



# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सडक परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

## National Highways Authority of India

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

श्रेणीय कार्यालय : 41-29-45A, सर्वे नं: 373/2A, कोदंडरामालयम्, चलासानी नगर,

रानीगारीतोटा, कृष्णलंका, विजयावाडा - 520 013, आन्ध्र प्रदेश

Regional Office : D.No. 41-29-45A, RS.No. : 373/2A, Kodandaramalayam, Chalasani Nagar,

Ranigari Thota, Krishna Lanka, Vijayawada - 520 013, Andhra Pradesh.

फोन / Tel : 0866-2483910, ई-मेल/e-mail: rovijayawada@nhai.org, nhairovja@gmail.com

वेब/ web: www.nhai.gov.in



Ref: NHAI/RO-VJA/IOCL/NH-16/706.000-713.384/2022-23/1216

March 27, 2023.

### INVITATION OF PUBLIC COMMENTS

**Sub:** RO - Vijayawada - Permission for issue of NOC for laying of 12.75" Natural Gas pipe line along with Optical Fibre Cable (OFC) for city Gas distribution of Vizag along NH-16 between Km stone 706 and 713 (From Km 706.000 to Km 713.384) and installation of DRS skids (pressure regulating valves) between Ch. 709.070 and Ch. 709.080 and also crossing at Km 707.900, Km 710.180 totalling to a length of 7504 mts. in Visakhapatnam district in the State of Andhra Pradesh - Public comments - Reg.

The Project Director, PIU - Visakhapatnam submitted a proposal of M/s. Indian Oil Corporation Limited along NH-16 from Km. 706.000 to Km. 713.384 (7384 mtrs) and crossing at Km 707.900 (60mtrs) & Km 710.810 (60 mtrs), totalling to 7504 mts in Visakhapatnam District of Andhra Pradesh.

As per MORTH guidelines vide letter No. RW/NH-33044/29/2015/S&R® dated 22<sup>nd</sup> November 2016, the Highway Administration will put out the application in the Ministry's website for 30 days seeking claims and objections (on grounds of public inconvenience, safety and general public interest).

In view of the above, the comments of public, if any, on the above mentioned proposal is invited on below mentioned address.

**Regional Officer - Vijayawada,**  
National Highways Authority of India,  
Regional Office, Dr. No.41-29-45A, R. S. No.373/2A  
Near Kodandaramalayam, Chalasani Nagar,  
Ranigarithota, Krishnalanka, Vijayawada - 520 013.  
Email: [rovijayawada@nhai.org](mailto:rovijayawada@nhai.org)

(R.K. Singh),  
Regional Officer  
RO - Vijayawada



# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय भारत सरकार)

## National Highways Authority of India

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

परियोजना कार्यालयन इकाई (जि वयू), भा.रा.रा.पा.एन्क्लेव, कि.मी. 2/8 रा.रा.-16

हनुमन्तवाका, विशाखपट्टणम - 530 040, ए.पि., भारत

Project Implementation Unit (GQ), NHAI Enclave, KM 2/8 NH-16

Hanumanthavaka, Visakhapatnam - 530 040, A.P., India

फोन / Tel : 0891-2707600, 2714119

ई-मेल/ E-mail : vis@nhai.org, nhaipiuvsp@gmail.com, वेब : www.nhai.gov.in



NHAI/PIU-VSP/IOCL/ 706/2022-23/ 1517

Date: 23.02.2023

To

The Regional Officer  
National Highways Authority of India  
Regional Office, Vijayawada  
Door No.41-29-45A, R.S.No.373/2A  
Near Kodandaramalayam  
Chalasani Nagar, Ranigarithota  
Krishnalanka, Vijayawada - 520 013.



**Sub: NHAI, PIU Visakhapatnam: NH permission for issue of NOC for laying of 12.75" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag along NH-16 between KM Stone 706 and 713 (From 706.000 km to 713.384 Km) and installation of DRS skids (pressure regulating valves) between Ch.709.070 km and 709.080 & also crossing at 707.900, 710.180 Km Visakhapatnam District, Andhra Pradesh State -Reg.**

- Ref:** 1) M/S IOCL Letter No. PJ-CGD/VIZAG/008, Dated: 31.10.2022.  
2) NHAI/PIU-VSP/city limits /2022-23/992, Dt:24.11.2022.  
3) 01041123/IE/02/AVA-PC/126, Dt: 22.12.2022 received on 23.12.2022.  
4) Vide E-mail compliance submitted on 13.02.2023.

Sir,

Please refer the authorized signatory vide Ref. 1 above M/s. Indian oil Corporation Pvt. Ltd (IOCL) has submitted a proposal with a request to accord Permission for laying of 12.75" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag along NH-16 between KM Stone 706 and 713 (From 706.000km to 713.384 Km) and installation of DRS skids ( pressure regulating valves) between Ch.709.070 km and 709.080 & also crossing at 707.900, 710.180 Km in Visakhapatnam, Visakhapatnam District, Andhra Pradesh State, details are mentioned below:

Sl.No.	Name of the Road	Chainage	Running Length in Mts
1.	NH-16 Along Road	Km. 706.000 km to 713.384 & crossings at 707.900, 710.180	7504 Mtrs

2. Subsequently, joint site inspection has been carried out by the representative of IE & NHAI along with M/s. Indian Oil Corporation Pvt. Ltd (IOCL). IE recommendations submitted vide ref.03 cited above.

3. While verifying the subject proposal, with certain observations the proposal was returned to the agency on 03.02.2023 through the NOC portal and the same is complied by the agency and submitted on 13.02.2023. The proposal is verified and found in order as per specified MORTH guidelines.

4. The following documents are submitted except license fee (as per MoU Dt: 07.06.2022 11:13 AM between NHAI & IOCL) estimate by the Agency as per the Ministry Circular No.RW/NH-33044/29/2015/S&R(R) dated 22.11.2016.

- (a) Proposal letter.
- (b) Check List.
- (c) Specification report to accompanying the estimate towards License fees for laying of pipe line.
- (d) Agreement regarding granting of Right of way permission.
- (e) Undertaking for Performance Bank Guarantee.
- (f) Certificates for Four laning.
- (g) Indemnity bond against all damages and claims as St. 5.6 Check list.
- (h) Affidavit to take all the actions as prescribed in the Check list from 5.1 to 5.12.
- (i) Technical specification for laying of duct.
- (j) Brief description of Horizontal Directional Drilling and Open Trench Methodology.
- (k) Cross section of Road crossing drawing.
- (l) Plan and profile submitted for laying of pipe line.

4. Considering the recommendations of the Consultants, the proposal submitted by M/s IOCL for according permission for laying of 12.75" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution in Vizag along NH-16 between KM Stone 706 and 713 (From 706.000km to 713.384 Km) and installation of DRS skids ( pressure regulating valves) between Ch.709.070 km and 709.080 & also crossing at 707.900, 710.180 Km. The proposal is herewith submitted for approval of Competent Authority.

This is for information and taking further necessary action.

Yours faithfully,

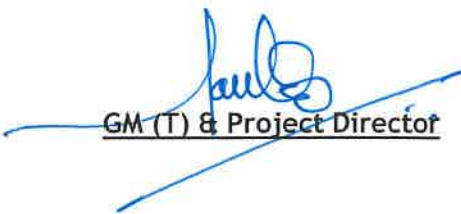
  
[P. Siva Sankar] 23/2/23  
G.M (T) & Project Director

Encl: Proposal in two sets  
(01 Original + 01 Duplicate)

### CERTIFICATE

1. It is certified that the proposal for "Permission for laying of 12.75" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag along NH-16 between KM Stone 706 and 713 (From 706.000km to 713.384 Km) and installation of DRS skids ( pressure regulating valves) between Ch.709.070 km and 709.080 & also crossing at 707.900, 710.180 Km in Visakhapatnam. Through HDD methodology Visakhapatnam District in Visakhapatnam, Andhra Pradesh State" is confirming of all the standard conditions / guidelines issued vide Ministry circular No. RW/NH-33044/29/2015/S&R(R) dt. 22.11.2016.
2. It is certified that sufficient ROW available at site for future improvement such as widening of the carriageway, easing of curve, etc...
3. It is certified that there will be no hindrance to the six-lane based on the feasibility at the said location, if the six-lane project is taken up, the agency shall take shifting of the gas pipeline on their own cost on request of NHAI (under taking enclosed).
4. It is certified that the details of the proposed permission shall be entered in the Register of Records of the Permission maintained by PIU.

  
DGM-(T)

  
GM (T) & Project Director

### LICENCE FEE & BG ESTIMATE

**Name of the Work:** Estimate towards License Fee for laying of 12.75" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag along NH-16 between KM Stone 706 and 713 (From 706.000km to 713.384 Km) and installation of DRS skids ( pressure regulating valves) between Ch.709.070 km and 709.080 & also crossing at 707.900, 710.180 Km .through HDD methodology in visakhapatnam,Visakhapatnam District, Andhra Pradesh State.

#### Estimate -A

#### Performace Bank Guarantee Amount Calculation

<b>Amount of performance Guarantee to be submitted :</b> Length in Mtr Rs. 100' met as per point No. 6 MORTH guide line vide letter No. RS/ NH/ 33044/29/2015/S&R(R), Dated. 22.11.2016.	7504 mt x Rs.250/met = 18,76,000/-	18,76,000/-
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Eigheen Lakh Seventy Six Thousand Rupees only/-

*For licence fee as per MoU between NHAI & IOCL dt:07.06.2022 11:13 AM point no 02.b.NHAI shall not levy any charges from IOCL and its agencies for laying new gas petroleum pipeline(s) along or across National Highways in National Highways Right of Way.*

  
DGM (T)

  
[P. Siva Sankar]  
G.M (T) & Project Diretor



Documents shortfall in the online file- 706 to 713.384

1 message

ANIL KUMAR, P M <anilkpm@indianoil.in>  
To: NHAJ-PIU VISAKHAPATNAM <nhaipiuvsp@gmail.com>

13 February 2023 at 18:03

Dear Sir,

The shortfall documents was uploaded and also attached here for your reference please.

Kindly take appropriate action ..

Thanks & Regards

P M Anil Kumar

Asst. Manager

CGD - Vizag

अस्वीकरण

यह संदेश इंडियन ऑयल मेसेजिंग गेटवे, भारत से भेजा गया है। इस इलेक्ट्रॉनिक संदेश में निहित जानकारी और इसके साथ कोई भी संलग्नक केवल प्रेषित व्यक्ति (यों) के लिए ही है और इसमें स्वामित्व, गोपनीय या विशेषाधिकार प्राप्त जानकारी हो सकती है। यदि आप वांछित प्राप्तकर्ता नहीं हैं तो आपको इस ई-मेल को प्रसारित, वितरित या कॉपी नहीं करना चाहिए। कृपया इसकी सूचना तुरंत प्रेषक को दें और इस संदेश की सभी प्रतियां और सभी संलग्नक नष्ट कर दें।

जभाषा हिन्दी में हम आपके पत्रों का स्वागत करते हैं।

Disclaimer

This Message was sent from IndianOil Messaging Gateway, India. The information contained in this electronic message and any attachments to this message are intended for the exclusive use of the addressee(s) and may contain proprietary, confidential or privileged information. If you are not the intended recipient, you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately and destroy all copies of this message and any attachments.

We welcome your communications in Rajbhasha Hindi.

4 attachments

706 to 713.pdf  
13420K

ANCLDGMNT.pdf  
223K

CROSSING DETAILS.pdf  
87K

ONLINE nhai strip sheetS.pdf  
316K

14/2  
Mahesh gauri  
15/2

706 to 713.pdf	✓
ANCLDGMNT.pdf	✓
CROSSING DETAILS.pdf	✓
ONLINE nhai strip sheetS.pdf	✓

### Return To Applicant

Application Reference No : 20221115/1/12/17478/1658

Reason :

Submit

### Returned Applications

Sno	Application Ref: No	Returned By	Return Date	Reason
1	20221115/1/12/17478/1658	Visakhapatnam	03/02/2023	Document short fall... please enclose Annexure-1,3,4,8, 9 as per check list 1.11,2.1,2.2,13.
2	20221115/1/12/17478/1658	Visakhapatnam	05/12/2022	Please check the chainages mentioned in the checklist which is not matching the main sheet chainages. please resubmit your proposal duly complying the above observations.

**SATRA** **FEEDBACK INFRA**  
SATA Services and Solutions Pvt Ltd in Joint Venture  
with Feedback Infra Pvt Ltd

E-mail: [pms@satragroup.in](mailto:pms@satragroup.in) ; [1123a@satragroup.in](mailto:1123a@satragroup.in)





भारतीय राष्ट्रीय राजमार्ग प्राधिकरण  
(सड़क परिवहन और राजमार्ग मंत्रालय भारत सरकार)

**National Highways Authority of India**

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

परियोजना कार्यालयन इकाई (जि वयू), भा.रा.रा.पा.एन्क्लेव, के.मों. 2/8 रा.रा.-16

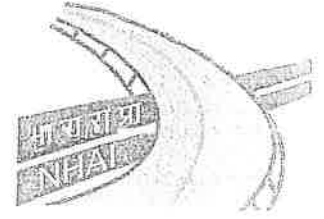
हनुमन्तवाका, विशाखपट्टणम - 530 040, ए.पि., भारत

Project Implementation Unit (GQ), NHAI Enclave, KM 2/8 NH-16

Hanumanthavaka, Visakhapatnam - 530 040, A.P., India

फोन / Tel : 0891-2707600, 2714119

ई-मेल/ E-mail : vis@nhai.org, nhai@piuvsp@gmail.com, वेब : www.nhai.gov.in



NHAI/PIU-VSP/CITY-LIMITS /2022-23/992

Date: 24.11.2022

To

M/s.SATRA Services and Solutions Pvt Ltd.,  
in JV with Feedback Infra private Limited,  
# 1-8-359-363, 4<sup>th</sup> Floor, Centre Point Building,  
US Consulate Lane, SP Road,  
Begumpet, Secunderabad-500 003.  
Email : [pms@satragrup.in](mailto:pms@satragrup.in), [1123@satragroup.in](mailto:1123@satragroup.in)

**Sub:** NHAI, PIU Visakhapatnam: NH Permission for laying of 12.75" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag along NH-16 between KM Stone 706 and 713 (From 706.000 km to 713.384 Km) and installation of DRS skids (pressure regulating valves) between Ch.709.070 km and 709.080 & also crossing at 707.900, 710.180 Km -Requested-Reg.

**Ref:** 1.PJ-CGD/VIZAG/008,Dt:31.10.2022 received to this office on 16.11.2022(online).

Sir,

Please refer (1) above letter for seeking permission for issue of NOC for laying of 12.75" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag along NH-16 between KM Stone 706 and 713 (From 706.000km to 713.384 Km) and installation of DRS skids ( pressure regulating valves) between Ch.709.070 km and 709.080 & also crossing at 707.900, 710.180 Km.

It is requested to inspect the site on 26.11.2022 at 11:30 hrs along with the representatives of NHAI & IE, M/s. IOCL authorised person. (b) Study the proposal with regard to the latest guidelines issued by the Ministry F.No.RW/NH-33044/29/2015/S&R(R) Dated:22<sup>nd</sup> November,2016 and submit your detailed report along with specific recommendations for taking further necessary action.

Received  
25/11/2022

Yours truly,

[P. Siva Sankar]

G.M (T) & Project Director

Copy to: Dushyant Mani, SM-PJ(CGD), IOCL, 4th floor, LIC Annexe Building,  
Thikkanna Road, Near RTC Complex, Visakhapatnam-530004.



इंडियन ऑयल कॉर्पोरेशन लिमिटेड

सिटी गैस वितरण परियोजना

चौथी मंजिल, एल.आई.सी. एनेक्सी भवन, थिक्कना (डायमंड पार्क) रोड,  
आर.टी.सी. कॉम्प्लेक्स के पास, विशाखापट्टणम-530 004

फोन : 0891-2595104

Indian Oil Corporation Limited

City Gas Distribution Project

4th Floor, LIC Annexe Building, Thikkanna (Diamond Park) Road,  
Near RTC Complex, Visakhapatnam-530004

Phone : 0891-2595104



IndianOil

A Maharatna  
Company

पाइपलाइन्स प्रभाग  
Pipelines Division

Ref.No: PJ-CGD/VIZAG/008

Date: 31.10.2022

To

The Project Director,  
National Highway Authority of India,  
Project Implementation Unit,  
Visakhapatnam (Andhra Pradesh).



**Sub:** Permission for laying of 12.75" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag at following locations:

1. Along NH-16 between KM Stone 706 and 713 (From 706/000 KM to 713/384 KM)
2. Crossings at KM 707/900 and KM 710/180 through HDD methodology.
3. Installation of DRS skids (Pressure regulating valves) between CH: 709.70KM - 709.80KM and CH: 711.80KM - 711.90KM

Dear Sir,

Indian Oil Corporation Limited, a Govt. of India Enterprise, leading company in Oil and Gas sector is operating and maintaining more than 13000 Km of underground crude, product, LPG and Natural Gas pipelines across India. IOCL got authorization to implement City Gas Distribution of Vizag, Srikakulam and Vizianagaram from Petroleum and Natural Gas Regulatory Board (PNGRB) vide PNGRB/CGD/BID/9/2018/01/Andhra Pradesh DT 01.03.2019.

The proposed 12.75" diameter, Carbon steel, API 5L Gr X52, pipeline along with optical fibre cable is intended along the National Highway at locations described below in Vizag:

1. Along NH-16 between KM Stone 706 and 713 (From 706/000 KM to 713/384 KM)
2. Crossing at KM 707/900 and KM 710/180 through HDD methodology.
3. Installation of DRS skids (Pressure regulating valves) between CH 709.70KM - CH 709.80KM and CH 711.80KM - CH 711.90KM

We are hereby submitting the proposal in compliance with the guidelines (F.No. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016) and MoU between M/s.IOCL and NHA Dated 08.06.2022.

Since this is a time bound project of National importance, contributing to national prosperity, we solicit your most expeditious action to grant NOC for laying the pipeline along with optical fibre cable under National Highway-16.

Thanking you,

Yours sincerely,

दुष्यंत मणि (Dushyant Mani)  
SM (CGD) Vizag  
Project Manager (CGD)  
इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
सिटी गैस वितरण परियोजना  
Indian Oil Corporation Limited  
City Gas Distribution Project  
विशाखापट्टणम / Vizag

Encl:

1. License Agreement on Non-Judicial stamp paper, Power of attorney of authorized Signatory
2. Checklist, Affidavit as per NHA, Methodology of laying, undertaking, certificate
3. PNGRB Authorization
4. Strip-Sheet, Open-cut and HDD drawings
5. List of Major bridges, Minor bridges, culverts and service roads

मुख्यालय : ए-1, उद्योग मार्ग, सेक्टर-1, नोएडा-201 301

● Head Office : A-1, Udyog Marg, Sector-1, Noida-201 301

पंजीकृत कार्यालय : जी-9, अलि यावर जंग मार्ग, बांद्रा (पूर्व) मुम्बई-400 051 (भारत)

● Regd. Office : G-9, Ali Yavar Jung Marg, Bandra (East) Mumbai-400 051. (India)

सी.आई.एन. नं. / C I N No. : L23201MH1959GOI011388

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण  
(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

National Highways Authority of India

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

निजीकरण कार्यक्रम इकाई (जि एच), आर.एम.एन.ए.ए., वि.जी. 2/6 द.म.-16

हनुमान्तावली, बिल्डिंग-530 040, ए.पी. इंडिया

Project Imp./Maintenance Unit, G.O. NH-16 Enclaves, KM 2/6 D.M.-16

Hanumanthavali, Visakhapatnam - 530 040, A.P., India

फोन / Tel: 0891-2707630, 2714119

ई-मेल / E-mail: vis@nhai.org, nhai@vsvp@gmail.com, वेब : www.nhai.gov.in

NHAI/PIU-VSP/CITY-LIMITS /2022-23/992

Date: 24.11.2022

To

M/s.SATRA Services and Solutions Pvt Ltd.,  
in JV with Feedback Infra private Limited,  
# 1-8-359-363, 4<sup>th</sup> Floor, Centre Point Building,  
US Consulate Lane, SP Road,  
Begumpet, Secunderabad-500 003.  
Email : [pms@satragrup.in](mailto:pms@satragrup.in), [1123@satragroup.in](mailto:1123@satragroup.in)

Sub: NHAI, PIU Visakhapatnam: NH Permission for laying of 12.75" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag along NH-16 between KM Stone 706 and 713 (From 706.000 km to 713.384 Km) and installation of DRS skids (pressure regulating valves) between Ch.709.070 km and 709.080 & also crossing at 707.900, 710.180 Km -Requested-Reg.

Ref: 1.PJ-CGD/VIZAG/008,Dt:31.10.2022 received to this office on 16.11.2022(online).

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Received  
25/11/2022

Yours truly,

[P. Siva Sankar]

G.M (T) & Project Director

Copy to: Dushyant Mani, SM: PJ(CGD), IOCL, 4th floor, LIC Annexe Building,  
Thikkanna Road, Near RTC Complex, Visakhapatnam-530004.

NHAI/PIU-VSP/CITY-LIMITS /2022-23/

Date: 24.11.2022

To

M/s.SATRA Services and Solutions Pvt Ltd.,  
in JV with Feedback Infra private Limited,  
# 1-8-359-363, 4<sup>th</sup> Floor, Centre Point Building,  
US Consulate Lane, SP Road,  
Begumpet, Secunderabad-500 003.  
Email : [pms@satragrup.in](mailto:pms@satragrup.in), [1123@satragroup.in](mailto:1123@satragroup.in)

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Sir,

Please refer (1) above letter for seeking permission for issue of NOC for laying of 12.75" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag along NH-16 between KM Stone 706 and 713 (From 706.000km to 713.384 Km) and installation of DRS skids ( pressure regulating valves) between Ch.709.070 km and 709.080 & also crossing at 707.900, 710.180 Km.

It is requested to inspect the site on 26.11.2022 at 11:30 hrs along with the representatives of NHAI & IE, M/s. IOCL authorised person. (b) Study the proposal with regard to the latest guidelines issued by the Ministry F.No.RW/NH-33044/29/2015/S&R(R) Dated:22<sup>nd</sup> November,2016 and submit your detailed report along with specific recommendations for taking further necessary action.

Yours truly,

  
[P. Siva Sankar]

G.M (T) & Project Director



Copy to: Dushyant Mani,SM-PJ(CGD),IOCL, 4th floor,LIC Annexe Building,  
Thikkanna Road,Near RTC Complex,Visakhapatnam-530004.



## इंडियन ऑयल कॉर्पोरेशन लिमिटेड

सिटी गैस वितरण परियोजना

चौथी मंजिल, एल.आई.सी. एनेक्सी भवन, थिक्कना (डायमंड पार्क) रोड,  
आर.टी.सी. कॉम्प्लेक्स के पास, विशाखापट्टणम-530 004

फोन : 0891-2595104

### Indian Oil Corporation Limited

City Gas Distribution Project

4th Floor, LIC Annexe Building, Thikkanna (Diamond Park) Road,  
Near RTC Complex, Visakhapatnam-530004

Phone : 0891-2595104



IndianOil

A Maharatna  
Company

## पाइपलाइन्स प्रभाग Pipelines Division

Ref.No: PJ-CGD/VIZAG/008

Date: 31.10.2022

To  
The Project Director,  
National Highway Authority of India,  
Project Implementation Unit,  
Visakhapatnam (Andhra Pradesh).



**Sub:** Permission for laying of 12.75" Natural Gas Pipeline along with Optical Fibre Cable for City Gas Distribution of Vizag at following locations:

1. Along NH-16 between KM Stone 706 and 713 (From 706/000 KM to 713/384 KM)
2. Crossings at KM 707/900 and KM 710/180 through HDD methodology.
3. Installation of DRS skids (Pressure regulating valves) between CH: 709.70KM - 709.80KM and CH: 711.80KM - 711.90KM

Dear Sir,

Indian Oil Corporation Limited, a Govt. of India Enterprise, leading company in Oil and Gas sector is operating and maintaining more than 13000 Km of underground crude, product, LPG and Natural Gas pipelines across India. IOCL got authorization to implement City Gas Distribution of Vizag, Srikakulam and Vizianagaram from Petroleum and Natural Gas Regulatory Board (PNGRB) vide PNGRB/CGD/BID/9/2018/01/Andhra Pradesh DT 01.03.2019.

The proposed 12.75" diameter, Carbon steel, API 5L Gr X52, pipeline along with optical fibre cable is intended along the National Highway at locations described below in Vizag:

1. Along NH-16 between KM Stone 706 and 713 (From 706/000 KM to 713/384 KM)
2. Crossing at KM 707/900 and KM 710/180 through HDD methodology.
3. Installation of DRS skids (Pressure regulating valves) between CH 709.70KM - CH 709.80KM and CH 711.80KM - CH 711.90KM

We are hereby submitting the proposal in compliance with the guidelines (F.No. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016) and MoU between M/s.IOCL and NHAI Dated 08.06.2022.

Since this is a time bound project of National importance, contributing to national prosperity, we solicit your most expeditious action to grant NOC for laying the pipeline along with optical fibre cable under National Highway-16.

Thanking you,

Yours sincerely,

*(Signature)*  
Dushyant Mani / DUSHYANT MANI  
Senior Project Manager (CGD)  
Indian Oil Corporation Limited  
सिटी गैस वितरण परियोजना  
City Gas Distribution Project  
Vizag

Encl:

1. License Agreement on Non-Judicial stamp paper, Power of attorney of authorized Signature .
2. Checklist, Affidavit as per NHAI, Methodology of laying, undertaking, certificate
3. PNGRB Authorization
4. Strip-Sheet, Open-cut and HDD drawings
5. List of Major bridges, Minor bridges, culverts and service roads

मुख्यालय : ए-1, उद्योग मार्ग, सेक्टर-1, नोएडा-201 301

● Head Office : A-1, Udyog Marg, Sector-1, Noida-201 301

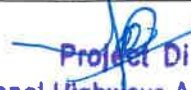
पंजीकृत कार्यालय : जी-9, अलि यावर जंग मार्ग, बांद्रा (पूर्व) मुम्बई-400 051 (भारत) ● Regd. Office : G-9, Ali Yavar Jung Marg, Bandra (East) Mumbai-400 051. (India)


सी.आई.एन. नं / C I N No. : L23201MH1959GOI011388

CHECK LIST	
Guidelines for processing the proposal for laying Natural Gas pipeline in the land across National Highway vested with NHA	
Relevant circulars	
1.	Ministry circular No. NH-41(58)/68 dated 31-01-1969
2.	Ministry circular No. NH-III/P/66/76 dated 18-11-1976
3.	Ministry circular No. RW-NJ-III/P/66/76 dated 01-05-1982
4.	Ministry circular No. RW/NH-11037/1/86-DOI(II) dated 28-07-1993
5.	Ministry circular No. RW/NH-11037/1/86-DOI dated 19-01-1995
6.	Ministry Circular No.RW/NH-34066/2/95/S&R dated 25-10-1999
7.	Ministry Circular No.RW/NH-34066/7/2003 S&R (B) dated 17-09-2003
8.	Ministry Circular No.RW/NH-33044/29/2015/S&R(R) dated 22.11.2016
9.	Memorandum of Understanding between IOCL and NHA dated: 08.06.2022

**Checklist for getting approval for laying of Natural Gas pipeline on NH land**

S.No.	Item	Information/Status	Remarks
1	General Information		
1.1	Name and address of the Applicant/Agency	Indian Oil Corporation Limited (Pipelines Division) Paradip-Hyderabad Pipeline Project, 4 <sup>th</sup> Floor, LIC Annexe Building, Thikkanna (Diamond Park) Road, Near RTC Complex, Visakhapatnam-530004	
1.2	National Highway Number	NH-16	
1.3	State	Andhra Pradesh	
1.4	Location	Akkayyapalem Jn. to NSTL gate	
1.5	(Chainage in km)	KM 706/000 to KM 713/384, Crossings at KM 707/900 and KM 710/180 and Installation of DRS skids (Pressure regulating valves) between CH: 709.70KM - 709.80KM and CH: 711.80KM - 711.90KM	
1.6	Length in Kilometres	7504 meters	
1.7	Width of available ROW	60 Mts.	
	(a) Left side from centre line towards increasing chainage/km direction	30-50Mts	
	(b) Right side from centre line towards increasing chainage/km direction	30Mts	
1.8	Proposal to lay underground petroleum pipeline for supply of petroleum products		
	(a) Left side from centre line towards increasing chainage/km direction	KM 706/000 to KM 713/384	
	(i) Right side from centre line towards increasing chainage/km direction	N.A	

  
**Project Director**  
**National Highways Authority of India**  
 Along NH-16 app. to City Gas Distribution Project  
 Location: Along NH-16 Between Km 715.300 – 718.345 (3.285 Km). Visakhapatnam District

  
**दुष्यंत मणि / DUSHYANT MANI**  
 वरिष्ठ परियोजना प्रबंधक (सी जी डी) / Senior Project Manager (CGD)  
 इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
 सिटी गैस डिस्ट्रीब्यूशन प्रोजेक्ट  
 City Gas Distribution Project  
 वेंजान / Vizag  
 Page 1 of 8



1.9	Proposal to acquire land		
	(a) Left side from center line	N.A	
	(b) Right side from center line	N.A	
1.10	Whether proposal is in the same side where land is not to be acquired	Yes	
	If not then where to lay the cable.	At the edge of available ROW	
1.11	Details of already laid services, if any along the proposed route	Attached.	Annex-1
1.12	Number of existing lanes (2/4/6/8 lanes).	4 lanes	
1.13	Proposed number of lanes (2 lane with paved shoulders/4/6/8 lanes).	4 lane	
1.14	Service road existing or not	Yes ( Details attached where service road is available)	
	If yes then which side	Both sides	
	(a) Left side from center line	KM 706/650 to KM 711/700	
	(b) Right side from center line	N.A	
1.15	Proposed service road		
	(a) Left side from center line	N.A	
	(c) Right side from center line	N.A	
1.16	Whether proposal to lay the petroleum pipeline is after the service road or between the service road and main carriageway	N.A	
1.17	Whether carrying of sewage/gas pipeline has been proposed on highway Bridges. If yes, then mention the methodology proposed for the same.	No pipeline is proposed on bridges.	
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 pipeline is proposed on parapet/any part of bridge.	
1.19	If crossings of the road involved If yes, it shall be either encased in pipes or through structure or conduits specially built for the purpose at the expenses of the agency owing the line	Yes, HDD Method. HDD is latest trenchless method without casing. It is safest and has no impact on surroundings. This method is being implemented for crossings of NH/NHA by pipelines all over the country. It has long life compared to cased crossing and is more reliable.	
	(a) Whether existing drainage structures are allowed to carry petroleum pipeline	No	
	(b) It is on a line normal to NH	Yes	
	(c) What is the distance of crossing the petroleum pipelines from the existing structures. Crossings shall not be too near the existing structures on the National Highway, minimum distance being 15 meter.	Complied	

Project Director  
National Highways Authority of India  
Vizakhapatnam

Along NH-16 application for City Gas Distribution Project  
Location: Along NH-16 Between Km 715.300 – 718.345 (3.285 Km). Visakhapatnam District

दुष्यंत मणि / DUSHYANT MANI  
वरिष्ठ परियोजना प्रबंधक (सी जी डी) / Senior Project Manager (CGD)  
इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
Indian Oil Corporation Limited  
सिटी गैस डिस्ट्रीब्यूशन प्रोजेक्ट  
City Gas Distribution Project  
वैजग / Vizag

	(d) The casing pipe(or conduit pipe in the case of electric cable) carrying the petroleum 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 pipe/cable. Mention type of casing.	NA	
	(e) Ends of casing /conduit pipe shall be sealed from the outside, so that it does not act as a drainage path.	NA	
	(f) The casing/conduit pipe should, as minimum extend from drain to drain in cuts and toe of slope in the fills.	NA	
	(g) The top of the casing/conduit pipe should be at least 1.2 meters below the surface of the road subject to being at least 0.3 m below the drain inverts. Mention the proposed details.	NA	
	(h) Mention the methodology proposed for crossings of road for the proposed Sewage/gas pipe line. Crossings shall be by boring method (HDD) (Trenchless Technology), specially, where the existing road pavement is of cement concrete or dense bituminous concrete type.	Pipeline crossing will be done by HDD Method (which is trenchless method without the need for casing). It is safest and has no impact on surroundings. This method is being implemented for crossings of NH/NHAI by pipelines all over the country. It has long life compared to cased crossing and is more reliable.	Annex-5
	(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.	NA	
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 1.65m deep *0.5m wide) i. Should not be greater than 60cm 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	Yes, Upon trenching cross section drawing attached.	Annex-3

	<p>from the centre lines of the nearest carriageway</p> <p>iii. Shall not be permitted to run along the National Highways when the road formation is situated in double cutting. Nor shall be laid over the existing culverts and bridges.</p> <p>iv. These should be so laid that their top is least 0.6m below the ground level so as not to obstruct drainage of the road land.</p>		
2.2	Cross section showing the size of pit and location of pipeline for HDD method	Yes, Enclosed	Annex-4
2.3	Strip plan/Route plan showing the Gas pipe line, 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 attached.	Annex-2
2.4	Methodology for lying of the petroleum pipe line.	Yes, Enclosed.	Annex-6
2.4.1	Open trenching method. (May be allowed in the petroleum corridor only where pavement is neither cement concrete nor dense bituminous concrete type. If yes, what is the methodology of refilling of trench?	Yes, Backfilling shall be done with granules material. Compaction shall be done in layers of 15cm each. The trench shall be filled upto the required height of 1.65m (measured from top of ducts as per trench cross section drawing attached in the proposal). A crown of 250mm shall be made at the top of backfilled trench to cater for soil settlement.	
	(a) The trench width should be at least 30cm, but not more than 60 cm wider than the outer diameter of the pipe.	Yes	
	(b) For filling of the trench, bedding shall be at a depth of not less than 30cm. it shall consist of granular material, free of lumps, clods and cobbles and graded to yield a firm surface without a sudden change in the bearing value. Unsuitable soil and rock edged should be excavated and replaced by selected material.	Yes	
	(c) The backfill shall be completed in two stages (i) side fill to level of the top of the pipe and (ii) overfill to the bottom of the road crust.	Yes	
	(d) The side fill shall consist of	Yes	

	mechanical tempering and controlled addition of moisture to 95% of the proctor's density. Overfill shall be compacted to the same density as the material that has been removed. Consolidation by saturation or ponding will not be permitted		
	(e) The road crust shall be built to the same strength as the existing crust on either side of the trench. Care shall be taken to avoid the formation of a dip at the trench.	Yes	
	(f) The excavation shall be protected by flagman, signs and barricades, and red lights during night hours.	Yes	
	(g) If required, a diversion shall be constructed at the expense of agency owing the natural gas pipe line.	Yes	
2.4.2	Horizontal directional drilling (HDD) method.	Yes	
2.4.3	Methodology for laying of pipe line through CD works and method of laying. In cases where the carrying of gas pipe line on the bridge becomes inescapable.	No CD works are involved in laying of pipeline	
3	Draft license Agreement is signed by two witnesses	Yes, Enclosed	
3.1	The license fee estimate as per Ministry's guidelines issued vide circular no. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016	NA (As per MoU between IOCL and NHAI dated: 08.06.2022)	
4	Whether performance Bank guarantee as per Ministry's circular no. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016 is obtained	BG will be obtained from M/s. IOCL after approval accorded from the NHAI	
4.1	Confirmation of BG has been obtained or not as per MoRTH/NHAI guidelines	Confirmation of BG shall be obtained after BG Submission by M/s. IOCL	
5	Affidavit/ Undertaking from the Applicant for the following is to be furnished		
5.1	Undertaking for not to damage any other utility, if damaged then to pay the losses either to NHAI or to the concerned agency.	Yes, Enclosed	
5.2	Undertaking for Renewal of bank guarantee as and when asked by MoRTH/NHAI.	Yes, Enclosed	
5.3	Undertaking for confirming all standard condition of Ministry circulars and NHAI's	Yes, Enclosed	

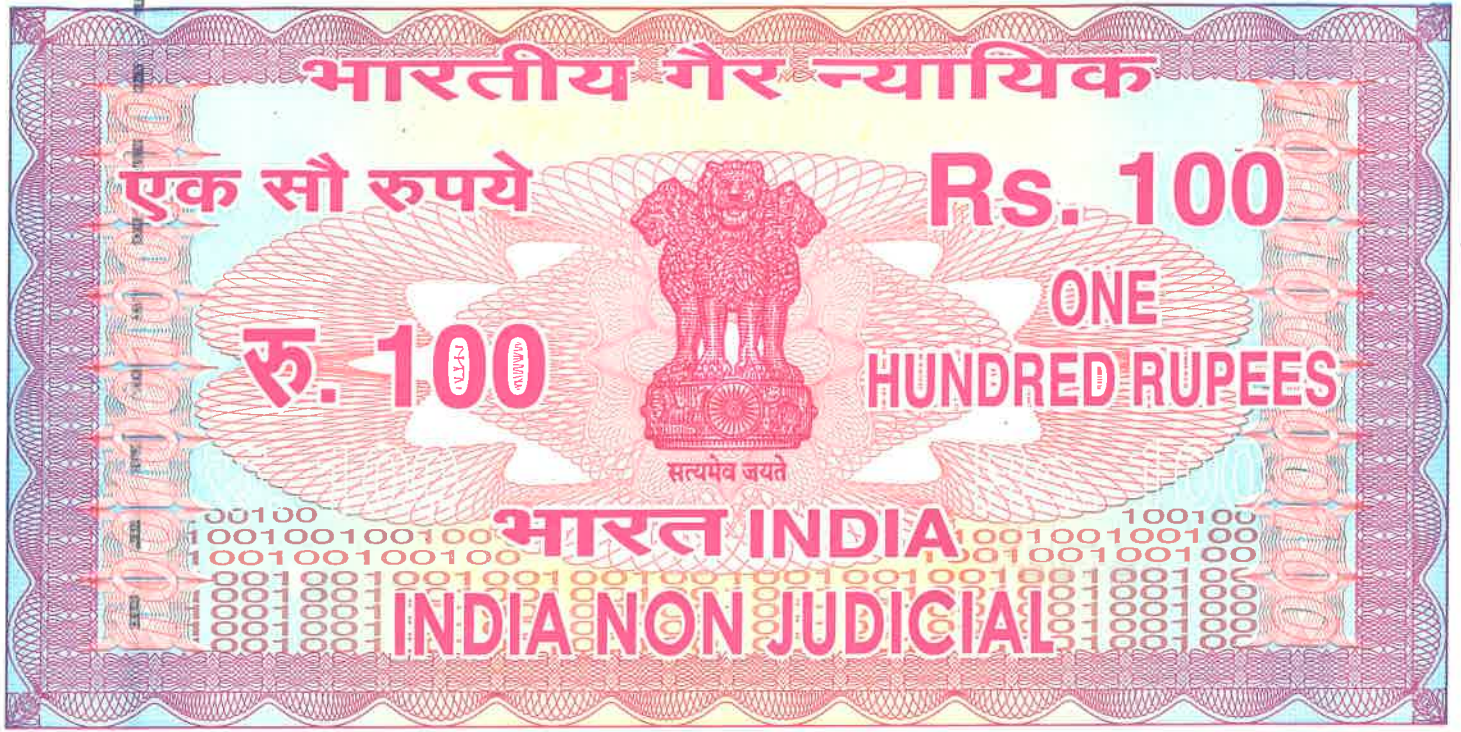
	guidelines.		
5.4	Undertaking for Indemnity against all damages and claims.	Yes, Enclosed	
5.5	Undertaking for management of traffic movement during laying of gas pipeline without hampering the traffic	Yes, Enclosed	
5.6	Undertaking that if any claim is raised by the concessionaire/contractor then the same has to be paid by the applicant.	Yes, Enclosed	
5.7	Undertaking that prior approval of the NHAI shall be obtained before undertaking any work for installation, shifting or repairs, or alterations to the natural gas located in the National Highway right-of-ways.	Yes, Enclosed	
5.8	Undertaking that expenditure, if any, incurred by NHAI for repairing any damage caused to the National Highway by the laying, maintenance or shifting of the gas pipeline will be borne by the applicant agency owing the line.	Yes, Enclosed	
5.9	Undertaking that text of the license deed is as per verbatim of MoRTH format (issued vide Ministry's circular no. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016	Yes, Enclosed	
5.10	Undertaking that the applicant has obtained various safety clearances from the representative authorities such as Directorate of Electricity, Chief controller of Explosives, Petroleum and Explosive safety Organization, Oil Industry safety Directorate, State/Central pollution control board and any other statutory clearances as applicable, before applying to Highway Administration	Petroleum and Explosives Safety Organization (PESO) approval for the Steel network can be applied to Chief Controller of Explosives only after mechanical completion and Hydrostatic testing of the line but before commissioning, as Hydro-testing report will be part of the submittal for obtaining PESO clearance. The approval will be submitted to NHAI after obtaining it. Electricity, OISD and PCB clearances are not applicable. Undertaking is being submitted. The construction of the Steel Network is done as per the T4S guideline of PNGRB and as per OISD 226 guidelines.	
5.11	If the MoRTH/NHAI consider it necessary in future to move the natural gas pipeline 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 owing the natural gas pipeline within a reasonable time (not exceeding 60 days) of the intimation given.	Yes, Enclosed	



5.12	Certificate from the applicant in the following format (i) Laying of Gas pipe line will not have any deleterious effects on any of the bridge components and roadway safety for traffic. (ii) "We do undertake that I/we will relocate service road/approach road/utilities at my/our own cost notwithstanding the permission granted within such time as will be stipulated by NHAI" for future six-lanning or any other development."	Enclosed	
6	Who will sign the agreement on behalf of Gas pipe line agency.	SM (CGD), Indian Oil Corporation Limited (pipelines division) City Gas Distribution project, Visakhapatnam.	
	Power of Attorney to sign the agreement is available or not	Yes, Enclosed	
7	The project Director will submit the following Certificates		
7.1	Certificate that the proposal is confirming to all standard conditions issued vide Ministry's circular No: RW/NH-33044/29/2015/S&(R) dated 22.11.2016	Yes, Enclosed.	
7.2	Certificate from PD in the following format (i)" It is certified that any other location of the Gas pipe line would be extremely difficult and unreasonable costly and the installation of Gas pipe line within ROW will not adversely affect the design, stability & traffic safety of the Highway nor the likely future improvement such as widening of the carriageway, easing of curve etc." (ii)for 6-lanning (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	Yes, Enclosed	



	lining”.		
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 License has been granted the right to lay Gas Pipeline/duct has also been granted as a right of way to the 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 license shall honour the same.”	N.A	
9	Who will supervise the work of laying of Gas pipe line		
	(a) On behalf of the Applicant	SM (CGD), Indian Oil Corporation Limited (pipelines division) City Gas Distribution Project, Visakhapatnam.	
	(b) On behalf of the MoRTH/NHAI	Project Director, NHAI, Visakhapatnam	
10	Who will ensure that the defects in road portion after laying of Gas pipe line are corrected and if not corrected then what action will be taken.		
	(a) On behalf of the applicant	SM (CGD), Indian Oil Corporation Limited (pipelines division) City Gas Distribution Project, Visakhapatnam.	
	(b) On behalf of NHAI	Project Director, NHAI, Visakhapatnam	
11	Who will pay the claims for damage done/disruption in working of concessionaire if asked by the concessionaire		
	On behalf of the applicant	Indian Oil Corporation Limited (Pipelines Division) City Gas Distribution Project, Visakhapatnam	
12	A certificate from PD that he will enter the proposed permission in the register of record of the permission in the prescribed proforma (copy enclosed)	Yes, Enclosed	
13	If any various approvals are accorded for laying of underground Gas pipe line then Photocopy of register of records of permission accorded (as maintained by PD) be enclosed.	Yes. PNGRB Authorization and MoU between IOCL and NHAI enclosed	Annex-8 & 9



ఆంధ్రప్రదేశ్ ఆంధ్ర ప్రదేశ్ ANDHRA PRADESH

Sl. No. 21636 Date : 18-10-2022

Sold To : Padmanabhan Srinivasan, S/o. K V Padmanabhan, Vsp.

For Whom : Self

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B. SURYA KANTHAM

Licenced Stamp Vendor  
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**AGREEMENT REGARDING GRANTING OF RIGHT OF WAY PERMISSIONS FOR LAYING UTILITY  
SERVICES ON NATIONAL HIGHWAYS**

Agreement to lay Natural Gas pipeline at the following location-

- Along NH-16 between KM Stone 706 and 713 (From 706/000 KM to 713/384 KM) - 1.38 A
- Crossing at KM 707/900 and KM 710/180 through HDD methodology.
- Installation of DRS skids (Pressure regulating valves) between CH: 709.70KM - 709.80KM and CH: 711.80KM - 711.90KM

This Agreement made this      day of      2022 between Project Director acting in his executive capacity through the President of India/ National Highways Authority of India (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 Indian Oil Corporation Limited(Pipeline Division), City Gas Distribution Project, 4<sup>th</sup>Floor, LIC Building, Thikkanna (Diamond Park) Road, Near RTC Complex, Visakhapatnam-530004, a Company registered under the Companies Act.1956 and have its Registered Office at Indian Oil Bhavan, G-9, Ali Yavar Jung Marg. Bandra (East), Mumbai-400051 (hereinafter called the "Licensee") which expression shall unless excluded by repugnant to the context, include his successors/administrator assignees on the second part.

दुष्यंत मणि / DUSHYANT MANI  
वरिष्ठ परियोजना प्रबंधक (सी जी डी) / Senior Project Manager (CGD)  
इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
Indian Oil Corporation Limited  
सिटी गैस डिस्ट्रीब्यूशन प्रोजेक्ट  
City Gas Distribution Project  
वेंजान / Vizag



Whereas the Authority is responsible, inter-alia, for development and maintenance of lands in KM Stone 706 and 713 (From 706/000 KM to 713/384 KM), Crossings at KM 707/900 and KM 710/180 through HDD methodology and Installation of DRS skids (Pressure regulating valves) between CH: 709.70KM - 709.80KM and CH: 711.80KM – 711.90KM of NH-16 RoW.

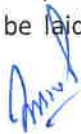
Whereas the Licensee proposes to lay about 7.504 Kms length of 12.75" outer dia Natural Gas pipeline along with OFC Cable referred to as utility services in subsequent paras.

Whereas the Licensee has applied to the Authority for permission to lay the utility services at the following locations:

- (i) NH-16 Road Between KM Stone 706 and 713 (From 706/000 KM to 713/384 KM), Crossings at KM 707/900 and KM 710/180 through HDD methodology and Installation of DRS skids (Pressure regulating valves) between CH: 709.70KM - 709.80KM and CH: 711.80KM – 711.90KM 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 witness 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 about 7.504 Kms length of 12.75" outer dia underground Natural Gas Pipeline 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.
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. 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.

  
दुष्यंत मणि / DUSHYANT MANI  
बहिर् परियोजना प्रबंधक (सी जी डी) / Senior Project Manager (CGD)  
इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
Indian Oil Corporation Limited  
सिटी गैस डिस्ट्रीब्यूशन प्रोजेक्ट  
City Gas Distribution Project  
वैजय / Vizag

5. 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.
6. 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.
7. 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.
8. 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.
9. 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.
10. Existing drainage structures shall not be allowed to carry the lines across.
11. 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 least 0.3m below the drain inverts. A typical sketch showing the clearances is given in Attachment-I.
12. The utility services shall cross the National Highway preferable on a line normal to it or as nearly so as practicable.
13. 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.

14. 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 cm 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.
- 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.
  - The backfill shall be completed in two stages (i) Side-till to the level of the top of the pipe (ii) Overfill to the bottom of the road crust.
  - 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.
  - 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.
15. 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.
16. 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.
17. 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.
18. 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.

19. 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.
20. 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.
21. 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.
22. 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.
23. 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.
24. 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.

25. Each day, the extent of digging the trenches should be strictly regulated so that utility services are 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.
26. 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.
27. 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.
28. 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.
29. 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 coordination with the Authority.
30. 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.
31. 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 inalienable by lapse of time.
32. The Licensee shall bear the Stamp Duty charged on this Agreement.
33. 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.
34. 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

  
दुष्यंत मणि / DUSHYANT MANI  
वरिष्ठ परियोजना प्रबंधक (सी जी डी) / Senior Project Manager (CGD)  
इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
Indian Oil Corporation Limited  
सिटी गैस डिस्ट्रीब्यूशन प्रोजेक्ट  
City Gas Distribution Project  
वीजाग / Vizag

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

35. 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 nor shall it be absolved from any liability already incurred.
36. 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.
37. The Licensee shall have to provide safety measures like barricading, danger lighting and other necessary caution boards while executing the work.
38. 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.
39. 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.
40. 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.

41. 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/ NHA/ 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 INDIAN OIL CORPORATION LIMITED (LICENSEE)

BY SHRI DUSHYANT MANI

दुष्यंत मणि / DUSHYANT MANI  
कीर्ति परियोजना प्रबंधक (सी जी डी) / Senior Project Manager (CGD)  
इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
Indian Oil Corporation Limited  
सिटी गैस डिस्ट्रीब्यूशन प्रोजेक्ट  
City Gas Distribution Project  
वैजान / Vizag

(Signature, name & address with stamp)

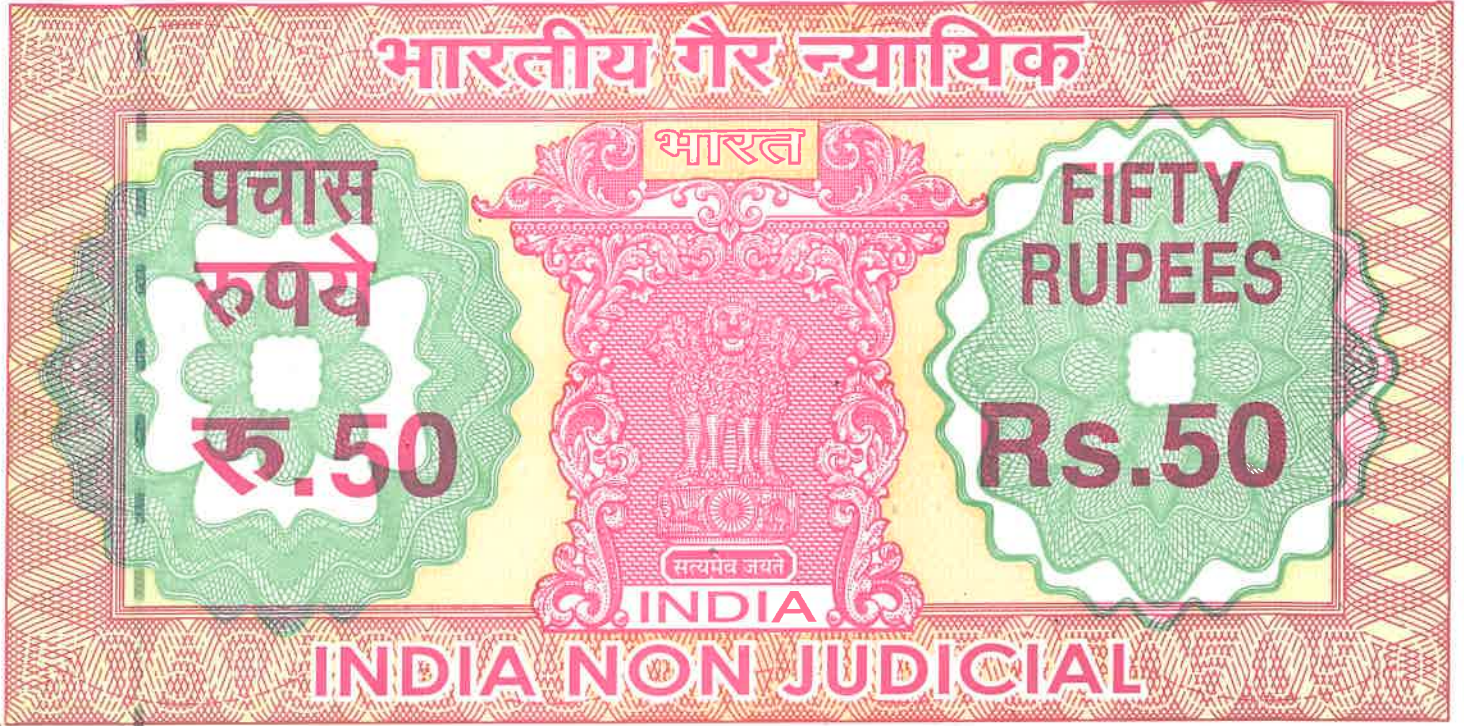
HOLDER OF GENERAL POWER OF ATTORNEY DATED.....

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. [TEKI ANIL CHANDRA, AM(CGD), SERPL-VIZAG]
2. [ANGADI VENKATESH, JE, IOCL-VIZAG]





ఆంధ్రప్రదేశ్ ఆంధ్ర ప్రదేశ్ ANDHRA PRADESH

Sl. No. 21638 Date : 18-10-2022

Sold To : Dushyant Mani, S/o. Jagtendra Singh, Vsp.

For Whom : Self

AW 736462  
B. SURYA KANTHAM  
Licenced Stamp Vendor  
L.No.03/14/003/2011, RL.No.03/14/17/2020  
Sunkavanipalem, D.NO.49-2-44  
Visakhapatnam, Cell : 9573246568

#### UNDERTAKING

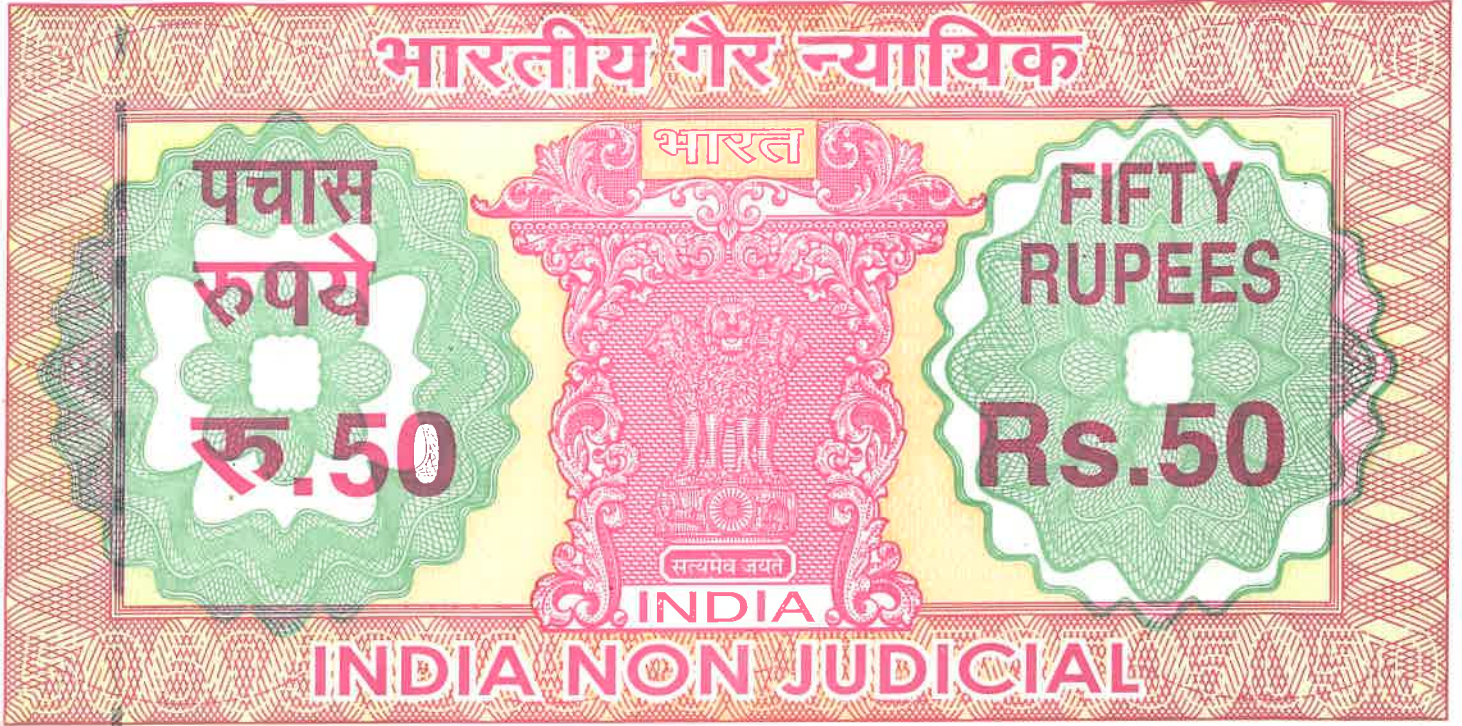
**Name of the work:** IOCL Proposal to lay 12.75"inch outer dia. underground utility line along the NH-16 with 40mm dia OFC duct between Akkayyapalem Jn. To NSTL Gate at KM Stone 706 and 713 (From 706/000 KM to 713/384 KM), Crossings at KM 707/900 and KM 710/180 through HDD methodology and Installation of DRS skids (Pressure regulating valves) between CH: 709.70KM - 709.80KM and CH: 711.80KM - 711.90KM for a total length of 7504 Mtrs in Visakhapatnam District, Andhra Pradesh.

Undersigned, Dushyant Mani, Senior Manager (CGD), Visakhapatnam on behalf of Indian Oil Corporation, CGD Visakhapatnam hereby certify that:

1. Not to damage other utility, if any and if damaged then to pay the losses either to NHAI or to the concerned agency.
2. IOCL agrees to submit Performance Bank Guarantee.
3. The work will be carried out, confirming to all standard conditions of NHAI's guidelines.
4. Shifting of Utility line as and when required by NHAI at the cost of the IOCL.
5. For NH Six-laning/widening, we do undertake that we will relocate Underground Utility line at our own cost notwithstanding the permission granted within such time as will be stipulated by NHAI for future six-laning or any other development.
6. Indemnity against all damages and claims.
7. Traffic movement during the laying of Utility line to be managed by the IOCL.

दुष्यंत मणि / DUSHYANT MANI  
Senior Project Manager (CGD)  
इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
Indian Oil Corporation Limited  
सिटी गैस डिस्ट्रीब्यूशन प्रोजेक्ट  
City Gas Distribution Project  
वैजाग / Vizag





ఆంధ్రప్రదేశ్ ఆంధ్ర ప్రదేశ్ ANDHRA PRADESH

Sl. No. 2640 Date : 18-10-2022

Sold To : Dushyant Mani, S/o. Jagtendra Singh, Vsp.

For Whom : Self

AW 736464  
B. SURYA KANTHAM

Licenced Stamp Vendor  
L.No.03/14/003/2011, RL.No.03/14/17/2020  
Sunkavanipalem, D.NO.49-2-44  
Visakhapatnam, Cell : 9573246568

8. If any claim is raised by the Concessionaire, then the same has to be paid by IOCL.
9. Prior approval of the NHAI shall be obtained before undertaking any work of installation, shifting, repairs, or alterations to the Utility line located in the National Highway Right-of-ways.
10. Expenditure, if any, incurred by NHAI for repairing any damage caused to the National Highway by the laying, maintenance or shifting of the Utility line will be borne by IOCL owning the line
11. If the 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 NHAI at the cost of the agency owning the utility line within a reasonable time (not exceeding 60 days) of the intimation given.
12. In case of burst of Utility line, the IOCL will bear the entire cost for restoration of damage caused to the road.
13. During the crossing of the Utility line across the road, the IOCL will take preventive steps and keep the caution boards at the point of crossing and sign boards and the reflective boards for the traffic to make aware of HDD activity so that traffic can go cautiously.

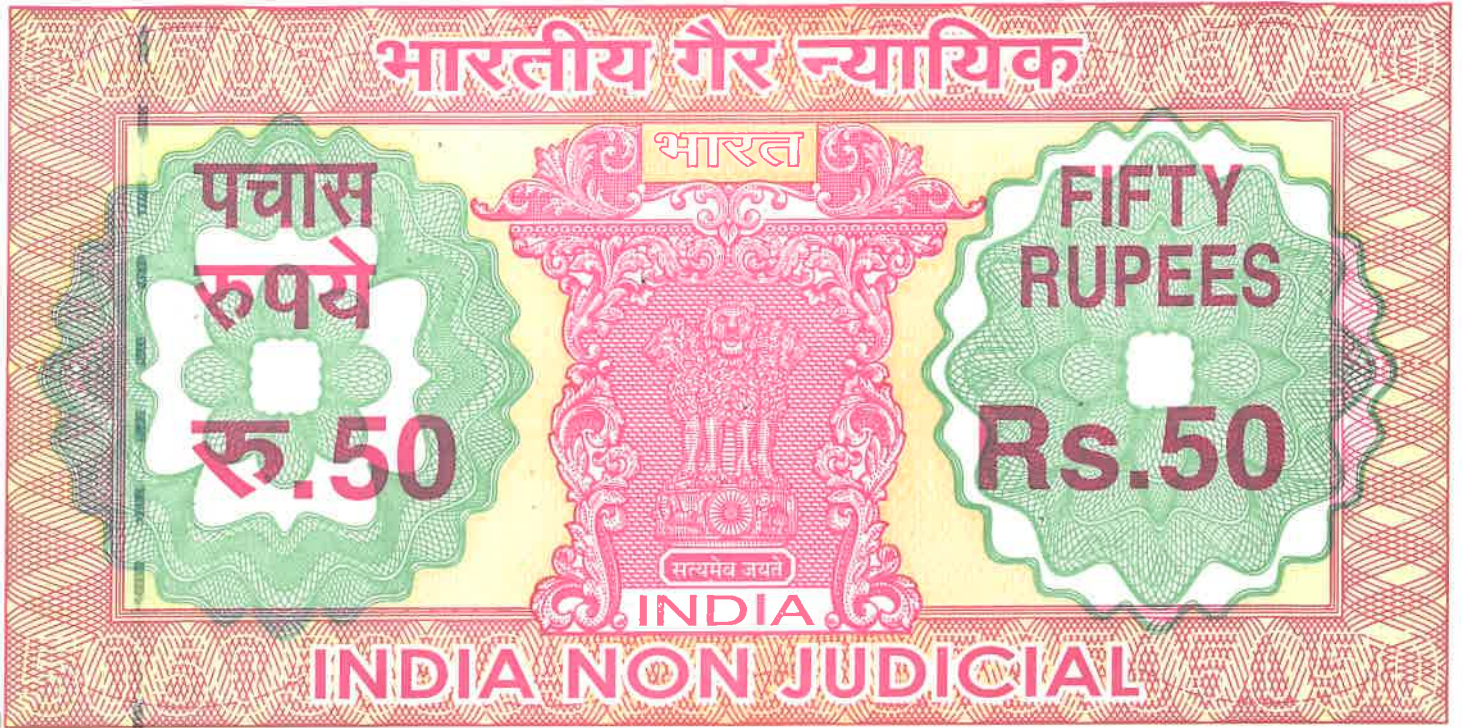
दुष्यंत मणि / DUSHYANT MANI  
वरिष्ठ परियोजना प्रबंधक (सी जी डी) / Senior Project Manager (CGD)  
इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
Indian Oil Corporation Limited  
सिटी गैस डिस्ट्रीब्यूशन प्रोजेक्ट  
City Gas Distribution Project  
वैजान्ध / Vizag

14. IOCL will be liable for any damage caused, to the road during execution of work and during service life of the Utility line.
15. The permission granted to IOCL shall not in any way to be deemed to convey to IOCL any right or any interest in Government land other than what it granted for.
16. IOCL shall not without the prior permission in writing to NHAI authority, undertake any fitting/repair or alteration to the proposed Utility line.
17. The text of the license deed is as per verbatim of MoRTH format (issued vide Ministry's Circular no. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016).
18. IOCL shall be responsible for restoring the road at their own cost to its original condition after laying the Utility line or any damage caused due to inadequate operation/maintenance of the Utility line.
19. The Utility line will cross the road at 90 degrees/as far as possible, in trenchless method, maintaining minimum cover/depth of 5 m from existing road level National Highway RoW.
20. Undertaking that the applicant will submit safety clearance from Petroleum and Explosive Safety Organization (PESO) before commissioning as the approval for the Steel network can be applied to Chief Controller of Explosives for PESO clearance only after mechanical completion and Hydrostatic testing of the Steel line but before commissioning, as Hydro-testing report will be part of the submittal for obtaining PESO Clearance. Electricity, OISD and PCB clearances are not applicable. The construction of the Steel Network is done as per the T4S guideline of PNGRB and as per OISD 226 guidelines.
21. Undertaking that Laying of Gas pipeline will not have any deleterious effects or any of the bridge components and roadway safety for traffic.

For Indian Oil Corporation Limited

  
दुष्यंत मणि DUSHYANT MANI  
सीनियर प्रोजेक्ट मैनेजर (CGD)  
इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
Indian Oil Corporation Limited  
सिटी गैस डिस्ट्रीब्यूशन प्रोजेक्ट  
City Gas Distribution Project  
वैजाग / Vizag





ఆంధ్రప్రదేశ్ ఆంధ్ర ప్రదేశ్ ANDHRA PRADESH

Sl. No 21642 Date : 18-10-2022

Sold To : Dushyant Mani, S/o. Jagtendra Singh, Vsp.

For Whom : Self

AW 736466  
B. SURYA KANTHAM  
Licenced Stamp Vendor  
L.No.03/14/003/2011, RL.No.03/14/17/2020  
Sunkavanipalem, D.NO.49-2-44  
Visakhapatnam, Cell : 9573246568

### CERTIFICATE

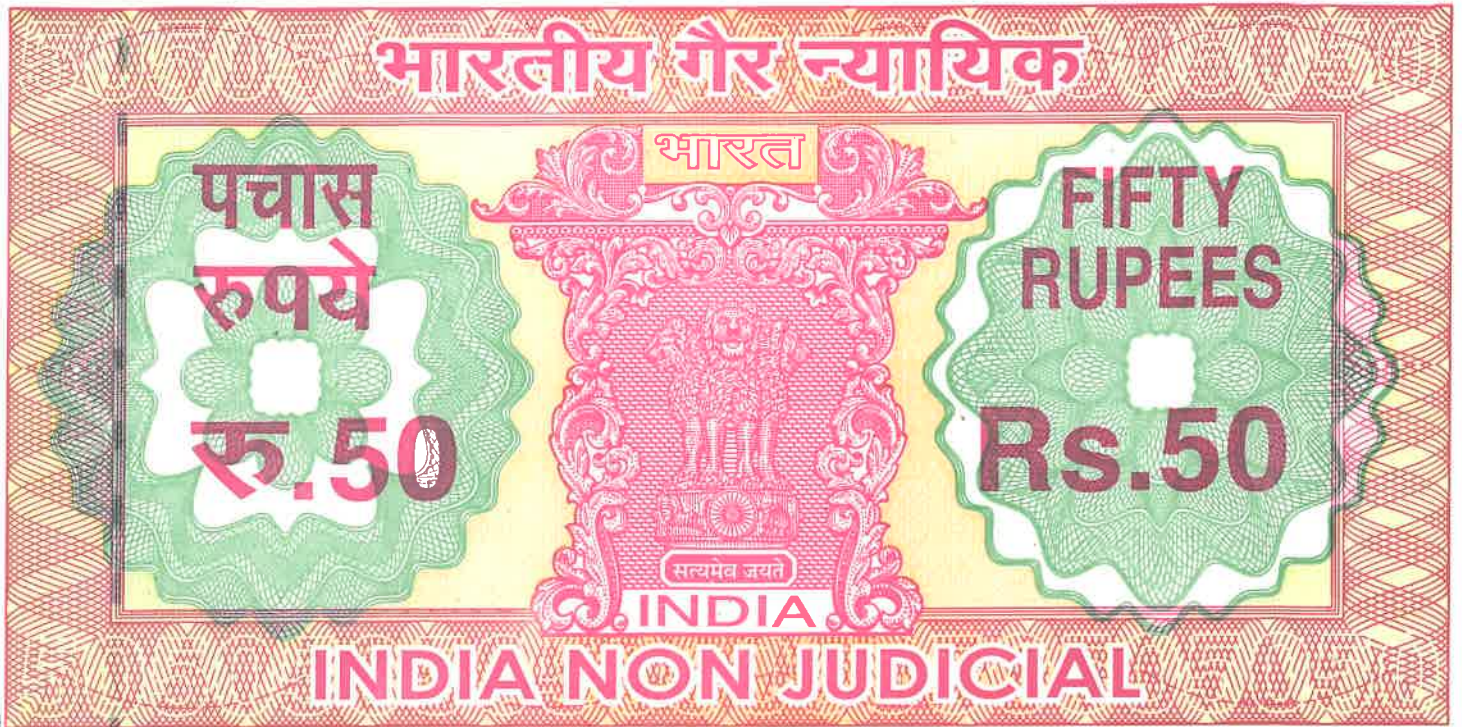
**NAME OF THE WORK:-** IOCL Proposal to lay 12.75 inch outer dia underground utility line along the NH-16 with OFC duct between Akkayypalem Jn. To NSTL Gate at KM Stone 706 and 713 (From 706/000 KM to 713/384 KM), Crossings at KM 707/900 and KM 710/180 through HDD methodology and Installation of DRS skids (Pressure regulating valves) between CH: 709.70KM - 709.80KM and CH: 711.80KM - 711.90KM for a total length of 7504 Mts in Visakhapatnam District, Andhra Pradesh.

Undersigned, Dushyant Mani, Senior Manager (CGD), Visakhapatnam on behalf of Indian Oil Corporation, Visakhapatnam hereby certify that:

1. Laying of Utility line will not have any deleterious effects on any of the bridge components and roadway safety for traffic.
2. For 6-Lanning" we do undertake that IOCL will relocate service road/approach road/ utilities (gas pipeline along with OFC) at our own cost notwithstanding the permission granted within such time as will be stipulated by NHAI" for future 6-lanng or any other development.
3. This proposal implemented now will not affect any likely future improvement to geometrics.

दुष्यंत मणि / DUSHYANT MANI  
वरिष्ठ परियोजना प्रबंधक (सी जी डी) / Senior Project Manager (CGD)  
इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
Indian Oil Corporation Limited  
सिटी गैस डिस्ट्रीब्यूशन प्रोजेक्ट  
City Gas Distribution Project  
वैजाग / Vizag





ఆంధ్రప్రదేశ్ ఆంధ్ర ప్రదేశ్ ANDHRA PRADESH

Sl. No. 21643 Date : 18-10-2022

Sold To : Dushyant Mani, S/o. Jagtendra Singh, Vsp.

For Whom : Self

AW 736467  
B. SURYA KANTHAM

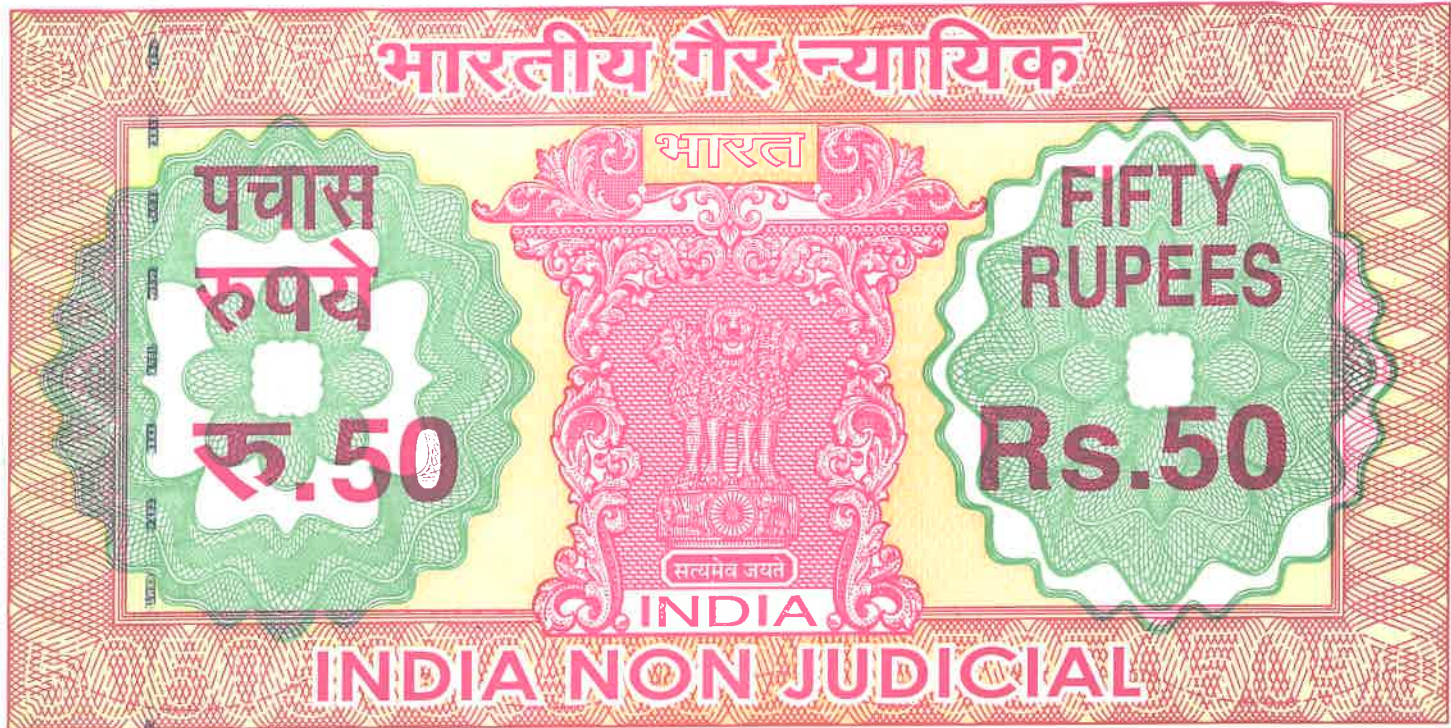
Licenced Stamp Vendor  
L.No.03/14/003/2011, RL.No.03/14/17/2020  
Sunkavanipalem, D.NO.49-2-44  
Visakhapatnam, Cell : 9573246568

4. We undertake that permission does not lead to the adverse impact on the safety and stability of the Highway Structure.
5. It is also certified that the alignment as proposed is the best available option for laying the underground utility line across NH in Visakhapatnam.
6. It is certified that any other location of the underground Utility line would be extremely difficult (proposed spot being located in Strip sheet) and unreasonable costly and the installation of underground utility line 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 carriageway, easing of curve etc.

For Indian Oil Corporation Limited

दुष्यंत मणि / DUSHYANT MANI  
Senior Project Manager (CGD)  
Indian Oil Corporation Limited  
City Gas Distribution Project  
Vizag





ఆంధ్రప్రదేశ్ ఆంధ్ర ప్రదేశ్ ANDHRA PRADESH

Sl. No 2166 Date : 18-10-2022

Sold To : Dushyant Mani, S/o. Jagtendra Singh, Vsp.

For Whom : Self

AW 736470  
B. SURYA KANTHAM

Licenced Stamp Vendor  
L.No.03/14/003/2011, RL.No.03/14/17/2020  
Sunkavanipalem, D.NO.49-2-44  
Visakhapatnam, Cell : 9573246568

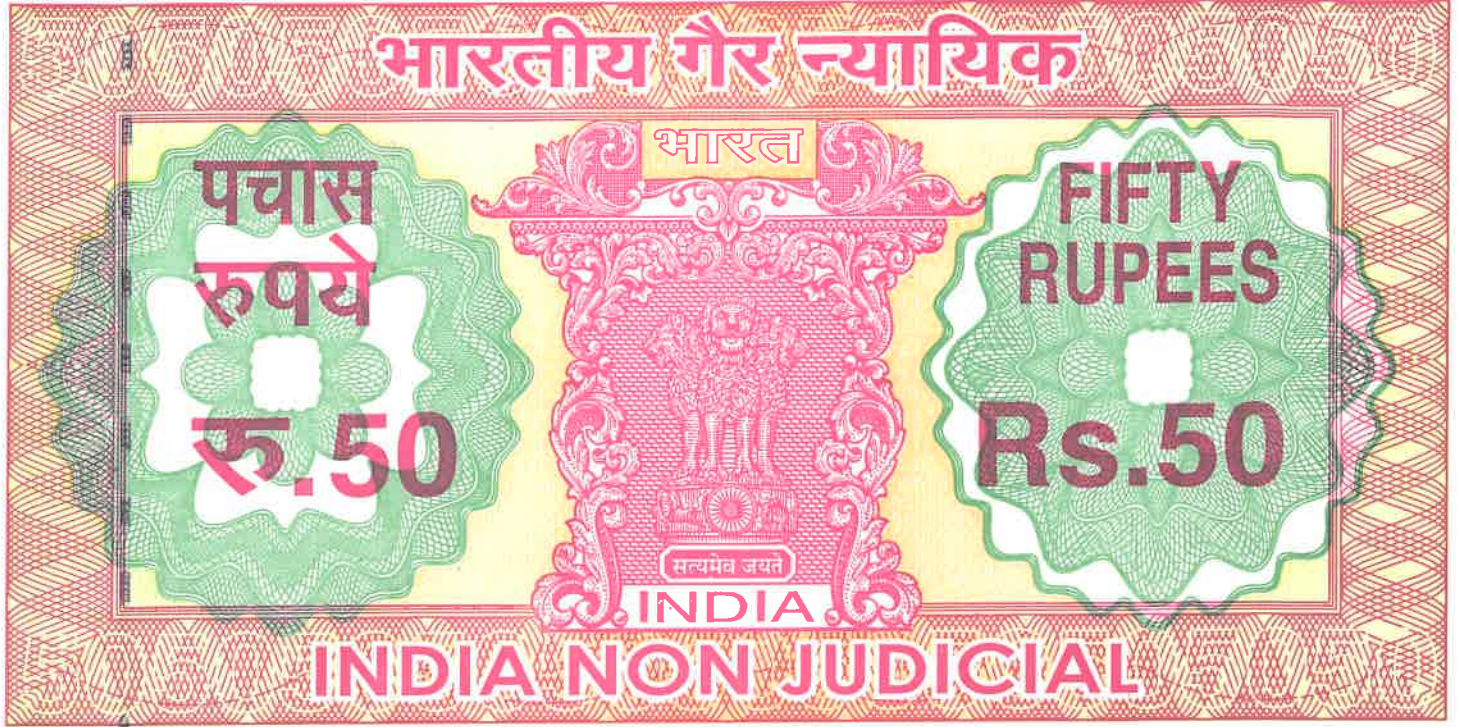
### AFFIDAVIT AS PER CHECKLIST 5.1 TO 5.12

I, Dushyant Mani, aged, 40 years, working as SM(CGD), IOCL, City Gas Distribution Project, Visakhapatnam hereby give the following undertaking to the NHAI in connection with the permission for laying of about 7.504 Km length of 12.75" Inch outer dia City Gas Distribution pipeline along with 40 mm dia. OFC duct along NH-16 between Stone 706 and 713 (From 706/000 KM to 713/384 KM), Crossings at KM 707/900 and KM 710/180 through HDD methodology and Installation of DRS skids (Pressure regulating valves) between CH: 709.70KM - 709.80KM and CH: 711.80KM - 711.90KM in Visakhapatnam being executed by Indian Oil Corporation Limited, Pipelines Division:

1. Undertaking for not to damage any other utility, if damaged then to pay the losses either to NHAI or to the concerned agency.
2. Undertaking for renewal of bank guarantee as and when asked by MoRTH/NHAI.
3. Undertaking for confirming all standard condition of Ministry circulars and NHAI's guidelines.
4. Undertaking for indemnity against all damage and claims.
5. Undertaking for management of traffic movement during laying of Natural Gas line without hampering the traffic.
6. Undertaking that if any claim is raised by concessionaire/contractor then the same to be paid by us.

डुष्यंत मणि / DUSHYANT MANI  
Senior Project Manager (CGD)  
Indian Oil Corporation Limited  
City Gas Distribution Project  
विजय / Vizag





ఆంధ్రప్రదేశ్ ఆంధ్ర ప్రదేశ్ ANDHRA PRADESH

Sl. No. 21607 Date : 18-10-2022

Sold To : Dushyant Mani, S/o. Jagtendra Singh, Vsp.

For Whom : Self

AW 736471  
B. S. SURYA KANTHAM  
Licenced Stamp Vendor  
L.No.03/14/003/2011, RL.No.03/14/17/2020  
Sunkavanipalem, D.NO.49-2-44  
Visakhapatnam, Cell : 9573246568

7. Undertaking that prior approval of NHAI shall be obtained before undertaking any work for installation, shifting or repairs, or alteration to the Natural Gas line located in the National Highway Right of ways
8. Undertaking that expenditure, if any, incurred by NHAI for repairing any damage caused to the National Highway by the laying, maintenance or shifting of the Natural Gas line will be borne by us.
9. Undertaking that text of the license deed is as verbatim of MoRTH format (issued vide Ministry's circular no. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016. ✓
10. Undertaking that the applicant will submit safety clearance from Petroleum and Explosive Safety Organization (PESO) before commissioning as the approval for the Steel network can be applied to Chief Controller of Explosives for PESO clearance only after mechanical completion and Hydrostatic testing of the Steel line but before commissioning, as Hydro-testing report will be part of the submittal for obtaining PESO Clearance. Electricity, OISD and PCB clearances are not applicable. The construction of the Steel Network is done as per the T4S guideline of PNGRB and as per OISD 226 guidelines.
11. If the MoRTH/NHAI considers it necessary in future to move the Natural Gas 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 owing the Natural Gas line within reasonable time (not exceeding 60 days) of the intimation given.

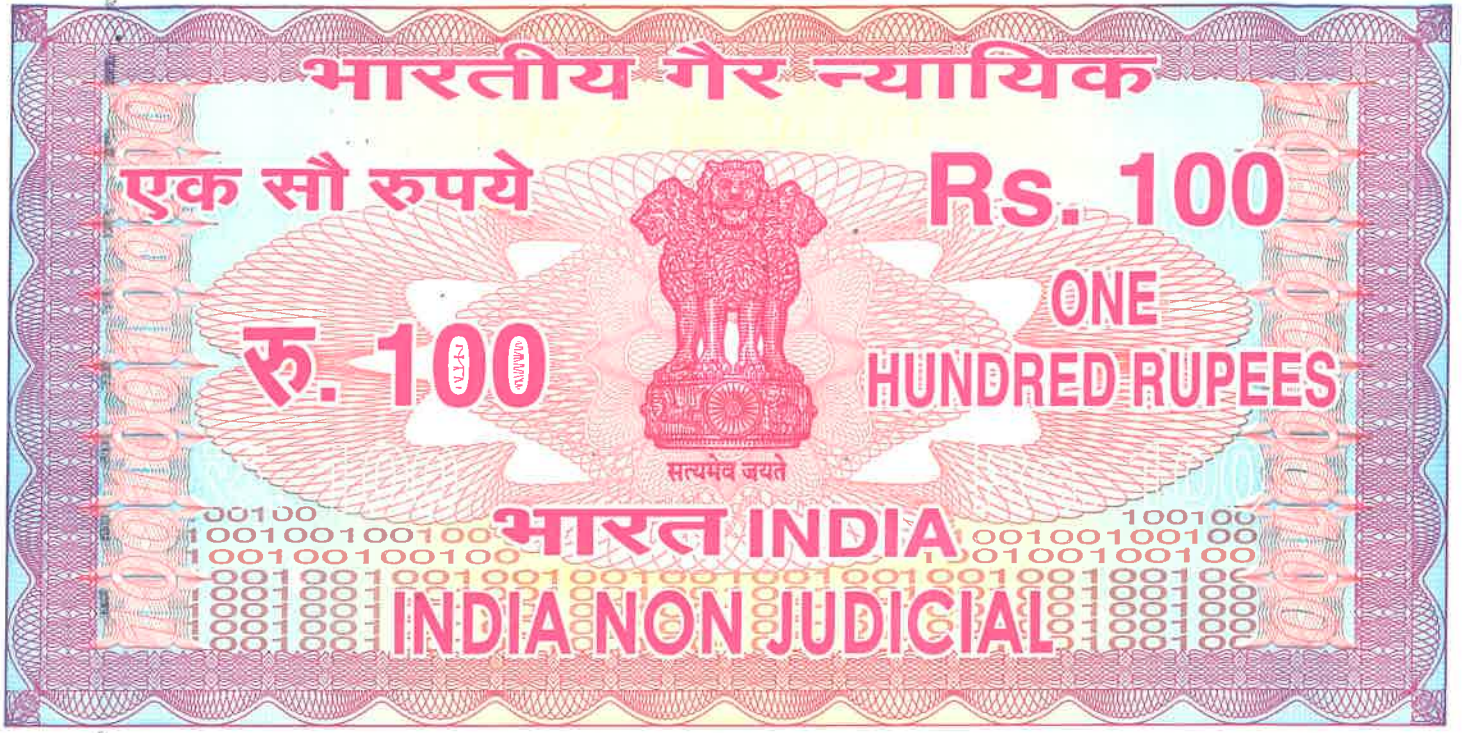
మి. దుష్యంత్ మణి / DUSHYANT MANI  
జూనియర్ ప్రాజెక్ట్ మేనేజర్ (సీ.ఎం.ఎం.) / Senior Project Manager (CGD)  
ఇండియన్ ఆయిల్ కార్పొరేషన్ లిమిటెడ్  
Indian Oil Corporation Limited  
సిటీ గేస్ డిస్ట్రిబ్యూషన్ ప్రాజెక్ట్  
City Gas Distribution Project  
వైజాగ / Vizag



12. (i) Certify that laying of Natural Gas pipeline will not have any deleterious effects on any of the bridge components and roadway safety for traffic. /  
(ii) "We do undertake that, we will relocate service road / approach road /utilities at our own cost notwithstanding the permission granted within such time as will be stipulated by NHAI" for future six-lining or any other development. ✓

For Indian Oil Corporation Limited,

  
(Dushyant mani) MANI  
SM (CGD), VIZAG Senior Manager (CGD)  
दुष्यंत मनी  
वैजयंत परियोजना प्रबंधक (सी जी डी) / Senior Manager (CGD)  
इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
Indian Oil Corporation Limited  
सिटी गैस डिस्ट्रीब्यूशन प्रोजेक्ट  
City Gas Distribution Project  
वैजाग / Vizag



ఆంధ్రప్రదేశ్ ఆంధ్ర ప్రదేశ్ ANDHRA PRADESH

Sl. No. 2/637 Date : 18-10-2022

Sold To : Dushyant Mani, S/o. Jagtendra Singh, Vsp.

For Whom : Self

DB 643130  
B. SURYA KANTHAM

Licenced Stamp Vendor  
L.No.03/14/003/2011, RL.No.03/14/17/2020  
Sunkavanipalem, D.NO.49-2-44  
Visakhapatnam, Cell : 9573246568

### Power Of Attorney

**Subject:** Authorization for signing and execution of documents related to Permanent / Statutory clearances for City Gas Distribution project of Indian Oil Corporation Ltd., Pipelines Division

I do hereby authorize Shri. Dushyant Mani, Senior Manager (CGD), Vizag to sign and execute all the documents related to Permissions/Statutory clearances from authorities for City Gas Distribution project in the state of Andhra Pradesh.

The specimen signature of Shri. Dushyant Mani is attested below.

Your faithfully,

(P Srinivasan)

Deputy General Manager

సి. జి. విజాగ్ P. SRINIVASAN  
ఉప సహకార్యకర్త (సీ జీ డి) / Dy. General Manager (CGD)  
భారతీయ ఆయిల్ కార్పొరేషన్ లిమిటెడ్  
Indian Oil Corporation Limited  
సిటీ గేస్ డిస్ట్రిబ్యూషన్ ప్రాజెక్ట్  
City Gas Distribution Project  
విజాగ్ / Vizag

Signature: Dushyant Mani  
Senior Manager (CGD)

Attested by:

[ Enclosure to Minister Circular No. RW/NH-33044/2005-S&amp;R(R) (PT). dated 06-08-2013 ]

Format for Maintaining Records of Right of Way permission granted for laying Natural Gas Pipeline

(To be maintained separately for every NH and State)

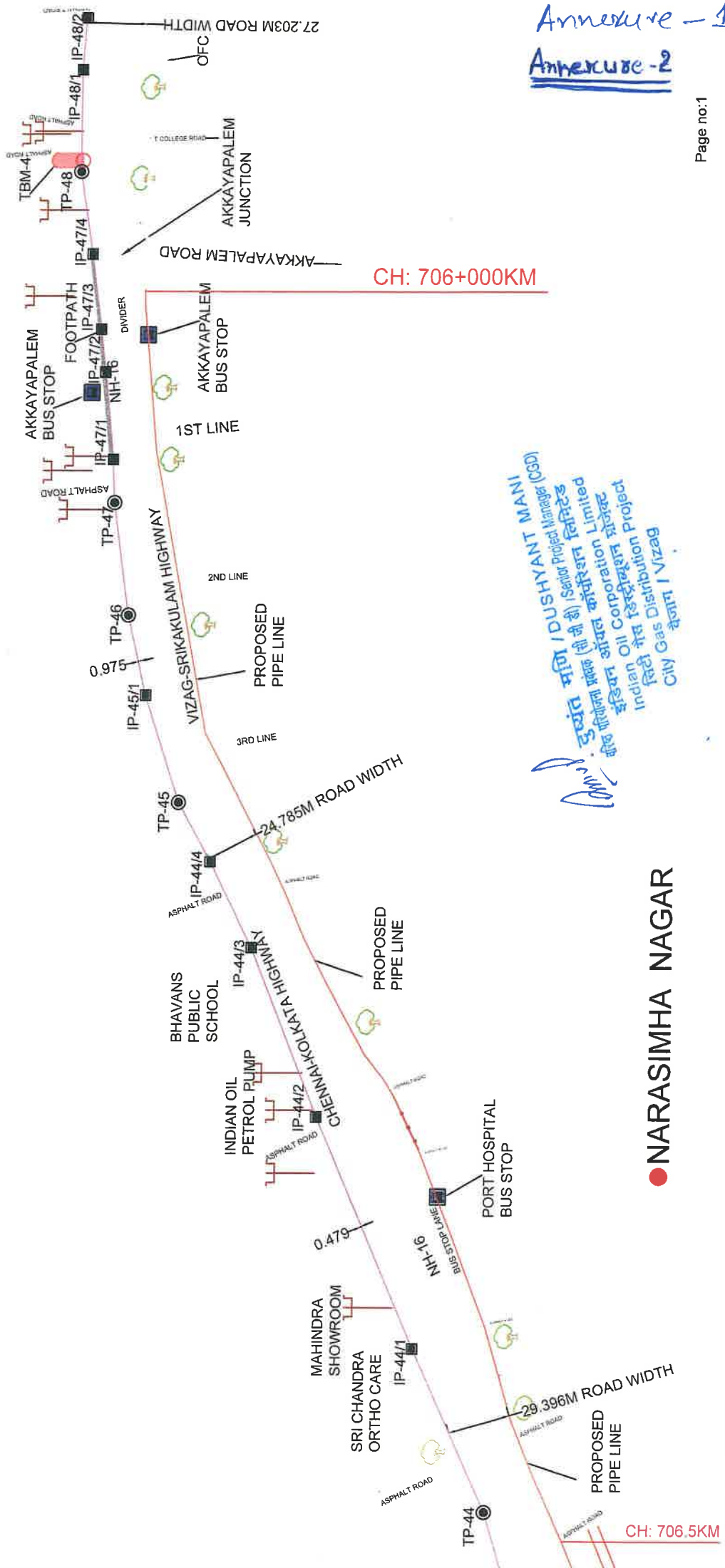
- 1) Name of State : Andhra Pradesh  
 2) Name of Agency : NHAI  
 3) NH Number : NHA1-16

S.No	Location (Chainage in km)	Left or Right Side of NH (towards increasing chainage/Km direction)	Section and reach	kind of service	Name of License and contact address	Date of Signing of agreement	Date of validity of agreement	Date of last inspection of site	Any deviation from Most standard norms	Remarks
1	From Ch: 706/000 KM to 713/384KM, Crossings at KM 707/900 and KM 710/180 through HDD methodology and Installation of DRS skids (Pressure regulating valves) between CH: 709.70KM – 709.80KM and CH: 711.80KM - 711.90KM for a total length of 7504meters	LHS from KM 706/000 to 713/384	NH-16 from Akkayyapalem Jn. To NSTL Gate	Natural Gas Pipeline	Indian Oil Corporation Limited (Pipeline Division) City Gas Distribution Project, 4th floor, LIC Annexe Building, Thikkana (Diamond Park) Road, Near RTC Complex, Visakhapatnam-5330004				No	

**दुष्यंत मणि / DUSHYANT MANI**  
 वरिष्ठ परियोजना प्रबंधक (सी जी सी) / Senior Project Manager (CGD)  
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 City Gas Distribution Project  
 बंगल / Vizag

**Project Director**  
 National Highways Authority of India  
 P. U. D. VISAKHAPATNAM



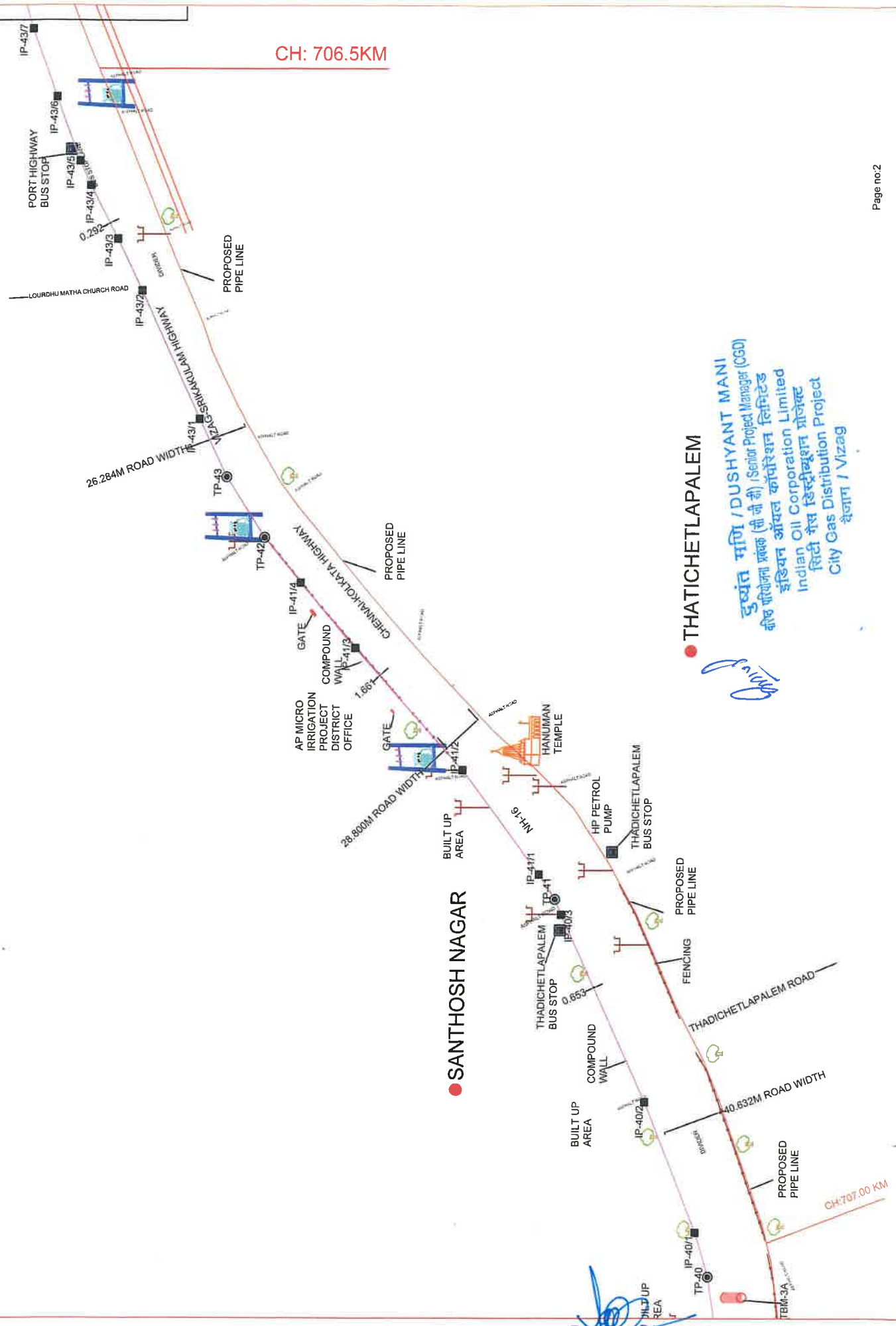


दुष्यंत मणि / DUSHYANT MANI (CGD)  
Senior Project Manager (CGD)  
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भारतीय गैस वितरण प्रोजेक्ट  
विटी गैस वितरण प्रोजेक्ट  
City Gas Distribution Project  
City Gas Distribution Project

● NARASIMHA NAGAR



● PORT QUARTERS



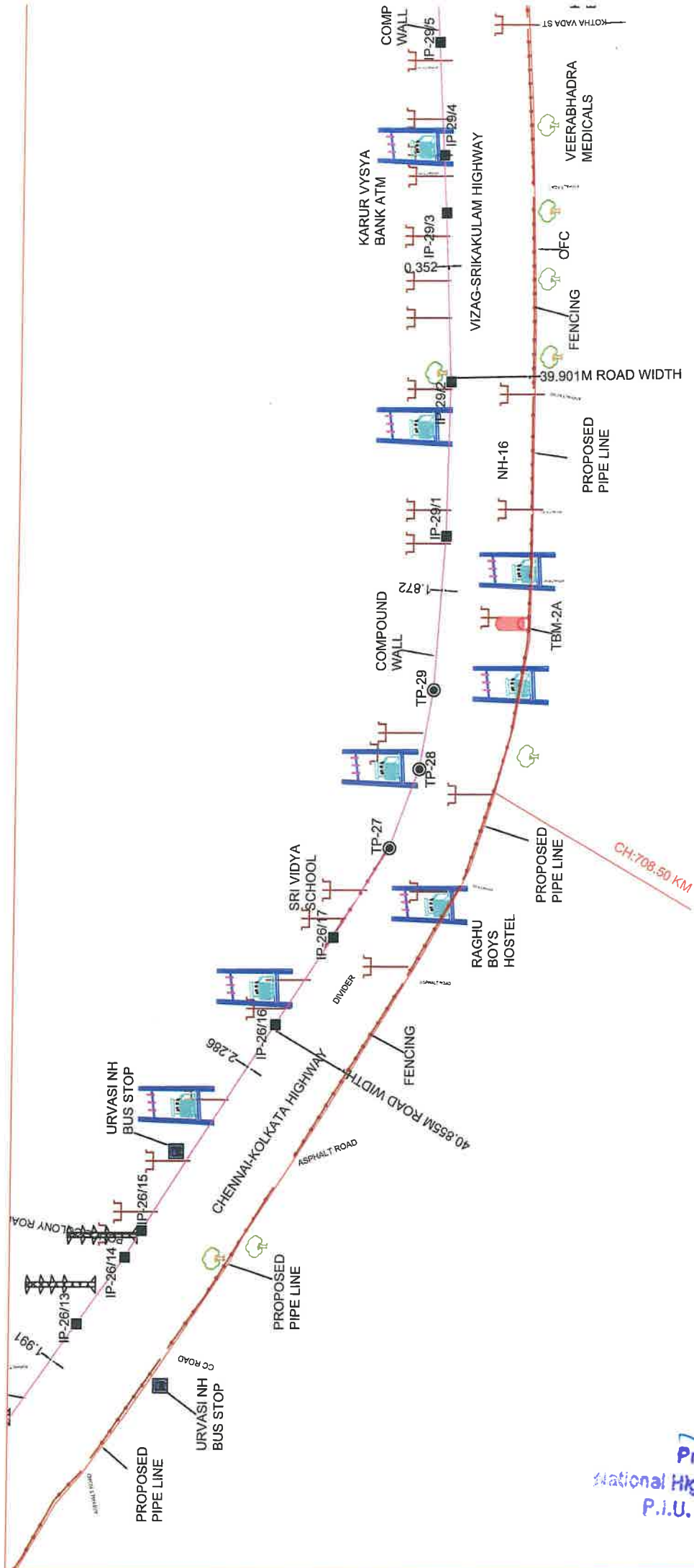
CH: 706.5KM

● SANTHOSH NAGAR

● THATICHETLAPEM

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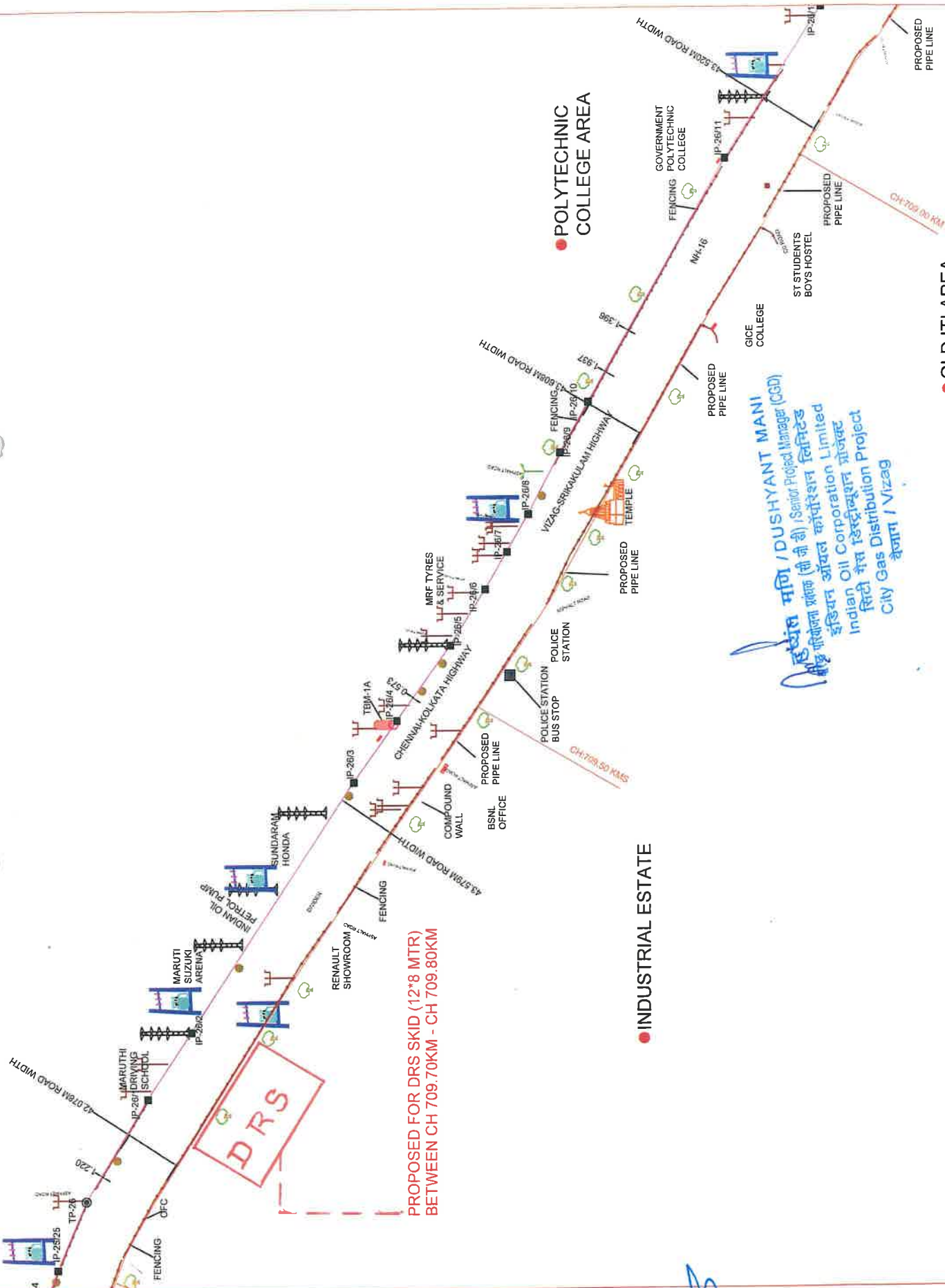




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● REDDY KANCHARAPALEM

Project Director  
 National Highways Authority of India  
 P.U. VISAKHAPATNAM



PROPOSED FOR DRS SKID (12\*8 MTR)  
BETWEEN CH 709.70KM - CH 709.80KM

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City Gas Distribution Project  
चेन्नई / वीजाग

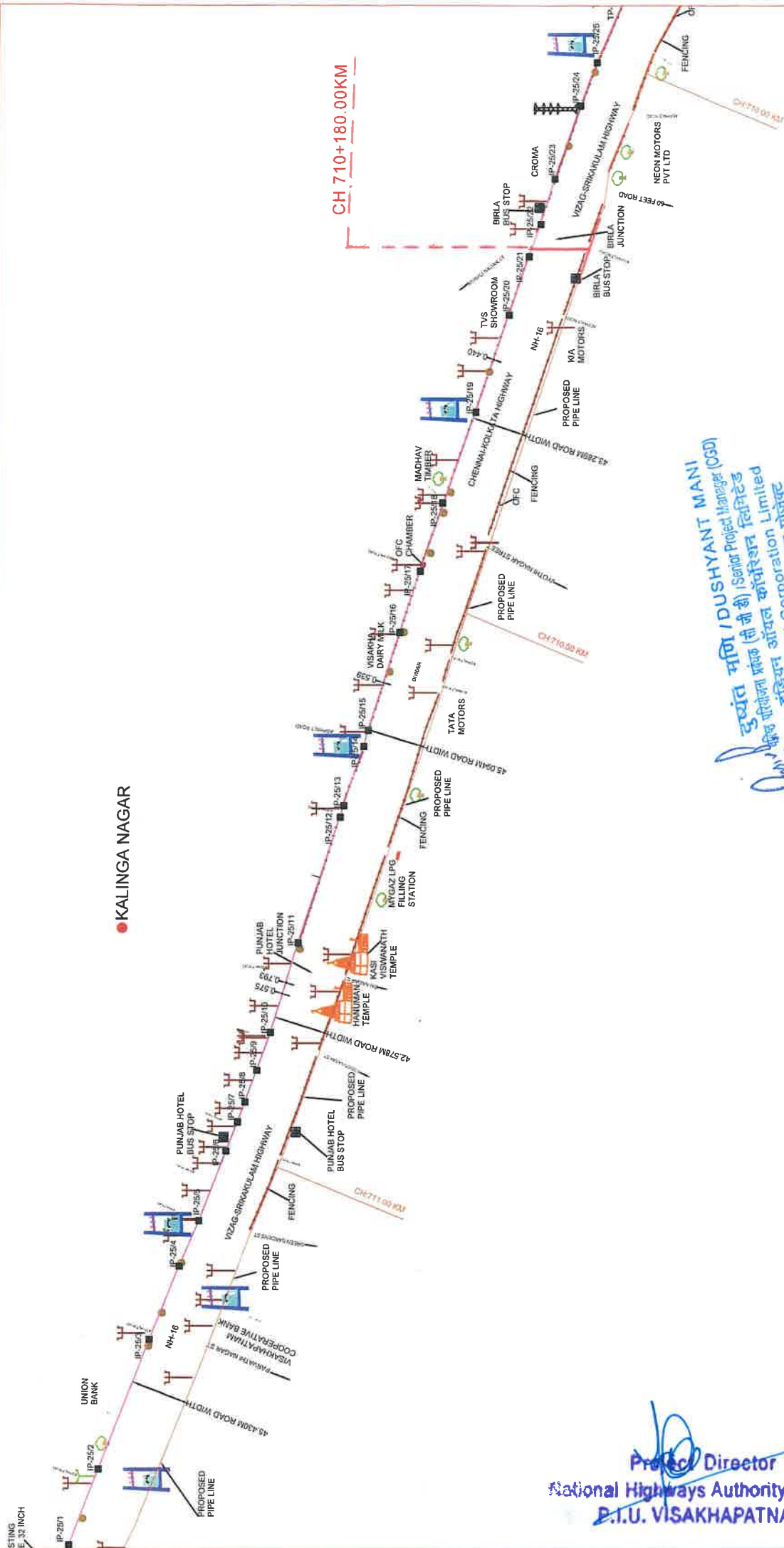
Project Director  
National Highways Authority of India  
P.I.U. VISAKHAPATNAM

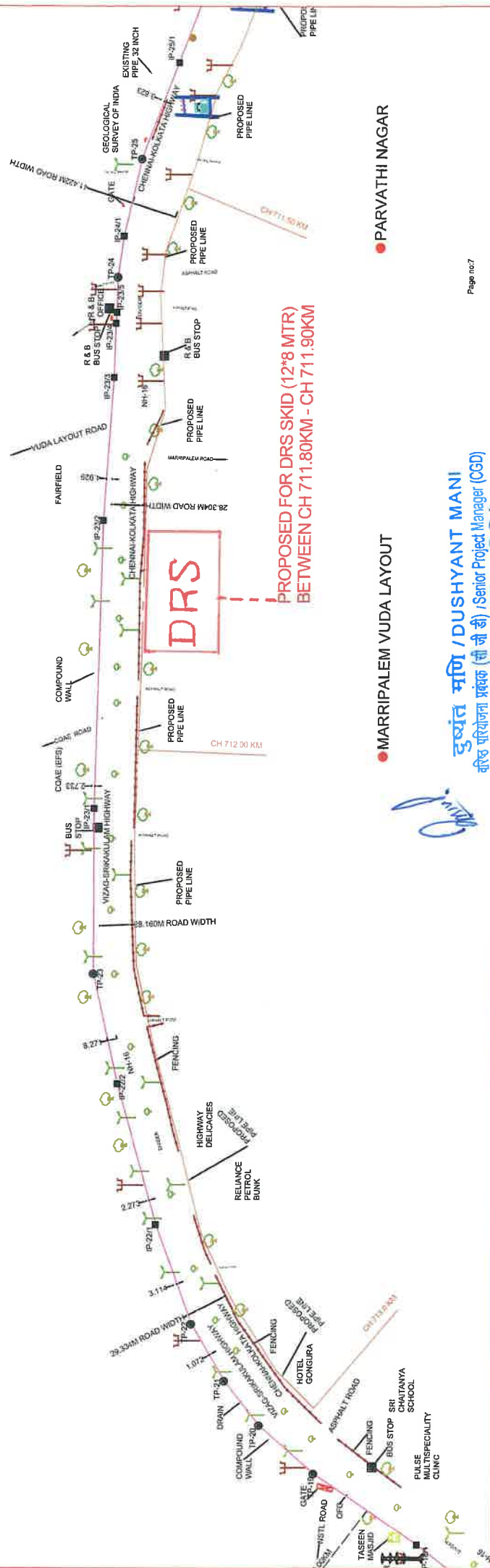
Paul



**Project Director**  
**National Highways Authority of India**  
**P.O. VISAKHAPATNAM**


 दुध्यांत मणि / DUSHYANT MANI  
 (सी.बी.डी.) Senior Project Manager (GSD)  
 फिक्चर प्रोजेक्ट प्रॉजॅक्ट (सी.बी.डी.) Senior Project Manager (GSD)  
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 Indian Oil Corporation Limited  
 सिटी गैस डिस्ट्रिब्यूशन प्रॉजॅक्ट  
 City Gas Distribution Project  
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 City Gas Distribution Project  
 मुंबई / मुंबई





Page no:7

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City Gas Distribution Project  
वैजाग / Vizag

● PARVATHI NAGAR

● MARRIPALEM VUDA LAYOUT

**Project Director**  
**National Highways Authority of India**  
**P.O. VISAKHAPATNAM**

**Methodology of Laying Pipes –Open Trenching &Trenchless (HDD)**

**1. Trenching Method:**

Laying of Pipe along the mentioned route will be done by conventional method/manual and machine Trenching method. The Dimension of the Trench will be 1.5m in depth and 1.0m in width .The pipe laying work will be carried out in phased manner in such a way that after the Pipes are laid, the trench will be restored to its Original surface. Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, from top of pipe including getting out the excavated soil and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 500m.

**2. 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 restoration of trenches. The entire depth of cutting will be filled either with coarse sand or the excavated material, compacted in layers not exceeding 20cm when compacted by ordinary power roller/plate compacter. Special compaction equipment like plate compacter, frog hammer will be utilized besides ordinary power roller.

**3. 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 and 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. Major crossings on the Route will be done by Horizontal Directional Drilling method without disturbing the road surface. Slurry liquid used in HDD will be disposed -off at suitable locations.

  
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City Gas Distribution Project  
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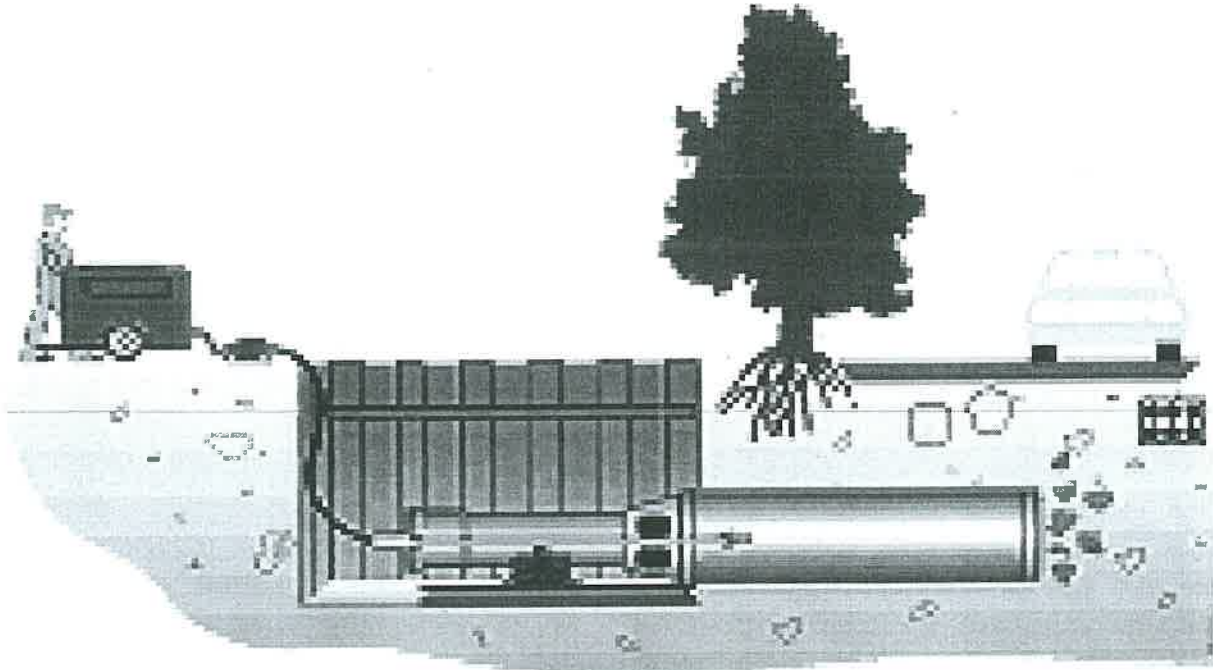


IndianOil

**Indian Oil Corporation Limited**

**CONSTRUCTION METHODOLOGY:**

For laying underground pipeline  
Crossing National highways by  
Horizontal Boring Method



  
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## **HORIZONTAL DIRECTIONAL DRILLING**

### **GENERAL**

Horizontal Directional Drilling or HDD, is a steerable trenchless method of installing underground pipes, conduits and cables in a shallow arc along a prescribed bore path by using a surface launched drilling rig, with minimal impact on the surrounding area. HDD is used when trenching or open excavation is not possible/practical. Directional boring minimizes environmental disruption. It is suitable for a variety of soil conditions and jobs including road, landscape and river crossings. Pipes can be made of materials such as Steel, PVC, etc. if the pipes can be pulled through the drilled hole.

### **Technique**

Directional boring is used for installing infrastructure such as telecommunications and power cable conduits, water lines, sewer lines, gas lines, oil lines, product pipelines and environmental remediation casings. It is used for crossing waterways, roadways, shore approaches, congested areas, environmentally sensitive areas, and areas where other methods are costlier. It is used instead of other techniques to provide less traffic disruption, lower cost, deeper and/or longer installation, no access pit, shorter completion times, directional capabilities, and environmental safety. The technique has extensive use in urban areas for developing subsurface utilities as it helps in avoiding extensive open cut trenches.

The method comprises a three stage process wherein first stage drills a pilot hole on the designed path and the second stage enlarges the hole by passing a larger cutting tool known as the back reamer. The third stage places the product or casing pipe in the enlarged hole. The directional control capabilities assist the rig operator in making necessary changes in the directions of the drilling head.

Horizontal directional drilling is done with the help of a viscous fluid known as drilling fluid. It is a mixture of water and, usually, bentonite or polymer continuously pumped to the cutting head or drill bit to facilitate the removal of cuttings, stabilize the bore hole, cool the cutting head, and lubricate the passage of the product pipe.

Location and guidance of the drilling is a very important part of the drilling operation, as the drilling head is under the ground while drilling and, in most cases, not visible from the ground surface.

### **Advantages**

HDD offers several advantages when compared to other trenchless construction methods:

- (a) Complicated crossings can be quickly and economically accomplished with a great degree of accuracy since it is possible to monitor and control the drilling operation.
- (b) Sufficient depth can be accomplished to avoid other utilities.
- (c) In river crossing applications, danger of river bed erosion and possible damage from river traffic is eliminated.
- (d) Requires only a small construction footprint.

## **The Horizontal Directional Drilling Process**

The tools and techniques used in the horizontal directional drilling (HDD) process are an outgrowth of the oil well drilling industry. The components of a horizontal drilling rig used for pipeline construction are similar to those of an oil well drilling rig with the major exception being that a horizontal drilling rig is equipped with an inclined ramp as opposed to a vertical mast. HDD

  
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pilot hole operations are not unlike those involved in drilling a directional oil well. Drill pipe and downhole tools are generally interchangeable and drilling fluid is used throughout the operation to transport drilled spoil, reduce friction, stabilize the hole, etc. Because of these similarities, the process is generally referred to as drilling as opposed to boring.

Installation of a pipeline by HDD is generally accomplished in three stages as illustrated in Figure 1. The first stage consists of directionally drilling a small diameter pilot hole along a designed directional path. The second stage involves enlarging this pilot hole to a diameter suitable for installation of the pipeline. The third stage consists of pulling the pipeline back into the enlarged hole.

### **Pilot Hole Directional Drilling**

Pilot hole directional control is achieved by using a non-rotating drill string with an asymmetrical leading edge.

It is common in soft soils to achieve drilling progress by hydraulic cutting with a jet nozzle. In this case, the direction of flow from the nozzle can be offset from the central axis of the drill string thereby creating a steering bias. This may be accomplished by blocking selected nozzles on a standard roller cone bit or by custom fabricating a jet deflection bit. If hard spots are encountered, the drill string may be rotated to drill without directional control until the hard spot has been penetrated.

### **Pre-reaming**

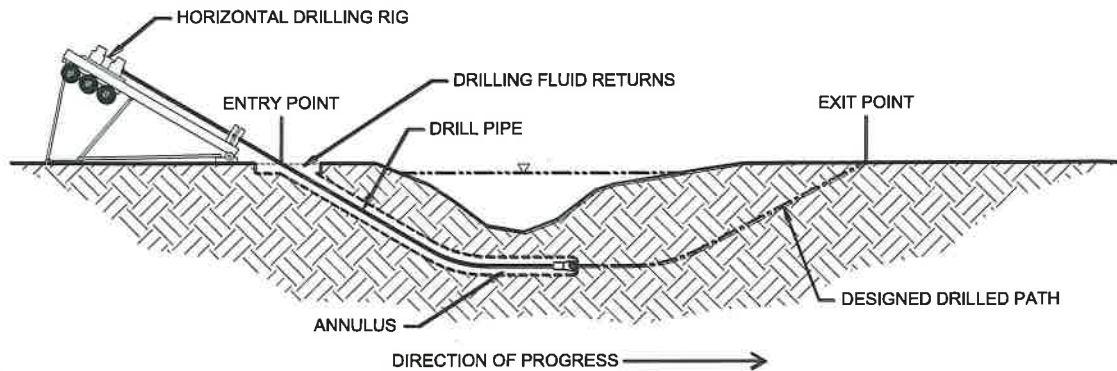
For a pre-reaming pass, reamers attached to the drill string at the exit point are rotated and drawn to the drilling rig thus enlarging the pilot hole. Drill pipe is added behind the reamers as they progress toward the drill rig. This insures that a string of pipe is always maintained in the drilled hole..

### **Pullback**

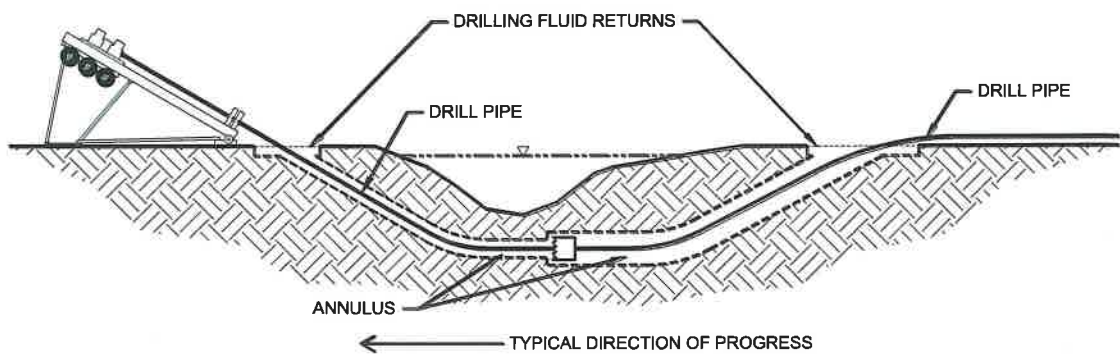
Pipe installation is accomplished by attaching the prefabricated pipeline pull section behind a reaming assembly at the exit point and pulling the reaming assembly and pull section back to the drilling rig. This is undertaken after completion of pre-reaming or, for smaller diameter lines in soft soils, directly after completion of the pilot hole. A swivel is utilized to connect the pull section to the leading reaming assembly to minimize torsion transmitted to the pipe.

  
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Indian Oil Corporation Limited  
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### PILOT HOLE



### PREREAMING



### PULLBACK

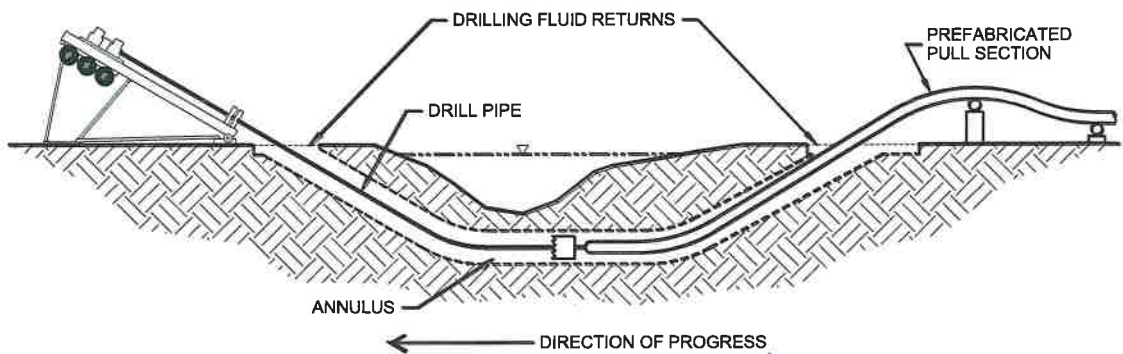


Figure 1  
The HDD Process


**दुष्यंत मणि / DUSHYANT MANI**  
 प्रोजेक्ट प्रबंधक (सी जी डी) / Senior Project Manager (CGD)  
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#### Disadvantages of Cased Crossing:

Cased Crossings are being worldwide discouraged due to technical & operational issues/problems being faced by people involved in installing & maintaining pipelines. Some of the points going against cased crossings are as follows:

- For installing a pipeline by cased crossing method, large launching & receiving pits are required to be excavated on both sides of the crossing (highway/ railway etc.). In case of high water table conditions, it is very difficult to keep these pits in stable/ dry condition. De-watering and sheet piling / shoring methods may be required especially for higher depth crossings.
- Collapse of the pits may lead to severe accidents. Several such accidents, fatal in some cases, have been reported in the past due to collapse of deep pits excavated at cased crossing locations.
- Due to requirement of deep pits and water table, depths more than of 3-4m are practically difficult to be achieved by this technique and may be risky.
- The installation is done by horizontal auger boring machine placed in the launching pit. The boring process is un-guided and at times may deviate considerably from the intended straight path due to soft soil conditions and/or presence of rock/ hard strata beneath the road/ rail surface. Under such conditions the hole may have to be abandoned and a new boring at a separate location may be required. Filling the abandoned hole is very difficult and settlement of road/ ground surface may occur in future.
- Maximum length of boring which can be practically achieved depends on the soil conditions and size of boring. However any length beyond 50-60m is difficult, risky & time consuming. As highway crossings, especially NH & SH are of longer lengths, this method has got limitations of installation.
- Problems of short-circuiting between casing & carrier pipes is another problem prevalent in cased crossings. This leads to loss of cathodic protection current thereby reducing the secondary protection to the carrier pipe. Any damage to pipe coating at such locations may lead to development of corrosion spots and potential areas for leakage of petroleum products in future.
- In case widening of the highway is undertaken in future, the low depth of the pipe may become a hindrance. Extension of the casing to cover the new width of crossing is very cumbersome and time consuming.

#### Advantages of HDD Technique:

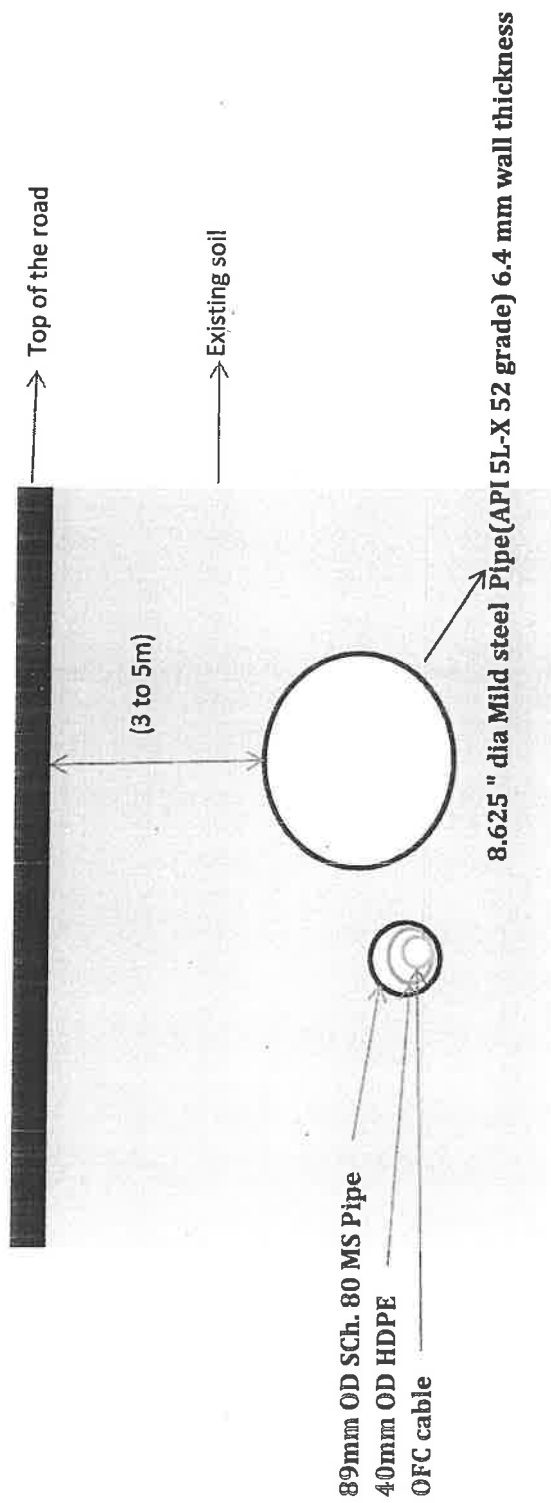
- Horizontal Directional Drilling (HDD) technique is a trenchless technique used worldwide for crossing of obstacles like rivers, canals, drains, highways etc. by petroleum pipelines (liquid / gas), sewer lines etc.
- It is a environment friendly technique for pipeline crossings
- It is a much safer technique as compared to other techniques of pipeline crossings.
- Small excavation is required at both ends

  
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- By the use of this technique the pipeline can be installed at a much greater depth from the obstacle as per requirement of client. In PRRPL project, the depth below highway has been kept more than 5m. Such depths may not be possible by cased crossing technique.
- In this technique, use of casing pipe is not required as the hole drilled for installation of the carrier pipe is kept stable due to presence of drilling fluid (bentonite) under pressure and the drill pipe / product pipe being always present in the hole.
- Much longer crossing lengths can be achieved by HDD technique. Thus highway widening activities can be carried out without any hindrance as the pipeline is laid at much higher depth and for longer length as compared to cased crossing. In PRRPL project HDD crossing length of more than 100m have been envisaged. Such lengths cannot be obtained by cased crossing method.
- Success rate of HDD technique is much higher than auger boring. Problems of abandonment of hole which have been mentioned above in cased crossings are almost nil in case of HDD crossings of small lengths for highways, small canals etc.

  
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**CROSS SECTION DRAWING OF GAS PIPELINE ALONG WITH OFC ( BY HDD METHOD)**

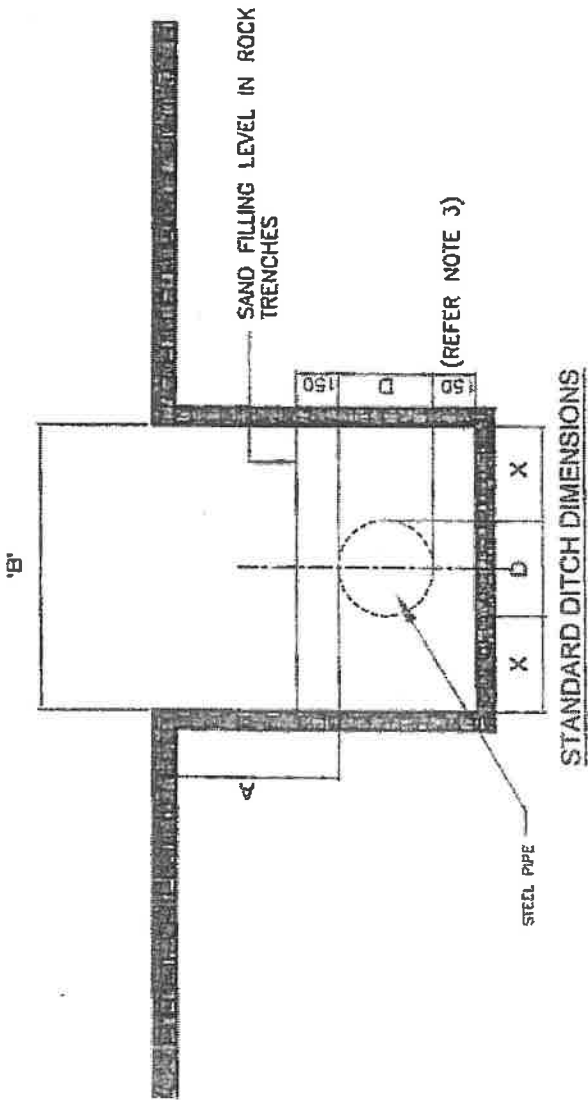




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**NOTES:-**

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED.
2. DITCH DIMENSIONS TO CONFORM TO TABLE GIVEN HEREIN.
3. REQUIRED DEPTH OF COMPACTED SOFT SOIL OR SAND PACKING AT THE BOTTOM OF ROCK TRENCH TO BE PROVIDED AT THE CONTRACTOR'S DISCRETION.
4. IN CUTTABLE LAND AND OTHER AREAS SPECIALLY DESIGNATED BY THE OWNER, THE CONSTRUCTION SHALL STOP TO THE DEPTH OF ROCK AND THESE AREAS SHALL BE SEPARATELY ALIGNED TO ALLOW RE-FILLING OF THIS MATERIAL ON TOP OF THE BACKFILLED DITCH.
5. IN CASE OF MODULAR EXTRA DEPTH OF 150MM EXCAVATION SHALL BE CARRIED OUT TO ACCOMMODATE SAND PACKING AT BOTTOM OF TRENCH AS PER SECTION OF DUNKER-H-01402.



**TABLE**

O.D. OF PIPE	DIMENSION 'A' IN ALL TYPE OF SOIL (MM)	DIMENSION 'X'		DIMENSION 'B'	
		IN NORMAL SOIL (MM)	IN ROCK (MM)	IN NORMAL SOIL (MM)	IN ROCK (MM)
D	1000 OR AS PER OISD / T&S / LOCAL AUTHORITY	200	300	D + 400	D + 600

दुष्यंत मणि / DUSHYANT MANI  
 वीरस प्रियोजना प्रबंध (वी पी डी) / Senior Project Manager (CGD)  
 इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
 Indian Oil Corporation Limited  
 सिटी गैस वितरण प्रोजेक्ट  
 City Gas Distribution Project

बेलगाम / Vizag

1.	STANDARD DITCH DIMENSIONS	800-9900-401-480-01
S&O	OLD REFERENCE DRAWING	ENCL. NO.

PURPOSE: TERRACE / PERMISSION

REVISION	DATE	BY	FOR
1	10/01/2018	AMCA	FOR APPROVAL
2	10/01/2018	AMCA	FOR APPROVAL
3	10/01/2018	AMCA	FOR APPROVAL
4	10/01/2018	AMCA	FOR APPROVAL
5	10/01/2018	AMCA	FOR APPROVAL
6	10/01/2018	AMCA	FOR APPROVAL
7	10/01/2018	AMCA	FOR APPROVAL
8	10/01/2018	AMCA	FOR APPROVAL
9	10/01/2018	AMCA	FOR APPROVAL
10	10/01/2018	AMCA	FOR APPROVAL

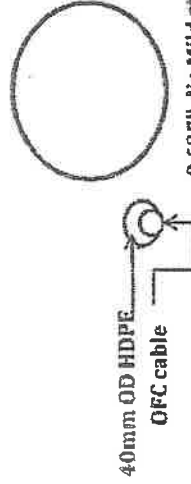
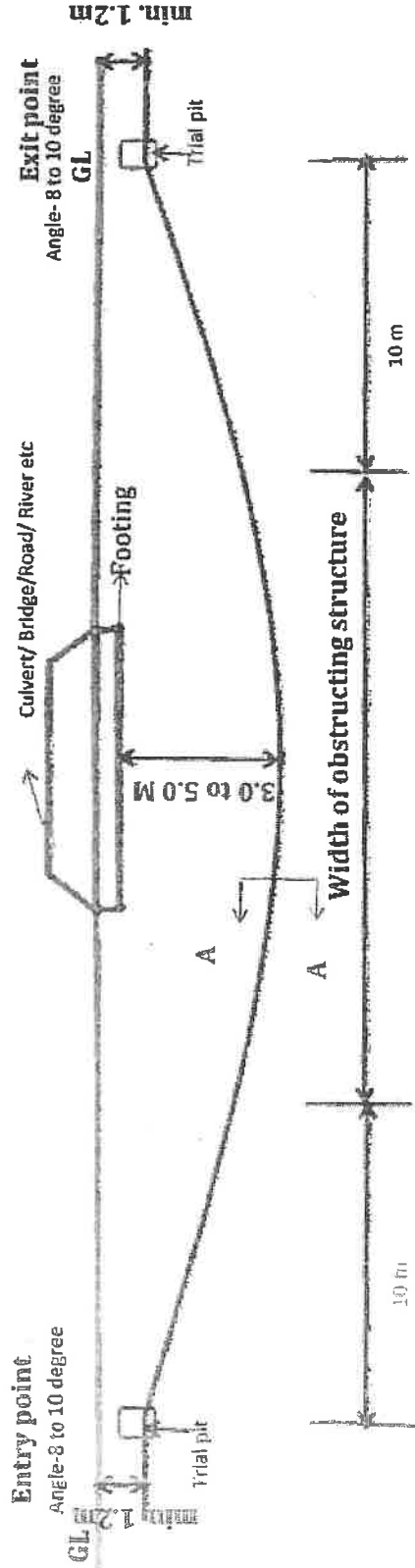
INDIAN OIL CORPORATION LIMITED PROJECT

CGD & CITY GAS DISTRIBUTION PROJECT

**STANDARD DITCH DIMENSIONS**

CGD FILE NO.	ENCL. NO.	SCALE	SHEET
CGD-01-009200-15700-30109-001-00	MS	AS	1 OF 1

# STANDARD DRAWING OF PIPELINE LAYING BY HDD METHOD



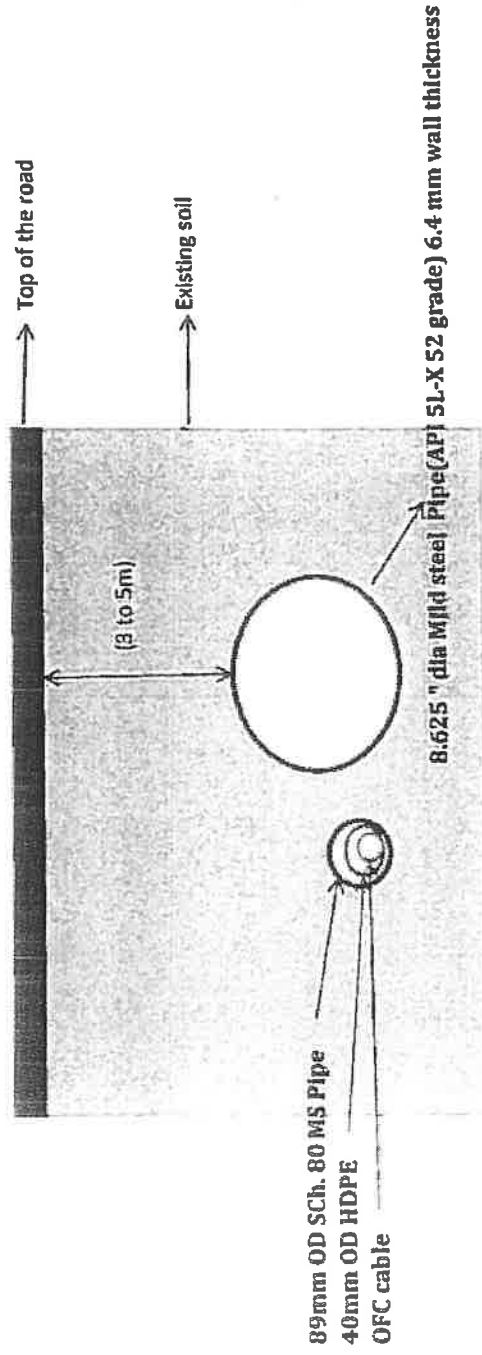
8.625" dia Mild steel Pipe(API 5L-X 52Q PSL-2G grade) 6.4 mm wall thickness

SECTION A-A

DRAWING NOT TO SCALE

दुष्यंत मणि / DUSHYANT MANI  
 Senior Project Manager (GSD)  
 इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
 Indian Oil Corporation Limited  
 सिटी गैस डिस्ट्रिब्यूशन प्रोजेक्ट  
 City Gas Distribution Project  
 चेन्नई / Vizag

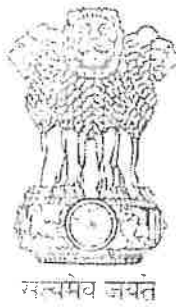
# CROSS SECTION DRAWING OF GAS PIPELINE ALONG WITH OFC ( BY HDD METHOD)



*Handwritten signature*

दुष्यंत मणि / DUSHYANT MANI  
 सिरि प्रोपोजन प्रॉज (सी पी सी) / Senior Project Manager (CSO)  
 इंडियन ऑयल कॉर्पोरेशन लिमिटेड  
 Indian Oil Corporation Limited  
 सिटी गैस डिस्ट्रिब्यूशन प्रोजेक्ट  
 City Gas Distribution Project  
 वीजाग / Vizag





## INDIA NON JUDICIAL

### Government of National Capital Territory of Delhi

#### e-Stamp

Certificate No.	: IN-DL43131039471235U
Certificate Issued Date	: 07-Jun-2022 11:13 AM
Account Reference	: IMPACC (SH)/ dlshimp17/ SUPREME COURT/ DL-DLH
Unique Doc. Reference	: SUBIN-DLDSLHIMP1770917717202787U
Purchased by	: INDIAN OIL CORPORATION LIMITED
Description of Document	: Article 5 General Agreement
Property Description	: Not Applicable
Consideration Price (Rs.)	: 0 (Zero)
First Party	: INDIAN OIL CORPORATION LIMITED
Second Party	: Not Applicable
Stamp Duty Paid By	: INDIAN OIL CORPORATION LIMITED
Stamp Duty Amount(Rs.)	: 100 (One Hundred only)



#### MEMORANDUM OF UNDERSTANDING

#### BETWEEN

INDIAN OIL CORPORATION LIMITED

#### AND

NATIONAL HIGHWAY AUTHORITY OF INDIA (NHAI)

This Memorandum of Understanding (hereinafter referred to as "MoU") made at **NHAI, G-3, Sector-10, Dwarka, New Delhi** on this **8<sup>th</sup> of June 2022** ("Effective Date"),

by and between:

**INDIAN OIL CORPORATION LIMITED**, a company duly incorporated under the Companies Act, 1956 and having its registered office at G-9, Ali Yavar Jung Marg, Bandra (East), Mumbai – 400 051 (hereinafter referred to as "IOCL" which expression shall, unless repugnant to the context or meaning thereof, be deemed to include its successors and permitted assigns) of the First Part.

And

**NATIONAL HIGHWAY AUTHORITY OF INDIA** (hereinafter called NHAI) an autonomous Authority constituted by Act of Parliament, having its registered office at Sector 10, Dwarka, New Delhi - 110075, India, which expression shall, unless the context required otherwise, include its legal successors and permitted assigns (hereinafter referred to as "NHAI") of the Second Part.

**IOCL and NHAI** are individually referred to as "Party" and collectively as "Parties".

**RECITALS:**

**WHEREAS;** IOCL, a Maharatna Central Public Sector Undertaking under the administrative control of Ministry of Petroleum and Natural Gas (MoPNG), Government of India and is India's flagship national oil company with business interests straddling the entire hydrocarbon value chain – from refining, pipeline transportation and marketing of petroleum products to natural gas and petrochemicals.

**WHEREAS;** NHAI, is an autonomous agency of the Government of India under the Ministry of Road Transport and Highways (MoRTH) for development, maintenance, and management of National Highways across the country.

**WHEREAS;** In ever expanding networks of cross-country pipelines of IOCL and National Highways of NHAI, interfacing of these two structures and many locations is unavoidable.

**WHEREAS:** Parties are desirous of simplification of the process of obtaining crossing permissions, optimization of the expenditure on the crossings and bringing about uniformity of such proceedings across the country.

**WHEREAS;** in furtherance of the same, NOW THEREFORE, it is understood between the parties as under:

- I. SCOPE AND APPLICABILITY:** The terms and conditions mentioned in this MoU will be applicable for complete network of NHAI's National Highways in National Highways Right of Way and IOCL's gas/ petroleum pipeline(s) across the country.
- II. DESCRIPTION OF PURPOSE:** This MOU is an understanding between the parties to express the mutual interest of the parties, within the framework of this MoU for amicable mutual interface for laying of gas/ petroleum pipeline(s) along and across National Highways Corridors and vice versa.
- III. OBLIGATIONS, DUTIES AND UNDERTAKINGS OF NHAI**

**1. In respect of already laid gas/ petroleum pipeline(s):**

- a. Wherever, the alignment of a National Highway ("NH") crosses an already laid gas/ petroleum pipeline(s) (i.e., pipeline(s) existing prior to declaration of said National Highway vide relevant Notification), NHAI shall either construct portal structure(s) over the existing pipeline (as per **Annexure-A**) or cause shifting of such operating pipeline(s) at NHAI's cost under supervision of IOCL.
- b. NHAI will inform IOCL regarding upcoming alignment of National Highways over IOCL's existing gas/ petroleum pipeline(s) as soon as NHAI becomes aware of such operating pipeline(s) to expedite the interface related formalities. However, NHAI may explore possibilities of expediting the information to IOCL regarding crossing of National Highways to IOCL's existing gas/ petroleum pipeline(s) during the land acquisition stage to expedite the crossing related formalities.



- c. NHAI will try to maximize the crossing angle i.e., near to 90 Deg to IOCL's gas/ petroleum pipeline(s).
- d. For crossing length exceeding 30m, NHAI to provide rectangular vent of minimum size, 3ft x 3ft in the RCC portal structure.
- e. NHAI will extend all possible support to IOCL during any exigency in IOCL's gas/ petroleum pipeline(s).
- f. Wherever, the alignment of an existing National Highway ("NH") crosses an already laid gas/ petroleum pipeline(s) (i.e., pipeline(s) laid after declaration of said National Highway vide relevant Notification), NHAI will allow IOCL to either shift or take suitable measures to protect its pipeline(s) at IOCL's cost within mutually agreed period of time upon receipt of notice from NHAI, if such pipeline obstructs the upgradation of the National Highway(s).

**2. In respect of laying of new gas/ petroleum pipeline(s):**

- a. NHAI will issue NOC to IOCL for laying gas/ petroleum pipeline(s) along and across National Highways in National Highways land (Right of Way) in 60 days period from the date of formal application by IOCL. Beyond this period of 60 days, it is understood by both the parties that the NOC stands issued.
- b. NHAI shall not levy any charges from IOCL and its agencies for laying new gas/ petroleum pipeline(s) along or across National Highways in National Highways Right of Way.
- c. NHAI will obtain Performance Security from IOCL before issuance of permission for laying gas/ petroleum pipeline(s) along and across National Highways in National Highways land (Right of Way).
- d. NHAI will extend all possible support during any exigency in IOCL's gas/ petroleum pipeline(s) at crossing location of NHAI to IOCL.

**IV. OBLIGATIONS, DUTIES AND UNDERTAKINGS OF IOCL**

**1. In respect of already laid gas/ petroleum pipeline(s):**

- a. Wherever, the alignment of a National Highway ("NH") crosses an already laid gas/

petroleum pipeline(s) (i.e., pipeline(s) existing prior to declaration of said National Highway vide relevant Notification), IOCL will allow NHAI to either construct portal structures over the existing pipeline (as per **Annexure-A**) or cause shifting of such operating pipeline(s) at NHAI's cost under supervision of IOCL.

- b. Wherever, the alignment of an existing National Highway ("NH") crosses an already laid gas/ petroleum pipeline(s) (i.e., pipeline(s) laid after declaration of said National Highway vide relevant Notification), IOCL to either shift or take suitable measures to protect its pipeline(s) at IOCL's cost within mutually agreed time period upon receipt of notice by NHAI, if such pipeline obstructs the upgradation of the National Highway(s).
- c. IOCL will not levy any charges on NHAI for constructing National Highways over their already laid gas/ petroleum pipeline(s).
- d. IOCL will obtain Insurance Cover from NHAI before allowing construction of National Highways over their already laid gas/ petroleum pipeline(s).
- e. IOCL will issue NOC to NHAI whenever under construction National Highway crosses over an already laid gas/ petroleum pipeline(s) (i.e. pipeline(s) existing prior to declaration of said National Highway vide Notification) in 60 days period from the date of formal application by NHAI. Beyond this period of 60 days, it is understood by both the parties that the NOC stands issued.
- f. IOCL will extend all possible support during any exigency in NHAI's National Highways in National Highways Right of Way at crossing location of IOCL to NHAI.

**2. In respect of laying of new gas/ petroleum pipeline(s):**

- a. IOCL, while laying gas / petroleum pipeline(s) across already constructed National Highways, will adopt Trenchless method throughout National Highways land (Right of Way) with the depth of topmost point of pipeline being at-least 1.5m below ground level/ bottom of any National Highway structure/ facility.
- b. IOCL shall bear all cost for laying of new pipeline along or across existing NH land (Right of Way).

- c. IOCL will try to maximize the crossing angle i.e., near to 90 Deg to NHAI's National Highways in National Highways Right of Way.
- d. IOCL will inform NHAI regarding crossing of IOCL's pipeline to National Highways during the land acquisition stage to expedite the crossing related formalities.
- e. IOCL will extend all possible support during any exigency in NHAI's National Highways in National Highways Right of Way at crossing location of IOCL to NHAI.

**V. DEFINITIVE AGREEMENT:**

1. The Parties may enter into separate agreement(s) in terms of this MoU on specific work association of the parties for crossing permissions and shall identify inter alia the methodology of crossing, division of their individual scope of work, division of responsibilities and respective liabilities, expenses etc.
2. Such definitive agreements would be binding on the parties and would be entered into generally as per the understanding contained in this MoU, upon approval by competent authorities of the parties.
3. In case of any contradiction/ discrepancy in any of the clauses of MoU and the definitive agreement(s), the definitive agreement shall prevail. However, clauses of the definitive crossing agreement (s) to be made in line with this MoU conditions for both the parties.

**VI. NON-EXCLUSIVITY:**

The understanding between the Parties under this MoU shall be initially on non-exclusive basis. However, the understanding shall be on exclusive basis contingent upon parties entering into definitive agreement as stipulated above.

**VII. BINDING UNDERSTANDING:**

1. The Parties undertake to act in good faith with respect to each other's rights and obligations under the objectives of this MoU,

2. The Parties recognize the impracticality of providing for every contingency, which may arise during or after the expiry of the MoU and hereby agree to operate fairly and without detriment to the interests of either of them.
3. Subject to any definitive agreements entered into, this MoU is binding in nature, and is a definite expression and record of the purpose and intention of the Parties concerned.

#### **VIII. TRANSFER AND ASSIGNMENT**

1. None of the Parties shall assign or transfer this MoU or any of its respective rights or obligations hereunder, to any other third party without the prior written consent of the other.
2. This consent requirement shall not apply in the event that a Party shall change its corporate name.

#### **IX. DISPUTE RESOLUTION AND GOVERNING LAW:**

1. This MoU will be construed and governed by the laws of India.
2. Any dispute arising out of this MoU shall be amicably resolved in first instance, through discussions in good faith with a view to expeditiously resolve such differences or disputes in a spirit of mutual understanding and cooperation.
3. In the event of any dispute or difference relating to the interpretation and application of the provisions of this agreement, such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 4(1)/2013-DPE (GM)/FIS-1835 dated 22.05.2018 issued by Ministry of Heavy Industries and Public Enterprises.

#### **X. DURATION AND TERMINATION OF THIS MOU:**

1. This MoU shall enter into force on the Effective Date.
2. This MoU shall remain in force for a period of three (3) years from the Effective Date (i.e. the date on which this MoU is signed).
3. The Parties may elect to extend the period of this MoU for an additional period of time or multiple periods of time as may be mutually agreed upon by the Parties in writing.
4. Each party has a right to terminate the MoU at any time during the validity of this MoU.



in writing, with at least one (1) month notice of such intention to the other party. However, the termination of this MoU shall not affect the actions that may have been formalized during its operation.

#### **XI. CONFIDENTIALITY**

1. The Parties hereto agree that they will not at any time during the Term of this MoU, without the prior written consent of the other Party, disclose the existence of, or the terms and conditions set forth in this MoU unless otherwise required by law or regulation.
2. Only those individuals and representatives of the Parties, and their respective legal and financial advisors, with a need to know and for the sole basis of advising the respective Parties concerning the transactions contemplated hereby, shall be permitted to receive knowledge of the information contained herein.

#### **XII. AMENDMENT**

1. This MoU may be amended in writing by mutual agreement between the Parties.
2. Any such amendment shall enter into force from the date agreed to by the Parties.

#### **XIII. NOTICES**

1. Notices in connection with this MOU must:
  - a) Be in writing, in the English language.
  - b) All notices or other information required or deemed necessary to be given to:

**i. For NHAI:**

Name: Chairperson, NHAI

Address: NHAI 2<sup>nd</sup> Office Building, G-3, Sector-10, Dwarka, New Delhi-110075

Email Id: [chairman@nhai.org](mailto:chairman@nhai.org), [chairperson@nhai.org](mailto:chairperson@nhai.org)

ii. For IOCL

Name: Executive Director (Operations), PLHO

Address: Indian Oil Bhavan, A-1, Udyog Marg, Sector 1, Noida (UP)-  
201301

Email Id: [edoplh@indianoil.in](mailto:edoplh@indianoil.in)

- c) Notices shall be delivered by courier or hand or sent by email to the respective addresses and email which are specified above or if the addressee specifies another address or email, in writing, then to that address or email.

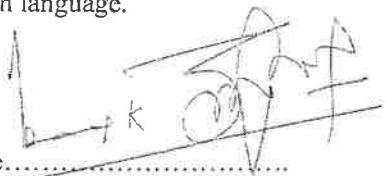
**XIV. COUNTER PARTS**

This MoU shall be executed in two counterparts. Both Parties shall each have one counterpart of this MoU. Both counterparts shall constitute one and the same MoU.

In witness whereof, the undersigned being duly authorized thereto, by their respective parties, have signed this MoU.

Signed at **NHAI, G-3, Sector 10, Dwarka, New Delhi** on **8<sup>th</sup> June 2022** in two originals text in English language.

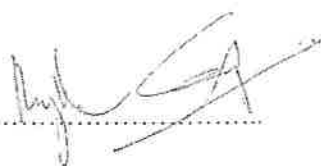
Signature.....



Signed by: **Udeep K Singhal**  
General Manager (Tech.) &  
Regional Officer, Delhi

For and on behalf of;  
**National Highway Authority of India**

Signature.....



Signed by: **Rajesh Gupta**  
Executive Director (Const.)  
PLHO, Noida

For and on behalf of;  
**Indian Oil Corporation Limited**

Witnesses:

Signature.....



Signed by .....

Mary Kanner  
Member (P)  
NHAI

Signature.....



Signed by .....

Rajesh Gupta  
Executive Director (Const.)  
PLHO, Noida



# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

## National Highways Authority of India

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

श्रेणीय कार्यालय : 41-29-45A, सर्वे नं: 373/2A, कोदंडरामालयम्, चलासानी नगर,

रानीगारीतोटा, कृष्णालंका, विजयावाडा - 520 013, आन्ध्र प्रदेश

Regional Office : D.No. 41-29-45A, RS.No. : 373/2A, Kodandaramalayam, Chalasani Nagar,

Ranigari Thota, Krishna Lanka, Vijayawada - 520 013, Andhra Pradesh.

फोन / Tel : 0866-2483910, ई-मेल/e-mail: rovijayawada@nhai.org, nhairovja@gmail.com

वेब/ web: www.nhai.gov.in



Ref: NHAI/RO-VJA/11045/ IOCL-8.625"/2022-23/3414

October 13, 2022.

To

The Project Director,  
National Highways Authority of India,  
Project Implementation Unit,  
Visakhapatnam.

Sub: RO - Vijayawada - Permission for laying of 8.625" diameter Natural Gas pipe line (Carbon Steel, API 5L Gr X52) along with Optical Fibre Cable (OFC) for city Gas distribution to Vizag on NH-16 between Km.703.700 to Km.706.000 LHS totalling to a length of 2300 mt in Visakhapatnam district in the State of Andhra Pradesh - Issuing NOC - Reg.

Ref: Your Lr. No.NHAI/PIU-VSP/IOCL-8.625"GasPipeline&OFC/2022-23/517 Dated 11.08.2022

Sir,

Please refer to your letter cited under reference above, wherein the proposal of M/s. Indian Oil Corporation Limited (IOCL) for laying of 8.625" diameter Natural Gas pipe line (Carbon Steel, API 5L Gr X52) along with Optical Fibre Cable (OFC) for city Gas distribution to Vizag on NH-16 between Km.703.7000 to Km.706.000 LHS total length of 2300 mt in Visakhapatnam district in the State of Andhra Pradesh was submitted for approval of the Competent Authority.

2.1 Based on recommendations of PD & IE, permission is hereby accorded for laying of 8.625" diameter Natural Gas pipe line (Carbon Steel, API 5L Gr X52) along with Optical Fibre Cable (OFC) for city Gas distribution to Vizag on NH-16 between Km.703.700 to Km.706.000 LHS total length of 2300 mt in Visakhapatnam district in the State of Andhra Pradesh.

2.2 However, before issuing the permission for laying of Utility, PD may be directed to ensure the following:

- Receipt of payment of license fee of Rs.68,23,254/- from the applicant as per extant guidelines and realization of the same in Govt. Account.
- Submission of Performance Bank Guarantee for Rs.5,75,000/- as per Clause 6 of MoRT&H Guidelines dated 22.11.2016.
- The text of the license agreement shall be same as that of the standard agreement enclosed at Appendix of MoRT&H circular dated 22.11.2016. The agreement shall be signed by PD, NHAI on behalf of NHAI.
- The proposal submitted for laying of 8.625" diameter Natural Gas Pipe Line along with OFC along NH-16 only and there should not be any crossings.

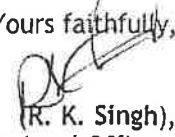
2.3 Further, PD shall ensure that the following terms and conditions are fulfilled by the applicant during laying of the utility:

*[Handwritten signature]*

- (i) The utility shall be laid at the extreme edge of RoW if utility corridor / utility duct is not available.
- (ii) Minimum damage to avenue plantation and in case avenue plantation needs to be cut, the applicant shall re-plant 5 times the plants cut as per the Standard Specifications of NHAI at their own cost including maintenance for 5 years.
- (iii) No utility service shall be laid over existing culvert 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. If 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. Further, the existing drainage structures shall not be allowed to carry the Utility across.
- (iv) Open trench method is allowed in utility corridor only. The width of the trench should be at least 1.0 m x depth 1.50m, but not more than 1.0m wider than the outer dia of pipe. Bedding shall be a depth not less than 1.50 m.
- (v) The licensee shall ensure making good the excavated trench for laying utility services by proper filling and compaction. The debris due to execution of trenching should be clear off at least 50m away from the edge of Row.
- (vi) Each day, the extent of digging the trench should be strictly regulated so that utility services are laid and trench filled up before the close of the work that day.
- (vii) The licensee shall have to provide safety measures like barricading, danger lighting and other necessary caution boards while executing the work.
- (viii) The licensee shall ensure the safety and security of already existing utilities.
- (ix) The applicant shall arrange all the clearances including Forest Clearance required for laying the utility as per Drawing. The applicant shall also arrange for shifting of utilities, if required at his own cost as per the directions of concerned Department.
- (x) Existing drainage structures shall not be allowed to carry the lines across. The utility services shall cross the National Highway Preferably on a line normal to it and at a minimum distance of 15m away from the structures.
- (xi) It shall be ensured that at no time there is interference with drainage of road, land and maintenance of NH.
- (xii) For crossing, casing pipe shall be provided as per MoRTH Circular dated 22.11.2016.

3. In case, the applicant fails to comply with any condition mentioned above or in the license agreement to the satisfaction of the Authority, immediate action shall be initiated against agency as per provisions in License Agreement.

Yours faithfully,

  
(R. K. Singh),  
Regional Officer,  
RO - Vijayawada





# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

## National Highways Authority of India

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

श्रेणीय कार्यालय : 41-29-45A, सर्वे नं: 373/2A, कोदंडरामालयम्, चलासानी नगर,

रानीगारीतोटा, कृष्णा लंका, विजयावाडा - 520 013, आन्ध्र प्रदेश

Regional Office : D.No. 41-29-45A, RS.No. : 373/2A, Kodandaramalayam, Chalasani Nagar,

Ranigari Thota, Krishna Lanka, Vijayawada - 520 013, Andhra Pradesh.

फोन / Tel : 0866-2483910, ई-मेल/e-mail: rovijayawada@nhai.org, nhairovja@gmail.com

वेब/ web: www.nhai.gov.in



Ref: NHAI/RO-VJA/11045/ IOCL-4.5"/2022-23/ 3415

October 13, 2022.

To

The Project Director,  
National Highways Authority of India,  
Project Implementation Unit,  
Visakhapatnam.

Sub: RO - Vijayawada - Permission for laying of 4.5" diameter Natural Gas pipe line (Carbon Steel, API 5L Gr X52) along with Optical Fibre Cable (OFC) for city Gas distribution to Vizag across NH-16 at Km 723+655 totalling to a length of 60 mt through HDD methodology in Visakhapatnam district in the State of Andhra Pradesh - Issuing NOC - Reg.

Ref: 1) Your Lr. No.NHAI/PIU-VSP/IOCL/723.655/2021-22/152 Dated 04.06.2022.  
2) Your Lr. No.NHAI/PIU-VSP/IOCL/723.655/2021-22/552 Dated 18.08.2022.

Sir,

Please refer to your letter cited under references above, wherein the proposal of M/s. Indian Oil Corporation Limited (IOCL) for laying of 4.5" diameter Natural Gas pipe line (Carbon Steel, API 5L Gr X52) along with Optical Fibre Cable (OFC) for city Gas distribution to Vizag across NH-16 at Km.723.655 total length of 60 mt through HDD methodology in Visakhapatnam district in the State of Andhra Pradesh was submitted for approval of the Competent Authority.

2.1 Based on recommendations of PD & IE, permission is hereby accorded for laying of 4.5" diameter Natural Gas pipe line (Carbon Steel, API 5L Gr X52) along with Optical Fibre Cable (OFC) for city Gas distribution to Vizag across NH-16 at Km.723.655 total length of 60 mt through HDD methodology in Visakhapatnam district in the State of Andhra Pradesh.

2.2 However, before issuing the permission for laying of Utility, PD is directed to ensure the following:

- Receipt of payment of license fee of Rs.45,736/- from the applicant as per extant guidelines and realization of the same in Govt. Account.
- Submission of Performance Bank Guarantee for Rs.6,000/- as per Clause 6 of MoRT&H Guidelines dated 22.11.2016.
- The text of the license agreement shall be same as that of the standard agreement enclosed at Appendix of MoRT&H circular dated 22.11.2016. The agreement shall be signed by PD, NHAI on behalf of NHAI.

2.3 Further, PD shall ensure that the following terms and conditions are fulfilled by the applicant during laying of the utility:

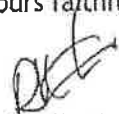
- The utility shall be laid at the extreme edge of RoW if utility corridor / utility duct is not available.

*PR*

- (ii) Minimum damage to avenue plantation and in case avenue plantation needs to be cut, the applicant shall re-plant 5 times the plants cut as per the Standard Specifications of NHAI at their own cost including maintenance for 5 years.
- (iii) No utility service shall be laid over existing culvert 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. If 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. Further, the existing drainage structures shall not be allowed to carry the Utility across.
- (iv) The licensee shall ensure making good the excavated trench for laying utility services by proper filling and compaction. The debris due to execution of trenching should be clear off at least 50m away from the edge of Row.
- (v) Each day, the extent of digging the trench should be strictly regulated so that utility services are laid and trench filled up before the close of the work that day.
- (vi) The licensee shall have to provide safety measures like barricading, danger lighting and other necessary caution boards while executing the work.
- (vii) The licensee shall ensure the safety and security of already existing utilities.
- (viii) The applicant shall arrange all the clearances including Forest Clearance required for laying the utility as per Drawing. The applicant shall also arrange for shifting of utilities, if required at his own cost as per the directions of concerned Department.
- (ix) Existing drainage structures shall not be allowed to carry the lines across. The utility services shall cross the National Highway Preferably on a line normal to it and at a minimum distance of 15m away from the structures.
- (x) It shall be ensured that at no time there is interference with drainage of road, land and maintenance of NH.
- (xi) For crossing, casing pipe shall be provided as per MoRTH Circular dated 22.11.2016.

3. In case, the applicant fails to comply with any condition mentioned above or in the license agreement to the satisfaction of the Authority, immediate action shall be initiated against agency as per provisions in License Agreement.

Yours faithfully,

  
(R. K. Singh),  
Regional Officer,  
RO - Vijayawada