

J03 MOTSU Wastewater Collection System

J03.1 MOTSU Overview

MOTSU is a major terminal of the Military Traffic Management Command located in southeast North Carolina. The facility is located along the Cape Fear River, approximately 5 miles North of Southport, North Carolina. MOTSU was initially constructed between 1951-1955. The U.S. Army purchased 9,250 acres of pine forest and river front property for the terminal and railroad lines. The terminal has grown over the years. Currently it is comprised of 8,573 fenced acres; 5,050 unfenced acres on permanent easement; 2,115 acres that form an explosive safety buffer zone on the east side of the Cape Fear River in New Hanover County; a 652-acre rail holding yard northwest in Leland, North Carolina; and 6 acres in the city of Southport, North Carolina, on Fort Johnston. The principal mission of MOTSU is to plan, coordinate, and accomplish movement of ammunition and other dangerous cargo through MOTSU to support the Department of Defense. The terminal is a transshipment point for ammunition and other equipment required by U.S. military personnel and the North Atlantic Treaty Organization.

J03.2 Wastewater Collection System Description

The wastewater network is comprised of approximately 25,000 linear feet of pipe, 11 sewage pumping stations, one septic tank sump pump, 12 septic systems, and three wastewater lagoons. The septic tanks and associated drain fields are used as the primary means of wastewater disposal on the Installation. Lagoons are used to treat the sewage from the smoking rooms and latrines at each of the three wharves. The lagoon for the center wharves also has a ship-to-shore transfer system, but it is no longer in use. There is a possibility Brunswick County wastewater system may allow connection at some future date. This has not been included in the current Life Cycle Cost Analysis.

J03.2.1 Wastewater Collection System Fixed Equipment Inventory

MOTSU wastewater systems have a combined design capacity of 0.1 MGD. Treatment is carried out through 12 septic tanks, 12 drain fields, and three (3) treatment lagoons. The wharf wastewater, after entering the lagoons and being chlorinated in a tablet chlorination chamber, is discharged to a drainage ditch which drains to the Cape Fear River. The system is maintained and monitored by EC Corporation. The system includes pipelines, manholes, lift stations, controls, etc. The following description and inventory is included to provide the contractor with a general understanding of the size and configuration of the system. The contractor shall base the proposal on site inspections, information in the technical library, and the following description and inventory. Under no circumstances shall the contractor be entitled to any service cost adjustments based on the accuracy of the following description and inventory.

J03.2.1.1 Description

Sewage Collection System

The existing on-post system is composed of 3-inch to 8-inch sewage lines. The majority of these lines are PVC, though there is some cast iron pipe in the system, and vitrified clay pipe is located in the drain fields.

Lift Stations

Eleven lift stations are located at various points throughout the system. Six of the lift Stations are located at the wharves, two in the classification yard, and one each at the visitor station, Building 12, and the administration area respectively.

Summary

The existing sanitary collection system at MOTSU is comprised of approximately 25,000 linear feet of pipe ranging from 3-inch to 18-inch, as measured from the system maps provided by the Installation. Eleven lift stations and one septic tank sump pump are also a part of the system.

J03.2.1.2 Inventory

Table 1 provides a general listing of major fixed assets for the Military Ocean Terminal, MOTSU wastewater system. The system will be sold “as is, where is” without any warranty, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. All ancillary equipment attached to and necessary for operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

**Table 1
Fixed Inventory
Wastewater Utility System – MOTSU**

Item	Size	Quantity	Unit	Approximate Year of Construction
Wastewater Lift/Pump Station-South Wharf - Lagoon	-	1	ea.	1967
Wastewater Lift/Pump Station-North Wharf - Lagoon	-	1	ea.	1967
Wastewater Lift/Pump Station- Center Wharf - Lagoon	-	1	ea.	1967
Wastewater Lift/Pump Station- Administration - Septic System	-	1	ea.	1967
Wastewater Lift/Pump Station-Toms Branch - Septic System	-	1	ea.	1967
Wastewater Lift/Pump Station- Building 12 - Septic System	-	1	ea.	1967
Wastewater Lift/Pump Station- Building 110 - Septic System	-	1	ea.	1967
Wastewater Lift/Pump Station- Building 139 - Septic System	-	1	ea.	1967

Item	Size	Quantity	Unit	Approximate Year of Construction
Wastewater Lift/Pump Station- Building 34 - Septic System	-	1	ea.	1967
Wastewater Lift/Pump Station- Building 35 - Septic System	-	1	ea.	1967
Wastewater Lift/Pump Station- Building 12 - Septic System	-	1	ea.	1967
Septic Tank Sump Pump-Building 6	-	1	ea.	1967

J03.2.2 Wastewater Collection System Non-Fixed Equipment and Specialized Tools Inventory

Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract. There are no ancillary equipment (spare parts) or specialized vehicles and tools included in the purchase.

J03.2.3 Wastewater System Manuals, Drawings, and Records Inventory

Table 2 lists the manuals, drawings, and records that will be transferred with the system. The electronic files will be supplied in GN format on CD-ROM, "As-Is" with no warranty of the information.

**Table 2
Manuals, Drawings, and Records
Wastewater Collection System – MOTSU**

Quantity	Item	Description	Remarks
1	System Drawings	CAD Drawings	Electronic and Hard Copy available
1	Infrastructure Master Plan	Discussion of future growth plans of the Installation	Hard Copy

1	Commercial Activities Study	Chapters pertinent to wastewater system standards of service requirements, maintenance and operation	Electronic and Hard Copy available
1	Sanitary and Storm Sewer System Study	Contract DCAH-92-C-0125; February, 1995; by RJN Group for Kansas City District, U.S. Army Corps of Engineers	Electronic and Hard Copy available

J03.3 Current Service Arrangement

The Installation currently collects wastewater through approximately 25,000 feet of piping and eleven lift stations, transporting the wastewater to septic tanks and lagoons. The wastewater enters the lagoon at the center, overflows a v-notch weir, is chlorinated, and is discharged to a drainage ditch, which drains to the Cape Fear River.

J03.4 Secondary Metering

There are currently no requirements for secondary metering of wastewater included in this contract. Any future wastewater secondary metering requested by the Government will be IAW C.3, Future Secondary Meters.

J03.5 Monthly Submittals

The contractor shall provide the Government monthly submittals for invoices (IAW G.2). The contractor's monthly invoice shall be presented in a format proposed by the contractor and accepted by the Government's Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to the Contracting Officer's designee. (This information will be provided upon award).

Outage Report – The contractor's monthly outage report will be prepared in the format proposed by the contractor and accepted by the Government's Contracting Officer. Outage reports shall include the following information for Scheduled and Unscheduled outages:

Scheduled: Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the Government's Contracting Officer's designee. (This information will be provided upon award).

System Efficiency Report – If required by paragraph C.3, the contractor shall submit a system efficiency report in a format proposed by the contractor and accepted by the Government's Contracting Officer. System efficiency reports shall be submitted by the 25th of each month for the previous month. System efficiency reports shall be submitted to the Government's Contracting Officer's designee. (This information will be provided upon award).

J03.6 Infiltration and Inflow (I&I) Projects

There are no Infiltration or Inflow projects associated with this scope.

J03.7 Service Area

IAW Clause C.4, Service Area, the service area is defined as all the areas within the MOTSU boundaries.

J03.8 Off-Installation Sites

There are no off-Installation sites associated with this scope.

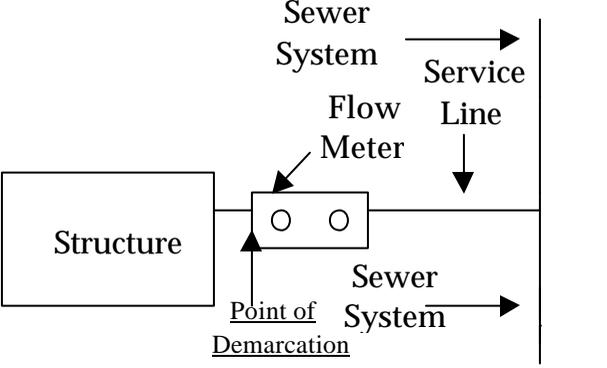
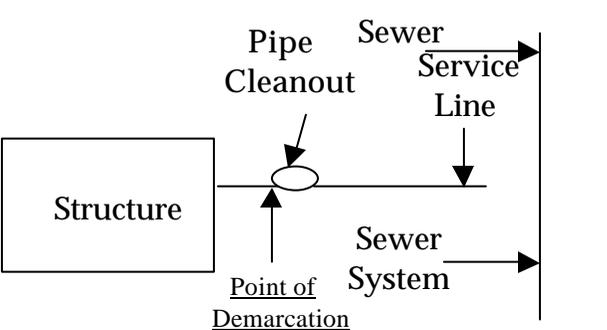
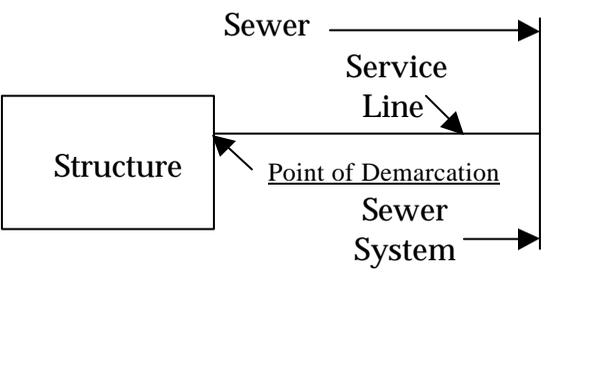
J03.9 Specific Transition Requirements

There are no service connections, disconnections, nor improvement projects required upon transfer of the MOTSU wastewater system.

J03.10 Wastewater Collection System Points of Demarcation

The point of demarcation is defined as the point on the wastewater collection pipe where the ownership changes from the Grantee to the building owner. The table below identifies the general locations of these points with respect to the building served.

**Table 3
Points of Demarcation
Wastewater Collection System – MOTSU**

Point of Demarcation	Applicable Scenario	Sketch
Point where the service line enters the structure	Sewer system flow meter is located on the service line entering the structure.	 <p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line representing the 'Service Line' enters the structure from the right. On this line, just before it enters the structure, is a rectangular box labeled 'Flow Meter' containing two small circles. Above the flow meter, an arrow points to it with the label 'Flow Meter'. To the right of the structure, a horizontal line represents the 'Sewer System' with an arrow pointing right. Another horizontal line, parallel to the sewer system, has an arrow pointing down to it labeled 'Service Line'. An arrow points from the text 'Point of Demarcation' to the flow meter.</p>
Point of demarcation is the cleanout device (if within 10 feet of the building perimeter)	No flow meter exists and a sewer system cleanout is located within 10 feet of the building perimeter on the service line.	 <p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line representing the 'Service Line' enters the structure from the right. On this line, just before it enters the structure, is an oval labeled 'Pipe Cleanout'. An arrow points to it with the label 'Pipe Cleanout'. To the right of the structure, a horizontal line represents the 'Sewer System' with an arrow pointing right. Another horizontal line, parallel to the sewer system, has an arrow pointing down to it labeled 'Service Line'. An arrow points from the text 'Point of Demarcation' to the pipe cleanout.</p>
Point where the service line enters the structure. Note: A new cleanout device should be installed within 10 feet of building during any stoppage or maintenance action. This will then become the new point of demarcation.	No flow meter or cleanout exists on the service line entering the structure.	 <p>The sketch shows a rectangular box labeled 'Structure' on the left. A horizontal line representing the 'Service Line' enters the structure from the right. To the right of the structure, a horizontal line represents the 'Sewer System' with an arrow pointing right. Another horizontal line, parallel to the sewer system, has an arrow pointing down to it labeled 'Service Line'. An arrow points from the text 'Point of Demarcation' to the service line just before it enters the structure.</p>

J03.10.1 Unique Points of Demarcation

There are no anomalous points of demarcation that do not fit any of the above categories.

J03.11 Wastewater Collection Points

There are no wastewater collection plants and intended demarcation points.