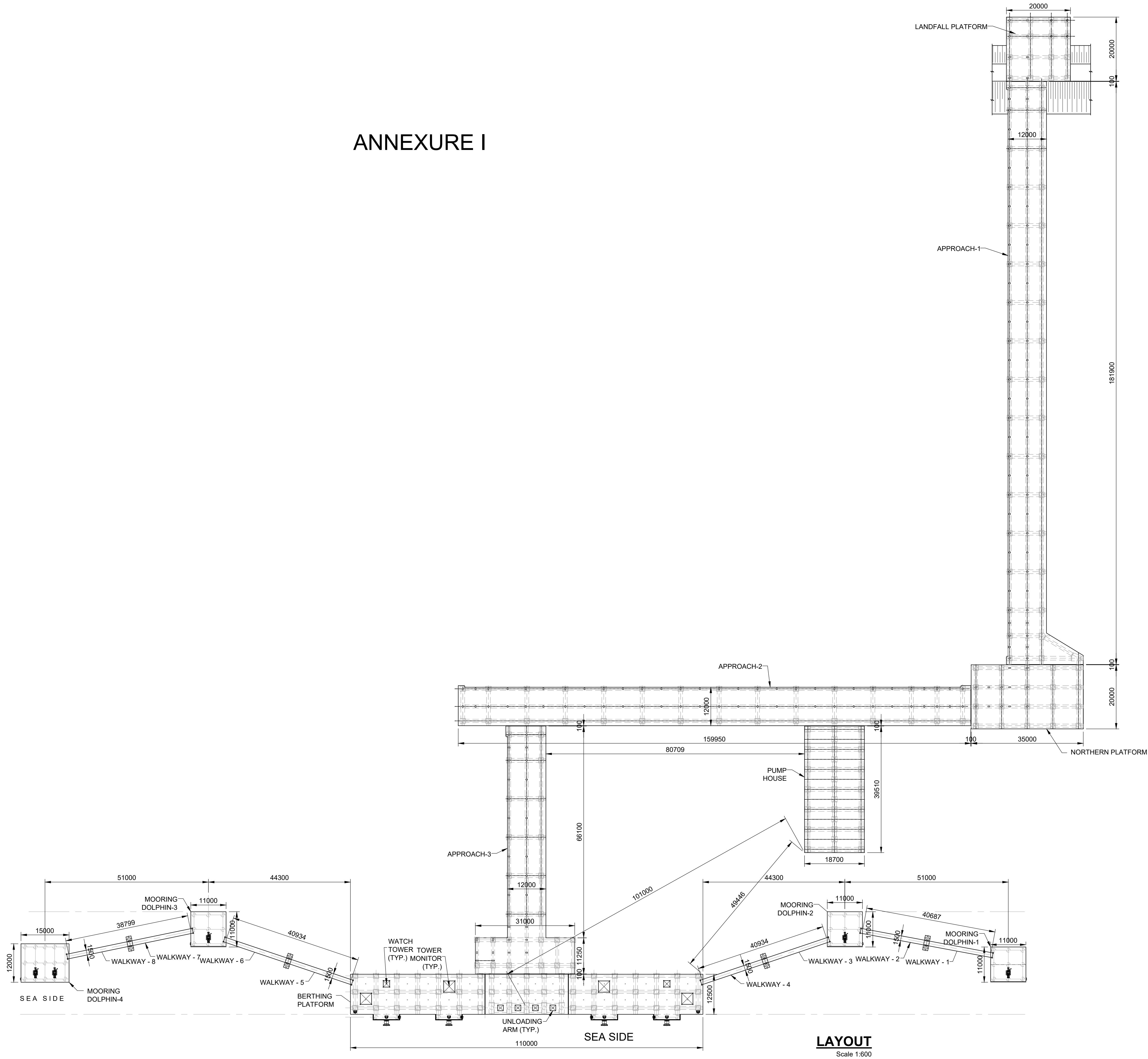


ANNEXURE I



NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.
- ALL LEVELS ARE IN METERS, UNLESS OTHERWISE SPECIFIED.

REV.	DATE	FIRST ISSUE	DESCRIPTION	HY	RNR	JKA
00	10-03-22					
				DR	CH	APR

REVISION DETAILS

OWNER:

DEENDAYAL PORT TRUST

PROJECT:

CONSTRUCTION OF OIL JETTY
NO. OJ 8 AND OJ 9
AT OLD KANDLA

PART/DISCIPLINE:

STRUCTURE

DIMENSIONS ARE IN
MILIMETERS

PURPOSE:

DETAIL DESIGN

DRAWING TITLE:

OIL JETTY - OJ 8
MARINE LAYOUT

DRAWING NUMBER:

60547559-DRG-D-0000-CS-1013

SHEET 03 OF 03

REV. 00

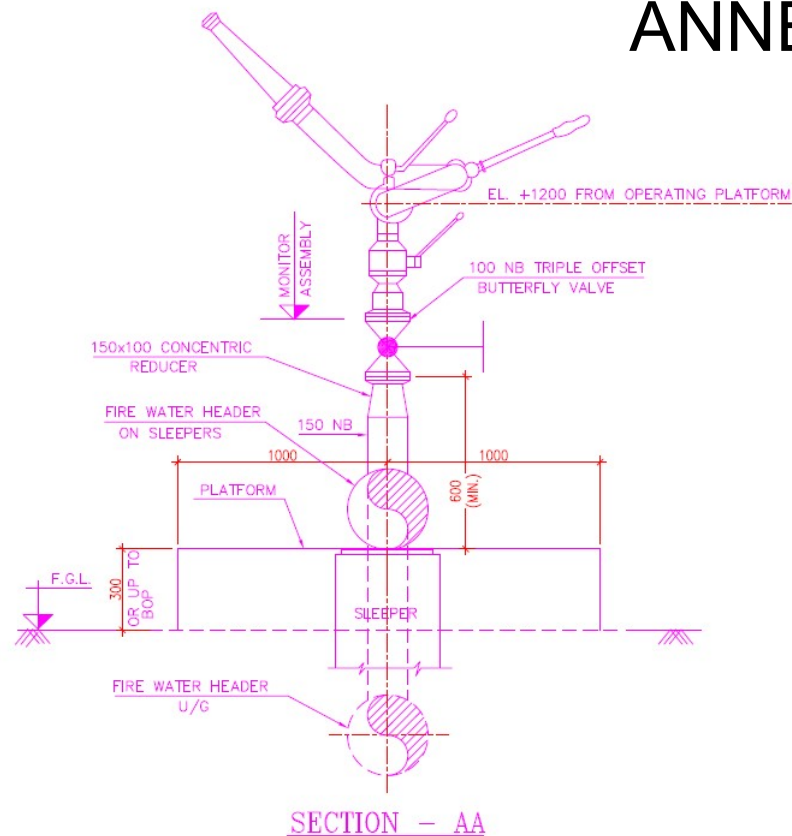
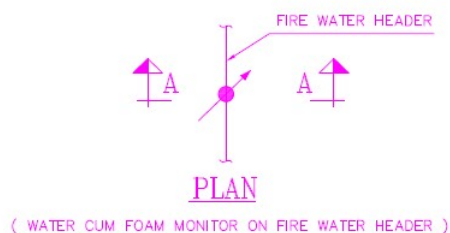
URS

URS Scott Wilson India Pvt. Ltd
(An AECOM company)



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

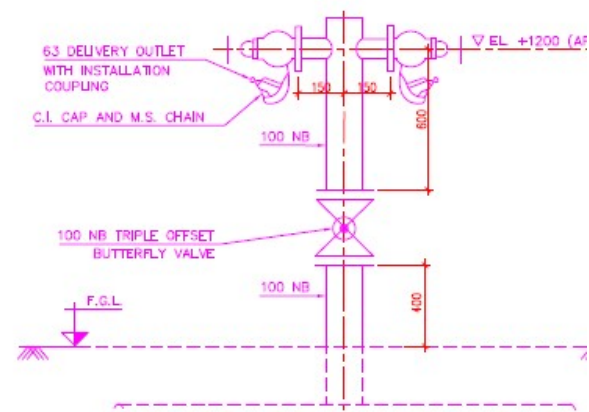
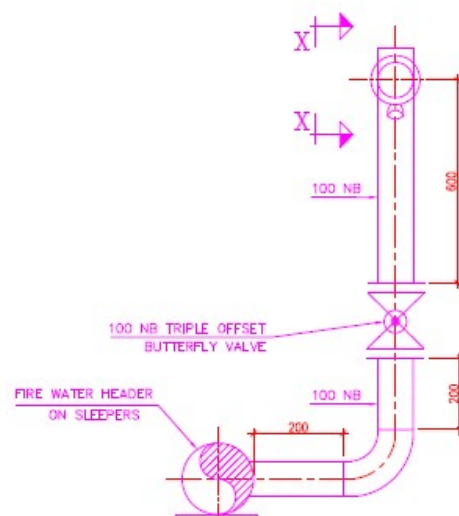
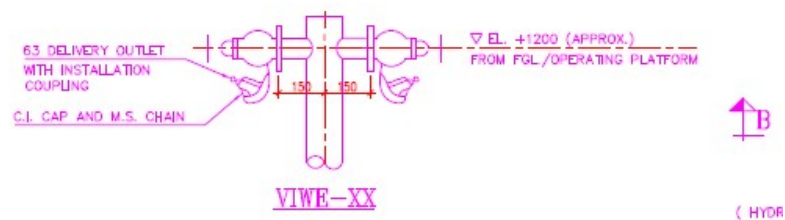
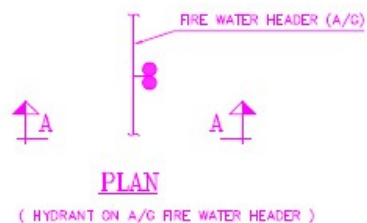
ANNEXURE II



Typical Installation details of Water/ Water cum Foam Monitor



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority



Typical Installation details of Fire hydrant



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

DESIGN FACTOR – 0.5

PIPELINE/PIPING DESIGN CODE		IS : 1239-I								IS : 3589									
ITEM	NOMINAL DIAMETER (INCHES)	0.50	0.75	1.00	1.50	2.00	3.00	4.00	6.00	8.00	10.0	12.0	14.0	16.0	18.0	20.0	22.0	24.0	
PIPE	WALL THICKNESS (MM/SCH)	HVY	HVY	HVY	HVY	HVY	HVY	HVY	HVY	*									
	MATERIAL	IS-1239 (BLACK) (CEMENT LINED)								IS-3589 GR.330 (CEMENT LINED)									
	DIMENSION STD.	IS-1239-I								IS-3589									
	METHOD OF MANUFACTURE, ENDS	C. WELDED PE				BE, C. WELDED				BE, WELDED									
FLANGE	MATERIAL AND GRADE	ASTM A 105				ASTM A 105 (CHARPY)													
	TYPE, FLANGE FACING	SW. RF 125AARH				SO, RF 125AARH													
	DIMENSION STD.	B16.5																	
BLIND FLANGE	MATERIAL AND GRADE	ASTM A 105				ASTM A 105 (CHARPY)													
	FLANGE FACING	RF 125AARH																	
	DIMENSION STD.	B16.5																	
BLANK	MATERIAL AND GRADE	ASTM A 105				ASTM A 105 (CHARPY)													
	FLANGE FACING	FF 125AARH																	
	DIMENSION STD.	ASME B16.4B				B16.5													
	TYPE	FIG.8 FLANGE																	
BOLTING	STUD BOLTS (FULLY THREADED)	A 307 Gr. B, B-18.2																	
	NUTS (HEAVY HEXAGONAL)	A 536 Gr. B, B-18.2																	
GASKET	TYPE ,MATERIAL AND Dmn. STD.	RING CAF B-16.21, IS-2712 Gr. W/3 SPIRAL WOUND, GRAPHITE FILLED																	
ELBOW-90 ELBOW-45	MATERIAL	ASTM A 105				ASTM A 234 Gr. WPB (CHARPY)													
	END DETAIL	SW,3000#				BW, 1.5D													
	DIMENSION STD.	B-16.11				B-16.9													
T-EQUAL T-RED	MATERIAL	ASTM A 105				ASTM A 234 Gr. WPB (CHARPY)													
	END DETAIL	SW,3000#				BW													
	DIMENSION STD.	B-16.11				B-16.9													
CAP	MATERIAL	ASTM A 105				ASTM A 234 Gr. WPB (CHARPY)													
	END DETAIL	SCRF3000				BW													
	DIMENSION STD.	B-16.11				B-16.9													
OTHER	MATERIAL	ASTM A 105				ASTM A 234 Gr. WPB (CHARPY)													
	END DETAIL	SW-3000				BW													

Piping Material Specification utilities 150# A3A



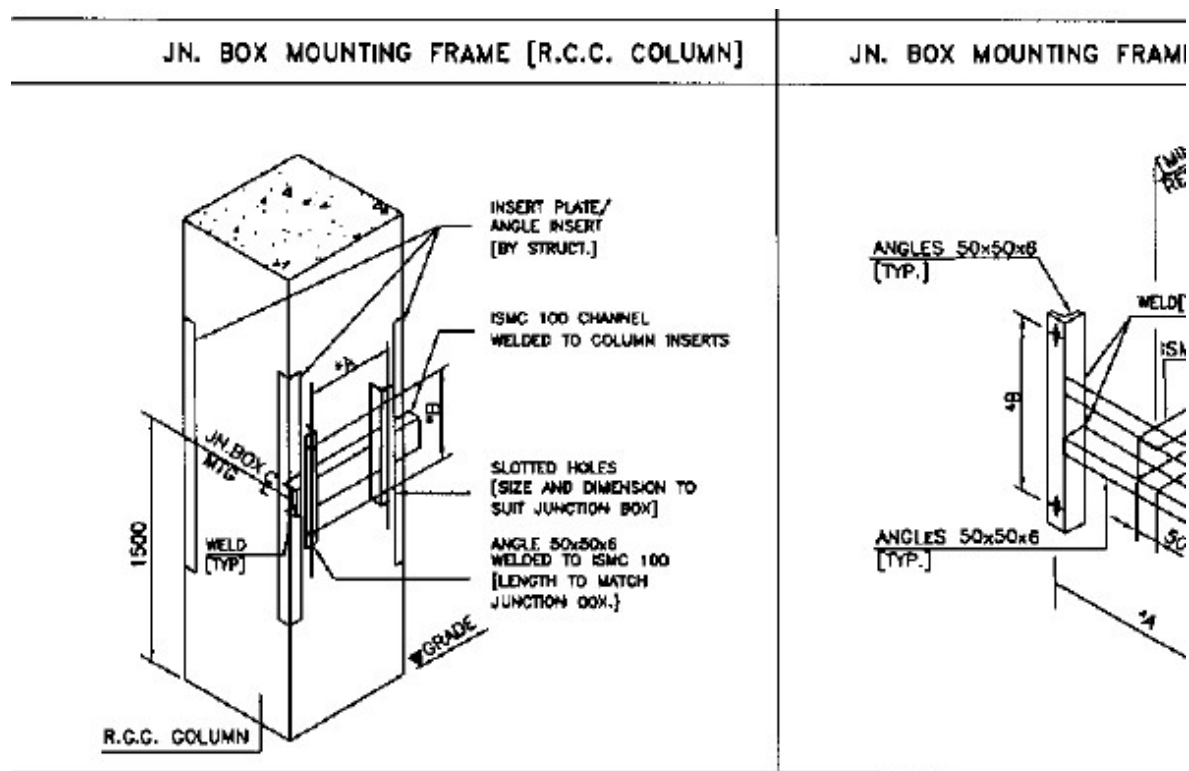
Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

VALVES						
TYPE	SIZE	RATING	ENDS	Dmn STD.	BODY MATERIAL	TRIM MATERIAL
CHECK	BELOW 2"	800 #	SW	BS 5352	ASTM A 105	13 % CR—STELLITED
	2" TO 24"	150 #	RF	BS 1868	ASTM A 216 GR WCB.	13 % CR
GLOBE	BELOW 2"	800 #	SW	BS 5352	ASTM A 105	13 % CR—STELLITED
	2" TO 12"	150 #	RF	BS 1873	ASTM A 216 GR WCB.	13 % CR
GATE	BELOW 2"	800 #	SW	API 602	ASTM A 105	STELLITED, STEM—13 % CR
	2" TO 24"	150 #	RF	API 600	ASTM A 216 GR WCB.	13 % CR

Valve Material Specification



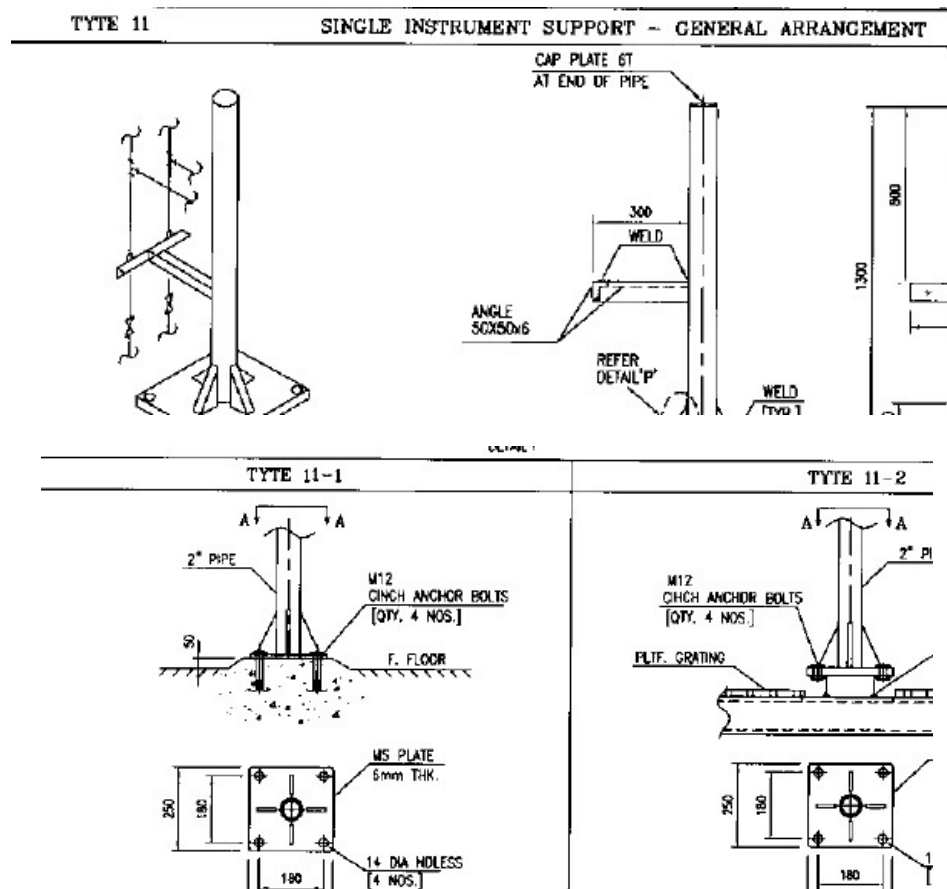
Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority



Typical Support Details for Junction Boxes



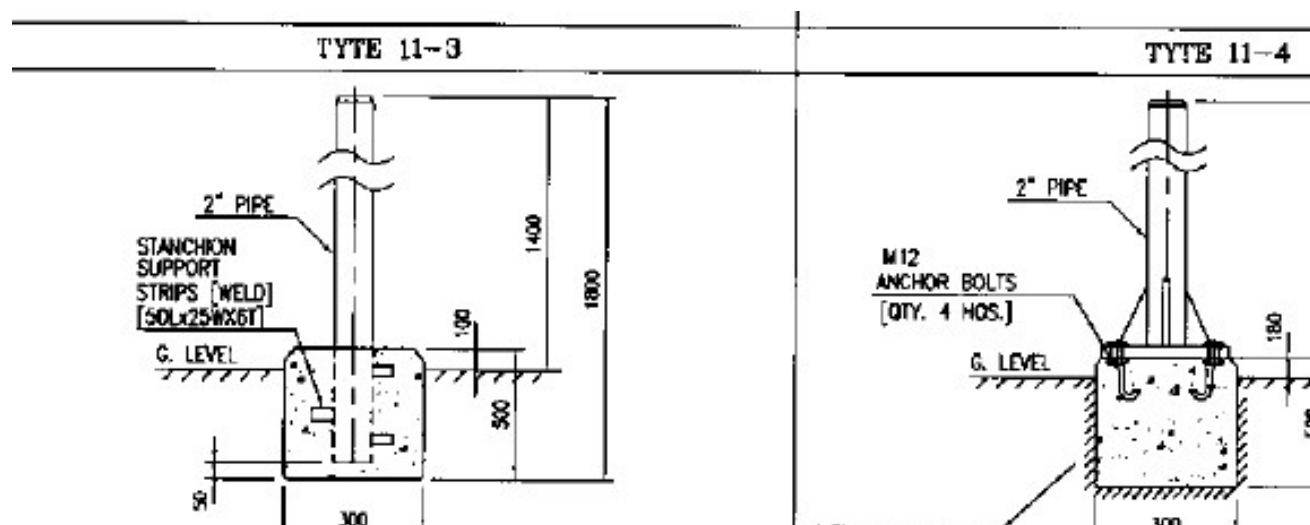
Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority



Typical Instrument Support Single Support



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority



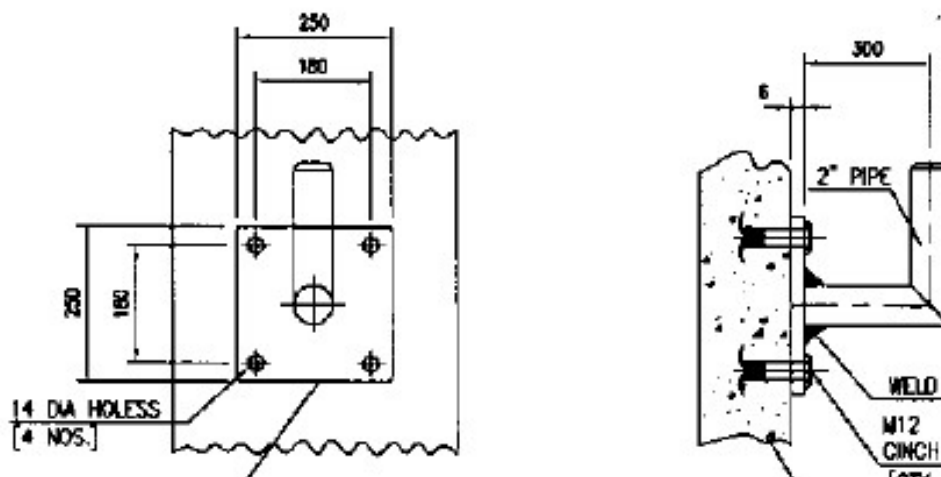
Typical Instrument Support Single Support



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

TYTE 12

CONCRETE COLUMN MOUNTING



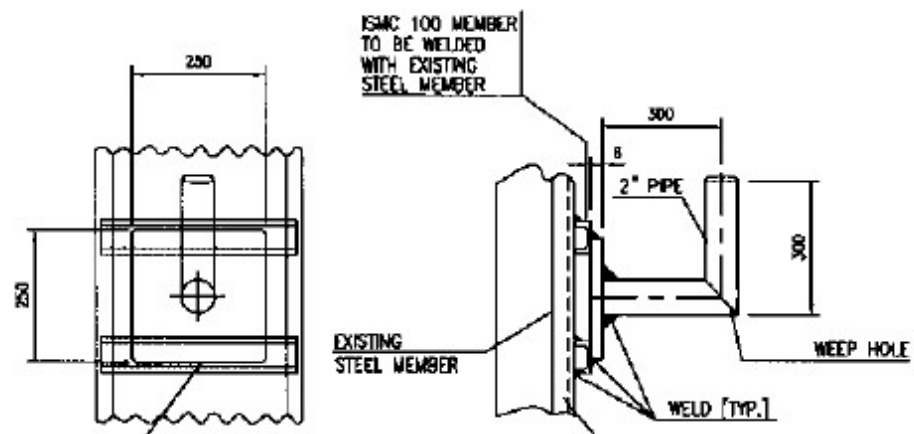
Typical Concrete Column Mounting



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

TYPE 13

CONCRETE COLUMN [WITH ANGLE INSERT] MOUNTING



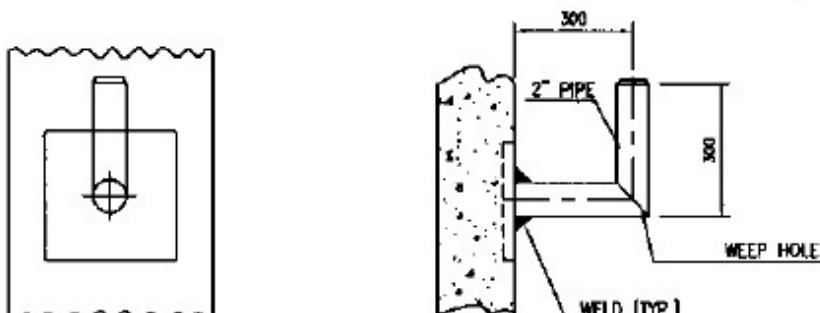
Typical Concrete Column Mounting



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

TYPE 14

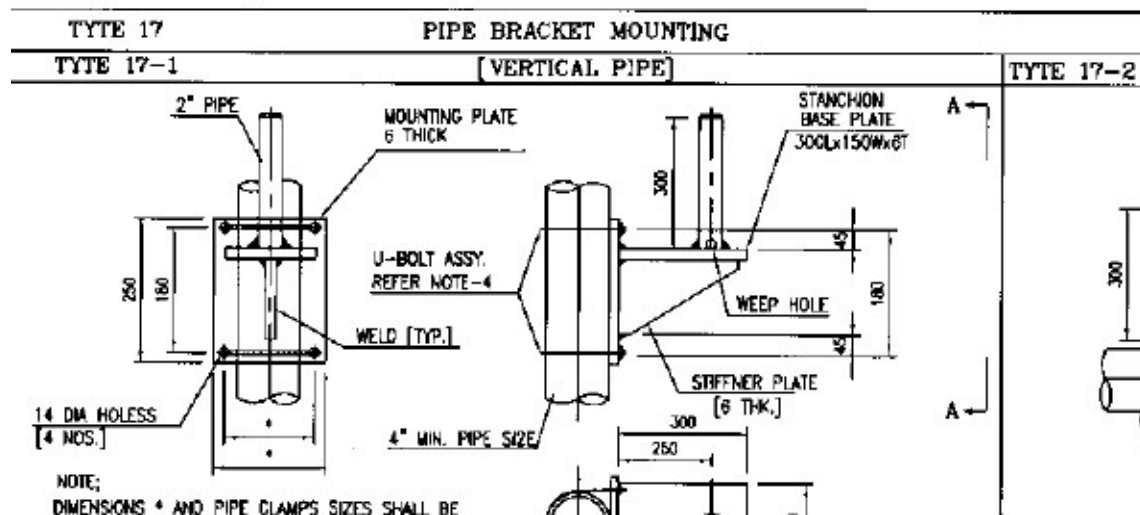
CONCRETE COLUMN [WITH INSERT PLATE] MOUNTING



Typical Concrete Column Mounting



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority



- NOTES:-
1. ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE SPECIFIED.
 2. PIPE MATERIAL SHALL BE IS:239 HEAVY GRADE AS A MINIMUM.
 3. 6mm DIA WEEP HOLE SHALL BE PROVIDED AT LOW POINT.
 4. U-BOLT ASSEMBLY SHALL BE OF MIN. M12 SIZE WITH NUT AND
 5. ALL WELD SHALL BE 3mm FILLET WELD FULL STRENGTH.
 6. ADD 50mm WHERE-EVER ARE INSULATION IS PROVIDED.
 7. BOLT SHALL BE TURNED FROM MS ROUNDS CONFORMING TO IS

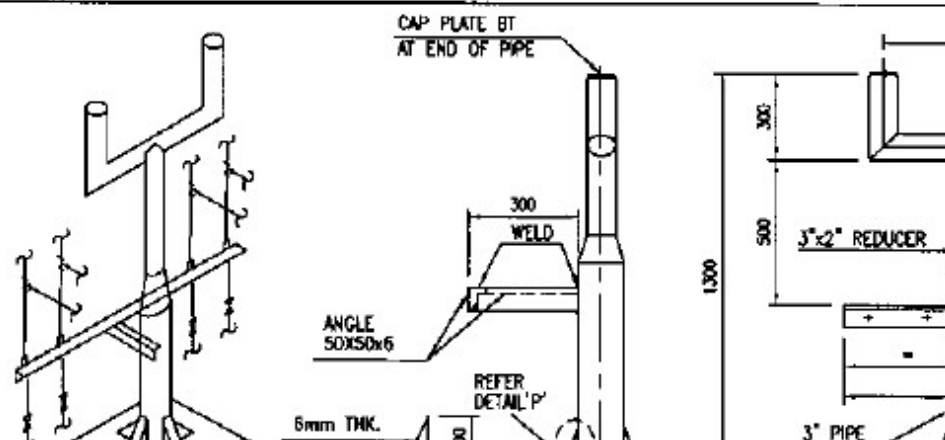
Typical Steel Column Mounting



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

TYPE 21

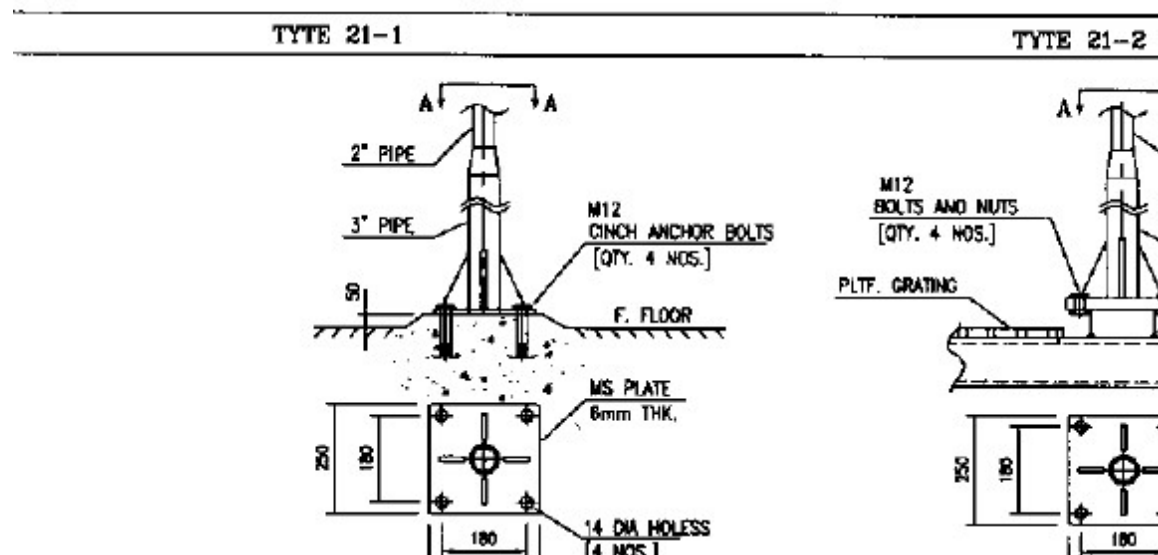
TWO INSTRUMENT SUPPORT – GENERAL ARRANGEMENT



Typical Instrument Support Two Instrument



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

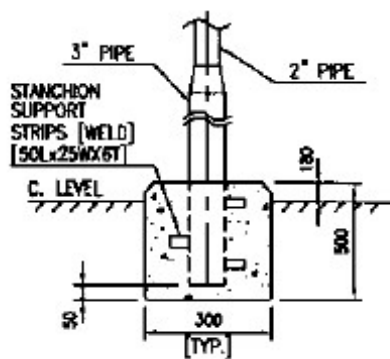


Typical Instrument Support Two Instrument

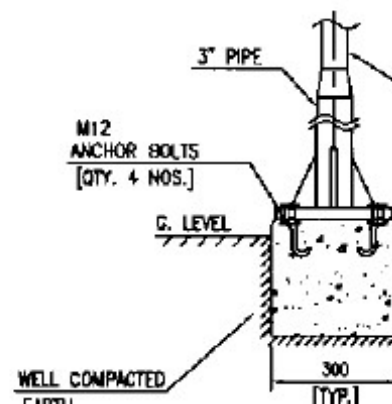


Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

TYTE 21-3



TYTE 21-4



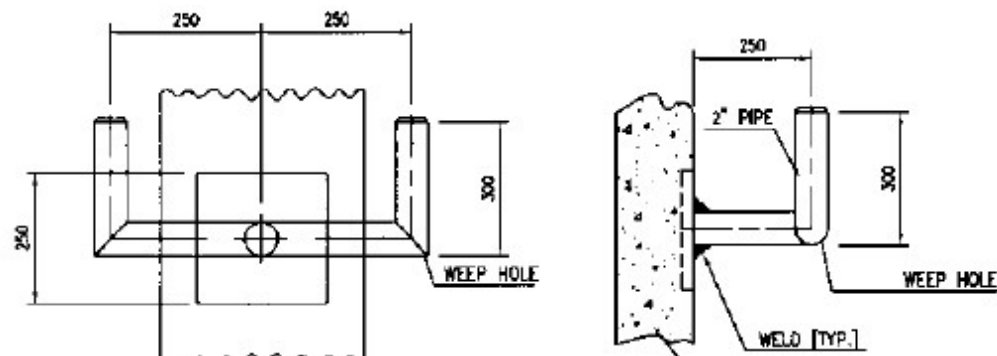
Typical Instrument Support Two Instrument



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

TYPE 24

CONCRETE [WITH INSERT PLATE] MOUNTING



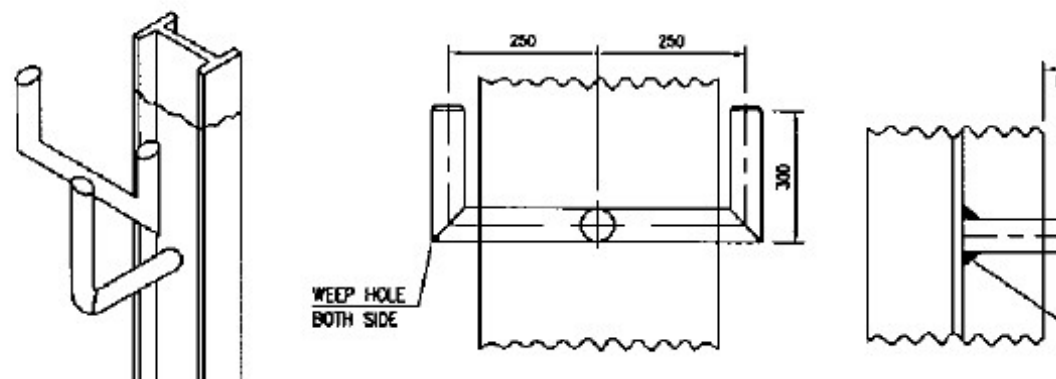
Typical Concrete Column Mounting



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

TYPE 26

STEEL COLOUMN MOUNTING [WEB FACE]

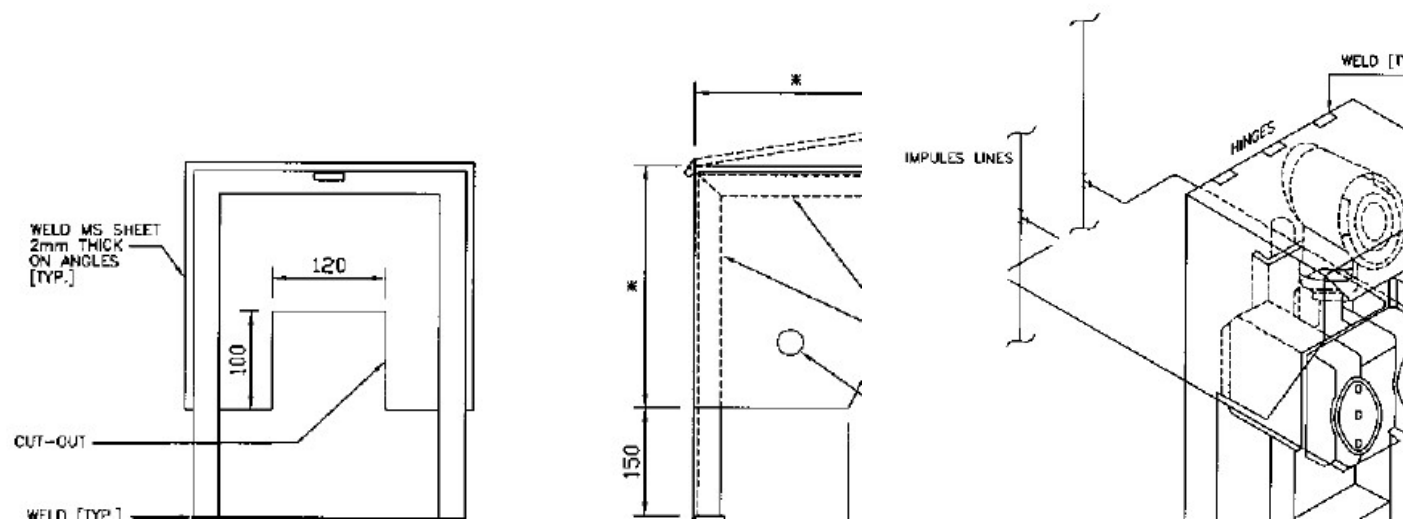


- NOTES:-
1. ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE SPECIFIED.
 2. PIPE MATERIAL SHALL BE IS:1239 HEAVY GRADE AS A MINIMUM.
 3. 6mm DIA WEEP HOLE SHALL BE PROVIDED AT LOW POINT.
 4. U-BOLT ASSEMBLY SHALL BE OF MIN. M12 SIZE WITH NUT AND
 5. ALL WELD SHALL BE 3mm FILLET WELD FULL STRENGTH.
 6. ADD 50mm WHERE-EVER ARE INSULATION IS PROVIDED.
 7. BOLT SHALL BE TURNED FROM MS ROUNDS CONFIRMING TO IS :
 8. NUTS AND WASHERS SHALL CONFIRM TO IS : 1363 AND IS : 31

Typical Steel Column Mounting



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority



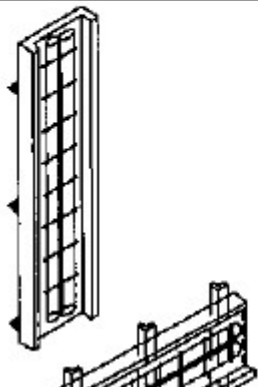
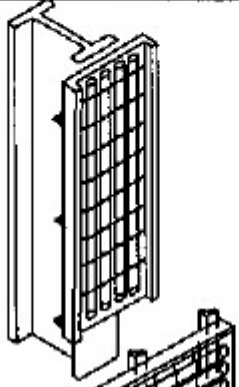
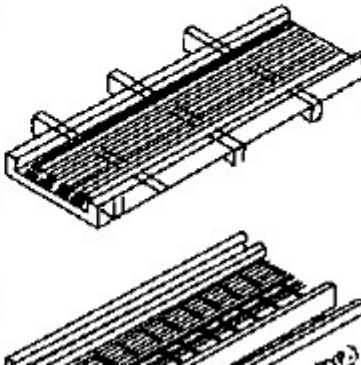
1. ALL DIMENSIONS ARE IN mm.
2. *-TO SUIT INSTRUMENT DIMENSIONS.
3. HINGES SHALL BE OF STAINLESS STEEL.
4. A MINIMUM OF TWO COATS PAINTING SHALL BE CARRIED
A MINIMUM OF ONE COAT OF RED OXIDE ZINC CHROMA
THE COLOUR OF THE PAINT SHALL BE AS PER IS-5.

Typical Fabricated Canopy for Instruments



Project Title: Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

PERFORATED TRAY-SUPPORTING DETAILS

TRAY ROUTING EDGEWISE HOR./ VER RUNS	TRAY ROUTING EDGEWISE IN HOR./ VER RUNS	TRAY ROUTING WIDTHWISE IN HORIZONTAL RUNS	CON IN
			

NOTES:

1. ALL DIMENSIONS ARE IN mm.
2. PERFORATED TRAY SHALL BE SUPPORTED AT EVERY 1000mm (TYP.) INTERVAL FOR HORIZONTAL AS WELL AS VERTICAL RUNS USING MINIMUM ANGLE SIZE AS 40x40x5 OR CONTINUOUS CHANNEL SUPPORT MC50.
3. CLAMPING OF CABLES ON PERFORATED TRAYS SHALL BE AT EVERY 500 mm ON VERTICAL RUNS AND EVERY 1000mm ON HORIZONTAL RUNS.
4. PERFORATED TRAYS SHALL BE SUPPLIED WITH CLAMPS, BOLTS/NUTS AND WASHER OF GALVANISED MILD STEEL.
5. GALVANISING SHALL BE AS PER 475B(86um/480g/m²)

CAPACITY OF

TRAY WIDTH (W)	FLANGE HEIGHT (H)
60	20
100	30
150	30
200	30

Typical Perforated Tray Supports & Cable Clamping Details

Annexure-A

Project Title- Design, Supply, Installation, Testing & Commissioning of Fire-fighting system and associated facilities including Operation & Maintenance for a period of five years as per OISD-156 at Oil Jetty No. 08, Kandla, of Deendayal Port Authority

SL.No	Ref: Tender Clause No.	Bidder's Queries	DPA's Clarification
1	NA OJ Layout main drawing	Drawing- Kindly share the readable layout of the complete Oil jetty No.8 (OJ 08) drawing showing the jetty berth, jetty approach road, proposed location of the pump house, substation, etc., along with the dimension and with the scope demarcation.	The details have been attached at Annexure I.
2	Vol -II of CL.No.5.3.32 (Page No.61)	The control room shall have emergency power fed by DG. We understand that the Substation with Emergency DG Set will be in DPA scope . Bidder need to lay the power cable from Substation to Control Room only. Kindly confirm our understanding	The DG set, if required, shall be under DPA scope.
3	Vol-I Appendix -5 CL.No.3 (Page No.112)	Performance Guarantee Parameters. We understand the parameters defined in this Appendix are not related to Fire Protection System and hence Not Applicable . Kindly confirm our understanding .	Revised Appendix -5 has been attached.
4	Vol-I Section -VI (GCC) CL.No.7.4.3. 1 (Page No.130)	During the initiation of O & M activity , the Contractor shall furnish tentative list and supply wherever and whenever required of spares required for the normal operation and maintenance of the Facilities , for a period of five years. We understand the Bidder shall include the price of all the Spares required during the 5 Years Operation and Maintenance Period along with the Man Power and Bidder need to consider this as CAMC (Comprehensive Annual Maintenance Contract) for 5 years after the date of Completion the Commissioning of the System .	Tender condition in this regard is amply clear and the same shall prevail.

		Kindly confirm our understanding .	
5	Vol-I Section -VI (GCC) CL.No.7.4.4. 1 (Page No.131)	<p>The Contractor shall supply along with the Equipment the oils, grease & lubricants required for the initial fill including flushing liquor and also chemicals for pickling , etc. , well in advance , for commissioning of the Equipment .</p> <p>We understand that this clause is not applicable for Initial Fill , Quantity required for Commissioning and for flushing of High Speed Diesel and Foam Concentrate . Kindly confirm our understanding .</p>	Kindly refer the clause no 24.3 of Vol I Tender Document for EPC Contract and point i of Cl. 1.2 in Vol II Employers Requirements and Annual Operation & Maintenance Contract.
6	Vol-I Section -VI (GCC) CL.No.22.6.4 .1 (Page No.157) Vol-II Part -B O& M Contract CL.No. g (f) (Page No.174)	<p>Land will be allotted on chargeable basis for the purpose of site office & stores.</p> <p>For office set up all the office stationery , furniture , computer , printer , etc. as required to be arranged by the contractor at his own cost . However , accommodation for office purpose (if available) shall be provided on chargeable basis as per approved scale of rates of DPA .</p> <p>Kindly share the charges as the same are neither given in Tender document nor at DPA portal .</p>	During construction phase and during O&M period, land will be allotted free of cost subject to availability, for site activities and offices.
7	Vol-I Section -V Appendix-III CL.No.2.1 (Page No.109)	<p>Terms Of Payment : Submission and approval of engineering drawings & engineering data - 5 % Supply of the respective Item / Equipment / materials to the site and approval by the EIC - 65 % Fabrication / Installation / Erection , Testing , Commissioning , painting and complete in all aspects - 25 % Demobilization and handing over of the site - 5 %</p> <p>We are proposing the following mentioned payment terms : - Submission and approval of engineering drawings & engineering data - 5 %</p>	Not acceptable. Tender conditions alone shall prevail.

		<p>Supply of the respective Item / Equipment / materials to the site and approval by the EIC - 70 %</p> <p>Fabrication / Installation / Erection , Testing , Commissioning , painting and complete in all aspects - 20 %</p> <p>Demobilization and handing over of the site - 5 %</p> <p>Kindly accept our request .</p>	
8	<p>Vol-I Section -VI (GCC)</p> <p>CL.No.29.1</p> <p>(Page No.163)</p>	<p>The Facilities will be commissioned in 15 months from the Effective Date of the Contract . " The Performance Bank Guarantee (BG) shall be submitted by the contractor within 30 days of signing of Contract "</p> <p>As per Cl . No. " U " from NIT (page No. 11) , time completion of 8 months is mentioned.</p> <p>Kindly confirm the Time of Project Completion.</p>	<p>The Completion period for the SITC part of the work shall be only 8 months and the same shall prevail for the whole tender volumes.</p>
9	<p>Vol-I Section -VII (SCC)</p> <p>CL.No.9</p> <p>(Page No.201)</p>	<p>The contractor has to arrange for Facility design & drawing Approval, Inspection & Certification from Petroleum and Explosive Safety Organization (PESO) as per OISD - 156 latest amendment from PESO or its authorized agency . The complete fire protection system at Oil Jetty No 08 , Deendayal Port Authority as per OISD - 156 will be only accepted after certification from PESO or its authorized agency The certification shall be submitted to DPA before acceptance of the system .</p> <p>We understand the PESO Approval is in DPA scope and Bidder need to provide necessary documents / drawings to DPA for getting the PESO Approval . Bidder scope is limited to accord Approval from Local Fire Authority Kindly confirm our understanding .</p>	<p>Kindly refer the clause no. 9 of SCC of Vol-I and 4.6.2 & 1.4.5 of Vol II Employers Requirements and Annual Operation & Maintenance Contract</p>

10	Vol-I Section -VII (SCC) CL.No.30 (Page No.204)	<p>Communication inside the port to be done through walki - Talki . Contractor will arrange the required no of walki - Talki for their representative and the same model (min . 06 nos) as per the requirement also to be provided by contractor to DPA , till the completion of the project .</p> <p>Since the site area is coming under Safe Zone , we understand that the said Walki - Talki sets required will be suitable for Non Hazardous Area. Kindly confirm our understanding .</p>	<p>During project execution phase (construction phase), provision of mobile shall be considered and during O&M contract provision of Intrinsically Safe Walkie-Talkies shall be considered.</p>
11	Vol-III Technical Specification for Fire Protection System Standard Specification for Fire Detection and Alarm System CL.No.4.2 (Page No.11)	<p>The Fire Alarm System shall be suitable to receive the power supply as given below : a) Voltage : 110V / 240V 6 % (field selectable) , b) Frequency : 50Hz 3 % , 1 phase Further distribution shall be vendor's responsibility . Any voltage , other than the above shall be internally derived by the vendor within the system .</p> <p>We understand that the power supply to the Fire Alarm Panel will be provided by DPA . Kindly confirm our understanding .</p>	<p>Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.</p>
12	Vol-III Technical Specification for Fire Protection System. Fire water network erection, welding, testing & painting. CL.No.6.2 (Page No.51-52)	<p>Surface shall be blast cleaned to SA 2 % .</p> <p>As per Cl . No. 1.3 (page No. 35) , the wire brush cleaning will be required for above ground piping which in contradiction to this Cl . No. 6.2</p> <p>Kindly confirm the pipe cleaning method .</p>	<p>Tender conditions shall prevail.</p>

13	Vol-III Technical Specification for Fire Protection System. Fire water network erection, welding, testing & painting. CL.No.6.5 (Page No.55- 57)	<p>c) Two pack epoxy - polyamidmio undercoat (U1) d) Epoxy high build finish paint (F1) e) Two pack aliphatic acrylic polyurethane finish paint (F2) f) Synthetic Enamel (F3)</p> <p>The color shade of these type of paints is not mentioned Kindly share the same .</p>	Tender conditions shall prevail.
14	General	We are requesting you to extend the Bid Submission Date by 2 weeks from the date of receiving the Pre - Bid Queries Clarification from DPA .	The Bid submission date shall be extended suitably after up loads
15	Vol-III Technical Specification for Fire Protection System Standard Specification for non percolating flexible fire fighting delivery hose with coupling. CL.No.2.2 (Page No.65)	<p>The material for Male and Female instantaneous type coupling shall be of Gunmetal as per IS: 903 .</p> <p>We are requesting you to accept the SS - 304 material for Coupling to avoid the theft issues after installation . The SS - 304 MOC is coming with ISI marked . Kindly accept our request .</p>	Tender conditions shall prevail.
16	Vol-III Technical Specification for Fire Protection System Standard Specification for non percolating flexible fire fighting delivery hose with	<p>The material for Delivery hose shall be rubberized fabric lined as per 3 IS : 636 TYPE A.</p> <p>As per Vol . II (page 48) , the Type - 8 hose pipe is asked . Kindly confirm the type of Hose need to be used.</p>	The material for Delivery hose shall be rubberized fabric lined as per IS: 636 TYPE B or any other higher specification without any extra cost.

	coupling. CL.No.2.2 (Page No.65)		
17	Vol-III Technical Specification for Fire Protection System Standard Specification for landing valve. CL.No.3.1 (Page No.71)	<p>Body Leaded Tin Bronze Gr . LTB - 2 of IS : 318 or Aluminum . alloy of IS designation 4225,4450 and 4600 of IS : 617</p> <p>As per CI , No. 3.0 (page 68) , the SS - 304 MOC is asked for Landing Valve body. Kindly confirm the MOC of the Landing Valve.</p>	Body Leaded Tin Bronze Gr . LTB - 2 of IS: 318.
18	Vol-III Technical Specification for Fire Protection System Standard Specification for pressure gauge. (Page No.85)	<p>Annexure - 1 Material Selection Chart for Pressure Gauge</p> <p>Kindly share the PMS (Piping Material Specification) as indicated in this Annexure - 1</p>	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.

19	Vol -II of CL.No.4.2 (Page No. 16)	<p>Brief Indicative Scope Of Work</p> <p>The Technical Data Sheet of the following mentioned products are not given in Tender Vol . III . We are requesting to share the same .</p> <ol style="list-style-type: none"> 1. CCTV System 2. NOVEC - 1230 Gas Based Clean Agent System 3. Fire Hose Reel 4.Foam Concentrate Pumps 5. Inline Balance Pressure Foam Proportionating System 6.PMS (Piping Material Specification) 7. VMS (Valve Material Specification) 8. Power and Control Cable 9.Cashion Pipe for VT Pumps 10. Foam Concentrate 11. Deluge Valve assembly. 12. Gas Detector 13. Exhaust Fans 14 .Lighting System inside the Pump 	<p>Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.</p>
20	Vol -II of CL.No.4.2 (Page No.16)	<p>Brief Indicative Scope Of Work: Suitable number of Flameproof CCTV</p> <p>Kindly confirm the location where these CCTV Cameras will be required . Also confirm that the monitor of these CCTV Cameras will be required at Control Room coming at OJ - 8 approach road .</p>	<p>Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.</p>
21	Vol -II of CL.No.4.2 (Page No.17)	<p>Brief Indicative Scope Of Work Notes : f . QRA (Quantitative Risk Assessment) hall be carried out before commencement of the work as directed by EIC .</p> <p>We understand that this is Design Built Lump - Sum project where Bidder need to Design the system as per OISD- 156 (Edition 2017) . And</p>	<p>Tender conditions shall prevail.</p>

		<p>the QRA for this project will be not required .</p> <p>Kindly confirm our understanding.</p>	
22	Vol -II	<p>Page No. 153 to 160 is not there in this Volume - II document.</p> <p>Kindly share the new file.</p>	<p>It is a typographical error. Page No 153 to 160 may be considered as "void".</p>
23	Vol -II of CL.No.4.2.5 (IX) (Page No.21)	<p>Structural guide supports & half sleeve welding in bottom of pipeline shall be provided at each structural & sleeper supports as per attached tender drawing.</p> <p>Kindly share the said drawing.</p>	<p>Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.</p>
24	Vol -II of CL.No.5.0 (Page No.35)	<p>Fire pipeline must be made of internally cement coated pipes as the sea water corrodes the pipes .</p> <p>As per OISD - 156 , the pipe with internally poly glass coating is permissible for sea water application . We are requesting you to accept the same .</p>	<p>Tender specification for Fire water pipelines is the barest minimum requirement. However, being an EPC contract the bidders can take any equivalent or higher quality specifications as per their own design. DPA may accept such higher version subject to the conditions that the bidder can not claim any weightage for upgrading specifications as per their own design. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.</p>
25	Vol -II of CL.No.5.3.1 (Page No.44)	<p>Vertical Firewater Pump</p> <p>In this project UL listed / FM Approved pumps are reqd . These Listed / Approved pump features are standard and can't be modified. We understand that UL listed / FM Approved Vertical Pumps suitable for sea water application and as per provided metrological data shall be required in this project with Listed / Approved pump features .</p> <p>Kindly confirm our understanding .</p>	<p>Tender conditions shall prevail.</p>
26	Vol -II of CL.No.5.3.1	<p>One No. foot valve having size 2 inch bigger than the suction port dia . with</p>	<p>Being an EPC contract, it is the responsibility of the contractor to</p>

	(Page No.45)	<p>strainers for each pump .</p> <p>In Vertical Turbine Fire Pump , the separate foot valve is not coming. The Impeller with strainer / bowl will be available .</p>	<p>prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.</p>
27	Vol -II of CL.No.5.3.1 (Page No.45)	<p>Additional engine starting panel preferably wall mounted , comprising of start bottom , stop bottom , ammeter , battery charging indication with necessary piping & cables to be provided at the pump room .</p> <p>The UL listed / FM Approved Pumps are coming with In - Built Controller with their standard features . Hence , separate Controller / Panel is not possible to provide .</p>	<p>Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.</p>
28	Vol -II of CL.No.5.3.8 (Page No.50)	<p>Cabinet shall be made of 3m thick FRP material with double doorframe glass covered . Glass shall be securely fitted to the doorframe in a standard manner .</p> <p>As per Cl . No. 3.1 from Vol . III , the 16 swg MS material is asked . Kindly confirm the MOC of the Hose Cabinet .</p>	<p>Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.</p>

29	Vol -II of CL.No.5.3.14 (Page No.52)	<p>Each tower monitor shall be capable of discharging required foam / water at required inlet pressure over a range of 95 mtrs respectively in horizontal direction and 45 Mtrs in vertical Direction . It is the responsibility of the Tenderer to select a suitable monitor to ensure throw of 95 m from tower using the main pump specified .</p> <p>Throw range will be as per UL / FM approved make which will be as follows : Horizontal throw @ 30 ° (2000GPM) - A) Water - 80 mtrs . B) Foam - 75 mtrs .) Kindly accept above deviation.</p>	<p>The jetty shall handle the vessel up to 1,00,000 DWT. Hence, the bidder shall consider the range in vertical and horizontal direction with respect to DWT as per OISD STD 156. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.</p>
30	Vol -I of Clause No. Y 2.2 (Salient feathers of the bid/Bid data sheet (BDS) (Page No.14)	<p>Since the work also includes AMC, the Original Equipment manufacturer shall have established own manufacturing facility in India along with in house testing & development facility.</p> <p>Since the manufacturer of UL listed / FM Approved Vertical Turbine Pumps in India are limited, we are requesting you to allow for the OEM from the globe who having the valid UL Listed / FM Approved Certificate which meet the Technical Specification of the project and having the Distributors in India with Trained Maintenance Manpower team.</p> <p>Kindly accept our request.</p>	<p>The Technical Specifications and Data Sheet of Main Motor Driven Pump and Main Engine Driven Pump have been provided vide clause no 5.3 of Vol II (page no 37 & 39) along with the provision to offer the make by the bidder (s). Accordingly the bidders may submit the relevant information for review and acceptance by DPA along with the bid submission. If the bidders intend to procure the pumps from any pump vendor other than those specified, the bidder may mention the same in the Technical Specifications and Data Sheet.</p> <p>The bidder shall submit any Agreement/ Certificate/ Letter/ Certificate of Compliance issued by FM/UL authority during last 7 years to OEM of pumps manufacturers for listing of their vertical turbine pumps (Capacity not less than 580 cu.m/ hr) for manufacturing/ fabrication in their manufacturing facility available in</p>

			<p>India.</p> <p>The Bidders shall submit the appropriate documents to demonstrate the above compliance along with bid submission.</p> <p>DPA reserves its rights to ask the issuing authority to submit to confirm the veracity of FM/UL Certification/ Letter produced by the bidder.</p>
31	General Query	Kindly share the Order Of Precedence for Technical and Commercial documents.	Kindly refer clause GUIDE LIST OF MAKES OF MATERIAL at page no 92 of Vol II Employers Requirements and Annual Operation & Maintenance Contract for the details of the order of Precedence for Technical and commercial documents
32	Furniture Layout Detailed Drawing	We request you to kindly provide Jetty layout with dimensions so that we can estimate the qty of piping.	Kindly refer the Sr.No 1 for the clarification.
33	Furniture Layout Detailed Drawing	Please provide distance between substation and pump house. In this case, substation means the substation from where we have to take the power.	Substation is approximately 01.25 km from the Jetty area. Kindly consider the same.
34	Datasheet/PMS	Please provide Data sheet or Piping Material Specification for Piping/Fittings/Flanges/Valves, etc.	Pl refer Annexure II.
35	Cement Lining on Pipe	As per tender, we have to provide Cement lining inside the pipe. Please provide thickness of Cement lining.	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior

			approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
36	Cement Lining on Pipe	We request you to replace Glass flake epoxy in place of Cement lining due to durability of glass flake epoxy coating.	Tender specification for Fire water pipelines is the barest minimum requirement. However, being an EPC contract the bidders can consider any equivalent or higher quality specifications as per their own design. DPA may accept such higher version subject to the conditions that the bidder cannot claim any weightage for upgrading specifications as per their own design.
37	Approved Vendors of Pump	We hereby suggest to add another Pump vendor - Ruhrpumpen, who has UL/FM approval for the Verticle Turbine Pump and he has been in the industry since many years. Details attached herewith.	Kindly refer the Sr.No 30 for the clarification.
38	Payment Terms	As per Present tender terms, 1 Submission and approval of engineering drawings & engineering data. (As per the items attached under Annexure- A and Scope of the work) - 5% 2 Supply of the respective Item/ Equipment/ materials to the site and approval by the EIC. (As per the Scope of the work) - 65% 3 Fabrication/ Installation/ Erection, Testing, Commissioning, painting and complete in all aspects of the respective Item/ Equipment/materials and approval by the EIC. (As per the Scope of the work) - 25% 4 Demobilization and handing over of the site 5%	Tender condition shall prevail

		<p>We propose to keep the following terms considering it would help us to manage our cashflows,</p> <p>1 Submission and approval of engineering drawings & engineering data. (As per the items attached under Annexure- A and Scope of the work) - 5%</p> <p>2 Supply of the respective Item/ Equipment/ materials to the site and approval by the EIC. (As per the Scope of the work) - 70%</p> <p>3 Fabrication/ Installation/ Erection, Testing, Commissioning, painting and complete in all aspects of the respective Item/ Equipment/materials and approval by the EIC. (As per the Scope of the work) - 20%</p> <p>4 Demobilization and handing over of the site 5%</p>	
39	Foam Pump	<p>We understand that we need to provide total 4 number of Foam pumps. 2 Electrical operated and 2 Diesel operated. Please confirm.</p>	<p>Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.</p>
40	Mechanical Query	<p>Furniture Layout</p> <p>We are received Furniture Layout Drawing without Dimensions. Please provide us the AutoCAD Layout Drawing showing location of Fire Water Pump House and size of Fire Water Pump House and Control Room Building.</p>	<p>Kindly refer the Sr. No. 1 for the clarification.</p>

41	Mechanical Query	<p>Furniture Layout</p> <p>Please provide location of the Jetty Main Control Room and its distance from proposed Fire Water Pump House Control Room</p>	<p>The pump house is being constructed through other agencies and a suitable location within the proposed pump house shall be earmarked for the main control room and fire water pump control room. However, the successful bidder shall have to provide suitable enclosure with prior approval of DPA and also to install all the controls for the automatic operation as per the scope present Tender at their own cost.</p>
42	Mechanical Query	<p>Furniture Layout</p> <p>Construction of Fire Fighting Pump House is bidder's scope or not. Please confirm</p>	<p>The construction of pump house shall be taken up by other agencies by DPA. However, the successful bidder shall carryout civil foundation works for pumps and other equipments, pedestals, and other mechanical equipment as per the scope of the present Tender.</p>
43	Vol-II of S.L.No.1 & (Page No. 17)	<p>Clean Agent System of Control Room</p> <p>Provide plan, elevation and detail cross sectional drawing of Control Room Building. Also mention number of Room to be protected and location of Clean Agent /CO2 Cylinder Battery Bank.</p>	<p>Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.</p>
44	Vol-II of general Requirements & (Page No. 36)	<p>Fire pipe line must be made of internal cement coated pipes as the sea water corrodes the pipe.</p> <p>Please confirm the Pipe Specification shall be as per IS:3589 Fe 330 Grade. Please confirm the Pipe thickness for these Pipe sizes more than 200 mm</p>	<p>Pl refer Annexure II.</p>

		Please confirm the Pipe Specification shall be as per IS: 1239 Part-I Medium OR Heavy Grade for Pipe sizes upto 150 mm	Pl refer Annexure II.
		Please provide us the thickness of Cement Lining for Internal Pipe coating	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
		Please confirm, Glass Flakes Coating is not envisaged for this Project	Tender specification for Fire water pipelines is the barest minimum requirement. However, being an EPC contract the bidders can consider any equivalent or higher quality specifications as per their own design. DPA may accept such higher version subject to the conditions that the bidder can not claim any weightage for upgrading specifications as per their own design.
45	Vol-II of CL.No.5.3.9 & (Page No. 51)	RRL Hose shall be confirm IS:636 Type -B and Hose shall be IS: 636 Type-A Which type of hose to be considered. Please confirm	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also,

			Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
46	Vol-II of CL.No.5.3.8	<p>Hose cabinet FRP 3 mm material with double doorframe glass covered and OJ08 -FF Tender VOL-III FF1 -Hose cabinet shall be made of 16 gauge M.S Sheet.</p> <p>Which type of hose cabinet to be considered. Please confirm</p>	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
47	Vol-II of Page No.92	<p>"Guide list of makes" of material fire hydrant system</p> <p>Please includes M/s SHAH BHOGILAL make Hydrant Accessories & Water monitor in the "Make list".Please confirm</p>	Tender Condition shall prevail
48	Vol-II	<p>MVWS System for 01 area.</p> <p>Please clarify area to be protected with MVWS system and its Detail drawing.</p>	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
49	Vol-II of Page No.92	<p>"Guide list of makes"</p> <p>Please includes NI/s SAM Turbo, NI/s WP1L, M/s Xylem make Water Pumps Sr Accessories in the "Make list" in line with Tenderer's other major Port. Please confirm</p>	Kindly refer the Sr.No 30 for the clarification.

50	Vol-II of Page No.92	"Guide list of makes" Please includes M/s. JEE Pumps (Guj) Private Limited, Ahmedabad, NI/s. Roto Pumps Limited, Kolkata make Foam Pumps & Accessories in the "Make List". Please confirm	Kindly refer 'Notes' under LIST OF SUPPLIERS OF ITEMS of Vol II of Tender Document.
51	Vol-II of Page No.92	"Guide list of makes" Please provide us the Approved Make List for Clean Agent System / CO2 Gas Flooding System at Control Room	Kindly refer Notes under LIST OF SUPPLIERS OF ITEMS of Vol II Employers Requirements and Annual Operation & Maintenance Contract
52	Fire Detection & Alarm System	Our scope of supply CFAP or DGFAP (if DGFAP only then the make of CFAP)	Tender Condition shall prevail
53	Fire Detection & Alarm System	Location and Distance Between CFAP to DGFAP	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
54	Fire Detection & Alarm System	UPS supply provided at panel end By Client	Tender Condition shall prevail
55	Fire Detection & Alarm System	Architectural Drawings required	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-

			II.
56	Fire Detection & Alarm System	We have Considered armoured cable for FDA system. No conduit is considered	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
57	Fire Detection & Alarm System	Please provide us the Approved Make List for Fire Detection & Alarm System	Kindly refer Notes under LIST OF SUPPLIERS OF ITEMS of Vol II of III Employers Requirements and Annual Operation & Maintenance Contract
58	Fire Detection & Alarm System	Please provide us the Approved Make List for Public Address System	Tender Condition shall prevail
59	Electrical	Please provide us LV/MV -Voltage rating and exact Fluctuations	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
60	Electrical	Please provide us HT -Voltage rating and exact fluctuations	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer

			Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
61	Electrical	Please provide us Switchgear Room's distance from Pump House	Kindly refer the Sr.No 33 for the clarification.
62	Electrical	Please confirm us, which type of IP are required	The bidder shall consider IP 65 or any other higher specifications without any extra cost.
63	Electrical	Please provide us, Motor standard required voltage	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
64	Electrical	Please provide us, Class and Type at field Instruments	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
65	Electrical	Please provide us, Frequency rating and evict fluctuations	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers

			requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
66	Electrical	In the case of main power failure, which pump motor, control panel are should be on position from DC set or UPS	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
67	Electrical	As per requirement, please finalized the total scope of electrical Designee work	Kindly refer section 7C. Electrical Work of Vol II of III Employers Requirements and Annual Operation & Maintenance Contract
68	Electrical	Please confirm us, what type of Control panel is required? Please provide us the specification.	Kindly refer clause no 5.3.32 of Vol II of III Employers Requirements and Annual Operation & Maintenance Contract and Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer.
69	Electrical	Please provide us 10 list.	Irrelevant.
70	Electrical	Please provide us Architecture of Control System	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs

			as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
71	Electrical	Please provide us Earthing Scheme	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
72	Electrical	Please provide us Schematic Drawing for fire system	Being an EPC contract, it is the responsibility of the contractor to prepare the Data sheets, Detailed Engineering calculations, Designs as per the relevant standards, codes & norms etc., taking into account the Employers requirements specified under the section no 1.2 of Vol II-Employer Requirements and O&MC and submit the same for the prior approval of the Employer. Also, Please refer Cl. No. 7 & 8 of SCC of Vol-I and Cl. No. 1.2 d of Vol-II.
73	Electrical	Please provide us the total distance between from Switchgear to Control Room and Pump House.	Kindly refer the Sr.No 33 for the clarification.
74	Electrical	Please provide us the Approved Make List for Instruments	Kindly refer Sr. No 50 for the clarification
75	Electrical	Please provide us the Approved Make List for Motor	Kindly refer Sr. No 50 for the clarification

76	Electrical	All type of Control Panels, MCC Panels, Distribution Panels, DVI.CP, DC Panels, Chargers Panel, DCDB, ACDB, PLC with (SCADA-HMI System). etc. shall be of TECH NICO Make	Kindly refer Sr. No 50 for the clarification
77	General	Delivery Period Please consider 12 months delivery period as UL Listed OR FM Approved Pumps minimum delivery period is 10 months (approx) from the date of Order.	The Completion period for the SITC part of the work shall be only 8 months and the same shall prevail for the whole tender volumes.
78	General	Fabrication Shed Please provide 100 M X 100 M Construction land with Illumination, Power Supply, Drinking Water facility for pipeline construction purpose.	Tender Condition shall prevail
79	Vol-II of Page No.92 to 153	Guide list of makes Please approve M/s.WPIL Ltd., Kolkatha make water pumps & accessories in the "Make List" as they are having FM/UL Certificate for other model Pumps. (UL Certificate attached) WPIL are the process to obtaining UL/FM Certification for VT pump Please Confirm.	Kindly refer the Sr.No 30 for the clarification.
80	Vol II of III Employers Requirements and Annual Operation & Maintenance Contract clause no 1.2 point I Page No 6	To obtain NO objection certificate from the local statutory fire authorities for the complete system It is requested to kindly forward the existng NO objection certificates issued to DPA by the Local Statutory fire authorities for the other oil jetties	These documents are codified and cannot be shared.
81	Vol II of III Employers Requirements and Annual Operation & Maintenance Contract clause no 1.4.5 point I Page No 8	I. Indian Standards Published by the Bureau of Indian Standards. II. Publication in Control of Pollution in industries in Gujarat. & iii, iv, v, vi, vii, viii, ix up to xi Kindly clarify the list of statutory bodies	It is the responsibility of the bidder to identify the statutory clearances and the authority to issue the such clearances and take appropriate action inline with the relevant provisions of the Tender.

82	Vol II of III clause no 1.2 point I Page No 6	List of Statutory Bodies (Second Row) Kindly clarify the list of statutory bodies	It is the responsibility of the bidder to identify the statutory clearances and the authority to issue the such clearances and take appropriate action inline with the relevant provisions of the Tender.
83	Vol II of III Employers Requirements and Annual Operation & Maintenance Contract clause no 1.4.21.3 Page No 11	<p>Communication inside the port shall be done through Walkie-Talkie. Contractor will arrange the required no of walkie-talkie for their representative and the same model suitable number shall be provided for Employer & for consultant also to be provided by EPC contractor till the completion of the project. Any repair for walkie-talkie and changing of batteries is to be done by Tenderer.</p> <p>Vol I of III E Tender document for EPC contract clause no 1.4.21.3 Page No 11</p> <p>The successful Tenderer shall provide two sets of latest model, duly activated Mobile Phones or as specified in TIS, to the Employer for use of Employer's representatives to remain in contact with the work site, construction yards of the successful Tenderer. This service shall be made available within 14 days of receipt of Notification of Award. The amount of Monthly + liability in normal circumstances shall not exceed Rs.1000/- per phone or as specified in TIS. The handset etc., shall be returned not later than 14 days from the date of release of Performance Guarantee in as is where is condition</p> <p>Walki talkie or mobile is not required sicne the jetty is under constrution stage and requested to remove the provision of mobile and Walkie Talkie</p>	Pl refer Sr.No 10 for the clarification.

84	Vol II of III Employers Requirements and Annual Operation & Maintenance Contract clause no 1.4.21.4 Page No 11	Two no AC porta cabin (01 no for Employer +01 no for Consultant) along with 2 number of Computers, Study table and chairs are to be arranged by EPC contractor at site (Excluding Operation and Maintenance period). In Vol I EPC Tender at Appendix 2 clause 2.6 TWO (2) new latest version laptops has been specified. It is requested to kindly clarify and keep the provision of one Desktop in one porta cabin	Tender Condition shall prevail
85	Vol II of III Employers Requirements and Annual Operation & Maintenance Contract clause no 1.4.22. 6 Page No. 12	Quantity recommended for five years operation and Maintenance including the insurance spares Kindly clarify Insurance Spares	Tender Condition shall prevail
86	Vol II of III E Tender Document for Technical Specification and Data Sheet for pumps Page no. 37 to 44	Regarding Authentication of OEM for supply of FM/UL Pumps. In case the bidder obtain technical Data sheet & specification from OEM without having any past experience or without any present FM/UL compliance confirmation. Then, will it be construed as OEM's certification or valid authorization ? Kindly Clarify.	Kindly refer Sr. No 30 for the clarification
87	Vol II of III Employers Requirements and Annual Operation & Maintenance Contract clause no 4.6 & 4.6.1 Page No 26	List of Statutory Bodies & (No fees shall we provided by DPA & on Page No. 27 4.6.2 Return the charges shall be reimbursed by DPA) Kindly clarify the list of statutory bodies & confirm who will pay the charges	Kindly refer the clause no 4.6 STATUTORY APPROVALS of Vol II of III Employers Requirements and Annual Operation & Maintenance Contract

88	Vol II of III Employers Requirements and Annual Operation & Maintenance Contract clause no 4.9 Page No 29	<p>Experience and qualification of the Project 4.9.1 Project Manager 4.9.2 Construction Manager 4.9.3 Construction team member (additional 7 Persons)</p> <p>It is requested to kindly reduce the no of persons since the work involves on single jetty</p>	<p>It is proposed to modify the requirements as follows;</p> <p>Reference clause no- 4.9 EXPERIENCE & QUALIFICATION OF THE PROJECT</p> <table><tr><th>Sl.No</th><th>Requirements as per Tender documents</th><th>Revised Minimum requirements*</th></tr><tr><td>1</td><td>Project Manager- 1</td><td rowspan="2">Project Manager CUM Construction manager - 1</td></tr><tr><td>2</td><td>Construction manager- 1</td></tr></table> <p>* Note- The details indicated are only minimum requirements and it is the responsibility of the successful bidder to provide a required additional man power, if any required at no extra cost, to ensure proper execution of the contract.</p>	Sl.No	Requirements as per Tender documents	Revised Minimum requirements*	1	Project Manager- 1	Project Manager CUM Construction manager - 1	2	Construction manager- 1
Sl.No	Requirements as per Tender documents	Revised Minimum requirements*									
1	Project Manager- 1	Project Manager CUM Construction manager - 1									
2	Construction manager- 1										
89	Vol I of III E Tender document for EPC Tender document clause no 5 point U Page No 11	<p>Time for Completion 8 Months</p> <p>Requested to kindly increase the Time for Completion to 11 months</p>	<p>The Completion period for the SITC part of the work shall be only 8 months and the same shall prevail for the whole tender volumes.</p>								
90	Vol I of III E Tender document for EPC Tender document Appendix 3 Payment Terms Page No. 108 & 109	<p>As Per Tender- Submission 5% Supply of material 65% Fabrication, 25% Demobilization and 5%</p> <p>Submission of Drawing5% Approval of Drawing 5% Supply of the respective items/equipment 65% Fabrication, 20% Demobilization and 5%</p>	<p>Tender Condition shall prevail</p>								
91	Vol I of III E Tender document for EPC Tender document	<p>Tender Documents says: In case of Micro and Small Enterprise (MSEs) holding valid certificate issued by any agencies/organization under The Ministry of Micro, Small and Medium</p>	<p>Tender Condition shall prevail</p>								

	clause 5 point J page no 8	<p>Enterprises indicating the list of activity related to the subject tender shall become eligible for exemption from payment of tender fee/EMD. Such bidder shall upload the scanned copy of valid certificate. EMD of Rs. 50 lakhs/- in the form of Bank Guarantees</p> <p>Kindly clarify, what line of words for nature of business shall require?</p>	
92	Vol I of III E Tender document for EPC Tender document clause 5 point U page no 11	<p>Time for Completion : (U-Memorandum) 8 months as per tender: Practically it is not possible as delivery of customized equipment will take 8 months from drawings approval. Hence, we request to keep Total work completion time minimum 18 Months. Further, During execution of work at site, if work front to carry out the work could not available due to ongoing jetty activity, ideal time shall exclude from the work completion time period.</p>	The Completion period for the SITC part of the work shall be only 8 months and the same shall prevail for the whole tender volumes.
93	Vol I of III E Tender document for EPC Tender document clause 5 point Y page no 12	<p>SIMILAR WORK MEANS: : As per tender require: Supply, Installation, Testing and Commissioning of “Firefighting pump set/ Firefighting pumping system”, ‘or’, other “Water Pump Set/ Water Pumping System including Vertical Turbine (VT) Pumps with minimum discharge rate of at least 8200 m³/hr”; with allied Electrical & Instrumentation works with or without AMC thereof executed for any Govt./Semi Govt./ Private reputed organization</p> <p>Experience with respect to amount is OK, but it should not necessary that it should have VT pump only and its pump capacity must be minimum 8200cub.Mtr. / Hr., as any bidder having experience say 8000 cub.mtr./Hr, can also easily do work for 8200 cub.mtr/Hr. Hence, we request you kindly to remove requirement of VT Pump as well as its capacity of 8200 from</p>	Tender Condition shall prevail

		similar work definition.	
94	Vol II of III Employers requirements and Technical Specifications clause 5.3 page no 37	We request you to accept WPIL as acceptable make of pump Manufacturer. Their credential are enclosed as Indian pump manufacturer. As per your current manufacturer list, only one manufacturer is having FM/UM approval, able to supply the pump, which restrict competition. Regarding UV/FM approval, same should allowed to get before dispatch, not at the time of evaluation. (Vol-II, Pg.42)	Kindly refer Sr. No. 30 for the clarification
95	Vol I of III E Tender document for EPC Tender document clause 5 point Y page no 12	WORK EXPERIENCE: As per tender: “ iii) The completed works only will be considered for qualification. Partly completed works or works in progress shall not be considered for qualification. “ However, major project has scope of Annual O&M of 5 OR 10 Yrs. So, we request that kind of project whose Capital scope completed and O&M scope is continue, shall consider as Qualified Experience	Tender Condition shall prevail
96	Vol I of III E Tender document for EPC Tender document clause 5 point AA page no 16	Shri S.K.Sarkar, IAS (Retd.)and Shri Saurabh Chandra, IAS (Retd.) has been appointed IEM by DPA from 2013 to 2016. Kindly share the newly appointed officer (In concern with CVC) name and contact number. If they are still continue, please confirm the same	Tender Condition shall prevail
97	Vol I of III E Tender document for EPC Tender document clause 2.1 payment terms page no 109	2 Supply of the respective Item/ Equipment/ materials to the site and approval by the EIC. (As per the Scope of the work) 65% We request to release against supply of equipment payment at least 85%.	Tender Condition shall prevail
98	Vol II Tender Document	Kindly confirm whether all the bidder have to furnish the authentication of the pump manufacturer for the technical data sheet	All the technical specifications and data sheet shall be filled and to be forwarded by the bidder by duly signed and stamped along

			with the Authentication of OEM of technical specification and data sheet during bidding, otherwise the bid shall be considered as non-responsive and the same will be rejected.
99	VOL II Tender Document	Kindly Provide Clear copy of Drawing of OJ 8	Kindly refer Sr. no. 1 for the clarification
100	VOL II Tender Document	Kindly confirm that OEM for Pump supply should have manufacturing facility in India.	Kindly refer sr. no. 30 for the clarification.
101	VOL I Tender Document	Kindly confirm the use of Walki – Talki	Kindly refer sr. no. 10 for the clarification.
102	VOL II	Kindly confirm the piping schedule	Kindly refer sr. no. 18 for the clarification.
103	VOL II	Kindly extend the BID SUBMISSION date for 04 weeks after the pre bid Clarification from DPA	Tender Condition shall prevail
104	VOL-I, APPENDIX - 1 PRICE SCHEDULE	Operation & Maintenance is mentioned in both PART A-1 AND PART A-2. Kindly clarify.	Part A-1 of Appendix-1 Price Schedule of Vol-I shall be read as: <i>“Engineering, Procurement and Construction (“EPC”) for work of Design, Supply, installation, Testing & Commissioning of Firefighting system and associated facilities as per OISD-156 at Oil Jetty no. 08, Kandla, of Deendayal Port Authority as per the Specifications and Scope of Contract etc., complete in all respect as per the direction of Engineer-in-Charge.”</i>
105	Vol -I of NIT Clause No. 5 point Y (Page No.12)	In the previous tenders, Storage Tank Terminals/ Storage Tank Farms had included in the similar completed type of works under Minimum eligibility/Qualification criteria (MQC) definition. In this connection we are requesting to consider the same to include Storage Tank Terminals/ Storage Tank Farms in the subject	Vol-I, NIT Cl. No. 5, Y (MQC), Note: 1. B. shall be read as: <i>“Design, Engineering, Supply, Installation, Testing and Commissioning of complete Fire Fighting System with or without associated works (i.e., Electrical/ Instrumentation/ firefighting</i>

		tender please.	<i>safety equipment's etc.) in the sector of Ports/ Fertilizers/ Refineries/ Gas/ Storage tank terminals (tank farms) /Power plant (only thermal or nuclear) / Hydrocarbon/ Chemical industries."</i>
106	General query	The work area for execution is limited to OJ-8 area or it will extend up to back up area of Oil Jetty No.8	Pl refer clause no 4.2 Scope of Work of Vol II and the same is self explanatory, which shall prevail.
107	General query	The foundations for pump room/fire monitor towers etc. covered under present scope or it shall be provided in the existing contract which is in progress.	Kindly refer Sr.No 42 for the clarification
108	General query	To ensure that electricity connection if needed will be provided by DPA at the applicable rates in the area of Oil Jetty No. 8 at single or multiple locations as the length of approach jetty provided is 380 meters.	Kindly refer Sr.No 42 for the clarification
109	General query	Sufficient space (working area) for execution purpose will be provided free of cost in the nearby area.	Kindly refer Sr.No 6 for the clarification

PERFORMANCE GUARANTEES

1.0 This Appendix sets out

- (a) The performance guarantees referred to in **Clause 27** of GCC (Performance Guarantee Tests).
- (b) The procedure for conducting the performance guarantee tests, recording of measurements / results and calculation for deriving the test results shall be provided to DPA/ Consultants.

2. Performance Guarantee Parameters

Guaranteed parameters Test as per the OEM schedule for the Discharge, Head, Pressure, Motor ratings, Volt-ampere for the No load Test. Minimum Load, Nominal load, Full load and other loads specified by the OEM).

The parameters above mentioned are only indicative, but not limited. However, all the Guaranteed parameters shall be done on prior approval of EIC.