

## Annexure 4

## Work Schedule (Contract Package-wise)

## WORK SCHEDULE

WORK SCHEDULE - CP1																																																																							
Project Name: Consultancy for “Design, Preparation of Bid Documents & Evaluation of Bids for the Proposed Construction of 400 MLD Capacity Seawater Reverse Osmosis Desalination Plant at Perur along East Coast Road, South of Chennai, Tamil Nadu and Construction Management & Supervision for the Proposed Desalination Plant and its Product Water Conveyance Pipeline from the Plant and upto Porur and all allied works.																																																																							
Activity	Task	Activities and tasks	Duration in Months	Project Duration in Months																																																																			
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66		
				YEAR 2020												YEAR 2021												YEAR 2022												YEAR 2023												YEAR 2024												YEAR 2025							
		Work Plan		Design and Bid document preparation (9 Months)												Bid process management and selection of contractor (12 Months)												Construction and Commissioning of Desalination Plant (42 Months)																																										Post Const. (2M)	
4.5.1		Team Mobilization and Kick Off meeting	1																																																																				
4.5.2		Inception Report: (Output-1)	1																																																																				
		Work Plan for Perur Desalination Plant ( CP1)																																																																					
4.5.3		Design Works of CP1	9																																																																				
	Task 1	Data and Information Collection	2																																																																				
	Task 2	Review the Technical Information	2																																																																				
	Task 3	Conducting Surveys and Investigations	2																																																																				
	Task 4	Concept Design of Perur DSP	5																																																																				
	Task 5	Preparation & Submission of Concept Design Report	1																																																																				
	Task 6	Preparation of Technical Specifications	2																																																																				
	Task 7	Financial Analysis	2																																																																				
	Task 8	Preparation of O&M Requirements for Bid Document	2																																																																				
4.5.4		Bid Documents Preparation for Perur DSP (CP1)																																																																					
	Task 9	Preparation of Request for PreQualification [RFQ] Documents																																																																					
	Task 10	Preparation of Request for Proposal [RFP] Documents																																																																					
4.5.5		Tendering Assistance	12																																																																				
	Task 11	Prebid Meetings, Clarifications & Issue of Addendums etc.	6																																																																				
	Task 12	Submission of PQ Evaluation Report	1																																																																				
	Task 13	Submission of Bid Evaluation Report - Technical	1.50																																																																				
	Task 14	Submission of Bid Evaluation Report - Financial	1																																																																				
4.5.6		Construction supervision for CP1	42																																																																				
	Task 15	Phase-I: Pre-construction activities	12																																																																				
	15.1	Design Review & Submission of Review Reports	12																																																																				
	15.2	Review of QAP & Construction Methodologies for Various Works	9																																																																				
	Task 16	Phase-II: Activities During Construction	30																																																																				
	16.1	Construction Supervision and Quality Control	30																																																																				
	16.2	Inspection of Material	30																																																																				
	16.3	Progress Monitoring, Record keeping and Reporting	30																																																																				
	16.4	Contract Management	30																																																																				

## WORK SCHEDULE - CP1

**Project Name: Consultancy for “Design, Preparation of Bid Documents & Evaluation of Bids for the Proposed Construction of 400 MLD Capacity Seawater Reverse Osmosis Desalination Plant at Perur along East Coast Road, South of Chennai, Tamil Nadu and Construction Management & Supervision for the Proposed Desalination Plant and its Product Water Conveyance Pipeline from the Plant and upto Porur and all allied works.**

[illegible]

**Note : 1.** The tentative date of deliverables have been worked out based on the discussion with CMWSSB officials, but the total time duration of each component is fixed as per ToR / as proposed by the PMC team.








2. \* During Video Conference call Zoom meeting held on 30.04.2020 with CMWSSB and PMC noted that due to the current COVID-19 Pandemic situation across the globe, overall 2 months delay in floating the RfQ and consequently the RfP for CP1.

3. CMWSSB has forwarded the PQ documents to JICA on March 2020 & August 2020 for concurrence. JICA has given concurrence on the PQ documents for CP1 to CMWSSB for floating of Notice Inviting Tender (NIT) on 30th September 2020

4. Pre-Application meeting held at CMWSSB and Webex Online for CP1 for PQ documents on 29.10.2020. CMWSSB has forwarded the reply to pre-Application for PQ documents to JICA on 05.11.2020 for concurrence.

5. JICA has given concurrence on the reply to pre-bid queries for PQ application for CP1 to CMWSSB on 18th November 2020

6. CMWSSB has extended the tender due date for receiving the application of PQ documents for CP1 from 01.12.2020 to 16.12.2020 (published in the website on 26th November 2020)

Legends	
	Main Activities [Full Time]
	Main Activities [Intermittent Time]
	Tasks Under Main Activities [Full Time]
	Tasks Under Main Activities [Intermittent Time]
	Sub Tasks Under Tasks
	Reports
	Client's Role

## WORK SCHEDULE - CP2



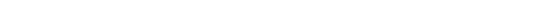

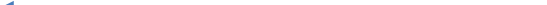


**Project Name: Consultancy for “Design, Preparation of Bid Documents & Evaluation of Bids for the Proposed Construction of 400 MLD Capacity Seawater Reverse Osmosis Desalination Plant at Perur along East Coast Road, South of Chennai, Tamil Nadu and Construction Management & Supervision for the Proposed Desalination Plant and its Product Water Conveyance Pipeline from the Plant and upto Porur and all allied works.**

Activity	Task	Activities and tasks	Duration in Months	Project Duration in Months																																																																						
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	
				YEAR 2020												YEAR 2021												YEAR 2022												YEAR 2023												YEAR 2024												YEAR 2025										
		Work Plan						Design and Bid document preparation (15 Months as per RFP)												Bid process management and selection of contractor (9 Months)									Construction and Commissioning (24 Months)																								Defect Liability Period (12 Months)																					
		Balance Team Mobilization by Commencement Date	1																																																																							
		Work Plan for Construction of Storage Reservoirs & Pumping Stations (CP2)																																																																								
4.5.8		Design Works of CP2	15																																																																							
	Task 1	Data and Information Collection	1																																																																							
	Task 2	Review the Technical Information	1																																																																							
	Task 3	Conducting Surveys and Investigations	1.50																																																																							
	Task 4	Detailed Design of the Reservoirs and Pumping Stations	8																																																																							
	Task 5	Preparation & Submission of Draft Detailed Design Report	3																																																																							
	Task 6	Preparation & Submission of Final Detailed Design Report	2																																																																							
4.5.9		Bid Documents Preparation for CP2	2																																																																							
	Task 7	Preparation of Request for PreQualification [RFQ] Documents (If required)	1																																																																							
	Task 8	Preparation of Request for Proposal [RFP] Documents	1																																																																							
4.5.10		Tendering Assistance	9																																																																							
	Task 8	Prebid Meetings, Clarifications & Issue of Addendums etc.	8																																																																							
	Task 9	Submission of PQ Evaluation Report	1																																																																							
	Task 10	Submission of Bid Evaluation Report - Technical	1																																																																							
	Task 11	Submission of Bid Evaluation Report - Financial	1																																																																							
4.5.14		Construction supervision for CP2	24																																																																							
	Task 12	Phase-I: Pre-construction activities	2																																																																							
	12.1	Review of QAP & Construction Methodologies for Various Works	2																																																																							
	Task 13	Phase-II: Activities During Construction	20																																																																							
	13.1	Construction Supervision and Quality Control	20																																																																							
	13.2	Inspection of Material	20																																																																							
	13.3	Progress Monitoring, Record keeping and Reporting	20																																																																							
	13.4	Contract Management	20																																																																							
	13.5	Measurements, Claims and Financial Control	20																																																																							
	Task 14	Phase-II: Activities During Trial Run and Commissioning	2																																																																							
	14.1	Pre Commissioning Activities	1																																																																							

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[illegible]

**Note :** The tentative date of deliverables have been worked out based on the discussion with CMWSSB officials, but the total time duration of each component is fixed as per ToR / as proposed by the PMC team.








Legends	
	Main Activities [Full Time]
	Main Activities [Intermittent Time]
	Tasks Under Main Activities [Full Time]
	Tasks Under Main Activities [Intermittent Time]
	Sub Tasks Under Tasks
	Reports
	Client's Role

## WORK SCHEDULE - CP3

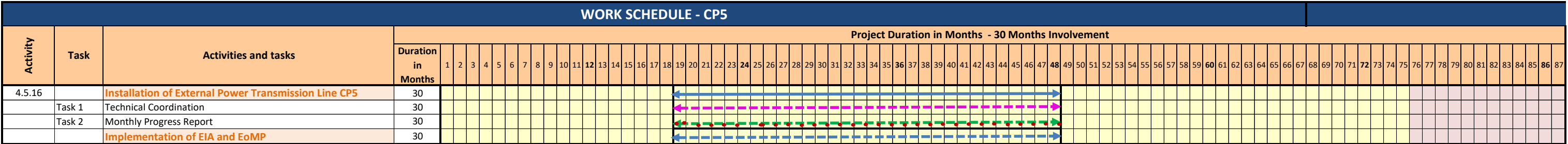
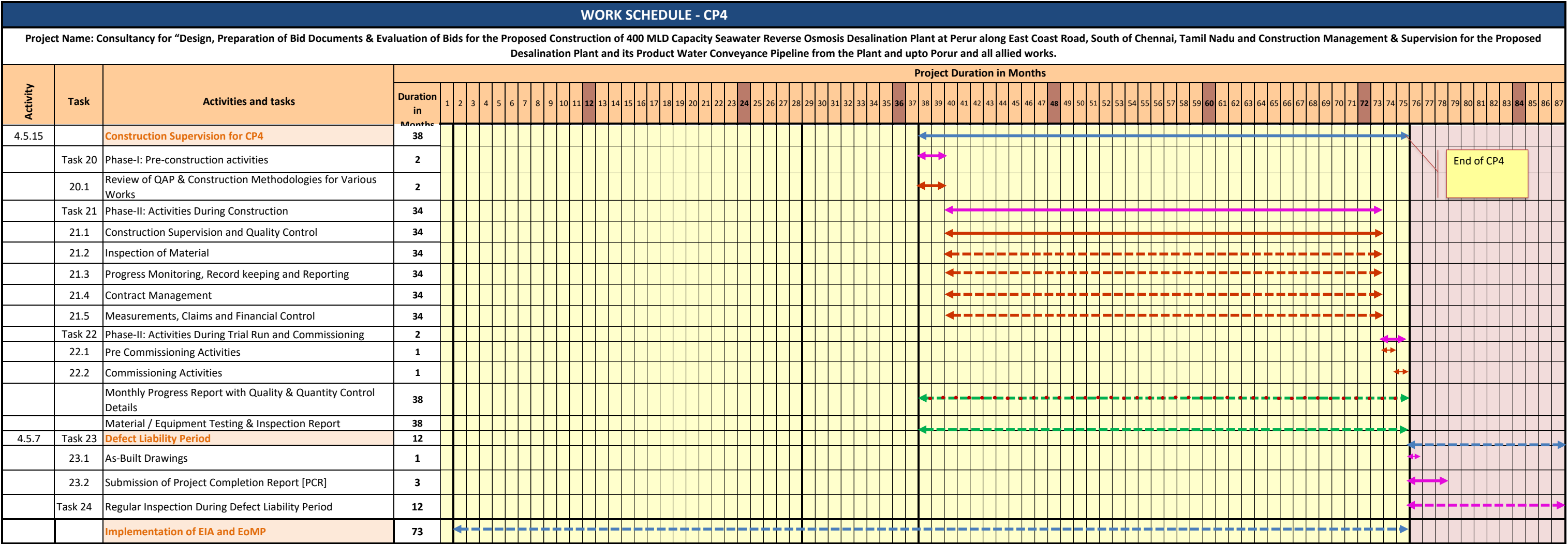
**Project Name: Consultancy for “Design, Preparation of Bid Documents & Evaluation of Bids for the Proposed Construction of 400 MLD Capacity Seawater Reverse Osmosis Desalination Plant at Perur along East Coast Road, South of Chennai, Tamil Nadu and Construction Management & Supervision for the Proposed Desalination Plant and its Product Water Conveyance Pipeline from the Plant and upto Porur and all allied works.**

Activity	Task	Activities and tasks	Duration in Months	Project Duration in Months																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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				YEAR 2020												YEAR 2021												YEAR 2022												YEAR 2023												YEAR 2024												YEAR 2025												YEAR 2026																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		Work Plan			CMWSSB sent the RFP document to JICA for concurrence									Construction and Commissioning (51 Months)																																																																			Defect Liability Period (12 Months)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
		Balance Team Mobilization by Commencement Date	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

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Legends	
	Main Activities [Full Time]
	Main Activities [Intermittent Time]
	Tasks Under Main Activities [Full Time]
	Tasks Under Main Activities [Intermittent Time]
	Sub Tasks Under Tasks
	Reports
	Client's Role

WORK SCHEDULE - CP4																																																																																										
Project Name: Consultancy for “Design, Preparation of Bid Documents & Evaluation of Bids for the Proposed Construction of 400 MLD Capacity Seawater Reverse Osmosis Desalination Plant at Perur along East Coast Road, South of Chennai, Tamil Nadu and Construction Management & Supervision for the Proposed Desalination Plant and its Product Water Conveyance Pipeline from the Plant and upto Porur and all allied works.																																																																																										
Activity	Task	Activities and tasks	Duration in Months	Project Duration in Months																																																																																						
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
				YEAR 2020												YEAR 2021												YEAR 2022												YEAR 2023												YEAR 2024												YEAR 2025												YEAR 2026												YEAR 2027		
		Work Plan		Design and Bid document preparation (28 Months)																								Bid process management and selection of contractor (9 Months)				Construction and Commissioning (38 Months)																																						Defect Liability Period (12 Months)																				
		Balance Team Mobilization by Commencement Date	1																																																																																							
		Work Plan for Improvement of Existing Water Distribution System (CP4)																																																																																								
4.5.11		Design Works of CP4	27																																																																																							
	Task 1	Reconnaissance Survey, Data and Information Collection	2																																																																																							
	Task 2	Review and Analysis of Data	2																																																																																							
	Task 3	Conducting Surveys and Investigations	3																																																																																							
	Task 4	Detailed Design of the Improvement of the Existing Water Distribution System CP4	18																																																																																							
	4.1	Upgradation of Existing network in GIS	12																																																																																							
	4.2	Creation of District Metered Areas (DMAs)	8																																																																																							
	4.3	Hydraulic Design and Modelling of distribution system	8																																																																																							
	4.4	Plan to Improve the Existing Network	6																																																																																							
	4.5	Design and Improvement of Storage reservoirs	6																																																																																							
	4.6	Design and providing metered service connections	6																																																																																							
	4.7	Design the SCADA system	6																																																																																							
	Task 5	Preparation and Submission of Draft Detailed Project Report	2																																																																																							
	5.1	Preparation and Submission of Final Detailed Project Report																																																																																								
	Task 6	Assisting in procurement of Software to CMWSSB	2																																																																																							
	Task 7	Preparation of Technical Specifications	3																																																																																							
	Task 8	BoQ Preparation	2																																																																																							
	Task 9	Bid Documents Preparation for CP4	2																																																																																							
4.5.13		Tendering Assistance	9																																																																																							
	Task 10	Prebid Meetings, Clarifications & Issue of Addendums etc.	8																																																																																							
	Task 11	Submission of Draft Bid Evaluation Report	1																																																																																							
	Task 12	Submission of Final Bid Evaluation Report - Technical	1																																																																																							
	Task 13	Submission of Bid Evaluation Report - Financial Evaluation	1																																																																																							



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Legends	
	Main Activities [Full Time]
	Main Activities [Intermittent Time]
	Tasks Under Main Activities [Full Time]
	Tasks Under Main Activities [Intermittent Time]
	Sub Tasks Under Tasks
	Reports
	Client's Role