# Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Project : Supply of Labor and Materials for the Replacement of Diesel Underground

Fuel Tank at SSS Main Building

Location : SSS Main Office, East Ave., Diliman, Quezon City

Items	Descriptions	Qty.	Unit	Delivery (Days/weeks)
1	General assessment of the local site and conditions.	1	lot	5
2	Fabrication of the new diesel fuel tanks in compliance with the standard engineering and industry practices. Leak testing	1	lot	25
3	Set-up security measures for the safety of personnel and property. Removal/recovery of existing diesel fuel and disposal of contaminated diesel fuel (Temporary storage tank shall be provided by the contractor).	1	Lot	10
4	Dismantling all piping layouts, manhole provisions, excavation of road pavement and carefully removal of the existing tank subject for replacement.	1	Lot	15
5	Preparation of concrete encasement under attached civil works	1	lot	15
6	Delivery and set-up new tanks per scope of works. Mounting essential attachment as define in the scope of works. Pressure testing of newly set-up tank and documentations of test results (appropriate pressure test as required under applicable petroleum industry standard)	1	lot	20
7	Re-installation all piping layout for the tanks fuel system and all other accessories such manhole provisions, supports, straps, stiffeners, filling lines, vents, return and supply system.	1	lot	10
8	Repainting/recoating of appropriate protective coating agent & paint outside cavity of the fuel tank. And refilling soil as per standard recommendations	1	lot	15
9	Restoration and concreting of road pavement.	1	lot	12
10	Recheck pressure leak test of completed set-up.	1	lot	5
11	Start-up, testing, commissioning and submission of asbuilt plans.	1	lot	5

## **NOTES:**

- The total number of days to complete the project shall not exceed 60 calendar days from receipt of approved Job Order (JO) and Notice to Proceed (NTP).
- Above schedule of requirement per item of work maybe revise based on the contractor's proprietary design and approach, methodology however, total number of calendar days shall not exceed 60 calendar days as stated earlier.

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Note:2 Submit Bar Chart for the work schedule implementation.

# SCOPE OF WORKS

#### I. Mechanical Works

- 1. General assessment of the local conditions, survey and measurements of areas, to evaluate clearances for the movement of tools and equipment. Prepare planning and suitable methodology to set-up the safety requirements of the pedestrians, personnel and equipment and third party entity that maybe affected during the implementation of the project.
- 2. Off-site Fabrication of brand new tank such as but not limited to the following;
  - Measurements of dimensions per plans, marking cutting of plates, and all other structural forms/shapes, fitting, full welding of first longitudinal joints, rolling of shell and fitting of secondary longitudinal joints, shedding of end plates, fitting and heavy tacking of stiffeners, fabrication of manholes, and nozzles, set-up manholes and nozzles positioning fittings full welding works,
  - Leak testing cleaning and application of suitable paints.
- 3. Preparation of necessary traffic barriers, warning signs, and all other needed security measures to secure the working areas. Coordinate with concern units for the necessary clearances with the EFMD representatives and security office. Secure all necessary approval relative to the implementation of the schedules activities.
- 4. Retrieval and proper disposal of existing diesel fuel in compliance with the applicable local ordinance and government agency regulating the product use and disposal.
- 5. Boarding up, and isolation of the working areas. Provide necessary traffic marking/devices to warn all passers-by in the working areas.
- 6. Set-up BI or GI sheets for the vehicle access as necessary to avoid inconvenience with the traffic flow.

- 7. Excavation works shall employ the use of suitable machineries, such as concrete cutting machines, power tools, excavation machines/backhoe, pay loader, dump truck and others equipment to pull the concrete topping, sand and soil, filling and other filling materials to provide access for the proper pull out of the tank.
- 8. Removal of existing underground fuel tank using lifting boom equipment, backhoe, pay loader, dump truck and other tools equipment and machineries in addition to the proper and manual excavation works.
- 9. Disassembling /demounting of materials to be re-utilized such as manhole cover, vent pipes, fittings, soil, sand and other accessories.
- 10. Delivery and supply installation of brand new diesel underground fuel tank complete with standard accessories, peripherals, and all other ventilations, safety devices, essential attachments and provisions to the designed underground diesel fuel tank.
- 11. Set-up tanks attachments, accessories, safety girder & devices to secure the stability of the tank and all other accessories to complete the proper installation of the subject tank. Installation of all essential piping system to the fuel supply, pump sources, returns and all other vents with safety gadgets as applicable.
- 12. Leak testing of all fuel lines, suction, discharge, returns, vents and all others pipe lines and implement fine tuning rectifications as necessary.
- 13. Supply and installation of valve box and vent pipe lines
- 14. Re-tapping of all fuel lines, piping system to complete project to a safe, functional, and operational, normal operating conditions.
- 15. Testing and commissioning and submit all gathered test parameters, operating procedures, brochures, safety operational manual and practices to ensure the safe operation of the underground fuel tank.
- 16. Proper markings, safety considerations shall be observed at all times.

Note: All phases of Mechanical, Electrical and Civil components of the works shall be done hand-in hand and with consistent phasing to avoid conflicts and synchronize the smooth execution and completion of the entire project.

# II. Civil: Scope of works and specifications

## A. General scope of requirements

- 1. The work contemplated under this contract shall consist of furnishing of all materials, labor, plant, tools and equipment, permits including the satisfactory performance of all work necessary for the complete execution of all the work as shown on the plans, specifications and other contract documents.
- 2. Materials and work deemed necessary to complete the project but not specifically mentioned in the Specifications, working drawings or in the other contract documents are inferred and shall be supplied, installed and rendered by the contractor without extra cost to the owner. Such material shall be of the highest

quality available, installed and applied in workmanlike manner at prescribed or appropriate locations.

## 1. SITE PREPARATION WORKS

- a. Provide board-up, safety barriers, warning and traffic signages.
- b. Demolition of concrete pavement above the existing underground diesel tank.
- c. Hauling and disposal of waste materials and debris out of the building premises.

## 2. EARTHWORKS AND TANK REPLACEMENT

- a. Excavation works and lifting of existing underground diesel tank.
- b. Installation of new Diesel Tank including fittings and accessories.
- c. Gravel and soil backfilling and compaction.
- d. Gravel bedding and base preparation for the restoration of concrete pavement.

## 3. CONCRETE / MASONRY WORKS

- a. Construction of underground diesel tank reinforced concrete pad.
- b. Construction and installation of 150mm thick reinforced CHB wall casing around the concrete pad with 20mm thick interior face smooth plaster finished.
- c. Construction and restoration of 150mm thick concrete pavement.

## **B. WORKMANSHIP**

1. All required phases of work shall be done by skilled and competent men who are regularly engaged or specialized in the type of work specified. Workmanship shall be the very best trade practice.

#### C. SITE EXAMINATION

- 1. Examine the site premises and all conditions apparent and visible therein. Consider all such conditions that may affect work.
- 2. Measure every existing work / structure at site. Verify all given dimensions and deviations in the plans / drawings and Bill of Quantities. It shall be understood that the work covers all exposed external surfaces regardless of measurements made.

## D. PROTECTION OF WORK AND PROPERTY

- 1. Provide adequate protection on the existing furniture, equipment, and other areas not affected by the work specified. Place warning signs where work is being undertaken.
- 2. Remove work materials damaged by failure to provide protection. Replace with new work materials at no extra cost to the Owner.

#### E. CLEANING

- 1. Leave premises clean, neat and orderly. Remove all stains, spots, blemishes, soil dirt from all finished work.
- 2. Remove all excess materials, used containers, tools, equipment and supplies out of the SSS premises during the progress of work and upon completion of work.

## F. SUBMITTALS

- 1. The Contractor shall submit samples of finishes, furnished materials and equivalent materials for approval by the Engineering & Maintenance Department prior to installation / application.
- 2. Two (2) sets 20" x 30" of As-Built plans duly signed and sealed by professional Engineers and/or Architect.

## III. WARRANTY

The defects liability period of the Project shall be one (1) year from the Contract Completion up to Final Acceptance by the SSS. During this period, the Contractor shall undertake the repair works, at his own expense

Technical Specifications

ITEM	SPECIFICATION	Statement of Compliance
		Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of <b>ITB</b> Clause 3.1(a)(ii) and/or <b>GCC</b> Clause 2.1(a)(ii).

ITEM NO.	SPECIFICATION	STATEMENTOF COMPLIANCE
Mechanical	Please refer to attached propose plans for other details	
Capacity	12,000 GAL. or 45,000 liters	
Dimension	Per existing: Length 6.50 x Diameter 3.60 Meters	
Tank shell	5.5 mm thick, Mild steel same with existing (minimum)	
BI Piping (Fuel lines)	Replace existing fuel lines with the same existing materials especially for corroded or defective areas.  Return, Supply & Suction lines with foot valve25 mm Ø  Gauge line 38 mm Ø  Vent line 50 mm Ø	
Fuel Pump	Motor driven gear pump, 3HP, 1735 RPM, 230VAC, 35GPM at 30Ft.  Same with existing (min.) (pls. verify on site) complete with essential accessories, standard wiring system, protective circuit breaker, and starter / controller	
Fill Cap	Weather Proof Locking Type	
Manhole	Manhole with bolted water proof cover	
Roadway Manhole cover	Standard 750 mm Ø cast iron, (reutilize existing after reconditioning) Cast Iron Frame: Traffic Type	

Circular metal	3/16 "Thick, Pre-painted with Epoxy Primer and finished	
wall welded to	with three coating epoxy paint Color Gray. Repaint	
strap and tank	welded areas	
shell		
Civil	Concrete encasement and other civil works refer to	
Civii	attached detailed plans.	
Pad / pavement	200mm thick with 12mm dia. DSB top and bottom	Ready mix
rau / pavement	200mm unck with 12mm that DSB top and bottom	concrete or job
		mixed
CHB wall	3,000 psi concrete	
reinforcement	150 mm thick non-load bearing blocks with class A	Portland cement
	mortar for filler and plaster	
Others	Per standards engineering practices and in compliance to	
	the local codes and applicable disciplines.	

# **Bid Breakdown**

		:	: Supply of Labor and Materials for the Replacement of Diesel Underground Fuel Tank at SSS Main Building									
		: SSS Main Building, East Avenue, Diliman, Quezon City										
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