



# **CHENNAI METROPOLITAN WATER SUPPLY & SEWERAGE BOARD (CMWSSB)**





## MPR (10) / (November 2020)

# PMC for Chennai Perur 400 MLD Desalination Plant and Allied Works

Reference No.: Loan ID-P267

Contract No. : CNT/ CON/DESAL /ICB/Gol/016/2018-19

10 December 2020

SMEC International Pty. Ltd., Australia in consortium with NJS Engineers India Private Limited, Pune Tata Consulting Engineers Limited, Mumbai SMEC (India) Private Limited, Haryana

# **PMC Chennai Office Address**

A, 13<sup>th</sup> Floor, Puravankara Primus, No.236 Okkiyampet, Old Mahabalipuram Road, Thuraipakkam, Chennai 600 097, Tamil Nadu, India

Phone no.: + 91 44 66973302









# **DOCUMENT CONTROL**

Document:	MPR (10) / (November 2020)
File Location:	-
Project Name:	PMC for Chennai Perur 400 MLD Desalination Plant and Allied Works
Revision Number:	0

## **REVISION HISTORY**

Revision No.	Date	Prepared by	Reviewed by	Approved for Issue by
0	10 December 2020	PMC Team	S.Siddappaswamy	Dr.P.Dharmabalan

# **ISSUE REGISTER**

Distribution List	Date Issued	Number of Copies
CMWSSB	10 December 2020	10

## **PMC DETAILS**

Approved by:	Dr.P.Dharmabalan		
Address:	Chennai Perur 400 MLD Desalination Plant Project Office, A 13th Floor, Puravankara Primus, No.236 Old Mahabalipuram Road, Thuraipakkam, Chennai 600 097, Tamil Nadu, India		
Tel:	+ 91 44 66973302, +91 95607 02631 & +61419765881		
Email:	P.Dharma@smec.com	Website:	www.smec.com

The information within this document is and shall remain the property of: SMEC and its project partners.

## IMPORTANT NOTICE

This report is confidential and is provided solely to report the monthly progress of the Project Management Consultant ("PMC") on the Consulting Services to be delivered under the Chennai Perur 400 MLD Desalination Plant and Allied Works project]. This report is provided according to a Contract Agreement between SMEC International Pty Limited ("SMEC"), as lead consultant in the PMC, and CMWSSB, under which SMEC undertook to perform a specific and limited task for CMWSSB.

This report is strictly limited to the matters stated in it and subject to the various assumptions, qualifications and limitations in it and does not apply by implication to other issues. SMEC makes no representation that the scope, assumptions, qualifications and exclusions set out in this report will be suitable or sufficient for other purposes nor that the content of the Reports covers all matters which you may regard as material for your purposes.

Unless expressly agreed otherwise in writing, SMEC does not accept a duty of care or any other legal responsibility whatsoever in concerning this report, or any related inquiries, advice or other work, nor does SMEC make any representation in connection with this report, to any person other than CMWSSB. Any other person who receives a draft or a copy of this report (or any part of it) or discusses it (or any part of it) or any related matter with SMEC, does so on the basis that he or she acknowledges and accepts that he or she may not rely on this report nor any relevant information or advice given by SMEC for any purpose whatsoever.

# **TABLE OF CONTENTS**

1	EXECUTIVE SUMMARY	1
2	ABBREVIATIONS & ACRONYMS	4
3	INTRODUCTION 3.1 This Progress Report 3.2 PMC Services 3.3 PMC Scope of Work	<b>5</b> 5 5
4	PROGRESS REPORT FOR PMC SERVICES  4.1 Achieved Activities – November 2020  4.2 Deliverables Status at November 2020  4.3 Actual Progress versus Planned Progress – Upto November 2020  4.4 Financial Progress Upto November 2020  4.5 Staffing Inputs – November 2020  4.6 Meetings and Site Visits – November 2020  4.7 Health & Safety – November 2020  4.8 Variations  4.9 Communication and Correspondence	7 7 10 14 18 20 24 26 28
5	PROGRESS OUTLOOK FOR PMC SERVICES  5.1 Activities Planned Next Month  5.2 Managing Progress Risks	<b>32</b> 32 34
6	PROGRESS REPORT FOR PROJECT (THE WORKS)  6.1 Achieved Activities – November 2020  6.2 Actual Progress versus Planned Progress – November 2020  6.3 Financial Progress at November 2020  6.4 Health & Safety – November 2020  6.5 Environmental and Regulatory Compliance  6.6 Communication and Correspondence  6.7 Variations	35 35 35 35 35 35 35 35
7	PROGRESS OUTLOOK FOR PROJECT (THE WORKS) 7.1 Activities Planned for Next Month 7.2 Managing Progress Risks	<b>36</b> 36 36
8	ANNEXURES	37
A 1-1	INEVLIDEO	
AN	INEXURES	

<b>ANNEXURE 1</b>	LIST OF	EXPERTS	WITH NAME	, ROLE AND	) MAN-MONTHS
-------------------	---------	---------	-----------	------------	--------------

- **ANNEXURE 2 PROJECT SCOPE**
- **ANNEXURE 3 OVERALL WORK SCHEDULE**
- ANNEXURE 4 WORK SCHEDULE (CONTRACT PACKAGE-WISE)
- ANNEXURE 5 PROJECTED FINANCIAL PROGRESS BASED ON MAN-MONTHS CONSUMED VS ACTUAL **PROGRESS (BILL PASSED)**
- **ANNEXURE 6 PERSONNEL INPUTS SUMMARY**
- ANNEXURE 7 DEPLOYMENT SCHEDULE FOR NEXT MONTHS
- **ANNEXURE 8 PMC ORGANISATION CHART**

# 1 EXECUTIVE SUMMARY

This Monthly Progress Report for November 2020 is submitted in accordance with the contractual requirements for Project Management Consultant ("PMC") services associated with the Chennai Perur 400 MLD Desalination Plant and allied works project being delivered for the Chennai Metropolitan Water Supply & Sewerage Board ("CMWSSB").

The document is structured to report on separately:

- Progress of the PMC (Consulting) Services
- Progress of the Project (the Works)

A summary of the key messages resulting during this period is provided in Table 1. Please peruse the full report for further details.

Table 1: Key Messages up to November 2020

Component	Key Message
PMC (Consulting) Services	<ul> <li>Revised Monthly Progress Report (MPR 01) for January &amp; February 2020 submitted on 06.04.2020, 14.04.2020 and 26.05.2020</li> <li>Revised Inception Report submitted on 04.04.2020 and 16.04.2020</li> <li>Revised Design Criteria for CP4 components submitted on 16.04.2020</li> <li>Monthly Progress Report (MPR 02) for March 2020 submitted on 17.04.2020 and 26.05.2020</li> <li>Interim Report for the development of Concept Design for Chennai Perur 400MLD Desalination Plant for CP1 components submitted on 23.04.2020 and 26.05.2020</li> <li>Quarterly Progress Report (QPR 01) for January to March 2020 submitted on 24.04.2020 and 22.05.2020</li> <li>Monthly Progress Report (MPR 03) for April 2020 submitted on 09.05.2020 and 22.05.2020</li> <li>Draft Environmental Impact Assessment (EIA) Review Report for CP1 submitted on 26.05.2020</li> <li>Monthly Progress Report (MPR 04) for May 2020 submitted on 11.06.2020</li> <li>Responses to JICA Comments and Revised Prequalification documents (RFQ) for CP1 on DBO basis submitted to CMWSSB on 24.06.2020</li> <li>Concept Design Report for 400 MLD Desalination Plant at Perur (CP1) submitted on 10.07.2020</li> <li>Monthly Progress Report (MPR 05) for June 2020 submitted on 10.07.2020 and 13.07.2020</li> <li>Review note on Product Water Transmission Main from Perur DSP to Porur WDS for CP2 components submitted on 02.07.2020 and 15.07.2020</li> <li>Quarterly Progress Report (QPR 02) for April to June 2020 submitted on 15.07.2020</li> <li>Responses to JICA 2nd Comments and Revised Prequalification documents (RFQ) for CP1 on DBO basis submitted to CMWSSB on 17.08.2020</li> <li>Bathymetry Survey fieldwork at Perur 400 MLD DSP has been completed on 28.08.2020.</li> <li>Sea Water Sample collection work has been carried out at proposed 400MLD DSP at Perur and existing Nemmeli 100 DSP on 29.08.2020</li> <li>Brine Diffusion Modelling Study has been carried out in September 2020</li> <li>Response to JICA 3<sup>rd</sup> comments and Revised Prequalification documents (RFQ) for CP1 on DBO basis sub</li></ul>

Component	Key Message
	<ul> <li>Monthly Progress Report (MPR 07) for August 2020 submitted on 10.09.2020</li> </ul>
	<ul> <li>Draft Environmental Impact Assessment (EIA) Review Report for CP1 and its Pumping Station (CP2-1) (Rev-1) submitted on 23.09.2020</li> </ul>
	<ul> <li>Revised Prequalification document (RFQ) for CP1 on DBO basis as per JICA</li> </ul>
	<ul> <li>4th comments submitted to CMWSSB on 23.09.2020</li> <li>Topographical Survey drawing for Perur DSP site for CP1 components</li> </ul>
	submitted to CMWSSB on 29.09.2020  JICA has given the concurrence for Prequalification document (RFQ) for
	CP1 on DBO basis to CMWSSB on 30.09.2020
	<ul> <li>Topographical Survey Drawings for Proposed UGT and Pumping Station (CP2-2) at Porur new WDS submitted on 09.10.2020</li> </ul>
	<ul> <li>Monthly Progress Report (MPR 08) for September 2020 submitted on 09.10.2020</li> </ul>
	<ul> <li>Final Prequalification document (RFQ) for CP1 on DBO basis submitted to CMWSSB on 12.10.2020</li> </ul>
	<ul> <li>Notice Inviting Application (NIT for RfQ) for Prequalification documents for CP1 was published in the website and published in Newspaper on 14.10.2020.</li> </ul>
	<ul> <li>Quarterly Progress Report (QPR 03) for July to September 2020 submitted on 15.10.2020</li> </ul>
	<ul> <li>Prequalification (PQ) Application meeting for CP1 components on DBO basis held at CMWSSB on 29.10.2020</li> </ul>
	<ul> <li>Reply to pre-bid queries of Application for Prequalification for CP1 components on DBO basis submitted on 04.11.2020</li> </ul>
	<ul> <li>Monthly Progress Report (MPR 09) for October 2020 submitted on 11.11.2020</li> </ul>
	Social Safeguard Review (Draft Report) submitted on 18.11.2020
	<ul> <li>The tender extension notice for receiving of PQ application of CP1, the due date has been extended to 16.12.2020 instead of the original date, i.e. 01.12.2020, the details have been published by CMWSSB in the website on 26.11.2020</li> </ul>
	<ul> <li>2<sup>nd</sup> reply to pre-bid queries and Addendum-1 of Application for</li> </ul>
	Prequalification for CP1 components on DBO basis submitted on 27.11.2020.
	<ul> <li>Draft layout plan for CWR and PS at Porur was discussed with CMWSSB staff. Finalization of layout plan is under progress.</li> </ul>
	<ul> <li>Monthly Progressive expenditure (at actuals, i.e. based on monthly bills passed till the end of November 2020) =1,54,72,083 (INR) and 409,354 (USD)</li> </ul>
	<ul> <li>In addition to the above, for SMEC India Pvt. Ltd., the Mobilisation advance</li> </ul>
	payment in INR (5% of Contract value) received on 19.05.2020 as against
	<ul> <li>Advance Bank Guarantee.</li> <li>In addition to the above, For SMEC International Pty Ltd, the Mobilisation</li> </ul>
	advance payment in USD (5% of Contract value) received on 17.09.2020 as
	against Advance Bank Guarantee.
	• In addition to the above, for TATA Consulting Engineers Ltd, the Mobilisation
	advance payment in INR (5% of Contract value) received on 22.10.2020 as
	against Advance Bank Guarantee.

Component	Key Message
	<ul> <li>Monthly Progressive expenditure (Projected based on man-month consumed till the end of November 2020) = 3,21,62, 512 (INR) and</li> </ul>
	855,688 (USD)
	Activities generally progressing on schedule
	<ul> <li>An accelerated program being followed for CP1, which brings forward the issue of the RFP to market by 4 to 5 months</li> </ul>
	The emerging COVID-19 virus outbreak is being monitored, and CMWSSB is to be informed of any impact on the mobilisation of PMC personnel. Due to the COVID-19 issues pandemic across the globe, the Government of Tamil Nadu announced and extended the partial lockdown period from 01.11.2020 to 30.11.2020 throughout Tamil Nadu.
	No Project site work has been commenced
Project (the Works)	Progressive expenditure = Nil
	No activities scheduled to commence as of end November 2020

Key items identified during this period for resolution with the CMWSSB include the following:

- 1. The impact of current water quality issues (i.e. white fibrous particles and associated elevated TOC and COD levels) being experienced at Nemmeli DSP on the selection of a preferred pretreatment process arrangement being addressed during conceptual design.
- 2. Revision of the current concept for the site layout for the proposed reservoir and pumping station at the Porur Headworks site, due to other works currently under construction for CMWSSB.
- Based on a discussion with CMWSSB officials, it is understood that the proposed desalination plant's land ownership transfer is in process. Upon receipt of the same, Consent To Establish (CTE) application will be forwarded to TNPCB (Tamil Nadu Pollution Control Board), the action to be taken up by CMWSSB.
- 4. Forest Clearance for cutting trees at Perur DSP site to be obtained from Tamil Nadu Forest Department.
- 5. Approval for the erection of offshore structure to be obtained from the Tamil Nadu Maritime Board.
- 6. System hydraulic design for the clear water transmission main from Perur DSP to Porur Headworks water transmission system (pumping station and transmission pipeline) and proposed water allocation to Chennai Core City and expansion area is to be resolved following initial analysis by PMC.
- 7. It is challenging to access the project site due to COVID-19 Pandemic issues spread across the globe. The Government of Tamil Nadu announced and extended the partial lockdown period from 01.11.2020 to 30.11.2020 throughout Tamil Nadu.
- 8. Quick turn-round of requests with approvals (Work From Home for International Experts till 31st December 2020 due to non-availability of international flights to India) and follow up on timeline is essential to undertake the acceleration of CP1 components and regular timeline schedule for CP2 to CP4 components. Some of the national staffs are giving the input for project components due to constraints of movement should be considered for payments as requested by PMC.
- Non-Availability of most of the pipeline inventory data specific to the CP4 package in the digital format [Scaled AutoCAD/ GIS files] and conversion of the available physical data into required digital format.

# 2 ABBREVIATIONS & ACRONYMS

Abbreviation / Acronym	Meaning
BoQ	Bill of Quantity
CMWSSB	Chennai Metropolitan Water Supply and Sewerage Board
СР	Contract Package
DI	Ductile Iron
DBO	Design-Build Operate
DMA	District Metered Area
DMS	Document Management System
DSP	Desalination Plant
GIS	Geographic Information System
HR & CE Board	Hindu Religious & Charitable Endowment Board
INR	Indian Rupees
JICA	Japan International Cooperation Agency
MLD	Million Litres per day
MPR	Monthly Progress Report
MS	Mild Steel
NJSEI	NJS Engineers India Pvt Ltd.
O&M	Operation & Maintenance
ODA	Official Development Assistance
OJT	On-Job-Training
PMC	Project Management Consultant (Consortium)
PQ	Prequalification
QPR	Quarterly Progress Report
RFP	Request for Proposal
RFQ	Request for Qualification
SMEC	SMEC International Pty Ltd
SMEC (India)	SMEC India Pvt Ltd
TCE	TATA Consulting Engineers Ltd.
TNPCB	Tamil Nadu Pollution Control Board
TOC	Total Organic Carbon
USD	United States Dollar
WDS	Water Distribution Station
WDZ	Water Distribution Zone

## 3 INTRODUCTION

## 3.1 This Progress Report

This is the tenth (10th) monthly progress report and covers activities of the Project Management Consultant (PMC services) and the Project (the Works) during **November 2020**.

#### 3.2 PMC Services

The Consulting Services addressed by the series of Monthly Progress Report ("MPR") to be delivered on this Project include design, preparation of bidding documents, tender evaluation, construction management and supervision for the proposed Chennai Perur 400 MLD Desalination Plant, its product water conveyance pipeline and all other allied works being carried out following with a Contract dated 09 January 2020 for Consulting Services between the Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB or "the Client") and Consortium members comprising of SMEC International Pty Ltd (SMEC), Australia as the Lead Member of the Consortium, NJS Engineers India Pvt. Ltd. (NJSEI), TATA Consulting Engineers Limited (TCE) and SMEC India Pvt. Ltd. (SMEC India) as Associate Consultants to the Consortium.

The Terms of Reference (ToR) for the Consulting Services provide for 1988 person-months of PMC services (National Local 1603 person-months, including support staff, and International, 385 person-months) in the following main categories. However, the details of all the team with their role and person-months are mentioned in **Annexure 1.** 

Table 2: Estimated Resourcing for PMC Services

Category	Resourcing
Management and Coordination, International and Local	87 person-months
Design, International	245 person-months
Design, Local	377 person-months
Safety, Environmental and Others, Local	265 person-months
Construction Supervision, Local	294 person-months
Support Staffs	720 person-months
TOTAL	1988 person-months

The Consulting Services are to be delivered in compliance with Guidelines for the Employment of Consultants under Japanese ODA Loans, April 2012.

# 3.3 PMC Scope of Work

The major components within the Scope of Work for the overall Project are listed below:

- CP1 400 MLD Sea Water Reverse Osmosis (SWRO) Desalination Plant at Perur
- CP2 Pumping Stations & Reservoirs at Perur and Porur
- CP3 Product Water Conveyance Main for about 65Km length from Perur to Porur
- CP4 Improvements to Existing Distribution System in the core area of Chennai City
- CP5 Installation of external dedicated transmission line

Further details on the components of the Contract packages are as summarised in **Annexure 2**.

The Consulting Services scope under each component (Contract Package) of the Project are as follows.

- CP-1: Review of the current technical information, conducting supplementary natural condition surveys, preparation of conceptual design report with raw water assessment, review of marine works, assessment of operating conditions, process flow diagram, general layout review, water and mass balance and review of electrical, instrumentation and automation plans. Preparation of PQ and bid document with technical specifications, Minimum Functional Specification (MFS), Assistance in Bid evaluations and construction supervision activities.
- 2. CP-2: Review of technical information, conducting necessary topographical and geotechnical investigations, Hydraulic analysis of the transmission mains for finalising the pumps configurations, detail design of reservoir and pumping stations with all civil, electro-mechanical and instrumentation works, preparation of PQ (if necessary) and bid document with BoQ and technical specifications, Assistance in Bid evaluations and construction supervision activities.
- 3. CP-3: Construction supervision activities of the Product Water Conveyance Main from Perur to Porur.
- 4. CP-4: Review of technical information, collect and review of the topographical and pipe inventory data, preparation of hydraulic modelling and analysis of the existing water distribution network for improvement, the establishment of DMAs, preparation of the bid documents with BOQ and Construction supervision activities.
- 5. CP-5: Preparation of technical documents, monitor the progress of the construction activities (Necessary Technical Assistance by PMC).
- 6. All packages: Assist CMWSSB in environmental management and monitoring activities in all stages.

Also, the PMC will assist the CMWSSB in the development of organisational capability in several key areas, including the following:

- Asset Management
- Acceleration of installation of service connections and water meters
- Improvement of customer services and publication
- Improvement of business operation

For a more comprehensive description of PMC scope of services and related works, please refer to the Inception Report, Interim Report for the development of Concept Design for Chennai 400 MLD Desalination Plant at Perur for CP1 components, Draft Environmental Impact Assessment (EIA) Review Report for CP1 components (Rev-1), Revised Prequalification documents (RFQ) for CP1 on DBO basis, Concept Design Report for Chennai 400 MLD Desalination Plant at Perur for CP1 components and Review note on Product Water Transmission Main from Perur DSP to Porur WDS for CP2 components, Social Safeguard Review (Draft), Quarterly Progress Reports, Monthly Progress Reports for the Project.

# 4 PROGRESS REPORT FOR PMC SERVICES

# 4.1 Achieved Activities - November 2020

The activities achieved during November 2020 are listed in Table 3.

Table 3: Achieved Activities - November 2020

Package	Achieved Activities  Achieved Activities
	Task 1: Data and information collection commenced (JICA documents, DPRs, water quality
	data)
	Task 2: Review of technical information commenced (JICA documents, DPRs, water quality data)
	Task 3: Conducting Surveys and Investigations
	<ul> <li>Carried out the Topographical Surveys at Perur Desalination Plant from 19.08.2020 to 07.09.2020</li> </ul>
	<ul> <li>Topographical Survey drawing for Perur DSP site for CP1 components submitted to CMWSSB on 29.09.2020</li> </ul>
	<ul> <li>Carried out the Bathymetry Survey fieldwork at Perur DSP site from 24.08.2020 to 28.08.2020</li> </ul>
	<ul> <li>Carried out Sea Water Sample Collection at Perur DSP and Nemmeli DSP on 29.08.2020</li> </ul>
	Task 4: Concept Design of Perur Desalination Plant has been submitted with design calculations based on the available existing data
	<ul> <li>Interim report for the development of Concept Designs for Chennai Perur 400 MLD Desalination Plant for CP1 components submitted to CMWSSB on 23.04.2020.</li> </ul>
	<ul> <li>Online Zoom Video conference call and discussion with CMWSSB officials on 30.04.2020 for the Interim Report for the development of Concept Design for Chennai Perur 400 MLD Desalination Plant for CP1 components.</li> </ul>
	<ul> <li>Online Zoom Video conference call and discussion with CE (O&amp;M)–II CMWSSB officials on 26.05.2020 for the progress of the consultancy work and technical</li> </ul>
CP1	discussion for CP1 to CP4 components.
OFT	<ul> <li>Preparation of proposed sludge treatment facility at Perur, RO Configuration – Conventional Design and RO Configuration – 3 Centre Design.</li> </ul>
	<ul> <li>Preparation and submission of sludge treatment process design, detail notes on 3 Centre or Pressure Centre Design.</li> </ul>
	<ul> <li>Preparation and submission of Mass Balance and Process Flow Diagram (Peak Flow and Normal Flow).</li> </ul>
	<ul> <li>Preparation of Summary of Revised Design Raw Sea Water Quality Parameters, Summary of major Product Water Quality Parameters, SWRO Desalination plant layout.</li> </ul>
	<ul> <li>Online Zoom Video conference call and discussion with Engineering Director (i/c)</li> <li>CMWSSB officials on 11.06.2020 for the progress of the consultancy work and</li> </ul>
	technical discussion for CP1 to CP4 components.  Preparation of Instrumentation Control Automation Works including plant operation
	control system, Redundancy Levels of DCS system, Central Control Room System, Instrumentation Plan, Critical Control Points, etc.
	<ul> <li>Capital Cost Comparison DPR, JICA, PMC.</li> <li>Preparation of Operation &amp; Maintenance (O&amp;M) Cost, Minimum Functioning</li> </ul>
	Specifications etc.  Online MS Teams meeting Video conference call and discussion with Chief
	Engineer (Project-III) and SE (Desal) CMWSSB officials on 18.09.2020 for the progress of the consultancy work and technical discussion for CP1 to CP4 components.
	Task 5: Submission of Concept Design Report:
	Tack of Cashindoloff of Contropt Boolgif Report.

Package	Achieved Activities				
	The Concept Design Report has been prepared based on the above activities, and				
	this includes the review outcome of the existing technical documents and data,				
	existing Desalination plants study and identified gaps in the process, proposed				
	process description of all units of DSP and along with the recommendations, Block				
	level Construction cost estimate and O&M cost estimate, Gaps in the statutory				
	approvals, process control philosophy, layout drawings, process flow diagrams etc.				
	<ul> <li>Concept Design Report for Chennai 400 MLD Desalination Plant at Perur for CP1</li> </ul>				
	components submitted on 10.07.2020.				
	<ul> <li>Action Taken Report/clarification on the Draft Concept Design Report for CP1 submitted to CMWSSB on 05.08.2020 and 12.08.2020</li> </ul>				
	<ul> <li>Preparation of Process Flow Diagram, critical control point review, Automation &amp;</li> </ul>				
	Control strategy (OCM) document etc.				
	Task 6: Preparation of Technical Specifications:				
	<ul> <li>Preparation of Technical Specifications including Civil works, Mechanical works,</li> </ul>				
	Instrumentation works etc.				
	<ul> <li>Preparation of Automation and Control strategy, DCS Arch plan, Instrumentation &amp;</li> </ul>				
	Control MFS				
	<ul> <li>Preparation of MFS consolidated circulation, technical schedule data gathering,</li> </ul>				
	finalisation of technical schedule, billing system analysis etc.				
	Task 7: Financial Analysis				
	Preparation of Financial Analysis  Tools 8: Preparation of OSM requirements for Bid Decuments.				
	Task 8: Preparation of O&M requirements for Bid Document  Preparation of O&M requirements for Bid Document				
	Task 9: Revised Request for Qualifications (RFQ) document was prepared on the DBO				
	basis and issued to the Client for review. After review, CMWSSB has sent the RFQ to JICA				
	for concurrence. Comments received from JICA on PQ documents on 05.06.2020.				
	<ul> <li>Online Zoom Video conference call and discussion with CE (Project)–II, CE (O&amp;M)–</li> </ul>				
	II CMWSSB officials on 15.06.2020 for the responses on JICA comments and				
	Prequalification documents for CP1 on DBO basis.				
	<ul> <li>Responses to JICA comments and Revised Prequalification documents (RFQ) for</li> </ul>				
	CP1 on DBO basis submitted to CMWSSB on 24.06.2020.  Online Microsoft Teams Meeting with Chief Development Operations (JICA) and				
	<ul> <li>Online Microsoft Teams Meeting with Chief Development Operations (JICA) and CMWSSB officials on 03.07.2020 for a discussion on the responses for JICA</li> </ul>				
	comments on Prequalification documents for CP1 on DBO basis.				
	After review, CMWSSB has sent the RFQ to JICA for concurrence. 2 <sup>nd</sup> comments received				
	from JICA on PQ documents on 13.08.2020.				
	<ul> <li>Responses to JICA 2<sup>nd</sup> comments and Revised Prequalification documents (RFQ)</li> </ul>				
	for CP1 on DBO basis submitted to CMWSSB on 17.08.2020.				
	After review, CMWSSB has sent the RFQ to JICA for concurrence. 3rd comments received				
	from JICA on PQ documents on 05.09.2020.				
	<ul> <li>Responses to JICA 3<sup>rd</sup> comments and Revised Prequalification documents (RFQ) for CP1 on DBO basis submitted to CMWSSB on 08.09.2020.</li> </ul>				
	After review, CMWSSB has sent the RFQ to JICA for obtaining the concurrence. 4th				
	comments received from JICA on PQ documents on 23.09.2020.				
	Revised Prequalification document (RFQ) for CP1 on DBO basis as per JICA 4 <sup>th</sup>				
	comments submitted to CMWSSB on 23.09.2020.				
	After review, JICA has given final concurrence to CMWSSB regarding the Revised				
	Prequalification document (RFQ) for CP1 on DBO basis on 30.09.2020.				
	Final Prequalification document (RFQ) for CP1 on DBO basis submitted to CMWSSB				
	on 12.10.2020				
	Notice Inviting Application (NIT for RfQ) for Prequalification documents for CP1 was				
	published in the website and published in Newspaper on 14.10.2020.				

Package	Achieved Activities			
	Prequalification (PQ) Application meeting for CP1 components on DBO basis held at			
	CMWSSB on 29.10.2020			
	<ul> <li>Reply to pre-bid queries of Application for Prequalification for CP1 components on DBO basis submitted on 04.11.2020</li> </ul>			
	The tender extension notice for receiving of PQ application of CP1, the due date has			
	been extended to 16.12.2020 instead of the original date, i.e. 01.12.2020, the details			
	have been published by CMWSSB in the website on 26.11.2020			
	<ul> <li>2<sup>nd</sup> reply to pre-bid queries and Addendum-1 of Application for Prequalification for CP1 components on DBO basis submitted on 27.11.2020</li> </ul>			
	Task 1: Data and information collection commenced (JICA documents, DPRs, Master Plan)			
	Task 2: Review of technical information commenced (checking of the hydraulic design of the transmission system based on the available data)			
	Calculation of CWR Capacity at Perur			
	<ul> <li>Reviewed the beneficiary population from Perur to Porur, and the observation was</li> </ul>			
	submitted to CMWSSB for feedback.			
	<ul> <li>Review note on Product Water Transmission Main from Perur DSP to Porur WDS for CP2 components submitted on 15.07.2020.</li> </ul>			
CP2	Task 3: Conducting Surveys and Investigations			
	<ul> <li>Carried out the Topographical Surveys at Porur new Water Distribution Station in</li> </ul>			
	October 2020			
	<ul> <li>Topographical survey drawings for Proposed Underground Tank (UGT) and Pump House at Porur new Water Distribution Station submitted on 09.09.2020</li> </ul>			
	<ul> <li>Topographical survey revised drawing for allocation of land for Proposed UGT and</li> </ul>			
	Pumping Station (CP2-2) at Porur WDS submitted on 11.11.2020			
	<ul> <li>Draft layout plan for CWR and PS at Porur was discussed with CMWSSB staff.</li> </ul>			
CP3	Finalization of layout plan is under progress.  No significant activities have been carried out during this period			
01 0	Task 1: Reconnaissance Survey, Data and information collection commenced (JICA			
	documents, Master Plan- Area X and XIII on top priority for world banking funding purpose			
	<ul> <li>Visit CMWSSB office to collect the CP-4 GIS data and meeting with P&amp;D wing</li> </ul>			
	AEE and discussion with EE & AEEs (desal).  Visit Area X office - T Nagar, discussions with area engineer (FE) and AEEs to			
	<ul> <li>Visit Area X office - T Nagar, discussions with area engineer (EE) and AEEs to discuss regarding the availability of Zone X distribution drawings</li> </ul>			
	<ul> <li>Visit to KK Nagar Headworks- Area X. Discussions with depo engineers of 131 &amp;</li> </ul>			
	137 for distribution network details			
	<ul> <li>Site Visit to Zone X and Data collection: Wards 128, 129, 131, 132, 137 to 140, 142)</li> </ul>			
	<ul> <li>Digitalization of pipeline inventory data collected for wards128, 132, 137 and 139</li> </ul>			
CP4	• Site visit and data collection for Ward 105, 106, 107, 108, 109, 112, 117, 127, 130,			
	133 to 136, 141 from Deputy Area Engineer, Assistant Engineer (CMWSSB) from			
	02.11.2020 to 20.11.2020			
	Digitalization of pipeline inventory data collected for wards 127,129,131,138,140     and 142 in Nevember 2020.			
	and 142 in November 2020  Modelling activity of ward no. 127 for a length of 33km			
	Task 2: Review and Analysis of Data			
	Review of salient details and existing water distribution network drawings collected			
	for CP4 components and identification of gaps in the available data			
	<ul> <li>Preparation of Water Distribution network modelling for total 33km (Ward 127)</li> </ul>			
CP5	from 23.11.2020 to 30.11.2020  No activities have been carried out during this period			
General	Monthly Progress Report (MPR 09) for October 2020 submitted on 11.11.2020			
. •	, , , , , , , , , , , , , , , , , , , ,			

Package	Achieved Activities
	Draft Environmental Impact Assessment (EIA) Review Report for CP1 components submitted to CMWSSB on 26.05.2020
	<ul> <li>Online Zoom Video conference call and discussion with SE (Desal) CMWSSB officials on 03.06.2020 for the Draft Environmental Impact Assessment (EIA) Review Report for CP1 components.</li> </ul>
	<ul> <li>Action Taken Report/clarification on the Draft Environmental Impact Assessment (EIA) Review Report for CP1 submitted to CMWSSB on 12.08.2020</li> </ul>
	Draft Environmental Impact Assessment (EIA) Review Report for CP1 and CP2-1 components (Rev-1) submitted to CMWSSB on 23.09.2020
	<ul> <li>Social Safeguard Review (Draft Report) submitted on 18.11.2020</li> </ul>
	Environmental and Social support activities commenced including documentation review and approvals planning

Note – task numbering listed in Table above corresponds to masterwork schedule (refer Annexure 4)

### 4.2 Deliverables Status in November 2020

A listing of the full suite of project deliverables included under the Consulting Services and their current status or tentative completion date are listed in Table 4.

Table 4: Deliverables Status

SI.No.	Report / Document	Tentative Date / Frequency / Status **
		Inception Report submitted on 28.02.2020
1	Inception Report	Observations on Inception Report received from CMWSSB on 30.03.2020
		Revised Inception Report submitted on 04.04.2020 and 16.04.2020
2	For Design and Tender Assistance for CP1	
	2.1 Conceptual Design Report	Interim report for development of Concept Designs for Perur 400 MLD Desalination Plant for CP1 submitted on 23.04.2020
	Zir Ganaapiaan Zaaigir tapan	Concept Design Report for Chennai Perur 400 MLD Desalination Plant for CP1 submitted on 10.07.2020
		Draft PQ document for CP1 components submitted on 24.02.2020
		Revised PQ document for CP1 components have been submitted on 03.03.2020, 06.03.2020 for client review and sent to JICA for Concurrence for floating of the tender
		1st comments received from JICA on PQ documents on 05.06.2020.
	2.2 PQ Document	Responses to JICA comments and Revised Prequalification document (RFQ) have been submitted to CMWSSB on 24.06.2020
		2 <sup>nd</sup> comments received from JICA on PQ documents on 13.08.2020.
		Responses to JICA 2 <sup>nd</sup> comments and Revised Prequalification document (RFQ) on DBO basis have been submitted to CMWSSB on 17.08.2020
		3 <sup>rd</sup> comments received from JICA on PQ document on 05.09.2020.

SI.No.	Report / Document	Tentative Date / Frequency / Status **
		Responses to JICA 3rd comments and
		Revised Prequalification document (RFQ)
		on DBO basis have been submitted to
		CMWSSB on 08.09.2020
		4th comments have been received from
		JICA on PQ documents on 23.09.2020.
		Revised Prequalification document (RFQ)
		as per JICA 4th comments have been
		submitted to CMWSSB on 23.09.2020
		JICA has given the concurrence for
		Prequalification document (RFQ) for CP1
		on DBO basis to CMWSSB on 30.09.2020
		Final Prequalification document (RFQ) for
		CP1 on DBO basis have been submitted to
		CMWSSB on 12.10.2020
		Notice Inviting Application (NIT for RfQ) for
		Pregualification documents for CP1 was
		published in the website and published in
		Newspaper on 14.10.2020.
		Prequalification (PQ) Application meeting
		for CP1 components on DBO basis held at
		CMWSSB on 29.10.2020
		Reply to pre-bid queries of Application for
		Pregualification for CP1 components on
		DBO basis submitted on 04.11.2020
		The tender extension notice for receiving of
		PQ application of CP1, the due date has
		been extended to 16.12.2020 instead of
		the original date, i.e. 01.12.2020, and the
		details have been published by CMWSSB
		in the website on 26.11.2020
		2 <sup>nd</sup> reply to pre-bid queries and Addendum-
		1 of Application for Prequalification for CP1
		components on DBO basis submitted on
		27.11.2020
	2.3 PQ Evaluation Report	January 2021 (July 2020)
	2.4 Bid (RFP) Document	February 2021 (September 2020)
	2.5 Bid Evaluation Report (Technical)	June 2021 (October 2020)
	2.6 Bid Evaluation Report (Financial)	August 2021 (December 2020)
3	For Design and Tender Assistance for CP2	
		Review note on Product Water
		Transmission Main from Perur DSP to Porur
	3.1 Detailed Design Report and Drawings	WDS for CP2 components submitted on
	5.1 Detailed Design Report and Drawings	02.07.2020 (soft copy) and 15.07.2020
		(hard copies)
		June 2021 (April 2021)
	3.2 PQ Document (if required)	July 2021
	3.3 PQ Evaluation Report (if required)	August 2021
	3.4 Bid Document (RFP)	September 2021
	3.5 Bid Evaluation Report (Technical)	December 2021
	3.6 Bid Evaluation Report (Financial)	February 2022
4	For Design and Tender Assistance for CP4	
	4.1 Detailed Design Report and Drawings	April 2022 (December 2021)
	. 5 1	

SI.No.	Report / Document	Tentative Date / Frequency / Status **	
	4.2 Bid Document(s)	June 2022 (April 2022)	
	4.3 Bid Evaluation Report (Technical)	September 2022	
	4.4 Bid Evaluation Report (Financial)	November 2022	
5	For Construction Supervision of CP 1		
	·	Within 1 month after submission of the	
	5.1 Contractor's Design Review Report	Contractor's design report	
	5.2 Quality and Quantity Control Report	Every Month	
	5.3 Final Inspection Report	At Appropriate timing	
6	For Construction Supervision of CP 2		
	6.1 Quality and Quantity Control Report	Every Month	
	6.2 Final Inspection Report	At Appropriate timing	
7	For Construction Supervision of CP 3-1 to CP 3-4		
	7.1 Quality and Quantity Control Report	Every Month	
	7.2 Final Inspection Report (CP 3-1, CP 3-2)	At Appropriate timing	
	7.3 Final Inspection Report (CP 3-3, CP 3-4)	At Appropriate timing	
8	For Construction Supervision of CP 4		
	8.1 Quality and Quantity Control Report	Every Month	
	8.2 Final Inspection Report	At Appropriate timing	
9	Environmental and Social Safeguard		
	9.1 EIA Review Report for CP 1	<ul> <li>Draft Environmental Impact Assessment (EIA) Review Report for CP1 component submitted to CMWSSB on 26.05.2020</li> <li>Draft Environmental Impact Assessment (EIA) Review Report for CP1 and CP-2 components (Rev-1) have been submitted to CMWSSB on 23.09.2020</li> <li>Social Safeguard Review (Draft Report) submitted on 18.11.2020</li> </ul>	
	9.2 Environmental Monitoring Report	Every Month	
10	Progress Report and Project Completion Report		
	10.1 Monthly Progress Report (MPR)	<ul> <li>MPR 01 for Jan' &amp; Feb'2020 (2 copies) submitted on 10.03.2020 for review</li> <li>Observations on MPR 01 received from CMWSSB on 31.03.2020</li> <li>Revised MPR 01 for Jan' &amp; Feb'2020 (soft copy) submitted on 14.04.2020</li> <li>Revised MPR 01 for Jan' &amp; Feb'2020 (10 copies) submitted on 26.05.2020</li> <li>MPR 02 for March 2020 (10 copies) submitted on 26.05.2020</li> <li>MPR 03 for April 2020 (10 copies) submitted on 22.05.2020</li> <li>MPR 04 for May 2020 (soft copy) submitted on 10.06.2020 and 10 copies submitted on 11.06.2020</li> <li>MPR 05 for June 2020 (soft copy) submitted on 10.07.2020</li> <li>MPR 05 for June 2020 (10 copies) submitted on 13.07.2020</li> </ul>	

SI.No.	Report / Document	Tentative Date / Frequency / Status **
		<ul> <li>MPR 06 for July 2020 (10 copies) submitted on 10.08.2020</li> </ul>
		<ul> <li>MPR 07 for August 2020 (10 copies) submitted on 10.09.2020</li> </ul>
		<ul> <li>MPR 08 for September 2020 (10 copies) submitted on 09.10.2020</li> </ul>
		<ul> <li>MPR 09 for October 2020 (10 copies) submitted on 11.11.2020</li> </ul>
	10.2 Quarterly Progress Report (QPR)	<ul> <li>QPR 01 for Jan' to March 2020 (soft copy) submitted on 24.04.2020</li> <li>QPR 01 for Jan' to March 2020 (10 copies) submitted on 26.05.2020</li> </ul>
		<ul> <li>QPR 02 for Apr' to June 2020 (10 copies) submitted on 15.07.2020</li> </ul>
		<ul> <li>Quarterly Progress Report (QPR 03) for July to September 2020 submitted on 15.10.2020</li> </ul>
	10.3 Project Completion Report (PCR)	Within 3 months after completion of the services

<sup>\*\*</sup> The tentative date of deliverables has 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.

It is highlighted that the tentative dates listed in Table 4 are subject to assumptions on the actual date of issue of tender documents to the market by CMWSSB.

During the Online Zoom meeting Video conference call held on 30.04.2020, the International experts expressed their concern on the resumption of International flights to Chennai and it may take longer duration due to COVID-19 pandemic across the globe. Hence, PMC requested CMWSSB to allow the International Experts to work from home. In general, both parties (PIU and PMC team) noted that due to the current COVID-19 Pandemic situation, an overall 2 months delay in floating of the RFQ and consequently the RFP for CP1 components. Where these tender dates are delayed, there will be an associated delay with the completion of tender evaluation reports. PMC also requested to consider the effort of national staff (outside Chennai) working from home on the Project, due to COVID-19 pandemic across the globe. CMWSSB also informed that the PMC members who are stationed outside Chennai and outside India of this Project Management Consultant Services to work from their home offices at their respective countries till 31.07.2020.

During the Online MS Teams meeting held on 18.09.2020, Project Manager indicated that due to COVID-19, some of the activities have been slipped out of the target date and requested CMWSSB to indicated the new target dates if they have anything in their consideration. CMWSSB advised submitting the revised Schedule for review and consideration. PMC revised the Annexure 3 – Overall Work Schedule and submitted on 28 September 2020 to CMWSSB for review and consideration.

Any impacts on the timing of deliverables will be communicated to CMWSSB regularly.

# 4.3 Actual Progress versus Planned Progress – Upto November 2020

The Actual progress during the month up to November 2020 is with planned progress is furnished in Table 5.

Table 5: Actual Progress vs Planned Progress

SI.No.	Deliverable	Planned	Actual	Remarks/reasons for the delay
1	Draft PQ document for CP1	25.02.2020	24.02.2020	
2	Draft Inception Report	12.02.2020	28.02.2020	Delay has been happened due to more focus on CP1 PQ document preparation due to its priority as CMWSSB advise. Please Refer Minutes of Progress Review Meeting conducted by CE (O&M)-II, CMWSSB held on 14.02.2020 for the revised date, i.e. 28.02.2020 which has been conveyed to the Client. Accordingly, submission has been made.
	Revised PQ document	03.03.2020	03.03.2020	
3	for CP1	06.03.2020	06.03.2020	CMWSSB; PQ documents sent to JICA for concurrence
4	Draft Monthly Progress Report (MPR 01) for January 2020 & February 2020	10.03.2020	10.03.2020	
5	Revised Inception Report	04.04.2020	04.04.2020	
3	ivevised inception vehori	16.04.2020	16.04.2020	
	Revised Monthly	06.04.2020	06.04.2020	
6	Progress Report (MPR	14.04.2020	14.04.2020	
	01) for January 2020 & February 2020	26.05.2020	26.05.2020	Hard copies submitted
7	Monthly Progress Report	17.04.2020	17.04.2020	
,	(MPR 02) for March 2020	26.05.2020	26.05.2020	Hard copies submitted
	Interim report for the	23.04.2020	23.04.2020	soft copy submitted
8	development of Concept Designs for Chennai Perur 400 MLD Desalination Plant for CP1 components	23.04.2020	26.05.2020	Hard copies submitted
	Quarterly Progress	24.04.2020	24.04.2020	
9	Report (QPR 01) for January 2020 to March 2020	22.05.2020	22.05.2020	Hard copies submitted
	Monthly Progress Report	10.05.2020	09.05.2020	
10	(MPR 03) for April 2020	10.05.2020	22.05.2020	Hard copies submitted

SI.No.	Deliverable	Planned	Actual	Remarks/reasons for the delay
11	Draft Environmental Impact Assessment (EIA) Review Report for CP1 components	20.04.2020	24.05.2020 (soft copy)	Delay has happened for the Environmental data collection from CMWSSB (Due to COVID-19 pandemic issues across the globe and continuous lockdown in India). Accordingly, submission has been made.
		20.04.2020	26.05.2020	Hard copies submitted
12	Monthly Progress Report (MPR 04) for May 2020	10.06.2020 10.06.2020	10.06.2020 11.06.2020	Hard copies submitted
13	Revised PQ document for CP1	24.06.2020	24.06.2020	Responses to JICA 1st comments and Revised Prequalification document (RFQ) for CP1 on DBO basis submitted to CMWSSB (Hard copies submitted)
14	Monthly Progress Report	10.07.2020	10.07.2020	
17	(MPR 05) for June 2020	10.07.2020	13.07.2020	Hard copies submitted
15	Concept Design Report for Chennai Perur 400MLD Desalination Plant for CP1 components	30.06.2020	10.07.2020	Delay has happened for the finalising the cost comparison of DPR, Study Report and PMC CAPEX, OPEX etc. (Due to COVID-19 pandemic issues across the globe and continuous lockdown in Chennai). Accordingly, submission has been made.
	Review note on Product	02.07.2020	02.07.2020	Soft copy submitted
16	Water Transmission Main from Perur DSP to Porur WDS for CP2 components	15.07.2020	15.07.2020	Hard copies submitted
17	Quarterly Progress Report (QPR 02) for April 2020 to June 2020	15.07.2020	15.07.2020	Hard copies submitted
18	Monthly Progress Report (MPR 06) for July 2020	10.08.2020	10.08.2020	Hard copies submitted
19	Revised PQ document for CP1	17.08.2020	17.08.2020	Responses to JICA 2 <sup>nd</sup> comments and Revised Prequalification document (RFQ) for CP1 on DBO basis submitted to CMWSSB (Hard copy submitted)
20	Revised PQ document for CP1	08.09.2020	08.09.2020	Responses to JICA 3 <sup>rd</sup> comments and Revised Prequalification document (RFQ) for CP1 on DBO basis submitted to CMWSSB (Hard copies submitted)

SI.No.	Deliverable	Planned	Actual	Remarks/reasons for the delay
21	Monthly Progress Report (MPR 07) for August 2020	10.09.2020	10.09.2020	Hard copies submitted
22	Draft Environmental Impact Assessment (EIA) Review Report for CP1 and CP-2 components (Rev-1)	23.09.2020	23.09.2020	Hard copies submitted
23	Revised PQ document for CP1	23.09.2020	23.09.2020	Revised Prequalification document (RFQ) for CP1 on DBO basis as per JICA 4 <sup>th</sup> comments submitted to CMWSSB (Hard copies submitted)
24	Topographical Survey Drawings for Proposed UGT and Pumping Station (CP2-2) at Porur new WDS	09.10.2020	09.10.2020	Hard copy submitted
25	Monthly Progress Report (MPR 08) for September 2020	09.10.2020	09.10.2020	Hard copies submitted
26	Final Prequalification document (RFQ) for CP1 on DBO basis	12.10.2020	12.10.2020	Hard copies submitted
27	Notice Inviting Application (NIT for RfQ) for Prequalification documents for CP1 was published in the website and published in Newspaper	14.10.2020	14.10.2020	Published by CMWSSB
28	Quarterly Progress Report (QPR 03) for July to September 2020	15.10.2020	15.10.2020	Hard copies submitted
29	Prequalification (PQ) Application meeting for CP1 components on DBO basis held at CMWSSB	29.10.2020	29.10.2020	
30	Reply to pre-bid queries of Application for Prequalification for CP1 components on DBO basis	04.11.2020	04.11.2020	Hard copy submitted
31	Monthly Progress Report (MPR 09) for October 2020	10.11.2020	11.11.2020	Hard copies submitted
32	Social Safeguard Review (Draft Report)	18.11.2020	18.11.2020	Hard copies submitted

SI.No.	Deliverable	Planned	Actual	Remarks/reasons for the delay
33	The tender extension notice for receiving of PQ application of CP1, the due date has been extended to 16.12.2020 instead of the original date, i.e. 01.12.2020, the details have been published by CMWSSB on the website	26.11.2020	26.11.2020	Published by CMWSSB
34	2 <sup>nd</sup> reply to pre-bid queries and Addendum-1 of Application for Prequalification for CP1 components on DBO basis	27.11.2020	27.11.2020	Hard copy submitted

Also, as per the baseline schedule, the PMC is progressing with the collection and review of data and information to inform early activities planned on CP1, CP2 and CP4.

## 4.4 Financial Progress Upto November 2020

A summary of financial progress (at actuals based on the bills passed) for the PMC Services Contract at the end of November 2020 is included in Table 6.

Table 6:Financial Progress (Actual based on the bill passed) on PMC Services at the end of November 2020

Month	Monthly	Cumulative	% of Total
MOILLI	Expenditure	Expenditure	Contract Value
January 2020 to	INR 1,54,72,083	INR 1,54,72,083	2.69%
June 2020 *	USD 409,354	USD 409,354	4.35%
July 2020	INR 0	INR 1,54,72,083	2.69%
July 2020	USD 0	USD 409,354	4.35%
August 2020	INR 0	INR 1,54,72,083	2.69%
August 2020	USD 0	USD 409,354	4.35%
September	INR 0	INR 1,54,72,083	2.69%
2020**	USD 0	USD 409,354	4.35%
October 2020 ***	INR 0	INR 1,54,72,083	2.69%
October 2020	USD 0	USD 409,354	4.35%
November 2020	INR 0	INR 1,54,72,083	2.69%
****	USD 0	USD 409,354	4.35%

<sup>\*</sup> In addition to the above, for SMEC India Pvt. Ltd., the Mobilisation advance payment (5% of Contract value) has been received on 19.05.2020 as against Advance Bank Guarantee.

However, a summary of financial progress (projected based on man-month consumed and reimbursable items) for the PMC Services contract at the end of November 2020 is included in Table 7. For further details, please refer to **Annexure 5.** 

<sup>\*\*</sup> In addition to the above, for SMEC International Pty Ltd, the Mobilisation advance payment (5% of Contract value) has been received on 17.09.2020 as against Advance Bank Guarantee.

<sup>\*\*\*</sup> In addition to the above, for TATA Consulting Engineers Ltd., the Mobilisation advance payment in INR (5% of Contract value) have been received on 22.10.2020 as against Advance Bank Guarantee.

<sup>\*\*\*\*</sup> For NJS Engineers India Pvt. Ltd., the monthly payment for Feb'2020 to June'2020 in INR has been received on 06.11.2020.

Table 7: Financial Progress (Projected based on man-month consumed and reimbursable items) on PMC Services at the end of November 2020

Month	Monthly	Cumulative	% of Total
WOITH	Expenditure	Expenditure	Contract Value
January 2020	INR 10,77,836	INR 10,77,836	0.18%
January 2020	USD 56,098	USD 56,098	0.60%
February 2020	INR 25,81,997	INR 36,59,833	0.62%
rebluary 2020	USD 112,801	USD 168,899	1.79%
March 2020	INR 38,31,393	INR 74,91,226	1.30%
March 2020	USD 56,261	USD 225,159	2.39%
April 2020	INR 22,26,340	INR 97,17,566	1.69%
April 2020	USD 90,351	USD 315,518	3.35%
May 2020	INR 23,29,743	INR 1,20,47,309	2.09%
May 2020	USD 60,913	USD 376,431	4.00%
June 2020	INR 42,21,118	INR 1,62,68,427	2.83%
June 2020	USD 88,100	USD 464,532	4.94%
July 2020	INR 30,52,922	INR 1,85,36,918	3.22%
July 2020	USD 67,841	USD 532,374	5.66%
August 2020	INR 16,18,166	INR 2,01,14,190	3.49%
August 2020	USD 63,232	USD 595,604	6.33%
September	INR 24,19,135	INR 2,25,03,011	3.91%
2020	USD 66,287	USD 661,889	7.03%
October 2020	INR 42,44,625	INR 2,67,47,636	4.65%
OCIODEI ZUZU	USD 70,882	USD 732,772	7.79%
November	INR 52,91,851	INR 3,21,62,512	5.59%
2020	USD 122,917	USD 855,688	9.09%

# 4.5 Staffing Inputs – November 2020

#### 4.5.1 Mobilized Personnel

The following key Project resources were mobilised and commenced work on the Consulting Services:

Table 8: Mobilized Personnel (International / National)

Position / Role	Name of the staff	Category	Commenced Date	De- mobilisation date	Remobilisation date	Total months allocated	Total months mobilised so far (till November 2020 end)	Balance man- months available (December 2020 onwards)
Project Manager (Team Leader)	Dr P.Dharmabalan	I	14.02.2020	26.02.2020	07.04.2020	70	5.21	64.79
Senior Civil Engineer	Mr.S.Siddappaswamy	N	27.01.2020	22.02.2020	01.04.2020	72	5.32	66.681
Desalination Expert	Dr.Ghulam Mustafa	I	10.02.2020	22.02.2020	01.04.2020	29.50	8.08	21.42
Additional Key Expert – International	Dr.Uday G.Kelkar	I	01.06.2020			2.50	0.83	1.67
Water Supply Engineer	Mr.Shane Farquharson	I	20.01.2020	20.03.2020		23	2.04	20.96
Mechanical Engineer (Desal)	Mr Michal Marillan	Michel Morillon I	20.01.2020	08.02.2020	23.02.2020	15	4.22	10.78
Wechanical Engineer (Desai)	IVII.IVIICITEI IVIOTIIIOTI			15.03.2020	01.04.2020			
Contract Specialist (Desal) -	Mr.Abdel Fattah Toukan	I	20.01.2020	15.02.2020				
International	(Replaced for Mr.Roderick Mackenzie)		I	02.11.2020			9	1.85
Monitoring and Control Expert (Desal)	Mr.Afzal Abdul Latheef (Replaced for Mr.Manikandan Ganesh Shoranur)	I	19.11.2020			11	0.36	10.64
Civil and Structural Engineer (Desal)	Dr.D.Elanchezian	I	20.01.2020	04.04.2020	15.10.2020	42	3.85	38.15
Financial Expert	Mr.Hemant Chadha	I	22.06.2020			3	1.05	1.95
Social Communication Specialist - International	Mr.Rajesh Mishra	I	05.10.2020			16	0.82	15.18
Civil Engineer	Mr.Ramesh Senthil	N	20.01.2020			72	9.62	62.38
Senior Pipeline Engineer	Mr.Nagesh Chinnam	N	04.02.2020			72	5.68	66.32

Position / Role	Name of the staff	Category	Commenced Date	De- mobilisation date	Remobilisation date	Total months allocated	Total months mobilised so far (till November 2020 end)	Balance man- months available (December 2020 onwards)
Environmental Specialist - International	Dr.Alok Kumar	I	24.02.2020	07.03.2020	25.04.2020	15	1. 772	13.228
Environmental Specialist - National	Mr.S.M.Karthikaeswaran	N	25.02.2020			30	7. 949	22.051
Pipeline Engineer-1	Mr.Rahul N Ramdhan (Replaced for Mr.Chandra Shekhar Reddy Yedla)	N	25.02.2020 23.09.2020	05.03.2020		60	2.04	57.96
Pipeline Engineer-2	Mr.P.Thangavel (Replaced for Mr.V.Tulasi Ram)	N	15.10.2020			60	1.50	58.50
Hydraulic Modeller-1	Mr.P.M.Saravanan	N	25.02.2020	27.02.2020		8	0.09	7.91
Social Communication Specialist – National	Mrs.R.Kanmani (Replaced for Dr.Rajshekar Reddy)	N	21.09.2020			72	2.22	69.78
Contract Management Specialist	Mr.Santosh Biswa	N	02.03.2020			6	3.31	2.69
Quantity Surveyor-1	Mr.R.Muthurajan (Replaced for Mr.K.C.Vinod Chandra)	N	21.10.2020			50	1.31	48.69
Quantity Surveyor-2	Mr.V.S.Rajasekar	N	21.09.2020			70	1.588	68.412
CAD Operator-1	Mr.G.Murali	N	25.02.2020	24.03.2020	01.05.2020	30	7.58	22.42
GIS Operator	Mr.Suresh Mohan Dwivedi	N	07.10.2020	24.10.2020	24.11.2020	18	0.82	17.18
Secretary	Mr.B.Ajithkumar	N	29.10.2020			70	0.95	69.05
Visa and Admin Officer	Mr.A.Renu Kumar	N	20.01.2020			70	9.75	60.25
Accountant	Mr.K.Manikandan	N	09.03.2020			70	8.39	61.61
Office Keeper-1	Mr.Pilominraj Raja (Replaced for Mr.R.Jagan)	N	03.02.2020			70	9.76	60.24
Office Keeper-2	Mr.Thiruvengadam Someswaran (Replaced for Mr.G.Arjun)	N	03.02.2020			70	9.76	60.24

I - International Staff

N - National Staff

A project office has been established in Chennai to accommodate PMC personnel and integrate resources from PMC partners into a united team. The permanent office is located at the Puravankara Primus building, Old Mahabalipuram Road, Okkiyampet, Thuraipakkam, Chennai 600 097. This office location is centrally positioned between the Client office and the Perur project site to balance both short and long-term commitments to the Project.

No PMC team has been permanently demobilised from the Project. However, some resources with intermittent or staged inputs were temporarily demobilised during the period due to COVID-19 pandemic issues.

After the COVID-19 pandemic issues resolved and the end of the extended partial lockdown period in Tamil Nadu, India, several of these team members are scheduled to return to Chennai for further inputs to this Project in the coming month of December 2020.

#### 4.5.2 Per-Diem Allowance

The following are the details of quantity for per-diem allowance for the staff of Consortium member of the Project on the Consulting Services:

Table 9: Details of Quantity for Per-Diem Allowance for Staff

SI. No.	Name of the firm	Category	Total Number of Days (As per Contract Agreement)	Total Number of Days (As per Allocation of Consortium)	Number of Days of Claim up to October 2020	Number of Days of Claim in November 2020	Cumulative Number of Days of Claim up to November 20200	Balance Number of Days for Claim
1	NJS Engineers India Pvt. Ltd.	International	2250	1,440	12	0	12	1,428
2	SMEC India	International		810	138	0	138	672
	Pvt. Ltd.	National	50	50	19	0	19	31
3	SMEC International Pty. Ltd.	<ul> <li>Per-diem allowance in INR for the Key International Experts will be claimed by SMEC India         Pvt. Ltd. (International Category)     </li> <li>Per-diem allowance in INR for the Non-Key International Experts will be claimed by SMEC         India Pvt. Ltd. (National Category)     </li> </ul>						
4	TATA Consulting Engineers Ltd.	Not applicable. Hence no claim will be made for the entire project duration						
	TOTAL		2,300	2,300	169	0	169	2,131

#### 4.5.3 Summary of Personnel Inputs for the Period

A summary of personnel inputs for the period (November 2020) is included in **Annexure 6**. Planned mobilisation of PMC personnel for the next three (3) month period (up to February 2021) is presented in **Annexure 7**.

#### 4.5.4 Team Structure

A copy of the current PMC organisation chart is attached in **Annexure 8**.

#### 4.5.4.1 Change of Team Structure PMC's nominated key personnel for this Project

As at the end of November 2020, there are some changes to the PMC's nominated personnel for this Project; however, two support staffs (Office Keeper-1 and Office Keeper-2) have been replaced with new personnel from July 2020 onwards.

Dr.Uday G.Kelkar, NJSEI Pvt. Ltd. have been mobilised for the Project since June 2020, as an additional Key Expert (International) with 2.50 man-months (Intermittent) by adjusting with the input man-months of Dr.Ghulam Mustafa (Desalination Expert), International Key Expert with remuneration of USD 26225 per Man month has been accepted by CMWSSB and JICA. As per CMWSSB letter dated 24.04.2020, it is informed that his input of 2.50 man-months is expected to spread over the entire Project duration and his cost is to be met from the cost of Desalination Expert, and there is no change in a project approved budget for this PMC assignment.

CMWSSB has provided the approval for the replacement of the following staffs till November 2020 as listed below:

SI. No.	Position	Original Staff as per Contract Agreement	Approved Staff by CMWSSB	Date of Approval
140.	KEY - INTERNATIONAL	Contract Agreement	by Civivood	Арріочаі
1	Electrical Engineer	Mr.Sergio de Bastos Vilar	Mr.Guilbert	16.09.2020
	(International)	Magalhaes Paulo	Z.Gonzales	
2	Contract Specialist (Desal) -	Mr. Roderick Mackenzie	Mr.Abdel Fattah	24.10.2020
	International		Toukan	
	NON KEY INTERNATIONAL			
3	Monitoring & Control Expert	Mr.Manikandan Ganesh	Mr.Afzal Abdul	10.09.2020
	(Desal)	Shoranur	Latheef	
	NON KEY – NATIONAL /			
	LOCAL EXPERT			
4	Mechanical Engineer	Mr.Surajit Debnath	Mr.Mayur Gupta	10.09.2020
5	Electrical Engineer	Mr.G.V.K Mohan	Mr.Om Prakash	10.09.2020
			Singh	
6	Structural Engineer	Mr.M.K.Vinod	Ms.J.Sudha	10.09.2020
7	Pipeline Engineer - 1	Mr.Chandra Shekhar	Mr.Rahul N	10.09.2020
		Reddy Yedla	Ramdhan	
8	Pipeline Engineer – 2	Mr.V.Tulasi Ram	Mr.P.Thangavel	10.09.2020
9	Social Communication	Dr.M.Rajsekhar Reddy	Mrs.R.Kanmani	10.09.2020
	Specialist			
10	Quantity Surveyor-1	Mr.Vinod Chandra K.C	Mr.R.Muthurajan	10.09.2020
11	Architect	Mr.M.Kumar	Mrs.Kirti Alhad	24.10.2020
			Sadarjoshi	

As per CMWSSB letter dated 10.09.2020, it is informed that above experts under International and Local Expert category, i.e. Non-Key Experts (SI.No.3 to 10) have been considered and approved for replacement.

As per CMWSSB letter dated 16.09.2020, it is informed that the above expert under International Key Expert category (SI.No.1) has been considered and approved for replacement.

As per CMWSSB letter dated 24.10.2020, it is informed that above experts under International and Local Expert category (SI.No.2 & 11) have been considered and approved for replacement.

# 4.6 Meetings and Site Visits – November 2020

A summary of critical meetings and site visits completed during the period is furnished in Table10.

Table 10: Meetings and Site Visits (November 2020)

Date	Meeting and Site Visit	Location	Attendees
02.11.2020	Online Microsoft Teams Meeting conducted by Project Coordinator (PMC) for a discussion on the reply to pre-bid queries for Prequalification (PQ) documents for CP1 components on DBO basis	Online Microsoft Teams Meeting Video Conference Call	PMC team members
03.11.2020	Meeting with CE (Project-III), CMWSSB officials and PMC team members for a discussion on the reply to pre-bid queries for Prequalification (PQ) documents for CP1 components on DBO basis	O/o CE (Project- III) CMWSSB	CMWSSB officials & PMC team members
04.11.2020	Online Microsoft Teams Meeting conducted by Executive Director, CMWSSB officials and PMC team members for a discussion on the reply to prebid queries for Prequalification (PQ) documents for CP1 components on DBO basis	Online Microsoft Teams Meeting Video Conference Call	CMWSSB officials & PMC team members
06.11.2020	Joint site visit with SE (Desal) CMWSSB officials for allocation of land for proposed Underground Tank (UGT) and Pumping station at Porur new WDS site	Site Visit at Porur new WDS	PMC team members & CMWSSB officials
06.11.2020	Online Microsoft Teams Meeting conducted by Contract Specialist - International Expert (PMC) for a discussion on the preparation of Part-I (Bidding Procedures) of Draft Request For Proposal (RFP) for CP1 components	Online Microsoft Teams Meeting Video Conference Call	PMC team members
09.11.2020	Online Microsoft Teams Meeting conducted by Project Coordinator (PMC) for a discussion on the topo levels requirement and utilization of Manpower for CP4 components	Online Microsoft Teams Meeting Video Conference Call	PMC team members
09.11.2020	Online Microsoft Teams Meeting conducted by Project Manager (PMC) for a discussion on the issues/ concerns for the specific tasks allocated / working deliverables/activities, project status on finalisation of Concept Design Report, Preparation of Draft Request For Proposal (RFP) and Social Safeguard Review (Draft Report) for CP1 components	Online Microsoft Teams Meeting Video Conference Call	PMC team members
09.11.2020	Online Microsoft Teams Meeting conducted by Project Manager (PMC) for a discussion on the issues/ concerns for the specific tasks allocated / working deliverables/activities and project status for CP2 and CP4 components	Online Microsoft Teams Meeting Video Conference Call	PMC team members

Date	Meeting and Site Visit	Location	Attendees
13.11.2020	Online Microsoft Teams Meeting conducted by Project Manager (PMC) for a discussion on the updated reply to JICA responses on the pre-bid queries for Prequalification (PQ) documents for CP1 components on DBO basis	Online Microsoft Teams Meeting Video Conference Call	PMC team members
13.11.2020	Online Microsoft Teams Meeting conducted by Project Manager (PMC) for a discussion on the Preparation of Draft Request For Proposal (RFP) for CP1 components	Online Microsoft Teams Meeting Video Conference Call	PMC team members
16.11.2020	Online Microsoft Teams Meeting conducted by Project Coordinator (PMC) for a discussion on the updated reply to JICA responses on the pre-bid queries for Prequalification (PQ) documents for CP1 components on DBO basis	Online Microsoft Teams Meeting Video Conference Call	PMC team members
16.11.2020	Online Microsoft Teams Meeting conducted by CE(Project-II & III) & CMWSSB officials and PMC team members for a discussion on the updated reply to JICA responses on the pre-bid queries for Prequalification (PQ) documents for CP1 components on DBO basis	Online Microsoft Teams Meeting Video Conference Call	CMWSSB officials & PMC team members
17.11.2020	Microsoft Teams Meeting conducted by Senior Civil Engineer (PMC) for a discussion on the updated reply to JICA responses on the pre-bid queries and notes on e-procurement for Prequalification (PQ) documents for CP1 components on DBO basis	Online Microsoft Teams Meeting Video Conference Call	PMC team members
17.11.2020	Online Microsoft Teams Meeting conducted by Project Manager (PMC) for a discussion on the preparation of Draft Request For Proposal (RFP) for CP1 components	Online Microsoft Teams Meeting Video Conference Call	PMC team members
19.11.2020	Online Microsoft Teams Meeting conducted by Project Manager (PMC) for a discussion on the preparation of Draft Request For Proposal (RFP) for CP1 components	Online Microsoft Teams Meeting Video Conference Call	PMC team members
25.11.2020	Online Microsoft Teams Meeting conducted by Project Coordinator (PMC) for a discussion on the finalisation of Concept Design Report and preparation of Draft Request For Proposal (RFP) for CP1 components	Online Microsoft Teams Meeting Video Conference Call	PMC team members
27.11.2020	Online Microsoft Teams Meeting conducted by Senior Civil Engineer (PMC) for a discussion on the preparation of Draft Request For Proposal (RFP) for CP1 components	Online Microsoft Teams Meeting Video Conference Call	PMC team members

Date	Meeting and Site Visit	Location	Attendees
27.11.2020	Online Microsoft Teams Meeting conducted by Project Coordinator (PMC) for a discussion on the preparation of proposed layout, administration building, other civil works and architectural works for the proposed Desalination Plant for CP1 components	Online Microsoft Teams Meeting Video Conference Call	PMC team members
30.11.2020	Online Microsoft Teams Meeting conducted by Project Coordinator (PMC) for a discussion on the preparation of Draft Request For Proposal (RFP) for CP1 components	Online Microsoft Teams Meeting Video Conference Call	PMC team members
02.11.2020 to 20.11.2020	Site visit and data collection for Ward 105, 106, 107, 108, 109, 112, 117, 127, 130, 133 to 136, 141from Deputy Area Engineer, Assistant Engineer (CMWSSB)	CMWSSB Area office & Depot offices	PMC team members
16.11.2020 to 19.11.2020	Site visit and data collection from Porur headworks, ValluvarKottam headworks, Choolaimedu Pumphouse and KK Nagar old/New Pumphouse.	CMWSSB Area office & Depot offices	PMC team members

The regular meetings/technical discussions have been conducted by PMC teams on the preparation of Concept Design Report including Instrumentation and Control Works including plant operation control system, Instrumentation Plan, Project Implementation Schedule, Civil structural and architectural works, review of technical specification for Draft Request For Proposal (RFP) for CP1 components on DBO basis including Bidding Procedures, Employer's requirements (3 Volumes), Conditions of Contract and Contract Forms. Preparation of Operation & Maintenance Cost, Minimum Functioning Specifications. Discussion on the reply to pre-bid queries and responses for JICA comments. Submission of Monthly Progress Report (MPR 09) for October 2020, Social Safeguard Review (Draft Report) submitted on 18.11.2020, reply to pre-bid queries for Prequalification (PQ) documents for CP1, notes on e-procurement etc. Also, regular interactions, discussions held with CMWSSB officials and other Project aspects until November 2020. Where formal minutes have not been recorded, these meetings are not listed in the above.

## 4.7 Health & Safety –November 2020

There are no health and safety incidents to report for November 2020, associated with the activities of the PMC. The evolving international situation regarding the COVID-19 virus is pandemic, however, of concern to the PMC, as restricted travel movements may impact mobilisation of international (and possibly national) staff. The PMC will keep CMWSSB officials informed of any developments that impact the delivery of the Consulting Services. It is requested that CMWSSB consider approval of out-of-Country professional inputs till the end of December 2020, if the COVID-19 virus Pandemic situation worsens and travel restrictions are enforced, for the PMC to maintain progress on activities. Also, it is requested that CMWSSB to consider the approval of national and support staff for work from home inputs, if the COVID-19 virus Pandemic situation worsens and travel restrictions to sites are enforced, for the PMC to maintain progress on activities.

The details of Insurance are listed in Table 11.

Table 11: Details of Insurance

Name of the Firm	Type of Insurance	Name of the Agency	Insurance Value	Period Insurance from	Period Insurance to
	Third-Party Motor Vehicle Liability Insurance Third-Party Liability Insurance	SBI General Insurance	INR 100 Million	10.01.2020	09.01.2021
SMEC International Pty. Ltd.	Professional Liability	Engineering Consultants Underwriters Ltd.	AUD 10 Million	30.06.2020	31.12.2021
•	Employer's Liability and Worker Compensation Insurance	CHUBB Insurance Singapore limited	SGD 10 Million	01.07.2019	31.12.2020
	Insurance against Loss or Damage	Not Applicable	-	-	-
	Third-Party Motor Vehicle Liability Insurance Third-Party Liability Insurance	SBI General Insurance	INR 100 Million	10.01.2020	09.01.2021
SMEC India Pvt. Ltd.	Professional Liability	Bajaj Allianz General Insurance Company Ltd.	INR 1000 Million	08.07.2020	07.07.2021
	Employer's Liability and Worker Compensation Insurance	IFFCO TOKIO General Insurance Co. Ltd.	INR 640.84 Million	05.01.2020	04.01.2021
	Insurance against Loss or Damage	Bajaj Allianz General Insurance Company Ltd.	INR 8.40 Million	30.04.2020	29.04.2021
	Third-Party Motor Vehicle Liability Insurance	IFFCO TOKIO General Insurance Company Ltd.	INR 1.70 Million	27.08.2020	26.08.2021
NJS Engineers India	Professional Liability	New India Assurance Company Limited	INR 259 Million	20.04.2020	19.09.2027
Pvt. Ltd.	Employer's Liability and Worker Compensation Insurance	New India Assurance Company Limited	INR 20 Million	20.04.2020	19.04.2021
	Insurance against Loss or Damage	Not Applicable	-	-	-
	Third-Party Motor Vehicle Liability Insurance	Royal Sundaram General Insurance	INR 0.31 Million	22.02.2020	21.02.2021
TATA Consulting	Professional Liability	The New India Assurance Co. Ltd.	INR 1500 Million	03.10.2020	02.10.2021
Engineers Ltd.	Employer's Liability and Worker Compensation Insurance	The New India Assurance Co. Ltd.	INR 1145 Million	01.04.2020	31.03.2021
	Insurance against Loss or Damage	The New India Assurance Co. Ltd.	INR 1000 Million	03.10.2020	02.10.2021

#### 4.8 Variations

#### 4.8.1 Submitted/Approved

There are some variation requests submitted or approved during this period.

Dr.Uday G.Kelkar, NJSEI Pvt. Ltd. have been mobilised for the Project since June 2020, as an additional Key Expert (International) with 2.50 man-months (Intermittent) by adjusting with the input man-months of Dr.Ghulam Mustafa (Desalination Expert), International Key Expert with remuneration of USD 26225 per Man-month has been accepted by CMWSSB and JICA. As per CMWSSB letter dated 24.04.2020, it is informed that his input of 2.50 man-months is expected to spread over the entire project duration and his cost is to be met from the cost of Desalination Expert, and there is no change in Project approved budget for this PMC assignment.

The following staff CVs have been submitted for the replacement of 2 nos. of Key Expert (International), 1 no. of Non-Key Expert (International) and 8 nos. of Non-Key National / Local Expert (Non-evaluation position) vide our correspondence letters communicated to CMWSSB. The following are the details of the approved staff by CMWSSB.

SI.	Position	Original Staff as per	Approved Staff	Date of
No.		Contract Agreement	by CMWSSB	Approval
	KEY – INTERNATIONAL			
1	Electrical Engineer (International)	Mr.Sergio de Bastos Vilar Magalhaes Paulo	Mr.Guilbert Z.Gonzales	16.09.2020
2	Contract Specialist (Desal) – International	Mr.Roderick Mackenzie	Mr.Abdel Fattah Toukan	24.10.2020
	NON KEY INTERNATIONAL			
3	Monitoring & Control Expert (Desal)	Mr.Manikandan Ganesh Shoranur	Mr.Afzal Abdul Latheef	10.09.2020
	NON KEY – NATIONAL / LOCAL EXPERT			
4	Mechanical Engineer	Mr.Surajit Debnath	Mr.Mayur Gupta	10.09.2020
5	Electrical Engineer	Mr.G.V.K Mohan	Mr.Om Prakash Singh	10.09.2020
6	Structural Engineer	Mr.M.K.Vinod	Ms.J.Sudha	10.09.2020
7	Pipeline Engineer – 1	Mr.Chandra Shekhar Reddy Yedla	Mr.Rahul N Ramdhan	10.09.2020
8	Pipeline Engineer – 2	Mr.V.Tulasi Ram	Mr.P.Thangavel	10.09.2020
9	Social Communication Specialist	Dr.M.Rajsekhar Reddy	Mrs.R.Kanmani	10.09.2020
10	Quantity Surveyor-1	Mr.Vinod Chandra K.C	Mr.R.Muthurajan	10.09.2020
11	Architect	Mr.M.Kumar	Mrs.Kirti Alhad Sadarjoshi	24.10.2020

#### 4.8.2 Under Consideration

There are some future variations currently under consideration as listed below:

SI.	Position	Original Staff as per	Proposed Staff	Status
No.		Contract Agreement	for replacement	
	KEY –			
	INTERNATIONAL			
1	Pipeline Engineer	Mr.John Goullee	Mr.Balvinder Singh	Not Approved
	(International)		Bahra	
	NON KEY			
	INTERNATIONAL			
2	Specification	Mr.J.Shanmuganathan	Mr.Ganesh	Awaiting approval
	Specialist (Desal)		Venkataraman	from CMWSSB

# 4.9 Communication and Correspondence

There is no progress on activities to report for Project communications this period. The PMC does, however, note the request of the CMWSSB to tighten up on Project communications and ensure that there is a "single voice" from the PMC during project discussions. Also, adherence to project communications protocols requires improved effort to ensure that correspondence is issued in the correct format and through agreed lines of communication.

The correspondence details of the letters submitted to CMWSSB and letters received from CMWSSB for the Project is furnished in Table 12.

Table 12: Details of Correspondence for the Project

SI.	Details of Correspondence letter	Letter Correspondence	Date of
No.		reference number, date	submission /
			received
1.	Submission of TDS Remittance Challan for	Ref: SMEC/CMWSSB/5061185/200	02.11.2020
	SMEC International Pty Ltd – January 2020	Dated: 02.11.2020	
	to June 2020 for monthly invoice payment		
2.	Details of Invoices for September 2020 for	Ref: SMEC/CMWSSB/5061185/192	04.11.2020
	all consortium Members	Dated: 04.11.2020	
3.	Submission of Reply to Pre-bid Queries of	Ref: SMEC/CMWSSB/5061185/201	04.11.2020
	Application for Prequalification for CP1	Dated: 04.11.2020	
4.	Updated reply to Pre-bid Queries for CP1	Soft copy sent by email to CMWSSB,	04.11.2020
		dated 04.11.2020	
5.	Request - Issue of supporting letter from	Ref: SMEC/CMWSSB/5061185/203	06.11.2020
	CMWSSB to Visa Officer- for mobilisation of	Dated: 05.11.2020	
	Mr.Abdel Fattah Toukan (Contract		
	Specialist, Desal)		

SI.	Details of Correspondence letter	Letter Correspondence	Date of
No.		reference number, date	submission /
			received
6.	Submission of NJS Engineers letter for	Ref: SMEC/CMWSSB/5061185/204	09.11.2020
	Foreign Currency Invoices payment	Dated: 09.11.2020	
7.	Submission of TATA Consulting Engineers	Ref: SMEC/CMWSSB/5061185/205	09.11.2020
	Ltd - Professional Indemnity Insurance &	Dated: 09.11.2020	
	Insurance against loss or damage		
8.	Submission of Revised Invoice Details for	Ref: SMEC/CMWSSB/5061185/207	09.11.2020
	July 2020 for all Consortium Members	Dated: 09.11.2020	
9.	Submission of Revised Invoice Details for	Ref: SMEC/CMWSSB/5061185/208	09.11.2020
	August 2020 for all Consortium Members	Dated: 09.11.2020	
10.	Submission of SMEC India Pvt Ltd Foreign	Ref: SMEC/CMWSSB/5061185/209	09.11.2020
	Currency Invoice from Jan' 2020 to April	Dated: 09.11.2020	
	2020		
11.	Mobilization of Mrs.Kirti Alhad Sadarjoshi	Ref: SMEC/CMWSSB/5061185/207	11.11.2020
	(Architect) & Ms.J.Sudha (Structural	Dated: 10.11.2020	
	Engineer)		
12.	Submission of Monthly Progress Report	Ref: SMEC/CMWSSB/5061185/210	11.11.2020
	(MPR 09) for October 2020 (10 Copies)	Dated: 11.11.2020	
13.	Request for allocation of Land for Proposed	Ref: SMEC/CMWSSB/5061185/211	11.11.2020
	UGT and Pumping Station (CP2-2) at Porur	Dated: 11.11.2020	
	WDS		
14.	Submission of Invoice for October 2020 for	Ref: SMEC/CMWSSB/5061185/212	11.11.2020
	SMEC International Pty Ltd in Foreign	Dated: 11.11.2020	
	Currency (2 copies)		
15.	Submission of Invoice for October 2020 for	Ref: SMEC/CMWSSB/5061185/213	11.11.2020
	SMEC India Pvt. Ltd. in Foreign Currency (2	Dated: 11.11.2020	
	copies)		
16.	Submission of Invoice for October 2020 for	Ref: SMEC/CMWSSB/5061185/214	11.11.2020
	SMEC India Pvt. Ltd. in Local Currency (2	Dated: 11.11.2020	
	copies)		
17.	Details of Invoice for October 2020 for all	Ref: SMEC/CMWSSB/5061185/215	12.11.2020
	Consortium Members	Dated: 12.11.2020	

SI.	Details of Correspondence letter	Letter Correspondence	Date of
No.		reference number, date	submission /
			received
18.	Reply to CMWSSB email dated 12.11.20	Ref: SMEC/CMWSSB/5061185/216	
	regarding Status of Mobilization/	dated 17.11.2020	17.11.2020
	Demobilization/ Remobilization of Experts		
19.	Submission of Revised Invoice for January	Ref: SMEC/CMWSSB/5061185/217	
	to April 2020 for SMEC India Pvt Ltd in	dated 17.11.2020	17.11.2020
	Foreign Currency		
20.	Submission of Social Safeguard Review	Ref: SMEC/CMWSSB/5061185/219	18.11.2020
	(Draft Report)	dated 18.11.2020	10.11.2020
21.	Submission of Notes on E-Procurement for	Ref: SMEC/CMWSSB/5061185/220	19.11.2020
	Prequalification of CP1 on DBO Basis	dated 19.11.2020	13.11.2020
22.	Submission of updated reply to Pre-bid	Ref: SMEC/CMWSSB/5061185/221	
	queries of application for Prequalification of	dated 19.11.2020	19.11.2020
	CP1		
23.	Reply to CMWSSB letter dated 18.11.2020	Ref: SMEC/CMWSSB/5061185/222	
	- Clarification on Mobilization of	dated 19.11.2020	19.11.2020
	Mr.B.Ajithkumar (Secretary, Support Staff)		
24.	Mobilization of Mr.Afzal Abdul Latheef	Ref: SMEC/CMWSSB/5061185/223	20.11.2020
	(Monitoring & Control Expert)	dated 19.11.2020	20.11.2020
25.	Submission of Notes on E-Procurement for	Ref: SMEC/CMWSSB/5061185/227	24.11.2020
	Prequalification of CP1 on DBO basis	dated 24.11.2020	24.11.2020
26.	Submission of 2 <sup>nd</sup> reply to pre-bid queries	Ref: SMEC/CMWSSB/5061185/228	
	and Addendum-1 of Application for	dated 27.11.2020	27.11.2020
	Prequalification for CP1		
27.	Bills Returned for July & August 2020 for all	Ref: CMWSSB/SE(Desal)/400 MLD	
	firms and Jan' to April 2020 for M/s SMEC	Plant/PMC-027/2020, dated	13.11.2020
	India Pvt. Ltd. (Foreign Currency)	11.11.2020	
28.	Request for Issuance of Multiple Entry Visa	Ref: CMWSSB/SE(Desal)/400 MLD	13.11.2020
	to Mr.Abdel Fattah Toukan	Plant/PMC/2020, dated 11.11.2020	13.11.2020
29.	Requested Clarification for Mobilization of	Ref: CMWSSB/SE(Desal)/400MLD	
	Mr.B.Ajithkumar (Secretary, Support Staff)	Plant/PMC-028/2020, dated	18.11.2020
		18.11.2020	
	1		

The PMC team is maintaining the Document Management System (DMS) for the Project.

# 5 PROGRESS OUTLOOK FOR PMC SERVICES

# 5.1 Activities Planned for Next Month

A summary of planned (key) activities for December 2020 is provided in Table 13.

Table 13: Planned Activities until December 2020 (PMC activities)

Contract	Activities (Planning for next months)		
Package			
	Task 3: Conducting Surveys and Investigations – Preparation of report on surveys and investigations on the following:  Submission of seawater quality testing and analysis report  Submission of topographical survey drawing at Perur DSP (TANGEDCO) substation site  Submission of Report on the Bathymetry Survey  Submission of Brine Diffusion Modelling Study Report  Carrying out the Geotechnical Investigations at Perur Desalination Plant site  Task 5: Preparation & Submission of Concept Design Report  Preparation and Submission of Final Concept Design Report including Financial Modelling and Operation & Maintenance Requirements  Task 6 Preparation of Technical Specifications		
CP1	<ul> <li>Financial Analysis</li> <li>Financial Modelling and Analysis</li> <li>Preparation of Sensitivity Analysis</li> <li>Preparation of Bid Parameters</li> <li>Task 8 Preparation of O&amp;M Requirements for Bid Document</li> <li>Task 9: Request for Qualification (RFQ) – issued the document to market (15.10.2020)</li> <li>Obtaining concurrence from JICA on balance reply to Prequalification (PQ)         <ul> <li>Application meeting for CP1 components.</li> </ul> </li> <li>Issue of balance reply to Prequalification (PQ) Application meeting to the Applicants on the website</li> </ul>		
	Task 10: Request for Proposal (RFP) – commence final document preparation of the following in December 2020  Part I – Bidding Procedures Part II – Employers Requirements (3 Volumes) Part III – Conditions of Contract and Contract Forms		
	Task 1: Data collection – collection and verification of data on the existing/proposed CMWSSB water transmission system and proposed battery limits (including site information for Porur WDS)		
CP2	<ul> <li>Task 2: Review the technical information – Decide on the preferred location of the new reservoir and pumping station on Porur Headworks site</li> <li>Pumps combination at Perur will be reviewed.</li> <li>Review of the preliminary design in the DPR. Reviewing the AECOM report about Pumping Station at Perur and WDS and PS at Porur and giving our observations, if any.</li> <li>Submission on Review Note on Product Water Transmission Main for arriving the pump head for Perur DSP.</li> </ul>		

Contract	Activities (Planning for next months)
Package	· · ·
	Task 3: Conducting Surveys and Investigations – Confirm the scope of services for proposed site topographic survey and geotechnical investigation
	Submission of the topographical survey drawing for Porur WDS site
	<ul> <li>Implementation of the topographical surveys for the construction area of the pumping stations in the premises of the Perur DSP, the pumping station and reservoir in the Porur WDS</li> </ul>
	<ul> <li>Finalization of layout plan for CWR and PS at Porur</li> </ul>
	<ul> <li>Carrying out the Geotechnical Investigations at Porur WDS site</li> </ul>
CP3	<ul> <li>Task 1: Design reviews – undertake the review of design and bid document deliverables (by others), if prioritised by CMWSSB</li> <li>Hydraulic analysis of the product water transmission main for final determination of the pump head and counter measure for water hammer.</li> <li>Received the product water pipeline transmission design, we will review the final design to arrive at the pumping head required at Perur pumping station.</li> </ul>
	Task 2: Review of draft CP3 bid documents (prepared by CMWSSB) and the issue of comments
CP4	Task 1: Reconnaissance Survey, Data and information collection – collect and verify data on the existing CMWSSB water distribution network according to agreed prioritisation of WDZs (Area X and Area XIII)  Review of Technical information about the Project, revision of population and demand details with CMWSSB consent.  Collect and review of the topographical survey for the Chennai core city.  Review of the inventory data of the other zone-wise distribution network provided by CMWSSB  Reconnaissance Survey and a Site visit to various Water Distribution Stations.  Task 1: GIS development – progressive development of the GIS database for existing
	water distribution asset inventory, including design of attribute data structure
	Task 2: Preliminary Design basis status report – a document for proposed design criteria for water distribution system modelling and design  Preparation and submission of PMC observations on various components of the Master plan/ JICA report
CP5	No planned activities during this period
General	<ul> <li>Preparation of updation of Concept Design Report for CP1 components – finalise based on Client/JICA reviews</li> <li>Preparation and Submission of Monthly Progress Report for November 2020</li> <li>External Approvals Register – confirm status and timing for all Project approvals and permits pre-requisite to delivering the Works and assemble in project-specific Register</li> <li>Project Updated EIA review report – complete review of the Project EIA review report and environmental commitments and brief package Leads on specific requirements relevant to each package</li> <li>Preparation of Environmental Management Plans and Environmental Monitoring Plans for CP1, CP2-1 and CP2-2 (for Perur pumping station).</li> <li>Presentation of Final Environmental Impact Assessment review report and finalisation of the EIA by incorporating the comments, if any, from CMWSSB.</li> <li>Preparation of Social Safeguard Review (Final Report) for CP1 and CP2 components</li> <li>Land acquisition/access status review – review and Report on the status of all land acquisition and access requirements for all Project sites/routes and develop an action plan to close gaps.</li> </ul>

## 5.2 Managing Progress Risks

A summary of potential progress risks (PMC activities) and proposed measures to mitigate/control these risks are provided in Table 14.

Table 14: Managing Progress Risks (PMC activities)

Contract Package	Risk	Control measure	Status
All	COVID-19 virus Pandemic restricts travel movements of PMC personnel and prevents mobilisation of key personnel	Agreement with CMWSSB for selected activities/tasks to be completed remotely (not Chennai based) to avoid any delays to progress	•
All	JICA concerns with the rate of progress and achieved activities to date	PMC has prepared an updated work schedule to compress the timeline for CP1 activities and shorten the duration through to tendering of this package.  Scheduling for other package is also being reviewed to seek the opportunity to shorten project duration.	•
CP1	JICA concerns with the rate of progress and achieved activities to date	Enter upon permission for the DSP site to be obtained by CMWSSB from HR & CE Board	•
CP2	Porur Headworks / WDS: The site designated for construction of reservoir and pumping station at Porur is taken for other Project, and already construction of 6 MLD WTP is under progress. This will call for a change in the layout plan for the proposed reservoir and pumping station in the nearby area.	Details of existing assets on the Porur Headworks / WDS site to be provided by CMWSSB as a priority to allow the PMC to review the site layout concept urgently.  CMWSSB has confirmed and allotted the land for construction of proposed UGT and Pumping Station at Porur new WDS site.  Allocation of 400 MLD of treated water:  CMWSSB has been requested to provide the quantities allocated enroute to Porur from Perur to review the pumping head requirement.	•
CP4	Lack of available digital data on the existing water distribution network (in AutoCAD drawing format) to develop an asset database and hydraulic model results in slower progress than estimated.	PMC to coordinate with internal CMWSSB (PIU) team looking at GIS development and will apply additional CAD/GIS resource if required for the digitisation of hard-copy network plans	•

Legend: Risk being managed (●); Risk managed with further action (●); Risk not effectively managed (●)

### 6 PROGRESS REPORT FOR PROJECT (THE WORKS)

At the time of preparing this Monthly Progress Report for November 2020, the Project works are yet to commence, and no contracts have been awarded. Comments made below reflect this current status.

It is expected in subsequent months that a more specific reporting format will be issued once works commence.

#### 6.1 Achieved Activities – November 2020

There are no achieved activities (Works) to report.

#### 6.2 Actual Progress versus Planned Progress –November 2020

The Project works are not scheduled to commence until later in 2020 (CP1 and CP3 components). Other contract packages may start even later during August 2021 and beyond.

There is no comparison of planned versus actual progress to report.

#### 6.3 Financial Progress in November 2020

There is no financial progress to be reported for the Project.

#### 6.4 Health & Safety - November 2020

There are no health and safety matters to report.

#### 6.5 Environmental and Regulatory Compliance

There are no regulatory and compliance matters to be reported for the Project during the November 2020 period. We note that before this period, the CMWSSB has been awarded CRZ clearance for the Project.

#### 6.6 Communication and Correspondence

Leading up to the appointment of the PMC, CMWSSB has engaged with relevant authorities and external stakeholders regarding the Project. A key stakeholder involved in progress to date is the Japan International Cooperation Agency ("JICA"), who will act on behalf of the Government of Japan to issue an Official Development Assistance (ODA) loan for the Project under Loan ID-P267.

Since the appointment of the PMC, limited Project communications with external stakeholders have transpired. A Project Communication Plan is required.

#### 6.7 Variations

#### 6.7.1 Scope of Work

Nil.

#### 6.7.2 Schedule

Nil.

#### 6.7.3 Budget

Nil.

## 7 PROGRESS OUTLOOK FOR PROJECT (THE WORKS)

#### 7.1 Activities Planned Next Month

No progress on construction activity is expected for the coming month of December 2020 as the works have not been tendered for any of the Contract Packages to date.

#### 7.2 Managing Progress Risks

A summary of potential Project progress risks and proposed measures to mitigate/control these risks is provided in

Table 15.

Table 15: Managing Progress Risks (Project)

Contract Package	Risk	Control measure	Status
All	Approvals and permits for project execution are not in place when needed resulting in delays to construction	PMC to prepare a register that lists all approvals and permits required for project execution across each of the Contract Packages for tracking purposes	•

Legend: Risk being managed (●); Risk managed with further action (●); Risk not effectively managed (●)

#### 8 ANNEXURES

The following annexures are included with this Monthly Progress Report:

- Annexure 1 List of Experts with Name, Role and Man-months
- Annexure 2 Project Scope
- Annexure 3 Overall Work Schedule
- Annexure 4 Work Schedule Task Breakdown (Contract Package-wise)
- Annexure 5 Projected Financial Progress Based on Man-months consumed Vs Actual Progress (Bill Passed)
- Annexure 6 Personnel Inputs Summary
- Annexure 7 Team Deployment Schedule for Next months
- Annexure 8 PMC Organisational Chart

## Annexure 1 List of Experts with Name, Role and Man-months

SI. No.	Name of the Expert (International/ National Local)	Role/ Position	Staff Month
			(SM)
KEV	EXPERT		
1	Dr.P.Dharmabalan	Project Manager- International Expert	70
2a	Dr.Ghulam Mustafa	Desalination Expert- International Expert	29.50
2b	Dr.Uday G.Kelkar	Additional Key Expert – International Expert	2.50
3	Mr.Shane Farquharson	Water Supply Engineer – International Expert	23
4	Mr.Michel Morillon	Mechanical Engineer (Desal)- International Expert	15
5	Mr.Guilbert Z Gonzales (Replaced for Sergio de Bastos Vilar Magalhaes Paulo)	Electrical Engineer (Desal)- International Expert	25
6	Mr.John Goullee	Pipeline Engineer-International Expert	70
7	Mr.Abdel Fattah Toukan (Replaced for Mr.Roderick Mackenzie)	Contract Specialist (Desal) – International Expert	9
8	Mr.Tharloak S Bhatt	Contract Specialist (Distribution)- International Expert	8
9	Mr.S.Siddappaswamy	Senior Civil Engineer	72
10	Mr.Nagesh Chinnam	Senior Pipeline Engineer	72
NON	Sub Total NKEY EXPERT – INTERNATIONAL		396
1	Dr.D.Elancherian	Civil and Structure Engineer (Desal)	42
2	Mr.Madhawa Delpachitra	Mechanical Engineer (Distribution)	4
3	Mr.Manfred Kurt (Meisner)	Electrical Engineer (Distribution)	4
4	Mr.Afzal Abdul Latheef (Replaced for Manikandan Ganesh Shoranur)	Monitoring and Control Expert (Desal)	11
5	Mr.Ashish Gosain	Monitoring and Control Expert (Distribution)	12
6	Mr.Shanmuganathan J	Specification Specialist (Desal)	4
7	Mr.Manish Chintamani Sane	Specification Specialist (Distribution)	3
8	Mr.Hemant Chadha	Financial Expert	3
9	Dr.Alok Kumar	Environmental Specialist	15
10	Mr.Santhosh Kumar	Commissioning Engineer	10
11	Mr.Rajesh Mishra Mr.Hyacinth Augusto Vaz	Social Communication Specialist Organisational Expert	16 9
12	Sub Total	отуальанопат Ехреп	133
NON	N KEY EXPERT – NATIONAL		
13	Mr.Ramesh Senthil	Civil Engineer	72
14	Mr.Mayur Gupta (Replaced for Surajit Debnath)	Mechanical Engineer	40
15	Mr.Om Prakash Singh (Replaced for Mr.G.V.K.Mohan)	Electrical Engineer	45

SI.	Name of the Expert	Role/ Position	Staff
No.	(International/ National Local)	Note, i ostaon	Month
	,		(SM)
16	Ms.J.Sudha (Replaced for Mr.Vinod M K)	Structural Engineer	28
17	Mrs.Kirti Alhad Sadarjoshi (Replaced for Kumar M)	Architect	12
18	Mr.K.Senthil	Building Mechanical and Electrical Engineer	16
19	Mr.Rahul N Ramdhan (Replaced for Mr.Chandra Shekhar Reddy Yedla)	Pipeline Engineer 1	60
20	Mr.P.Thangavel (Replaced for Mr.V.Tulasi Ram)	Pipeline Engineer 2	60
21	Mr.Hema Kumar.S	Pipeline Engineer 3	50
22	Mr.P.M.Saravanan	Hydraulic Modeler – 1	8
23	Mrs.V.Nandhini	Hydraulic Modeler – 2	8
24	Mr.Naisa Sreenivasulu Reddy	Construction Planner Cost Estimator	4
25	Mr.S.Sreenivasula Reddy	Specification Specialist	4
26	Mr.S.M.Karthikaeswaran	Environmental Specialist	30
27	Mrs.R.Kanmani (Replaced for Dr.M.Rajsekhar Reddy)	Social Communication Specialist	72
28	Mr.Najas Thattakatte Abdulkareem	Safety and Health Expert-1	40
29	Mr.Prasanth Balan	Safety and Health Expert-2	70
30	Mr.R.Muthurajan (Replaced for Mr.Vinod Chandra K.C)	Quantity Surveyor 1	50
31	Mr.V.S.Rajasekar	Quantity Surveyor 2	70
	Sub Total		739
SUP	PORTING STAFF		<b>'</b>
1	Mr.B.Ajithkumar	Secretary	70
2	Mr.G.Murali	CAD Operator-1	30
3	TBN	CAD Operator (2 Nos.)	60
4	Mr.Suresh Mohan Dwivedi	GIS Operator	18
5	TBN	Inspectors (4 Nos.)	200
6	TBN	Geotechnical Engineer	6
7	TBN	MIS Specialist	50
8	Mr.Santosh Biswa	Contract Management Specialist	6
9	Mr.A.Renu Kumar	Visa and Admin. Officer	70
10	Mr.K.Manikandan	Accountant	70
11	Mr.Pilominraj Raja (Replaced for Mr.R.Jagan)	Office Keeper-1	70
12	Mr.Thiruvengadam Someswaran (Replaced for Mr.G.Arjun)	Office Keeper-2	70
L	Sub Total		720
	Total		1988

# **Annexure 2 Project Scope**

SI. No.	Component	Construction Items
CP1	Construction of the Perur DSP (400 MLD)	<ul> <li>Seawater intake facilities</li> <li>Pre-treatment facility</li> <li>Seawater desalination facilities by Reverse Osmosis (RO) technology</li> <li>Post-treatment facility for remineralisation and disinfection</li> <li>Potable water storage</li> <li>Effluent discharge pipelines</li> <li>Pre-treatment and wastewater treatment facility</li> <li>All other buildings and structures necessary for the seawater desalination plant</li> <li>Perur electrical sub-station (80 MVA capacity).</li> <li>Perur UGT Product water tanks of Capacity 36 ML (4 compartments of each 9 ML)</li> <li>Proposed to construct a potable water tank of 10 ML capacity instead of 9 ML capacity</li> </ul>
CP2	Construction of Pumping Station and Reservoirs	<ul> <li>Pumphouse and pump facility at Perur DSP</li> <li>Porur UGT of Capacity of 10 ML</li> <li>Pumphouse and pump facility at Porur Headworks</li> </ul>
CP3	Construction of product water transmission system	<ul> <li>Product water transmission main (DN 1000, 1600, 1800 and 2000mm, 65 km, MS or DI pipe)</li> </ul>
CP4	Improvement of the existing distribution system in Chennai Core City	<ul> <li>Replacement of the existing distribution pipes (DN100-450 mm, 375km, DI pipe)</li> <li>Installation of supplementary distribution pipes to strengthen the capacity of the existing distribution networks (D150-700mm, 101km, DI pipe)</li> <li>Installation of new water distribution pipes in un-covered streets in Core city (DN100-150 mm, 258km, DI pipe)</li> <li>Reinforcement of the storage capacity of Under Ground Tank (UGT) and Elevated Storage Tanks (ESRs)</li> <li>Installation of service connections and water meters</li> <li>Setup of district metered areas (DMA)</li> </ul>
CP5	Installation of external power transmission line	<ul> <li>Construction of 230/110 kV transmission lines to achieve dedicated power feed to the existing Nemmeli DSP, Nemmeli Expansion DSP and the proposed Perur DSP</li> </ul>

## Annexure 3 Overall Work Plan

## **Annexure 4 Work Schedule (Contract Package-wise)**

# Annexure 5 Projected Financial Progress Based on Man-months consumed Vs Actual Progress (Bill Passed)

# **Annexure 6 Personnel Inputs Summary**

#### PERSONNEL INPUT SUMMARY FOR NOVEMBER 2020

SI. No.	Key activity / significant task carried out	List of PMC team members	Working on Delivery
INU.	<ul> <li>Due to COVID-19 Pandemic</li> </ul>	team members	Delivery
1	issues across the globe, the Government of Tamil Nadu announced the partial lockdown period from 01.11.2020 to 30.11.2020 throughout Chennai and its adjacent Districts in Tamil Nadu, so some of the International staff (outside Chennai) are allowed to work on the Project as Work From Home option.  Online Microsoft Teams Meeting conducted by Project Coordinator (PMC) for a discussion on the reply to pre-bid queries for Prequalification (PQ) documents for CP1 components on DBO basis.  Mobilisation of Mr.Abdel Fattah Toukan (Contract Specialist, International Expert) on 02.11.2020	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.Pushpendra Sharma, (Legal Expert); Mr.S.Srinivasarao (Project Coordinator); Dr.Uday G.Kelkar (Additional Key Expert – International); Mr.Abdel Fattah Toukan (Contract Specialist, International Expert) Mr.R.Senthil (Civil Engineer); Mr.Santosh Biswa (Contract Management Specialist)	Preparation of Final Concept Design Report for CP1 components on DBO basis
2	Meeting with CE (Project-III), CMWSSB officials and PMC team members for a discussion on the reply to pre-bid queries for Prequalification (PQ) documents for CP1 components on DBO basis on 03.11.2020	Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.R.Senthil (Civil Engineer); Mr.Santosh Biswa (Contract Management Specialist)	Submission of reply to Pre-bid
3	Online Microsoft Teams Meeting conducted by Executive Director, CMWSSB officials and PMC team members for a discussion on the reply to pre-bid queries for Prequalification (PQ) documents for CP1 components on DBO basis on 04.11.2020	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.Abdel Fattah Toukan (Contract Specialist, International Expert); Mr.R.Senthil (Civil Engineer); Mr.Santosh Biswa (Contract Management Specialist)	queries for Prequalification (PQ) Application for CP1 components on DBO basis

SI.	Key activity / significant task	List of PMC	Working on
No.	carried out	team members	Delivery
4	■ Joint site visit with SE (Desal) CMWSSB officials for allocation of land for proposed Underground Tank (UGT) and Pumping station at Porur new WDS site on 06.11.2020	Mr.Siddappaswamy (Sr.Civil Engineer); Mr.R.Senthil (Civil Engineer)	Allocation of land for proposed UGT and Pumping station at Porur new WDS site
5	<ul> <li>Online Microsoft Teams Meeting conducted by Contract Specialist         <ul> <li>International Expert (PMC) for a discussion on the preparation of Part-I (Bidding Procedure) of Draft Request For Proposal (RFP) for CP1 components on 06.11.2020</li> </ul> </li> </ul>	Mr.Abdel Fattah Toukan (Contract Specialist, International Expert); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.R.Senthil (Civil Engineer); Mr.Santosh Biswa (Contract Management Specialist)	Preparation of Part-I (Bidding Procedure) of Draft Request For Proposal (RFP) for CP1 components on DBO basis
6	Online Microsoft Teams Meeting conducted by Project Coordinator (PMC) for a discussion on the topo levels requirement and utilization of Manpower for CP4 components on 09.11.2020	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.Nagesh Chinnam (Senior Pipeline Engineer)	Preparation of Preliminary Design Report for CP4 components
7	<ul> <li>Preparation of O&amp;M Cost, Minimum Functional Specification, Draft Financial Analysis, Instrumentation related works, Civil Structural and Architectural works for CP1 etc.</li> <li>Online Microsoft Teams Meeting conducted by Project Manager (PMC) for a discussion on the issues/concerns for the specific tasks allocated / working deliverables/ activities, project status on finalisation of Concept Design Report, Preparation of Draft Request For Proposal (RFP) for CP1 components and Draft Social Safeguard Review Report on 09.11.2020</li> </ul>	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Dr.Ghulam Mustafa (Desalination Expert); Mr.Abdel Fattah Toukan (Contract Specialist, International Expert); Dr.D.Elanchezian (Civil & Structural Engineer) Mr.Hemant Chadha (Financial Expert); Dr.Alok Kumar (Environmental Specialist); Mr.S.M.Karthikaeswaran (Environmental Specialist); Mr.Santosh Biswa (Contract Management Specialist); Mr.Rajesh Mishra (Social Communication Specialist); Mrs.R.Kanmani (Social Communication Specialist); Mr.Afzal Abdul Latheef (Monitoring & Control Expert (Desal))	Finalisation of Concept Design Report and Preparation of Draft Request For Proposal (RFP) for CP1.

SI.	Key activity / significant task	List of PMC	Working on
No.	carried out	team members	Delivery
	<ul> <li>Mobilisation of Mr.Afzal Abdul Latheef (Monitoring &amp; Control Expert (Desal)) on 19.11.2020</li> <li>Preparation of Process Flow Diagram, critical control point review, Automation &amp; Control strategy (OCM) document etc. Automation &amp; Control strategy, DCS Arch plan, Instrumentation &amp; Control MFS, MFS consolidated circulation, technical schedule data gathering, finalisation of billing system analysis from 19.11.2020 to 30.11.2020</li> </ul>		
8	<ul> <li>Online Microsoft Teams Meeting conducted by Project Manager (PMC) for a discussion on the issues/ concerns for the specific tasks allocated / working deliverables/ activities, project status for CP2 and CP4 components on 09.11.2020</li> <li>Mobilisation of Ms.J.Sudha (Structural Engineer) on 09.11.2020</li> <li>Mobilisation of Mrs.Kirti Alhad Sadarjoshi (Architect) on 09.11.2020</li> </ul>	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.Nagesh Chinnam (Senior Pipeline Engineer); Mr.Rahul N Ramdhan (Pipeline Engineer-1); Mr.P.Thangavel (Pipeline Engineer-2); Dr.Alok Kumar (Environmental Specialist); Mr.S.M.Karthikaeswaran (Environmental Specialist); Mr.Rajesh Mishra (Social Communication Specialist); Mrs.R.Kanmani (Social Communication Specialist); Mr.R.Muthurajan (Quantity Surveyor-1); Mr.V.S.Rajasekar (Quantity Surveyor-2); Ms.J.Sudha (Structural Engineer); Mrs.Kirti Alhad Sadarjoshi (Architect); Mr.Suresh Mohan Diwivedi (GIS Operator)	Preparation of Preliminary Design Report and Site Visit Report for CP2 and CP4
9	<ul> <li>Preparation of Monthly Progress Report (MPR 09) for October 2020</li> </ul>	Dr.Dharmabalan (Project Manager, International Expert); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.Nagesh Chinnam (Senior Pipeline Engineer); Mr.R.Senthil (Civil Engineer); Mr.B.Ajithkumar (Secretary)7	MPR 09 (10 copies) submitted on 11.11.2020

SI.	Key activity / significant task	List of PMC	Working on
No.	carried out	team members	Delivery
10	<ul> <li>Online Microsoft Teams Meeting conducted by Project Manager (PMC) for a discussion on the updated reply to JICA responses on the pre-bid queries for Prequalification (PQ) documents for CP1 components on DBO basis on 13.11.2020</li> </ul>	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.Pushpendra Sharma, (Legal Expert); Mr.R.Senthil (Civil Engineer); Mr.Santosh Biswa (Contract Management Specialist)	Preparation of updated reply to Pre-bid queries for Prequalification (PQ) Application for CP1 components on DBO basis
11	<ul> <li>Online Microsoft Teams Meeting conducted by Project Manager (PMC) for a discussion on the preparation of Draft Request For Proposal (RFP) for CP1 components on DBO basis on 13.11.2020</li> </ul>	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.Abdel Fattah Toukan (Contract Specialist, International Expert); Mr.Ganesh Venkataraman (Specification Specialist, Desal) Mr.Pushpendra Sharma, (Legal Expert); Mr.R.Senthil (Civil Engineer); Mr.Santosh Biswa (Contract Management Specialist)	Preparation of Draft Request For Proposal (RFP) for CP1 components on DBO basis
12	<ul> <li>Online Microsoft Teams Meeting conducted by Project Coordinator (PMC) for a discussion on the updated reply to JICA responses on the pre-bid queries for Prequalification (PQ) documents for CP1 components on DBO basis on 16.11.2020</li> <li>Online Microsoft Teams Meeting conducted by CE (Project-II &amp; III) CMWSSB officials and PMC team members for a discussion on the updated reply to JICA responses on the pre-bid queries for Prequalification (PQ) documents for CP1 components on DBO basis on 16.11.2020</li> </ul>	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.Abdel Fattah Toukan (Contract Specialist, International Expert); Mr.R.Senthil (Civil Engineer)	Preparation of updated reply to JICA responses on the pre-bid queries for Prequalification (PQ) Application for CP1 components on DBO basis

SI.	Key activity / significant task	List of PMC	Working on
No.	carried out	team members	Delivery
13	Online Microsoft Teams Meeting conducted by Senior Civil Engineer (PMC) for a discussion on the updated reply to JICA responses on the pre-bid queries for Prequalification (PQ) documents and notes on e-procurement for CP1 components on DBO basis on 17.11.2020	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Dr.Uday G.Kelkar (Additional Key Expert – International); Mr.Abdel Fattah Toukan (Contract Specialist, International Expert); Mr.R.Senthil (Civil Engineer); Mr.S.M.Karthikaeswaran (Environmental Specialist)	Preparation of updated reply to JICA responses on the pre-bid queries for Prequalification (PQ) Application for CP1 components on DBO basis
14	<ul> <li>Online Microsoft Teams Meeting conducted by Project Manager (PMC) for a discussion on the preparation of Draft Request For Proposal (RFP) for CP1 components on 17.11.2020 and 19.11.2020</li> </ul>	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.Abdel Fattah Toukan (Contract Specialist, International Expert); Mr.Ganesh Venkataraman (Specification Specialist, Desal); Dr.Ghulam Mustafa (Desalination Expert); Dr.D.Elanchezian (Civil & Structural Engineer); Mr.Hemant Chadha (Financial Expert); Mr.R.Senthil (Civil Engineer); Mr.Santosh Biswa (Contract Management Specialist)	Preparation of Draft Request For Proposal (RFP) for CP1 components on DBO basis
15	<ul> <li>Preparation of Social Safeguard Review (Draft Report) from 02.11.2020 to 18.11.2020</li> </ul>	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.Rajesh Mishra (Social Communication Specialist); Mrs.R.Kanmani (Social Communication Specialist)	Submission of Social Safeguard Review (Draft Report) (5 copies) on 18.11.2020

SI.	Key activity / significant task	List of PMC	Working on
No.	carried out	team members	Delivery
16	<ul> <li>Review of Process Flow Diagram and Specification for Dredging and other civil works, Design of proposal no.2 Hexagonal Administrative building for new Desalination Plant at Perur for CP1.</li> <li>Preparation of Architectural Layouts for Workshop and Warehouse, Security office.</li> <li>Preparation and review of General Specification and 5A Particular Specification for the Civil works.</li> <li>Preparation of Rough cost Estimate for Proposed Administrative Building for new Desalination Plant at Perur for CP1 from 01.11.2020 to 30.11.2020</li> </ul>	Mr.Siddappaswamy (Sr.Civil Engineer); Dr.D.Elanchezian (Civil & Structural Engineer); Mrs.Kirti Alhad Sadarjoshi (Architect); Mr.R.Muthurajan (Quantity Surveyor-1)	Preparation of Final Concept Design Report and Draft Request For Proposal (RFP) for CP1 components on DBO basis
17	<ul> <li>Site visit and data collection for Ward 105, 106, 107, 108, 109, 112, 117, 127, 130, 133 to 136, 141 from Deputy Area Engineer, Assistant Engineer (CMWSSB) from 02.11.2020 to 20.11.2020</li> <li>Site visit and data collection from Porur headworks, ValluvarKottam headworks, Choolaimedu Pump house and KK Nagar old/New Pumphouse from 16.11.2020 to 19.11.2020</li> <li>Preparation of Water Distribution network modelling activity for total a total length of 33km (Ward 127) from 23.11.2020 to 30.11.2020</li> <li>Digitalization of pipeline inventory data collected for ward 127,129,131,138,140 and 142</li> </ul>	Mr.Nagesh Chinnam (Sr. pipeline Engineer); Mr.Rahul N Ramdhan (Pipeline Engineer-1); Mr.P.Thangavel (Pipeline Engineer-2); Mr.R.Muthurajan (Quantity Surveyor-1); Mr.V.S.Rajasekar (Quantity Surveyor-2)	Preparation of Preliminary Design Report and Site Visit for CP2 to CP4 components
17	Online Microsoft Teams Meeting conducted by Project Manager (PMC) for a discussion on the finalisation of Concept Design Report and preparation of Draft Request For Proposal (RFP) for CP1 components on 25.11.2020	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Dr.Ghulam Mustafa (Desalination Expert); Mr.R.Senthil (Civil Engineer); Mr.Santosh Biswa (Contract Management Specialist); Mr.S.M.Karthikaeswaran (Environmental Specialist)	Preparation of Final Concept Design Report and Draft Request For Proposal (RFP) for CP1 components on DBO basis

SI. No.	Key activity / significant task carried out	List of PMC team members	Working on Delivery
18	<ul> <li>Online Microsoft Teams Meeting conducted by Senior Civil Engineer (PMC) for a discussion on the preparation of Draft Request For Proposal (RFP) for CP1 components on 27.11.2020</li> </ul>	Mr.Siddappaswamy (Sr.Civil Engineer); Mr.R.Senthil (Civil Engineer); Mr.Santosh Biswa (Contract Management Specialist)	Preparation of Draft Request For Proposal (RFP) for CP1 components on DBO basis
19	<ul> <li>Online Microsoft Teams Meeting conducted by Project Coordinator (PMC) for a discussion on the preparation of proposed layout, administration building, other civil works and architectural works for proposed Desalination Plant for CP1 components on 27.11.2020</li> </ul>	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Dr.D.Elanchezian (Civil & Structural Engineer); Mrs.Kirti Alhad Sadarjoshi (Architect)	Preparation of Final Concept Design Report for CP1 components on DBO basis
20	<ul> <li>Online Microsoft Teams Meeting conducted by Project Coordinator (PMC) for a discussion on the preparation of Draft Request For Proposal (RFP) for CP1 components on 30.11.2020</li> </ul>	Dr.P.Dharmabalan (Project Manager, International Expert); Mr.S.Srinivasarao (Project Coordinator); Mr.Siddappaswamy (Sr.Civil Engineer); Mr.Ganesh Venkataraman (Specification Specialist, Desal); Mr.R.Senthil (Civil Engineer); Mr.Santosh Biswa (Contract Management Specialist)	Submission of Draft Request For Proposal (RFP) for CP1 components on DBO basis (soft copy submitted to CE Project-III, CMWSSB) on 30.11.2020

## **Annexure 7 Team Deployment Schedule for Next months**

# **Annexure 8 PMC Organisation Chart**

The CHENNAI 400 MLD DESALINATION PLANT is a Project being delivered by the Chennai Metropolitan Water Supply & Sewerage Board (CMWSSB) with the assistance of an Official Development Assistance (ODA) loan from the Japan International Cooperation Agency (JICA).

The Project Management Consultant (PMC) for the Chennai 400 MLD Desalination Plant project is a consortium led by SMEC International Pty Ltd in partnership with Tata Consulting Engineers Limited (TCE), NJS Engineers India Pvt Ltd (NJSEI) and SMEC India Pvt Ltd.









