

TRANSMITTAL COVER SHEET

**TO: Christopher Doll, P.G., Assessment Section Manager**

**COMPANY / AGENCY: UST Program / Bureau of Land and Waste  
Management**

**FROM: Joseph Goings**

**RE: CARTA Leeds Avenue Operations Center; UST Permit #09959  
Site-Specific Work Plan**

**DATE: March 17, 2015**

**TRANSMITTAL VIA:**     Standard US Mail     Priority US Mail  
                                  Overnight Courier     Hand Delivery


**COMMENTS:**

**Enclosed you will find a Site-Specific Work Plan for the activities requested at the site.**

**Upon your approval of the Work Plan and cost proposal, ARM personnel will initiate the assessment.**

**Please do not hesitate to give me a call if you have any questions or if further information is required.**

**Sincerely,  
ARM Environmental Services, Inc.**

  
**Joseph A. Goings, P.G.  
Staff Geologist**



## Site-Specific Work Plan for Approved ACQAP Underground Storage Tank Management Division

To: Christopher Doll (SCDHEC Project Manager)  
 From: Joseph Goings (Contractor Project Manager)  
 Contractor: ARM Environmental Services, Inc. UST Contractor Certification Number: #4

Facility Name: CARTA Leeds Avenue Operations Center UST Permit #: 09959  
 Facility Address: 3664 Leeds Avenue, Charleston, SC  
 Responsible Party: Charleston Area Regional Transportation Authority Phone: \_\_\_\_\_  
 RP Address: 36 John Street, Charleston, SC 29403  
 Property Owner (if different): same  
 Property Owner Address: \_\_\_\_\_  
 Current Use of Property: Charleston Area Regional Transportation Authority Operations Center

**Scope of Work** (Please check all that apply)

- IGWA                       Tier II                       Groundwater Sampling                       GAC  
 Tier I                       Monitoring Well Installation                       Other \_\_\_\_\_ Survey, Receptor Survey

**Analyses** (Please check all that apply)

Groundwater/Surface Water:

- BTEXNMDCA (8260B)                       Lead                       BOD                       Methane  
 Oxygenates (8260B)                       8 RCRA Metals                       Nitrate                       Ethanol  
 EDB (8011)                       TPH                       Sulfate                       Dissolved Iron  
 PAH (8270D)                       pH                       Other \_\_\_\_\_

Soil:

- BTEXN                       8 RCRA Metals                       TPH-DRO (3550B/8015B)                       Grain Size  
 PAH                       Oil & Grease (9071)                       TPH-GRO (5030B/8015B)                       TOC

Air:

- BTEXN

**Sample Collection** (Estimate the number of samples of each matrix that are expected to be collected.)

1 \_\_\_\_\_ Soil                      \_\_\_\_\_ Water Supply Wells                      \_\_\_\_\_ Air                      1 \_\_\_\_\_ Field Blank  
 1 \_\_\_\_\_ Monitoring Wells                      \_\_\_\_\_ Surface Water                      2 \_\_\_\_\_ Duplicate                      1 \_\_\_\_\_ Trip Blank

**Field Screening Methodology**

Estimate number and total completed depth for each point, and include their proposed locations on the attached map.

# of shallow points proposed: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
 # of deep points proposed: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
 Field Screening Methodology: \_\_\_\_\_

**Permanent Monitoring Wells**

Estimate number and total completed depth for each well, and include their proposed locations on the attached map.

# of shallow wells: 1 \_\_\_\_\_ Estimated Footage: 12 \_\_\_\_\_ feet per point  
 # of deep wells: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
 # of recovery wells: \_\_\_\_\_ Estimated Footage: \_\_\_\_\_ feet per point  
 Monitoring Well development method (consistent with SOP): pumping

Comments, if warranted:

MW-1  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

UST Permit #: 09959 Facility Name: CARTA Leeds Avenue Operations Center

**Implementation Schedule** (Number of calendar days from approval)  
Field Work Start-Up: 30 days Field Work Completion: 45 days  
Report Submittal: 90 days # of Copies Provided to Property Owners: \_\_\_\_\_

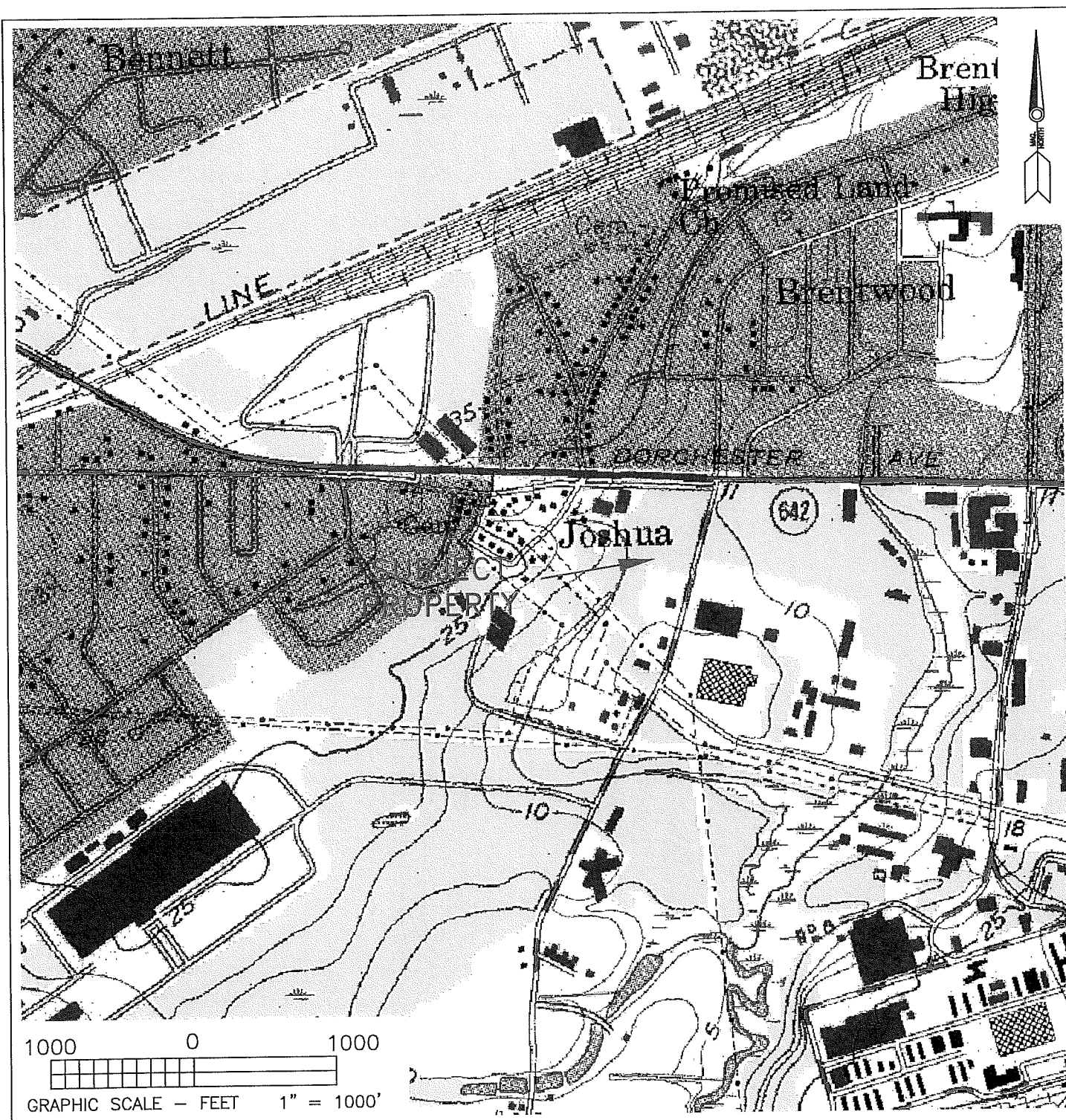
**Aquifer Characterization**  
Pump Test:  Slug Test:  (Check one and provide explanation below for choice)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Investigation Derived Waste Disposal**  
Soil: 0.5 Tons Purge Water: 50 Gallons  
Drilling Fluids: \_\_\_\_\_ Gallons Free-Phase Product: \_\_\_\_\_ Gallons

**Additional Details For This Scope of Work**  
For example, list wells to be sampled, wells to be abandoned/repared, well pads/bolts/caps to replace, details of AFVR event, etc.  
MW-1  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Compliance With Annual Contractor Quality Assurance Plan (ACQAP)**  
Yes Laboratory as indicated in ACQAP? (Yes/No) If no, indicate laboratory information below.  
Name of Laboratory: \_\_\_\_\_  
SCDHEC Certification Number: \_\_\_\_\_  
Name of Laboratory Director: \_\_\_\_\_  
  
\_\_\_\_ Well Driller as indicated in ACQAO? (Yes/No) If no, indicate driller information below.  
Name of Well Driller: \_\_\_\_\_  
SCLLR Certification Number: \_\_\_\_\_  
  
\_\_\_\_ Other variations from ACQAP. Please describe below.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Attachments**  
1. Attach a copy of the relevant portion of the USGS topographic map showing the site location.  
2. Prepare a site base map. This map must be accurately scaled, but does not need to be surveyed. The map must include the following:  
North Arrow Proposed monitoring well locations  
Location of property lines Legend with facility name and address, UST permit number, and bar scale  
Location of buildings Streets or highways (indicate names and numbers)  
Previous soil sampling locations Location of all present and former ASTs and USTs  
Previous monitoring well locations Location of all potential receptors  
Proposed soil boring locations  
3. Assessment Component Cost Agreement, SCDHEC Form D-3664



**PROJECT:**  
 INITIAL GROUNDWATER ASSESSMENT  
 CARTA LEEDS AVENUE  
 3664 LEEDS AVENUE  
 CHARLESTON, CHARLESTON COUNTY, SC  
 UST PERMIT #09959

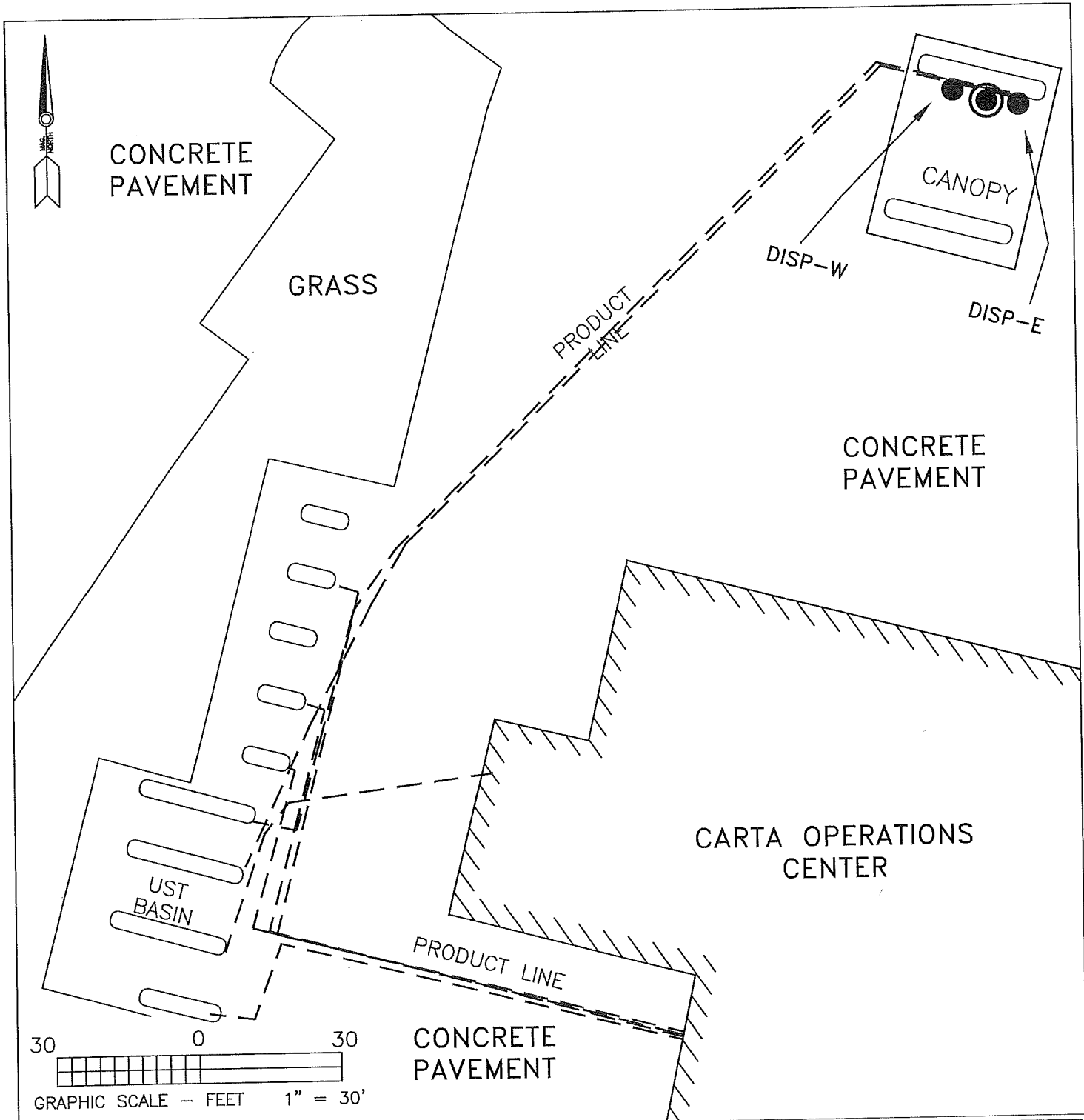
**DESCRIPTION:**  
 SITE LOCATION MAP

**FIGURE 1**  
**DATE:**  
 MARCH 2015

**ARM ENVIRONMENTAL SERVICES, INC.**

**REFERENCE:**  
 U.S.G.S. TOPOGRAPHIC MAP  
 (7.5 MINUTE SERIES)  
 JOHNS ISLAND - 1958/1979  
 SOUTH CAROLINA QUADRANGLE

**LEGEND:**



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 INITIAL GROUNDWATER ASSESSMENT  
 CARTA LEEDS AVENUE  
 3664 LEEDS AVENUE  
 CHARLESTON, CHARLESTON COUNTY, SC  
 UST PERMIT #09959


**DESCRIPTION:**  
 SITE BASE MAP

**FIGURE 2**

**DATE:**  
 MARCH 2015



**REFERENCE:**  
 BASED ON AERIAL  
 PHOTOGRAPHY OBTAINED FROM  
 GOOGLE EARTH, DATED 2014

**LEGEND:**  
 = PROPOSED MW