If the MoRTH/ NHAI considers if necessary in future to move the pipeline for any work of improvement repairs to the road. it will carried out as desired by the MoRTH/NHAI at the cost of applicant Agency within reasonable time (not exceeding 60 days)of the intimation given by the MoRTH.

Executive Engineer
Pench Diversion Project, Canal Division
Singna, The-Chourai, Distt-Chhindwara(M.P.)

CERTIFICATE

(As per S. No. 5.12 of checklist with application)

(i) It is certified that laying of pipe line across NH 547 at Chainage 99.90 km by department will not have any deleterious effect on any of the bridge components and roadway safety for traffic in future.

(ii) We do undertake that applicant department will relocate service road/approach road/utilities related to the pipeline in the vicinity of NH at own cost notwithstanding the permission granted within such time as will be stipulated by MORT&H for future six laning or any other developments.

Executive Engineer
Pench Diversion Project, Canal Division,
Singna, Teh. Chuarai, Dist. Chhindwara (M.P.)

CROSSING METHODOLOGY TO BE ADOPTED FOR TRENCHLESS (HDD) METHOD

The laying of pipeline across the National Highway / State Highway shall be carried out byTrench Less Technique i.e. either by Boring or Ramming of carrier pipe or by Micro-Tunnelling or by Horizontal Directional Drilling without disturbing the normal traffic on the Highway. All the safety measures shall be taken during execution of pipeline laying work across the National Highway/State highway.

The actual procedure shall be decided best on the Geo Technical report conformingthe soilstrata and ascertaining the correct profile of the watercourse or other obstacles to be crossed.

Boring

Boring is the most popular and simplest procedure for crossing of highways and majorroads with heavy traffic. Similar to a directional drill for river crossings, the road bore is accomplished with a horizontal drill rig, or boring machine. The boring machine drills a hole under the road to allow insertion of the pipe. In most of the cases, a casing is first Installed In the hole, and the carrier pipeline is inserted inside the casing. The benefit of the road boring is that it allows installation of the pipeline without disrupting traffic. Carrier pipe shall be laid inside the casing pipe. Generally, diameter of casing will be 150mm higher than the carrier pipe. The casing pipe shall be made of approved steel with epoxy coating (Internal and External) or approved reinforced concrete pipe. The thickness of casing nipe shall he decided spag to take all the external lgqq during construction and after completion of work, 1: 100 slopes will be provided towards drain during installation of the casing pipe. The casing pipe will be extended a minimum of 600 mm beyond the toe of the slope or base grade or 90 mm beyond the bottom of the drainage ditch whichever is greater.

Inserting the Casing

The inserting of casing pipe will start only after the working pits have been constructed andfinished completely and the assembly between the wall and the driving unit has been carried out. During the driving process a cutting head will be pushed gradually into the virgin soil.As the insertion progresses, the soil excavated by the cutting head will be removed using a soil transportation device. The excavation face will under no circumstances go beyond the cutting head. Where necessary, the work will be carried out by exercising a counter - pressure at excavation face to prevent any water from bursting through. The front face will be at all times be sealed tight against water and soil. The cutting head will be manageable by itself and provide with the necessary guiding jacks which will be able to be driven independently. In case of driving with pressurized air as front support, the air pressure will be constantly maintained where there is a danger of water seepage and /or collapse.

The casing will have a sufficient number of Injection openings to enable lubrication of thecasing, during driving, between the soil and the outside wall with thixotropic or equivalent fluids in order to reduce soil friction. After the insertion operations, the injection openings will be sealed to air -and-water-tightness.

Following measurements shall be taken during the driving operation.

- Measurement of the number of meters casing inserted, including the cutting head in each work shift of 8 hours.
- Measurement of the peak pressure of the main jacks and that of any intermediate driving stations required to start moving the casing at the commencement of the work of each work shift.

- Measurement of the center of the cutting head in X, Y and Z co-ordinates after driving each pipe with an accuracy of 5 mm and comparison with a fixed center line system independent of the driving wall and casing train;
- The automatic recording of the front face support pressure (drilling fluid, air, soil,water)

The maximum permitted deviation throughout the entire duration of the driving process in10 cm both vertically and horizontally measured in relation to the connection line of the centers of the bore holes in the entry and exit working pit walls.

Inserting Carrier pipe through the casing

When the pipe is insert into the casing, the presence of the Owner and/or itsrepresentative is required. The insertion will be carried out with a sufficient number of suitable machines.

The pipeline will be kept completely in line with the casing. Damage to the coating will beexcluded altogether. The progress of the pipeline in the casing will be gradual and under control. The front end of the pipe will be equipped with a slider-shoe and drawn by a cable through the casing.

The casing pipe will be filled by sand / bentonite slurry filling (by pumps). Both extremitiesof casing will be sealed in an appropriate manner.

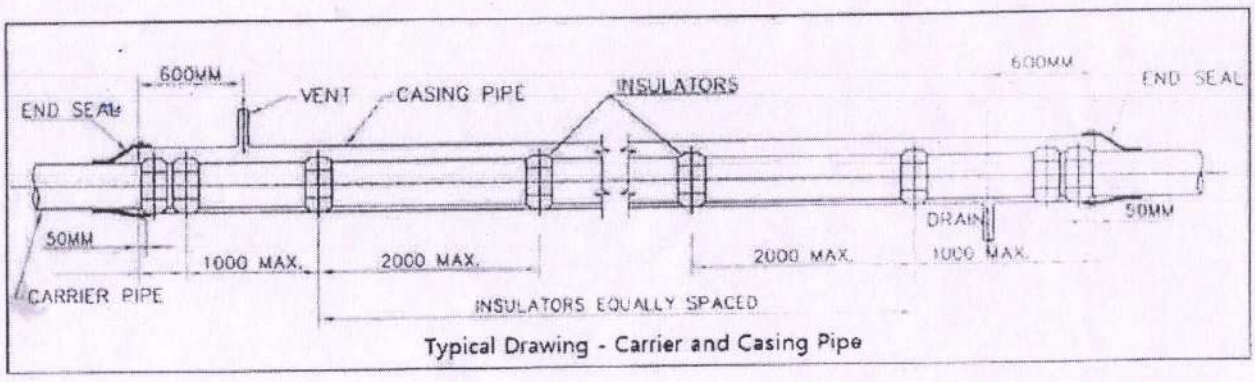
Installing Space Collars/tnsulators

The spacer collars will be placed at 2.00m from each other. At the extremities of the casing,two spacer collars will be placed whereby the outer spacer collars will be located at least 30cm inside the casing.

The support points of the successive spacer collars may not be located in one line but willbe regularly staggered. The spacer collars will be made completely of HDPE material with a minimum height of 25cm. Electrical insulation between the casing and carrier pipe shall be checked with megger time to time.

Site Restoration and Installation of Vent, Drain and Warning Sign Board

After installation of casing and carrier pipe the road shall be restored to the satisfaction ofconcern authorities. The installation of vent and drain shall be installed at both the ends of crossing. Warning sign boards indicating the warning about flowing of high pressure natural gas and telephone numbers of the concern maintenance office shall be installed on both side of the high way as per drawing.



Typical Drawing - Carrier and Casing Pipe