

MEMORANDUM

FOR : **PATRICK LESTER N. TY**
Chief Regulator

FROM : **EVELYN B. AGUSTIN**
DA, Technical Regulation Area

SUBJECT : **TERMS OF REFERENCE**
Consultancy Services for the Technical Audit and Evaluation of MWCI
and MWSI Capex Programs and Projects

DATE : 14 April 2025

This is to seek for your approval of the Terms of Reference (TOR) for the procurement of Consultancy Services necessary for the conduct of Technical Audit and Evaluation of MWCI and MWSI CAPEX Programs and Projects for the period: second half of 2022 to 1st half of 2025 (2H2022 to 1H2025). This undertaking aims to assist the Technical Regulation Area in the determination of the Concessionaires' CAPEX implementation in terms of prudence and efficiency which will be an input in the next rate rebasing exercise in 2027.

Executive Order No. 149, series of 2021 and Article 12 of the Revised Concession Agreement serve as the legal basis for this engagement both of which mandated the MWSS RO to arrange for the regular, independent, technical and financial audit of the activities of the Concessionaires.

Appended to this submission are copies of the TOR and the Project Estimated Cost in the amount of Twenty-One Million Nine Hundred Seventy-Six Thousand Four Hundred Sixteen (₱21,976,416.00 vat inclusive). The cost includes remuneration of professional and support staff and reimbursables.

Your usual support is highly appreciated. Thank you.

☒ Approved/ ☐ Disapproved


PATRICK LESTER N. TY
Chief Regulator

**Consultancy Services for the Technical Audit and Evaluation of MWCI and MWSI
CAPEX Programs and Projects (2022-2025)
COST ESTIMATES**

Remuneration			
Professional Staff	Man-Months	Billing Rate/Month	Total Amount
Project Manager/Planning & Programming Expert (1)	6	P440,000.00	P2,640,000.00
Water Supply Engr./Design & Specification Specialist (2)	8	P330,000.00	P2,640,000.00
Sewerage & Sanitation Specialist (1)	6	P330,000.00	P1,980,000.00
Electro-Mechanical Engineer (1)	3	P330,000.00	P990,000.00
Water Supply Engr./NRW Specialist (1)	3	P330,000.00	P990,000.00
Sub-Total	26		P9,240,000.00
Support Staff			
Administrative Officer (1)	6	P90,000.00	P540,000.00
Junior Engineer/Researcher (6)	36	P90,000.00	P3,240,000.00
Encoder (2)	12	P50,000.00	P600,000.00
Utilityman (1)	6	P30,000.00	P180,000.00
Sub-Total	60		P4,560,000.00
Total Remuneration			P13,800,000.00
Reimbursables			
	Unit	Unit Price	Total Amount
Material Testing and other Miscellaneous Expenses	L.S	P450,000.00	P450,000.00
Inception Report (5 copies x 50 pages/copy)	page	P10.00	P2,500.00
Monthly Progress Report (5 copies x 30 pages/copy x 6 reports)	page	P10.00	P9,000.00
Draft Final Report (5 copies x 400 pages/copy)	page	P10.00	P20,000.00
Final Report (10 copies x 400 pages/copy)	page	P10.00	P40,000.00
Binding and Packaging (50 copies)	copy	P250.00	P12,500.00
Brand new vehicles (2 units Pick-up)	day	P2,000,000.00	P4,000,000.00
Fuel Oil (2 units x 10 liters/day x 132 days)	liters	P70.00	P184,800.00
Office Supplies (6 months)	month	P5,000.00	P30,000.00
Pantry Supplies (water dispenser, coffee, sugar, water, etc.)	L.S	P30,000.00	P30,000.00
Procurement of GPS Camera (1 unit)	unit	P50,000.00	P50,000.00
Procurement of Laptop Computer with License OS and Office Application (/ units)	unit	P75,000.00	P525,000.00
Heavy Duty Printer (2 units)	unit	P50,000.00	P100,000.00
Procurement of Plotter (1 unit)	unit	P140,000.00	P140,000.00
Drone Camera (1 unit)	unit	P150,000.00	P150,000.00
Meeting Expenses (24 meetings)	meeting	P2,500.00	P60,000.00
Communication Costs (6 months)	month	P3,000.00	P18,000.00
Total Reimbursables			P5,821,800.00
Total Estimated Project Cost (w/o VAT)			P19,621,800.00
Total Estimated Project Cost (w/ VAT)			P21,976,416.00



MWSS
REGULATORY OFFICE



TERMS OF REFERENCE

CONSULTANCY SERVICES FOR
THE TECHNICAL AUDIT AND EVALUATION
OF MWCI AND MWSI CAPEX PROGRAMS
AND PROJECTS (2022-2025)

July 2024

TABLE OF CONTENTS

1.	PROJECT OBJECTIVES	1
	1.1 Background and Purpose.....	1
	1.2 Scope.....	2
2.	SPECIFIC TASKS	2
3.	CONSTRAINTS	4
4.	TIMETABLE	5
5.	REPORTS	5
6.	REQUIRED EXPERTS	6
	6.1 Minimum Qualifications and Experience Requirements	7
7.	TERMS OF PAYMENT	8
	7.1 Remuneration Payments.....	8
	7.2 Reimbursable Expenses	8
8.	ASSISTANCE TO BE PROVIDED BY MWSS RO	9

1. PROJECT OBJECTIVES

The Metropolitan Waterworks and Sewerage System Regulatory Office (MWSS RO) through its Bids and Award Committee (BAC) intends to hire Consultants to assist the Technical Regulation Area in the performance of its duties and responsibilities. The Consultants shall provide technical expertise in auditing and evaluating the 2022¹-2025 CAPEX programs and projects of the Concessionaires, Manila Water Company, Inc. (MWCI) and Maynilad Water Services, Inc. (MWSI), being undertaken in compliance with their respective Approved Business Plan (Approved BP²).

The Consultants shall conduct technical audit and provide advisory services, undertake field verification and assessments, and prepare and deliver the necessary reports (refer to Item 5) to the MWSS RO on all matters arising from the audit and evaluation of the Concessionaires' CAPEX programs and projects.

1.1 Background and Purpose

Pursuant to Article 6.5.1 of the Revised Concession Agreement (RCA), the Concessionaires have certain asset management obligations to ensure their capability to meet service obligations. In compliance with these obligations, CAPEX programs and projects which were considered in the tariff adjustments during the 2022 Rate Rebasing exercise, have to be implemented by the Concessionaires, MWCI and MWSI. The CAPEX programs and projects were approved by the MWSS RO and made integral part of the Concessionaires' Approved BP.

To ensure that the MWSS RO approved CAPEX programs and projects are being undertaken diligently by MWCI and MWSI, Executive Order 149, series of 2021 and Article 12 of the RCA mandated the MWSS RO to arrange for the regular, independent, technical and financial audit of the activities of the Concessionaires.

In view of the large number and complexity of these programs and projects being implemented by both Concessionaires over a broad and expanding Service Area, it is necessary to provide technical assistance to the Technical Regulation Area of the MWSS RO in order to cope with the increased work load and come up with timely and effective assessments.

¹ Second half of 2022; Capex projects unaudited during the 2022 RR exercise

² Approved BP shall refer to Approved Service Improvement Plan for MWCI and Approved Business Plan for MWSI

It is for this purpose that this Consultancy Services is being procured from qualified local consultants who can provide the necessary expertise with proven track record in waterworks and sewerage engineering and project management.

1.2 Scope

The Consultant shall audit and evaluate all completed and on-going CAPEX programs and projects (covering the period 2022-2025) undertaken by each Concessionaire as embodied in their respective Approved BP, in the recently concluded Rate Rebasing exercise in 2022.

2. SPECIFIC TASKS

To achieve the objectives set out above, the Consultant shall undertake the following principal tasks, in close coordination and with the active participation of the Operation Monitoring Department (OMD) of the MWSS RO, and the two (2) Concessionaires. Utilizing the MWSS Board of Trustees approved Technical Audit Guidelines (TAGs), the Consultant shall determine the prudence and efficiency of the said programs and projects. To ensure that the Concessionaires are meeting the agreed targets and objectives spelled out in their Approved BP, the foregoing tasks will include, but not limited to the following:

- a. Audit and evaluate the procurement process employed by the Concessionaires and determine its objectivity and effectiveness in identifying the most advantageous offer for the project. In addition, establish prudence and efficiency in costing projects for bidding;
- b. Audit and evaluate the quality control procedures employed and its effectiveness in ensuring that the output of the project will satisfy the plans and specifications provided;
- c. Audit and evaluate the safety provisions and procedures employed by the Concessionaires in their project implementation in relation to the record of work-related incidents to determine adequacy of safety measures;
- d. Audit and evaluate effectiveness of completed projects in meeting the objectives set for the achievement of the Concessionaires' service obligations in terms of budget, timeliness, and compliance to plans and specifications;

- e. Determine the actual progress of work for on-going projects based on reliable information and independent assessments through field inspections;
- f. Audit and evaluate the results and effectiveness of the NRW reduction programs by comparing the extent of completed projects versus the impact to the NRW for the MWSI. On the other hand, the Consultant should also assess the NRW level of MWCI against the target of 15% and determine the appropriate savings generated compared to maintaining the NRW level at 12% as provided in its Approved BP;
- g. Undertake a detailed audit of the Concessionaires CAPEX Programs to include among others, the following:
 - i. Validate CAPEX disbursements and analyze on how over or under spending has affected their Service Obligations performance;
 - ii. Analyze the effect of unimplemented CAPEX to KPIs/BEMs and service obligations;
 - iii. Establish the level of operations resulting from existing as well as additional CAPEX (additional wastewater flows treated, additional capacity...) and additional areas served;
 - iv. Reconcile the results of the CAPEX audit with the operational performance of new infrastructure; and
 - v. Benchmark unit cost prices of CAPEX materials and projects with comparative water supply or wastewater service provider locally and abroad. For purposes of benchmarking, the Consultant may refer to the established Cost Referencing System for projects awarded more than 15% of the Concessionaires' estimated cost
- h. Recommend enhancement to the existing TAGs based on the audit conducted to ensure that they remain relevant and effective in a continuously evolving environment;
- i. Recommend policy and treatment of expenditures for suspended and terminated projects in consonance with the ratings and parameters established in the TAGs;
- j. Recommend policy and treatment of standby-costs which could be incorporated in the TAGs as well as the treatment of repair and maintenance costs of facilities not contributing in the delivery of service;

- k. Develop a project monitoring systems and procedures that will address the following:
 - i. Establish monitoring indicators of implementation efficiency, effectiveness and impact;
 - ii. Set up an effective system of data/information collection relating to the above indicators;
 - iii. Establish an effective and efficient collection, recording and retrieval of these information;
 - iv. Evaluate/analyze the data/ information; and
 - v. Make use of the information to regularly inform/update the MWSS RO.

The Consultant may consider upgrading/enhancing the MWSS RO developed computer-based CAPEX monitoring and reporting system that shall capture project related information (i.e. project scope, contractor, contract amount, contract duration, unit prices, variation orders, etc.) and will provide an up-to-date flow of information from the Concessionaires to the MWSS RO, based on predefined indicators stated in their respective Approved BP.

- l. Administer the transfer of technology and expertise to MWSS RO personnel thereby requiring full participation in all phases of the project.

3. CONSTRAINTS

To ensure fairness and objectivity, the following constraints shall apply:

- a. The Consultant firm and any member of the proposed team of Consultants had no previous professional relationship or engagement, directly or indirectly with the Concessionaires, their parent companies and subsidiaries in the past one (1) year immediately preceding the day of submission of bids;
- b. Any key member of the proposed team of Consultants has not been a partner, director, officer, or employee of the East and West Zone Concessionaires of the MWSS within the prohibitive period immediately preceding the day of submission of bids, prescribed as follows:
 - i. Three (3) years for a partner, director or officer; and

- ii. One (1) year for an employee;
- c. Any key member of the proposed team of Consultants has no familial relationship within the 3rd civil degree of consanguinity or affinity with any of the employees or officers of the MWSS-CO, the MWSS RO or any of the Concessionaires, or current members of the Bids and Awards Committee of the MWSS-CO or the MWSS RO; and;
- d. The provision of Section 47 (Disclosure of Relations) of the Implementing Rules and Regulations (IRRs) of Republic Act No. 9184 ("RA 9184") shall apply to all personnel of the Consultant.

For purposes of the Constraints above, affiliate shall mean an inter-company relationship in which one of the companies directly owns fifty percent (50%) or less of the other companies' outstanding capital stock. Companies controlled by a common entity, are not considered affiliates under this project. Companies owning capital stock of another company through mutual funds being managed by another entity is not considered as an affiliate under this project.

All other provisions of RA 9184 and its IRRs shall also apply to the Consultant firm and any key member of the proposed team of Consultants.

4. TIMETABLE

The undertaking will be for a period of six (6) months as will be determined/agreed upon with the MWSS RO.

5. REPORTS

The Consultant shall prepare and submit the following reports in the course of the project:

- a. Inception Report after the first month of project implementation;
- b. Monthly Progress Reports;
- c. Draft Final Audit Report one month before the completion of the project; and
- d. Final Audit Report prior to the completion of the project.

The Final Audit Report shall detail the extent covered by the technical audit and evaluation activities, the methodology employed, the result of evaluation and assessments, the major findings and observations, and the recommendations for improvements. The Inception, Progress, and Draft Final

Reports shall be submitted to the MWSS RO in five (5) copies each, while the Final Audit Report shall be submitted in ten (10) copies. All Reports shall include an electronic copy.

The audit reports shall be supplemented with pictures, maps, engineering drawings of facilities, project scope/profile etc., and bar chart of implementation/work schedules.

6. REQUIRED EXPERTS

To meet the requirements of the project and considering the extent and volume of programs and projects to be audited and evaluated, each Concessionaire shall be assigned its own audit team. The following experts shall be required:

Position	No. of Personnel
<i>Consultants</i>	6
Project Manager/Planning and Programming Expert	1
Water Supply Engineer/Design and Specifications Specialist	2
Sewerage & Sanitation Specialist	1
Electro-mechanical Engineer	1
Water Supply Engineer/NRW Specialist	1

Position	No. of Personnel
<i>Local Staff</i>	10
Junior Engineer	6
Encoder/Secretary	2
Administrative Officer	1
Utility	1

6.1 Minimum Qualifications and Experience Requirements

Planning and Programming Expert

- Qualification - Bachelor's Degree in Civil Engineering or equivalent degree relevant to the position as may be determined by the MWSS RO.
- Experience - At least ten (10) years of experience in the field of water supply and/or sewerage operations, five (5) years of which as planning and programming manager involving similar projects.

Design and Specifications Specialist

- Qualification - Bachelor's Degree in Civil Engineering, or other relevant degree as may be determined by the MWSS RO.
- Experience - At least ten (10) years of experience in the field of water supply and sewerage engineering, specifically on the design and specifications of water and wastewater facilities.

Sewerage and Sanitation Specialist

- Qualification - Bachelor's Degree in Civil or Sanitary Engineering, or other relevant degree as may be determined by the MWSS RO.
- Experience - At least ten (10) years of experience in the field of sewerage and sanitation engineering, specifically on the design and implementation of sewerage and sanitation facilities.

Electro-mechanical Engineer

- Qualification - Bachelor's Degree in Mechanical or Electrical Engineering or other relevant degree as may be determined by the MWSS RO.
- Experience - At least ten (10) years of experience in the field of water supply and sewerage operation, specifically on the operation and maintenance and commissioning of various electro-mechanical facilities.

NRW Specialist

Qualification - Bachelor's Degree in Civil or Sanitary Engineering, or other relevant degree as may be determined by the MWSS RO.

Experience - At least ten (10) years of experience in the field of water supply operation, specifically on the control of NRW in water distribution networks.

7. TERMS OF PAYMENT

7.1 Remuneration Payments

Deliverables/Milestones	Percent of Contract Value
1. Advance Payment	15% of total remuneration
2. Inception Report	15% of total remuneration less recovery of advance payment
3. Monthly Progress Reports (Upon submission of the 2 nd monthly report following the Inception Report)	10% of total remuneration less recovery of advance payment
4. Draft Final Audit Report	50% of total remuneration less recovery of advance payment
5. Final Audit Report	15% of total remuneration less recovery of advance payment
6. Final Acceptance (Upon issuance of Certificate of Acceptance)	10% of total remuneration less recovery of advance payment

7.2 Reimbursable Expenses

The Consultant may include certain reimbursable expenses, as part of the project cost. The reimbursable for the project shall be limited to any or all of the following:

- i. Equipment / material testing;
- ii. Printing and report reproduction;
- iii. Acquisition of two (2) pick-up vehicles for mobility of the Consultants during the project;
- iv. Consumable office supplies;

- v. Pantry supplies;
- vi. Acquisition of one (1) GPS Camera;
- vii. Procurement of seven (7) laptop computers with operating systems to be used exclusively for the project;
- viii. Procurement of two (2) heavy duty printers;
- ix. Procurement of one (1) unit plotter printer to be used exclusively for the project;
- x. Procurement of one (1) unit drone camera to be used exclusively for the project during inspection;
- xi. Communication expenses; and
- xii. Meeting expenses.

Reimbursable expenses shall be claimed within a two-month period after the end of each calendar month, otherwise they are deemed waived. These must be supported by proof of payments, e.g. Official Receipt or Sales Invoice. The two (2) pick-up vehicles, GPS Camera, laptop computers with operating systems, plotter, heavy duty printers, and drone camera subject to reimbursement, shall be turned over to the MWSS RO upon the conclusion of the engagement.

8. ASSISTANCE TO BE PROVIDED BY MWSS RO

The MWSS RO shall provide the following assistance to the project teams:

- a. Office personnel available to manage and supervise the project;
- b. MWSS RO personnel to be seconded for the project for the transfer of technology;
- c. Assistance in securing the needed data for the project;
- d. Coordination with the MWCI and the MWSI; and
- e. Fully furnished office space to accommodate the Consultants' staff.