



सत्यमेव जयते

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

NATIONAL HIGHWAYS AUTHORITY OF INDIA

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

क्षेत्रीय कार्यालय - हैदराबाद

प्रथम तल, नया भवन, भारतीय प्रशासनिक स्टाफ कॉलेज, रोड नंबर 3, बंजारा हिल्स, हैदराबाद - 500034, तेलंगाना

REGIONAL OFFICE - HYDERABAD

First Floor, New Building, Administrative Staff College of India (ASCI), College Park Campus, Road No. 3, Banjara Hills, Hyderabad - 500034, Telangana

टेली / Tele: 040-29562147 / 48 ई-मेल / Email: rohyderabad@nhai.org / nhairohyd@gmail.com

Notice Inviting Public Comments



NHAI/RO-HYD/25011/1/64/2023/Utility/1717

Dt. 26.10.2023

विषय: भा.रा.रा.प्रा- क्षेत्रीय कार्यालय, हैदराबाद - प.का.इ हैदराबाद -Proposal for laying of 10.75 inch/ 4.5 inch OD Steel Pipeline and OFC cable for Public Utility -City Gas Distribution Pipeline along & across Hyderabad to Bangalore section of NH-44- (i) 10.75 inch Steel Pipeline Along the road on LHS from Km.202+100 to Km.202+300, from Km.202+400 to Km.202+800, from Km.203+000 to Km.203+900, from Km.204+200 to Km.204+300, from Km.204+500 to Km.204+600, from Km.205+700 to Km.205+750, from Km.206+200 to Km.206+800, from Km.207+100 to Km.207+150, from Km.207+600 to Km.207+800, from Km.208+300 to Km.209+200, from Km.209+400 to Km.210+300, by HDD methodology, (ii) 10.75 inch Steel Pipeline along the road on LHS from Km.202+300 to Km.202+400, from Km.202+800 to Km.203+000, from Km.203+900 to Km.204+200, Km.204+300 to Km.204+500, from Km.204+700 to Km.205+700, from Km.205+750 to Km.206+200, from Km.206+800 to Km.207+100, Km.207+100 to Km.207+120, from Km.207+150 to Km.207+600, from Km.207+800 to Km.208+300, from Km.209+200 to Km.209+400 by Open trench method and (iii) 4.5 inch Steel Pipeline across the National Highway at Km.207+100, Km.208+500, & Km.209+700 by HDD methodology for a total length of 8.2 Kms on Hyderabad to Bangalore in the State of Andhra Pradesh- के संबंध में |

Ref: 1. PD Lr.no. Lr.no.NHAI/PIU-HYD/NH-44/AP-5/IOCL/Km.202-211/2023/864, dated 29.08.2023 (received on 01.09.2023)
2. PD Lr.no. Lr.no.NHAI/PIU-HYD/NH-44/AP-5/IOCL/Km.202-211/2023/950, dated 11.10.2023 (received on 16.10.2023)

The Project Director, NHAI vide letter cited above has recommended the Proposal of M/s IOCL, for laying of City Gas Distribution Pipeline between Km. 202/000 to Km. 211/000 along and across Hyderabad to Bangalore section of NH- 44 in the State of Andhra Pradesh.

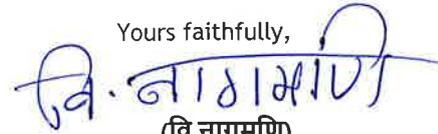
2. As per para 4 of the Ministry's guidelines no. RW/NH-33044/29/2015/S&R(R) dated 22.11.2016, public comments is hereby invited on the above proposal seeking claims and objections (on grounds of public inconvenience, safety and general public interest) within 30 days on public portal i.e. website of Ministry of Road Transport and Highways (www.morth.nic.in) in Form-A (copy enclosed) for "Accommodation of Public and Industrial Utility Services along and across National Highways".

Comment Inviting Authority

The Regional Officer,
National Highways Authority of India,
Regional Office: Hyderabad,
First Floor, New Building,
Administrative Staff College of India(ASCI),
College Park Campus, Road No.3,
Banjara Hills, Hyderabad - 500 034,
Telangana State,
Phone: 040-29562147, 040-29562148,
Email: rohyderabad@nhai.org, nhairohyd@gmail.com

Encls: Above Proposal

Yours faithfully,



(वि.नागमणि)

उप महाप्रबंधक (तक.)

कृते क्षेत्रीय अधिकारी - एवं -
राजमार्ग प्रशासक, हैदराबाद

To:1. Senior Technical Director, NIC, Transport Bhawan, New Delhi- 110001 for uploading on Ministry's website.

2. Shri S.Manivasagam, Dy. GM (IT), NHAI HQs, New Delhi for uploading on NHAI website.

Copy to:- The PD, PIU Hyderabad: for information

FORM-A

Form for seeking claims and objections (on grounds of public inconvenience, safety and general public interest) on the application for Accommodation of Public and Industrial Utility Services along and across National Highways

विषय:भा.रा.रा.प्रा- क्षेत्रीय कार्यालय, हैदराबाद – प.का.इ हैदराबाद -Proposal for laying of 10.75 inch/ 4.5 inch OD Steel Pipeline and OFC cable for Public Utility -City Gas Distribution Pipeline along & across Hyderabad to Bangalore section of NH-44- (i) 10.75 inch Steel Pipeline Along the road on LHS from Km.202+100 to Km.202+300, from Km.202+400 to Km.202+800, from Km.203+000 to Km.203+900, from Km.204+200 to Km.204+300, from Km.204+500 to Km.204+600, from Km.205+700 to Km.205+750, from Km.206+200 to Km.206+800, from Km.207+100 to Km.207+150, from Km.207+600 to Km.207+800, from Km.208+300 to Km.209+200, from Km.209+400 to Km.210+300, by HDD methodology, (ii) 10.75 inch Steel Pipeline along the road on LHS from Km.202+300 to Km.202+400, from Km.202+800 to Km.203+000, from Km.203+900 to Km.204+200, Km.204+300 to Km.204+500, from Km.204+700 to Km.205+700, from Km.205+750 to Km.206+200, from Km.206+800 to Km.207+100, Km.207+100 to Km.207+120, from Km.207+150 to Km.207+600, from Km.207+800 to Km.208+300, from Km.209+200 to Km.209+400 by Open trench method and (iii) 4.5 inch Steel Pipeline across the National Highway at Km.207+100, Km.208+500, & Km.209+700 by HDD methodology for a total length of 8.2 Kms on Hyderabad to Bangalore in the State of Andhra Pradesh- Reg..

The claims and objections (on grounds of public inconvenience, safety and general public interest) by the general public needs to be given within 30 days of uploading the online application for comments

Sl. No	Item	Details
1	Name of the person who is desiring to give claims and objections (on grounds of public inconvenience, safety and general public interest)	
2	Address of the person	
3	Details of the application for Accommodation of Public and Industrial Utility Services along and across National Highways against which claims and objections are being given (name of applicant and other details like site address etc.)	
	a) Application No.	
	b) Name of applicant (who applied to Accommodation of Public and Industrial Utility Services along and across National Highways)	
	c) Details of Application	
4	The claims and objections (on grounds of public inconvenience, safety and general public interest)	



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भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)
NATIONAL HIGHWAYS AUTHORITY OF INDIA

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

परियोजना कार्यान्वयन इकाई - हैदराबाद

आवास सं : 25A & 28A, भारत का प्रशासनिक स्टाफ कॉलेज, कॉलेज पार्क कैम्पस, सड़क सं : 3, बंजारा हिल्स, हैदराबाद - 500 034, तेलंगाना

PROJECT IMPLEMENTATION UNIT - HYDERABAD

Qtr No.25A & 28A, Administrative Staff College of India (ASCI), College Park Campus, Road No. 3, Banjara Hills, Hyderabad - 500 034, Telangana.

Land Mark : Near Tv9 Bus Stop

टेली Tel : 040 - 29550558 ई-मेल Email : hyd@nhai.org , nhaihyd@gmail.com

NHAI/PIU-HYD/NH-44/AP-5/IOCL/Km. 202-211/2023/1950

11.10.2023

To

The Regional Officer

National Highways Authority of India

Regional Office, First Floor, New Building,

Administrative Staff College of India (ASCI),

College Park Campus, Road No.3

Banjara Hills, Hyderabad-500034, Telangana.

Sub: NHAI, PIU-Hyderabad - Design, Construction, Development, Finance, Operation and Maintenance of Km.135.469 (end of Kothakota Bypass) to Km.211.000 (Kurnool) on NH-44 (old NH-7) in the State of Andhra Pradesh on BOT (Annuity) basis - Contract Package No. NS-2/BOT/AP-5 - Grant of NOC for laying of 10" OD Steel Pipe and OFC for public utility - "City Gas Distribution along the NH44 in Kurnool District by Open cut method and HDD method - Necessary compliance requested - Reg.

- Ref:**
- MoRTH Circular no.RW/NH-33044/29/2015/S&R (R) dated 22.11.2016
 - M/s. IOCL lr. no. SERPL/KNL/STAT/602 dated: 20.01.2023 (file received on 28.03.2023 in this office)
 - M/s. IOCL lr. no. SERPL/KNL/STAT/602 dated: 09.03.2023
 - PIU-Hyd lr. No. NHAI/PIU-HYD/NH-44/AP-5/IOCL/Km. 202-211/2023/378 dated: 10.04.2023
 - I.E lr. No. AA/TL/AP-05/NH-44/NHAI/2349/23-24/1870 dated: 29.04.2023
 - PIU-Hyd lr. No. NHAI/PIU-HYD/NH-44/AP-5/IOCL/Km. 202-211/2023/624 dated: 12.06.2023
 - M/s. IOCL lr. no. SERPL/KNL/STAT/602 dated: 04.08.2023 (mail dated: 26.08.2023)
 - PIU-Hyd lr. No. NHAI/PIU-HYD/NH-44/AP-5/IOCL/Km. 202-211/2023/864 dated: 29.08.2023
 - RO-Hyderabad mail dated: 06.09.2023

Sir,

In continuation of this office letter dated: 29.08.2023 wherein this office had requested to put out in the IOCL proposal in public domain for 30 days for seeking claims and objections (on grounds of public inconvenience, safety and general public interest), as per the request from M/s IOCL the application No. SERPL/KNL/STAT/602 dated 20.01.2023.

2. In response, Regional Office vide mail dated: 06.09.2023 wherein necessary documents were sought to host the proposal in public domain for seeking claims and objections (on grounds of public inconvenience, safety and general public interest).

3. Further, M/s IOCL vide letter dated: 13.09.2023 has submitted BG as per the demand note and same has been sent for Bank Confirmation vide this office letter dated: 14.09.2023, however same is awaited.

4. In view of the above, necessary documents such as checklist and drawings are enclosed for hosting the proposal in public domain for seeking claims and objections (on grounds of public inconvenience, safety and general public interest).

Yours faithfully,

(P. Nageswara Rao)

GM (T) & Project Director

CHECK – LIST

Guidelines for Project Directors for processing the proposal of laying 10.75” carbon steel Pipes & 125 MM MDPE pipes by IOCL Pipelines division in the land along National Highway 44 vested with NH.

- **Relevant circulars**

1) MoRTH Circular No: RW/NH-33044/29/2015/S&R(R) Dated: 22-11-2016

Check list for getting approval for laying of 10.75” Carbon steel Pipes on NH land

Sl. No.	Item	Information/ Status	Remarks
1	General Information		
1.1	Name and Address of the Applicant	Mr. M. Chaitanya Kumar Manager (CGD) Indian Oil Corporation Limited Southern Eastern Region Pipelines City Gas Distribution project 3 rd Floor, Vishnu Sai Enclave Kurnool-518003	
1.2	National Highway Number	NH-44	
1.3	State	Andhra Pradesh	
1.4	Location	Panchalingala to Kallur along NH 44	
1.5	(Chainage in km)	KM 202 (Survey No.281/3) to KM 211 (Survey No.493/A)	LHS
1.6	Length in Meters	10000	
1.7	Width of available ROW	60 M	
	(a) Left side from center line towards increasing Chainage/ km direction	30 M	
	(b) Right side from center line towards increasing chainage/ km direction	30 M	
1.8	Proposal to lay underground Gas Pipeline along with OFC		
	(a) Left side from center line tow	KM 202 to 211	
	(b) Right side from center line towards increasing chainage/ km direction	NA	
1.9	Proposal to acquire land		
	(a) Left side from center line	NA	
	(b) Right side from center line	NA	
1.10	Whether proposal is in the same side where land is not to be acquired	Yes	
	If not then where to lay the Pipeline	NA	

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1.11	Details of already laid services, if any, along the proposed route	NA	
1.12	Number of lanes (2/4 / 6/8 lanes) existing	2/4 lanes	
1.13	Proposed Number of lanes (2 lane with paved shoulders/4 / 6/8 lanes)	NA	
1.14	Service road existing or not		
	If yes then which side	NA	
	(a) Left side from center line	NA	
	(b) Right side from center line	NA	
1.15	Proposed Service road	NA	
	(a) Left side from center line	NA	
	(b) Right side from center line	NA	
1.16	Whether proposal to lay pipe is after the service road or between the service road and main carriageway	At the edge of NH RoW & at a clear distance as per T4S guidelines of PNGRB from other hydrocarbon Pipelines & utilities	LHS
1.17	Whether carrying of sewage/gas pipeline has be proposed on highway bridge If "Yes", then mention the methodology proposed for the same.	NA	
1.18	Whether carrying of sewage/gas pipeline has been proposed on the parapet/any part of the bridge. If "Yes", then the methodology proposed for the same.	NA	
1.19	If crossing of the road involved If "Yes", then it shall be encased in pipes or through the structure or conduit specially built for that purpose at the expenses of agency owning the line.	KM 206/960 (Survey No. 384), KM 208/260 (Survey No.310), KM 209/420 (Survey No. 443)	
	a)whether existing structure allowed to carry sewage/gas pipeline	NA	
	b) It is in the line normal to NH	Yes	
	c) What is the distance of crossing the sewage/gas pipeline from the existing structure Crossing should not be too near to existing structure on National Highway, the minimum distance should be 15 meters	NA	
	d) The casing pipe(or conduit pipe in the case of electric cable) carrying the utility line shall steel, cast iron or reinforce cement concrete and having adequate strength and be large enough to permit ready withdrawal of carrier pipe/cable. Mention type of casing	NA	
	e) End of the casing/conduit shall be sealed from the outside, so that it does not act as drainage path	NA	
	f) The casing/conduit should, as	NA	

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	minimum extended minimum drain to drain curs and toes of slope in the fills		
	g) The top of the casing/conduit should be at least 1.2 meters below the surface of the road subject to being at least 0.3meter below the drain invert. Mention the proposed details	NA	
	h) Mention the methodology for crossing of road for the proposed sewage/gas pipeline. Crossing shall be by boring machine (HDD) [TRENCHLESS TECHNOLOGY], specially, where the existing road pavement is of cement concrete or dense bitumen concrete type.	HDD	
	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 waterway along it	NA	
2	Document / Drawings enclosed with the proposal	Enclosed	
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) a) Should not be greater than 60cm wider than the outer diameter of pipe b) Located as close to the extreme edge of the ROW as possible but not less than 15 meter from the Centre lines of the nearest carriage way c) Shall not be permitted to run along the national highway when the road formation is situated in double cutting, nor shall be laid over existing culverts and bridge d) It should be laid so that their top is at least 0.6 meter below the ground level so as the obstruct of the road land.	Yes	
2.2	Cross section showing the size of pit and location of cable for HDD method	Enclosed	
2.3	Strip plan/ Route Plan showing the natural gas pipeline, Chainage, width of ROW, distance of proposed, cable from the edge of ROW, important mile stone, intersections, cross drainage works etc.	Enclosed	
2.4	Methodology for laying of pipe		
2.4.1	Open trenching method. (May be allowed in utility corridor only where	Excavate the area 2.0 m (D) x 1.0m(W), place the pipe inside and	

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	pavement is neither cement concrete nor dense bituminous concrete type.) If Yes, what is the methodology of refilling of trench.	refill the trench with the soft / excavated soil in layers not exceeding 150mm and compaction will be done	
	a) The trench width should be at least 30cm, but not more than 60cm wider than outer diameter of the pipe.	Yes	
	b) For the filling of the trench, Bedding shall be to a depth of not less than 60cm. It shall consist of granular material, free of lumps, clods and cobbles and graded to yield a firm surface without sudden change in the bearing value. Unsuitable soil and rock edged should be excavated and replace by selected material	Yes	
	c) The backfill shall be completed in two stages 1.sidefill to the level of the top of the pipe and overall to the bottom of the road crust.	Yes	
	d) The side fill shall consist of granular material laid in 15cm layer each consolidated by mechanical tampering and controlled addition to moisture to 95% of the proctor's density. Overfill shall be compacted to the same density as material has been removed. Consolidation by saturation or pounding will not be permitted.	Yes	
	e) The road crust shall be built to the same strength as existing crunch of either side of the trench. Care shall be take to avoid formation of dip at trench.	Yes	
	f) The excavation shall be protected by flagman, signs and barricades, and red light during night hours.	Yes	
	g) If required, diversion shall be constructed at the expenses of agency owing utility line.	Yes	
2.4.2	Horizontal Directional Drilling (HDD) Method	As per Site condition	
2.4.3	Laying Natural gas pipeline through CD works and method of laying. In case where the carrying of natural gas	NA	



	pipeline on bridge becomes inescapable.		
3	Draft License Agreement signed by two witnesses	Enclosed	
4	Performance Bank guarantee in favor of NH has to be obtained at Rs.100/- per running meter (parallel to NH) and Rs. 1, 00,000/-per crossing of NH, for period of one year initially (extendable if require till satisfactory completion of work) as a security for ensuring/making good excavated trench for laying gas pipeline/duct filling and compaction, clearing debris/loose earth produced due to execution of trenching at least 50m away from the edge of ROW. No payment shall be payable by NH to the licensee for clearing debris/loose earth. Performance BG as per above is to be obtained.	Shall be submitted on receipt of demand note from NH	
4.1	Confirmation of BG has been obtained as per NH guidelines	Applicable at Later stage	
5	Affidavit / Undertaking from the Applicant for		
5.1	Not to Damage to other utility, if damaged then to pay the losses either to NH or to the concerned agency	Enclosed	
5.2	Renewal of Bank Guarantee	NA	
5.3	Confirming all standard condition of NH's guideline and ministry circular	Yes	
5.4	Shifting of Natural gas pipeline as and when required by NH	Undertaking enclosed	
5.5	Shifting of Natural gas pipeline due to 6 laning / widening of NH	Undertaking enclosed	
5.6	Indemnity against all damages and claims clause (xxiv)	Undertaking enclosed	
5.7	Traffic movement during laying of Natural gas pipeline to be managed by the applicant.	Undertaking enclosed	
5.8	If any claim is raised by the Concessionaire then the same has to be paid by the applicant	Undertaking enclosed	
5.9	Prior approval of NH shall be obtain before taking any work of installation, shifting or repair or alternative to Natural gas pipeline/any other utility located in national Highway ROW	Undertaking enclosed	
5.10	Expenditure, If any, incurred by NH for repairing any damage cause to NH by the laying, maintenance or shifting of Natural gas pipeline borne by applicant agency owning the line.	Yes	
5.11	If NH consider it necessary in future to move the utility line for any work of	Yes	

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	improvement or repairs to the road, it will be carried out as desired by the NH at the cost of agency owning utility line.		
5.12	Certificate from applicant in following format 1. Laying of Natural gas pipeline will not having any deleterious effect on any of the bridge component and roadway safety of traffic. 2. "We do undertake that I/we will relocate service road/approach road/utility at my own cost notwithstanding the permission granted within such time as will be stipulated by "NH" for future six laning or any other development work	Enclosed	
6	Who will sign the agreement on behalf of Natural gas pipeline agency	M(CGD), Kurnool	
	Power of Attorney to sign the agreement is available or not.	Yes	
7.1	Certificate of conforming all standard condition issued vide Ministry of Road Transport and Highway, Circular no. NH-III/P/66/76 DATED 18/19.11.1976, RW/NH-III/P/66/76 DATED 11.05.1982, RW/NH-11037/1/86 DOI (ii) DATED 28.07.1993, RW/NH/34066/2/95/S&R DATED 25.10.1999 and Circular no. RW/NH-34066/7/2003/S&R(B) DATED 17.09.2003	Enclosed	
7.2	Certificate from PD in following format a) "It is certified that any other location of the Natural gas pipeline would be extremely difficult and unreasonably costly and installation of Natural gas pipeline within ROW will not adversely affect the design, stability & traffic safety of the highway nor the likely future improvement such as widening the carriage way, easing the curve etc. b) For 6-laning i. Where feasibility is available "I do certify that there will be no hindrance to proposed 6-laning based of feasibility report considering proposed structures at the said location". ii. In case of feasibility not available	Yes	

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	" I do certify that sufficient ROW is available at site for accommodating proposed 6-laning"		
8	If NH section proposed to be taken up by NH on BOT basis - a clause in para 17 to be inserted in the agreement. " <i>The permitted Highway on which Licensee has been granted the ROW to the concessionaire under the concession agreement for up-gradation of (.....Section from Km...to Km.....of NMH No....On Build, Operate and Transfer Basis) and therefore, the licensee shall honor the same.</i> "	Yes	
9	Who will supervise work of laying Natural gas pipeline? a) On behalf of applicant b) On behalf of NH	M(CGD), Kurnool DE, NH	
10	Who will ensure that the defects in road portion after laying of Natural gas pipeline are corrected and if not corrected then what action will be taken. a) On behalf of applicant b) On behalf of NH	Yes M(CGD), Kurnool DE, NH	
11	Who will pay the claims for damages done/disruption in working of Concessionaire if asked by the Concessionaire? On behalf of applicant	IOCL, Pipeline Division	
12	A certificate from PD that he will enter the proposed permission in the register of records of the permissions in the prescribed proforma (copy enclosed)	Enclosed	
13	If any previous approval is accorded for laying of Natural gas pipeline then Photocopy of register of records of permissions accorded as maintained by PD (copy enclosed).	NA	

M (CGD), Kurnool
IOCL, Southern Eastern Region Pipelines

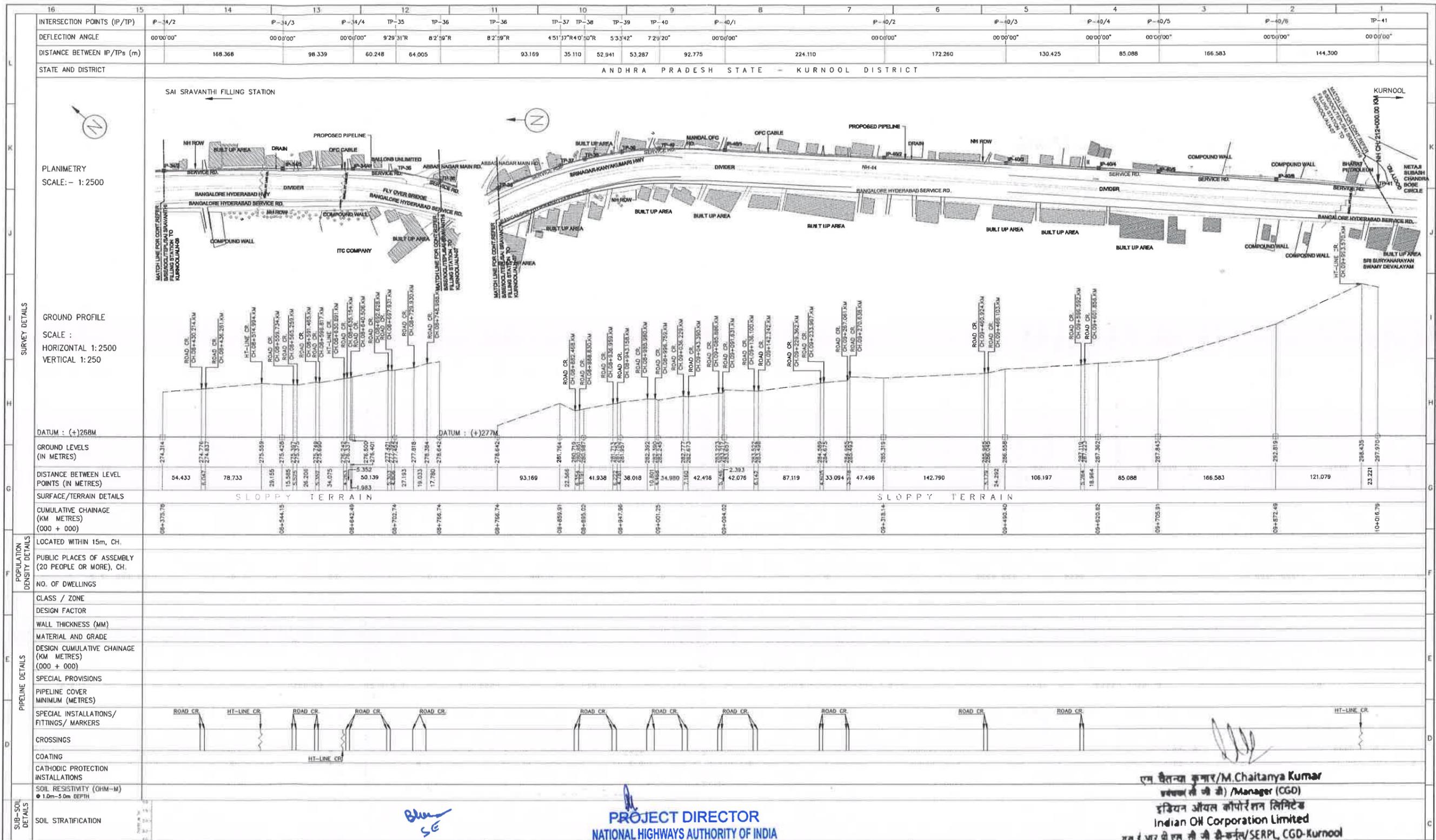
एम. चैतन्या कुमार/M.Chaitanya Kumar
प्रबंधक सी जी सी /Manager (CGD)
इंडियन ऑयल कॉर्पोरेशन लिमिटेड
Indian Oil Corporation Limited
एस ई आर पी एल, सी जी सी-कूर्नूल/SERPL, CGD-Kurnool



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TOPOGRAPHIC SYMBOLS			
PARTICULARS	SYMBOLS	PARTICULARS	SYMBOLS
PROPOSED PIPELINE	IP	MASJID	
EXISTING PIPELINE	IP	NALA/DRAIN	
EXISTING WATER PIPELINE		CANAL	
OFC CABLE		EP,LP, TRANSFORMER	
ASPHALT ROAD		TBM	
CC ROAD		BUS STOP, WELL	
MOORUM ROAD		TREE	
COMPOUND/BOUNDARY WALL		CHAMBER	
BUILT UP AREA /BUILDING		NH ROW	
BRIDGE		RAILWAY ROW	
RAILWAY TRACK		DIVIDER	
GATE		TRANSFORMER	
HT LINE		LP	
TEMPLE / CHURCH			
CULVERT			

PROJECT DIRECTOR
NATIONAL HIGHWAYS AUTHORITY OF INDIA
PROJECT IMPLEMENTATION UNIT
HYDERABAD - 500004

LEGENDS: -

- LOCATION OF PIPELINE MARKERS IS INDICATED ONLY. EXACT LOCATION OF MARKERS SHALL BE DETERMINED FROM AS-BUILT SURVEY DATA.
- FOR ALL CROSSINGS, CONTRACTOR SHALL ENSURE THAT EXISTING STRUCTURES OR CASINGS AS SHOWN IN THE DRAWING MEETS THE MINIMUM REQUIREMENTS OF RELEVANT STANDARD DRAWING BASED ON VERIFICATION AT SITE.
- TYPE OF CROSSING (CASED OR UNCASED) FOR TRENCHES AND ROADS SHALL BE DECIDED FOR INDIVIDUAL CASES AFTER CONSULTATION WITH CONCERNED AUTHORITIES.
- ALL CROSSINGS FOR WHICH DETAILS ARE NOT GIVEN SHALL BE EXECUTED AS PER JOB STANDARDS.
- ANTI-BLASTING COVERS, SLOPE/BACKFILL, STABILIZATION, COVER AT OVER AND SING RENDS AND OTHER MEASURES NOT SPECIFICALLY SHOWN IN THE DRAWING SHALL BE DECIDED AT THE SITE AS PER SPECIFICATIONS AND INSTRUCTIONS OF COMPANY REPRESENTATIVE.

NOTES:

OTHER MATERIALS		DRAWING TITLE		DRAWING NO.	
O.D. φ	WT (mm)	DESCRIPTION	NUMBER	PIPELINE ROUTE MAP 1:50,000 SCALE	8/16/2013/PEPL/SW ENGINEERING PVT. LTD. TO SERPL/ALN-07
TOTAL					
CASING (SEE GEN. NOTES 2 AND 3)					
O.D. φ	WT (mm)	COATING	LENGTH		
FOR OTHER REQUIRED MATERIAL SEE DRAWING TITLE DRAWING NO.					

ISSUE RECORD					
No.	DATE	REVISIONS	BY	CHKD	APPD.
1	17.01.2013	ISSUED FOR CLIENT APPROVAL			

REFERENCE DRAWINGS		DRAWING NO.	
O.D. φ	WT (mm)	DESCRIPTION	NUMBER
TOTAL			

REV.	DATE	INITIAL	REASON	DESCRIPTION
00	17.01.2013			

CLIENT		CONSULTANT	
NAME	ADDRESS	NAME	ADDRESS
INDIAN OIL CORPORATION LTD.		TRACTEBEL ENGINEERING PVT. LTD.	

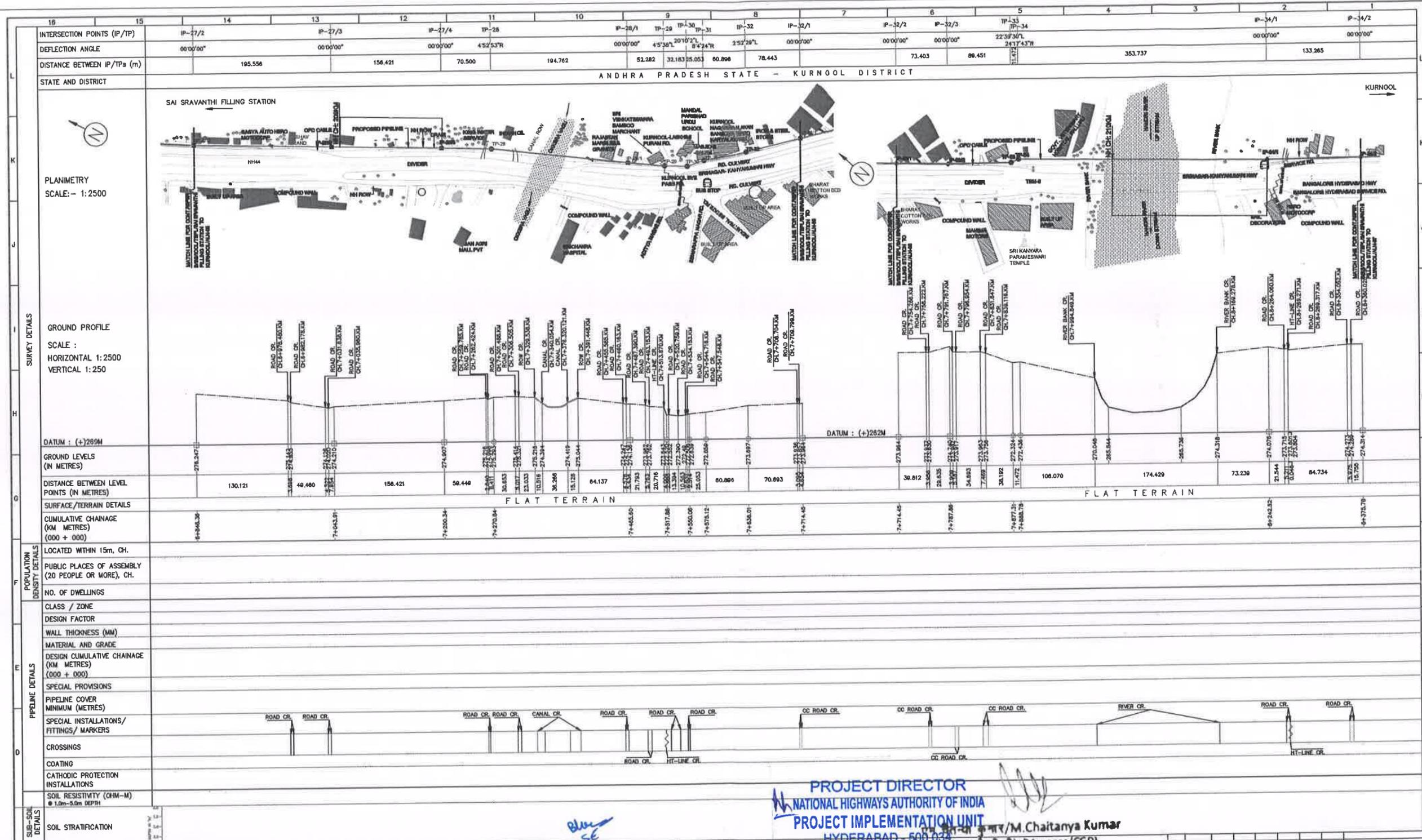
PROJECT		SECTION	
NAME	ADDRESS	NAME	ADDRESS
IOCL - CITY GAS DISTRIBUTION PROJECT-KURNOOL		SAI SRAVANTHI FILLING STATION TO KURNOOL	

SURVEYED & PREPARED BY		TITLE	
NAME	ADDRESS	NAME	ADDRESS
SWAYIN ENGINEERING ASSOCIATES PVT. LTD.		ALIGNMENT SHEET	
		FROM CH: 08+375.780M TO CH: 10+016.780M	

SCALE		SHEET NO.	
AS SHOWN	DRAWING NO.	NO.	REV.
BISE/OCL/TEPL/SAI SRAVANTHI FILLING STATION TO KURNOOL/ALN-07		07 OF 07	00

एम चैतन्य कुमार/M.Chaitanya Kumar
 प्रबन्धक (सी जी डी) /Manager (CGD)
 इंडियन ऑयल कॉर्पोरेशन लिमिटेड
 Indian Oil Corporation Limited
 यतः आर सी एन सी डी कर्नूल/SERPL, CGD-Kurnool

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TOPOGRAPHIC SYMBOLS			
LEGENDS:-			
PARTICULARS	SYMBOLS	PARTICULARS	SYMBOLS
PROPOSED PIPELINE	IP	PROPOSED PIPELINE	IP
EXISTING PIPELINE	TP	EXISTING PIPELINE	TP
EXISTING WATER PIPELINE	MASID	EXISTING WATER PIPELINE	MASID
OFC CABLE	NALA/DRAIN	OFC CABLE	NALA/DRAIN
ASPHALT ROAD	CANAL	ASPHALT ROAD	CANAL
CC ROAD	EP,LP,TRANSFORMER	CC ROAD	EP,LP,TRANSFORMER
WOODRUM ROAD	YBM	WOODRUM ROAD	YBM
COMPOUND/BOUNDARY WALL	BUS STOP,WELL	COMPOUND/BOUNDARY WALL	BUS STOP,WELL
BUILT UP AREA / BUILDING	TRICE	BUILT UP AREA / BUILDING	TRICE
BRIDGE	CHAMBER	BRIDGE	CHAMBER
RAILWAY TRACK	NH ROW	RAILWAY TRACK	NH ROW
GATE	RAILWAY ROW	GATE	RAILWAY ROW
HT LINE	DIVIDER	HT LINE	DIVIDER
TEMPLE, CHURCH	TRANSFORMER	TEMPLE, CHURCH	TRANSFORMER
CULVERT	LP	CULVERT	LP

NOTES:

- LOCATION OF PIPELINE MARKERS IS RESERVE ONLY, EXACT LOCATION OF PIPELINE, MARKERS TO BE DETERMINED FROM AS-BUILT SURVEY.
- FOR ALL CROSSINGS, CONTRACTOR SHALL ENSURE THAT EXISTENT OF UNDER PIPE OR CABLES AS SHOWN IN THE DRAWING MEETS THE MINIMUM REQUIREMENTS OF RELEVANT STANDARD DRAWING BASED ON VARIATION AT SITE.
- TYPE OF CROSSING (CAISSON OR UNDER) FOR CANALS AND ROADS SHALL BE DECIDED FOR INDIVIDUAL CASES AFTER CONSULTATION WITH CONCERNED AUTHORITIES.
- ALL CROSSINGS FOR WHICH DETAILS ARE NOT GIVEN SHALL BE EXECUTED AS PER JOB STANDARDS.
- WITH-SURVEY CONTROL, SLOPE/SWATH, STABILIZATION, OTHER AT OVER AND SHO BENCH AND OTHER MEASURES NOT SPECIFICALLY SHOWN IN THE DRAWING SHALL BE DECIDED AT THE SITE AS PER SPECIFICATIONS AND INSTRUCTIONS OF COMPANY REPRESENTATIVE.

BILL OF MATERIAL FOR THIS DRAWING			
CARRIER PIPE		OTHER MATERIALS	
O.D. #	WT(MM)	COATING	LENGTH
TOTAL			
CASING (SEE GEN. NOTES 2 AND 3)			
O.D. #	WT(MM)	COATING	LENGTH
FOR OTHER REQUIRED MATERIAL SEE			
DRAWING TITLE		DRAWING NO.	

ISSUE RECORD			
No.	DATE	REVISIONS	BY
1	17.01.23	ISSUED FOR CLIENT APPROVAL	

REV.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

DR.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

PROJECT DIRECTOR
NATIONAL HIGHWAYS AUTHORITY OF INDIA
PROJECT IMPLEMENTATION UNIT
HYDERABAD - 500 034
 M. Chaitanya Kumar
 Project Director

REV.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

NO.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

NO.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

NO.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

NO.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

NO.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

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NO.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

NO.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

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NO.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

NO.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

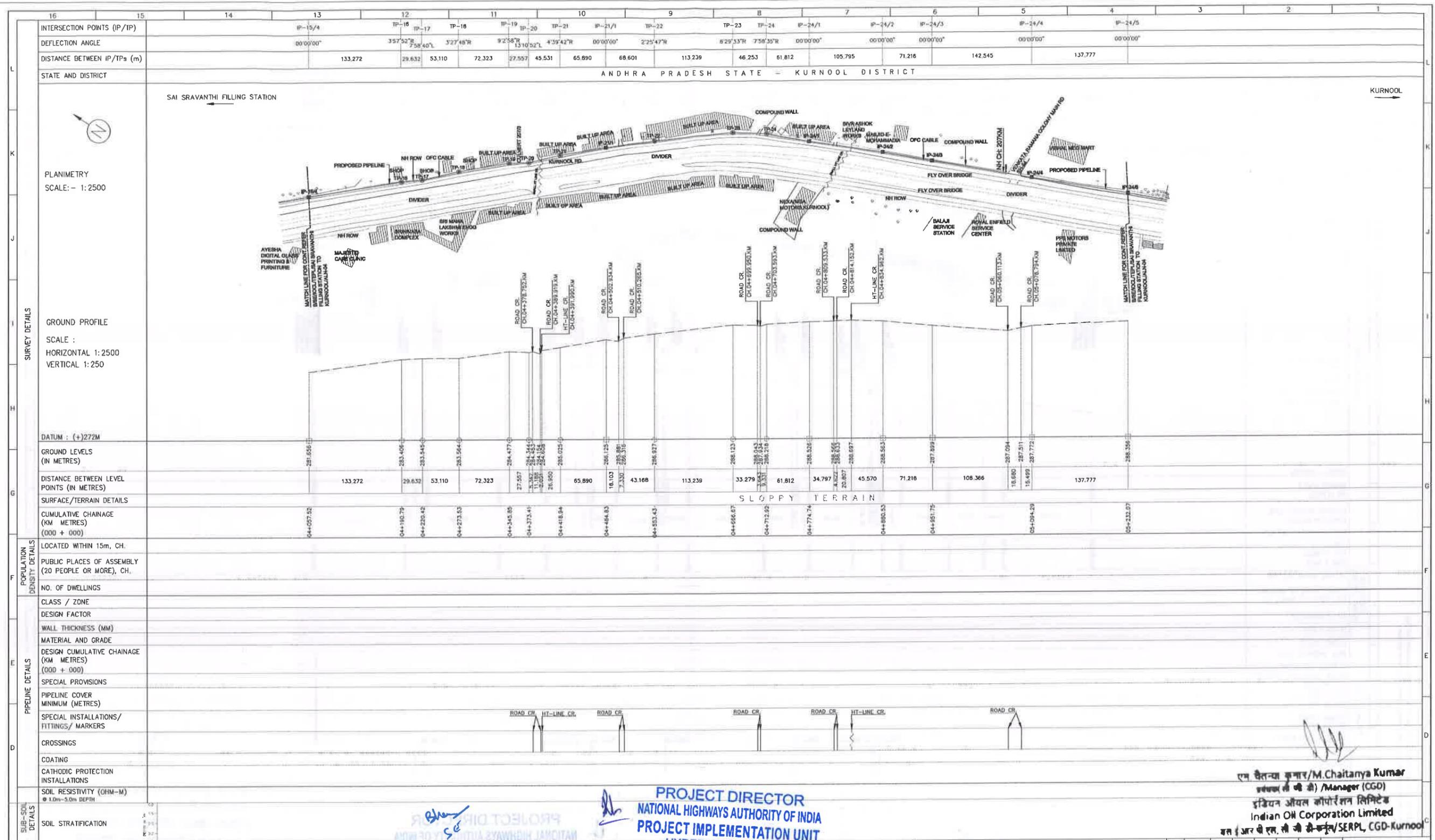
NO.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

NO.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

NO.	DATE	BY	CHKD.	APPRD.	DESCRIPTION

NO.	DATE
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TOPOGRAPHIC SYMBOLS			
PARTICULARS	SYMBOLS	PARTICULARS	SYMBOLS
PROPOSED PIPELINE	IP	EXISTING PIPELINE	TP
EXISTING WATER PIPELINE	MAS.ID	OFC CABLE	NALA/DRAIN
ASPHALT ROAD	CANAL	CC ROAD	EP, I.P. TRANSFORMER
MOORUM ROAD	TTM	COMPOUND/BOUNDARY WALL	BUS STOP, WELL
BUILT UP AREA / BUILDING	TREE	BRIDGE	CHAMBER
RAILWAY TRACK	NH ROW	GATE	RAILWAY ROW
HT LINE	DIVIDER	TEMPLE, CHURCH	TRANSFORMER
CULVERT	LP		

CARRIER PIPE		OTHER MATERIALS	
O.D. & WT (mm)	COATING	DESCRIPTION	NUMBER
TOTAL			
CASING (SEE GEN. NOTES 2 AND 3)			
O.D. & WT (mm)	CHAINING	LENGTH	
FOR OTHER REQUIRED MATERIAL SEE DRAWING TITLE DRAWING NO.			

DRAWING TITLE		DRAWING NO.	
PIPELINE ROUTE MAP 1:50,000 SCALE	ROUTE NO./TYPE/LIN/UM	STATION	TO KURNOOL/UM-04

REV.	DATE	INITIAL	BY	CHKD	APPD.	DESCRIPTION
1	17.01.2023					ISSUED FOR CLIENT APPROVAL

REV.	DATE	INITIAL	BY	CHKD	APPD.	DESCRIPTION
00	17.01.2023	TUTU	DRN	INTAL	DRN	FINAL SUBMISSION

CLIENT	CONSULTANT	PROJECT	SECTION	TITLE	SCALE	AS SHOWN
INDIAN OIL CORPORATION LTD.	TRACTEBEL ENGINEERING PVT. LTD.	IOCL - CITY GAS DISTRIBUTION PROJECT-KURNOOL	SAI SRAVANTHI FILLING STATION TO KURNOOL	ALIGNMENT SHEET FROM CH: 04+067.520M TO CH:05+232.070M	DRAWING NO. BISE/IOCL/TEPL/SAI SRAVANTHI FILLING STATION TO KURNOOL/ALN-04	04 OF 07

NO.	DATE	REVISIONS	BY	CHKD	APPD.
1	17.01.2023	ISSUED FOR CLIENT APPROVAL			

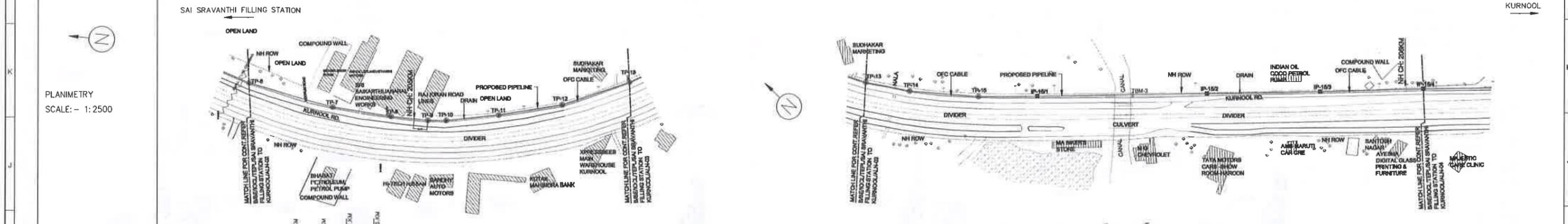
PROJECT DIRECTOR
NATIONAL HIGHWAYS AUTHORITY OF INDIA
PROJECT IMPLEMENTATION UNIT
HYDERABAD - 500 034

एम चैतन्य कुमार/M.Chaitanya Kumar
 इन्चार्ज (सी जी डी) /Manager (CGD)
 इंडियन ऑयल कॉर्पोरेशन लिमिटेड
 Indian Oil Corporation Limited
 इत और सी एन. सी जी डी-कॉम्प/SEPL, CGD-Kurnool

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16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
INTERSECTION POINTS (IP/TP)		IP-6	IP-7	IP-8	IP-9	IP-10	IP-11	IP-12	IP-13	IP-14	IP-15	IP-15/1	IP-15/2	IP-15/3	IP-15/4
DEFLECTION ANGLE		7°49'44"L	6°36'57"L	3°28'39"L	5°32'35"L	9°37'11"L	3°18'58"L	9°24'19"L	6°48'33"L	7°5'45"L	4°47'2"L	00°00'00"	00°00'00"	00°00'00"	00°00'00"
DISTANCE BETWEEN IP/TPs (m)		112.089	76.363	48.011	67.899	82.654	90.933			57.024	88.675	75.763	218.380	144.967	132.699

ANDHRA PRADESH STATE - KURNOOL DISTRICT



DATUM : (+)2270M																				
GROUND LEVELS (IN METRES)	282.485	280.816	280.754	281.483	280.708	281.125	280.969	279.338	279.348	279.312	279.388	279.388	279.388	279.388	281.056					
DISTANCE BETWEEN LEVEL POINTS (IN METRES)	75.353	34.210	34.155	39.722	48.011	23.089	87.899	82.654	70.676	15.046	37.262	18.720	88.675	75.763	100.106	19.206	99.068	157.201	157.201	
SURFACE/TERRAIN DETAILS	FLAT TERRAIN										FLAT TERRAIN									
CUMULATIVE CHAINAGE (KM METRES) (000 + 000)	02+835.97	02+985.08	03+027.42	03+075.45	03+088.56	03+166.42	03+244.07	03+340.01	03+340.01	03+340.01	03+340.01	03+340.01	03+485.71	03+561.47	03+779.85	03+924.82	04+057.52			

POPULATION DENSITY DETAILS	LOCATED WITHIN 15m, CH.
	PUBLIC PLACES OF ASSEMBLY (20 PEOPLE OR MORE), CH.
	NO. OF DWELLINGS
	CLASS / ZONE
	DESIGN FACTOR
	WALL THICKNESS (MM)
	MATERIAL AND GRADE
	DESIGN CUMULATIVE CHAINAGE (KM METRES) (000 + 000)
	SPECIAL PROVISIONS
	PIPELINE COVER MINIMUM (METRES)
	SPECIAL INSTALLATIONS/FITTINGS/ MARKERS
	CROSSINGS
	COATING
	CATHODIC PROTECTION INSTALLATIONS
	SOIL RESISTIVITY (OHM-M) @ 1.5m-5.0m DEPTH
SUB-SOIL DETAILS	SOIL STRATIFICATION

PROJECT DIRECTOR
NATIONAL HIGHWAYS AUTHORITY OF INDIA
PROJECT IMPLEMENTATION UNIT
HYDERABAD - 500 034.

एम. चैतन्य कुमार / M. Chaitanya Kumar
इंसपेक्टर (सी & डी) / Manager (CGD)
इंडियन ऑयल कॉर्पोरेशन लिमिटेड
Indian Oil Corporation Limited
बल ई आर डी इल. सी & डी-कूर्नूल/SERPL, CGD-Kurnool

LEGENDS:-			
PARTICULARS	SYMBOLS	PARTICULARS	SYMBOLS
PROPOSED PIPELINE	IP	EXISTING PIPELINE	IP
EXISTING PIPELINE	IP	EXISTING WATER PIPELINE	MASJD
EXISTING WATER PIPELINE	MASJD	D/C CABLE	NALA/DRAIN
D/C CABLE	NALA/DRAIN	ASPHALT ROAD	CANAL
ASPHALT ROAD	CANAL	CC ROAD	EP.L.P. TRANSFORMER
CC ROAD	EP.L.P. TRANSFORMER	MOORUM ROAD	FBM
MOORUM ROAD	FBM	COMPOUND/BOUNDARY WALL	BUS STOP, WELL
COMPOUND/BOUNDARY WALL	BUS STOP, WELL	BUILT UP AREA / BUILDING	TREE
BUILT UP AREA / BUILDING	TREE	BRIDGE	CHAMBER
BRIDGE	CHAMBER	RAILWAY TRACK	NH ROW
RAILWAY TRACK	NH ROW	GATE	RAILWAY ROW
GATE	RAILWAY ROW	HT LINE	DIVIDER
HT LINE	DIVIDER	TEMPLE / CHURCH	TRANSFORMER
TEMPLE / CHURCH	TRANSFORMER	CULVERT	LP

NOTES:

- LOCATION OF PIPELINE MARKERS IS INDICATIVE ONLY, EXACT LOCATION OF KILOMETER/ AERIAL MARKERS TO BE DETERMINED FROM AS-BUILT SURVEY.
- FOR ALL CROSSINGS, CONTRACTOR SHALL ENSURE THAT EXTENT OF THICKER PIPE OR CASING AS SHOWN IN THE DRAWING MEETS THE MINIMUM REQUIREMENTS OF RELEVANT STANDARD DRAWING BASED ON VERIFICATION AT SITE.
- TYPE OF CROSSING (CASED OR UNCASED) FOR CANALS AND ROADS SHALL BE DECIDED FOR INDIVIDUAL CASES AFTER CONSULTATION WITH CONCERNED AUTHORITIES.
- ALL CROSSINGS FOR WHICH DETAILS ARE NOT GIVEN SHALL BE EXECUTED AS PER JOB STANDARDS.
- ANTI-CORROSION CONTROL, SLOPE, BACKFILL, STABILIZATION, COVER AT OVER AND SNO BORDS AND OTHER MEASURES NOT SPECIFICALLY SHOWN IN THE DRAWING SHALL BE DECIDED AT THE SITE AS PER SPECIFICATIONS AND INSTRUCTIONS OF COMPANY REPRESENTATIVE.

REFERENCE DRAWINGS					
DRAWING TITLE	DRAWING NO.				
PIPELINE ROUTE MAP 1:50,000 SCALE	B/SE/IOCL/TEPL/SAI SRAVANTHI FILLING STATION TO KURNOOL/ALN-03				
OTHER MATERIALS					
O.D. #	WT(mm)	COATING	LENGTH	DESCRIPTION	NUMBER
TOTAL					
CASING (SEE GEN. NOTES 2 AND 3)					
O.D. #	WT(mm)	COATING	LENGTH		
FOR OTHER REQUIRED MATERIAL SEE DRAWING TITLE DRAWING NO.					

ISSUE RECORD					
No.	DATE	REVISIONS	BY	CHKD	APPD.
1	17.01.2023	ISSUED FOR CLIENT APPROVAL			

REV.	DATE	INITIAL	REASON	INITIAL	REASON	INITIAL	REASON	FINAL DIMENSION
00	17.01.2023	TUTU		SHB		SHB		

CLIENT: INDIAN OIL CORPORATION LTD.

CONSULTANT: TRACTEBEL ENGINEERING PVT. LTD.

PROJECT: IOCL - CITY GAS DISTRIBUTION PROJECT-KURNOOL

SURVEYED & PREPARED BY: SWAYIN ENGINEERING ASSOCIATES PVT. LTD.

SECTION: SAI SRAVANTHI FILLING STATION TO KURNOOL

TITLE: ALIGNMENT SHEET FROM CH: 02+838.970M TO CH04+057.520M

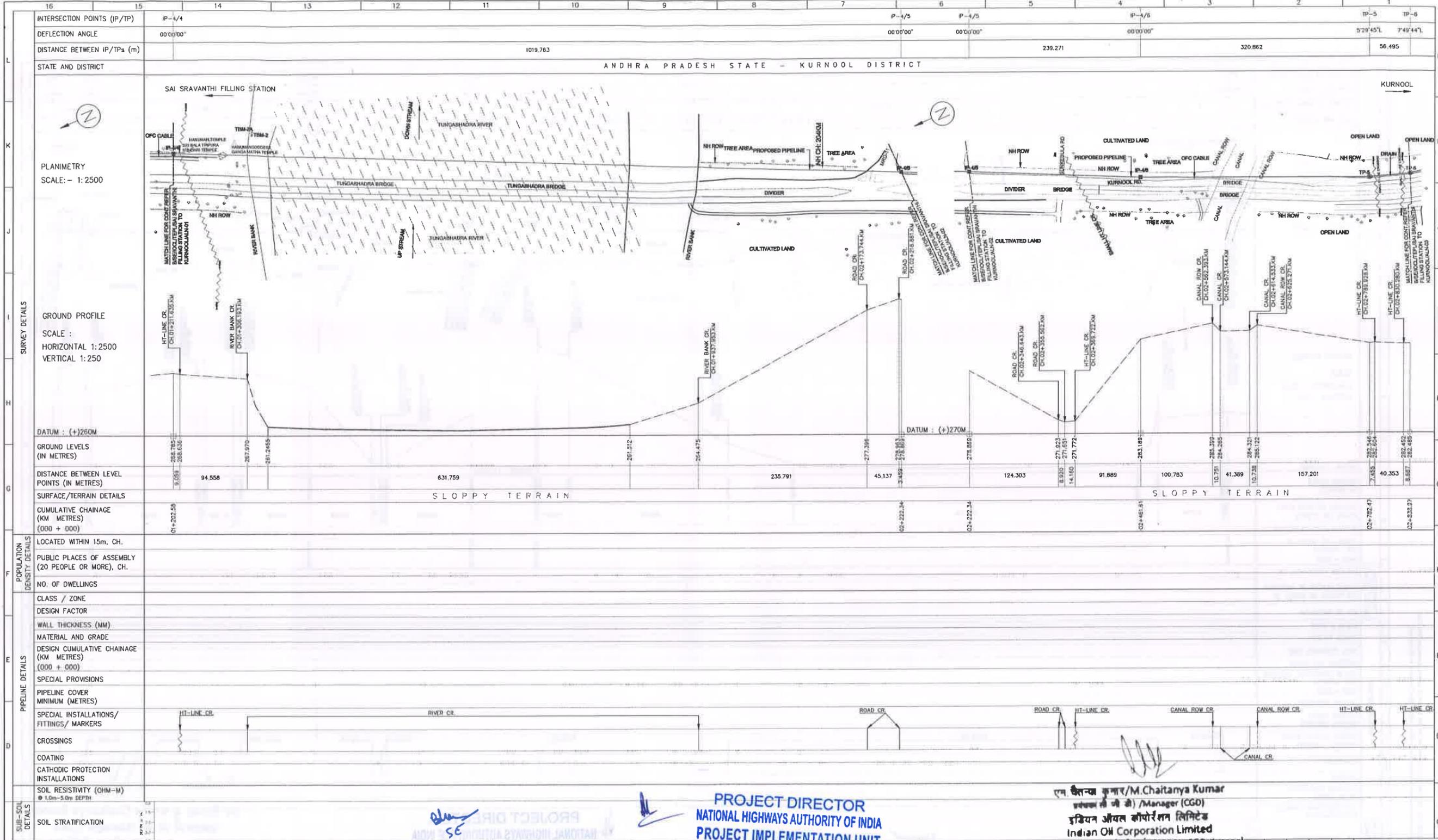
SCALE: DRAWING NO.

AS SHOWN: B/SE/IOCL/TEPL/SAI SRAVANTHI FILLING STATION TO KURNOOL/ALN-03

SHEET NO. 03 OF 07

REV. 00

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TOPOGRAPHIC SYMBOLS			
PARTICULARS	SYMBOLS	PARTICULARS	SYMBOLS
PROPOSED PIPELINE	IP	EXISTING PIPELINE	IP
EXISTING WATER PIPELINE	MASJID	EXISTING CABLE	NALA/DRAIN
ASPHALT ROAD	CANAL	CC ROAD	EP, LP, TRANSFORMER
MODURUM ROAD	TM	COMPOUND/BOUNDARY WALL	BUS STOP, WELL
BUILT UP AREA / BUILDING	TREE	BRIDGE	CHAMBER
RAILWAY TRACK	NH ROW	RAILWAY TRACK	RAILWAY ROW
GATE	DIVIDER	TEMPLE / CHURCH	TRANSFORMER
HT LINE	LP	CULVERT	

NOTES:

- LOCATION OF PIPELINE MARKERS IS INDICATIVE ONLY. EXACT LOCATION OF METER/PIECE, ARIAL MARKERS TO BE DETERMINED FROM AS-BUILT SURVEY.
- FOR ALL CROSSINGS CONTRACTOR SHALL ENSURE THAT EXTENT OF TRACKER PIPE OR CASING AS SHOWN IN THE DRAWING MEETS THE MINIMUM REQUIREMENTS OF RELEVANT STANDARD DRAWING BASED ON VERIFICATION AT SITE.
- TYPE OF CROSSING (CASED OR UNCASED) FOR CANALS AND ROADS SHALL BE DECIDED FOR INDIVIDUAL CASES AFTER CONSULTATION WITH CONCERNED AUTHORITIES. ALL CROSSINGS FOR WHICH DETAILS ARE NOT GIVEN SHALL BE EXECUTED AS PER JOB STANDARDS.
- ANTI-VIBRATION CONTROL, SLOPE/BACKFILL, STABILIZATION, COVER AT OVER AND SIDE BEAMS AND OTHER MEASURES NOT SPECIFICALLY SHOWN IN THE DRAWING SHALL BE DECIDED AT THE SITE AS PER SPECIFICATIONS AND INSTRUCTIONS OF COMPANY REPRESENTATIVE.

PROJECT DIRECTOR
NATIONAL HIGHWAYS AUTHORITY OF INDIA
PROJECT IMPLEMENTATION UNIT
HYDERABAD

एन. चैतन्य कुमार/M. Chaitanya Kumar
प्रबंधक (जी.डी.) /Manager (CGD)
इंडियन ऑयल कॉर्पोरेशन लिमिटेड
Indian Oil Corporation Limited
भारतीय ऑयल कॉर्पोरेशन लिमिटेड/SERPL, CGD-Kurnool

CARRIER PIPE		OTHER MATERIALS	
O.D. #	WT (mm)	COATING	LENGTH
TOTAL			
CASING (SEE GEN. NOTES 2 AND 3)			
O.D. #	WT (mm)	COATING	LENGTH
FOR OTHER REQUIRED MATERIAL SEE DRAWING TITLE AND DRAWING NO.			

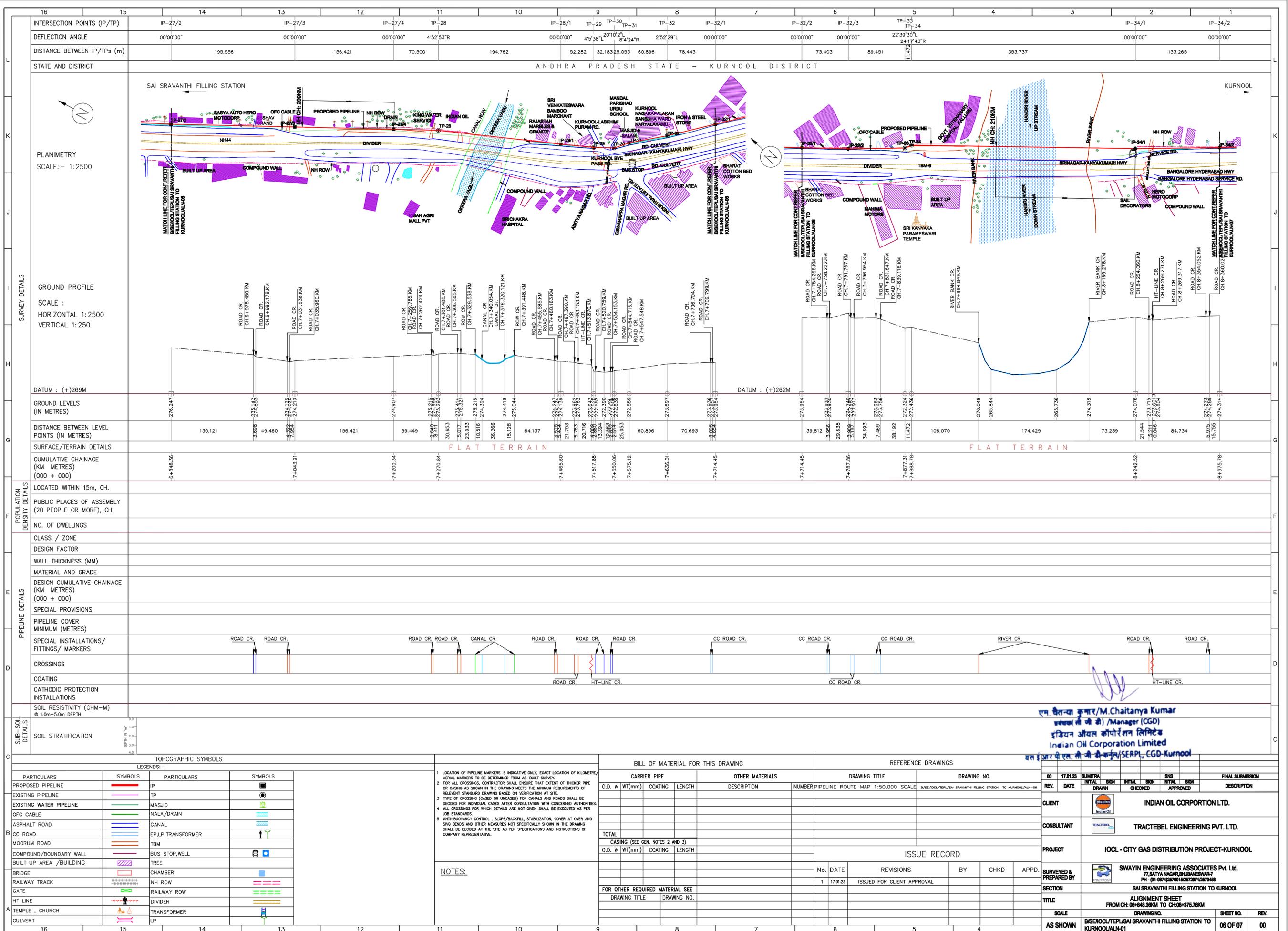
DRAWING TITLE		DRAWING NO.	
PIPELINE ROUTE	MAP 1:50,000 SCALE	B/SE/AC/CL/TE/PL/SAI BRAVANTHI FILLING STATION TO KURNOOL/ALN-02	

ISSUE RECORD		DATE		REVISIONS		BY		CHKD		APPD.	
No.	DATE	REVISIONS	BY	CHKD	APPD.						
1	17.01.2023	ISSUED FOR CLIENT APPROVAL									

REV.	DATE	INITIAL	HIGH	INITIAL	HIGH	INITIAL	HIGH	INITIAL	HIGH	DESCRIPTION

CLIENT	INDIAN OIL CORPORATION LTD.
CONSULTANT	TRACTEBEL ENGINEERING PVT. LTD.
PROJECT	IOCL - CITY GAS DISTRIBUTION PROJECT-KURNOOL
SURVEYED & PREPARED BY	SWAYIN ENGINEERING ASSOCIATES PVT. LTD. 77, SATYA NAGAR, DURGAMCHERU-7 PH: 01-4010020/022/027/027/027/027/027
SECTION	SAI BRAVANTHI FILLING STATION TO KURNOOL
TITLE	ALIGNMENT SHEET FROM CH: 01+202.580M TO CH: 02+528.870M
SCALE	DRAWING NO.
AS SHOWN	B/SE/AC/CL/TE/PL/SAI BRAVANTHI FILLING STATION TO KURNOOL/ALN-02
SHEET NO.	02 OF 07
REV.	00

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एम. चैतन्य कुमार/M. Chaitanya Kumar
 इन्चार्ज सी. जी. डी. /Manager (CGD)
 इंडियन ऑयल कॉर्पोरेशन लिमिटेड
 Indian Oil Corporation Limited
 बत इंज़र वेरल. सी. जी. डी. कर्नूल/SERPL, CGD-Kurnool

TOPOGRAPHIC SYMBOLS			
LEGENDS :-			
PARTICULARS	SYMBOLS	PARTICULARS	SYMBOLS
PROPOSED PIPELINE	[Red line with dashes]	IP	[Square symbol]
EXISTING PIPELINE	[Green line with dashes]	TP	[Circle symbol]
EXISTING WATER PIPELINE	[Blue line with dashes]	MASJID	[Green square symbol]
OFC CABLE	[Yellow line with dashes]	NALA/DRAIN	[Blue wavy line symbol]
ASPHALT ROAD	[Red line with dashes]	CANAL	[Blue wavy line symbol]
CC ROAD	[Blue line with dashes]	EP, LP, TRANSFORMER	[Green symbol]
MOORUM ROAD	[Orange line with dashes]	TBM	[Green symbol]
COMPOUND/BOUNDARY WALL	[Purple line with dashes]	BUS STOP, WELL	[Green symbol]
BUILT UP AREA /BUILDING	[Purple hatched area]	TREE	[Green symbol]
BRIDGE	[Red hatched area]	CHAMBER	[Green symbol]
RAILWAY TRACK	[Black hatched area]	NH ROW	[Green symbol]
GATE	[Red hatched area]	RAILWAY ROW	[Green symbol]
HT LINE	[Red hatched area]	DIVIDER	[Green symbol]
TEMPLE, CHURCH	[Red hatched area]	TRANSFORMER	[Green symbol]
CULVERT	[Red hatched area]	LP	[Green symbol]

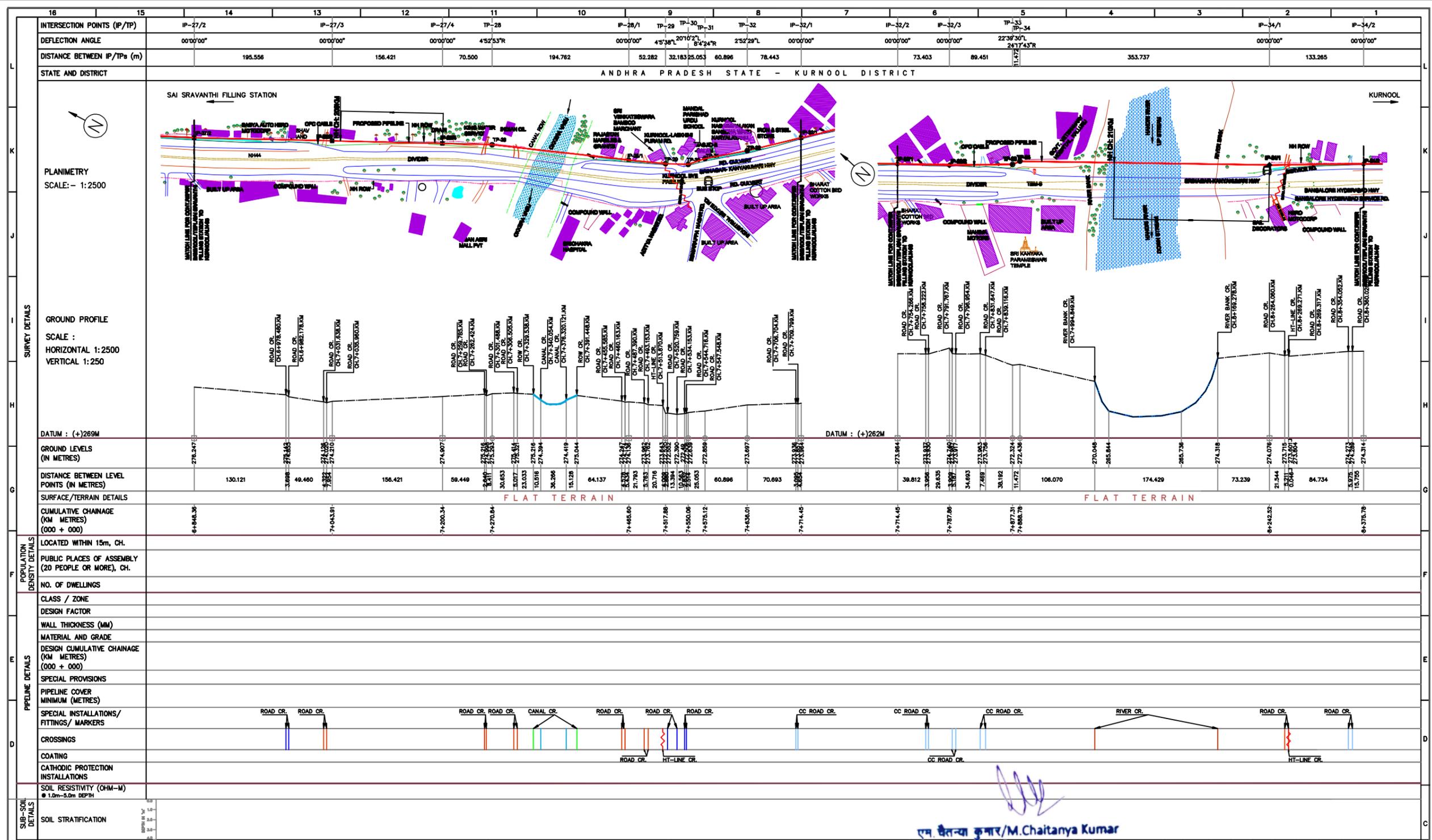
BILL OF MATERIAL FOR THIS DRAWING	
CARRIER PIPE	OTHER MATERIALS
O.D. # WT(mm) COATING LENGTH	DESCRIPTION
TOTAL	
CASING (SEE GEN. NOTES 2 AND 3)	
O.D. # WT(mm) COATING LENGTH	DESCRIPTION

REFERENCE DRAWINGS	
DRAWING TITLE	DRAWING NO.
PIPELINE ROUTE MAP 1:50,000 SCALE	B/SE/OCL/TEPL/SRAVANTHI FILLING STATION TO KURNOOL/ALN-08

ISSUE RECORD				
No.	DATE	REVISIONS	BY	CHKD
1	17.01.23	ISSUED FOR CLIENT APPROVAL		

CLIENT			
INDIAN OIL CORPORATION LTD.			
CONSULTANT			
TRACTEBEL ENGINEERING PVT. LTD.			
PROJECT			
IOCL - CITY GAS DISTRIBUTION PROJECT-KURNOOL			
SURVEYED & PREPARED BY			
SWAYAN ENGINEERING ASSOCIATES PVT. LTD. 77, SATYA NAGAR, BHUBANESHWAR-7 PH - (91-0674)2570015/2572871/2570468			
SECTION			
SAI SRAVANTHI FILLING STATION TO KURNOOL			
TITLE			
ALIGNMENT SHEET FROM CH: 06+848.380M TO CH: 06+376.780M			
SCALE	DRAWING NO.	SHEET NO.	REV.
B/SE/OCL/TEPL/SRAVANTHI FILLING STATION TO KURNOOL/ALN-01		06 OF 07	00

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TOPOGRAPHIC SYMBOLS			
LEGENDS:-			
PARTICULARS	SYMBOLS	PARTICULARS	SYMBOLS
PROPOSED PIPELINE	IP	EXISTING PIPELINE	TP
EXISTING WATER PIPELINE	MASJID	OFC CABLE	NALA/DRAIN
ASPHALT ROAD	CANAL	CC ROAD	EP,LP,TRANSFORMER
MOORUM ROAD	TBM	COMPOUND/BOUNDARY WALL	BUS STOP,WELL
BUILT UP AREA /BUILDING	TREE	BRIDGE	CHAMBER
RAILWAY TRACK	NH ROW	GATE	RAILWAY ROW
HT LINE	DIVIDER	TEMPLE , CHURCH	TRANSFORMER
CULVERT	LP		

1 LOCATION OF PIPELINE MARKERS IS INDICATIVE ONLY. EXACT LOCATION OF PIPELINE/ AERIAL MARKERS TO BE DETERMINED FROM AS-BUILT SURVEY.
 2 FOR ALL CROSSINGS CONTRACTOR SHALL ENSURE THAT EXISTENT OF UNDER PIPE OR CASING AS SHOWN IN THE DRAWING MEETS THE MINIMUM REQUIREMENTS OF RELEVANT STANDARD DRAWING BASED ON VERIFICATION AT SITE.
 3 TYPE OF CROSSING (CASED OR UNCASED) FOR CANALS AND ROADS SHALL BE DECIDED FOR INDIVIDUAL CASES AFTER CONSULTATION WITH CONCERNED AUTHORITIES.
 4 ALL CROSSINGS FOR WHICH DETAILS ARE NOT GIVEN SHALL BE EXECUTED AS PER IS STANDARDS.
 5 ANTI-SUCKBACK CONTROL , SLOPE/BACKFILL, STABILIZATION COVER AT OVER AND SHO BENCHES AND OTHER MEASURES NOT SPECIFICALLY SHOWN IN THE DRAWING SHALL BE DECIDED AT THE SITE AS PER SPECIFICATIONS AND INSTRUCTIONS OF COMPANY REPRESENTATIVE.

NOTES:

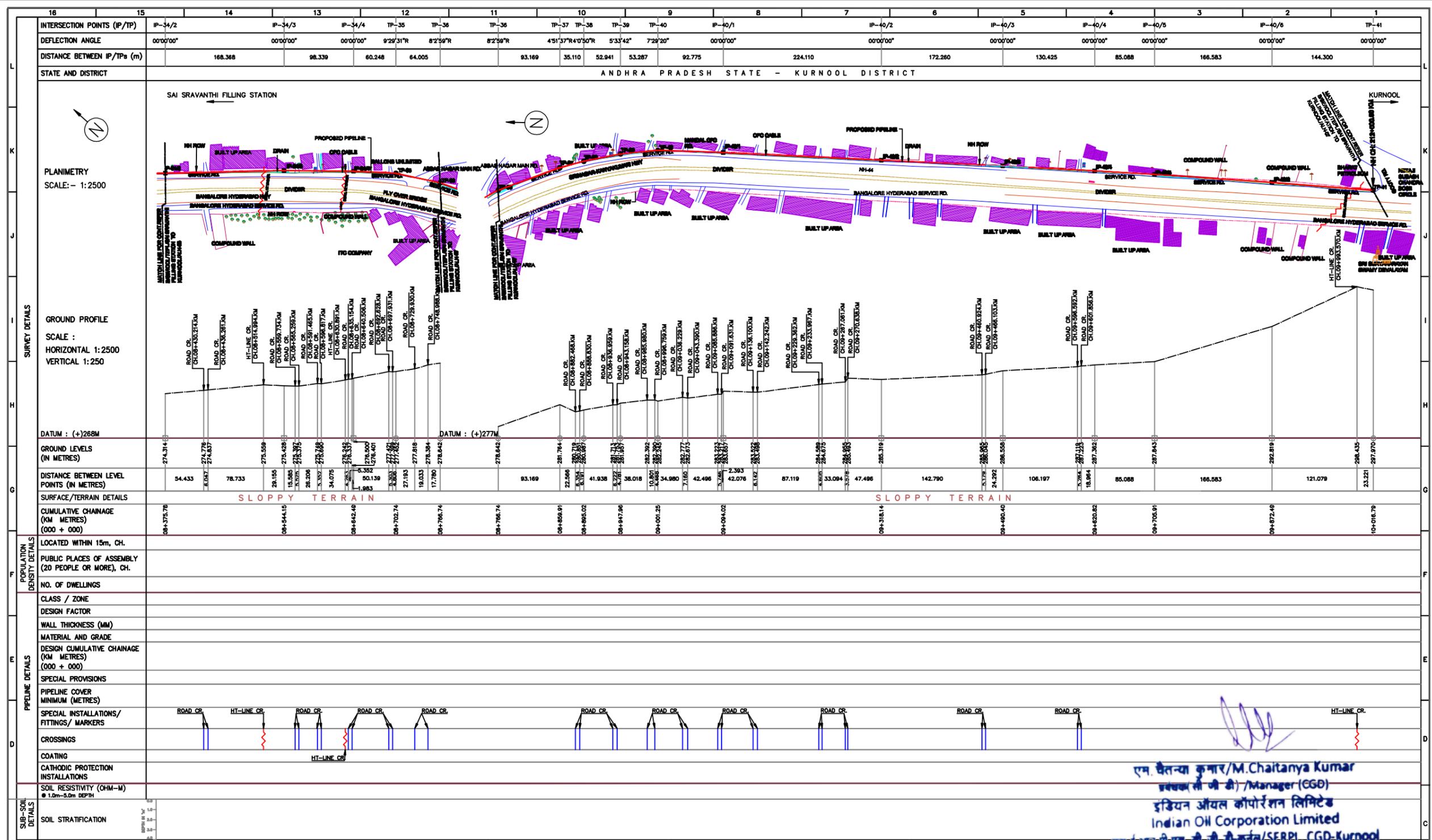
BILL OF MATERIAL FOR THIS DRAWING			
CARRIER PIPE		OTHER MATERIALS	
O.D. # (WT)(mm)	COATING	DESCRIPTION	NUMBER
TOTAL			
CASING (SEE GEL. NOTES 2 AND 3)			
O.D. # (WT)(mm)	COATING	LENGTH	
TOTAL			

ISSUE RECORD				
No.	DATE	REVISIONS	BY	CHKD
1	17.01.23	ISSUED FOR CLIENT APPROVAL		

CLIENT		CONSULTANT	
INDIAN OIL CORPORATION LTD.		TRACTEBEL ENGINEERING PVT. LTD.	
PROJECT		IOCL - CITY GAS DISTRIBUTION PROJECT-KURNOOL	
DRAWN BY		CHECKED BY	
APPROVED BY		DATE	
SECTION		TITLE	
SCALE		SHEET NO.	
AS SHOWN		OF 07	

एम चैतन्या कुमार/M.Chaitanya Kumar
 इन्डियन ऑयल कॉर्पोरेशन लिमिटेड
 Indian Oil Corporation Limited
 इन्डियन ऑयल कॉर्पोरेशन लिमिटेड/SERPL,CGD-Kurnool

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एम. चैतन्या कुमार/M.Chaitanya Kumar
इन्चार्ज सी.जी.डी./Manager (CGD)
इंडियन ऑयल कॉर्पोरेशन लिमिटेड
Indian Oil Corporation Limited
वत ई आर पी एल सी जी डी कर्नूल/SERPL, CGD-Kurnool

TOPOGRAPHIC SYMBOLS				BILL OF MATERIAL FOR THIS DRAWING				REFERENCE DRAWINGS				ISSUE RECORD			
LEGENDS:-				CARRIER PIPE				DRAWING TITLE				DRAWING NO.			
PARTICULARS				O.D. # WT(mm) COATING LENGTH				PIPELINE ROUTE MAP 1:50,000 SCALE				S/PL/CGD/TP/SAI SRAVANTHI FILLING STATION TO KURNOOL/ALL-07			
PARTICULARS				OTHER MATERIALS				NUMBER				DIVISION			
SYMBOLS				DESCRIPTION				NO.				CHECKED			
PROPOSED PIPELINE				CULVERT				DATE				APPROVED			
EXISTING PIPELINE				CULVERT				DATE				APPROVED			
EXISTING WATER PIPELINE				CULVERT				DATE				APPROVED			
OFC CABLE				CULVERT				DATE				APPROVED			
ASPHALT ROAD				CULVERT				DATE				APPROVED			
CC ROAD				CULVERT				DATE				APPROVED			
MOORUM ROAD				CULVERT				DATE				APPROVED			
COMPOUND/BOUNDARY WALL				CULVERT				DATE				APPROVED			
BUILT UP AREA /BUILDING				CULVERT				DATE				APPROVED			
BRIDGE				CULVERT				DATE				APPROVED			
RAILWAY TRACK				CULVERT				DATE				APPROVED			
GATE				CULVERT				DATE				APPROVED			
HT LINE				CULVERT				DATE				APPROVED			
TEMPLE , CHURCH				CULVERT				DATE				APPROVED			
CULVERT				CULVERT				DATE				APPROVED			