No. RO/VJA/Misc.24/B/Gas Pipeline(MDPE)/NH-342/Sr.no.117 /459

Government of India

Ministry of Road Transport & Highways Regional Office, Vijavawada

Door No.41-29-45A, 3rd & 4th floors, MORTH/NHAI Buildings, Ranigarithota, Near Kanakadurga Varadhi, Krishnalanka, Vijayawada-520013. Tele: 0866-2571985

Dated: 29.07.2022

Invitation of Public Comments

Sub: Proposal for Permission for laying underground MDPE (Medium Density Polyethylene) pipeline for CGD network (city Gas Distribution) in Puttaparthi town across NH 342 from Km 35/600 to 43/700 (LHS) with road crossing at km 36/900 & at Km 38/600 for a total length of 8145m in Puttaparthi district of Andhra Pradesh.- reg.

Please find enclosed herewith the proposal in accordance with Ministry's latest guidelines dated 22.11.2016 forwarded by Chief Engineer(R&B), NH & CRF, AP vide letter dated 07.07.2022 for laying underground MDPE (Medium Density Polyethylene) pipeline for CGD network (city Gas Distribution) in Puttaparthi town across NH 342 from Km 35/600 to 43/700 (LHS) with road crossing at km 36/900 & at Km 38/600 for a total length of 8145m in Puttaparthi district of Andhra Pradesh by the Horizontal Directional Drilling method and open trench method.

- 2. The work of pipeline Shall not disturb the ongoing work and damages, if any, may be appropriated from bank guarantee submitted.
- 3. As per the guidelines, issued by the Ministry vide Circular No.RW/NH-33044/29/2015/S&R(R) dated 22.11.16, the proposal for Highway crossing permission along National Highways shall be put out in the public domain for 30 days for seeking claims and objections on grounds of public inconvenience, safety and general public interest.
- 4. In view of the above, comments of the public on the above mentioned proposal is invited on the address mentioned below:

The Regional Officer,
Ministry of Road Transport and Highways,
Door No.41-29-45A, 3rd & 4th floors, MORTH/NHAI Buildings,
Ranigarithota, Near Kanakadurga Varadhi,
Krishnalanka, Vijayawada - 520013
Email id: romorthvijayawada@gmail.com.

Yours Faithfully,

Encl: As above

(Venkataiah M) Assistant Engineer, For Regional Officer, MoRTH, Vijayawada

Copy to:

- 1) Senior Technical Director, NIC for uploading on the Ministry's website.
- 2) The Chief Engineer(R&B), NH & CRF, AP.
- 3) M/s AGP City Gas Private Limited, 1st floor, BNR Complex, D.no. 8-288C, District Court Road, Ananthapur 515001.

INSPECTION REPORT

Proposals for Permission of laying underground MDPE (**Medium Density Polyethylene**) Pipeline for CGD network (CITY GAS DISTRIBUTION) in Puttaparthi Town across National Highway NH-342 from Km.35/600 to 43/700 (LHS).

We have inspected the proposed site, with reference to the proposals submitted by M/s AG&P City Gas Pvt. Limited, Ananthapuramu vide their reference letter No.AGP/CG/ATP/NH(R&B)-040; Dated:28-03-2022 and observations are as follows,

- 1. This proposals are for laying of GAS Pipeline in Puttaparthi Town across National Highway NH-342 from Km.35/600 to 43/700 (LHS) of 8,100.mts and 2' (two) Road crossings (1)15.mts at ch.36/900 and (2) 30.mts at 38/600, with a total length of 8145.mts, starting from Chitravathi River Sathyamma Temple Prashanthi Nilayam Ganesh Circle Airport Super Speciality Hospital and terminates at Ch.43/700 to join in Stock Yard.
- 2. In the proposed stretch the 900.mts Road length from ch.35/600 to 36/500 is a Two-Lane Municipality Road Not Taken to NH in view of upcoming Byepass and the details of the remaining road stretch is as follows,

Sl.	From	То	Length	Lane Type	Type of Surface	RoW
1	35/600	36/500	900.mts	Municipal Road - (2'Lane)	CC	10 - 15.mts
2	36/500	37/250	750.mts	2'Lane	CC	8 - 10.mts
3	37/250	38/250	1000.mts	2'Lane (University Zone)	BT	10 - 14.mts
3	38/250	39/850	1600.mts	4'Lane	BT	20 - 28.mts
4	39/850	42/750	2900.mts	AIRPORT Road - 2'Lane	BT	15.mts
5	42/750	43/700	950.mts	HOSPITAL Road - 4'Lane	BT	20 - 28.mts
	Total	Length:	8100.mts			

- 3. The M/s AG&P City Gas Pvt. Limited, has Proposed to lay Gas Pipeline in Puttaparthi town by Open trench and HDD methods (at a depth of 1.65 Mts below ground level).
- 4. It is submitted that, in the entire length of the proposal, the Gas Pipeline runs in Left Hand Side (LHS) of the carriageway at extreme edge.
- 5. During Inspection, it is instructed to the agency to lay the Gas Pipeline with HDD method only in (1) Puttaparthi Town limits, due to existing minimum ROW, (2) At University Zone due to existing paved Shoulders, Drains & Footpaths, (3) In front of Airport (4) In front of Hospital (5) At Culvert Locations and at locations where open trench is not possible where undisturbed Road surface is to be maintained.

- 6. Restoration of trench should be done by the Agency as specified by the Ministry vide F.No.RW/NH-33044/29/2015/S&R(R) Dated 22-11-2016.
- 7. The Agency has submitted Undertaking for submission of Performance Bank Guarantee, Indemnity bond, Certificate for relocation of pipeline in case of widening of the existing road and undertaking to comply with the MORTH Guide lines.
- 8. The strip plan and methodology of laying pipeline and other documents submitted by the agency is attached here with.
- 9. It is proposed 2'No.s of Road crossings, (1) One at ch.36/900 to connect Prashathi Nilayam, (2) Second at ch.38/600 at Ganesh Circle to cross the side Road of Yanamulapalli village.
- 10. At Major bridges/ CD Works and village/Town limits where available ROW is restricted the pipeline shall have to be laid using HDD method.

The land rates have been obtained from the Govt. portal of the Registration and Stamps Department, Government of Andhra Pradesh, and a copy of the same is attached.

Further the charges towards the **Restoration charges** of **Rs.8,14,500/-** in the shape of Bank Guarantee and the **License fee of Rs. 10,50,459/-** (for five years) in the shape of DD may be obtained from M/s AG&P City Gas Pvt. Limited.

Assistant Executive Engineer (R&B) NH Section, Gooty

Executive Engineer (R&B) 31/ MN NH Division, Ananthapuramu

Deputy Executive Engineer (R&B) NH Sub Division, Ananthapuramu

Superintending Engineer

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CERTIFICATE

Undersigned has examined the proposals of the application for laying of underground MDPE (Medium Density Polyethylene) Pipeline for CGD network (CITY GAS DISTRIBUTION) in Puttaparthi Town across National Highway NH-342 from Km.35/600 to 43/700 (LHS) in Puttaparthi District of Andhra Pradesh and confirm that all the standard conditions issued vide Ministry Circular No.RW/NH-33044/29-2015/S&R, Dt.22.11.2016 has been followed.

- It is certified that any other location for laying of the "CITY GAS DISTRIBUTION"
 utility line would not serve the purpose of the City Gas connecting network and the
 proposed installation procedure of utility line within RoW will not adversely affect the
 design stability & traffic safety of the highway nor the likely future improvements such
 as widening of the carriageway, casing of curve etc.,
- 2. It is certified that, the installation work of the proposed Gas Pipeline will be done under the supervision of the National Highway Authority and ensure that the defects in the road portion after laying of utility are corrected.
- 3. It is certified that the Bank Guarantees of the utility Agency will be notified / forfeited for claims of the damages done / disruption occurred to the road property during the installation work if any.

4. It is ensured that, the permission of the proposals is entered in the register of records.

Assistant Executive Engineer

(R&B) NH Section, Gooty

Executive Engineer (R&B)

NH Division, Ananthapuramu

Deputy Executive Engineer (R&B)
NH Sub Division, Ananthapuramu

11 Counter Signed!)

Superintending Engineer

& & B \ NH Circle, Anantaburame

CHECK LIST ALONG THE NH-342, DHARMAVARAM ROAD, PUTTAPARTHI. Section of NH-342

Guidelines for processing the proposal for laying Utility / Gas Line in the land along National Highway vested with NH/PWD/BRO

Sr. No	Item	Information / Status of Crossing – 1	Remarks
1	General Information	Construction of Gas Pipeline in Puttaparthi / Andhra Pradesh	,
1.1	Name and Address of the Applicant / Agency	M/s. AGP City Gas Private Limited, 1st Floor, BNR Complex, Door No. 8-288C, District Court Road, Ananthpur-515001, Andhra Pradesh	
1.2	National Highway Number	NH-342	
1.3	State	Andhra Pradesh	
1.4	Location	Along the NH-342, DHARMAVARAM Road, PUTTAPARTHI	
		Karnataknagepalle to Mamillakunta Cross Stretch	
1.5	Chainage in KM	From km 35/600 to km 43/700 LHS, 1 st crossing at CH:38/600 and 2 nd crossing at 36/900.	Centreline chainage of NH
1.6	Length in Meters	8100m+30m+15m=8145m	
1.7	Width of Available ROW	-	0
	(a) Left side from center line towards increasing chainage / km direction	Varying width of ROW (Details mentioned in Inspection Report)	Details founiels in Julpution Report
	(b) Right side from center line toward increasing chainage/ km direction	Varying width of ROW (Details mentioned in Inspection Report)	
1 8	Proposal to lay underground Gas pipeline	Yes	
	(a) Left side from centreline towards increasing chainage/ Km direction	Yes	
	b) Right side from center line toward increasing chainage/ km direction	NA	

Asst. Executive Engineer

(R&B) NH Cention, Gooty.

Deputy Executive Engineer (R & B) NH SUB-DIVISION ANANTHAPURAMU. ANANTAPUR & KADAPA (Y.

Executive Engineer (R&B, NH Division, Anantapuramu

1.9	Proposal to acquire land	NA	Land acquisition is not required as sufficient utility corridor is available.
	(a) Left side from centreline	NA	7
	(b) Right side from centreline	NA	
1.10	Whether proposal is in the same side where land is not to be acquired	NA	
	If not then where to lay the cable	NA	<u> </u>
1.11	Details of already laid services, if any along the proposed route.	OFC, Water pipeline, electrical lines etc.	
1.12	Number of existing lanes (2/4/6/8 lanes)	2/4	10
1.13	Proposed Number of lanes (2 land with paved shoulders 4/6/6/8 lanes)	9 1	
1.14	Service road existing or not	No	
	If yes then which side	Ÿ.	
	(a) Left side from Center line		
	(b) Right side from center line		
1.15	Proposed Service Road	No	
	(a) Left side from center line		
	(b) Right side from center line		
1.16	Whether proposal to lay Gas Pipeline is after the service road or between the service road and main carriageway	NA	
1.17	Whether carrying of sewage / gas pipeline has been proposed on highway bridges. Then mention the methodology proposed for the same	Gas line laying with HDD method under CD Works	
1.18	Whether carrying of sewage / gas pipeline has been proposed on the parapet / any part of bridges. If yes, then mention the methodology proposed for the same	NA	
1.19	If crossing of the road involved		
	If yes, it shall be either encased in pipes or through structure on conduits specially built for that purpose at the expenses of the agency owning the line.	Yes, crossings are proposed to lay with HDD Method and a casing pipe	

Deputy Executive Engineer (R & B) NH SUB-DIVISION AND THE PURAMU.

ANANTAPUR & KADAPA (YSE) AG & P

	(a) Whether existing drainage structures are allowed to carry the utility pipelines.	NA	
	(b) Is in on a line normal to NH	Yes	
	(c) What is the distance of crossing the utility pipelines from the existing structures.		
	Crossing shall not be too near the existing structures on the National Highway, the minimum distance being 15 meter.	NA	
	(d) The casing pipe (or conduit pipe in the case of electric cable) carrying the utility line shall be of steel, cast iron, or reinforced cement concrete and have adequate strength and be large enough to permit ready withdrawal of the carrier pipe/cable.		
	Mention type of casing.	NA Y	
	(e) Ends of the 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 toe of slope in fills	NA	
	(g) The top of the casing / conduit pipe should be at least 1.2 meter below the surface of the road subject to being at least 0.3m below the drain inverts. Mention the proposed details	NA	
	(h) Mention the methodology proposed for crossing of road for proposed sewerage / Gas Pipeline. Crossing shall be by boring method (HDD) (Trenchless technology) especially where the existing road pavement is of cement concrete or dense bituminous concrete type.	Treanchless method (HDD Boring)	
	(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 enclosed with the proposal		\cap

Deputy Executive Engineer (R & B) NH SUB-DIVISION ANANTHAPURAMU. ANANTAPUR & KADAPA (YSL.) AG & P

	(b) For filling the trench, Bedding shall be to 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 sudden change in the bearing value. Unsuitable soil and rock edged should excavated and replaced by selected material.	Agreed
	(a) The trench width should be at least 30cm, but not more than 60cm wider than the outer diameter of the Pipe.	Agreed
2.4.1	Open trenching method. (May be allowed in utility corridor only where pavement is neither cement concrete not dense bituminous concrete type. If yes, Methodology of refilling of	Agreed
2.4	Methodology for laying of sewage / Natural Gas Pipe line	Enclosed
2,3	Strip plan / Route plan showing Gas Pipeline, Chainage, width of ROW. Distance of proposed, cable from edge of RoW, important mile stone, intersections, cross drainage works etc.	NA
2.2.	Cross Section showing the size of pit and location of Gas Pipeline for HDD method	NA
	(iv) These should be said that their top is at least 0.6 meter below the ground level so as not to obstruct drainage of the road land.	**
	(iii) Shall not be permitted to run along the National Highways when the road formation is situated in double cutting. Nor shall these be laid over the existing culverts and bridges.	
	(ii) Located as close to the extreme edge of the right-of-way as possible but not less than 15 meter from the centrelines of the nearest carriageway.	
	(i) Should not be greater than 60cm wider than the outer diameter of the pipe	
2.1	Cross section showing the size of trench for open trenching method (is it normal size of 1.2m deep x 0.3m wide)	

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(R&B) NH Section, Gooty.

Deputy Executive Engineer
((R & B) NH SUB-DIVISION
ANANTHAPURAMU.

GA YENRAYESH GA HEAD AMANTAPUR & KADAPA (YSR) AG & P

	(c) The backfill shall be completed in two stages	H 11	
	(i) side fill to the level of the top of the pipe and	Agreed	
	(ii) overfill to the bottom of the road crust.		,
	d) The side fill shall consist of granular material laid in 15cm layers each consolidated by mechanical tampering 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	Agreed	
	(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.	Not Applicable	
	(f) The excavation shall be protected by flagman. Signs and barricades, and red lights during night hours.	Agreed	
	(g) If required, a diversion shall be constructed at the expenses of agency owning the utility line.	Agreed	
2.4.2	Horizontal Directional Drilling (HDD) Method	Yes	
2.4.3	Methodology for laying pipeline through CD works and method of laying. In case of where the carrying of gas pipeline on the bridge becomes inescapable.	Not Applicable	
3	Draft License Agreement signed by two witnesses	Enclosed	
3.1	The license fee estimate as per Ministry's guidelines issues vide circular No. RW/NH-33044/29/2015/S&R(R) DATED 22.11.2016		AG&P Agrees for the same as per requirement of NH
4	Whether performance Bank Guarantee as per Ministry's Circular no. RW/NH-33044/29/2015/S&(R) dated 22.11.2016 is obtained.		AG&P Agrees for the same as per requirement of NH

Deputy Executive Engineer (R & B) NH SUB-DIVISION ANANTHAPURAMU.

GA HEAD ANANTAPUR & KADAPA (100) AD 8 P

4.1	Confirmation of BG has been obtained or not as per MoRTH. NH guidelines		AG&P Agrees for the same as per requirement of NH
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 NH or to the concerned agency	Enclosed	
5.2	Undertaking for Renewal of Bank Guarantee as and when asked by MORTH / NH.	Enclosed	
5.3	Undertaking for Confirmation all standard condition of Ministry Circulars & NH's guideline	Enclosed	
5.4	Undertaking for indemnity against all damages and claims	Enclosed	
5.5	Undertaking for management of traffic movement during laying of utility line without hampering the traffic	Enclosed	
5.6	Undertaking that prior approval of the NH shall be obtained before undertaking any work of installation, shifting or repairs or alterations to the utility located in the National Highway right-of-ways.	Enclosed	
5.7	Undertaking that expenditure, if any, incurred by NH for repairing any damage caused to the National highway by the laying, Maintenance of shifting of the utility line will be borne by the applicant agency owing	Enclosed	
5.8	Undertaking that text of 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	Enclosed	

Deputy Executive Engineer
(R & B) NH SUB-DIVISION ANANTHAPURAMU

GAVEN ATESH GA HEAD ANANTAPUR & KADAPA (V AG & P

5.9	Undertaking that the applicant has obtained various safety clearances' from the respective 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	Enclosed	
	other statutory clearances applicable, before applying to Highway Administration		
5.10	If the MoRTH/NH 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 NH at the cost of the agency owning the utility line within a reasonable time of the intimation given.	Enclosed	76
5.11	Certificate from the applicant in the following format	~	
	(i) Laying of Gas Pipeline will not have any deleterious effect on any of the bridge components and roadway safety for traffic	Enclosed	
	(ii) "We do undertake that I / we will relocate service road / approach road/ utilities at my own cost notwithstanding the permission granted within such time as will be stipulated by NH for future six-lanning or another development		
6	Who sign the agreement on behalf of Gas Pipeline agency	Sri. Gumalapalli A Venkatesh Regional Head- Anantapur and YSR Kadapa GA	
	g	M/s. AGP City Gas Pvt Ltd, Ananthpur	
6.1	Authorised person to sign the agreement on behalf of Gas pipeline agency	Copy enclosed	
7	Certificate from Project Director		
7.1	Certificate that the proposal is confirming to all standards conditions issued vide Ministry's Circular No: RW/NH-33044/29/2015/S&(R) Dated 22.11.2016	Yes, enclosed	

Deputy Executive Engineer (R & B) NH SUB-DIVISION ANANTHAPURAME

ON THE PROPERTY OF THE PROPERT

	format (Yes / No) (i) " It is certified that any other location	7 - 22 2 -	
	of the 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 carriage way, easing of curve etc".	Yes, Enclosed	
	(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-laning".		
48	if NH section proposed to be taken up by NH on BOT basis – a clause is to be inserted in the agreement. " The permitted Highway on which Licensee has been granted the right to lay Pipeline has also been granted as a		
100	right of way to the concessionaire under the concession agreement for upgradation of Kerala Section from Km to KM Of NH No man build, Operate and Transfer Basis] and therefore, the licenses shall honour the same."	Included in the agreement.	
	Who will supervise the work of laying gas supply pipeline		
	(a) On Behalf of Applicant	Sri. Gumalapalli A Venkatesh Regional Head- Anantapur and YSR Kadapa GA M/s. AGP City Gas Pvt Ltd, Ananthpur	
- 50	(b) on Behalf of MoRTH / NH	Executive Engineer NH, Ananthapuramu.	
Pass	butto	c/ GAR	VENKATESH SA HEAD
Pers	26/5/22	ANANTAPU	VENKATESH GA HEAD R & KADAPA AG & P

Deputy Executive Engineer (R & B) NH SUB-DIVISION ANANTHAPURAMU,

10	Who will ensure that the defects in road portion after laying of gas supply pipe line are corrected and if not corrected then what action will be taken		
	(a) On Behalf of Applicant	Sri. Gumalapalli A Venkatesh Regional Head— Ananthapur YSR Kadapa GA M/s. AGP City Gas Pvt Ltd, Ananthapur	
	(b) on Behalf of MoRTH / NH	Executive Engineer NH, Ananthapuramu,	
11	Who will pay the claims for damages done / disruption in working of Concessionaire if asked by the Concessionaire	M/s AGP City Gas Private Limited.	
12	A Certificate from PD that he will enter the proposed permission in the register of records of the permission in the prescribed proforma (copy enclosed)		M/s AGP City Gas Private Limited will agree for the same as per the requirement of NH
13	If any previous approval is accorded for laying of underground Gas Supply Pipeline	No previous approvals accord at the proposed location.	

Name & Designation Signature of puthorized Representative of applicant & P

Name & Designation, Signature of Concerned field authority of NH / PWD / BRO

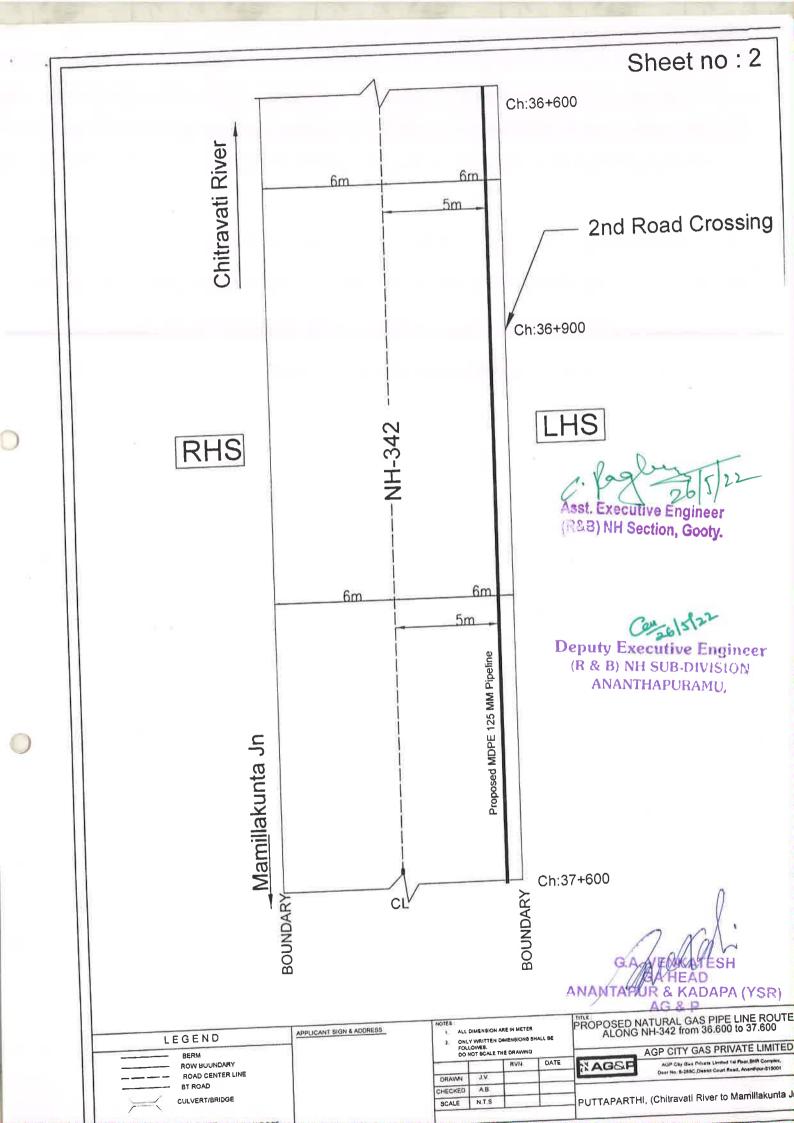
Asst. Executive Engineer (R&J) NH Section, Gooty.

Deputy Executive Engineer (R & B) NH SUB-DIVISION ANANTHAPURAMU.

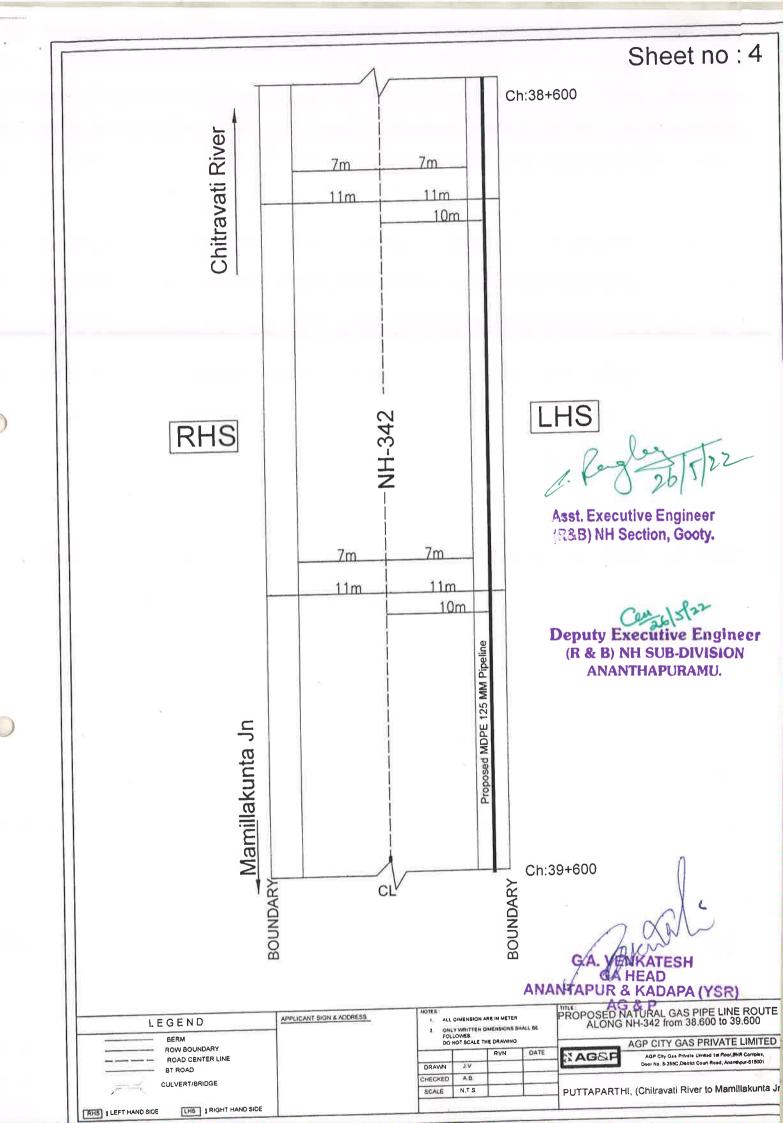
Executive Engineer (R&B)
NH Division, Anantapuramu

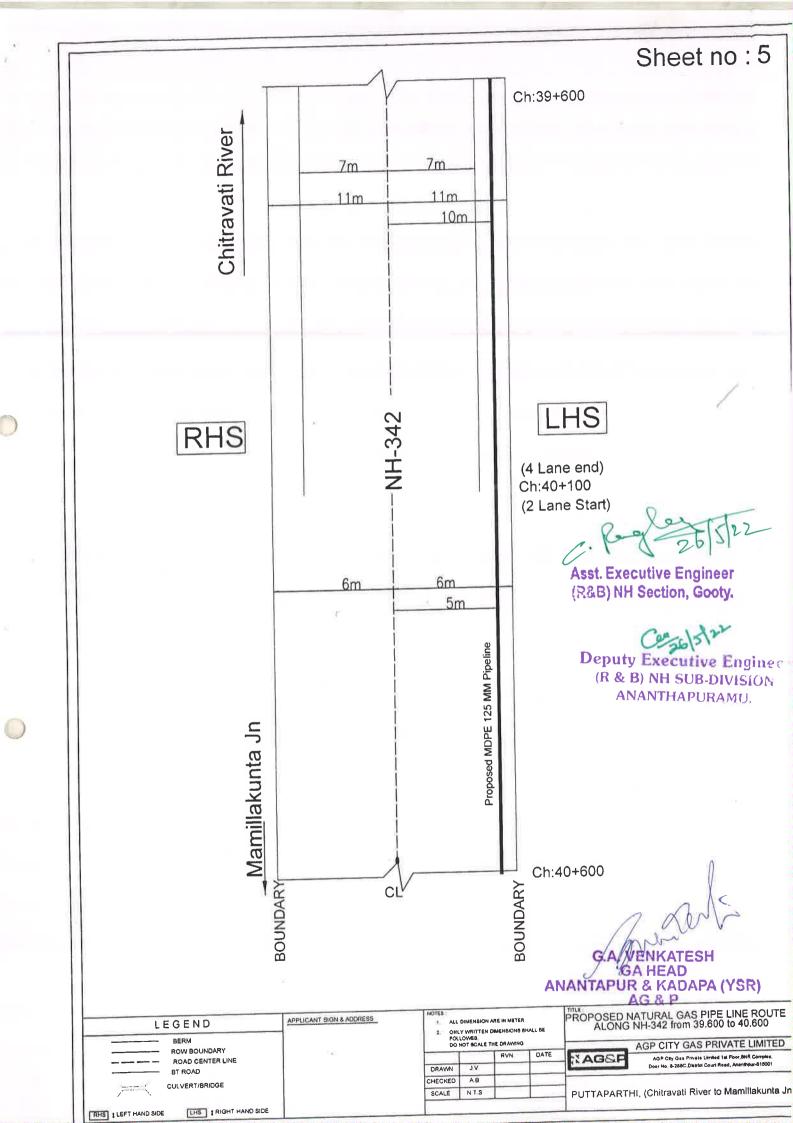
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R & B \ NH Circle, Anamapurame.

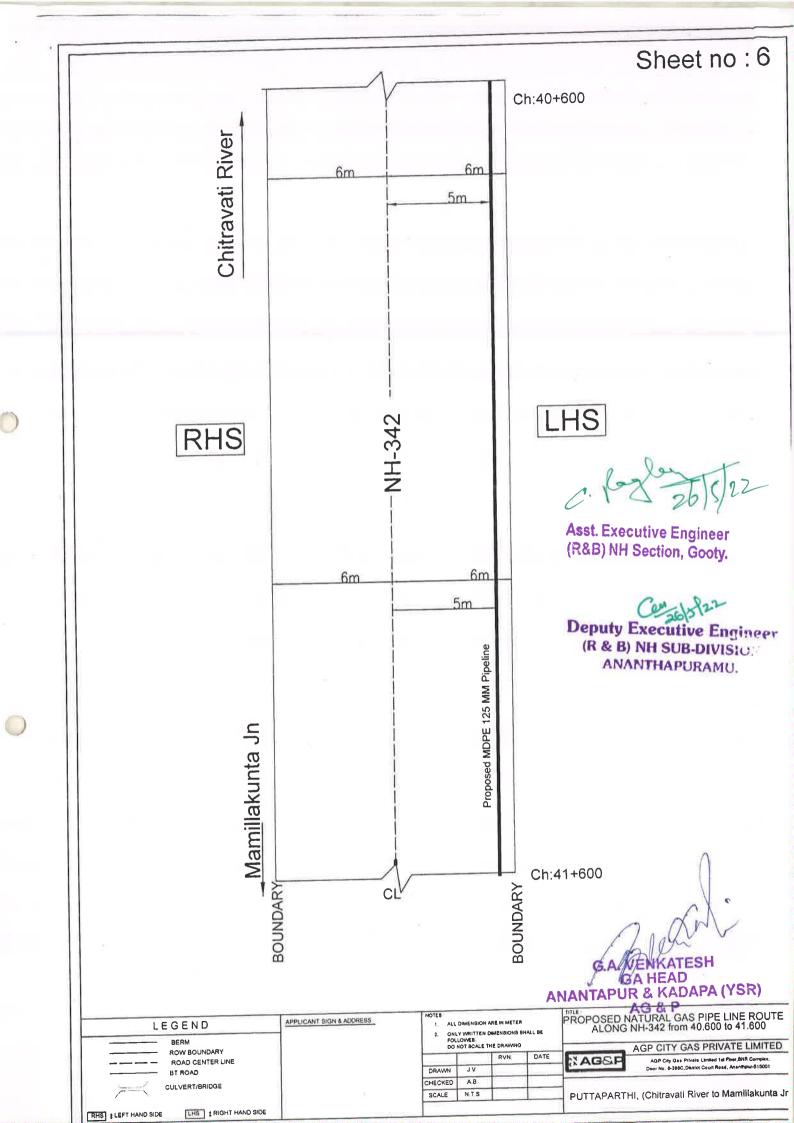


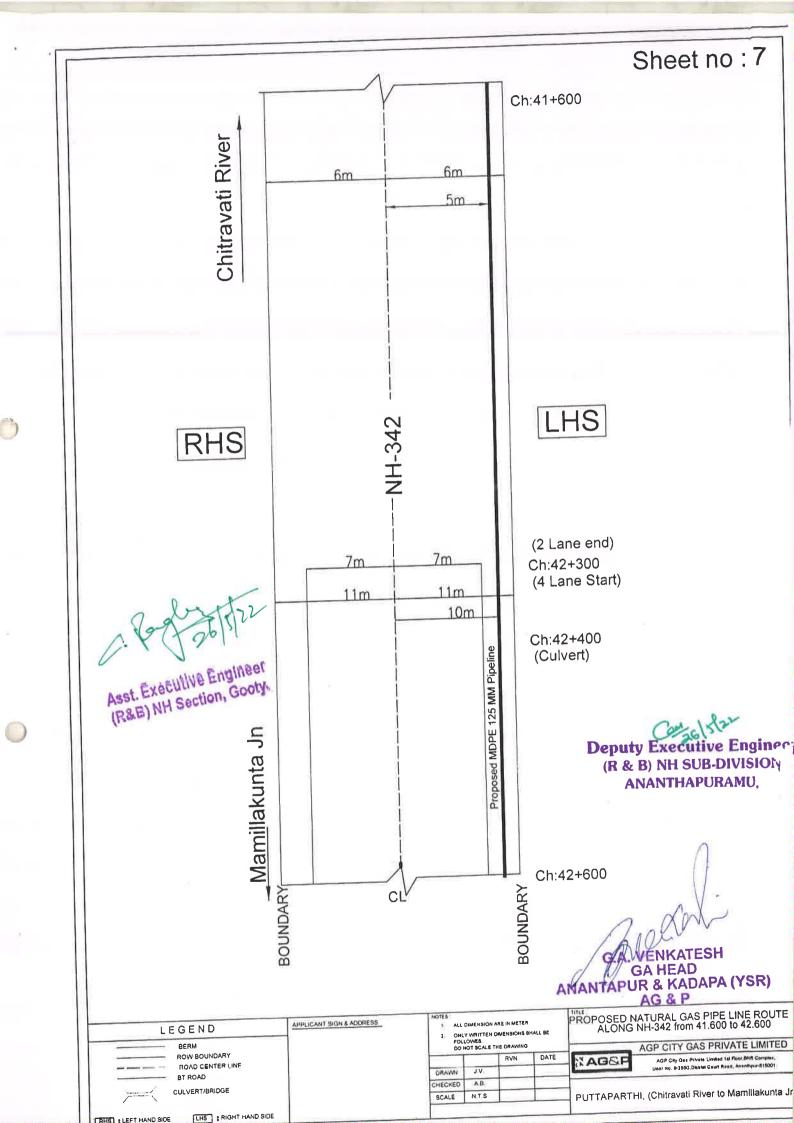












Sheet no:8 Ch:42+600 Chitravati River 7_m 7m 11m 11m 10m RHS Asst. Executive Engineer (R&B) NH Section, Gooty. 7m 7m 11m 11m 10m Proposed MDPE 125 MM Pipeline Deputy Executive Engines (R & B) NH SUB-DIVISION ANANTHAPURAMU. Mamillakunta Jn Executive Engineer (R&B) NH Division, Anantapyramu Ch:43+700 BOUNDARY ANANTAPUR & KADAPA (YER) PROPOSED NATURAL GAS PIPE LINE ROUTE ALONG NH-342 from 42.600 to 43.700 APPLICANT SIGN & ADDRESS ALL DIMENSION ARE IN METER LEGEND ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWES DO NOT SCALE THE DRAWING AGP CITY GAS PRIVATE LIMITED ROW BOUNDARY AGP City Gas Private Limited but Poor, Shift Complex, Door No. 9-288C, Olishid Court Read, Ananthou-515001 AGSF ROAD CENTER LINE CHECKED CULVERT/BRIDGE PUTTAPARTHI, (Chitravati River to Mamillakunta N.T.S SCALE

Enclosure to Ministry of Road Transport & Highways Letter No.RW/NH-33044/29/2015S&R Dt. 22/11/2016 CROSS SECTION DRAWING OF CROSSING PIT BY HORIZONTAL DIRECTIONAL DRILLING (HDD) METHOD Road NH-342 and Chainage at 38.600 TOP OF THE ROAD TOP OF SUBGRADE Overfill (GRANULAR MATERIAL IN LAYERS NOT GREATER THAN 15CM in LAYER) 1.5 m(Min.) B. Die 15 TO 30 CM 5" Dia 15 TO 30 CM SIDE FILL SIDE FILL GRANULAR MATERIAL IN LAYERS NOT GREATER THAN **BED FILL** 15CM In LAYER) 30 CM Asst. Executive Engineer GRANULAR MATERIAL FREE FROM LUMPS, COLDS AND CABBLES AGP City Gas Private Limite (R&B) NH Section, Gooty.

Deputy Executive Engineer

(R & B) NH SUB-DIVISION ANANTHAPURAMU. UR & KADAPA (YSR)

Enclosure to Ministry of Road Transport & Highways Letter

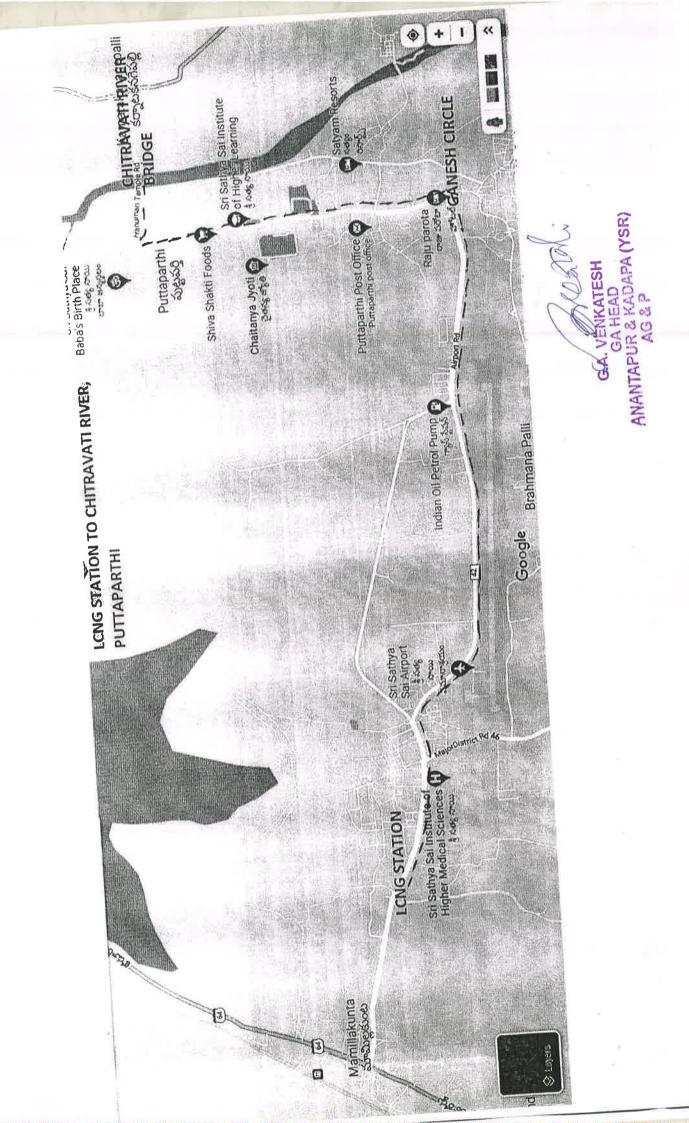
No.RW/NH-33044/29/2015S&R Dt. 22/11/2016 CROSS SECTION DRAWING OF CROSSING PIT BY HORIZONTAL DIRECTIONAL DRILLING (HDD) METHOD Road NH-342 and Chainage at 36.900 TOP OF THE ROAD TOP OF SUBGRADE Overfill (GRANULAR MATERIAL IN LAYERS NOT GREATER THAN 15CM in LAYER) 1.5 m(Min.) 15 TO 30 CM 15 TO 30 CM SIDE FILL SIDE FILL GRANULAR MATERIAL IN BED FILL LAYERS NOT GREATER THAN 15CM in LAYER) 30 CM GRANULAR MATERIAL FREE AGP City Gas Private Limited FROM LUMPS, COLDS AND CABBLES **Executive Engineer** NH Section, Gooty

> **Deputy Executive Engineer** (R & B) NH SUB-DIVISION ANANTHAPURAMU.

R & KADAPA (YSR)

AG & P

ANANTAPUR & KADAPA (YSF)

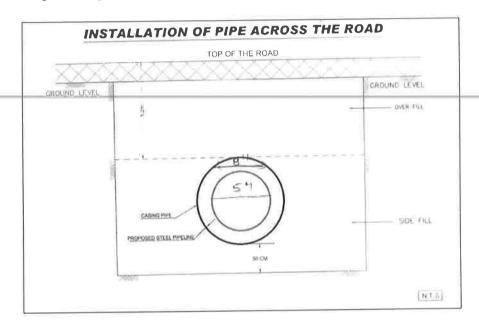




CROSSING METHODOLOGY - NHAI/NH/R&B ROADS

This methodology is submitted for laying & crossing of NHAI/NH/R&B Roads.

Typical crossing drawing and pipeline specific details are as below;



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

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

Boring

Boring is the most popular and simplest procedure for crossing of highways and major roads with heavy traffic. Similar to a directional drill for river crossings, the road bore is accomplished with a horizontal drill rig, or boring machine. The boring machine drills a hole under the road to allow insertion of the pipe. In most of the cases, a casing is first installed in the hole, and the carrier pipeline is inserted inside the casing. The benefit of the road boring is that it allows installation of the pipeline without disrupting traffic.

Carrier pipe shall be laid inside the casing pipe. Generally, diameter of casing will be 150mm higher than the carrier pipe. The casing pipe shall be made of approved steel with epoxy coating (Internal and External) or approved reinforced concrete pipe. The thickness of casing pipe shall be decided so as to take all the external load during construction and



after completion of work. 1:100 slopes will be provided towards drain during installation of the casing pipe. The casing pipe will be extended a minimum of 600 mm beyond the toe of the slope or base grade or 90 mm beyond the bottom of the drainage ditch whichever is greater.

Inserting the Casing

The inserting of casing pipe will start only after the working pits have been constructed and finished completely and the assembly between the wall and the driving unit has been carried out. During the driving process a cutting head will be pushed gradually into the virgin soil. As the insertion progresses, the soil excavated by the cutting head will be removed using a soil transportation device. The excavation face will under no circumstances go beyond the cutting head.

Where necessary, the work will be carried out by exercising a counter - pressure at excavation face to prevent any water from bursting through. The front face will be at all times be sealed tight against water and soil. The cutting head will be manageable by itself and provide with the necessary guiding jacks which will be able to be driven independently. In case of driving with pressurized air as front support, the air pressure will be constantly maintained where there is a danger of water seepage and /or collapse.

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

Following measurements shall be taken during the driving operation.

- Measurement of the number of meters casing inserted, including the cutting head in each work shift of 8 hours.
- Measurement of the peak pressure of the main jacks and that of any intermediate driving stations required to start moving the casing at the commencement of the work of each work shift;
- Measurement of the center of the cutting head in X, Y and Z co-ordinates after driving each pipe with an accuracy of 5 mm and comparison with a fixed center line system independent of the driving wall and casing train;
- The automatic recording of the front face support pressure (drilling fluid, air, soil, water)

The maximum permitted deviation throughout the entire duration of the driving process in 10 cm both vertically and horizontally measured in relation to the connection line of the centers of the bore holes in the entry and exit working pit walls.

Inserting Carrier pipe through the casing

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



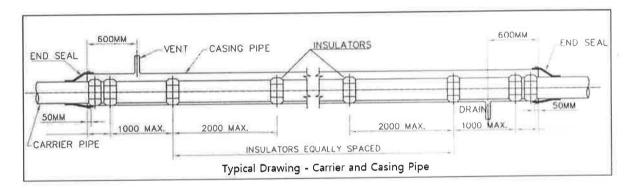
The pipeline will be kept completely in line with the casing. Damage to the coating will be excluded altogether. The progress of the pipeline in the casing will be gradual and under control. The front end of the pipe will be equipped with a slider-shoe and drawn by a cable through the casing.

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

Installing Space Collars/Insulators

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

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



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

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

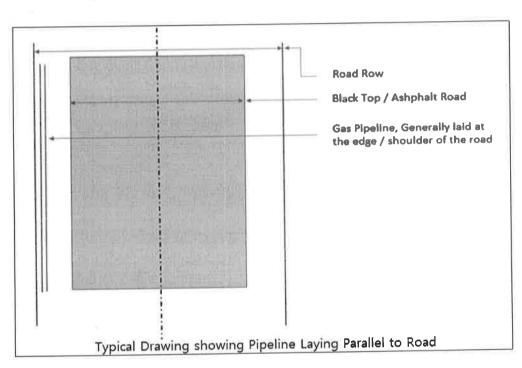




Open-Cut laying (parallel to Road) within RoW of NHAI/NH/R&B Roads

1. Pre-Excavation Planning

- o Route survey is initiated for proposed area of laying
- Route finalized keeping safety, construction and operation ease
- o Normally, pipeline is laid at the edge of road on berm / soil
- o Joint site visit; followed by Permissions from concern authorities prior to start of work
- Before starting of work route marking is done
- Presence of other utilities like water line, cables etc are identified with the help of
 Trial Pits and/or Cable Locator



2. Excavation

- Risk Assessment and mitigation is done for route including U/G utilities
- Work area is isolated properly with barricades and display boards
- Excavation soil is kept away from trench edge
- Native soil is kept separate for backfilling purpose
- Activity shall be planned in a manner to cause minimum inconvenience to general public

3. Pipeline Laying and Backfilling

- Upon reaching to desired depth of excavation, pipeline laying will be planned
- Visual inspection of trench is done to ensure that there is not sharp objects inside the trench; and desired depth of trench is done



- Soft Soil bedding is provided for 100/150mm for normal and rocky strata respectively
- Pipeline is lowered at the center of trench
- o Soft Soil padding is provided for 100mm above the pipe
- O Native soil is backfilled after removing stones, sharp edge objects
- Warning tape is laid at 0.5 m depth to safeguard the pipe
- O Watering and stage-wise soil compaction is done to avoid depression of trench
- o Crowning of trench is done for about 200-300mm for settling backfilled material
- After backfilling to of trench near to original condition, NOC from authority shall be obtained by AG&P Contractor

HSE Plan for National Highway/State Highway Roads

- 1. Identify the underground utility during joint visit with concerned authority. Risk identified during site visit report will be mitigated with proper risk assessment.
- 2. The location and status of underground services shall be marked on ground and discussed in Toolbox Talks.
- 3. Site Specific Risk assessment according to site risks and dynamic risk assessment to be done prior to execution of work.
- 4. Excavation area site to be visually inspected for other utilities, source of ignition etc.
- 5. All efforts to be made to minimize the night work.
- 6. Assess the requirement for personnel to enter and egress from the excavation.
- 7. Contractor supervisor must discuss the job with AG&P engineer including the risk involved, any abnormal situation, possible failure of machines/ system, human error etc.
- 8. Assess the impact that excavation may have on any adjacent structures.
- 9. Manual excavation laborer involved should be experienced with proper HSE induction.
- 10. PPE is must for all the persons involved and to be ensured by the supervision.
- 11. Proper barricading to be ensured at the worksite.
- 12. Trenching to be supervised with experienced supervisor.
- 13. As the trench depth increases, step cutting to be done for proper exit in case of emergency.
- 14. Buddy system to be followed for keeping risk of confined space at minimal levels. Proper communication method and regular communication to be done with the excavation workers involved will be done.
- 15. The trench depth shall be increased uniformly in accordance with minimum permissible radius of bend at approaches to crossing and shall have proper slope for the trench side in order to avoid slide / collapse.
- 16. Excavation and other material to be stored away from edge of the trench.
- 17. Workers should not be permitted to work in excavations where water has accumulated or is accumulating unless adequate precautions have been taken.
- 18. All lifting tool and devices used should be well maintained and approved by competent authority.
- 19. The site must be checked daily for tidiness and safety before work begin.



- 20. Movement of pipe section to be done with proper risk assessment of the site conditions.
- 21. Only trained rigging personnel to be deployed for this activity.
- 22. Personnel around the machine should be cautious for overhead falling objects.
- 23. Guiding ropes to be used for directing pipe section for unloading.
- 24. Lowering of pipe to be done in closed supervision of the AG&P team / representatives
- 25. Pipe to be placed in the center of underground utility for which crossing need to be done.
- 26. Underground utility to be properly safeguarded during carrying out these activities.
- 27. Proper backfilling to be ensured after completion of the activity.
- 28. First aid kit to be ensured at site.
- 29. Special attention to be paid by the site engineer to the following: -
 - The stability of the ground
 - Adequacy of supports;
 - Undue loading to trench edges;
 - Clear working space;
 - Adequate means of entry and exit;
 - Provision of suitable protection to prevent persons falling into the trench.

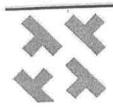




EXTRACT OF THE RESOLUTION PASSED BY THE BOARD OF AGP CITY GAS PRIVATE LIMITED IN ITS BOARD MEETING HELD ON TUESDAY, DECEMBER 17, 2019 AT 6:00 PM (PHP TIME) AT 28TH FLOOR, TOWER 2, INSULAR LIFE CORPORATE CENTRE, INSULAR LIFE DRIVE, FILINVEST CORPORATE CITY, ALABANG, MUNTINLUPA CITY, PHILIPPINES

"RESOLVED THAT the consent of the Board of Directors of the Company be and is hereby accorded to the delegation of certain powers/ functions to Mr. Palepuparatparagopala Sarma, Director of the company subject to the supervision and control of the Board:

- To authorize to apply for various statutory registration/s and approvals for the Company in respect of Custom Duty, Provident Fund, Labour, ESI and any other licenses required for the operation of business of the company and to sign all the necessary documents, papers, deeds, bonds, guarantee, etc. including arranging of bank guarantees and making necessary deposits, if so required, to give effect to this resolution.
- To sign, verify and file all statutory returns, statements of all kinds of application required under the various acts and various authorities/ departments as may be applicable to the Company.
- 3. To authorize to make necessary corrections / modifications in the applications and collect the all the Registration Certificates from the respective agencies on behalf of the company."
- 4. To take decision for instituting and defending legal proceedings and to institute and defend legal proceedings civil, criminal or revenue including Income tax, Sales tax, Service tax and Excise and Confess judgment or withdraw, compromises compound or refer any matter or dispute to arbitration, as he may think fit in connection with the Company's business.
- 5. To sign, verify and file in all or any courts and offices in India in all or any cases, whether original, appellate or revision plaints, complaints, written statements, affidavits and applications review or revision petitions, statutory returns and memoranda of appeals or cross objections, etc.
- To represent the Company in connection with its assessment, appeals and revision, proceedings before any revenue and sales tax authority or the Appellate Tribunal, Excise Tribunals, Sales Tax Tribunal and to produce and document connected therewith.
- 7. To engage and appoint advocates, vakils, solicitors, pleaders and mukhtiars, as the
- 8. To appoint special agents or attorneys, on such terms and conditions as he may deem fit and authorize such agent or attorney to do any of the act, deeds or things for the purpose of Company.
- To convene meetings of the Board of directors, Committees, Sub-Committees of directors, if any, and pursuant to the directions of the Board of directors also the Ordinary or Extraordinary General Meetings of the shareholders.
- 10. To purchase, pay for, acquire, either on lease or by purchase, or otherwise, repurchase, import, exchange, capital assets, properties, buildings, lands, premises, machinery, plants, Vehicle etc. for factories, workshops, offices, showrooms, stores, etc. of the Company whether for cash or credit and either present or future delivery.



11. To apply for any new connection of telephone/cell phone/power connection/water connection for factories, workshops, offices, showrooms, stores, etc. of the Company whether for cash or credit and either present or future

12. To make all applications to the import and export control authorities in connection with the import and export of plant and machinery, goods, raw-materials, stores etc. for and on behalf of the unit including applications for

Import and export licenses

Cash compensatory support

Replenishment licenses

Export performance certificate etc.

13. To deposit or obtain refund of stamps duty or court fee or to repay the same.

14. To deposit in or withdraw from any or all courts or other offices moneys and give receipts thereof.

15. To apply for copies of documents or other records of courts or offices.

16. To apply for inspection of and to inspect records of which inspection is allowed.

17. To execute decrees, receive moneys and obtain possession of properties in execution of decrees give receipts and discharge/s thereof and compromise or compound any such decree.

18. To sign, execute and register contracts, and agreements and all other documents including lease deeds in respect of any buildings, shops godowns or premises taken on lease by the Company in connection with the work of Company.

19. To sign, execute, submit and file all statutory returns, letters, forms, registers and applications required under the companies act

20. To authorize, sign letter of subrogation in favour of Insurance Companies for lodging claim against third parties on our behalf.

21. To present for Registration and to admit execution at any Office of Registration in India, any document executed on behalf of Company.

22. To authorize to sub-delegate any of the aforesaid delegations to any Professional and /or company employee.

23. And generally, to do all such acts, deeds or things as may be necessary or proper for the purposes mentioned above.

RESOLVED FURTHER THAT the Company hereby agrees that all acts, deeds and things lawfully done by the said Attorney under the authority of this power shall be construed as acts, deeds and things done by the Company and the Company hereby undertakes to confirm and ratify all and whatsoever the said Attorney shall lawfully do or cause to be done by virtue of the powers hereby given.

Certified to be true

For AGP City Gas Private Limited

SPRIL

AGSP

Not the Country of the

Abhilesh Gupta Director

DIN: 06978920

Date: October 19, 2020