

Sun Petrochemicals Private Limited

(SunPetro)

Commercial & Supply Chain Management

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CIN: U24219GJ1995PTC028519

No. SunPetro/Gujarat/Onshore/IDS/2022-23/SPPL-134/Bulletin-13

Date: 24-02-2023

BULLETIN #13

Sub: Hiring of Rig for Integrated Drilling Services on Callout basis for Onshore Oil & Gas Fields.

Ref: Tender No.: SunPetro/Gujarat/Onshore/IDS/2022-23/SPPL-134

Sun Petrochemicals Private Limited (SunPetro), hereby authorized following amendment / clarification in the above referred Tender:

Bidder to note that, additional Scope of Work is added in subject tender along with revised price schedule as follows:

Sr No	Content	Remarks	
1	Scope of Work		
	1	Tubulars (Casing and Tubing)	
	2	A) DRILLING	
	3		Well Head and X-Mass Tree Assembly
			Casing Accessories
		Fishing, if any	
	4	B) CIVIL	
			Land acquisition for approach road/well site/ flowline, Civil works for preparation of drill site, construction of approach road to well site, Boundary fencing with gate, Electrical equipments cum security shed with solar lights, temporary toilet with septic tank/soak pit and well head cage etc.
	5		Well Intervention & Stimulation Service
	6		Chemical Injection Unit
7	C) PRODUCTION		
		Piping	
8	Provision for Hooking upto Mobile Test Unit		
9	D) HSE		
	Waste Disposal		
		Refer as attached Annexure-1	
2	Revised Price Schedule	Bidder to submit their rates as per Revised Price Schedule format considering the additional scope of work. Please refer Revised Price Schedule attached at Annexure-2	

All other terms and conditions of tender remains unchanged.

Regards

Sun Petrochemicals Pvt. Ltd.

Annexure-1

ADDITIONAL SCOPE OF WORK

1	A) DRILLING	Tubulars (Casing and Tubing)
2		Well Head and X-Mass Tree Assembly
3		Casing Accessories
		Fishing, if any
4	B) CIVIL	Civil Work including Fencing, parapet wall & security cabin with solar light
5	C) PRODUCTION	Well Intervention & Stimulation Service
6		Chemical Injection Unit
7		Piping
8		Provision for Hooking upto Mobile Test Unit
9	D) HSE	Waste Disposal

A) Drilling

1. TUBULARS (CASING AND TUBINGS):

1.1. SCOPE OF SUPPLIES (SOS) & TECHNICAL SPECIFICATION (TS)

All the Casing should be supplied in R-3 range (in between 34-48 feet range) and all Tubing should be supplied in R-2 range as per latest edition of API 5CT. Following is the tentative Casing requirement for standard 1500 M well. Quantities may vary with respect to actual drilling.

Sr No.	Description of Items	Specification/ Size	UOM (ton)	Total ton Per well
1	Casing - 9 5/8" BTC, 40 PPF, K-55, R-3	9 5/8"	Ton	40 Ton
2	Casing - 7" BTC, 29 PPF, L-80, R-3	7"	Ton	70 Ton
3	Tubing - 2 7/8", EUE, 6.5 ppf, N-80, R-2	2 7/8"	Ton	20 Ton
4	Casing Pup Joint - 7" BTC, 29 PPF, L-80, Length: 6 Meter	7"	No.	2
5	Tubing Pup Joint - Tubing - 2 7/8", EUE, 6.5 ppf, N-80, Length: 0.5 Meter	2 7/8"	No.	1
6	Tubing Pup Joint - Tubing - 2 7/8", EUE, 6.5 ppf, N-80, Length: 1 Meter	2 7/8"	No.	1
7	Tubing Pup Joint - Tubing - 2 7/8", EUE, 6.5 ppf, N-80, Length: 1.5 Meter	2 7/8"	No.	1
8	Tubing Pup Joint - Tubing - 2 7/8", EUE, 6.5 ppf, N-80, Length: 2 Meter	2 7/8"	No.	1
9	Tubing Pup Joint - Tubing - 2 7/8", EUE, 6.5 ppf, N-80, Length: 3 Meter	2 7/8"	No.	1
10	Tubing Pup Joint - Tubing - 2 7/8", EUE, 6.5 ppf, N-80, Length: 5 Meter	2 7/8"	No.	1

Notes:

1. All Casings & Tubings Must manufacture as per latest API guidelines.
2. Longterm supplies if have after completion of 1 year contract period, it will be linked to material index or may be agreed as per mutual agreement.
3. Any change in specification shall be treated under change in order,
4. Any item required material other than defined in SOR, list may be approved by the contractor and and company at mutually agreed basis.
5. Supplier must provide the Company Valid API certification history for the mill. Mill must have continued valid API certification.
6. Must provide the pressure test certificate & MTC for the LOT & Heat Number supplied.
7. API Grade Casings & Tubings must be manufactured as per API Spec. 5CT, latest edition and must bear API monogram. A copy of valid API Spec. 5CT certificate from the Manufacturer shall be submitted along with the offer.
8. The Casings & Tubings shall be brand new un-used.
9. Couplings shall be as specified in API Spec. 5CT (latest edition) and must be manufactured by API approved mills, as applicable. All couplings shall be inspected as per API Spec. 5CT.
10. Coating shall be done as per API Spec. 5CT (latest edition).
11. Pipe ends: Ends must be prepared as per relevant API specifications. Close end vented plastic or composite protectors at both ends as specified in API 5CT (latest edition) shall be used to protect the ends. Metal protectors shall not be acceptable.
12. The threading and gauging of the casing shall be in accordance with API Standard 5CT and shall be in accordance with QA plan of threads.
13. The Casing & tubing supplied must be as per the API tolerance limit, any deviation on ID should be as per API.
14. The offer must contain detailed description of the materials giving details of size, weight/ wall thickness, grade, length range, type of end, API Std., end protectors etc.
15. Marking is to be done on each joint strictly as per API Spec. 5CT
16. The color coding shall be done as per API Spec. 5CT (latest edition).

17. Bundling Requirements: • Diameters less than 7" – bundled in a manner to prevent any metal-to-metal contact. • Diameters 7" and larger if shipped loose – Bumper rings (donut type) along length of pipe to prevent metal to metal contact. Use of nylon slings per lift is recommended for shipment.
18. Bidder/Contractor need to send material to our warehouse in open top container or in loose bundles on trailer (but it needs to be transport as per API Standards and without metal-to-metal contacts of tubulars with proper wooden dunnage.
19. If Bidder/Contractor sends material in close container, it will not be accepted.
20. Bidder/Contractor shall be responsible for any damage cause while unloading tubulars if not sent in proper way as per API Standards and with proper wooden dunnage.
21. It is recommended that Bidder/Contractor representative shall be available to check all casing prior to unload from trailer at our warehouse to re-check any damage cause while transportation.
22. Bidder/Contractor shall be responsible for delivery of material at designated site as per delivery schedule. Any damage to the material shall be again inspected as per API Spec. 5CT / Replaced at Bidder/ Contractor cost.
23. The Bidder need to submit all Technical Documents in supporting of Technical Evaluation Proposal for Acceptance to Sunpetro.
24. The Bidder need to take Technical Acceptance from Sunpetro prior to finalizing Manufacturer/ Authorizes Dealer or Supplier.
25. In case of non-performance of work as per satisfaction of the Company, purely for the reason attributable to the Contractor, no payment will be made.
26. Inspection to be carried out by SunPetro representative at Bidders' premises before dispatch.
27. SunPetro may depute his inspection personal to factory for final acceptance of the material. Contractor must note to share each MTC to M/s SunPetro.
28. Logistics of all material upto Sunpetro Well Site will be in Contractors Scope.All loading unloading till material stack to designated location is in the scope of contractor.
29. Paint Stencil
Tenderer shall stencil an identification marking in white paint on the outside surface of each length of the tubular goods with the following marking sequence in accordance with API 5CT:
 - I. Company Name: SunPetro
 - II. Company Item Code (Will be mentioned in PO)
 - III. Company Purchase Order Number.
 - IV. API Monogram, whenever applicable
 - V. Size in inches
 - VI. Weight in lb./ft
 - VII. Tubular Grade
 - VIII. Thread Type
 - IX. Length in feet (up to two (2) decimal places)
 - X. Month and Year of Production
30. The following tests and inspections shall be carried out as per API spec. 5CT (latest edition) and results there of furnished to SunPetro along with the supply. Mill Test certificates are to be submitted to SunPetro in Original.
 - i) Testing of Chemical Composition.
 - ii) Testing of Mechanical Properties.
 - iii) Hydrostatic Tests.
 - iv) Dimensional testing (wall thickness, drift test, length, weight, determination, and straightness).
 - v) Visual Inspection.
 - vi) Non-Destructive Inspection.

Bidder/ Contractor shall submit all above documents prior to dispatch of material and on acceptance of same by Sun Petrochemicals Pvt. Ltd material shall proceed for dispatch. The manufacturer shall furnish a certificate of compliance stating that the material has been manufactured, sampled, tested and inspected in accordance with API Spec. 5CT (SR-15), latest edition. The above certificate should be submitted to sun petrochemicals in Original. In addition to above, SunPetro reserves right to for carrying out Inspection by SunPetro representatives at Bidders premises before dispatch.

31. Tubular Selection Criteria:
- a. Bidder's Supplying Casing & Tubing / Accessories Qualification:
The bidder should be Manufacturer /authorized dealer or supplier of items Manufacturer / delivered in India. Further Manufacturer shall have valid API Certificate/license for same.
 - b. Bidders' Experience for Supply of Casing & Tubings / Accessories:
The Manufacturer /Bidder must have minimum experience of 3 (three) years
 - c. Supporting Document
 - i. For bidder qualification Manufacturer factory registration and valid Authorization letter from manufacturer to bidder to be submitted
 - ii. For proof of requisite experience, any one of the following documents / photocopies must be submitted along with the bid:
Copy of certificate of completion (COC)/Certificate of Payment (COP) of jobs successfully completed in last five years from the date of floating the enquiry showing the gross value of the supplies.

2. WELL HEAD AND X-MASS TREE ASSEMBLY:

2.1. SCOPE OF SUPPLIES (SOS) & TECHNICAL SPECIFICATION:

Table A: Scope of Supply for 9 5/8" X 7", TUBING SIZE 2-7/8" EUE

S. No.	Part Name / Description	Qty	Unit
1.0	WELL HEAD AND X-MASS TREE ASSEMBLY FOR 2CP, CASING SIZE: 9 5/8" X 7", TUBING SIZE 2-7/8" EUE, PRESSURE-5000 PSI. NOTE: MATERIAL- AA CLASS, PSL-2, PR-1, TEMP- 'U' as per latest edition of API- 6 A Each Set Consisting of following below items:	1	set
1.1	CASING HEAD HOUSING- 11"-5M FLG TOP-9 5/8" BOTTOM SLIP-ON WELD WITH 2" LP THRDS, SIDE OUTLET	1	No.
1.2	CASING HANGER- SLIP AND SEAL CASING HANGER MANUAL 11" X 7"(Compatible to RUN ESP pump)	1	No.
1.3	FLOW LINE PLUG-2" LPX6" LONG	1	No.
1.4	NIPPLE-2" LPX 6" LONG	1	No.
1.5	GATE VALVE-2 1/16"X5000 PSI WP, 2"LP THREADED END	1	No.
1.6	PRESSURE GUAGE-6" DIA, 1/2" NPTM CONN, 0-5000 PSI LIQUID FILLED	1	No.
1.7	RING GASKET-RX 54	1	No.
1.8	STUD WITH TWO NUTS-1-7/8"X14-1/4" LONG, ZINC PLATED	12	No.
1.9	PRIMARY AND SECONDARY SEAL ASSY.-11"X 7"	1	No.
1.10	TUBING HEAD SPOOL-11"-5000 PSI WP FLG BTM X 7 1/16"-5000 PSI WP FLG TOP WITH 2 1/16"-5000 PSI STUDDED SIDE OUTLET	1	No.
1.11	GATE VALVE-2 1/16"X5000 PSI WP, FLANGE END	4	No.
1.12	RING GASKET-RX24	6	No.
1.13	STUD WITH TWO NUTS-7/8"X6-1/2" LONG, ZINC PLATED	48	No.
1.14	BLIND FLANG-2 1/16"-5000 PSI	1	No.
1.15	TUBING HEAD ADAPTOR ASSEMBLY- 7 1/16"-5000 PSI FLG BOTTOMX 2 9/16"-5000 PSI STUDDED TOP. 2" NPT CONN. PORT, 1/4" NPT CONN. PORT. (Compatible to RUN ESP pump) with 2" and 1/4" NPT Blind Plug.	1	No.
1.16	RING GASKET-RX-46	1	No.
1.17	TUBING HANGER-EXTENDED NECK, 2-7/8" LIFT X BOTTOM THREAD, 2" NPT CONN. TOP AND BOTTOM, 1/4" NPT CONN. PORT. (Compatible to RUN ESP pump)	1	No.
1.18	BULL PLUG-2" LPX4" LONG, 1/2" NPT CONN.	1	No.
1.19	GATE VALVE-2 9/16"X5000 PSI FLANGE END	3	No.
1.20	STUD WITH TWO NUTS- 1 3/8"X11 1/4" LONG ZINC PLATED	12	No.
1.21	RING GASKET-RX-27	5	No.
1.22	STUD WITH TWO NUTS- 1"X7" LONG ZINC PLATED	40	No.
1.23	STUDDED TEE-2 9/16"-5000 PSI RUN X 2 1/16"-5000 PSI TWO SIDE OUTLET	1	No.
1.24	GATE VALVE-2 1/16"X5000 PSI FLANGE END	2	No.
1.25	PRESSURE GUAGE-6" DIA, 1/2" NPTM CONN, 0-5000 PSI LIQUID FILLED	2	No.
1.26	TREE CAP-2 9/16"-5000 PSI FLG BOTTOM COMPLETE WITH NUT AND PLUG THRD. 1/2" NPT FEMALE, 2- 7/8" LIFT THRDS	1	No.
1.27	POSITIVE CHOKE-2 1/16"X5000 PSI FLANGED END, 1" ORIFICE	2	No.
1.28	STUD WITH TWO NUTS - 7/8"X6 1/2" LONG, ZINC PLATED	48	No.
1.29	WELDNECK FLANG- 2 1/16"X 5000 PSI	2	No.
1.30	RING GASKET-RX – 24	6	No.
1.31	2 1/16" X 5000 PSI FLANGE WITH 2" LP THREAD	1	No.
2.0	11" Test Plug compatible to above well head (For Section A)	1	No.
3.0	7 1/16" Test Plug compatible to above well head (For Section B)	1	No.
4.0	7 1/16" T/Hanger (Centric) with 2 7/8" EUE UP and BOTTOM Lift. Compatible to above Well Head	1	Nos.
5.0	7 1/16" x 5M - 2 9/16" x 5M Adaptor Flange (Centric)	1	Nos.

SPARES for 9 5/8" X 7", TUBING SIZE 2-7/8" EUE

Sr NO	Part Name / Description	Quantity	Unit
i.	RING GASKET-RX 54	2	No.
ii.	STUD WITH TWO NUTS-1-7/8"X14-1/4" LONG, ZINC PLATED	12	No.
iii.	RING GASKET-RX24	6	No.
iv.	PRIMARY AND SECONDARY SEAL ASSY.-11"X 7" compatible to above Well Head Assembly	4	Nos.
v.	RING GASKET-RX-46	4	No.
vi.	STUD WITH TWO NUTS- 1 3/8"X11 1/4" LONG ZINC PLATED	24	No.
vii.	RING GASKET-RX-27	5	No.
viii.	STUD WITH TWO NUTS- 1"X7" LONG ZINC PLATED	20	No.
ix.	STUD WITH TWO NUTS - 7/8"X6 1/2" LONG, ZINC PLATED	32	No.
x.	WELDNECK FLANG- 2 1/16"X 5000 PSI	2	No.
xi.	2 1/16" X 5000 PSI FLANGE WITH 2" LP THREAD	2	No.
xii.	BULL PLUG-2" LPX4" LONG, 1/2" NPT CONN.	2	No.
xiii.	CASING HANGER- SLIP AND SEAL CASING HANGER MANUAL 11" X 7"(Compatible to RUN ESP pump)	2	No.

Note:

- Contractor to supply material following relevant API class certification.
- SunPetro reserves its right to carry out inspection by their own or through Third Party Inspector (TPI) during manufacturing or before dispatch.
- Well Head Assembly Selection criteria:
 - a. Bidder's Qualification:
The bidder should be Manufacturer of /authorized dealer of quoted items.
 - b. Bidders' Experience:
The Manufacturer / Bidder must have minimum experience of 3 (three) years with Continuous API certification.
 - c. Supporting Document
 - (i) For bidder qualification Manufacturer factory registration and valid Authorization letter from manufacturer to bidder to be submitted.
 - (ii) For proof of requisite experience, any one of the following documents / photocopies must be submitted along with the bid: Copy of certificate of completion (COC)/Certificate of Payment (COP) of jobs successfully completed in last five years from the date of floating the enquiry showing the gross value of the supplies.
 - (iii) Manufacture must have the valid API certification.

RESPONSIBILITY MATRIX

S. No.	Description	Scope	
		Contractor	SunPetro
1	All well head must follow API-6A guideline.	<input type="checkbox"/>	
2	Provide API- certification (Bidder Must have the Valid API certification)	<input type="checkbox"/>	
3	Provide Pressure test report.	<input type="checkbox"/>	
4	Provide Material Class-certification.	<input type="checkbox"/>	
5	INSTALLATION, COMMISSIONING AND TESTING OF WELLHEAD AT WELL SITE: A. The BIDDER will have to provide wellhead Engineer and services to make up, run and install and test the BIDDER's supplied equipment. B. It is the suppliers" / contractors" responsibility to service, commission and test the well head components at each stage at well site after it is installed. The above jobs shall be carried	<input type="checkbox"/>	

	out at contractor's expert supervision. Supplier/ contractor to provide competent and experienced wellhead Engineer.		
6	API Monogram is to be embossed on the supplied items.	<input type="checkbox"/>	
7	Equipment Marking: Manufacturers name, API Monogram, rated working pressure, bore size, service conditions, PSL& Trim designation, Assembly Serial Number, year of manufacture, are to be marked on the body as well as on the name plate.	<input type="checkbox"/>	
8	Storing, packing and shipping should be as per API	<input type="checkbox"/>	
9	A copy of valid API authorization certificate/license is to be forwarded.	<input type="checkbox"/>	
10	Logistics of all material upto Sunpetro Well Site will be in Contractors Scope.	<input type="checkbox"/>	

3 CASING ACCESSORIES

3.1 SCOPE OF SUPPLY (SOS) & TECHNICAL SPECIFICATION (TS):

SCOPE OF SUPPLY (SOS) & TECHNICAL SPECIFICATION (TS)		
Sr. No.	DESCRIPTION	UOM
1	<p>SIZE 9 5/8" ANTI-ROTATIONAL CEMENT FLOAT COLLAR, PROVIDED WITH SINGLE POPPET VALVE, PDC DRILLABLE, SUITABLE FOR USE WITH 9 5/8" OD, 40 PPF, K-55 CASING WITH BTC BOX UP X PIN DOWN THREAD CONNECTION. MATERIAL K-55</p> <p>COMPRISING OF FOLLOWING CEMENT PLUGS:</p> <p>SIZE 9 5/8" ANTI-ROTATIONAL TOP RUBBER CEMENTING PLUG, PDC DRILLABLE, SUITABLE FOR 9 5/8" 40 PPF CASING</p> <p>SIZE 9 5/8" ANTI-ROTATIONAL BOTTOM RUBBER CEMENTING PLUG, PDC DRILLABLE, SUITABLE FOR 9 5/8" 40 PPF CASING</p>	No.
2	<p>SIZE 9 5/8" CEMENT FLOAT SHOE, SINGLE POPPET VALVE, PDC DRILLABLE, SUITABLE FOR 9 5/8", K-55, 40 PPF CASING WITH BTC BOX UP THREAD CONNECTION. MATERAIL: K-55</p>	No.
3	<p>SIZE 7" CONVENTIONAL CEMENT FLOAT COLLAR, PROVIDED WITH SINGLE POPPET VALVE, PDC DRILLABLE, SUITABLE FOR USE WITH 7" OD, 29 PPF, L-80 CASING WITH BTC BOX UP X PIN DOWN THREAD CONNECTION. MATERIAL L-80</p> <p>COMPRISING OF FOLLOWING CEMENT PLUGS:</p> <p>SIZE 7" CONVENTIONAL TOP RUBBER CEMENTING PLUG, PDC DRILLABLE, SUITABLE FOR 7", 29 PPF CASING. INSERT MATERIAL: ALLUMINIUM CORE</p> <p>SIZE 7" CONVENTIONAL BOTTOM RUBBER CEMENTING PLUG, PDC DRILLABLE, SUITABLE FOR 7", 29 PPF CASING. INSERT MATERIAL: ALLUMINIUM CORE</p>	No.
4	<p>SIZE 7" CEMENT FLOAT SHOE, SINGLE POPPET VALVE, PDC DRILLABLE, SUITABLE FOR 7", L-80, 29 PPF CASING WITH BTC BOX UP THREAD CONNECTION. MATERAIL: L-80</p>	No.
5	RIGID CENTRALIZER SIZE: 9 5/8" X 13 3/8" Casing Centralizer with Stop Collar and Pins/Nails	No.
6	9-5/8" X 12-1/4" NON-WELD BOW TYPE Casing Centralizer with Stop Collar and Pins/Nails	No.
7	RIGID CENTRALIZER SIZE: 7" X 9 5/8" Casing Centralizer with Stop Collar and Pins/Nails	No.
8	7" X 8 1/2" NON-WELD BOW TYPE Casing Centralizer with Stop Collar and Pins/Nails	No.
9	CASING ACCESSORIES, 7" CSG X 8 1/2" HOLE, Hinged Non-Welded Bow Spring Turbolizer - Centralizers	No.
10	7" X 8-1/2" Single Body NON-WELD BOW TYPE Casing Centralizer with Stop Collar and Pins/Nails	No.
11	CASING ACCESSORIES, 7" CSG X 8 1/2" HOLE, WIRE SCRATCHERS	No.
12	CASING ACCESSORIES, 7" CSG X 8 1/2" HOLE, CABLE WALL CLEANER	No.
15	Casing Thread Lock Compound (Baker Lock)	Kit

NOTE:

- All materials shall confirm to, and be consistent with, referenced oil industry standards and as per API standards (API5CT & API Q1, ISO 9001), and as specified above.
- Design criteria should be documented to include methods, assumptions, calculations, and design requirements. Design requirements shall include but not be limited to those criteria for size, test and operating pressure, materials, environmental and API5CT & API Q1, ISO 9001 / ASME / Industrial specification and other pertinent requirements upon which the design is to be based. Manufacturer should also share detail specification with installation procedure/manual and should have permanent unique identification.
- All materials provided shall give Guarantee for Performance, qualified and capable of withstanding rated working pressure at rated temperature without deformations. Materials shall be capable of functioning throughout the temperature range for which the material is rated and shall confirm to relevant certification requirements and other API standards (API5CT & API Q1, ISO 9001).
- Material / Equipment qualification testing for Tensile Property, **Impact** toughness, Hardness Requirement, Chemical composition, and heat treatment shall govern the manufacturing process and as per API standards (API5CT & API Q1, ISO 9001).
- Measurement standards and measuring equipment shall be controlled and calibrated by SONG as per manufacturer's written specifications or procedures and should have permanent unique identification.
- API Monogram is to be embossed on the supplied items. Material class certificated /MTC shall be provide.
- All Material Detailed Design Catalogue and manual to be shared for technical specification confirmation with bid.
- Storing, packing, and shipping should be as per API standards.
- Logistics of all material upto Sunpetro Well Site will be in Contractors Scope.
- In addition to above, SunPetro reserves right to for carrying out Inspection by SunPetro representatives at Bidders premises before dispatch.
- Paint Stencil
Tenderer shall stencil an identification marking in white paint on the outside surface of each goods with the following marking sequence:
 - i. Company Name: SUNPETRO
 - ii. Company Item Code (Will be mentioned in PO)
 - iii. Company Purchase Order Number.
 - iv. API Monogram, whenever applicable
 - v. Size in inches
 - vi. Weight in lb./ft
 - vii. Grade
 - viii. Thread Type
 - ix. Month and Year of Production

General Terms & Conditions for Drilling Activity:

- Bidder Must have all sections fishing tool for his tubulares & 2 7/8" & 3 1/2" Tubing fishing tool.
- Bidder must provide all required material/equipment which is required for Drilling a well as per SOW mention in tender.
- All additional services if required by company will be consider on mutual understanding & the requirement of that well activity.
- Bidder must prove all the DGMS requirement for the Rig & allied services.
- Any deviation in the Equipment supplied and specification in middle of the contract or in middle of the Drilling well activity will be subjected to review by company considering the Well safety & Standards requirement.
- All material which is required to fulfill the SOW must be provided by the contractor.
- Bidder needs to inform company prior to 15 days if any specific requirement.
- Bidder must follow the Guideline specified in the GTO. GTO will be provided to Bidder in advance with sufficient time for preparation.
- Conductor installation is in the scope of Bidder.
- Quantity of the casing may change with respect to actual drilling progress, bidder need to take this into account.

- Any left-over material bidder need to submit it back to company at designated material storage yard.
- All manpower required need to be provided as per the SOW mention, if any changes required for short time, Bidder need to inform to company prior to deployment of the personal.
- The work of Drilling activity including all the SOW mention in tender should not hampered. The contractor should take care to meet requirement of material & services in the agreed timeline

B) Civil

4.0 SCOPE OF LAND ACQUISITION, CIVIL & GREEN BELT WORKS FOR DRILLING OPERATIONS IN OIL FIELDS/BLOCKS

Broad scope of work related with land acquisition and Civil works for transportation and deployment of land-based drilling rig in Oil Fields of SunPetro in the state of Gujarat, following will be the.

4.1 Land Acquisition:

Typically, an area of 100mx100m is required to meet the requirements of a drilling rig including the space required for the waste pit. The location of the land is identified based on the coordinates of the well are given by SunPetro. The road to the drill site will require minimum 10m wide strip of land. The contractor shall find out the ownership details of the required land from the land records and check the actual physical possession details of the said land.

After the land is identified and its ownership details are checked, the contractor will interact with the landowners and will negotiate the amount of annual lease rent and onetime crop compensation to be paid. For the purpose of benchmarking, prevailing rates of ONGC for lease rent and crop compensation in that particular area will be considered.

Before signing the lease rent agreement, the contractor will also carry out land demarcation survey with the help of local Talati. The lease rent agreement will be signed with a provision of further extension of the agreement on annual basis. Standard format for the lease agreement will be provided by the SunPetro.

4.2 Civil Works:

The scope of Civil works at the drill site and approach road shall be but not limited to the following.

4.2.1 Approach Road:

Height of the road shall be kept at least 90cm above the normal ground level. Width of the road at top will be 4.00m of carriageway plus 1.00m(Min.) side shoulders on each side. The embankment will be constructed using good quality yellow soil and will have side slope of 1:1 and will be compacted thoroughly to 95% proctor density. Over the well compacted embankment, metaled road with standard WBM specification will be constructed which should be capable of meeting the requirements of drilling rig transportation. Periodical repair/maintenance will be done by the contractor during the drilling operations to ensure that the road is in full serviceable condition. Typical sketch of the road cross section is attached at Annexure-I.

After completion of the drilling and taking out the Rig, the road will be repaired and handed over to SunPetro in properly finished condition.

4.2.2 Works at drill site before Rig movement:

- a) Excavation of the waste pit to meet the requirements of the specific drilling rig to be deployed. Waste pit shall be provided with a HDPE sheet lining of minimum 400-micron thickness to ensure that the drilling fluid do not percolate in the soil.
- b) Construction of the cellar pit using Cement concrete of Min. grade M20. Dimensions of the cellar pit will be as per the requirements of drilling rig and subsequent operational requirement of SunPetro. Top level of the cellar pit shall be kept at least 90cm above the normal ground level of the area.
- c) For the foundation of all other equipment and the Rig carrier, portable precast RCC slabs of 4mx2m size and thickness of 150mm will be used. Nearly 60 Nos. of slabs are required at a typical drill site. One set of 60 slabs will be provided by SunPetro as free issue. The slabs which gets damaged during use, will be replaced by the drilling contractor at his own cost. The design of the RCC slabs will be provided by SunPetro. The contractor will ensure quality of the RCC slabs so that these slabs are fit for use for min. 8 drill site usages.
- d) Hardening of the area for rig movement, placement of equipment, bunk housed and mud tanks etc. Generally, around 4000 sqm of area needs to be hardened.
- e) Arrangement of portable toilet unit and making a septic tank sufficient to accommodate the sewage generated during drilling operations. This also require periodic emptying to avoid overflow. After completion of the drilling, septic tank/soak pit will be backfilled with soil and the area will be levelled/dressed.

4.2.3 Works at the drill site after Rig movement:

- a) G.I Chain link fencing over a RCC pardi (as per the typical design of SunPetro attached) with total height of 1.80m above the general ground level.
- b) Fabrication and installation of gate as per typical SunPetro design.
- c) Fabrication and installation of M.S well head cage as per typical SunPetro design.

4.2.4 Shed for Electrical equipment and security:

A shed of 3mx5m dimensions will be constructed with M.S supporting structure and Precoated G.I sheets on sides and roof as per typical drawing provided by the SunPetro. The shed will be constructed over a masonry and concrete platform having top plinth level at 50cm above top of the cellar pit. In case of drilling of 2 wells from the same well site area, the dimensions of the shed will be increased to 3mx8m. Sketch of the typical shed details is attached.

4.2.5 Green Belt/Tree plantation Area:

Tree plantation will be done at the periphery of drill site land (three rows) and one row on each side of approach roads. Above mentioned area of the drill site and approach road will be cleared of any materials/debris etc. and will be leveled/dressed after completion of the drilling for plantation work which will be done by another contractor of SunPetro.

4.2.6 Technical Specifications

In general, latest CPWD specifications will be applicable for all civil and plantation works. These specifications are available in public domain at cpwd.gov.in.

Note: Following drawings/sketches/photographs attached for reference: -

Annexure-I Approach road- cross section.

Annexure-II cross section for Well site area hardening.

Annexure-III Details of Chain-link boundary fencing.

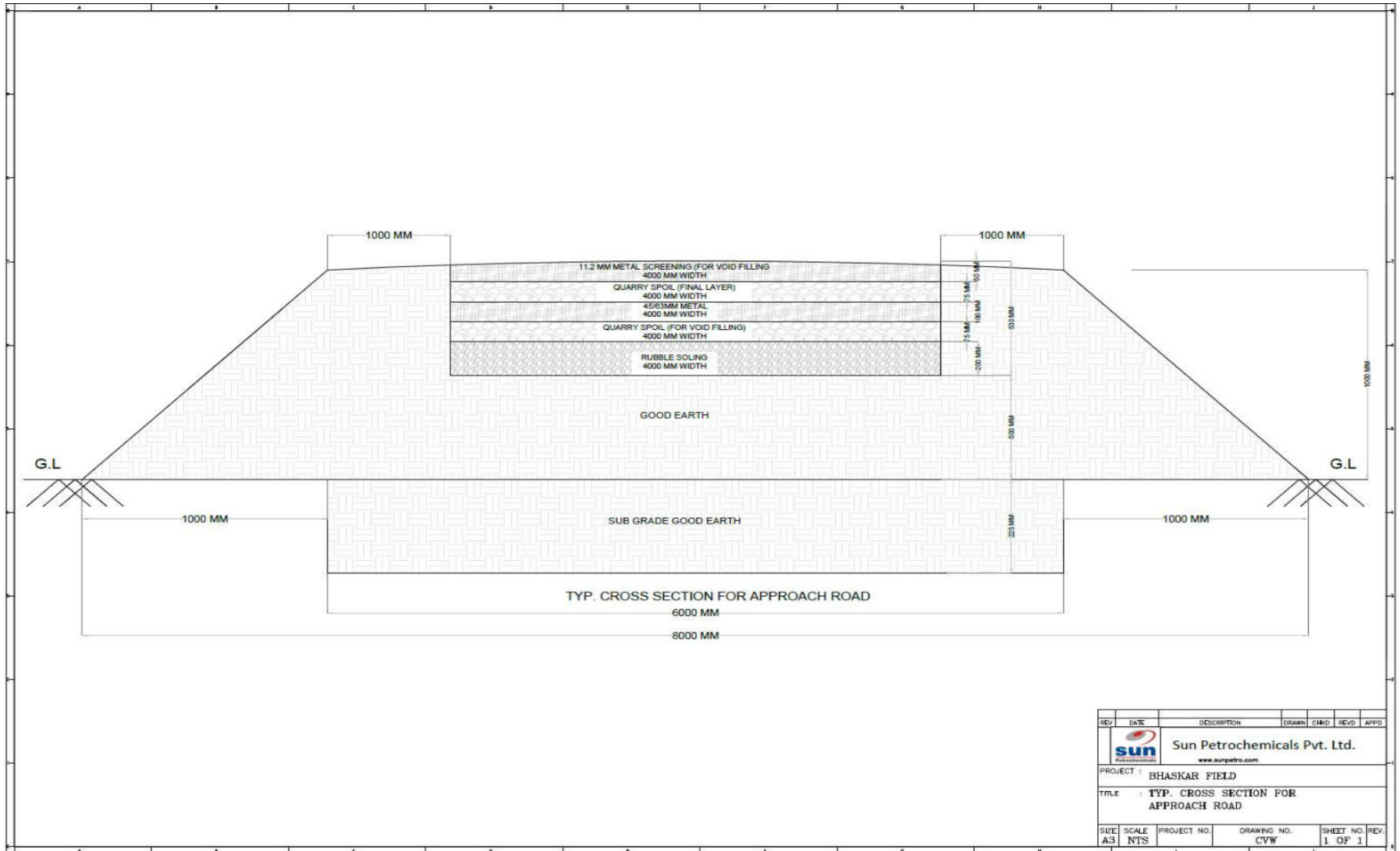
Annexure-IV Cellar pit details.

Annexure-V. MCC cum security shed details.

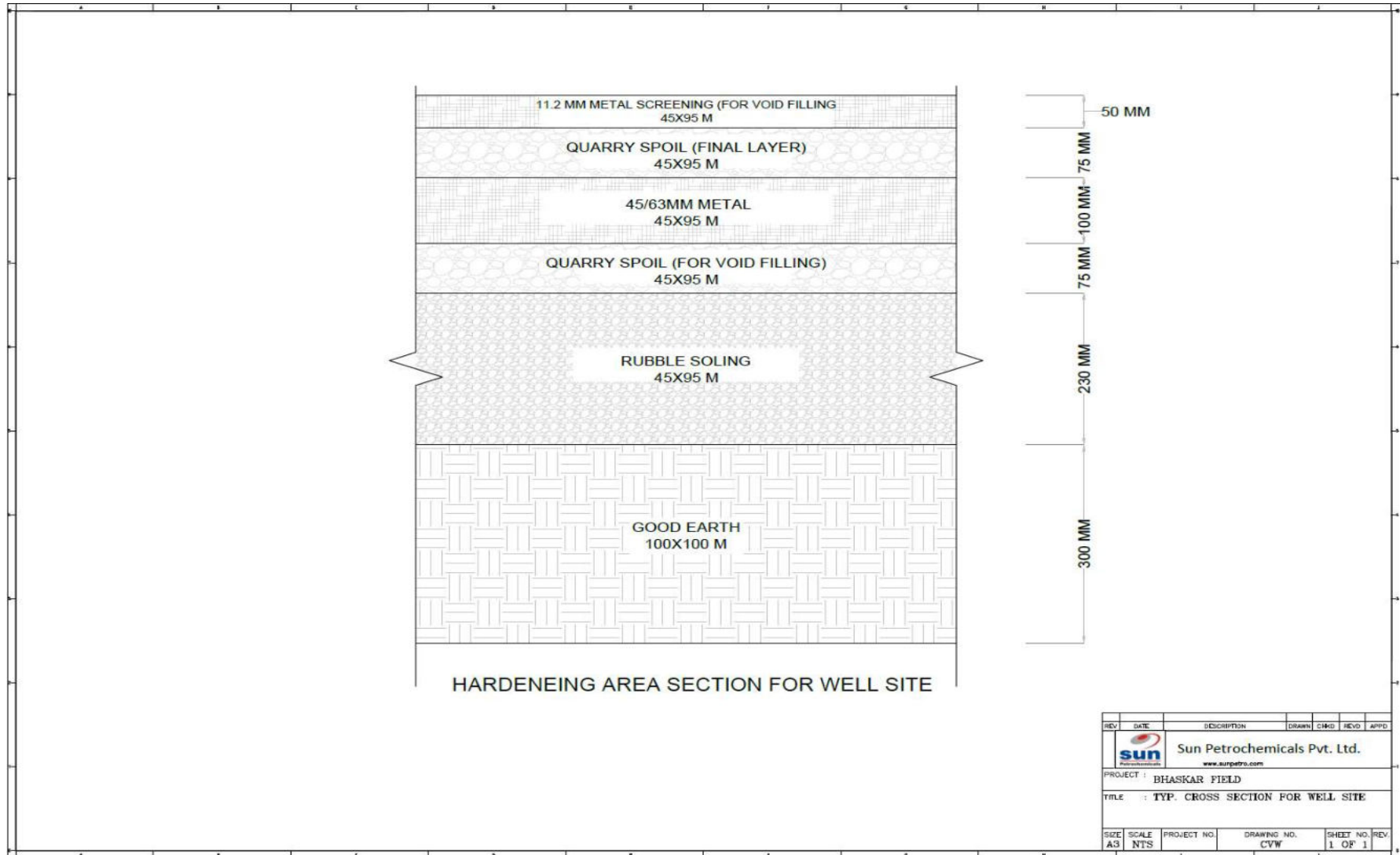
Annexure- VI Picture of Entrance gate of well site with dimensions.

Annexure- VII Well head cage picture with dimensions.

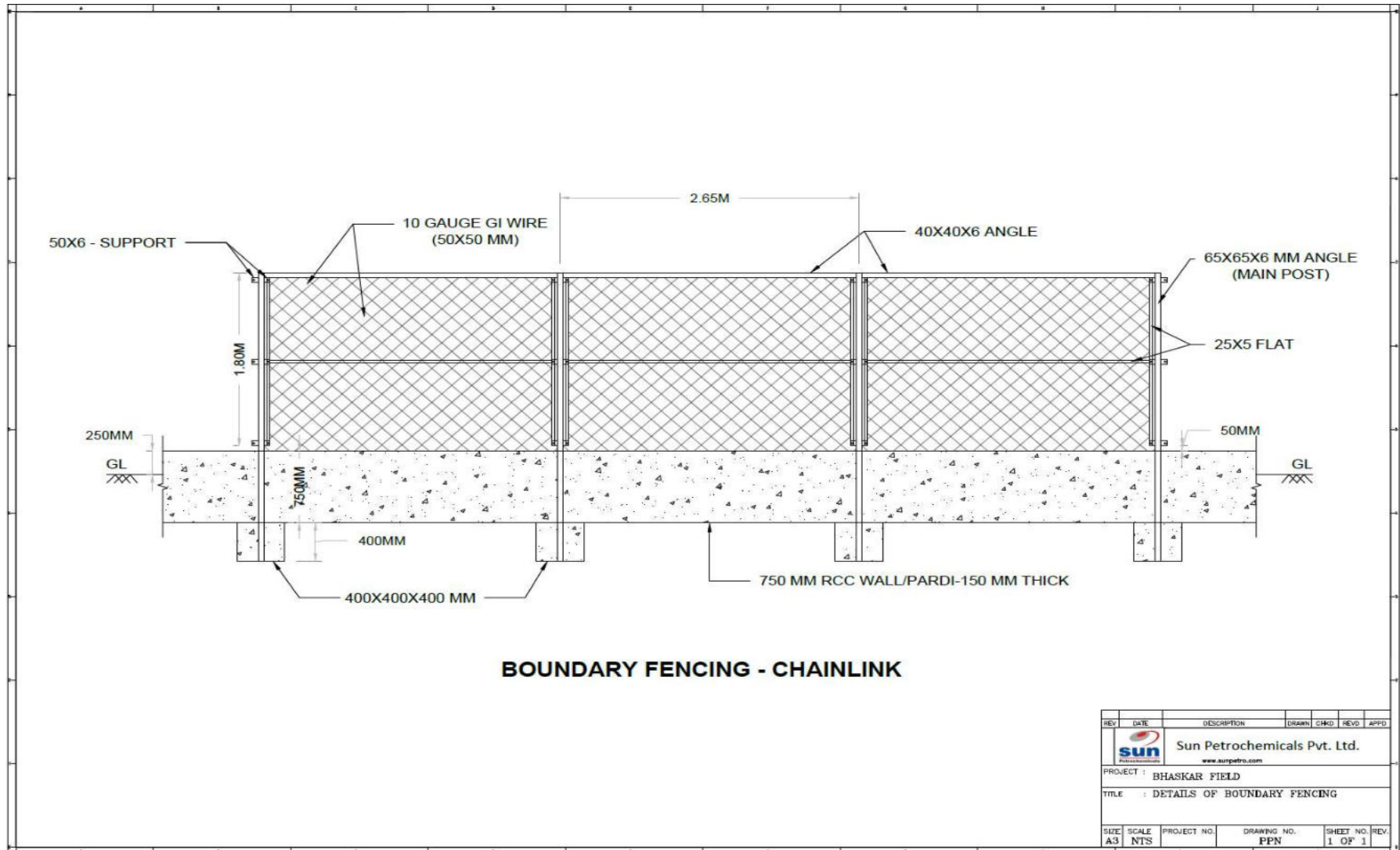
Annexure-I Approach Road



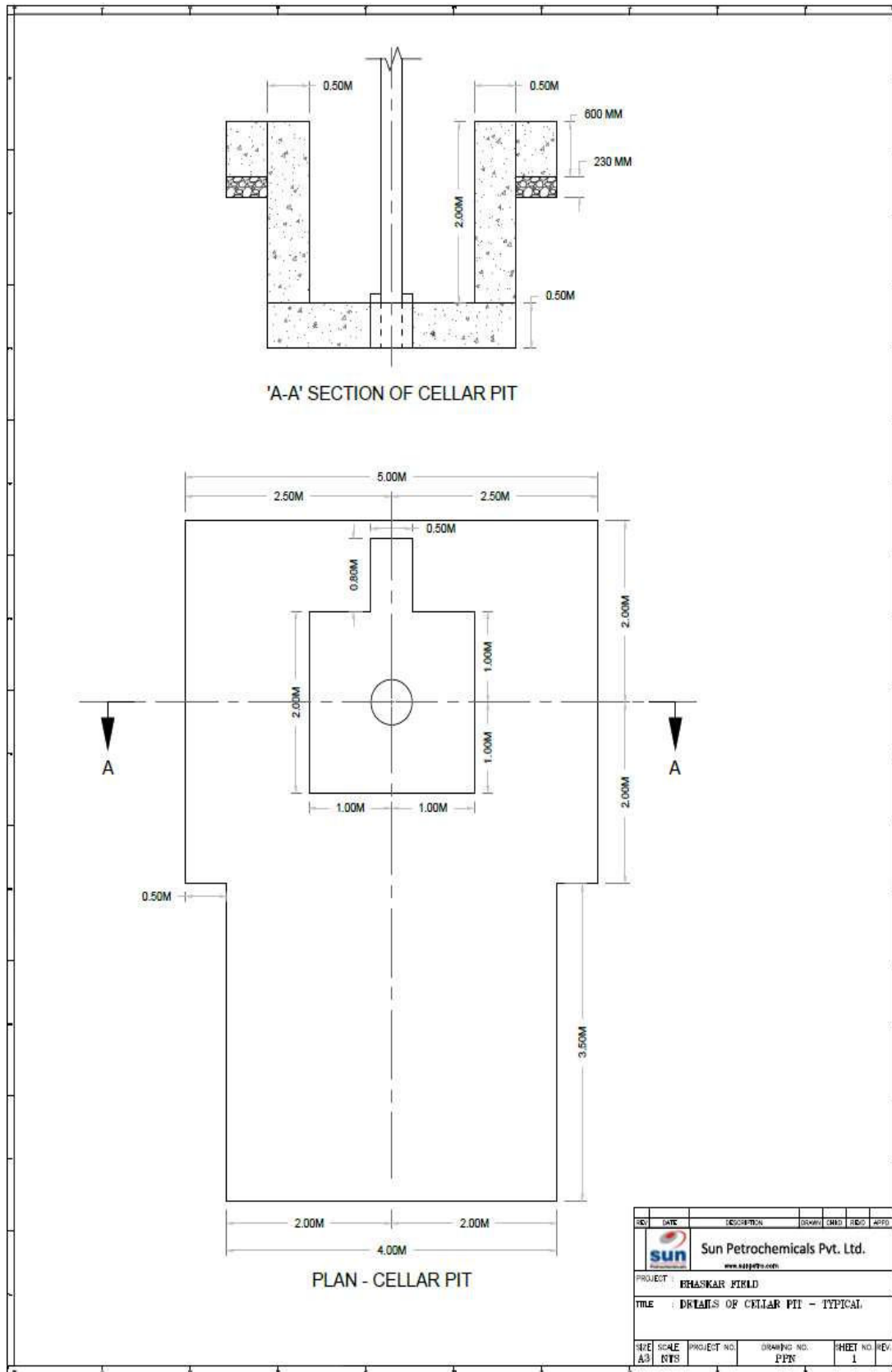
Annexure-II
Well site area.



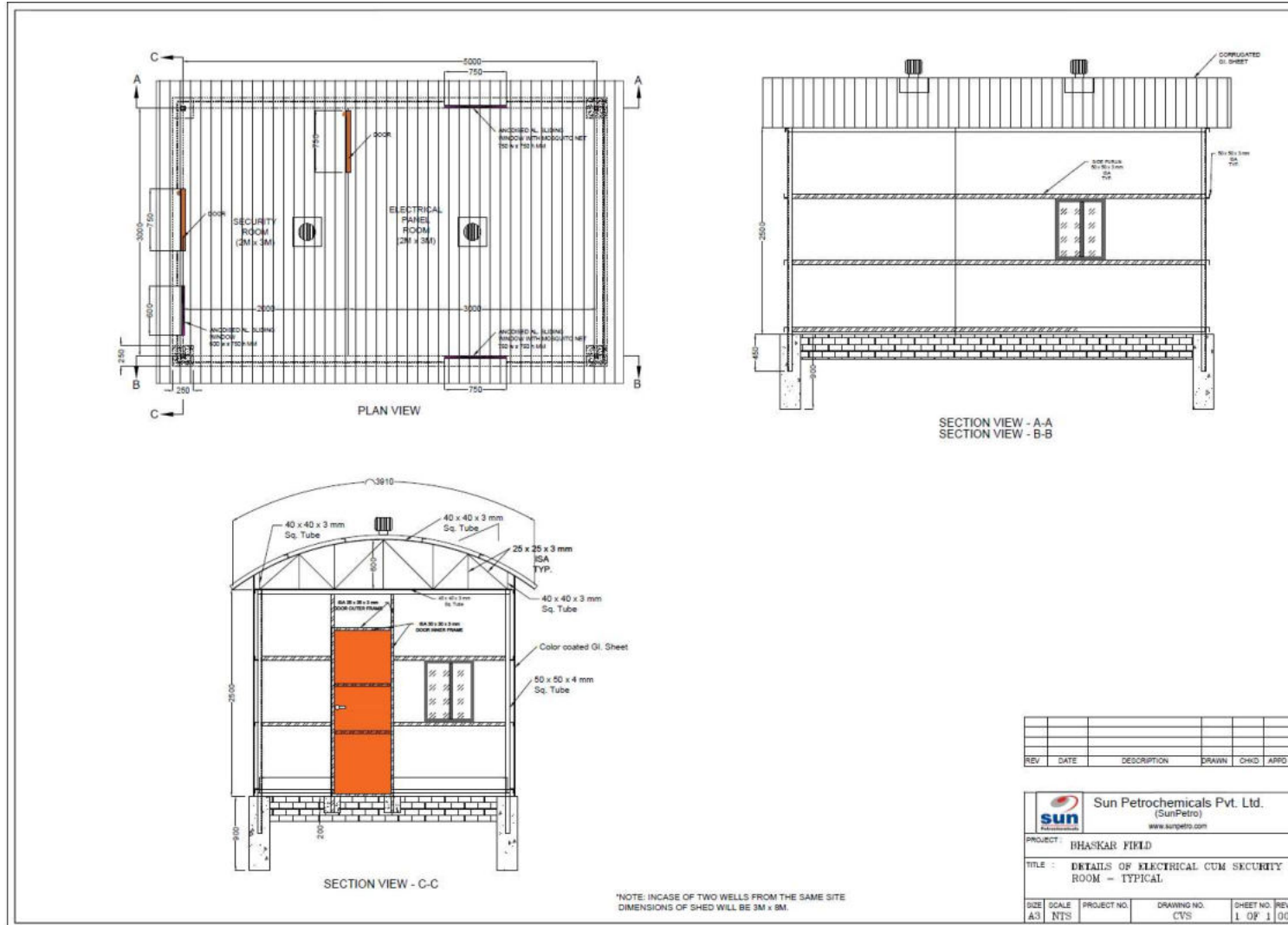
Annexure-III
Chain-Link Fencing



Annexure-IV
Cellar-Pit



Annexure-V Electrical cum Security Room



Annexure-VI
(Actual Image)
Entry Gate



Annexure-VII
(Actual Image)
Well Head Cage



C) Production

5 WELL INTERVENTION & STIMULATION SERVICE

5.1. PURPOSE:

To carry out Well **activation, intervention, & Stimulation** job followed by **EOR** in vertical wells, & deviated wells to enhance Oil production.

5.2 SCOPE:

Service required but not necessarily limited to any or all of the following:

- To provide good quality equipment and skilled personnel required for Well intervention, Stimulation, & activation.
- To provide coiled tubing services, Nitrogen pumping services and MPPC and other related Units & equipments for well activation, dewaxing, sand cleaning, acidization & wells bore back washing
- To provide final report and all relevant data gathered at the end of each operation.
- Logistics of all material upto Sunpetro Well Site will be in Contractors Scope.

GUIDELINES:

Recommended Safe Operating Procedures & guidelines should be followed while carrying out well stimulation operation.

[Refer: OISD-182]

5.2.1 SERVICE REQUIRED

5.2.1.1 Activation of Oil/Gas Well (with Packer set)

Unit required: Coiled Tubing Unit (CTU) and Nitrogen Pumping Unit (NPU)

Activity:

- Unloading and activation of new/ work-over/ shut in/ ceased wells using CTU & NP units.
- Lowering of coiled tubing in stages to the bottom of the well or to the final depth as decided by the Company and displaces the well fluid with Nitrogen to the desired volume/ depth.
- Unloading and maintain of fluid levels of wells prior to perforations.

5.2.1.2 Sand cleaning from Well bore

Units required: CTU and MPPU (Multi-Purpose Pumping Unit) or NPU

Activity:

- Cleaning of sand particles deposited inside the well bore up to the bottom of the well or to the desired depth by using CTU and MPU or NPU.
- The circulation medium may be water, formation water, foam and other viscous nitrified gel etc. based on requirement.

5.2.1.3 Well killing/well fluid change over

Units required: MPPU, CTU (optional)

Activity:

- Pumping of water to replace drilling fluid or work-over fluid or vice versa using MPPU, CTU (optional) during emergency or for any special operation.
- In an emergency situation like uncontrollable release of well fluid, the well needs to be killed, for killing the well; requisite amount of suitable killing fluid at desired pressure should be pumped into the well bore to suppress inflow from the reservoir.
- The entire job will be carried out in presence and supervision of the Company's representative.

5.2.1.4 Acidization job

Units Required: MPU or MPPU, CTU & NPU (Packer Well)

Activity:

- Acidization of intended formations by pumping suitable acid.

- Well bore cleaning up and residuals Flow back from the well bore by CTU, NPU / MPPU (Packer Well)
- The design of individual job including selection of chemicals and acids will be decided by the company.
- Acid and other Chemicals required for the job will be supplied by Company.
- Prior to taking up the acid job, the company will furnish the available information to the bidder regarding recipe of the acid & chemicals to be used. Moreover, the chemical properties and brand name and MSDS information will also be provided.
- If desired by the bidder, a sample of the subject chemicals will also be given to the bidder for their laboratory testing.

5.2.1.5 Injectivity testing of the well (before and after Acidization job)

Units required: MPPU

Activity:

- Injecting suitable liquid to the formation by pumping with MPPU.
- The contractor shall ensure proper record of pumping rates (i.e., injectivity) at different pumping pressures.

5.2.1.6 Any other job not covered above

Any other similar type of job, not spelt out above but, which can be carried out with the use of the offered CTU/NPU/MPPU/Acid Tanker and other equipment shall have to be carried out by the bidder as and when necessary.

5.3 TECHNICAL SPECIFICATION

UNITS AND ACCESSORIES TO BE PROVIDED BY CONTRACTOR

5.3.1 COILED TUBING UNIT

Coiled Tubing Unit shall be Self-propelled (i.e., same prime mover for both road and operation mode) mounted on an oil field truck along with accessories to meet following minimum requirements:

Specification

- i. Dimensions (LxBxH): ≤1440x2550x4250 mm
- ii. Injector: 5T, Trailer- 11T, Generator- 0.3T, BOP &Stripper: 1.2 T, other: 19.5T
- iii. Injector Max. pulling capacity: 60000lbs
- iv. Injector Max. snubbing capacity: 30000lbs
- v. Max. Operating speed of CT: 220ft/min
- vi. Guide radius : 72"
- vii. Reel capacity: : 1", 1-1/4", 1.5" Length: 2000m
- viii. Stripper
- ix. BOP

5.3.2 NITROGEN PUMPING UNIT

Self-propelled & Self-contained (i.e. composite unit with Liquid Nitrogen Tank with pumper) mounted on an Oil field truck capable of pumping and vaporizing along with a storage tank of liquid nitrogen.

The bidder should provide all the necessary surface connections for smooth operation of each job.

Specification

- i. Max. Nitrogen Pumping capacity: 180,000SCFH (5,000 m³/hr.)
- ii. Min. Nitrogen pumping capacity: 21,000SCFH (590 m³/hr.)
- iii. Max. allowable working pressure:10000 psi
- iv. Storage Tank: > 7 KL
- v. Overall dimension (L×W×H)mm: 5000×2500×2500
- vi. Total weight: 11T (dry weight)
- vii. Heat recovery vaporizer working capability:
 - a. Max. pressure: 10000PSI
 - b. Max. capacity: 180K SCFH

- viii. Discharge nitrogen temperature under maximum pressure and maximum capacity: 86°F - 113°F (30°C~45°C)
- ix. Liquid Nitrogen Triplex Pump
 - ❖ The pump should be capable of delivering:
 - ❖ Maximum Capacity: 180,000 SCFH (85 m³/min) of gaseous
 - ❖ Nitrogen equivalent LN₂
 - ❖ Maximum Pressure: 10,000 Psi.

5.3.3 Multi-purpose Pumping Unit (MPPU)

Oil Field Truck Mounted Multi-Purpose Pumping Unit complete with Blender & Filtration unit with a 10 KI capacity tank and necessary piping, fittings & tools. Loading & Supercharging pumps suitable for the main Triplex pump shall also be fitted with the unit. The bidder should provide all the necessary surface connections for smooth operation of each job. The Fluid Pumping System should meet the following minimum requirement:

Pumping Unit:

- Horizontal, single acting triplex plunger pump.
- The pump shall be suitable for handling water, saline water, different acids, crude oil, HSD etc.
- All piping shall be suitable for acid service.

Fluid Tanks:

- Tank equipped with hydraulic driven stirrer / agitator.
- The tank shall have a coat of corrosion resistance paint or liner on the inner surface to protect against acid and other corrosive material.
- Level measurement system shall be provided.

Specification

- i. Acid Tanker- 10KI Capacity
- ii. Triplex Pump-
 - a. Max. Working pressure-10,000 psi
 - b. Discharge rate- >75GPM at 5000 psi
- iii. Transfer pump:
 - a. Capacity - > 5 M³/Hr.
 - b. Head – > 10 METER
 - c. Pipe Suction Dia- > 32 mm
 - d. Discharge Dia- > 25mm

5.3.4 ACID TANKER & TRANSFER PUMP

Acid Tanker

Capacity: 10 KI

Acid Transfer Pump

- Suitable for transferring acid from static tanks (Ground position) to an elevated tank.
- The pump shall have the following specifications:
 - ✓ Discharge Rate: > 5 M³/hr.
 - ✓ Head: > 30 ft.

RESPONSIBILITY MATRIX			
No	Description	Responsibility	
		Company	Contractor
1.	Intimation for Mobilization of Unit. by e-mail- 24 hr before mobilization	√	X
2.	Intimation for Job cancellation or deferred by e-mail - 12 hr. before mobilization	√	X
3.	Activity to be performed intimation by e-mail 24 hr. before unit mobilization.	√	X
4.	Mobilization of Units along with Tools & tackles.	X	√
5.	Required PPE for acid & Liquid Nitrogen handling	X	√
6.	PTW issue	√	X
7.	Chiksen / hose Connection & end Flanges with ring/gasket	X	√
8.	Supply of Chemical / Acid / HSD for job	√	X
9.	Chemical / Acid transfer to Unit	X	√
10.	Area cleaning if Acid or diesel is spilled	X	√
11.	Supply of Water & Power	X	√
12.	Lighting facility during nighttime	X	√
13.	Supply of Air if required	X	√

6.0 CHEMICAL INJECTION SKID

Objective:

Chemical Dozing in Well Flowline or Annulus to minimise formation of Emulsion or deposition of Wax in Pipeline.

Scope:

Newly Drilled Well of SunPetro.

Description

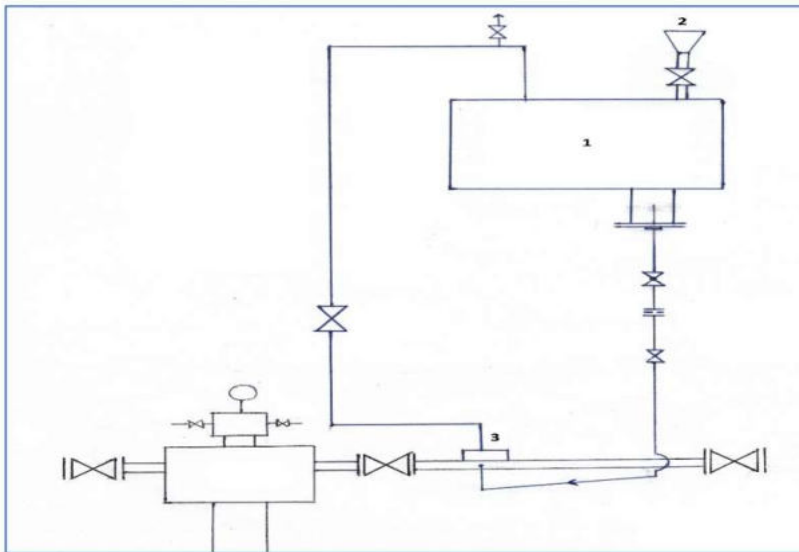
Chemicals shall be Injected through a Pressurized Vessel by Gravity.

Injection Rate shall be controlled by Orifice fitted in the out let of Vessel

Chemical shall be filled in the Vessel by Barrel Pump.

Vessel shall be placed close to Wellhead.

Drawing:



Legend:

- 1 – Chemical Storage Vessel
- 2 – Hopper for Pouring Chemical
- 3 – Injection Point on Flowline

Specification:

Vessel: ASTM A 106 Gr. B

Flanges: ASTM A 105.

Capacity of Vessel: 300 lt.

Operating Pressure: 30 bar (Max)

Hydro Test Pressure: 45 bar.

PSV set Pressure: 10 % above MWP.

Skid Height: 1.5 m above ground.

Responsibility Matrix

No	Description	Responsibility		Remark
		SPPL	Cont.	
1	Fabrication of Skid as per design	--	√	
2	QA / QC	√	--	
3	Transportation of Skid to site	--	√	
4	Unloading at site	--	√	
5	Civil foundation for Placing skid.	--	√	

6	Chemical Dozing Provision in Flow line or Annulus	--	√	
7	Tubing work from skid to Well	--	√	
8	Supply of Chemicals for Testing	√	--	
9	Commissioning of Skid	--	√	
10	Vessel Surface coating (3 Coat System)	--	√	

7.0 PIPING

Piping including all fittings, valves, vent and drain provisions from Well to the manifold including provision of hooking up Mobile Separator is in scope of contractor. Scope includes material supply, welding & testing etc are in scope of contractor.

Specification of pipeline: 4" Sch 40 with compatible fittings and valves.

As piping is site specific company shall provide details for each site separately.

PFD for a typical well site piping is as given on next page.

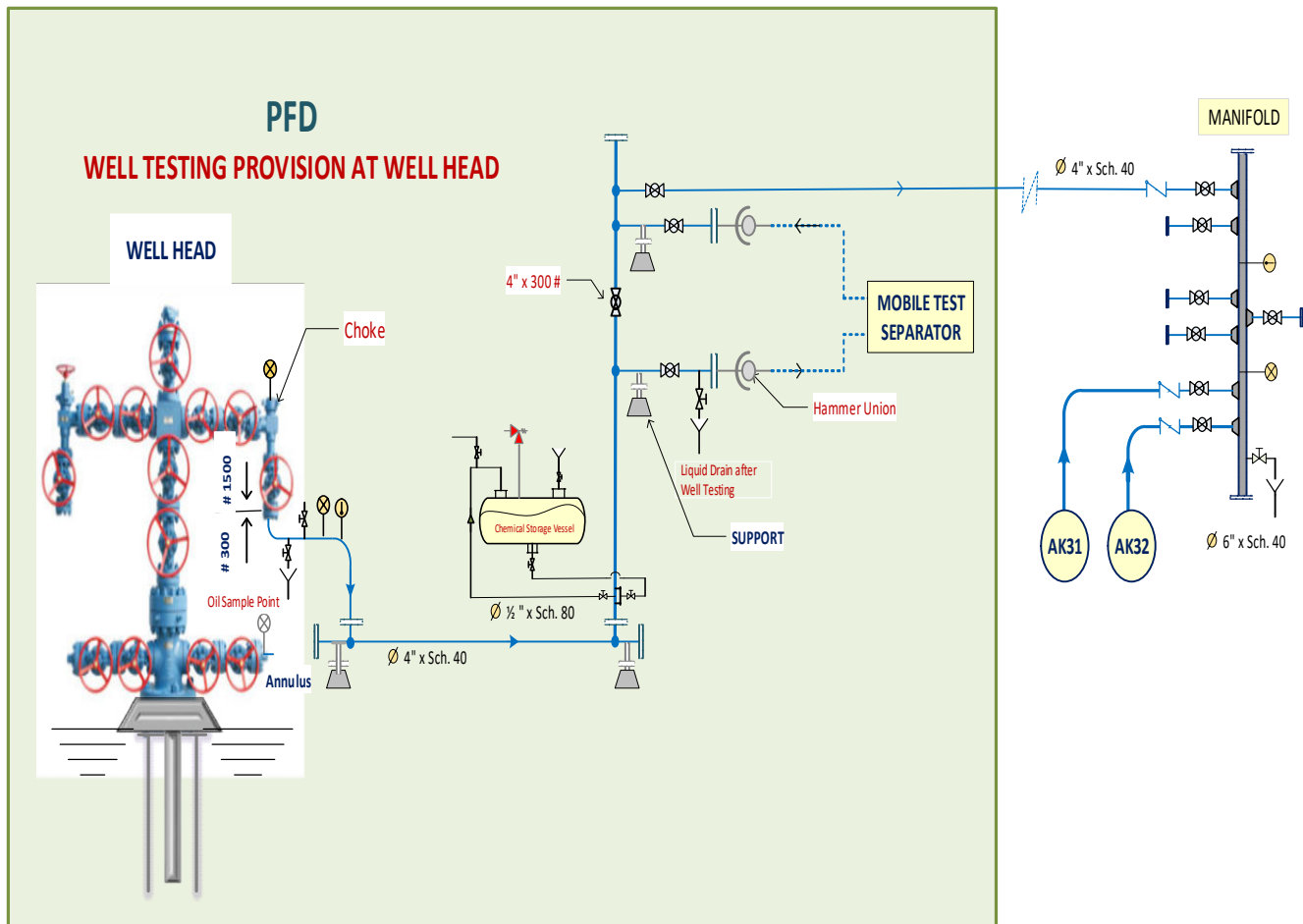


Fig 1: PFD of well site showing provision for hook up of Mobile test Separator

8.0 MOBILE TEST SEPARATOR HOOK-UP PROVISION

Objective:

To provide a suitable & Safe Location for Mobile test Separator Hook-up provision for Well Testing.

Scope:

Newly Drilled Well of SunPetro.

Description:

Provision shall be made in Flowline for Well Testing at regular Interval or as per requirement.

Testing point shall be provided at suitable distance of 30m from the well.

A hardened area shall be marked for parking Mobile Test Unit of Dimension 35' x 10'

Specification:

Inlet, Outlet & Isolation Valves: (ASME-B 16.5/ API 6D)

Reduce Bore Ball Valves, 4 x 300 #,

Studs shall be ANSI-B 16.5

Deep galvanised.

3/4' x L=110 mm, no: 8 for each Flange.

Responsibility Matrix

No	Description	Responsibility		Remark
		SPPL	Cont.	
1	Design Drawing	√	--	
2	Fabrication of Test Point	--	√	
3	Supply of Valves	--	√	
4	PG points including Pressure gauge	--	√	
5	Fabrication of Support	--	√	
6	QA / QC	√	--	
7	Hydro Test	--	√	
8	Surface Coating	--	√	
9	Parking Area Hardening	--	√	

D) HSE (Waste Disposal)

9.0 Scope of Work for Waste Management:

SunPetro intend to carry out disposal of waste drill cutting (Solid waste) / drilling fluids effluents (liquid waste) generated during drilling and testing of wells in Gujarat.

The bidder scope is collection, transportation and disposal of the above wastes following all relevant statutory provisions and applicable guidelines/rules issued by State/Central Pollution Control Board from time to time.

Broad scope of work shall include but not limited to any or all the following:

1. Bidder shall identify the disposal site approved by State Pollution Control Board (SPCB) or SPCB approved Treatment Storage Disposal Facility (TSDF) for disposal of drill cutting waste (Solid waste) collected from SunPetro's drill sites. Make all arrangements for the TSDF membership with nearby GPCB approved disposal facility.
2. Bidder shall collect the drilling liquid effluent from the waste pits at drill sites, transportation to the State Pollution Control Board approved CETP arrangement by contractor & proper treatment of the same at the CETP following statutory provisions, testing if required at CETP, preparation of Reports, Certificates etc., complete as per Scope of Work, terms & conditions of the contract and instructions of Engineer in Charge. Charges for testing / disposal etc. at CETP.
3. Bidder is also responsible for proper waste disposal and shall deal with Government and Environment authorities and indemnify Company against any claims from Local Government Authorities or State Government Authorities or National level Government Authorities and Regulatory Bodies. In case of any claim for penalties from authorities/ GPCB for not handling waste properly, bidder will be liable to pay the damages and carry out rectification free of cost.
4. Bidder is responsible to provide the required number of equipment as per operational requirement (like pumps to lift the liquid waste from waste/effluent pits, tankers, skips, vaccum trucks, excavator etc.) and personnel to offload the drilling fluid effluent/ drill cuttings from the waste/effluent pit and fill in the tanker or other suitable containers and transport them to bidder's designated disposal location duly approved by SPCB or TSDF/CETP/IHWMP.
5. Bidder shall also provide the necessary transportation by tankers/tank lorries/suitable container on daily or need basis to transport the drilling fluid effluent/ Drill cuttings from the drilling location to the SPCB approved disposal site/ TSDF/CETP/IHWMP for treatment and proper waste disposal and also transport the empty tankers from the disposal sites to SunPetro's drill site.
6. Bidder shall provide a qualified and experienced Supervisor at drill site apart from the team of personnel required for carrying out the work including operators, drivers and maintenance team etc.

Note: Bidder shall comply with "Guidelines for Disposal of Solid waste, Drill cuttings, Drill fluids for offshore and onshore drilling operations" notified by MoEF dated 30/08/2005, for disposal of non-hazardous drill cuttings and drilling fluid effluents or else shall follow Construction & Demolition Waste Management Rules 2016, Solid Waste Management Rule 2016, if applicable. Further, the disposal site for disposal of Non-Hazardous Drill Cuttings shall be arranged by the contractor at his own cost. All necessary statutory approvals/ clearances from SPCB, local bodies shall be obtained by the contractor this regard and copy of such approvals shall be submitted to SunPetro. Disposal shall be carried out in compliance of all applicable Govt regulations / provisions.

S. No.	Description	Units	Quantity/Well
1	Collection, packing & labelling of drilling liquid effluent from the waste pits at drill sites, transportation to the State Pollution Control Board approved CETP arrangement by contractor & proper treatment of the same at the CETP following statutory provisions, testing if required at CETP, preparation of Reports, Certificates etc., complete as per Scope of Work, terms & conditions of the contract and instructions of Engineer in Charge. Charges for testing / disposal etc. at CETP and any other activity required to complete the work are to be included in the quoted rates.	M3	1000
2	(Drill Cuttings categorized as Non-Hazardous in the tests conducted by BPRL) Removing drill cuttings from the waste pits at drill sites, drying by making suitable arrangements at drill site, Collection of Dried drill cuttings, packing & labelling if required, transportation to the disposal site arranged by contractor & proper disposal of the drill cuttings at the disposal site, including preparation of Reports, Certificates etc., obtaining necessary clearances and statutory approvals etc with respect to disposal of the drill cuttings, if required, complete to the satisfaction of Engineer in Charge as per Scope of Work. Charges for testing / disposal etc at disposal site and any other activity required to complete the work are to be included in the quoted rates.	Ton	300

ANNEXURE-2

REVISED PRICE SCHEDULE

Bidder has to provide price of all items as indicated in price schedule below for all the services required under Integrated Drilling Rig Services as per SOW in Tender & mentioned in Bulletin herein.

Sr No	Description	Evaluation quantity	Unit Rate (INR)	Additional Rate per Meter for Integrated Drilling Services
1	Mobilization of Integrated Drilling Services (Lump sum rate)	1		
2	De-mobilization of Integrated Drilling Services (Lump sum rate)	1		
3	<p>Lump sum rate for Civil, drilling a well of 1500 M MD well having 2 casing policy using the Integrated services (Rig + Cementing + Mud services + Drill Bits + Casings +Casing Accessories+ Well Head & X-Mass Tree Assembly +Standard Logging Suit (High Resolution Latro Logging + Compact COMBO + Gamma Ray + Six Arm Caliper, CBL, VDL, Gama Ray & Cement Channel Analyzer, average perforation of 10m per well using 4 ½” gun, 5 SPF, using deep penetration RDX charges (70”) using CCL & 3 3/8” gun, 5 SPF, using deep penetration RDX charges (40”) using CCL, Well activation services, Chemical Injection, etc. Detailed as per SOW.</p> <p>12 ¼” hole- 600 m MD 8 ½” hole 600 to 1800 m MD</p> <p>(Inclusive of all Drilling Tangible Materials)</p>	6		
4	<p>Lump sum rate for providing required directional drilling equipment & personal services for from KOP</p> <p>a. 12 ¼” HOLE :500 MD b. 8 ½” HOLE:500 MD</p>		a. b.	<p>a. 12 ¼” Hole per meter beyond 500 m: _____</p> <p>b. 8 ½” Hole per meter beyond 500 m:</p>
5	Operating Rate [R-I (Rate- 1)] (Including Integrated Drilling Services)	1		
6	Standby Rate [R-II (Rate-2)]- (Including Integrated Drilling Services)	1		
7	Operating Day Rate (Rig, Rig Services And Rig Crew Only)	1		
8	Stand By Day Rate (Rig, Rig Services and Rig Crew Only)	1		
9	Inter location charges (cluster movement within 100 m cellar to cellar)	1		
10	Inter location charges (101m-5km)	1		

11	Inter location charges (5.01Km – 10km)	1		
12	Inter location charges (10.01km-15km)	1		
13	Inter location charges (15.01km-30 km)	1		
14	Inter location charges (per km above 30-50 km.	1		
15	Rig move per km beyond 50 Km	1		

Optional Logging Tools Cost

Sr No	Description of service			
1	Charges for	Dipole Sonic Tool		
		Nuclear magnetic Resonance Log		
		Side Wall Core with GR (24 samples)		
		Dynamic Formation Tester Tool with GR (Modular)		
		Gamma Ray Spectrometry Tool		
		Full Bore Resistivity Imager		
2		3D Resistivity		
3		Elemental Concentration Log		
4		Cased hole Reservoir Saturation Tool (RST / RMT-GR)		
5		Free Point Indicator		
6		Bridge Plug /Packer/ Cement Retainer Setting Tool including junk basket		
7		Radial Cutting Torch		
8		Motorized Coring Tool (24 samples)		
9		Dual Packer Module of – Formation Tester- 350° F		
10		Insitu Fluid Analyzer Module of Formation tester		
11		Perforation for Cement Squeeze		
12		Tubing Puncture		
13		Tubing Cutter		
14		Casing Cutter		
15		Split shot Cutter		
16		Colloidal/ Severing Service		
17		Back-off Services		

Note for All of above:

- The rates are inclusive of GST. GST shall be extra at actual.
- The above Integrated Services Rates must be inclusive of all consumables (tangible drilling materials) required in Drilling Well for define range of depth and it is to be supply as per mention Technical Specification and Scope.
- The above quantity is for evaluation purpose only. Payment shall be made as per actuals. There is no firm commitment for no. of wells.
- Any additional services / items required which are outside scope of work would be provided by successful bidder, however the rates shall be finalized based on mutual discussion between SunPetro and successful bidder which will be inline with item rates as quoted above and contract terms & conditions.

- Casing size is as per below:

Sr nos	HOLE SIZE	CASING SIZE
1	17 ½"	13 3/8"
2	12 ¼"	9 5/8"
3	8 ½"	7" OR 5 ½" Or 5 ¾"

Note: Casing size may change considering well design requirement but limited to hole size & casing requirement mention above table.

- Payment Terms:
Payment of the correct / undisputed / Certified invoice supported with job sheet / field ticket

/ any other relevant document, which is jointly signed by Engineer In-charge/ Company representative along with the representative, shall be made within Thirty (30) working days' period after receipt of invoice unless the Company disputes the invoice or a part thereof.

a) Milestone payment for two casing policy wells, as per below:

- 5% of payment shall be released at the conductor casing.
- 35% of payment shall be released at the end of 1st casing.
- 35% of payment shall be released at the end of 2nd casing.
- 25% payment to be released on completion of well.

b) Milestone payment for three casing policy wells, as per below:

- 5% of payment shall be released at the conductor casing
- 20% of payment shall be released at the end of 1st casing
- 25% of payment shall be released at the end of 2nd casing
- 25% of payment shall be released at the end of 3rd casing
- 25% payment to be released on completion of well.

In case of any variation in drilling depth, the rates will be mutually agreed based on the quoted above