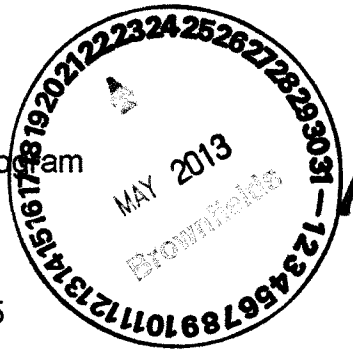
08620-0410

Carolina Creosoting

April 22, 2013



North Carolina Brownfields Program
Attn.: Ms. Lisa Taber, P.G.
Brownfields Project Manager
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605

ARM
Geothermal, Environmental, & Well Drilling

Re.: Revised Workplan For The Brownfield Area (91.37 Acre Tract Adjacent To Seaboard Coast Line Railroad)
Nancy S. Smith Trustee Property
Carolina Creosote
Leland, Brunswick County, North Carolina

Ms. Taber,

As per our recent conversation and email agreements, the following presents a revised work plan for selective sampling known and potential sources of contamination at the referenced property. Figure 1 is a Site Vicinity Map showing the project location. The proposed sampling and action areas are depicted on Figure 2 and are listed as follows:

1. Pond located in the northwest portion of the property and adjacent to the Seaboard Coast Line Railroad.
2. Two water supply wells located in the west portion of the property. Well #1 was formerly utilized as potable water for the office. Well #2 is identified as the former Todd Residence potable well. Reportedly, hazardous substances have been detected in the potable wells. It is recommended that both wells be properly abandoned per NCAC T:15 02C standards.
3. Weight scales area located in the western portion of the property. It is unknown if the subsurface has been impacted in this area.
4. Railroad Spur area located in the northwest portion of the property. Potential area for petroleum, herbicides, and RCRA metals. Impacts to the subsurface are not known.
5. Shed/storage area located in the central portion of the site. Contaminant releases into the subsurface within this area are not known.
6. Concrete foundation located in the northwest portion of the property. It is unknown if petroleum contaminants, unknown contaminants, or RCRA metals are present beneath the foundation.
7. Former AST area located between the concrete foundation and weight scales on the west portion of the property. Potential area for petroleum release from leaking AST system.

Applied Resource Management, P. C.
P. O. Box 882, 257 Transfer Station Road, Hampstead, NC 28443 910.270.2919 Fax 910.270.2988

The following summarizes the areas of concern and presents recommended sampling strategies:

AOC I.D.	Area of Concern	Recommended Data Points/Activity	Recommended Samples
AOC-1	*Pond area in the north portion of property. Potential for contaminants to have been discharged into the pond by surface runoff and drainage.* Sampling in this area is necessary due to possible impacts to the pond water and sediments from potential residual oil and petroleum runoff.	One pond bottom sediment sample. One pond water sample.	Obtain one pond bottom sediment sample for analysis per EPA Methods 8260B, 8270D, and RCRA metals. Obtain one pond water sample and analyze per EPA Methods 8260B and 8270D.
AOC-2	*Two water supply wells located in the west portion of the property.*	Abandon both wells per NCAC T:15C.	Not applicable
AOC-3	*Weight scale area located in west portion of property.* Sampling in this area is necessary due to possible presence of unknown contaminants impacting the subsurface.	2 x 5' Soil borings	Screen samples from the boring locations. Obtain two soil samples for analysis per EPA Methods 8260B and 8270D.
AOC-4	*Railroad Spur area located in north portion of property.* Sampling in this area is necessary to check for contaminants associated with railroad operations.	2 x 5' Soil Borings	Obtain two soil samples shallower than five feet deep for analysis per EPA Methods 8270 for Polynuclear Aromatic Hydrocarbons, 8151 for herbicides, and 6010B for RCRA metals.

AOC-5	*Shed/storage area located in the central portion of the site.* Sampling in this area is necessary to check for potential unknown contaminates impacting the subsurface.	2 x 5' Soil Borings 1 x 15' Type II Monitoring Well	Screen samples from the soil boring and test well locations. Obtain two soil samples shallower than five feet deep for analysis per EPA Methods 8260B, 8270D, and RCRA metals. Obtain one groundwater sample for analysis per EPA Methods 8260B, 8270D, and RCRA metals.
AOC-6	*Concrete foundation located in northwest portion of property.* Sampling in this area is necessary to check for potential impacts beneath or adjacent to the foundation from potential spills or unknown contaminant runoff onto the subsurface.	2 x 5' Soil Borings and concrete coring	Screen samples from the boring locations. Obtain two soil samples shallower than five feet deep for analysis per EPA Methods 8260B, 8270D, and 6010B for RCRA metals.
AOC-7	Former ASTs area between the concrete foundation and weight scales on west portion of property. Sampling in this area is necessary to check for potential petroleum releases from the former AST systems.	2 X 5' soil Borings	Screen samples from the boring locations. Obtain two soil samples shallower than five feet deep for analysis per EPA Methods 8260B, 8270D, and 6010B for RCRA metals.

This revised work plan consists of the installation of one Type II monitoring well, advancement of approximately ten exploratory borings within the identified areas of concern, soil and groundwater sampling, and well abandonment of the two on-site water supply wells. Soil, pond, and groundwater samples will be collected and analyzed as per the above table. RCRA metals analyses have been added to the railroad spur, AST, and

concrete foundation areas. Also, as agreed upon, the soil samples will be collected shallower than five feet deep or within the upper two feet as dependant upon boring findings, soil screening, and groundwater table depths. Upon receipt of laboratory results, a Report of Findings will be prepared and submitted to the Brownfields Program for review.

If you have any questions, please do not hesitate to call.

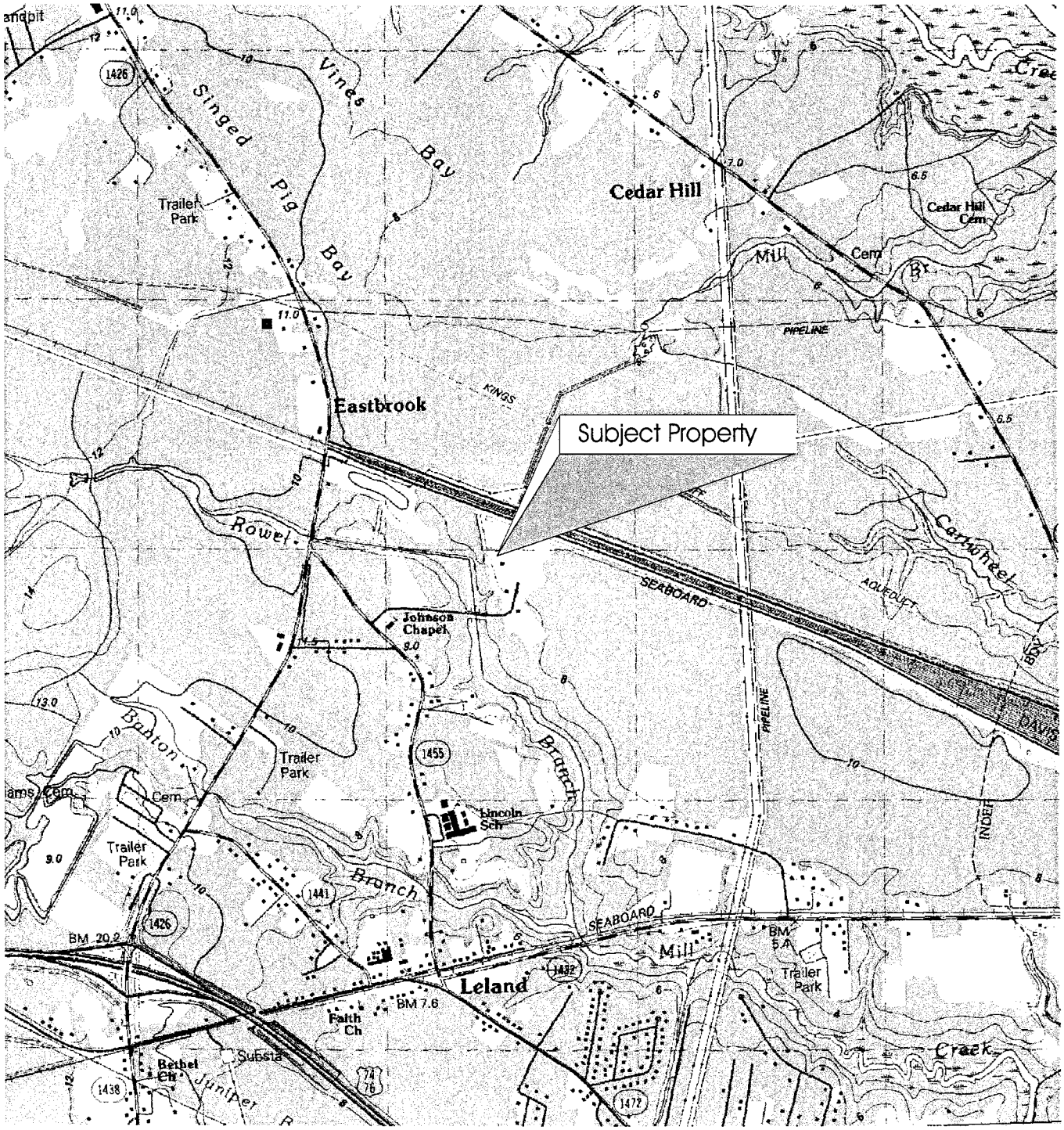
Sincerely,

Joseph L. Zuncich
Project Manager/Geologist

James L. Cornette, P.G.
Project Manager

Encs.

cc. Mr. E. G. Dale w/encs.
Mr. Michael D. McCulley w/encs.



Adapted from USGS Topographic
"Leland, N.C.," 1984

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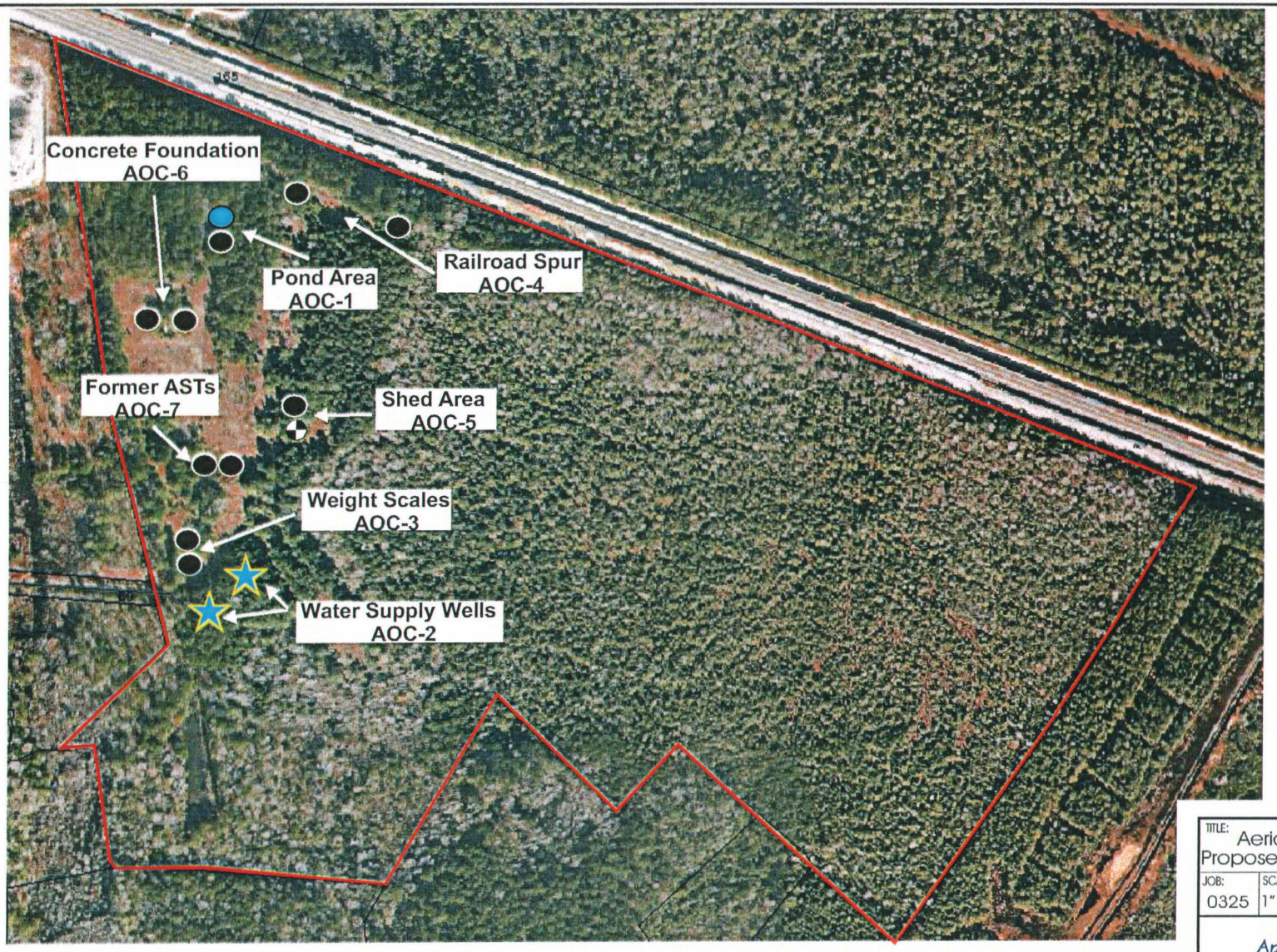
(910) 270-2919 FAX 270-2988

TITLE: SITE VICINITY MAP				FIGURE: 1
JOB: 0325	SCALE: 1"=2,000'	DATE: 4/13/05	DRAWN BY: KLC	



Adapted from the Brunswick County On-line GIS, Aerial 2010

TITLE: Aerial Photograph With Proposed Sampling Locations				FIGURE:
JOB:	SCALE:	DATE:	DRAWN BY:	2
0325	1" = ~262'	3/14/13	KLC	

Applied Resource Management, P.C.
Hampstead, NC 28443