

**KOLKATA PORT TRUST**

**HALDIA DOCK COMPLEX**

**Tender No.: DM(P&E)/T/54/2019-2020**

**E-Tender No. 2019\_KoPT\_516731**

**E-Tender under two cover system (Cover-I: Pre-qualification, Techno-commercial terms and Cover-II: Price cover) for work of “Design, Manufacture, Fabrication, Supply, Erection, Testing, Commissioning and handing over of firefighting facilities at 3rd Oil Jetty (HOJ-III) under two cover systems.”**

**♠ ADDENDUM-II ♠**

**CORRECTIONS / ADDITIONS / DELETIONS, ETC.**

**[Total Number of Pages:14 ]**

**NOTE:**

1. This “Addendum-II” should be read in conjunction with this office above Tender Document.
2. Consequential changes, arising out of this Addendum-II, will be deemed to have been effected, even if the same were not incorporated specifically in the Tender Document.
3. One set of this “Addendum-II”, shall have to be submitted along with the Offer (in with each page of it, duly signed and stamped, as token of acceptance.
4. All other terms and conditions of this office above Tender Document will remain unchanged

**HALDIA DOCK COMPLEX**  
**♠ ADDENDUM-II ♠**  
**Tender No.: DM(P&E)/T/54/2019-2020**

**Terms and conditions:**

<b>Sl. No.</b>	<b>Clause No./Ref. No.</b>	<b>Para/Line No./Page No.</b>	<b>As specified in the Tender Document. [As per Addendum-II]</b>	<b>To be Read as</b>
1.	.....	.....	.....	The tentative P&I diagram of the system is enclosed at page no- 11 of this addendum.
2.	BoQ Sl.no. 3	238		Tentative structural drawing of Tower Monitor-II is provided at Pg no. 12&13 of this Addendum.
3.	Clause no-6.86	103	<p>SCOPE OF SUPPLY &amp; OPERATION PHILOSOPHY:  Engineering, Supply, Installation commissioning of Tower Monitors.</p> <p>Engineering, Supply, Installation commissioning, Fire detection system &amp; Status Indication.</p> <p>All additional instruments and controls necessary for safe, efficient operation and safety which are not listed specifically in the document and not in the scope of BPCL but which are required as per vendor's experience/</p>	<p>SCOPE OF SUPPLY &amp; OPERATION PHILOSOPHY:  Engineering, Supply, Installation commissioning of Tower Monitors shall be as per structural drawing attached at - Page no.12&amp;13 of this Addendum-II</p> <p>Engineering, Supply, Installation commissioning of Fire detection system &amp; Status Indication at the control room including all associated work shall be carried out as per revised BoQ.</p> <p>All additional instruments and controls necessary for safe, efficient operation and safety which are not listed specifically in the revised BoQ, Tender document,</p>

Sl. No.	Clause No./Ref. No.	Para/Line No./Page No.	As specified in the Tender Document. [As per Addendum-II]	To be Read as
			recommendation and for safety of the plant operation, shall be in the scope of Contractor.	including Addendum-II as per vendor's experience/ recommendation and for safety of the plant operation, shall be in the scope of Contractor.
4.	6.24	Page-39 of tender document	Deluge Valve, QBD, Tower mounted monitor shall be UL listed or FM approved.	Deleted
5.	SECTION-X(A)	Page-238-242 of tender document	Price Schedule	The Revised BOQ is enclosed as page no. 7 to 10 of this Addendum-II
6.	Clause no-7	Page-214 of tender document	<p>Payment Terms:            Payment will be made based on accepted rates of the bill of quantities. Monthly one bill would be accepted.            i) 70% Payment against each item will be made against supply of respective item at site and submission of bills along with Custodian Certificate and other relevant documents like Inspection Reports, Challans, etc. ii) 20% Payment against each item will be made against installation of the respective item and submission of bills along with Installation Certificate. iii) 10 % Payment against each item will be made against Testing, successful commissioning, and taking over the commissioned job by KoPT, obtaining statutory certificate by the contractor</p>	<p>Payment Terms:            Payment will be made based on accepted rates of the bill of quantities. Monthly one bill would be accepted.            i) 70% Payment against each item will be made against supply of respective item at site and submission of bills along with Custodian Certificate and other relevant documents like Inspection Reports, Challans, etc.            ii) 20% Payment of supply of each item will be made against installation &amp; commissioning of the respective item and submission of bills along with Installation Certificate.            iii) 90% of erection, testing &amp; commissioning against completion of erection &amp; commissioning of the respective items.</p>

Sl. No.	Clause No./Ref. No.	Para/Line No./Page No.	As specified in the Tender Document. [As per Addendum-II]	To be Read as
			and submission of bills, along with Job Completion Certificate.	iii) 10 % of supply and erection, testing & commissioning against commissioning, handover and obtaining statutory certificate of the system by the contractor and submission of bills,.
7.	Sl no-3.6 of schedule of tender	Page-5 of tender document	Completion Period :: 6 months.	Completion Period :: 09 (nine) months.
8.	Section VIII, Sl.no.4 (c )	210 of tender document	Clear layout of the system, showing all major components, indicating their individual capacity	Clear layout of the system, showing all major components, indicating their individual Capacity. However, The tentative lay out drawing of the jetty is enclosed as reference at Pg. no. 14 of this Addendum-II.
9.	6.6	28	Piping MOC shall be ASTM A 106 Gr B Std Schedule	Piping MOC shall be Carbon Steel ERW as per IS 3589/IS: 1239.
10.	6.27 (a)	45	Supply & installation of Horizontal split casing pumps -720 m3/hr (approx.) for Water Hydrant, ground Monitors and Tower monitor system including diesel drive with propeller shaft coupling, control panels, including diesel tanks, associated piping, valves and pressure gauges, battery banks & battery chargers, cables, etc	Supply & installation of Horizontal split casing pumps -900 m3/hr (approx.) for Water Hydrant, ground Monitors and Tower monitor system including diesel drive with propeller shaft coupling, control panels, including diesel tanks, associated piping, valves and pressure gauges, battery banks & battery chargers, cables, etc

Sl. No.	Clause No./Ref. No.	Para/Line No./Page No.	As specified in the Tender Document. [As per Addendum-II]	To be Read as
11.	6.24	39	For water curtain system, the pipes downstream of deluge valve & pipe for detector network shall be galvanized. The pipes carrying foam concentrate shall be of stainless steel.	For water curtain system, the pipe for detector network shall be galvanized. The pipes carrying foam concentrate shall be of stainless steel.
12.	6.83	101	BPCL scope of work BPCL's scope of work for control and instrumentation are mentioned below: All balance work related to control and instrumentation are in the scope of the contractor.	Deleted
13.	DATA SHEET ANNEXURE	136	QUANTITY : 6, WORKING : 4, STAND BY : 2 WATER CAPACITY (M3/Hr) : MIN - NOR 720 M3/HR	QUANTITY : 5, WORKING : 3, STAND BY : 2  WATER CAPACITY (M3/Hr) : MIN - NOR 900 M3/HR
14.	5. DATA SHEET FOR CS PIPE LINE & FLANGES & FITTING ( SL NO 1.2)	150	Type- Seamless	Type- ERW
15.	Section-VIII 4.0	213	TIME OF COMPLETION: The project work is to be completed within 6(Six) months from the date of placement of work order/LOI whichever is earlier.	TIME OF COMPLETION: The project work is to be completed within 9(nine) months from the date of placement of work order/LOI whichever is earlier.

Sl. No.	Clause No./Ref. No.	Para/Line No./Page No.	As specified in the Tender Document. [As per Addendum-II]	To be Read as
16.	Clause No. 6.89.33.14	120	Immediately, after pouring concrete all exposed surfaces shall be protected by screens of thick matting or other suitable material which are to be kept wet throughout for a minimum period of seven days after depositing concrete	Immediately, after pouring concrete all exposed surfaces shall be protected by screens of thick matting or other suitable material which are to be kept wet throughout for a minimum period of twenty-eight days after depositing concrete
17.	Clause No. 6.89.44 to Clause No. 6.89.59	125-130	PILE FOUNDATION	To be deleted
18.	Clause No.6.89.20	113-114	The mooring system shall comprise remote controlled mooring hooks fitted with electrically operated capstan and vendor has to approve, it will be located at <b>HOJ-1&amp;2</b> as detailed below :	The mooring system shall comprise remote controlled mooring hooks fitted with electrically operated capstan and vendor has to approve, it will be located at <b>HOJ-III</b> as detailed below :
19.	Clause No. 6.87.4	104	Instrumentation Scope of Work for Fire Fighting system for all <b>four jetties.</b>	Instrumentation Scope of Work for Fire Fighting system for <b>HOJ-III.</b>
20.	Clause No. 6.26.2	43	-----	q. The financial implication of the above items under Clause No. 6.26.2 shall be equally distributed in the relevant items in BoQ during quoting by the respective Bidders.

**SECTION – X (A)**

**REVISED PRICE SCHEDULE - B**  
**(To be filled up and uploaded, duly signed & stamped)**

SL.NO	DESCRIPTION	Qty	Unit	Applicable GST%		
				CGST	SGST	IGST
1.	Main Fire water Pump with Diesel Engine (Capacity 900m <sup>3</sup> /hr, Head 160m). Strainers (POT type 3nos) including all accessories as per the Technical Specification.					
i)	Design & Supply	1	No.			
ii)	Erection, Testing & Commissioning	1	No.			
2.	Design, Supply, Erection, Testing & Commissioning of Electric motor driven <b>jockey pump</b> of 70 m <sup>3</sup> /hr discharge & 160 m head, strainers (Y type 2nos.) as per Technical Specification.					
i)	Design & Supply	2	No.			
ii)	Erection, Testing & Commissioning	2	No.			
3.	Design, Supply, Erection, Testing & Commissioning of Remote operated 6" <b>Tower monitor</b> on 20 mtr high tower, capacity 6000 LPM (complete with panel & accessories), as per Technical Specification.					
i)	Design & Supply	1	No			
ii)	Erection, Testing & Commissioning	1	No			
4.	Design, Supply, Erection, Testing & Commissioning of <b>Ground Monitor</b> with isolation valve at elevated level with all insert plates, fixtures, clamps, SS fasteners pressure gauge dial type 150 mm size connected at monitor inlet pipe and supporting for riser pipe and monitor, orifice plates suitable to discharge 3000 LPM capacity at 12.25 kg/cm <sup>2</sup> with a horizontal throw range of 45m with electrical/electrohydraulic equipments for horizontal and vertical rotation with base operation as per Technical Specification.					
i)	Design & Supply	2	No.			
ii)	Erection, Testing & Commissioning	2	No.			
5.	Design, Supply, Erection, Testing & Commissioning of SS-316 size 63mm <b>Double Headed Fire Hydrant</b> with (landing valves as per BIS:5290) and isolation valve (100 NB), SS-316 with orifice plates to be placed below each hydrants and separate controls fitted with 63 mm instantaneous female coupling on each outlet along with 2 nos hose box stand with 15m long hose pipe each with end coupling with nozzles, as per Technical Specification.					
i)	Design & Supply	8	No.			
ii)	Erection, Testing & Commissioning	8	No.			

<b>6.</b>	Design, supply, erection, testing & commissioning of the following <b>ERW steel pipe</b> - internal paint lined along with bends, tees, reducers flanges, gaskets, bolt-nuts, washers, u-clamp supports and any other fitting, painting as applicable, as per Technical specification for above ground piping system including Excavation back filling of trench and interconnection between existing and new facilities, as per Technical Specification.					
<b>A.</b>	Design & Supply					
<b>i)</b>	400 NB	530	Mtr			
<b>ii)</b>	300 NB	105	Mtr			
<b>iii)</b>	250 NB	55	Mtr			
<b>iv)</b>	150 NB	65	Mtr			
<b>v)</b>	100 NB	150	Mtr			
<b>B.</b>	Erection, Testing & Commissioning					
<b>i)</b>	400 NB	530	Mtr			
<b>ii)</b>	300 NB	105	Mtr			
<b>iii)</b>	250 NB	55	Mtr			
<b>iv)</b>	150 NB	65	Mtr			
<b>v)</b>	100 NB	150	Mtr			
<b>7.</b>	Design, supply, erection, testing & commissioning of the following Stainless-Steel pipe for Foam line etc.- along with bends, tees, reducers flanges, gaskets, bolt-nuts, washers, u-clamp supports and any other fitting, painting as applicable, as per Technical specification for above ground piping system including Excavation back filling of trench and interconnection between existing and new facilities, as per Technical Specification.					
<b>i)</b>	100 NB Pipe	240	Mtr			
<b>ii)</b>	75 NB Pipe	120	Mtr			
<b>iii)</b>	40 NB Pipe	5	Mtr			
<b>8.</b>	Design, supply, erection, testing & Commissioning of the following types of <b>Valves</b> , as per Technical Specification.					
<b>A.</b>	<b>Design &amp; Supply</b>					
<b>i)</b>	400 NB Gate Valve (Cast Steel)	7	No			
<b>ii)</b>	350 NB Gate Valve( Cast Steel )	3	No			
<b>iii)</b>	250 NB Gate Valve( Cast Steel )	1	No			
<b>iv)</b>	75 NB Gate Valve( Cast Steel )	2	No			
<b>v)</b>	50 NB Gate Valve( Cast Steel )	5	No			
<b>vi)</b>	50 NB Gate valve (Brass)	13	No			
<b>vii)</b>	350 NB NRV (Cast Steel)	3	No			

<b>B.</b>	<b>Erection, Testing &amp; Commissioning</b>					
<b>i)</b>	400 NB Gate Valve ( Cast Steel )	7	No			
<b>ii)</b>	350 NB Gate Valve( Cast Steel )	3	No			
<b>iii)</b>	250 NB Gate Valve( Cast Steel )	1	No			
<b>iv)</b>	75 NB Gate Valve( Cast Steel )	2	No			
<b>v)</b>	50 NB Gate Valve( Cast Steel )	5	No			
<b>vi)</b>	50 NB Gate valve (Brass)	13	No			
<b>vii)</b>	350 NB NRV ( Cast Steel )	3	No			
<b>9.</b>	Design, supply, erection, testing & Commissioning of <b>Hose box</b> (750mm x 600mm x 250mm) along with 2nos.hose (IS-636: 63mm dia x 15 m long) each connected with end couplings (IS-903) , 2 nos. Branch pipe with nozzles (IS-903), as applicable, as per Technical Specification.					
<b>i)</b>	Design & Supply	2	Set			
<b>ii)</b>	Erection, Testing & Commissioning	2	Set			
<b>10.</b>	<b>Design, Installation, Testing &amp; Commissioning of Quick Release Mooring Hook as per Technical Specification.</b>					
<b>i)</b>	Design & Supply	6	No			
<b>ii)</b>	Erection, Testing & Commissioning	6	No			
<b>11.</b>	<b>Design, Installation, Testing &amp; Commissioning of Water curtain nozzle as per Technical Specification.</b>					
<b>i)</b>	Design & Supply	9	No			
<b>ii)</b>	Erection, Testing & Commissioning	9	No			
<b>12.</b>	Design, Installation, Testing & Commissioning of following instrumentation and control system with complete accessories including FRP cable and FRP cable tray as per relevant standards.					
<b>i)</b>	Gas detection system, detectors panels. Flame Proof Junction Box Panel.	LS				
<b>ii)</b>	Fire alarm and detection system, Triple IR flame detectors. Flame Proof manual call points. Smoke detectors. Response indicators. Heat detectors. 2 loop control panel(UL listed). Repeater panel.	LS				
<b>iii)</b>	Sprinkler alarm system, alarm valve. QB. isolation valve . flow switches. GI pipe(c class) . fittings . etc.	LS				
<b>iv)</b>	PA system, Panel . Speaker etc	LS				
<b>v)</b>	Submersible type level transmitter (0 to 6m) with perforated guide tube etc.	2	No			
<b>vi)</b>	Pressure Transmitter (0 – 21Kg/cm <sup>2</sup> ) with isolation manifold 3way (MOC SS316grade) as tube fittings etc.	3	No			
<b>vii)</b>	Pressure Gauge(0 - 21Kg/cm <sup>2</sup> ), 150mm dial full scale SS 316 grade, ½ "NTPM with 3way isolation valve for all pumps and monitors etc. to be supplied by him.	10	No			
<b>viii)</b>	Local control panel with all accessories including mimic diagram Viz HMI, PLC for instrumentation and controls including complete with SCADA etc	LS				
<b>13.</b>	<b>Portable fire extinguisher</b> , as per Technical Specification.					

<b>A.</b>	Design & Supply of					
<b>i)</b>	9 kg. dry chemical powder (DCP) extinguisher	8	No			
<b>ii)</b>	6.9 kg capacity CO2 extinguishers on wheel	1	No			
<b>iii)</b>	75 kg capacity wheel mounted dry chemical powder (DCP) fire extinguisher	10	No			
<b>B.</b>	Erection, Testing & Commissioning					
<b>i)</b>	9 kg. Capacity dry chemical	8	No			
<b>ii)</b>	6.9 kg capacity CO2 extinguishers on wheel	1	No			
<b>iii)</b>	75 kg capacity wheel mounted dry chemical powder fire extinguisher	10	No			
<b>14.</b>	Dismantling of old MS works in joists, angles, plates, bracings, pipes of different sizes etc. including cutting rusty bolts and nuts etc. from damaged / corroded structures of jetty and stacking the materials at shore within 150 mtr. lead. Include for loading the dismantled steel materials into truck at Oil Jetty No 3 area, carriage of the materials overpucca road lead upto 2 Kms. and unload at the RZ Store of I&CF Division after weighment, stack properly in stack yard etc. as directed including carriage by head load upto a lead of about 30 m of each of the two points.	100	MT			
<b>15.</b>	M.S. Structural works in columns beams etc. with simple rolled structural members (e.g. joists, angle, channel sections, plates etc conforming to IS: 226, IS: 808 & SP (6)- 1964 connected to one another with bracket, gussets, cleats as per design, direction of Engineer-in charge complete including cutting to requisite shape and length, fabrication with necessary bolting, metal arc welding conforming to IS: 816- 1969 & IS: 1995 using electrodes of approved make and brand conforming to IS:814- 2004, haulage, hoisting including surface preparation with painting related to Tower Monitor-2.	10	MT			

NOTE :

- a. The Tenderer shall furnish the quoted amount online through CPPP only.
- b. The Tenderer shall furnish applicable GST.

TENDERER

Date :

Seal & Signed



## **TOWER MONITOR FOR FIRE FIGHTING SYSTEM AT HOJ-III OF HDC AS PER OISD-156.**

### **1) INTRODUCTION**

The scope of bidder is to design tower monitor supporting structures for Haldia Dock Complex(HDC) at Haldia. Height of the monitor is 20.0 m and plan dimensions are 2.0 m x 2.0 m. The tower monitor is to be installed over pile cap in Jetty area.

### **2. ASSUMPTIONS/ INPUT:**

1. Since Foundation rest on slab. The chemical anchor bolts are proposed to rest on pile cap.
2. The construction and material specification will be as per IFC drawing.

### **3. REFERENCES:**

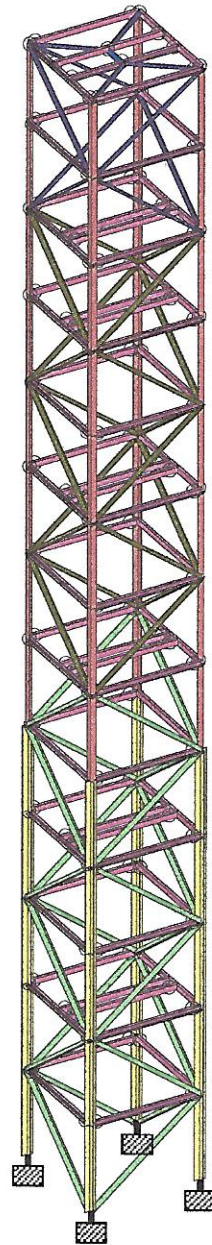
1. **IS 456-2000** Plain and Reinforced Concrete - Code of Practice.
2. **IS 800-2007** General Construction in Steel - Code of Practice.
3. **IS875-1987** Code of Practice for Design loads (Other than Earthquake) for Building and Structures (Part-II Imposed Loads)
4. **IS875-2015** Code of Practice for Design loads (Other than Earthquake) for Building and Structures (Part III Wind loads).
5. **IS 1893 -2000** Criteria For Earthquake Resistant Design of Structures

### **4. Tentative Sizes for reference for bidding:**

Vertical column up to 7.75 m –Star L 100x100x10  
Vertical column above 7.75 m – L 100x100x10  
Horizontal Tie Beam – ISMC 100  
Bracing up to 6.2m – L 100x100x10  
Bracing from 6.2m to 12.4m – L 90x90x8  
Bracing above 12.4m – L 75x75x8  
Pipe supporting angle – L80x80x10

However, the bidder has to design the structure of Tower Monitor conforming to OISD-156.

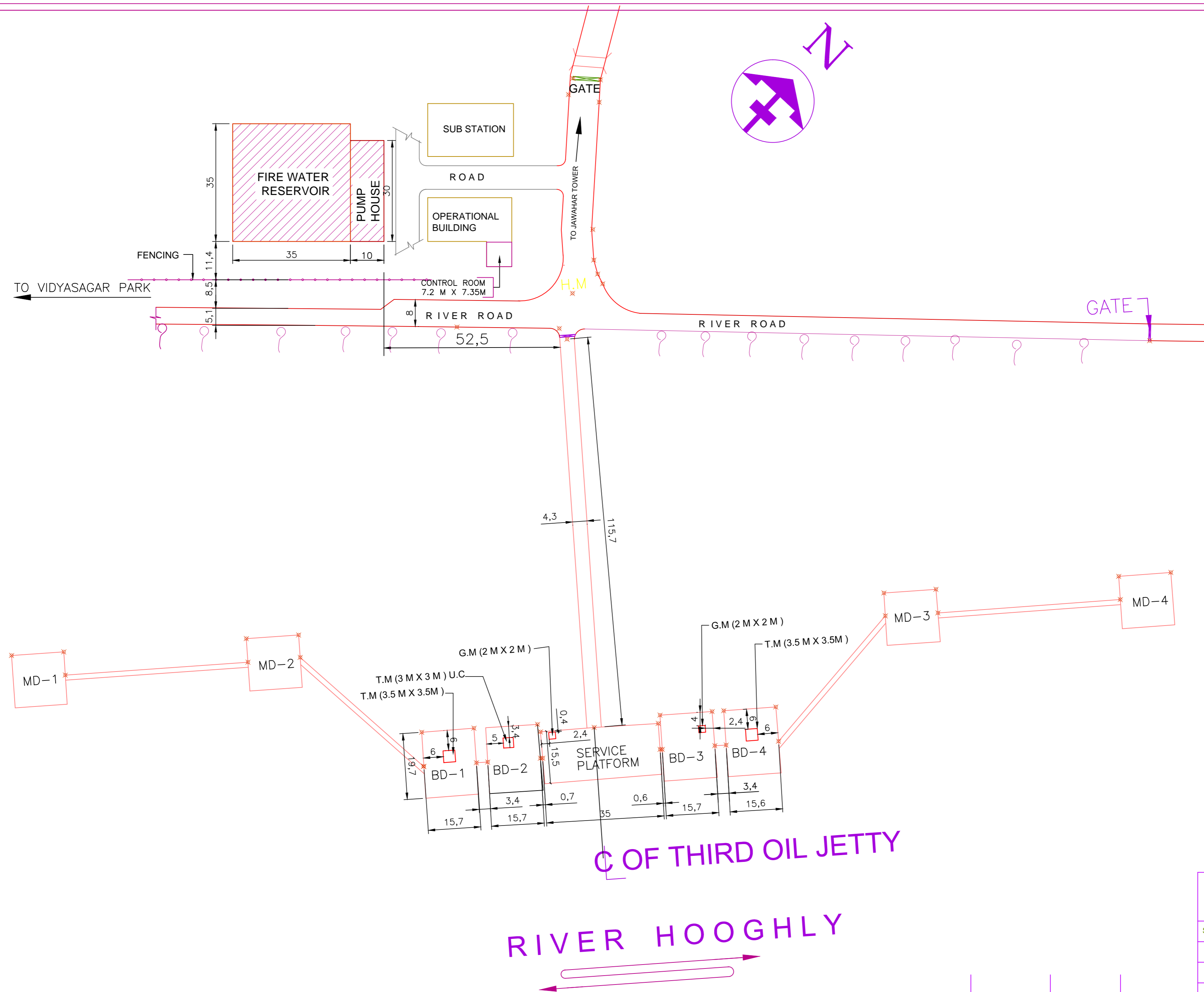
### **5. Painting : As per tender document.**



Entity Color Legend

ISA100X100X10	<span style="color: red;">■</span>
ISA100X100X10 SA	<span style="color: yellow;">■</span>
ISA90X90X8	<span style="color: green;">■</span>
ISA80X80X10	<span style="color: blue;">■</span>
ISMC100	<span style="color: magenta;">■</span>
ISA75X75X8	<span style="color: brown;">■</span>
ISA60X60X5	<span style="color: purple;">■</span>
Default Plate Color	<span style="color: teal;">■</span>
Default Solid Color	<span style="color: darkblue;">■</span>

### Member Sizes



KOLKATA PORT TRUST  
HALDIA DOCK COMPLEX

SURVEYED.		SHOWING PUMP HOUSE & RESERVOIR AREA AT THIRD OIL JETTY	
DRN.			
CHKD.			
TRCD.			
R	SCALE : - 1:12000	DATE : 26.11.19	DRG. NO :-

**KOLKATA PORT TRUST**

**HALDIA DOCK COMPLEX**

**Tender No.: DM(P&E)/T/54/2019-2020**

**E-Tender No. 2019\_KoPT\_516731**

**E-Tender under two cover system (Cover-I: Pre-qualification, Techno-commercial terms and Cover-II: Price cover) for work of “Design, Manufacture, Fabrication, Supply, Erection, Testing, Commissioning and handing over of firefighting facilities at 3rd Oil Jetty (HOJ-III) under two cover systems.”**

**♠ ADDENDUM-III ♠**

**CORRECTIONS / ADDITIONS / DELETIONS, ETC.**

**[Total Number of Pages:02 ]**

**NOTE:**

1. This “Addendum-III” should be read in conjunction with this office above Tender Document.
2. Consequential changes, arising out of this Addendum-III, will be deemed to have been effected, even if the same were not incorporated specifically in the Tender Document.
3. One set of this “Addendum-III”, shall have to be submitted along with the Offer (in with each page of it, duly signed and stamped, as token of acceptance.
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**HALDIA DOCK COMPLEX**  
**♠ ADDENDUM-III ♠**  
**Tender No.: DM(P&E)/T/54/2019-2020**

**Terms and conditions:**

<b>Sl. No.</b>	<b>Clause No./Ref. No.</b>	<b>Para/Line No./Page No.</b>	<b>As specified in the Tender Document. [As per Addendum-III]</b>	<b>To be Read as</b>
1.	<b>6.31.19</b>	<b>77</b>	<b>Accessories</b> i. Junction box for welding generator in pump house - 1 No. ii. Blowers, exhaust fans in pump house as may be required on site considerations. iii. Wind socks - 2 Nos. iv. Portable explosive meter- 1 no. v. Safety showers / Eye wash fountains to be installed at Strategic Locations – 2 Sets Further accessories as required in OISD 156 shall be provided.	<b>Accessories</b> i. Safety showers / Eye wash fountains to be installed at Strategic Locations – 2 Sets. ii. Earthing system 600x600x6 mm copper plate with earth strip of 50x6 mm and tapping suitable earth strip of 25x3mm/earth wire However, the price of the aforesaid items shall be considered in the respective items of revised BoQ.

**Design, Manufacture, Fabrication, Supply, Erection, Testing, Commissioning and handing over of firefighting facilities at 3rd Oil Jetty,HDC**  
**E-tender:2019\_KoPT\_516731**

Sl. No.	Document No./Clause No./Page.No.	Tender Description	Bidders Query	HDC REPLIES
1			Please provide us the System P&I drawing and overall layout drawing.	Enclosed as SI no-1 of Addendum-II. For reference only.
2	BOQ SI no: 1 & 15, Clause No: 6.2.1 table - III SI No 4. Page No.27	Existing pump House to accommodate all firewater pumps, jockey pumps and foam pumps and foam tanks.	As per the document minor civil works are under scope of work for pump house and we assume it is only the pump foundations we have to consider.	Proposed pumps shall be installed at existing Pump House with complete foundation. As per the site conditon, to provide / modify foundation of the equipments at existing pump house.
3	BOQ SI no: 2 & 3 Page No.238	Remote operated 6" Tower monitor and Ground monitor	Please provide us the detail structutal drawings of tower monitor and details of structural works involved in the current scope of work.	Tentative structural drawing of Tower Monitor-2 is enclosed as SI no-2 of Addendum-II for reference only.
4	BOQ SI no: 3 and data sheet of ground monitor Page No.238 &161	As per datasheet - flow-900 LPM & horizontal throw is 50 M. As per BOQ it is 3000 LPM and 75 M respectively.	As per datasheet the flow in the ground monitor is 900 LPM whereas as per BOQ the flow is 3000 LPM. Moreover the horizontal throw is 50 M as per the datasheet and as per the BOQ it is 75 M. Please confirm the same.	Flow of ground monitor is 3000 LPM with horizontal throw of 45m.
5	Clause No: 6.2.1 table - III SI No 4. Page No.27	Existing pump House to accommodate all firewater pumps, jockey pumps and foam pumps and foam tanks.	In the given BOQ there is no mention of Foam tank. Please confirm whether we have to consider the same. Please also confirm the type of foam tank SS or PVC.	Foam tank with pumps are already existing in good condition. However, as per Tender AFFF foam to be filled with new by the contractor.
6	Clause No: 6.24 Page No.39	Brief Specifications of Major Fire Fighting Components	In this clause Deluge valve approvals is mentioned but in the BOQ it is not mentioned. Please confirm the requirement of Deluge Valve.	Relevant portion of Deluge valve may be deleted. <b>SI no-4 of Addendum-II.</b>
7	BOQ SI no: 10 Page No.239	Water Curtain Nozzels	Please provide us the MOC, flow, size details and datasheet of water curtain nozzels.	Water curtain nozzles shall be considered as per OISD-156 norms.
8	BOQ SI no: 9 Page No.239	Quick Release Mooring Hook	Please provide us the MOC, flow, size details and datasheet of quick release mooring hook. Please also provide us the GA drawing if available.	Pl. see clause no.6.89.20 and 6.89.21 of Tender document page no-113 &n 114.

9	BOQ SI no: 7 and data sheet of Gate valve Page No.238 &156	Design, supply, erection, testing & Commissioning of the following types of Valves, as per Technical Specification.	In the BOQ the Gate valves will be CI type whereas in the datasheet of the gate valve it is mentioned that the Gate valves will be Cast Steel type and for 250 NB and above it will be Gear Operated.Please confirm the requirement	Please refer revised BoQ of Addendum-II and clause no- 6.31.8, 6.31.9 of tender document.
10	BOQ SI No: 5 & 6 Page No.238	ERW Steel Pipe and Stainless Steel Pipe	Please provide us the quantity wise breakup of these pipes for above ground and under ground laying.	As per site condition as is where is basis.
11	BOQ SI No: 5 & 6 Page No.238	ERW Steel Pipe and Stainless Steel Pipe with internal cement lined bends	As per regular practice internal cement lining is possible upto 100 NB below that it is not feasible. Please confirm.	As per standard to provide relevant painting instead of cement lining.
12	BOQ SI No: 5 & 6 Page No.238	ERW Steel Pipe and Stainless Steel Pipe	Please confirm the surface preparation of these pipes.	Please refer clause no.6.71 of the tender.
13	Clause No: 6.2.1 table - III SI No 9. Page No.27	Entire remote control system including instrumentation and electrical and electronic equipment's with associated SCADA system. - As per design requirements of OISD-156. The installed equipments are to be synchronised with the existing SCADA system in the control room by the contractor at their cost.	Please confirm whether it is the requirement of PLC based pump annunciation Panel or the PLC system for the entire scope/battery limit.	To provide control panel
14	Clause No: 6.2.1 table - III SI No 9. Page No.27	PLC details	Please provide us the PLC details like the no of digital and analogue input output numbers, clock speed and communication protocol.	Please see the attached IO list of existing PLC.
15	Clause No: 6.18 SI No h. Page No.36	The damaged structures of another one Tower monitor to be replaced, grit blasted & painted to the satisfaction of the engineer as specified in the BOQ, Technical Specification & scope of work.	Please provide us the details of the damaged structure.	The damaged structure shall be replaced as is where is basis against SI.No.5 of BOQ of Addendum-II.

16	Clause No: 6.25.1 Page No.39	For the purpose, fire alarm system consisting of manual call points (break glass), automatic gas/smoke/ heat detectors, release & inhibit switches for fire suppressment clean agent. Conventional or micro-processor based data gathering fire alarm and central fire alarm panel, mimic panels & associated equipment are provided.	Apart from Manual Call Point nothing is mentioned in the given BOQ. Please confirm the scope and confirm the requirement.	Please refer <b>sl no-12 of revised BoQ.</b>
17	General	General	As per the site condition and meeting we had on 18.11.2019 at Jawhar Tower we suggest to consider this job as an unit rate contract.	Tender conditions prevails.
18	Payment Terms Page No.214	Payment Terms	As per the tender document payment terms against erection has not been mentioned. Please confirm the same.	Please see the Revised Payment terms as sl no-7 of Addendum-II
19	Page No 5	Schedule of Tender	As per the tender document the project completion time is six (06) months and which is appearing not feasible. We request you to kindly extend the completion time for 15 months considering the nature of the job.	The project completion period is 9 months instead of 6 months ( <b>Sl.No.7 of Addendum-II.</b> )
20	Clause No 6.25.1 Page No.39	Fire Detection System	Please note that in the tender document the scope of FDA has been mentioned but in the SOR it is not reflected. Please incorporate the same.	Pl. refer revised BoQ (Addendum-II).
21	Clause No 6.25.1 Page No.39	Fire Detection System	Please incorporate the items involved in the Gas Detecion system. Please also provide us the Gas detection system technical specification and Technical Datasheet.	Pl. refer revised BoQ (Addendum-II).
22	Clause No 6.89.20 Page No.113	Quick Release Mooring Hook	Please confirm whether the quick release mooring hooks will be operated automatically from the control room or manually from the Jetty itself.	Provide with Auto/Manual from Control Room or Jetty respectively
23	Price Schedule SI.No.8	Double headed Fire hydrant	As per BOQ SI no: 4 the asked quantity of hose box for double headed hydrant is two (020 numbers. Please note that the number of Hose Box will be one (01) no. with 2 nos 15 Mtrs. Hose and 2 nos. branch pipe with nozzles. Please confirm the same.	Pl. refer revised BoQ (Addendum-II).

24	Price Schedule SI.No.5&6	ERW Pipes	As per the site visit experience we are considering 140 mtrs. Of 400 NB MS ERW pipe and 70 Mtrs. Of 100 NB SS Foam line pipe as underground portion. Please confirm the same.	Pl. see at SI.No.10 above.
25	Price Schedule SI.No.5&6	ERW Pipes	Please confirm the MOC of pipes whether it will be MS ERW or Seamless.	The water pipe shall be of Carbon Steel ERW type. SI no-12 of Addendum-II may be referred to.
26	Price Schedule SI.No.7	Valves	We are considering the INTERVALVE as a valve manufacturer as an Indian make. We request you to kindly consider the same.	Tender condition prevails.
27	Price Schedule SI.No.7	Valves	As per BOQ SI No: 7.106 please confirm the nature of the 50 NB Brass valve. Whether gate valve or NRV.	Please refer revised BoQ sl no-8 A (vi) and 8 B (vi).
28	Price Schedule SI.No.5	ERW Pipes	As per the site survey we have observed that the intake water is not saline type so the internal cement lining is not required. Please confirm the same.	Tender conditions prevails.
29	Price Schedule SI.No.2 & Page 149	Tower Mounted Water cum Foam Monitors	As per the site visit it was mutually agreed that the structure for the new tower monitor will be made of angles and channels as done by the BPCL for the other one. Please confirm the same.	Pl. see the SI.no.3 above.
30	Price Schedule SI.No.2 & Page 149	Water curtain nozzels	Please confirm that the water curtain system will be operated through MOV.	Yes, agreed.
31	Price Schedule SI.No.2 & Page 149	Tower Monitor	Please add another quantity for Tower monitor to be supplied by the contractor in the revised BOQ.	Please refer revised BoQ.
32	General		Please confirm that along with the Foam tank the Foam pumps are also there and we do not need to consider the same under scope of supply	Please consider the existing Foam Tank alongwith the Foam Pumps,. However, the SS pipeline shall be replaced as per BoQ.
33	General		We request to kindly give us an extension of two weeks for the submission of the tender.	Refer to SI.No.1,2&3 of Addendum-I uploaded on 28.11.19

34	Sl. No. - 15.0 of BOQ & Datasheet Annexure - 1. Datasheet for Main Fire Water Pump	'Main Fire water Pump with Diesel Engine(Capacity 900m <sup>3</sup> /hr,Head 160m) '& As per Datasheet -capacity :MIN -720 m3/hr.'	The two statements are contradictory. Please confirm which one to follow.	Main Fire water Pump with Diesel Engine shall be (Capacity 900m <sup>3</sup> /hr,Head 160m
35	Sl. No. - 2.0 of BOQ	Design, Supply, Erection, Testing & Commissioning of Remote operated 6" Tower monitor on 20 mtr high tower, capacity 6000 LPM (complete with panel & accessories), as per Technical Specification & scope of work.	Our understandings based on the statement & technical Specification provided are as follows and request you to confirm the same :1) Isolation Valve for Tower Monitor has considered on separate item no.2) Monitor shall be fixed flow type.3) Panel of tower monitor shall be connected to the existing PLC at control room of the customer.4) Only Provision for connection betweenMonitor Panel with Customer's PLC shall be provided on the Monitor Panel and the same is under the scope of this tender. The connection between these two are under the scope of some other tender.	The contractor has to integrate their supplied PLC of main pump and tower monitor & other equipments with the PLC of the existing equipments which is under installation through separate contract. Accordingly, the bidder shall consider all costs w.r.t the above. For details please refer 'SCOPE OF WORK FOR INSTRUMENTATION ' at page no- 100 to 105 of tender document and revised BoQ of Addendum-II.
36	Sl. No. - 3.0 of BOQ	Design, Supply, Erection, Testing & Commissioning of <b>Ground Monitor</b> with isolation valve at elevated level with all insert plates, fixtures, clamps, SS fasteners pressure gauge dial type 150 mm size connected at monitor inlet pipe and supporting for riser pipe and monitor, orifice plates suitable to discharge 3000 LPM capacity at 12.25 kg/cm <sup>2</sup> with a horizontal throw range of 45m with electrical / electro-hydraulic equipments for horizontal and vertical rotation with base operation.	Our understandings based on the statement & technical Specification provided are as follows and request you to confirm the same : 1) Isolation Valve for Ground Monitor shall be included in this item no. 2) Movement through Electrical equipment shall be considered. 3) The Monitor shall be fixed flow type.	As per revised BoQ, Isolation valve all electricals works considered the scope of work. However, the monitor shall be fixed flow type.

37	Sl. No. - 4.0 of BOQ	Design, Supply, Erection, Testing & Commissioning of SS-316 size 63mm <b>Double Headed Fire Hydrant</b> with (landing valves as per BIS:5290) and isolation valve (100 NB), SS-316 with orifice plates to be placed below each hydrants and separate controls fitted with 63 mm instantaneous female coupling on each outlet along with 2 nos hose box stand with 15m long hose pipe each with end coupling with nozzles , as per Technical Specification.	Our understandings based on the statement & technical Specification provided are as follows and request you to confirm the same :1) Isolation Valve for DH Hydrant Valve shall be included in this item no.2) 2 Nos. Hose Pipe, 1 No. Hose Cabinet, 1 No. Branch Pipe with Nozzle & 1 No. Stand for Hose Cabinet shall be included with this item no.	Plese refer revised BoQ and scope of work.
38	Sl. No. - 5.0 of BOQ	Design, supply, erection, testing & commissioning of the following ERW steel pipe - internal cement lined along with bends, tees, reducers flanges, gaskets, bolt- nuts, washers,u-clamp supports and any other fitting, painting as applicable, as per Technical specification for above ground piping system including Excavation back filling of trench and interconnection between existing and new facilities, as per Technical Specification.	It is requested to provide the excavation and Back filling qty.	The bidders participated in the pre-bid meeting had alredy visited at the site and collected the same. Accordingly, the bidders are requested to visit the site before quoting.
39	Sl. No. - 6.0 of BOQ	Design, supply, erection, testing & commissioning of the following <b>Stainless-Steel pipe for Foam line</b> etc.- internal cement lined along with bends,tees, reducers flanges, gaskets, boltnuts,washers, u-clamp supports and any other fitting, painting as applicable, as per Technical specification for above ground piping system including Excavation back filling of trench and interconnection between existing and new facilities, as per Technical Specification.	It is requested to provide the excavation and Back filling qty.	Pl. see sl.no.38 above.

40	Sl. No. - 7.0 of BOQ	As per BOQ the Valves shall be CI clearly mentioned in the brackets, whereas as per Technical Datasheet the valves shall be Carbon Steel Body manufacture.	The two statements are contradictory. Please confirm which one to follow.	Pl. see sl.no.9 above.
41	Sl. No. - 8.0 of BOQ	Design, supply, erection, testing & Commissioning of Hose box (750mm x 600mm x 250mm) along with 2nos.hose (IS 636: 63mm dia x 15 m long) each connected with end couplings(IS-903) , 2 nos. Branch pipe with nozzles (IS- 903), as applicable, as per Technical Specification.	As per Sl. No. 4 above the Hose Cabinet shall be included with the Hydrant Valve Accessories Item. Please confirm what are the items to be consider under this sl. No.	Pl. refer revised BoQ (Addendum-II).
42	Clause 6.18/j & 6.87.4/iii & IO List: Jetty PLC system of Technical Specification Page No.34	"Design Philosophy of Fire Fighting System" & "Instrumentation Scope of Work for Fire Fighting System for all four jetties" & IO List: Jetty PLC system	From the tender spec, we assume that the new PLC shall be capable to operate in Hot-Standby mode, i.e it will have redundant processor/power supply unit & sufficient IO/communication modules.Please ensure the hardware configuration & confirm the same. May you please suggest any sample model no (From any reputed PLC Vendor) for better understanding.Also mention the communication protocol between new-PLC (Contractor's scope) & existing DCS/PLC & Other panels such as Tower Monitor LCP interfacing (Client/End user's scope).Also from the given IO List, we understand that IO count shall be considered for new-PLC only. F&G PLC is not in our scope. May you please provide system architectural drawings of overall control system along with new PLC.Hydro Carbon Detection system scope?Qty of 10 to consider in PLC?	Please see sl no 35 above and revised BoQ (Addendum-II).
43		Control Panel Qty	Please confirm the qty as below for better understanding : a. New PLC- 1 no b. DE-LCP: For Engine driven Fire Pump-1no c. Tower Monitor LCP- 1 no d. Annunciation Panel- 1 no	Please see revised BoQ (Addendum-II) and sl no-35 above.

44	Clause 6.87.4/iii & Datasheet Annexure of Technical Specification Page No.102	Instrumentation Scope of Work for Fire Fighting System for all four jetties&Datasheet Annexure	Please provide the type of Field Instruments like switches/transmitters (Working principle: Pressure/Flow/Level Instruments) with actual quantity to be considered.Ex:Pressure Transmitters: QtyMag-Flow meter: QtyLevel Switch (capacitive type): Qty** The same can be estimated if tender P&ID is available.	The contractor shall design the system considering the scope of work, technical specification and drawings, etc.
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45	Control & Instrumentation Page: 145		Please provide tender P&ID which may be modified during detailed engineering stage. Also may you provide plant/equipment layout drawings to estimate tray/cable.	Please see sl no-1 above for P&ID. Layout drawing is enclosed as sl no-8 of Addendum-II. The bidder shall have to estimate the cable tray after visiting HDC site and quote as per sl no 12 of revised BoQ.
46	6.27/j of Technical Specification Page No. 45	"TECHNICAL SPECIFICATION - FIRE FIGHTING EQUIPMENTS"	a. Control & Signal cables are FR (Fire Resistance) or FRLS (Flame Retardant Low Smoke) type? Please confirm.Can we consider other reputed cable vendors like Polycab/Thermocables? B. MCC panel scope? Feeder nos & details? C. Incomer Power cable length & spec (sq. mm) from Substation to MCC? Scope? d. Control cable tentative length?	Please see the revised BoQ (Addendum-II).
47	General		We request you to extend the submissin date by 10 days.	Please see sl no-33 above.
48	Clause No: 6.6 & 6.24 Page No.28 & 38	Piping: Piping MOC shall be ASTM A106 Gr B Std. Schedule.	There is a contradiction in pipe Specification. ASTM A 106 Grade B indicated in specification is for CS seamless pipe. But in BOQ , ERW pipes are called for . In general, ERW pipes are manufactured as per IS-1239/IS-3589 & ASTM A53 standard.Kindly confirm which one we have to offer.	The bidder shall have to supply ERW pipe for hydrant lines suitable to withstand water pressure as per OISD-156.
49	Clause No: 6.18 Page No.34	fire protection system for protection of ships at HOJ-III after replacement of the existing Fire Fighting system	(1) As per the specification, dismantling of existing fire protection system are also our scope.Please clarify the dismantling of existing system in detail manner including qty, layout drawings. (2) Required fire protection system is for ship or for Haldia Oil Jetty -III(Unit protection) area. Please confirm.	1) Dismantling, shifting to the yard/location under contractor's scope. Please refer revised BoQ at Item no.14. 2) The proposed fire fighting system are as per OISD-156 standard at HoJ-III for handling LPG/POL vessels.

50	Clause No: 6.22 Page No.38	<b>Tower Mounted Water cum Foam Monitors :</b> The monitor is tapped from firewater network system through a motorized gate valve and shall be installed at the suitable height on the tower such that it will cover the deck of the largest tanker in the lightest condition at spring tides at the jetty. At the downstream of the motorized gate valve an inline balance proportioner shall be installed.	Motorised gate valve quantity is not provided in BOQ. Kindly confirm same has to be included in tower monitor line item(or) to be quoted separately.	As per scope of work, MOV shall be included in the item of tower monitor and water curtain nozzels.
51	Clause No: 6.22 Page No.38	To feed foam to the tower mounted monitor atmospheric foam concentrate storage tank, foam pumping system is considered at the terrace level of the fire water pump house. The discharge header from foam pump shall be connected to the pressurized foam concentrate pipe, which will be laid parallel to the hydrant header throughout jetty terminal	(1)Quantity for foam storage tank, foam concentrate, foam proportioner are not shown in BOQ. Shall we include the same in Sl. No 2(Tower Monitor) (2)Foam concentrate percentage is not mentioned in tender specification. Please indicate the required foam concentrate percentage.	The existing foam tank capacity 40 cu.m (2x20 cu.m.) and foam proportionate system with the ratio of 97% water and 3% foam and not in the scope of the Bidder.
52	Clause No: 6.22 Page No.38	Detailed Fire water pump capacity, foam pump capacity and foam concentrate storage requirement shall be shown in P&ID	P&ID is missing .Kindly share the same.	Please see sl no-1 above.
53	Clause No: 6.25.1 Page No.39	Fire Detection System	Refer to BOQ, there is no line item in BOQ for fire detection and alarm system.Hence we understand that this is not in bidder scope .Please confirm.	Fire detection system and automatic alarm system shall be considered by the bidder as separate BOQ. Please see sl no-12 of revised BoQ (Addendum-II).
54	Clause No: 6.27 Page No.44	Supply & installation of <b>Horizontal split casing pumps</b> 720 m <sup>3</sup> /hr (approx.) for Water Hydrant, Ground Monitors and Tower monitor system including diesel drive with propeller shaft coupling, control panels, including diesel tanks, associated piping, valves and pressure gauges, battery banks & battery chargers, cables, etc.	As per specification it is 720 m <sup>3</sup> /hr. and as per BOQ it is 900 m <sup>3</sup> /hr. Please confirm the capacity	Please see no 34 above.

55	Clause No: 6.89.20 Page No.113	QUICK RELEASE MOORING HOOKS AND CAPSTANS (REMOTE CONTROLLED)	Hope this is not related to fire protection system accessories. Please confirm that the scope of supply and installation of the same.If it is in our scope then furnish the make, MOC, specification/datasheet.	This item is a part of the scope of work under revised BoQ item no.10.
56	Data Sheet for Gate Valve Page No.156	MOC of gate valve is Cast Carbon Steel ASTM A 216 Gr WCB	There is contradiction in BOQ & tender specification regarding MOC of gate valves. CS MOC is given in tender spec. But in BOQ, CI MOC gate valves are called for. Clarify the MOC gate valves.	Please see sl no-9 above.
57	Data Sheet for NRV Page No.157	MOC of NRV ASME B 16.34/API 594,ASTM A 216 GR.WCB	MOC for NRV is not mentioned in BOQ. But in datasheet , CS MOC is given. Please reconfirm the same.	The MOC of NRV as per datasheet shall be considered.
58	BOQ SI.No.10 Page No.238	Water Curtain Nozzles	Furnish MOC and K-factor details.	Please refer Addendum-II.
59	BOQ SI.No.2 Page No.238	Design, Supply, Erection, Testing & Commissioning of Remote operated 6" <b>Tower monitor</b> on 20 mtr high tower, capacity 6000 LPM (complete with panel & accessories), as per Technical Specification & scope of work.	1) Indicate the distance between Tower Monitor and control room. 2)Kindly confirm the location of control panel 3)Furnish the required flow and pressure available at the tapping point/pipeline nearer to the tower monitor.	Please refer sl.no.8 of Addendum-II. The flow and pressure at the tapping point/pipeline nearer to the tower monitor shall be as per OISD-156.
60	General	Plot Plan	Request to share the plot plan showing the area to be protected	Please refer sl.no.8 of Addendum-II.
61	General	Pumphouse Location	Indicate the location of fire pumphouse in plot plan.	Please refer sl.no.8 of Addendum-II.
62	General	Civil works	List out the scope of civil works in detail which are under fire protection system vendor scope.	Please refer clause no-6.88.1 and other relevent portion of tender document. However, all the proposed foundatin of fire fighting equipments including pipeline supports / tresstle required for civil work including repairing of existing support.
63	BOQ SI.No.7	All valves should be C.S	Please confirm	Please refer Revised BoQ.

64	Page No. 5 Cl.No 3.6	Completion Period 6 months	It should be min. 24 months as it is not a green field and approx. 6/7 months will be required for design engineering, PESO approval and procurement.	Pl. see sl.no.7 of addendum-II.
65	Cl. No 3.13 (ii) Page No.6	Closing date & time of submission of e-Tender - 03.12.2019	Tender submission date and respective other dates should be extended by another 15/20 days to prepare initial design engineering and also to collect back up quotes from vendors to finalize a moderate rate after incorporating of line items in the BOQ of the package, further pre bid meeting is not required.	Refer to Sl.No.1,2&3 of Addendum-I uploaded on 28.11.19
66	BOQ Sl.No.2 Page No.238	Design, Supply, Erection, Testing & Commissioning of Remote operated 6" Tower monitor on 20 mtr high tower, capacity 6000 LPM (complete with panel & accessories), as per Technical Specification & scope of work.	Please provide Approximate distance from Monitor to Panel.	Sl.No 8 of Addendum-II may be referred to.
67	BOQ Sl.No.3 Page No.238	Design, Supply, Erection, Testing & Commissioning of Ground Monitor with isolation valve at elevated level----- -----discharge 3000 LPM capacity at 12.25 kg/cm <sup>2</sup> with a horizontal throw range of 75m with electrical/electrohydraulic equipments for horizontal and vertical rotation with base operation	i) Kindly provide the level as Elevated level is mentioned for ground monitors. ii) Elevated structure is included in this item. iii) Is it required to be remote control operated? iv) Maximum flow can be 50/60M and not 75 m as required. Please clarify.	Please refer the revised BoQ
68	BOQ Sl.No.2-3 Page No.238	Price Schedule for Ground & Tower monitor	Local FLP control panel is required to be additionally provided for item No. 2 and 3 and not provided in SOR	Please refer item no.12(viii) of revised BoQ.
69	BOQ Sl.No.4 Page No.238	Along with 2nos. Hose box stand with 15M long hose pipe	i) What do you mean with separate control. ii) Along with 2nos. Hose box stand with 15M long hose pipe. IT should be, 1 No. Hose box stand with 2nos. 15M long hose pipes each	Please refer Item no.9 of BoQ and its technical specificaliton.

70	BOQ SI.No.5 Page No.238	Design, supply, erection, testing & commissioning of the following ERW steel pipe - internal cement lined-----system including Excavation back filling of trench and interconnection between existing and new facilities, as per Technical Specification.	i) Pipes specified in SOR are ERW whereas in specification these pipes are shown as Seamless standard ASTM A 106 Gr. B i.e. Seamless. Please clarify. ii) In case of ERW pipes thickness shall be based on system pressure requirement. Please confirm	It shall be ERW pipe and suitable design & supply for withstanding the system pressure.
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71	BOQ Sl.No.7 Page No.238	Design, supply, erection, testing & Commissioning of the following types of Valves, as per Technical Specification.	i) 400 NB Gate Valve (CI) are appearing at 2 different places i.e. Sr. No. 7.A.i . & 7.A.viii. Similarly in Erection part i.e. Sr. No. 7.B.i . & 7.B.viii. Please clarify. ii) in Sr. no. 7.A.vi - Please specify complete item as you are mentioned "50 NB Brass"	Please see revised BoQ of Addendum-II.
72	Clause No. 6.18.g Page No.36	Existing one tower to be replaced & grit blasted & painted.	Existing one tower to be replaced & grit blasted & painted. This item is not appearing in SOR. Where shall we include price for this item. Drawing is required to estimate the work.	Please refer sl no 15 above.
73	Clause No. 6.18.i Page No.36	Tender specifying all equipment and accessories shall be UL/FM approved.	Please note that only Monitors will be UL/ FM approved and all other equipment and accessories will be IS approved and not UL/FM approved. Please clarify	The monitors will be UL approval.
74	Clause No.6.25.1 Page No.39	Fire detection Alarm & detection system.	Fire detection Alarm & detection system. Weather this is in the present scope of work if yes where shall we quote for this items as SOR does not show this item. In case it is to be quoted, relevant drawings will be required to workout.	Please see revised BoQ of Addendum-II.
75	Clause No.6.27.a Page No.44	Diesel Engine Operated Pump.	Diesel Engine Operated Pump. In SOR shown is 900 Cu M/ hr. capacity whereas specification indicates 720 CuM capacity. Please clarify.	Please see sl no-34 above.
76	Clause No 6.3.III Page No.66	Horizontal water range of tower monitor is mentioned as 100 meter.	Horizontal water range of tower monitor is mentioned as 100 meter. This will not be possible. Maximum 75-80 mtr is possible. Please accept and confirm.	It shall be as per OISD-156.
77	Clause No. 6.31.8 Page No.71	<b>Valves</b> The contractor shall replace the existing valves as per BOQ.	Existing valves to be replaced by new one as per BOQ. Please note that CI Body valves will not be suitable for 16kg pressure as new pump is being installed of 16kg/Sq.M output. However in specification MOC has been specified CS for valves body.	Valve body shall be of Cast Steel type.

78	Clause No. 6.19.5 Page No.37	Water curtains facility are already there and to be put operational by the contractor at his cost.	Curtain Nozzles are provided 9 nos only. Please give complete specification and further commissioning of old system is included in this scope refer clause 6.19.5. Please confirm and give the drawing and specification along with clear scope.	Water curtain system along with nozzles have to be supplied by the bidder as per revised BoQ sl no 11.
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79	Clause No.6.19.6 Page No.37	Manual/ automatic below deck fixed water spray system or pile fire-proofing to protect berth structure and installations shall be provided.	Spray system for Pile fireproofing is included in scope but <b>not provided in SOR</b> . Please provide <b>Civil drawing</b> for estimating the work and where shall we quote for this item.	Please refer revised BoQ at Item no.12 (iii).
80	Clause 6.22.4 Page No.38	Tapping shall be taken from foam concentrate header and will be connected to the foam line of inline balance proportioner of each tower mounted monitor through a manual isolation valve	It means we have to 1 or 3 Valves. Please clarify. Further Elevated monitor also to be provided this isolation valve or not. <b>Please specify total no. of 4" SS isolation manual operated valves.</b>	In the foam line shall provide necessary valves as per relevant norms.
81	Clause No. 6.25.1.22.		Scope not clear. This system is available or to be provided. If to be provided not available in SOR	The clause no referred as 6.25.1.22 does not exist in the tender document.
82	Clause No.6.31.19 (Accessories) Page No.77	Contractor of the responsibility of furnishing equipment and accessories/auxiliaries of proper design, materials and workmanship to meet the specified start up and operating conditions	Weather we have to supply these accessories if yes where to add the cost as SOR does not show these items.	Please refer the revised BoQ.
83	Clause No 6.41 (Pipes) Para 5 Page No.83	Maximum of 10% of Corrosion Allowance may be adjusted to optimize on pipe schedule. However, if CA is suffixed by 'minimum', this downward adjustment shall not be used.	Maximum 10% corrosion allowance is written in this clause whereas in clause no. 6,18.B, page no.35 this corrosion allowance is shown as 3mm. Please confirm.	Corrosion allowance shall be as per relevant standard.
84	Clause No 6.78 Page No.99	All statutory approvals required for design , supply and installation and commissioning of individual equipment and for system as a whole are included in scope of work.	<b>Please clarify</b> what actually you need in this clause.	The proposed work consisting of augmentation of existing jetty with fire fighting quipment as per OISD-156. However, the final as build drawing shall be made by the contractor after installing all the equipments at site along with few item installed by BPCL and the same drawing is forwrded to PESO for approval. The necessary arrangement made by the contractor for aproval of the drawing with the support of HDC.

85	Clause No.6.84 Para 5 Page No.102	Any other document/ drawing not listed but required to carry out the engineering and for integration of other equipment packages sub-ordered by Contractor shall also be prepared and furnished to HDC for approval.	We agree for all specified work and will quote accordingly. In case some additional work crops up, same will be quoted and on approval from HDC will be executed. It is difficult to visualize at this stage and include such prices in our offer.	Any additional work beyond the scope of this tender including Addendums shall be carried out as extra work and as per mutually agreed rates between KoPT and the Contractor including variation in quantity of the revised BoQ.
86	Clause No. 6.92 Page No.133	RCC structure with columns shall be provided for Tower Monitor.	Please note Sir that RCC structure of 20M High will take a long time and hence we wish to suggest steel structure. Please confirm.	Please see sl no-3 above.
87	Clause No 6.92.2 Page No.133	Hand Railings	Weather these will be done & paid under SOR item No.14 or else where, please clarify.	The contractor has to provide railings in Tower monitor and Ground Monitor to be supplied by them.
88	Clause No. 6.93 (Portable and wheeled Extinguisher) Page No.135	Portable and wheeled Extinguisher	Please refer table for above for a Jetty handling ships of 20000 to 40000 Tones shall have 8 x 9 kg DCP & 10 x 75kg wheeled DCP Extinguishers whereas SOR shows only. 1) 4 x 9 kg Capacity dry chemical 2) 2 x 75kg capacity wheel mounted dry chemical power fire extinguisher. 3). 6.9 kg capacity CO2 extinguishers on wheel.	Please refer revised BoQ at Item no.13.
89	DATASHEET Page No.151	Flanges & Nut Bolt	As pipes specified in SOR are ERW than flanges can also be of IS 226/2062 and not ASTM A105. Further Nut Bolt SOR specifies SS Nut Bolts whereas datasheet showing MOC Bolts CS to SA193 Gr B & SA194 Gr 2H. Please clarify.	Pipes specified in BoQ are ERW and flanges shall be as per clause no-6.42 of tender document. All nuts & bolts shall be as per clause no-6.46 of tender document.
90	DATASHEET Page No.156	Pumps & Line Pressure	Pump & line pressure is 16 Kg whereas valves required rating is specified as 150. Please clarify. Also clarify what the Valve Body MOC should be C.I. or C.S.	As already clarified valve body shall be of Cast Steel. Valve required rating shall be suitable for withstanding working pressure of 16 kg/sq cm.
91	SECTION-VIII Page No.213&241	Quick Release Hook	Please give approved make and specification of Quick Release Hook.	Please see sl no-8 above.

92	SECTION-VIII, Part-B, Sl.No. 7 Page No.214	Payment will be made based on accepted rates of the bill of quantities. Monthly one bill would be accepted. i) 70% Payment against each item will be made against supply of respective item at site and submission of bills along with Custodian Certificate and other relevant documents like Inspection Reports, Challans, etc. ii) 20% Payment against each item will be made against installation of the respective item and submission of bills along with Installation Certificate. iii) 10 % Payment against each item will be made against Testing, successful commissioning, and taking over the commissioned job by KoPT, obtaining statutory certificate by the contractor and submission of bills, along with Job Completion Certificate.	Payment Terms is given for composite item but here in tender BOQ prices are separate for Supply and Erection/Commissioning. Therefore payment terms break up for Supply and Erection/Commissioning be given.	Please see sl no-18 above.
93	BOQ item No. 5	ERW pipe requirement	As per specification datasheet No. 6 of Pg. no 150 of tender notice, CS seamless pipe is required. However as per tender BOQ item no. 5, the pipe indicated is ERW type. Please clarify the actual requirement. If pipe is ERW required, please specify its MOC.	Water pipe shall be Carbon Steel ERW .
94	BOQ item No. 6	Cement lining in Stainless steel pipe.	Since the MOC of pipe indicated is stainless steel, the requirement of cement lining would not be there. You are requested to clarify/ confirm the same.	Agreed, cement lining is not required in stainless steel pipe. Sl no-7 of Revised BoQ may be referred to.
95	BOQ item No. 7.106/206	50 NB Brass	Please provide the type of valve required along with applicable technical datasheet.	50 NB Brass shall of of gate valve type. Please refer sl no-8 of revised BoQ.
96	BOQ item No. 7.107/207	350 NB NRV	Please confirm the MOC of the valve required.	350 NB NRV body shall be of cast steel. For details please refer clause no 6.31.10.
97	BOQ item No. 7.108/208	400 NB gate valve (CI)	This item is already covered under item no. 7.A.(i). kindly confirm this requirement.	BoQ sl no 7 A(viii) and 7 B(viii) are deleted from the scope of the contractor.
98	BOQ item No. 9	Quick release Mooring Hook	Please provide the technical datasheet of Mooring hook. Also specify the approved makes for Mooring hook.	Please see sl no-8 above.
99	BOQ item No. 11	Manual call point	Kindly provide the GA drawing of control rooms wherein this item is to be installed.	Please refer revised BoQ.

100	Tender notice clause no. 6.90 Pg 131	Civil scope	The BOQ given with the enquiry does not indicate any civil items. Please confirm whether we have to consider pipe pedestals in our scope. If pipe pedestal is to be considered please provide the typical drawing with c/c distance for estimation purpose.	All pipes shall be installed on pedestals as per clause no-6.18 (b) of Pg. no.35 and scope of work sl.no.(f), Page no.208 of tender document.
101	Tender notice clause no. 6.18.j Pg no. 37	PLC integration of Pumps	We understand that our scope includes integration of Fire water pump with existing PLC system. Please confirm the cabling required for integration is in M/s KoPT scope or in contractor's scope? If cable is in contractor scope, please provide the type and length of cable required.	Please see sl no-14 above.
102	Tender notice clause no. 6.18.i Pg no. 36	PLC integration of tower monitor	Kindly clarify the location of existing PLC to be integrated with tower monitor along with cabling scope. If cable is in contractor's scope, kindly provide the type and length of cable required. Further we presumed that only tower monitor, which is to be supplied by contractor, is to be integrated? Please confirm.	Please see sl no-35 above.
103	Tender notice clause no. 6.25.1 Pg no. 39	Fire alarm system	We understand that Fire alarm system is not in contractor's scope of work. Kindly clarify.	Please refer revised BoQ (Addendum-II).
104	Tender notice clause no. 6.27 Pg no. 45	Foam proportioned system and foam tank	We understand that Foam proportioned system and foam tank is not in contractor's scope of work. Kindly confirm.	Please see sl no-51 above.
105	Tender notice clause no. 6.30 Pg no. 66	Tower for tower monitor	Please provide the GA drawing of tower for tower monitor for estimation purpose.	Please see sl no-3 above.
106	BOQ item No. 5	ERW pipe requirement	As per specification datasheet No. 6 of Pg. no 150 of tender notice, CS seamless pipe is required. However as per tender BOQ item no. 5, the pipe indicated is ERW type. Please clarify the actual requirement. If pipe is ERW required, please specify its MOC.	Please see sl no-93 above.
107	BOQ item No. 6	Cement lining in Stainless steel pipe.	Since the MOC of pipe indicated is stainless steel, the requirement of cement lining would not be there. You are requested to clarify/ confirm the same.	Please see sl no-94 above.

108	BOQ item No. 7.106/206	50 NB Brass	Please provide the type of valve required along with applicable technical datasheet.	Please see sl no-95 above.
109	BOQ item No. 7.107/207	350 NB NRV	Please confirm the MOC of the valve required.	Please see sl no-96 above.
110	BOQ item No. 7.108/208	400 NB gate valve (CI)	This item is already covered under item no. 7.A.(i). kindly confirm this requirement.	Please see sl no-97 above.
111	BOQ item No. 9	Quick release Mooring Hook	Please provide the technical datasheet of Mooring hook. Also specify the approved makes for Mooring hook.	Please see sl no-8 above.
112	BOQ item No. 11	Manual call point	Kindly provide the GA drawing of control rooms wherein this item is to be installed.	Please see sl no-99 above.
113	Tender notice clause no. 6.90 Pg 131	Civil scope	The BOQ given with the enquiry does not indicate any civil items. Please confirm whether we have to consider pipe pedestals in our scope. If pipe pedestal is to be considered please provide the typical drawing with c/c distance for estimation purpose.	Please see sl no-100 above.
114	Tender notice clause no. 6.18.j Pg no. 37	PLC integration of Pumps	We understand that our scope includes integration of Fire water pump with existing PLC system. Please confirm the cabling required for integration is in M/s KoPT scope or in contractor's scope? If cable is in contractor scope, please provide the type and length of cable required.	Please see sl no-14 above.
115	Tender notice clause no. 6.18.i Pg no. 36	PLC integration of tower monitor	Kindly clarify the location of existing PLC to be integrated with tower monitor along with cabling scope. If cable is in contractor's scope, kindly provide the type and length of cable required. Further we presumed that only tower monitor, which is to be supplied by contractor, is to be integrated? Please confirm.	Please see sl no-35 above.
116	Tender notice clause no. 6.25.1 Pg no. 39	Fire alarm system	We understand that Fire alarm system is not in contractor's scope of work. Kindly clarify.	Please refer revised BoQ.
117	Tender notice clause no. 6.27 Pg no. 45	Foam proportioned system and foam tank	We understand that Foam proportioned system and foam tank is not in contractor's scope of work. Kindly confirm.	Please see sl no-51 above.
118	Tender notice clause no. 6.30 Pg no. 66	Tower for tower monitor	Please provide the GA drawing of tower for tower monitor for estimation purpose.	Please see sl no-3 above.