



**PROJECT MANUAL
REMEDIAL ACTION - STEP 2**

Former Copes-Vulcan Site
601 West Summit Avenue
Charlotte, North Carolina 28203

Owner:

Electrolux Home Products, Inc.
20445 Emerald Pkwy., Suite 250
P.O. Box 35920
Cleveland, Ohio 44135-0920

Owner's Representative:

Quantum Management Group, Inc.
3550 Burch Avenue
Second Floor
Cincinnati, OH 45208

Owner's Consultant:

The Kelly-Buck Company
2130 Superior Avenue
Suite 3A
Cleveland, OH 44114

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R18 - Proposed Grading Plan

VOLUME I



**PROJECT MANUAL
REMEDIAL ACTION - STEP 2
VOLUME I:
DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS**

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Issue Date: March 15, 2010

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DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 002113 – INSTRUCTIONS TO BIDDERS

1.0 GENERAL INFORMATION:

Electrolux Home Products, Inc. (Owner) will receive sealed Proposals (Bids), only from invited prime contractors (Bidders) intending to enter into an agreement and serve as Environmental Remediator, for implementation of the Remedial Action – Step 2 (project) at the former Copes-Vulcan site (site), located at 601 West Summit Avenue, Charlotte, Mecklenburg County, North Carolina. All Proposals shall be final and complete and valid for a minimum of 90 days. The Owner reserves the right to reject any and all Proposals and to waive informalities in Proposals as the Owner may deem to be in its best interest. Escalation of any kind will not be permitted.

2.0 CONTACT INFORMATION:

<u>OWNER:</u>	<u>OWNER'S REPRESENTATIVE:</u>	<u>OWNER'S CONSULTANT:</u>
Electrolux Home Products, Inc. 20445 Emerald Parkway, S.W. - Suite 250 P.O. Box 35920 Cleveland, Ohio 44135-0920 Contact: John A. Heer voice: (216) 898-2332 john.heer@electrolux.com	Quantum Management Group, Inc. 3550 Burch Avenue Second Floor Cincinnati, OH 45208 Contact : Douglas J. Ucci, CHMM voice: (513) 871-7203 mobile: (513) 919-8134 ducci@qmg-inc.com	The Kelly-Buck Company 2130 Superior Avenue Suite 3A Cleveland, OH 44114 Contact : Michael J. Lyden, P.E. voice: (216) 861-1716 mobile: (216) 272-1345 mike.lyden@kelly-buck.com

The Owner's Consultant will be the official and single point of contact during bidding and execution of the project. The Owner's Consultant will distribute communications and correspondence to and from the Owner, the Owner's Representative, the Bidders, and the Environmental Remediator, once the Environmental Remediator has been selected and entered into an Agreement with the Owner for performance of the project.

3.0 PROJECT SUMMARY:

A summary of project work is provided in Section 011100 of the Contract Documents. A brief description of some, but not all, of the main project elements is as follows:

- provide and construct project support facilities;
- remove and load-out soil, concrete, asphalt and other materials and debris impacted by polychlorinated biphenyls (PCBs);
- remove and load-out soil and other materials impacted by other contaminants;
- remove and load-out identified segments of storm sewers, sanitary sewers and floor drains;
- construct in situ soil and ground-water remediation systems;
- backfill, re-grade and restore site;
- (optional) provide and construct facilities for the storage, mixing and application of in situ soil and ground-water treatment chemicals; and when requested, procure, mix and apply treatment chemicals and other solutions at the in situ soil and ground-water remediation systems.
- (optional) provide transportation and disposal of impacted soil, concrete, asphalt and other materials and debris.

4.0 PRE-BID SITE MEETING & SITE ACCESS DURING BIDDING:

A pre-bid meeting and preliminary walk were held at the site on Wednesday, December 16, 2009. During preparation of Proposals, Bidders will be permitted to re-visit the site for additional inspection as needed. Please coordinate and schedule all such visits in advance by contacting Owner's Consultant at least 48 hours before the intended visit.

5.0 KEY DATES:

Some of the key dates and deadlines for this project are listed below. Please note that the Owner may choose to adjust some of these dates; however, in the absence of any such adjustments, they are to be considered fixed and firm.

ITEM	DATE
Release of Bid Requests by Owner	Monday, March 15, 2010
Deadline for Bid Submittal by Bidders	Friday, April 9, 2010 - 5:00 PM Eastern Time
Project Award Date (Estimated)	Friday, April 23, 2010
Notice to Proceed (Estimated)	Friday, May 7, 2010
Substantial Project Completion Deadline	Friday, October 22, 2010
Mandatory Project Completion Deadline	Friday, November 19, 2010

6.0 USE OF BID FORM

Bids (proposed Contract Price) shall be submitted only on the prescribed Bid Form provided with the Project Manual. All entries on the Bid Form shall be made with permanent ink. Sums shall be expressed in both words and figures in the spaces indicated on the Bid Form. Where there is a discrepancy between the bid sum expressed in words and the bid sum expressed in figures, the words shall control.

7.0 PROPOSAL REQUIREMENTS

In addition to the Bid Form, the Proposals must be comprehensive and complete, and describe in detail the proposed means and methods that Bidder will utilize in order to implement the entire project in accordance with the Contract Documents. At a minimum, Bids should contain the following; however, additional detail is encouraged:

- a) qualifications and relevant experience of Bidder and all Subcontractors;
- b) identification of key personnel who will be assigned to the project, along with their qualifications and experience;
- c) a description of the means, methods, procedures, equipment, facilities and personnel that will be employed in order to complete the project;
- d) proposed alternates, if applicable, but only after describing and pricing the work as specified;
- e) a proposed project schedule, indicating the sequencing of individual tasks and elements, and the progression of the project in order to achieve key milestones and the mandatory project completion deadline;
- f) a description of health and safety procedures that will be implemented during the project;
- g) a description of proposed construction vehicle routes and traffic control methods to prevent hazards to site workers, and pedestrians and vehicles on-site and in the public right-of-way;
- h) a description of proposed facilities and methods for decontamination of personnel, site equipment, trucks and other vehicles leaving the site, and for containment, testing and disposal of decontamination fluids and residues;
- i) a description of proposed methods for excavation, handling and management of contaminated soil and debris, including: ensuring that the excavation work is properly controlled to provide accurate and adequate, but not excessive, removal; properly segregating materials as required for the specified management, transportation and disposal options; and ensuring that areas that were not contaminated or have been remediated do not become contaminated;
- j) a description of proposed methods to prevent spillage and dispersal of contaminated soil and debris; minimize exposure of contaminated soil and debris to precipitation and surface runoff; and, if deemed necessary for continuation of the work, allow for collection, containment and disposal of any excess water that may enter excavations or other potentially contaminated work areas;
- k) a description of proposed dust control and monitoring measures to prevent airborne emissions of dust, vapors or other forms of air emission;
- l) a description of proposed methods to prevent any migration of contaminated or potentially contaminated materials in surface water runoff entering and leaving the work areas and the site, along with proposed means and methods to maintain compliance with the NPDES construction stormwater discharge permit requirements, as well as permit and plan requirements associated with the City of Charlotte Erosion and Sediment Control rules;
- m) a description of the proposed backfill, re-grading, re-vegetation and other site restoration work;

- n) if selected for the optional off-site transportation and disposal of soil and other materials, a description of proposed transportation and disposal companies, facilities and procedures to be used during the project;
- o) if selected for the optional procurement, mixing and application of treatment chemicals to in situ soil and ground-water remediation systems, along with the providing and construction of facilities for said work, a description of the facilities, equipment and supplies to be provided and constructed, the methods for procurement, delivery and storage of treatment chemicals, and the personnel and methods to be used during performance of each requested episode of treatment;
- p) methods for securing and protecting the site, work areas and property during the project, and for decommissioning and demobilizing at completion.

8.0 ALTERNATES

Following bidding of all project work as specified, Bidders are encouraged to consider, and where appropriate submit, voluntary alternates in accordance with the provisions specified on the Bid Form. Voluntary alternates related to innovative suggestions, methods, operations, reduced costs, optimization of schedule or other measures intended to improve the quality, cost-effectiveness and/or expediency of the work are encouraged.

Each Bidder shall acknowledge Alternates, where offered, by listing on the Bid Form and entering the corresponding dollar amount of addition or subtraction.

9.0 REQUESTS FOR INTERPRETATION

Bidders shall promptly notify the Owner's Consultant, in writing, of any ambiguity, inconsistency or error which they may discover upon examination of the Contract Documents, the site, and local conditions.

Bidders requiring clarification or interpretation of the Contract Documents shall make a written request to the Owner's Consultant. The Owner's Consultant will attempt to answer such requests if received no later than seven (7) calendar days before the Bid Due Date. Any interpretation, correction, or change in the Contract Documents will be made only by written Addendum, which will become part of the Contract Documents and will be issued to all Bidders. Neither the Owner, the Owner's Representative nor the Owner's Consultant will be responsible for any verbal explanations, interpretations, clarifications or other comments.

10.0 BID SUBMITTAL REQUIREMENTS:

Submit four (4) hardcopies and an electronic copy of the full Bid package to the Owner, in care of the Owner's Consultant, to the following address:

The Kelly-Buck Company
Attn: Michael J. Lyden, P.E. – Project Manager
2130 Superior Avenue E, Suite 3A
Cleveland, OH 44114
(216) 861-1716
mike.lyden@kelly-buck.com

11.0 CONTRACT TYPE

This is a stipulated fixed price contract. No additions to the contract price will be considered unless previously approved in writing by the Owner at an agreed-upon unit or fixed price. There will be no exceptions and no excuses permitted.

12.0 CONTRACTOR AGREEMENT

The terms and conditions that will govern this work are included with this Project Manual.

13.0 CONTRACT DOCUMENTS

The Contract Documents for this project include the following:

- a) the Project Manual, including all Sections within Division 0 – Procurement and Contracting Requirements, Division 1 – General Requirements, Division 2 – Existing Conditions and Division 31 – Earthwork, along with all Drawings;
- b) written Addenda, if any, issued after the issuance of the Project Manual and prior to the Contract award.

14.0 FORMS REQUIRED FOR CONTRACT APPROVAL

Upon Award, the successful Bidder shall complete the following forms to ensure prompt contract validation.

- Insurance Certificates for the Environmental Remediator and all Subcontractors
- Evidence of authority to do business in the State of North Carolina and serve as a General Contractor for the project
- Signed Agreement

- END OF SECTION 002113 -

SECTION 004113 – BID FORM – STIPULATED SUM

1.0 PROJECT TITLE

Remedial Action – Step 2
Former Copes-Vulcan Site
601 West Summit Avenue
Charlotte, North Carolina 28203

2.0 BID RECIPIENT

This Bid is submitted to:

Electrolux Home Products, Inc.
20445 Emerald Pkwy., Suite 250
P.O. Box 35920
Cleveland, Ohio 44135-0920

3.0 BIDDER INFORMATION

This Bid is submitted by:

Company Name _____

Address _____

City, State & Zip Code _____

Telephone _____ Fax _____

Regarding this Bid contact _____

At phone/email _____

North Carolina General Contractor's License No. (w/type & limits):

3. BIDDER'S ACKNOWLEDGEMENTS AND REPRESENTATIONS

In submitting this Bid, Bidder acknowledges and represents that:

- a) Bidder has examined and carefully studied the Bidding and Contract Documents, including specifications, drawings, data contained in or referenced by the Bidding and Contract Documents, and the following Addenda, receipt of which is hereby acknowledged.

Addendum No.	Addendum Date
_____	_____
_____	_____
_____	_____
_____	_____

- b) Bidder has visited and become familiar with the site and is satisfied as to the general, local and site conditions that may affect cost, progress, and performance of the project.
- c) Bidder is familiar with and is satisfied as to all Federal, State and local Laws and Regulations that may affect cost, progress and performance of the project.
- d) Bidder has given Owner’s Consultant written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding and Contract Documents, and the written resolution thereof by Owner’s Consultant is acceptable to Bidder.
- e) Bidder will submit written evidence of its authority to do business in the State of North Carolina and serve as a General Contractor for the project not later than the date of its execution of the Agreement.
- f) Bidder understands and acknowledges that this is a Stipulated Fixed Price Contract, and that the Lump Sum Base Bid Price indicated on the Bid Form shall be the total Contract Price for all work necessary for completion of the project, regardless of any deviations in the estimated quantities provided in the Bidding and Contract Documents. The Lump Sum Base Bid Price does not include the cost of a Payment and Performance Bond, which is not currently required by the Owner. The Lump Sum Base Bid Price does not include any of the alternates listed herein. The Lump Sum Base Bid Price does not include any work specifically identified in the Bidding and Contract Documents as Unit Price Work.

The undersigned Bidder proposes and agrees, if this Bid is accepted by Owner, to enter into an Agreement with Owner in the form included in the Bidding Documents, to perform all work associated with the project as specified or indicated in the Bidding Documents and Contract Documents for the Lump Sum Base Bid Price and applicable Unit Prices submitted by Bidder herein, within the times indicated in this Bid, and in accordance with all requirements, terms and conditions of the Bidding Documents and Contract Documents.

_____ dollars
Lump Sum Base Bid Price - words (breakdown included on attached Bid Form Detail)

\$ _____
Lump Sum Base Bid Price – numerals (breakdown included on attached Bid Form Detail)

(Prices for Optional Work per Owner’s Discretion, Voluntary Alternates & Potentially Applicable Unit Prices are on attached Bid Form Detail)

Signature

Name & Title

Representing

Signed and sealed this _____ day of _____ 2010.

Witnessed by:

Signature

Name & Affiliation

Date

***** NOTE: COMPLETE AND SUBMIT ATTACHED MANDATORY BID FORM
DETAIL WITH BREAKDOWN OF LUMP SUM BASE BID PRICE & APPLICABLE
UNIT PRICES. *****

SECTION 004113 ATTACHMENT 1

MANDATORY BID FORM DETAIL SHEETS (5 PAGES) – ALL MUST BE SIGNED

Project: Former Copes-Vulcan Facility - Remedial Action Plan - Step Two

BID FORM - DETAIL SHEETS (REQUIRED)

Fill In Blank Cells Only. Subtotals and Totals will add automatically.

BIDDER COMPANY NAME, SIGNATURE & DATE:

--

Item	Description	Amount	TOTALS
028100 - Transportation & Disposal of Contaminated Materials			
	>/= 50 ppm PCBs - TSCA Regulated (Unit Price - Ton)	<input style="width: 80px;" type="text"/>	
	>/= 50 ppm PCBs - TSCA Regulated (Est. Total - Assume 2,500 Tons)	<input style="width: 80px;" type="text" value="\$0.00"/>	
	RCRA Hazardous TCLP PCE No pretreat (Unit Price - Ton)	<input style="width: 80px;" type="text"/>	
	RCRA Hazardous TCLP PCE No pretreat (Est. Total - Assume 500 Tons)	<input style="width: 80px;" type="text" value="\$0.00"/>	
	RCRA Hazardous TCLP PCE Pretreat (Unit Price - Ton)	<input style="width: 80px;" type="text"/>	
	RCRA Hazardous TCLP PCE Pretreat (Est. Total - Assume 100 Tons)	<input style="width: 80px;" type="text" value="\$0.00"/>	
	RCRA Hazardous Chromium No pretreat (Unit Price - Ton)	<input style="width: 80px;" type="text"/>	
	RCRA Hazardous Chromium No pretreat (Est. Total - Assume 250 Tons)	<input style="width: 80px;" type="text" value="\$0.00"/>	
	RCRA Hazardous Chromium Pretreat (Unit Price - Ton)	<input style="width: 80px;" type="text"/>	
	RCRA Hazardous Chromium Pretreat (Est. Total - Assume 50 Tons)	<input style="width: 80px;" type="text" value="\$0.00"/>	
	<50 ppm PCBs non-Haz. Sub. D SW Landfill (Unit Price - Ton)	<input style="width: 80px;" type="text"/>	
	<50 ppm PCBs non-Haz. Sub. D SW Landfill (Est. Total - Assume 17,500 Tons)	<input style="width: 80px;" type="text" value="\$0.00"/>	
SUB-TOTAL SECTION 027400:			<input style="width: 80px;" type="text" value="\$0.00"/>
TOTAL (B) - OPTIONAL WORK AT OWNER'S DISCRETION>>>			<input style="width: 80px;" type="text" value="\$0.00"/>

(C) - VOLUNTARY ALTERNATES - OFFERED FOR OWNER'S CONSIDERATION

DESCRIBE (ATTACH ADDITIONAL DESCRIPTION IF NEEDED & INDICATE PRICE ADDITION OR DEDUCTION)

V1 Voluntary Alternate 1

	<p style="color: red;">PRICE ADJUSTMENT (INDICATE + OR -)</p> <input style="width: 100px;" type="text"/>
--	--

V2 Voluntary Alternate 2

	<p style="color: red;">PRICE ADJUSTMENT (INDICATE + OR -)</p> <input style="width: 100px;" type="text"/>
--	--

Project: Former Copes-Vulcan Facility - Remedial Action Plan - Step Two

BID FORM - DETAIL SHEETS (REQUIRED)

Fill In Blank Cells Only. Subtotals and Totals will add automatically.

BIDDER COMPANY NAME, SIGNATURE & DATE:

--

Item	Description	Amount	TOTALS
(D) - UNIT PRICING SCHEDULE (Used only in the event of Owner-authorized Changes)			

Item	Description	Amount	TOTALS
			UNIT PRICE
	Transportation & treatment of wastewater - non-hazardous (per gallon)		<input type="text"/>
	Transportation & treatment of wastewater - RCRA and/or TSCA regulated (per gallon)		<input type="text"/>
	Drill & install intermediate injection well - new well or added footage (per foot)		<input type="text"/>
	Drill & install deep injection well - new well or added footage - surface cased portion (per foot)		<input type="text"/>
	Drill & install deep injection well - new well or added footage - bedrock portion (per foot)		<input type="text"/>
	Add or delete area from any shallow infiltration area (per square foot of area - add or deduct)		<input type="text"/>
	Soil excavation within 25 ft of railroad tracks per N&S requirements (CU YD in-place vol.)		<input type="text"/>
	Soil excavation w/ gas line removal required per Piedmont requirements (CU YD in-place vol.)		<input type="text"/>

LABOR AND EQUIPMENT RATE SCHEDULE

Attach Pricing Sheets

- END OF SECTION 004113 -

SECTION 005213 – FORM OF AGREEMENT

ATTACHED:

- **STANDARD FORM OF AGREEMENT BETWEEN OWNER AND ENVIRONMENTAL REMEDIATOR ON THE BASIS OF A STIPULATED PRICE**

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

**STANDARD FORM OF AGREEMENT
BETWEEN OWNER AND
ENVIRONMENTAL REMEDIATOR
ON THE BASIS OF A STIPULATED PRICE**

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By



PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
a practice division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN COUNCIL OF ENGINEERING COMPANIES

AMERICAN SOCIETY OF CIVIL ENGINEERS

ASSOCIATED GENERAL CONTRACTORS OF AMERICA

This Standard Form of Agreement has been prepared for use with the Standard General Conditions of the Contract Between Owner and Environmental Remediator (No. R-700) (2005 Edition). Their provisions are interrelated and a change in one may necessitate a change in the other. The suggested language contained in the Commentary on EJCDC Environmental Remediation Documents (No. R-001) (2005 Edition) discusses certain features of this Agreement.

Note to User

Before entering into this Agreement, it is recommended that the parties determine whether applicable Laws and Regulations prohibit or require alterations in the contemplated contractual arrangements and the assignments of responsibilities for an environmental remediation project. Check competitive bidding, contractor licensing, design professional licensing, and professional practice Laws and Regulations, among others.

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1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, DC 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

Associated General Contractors of America
2300 Wilson Boulevard, Suite 400, Arlington, VA 22201
(703) 548-3118
www.agc.org

**STANDARD FORM OF AGREEMENT
BETWEEN OWNER AND ENVIRONMENTAL REMEDIATOR
ON THE BASIS OF A STIPULATED PRICE**

THIS AGREEMENT is dated as of the _____ day of _____, 201____ by and between

Electrolux Home Products, Inc. (Owner) and

 (“Environmental Remediator”).

Owner and Environmental Remediator, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1 – REMEDIATION

1.01 *Environmental Remediator shall complete all Remediation as specified or indicated in the Contract Documents. The Remediation is generally described as follows:*

- provide and construct project support facilities;
- remove and load-out soil, concrete, asphalt and other materials and debris impacted by polychlorinated biphenyls (PCBs);
- remove and load-out soil and other materials impacted by other contaminants;
- remove and load-out identified segments of storm sewers, sanitary sewers and floor drains;
- construct in situ soil and ground-water remediation systems;
- backfill, re-grade and restore site;
- (optional) provide and construct facilities for the storage, mixing and application of in situ soil and ground-water treatment chemicals; and when requested, procure, mix and apply treatment chemicals and other solutions at the in situ soil and ground-water remediation systems.
- (optional) provide transportation and disposal of impacted soil, concrete, asphalt and other materials and debris.

ARTICLE 2 – THE PROJECT

2.01 The Project for which the Remediation under the Contract Documents may be the whole or only a part is generally described as follows:

The Remediation represents the whole of the Project.

ARTICLE 3 – CONTRACT TIMES

3.01 *Time of the Essence*

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

3.02 *Dates for Substantial Completion and Final Payment*

- A. The Remediation will be substantially completed on or before October 22, 2010, and completed and ready for final payment in accordance with Paragraph 13.08 of the General Conditions on or before November 19, 2010.

3.03 *Liquidated Damages*

- A. Environmental Remediator and Owner further recognize that Owner will suffer financial loss if the Remediation is not completed within the times specified in Paragraph 3.02.A, plus any extensions thereof allowed in accordance with Paragraph 11.02 of the General Conditions. The parties also recognize the delays, expenses and difficulties involved in proving the actual loss suffered by Owner if the Remediation is not completed on time. Accordingly, instead of requiring any such proof, Owner and Environmental Remediator agree that as liquidated damages for delay (but not as a penalty) Environmental Remediator shall pay Owner \$1,000.00 for each day that expires after the time specified in Paragraph 3.02.A for Substantial Completion until the Remediation is substantially complete. After Substantial Completion, if Environmental Remediator shall neglect, refuse or fail to complete the remaining Remediation within the time specified in Paragraph 3.02.A for completion and readiness for final payment or any proper extension thereof granted by Owner, Environmental Remediator shall pay Owner \$1,000.00 for each day that expires after the time specified in Paragraph 3.02.A for completion and readiness for final payment.

ARTICLE 4 – CONTRACT PRICE

4.01 Owner shall pay Environmental Remediator for completion of the Remediation in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraphs 4.01.A and 4.01. B below:

- A. For all Remediation other than Unit Price Work, a Lump Sum of \$_____.

The specific cash allowances are included in the above price and have been computed in accordance with Paragraph 10.02.A of the General Conditions.

- B. For all Unit Price Remediation, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Remediation times the estimated quantity of that item as indicated in this Paragraph 4.01.B.

<u>UNIT PRICE REMEDIATION</u>					
<u>No.</u>	<u>Item</u>	<u>Unit</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Estimated Price</u>

ESTIMATED TOTAL OF ALL UNIT PRICE REMEDIATION					\$ _____

As provided in Paragraph 10.03.A of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classification are to be made by Owner as provided in Paragraph 10.03.A of the General Conditions. Unit prices have been computed as provided in Paragraph 10.03 of the General Conditions.

C. For all Remediation covered by the Lump Sum amount in Paragraph 4.01.A and the currently estimated total for Unit Price Work covered in Paragraph 4.01.B, and subject to adjustment based on final quantities for Unit Price Work, the total Contract Price is established as \$ _____.

ARTICLE 5 – PAYMENT PROCEDURES

5.01

- A. Environmental Remediator shall submit and Owner will process Applications for Payment in accordance with Article 13 of the General Conditions.
- B. *Progress Payments; Retainage.* Owner shall make progress payments as provided in Paragraphs 5.01.B.1 and B.2 below on account of the Contract Price on the basis of Environmental Remediator’s Applications for Payment, which are to be submitted on or about the 10th day of each month during performance of the Remediation below. All such payments will be based on the acceptable Schedule of Values established under Paragraph 2.06.A.3 of the General Conditions, and in the case of Unit Price Remediation, based on the number of units completed.
 - 1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold in accordance with Paragraph 13.03.B of the General Conditions:
 - a. 90 percent of Remediation completed (with the balance being retainage). If the Remediation has been 50 percent completed as determined by Owner, and if the character and progress of the Remediation have been satisfactory to Owner, Owner may determine that as long as the character and progress of the Remediation remain satisfactory to Owner, there will be no additional retainage on account of Remediation completed, in which case the remaining progress payments prior to Substantial Completion will be in an amount equal to 100 percent of the Remediation completed.

2. Upon Substantial Completion, payment will be made in an amount sufficient to increase total payments to Environmental Remediator to 95 percent of the Contract Price (with the balance being retainage), less such amounts that Owner may withhold in accordance with Paragraph 13 of the General Conditions.
- C. Final Payment. Upon final completion and acceptance of the Remediation in accordance with Paragraph 13.08 of the General Conditions, Owner shall pay the remainder of the Contract Price.

ARTICLE 6 – INTEREST

- 6.01 All moneys not paid when due as provided in Article 13 of the General Conditions shall bear interest at the rate of 12 percent per annum.

ARTICLE 7 – ENVIRONMENTAL REMEDIATOR’S REPRESENTATIONS

- 7.01 To induce Owner to enter into this Agreement, Environmental Remediator makes the following representations:
- A. Environmental Remediator has examined and carefully studied the Contract Documents (including the Addenda) listed in Paragraphs 8.01.A through J.
 - B. Environmental Remediator has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, performance or furnishing of the Remediation.
 - C. Environmental Remediator is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress, and performance or furnishing of the Remediation.
 - D. Environmental Remediator is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Remediation as indicated in the Contract Documents.
 - E. Environmental Remediator has correlated the information known to Environmental Remediator, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.
 - F. Environmental Remediator has given Owner written notice of all conflicts, errors, ambiguities or discrepancies that Environmental Remediator has discovered in the Contract Documents and the written resolution thereof by Owner is acceptable to Environmental Remediator.
 - G. The Contract Documents are sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Remediation.

ARTICLE 8 – CONTRACT DOCUMENTS

8.01 The Contract Documents consist of the following:

- A. This Agreement (pages 1 through ____).
- B. Performance Bond (not used).
- C. Payment Bond (not used).
- D. Other Bonds (not used).
- E. Standard General Conditions of the Contract Between Owner and Environmental Remediator (pages 1 through ____, inclusive, and including Exhibit GC-A and Attachment 1 to Exhibit GC-A).
- F. Supplementary Conditions (not used).
- G. Conceptual Documents identified in the Request for Proposal, including the Project Manual (Volume I, Volume II and Drawings).
- H. Environmental Remediator's Proposal (identified as Exhibit ____ and consisting of ____ pages).
- I. Addenda numbers ____ through ____.
- J. Exhibits to this Agreement (pages ____ to ____, inclusive).
- K. The following which may be prepared, delivered, or issued after the Effective Date of this Agreement and are not attached hereto.
 - 1. Notice to Proceed.
 - 2. All Change Directives and Change Orders amending, modifying or supplementing the Contract Documents pursuant to Paragraph 3.04.A of the General Conditions.
 - 3. Specifications as defined in Paragraph 1.01.A.43 of the General Conditions.
 - 4. Drawings as defined in Paragraph 1.01.A.16 of the General Conditions.

8.02 The documents listed in Paragraph 8.01 above are either attached to this Agreement or incorporated by reference.

8.03 There are no Contract Documents other than those listed above in this Article 8.

8.04 The Contract Documents may only be amended, modified or supplemented as provided in Paragraph 3.04.A of the General Conditions.

ARTICLE 9 – MISCELLANEOUS

- 9.01 The Standard General Conditions of the Contract Between Owner and Environmental Remediator are referred to herein as the General Conditions.
- 9.02 Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated therein.
- 9.03 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 9.04 Owner and Environmental Remediator each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.
- 9.05 Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Environmental Remediator, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

IN WITNESS WHEREOF, Owner and Environmental Remediator have signed this Agreement in duplicate. One counterpart each has been delivered to Owner and Environmental Remediator. All portions of the Contract Documents have been signed, initialed or identified by Owner and Environmental Remediator.

This Agreement will be effective on _____ (which is the Effective Date of the Agreement).

Owner:

Environmental Remediator:

By: _____
[CORPORATE SEAL]

By: _____
[CORPORATE SEAL]

Attest: _____
Address for giving notices:

Attest: _____
Address for giving notices:

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

License or Certificate No. _____
(Where applicable)

(If Environmental Remediator is a corporation, attach evidence of authority to sign).

Designated Representative:

Designated Representative:

Name: _____
Title: _____
Address: _____

Name: _____
Title: _____
Address: _____

Phone: _____
Fax: _____
E-Mail: _____

Phone: _____
Fax: _____
E-Mail: _____

- END OF SECTION 005213 -

SECTION 007200 – GENERAL CONDITIONS OF THE CONTRACT

ATTACHED:

- **STANDARD GENERAL CONDITIONS OF THE CONTRACT BETWEEN OWNER AND ENVIRONMENTAL REMEDIATOR**
- **EXHIBIT GC-A – INSURANCE & OTHER REQUIREMENTS**
- **ATTACHMENT 1 TO EXHIBIT GC-A - ENVIRONMENTAL RIGHT OF ENTRY AGREEMENT,” BETWEEN ELECTROLUX HOME PRODUCTS, INC. AND NORFOLK SOUTHERN RAILWAY COMPANY, DATED JULY 28, 2008**

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

STANDARD GENERAL CONDITIONS OF THE CONTRACT BETWEEN OWNER AND ENVIRONMENTAL REMEDIATOR

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By



PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
a practice division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN COUNCIL OF ENGINEERING COMPANIES

AMERICAN SOCIETY OF CIVIL ENGINEERS

ASSOCIATED GENERAL CONTRACTORS OF AMERICA

These General Conditions have been prepared for use with either one of the two Agreements between Owner and Environmental Remediator (Nos. R-520 and R-525, 2005 Editions) of the Engineers Joint Contract Documents Committee. Their provisions are interrelated and a change in one may necessitate a change in the others. The Commentary on EJCDC Environmental Remediation Documents (No. R-001, 2005 Edition) contains comments concerning the use of the General Conditions.

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STANDARD GENERAL CONDITIONS
OF THE CONTRACT BETWEEN
OWNER AND ENVIRONMENTAL REMEDIATOR

ARTICLE 1 – DEFINITIONS

1.01 *Defined Terms*

- A. Wherever used in the Contract Documents the following terms have the meanings indicated, which are applicable to both the singular and plural thereof:
1. *Addenda* – Written or graphic instruments issued prior to the opening of Proposals which clarify, correct or change the Request for Proposals or the Contract Documents.
 2. *Agreement* – The written instrument which is evidence of the agreement between Owner and Environmental Remediator covering the Remediation.
 3. *Application for Payment* – The form which is to be used by Environmental Remediator in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Asbestos* – Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
 5. *Bonds* – Performance and Payment Bonds and other instruments of security.
 6. *Change Directive* – A written directive to Environmental Remediator, issued on or after the Effective Date of the Agreement and signed by Owner ordering an addition, deletion or revision in the Remediation, or responding to differing site conditions under which the Remediation is to be performed as provided in paragraph 4.04 or to emergencies under paragraph 6.16. A Change Directive will not change the Contract Price or the Contract Times, but is evidence that the parties expect that the change directed or documented by a Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.
 7. *Change Order* – A written order which is signed by Environmental Remediator and Owner which authorizes an addition, deletion or revision in the Remediation, or an adjustment in the Contract Price or the Contract Times, or both, issued on or after the Effective Date of the Agreement.
 8. *Claim* – A demand or assertion by Owner or Environmental Remediator seeking an adjustment of Contract Price or Contract Times, or both, or other relief with

respect to the terms of the Contract. A demand for money or services by a third party is not a claim.

9. *Conceptual Documents* – The drawings and specifications and/or other graphic or written materials, criteria and information concerning Owner’s requirements for the Project, such as Remediation objectives and constraints, space, capacity and performance requirements, flexibility and expandability, including those items enumerated in the Request for Proposals which show or describe the character and scope of, or relate to, the Remediation to be performed or furnished and which have been prepared by or for Owner.
10. *Construction* – The result of performing or furnishing of labor, the furnishing and operation of equipment, and the furnishing and incorporating of materials and equipment into the Remediation, all as required by the Contract Documents.
11. *Contaminant* – Any substance or material that is regulated by Laws or Regulations to protect the public health or the environment due to its characteristics or as a result of its quantity or both. A contaminant may include, but is not limited to the following: Asbestos, Hazardous Substances, Hazardous Wastes, PCBs, Petroleum, or Radioactive Materials.
12. *Contract* – The entire and integrated written agreement between Owner and Environmental Remediator concerning the Remediation. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
13. *Contract Documents* – Those items so designated in the Agreement. Only printed or hard copies of those items listed in the Agreement are Contract Documents.
14. *Contract Price* – The moneys payable by Owner to Environmental Remediator for completion of the Remediation in accordance with the Contract Documents.
15. *Contract Times* – The numbers of days or the dates stated in the Agreement to (a) achieve Substantial Completion, and (b) complete the Remediation so that it is ready for final payment in accordance with paragraph 13.08.
16. *Drawings* – Those portions of the Contract Documents prepared by or for Environmental Remediator and approved by Owner consisting of drawings, diagrams, illustrations, schedules and other data which show the scope, extent, and character of the Remediation.
17. *Effective Date of the Agreement* – The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
18. *Engineer* – A duly licensed individual or entity designated by Environmental Remediator to perform or furnish specified Professional Services in connection with the Remediation.

19. *Environmental Remediator* – The individual or entity with whom Owner has entered into the Agreement.
20. *Field Order* – A written order issued by Owner which requires minor changes in the Remediation but which does not involve a change in the Contract Price or the Contract Times.
21. *Hazardous Substance* – Unless otherwise defined in the Supplementary Conditions the term Hazardous Substance shall have the meaning provided in Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. Section 9601(14)), as amended.
22. *Hazardous Waste* – Unless otherwise defined in the Supplementary Conditions, the term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 U.S.C. Section 6903), as amended.
23. *Indemnitee* – Environmental Remediator, Subcontractors, Suppliers, Engineers and the officers, directors, employees, agents, other consultants and subcontractors of each and any of them.
24. *Laws and Regulations; Laws or Regulations* – Any and all applicable laws, rules, regulations, ordinances, codes and orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.
25. *Liens* – Charges, security interests or encumbrances upon Project funds, real property or personal property.
26. *Milestone* – A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Remediation.
27. *Notice of Award* – The written notice by Owner to the successful proposer stating that upon compliance by the successful proposer with the conditions precedent enumerated therein, within the time specified, Owner will sign and deliver the Agreement.
28. *Notice to Proceed* – A written notice given by Owner to Environmental Remediator fixing the date on which the Contract Times will commence to run and on which Environmental Remediator shall start to perform the Remediation.
29. *Owner* – The public body, or authority, individual or entity with whom Environmental Remediator has entered into the Agreement and for whom the Remediation is to be provided.
30. *Owner's Consultant* – An individual or entity with whom the Owner may contract to furnish services to Owner with respect to the Project and who is identified as such in the Supplementary Conditions.

31. *Partial Utilization* – Use by Owner of a substantially completed part of the Remediation for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Remediation.
32. *PCBs* – Polychlorinated biphenyls.
33. *Petroleum* – Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Wastes.
34. *Professional Services* – Services required to be performed by a licensed or registered professional, as well as services provided by, for or on behalf of such a professional, including but not limited to investigation, testing, evaluation, alternatives analysis, regulatory submittals and reports.
35. *Project* – The total undertaking of which the Remediation to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.
36. *Proposal* – The documents submitted by a proposer to serve as Environmental Remediator in response to the Request for Proposals setting forth the Remediation concepts, proposed prices, and other conditions for the Remediation to be performed.
37. *Radioactive Material* – Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 U.S.C. Section 2011 et seq.) as amended from time to time.
38. *Remediation* – The entire completed effort or the various separately identifiable parts thereof required to be performed or furnished under the Contract Documents. Remediation includes and is the result of performing or furnishing Professional Services and Construction required by the Contract Documents.
39. *Request for Proposals* – The document prepared by or for Owner specifying and describing Owner's objectives and the procedure to be followed in preparing and submitting a Proposal and awarding a contract.
40. *Resident Project Representative* – An authorized representative of Owner who may be assigned to the Site or any part thereof.
41. *Schedule of Values* – A schedule prepared by Environmental Remediator and acceptable to Owner indicating that portion of the Contract Price to be paid for each major component of the Remediation.
42. *Site* – Lands, structures, facilities or other areas designated in the Contract Documents to be furnished by Owner as the location of the Remediation and for the performance of the Construction, storage, and access.

43. *Specifications* – Those portions of the Contract Documents prepared by or for Environmental Remediator and approved by Owner consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Remediation and certain administrative details applicable thereto.
44. *Subcontractor* – An individual or entity having a direct contract with Environmental Remediator or having a subcontract with such an individual or entity to perform a part of the Remediation.
45. *Submittal* – A written or graphic document prepared by or for Environmental Remediator which is required by the Contract Documents to be submitted to Owner by Environmental Remediator. Submittals may include Drawings, Specifications, progress schedules, shop drawings, samples, cash flow projections, and Schedules of Values. Submittals other than Drawings and Specifications are not Contract Documents.
46. *Substantial Completion* – The time at which the Remediation (or a specified part thereof) has progressed to the point where it is sufficiently complete, in accordance with the Contract Documents, so that the Remediation (or a specified part) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Remediation refer to Substantial Completion thereof.
47. *Supplementary Conditions* – The part of the Contract Documents which amends or supplements these General Conditions.
48. *Supplier* – A manufacturer, fabricator, supplier, distributor, materialman or vendor having a direct contract with Environmental Remediator or with any Subcontractor to furnish materials or equipment to be incorporated in the Remediation by Environmental Remediator or any Subcontractor.
49. *Uncovering Costs* – The costs and damages resulting from an Owner request under paragraphs 12.03.D or 12.04.B caused by or resulting from the uncovering, exposure, observation, inspection and testing any part of the Construction, including but not limited to the costs of satisfactory replacement or rework. Such costs and damages further include but are not limited to all fees and charges of engineers, architects, attorneys and other professionals, all court or arbitration or other dispute resolution costs, and all costs of repair or replacement of work of others.
50. *Unit Price Remediation* – Remediation to be paid for on the basis of unit prices.

1.02 *Terminology*

A. Intent of Certain Terms or Adjectives

1. The word “day” shall constitute a calendar day of 24 hours measured from midnight until the next midnight.
2. The word “defective” when modifying the term “Construction” refers to Construction that is unsatisfactory, faulty or deficient, in that it does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to Owner’s final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion) provided that the defect was not caused by Owner.
3. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
4. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials or equipment complete and ready for intended use.
5. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
6. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Environmental Remediator, "provide" is implied.
7. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with that meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 Delivery of Bonds (not used)

2.02 Commencement of Contract Times; Notice to Proceed

- A. The Contract Times will commence to run on the 30th day after the Effective Date of the Agreement, or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. Unless agreed to in writing by the Owner and Environmental Remediator, the Contract Times will commence to run no later than the 90th day after the last day for receipt of the Proposal or the 30th day after the Effective Date of the Agreement, whichever date is earlier.

2.03 *Before Starting Remediation*

- A. Before undertaking each part of the Remediation, Environmental Remediator shall carefully study and compare those Contract Documents prepared by Owner and check and verify pertinent figures therein and all applicable field measurements. Environmental Remediator shall promptly report in writing to Owner any conflict, error, ambiguity, or discrepancy which Environmental Remediator may discover and shall obtain a written interpretation or clarification from Owner before proceeding with any Remediation affected thereby; however, Environmental Remediator shall not be liable to Owner for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Environmental Remediator knew or reasonably should have known thereof.
- B. Environmental Remediator shall submit to Owner the following within ten days after commencement of the Contract Times (unless otherwise specified in the Contract Documents):
 - 1. a preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Remediation including each Milestone specified in the Contract Documents;
 - 2. a preliminary schedule of required Submittals and the times for submitting, reviewing and processing each Submittal;
 - 3. a preliminary Schedule of Values for all of the Remediation which will include quantities and prices of items aggregating the Contract Price and will subdivide the Remediation into component parts in sufficient detail to serve as the basis for progress payments during performance of the Remediation. Such prices will include a pro rata amount of overhead and profit applicable to each item of Remediation;
 - 4. a site-specific health and safety plan; and
 - 5. a description of required training and certification for employees of Environmental Remediator and its Subcontractors.
- C. Evidence of Insurance. Before any Remediation at the Site is started, Environmental Remediator and Owner shall each deliver to the other certificates of insurance as required by paragraph 5.03 which Environmental Remediator and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.04 *Starting the Remediation*

- A. Environmental Remediator shall start to perform the Remediation on the date when the Contract Times commence to run. No work shall be done at the Site prior to the date on which Contract Times commence to run.

2.05 *Initial Conference*

- A. Within 20 days after the Contract Times start to run, Environmental Remediator will arrange a conference attended by Owner, Environmental Remediator and others as appropriate to establish a working understanding among the parties as to the Remediation and to discuss the Remediation concepts, schedules and Submittals referred to in paragraph 2.03.B, procedures for handling Submittals, processing Applications for Payment, maintaining required records, items required pursuant to paragraphs 6.08 and 8.01.A.7. and other matters.

2.06 *Initial Acceptance of Schedules*

- A. At least ten days before submission of the first Application for Payment Environmental Remediator will arrange a conference attended by Environmental Remediator, Owner and others as appropriate to review for acceptability the schedules submitted in accordance with paragraph 2.03.B. Environmental Remediator shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Environmental Remediator until acceptable schedules are submitted to Owner as provided below.
 - 1. The progress schedule will be acceptable to Owner if it provides an orderly progression of the Remediation to completion within any specified Milestones and the Contract Times. Such acceptance will not impose on Owner responsibility for the progress schedule, for sequencing, scheduling or progress of the Remediation nor relieve Environmental Remediator from Environmental Remediator's full responsibility therefor.
 - 2. Environmental Remediator's schedule of Submittals will be acceptable to Owner if it provides a workable arrangement for reviewing and processing the required Submittals.
 - 3. Environmental Remediator's Schedule of Values will be acceptable to Owner as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Remediation.

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
- B. It is the intent of the Contract Documents to describe a complete Project (or part thereof) to be Remediated in accordance with the Contract Documents. Any labor, documentation, services, materials or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be furnished and performed whether or not specifically called for at no additional cost to Owner.

- C. Owner and Environmental Remediator understand that the Site contains Contaminants and that the scope of the Remediation may include the management and movement of Contaminants either on-site, off-site or both. They further understand that Environmental Remediator and Subcontractors have no responsibility for either the presence of Contaminants at the Site or Site conditions existing on the Effective Date of the Agreement. It is the intent of the Contract Documents that:
1. Owner's status as an owner or operator of the Site or as a handler, generator, arranger or transporter of Contaminants, if any, shall not be transferred in any way to Environmental Remediator or Subcontractors;
 2. Environmental Remediator and Subcontractors shall not be deemed or alleged to be an owner or operator of the Site; and
 3. Environmental Remediator shall not be deemed or alleged to be a handler, generator, arranger, transporter or disposer of any Contaminant.

3.02 *Reference Standards*

- A. Standards, Specifications, Codes, Laws, or Regulations.
1. Reference to standards, specifications, manuals or codes of any technical society, organization or association, or to the Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code or Laws or Regulations in effect on the last day for receipt of Proposals except as may be otherwise specifically stated in the Contract Documents.
 2. No provision of any such standard, specification, manual, code or instruction of a Supplier shall be effective to change the duties and responsibilities of Owner, Environmental Remediator or any of their Subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall it be effective to assign to Owner any duty or authority to supervise or direct the furnishing or performance of the Remediation or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Resolving Discrepancies*

- A. In the event of a discrepancy between the Conceptual Documents on the one hand and the Proposal or Drawings or Specifications on the other hand, the Conceptual Documents will control except when Owner has approved a Submittal pursuant to paragraph 6.17.A.
- B. Except as otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity or discrepancy between the provisions of the Contract Documents and:

1. the provisions of any such standard, specification, manual, code or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
2. the provisions of any such Laws or Regulations applicable to the performance of the Remediation (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Laws or Regulations).

3.04 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended to provide for additions, deletions and revisions in the Remediation or to modify the terms and conditions thereof in one or more of the following ways:
 1. owner's approval of required Submittals (pursuant to paragraph 6.17.B);
 2. a Change Directive;
 3. a Change Order; or
 4. a Field Order.

3.05 *Reuse of Documents*

- A. All documents including Drawings and Specifications prepared or furnished by Environmental Remediator pursuant to this Contract are for Environmental Remediator's own use. All intellectual property rights developed in the performance of the Contract are and shall remain the property of Environmental Remediator. Owner is hereby granted a limited non-exclusive license to make and retain copies for information and reference in connection with the use and occupancy of the Project by Owner and others. However, such documents are not intended or represented to be suitable for reuse by Owner or others on extensions of the Project or on any other project.
- B. Any reuse or any continued use after any termination without written verification or adaptation by Environmental Remediator for the specific purpose intended will be at Owner's sole risk and without liability or legal exposure to Environmental Remediator. Owner shall indemnify and hold harmless Environmental Remediator from all claims, costs, losses and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising out of or resulting from such reuse. Any such verification or adaptation will entitle Environmental Remediator to further compensation at rates to be agreed upon by Owner and Environmental Remediator.

3.06 *Electronic Data*

- A. Copies of data furnished by Owner to Environmental Remediator or by Environmental Remediator to Owner that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or of other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
- C. When transferring documents in electronic media format, transferring party makes no representations as to long term compatibility, usability, or the readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 – AVAILABILITY OF LANDS; DIFFERING SITE CONDITIONS; REFERENCE POINTS; HAZARDOUS CONDITIONS

4.01 *Availability of Site and Other Lands*

- A. Owner shall furnish and provide access to:
 - 1. all lands, including the Site and rights-of-way and easements for access thereto, as indicated in the Contract Documents, and
 - 2. such other lands and facilities that are designated or required for the use of Environmental Remediator, including but not limited to such off-site lands and facilities as are reasonably necessary to conduct investigation and monitoring.
- B. If Owner's furnishing of these lands is untimely or incomplete, or both, and if this causes Environmental Remediator to be delayed in performing the Remediation or incur additional costs, and if Environmental Remediator and Owner are unable to agree on entitlement to or the amount or extent of any adjustments in the Contract Price or the Contract Times as a result, Environmental Remediator may make a claim therefor as provided in Article 9. Failure to furnish lands and provide access for 30 or more days is cause for termination by Environmental Remediator under paragraph 14.04.A.
- C. Upon reasonable written request, Owner will furnish Environmental Remediator with a current statement of record legal title and legal description of the Site and Owner's interest therein as necessary for giving notice of or filing a mechanic's lien against

such lands in accordance with applicable Laws and Regulations. Owner shall notify Environmental Remediator of any encumbrances or restrictions not of general application but specifically related to use of the Site which Environmental Remediator will have to comply in performing the Remediation. Unless otherwise provided in the Contract Documents, Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities.

- D. Environmental Remediator shall provide for all additional lands and access thereto that may be required for off-site temporary Construction facilities or storage of materials and equipment; provided that Environmental Remediator shall not be required to provide land and access thereto for the storage, treatment or disposal of any Contaminant.

4.02 *Existing Conditions*

- A. Owner represents that it has fully disclosed to Environmental Remediator any information that Owner knows or has reason to suspect concerning the existence of Contaminants at the Project Site. Owner will be responsible for any existing condition encountered at the Site that was not identified in the Contract Documents to be within the scope of the Remediation.
- B. Owner acknowledges that Environmental Remediator may have legal obligations with respect to public health and safety and will cooperate with Environmental Remediator to help ensure compliance with these obligations.
- C. Environmental Remediator shall periodically advise Owner of the presence and condition of Contaminants encountered at the Site.
- D. If Environmental Remediator discovers or identifies conditions for which it reasonably believes that the Owner is legally required to provide notice to a public agency, it shall so advise Owner and give Owner the first opportunity to provide such notification. In any event Environmental Remediator shall have the right to report the presence of any Contaminant to public agencies having jurisdiction if it reasonably believes that it is required by law to do so.
- E. The parties acknowledge and understand that the presence of Contaminants and other potentially hazardous conditions at the Site were not caused by or the responsibility of Environmental Remediator, and that the Contract Documents do not transfer any legal responsibilities for such conditions from Owner to Environmental Remediator. Accordingly, Owner shall maintain complete and absolute responsibility for the ownership, title and management of all Contaminants resulting from investigation and Remediation activities. This includes but is not limited to generation, handling, storage, transportation, treatment, arranging for disposal and disposal of waste materials from Environmental Remediator's activities on and off the Site, including but not limited to soil cuttings, drilling muds, purged ground water, decontamination fluids, disposable sampling equipment, and disposable personal protective equipment.

- F. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Indemnitees from and against all claims, costs, losses and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising out of or resulting from: (1) any existing condition at the Site; (2) any allegation or claim that any Indemnatee is liable as an owner or operator; or (3) any allegation or claim that any Indemnatee is liable as a handler, generator, arranger, transporter, treater, storer or disposer of any Contaminant. Nothing in this paragraph 4.02.F. shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence or willful misconduct.

4.03 *Reference Points*

- A. Environmental Remediator shall be responsible for laying out the Remediation and shall protect and preserve the reference points established by Owner pursuant to paragraph 8.01.A.7.e and shall make no changes or relocations without the prior written approval of Owner. Environmental Remediator shall report to Owner whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Differing Site Conditions*

- A. Environmental Remediator shall promptly, and before the conditions are disturbed, give written notice to Owner of:
1. subsurface or latent physical conditions at the Site which differ materially from those indicated in the Contract Documents; or
 2. unknown physical conditions at the Site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character called for by the Contract Documents; or
 3. the presence of Contaminants, contaminated areas or contaminated resources not disclosed in those Contract Documents in existence as of the date of receipt of the Proposal.
- B. Owner will investigate the Site conditions promptly after receiving the notice. If (1) the conditions do materially so differ, or (2) there is contamination not disclosed in the Contract Documents, and either (1) or (2) cause an increase or decrease in the Environmental Remediator's cost of, or the time required for, performing any part of the Remediation, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the Contract Price or Times modified in writing by Change Order in accordance with Article 9.
- C. No request by Environmental Remediator for an equitable adjustment under paragraph 4.04 shall be allowed unless Environmental Remediator has given the written notice

required; provided that the time prescribed in paragraph 9.03.A for giving written notice may be extended by Owner.

ARTICLE 5 – BONDS AND INSURANCE

5.01 Performance, Payment and Other Bonds (not used)

5.02 Licensed Sureties and Insurers

- A. All Bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Environmental Remediator will be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds or insurance policies for the limits and coverages so required.

5.03 Certificates of Insurance

- A. Environmental Remediator will deliver to Owner, with copies to each other entity identified in Exhibit GC-A, certificates of insurance (and other evidence of insurance requested by Owner or any other entity) which Environmental Remediator is required to purchase and maintain. Owner shall deliver to Environmental Remediator, certificates of insurance (and other evidence of insurance requested by Environmental Remediator or any other entity) which Owner is required to purchase and maintain.

5.04 Environmental Remediator's Liability Insurance

- A. Environmental Remediator shall purchase and maintain the liability insurance set forth in Exhibit GC-A.

5.05 Owner's Liability Insurance

- A. In addition to the insurance required to be provided by Environmental Remediator under paragraph 5.04, Owner will purchase and maintain its own liability insurance, at its expense, that will protect Owner against claims which may arise due to its ownership of the Site.

5.06 Property Insurance

- A. Unless otherwise provided in Exhibit GC-A, Environmental Remediator shall purchase and maintain property insurance for the Remediation in the amount of its full replacement cost (subject to such deductible amounts as may be provided in Exhibit GC-A or required by Laws or Regulations). This insurance must:
 - 1. include a "loss payable provisions" endorsement naming Owner as a loss payee so that the payment of any loss will be made jointly to Owner and Environmental Remediator;

2. contain a waiver of subrogation endorsement that will waive all rights of the insurance company against Owner, any of Environmental Remediator's Subcontractors, Suppliers, or any other persons or entities that provide any services, material, equipment or labor for the Remediation;
 3. be written on an inland marine Builder's Risk "all-risk" policy form that will at least include insurance for physical loss and damage to the Remediation, temporary buildings, falsework and all materials and equipment in transit, and shall insure against at least the following perils or causes of loss: boiler explosion (through testing only), fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, water damage, and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;
 4. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
 5. cover materials and equipment intended to be incorporated in the Construction that is stored at the Site or at another location;
 6. be maintained in effect until final payment is made under this Agreement or the improvements are put to their intended use by Owner, whichever is earlier;
 7. allow Partial Utilization by Owner according to paragraph 5.09; and
 8. include an endorsement that the coverage afforded by this policy will not be canceled until at least 30 days' prior written notice has been given to Owner and Environmental Remediator.
- B. Following successful testing of any boiler or pressure vessel that is part of the Construction, Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required to protect the interests of Owner and any other individuals or entities indicated in the Supplementary Conditions. Any policy providing such insurance will contain a waiver of subrogation endorsement that will waive all rights of the insurance company against Environmental Remediator, any of Environmental Remediator's Subcontractors, Suppliers, or any other persons or entities that provide any services, material, equipment or labor for the Remediation.
- C. The risk of loss within any deductible amount under the property insurance to be purchased under this section by the respective parties will be borne by the party purchasing such insurance.

5.07 *Receipt and Application of Proceeds*

- A. Any insured loss under the policy of insurance required by paragraph 5.06.A. will be made payable to Environmental Remediator and Owner jointly, subject to the requirements of any applicable mortgage clause and of paragraph 5.07.B. The parties shall deposit in a separate account any money so received, and shall distribute it according to such agreement as the parties in interest may reach. If no agreement is

reached, the damaged Remediation will be repaired or replaced, the moneys so received applied to such repair or replacement and such rework and its costs will be covered by an appropriate Change Order.

- B. Environmental Remediator will have power to adjust and settle any loss with the insurers unless one of the parties in interest objects in writing to Environmental Remediator's authority to exercise this power within 15 days after the occurrence of such loss. If such objection is made, Environmental Remediator will make settlement with the insurers according to such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Environmental Remediator will adjust and settle the loss with the insurers and, if required in writing by any party in interest, Environmental Remediator will provide a bond for the proper performance of such duties.

5.08 *Acceptance of Bonds and Insurance; Option to Replace*

- A. If Owner or Environmental Remediator has any objection to the coverage afforded by or other provisions of the Bonds or insurance required to be purchased and maintained by the other party according to Article 5 on the basis of their not complying with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by paragraph 2.03.C. Owner and Environmental Remediator shall each provide to the other such additional information regarding the Bonds or insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the Bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Remediation, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent Bonds or insurance to protect such other party's interests at the expense of the party who was supposed to provide such coverage, and a Change Order will be issued to adjust the Contract Price accordingly.

5.09 *Partial Utilization – Property Insurance*

- A. If Owner desires to occupy or use a portion or portions of the Site subject to the Remediation prior to Substantial Completion of all the Remediation as provided in paragraph 13.06.A., no such use or occupancy will commence before the insurers providing the property insurance pursuant to paragraph 5.06 have acknowledged notice of such use or occupancy in writing by agreeing to make the necessary changes in coverage. These insurers will issue the necessary endorsements for such use or occupancy as soon thereafter as possible. The property insurance shall not be cancelled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 – ENVIRONMENTAL REMEDIATOR’S RESPONSIBILITIES

6.01 *Professional Services*

A. Standard of Care

1. The standard of care for Professional Services performed or furnished under this Agreement will be the care and skill ordinarily used by members of the Environmental Remediator’s profession practicing under similar conditions at the same time and locality.
2. Environmental Remediator makes no representation, or warranty or guarantee, express or implied, including without limitation the implied at law warranties of merchantability and fitness for a particular purpose, as to its findings, recommendations, plans, Specifications, Drawings, or professional judgment or advice except as provided in paragraph 6.01.A.1.
3. Owner acknowledges that compliance with the standard of care is not an assurance that all risks applicable to Owner in connection with the Project have been identified and managed.
4. General Scope of Professional Services: (not used)

6.02 *Supervision and Superintendence of Construction*

- A. Environmental Remediator shall supervise, inspect and direct any Construction competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to provide the Construction in accordance with the Contract Documents. Environmental Remediator shall be solely responsible for the means, methods, techniques, sequences and procedures employed by it to perform Construction. The means, methods, techniques, sequences and procedures employed by Owner or other contractors pursuant to Article 7 are the sole responsibility of the performing party. Environmental Remediator shall be responsible to see that the completed Construction conforms with the Contract Documents and shall keep Owner advised as to the quality and progress of the Construction.
- B. At all times during progress of Construction, the Environmental Remediator shall assign a qualified resident superintendent, who shall not be replaced without written notice to Owner except under extraordinary circumstances. The superintendent will be Environmental Remediator’s representative at the Site and shall have authority to act on behalf of Environmental Remediator. All communications given to or received from the superintendent shall be as binding on Environmental Remediator.

6.03 *Labor; Working Hours*

- A. Environmental Remediator shall provide suitably qualified personnel to perform the Construction as required by the Contract Documents. Environmental Remediator shall at all times maintain good discipline and order at the Site.

- B. Except as required for the safety or protection of persons or property at or adjacent to the Site, and except as otherwise indicated in the Contract Documents, all Construction at the Site shall be performed during regular working hours, and Environmental Remediator will not permit overtime work or the performance of Construction on Saturday, Sunday or any legal holiday without Owner's written consent, which will not be unreasonably withheld.

6.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Environmental Remediator shall furnish or cause to be furnished and assume full responsibility for materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the Construction.
- B. All materials and equipment incorporated into the Construction shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Contract Documents shall expressly run to the benefit of Owner. If reasonably required by Owner, Environmental Remediator shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with instructions of the applicable Supplier, except as otherwise provided in the Contract Documents.

6.05 *Progress Schedule*

- A. Environmental Remediator shall adhere to the progress schedule established in accordance with paragraph 2.06.A as it may be adjusted from time to time.
- B. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 11. Such adjustments may only be made by a Change Order.

6.06 *Concerning Subcontractors, Suppliers and Others*

- A. Environmental Remediator shall not contract with any Subcontractor, Supplier or other individual or entity against whom Owner may have reasonable objection. Environmental Remediator shall not be required to contract with any Subcontractor, Supplier or other individual or entity to furnish or perform any of the Remediation against whom Environmental Remediator has reasonable objection.
- B. Environmental Remediator shall be fully responsible to Owner for all acts and omissions of Subcontractors, Engineers, Suppliers and other individuals or entities performing or furnishing any of the Remediation just as Environmental Remediator is responsible for Environmental Remediator's own acts or omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier or other individual or entity any contractual relationship between Owner and any such

Subcontractor, Supplier or other individual or entity, nor shall it create any obligation on the part of Owner to pay or to see to the payment of any moneys due any such Subcontractor, Engineer, Supplier or other individual or entity except as may otherwise be required by Laws and Regulations.

- C. Environmental Remediator shall be solely responsible for scheduling and coordinating Subcontractors, Suppliers and other individuals and entities performing or furnishing any of the Remediation under a direct or indirect contract with Environmental Remediator.
- D. Environmental Remediator shall require all Subcontractors, Suppliers and such other individuals and entities performing or furnishing any of the Remediation to communicate with the Owner through Environmental Remediator.
- E. All Remediation performed for Environmental Remediator by a Subcontractor or Supplier will be pursuant to an appropriate written subagreement between Environmental Remediator and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner.

6.07 *Patent Fees and Royalties*

- A. Environmental Remediator shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Remediation or the incorporation in the Remediation of any invention, design process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design process, product or device is specified in the Conceptual Documents for use in the performance of the Construction and if to the actual knowledge of Owner its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Conceptual Documents.
- B. To the fullest extent permitted by Laws or Regulations, Environmental Remediator shall indemnify and hold harmless Owner and Owner's Consultant, and the officers, directors, partners, employees, agents, and other consultants of each and any of them from and against all claims, costs, losses and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising out of or resulting from any infringement of patent rights or copyrights incident to the use in the performance of the Remediation or resulting from the incorporation in the Remediation of any invention, design, process, product or device not identified in the Conceptual Documents.
- C. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Indemnitees, from and against all claims, costs, losses and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising out of or resulting from any infringement of patent rights or copyrights incident to the

use in the performance of the Remediation or resulting from the incorporation in the Remediation of any invention, design process, product or device required by the Conceptual Documents.

6.08 *Permits*

- A. Environmental Remediator shall obtain and pay for those permits, approvals, certifications and licenses of governmental authorities having jurisdiction over the Remediation, specifically described and identified as Environmental Remediator's responsibility in the Contract Documents. Owner shall assist Environmental Remediator in obtaining such permits, approvals, certifications and licenses.
- B. Owner shall be responsible to obtain and pay for all required permits, approvals, certifications, licenses, utility charges, governmental charges and inspections that are not specifically identified in the Contract Documents as the Environmental Remediator's responsibility. Environmental Remediator shall assist Owner in obtaining such permits, approvals, certifications and licenses.

6.09 *Laws and Regulations*

- A. Except as provided in paragraph 4.02.D, Environmental Remediator shall give all notices and comply with all Laws or Regulations applicable to performance of the Construction. Except where otherwise expressly required by applicable Laws and Regulations or the Contract Documents, Owner shall not be responsible for monitoring Environmental Remediator's compliance with any Laws or Regulations relating to Construction.
- B. If Environmental Remediator performs any Construction knowing or having reason to know that it is contrary to Laws or Regulations, Environmental Remediator shall bear all costs arising therefrom.
- C. Changes in Laws and Regulations not in effect on the date of receipt of Proposals having an effect on the cost or time of performance may be the subject of a change in Contract Price or Contract Times.

6.10 *Taxes*

- A. Environmental Remediator shall pay all sales, consumer, use, gross receipts and other similar taxes required to be paid by Environmental Remediator in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Remediation.

6.11 *Use of Site and Other Areas*

- A. Limitation on Use of Site and Other Areas.
 - 1. Environmental Remediator shall confine construction equipment, the storage of materials and equipment, and the operations of construction workers to the Site

and areas permitted by Laws and Regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Environmental Remediator shall assume full responsibility for any damage to any such land or area incurred by any person or entity other than Owner, or to the owner or occupant thereof or of any adjacent land or areas, resulting from the performance of the Remediation.

2. Should any claim be made by any such owner or occupant that it has suffered damages solely because of the performance of the Remediation, Environmental Remediator shall promptly take reasonable action to settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
- B. Environmental Remediator shall manage accumulations of materials and rubbish related to on-site investigations and Construction, subject to Owner's responsibilities for materials and rubbish that may be contaminated during the performance of the Remediation.

6.12 *Record Documents*

- A. Environmental Remediator shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Change Directives and Field Orders, in good order and annotated to show changes made during performance of the Remediation. These record documents together with all approved Submittals will be available to Owner for reference. Upon completion of the Remediation, these record documents and Submittals, including a reproducible set of record Drawings, will be delivered to Owner.

6.13 *Safety and Protection*

- A. Environmental Remediator shall maintain a safe working environment during performance of the Remediation. Environmental Remediator shall comply, and shall secure compliance by its employees, agents, and Subcontractors, with all applicable health and safety laws and regulations, including without limitation, Federal OSHA (and specifically including 29 CFR 1910.120 and 1926.65) and equivalent Laws and Regulations.
- B. Environmental Remediator shall prepare and implement its own Project health and safety plan, based on its health and safety program and all written programs required by Federal, State and local regulations and shall bear responsibility for the completeness and accuracy of the plan. Environmental Remediator's health and safety plan and required documentation shall be available at the Site for review by Owner, Subcontractors and regulatory personnel.

- C. Environmental Remediator shall consider the requirements of any applicable site safety plan prepared by Owner when developing Environmental Remediator's health and safety plans.
- D. Environmental Remediator shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Construction. Environmental Remediator shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
 - 1. all persons on the Site or who may be affected by the Remediation;
 - 2. all Construction and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at or adjacent to the Site, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities not designated for removal, relocation or replacement in the course of Construction.
- E. Environmental Remediator shall comply with applicable Laws or Regulations relating to safety of persons or property or to the protection of persons or property from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Environmental Remediator shall notify owners of adjacent property and of underground facilities and utility owners when performance of the Remediation may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property.
- F. All damage, injury or loss to any property referred to in paragraph 6.13.D.2 or 6.13.D.3 caused, directly or indirectly, in whole or in part, by Environmental Remediator, any Subcontractor, Supplier or any other individual or entity directly or indirectly employed by any of them to perform or furnish any of the Remediation or anyone for whose acts any of them may be liable, shall be remedied by Environmental Remediator; provided that nothing in this paragraph shall waive or otherwise limit any claim that Environmental Remediator may have for contribution, indemnification, reimbursement or additional compensation.
- G. Environmental Remediator's duties and responsibilities for safety and for protection of the Construction shall continue until such time as all the Remediation is completed and Owner has issued a notice to Environmental Remediator in accordance with paragraph 13.08.B. that the Remediation is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

- A. Environmental Remediator shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs associated with Environmental Remediator's activities at the Site. Nothing in this Agreement requires Environmental Remediator to assume or perform accident

prevention or safety responsibilities in connection with activities or operations of Owner or other entities operating at the Site.

6.15 *Hazard Communication Programs*

- A. Environmental Remediator shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Remediation or property at or adjacent to the Site, Environmental Remediator is obligated to act to prevent threatened damage, injury or loss. Environmental Remediator shall give Owner prompt written notice if Environmental Remediator believes that any significant changes in the Remediation or variations from the Contract Documents have been caused thereby or are required as a result thereof. If a change in the Contract Documents is required because of the action taken by Environmental Remediator in response to such an emergency, a Change Directive or Change Order will be issued.

6.17 *Submittals*

- A. Owner will review and approve Submittals in accordance with the schedule of required Submittals accepted by Owner as required by paragraph 2.06.A. Owner's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Construction, conform to the information given in the Contract Documents and be compatible with the Remediation concept of the completed Project as a functioning whole as indicated by the Contract Documents. Owner's review and approval will not extend to means, methods, techniques, sequences or procedures of Construction (except where a particular means, method, technique, sequence or procedure of Construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- B. Owner's review and approval of required Submittals shall not relieve Environmental Remediator from responsibility for any variation from the requirements of the Contract Documents unless Environmental Remediator has in a separate written communication at the time of submission called Owner's attention to each such variation and Owner has given written approval.
- C. Construction prior to Owner's review and approval of any required Submittal will be at the sole risk of Environmental Remediator.

6.18 *Continuing the Remediation*

- A. Except as expressly permitted by paragraphs 6.18.B and 14.04.A, Environmental Remediator shall carry on the Remediation and adhere to the progress schedule during all disputes or disagreements with Owner. No Remediation shall be delayed or postponed pending resolution of any disputes or disagreements, except as Environmental Remediator and Owner may otherwise agree in writing.
- B. Environmental Remediator may suspend operations if a dispute or disagreement relates to work that must be performed before additional work can be performed to the extent necessary to protect public health and safety or the environment, or as otherwise authorized in the Contract Documents.

6.19 *Environmental Remediator's General Warranty and Guarantee*

- A. Environmental Remediator warrants to Owner that all Construction will be according to the Contract Documents and will not be defective. However, these warranties cover equipment, accessories and parts manufactured by others only to the extent of liability to Environmental Remediator on the part of their manufacturer. Any warranty obtained by Environmental Remediator from any such manufacturer will be deemed to have been obtained for the benefit of Owner. The foregoing warranties are in lieu of all other warranties, express or implied, including but not limited to, the implied warranties of merchantability and fitness for purpose. Environmental Remediator's warranties exclude defects or damage caused by:
 - 1. abuse, modification, improper or inadequate maintenance, or improper operation by persons other than Environmental Remediator, Subcontractors or Suppliers or any other individual for whom Environmental Remediator is responsible; or
 - 2. normal wear and tear under normal usage.
- B. Owner acknowledges that completion of the Remediation in accordance with the Contract Documents may not constitute all necessary remedial activities. While it is the intent of the Owner and Environmental Remediator to avoid its occurrence, continued, additional or other remedial action may be required by Owner after the completion of the planned Remediation. For example, Owner may remain responsible by law for Contaminants which are not the subject of the Remediation or contaminated residuals resulting from the Remediation. Varying characteristics of the Contaminants may require in-progress modifications to the intended Construction to achieve the intended objective(s) of the Remediation. Therefore, Environmental Remediator makes no representation, or warranty or guarantee, express or implied, that the Remediation will result in a complete resolution for Owner of responsibilities and liabilities for Contaminants and their residuals associated with the Site, or that the Site will become completely free of all Contaminants or fit for all uses.

- C. None of the following will constitute an acceptance of Remediation that is not in accordance with the Contract Documents or a release of Environmental Remediator's obligation to perform the Remediation in accordance with the Contract Documents:
1. observations by Owner, Owner's Representative, Owner's Consultant or others;
 2. the making of any progress or final payment;
 3. the issuance of a certificate of Substantial Completion;
 4. use or occupancy of the Site or any part thereof by Owner;
 5. any review or approval of a Submittal;
 6. any inspection, test or approval by others; or
 7. any correction of defective Construction by Owner.

6.20 *Indemnification*

- A. To the fullest extent permitted by Laws or Regulations, Environmental Remediator shall indemnify and hold harmless Owner, Owner's Representative, Owner's Consultant, the officers, directors, partners, and employees, agents, other consultants and subcontractors of each from and against all claims, costs, losses and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising out of or resulting from the failure of Environmental Remediator to meet the standard of care as described in paragraph 6.01.A for its Professional Services, or for its negligent acts or omissions during performance of Construction, provided that: (1) any such claim, cost, loss or damage is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Construction itself); and (2) such obligation shall apply only to the extent such claim, cost, loss or damage is caused by any negligent act or omission of Environmental Remediator or any of its Subcontractors, Engineers, Suppliers, or any other individual or entity for whose acts Environmental Remediator is liable at common law.
- B. In any and all claims against Owner, Owner's Representative, Owner's Consultant or any of their respective consultants, agents, officers, directors, partners or employees by any employee (or the survivor or personal representative of such employee) of Environmental Remediator or any of its Subcontractors, Suppliers, or any other individual or entity for whose acts Environmental Remediator is liable at common law, the indemnification obligation under paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for Environmental Remediator or any such Subcontractor, Engineer, Supplier or other individual or entity under workers' compensation acts, disability benefit acts or other employee benefit acts.

ARTICLE 7 – OTHER CONSTRUCTION

7.01 *Related Remediation at Site*

- A. Owner may perform other work related to the Project at the Site by Owner's employees, or let other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:
1. written notice thereof will be given to Environmental Remediator prior to starting any such other work; and
 2. Environmental Remediator may make a claim therefor as provided in Article 9 if Environmental Remediator believes that such performance will involve additional expense to Environmental Remediator or require additional time and the parties are unable to agree as to the amount or extent thereof.
- B. Environmental Remediator shall afford each other contractor who is a party to such a direct contract and each utility owner (and Owner, if Owner is performing the additional work with Owner's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other Remediation and shall properly connect and coordinate the Construction with theirs. Unless otherwise provided in the Contract Documents, Environmental Remediator shall do all cutting, fitting and patching of the Construction that may be required to make its several parts come together properly and integrate with such other Remediation. Environmental Remediator shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of Owner and the others whose Construction will be affected. The duties and responsibilities of Environmental Remediator under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Environmental Remediator in said direct contracts between Owner and such utility owners and other contractors.
- C. If the proper execution or results of any part of the Remediation depends upon work performed or services provided by others under this Article 7, Environmental Remediator shall inspect such other work and appropriate instruments of service and promptly report to Owner in writing any delays, defects or deficiencies in such other work or services that render it unavailable or unsuitable for the proper execution and results of the Remediation. Environmental Remediator's failure so to report will constitute an acceptance of such other work as fit and proper for integration with the Remediation except for latent defects and deficiencies in such other work.

7.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified;
 2. the specific matters to be covered by such authority and responsibility will be itemized; and
 3. the extent of such authority and responsibility will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility in respect of such coordination.

ARTICLE 8 – OWNER’S RESPONSIBILITIES

8.01 General

- A. Owner shall do the following in a timely manner so as not to delay the services of Environmental Remediator:
1. designate in writing persons to act as Owner’s Representative and/or Owner’s Consultant with respect to the services to be rendered under this Agreement. Such person or persons shall have complete authority to transmit instructions, receive information, interpret and define Owner’s policies, make decisions with respect to performance of the Remediation, and shall provide such other services as may be agreed upon;
 2. provide such legal services as Owner may require with regard to legal issues pertaining to the Project, including any that may be raised by Environmental Remediator;
 3. if requested in writing by Environmental Remediator, furnish reasonable evidence satisfactory to Environmental Remediator, that sufficient funds are available and committed for the entire cost of the Project. Unless such reasonable evidence is furnished, Environmental Remediator is not required to commence or continue any Remediation, or may, if such evidence is not presented within a reasonable time, suspend Remediation upon 15 days notice to the Owner;
 4. make payments to Environmental Remediator promptly when they are due as provided in paragraphs 13.03 and 13.08;
 5. furnish lands and easements as set forth in paragraph 4.01.A;
 6. take appropriate action regarding permits pursuant to paragraph 6.08.
 7. furnish to Environmental Remediator, as required for performance of Environmental Remediator’s Services the following, all of which Environmental Remediator may use and rely upon in performing services under this Agreement:
 - a. environmental assessment and impact statements;

- b. property, boundary, easement, right-of-way, topographic and utility surveys;
 - c. property descriptions;
 - d. zoning, deed and other land use restrictions;
 - e. engineering surveys to establish reference points for Remediation that are necessary to enable Environmental Remediator to proceed with the Remediation;
 - f. assistance to Environmental Remediator in filing documents required to obtain necessary permits, licenses, and approvals of governmental authorities having jurisdiction over the Project;
 - g. permits, licenses, and approvals of government authorities which Owner is specifically required to obtain by the Contract Documents;
 - h. all subsurface data at or contiguous to the Site which Owner may have obtained;
 - i. information required to be provided by Owner under Laws or Regulations, including but not limited to all applicable OSHA regulations (specifically including 29 CFR 1910.120(b)(1)(iv) and 1926.65(b)(1)(iv)); and
 - j. such other data, analyses and other information in the Owner's possession or control that may assist Environmental Remediator in performing its obligations under the Contract Documents.
8. review submittals subject to Owner review pursuant to paragraph 6.17.A;
9. provide information known to or in the possession of Owner relating to the presence of Contaminants;
10. as the person or entity with legal title to the Contaminants, have a representative available to sign all contracts, certifications, manifests, and all other documents associated with arranging for all transportation, treatment and disposal, or handling of Contaminants, identified in the Contract Documents or encountered on the Site by Environmental Remediator in connection with performance of the Remediation, including investigation derived wastes;
11. in jurisdictions where legal or statutory title remains with the Owner, Owner may authorize Environmental Remediator to sign Hazardous Wastes manifests and other shipping documents as an agent for Owner, by signing "On behalf of (Owner's Name)," for the purpose of expediting off-site transportation of Contaminants;
12. unless otherwise required by Laws and Regulations or set forth in the Contract Documents, accurately locate, horizontally and vertically, and prominently mark

any buried or concealed pipes, tanks, cables, utilities, or other manmade obstructions that may affect or be affected by Environmental Remediator's services. Environmental Remediator shall be entitled to rely on such information; and

13. report to the appropriate Federal, state, or local public agencies, as required, any conditions at the Site that may present a potential danger to public health, safety, or the environment.

8.02 *Insurance*

- A. Owner's responsibilities to purchase and maintain liability and property insurance are set forth in Article 5.

8.03 *Limitations on Owner's Responsibilities*

- A. Owner shall not supervise, direct or have control or authority over, nor be responsible for, Environmental Remediator's means, methods, techniques, sequences or procedures of Construction or the safety precautions and programs incident thereto, or for any failure of Environmental Remediator to comply with Laws or Regulations applicable to the furnishing or performance of the Remediation. Owner will not be responsible for Environmental Remediator's failure to perform or furnish the Remediation in accordance with the Contract Documents.

8.04 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility with respect of undisclosed Contaminants and existing conditions uncovered or revealed at the Site is set forth in paragraph 4.04.

8.05 *Resident Project Representation*

- A. Owner may furnish a Resident Project Representative, Owner's representative and/or Owner's Consultant to observe the performance of Construction. The duties, responsibilities and limitations of authority of any such Resident Project Representative and assistants will be as provided in the Contract Documents.

ARTICLE 9 – CHANGES IN THE REMEDIATION; CLAIMS

9.01 *Authorized Changes in the Remediation*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions or revisions in the Remediation within the general scope of the Contract by a Change Order or a Change Directive. Upon receipt of any such document, Environmental Remediator shall promptly proceed with the Remediation involved which will be performed under the applicable provisions of the Contract Documents (except as otherwise specifically provided). However, Owner does not have the right to order additions or revisions which would require Environmental Remediator to deal with Contaminants, contaminated areas, or

contaminated resources not disclosed in the Contract Documents in existence as of the date of receipt of Proposals.

9.02 *Unauthorized Changes in the Remediation*

- A. Environmental Remediator will not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any Remediation performed that is not required by the Contract Documents as they may be amended as provided in paragraph 3.04, except in the case of an emergency as provided in paragraph 6.16 or in the case of uncovering Construction as provided in paragraph 12.04.

9.03 *Claims*

- A. If Owner and Environmental Remediator are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or an adjustment of the Contract Times or both, that should be allowed as a result of any order of Owner pursuant to paragraph 9.01.A or other occurrence for which the Contract Documents provide that such adjustment(s) may be made, a Claim may be made therefor. Written notice of intent to make such a claim will be submitted to the other party promptly and in no event more than 15 days after the start of the occurrence or event giving rise to the Claim.
- B. Substantiating documentation shall be submitted by the claiming party within 30 days after delivery of the notice required by paragraph 9.03.A.
- C. If Environmental Remediator has given notice of claim pursuant to paragraph 9.03.A., Owner shall render a decision on the claim not more than 30 days after the receipt of the substantiating documentation required by paragraph 9.03.B. This decision will be final and binding unless Environmental Remediator gives notice of intention to exercise its rights under Article 15 within 30 days of receipt of the decision and exercises such rights within 30 days of giving the notice of intent.
- D. If Owner has given the notice of claim pursuant to paragraph 9.03.A., Environmental Remediator shall render a decision on the claim not more than 60 days after the receipt of the substantiating documentation required by paragraph 9.03.B. This decision will be final and binding unless Owner gives notice of intention to exercise its rights under Article 15 within 30 days of receipt of the decision and exercises such rights within 30 days of giving the notice of intent.
- E. The time limits of paragraphs 9.03.B, C and D may be extended by mutual agreement.

9.04 *Execution of Change Orders*

- A. Owner and Environmental Remediator shall execute appropriate Change Orders covering changes in:
 - 1. the Remediation which are (a) ordered by Owner under paragraph 9.01, (b) required because of acceptance of defective Construction under paragraph 12.08

or Owner's correction of defective Construction under paragraph 12.09 or (c) agreed to by the parties; and

2. the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Remediation actually performed in accordance with a Change Directive.

9.05 *Notice to Sureties (not used)*

ARTICLE 10 – COST OF REMEDIATION; CASH ALLOWANCES; UNIT PRICE WORK

10.01 *Cost of the Remediation*

A. **Costs Included:** The term Cost of the Remediation means the sum of all costs necessarily incurred and paid by Environmental Remediator in the proper performance of the Remediation. When the value of any Remediation covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Remediation, the cost to be reimbursed to Environmental Remediator will be only those additional or incremental costs required because of the Change in the Remediation or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, include only the following items, and shall not include any of the costs itemized in paragraph 10.01.B:

1. payroll costs for employees in the direct employ of Environmental Remediator in the performance of the Remediation under schedules of job classifications agreed upon by Owner and Environmental Remediator.
 - a. Such employees will include without limitation superintendents, foremen and other personnel employed full-time at the Site. Payroll costs for employees not employed full-time on the Site will be apportioned on the basis of their time spent on the Site. Payroll costs will include, but not be limited to, salaries and wages plus the cost of fringe benefits which will include social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and any applicable holiday pay. The expenses of performing Remediation after regular working hours, on Saturday, Sunday or legal holidays, will be included in the above costs to the extent authorized by Owner.
 - b. Such employees will also include engineers, engineering technicians, architects, and others providing Design Professional Services. For purposes of this paragraph 10.01.A.1, Environmental Remediator will be entitled to payment for such employees an amount equal to salary costs times a factor, both as designated in the Agreement, for all services performed or furnished by such employees engaged on the Project.
2. cost of all materials and equipment furnished and incorporated in the Remediation, including costs of their transportation and storage and Suppliers' field services

required in connection with them. All cash discounts will accrue to Environmental Remediator unless Owner deposits funds with Environmental Remediator with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Environmental Remediator will make provisions so that they may be obtained.

3. payments made by Environmental Remediator to Subcontractors (excluding payments for Design Professional Services pursuant to paragraph 10.01.A.4) for Remediation performed or furnished by Subcontractors. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of Construction plus a fee, the Subcontractor's cost of the Construction Remediation and fee shall be determined in the same manner as Environmental Remediator's Cost of Remediation and fee.
4. payments made by Environmental Remediator for Professional Services
5. costs of special consultants (including but not limited to testing laboratories, surveyors, attorneys and accountants) employed for services specifically related to the Remediation.
6. supplemental costs, including the following items:
 - a. the proportion of necessary transportation, travel and subsistence expenses of Environmental Remediator's employees incurred in discharging duties connected with the Remediation.
 - b. cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the Site and hand tools not owned by the workers, which are consumed in performing the Remediation, and cost, less market value of such items used but not consumed which remain the property of Environmental Remediator.
 - c. rentals of all equipment and machinery and their parts, whether rented from Environmental Remediator or others according to rental agreements approved by Owner, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery or parts will cease when their use is no longer necessary for the Remediation.
 - d. sales, consumer, use or similar taxes related to the Remediation, for which Environmental Remediator is liable, imposed by Laws or Regulations.
 - e. deposits lost for causes other than negligence of Environmental Remediator, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

- f. losses, damages and related expenses caused by damage to the Remediation not compensated by insurance or otherwise, sustained by Environmental Remediator in connection with the furnishing and performance of the Remediation provided they have resulted from causes other than the negligence of Environmental Remediator, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages and expenses will be included in the Cost of the Remediation for the purpose of determining Environmental Remediator's fee.
 - g. the cost of utilities, fuel and sanitary facilities at the Site.
 - h. minor expenses such as long distance telephone calls, telephone service at the Site, expressage and similar petty cash items in connection with the Remediation.
 - i. cost of premiums for all Bonds and insurance that Environmental Remediator is required to purchase and maintain.
- B. Costs Excluded: The term Cost of the Remediation will not include any of the following:
- 1. payroll costs and other compensation of Environmental Remediator's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by Environmental Remediator whether at the Site or in Environmental Remediator's principal or a branch office for general administration of the Remediation and not specifically included in the agreed-upon schedule of job classifications referred to in paragraph 10.01.A.1, all of which are to be considered administrative costs covered by the Environmental Remediator's fee.
 - 2. expenses of Environmental Remediator's principal and branch offices other than Environmental Remediator's office at the Site.
 - 3. any part of Environmental Remediator's capital expenses, including interest on Environmental Remediator's capital employed for the Remediation and charges against Environmental Remediator for delinquent payments.
 - 4. costs due to the negligence of Environmental Remediator, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to the correction of defective Remediation, disposal of materials or equipment wrongly supplied and making good any damage to property.
 - 5. other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 10.01.A.

- C. Environmental Remediator's Fee: When the value of the Remediation covered by a Change Order is determined on the basis of Cost of the Remediation, Environmental Remediator's fee shall be determined as set forth in paragraph 11.01.C.
- D. Documentation: Whenever the cost of any Remediation is to be determined under paragraphs 10.01.A and 10.01.B, Environmental Remediator will establish and maintain records of such costs according to generally accepted accounting practices and submit in a form acceptable to Owner an itemized cost breakdown together with supporting data.

10.02 *Cash Allowances*

- A. The Contract Price includes all allowances so named in the Contract Documents. Environmental Remediator shall cause the Remediation so covered to be performed for such sums as may be acceptable to Owner. Environmental Remediator agrees that:
 - 1. the allowances include the cost to Environmental Remediator (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - 2. except as set forth in the Contract Documents, Environmental Remediator's costs for unloading and handling on the Site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances and no demand for additional payment on account of any of the foregoing will be valid.
- B. Prior to final payment, an appropriate Change Order will be issued to reflect actual amounts due Environmental Remediator on account of Remediation covered by allowances, and the Contract Price shall be correspondingly adjusted.

10.03 *Unit Prices*

- A. Where the Contract Documents provide that all or part of the Remediation is to be paid on the basis of Unit Prices, initially the Contract Price will be deemed to include for all of the Unit Price Remediation an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Remediation times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Remediation are not guaranteed and are solely for the purpose of comparison of Proposals or determining an initial Contract Price, or both.
- C. Determinations of the actual quantities and classifications of Unit Price Remediation performed by Environmental Remediator will be made by Owner.
- D. Each unit price will be deemed to include an amount considered by Environmental Remediator to be adequate to cover Environmental Remediator's overhead and profit for each separately identified item.

- E. The unit price of an item of Unit Price Remediation may be subject to adjustment if:
 - 1. the total estimated cost of a particular item of Unit Price Remediation as stated in the Agreement amounts to 10 percent or more of the initial Contract Price; and
 - 2. the actual quantity of that particular item of Unit Price Remediation performed by Environmental Remediator differs by more than 15 percent from the estimated quantity of such item indicated in the Agreement; and
 - 3. Environmental Remediator believes that Environmental Remediator is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price.
- F. If the parties are unable to agree as to the amount of any increase or decrease, then either party may make a claim according to Article 9.

ARTICLE 11 – CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

11.01 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice delivered by the party making the Claim to the other party promptly in accordance with paragraph 9.03.A.
- B. The value of any Remediation covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
 - 1. where the Remediation involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of paragraph 10.03); or
 - 2. where the Remediation involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 11.01.C.2); or
 - 3. where the Remediation involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 11.01.B.2, on the basis of the Cost of the Remediation (determined as provided in paragraph 10.01) plus a Environmental Remediator's Fee for overhead and profit (determined as provided in paragraph 11.01.C).
- C. Environmental Remediator's Fee: The Environmental Remediator's fee for overhead and profit on Change Orders shall be determined as follows:
 - 1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Remediation:
 - a. for costs incurred under paragraphs 10.01.A.1 and 10.01.A.2, the Environmental Remediator's fee shall be 15 percent;
 - b. for costs incurred under paragraph 10.01.A.3, 10.01.A.4, 10.01.A.5 and 10.01.A.6, the Environmental Remediator's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Remediation plus a fee and no fixed fee is agreed upon, the intent of paragraphs 11.01.C.1 and 11.01.C.2.a is that the Subcontractor who actually performs or furnishes Remediation, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under paragraphs 10.01.A.1 and 10.01.A.2 and that any higher tier Subcontractor and Environmental Remediator will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;
 - d. the amount of credit to be allowed by Environmental Remediator to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Environmental Remediator's fee by an amount equal to five percent of such net decrease; and
 - e. when both additions and credits are involved in any one change, the adjustment in Environmental Remediator's fee shall be computed on the basis of the net change in accordance with paragraphs 11.01.C.2.a through 11.01.C.2.d, inclusive.

11.02 *Change of Contract Times*

- A. The Contract Times (or Milestones) may only be changed by a Change Order. Any claim for an adjustment of the Contract Times (or Milestones) will be based on written notice under paragraph 9.03.A.
- B. If Environmental Remediator is delayed in the performance or progress of the Remediation by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Environmental Remediator, then Environmental Remediator shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Environmental Remediator's ability to complete the Remediation within the Contract Times. Such an adjustment shall be Environmental Remediator's sole and exclusive remedy for the delays described in this paragraph 11.02.B.
- C. If Owner or other contractor or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Remediation, then Environmental Remediator shall be entitled to an equitable adjustment in the Contract

Price or the Contract Times, or both. Environmental Remediator's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Environmental Remediator's ability to complete the Remediation within the Contract Times.

- D. Owner, Owner's Representative and Owner's Consultant shall not be liable to Environmental Remediator for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Environmental Remediator on or in connection with any other project or anticipated project.
- E. Environmental Remediator shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Environmental Remediator. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Environmental Remediator.

ARTICLE 12 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE CONSTRUCTION

12.01 Notice of Defects

- A. Owner shall give Environmental Remediator prompt written notice of all defective Construction of which Owner has actual knowledge. All defective Construction may be rejected, corrected or accepted as provided in this Article 12.

12.02 Access to Construction

- A. Owner, Owner's Representative, Owner's Consultants, other representatives and personnel of Owner, independent testing laboratories and governmental agencies with jurisdictional interests will have access to the Site and Construction at reasonable times for their observation, inspecting and testing. Environmental Remediator shall provide them proper and safe conditions for such access and advise them of Environmental Remediator's Site safety procedures and programs so that they may comply with them.

12.03 Tests and Inspections

- A. If the Contract Documents or Laws or Regulations of any public body having jurisdiction require any part of the Construction specifically to be inspected, tested or approved, Environmental Remediator shall assume full responsibility for arranging and obtaining such inspections, tests or approvals, pay all their costs, and furnish Owner the required certificates of inspection, testing or approval.
- B. Environmental Remediator shall also be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests or approvals required by the Contract Documents for Owner's acceptance of materials or equipment to be incorporated in the Construction or of materials, mix designs, or equipment submitted

for approval prior to Environmental Remediator's purchase of them for incorporation in the Construction.

- C. Environmental Remediator shall give Owner reasonable notice of the planned schedule for all required inspections, tests or approvals.
- D. If any Construction (or the construction work of others) that is required to be inspected, tested or approved is covered by Environmental Remediator without written concurrence of Owner, it must, if requested by Owner, be uncovered for observation. Environmental Remediator shall be responsible for Uncovering Costs unless Environmental Remediator has given Owner timely written notice of Environmental Remediator's intention to cover it and Owner has not acted with reasonable promptness in response to such notice.

12.04 *Uncovering Construction*

- A. If any Construction is covered contrary to the written request of Owner, it must, if requested by Owner, be uncovered for Owner's observation and recovered at Environmental Remediator's expense.
- B. If Owner considers it necessary or advisable that covered Construction be observed by Owner or inspected or tested by others, Environmental Remediator, at Owner's request, shall uncover, expose or otherwise make available for observation, inspection or testing as Owner may require, that portion of the Construction in question, furnishing all necessary labor, material and equipment.
 - 1. If it is found that such Construction is defective:
 - a. Environmental Remediator shall be responsible for Uncovering Costs, and
 - b. Owner shall be entitled to an appropriate decrease in the Contract Price.
 - 2. If it is found that such Construction is not defective, Environmental Remediator will be allowed an increase in the Contract Price for the resulting Uncovering Costs or an extension of the Contract Times (or Milestones), or both.
 - 3. If the parties are unable to agree as to the amount or extent of Uncovering Costs, Environmental Remediator or Owner may make a claim therefor as provided in Article 9.

12.05 *Owner May Stop the Construction*

- A. If the Construction is defective, or Environmental Remediator fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Construction in such a way that the completed Construction will conform to the Contract Documents, Owner may order Environmental Remediator to stop any or all of the Construction, until the cause for such order has been eliminated; however, this right of Owner to stop Construction will not give rise to any duty on the part of

Owner to exercise this right for the benefit of Environmental Remediator or any other party.

12.06 *Correction or Removal of Defective Construction*

- A. Owner will have authority to disapprove or reject defective Construction and will have authority to require special inspection or testing of the Construction whether or not the Construction is fabricated, installed or completed. If required by Owner, Environmental Remediator shall promptly, as directed, either correct all defective Construction, whether or not fabricated, installed or completed, or, if the Construction has been rejected by Owner, remove it from the Site and replace it with nondefective Construction. Environmental Remediator shall bear all direct costs of such correction or removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby.

12.07 *Correction Period*

- A. If within one year after the date of Substantial Completion of the entire Remediation or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents, any Construction is found to be defective, Environmental Remediator shall promptly, without cost to Owner and according to Owner's written instructions, (1) correct such defective Construction, or, if it has been rejected by Owner, remove it from the Site and replace it with Construction that is not defective, and (2) satisfactorily correct or remove and replace any damage to other Construction or the work of others resulting from such defective Construction. If Environmental Remediator does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Construction corrected or the rejected Construction removed and replaced, and all direct costs, losses, and damages caused by or resulting from such removal and replacement (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals, all court or arbitration or other dispute resolution costs, and all costs of repair or replacement of work of others) will be paid by Environmental Remediator.
- B. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Remediation, the correction period for that item may start to run from an earlier date if so provided in the Conceptual Documents.
- C. Where defective Construction (and damage to other Construction resulting therefrom) has been corrected, removed or replaced under this paragraph 12.07, the correction period hereunder with respect to corrected Construction will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

12.08 *Acceptance of Defective Construction*

- A. If, instead of requiring correction or removal and replacement of defective Construction, Owner prefers to accept it, Owner may do so. Environmental Remediator shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Construction. If any such acceptance occurs prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents, and Owner will be entitled to an appropriate decrease in the Contract Price reflecting the diminished value of the Construction so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a claim therefor as provided in Article 9. If the acceptance occurs after final payment, an appropriate amount will be paid by Environmental Remediator to Owner.

12.09 *Owner May Correct Defective Construction*

- A. If Environmental Remediator fails within a reasonable time after written notice from Owner to correct defective Construction or to remove and replace rejected Construction as required by Owner according to paragraphs 12.06.A or 12.07.A, or if Environmental Remediator fails to perform the Construction according to the Contract Documents, or if Environmental Remediator fails to comply with any other provision of the Contract Documents, Owner may, after seven days' written notice to Environmental Remediator, correct and remedy any such deficiency.
- B. In exercising the rights and remedies under this paragraph 12.09 Owner shall proceed expeditiously. In connection with such corrective and remedial action, Owner may exclude Environmental Remediator from all or part of the Site, take possession of all or part of the Construction, and suspend Environmental Remediator's services related to that Construction, and incorporate in the Construction all materials and equipment stored at the Site or for which Owner has paid Environmental Remediator but which are stored elsewhere. Environmental Remediator shall allow Owner, Owner's Representatives, agents and employees, and other contractors access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All costs, losses, and damages (including but not limited to fees and charges of engineers, architects, attorneys and other professionals, all court or arbitration or other dispute resolution costs and all costs of repair or replacement of work of others) incurred or sustained by Owner in exercising such rights and remedies under this paragraph 12.09 will be charged against Environmental Remediator and a Change Order will be issued incorporating the necessary revisions in the Contract Documents, and Owner will be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to its amount, Owner may make a claim under Article 9.

- D. Environmental Remediator will not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Remediation attributable to the exercise by Owner of Owner's rights and remedies under this paragraph 12.09.

ARTICLE 13 – PAYMENTS TO ENVIRONMENTAL REMEDIATOR AND COMPLETION

13.01 Schedule of Values

- A. The Schedule of Values as provided in paragraph 2.06.A will serve as the basis for progress payments. Progress payments on account of Unit Price Remediation will be based on the number of units completed.

13.02 Application for Progress Payment

- A. On or about the date established in the Agreement for submission of each application for progress payment (but not more often than once a month), Environmental Remediator shall submit to Owner for review an Application for Payment filled out and signed by Environmental Remediator covering the Remediation completed as of the date indicated on the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Remediation but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by a bill of sale, invoice or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect Owner's interest in such materials and equipment, all of which will be satisfactory to Owner.
- B. Beginning with the second Application for Payment, each Application shall include an affidavit of Environmental Remediator stating that all previous progress payments received on account of the Remediation have been applied on account to discharge Environmental Remediator's legitimate obligations associated with prior Applications for Payment.
- C. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

13.03 Progress Payments

- A. Progress payments shall be made by the Owner to the Environmental Remediator according to the following procedure:
 - 1. Owner will promptly review each Application for Payment, and either indicate in writing its acceptance of the Application and state that the Application is being processed for payment, or return the Application to Environmental Remediator indicating in writing its reasons for refusing to accept the Application. Not more than forty-five days after accepting such Application the amount will become due and when due will be paid by Owner to Environmental Remediator.

2. If the Owner should fail to pay the Environmental Remediator at the time the payment of any amount becomes due, then Environmental Remediator may, at any time thereafter, upon serving written notice that Environmental Remediator will stop the Remediation within seven days after receipt of the notice by the Owner, and after such seven day period, stop the Remediation until payment of the amount owing has been received. Written notice shall be deemed to have been duly served if sent by certified mail to the last known business address of the Owner.
 3. Payments due but unpaid will bear interest at the rate specified in the Agreement.
 4. No Progress Payment nor any partial or entire use or occupancy of the Project by the Owner will constitute an acceptance of any Remediation not according to the Contract Documents.
- B. Owner may refuse to make the whole or any part of any such payment, or because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any previous payment, to the extent that is reasonably necessary to protect Owner from loss because:
1. the Construction is defective, or completed Construction has been damaged by Environmental Remediator and requires correction or replacement; or
 2. the Contract Price has been reduced by Change Order; or
 3. owner has been required to correct defective Construction or complete Construction according to paragraph 12.09.A; or
 4. owner has actual knowledge of the occurrence of any of the events enumerated in paragraph 14.02.A; or
 5. claims have been made against Owner on account of Environmental Remediator's performance or furnishing of the Remediation; or
 6. liens have been filed in connection with the Remediation, except where Environmental Remediator has delivered a specific Bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 7. there are other items entitling Owner to a set-off against the amount for which application is made.
- C. If Owner refuses to make payment of the full amount requested by Environmental Remediator, Owner must give Environmental Remediator immediate written notice stating the reasons for such action and promptly pay Environmental Remediator any amount remaining after deduction of the amount withheld. Owner shall pay Environmental Remediator the amount withheld or any adjustment thereto agreed to when Environmental Remediator corrects to Owner's satisfaction the reason for such action.

13.04 *Environmental Remediator's Warranty of Title*

- A. Environmental Remediator warrants and guarantees that title to all Construction materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

13.05 *Substantial Completion*

- A. When Environmental Remediator considers the Remediation ready for its intended use, Environmental Remediator shall notify Owner in writing that the Remediation is substantially complete (except for items specifically listed by Environmental Remediator as incomplete) and request that Owner issue a certificate of Substantial Completion. Promptly thereafter, Owner and Environmental Remediator shall make an inspection of the Remediation to determine the status of completion. If Owner does not consider the Remediation substantially complete, Owner will notify Environmental Remediator in writing giving its reasons. If Owner considers the Remediation substantially complete, Owner will prepare and deliver to Environmental Remediator a certificate of Substantial Completion which shall fix the date of Substantial Completion. There will be attached to the certificate a list of items to be completed or corrected before final payment. At the time of delivery of the certificate of Substantial Completion Owner will deliver to Environmental Remediator a written determination as to division of responsibilities pending final payment between Owner and Environmental Remediator with respect to security, operation, safety, protection of Construction, maintenance, heat, utilities, insurance and warranties and guarantees.
- B. Owner will have the right to exclude Environmental Remediator from the Site after the date of Substantial Completion, but Owner will allow Environmental Remediator reasonable access to complete or correct items on the list of items to be completed.

13.06 *Partial Utilization*

- A. Prior to Substantial Completion of the Remediation, Owner may use or occupy any substantially completed part of the Remediation which (1) has specifically been so identified for early use in the Contract Documents, or (2) Owner and Environmental Remediator agree constitute a separately functioning and usable part of the Construction that can be used by Owner for its intended purpose without significantly interfering with Environmental Remediator's performance of the remaining Construction. The procedures to allow for this use are:
 - 1. At any time during Construction, Owner may request Environmental Remediator in writing to permit Owner to use or occupy any part of the Construction which Owner believes to be ready for its intended use and substantially complete. Within a reasonable time after such request, Owner and Environmental Remediator will make an inspection of that part of the Construction to determine its status of completion. If Environmental Remediator agrees that such part of the Construction is substantially complete, Environmental Remediator will certify to

Owner that such part of the Construction is substantially complete and request Owner to issue a certificate of Substantial Completion for that part of the Construction.

2. At any time during Construction, Environmental Remediator may notify Owner in writing that Environmental Remediator considers any part of the Construction ready for its intended use and substantially complete and request Owner to issue a certificate of Substantial Completion for that part of the Construction. Within a reasonable time after such requests, Owner and Environmental Remediator will make an inspection of that part of the Construction to determine its status of completion. If Owner does not consider that part of the Construction to be substantially complete, Owner will notify Environmental Remediator in writing giving its reasons. If Owner considers that part of the Construction to be substantially complete, the provisions of paragraph 13.05 will apply regarding the issuing of a certificate of Substantial Completion of that part of the Construction and the division of responsibility involving such work and its access.
- B. No use or occupancy of part of the Construction will be accomplished prior to complying with the property insurance requirements of paragraph 5.09.

13.07 *Final Inspection*

- A. Upon written notice from Environmental Remediator that the entire Construction or an agreed portion thereof is complete, Owner will make a final inspection with Environmental Remediator and will notify Environmental Remediator in writing of all particulars in which this inspection reveals that the Construction is incomplete or defective. Environmental Remediator shall immediately take such measures as are necessary to complete such Construction or remedy such deficiencies.

13.08 *Final Application for Payment*

- A. Application for Payment
 1. After Environmental Remediator has completed all such corrections to the satisfaction of Owner and delivered according to the Contract Documents all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance, certificates of inspection, marked-up record documents (as provided in paragraph 6.12) and other documents, Environmental Remediator may make application for final payment following the procedure for progress payments.
 2. The final Application for Payment will be accompanied (unless previously delivered) by: (a) all documentation called for in the Contract Documents, (b) consent of the surety, if any, to final payment, and (c) complete and legally effective releases or waivers (satisfactory to Owner) of all Liens filed in connection with the Remediation.

3. In lieu of such releases or waivers of Liens specified in paragraph 13.08.A.2 and as approved by Owner, Environmental Remediator may furnish receipts or releases in full and an affidavit of Environmental Remediator that: (a) the releases and receipts include all labor, services, material and equipment for which a Lien could be filed, and (b) all payrolls, material and equipment bills and other indebtedness connected with the Remediation for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Environmental Remediator may furnish a Bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.
- B. If Owner is satisfied that the Remediation has been completed and Environmental Remediator's other obligations under the Contract Documents have been fulfilled, Owner will, within ten days after receipt of the final Application for Payment, give written notice to Environmental Remediator that the Remediation is acceptable. Otherwise, Owner will return the Application to Environmental Remediator, indicating in writing the reasons for refusing to process final payment, in which case Environmental Remediator shall make the necessary corrections and resubmit the Application.
 - C. Thirty days after the presentation to Owner of the acceptable Application and accompanying documentation, in appropriate form and substance and with Owner's notice of acceptability, the amount will become due and will be paid by Owner to Environmental Remediator.

13.09 *Final Completion Delayed*

- A. If, through no fault of Environmental Remediator, final completion of the Remediation is significantly delayed, Owner shall, upon receipt of Environmental Remediator's final Application for Payment, and without terminating the Agreement, make payment of the balance due for that portion of the Remediation fully completed and accepted. If the remaining balance to be held by Owner for Remediation not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.01.A, the written consent of the surety to the payment of the balance due for that portion of the Remediation fully completed and accepted shall be submitted by Environmental Remediator to Owner with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

13.10 *Waiver of Claims*

- A. The making and acceptance of final payment will constitute:
 1. a waiver of all Claims by Owner against Environmental Remediator, except Claims arising from unsettled Liens, from defective Construction appearing after final inspection under paragraph 13.07, from failure to provide Professional

Services consistent with the standard of care of paragraph 6.01.A.1, from failure to comply with the Contract Documents, including any special guarantees, or from Environmental Remediator's continuing obligations under the Contract Documents; and

2. a waiver of all payment claims by Environmental Remediator against Owner other than those previously made in writing and still unsettled.

ARTICLE 14 – SUSPENSION OF REMEDIATION AND TERMINATION

14.01 Owner May Suspend Remediation

- A. At any time and without cause, Owner may suspend any or all of the Remediation for a period of not more than 90 days by notice in writing to Environmental Remediator which will fix the date on which Remediation will be resumed. Environmental Remediator shall resume the Remediation on the date so fixed. Environmental Remediator will be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Environmental Remediator makes a claim therefor as provided in Article 9.

14.02 Owner May Terminate for Cause

- A. The occurrence of any one or more of the following events justifies termination for cause:
 1. Environmental Remediator's repeated failure to perform the Remediation according to the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.06.A, as adjusted from time to time pursuant to paragraph 6.05);
 2. Environmental Remediator's disregard of Laws or Regulations of any public body having jurisdiction; or
 3. Environmental Remediator's violation in any substantial way of provisions of the Contract Documents.
- B. If one or more of the events identified in paragraph 14.02.A. occurs, Owner may, after giving Environmental Remediator (and the surety, if any) 30 days' written notice, terminate the services of Environmental Remediator, take possession of any completed Drawings and Specifications prepared by or for Environmental Remediator (subject to the indemnification provisions of paragraph 3.05.A), exclude Environmental Remediator from the Site and take possession of the Remediation, incorporate in the Remediation all materials and equipment stored at the Site or for which Owner has paid Environmental Remediator but which are stored elsewhere, and finish the Remediation as Owner may deem expedient. In such case Environmental Remediator will not be entitled to receive any further payment until the Remediation is finished. If the unpaid balance of the Contract Price exceeds all costs, losses and

damages sustained by Owner arising out of or resulting from completing the Remediation (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) such excess will be paid to Environmental Remediator. If such costs, losses and damages exceed such unpaid balance, Environmental Remediator shall pay the difference to Owner. Such costs, losses and damages incurred by Owner will be incorporated in a Change Order, provided that when exercising any rights or remedies under this paragraph Owner shall not be required to obtain the lowest price for the Remediation to be performed.

- C. Notwithstanding paragraph 14.02.B, Environmental Remediator's services will not be terminated if Environmental Remediator begins, within seven days of receipt of such notice of intent to terminate, to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice. However, if and to the extent such failure cannot be reasonably cured within such 30-day period, and if Environmental Remediator has diligently attempted to cure such failure and thereafter continues diligently to cure it, then the cure period under this paragraph will extend up to, but in no case more than, 60 days after the date of receipt of the notice.
- D. Where Environmental Remediator's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Environmental Remediator then existing or which may thereafter accrue. Any retention or payment of moneys due Environmental Remediator by Owner will not release Environmental Remediator from liability.

14.03 *Owner May Terminate for Convenience*

- A. Upon seven days' written notice to Environmental Remediator, Owner may, without cause and without prejudice to any other right or remedy of Owner, elect to terminate the Contract. In such case, Environmental Remediator will be paid (without duplication of any items) for:
 - 1. Remediation executed according to the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Remediation;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials or equipment required by the Contract Documents in connection with uncompleted Remediation, plus fair and reasonable sums for overhead and profit on such expenses;
 - 3. amounts paid in settlement of terminated contracts with Subcontractors, Engineers, Suppliers and others (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs incurred in connection with termination of such contracts); and

4. Reasonable expenses directly attributable to termination.
- B. Except as provided in paragraph 14.03.A, Environmental Remediator shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

14.04 *Environmental Remediator May Stop Remediation or Terminate*

- A. If, through no act or fault of Environmental Remediator, the Remediation is suspended for a period of more than 90 days by Owner or under an order of court or other public authority, or Owner fails to act on any Application for Payment within 30 days after it is submitted, or Owner fails for 30 days to pay Environmental Remediator any sum finally determined to be due, or Owner fails for 30 days to furnish lands and access pursuant to paragraph 4.01.A, or Owner repeatedly fails to perform a material obligation of the Contract, then Environmental Remediator may, upon seven days' written notice to Owner, and provided Owner does not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in paragraph 14.03.A. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Owner has failed for 30 days to pay Environmental Remediator any sum finally determined to be due, Environmental Remediator may upon seven day's written notice to Owner stop the Remediation until payment is made of all such amounts due Environmental Remediator, including interest thereon. The provisions of this paragraph 14.04.A are not intended to preclude Environmental Remediator from making claim under Article 9 for an increase in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Environmental Remediator's stopping Remediation as permitted by this paragraph.
- B. If Environmental Remediator encounters Contaminants different in type or extent from those originally represented by Owner, Environmental Remediator may, at its option, terminate the Contract and be paid for those items described in paragraph 14.03.A. In lieu of terminating the Contract and without prejudice to any other right or remedy, Environmental Remediator may suspend performance under this Contract pending negotiation of a satisfactory Change Order to provide for the newly discovered existing conditions.

14.05 *Obligations Upon Termination*

- A. In the event of termination under paragraph 14.03 or 14.04:
 1. Environmental Remediator shall promptly cease operations and:
 - a. take actions necessary, or that Owner may direct, for the protection and preservation of the Remediation; and
 - b. except for Remediation directed to be performed prior to the effective date of termination, terminate all existing subcontracts and purchase orders, and enter into no further subcontracts or purchase orders.

2. Owner shall promptly take such actions as are reasonably necessary to close out the Contract, including the making of final payment under paragraph 13.09.

ARTICLE 15 – DISPUTE RESOLUTION

15.01 Methods and Procedures

- A. Dispute resolution methods and procedures, if any, will be as set forth in Exhibit GC-B. If no such agreement on the method and procedure for resolving such disputes has been set forth, Owner and Environmental Remediator may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.

ARTICLE 16 – MISCELLANEOUS

16.01 Giving Notice

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given, if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by certified mail, postage prepaid, to the last business address known to the giver of the notice.

16.02 Computation of Times

- A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

16.03 Cumulative Remedies

- A. The duties and obligations imposed by these General Conditions, and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by:
 1. Laws or Regulations; or
 2. any special warranty or guarantees; or
 3. other provisions of the Contract Documents.
- B. The provisions of this paragraph 16.03 will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.

16.04 *Survival of Obligations*

- A. All representations, indemnifications, and warranties and guarantees made in, required by or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion and acceptance of the Remediation and termination or completion of the Contract.

16.05 *Waiver of Consequential Damages*

- A. To the fullest extent permitted by law, and except as specifically provided to the contrary herein, Environmental Remediator and Owner waive Claims against each other for special, incidental and consequential damages arising out of this Agreement. This mutual waiver includes, but is not limited to:
 - 1. damages incurred by Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
 - 2. damages incurred by Environmental Remediator for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Remediation.
- B. This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination according to Article 14. Nothing contained in this paragraph 16.05 will be deemed to preclude an award of liquidated damages, when applicable, according to the requirements of the Contract Documents.

16.06 *No Third-Party Beneficiaries*

- A. This Agreement is not intended to, and does not, create any rights or benefits to individuals or entities other than Owner and Environmental Remediator.

16.07 *No Waiver By Non-Enforcement*

- A. Non-enforcement of any provision by either party will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or the remainder of the Contract Documents.

16.08 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

16.09 *Limitation of Liability*

- A. If and to the extent that Owner and Environmental Remediator have agreed to limiting Environmental Remediator's liability, that agreement is in Exhibit GC-C, Limitation of Liability, to be attached hereto and incorporated herein.

EXHIBIT GC-A – INSURANCE AND OTHER REQUIREMENTS

(A) INSURANCE REQUIREMENTS

(1) Environmental Remediator and Environmental Remediator's subcontractors shall maintain in full-force and effect with insurance carriers acceptable to Owner the following insurance and associated requirements:

(a) Workers' Compensation Insurance satisfying statutory limits applicable to the State where project is located;

(b) Employers' Liability Insurance with limits of not less than \$1,000,000 each accident, \$1,000,000 per disease - policy limit, and \$1,000,000 per disease - each employee;

(c) Comprehensive General Liability Insurance on an "occurrence" basis against claims for property damage and personal injury, including protective liability coverage on operations of independent contractors engaged in construction, with a combined limit of not less than \$5,000,000 per occurrence for all loss, damage, cost and expense, including attorney's fees, arising out of bodily injury, liability and property damage liability during the policy period;

(d) Comprehensive Automobile and Vehicle Liability Insurance, covering claims for injuries to members of the public and/or damages to property of others arising from use of automobiles, trucks, and miscellaneous powered and automotive equipment, including on-site and off-site operations, and owned, non-owned, or hired vehicles, with a combined limit for bodily injury and property damage of not less than \$5,000,000 per occurrence;

(e) Contractors' Pollution Liability Insurance in an amount not less than \$5,000,000; and

(f) Umbrella/Excess Coverage Insurance for all required insurance coverages specified herein (except for Workers' Compensation Insurance) in an amount not less than \$5,000,000.

(2) Insurance policies required under items (1)(c) (Comprehensive General Liability Insurance) and (1)(d) (Automobile Liability Insurance) above shall be endorsed to name Electrolux Home Products, Inc., Quantum Management Group, Inc. and The Kelly-Buck Company as additional insureds and certificate holders, and shall include severability of interests provisions.

(3) In addition to the insurance requirements specified in (1) and (2) above, Environmental Remediator and any of Environmental Remediator's subcontractors shall comply with all insurance requirements specified in Attachment 1 to this Exhibit GC-A, titled "ENVIRONMENTAL RIGHT OF ENTRY AGREEMENT," between Electrolux Home Products, Inc. and Norfolk Southern Railway Company, dated July 28, 2008.

(4) The amount and conditions of insurance specified herein are not a ceiling that will limit Environmental Remediator's liability due to its negligence or willful misconduct. These coverages must be maintained throughout the term of this Agreement, with the exception of the required Contractors' Pollution Liability coverage, which must be maintained for a one (1) year period beyond the term of this Agreement.

(5) Certificates of insurance from acceptable insurers verifying each of the above conditions shall be provided to the Owner and all other additional insureds and certificate holders prior to the issuance of Notice to Proceed for the project, and on an annual policy renewal basis for the duration of the project. The certificates shall provide for 30 days advance notification of Owner and all other additional insureds and certificate holders in the event of cancellation or material change in coverage.

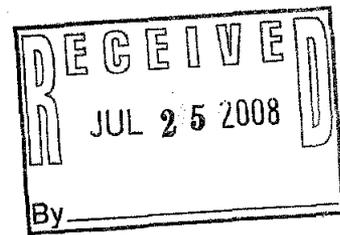
(B) OTHER REQUIREMENTS

(1) Environmental Remediator and any of Environmental Remediator's subcontractors performing work within the Norfolk Southern Railway Company right-of-way shall comply with all requirements (in addition to the insurance requirements specified herein) specified in Attachment 1 to this Exhibit GC-A, titled "ENVIRONMENTAL RIGHT OF ENTRY AGREEMENT," between Electrolux Home Products, Inc. and Norfolk Southern Railway Company, dated July 28, 2008.

**ATTACHMENT 1 TO EXHIBIT GC-A
ENVIRONMENTAL RIGHT OF ENTRY AGREEMENT,” BETWEEN ELECTROLUX
HOME PRODUCTS, INC. AND NORFOLK SOUTHERN RAILWAY COMPANY,
DATED JULY 28, 2010**



Norfolk Southern Corporation
Law Department
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July 22, 2008

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20445 Emerald Parkway, S.W.
Suite 250
Cleveland, OH 44135

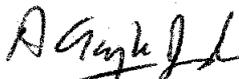
RE: Charlotte, NC; Electrolux Home Products, Inc. ROE Request; NS Law File
ROE00088

Dear Mr. Heer:

Enclosed are two originals of the above-captioned agreement already executed by Norfolk Southern. Please have them signed by Electrolux and return an original to me for our file.

Forward Certificate(s) of Insurance directly to our Risk Management Department (scott.dickerson@nscorp.com; (757) 629-2364) referencing the NS Law File shown above. Thank you.

Sincerely,


A. Gayle Jordan

Enclosure

ENVIRONMENTAL RIGHT OF ENTRY AGREEMENT

ELECTROLUX HOME PRODUCTS, INC. ("Owner"), a Delaware corporation, has requested the consent of **NORFOLK SOUTHERN RAILWAY COMPANY** ("Company"), a Virginia corporation, to enter upon property owned by Owner and over which the Company has a right of way easement in an area adjacent to a facility of Owner at 601 West Summit Avenue, Charlotte, North Carolina, as indicated on the attached map, marked as Exhibit A (hereinafter referred to as "Right of Way Property") for the purpose of remedial activities to include soil sampling, well installation, and removal and treatment of soil and groundwater on the Right of Way Property.

Company, in consideration of the covenants and conditions contained in this agreement and insofar as its right, title and interest permits, grants its consent for Owner to enter on the said Right of Way Property for the purpose stated in the preceding paragraph, subject to the terms and conditions set forth below:

1. In consideration of Company's consent for the said purpose, Owner agrees to indemnify and hold Company and any other corporation associated, controlled by or under common control with Company and their officers, employees and agents, harmless from and against all costs, losses, claims, damages, or expenses, including attorneys' fees, arising out of any loss of life or personal injury or property loss or damage whatsoever which results from, accrues from, is connected to or is incidental to the undertakings of Owner hereunder, unless such loss, injury or damage is caused solely by the negligence or intentional conduct of the Company. In addition, Owner agrees to indemnify and hold Company and any other corporation associated, controlled by or under common control with Company, and their officers, employees and agents, harmless from and against all costs, losses, claims, damages, or expenses, including attorneys' fees, arising out of any loss of life or personal injury or property loss or damage whatsoever in the event any well installed acts as a conduit for any contamination of any type, unless such loss, injury or damage is caused solely by the negligence or intentional conduct of the Company.

2. The work to be done includes:

a. Shallow soil sampling for pre-construction definition of areas exceeding final action levels for contaminants of concern (i.e., polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs) and chromium) and therefore requiring removal;

b. Excavation and offsite disposal of soil exceeding contaminant action levels;

c. Excavation and offsite disposal of soil exhibiting elevated contaminant levels, combined with situ soil and groundwater treatment; and

d. Installation of treatment and monitoring wells and other bioremediation injection systems, as indicated on Exhibit A for in situ treatment and monitoring of groundwater impacted by VOCs.

3. a. All work done hereunder shall be done at Owner's sole expense. No work shall occur within twenty-five (25) feet of the center line of any track; provided that Company reserves the right to require placement of wells at distances even more than twenty-five feet from the center line of any track if conditions dictate. No drainage condition shall be created or allowed to exist that may be adverse to Company. Owner's work shall not interfere with the safe and proper support of Company's roadbed and track. All work done hereunder shall occur only during daylight hours .

b. All work done hereunder shall be performed by Owner with such care, diligence and cooperation of Owner with Company personnel as will avoid accident, damage or harm to persons or property and delays to or interference with operations of Company. If the work is to be performed within 25 feet of the center line of any track, said work shall be performed in accordance with (a) the latest American Railway Engineering and Maintenance Association Guidelines, by reference hereby made a part hereof; and (b) to the satisfaction of Company's Division Engineer or his duly authorized representative.

c. Owner agrees to reimburse Company promptly, as soon as practicable after a bill is rendered, for all expenses incurred by Company required by the union agreement, resulting from or in connection with any such special engineering studies, field supervision, flagging protection or other services as Company may find necessary to perform in connection with Owner's proposed work.

d. It is expressly understood that the initial work covered hereunder will take approximately 180 day(s). Samples will be taken by Owner only on an as-needed basis. Any well casings will be flush with the ground and will be clearly marked, with an appropriate locking cap.

4. Company's Division Engineer E. Greg Cody at (864) 255-4251 shall be given notice not less than seventy-two (72) hours before Owner proposes to enter upon Company's property. Owner understands that additional notice may be required if Company is to provide, at the desired time, any flagging which Company may deem necessary under Article 2 hereof.

5. This Environmental Right of Entry Agreement (a) shall not be assigned or transferred without written approval of the Company and (b) may be terminated at will by the Company or Owner on five (5) days' written notice to the other party and shall terminate automatically **five years** from the date of this agreement unless an extension is agreed to in writing by the Company and Owner; provided,

however, that such termination shall not affect Owner's continued operation and maintenance of remediation systems implemented prior to such termination and that termination shall not relieve Owner or Company, or its contractors, of any obligation or liability incurred prior to such termination.

6. As used herein, the term Owner shall be deemed to include Owner and its agents and contractors.

7. a. Owner or its contractor shall secure, at its or their own expense, any permits or licenses required by federal, state, or local laws or ordinances and shall comply with all applicable laws, including (but not limited to) any laws, regulations, standards, and permit requirements relating to environmental pollution or contamination or to occupational health and safety. Owner shall indemnify and hold harmless Company from and against any and all claims arising out of or connected with the violation, by Owner, of any law, standard, regulation, or permit requirement.

b. If any mechanics' or materialmen's liens, or similar lien, is asserted against the Right of Way Property, or any other property of Company or Owner, as a result of the exercise of any consent herein granted, Owner shall immediately satisfy, defend, or obtain the release of such lien, all at Owner's expense, and Owner shall indemnify and hold harmless Company from and against any claims arising out of or connected with such lien.

8. No work of any character shall be started on the Right of Way Property until:

a. Certificates of Insurance, specifying that the policies are applicable to the particular work, have been furnished to and accepted by Company as evidence that Owner, contractor and subcontractor maintain the following insurance coverages:

- (i) Workers' Compensation Insurance in satisfaction of statutory requirements of the state where the property covered by this agreement is located. Also, Employers' Liability Insurance having limits of not less than \$500,000 each accident, \$500,000 per disease - policy limit, and \$500,000 per disease - each employee.
- (ii) Comprehensive General Liability Insurance having a combined single limit of not less than \$2,000,000 per occurrence for all loss, damage, cost and expense, including attorney's fees, arising out of bodily injury, liability and property damage liability during the policy period. Such policy shall be endorsed to name Company as an additional insured and shall include a severability of interests provision. In addition, Owner's policy shall be endorsed to reflect

Contractual Liability Insurance specifically relating to the indemnity provisions of this agreement. Any exclusion for construction or demolition activities (including installing wells or bore holes, but not for work done by means of a hand augur) conducted within 50 feet of railroad tracks shall be deleted from Owner's policy.

- (iii) In the event Owner cannot obtain contractual liability insurance to cover the obligations assumed under this Environmental Right of Entry Agreement, Owner or its contractor shall procure and furnish to Company a Railroad Protective Liability Insurance Policy having a combined single limit of \$2,000,000 per occurrence. Said policy shall name Company as the named insured.
- (iv) Automobile Liability Insurance having a combined single limit of not less than \$1 million per occurrence. Said policy shall name Company as an additional insured and shall include a severability of interests provision.

b. Company has advised the Owner that limits, form, and substance of insurance policies and certificates of insurance are satisfactory to Company. Said policies and certificates should be forwarded to Risk Manager, Norfolk Southern Corporation, Three Commercial Place, Norfolk, Virginia, 23510. The furnishing by Owner of such insurance and the acceptance of the same by Company is not intended to and shall not reduce, limit, affect or modify the primary obligations and liabilities of Owner under the other provisions of this agreement.

c. Authorized representatives of Owner have met with Division Engineer Cody or his representative and also with a representative of Company's Communications and Signals Department to receive any instructions Company may have concerning the Owner's activities on the Right of Way Property. Owner agrees to follow, at its expense, all such reasonable instructions, and in such manner as is reasonable and satisfactory to Company.

9. All insurance described above shall be maintained until all work contemplated hereunder has been satisfactorily completed. Insurance Companies may cancel or make significant changes in the insurance by permission of the Owner and Company, or upon giving thirty (30) days' written notice to Owner and Company of their intent to do so.

10. After completion of the groundwater sampling/treatment project, or after termination of this Environmental Right of Entry Agreement, whichever first occurs, Owner agrees to remove the wells it installed in accordance with State procedures unless such wells remain necessary for continued operation and maintenance of

remediation systems pursuant to Paragraph 5 above. Removal procedures shall include pulling or reaming the well casings and grouting the holes to ground surface. After termination of this Environmental Right of Entry Agreement, Licensee agrees to restore the Property and shall leave it free of debris and holes in the ground and in such condition as is satisfactory to Company. Restoration of the Property shall be completed within thirty (30) days after termination of this agreement.

11. If any of the foregoing provisions is held for any reason to be unlawful or unenforceable, the parties intend that only the specific words found to be unlawful or unenforceable are severed and deleted from this agreement and that the balance of the agreement remain a binding enforceable agreement to the fullest extent permitted by law.

12. If there is a conflict between the terms of another contract and this Environmental Right of Entry Agreement concerning this Right of Way Property, Owner and Company agree that the terms of this Agreement shall control.

13. a. Owner warrants that it is analyzing only for the presence of PCBs, volatile and semi-volatile organic compounds and various metals, including chromium.

b. Owner agrees to give Company a complete copy of the results of the analyses of any samples taken from, and advise of any planned corrective action on, the Right of Way Property, and closure of wells.

14. With the exception of public grade crossings, Owner shall **not** cross the tracks of Company with any vehicle unless it shall have executed such separate agreement as shall be provided by Company.

15. Owner recognizes and assumes all responsibility for all present and future environmental obligations imposed under applicable environmental laws, regulations or other such requirements relating to any contamination of the Right of Way Property or groundwater thereunder arising from any operations conducted by Owner at its 601 West Summit Avenue, Charlotte, North Carolina, facility. Owner further agrees to undertake at its own expense any cleanup of any contamination of the Right of Way Property and groundwater thereunder arising from any operation conducted by Owner at its 601 West Summit Avenue, Charlotte, North Carolina, facility as required by law.

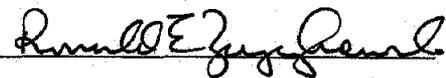
Executed in duplicate, each part being an original, this 28th day of July, 2008.

NORFOLK SOUTHERN RAILWAY
COMPANY

By: 

Title: Vice President

ELECTROLUX HOME PRODUCTS,
INC.

By: 

Title: SR VICE PRESIDENT

(AGRMTS/NC/roe88.agr.)

- END OF SECTION 007200 -

VOLUME II



**PROJECT MANUAL
REMEDIAL ACTION - STEP 2
VOLUME II:
DIVISION 01 – GENERAL REQUIREMENTS
DIVISION 02 – EXISTING CONDITIONS
DIVISION 31 – EARTHWORK**

Former Copes-Vulcan Site
601 West Summit Avenue
Charlotte, North Carolina 28203

Owner:

Electrolux Home Products, Inc.
20445 Emerald Pkwy., Suite 250
P.O. Box 35920
Cleveland, Ohio 44135-0920

Owner's Representative:

Quantum Management Group, Inc.
3550 Burch Avenue
Second Floor
Cincinnati, OH 45208

Owner's Consultant:

The Kelly-Buck Company
2130 Superior Avenue
Suite 3A
Cleveland, OH 44114

Issue Date: March 15, 2010

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ATTACHMENT 1 TO EXHIBIT GC-A - ENVIRONMENTAL RIGHT OF ENTRY AGREEMENT," BETWEEN ELECTROLUX HOME PRODUCTS, INC. AND NORFOLK SOUTHERN RAILWAY COMPANY, DATED JULY 28, 2010

VOLUME II

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SECTION 310000 – EARTHWORK

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DIVISION 01 – GENERAL REQUIREMENTS

SECTION 011100 – SUMMARY OF WORK

PART 1 GENERAL

1.1 WORK COVERED BY CONTRACT DOCUMENTS

- A. The work to be performed under this Contract shall consist of furnishing all labor, materials, tools, equipment, and incidentals and performing all work required and specified by the Contract Documents including, but not limited to, the following work:
1. Provide project support facilities, to include construction, operation and maintenance of all necessary support facilities, services, controls and other items for the duration of the project.
 2. Remove and load out soil, concrete and other debris impacted by PCBs, to include excavation from all specified areas and depth intervals, segregated as directed for various types of disposal, and including proper on-site management and loading into trucks and containers for off-site transportation and disposal (trucks and containers, and off-site transportation and disposal provided separately by others, or by Environmental Remediator if requested under separate Unit Price task).
 3. Remove and load out soil and debris impacted by other contaminants, to include excavation from specified areas and depth intervals, segregated as directed for various types of disposal, and including proper on-site management and loading into trucks and containers for off-site transportation and disposal (trucks and containers, and off-site transportation and disposal provided separately by others, or by Environmental Remediator if requested under separate Unit Price task).
 4. Remove and load out identified segments of storm sewers, sanitary sewers and floor drain lines, along with associated residues and specified soil intervals, segregated as directed for various types of disposal, and including proper on-site management and loading into trucks and containers for off-site transportation and disposal (trucks and containers, and off-site transportation and disposal provided separately by others, or by Environmental Remediator if requested under separate Unit Price task).
 5. Construct in situ soil and ground-water remediation systems, to include excavation and management of soil from the specified areas and depth intervals, and in the manner described in items #2 and #3 above, followed by construction of infiltration areas, drilling and installation of injection wells, and installation of piping and other components.
 6. Backfill, re-grade, and restore the site to its pre-construction conditions.

7. Optional – At Owner’s Discretion: Provide and construct facilities for the storage, mixing and application of in situ soil and ground-water treatment chemicals treatment chemicals; and when requested, procure, mix and apply treatment chemicals and chaser solutions (potable water) in the infiltration areas and/or wells associated with wells treatment systems.
8. Optional – At Owner’s Discretion: Provide off-site transportation of soil, concrete, asphalt, sewer and drain lines, residues debris, wastewater and other materials and wastes specified.
9. All other work specified in the Contract Documents, whether or not listed here.

1.2 PROJECT LOCATION

- A. The project location is 601 West Summit Avenue, Charlotte, Mecklenburg County, North Carolina.

1.3 SCHEDULING AND SEQUENCE OF WORK

- A. Submit a detailed schedule in accordance with the Contract Documents, showing the proposed sequencing and duration for all of the work elements. The following are required components of this schedule, and must be shown on the schedule and adhered to during the project.
 1. Each in situ soil and ground-water treatment system shall be fully constructed and made available for use by the Owner as early as possible during the project. System locations AOC #4 and AOC #21 shall be fully constructed at the beginning of the project. Systems locations AOCs #3 and #13 shall be constructed as soon as PCB-impacted soil has been removed from overlying and surrounding areas, and the areas have been tested and verified by the Owner as acceptable for proceeding.
 2. Schedule and sequence all excavation, removal, loading, material handling, backfilling, re-grading, site restoration and other activities so that the work proceeds in a safe, orderly and controlled fashion, and so that areas of the site not previously impacted by contaminants or previously remediated do not become contaminated.
 3. Establish and adhere to intermediate Milestones during the project, to ensure and demonstrate to the Owner that the time for Substantial Project Completion and the Mandatory Project Completion Deadline are met.

1.4 CONFLICTING REQUIREMENTS

- A. In case of conflict between the requirements, the requirement which is in compliance with all the applicable laws, regulations, codes, directives and other governmental requirements and which is, in the opinion of the Owner, is more advantageous to the Owner, shall govern. This shall apply to all requirements indicated by the Contract Documents.

1.5 USE OF PREMISES

- A. Confine operations at the site to the Project Limits as shown on the Drawings, and to areas permitted by law, ordinances, permits, easements and the Contract Documents.
- B. Do not unreasonably encumber premises with materials and equipment.
- C. Do not cause or allow the release or dispersal of hazardous substances onto the ground, into ground water, surface water, air or other media.
- D. Ensure the health, welfare and safety of the public, the community surrounding the site and the environment during the conduct of all work.
- E. Maintain the premises in a clean, safe and orderly condition at all times.
- F. Maintain access for the Owner and personnel authorized by the Owner, emergency service personnel, police, fire, or other departments having legal jurisdiction to the site at all times during construction and provide cooperation in their work.
- G. Hours of Work shall be as follows. Work shall be performed only between the hours of 7:00 a.m. and 7:00 p.m., on weekdays. Work shall not be performed on Saturdays, Sundays or legal holidays. Exceptions to these Hours of Work will be permitted only after obtaining written authorization from the Owner.

1.6 COMMUNICATION

- A. All communications shall be in writing. The Owner's Consultant, as identified in the Contract Documents, shall serve as Owner's authorized representative for sending and receiving all communications.
- B. Environmental Remediator shall designate in writing the individual who will be the Environmental Remediator's authorized representative.

PART 2 PRODUCTS (none specified)

PART 3 EXECUTION (none specified)

- END OF SECTION 011100 -

SECTION 015000 – MOBILIZATION/DEMOBILIZATION AND TEMPORARY FACILITIES & CONTROLS

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes requirements for mobilization and demobilization, as well as for temporary facilities and controls, including:
1. mobilization/demobilization;
 2. electrical power;
 3. lighting;
 4. water service;
 5. toilet and sanitary facilities;
 6. fire protection;
 7. first aid and emergency response;
 8. fencing and barricades;
 9. security and access control;
 10. field office;
 11. personnel decontamination facilities;
 12. vehicle and equipment decontamination facilities;
 13. erosion and sediment control;
 14. control of dust and other airborne pollutants;
 15. traffic control;
 16. waste storage facilities;
 17. property maintenance.
- B. All work under this Section shall be covered under the Lump Sum Base Bid Price, except as specifically stated otherwise in this Section.

PART 2 PRODUCTS (none specified)

PART 3 EXECUTION

3.1 MOBILIZATION/DEMOBILIZATION

- A. At project initiation, provide all necessary preparations, permits, approvals, transportation, set-up and other work necessary for initiation of the work.

- B. At project completion, provide all necessary disconnection, removal, termination of services, clean-up, transportation and other work to return the site to an acceptable condition.

3.2 ELECTRICAL POWER

- A. Provide all electrical power hook-ups, tie-ins, portable generators and other work as required for performance of the project.
- B. Include establishment of any temporary service connections, disconnections at termination, wiring and equipment, metering and usage charges for the duration of the project.
- C. Include all electrical power requirements for facilities and items to be provided by Environmental Remediator, including but not limited to:
 - 1. Lighting (if provided);
 - 2. water service;
 - 3. toilet and sanitary facilities;
 - 4. Environmental Remediator's field office trailer(s), if provided;
 - 5. personnel decontamination facilities;
 - 6. vehicle and equipment decontamination facilities;
- D. Do not include costs for electrical power associated with in situ treatment chemical storage, mixing and transfer operations, as this is covered under a separate Section.
- E. Do not include costs for electrical power associated with Owner's separate field office trailer, as this will be provided by others under separate contract.

3.3 LIGHTING

- A. Provide any temporary lighting as deemed necessary for maintaining site and equipment security, and for safe and efficient execution of the project.

3.4 WATER SERVICE

- A. Provide water services as required for performance of the project.
- B. Arrange, install and provide a temporary water service by means of a public fire hydrant and the Charlotte-Mecklenburg Utilities program. It is currently anticipated that the fire hydrant located at the northeast corner of the site (West Summit Avenue near the Norfolk Southern railroad tracks) will be used.
- C. Include procurement and installation of the required backflow prevention device, meter, 2-1/2 inch NST fire hose connection, and pay all permit and installation fees directly to Charlotte-Mecklenburg Utilities.
- D. Provide a clean water storage tank at the designated Temporary Facilities Area, capable of holding an adequate volume of water for all anticipated water uses during the project, and at a minimum, capable of holding 2,500 gallons. The tank shall be suitable as if it were to

hold potable water for drinking water purposes, even though such use shall be prohibited. The tank shall be provided with at least two closeable access ports at the top of the tank.

- E. Provide and install temporary, rigid metal or plastic piping, extending from a flexible hose connection at the hydrant to a rigid vertical riser fill pipe affixed to the clean water storage tank. Include trenching or traffic protection devices so that the piping does not interfere with vehicle traffic or present a safety hazard or nuisance. The rigid vertical riser fill pipe at the clean water storage tank shall extend above and be suspended over top of a closeable fill port at the top of the tank, so that a mandatory minimum 6-inch air gap is maintained between the outlet of the fill pipe and the tank, regardless of the type of backflow prevention provided at the public fire hydrant.
- F. While the storage tank and all lines shall be provided in a clean and sanitary condition so that it would be acceptable for potable use, prohibit the use of this water source for drinking, cooking or sanitary uses, and label the tank, piping and all outlets accordingly.
- G. Provide a pump and clean flexible hose for withdrawal of water from the clean water storage tank, with sufficient capacity to rapidly and efficiently meet all water supply needs for the project, and at a minimum, 20 gallons per minute for a continuous 60 minute duration; make the water supply pump and hose available as needed to Owner's representatives for other site activities, and equip the clean water storage tank with additional, closeable access ports at the top to allow others to install additional pumps and piping if needed.
- H. Ensure that water supplies are protected from freezing and available for use by Environmental Remediator, Subcontractors, and separately by Owner's representatives at all times.
- I. Pay for all water usage charges billed by Charlotte-Mecklenburg Utilities for the duration of the project; include in the Lump Sum Base Bid Price an allowance for the use and payment of up to 100,000 cubic feet (1,000 hundred cubic feet (Ccf) or 748,000 gallons), and submit actual water use records as recorded and billed by the Charlotte-Mecklenburg supplied meter with progress invoices to the Owner. If additional water is required and used, submit bills based on actual usage, and at the direct rate charged by Charlotte-Mecklenburg Utilities.
- J. At project completion, allow Owner the option to either request dismantlement and removal of all water supply system components described herein and provided, or to request that said supply system components remain on-site for further use by Owner, and in either case, at no additional cost to Owner.

3.5 TOILET AND SANITARY FACILITIES

- A. Provide adequate chemical toilet and sanitary facilities in the designated Temporary Facilities Area as required for the duration of the project. Include all necessary replacement of personal sanitary supplies, maintenance, cleaning, and removal and disposal of waste materials. Maintain all toilet and sanitary facilities in a clean and operational condition for the duration of the project.

3.6 FIRE PROTECTION

- A. Provide fire protection measures and equipment as required for performance of the project. Include the following at a minimum:
 - 1. work practices that minimize the accumulation of combustible and flammable materials;
 - 2. use of fire-resistant containers and enclosures for storage of combustible and flammable materials;
 - 3. portable fire extinguishers at locations where fire hazards may be present.

3.7 FIRST AID, EMERGENCY COMMUNICATIONS AND EMERGENCY RESPONSE

- A. Provide adequate trained personnel, facilities and equipment to address minor first aid requirements, notify emergency medical personnel and otherwise promptly and adequately respond to life and health emergencies. Ensure that all personnel working at the site have immediate access to a communication system for notification and summoning of emergency responders, and that all personnel have been trained and notified as to all emergency response and communication procedures, including knowledge of the site location and means for directing emergency responders to an incident area.

3.8 FENCING AND BARRICADES

- A. Most of the site within the Project Limits is enclosed by chain-link fence and locking gates. Portions of the site, particularly in situ treatment area #AOC-21 and portions of the soil removal areas located in the north-northwest part of the site, are not enclosed by chain-link fence and locking gates.
- B. Maintain all existing fence and gates in good condition as required for the duration of the project. If fence or gates are damaged as the result of work by Environmental Remediator or Environmental Remediator's subcontractors, repair or replace damaged fence or gates at no cost to Owner. If it is necessary to remove portions of fence or gates for performance of the project, use reasonable care to attempt re-installation without the need for replacement.
- C. Provide temporary fencing or suitable barricades around work areas that are located outside of currently fenced portions of the site as required to prevent unauthorized entry during the project, including in situ treatment area #AOC-21, and portions of the soil removal areas located in the north-northwest part of the site.

3.9 SECURITY AND ACCESS CONTROL

- A. During the Hours of Work as defined in Section 011100, and for the duration of the project, provide site security and access control as required to prevent unauthorized site entry, and to protect the site, equipment and property and elements of the work. For times other than the Hours of Work, at a minimum, ensure that the site is locked and secure, all work areas, equipment, materials and supplies are secured to prevent theft, vandalism, hazardous conditions, releases to the environment or other adverse consequences.

3.10 PROTECTION OF RAILROAD, GAS LINE AND OTHER UTILITIES

- A. A 100 ft right-of-way extends south from the Norfolk Southern railroad tracks present in the north portion of the site, as indicated in the Contract Documents. The Owner has entered into an Environmental Right of Entry Agreement with Norfolk Southern for work within the right-of-way. A copy of this Agreement is included in the Contract Documents. Environmental Remediator shall comply with all provisions of this Agreement. In addition, Environmental Remediator shall not allow personnel, vehicles or equipment under control of Environmental Remediator and Environmental Remediator's subcontractors to be within 25 feet of the railroad track rails on the property, without the express written permission of Owner, and without first complying with all requirements of the Agreement for work within 25 feet of the rails.
- A. Piedmont Natural Gas Company (Piedmont) owns and operates a natural gas transmission line in the north portion of the property. The general location of the line and corresponding easement is shown in the Contract Documents; however, the location is approximate and Environmental Remediator must coordinate location and protection of this line with Piedmont during the project. Portions of the planned soil removal are anticipated to be within the easement, and may be over top of this line. For such work, Environmental Remediator shall specifically coordinate with Piedmont, obtain all necessary approvals and work permits, verify that adequate Piedmont personnel are available and that an emergency shut-off procedure is readily available in the event that the transmission line is damaged, ensure that adequate distance is maintained between the transmission line and all excavation and re-grading areas, ensure that the transmission line is adequately protected (and provide additional protection if necessary) before allowing any trucks or other equipment to drive near or over any portions of the transmission line, perform "hot-dig" work only under Piedmont's supervision and direction, and implement whatever measures are deemed necessary by Piedmont for protection of the gas line. Should Piedmont determine that planned work cannot continue, Environmental Remediator shall notify Owner for determination of an alternate course of action.
- B. Environmental Remediator shall notify the North Carolina One-Call Center and all other entities having underground utilities on or near the site prior to starting any excavation, and take whatever measures are necessary to protect those utilities and prevent damage. Selected underground utilities coming onto the property were reported to have been cut and capped during previous work at the site, as indicated in the Contract Documents. Environmental Remediator shall take reasonable precautions to verify that such utilities are out of service before excavating and encountering such utilities.

3.11 ENVIRONMENTAL REMEDIATOR'S FIELD OFFICE

- A. Environmental Remediator may, at Environmental Remediator's discretion, establish a field office trailer for use by Environmental Remediator and Environmental Remediator's subcontractors during the project; however, one is not required. If Environmental Remediator elects to provide a field office for use by Environmental Remediator, all associated costs, permits, approvals, utility hook-ups and other elements will be the

responsibility of Environmental Remediator. The appearance, condition and location of such facilities will be subject to review and approval by Owner.

- B. The Owner is expecting to separately provide and maintain a field office for use by Owner, Owner's Representative and Owner's Consultant during and following the project; do not include any costs for this in the Contract Price.

3.12 HEALTH AND SAFETY

- A. Prepare and implement a project health and safety plan that adequately protects the health, safety, and welfare of site workers, the surrounding public and the environment, as required by the U.S. Occupational Safety and Health Administration (OSHA), by other Federal, State and local requirements, and as specified in the Contract Documents.
- B. Ensure that all employees under the control of Environmental Remediator and subcontractors are in compliance with all required training, medical monitoring and other requirements specified by OSHA under 29 CFR 1910.120.
- C. Provide all personal protective equipment (PPE) as required for use by Environmental Remediator and Environmental Remediator's subcontractors, as well as for authorized site visitors. Owner, Owner's Representative and Owner's Consultant will provide their own PPE as necessary during the project.

3.13 PERSONNEL DECONTAMINATION FACILITIES AND PROCEDURES

- A. Provide personnel decontamination facilities, equipment and supplies for use by all site personnel, including Environmental Remediator, subcontractors, Owner, Owner's Representative, Owner's Consultant and authorized site visitors.
- B. Decontamination facilities must be adequate to account for all chemical hazards, work activities and required levels of protection associated with the project. Currently, it is estimated that the required level of protection will involve Modified Level D, with some work in Level C depending on work conditions and other considerations.
- C. At a minimum, personnel decontamination facilities are expected to include the following:
 - 1. use during inclement weather;
 - 2. chairs and other items to allow for safe removal, cleaning and changing of re-usable and disposable personal protective equipment (PPE);
 - 3. waste receptacles for placement of disposable personal protective equipment (PPE) such as disposable gloves, coveralls and over-boots;
 - 4. a boot-washing station with necessary equipment and supplies for cleaning of re-usable boots and over-boots and collection of solid and liquid decontamination residues;
 - 5. a potable water supply and wash sink for cleaning and sanitary purposes;

6. a storage tank or other container for holding wastewater generated by personnel decontamination and cleaning, including secondary containment in compliance with RCRA and TSCA requirements.
 - D. Provide all necessary sampling, waste profiling, contracting and completion of removal and off-site transportation, treatment and/or disposal of PPE and wastewater associated with personnel decontamination during the project. Provide Owner with documentation that all PPE and wastewater were properly characterized and disposed of, along with documentation of the quantities of PPE (volume, in 55-gallon drums or equivalent) and wastewater (in gallons).
 - E. Pay for all removal, off-site transportation, treatment and/or disposal of PPE and wastewater for the duration of the project. Include in the Lump Sum Base Bid Price an allowance for payment of up to 1 cubic yard (4, 55-gallon drums) of PPE, and assume disposal at a licensed municipal solid waste landfill. Include in the Lump Sum Base Bid Price an allowance for payment of up to 250 gallons of personnel decontamination wastewater, and assume disposal at a licensed industrial wastewater treatment facility. Submit actual bills showing quantities and amounts paid with progress invoices to the Owner. If additional removal, off-site transportation, treatment and/or disposal of PPE and/or wastewater are required, submit bills based on actual amounts, and at the direct amount paid.
 - F. At project completion, allow Owner the option to either request dismantlement and removal of all personnel decontamination components described herein and provided, or to request that said components remain on-site for further use by Owner, in either case, at no additional cost to Owner.
- 3.14 VEHICLE AND EQUIPMENT DECONTAMINATION FACILITIES AND PROCEDURES
- A. Construct and provide fixed and portable decontamination facilities for vehicles and equipment, and provide decontamination of all vehicles and equipment during the project, as specified in the Contract Documents.
 - B. All vehicle and equipment must be decontaminated prior to leaving controlled areas of the site (i.e., within the area designated in the Contract Documents as “Approximate Limits of Contaminated Area”), as well as before vehicles and equipment are moved from work areas within the overall controlled area that are contaminated, to areas that are either non-contaminated or have been remediated.
 - C. Environmental Remediator shall decontaminate all vehicles and equipment under the control of Environmental Remediator and Environmental Remediator’s subcontractors, as well as all trucks and vehicles that have entered controlled areas of the site for loading of contaminated soil, debris and other materials, or for loading/unloading of other items, even if said trucks and other vehicles are being provided by others separate from this contract. Environmental Remediator shall also decontaminate vehicles used by authorized site visitors. Owner, Owner’s Representative and Owner’s Consultant will be responsible for decontamination of vehicles and equipment under their control; however, Environmental

Remediator must ensure that decontamination facilities and equipment are available for this purpose at all times.

- D. Environmental Remediator shall decontaminate vehicles and equipment as follows:
1. for excavation and other earthmoving and soil handling equipment, whenever used in a contaminated or potentially contaminated area, regardless of whether visible residues are present;
 2. for trucks and other vehicles that have entered a contaminated work area for loading of contaminated soil, loading or unloading of roll-off containers or other items, regardless of whether visible residues are present;
 3. for all other vehicles and equipment at the site, whenever visible residues are present.
- E. Decontamination facilities shall be adequate to permit thorough cleaning of potentially contaminated vehicles and equipment, including tires, tracks, undercarriages and other portions of vehicles and equipment as needed, and for complete capture, collection, conveyance and storage of all solid and liquid decontamination residues.
- F. At a minimum, vehicle and equipment decontamination facilities shall include the following:
1. fixed decontamination facilities, as necessary, located at the main transition point(s) between the controlled area of the site (i.e., the area designated in the Contract Documents as “Approximate Limits of Contaminated Area”) and uncontrolled areas;
 2. portable decontamination facilities, as necessary, for use at the boundary of a contaminated area or sub-area, should vehicles and equipment be moving to non-contaminated or previously remediated areas;
 3. adequate in size, design and construction to contain all solid and liquid decontamination residues and ensure no releases to the surface or subsurface;
 4. provided with a clean water supply, and safe electrical power and pressure-washing equipment as necessary for adequate cleaning capability;
 5. provided with an efficient means for removal/transfer of solid and liquid decontamination residues to a wastewater holding container;
 6. provide for secure wastewater holding container for storage of decontamination residues, including secondary containment and other requirements in compliance with RCRA and TSCA;
 7. provided with a means for covering or otherwise protecting the decontamination area when not in use, so that rainwater and surface water runoff do not enter and result in excessive wastewater volumes;
 8. available for use at all times as needed by all site personnel, including Environmental Remediator and Environmental Remediator’s subcontractors, as well as by Owner, Owner’s Representative, Owner’s Consultant and others.

- G. Provide for operation, maintenance and repair of vehicle and equipment decontamination facilities for the duration of the project.
- H. Provide all necessary sampling, waste profiling, contracting and completion of removal and off-site transportation, treatment and/or disposal of wastewater associated with vehicle and equipment decontamination during the project. Provide Owner with documentation that all wastewater was properly characterized and disposed of, along with documentation of the quantities of wastewater (in gallons).
- I. Pay for all removal, off-site transportation, treatment and/or disposal of wastewater associated with vehicle and equipment decontamination for the duration of the project. Include in the Lump Sum Base Bid Price an allowance for payment of up to 10,000 gallons of wastewater associated with vehicle and equipment decontamination, and assume disposal at a licensed industrial wastewater treatment facility. Submit actual bills showing quantities and amounts paid with progress invoices to the Owner. If additional removal, off-site transportation, treatment and/or disposal of wastewater associated with vehicle and equipment decontamination is required, submit bills based on actual amounts, and at the direct amount paid.
- J. At project completion, allow Owner the option to either request dismantlement and removal of all vehicle and equipment decontamination components described herein and provided, or to request that said components remain on-site for further use by Owner, in either case, at no additional cost to Owner.

3.15 EROSION AND SEDIMENT CONTROL

- A. Provide all necessary materials, labor, construction and actions to prevent any release or dispersal of contaminants to the ground, storm or sanitary sewer lines, surface water drainage features and surface water runoff leaving the work areas and the site.
- B. The Owner will be preparing and submitting an application to Charlotte-Mecklenburg County for a National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Discharge Permit. As part of the Permit requirements, the Owner will prepare an Erosion and Sedimentation Control Plan (ESCP) for submittal to, and approval by, Charlotte-Mecklenburg County. Primary elements of the ESCP are indicated in the Contract Documents. Environmental Remediator shall provide all necessary materials, labor, construction, installations and actions to comply with terms of the NPDES Permit and approved ESCP, and as otherwise necessary to minimize soil erosion and sedimentation, and prevent any dispersal of contaminants, during the project.
- C. Provide all necessary inspection of erosion and sediment control measures as required by the NPDES Permit and approved ESCP, and as otherwise necessary to minimize soil erosion and sedimentation, and prevent any dispersal of contaminants, during the project. Promptly repair and otherwise address any issues identified during those inspections, and/or identified by Owner, Owner's Representative, Owner's Consultant or regulatory officials.
- D. At a minimum, erosion and sediment control measures shall include the following:

1. minimize the amount of soil that is disturbed at any point in time to the extent practicable;
2. promptly backfill, grade and re-vegetate disturbed areas once the Owner's Consultant has provided written approval that an area has been tested, found to have been adequately remediated and is ready for backfill;
3. provide diversion structures and other measures in non-contaminated areas up-slope of work areas to minimize run-on of non-contaminated water that has the potential to increase erosion and sedimentation in the work areas;
4. provide erosion and sediment control measures as necessary to prevent migration of sediment from work areas, vehicle traffic areas, and other disturbed areas and to prevent entry of sediment into surface water drainage features such as ditches, swales, stream channels and storm sewers;
5. promptly repair and maintain all erosion and sediment control measures and address all identified concerns;
6. decommission, remove and dispose of all non-permanent all erosion and sediment control measures at project completion, and as required by the NPDES Permit and the approved ESCP.

3.16 CONTROL OF DUST AND OTHER AIRBORNE POLLUTANTS

- A. Provide all necessary materials, labor, construction, control measures and other actions to prevent the generation and dispersal of dust, airborne particulate matter, vapors, fumes, odors and other air pollutants and emissions during the project.
- B. Provide frequent checks, inspections and monitoring to verify and ensure that control measures and actions are functioning properly, and that there is an absence of any airborne emissions of dust or other pollutants. Promptly address any issues identified during those inspections, and/or identified by Owner, Owner's Representative, Owner's Consultant or regulatory officials.
- C. Air monitoring will be conducted at the perimeter of work areas and vehicle traffic areas at the site, as deemed necessary by the Owner. Any such monitoring is not intended to replace the responsibility of the Environmental Remediator to implement, maintain and monitor all necessary controls and actions.
- D. The following criteria shall be met at all times:
 1. no visible dust emissions;
 2. no objectionable odors;
 3. no measurable airborne emissions of Total Particulate Matter (TPM) exceeding 0.15 milligrams per cubic meter (mg/m^3) based on an 8-hour time-weighted average (TWA), or at concentrations exceeding $1 \text{ mg}/\text{m}^3$ based on a 15-minute TWA;
 4. no airborne emissions of any chemical or pollutant at concentrations exceeding one-tenth of the corresponding Permissible Exposure Limits (PELs) established by the

U.S. Occupational Safety and Health Administration (OSHA) or, if no PEL has been established, at concentrations exceeding one-tenth of other occupational exposure limits such as those published by the National Institute for Occupational Safety and Health (NIOSH) or the American Conference of Governmental Industrial Hygienists (ACGIH);

5. upon discovery or notification by Owner, Owner's Representative, Owner's Consultant or regulatory officials that any of the criteria are not being met, promptly modify work practices, implement or expand controls or other actions, or suspend work operations until the condition is corrected.
- E. At a minimum, dust and other air pollutant control measures shall include the following:
1. promptly and frequently clean up work areas and vehicle traffic areas to remove soil and debris that can be dispersed by wind, truck traffic or other means;
 2. lightly wet soil and debris during excavation, removal, truck loading, and other activities that have the potential to emit dust or other pollutants;
 3. lightly wet vehicle traffic routes as-needed to minimize dust;
 4. provide light wetting, foam or other suppression methods to exposed soil, as necessary, if excessive vapors or objectionable odors are indicated.

3.17 TRAFFIC CONTROL

- A. Provide traffic safety and control measures for all trucks and other vehicles entering and leaving the site from public roads and right-of-ways, and while trucks and other vehicles are operating on-site, to ensure the safety of vehicles and pedestrians in the public right-of-ways, to ensure the safety of site workers and visitors, and to prevent damage to the site. Provide such measures regardless of whether the trucks and vehicles are under the control of Environmental Remediator and Environmental Remediator's subcontractors, or under the control of others under separate contract. This includes all trucks and other vehicles used for off-site transportation and treatment/disposal of soil, debris, wastes and other materials.
- B. For all trucks and other vehicles entering and leaving the site, provide warning signs and flagging as necessary. Comply with all Charlotte/Mecklenburg County and State of North Carolina requirements for flagging and other applicable traffic safety and control measures.
- C. For on-site work, establish, mark, maintain and enforce traffic control patterns to prevent accidents. Establish, post and enforce speed limits for both safe operation and prevention of dust.
- D. Prohibit truck and other vehicular traffic through areas of the site where contaminants are present, except when necessary to accomplish the work. Ensure that any vehicles traversing those areas are properly decontaminated before leaving the contaminated work area and the site, as specified elsewhere in the Contract Documents.

- E. Prohibit truck and other vehicular traffic through areas of the site that are non-contaminated, or that have been remediated, except as expressly authorized by the Contract Documents.

3.18 MISCELLANEOUS SOLID WASTE MANAGEMENT AND DISPOSAL

- A. In addition to requirements specified elsewhere in the Contract Documents for management of waste from other sources, provide waste receptacles for all non-hazardous solid waste (e.g., general rubbish, non-contaminated construction debris) generated by the Environmental Remediator, Environmental Remediator's subcontractors, Owner, Owner's Representative, Owner's Consultant and authorized visitors during the project. Include costs in the Lump Sum Base Bid Price.

3.19 PROPERTY MAINTENANCE

- A. Maintain all grass and other vegetative cover within the project area in a mowed condition, so that grass does not exceed 3-inches in height, and is in compliance with Charlotte-Mecklenburg County requirements, during the entire duration of the project. Grass inside the fenced area of the site has typically been cut with a bush-hog and tractor as needed. Grass on the curb lawn along West Summit and Merriman Avenue at the east-southeast portions of the site has typically required more frequent cutting with a hand mower.

- END OF SECTION 015000 -

DIVISION 02 – EXISTING CONDITIONS

SECTION 026113 – EXCAVATION AND HANDLING OF CONTAMINATED MATERIALS

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes requirements for excavation, on-site handling and loading of contaminated soil, concrete, asphalt, debris and other materials (herein referred to as “contaminated soil and materials”), certain non-contaminated soil concrete, asphalt, debris and other materials (herein referred to as “non-contaminated soil and materials”), and potentially contaminated soil, concrete, asphalt, debris and other materials (herein referred to as “potentially contaminated soil and materials”)all as identified in the Contract Documents
- B. Within the specified removal areas and depths indicated in the Contract Documents, all materials encountered shall be removed and handled in the manner specified for that area, whether visible or concealed, and whether overlying or within the specified removal areas and limits, and including but not limited to: soil, gravel, concrete, asphalt, masonry block, wood, steel, sumps, pits, mechanical systems, waste materials and debris.
- C. All work under this Section shall be covered under the Lump Sum Base Bid Price, except as specifically stated otherwise in this Section.

PART 2 PRODUCTS (none specified)

PART 3 EXECUTION

3.2 MARKING AND PROTECTION

- A. Locate, mark and protect from damage, all equipment, supplies, utilities, remediation systems, monitoring systems, improvements and other features currently existing at the site, as well as any that are constructed or delivered to the site during the project. Such improvements include, but are not limited to, aboveground utilities, underground utilities, ground-water monitoring wells, soil and ground-water remediation systems. If damaged, reimburse Owner for repair or replacement costs as determined by Owner.
- B. Notify all public and private entities that may have utility lines in the site vicinity, and ensure that all utilities are properly marked and protected prior to any work, as specified elsewhere in the Contract Documents.
- C. Coordinate with Norfolk Southern Railway Company, Piedmont Natural Gas Company and other entities to protect utilities and rail lines on and near the property, as specified elsewhere in the Contract Documents.

3.3 PREPARATION AND STAKING

- A. Prepare each work area by clearing, grubbing and removing any vegetation, obstructions and impediments. Clear a sufficient area surrounding all sides of the excavation area to allow Owner's Consultant to survey, stake and check excavation and removal limits, excavation and removal limit offsets, to allow installation of silt fence, sediment traps and other erosion and sediment control items to be installed as specified elsewhere in the Contract Documents, and to allow access of equipment, trucks and containers by Environmental Remediator and others performing work under separate contract (e.g., off-site transportation and disposal of soil and other materials).
- B. Notify Owner's Consultant when a work area has been cleared and prepared and is ready for staking, excavation and other project work. Owner's Consultant will then proceed to survey and stake the horizontal limits of required removal areas, as specified and shown in the Contract Documents. Owner's Consultant will also survey the pre-removal grade elevations in the removal areas, and provide reference staking for checking of grade elevations during removal.
- C. Exercise precautions to protect survey and control staking during performance of the work. If, in Owner's opinion, adequate precautions are not taken and re-surveying of an area by Owner's Consultant is required, Owner reserves the right to back-charge Environmental Remediator for associated costs.

3.4 REMOVAL AND HANDLING OF CONTAMINATED MATERIALS

- A. Excavate, remove and load contaminated and potentially contaminated soil and materials from the full horizontal and vertical limits of the designated areas specified in the Contract Documents. Also, excavate and stockpile non-contaminated soil and materials where specified in the Contract Documents. This work includes the following:
 - 1. contaminated soil and materials excavated for infiltration gallery construction associated with in situ treatment areas #AOC-3, #AOC-13 and #AOC-21;
 - 2. contaminated, potentially contaminated and non-contaminated soil and materials in PCB soil removal sub-areas #1, #2, #3, #4 and #5;
 - 3. contaminated and non-contaminated soil and materials in remaining area of concern #AOC-16;
 - 4. contaminated soil and materials in remaining area of concern #AOC-19;
 - 5. contaminated (non-RCRA/non-TSCA) concrete in remaining area of concern designated "existing concrete slab," and outside limits of PCB soil removal sub-areas;
 - 6. contaminated and non-contaminated soil and materials associated with main sanitary sewer, main storm sewer and secondary sewer lines.

- B. Removal areas designated on the Drawings or elsewhere in the Contract Documents as “TSCA” indicate the presence of PCBs in soil and other materials at concentrations of 50 parts per million (ppm) or greater, which shall be managed in accordance with EPA’s Toxic Substance Control Act (TSCA). Removal areas designated “RCRA Hazardous” indicate the presence of contaminated materials classified or potentially classified as containing RCRA hazardous wastes which shall be managed in accordance with EPA’s Resource Conservation and Act (RCRA). In both instances, work in these removal areas shall be segregated from one another and performed separately and distinctly from one another, as well as from other soil and material removal and handling activities during the project. Environmental Remediator shall exercise the utmost precautions to prevent any spillage or release of contaminated soil and materials. Only direct-loading of soil and materials from these excavation areas into trucks or containers shall be permitted.
- C. Removal areas designated on the Drawings or elsewhere in the Contract Documents as “non-TSCA,” and all other excavation and removal areas and activities specified in the Contract Documents, involve soil and other materials containing contaminants which must be managed and disposed of as a non-hazardous solid waste, but not as a regulated PCB-containing waste under TSCA or a hazardous waste under RCRA. In this instance, work shall be segregated and performed separately and distinctly from the defined TSCA and RCRA removal areas, to ensure no co-mingling of the various waste streams. Removal and handling activities shall also proceed with good control and adequate precautions to prevent any spillage or release of contaminated soil and materials. Environmental Remediator shall also direct-load soil and materials from these removal areas into trucks or containers. Staging and stockpiling of non-TSCA, non-RCRA materials for re-handle and loading will be permitted only after the Environmental Remediator has proposed adequate procedures to ensure containment and prevent any co-mingling with underlying and surrounding soil or materials, and only after the express written approval by Owner.
- D. Provide all necessary equipment, experienced personnel, methods and techniques so that contaminated soil and materials are removed and handled in the proper fashion. Specifically:
1. do not remove more or less soil and materials than what has been specified and identified;
 2. do not any allow mixing of soil and materials being removed with underlying or surrounding soil and materials;
 3. do not allow potentially contaminated soil and materials, or equipment being used to handle contaminated soil and materials, to contact areas that are non-contaminated or have undergone remediation.
- E. Trucks, roll-off containers and other containers will be provided pursuant to a separate Section of the Contract Documents under this contract, or separately by others, at the Owner’s discretion. In whichever manner trucks and containers are provided, Environmental Remediator shall coordinate work with the trucks and containers being provided, and shall direct-load contaminated soil and materials into trucks for off-site

transportation and disposal. Where roll-off containers or other containers are provided, load contaminated material into those containers.

- F. Cut, break or otherwise reduce the size of any concrete, masonry, steel or other materials encountered in the specified removal areas and being loaded for off-site transport and disposal, to the maximum allowable sizes specified by the receiving disposal facility, or as otherwise specified by the Owner or Owner's Consultant. Do not use open-flame devices for cutting.
- G. Notify Owner's Consultant when it is believed that all specified removal has been accomplished in a given sub-area. Owner's Consultant will survey horizontal limits and vertical elevations, in order to verify that all specified removal has been accomplished per the Contract Documents. If Owner's Consultant indicates that all specified removal has been accomplished, proceed to other portions of the work while Owner's Consultant samples the removal area for laboratory analysis.
- H. Following receipt and review of laboratory results, Owner's Consultant will inform Environmental Remediator of one of the following outcomes and required courses of action for a given removal area:
 - 1. the area has been adequately remediated, in which case Owner or Owner's Consultant will provide written authorization that the area will be available for covering (backfill with clean fill) as specified elsewhere in the Contract Documents (or in the case of in situ treatment areas #AOC-3 and AOC-13, the exposed sub-grade will remain open for treatment system construction at a later time); or
 - 2. additional soil removal and sampling is needed, in which case Owner will issue a Change Order for Environmental Remediator to promptly remove, handle and load out a specified additional volume, based solely on in-place volume of material to be removed in accordance with Unit Prices submitted by Environmental Remediator, and in accordance with all other requirements in the Contract Documents.
- I. In no case shall Environmental Remediator cover or backfill a removal area until the Owner or Owner's Consultant has provided written authorization that the area will be available for covering/backfill.

3.5 MANAGEMENT AND CONTROL OF WORK AREAS

- A. Clean and decontaminate all trucks, vehicles, containers and equipment before they leave the work area, including Environmental Remediator's trucks, vehicles, containers and equipment, as well as trucks and containers being provided by others, as specified elsewhere in the Contract Documents.
- B. Adequately secure all work areas, equipment, tanks, containers, open excavations and other elements of the project in order to prevent injury to site workers and the public.
- C. Protect all removal areas from re-contamination.

- END OF SECTION 026113 -

SECTION 027300 – CONSTRUCTION OF IN SITU TREATMENT SYSTEMS

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes requirements for construction of in situ soil and ground-water treatment systems in the areas identified as #AOC-3, #AOC-4, #AOC-13 and #AOC-21, as specified in the Contract Documents.
- B. In situ soil and ground-water treatment systems located in areas #AOC-3, #AOC-13 and #AOC-21 will include both shallow infiltration areas (also referred to herein as infiltration galleries or infiltration basins), along with intermediate and deep injection wells, and associated distribution piping and connections for both the basins and the wells. The in situ soil and ground-water treatment system located in area #AOC-4 will include intermediate and deep injection wells, along with associated distribution piping and connections for the wells.
- C. Provide all necessary equipment, materials, fabrication, installation, testing and other work for fully installed and functional systems.
- D. All work under this Section shall be covered under the Lump Sum Base Bid Price, except as specifically stated otherwise in this Section.

PART 2 PRODUCTS

2.1 SHALLOW INFILTRATION AREAS

- A. Granular media for shallow infiltration areas shall comply with North Carolina Department of Transportation (NCDOT) Standard Specifications (2002) for coarse aggregate, standard size no. 67, crushed and washed stone. Approved sources for granular media, based on Permanganate Soil Oxidant Demand (PSOD) test results, are as follows:
 - 1. Martin Marietta Aggregates, Charlotte Quarry, 4551 Beatties Ford Road, Charlotte, NC.
- B. Solid and perforated pipe shall be 4-inch inside-diameter (ID), Schedule 40, polyvinyl chloride (PVC). Perforated pipe shall either be circular or slotted, with minimum open area of 0.22 square inches per lineal ft of pipe, and capable of permitting free flow of water.
- C. Geotextile fabric shall be nonwoven with minimum tensile strength of 80 pounds and apparent opening size of 70 US Sieve.

2.2 INTERMEDIATE AND DEEP INJECTION WELLS

- A. Surface casing for deep injection wells shall be new, seamless or electric-resistance welded, galvanized steel, 6 inch nominal diameter, only with threaded ends and couplings, meeting ASTM A-120, A-53 or A-589, with minimum wall thickness of 0.185 inches.

- B. Screen, riser pipe and bottom caps for injection wells shall be 2-inch inside-diameter (ID), Schedule 40, polyvinyl chloride (PVC), with flush-joint, neoprene gasketed, threaded ends and bottom caps. Screen slots shall be continuous, machine-slotted with a slot size of 0.020-inch.
- C. Filter pack material for injection wells shall be clean, uniform-sized, coarse-grained quartz sand, of a size and uniformity such that at least 90 percent is retained by the well screen slot size.
- D. Cement-bentonite grout for grouted sections of surface casings and injection wells shall be comprised of Portland cement with 2 percent powdered bentonite, pre-mixed with potable water and installed with a tremie pipe and grout pump from the base of the grouting interval.

PART 3 EXECUTION

3.1 PREPARATION, STAKING AND SOIL EXCAVATION

- A. Prepare and stake the limits of the shallow infiltration areas.
- B. Actual excavation and loading of contaminated soil and materials associated with preparation of the shallow infiltration areas is covered in a separate Section of the Contract Documents; however, the requirements of this Section and other requirements in the Contract Documents apply as well.
- C. Minimize heavy equipment traffic when excavating the shallow infiltration basins, in order to minimize compaction of underlying soil.
- D. Following soil excavation for shallow infiltration basins in areas #AOC-3, #AOC-13 and #AOC-21, and prior to any additional work in the excavated areas, place, but do not compact, a uniform 6-inch deep base layer of the specified NCDOT no. 67 granular fill in the base of the excavation, to reduce compaction of underlying soil during subsequent work with a drill rig.

3.2 DRILLING AND INSTALLATION OF INJECTION WELLS

- A. Drill and install intermediate and deep injection wells as specified in the Contract Documents, and in accordance with requirements contained in North Carolina Administrative Code, Title 15A, Subchapter 2C, Section .0200 – Criteria and Standards Applicable to Injection Wells.
- B. All subsurface drilling and installation of injection wells shall be completed by a North Carolina Certified Well Contractor.
- C. Owner's Consultant must be present to observe and log all drilling and installation of injection wells, and to make adjustments to drilling, surface casing completion depths, well completion depths, screened intervals and other elements, in order to help maximize the performance of the infiltration system.

- D. The approximate number, estimated depths and other construction details for injection wells to be drilled and installed are summarized in Table 3.2.C.1. Environmental Remediator shall base the Lump Sum Base Bid Price on these quantities. Final quantities may differ, and final payment shall be computed by making additions and/or subtractions to the Lump Sum Base Bid Price based on actual depths and Unit Costs submitted by Environmental Remediator.

Table 3.2.C.1 – Estimated Quantities for Drilling & Installation of Injection Wells*

Area	Intermediate Injection Wells			Deep Injection Wells			
	Number of Intermediate Injection Wells	Total Depth Each (ft)	Depth Interval of Each Well Screen (from – to, ft)	Number of Deep Injection Wells	Total Depth Each (ft)	Depth Interval of Each Surface Casing & Grout (from – to, ft)	Depth Interval of Each Well Screen (from – to, ft)
AOC-3	4	50	10-50	2	90	0-55	60-90
AOC-4	2	40	10-40	2	80	0-45	50-80
AOC-13	21	100	10-100	3	140	0-105	110-140
AOC-21	9	80	10-80	2	120	0-85	90-120

* Note - Depths are approximate. Final depths will be based on measured distance below ground surface as it exists at each injection well location at the time drilling and installation occurs.

- E. Locate and stake well drilling locations in accordance with the Contract Documents.
- F. Decontaminate all down-hole drilling equipment by steam cleaning with potable water prior to advancing boreholes at each injection well location. Provide new or reconditioned 55-gallon steel drums with tight-sealing lids, and/or suitable bulk containers, collect all decontamination residues and transfer to a centralized storage area as designated by Owner’s Consultant.
- G. Utilize methods and equipment during drilling, installation and development to fully contain residues generated during drilling, injection well installation and injection well development work, including soil and rock cuttings, drilling fluids, grout, development water and other residues, in order to prevent migration of residues that could plug and reduce the performance of the excavated infiltration basin. Provide new or reconditioned 55-gallon steel drums with tight-sealing lids, and/or suitable bulk containers, collect drilling residues and transfer to a centralized storage area as designated by Owner’s Consultant.
- H. Do not include costs for characterization, off-site transportation and disposal of decontamination and drilling residues in the Lump Sum Base Bid Price. Owner will perform or authorize this work separately.
- I. Utilize methods and equipment as necessary during drilling and injection well installation to keep boreholes open at all times and prevent collapse or other conditions that could interfere with installation of surface casing, grout, filter packs, well screen or well casing.

Maintain a minimum of 1.5 inches of annular spacing on all sides of the surface and well casings during installation and tremie grouting of surface casings, and during installation of filter pack, well screen, well casing and tremie grouting of wells.

- J. Intermediate injection wells are located within the limits of the infiltration basins, where being constructed. Advance intermediate boreholes to the specified depths and proceed with installation of intermediate injection wells.
- K. Deep injection wells are located outside the limits of the infiltration basins, where being constructed. Advance deep boreholes until competent bedrock is encountered, and continue to a depth of 5 ft into competent bedrock. Install and firmly seat galvanized steel surface casing into the 5 ft competent bedrock socket. Install cement-bentonite grout into the annular space between the borehole and the surface casing using pressure tremie grouting methods. Monitor grout level in annular space for 24 hours. Mix and add additional grout if necessary. Allow the grout to set for a minimum of 24 hours before continuation of drilling.
- L. Proceed with drilling to advance borehole to the specified depth into competent bedrock. Assist Owner's Consultant with evaluation of borehole conditions during bedrock drilling and after completion of drilling to the target depth. For example, drilling may be paused in order to check borehole for water, inject air or remove water by pumping or bailing to assess yield and verify that an adequate interval of ground-water transmission has been encountered. If deemed adequate by Owner's Consultant, proceed with installation of deep injection well; otherwise, advance borehole to greater depth for further evaluation and possible injection well installation as directed by Owner's Consultant.
- M. Install intermediate and deep injection wells as follows:
 - 1. install 2-inch PVC well screen, riser pipe and end cap as specified in the Contract Documents, and as directed by Owner's Consultant based on results during drilling;
 - 2. extend PVC riser pipe so that the top of PVC casing elevation is 22-inches above final (post-construction) grade elevation at each location. For injection wells located within infiltration area limits, this will require the addition of threaded PVC well casing and galvanized steel outer protective casing segments during placement of granular media and soil up to final grade elevation;
 - 3. for intermediate injection wells located within infiltration areas, install a length of 6-inch threaded galvanized steel protective casing around the 2-inch PVC riser pipe, from at least 3 feet below the exposed subgrade elevation in the infiltration area to 24-inches above final grade elevation (i.e., grade elevation following final construction of infiltration system) at each well location;
 - 4. for deep injection wells, extend the 6-inch galvanized steel surface casing to 24-inches above grade elevation at each well location;
 - 5. for all injection wells (intermediate and deep), ensure that the final top of PVC casing elevation is between 1.5-inches and 3.0-inches below the final top of galvanized steel casing elevation;

6. install the coarse silica sand filter pack in the annular space of borehole, to include the full screened interval and extending a minimum of 2 ft above the top of the screen;
7. install the bentonite pellet seal in the annular space of borehole above filter pack, extending a minimum of 1 ft above the filter pack;
8. install the cement-bentonite grout seal from the top of the bentonite pellet seal to grade or exposed subgrade at time of drilling;
9. for the 6-inch threaded galvanized steel protective casing surrounding the upper portion of intermediate wells, fill the space between the steel and PVC casings with the coarse sand media used for the filter pack, to within 6-inches of the final top of PVC elevation;
10. for both the intermediate and deep injection wells, the final top of 6-inch galvanized steel casings shall have threaded ends, maintained in good condition during drilling, and be fitted with a threaded, galvanized steel cap with a locking mechanism, to serve as a locking protective well cover. The 2-inch PVC well casing shall be fitted with a vented slip-on PVC cap.

3.3 CONSTRUCTION OF SHALLOW INFILTRATION AREA DISTRIBUTION PIPING

- A. Following drilling and installation of all intermediate wells to the exposed subgrade within an infiltration area, install 4-inch ID Schedule 40 perforated PVC pipe horizontally along the 6-inch base layer of granular media, at the locations specified in the Contract Documents. At each end and specified intermediate location along the perforated pipe segments as specified in the Contract Documents, install a 90 degree PVC fitting and a vertical section of 4-inch Schedule 40 solid PVC riser pipe, extended upward to an elevation of 24 inches above final grade elevation at that location. Install a 4-inch vented slip-on PVC cap on each riser pipe.
- B. Upon completion of the piping arrangement within the infiltration area, carefully place the NCDOT no. 67 granular media in maximum 12-inch lifts, within the infiltration area to within 4.0 inches of surrounding grade, using whatever methods and precautions as necessary to ensure that the perforated pipe, vertical riser pipe and injection wells are not damaged. If any of these components are damaged, Environmental Remediator shall promptly repair or replace to Owner's satisfaction at no additional cost to Owner.
- C. Install geotextile fabric on top of the granular media layer within the limits of the infiltration area, followed by 6 inches of clean topsoil from a source approved by the Owner, graded to provide a positive drainage slope outward from the center to the outer perimeter of the infiltration area and taking subsequent settlement into account so that areas of standing water do not develop. Grade and level the work area to provide smooth transitions between disturbed and undisturbed areas. Once again, use whatever methods and precautions as necessary to ensure that all pipes and injection wells are not damaged. If any of these components are damaged, Environmental Remediator shall promptly repair or fully replace to Owner's satisfaction at no additional cost to Owner.

- D. Install concrete pads around each injection well located both inside and outside the limits of each infiltration area. Concrete pads shall be 2 ft by 2 ft in area, centered at the well or riser pipe, with a minimum thickness of 4 inches, and provided with a positive slope outward from the center to the edges.

- END OF SECTION 027300 -

SECTION 027400 – PREPARATION AND APPLICATION OF IN SITU TREATMENT CHEMICALS

PART 1 GENERAL

1.1 SUMMARY

- A. Work under this section includes the following subdivisions:
1. Provide Secure Chemical Storage and Handling Area and Enclosures;
 2. Provide Water and Electric Services for Chemical Mixing, Handling and Application;
 3. Provide Safety and Spill Containment Facilities and Equipment;
 4. Provide Equipment, Supplies and Materials for Chemical Mixing, Handling and Application;
 5. Procure Treatment Chemicals, Deliver to Site and Place in Storage;
 6. Mix and Apply Treatment Chemicals and Chaser Water.
- B. All facilities, equipment, supplies, materials and other items provided under this Section shall become the property of the Owner, remain at the site for the duration of the project, and remain at the site following completion of the project. During the duration of the project, and for each episode of chemical procurement, mixing, and application, Environmental Remediator shall be responsible for maintenance, repair and replacement of the facilities, equipment, supplies, materials and other items provided under this Section.
- C. All personnel provided for performance of work under this Section shall be adequately trained and experienced in the mixing, handling and field application of hazardous chemicals, specifically, concentrated sodium permanganate and concentrated calcium polysulfide.
- D. This Section includes requirements for work associated with the application of treatment chemicals in association with the in situ soil and ground-water remediation systems. Award of work under this Section is optional, and will be awarded, or not awarded, to the Environmental Remediator at the discretion of the Owner. Therefore, payment for work under this Section is not covered in the Lump Sum Base Bid Price. Instead, payment will be based on separate Lump Sum and Unit Prices provided by the Environmental Remediator for the different subdivisions of work described in this Section.

PART 2 PRODUCTS (none specified)

PART 3 EXECUTION

- 3.1 PROVIDE SECURE CHEMICAL STORAGE AND HANDLING AREA AND STORAGE ENCLOSURES
- A. Prepare the area designated and approved by Owner area for the Treatment Chemical Storage and Handling Area, as necessary, by clearing, leveling and repairing, to provide an open and level surface free of obstructions and accessible to trucks and other vehicles and equipment.
 - B. Provide and install secure, galvanized chain-link fencing, 6 ft in height, with three barbed wire top strands, around a minimum 30 ft by 60 ft perimeter. Install a minimum 30 ft wide, double-sided, locking gate with lock along the fenced area, in a location, size and orientation to allow access for trucks, other vehicles and equipment. Install two locking man-gates on opposite sides of the fenced area.
 - C. Reserve a minimum area of 10 ft by 20 ft within the fenced area for placement of Owner's field office trailer by others.
 - D. Provide secure storage enclosures as follows:
 - 1. one storage enclosure for bulk containers of concentrated sodium permanganate, a second storage enclosure for bulk containers of concentrated calcium polysulfide treatment chemical, and a third storage enclosure for all other equipment, supplies and other items required under this Section;
 - 2. a separation distance of at least 25 ft between the two chemical storage enclosures;
 - 3. adequately ventilated to prevent the development of potentially hazardous conditions within the enclosures;
 - 4. constructed in a manner that prevents tampering or break-in, and provided with locking doors;
 - 5. designed to hold 275-gallon intermediate bulk containers, and configured and oriented to allow access by forklift or other equipment for easy placement and removal of the containers;
 - 6. equipped with spill containment systems (fixed or portable) capable of containing at least 150 percent of the largest single container to be stored in the enclosure;
 - 7. adequate capacity of the chemical storage enclosures for storage of up to eight (8), 275-gallon intermediate bulk containers (sodium permanganate enclosure) and up to four (4), 275-gallon intermediate bulk containers (calcium polysulfide enclosure).

3.2 PROVIDE WATER AND ELECTRIC SERVICES FOR CHEMICAL MIXING, HANDLING AND APPLICATION

- A. Tie-in and extend rigid piping from the clean water storage tank and associated pump provided under Section 015000 to the Treatment Chemical Storage and Handling Area, and provide all necessary piping, hoses, fittings and other items so that all water supply requirements under this Section are met, including providing adequate water supply for preparation and transfer of diluted chemical treatment solutions and potable water chaser fluid, a separate water supply of adequate flow rate and quantity for emergency eye wash and emergency shower facilities, and all other water requirements. Ensure that water supplies are protected from freezing and available for use by Environmental Remediator, Subcontractors, and separately by Owner's Consultant at all times.
- B. Provide all electric power as needed for work under this section, including any pumps, mixers and other equipment and devices to be used in the Treatment Chemical Storage and Handling Area, as well as portable equipment and devices to be used elsewhere at the site.
- C. Electrical power, if supplied separately by Owner for Owner's field office and/or other purposes, shall not be used or relied upon for any work required under this Section.

3.3 PROVIDE SAFETY AND SPILL CONTAINMENT FACILITIES AND EQUIPMENT

- A. Provide, install and maintain fixed emergency eyewash and emergency shower systems in the Treatment Chemical Storage and Handling Area, and arrange these systems so that they have a sufficient supply of potable-grade water at all times when chemical handling is occurring at the site. Provide separate emergency eyewash and emergency shower systems for use elsewhere at the site where chemicals are being handled, and arrange these systems so that they have a sufficient supply of potable-grade water at all times when chemical handling is occurring at the site. Ensure that all emergency eyewash and emergency shower systems are maintained in a clean and sanitary condition, and protected from freezing.
- B. Procure, prepare and maintain adequate quantities of neutralizing solutions for the sodium permanganate treatment chemical in the Treatment Chemical Storage and Handling Area, and at other site locations where sodium permanganate is being handled, at all times during the project.

3.4 PROVIDE EQUIPMENT, SUPPLIES AND MATERIALS FOR CHEMICAL MIXING AND APPLICATION

- A. Provide all necessary equipment and other items for transfer, mixing, transport and application of treatment chemicals, diluted chemical solutions and potable water chaser fluid during the project. Include an adequate number and volume of portable tanks for mixing, intermediate holding, transfer and application (gravity-feed dosing) in the treatment areas.

- B. Provide flexible hoses, shutoff valves, flow control valves tees, nozzles and other fittings needed for efficient transfer, mixing and dosing. All fittings shall be quick-connect type for efficient installation and removal.
- C. Provide equipment and other items to allow only gravity flow methods during application of treatment solutions at the individual treatment areas, taking into account the need to provide manifold-type delivery to multiple application points (e.g., injection wells) simultaneously, and the need to closely monitor and promptly vary flow rates to the individual application points.
- D. Provide only tanks, pipes, hoses, fittings, pumps and other items designed and intended for safe use with transfer and handling of hazardous chemicals, and chemically compatible with sodium permanganate and calcium polysulfide solutions. Provide separate items for dedicated use with sodium permanganate and calcium polysulfide chemicals, or provide safe and adequate methods for cleaning and use of components with both chemicals.

3.5 PROCURE TREATMENT CHEMICALS, DELIVER TO SITE AND PLACE IN STORAGE

- A. Provide treatment chemicals in amounts and frequencies as required by Owner during the project. Procure chemicals, arrange for safe transport and delivery to the site, unload and place in the secure storage enclosures. Provide treatment chemicals only in 275-gallon intermediate bulk storage containers, unless alternate containers or delivery options are agreed to in writing by Owner. Provide treatment chemicals only in containers which meet all U.S. Department of Transportation requirements for transport of the applicable chemical. Provide treatment chemicals only which are designated as a grade suitable for use in remediation or potable water treatment applications, and which are accompanied by certificates of analysis documenting purity and absence of metals and other harmful substances at unacceptable concentrations. Currently approved sources of treatment chemical are as follows:
 - 1. RemOx[®] L ISCO 39.5-41.0% sodium permanganate, supplied by Carus Chemical Company, LaSalle, Illinois;
 - 2. F2SP-40 40% sodium permanganate, supplied by Hepure Technologies, Wilmington, Delaware;
 - 3. BSP Cascade[®] 29% calcium polysulfide, supplied by Best Sulfur Products, Fresno, California.

3.6 MIX AND APPLY TREATMENT CHEMICALS AND CHASER WATER

- A. Provide mixing, transfer and application of treatment chemical solutions and potable water at the site, on a frequency and duration as required by Owner during the project. This work shall include all necessary labor, vehicles and other items required for completion of the work, including any items not specified or required elsewhere in this Section. The work shall generally involve the following:
 - 1. mobilization of treatment personnel, vehicles and other items to the site;

2. transfer of concentrated treatment chemicals (previously procured and delivered) from the secure storage enclosure to mixing tanks;
 3. measurement and mixing of chemicals and potable water to form diluted chemical treatment solutions in the quantities and concentrations specified by Owner;
 4. transfer of bulk quantities of diluted chemical treatment solution and potable water chaser fluid from the mixing area to portable dosing tanks in the specified treatment areas;
 5. set-up and installation delivery hose configurations, including portable hoses, valves, flow control devices and other items;
 6. discharge of diluted chemical treatment solutions and potable water chaser fluid to the points of application (i.e., injection wells and infiltration gallery riser pipes), only by controlled, gravity-feed methods, and in the amounts and duration specified;
 7. monitoring and adjustment of flow rates as needed to maintain flows and achieve the target volumes while not exceeding the treatment system's capacity to accept the fluids;
 8. rinsing of portable tanks, hoses and other items with potable water;
 9. replacement and securing of equipment and supplies in the storage enclosure; and
 10. demobilization from the site.
- B. Exercise caution and diligence during all chemical procurement, transportation, unloading, transfer and application of treatment chemicals, and ensure that no chemical spillage occurs. If any spillage or other unintended release of chemicals occurs, promptly contain, clean up and dispose of all spilled material and affected soil or other media, at no additional cost to Owner.
- C. The estimated volumes of treatment solution and potable water chaser fluid to be applied during each treatment episode are summarized in Table 3.6.C.1. Environmental Remediator shall base the Lump Sum Base Bid Price on these quantities. Final quantities may differ, and final payment shall be computed by making additions and/or subtractions to the Lump Sum Base Bid Price based on actual depths and Unit Costs submitted by Environmental Remediator.

Table 3.6.C.1 – Estimated Quantities of Treatment Chemicals and Chaser Water Per Treatment Episode*

Area	Estimated Volume of Treatment Chemical Solution Per Each Treatment Episode (solution in dilute form following mixing with potable water - gallons)	Estimated Volume of Potable Water Chaser Fluid Per Each Treatment Episode (gallons)
AOC-3	2,000	2,000
AOC-4	13,500	13,500
AOC-13	41,250	41,250
AOC-21	18,250	18,250

* Note - Quantities are approximate, and are only intended to represent a rough approximation of the anticipated level of effort.

- **END OF SECTION 027400** -

SECTION 028100 – TRANSPORTATION & DISPOSAL OF CONTAMINATED MATERIALS

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes requirements for work associated with the off-site transportation, treatment and disposal of all contaminated soil, concrete, asphalt, debris and other materials (collectively referred to as "contaminated materials") generated during the project, to the extent described herein and not covered under other Sections of the Contract Documents.
- B. Work under this section includes the following:
 - 1. off-site transportation and disposal of contaminated materials containing PCBs at 50 ppm or greater, and identified in the Contract Documents as "TSCA regulated," at a TSCA permitted facility that has been approved by Owner;
 - 2. off-site transportation and disposal of contaminated materials containing RCRA hazardous-waste or exhibiting RCRA hazardous-waste characteristics, and identified in the Contract Documents as "RCRA-regulated," at a RCRA Subtitle C permitted facility that has been approved by Owner;
 - 3. off-site transportation and disposal of contaminated materials identified in the Contract Documents as "non-TSCA regulated" and "non-RCRA regulated" solid waste at a licensed solid waste disposal facility that has been approved by Owner.
- C. Award of work under this Section is optional, and will be awarded, or not awarded, to Environmental Remediator at the discretion of Owner. Therefore, do not include any costs for work under this Section in the Lump Sum Base Bid Price. Instead, provide separate Unit Prices for transportation and disposal, as indicated on the Bid Form.

PART 2 PRODUCTS (none specified)

PART 3 EXECUTION

3.1 TRANSPORTATION AND DISPOSAL OF SOIL AND DEBRIS

- A. Provide all necessary labor, equipment and other items to arrange, schedule, coordinate and complete the transportation and disposal of contaminated materials, once the contaminated materials been excavated or otherwise removed and loaded in accordance with work covered under other Sections.

- B. Transport and dispose of soil and debris only at facilities that have been approved by Owner. Currently approved facilities include the following:

TSCA-Regulated:

1. Waste Management, Inc., Emelle, Alabama
2. EQ – Environmental Quality Co., Wayne Disposal Site #2, Bellville, Michigan

RCRA-Regulated:

1. Waste Management, Inc., Emelle, Alabama
2. EQ – Environmental Quality Co., Wayne Disposal Site #2, Bellville, Michigan

Non-TSCA Non-RCRA Regulated Solid Waste:

1. Waste Management, Inc., Richland Landfill, Elgin, South Carolina
 2. Republic Services, Charlotte Motor Speedway Landfill, Concord, North Carolina
- C. Provide and complete all elements of transportation and disposal as needed, and as required by Federal, State and local laws and regulations, including, but not limited to, notifications, manifesting, placarding, securing and covering of loads, use of liners, maintenance of safe vehicles, maintenance of loaded vehicle weights within allowed load limits, use of properly licensed transportation entities and properly licensed treatment/disposal entities and facilities.
- D. Provide Owner with fully completed and signed manifests (original) for each shipment of TSCA-regulated, RCRA-regulated, and non-TSCA, non-RCRA Solid Waste, including both the initial copy and the copy returned from the treatment, storage and disposal facility or solid waste landfill.
- E. Provide Owner with scale weight tickets from the destination disposal facility for each shipment of TSCA-regulated, RCRA-regulated, and non-TSCA, non-RCRA Solid Waste. Scale weight tickets shall be signed and certified by a representative of the disposal facility, and shall list the following: pre-dump gross vehicle weight with date and time stamps; post-dump tare weight with date and time weighed; name of facility. Pre- and post-dump weights shall be determined only from certified scales at the approved receiving facility, and shall be recorded within two hours of one another.
- F. Include with the unit costs for this work all applicable costs and fees.

- END OF SECTION 028100 -

DIVISION 31 – EARTHWORK

SECTION 310000 – EARTHWORK

PART 1 GENERAL

1.1 SUMMARY

- A. This Section includes requirements for the following:
 - 1. backfilling, including providing, placing, grading and compacting clean fill;
 - 2. restoration, including placement and preparation of topsoil, seeding and establishment of vegetation;
 - 3. establishment of post-construction surface water drainage, including construction of drainage channels and installation of erosion and sedimentation controls.
- B. All work under this Section shall be covered under the Lump Sum Base Bid Price, except as specifically stated otherwise in this Section.

PART 2 PRODUCTS

2.1 IMPORTED BACKFILL

- A. Provide clean backfill only from a single source that has been sampled and analyzed, is documented to be free of any hazardous substances, pollutants and other potential or known contaminants as defined by the U.S. Environmental Protection Agency and the NCDENR, exhibits the engineering properties specified in the Contract Documents, and has been proposed to, and pre-approved in writing by, the Owner. Currently approved backfill sources include the following:
 - 1. Vulcan Materials Co., 10526 Old Nations Ford Road, Charlotte, NC.
- B. Before the start of any work, identify and propose the source of all backfill for the entire project to Owner, including the specific sub-area of the proposed location where all backfill will come from during the entire project. Identify the source location and submit documentation on the environmental conditions associated with the source property, and laboratory analytical results from representative sampling of the backfill demonstrating an absence of any detectable hazardous substances, pollutants and other potential or known contaminants. Submit testing results which demonstrate that proposed subsoil and topsoil components from the source exhibit the engineering properties specified in the Contract Documents. Owner may elect to visit the location and conduct additional sampling and analysis.

- C. Identify to Owner the proposed methods and documentation that will be implemented to ensure and document that all backfill will be provided only from the single source, once approved.
- D. Requirements of this Section apply regardless of whether the Owner-approved source or an alternate source is proposed.
- E. Any backfill found to not meet all of the requirements specified in the Contract Documents shall be rejected and promptly removed from the site at no expense to Owner.
- F. Engineering properties for all backfill shall be as follows:
 - 1. Backfill shall contain no rocks or stones larger than 3 inches and shall be free of frozen lumps, organic matter, trash, chunks of highly plastic clay, snow, ice, contamination or other unsatisfactory material.
 - 2. Backfill material shall consist of inert, cohesive or granular soil with a liquid limit less than 40.
 - 3. No recycled concrete or other manmade materials, whether generated from the site or elsewhere, shall be permitted for use as backfill.
 - 4. The topsoil portion of all backfill shall also contain a minimum of 5 percent organic matter by weight, and be suitable for growth of vegetation.

2.2 SEED

- A. Grass seed shall be a tall fescue blend certified free of noxious weeds.

PART 3 EXECUTION

3.1 BACKFILL

- A. Promptly backfill each sub-area following written approval from Owner that sub-area is cleared for covering.
- B. Backfill areas to achieve final grading plans specified in the Contract Documents.
- C. Match and blend the perimeter of backfilled areas with the existing grade elevations of surrounding undisturbed or re-configured surfaces. Level the backfilled areas to provide smooth transitions between disturbed and undisturbed areas. Backfilled areas shall be provided with a positive slope toward the outer perimeter, taking subsequent settlement into account, so that adequate surface drainage is provided, and no areas of standing water develop.
- D. Place all backfill in maximum 8-inch lifts and compact by traversing each lift at least five times using a vibratory roller with minimum 10-ton demonstrated weight. If a cohesive (clay) soil is provided, the roller shall be a sheepsfoot type.

- E. Finish each area by placement, fine grading and raking of topsoil to provide a minimum 6 inch thickness of topsoil in all areas, with a smooth surface free of rocks.

3.2 SEEDING

- A. Promptly re-establish grass cover over all bare soil areas following backfilling, grading and topsoiling operations.
- B. Prior to seeding, the ground shall be raked until the surface is smooth and of uniform texture, then lightly compact.
- C. Apply specified grass seed at a rate of 80 pounds per acre. Apply lime and fertilizer at 4,000 pounds per acre limestone and 1,000 pounds per acre 10-10-10 fertilizer.
- D. After seeding, the area shall be raked so as to cover the seed to a depth of approximately ¼ inch and watered.
- E. Place straw over all seeded areas at a rate of 2 tons per acre.
- F. Water the areas as needed until a good stand of grass has been established, and has been approved by Owner.

3.3 POST-CONSTRUCTION EROSION AND SEDIMENTATION CONTROLS

- A. Concurrent with backfilling, grading and re-seeding operations, construct and provide all post-construction erosion and sedimentation controls in accordance with the Contract Documents.

- END OF SECTION 310000 -

DRAWINGS

THIS SURVEY IS CERTIFIED TO ONLY Brandenburg Industrial Service Company, STATE OF NORTH CAROLINA, Mecklenburg County. This is to certify that this map or plan and the survey on which it is based were made in accordance with "Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys," jointly established and adopted by ALTA, ACSM and NSPS in 1999, and includes items 1-4, 6, 7, 8, 9, 10, and 11a of Table A thereof. Pursuant to the accuracy standards as adopted by ALTA, NSPS, and ACSM and in effect on the date of this certification, undersigned further certifies that proper field procedures, instrumentation, and adequate survey personnel were employed in order to achieve results comparable to those outlined in the "Minimum Accuracy and Closure Requirements for Survey Measurements Which Control Land Boundaries for ALTA/ACSM Land Title Surveys."

I, Andrew G. Zoutewelle, do hereby certify that this map was drawn from an actual field survey performed under my supervision; that the precision is 1:15,000; that the angular precision is less than 7.5 seconds per angle; that this map meets GS-47 recording requirements.

This survey certified only as to the revisions of October 8, 2007.

LEGEND
 ch. chord
 L.P. curve length & radius
 s.f. square feet (by coordinates)
 I.P./NIP. iron survey stake
 conc. concrete
 a/c. air conditioner
 MB, DB record map and deed references
 SSMH Sanitary Sewer Manhole
 MH Manhole
 PM Power meter
 NIP New Iron Pin/Pipe set
 Light Pole
 Power Pole
 Ground Light

☐ Catch basin
 ☐ Gas valve
 ☐ Water valve
 ☐ Fire hydrant
 --- Underground water line
 --- Gas line
 --- Underground telephone line
 --- monitoring well (see detail)
 ☉ soil boring location
 ☉ spot elevation
 ☐ surface water/sediment sample

ROBERT SINYARD
 DB 4673-169



GENERAL NOTES:
 1. Source of title is recorded in Deed Book 13251 Page 604 and Deed Book 14172 Page 689. See titles recorded in Map Book 230 Page 297 and Map Book 332 Page 286. No record of abandonment of 10-foot alleyways and 45-foot Walnut Street (now Larch Street) was found; however, portions of these alleyways and Walnut Street have been removed from Mecklenburg County tax maps and GIS. Also see abandonment language in Deed Book 1161 Page 115.
 2. This survey does not reflect a complete title examination, which may reveal additional easements and restrictions. An attorney should verify the title to this property prior to design or construction.
 3. Utility locations shown hereon are based on markings provided by the North Carolina One-Call Utility Locating Service at the time of the fieldwork for this survey. Contractors should contact the North Carolina One-Call Utility Locating Center at 1-800-632-4949 before any digging or excavation is begun.
 4. This property is zoned R-8 (single family residential), I-1 (light industrial) and I-2 (heavy industrial) per Mecklenburg County GIS. This survey does not reflect zoning analysis.
 5. Total area of this property is 826,300 s.f. or 18,969 acres (including existing Alleyway, a portion of Walnut Street area, and Railroad R/W area), as computed by coordinates.
 6. See Gas Easement recorded in Deed Book 8320 page 104. Also see easements as follows:
 7. This survey is of an existing parcel of land within the City of Charlotte which has a subdivision ordinance.
 The following matters are reflected to title insurance policy issued by Lawyers Title of North Carolina, Inc., Policy No. 136-00-328501-0 dated March 15, 1995:
 2. Easement(s) to Southern Bell Telephone and Telegraph Company recorded in Book 777 Page 553, Mecklenburg County Registry. Not shown because of insufficient description. See also Southern Bell utilities depicted on Map Book 3 Page 581.
 3. Easement(s) to Southern Bell Telephone and Telegraph Company recorded in Book 790 Page 307, Mecklenburg County Registry. Located within alleys which are shown hereon.
 4. Easement(s) to Southern Bell Telephone and Telegraph Company recorded in Book 1091 Page 429, Mecklenburg County Registry. Not shown because of insufficient description; easement is for 1 pole anchor.
 5. Easement(s) to Duke Power Company recorded in Book 1197 Page 219, Mecklenburg County Registry. Shown hereon.
 6. Deed recorded in Book 1161 Page 115, Mecklenburg County Registry, dedicates a strip of land at the westerly margin of the subject property to public use. Shown hereon.

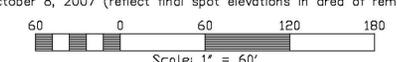
FLOOD NOTES:
 * The subject property is not located within a Special Flood Hazard Area as per FIRM Panel No. 370159 0186C dated February 4, 2004.

TOPO NOTE:
 * The contour lines shown hereon were taken from City of Charlotte topographic map which is based on aerial photography and should be considered approximate NAVD 1988 datum.

LEGAL DESCRIPTION
 BEING all that certain tract or parcel of land located within the City of Charlotte, Mecklenburg County, N.C. and being more particularly described as follows:
BEGINNING at a new pk nail located at the intersection of the southwesterly margin of West Summit Avenue, said right of way having a width of 60 feet as recorded in Map Book 230 Page 297 of the Mecklenburg County Registry, and the northwesterly right of way margin of Merriman Avenue, said right of way having a width of 50 feet as recorded in Map Book 332 Page 286 of the Mecklenburg County Registry, and running thence from said point and piece of BEGINNING along the northwesterly margin of the said Merriman Avenue South 56°-25' West 159.17 feet to an existing iron pin, thence South 33°-31'-09" East 4.31 feet to a new iron pin located on the northwesterly right of way margin of the said Merriman Avenue as it narrows in width to 40 feet as recorded in Map Book 230 Page 297; thence continuing with the northwesterly margin of the said Merriman Avenue South 56°-25' West 109.78 feet to an existing iron pin; thence following the northeasterly boundary of Lot 23 of Wilmore Section #2 as recorded in the said Map Book 230 Page 297 of the Mecklenburg County Registry, North 33°-31'-09" West 154.94 feet to a new iron pin located in the northwesterly margin of a 10-foot alley as shown on the said Map Book 230 Page 297 of the Mecklenburg County Registry; thence following the northwesterly margin of the said 10-foot alley the following six (6) calls: (1) South 56°-30'-00" West 100.00 feet to a new iron pin, (2) South 64°-01'-12" West 45.38 feet, to an existing iron pin, (3) following the arc of a circular curve to the right having a radius of 643.00 feet and an arc length of 230.35 feet (chord bearing South 70°-53'-33" West 229.16 feet) to a point, (4) South 81°-08'-00" West 52.05 feet to a point, (5) following the arc of a circular curve to the left having a radius of 1,042.87 feet and an arc length of 374.65 feet (chord bearing South 70°-50'-30" West 372.64 feet) to a point and (6) South 60°-33'-00" West 52.63 feet to an existing iron pin; thence following the northwesterly right of way margin of Spruce Street, said right of way having a width of 40 feet as recorded in the said Map Book 230 Page 297, the following two (2) calls: (1) following the arc of a circular curve to the left having a radius of 430.00 feet and an arc length of 33.95 feet (chord bearing North 49°-17'-24" West 33.94 feet) to an existing iron pin and (2) following the arc of a circular curve to the right having a radius of 305.00 feet and an arc length of 189.18 feet (chord bearing North 34°-43'-38" West 186.16 feet) to a new iron pin (continued above)

See Map Book 230 Page 50
 SPEAR PROPERTIES
 DB 5575-072
 SPEAR PROPERTIES
 DB 7153-663

FINAL CONDITIONS SURVEY
601 WEST SUMMIT AVENUE
 CHARLOTTE, MECKLENBURG COUNTY, N.C.
 for BRANDENBURG INDUSTRIAL SERVICE COMPANY
 Original Survey Date: March 25, 2004
 Last Revised: October 8, 2007 (reflect final spot elevations in area of removed building)

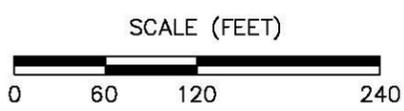
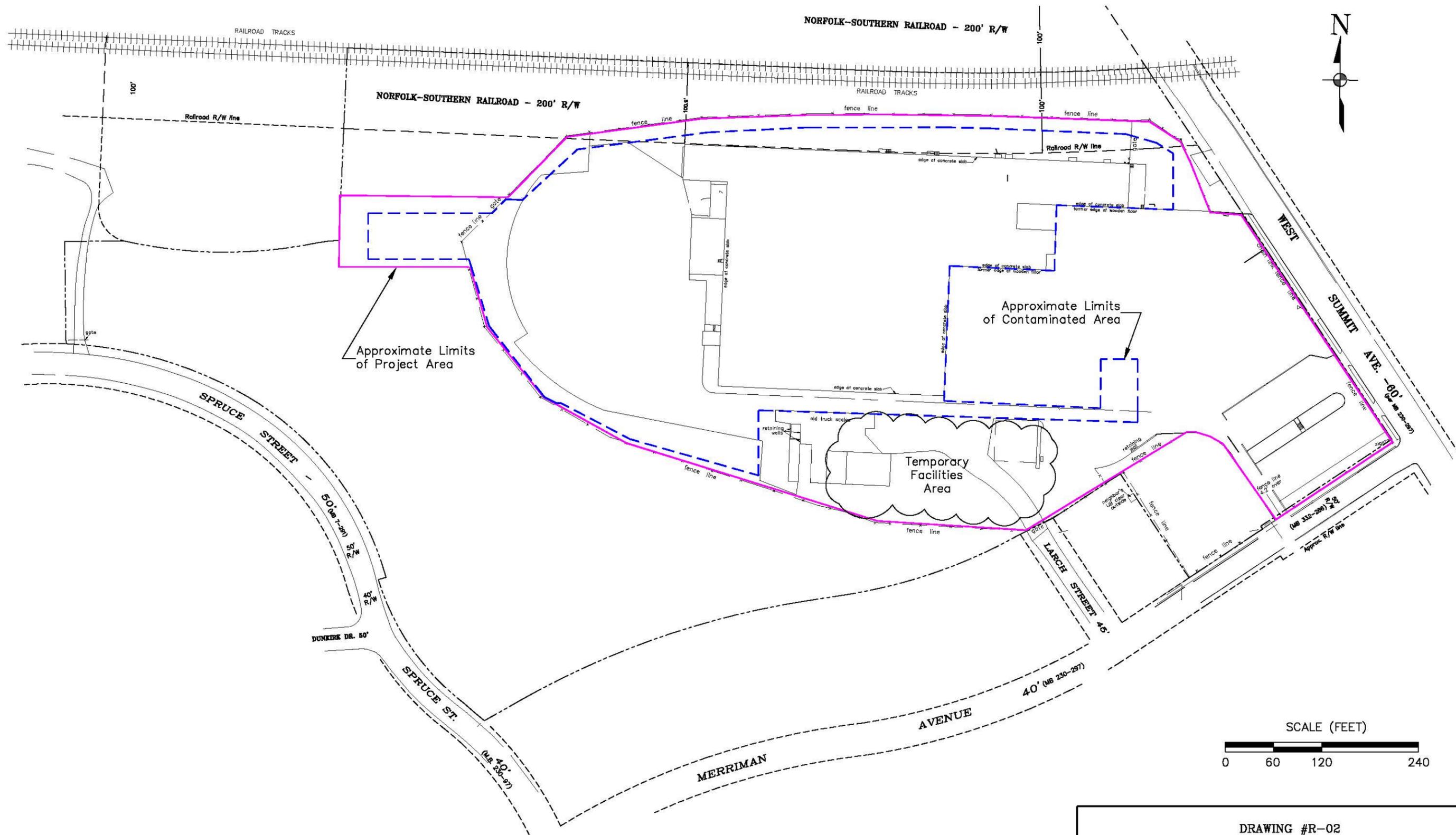


ADDITIONAL SAMPLE LOCATIONS APRIL - MAY 2006

Node ID	Description	Northing	Eastng	Elevation	Node ID	Description	Northing	Eastng	Elevation
426	B12-25	4778.63	4270.55	688.25	5	MW B12-01	5028.10	4592.13	691.23
427	B16-03	4696.84	4390.79	686.43	23	MW B2-04	5016.63	4597.80	687.24
428	B16-04	4659.30	4451.27	686.18	37	MW B2-02	4997.66	4685.54	688.49
429	SV01 BAKE	4583.92	4480.32	686.32	38	MW B12-01	5030.04	4597.48	691.14
430	SV01 TOP	4583.63	4480.15	686.74	42	MW B12-01	4887.50	4671.02	691.08
431	B12-25	4827.52	4161.65	688.17	43	MW B1-01	5044.90	4414.29	691.36
432	B13-23	4912.86	4136.74	688.05	44	MW B1-01	5045.39	4414.29	691.37
433	B13-21	4945.91	4212.90	687.95	56	BE-01	4674.45	4671.45	691.17
434	B13-24	4908.46	4277.66	688.66	57	BE-05	4784.67	4669.98	691.13
442	B13-18	5093.61	4278.93	685.65	58	BE-06	4784.34	4676.15	691.19
443	B13-19	5090.32	4176.26	683.75	59	BE-06	4774.31	4647.81	691.19
445	B13-22	4951.30	4082.72	686.23	60	BE-07	4780.73	4648.90	691.16
446	NORHRD-01	5082.10	4461.71	686.63	61	BE-09	4783.18	4652.08	691.16
447	NORHRD-03	5010.10	4582.49	687.08	62	MW B1-01	5033.10	4685.57	691.24
448	B13-27	5094.02	4596.27	687.10	63	B11-01	4801.08	4488.51	690.63
450	NORHRD-04	5071.16	4799.76	687.33	64	MW B1-02	4860.30	4404.04	690.38
451	B12-01	5082.55	4606.92	687.26	65	MW B1-02	4860.30	4404.04	690.38
452	NORHRD-05	5056.38	4798.92	687.46	66	MW B4-12S CAP	4676.05	4618.63	690.16
453	B2-09	5074.19	4901.53	687.32	67	MW B4-12S CAP	4676.05	4618.63	690.16
455	B13-20	5024.84	4107.27	684.88	68	MW B4-12S CAP	4676.05	4618.63	690.16
458	B12-02	4987.02	4602.00	691.35	69	MW B4-12S CAP	4676.05	4618.63	690.16
459	B12-07	4940.15	4579.32	691.39	70	MW B4-12S CAP	4676.05	4618.63	690.16
460	B12-08	4885.84	4609.73	691.31	71	MW B4-12S CAP	4676.05	4618.63	690.16
462	B13-17A	5045.39	4541.67	691.31	72	MW B4-12S CAP	4676.05	4618.63	690.16
463	B13-17B	5037.68	4548.44	691.36	73	MW B4-12S CAP	4676.05	4618.63	690.16
464	B2-11	5027.10	4796.73	691.25	74	MW B4-12S CAP	4676.05	4618.63	690.16
465	B12-02	4853.11	4739.60	691.25	75	MW B4-12S CAP	4676.05	4618.63	690.16
469	B12-06	4825.42	4555.98	691.38	76	MW B4-12S CAP	4676.05	4618.63	690.16
470	B13-16	4925.85	4415.07	691.56	77	MW B4-12S CAP	4676.05	4618.63	690.16
471	NORHRD-02	5103.57	4422.83	691.57	78	MW B4-12S CAP	4676.05	4618.63	690.16
472	B21-11	5073.73	3946.48	685.07	79	MW B4-12S CAP	4676.05	4618.63	690.16
473	B21-12	5082.16	3901.17	683.54	80	MW B4-12S CAP	4676.05	4618.63	690.16
475	DA02A	4865.90	3800.99	687.41	81	MW B4-12S CAP	4676.05	4618.63	690.16
476	DA02B	4865.90	3800.99	687.41	82	MW B4-12S CAP	4676.05	4618.63	690.16
478	SV02BASE	4732.27	3869.80	684.87	83	MW B4-12S CAP	4676.05	4618.63	690.16
479	SV02TOP	4732.27	3869.80	687.77	84	MW B4-12S CAP	4676.05	4618.63	690.16
480	SV03	4833.42	3549.67	685.65	85	MW B4-12S CAP	4676.05	4618.63	690.16
484	SE-06E	5137.21	4992.69	682.11	86	MW B4-12S CAP	4676.05	4618.63	690.16
485	SE-08NE	5202.25	4974.22	679.68	87	MW B4-12S CAP	4676.05	4618.63	690.16
487	SE-07A	5174.44	4789.92	683.55	88	MW B4-12S CAP	4676.05	4618.63	690.16
488	SE-07UP	5125.19	4596.61	682.97	89	MW B4-12S CAP	4676.05	4618.63	690.16
489	SE-07DN	5123.21	4544.28	682.83	90	MW B4-12S CAP	4676.05	4618.63	690.16

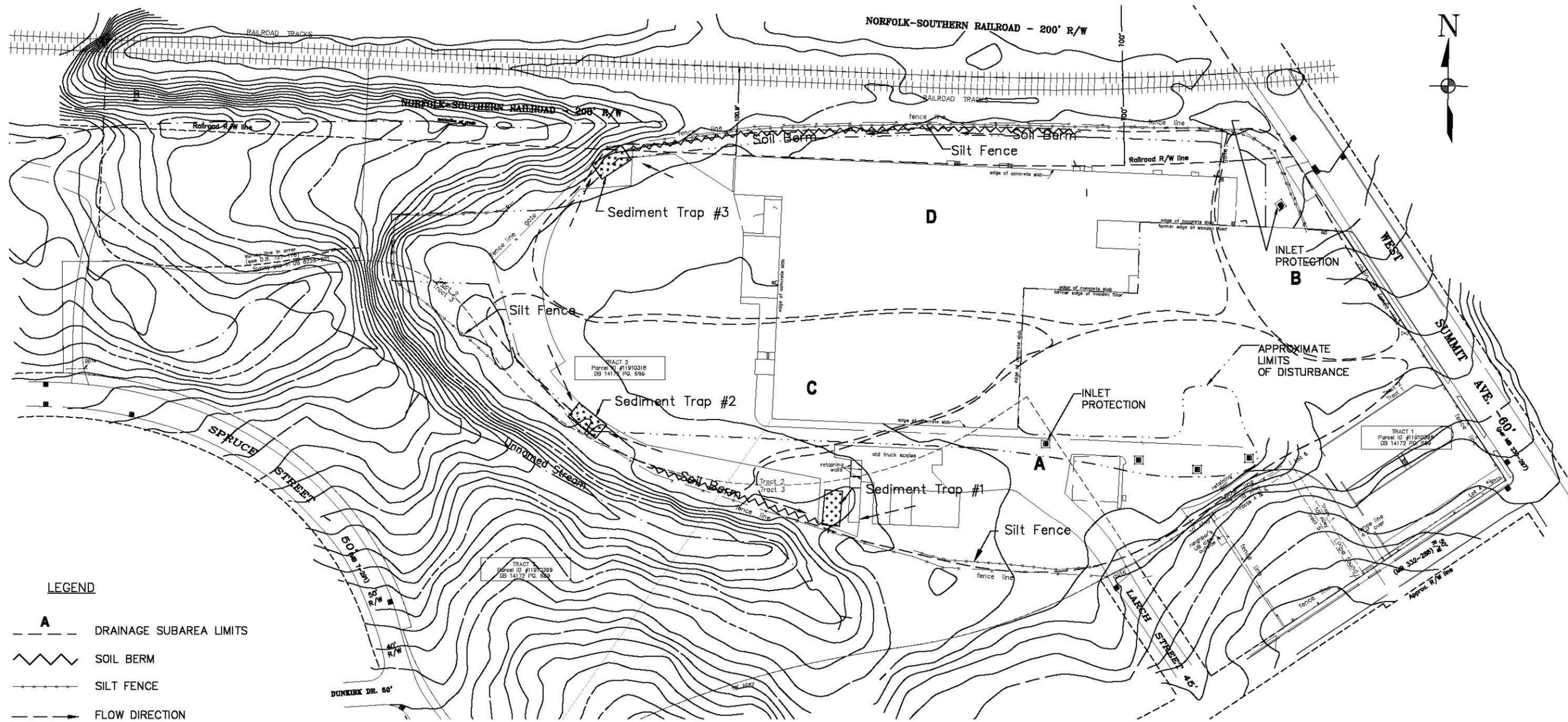
ADDITIONAL SAMPLE LOCATIONS OCTOBER-NOVEMBER 2005

Node ID	Description	Northing	Eastng	Elevation	Node ID	Description	Northing	Eastng	Elevation
1	B10-16	4763.75	4488.12	692.34	350	B10-07	4747.75	4770.17	690.82
6	B10-15	4761.81	4526.66	691.10	351	B10-08	4749.70	4821.23	690.96
7	MW B16-02B PAD	4663.16	4406.20	685.84	352	B10-01	4788.81	4766.83	691.30
8	MW B16-02B CAP	4663.16	4406.20	685.84	353	B10-02	4771.32	4831.63	691.25
9	cnrr Test Pit 2	4813.72	4239.46	688.26	354	B10-05	5008.84	4721.32	691.08
10	cnrr Test Pit 1	4813.72	4243.81	688.27	355	B10-06	4874.20	4715.23	691.26
11	cnrr Test Pit 2	4835.84	4241.79	688.43	356	B10-02	4973.80	4724.95	691.24
14	B13-08	4892.42	4212.76	688.30	357	B10-03	4857.54	4721.20	691.04
14	centerline Test Pit 4	4945.95	4204.95	688.01	358	B10-07	4958.92	4741.51	691.25
15	centerline Test Pit 3	4889.03	4075.88	688.96	359	B10-08	4846.90	4713.96	691.29
16	B13-09	5056.44	4186.61	689.85	360	B10-04	4943.12	4724.03	691.27
17	B13-02	5046.15	4248.25	686.23	361	B10-06	4884.15	4740.51	691.29
18	B13-10	5077.56	4277.63	686.98	362	B20-01	4786.90	4377.83	691.48
19	B13-04	5048.55	4314.12	686.23	363	B20-02	4794.07	4374.12	691.46
20	B13-05	5019.59	4359.93	687.43	364	B13-11	4851.54	4691.41	691.48
21	B13-06	5071.19	4353.42	686.19	366	B12-04	5016.43	4589.74	691.48
22	B13-07	5074.88	4392.66	686.30	367	B12-02	5042.30	4592.43	691.38
26	B10-21	5070.92	4480.38	686.56	368	B13-15	5042.85	4474.75	691.36
27	B10-18	5066.13	4553.43	687.91	369	B13-14	5062.09	4429.45	691.40
28	B10-19	5061.37	4575.72	687.73	370	B13-07	5045.19	4386.32	691.37
29	B1-05	5069.71	4594.64	687.48	371	B13-13	5035.90	4346.91	687.07
30	B1-02	5063.14	4652.69	687.63	372	B12-03	5032.57	4616.11	691.38
31	B1-03	5078.24	4647.55	686.91	373	B3-05	5038.10	4705.73	691.25
32	B1-04	5057.09	4683.68	687.76	374	B3-04	5028.37	4724.44	691.20
33	B3-08	5064.78	4699.06	687.31	376	B3-03	5045.98	4725.74	691.32
34	B3-10	5066.13	4726.45	687.03	377	B3-02	5038.23	4744.81	691.34
36	B3-09	5058.98	4723.09	687.37	378	B2-06	5021.12	4857.60	691.27
37	B3-11	5057.73	4737.59	687.55	379	B2-05	5005.11	4879.93	691.20
329	centerline Test Pit 8	4906.10	4002.20	683.07	380	B2-07	5036.70	4881.25	691.16
330	B21-08	4924.14	3969.10	683.91	381	B2-08B	4893.82	4831.83	691.31
331	B21-04	4945.16	3934.09	682.87	382	B2-02	5004.30	4891.43	687.45
332	B21-06	4929.04	3928.50	680.75	383	B2-03B	5029.45	4893.22	687.65
333	B21-05	4951.95	3999.96	681.24	384	B2-01	4891.44	4857.65	691.38
334	B21-01	4954.35	3991.97	684.17	385	B2-08	5056.38	4892.15	687.40
335	B21-02	4965.30	3960.97	684.29	386	B10-22	5023.35	4949.12	687.58
336	B21-03	4964.19	3956.41	683.13	387	B10-20	5016.21	4933.65	687.02
337	B21-07	4982.19	3952.10	682.29	388	MW B08B0 PAD	4875.48	4699.99	689.49
338	B21-02	4968.25	3931.46	681.40	389	SE06-up	5091.51	4637.45	685.87
339	DA-05	4967.69	3915.06	680.31	390	SE06-down	5126.83	4644.98	683.94

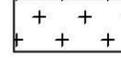


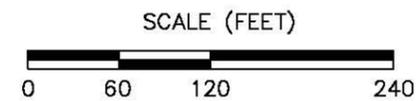
KELLY-BUCK
 COMPANY
 Civil & Environmental Engineers
 2130 Superior Ave., Suite 3-A
 Cleveland, OH 44114
 (216) 861-1716

DRAWING #R-02
 PROJECT LIMITS
 FORMER COPES-VULCAN FACILITY
 REMEDIAL ACTION PLAN - STEP TWO
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC



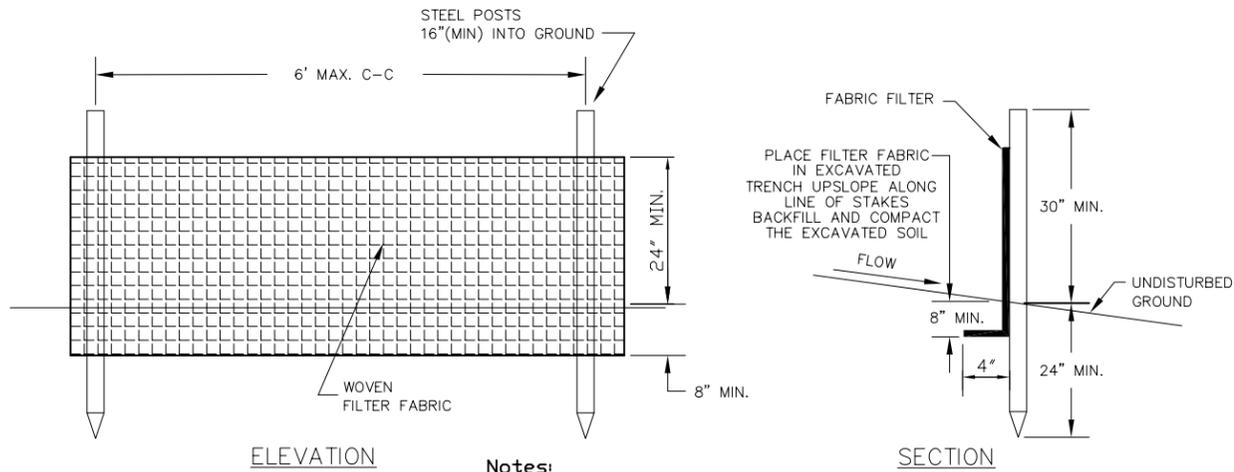
LEGEND

-  DRAINAGE SUBAREA LIMITS
-  SOIL BERM
-  SILT FENCE
-  FLOW DIRECTION
-  LIMITS OF DISTURBANCE
-  TEMPORARY SEDIMENT TRAP
(See Standard Details)
-  CATCH BASIN INLET PROTECTION



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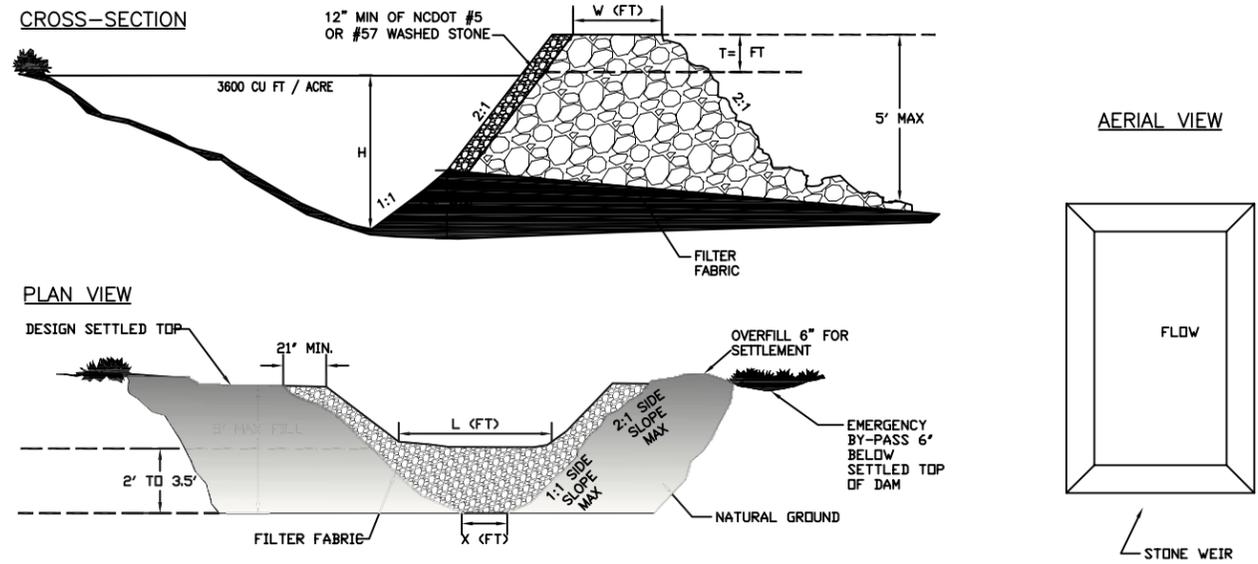
DRAWING #R-03
 PROJECT EROSION CONTROL &
 SEDIMENT CONTROL MEASURES
 FORMER COPES-VULCAN FACILITY
 REMEDIAL ACTION PLAN - STEP TWO
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC



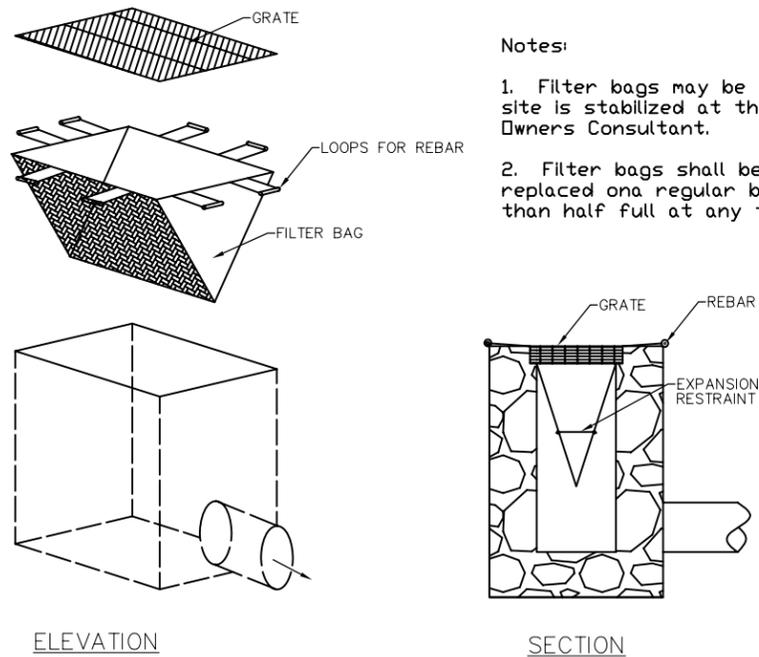
Notes:

1. Steel posts shall be 5'-0" in height and be of the self-fastener angle steel type.
2. Sediment deposits should be removed when deposits reach approximately half the height of the barrier.

TEMPORARY SILT FENCE



**TEMPORARY SEDIMENT TRAP
NOT TO SCALE**

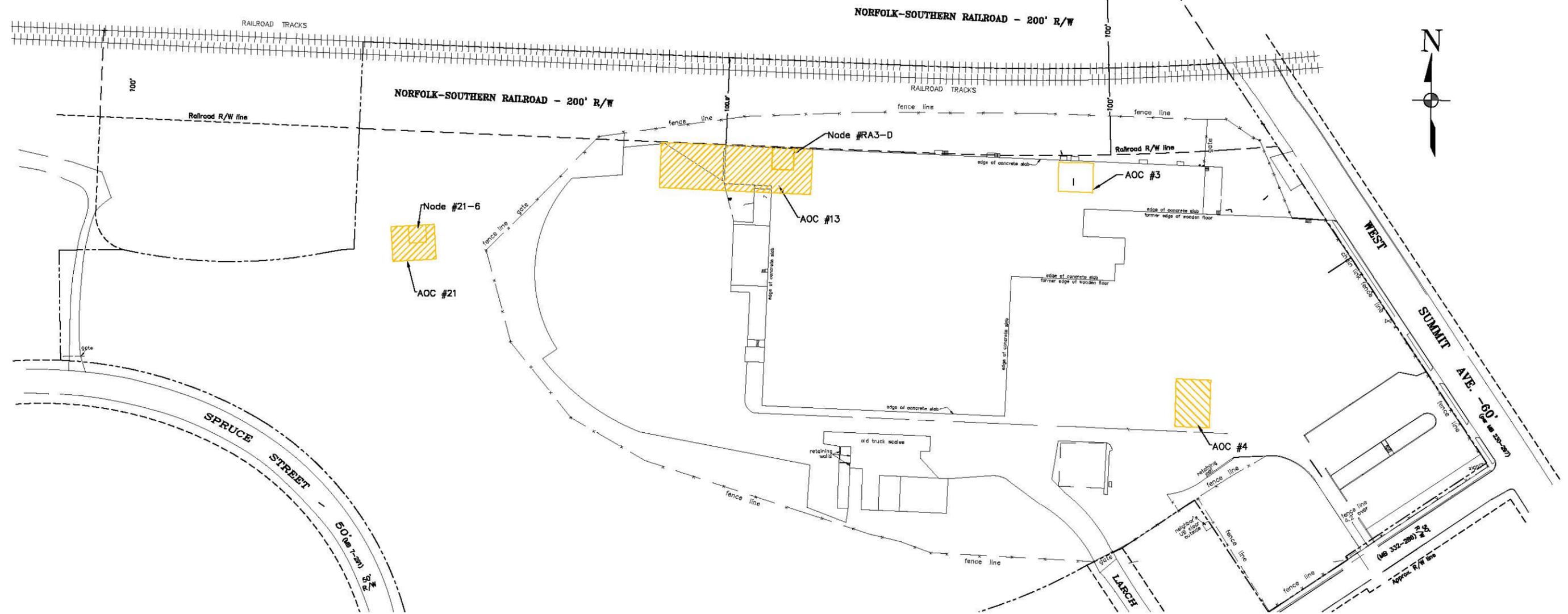


Notes:

1. Filter bags may be removed when site is stabilized at the direction of Owners Consultant.
2. Filter bags shall be cleaned or replaced on a regular basis (not more than half full at any time).

CATCH BASIN INLET PROTECTION

Trap Number	Trap Volume (cu ft)	L (ft)	A (ft)	B (ft)	H (ft)	Cleanout Depth (ft) (H/2)	T (ft)	W (ft)	X (ft)
1	2040	14	20	40	3	1.5	1.5	5	7
2	7000	29	35	73	3	1.5	1.5	5	7
3	11830	23	35	68	6	3.0	1.5	5	7



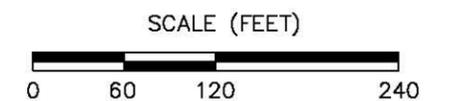
LEGEND

SOURCE REMOVAL/GROUND-WATER TREATMENT ZONE (INFILTRATION GALLERY)

AOC	Excavation Limits (approximate)	Excavation Interval (approximate)	Characterization & Disposal
3	20.0 ft (N-S) 20.0 ft (E-W)	0-3.0 ft	Dispose as TSCA waste
13	50.0 ft (N-S) 175.0 ft (E-W)	0-3.0 ft	Dispose as non-TSCA, non-RCRA waste
		0-3.0 ft (Node #RA2-B)	Dispose as TSCA waste (see PCB Soil Removal figures)
21	40.0 ft (N-S) 50.0 ft (E-W)	0-5.0 ft	Dispose as non-TSCA, non-RCRA waste
		4.0-5.0 ft (Node #21-6)	Dispose as RCRA waste

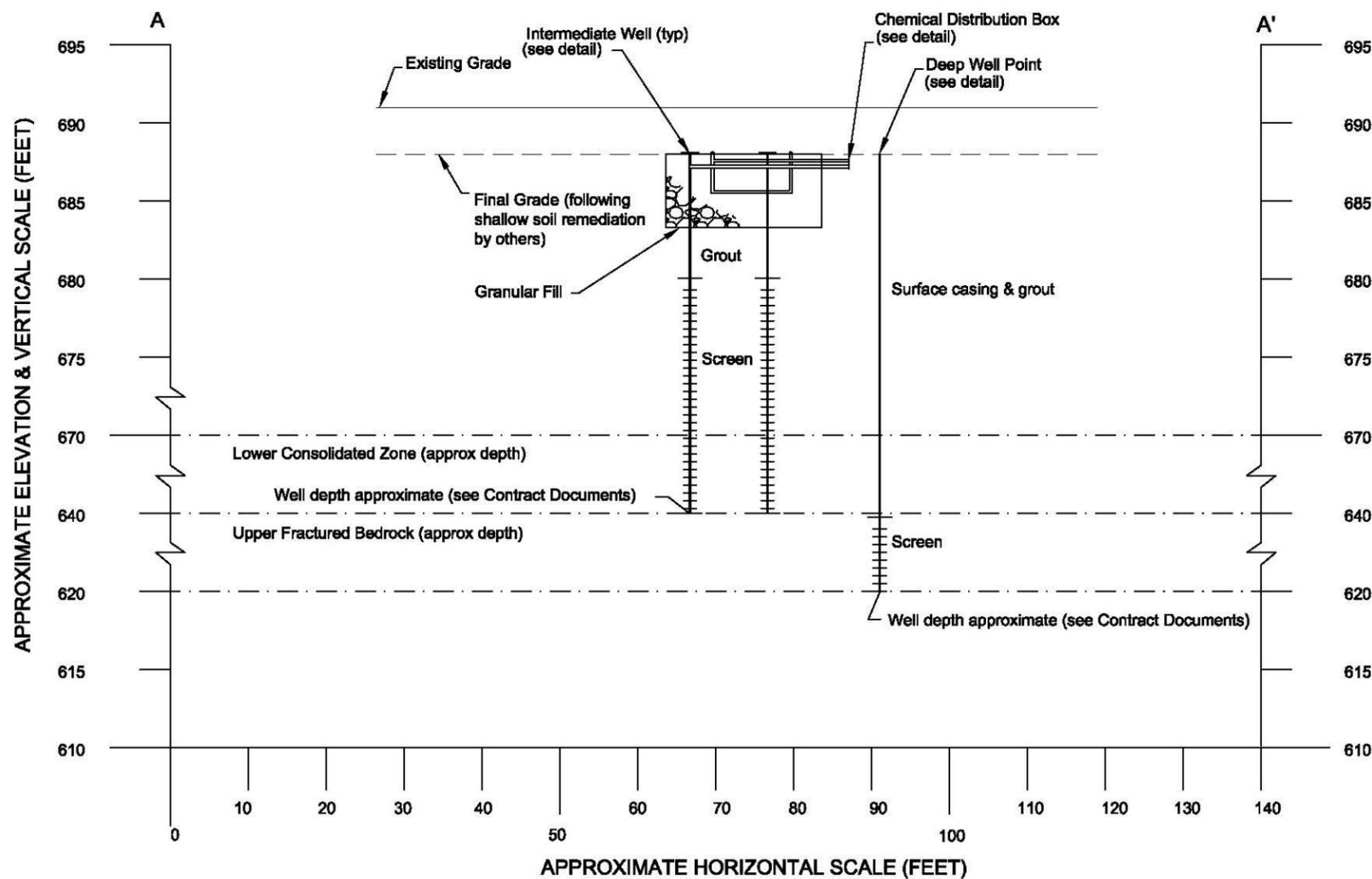
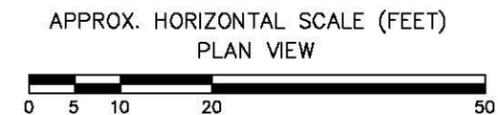
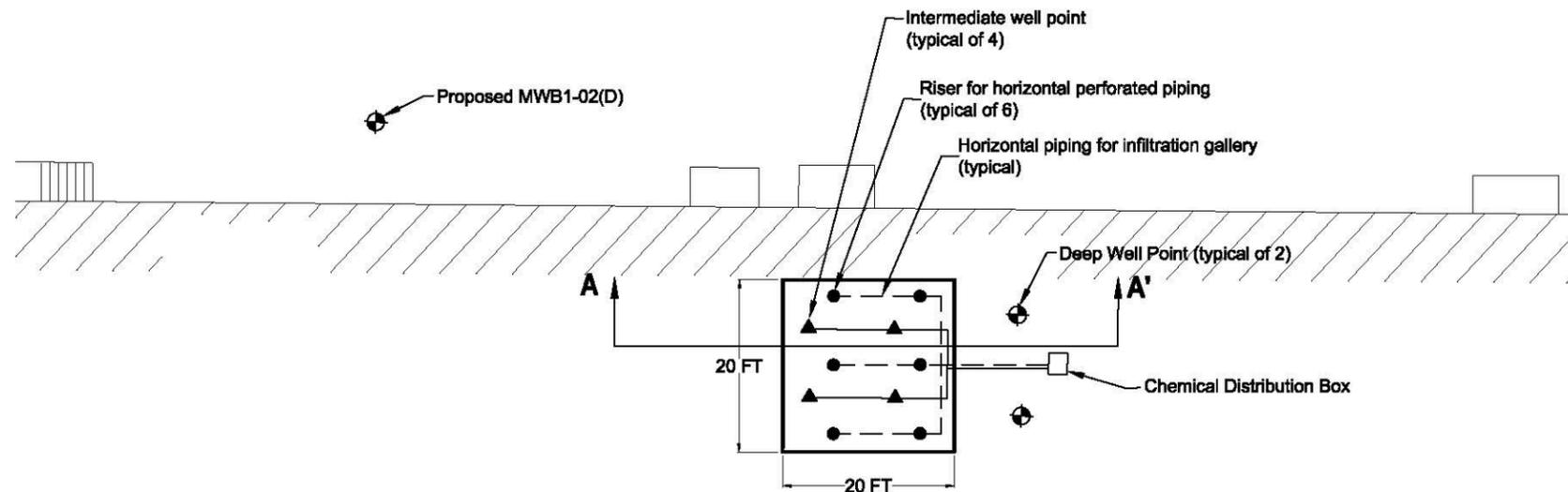
NOTES:

- All dimensions are approximate & subject to field verification by Owner's Consultant.
- Characterization and disposal may be modified by Owner's Consultant based on observation and testing during work.



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DRAWING #R-05
 SITE PLAN
 IN-SITU TREATMENT AREAS
 FORMER COPE-S-VULCAN FACILITY
 REMEDIAL ACTION PLAN - STEP TWO
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC

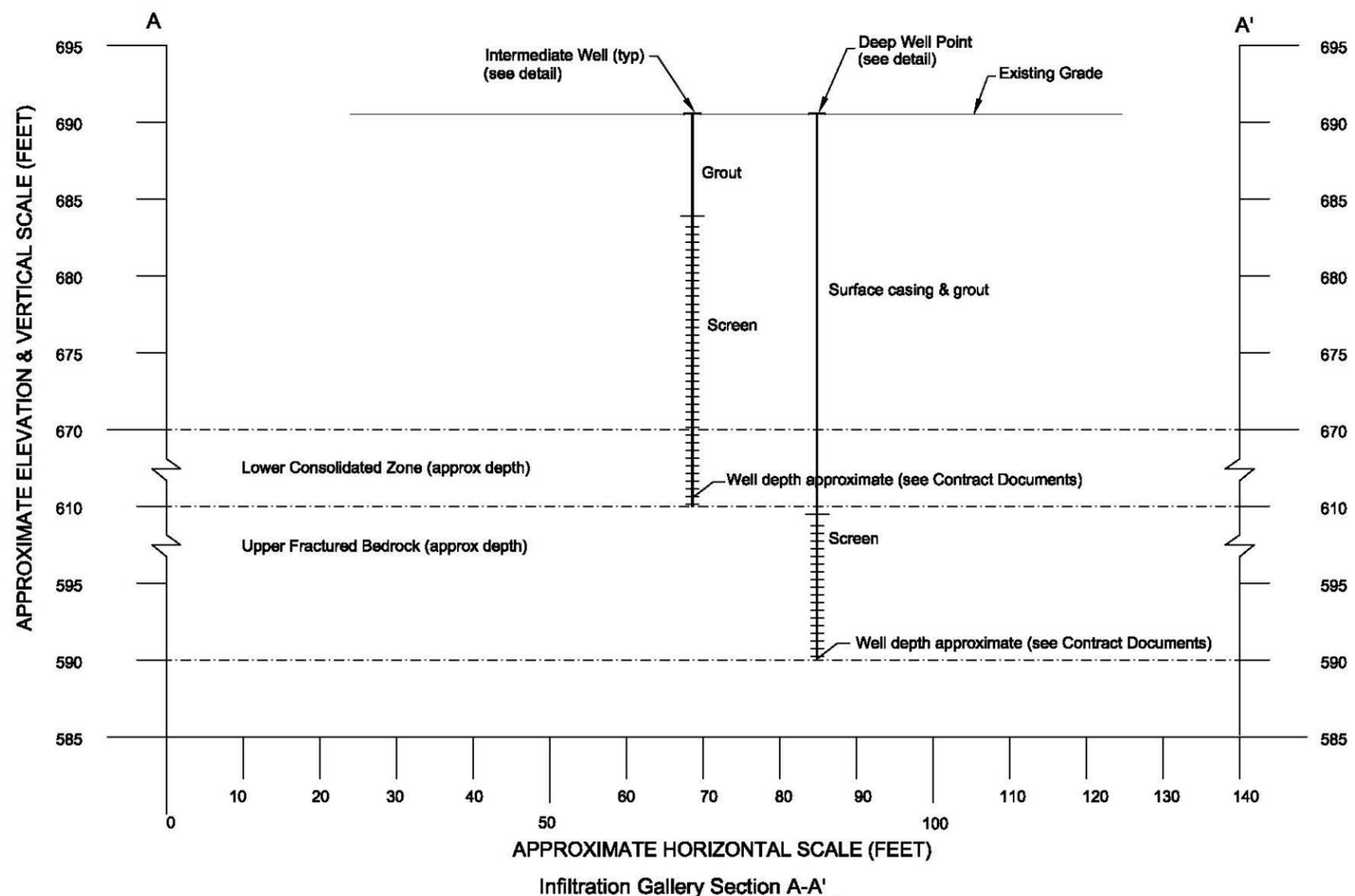
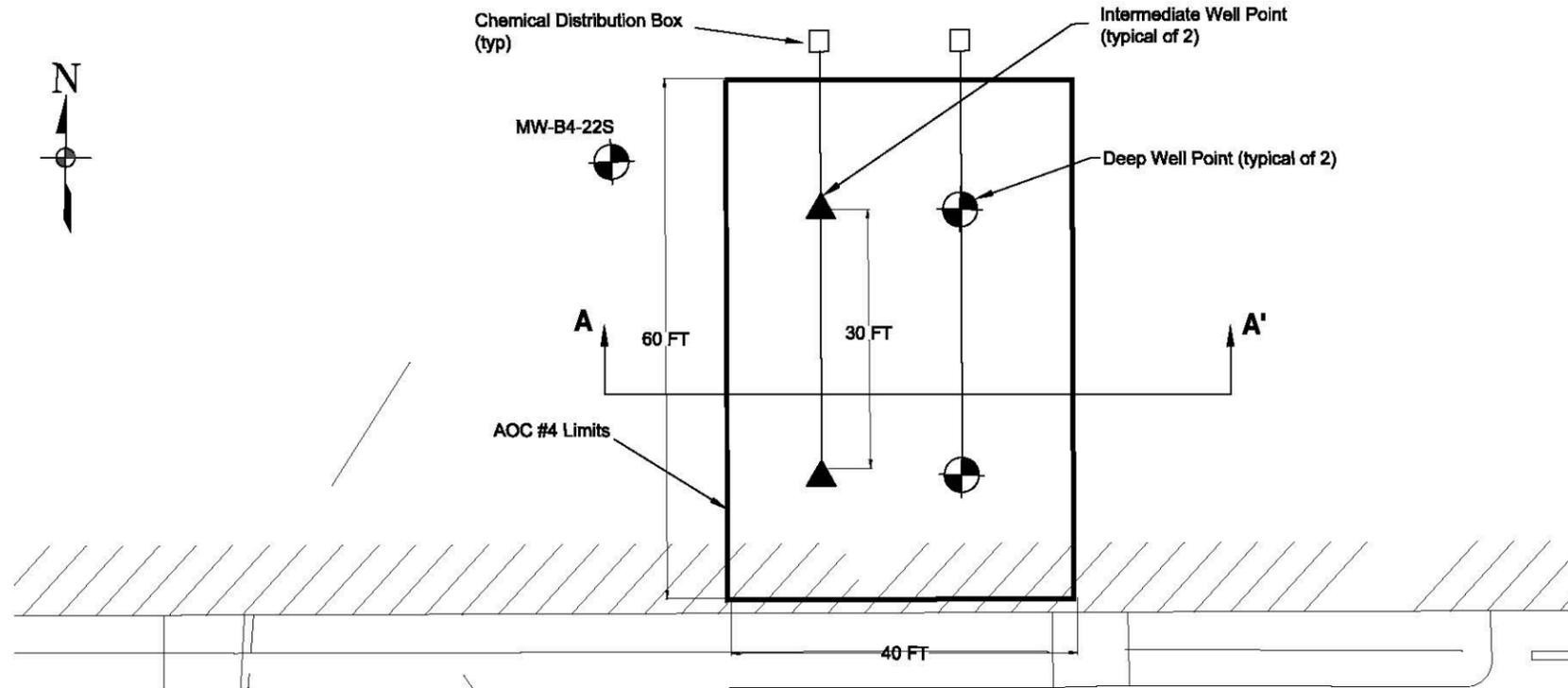


Note: Dimensions are preliminary and subject to final design and field verification.

Infiltration Gallery Section A-A'

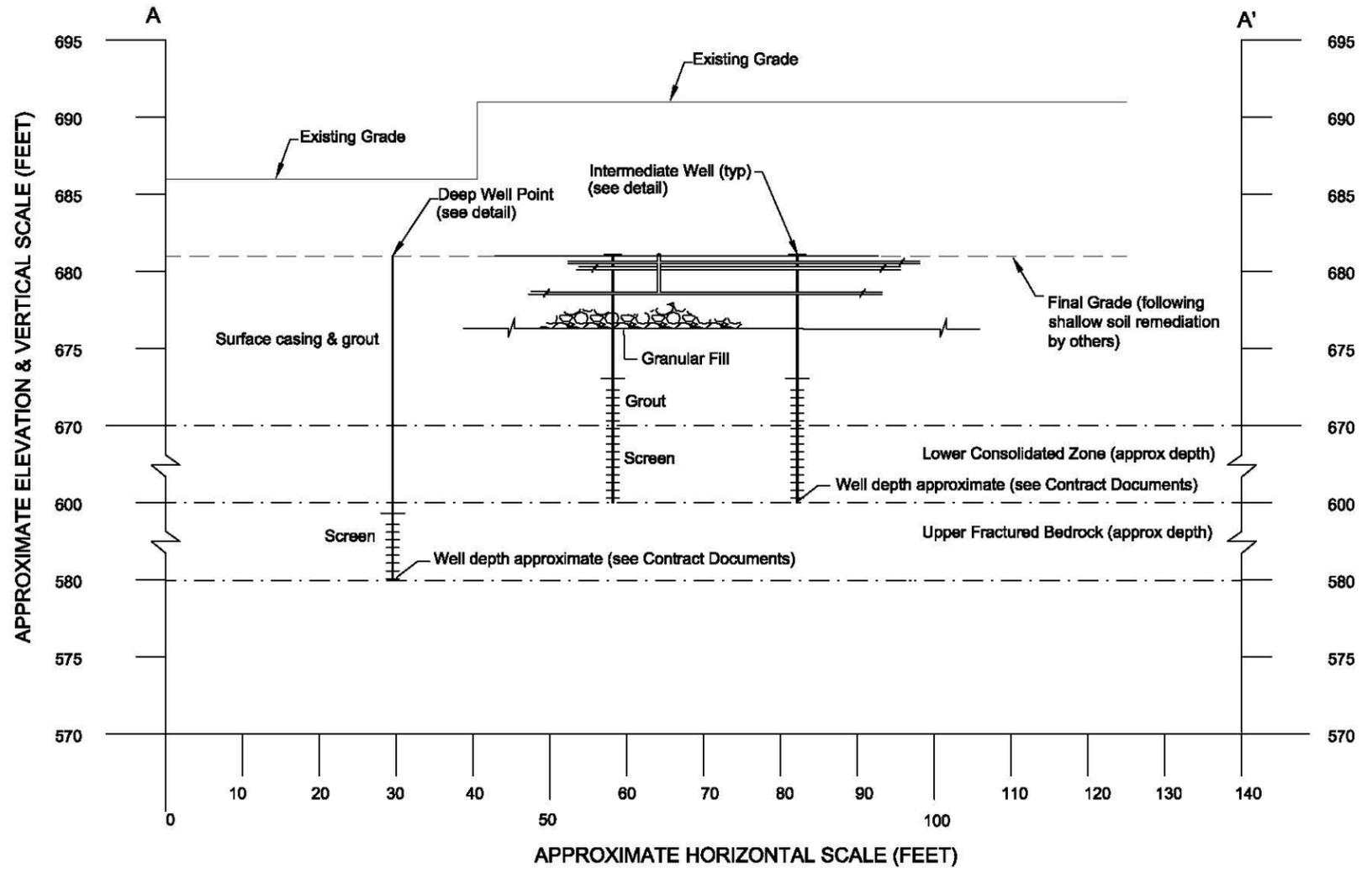
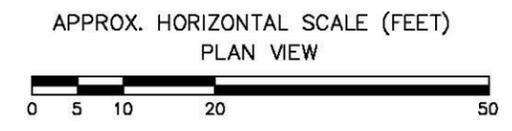
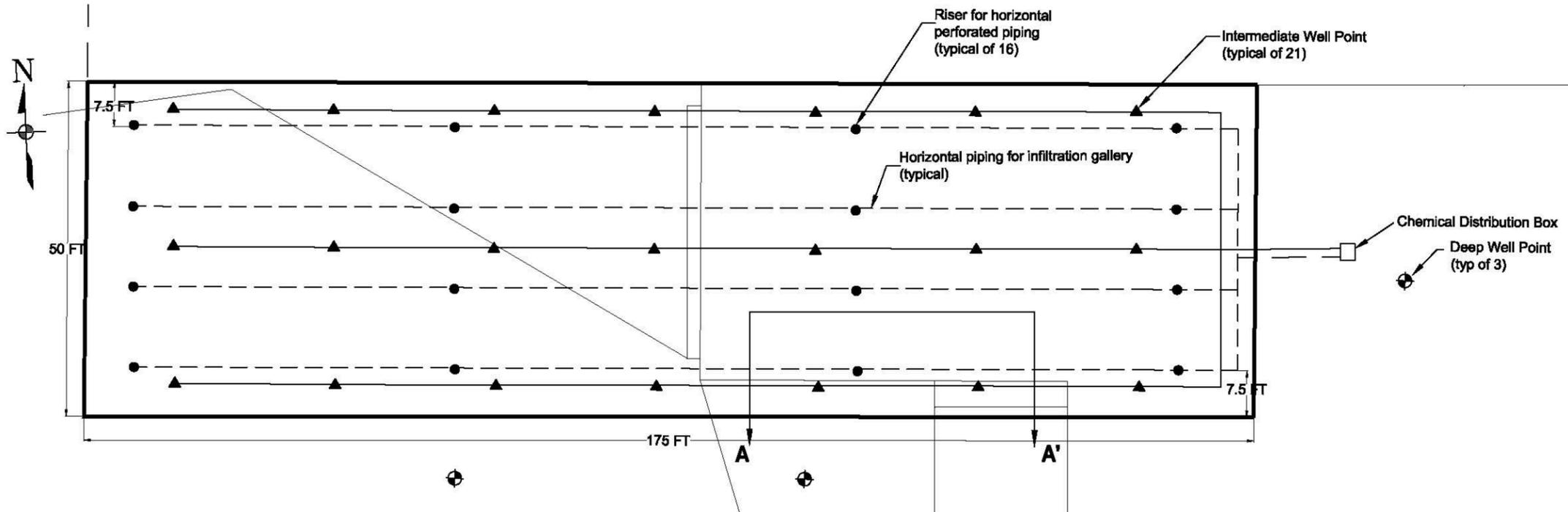
DRAWING #R-06
 INFILTRATION GALLERY - AOC #3

FORMER COPES-VULCAN FACILITY
 REMEDIAL ACTION PLAN - STEP TWO
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC



Note: Dimensions are preliminary and subject to final design and field verification.

DRAWING #R-07
 INFILTRATION GALLERY - AOC #4
 FORMER COPES-VULCAN FACILITY
 REMEDIAL ACTION PLAN - STEP TWO
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC

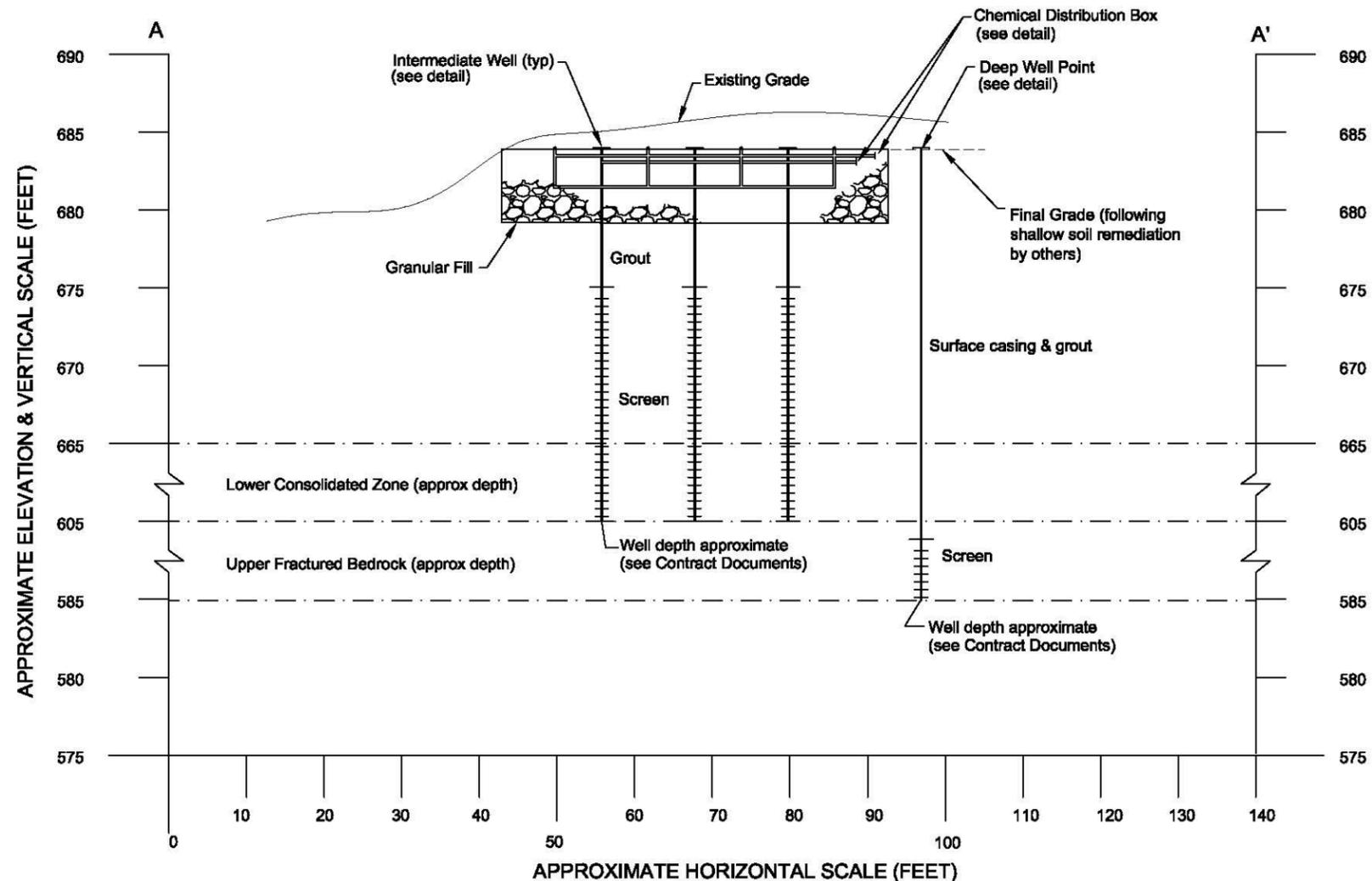
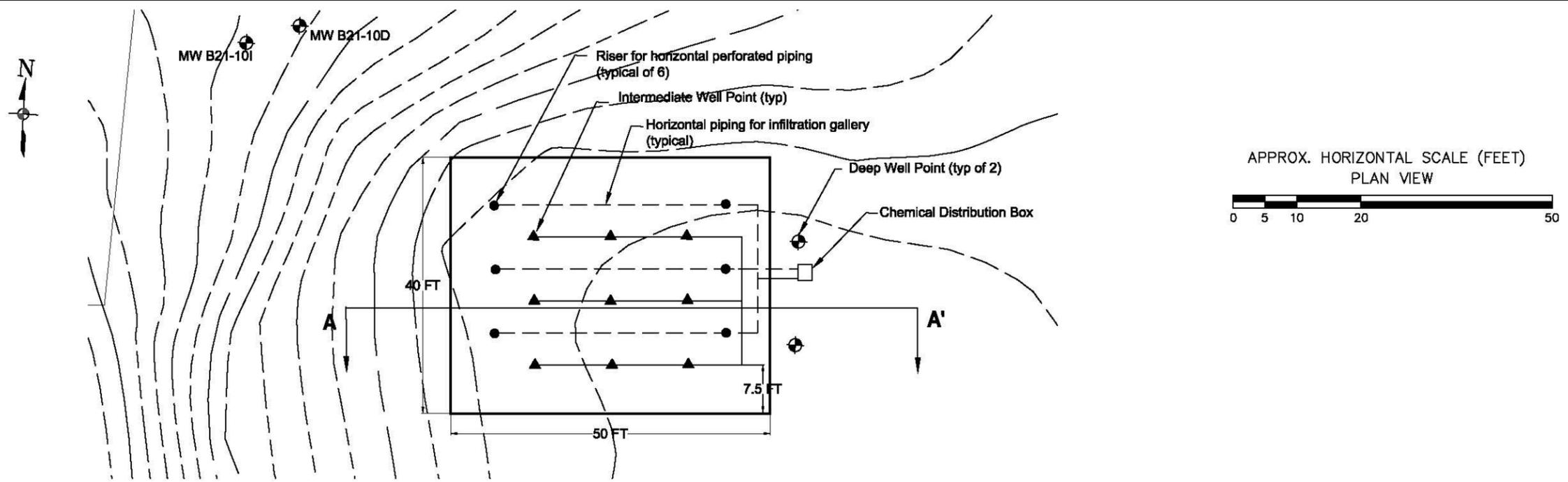


Note: Dimensions are preliminary and subject to final design and field verification.

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DRAWING #R-08
INFILTRATION GALLERY - AOC #13
FORMER COPES-VULCAN FACILITY
REMEDIAL ACTION PLAN - STEP TWO
601 WEST SUMMIT AVENUE
CHARLOTTE, NC

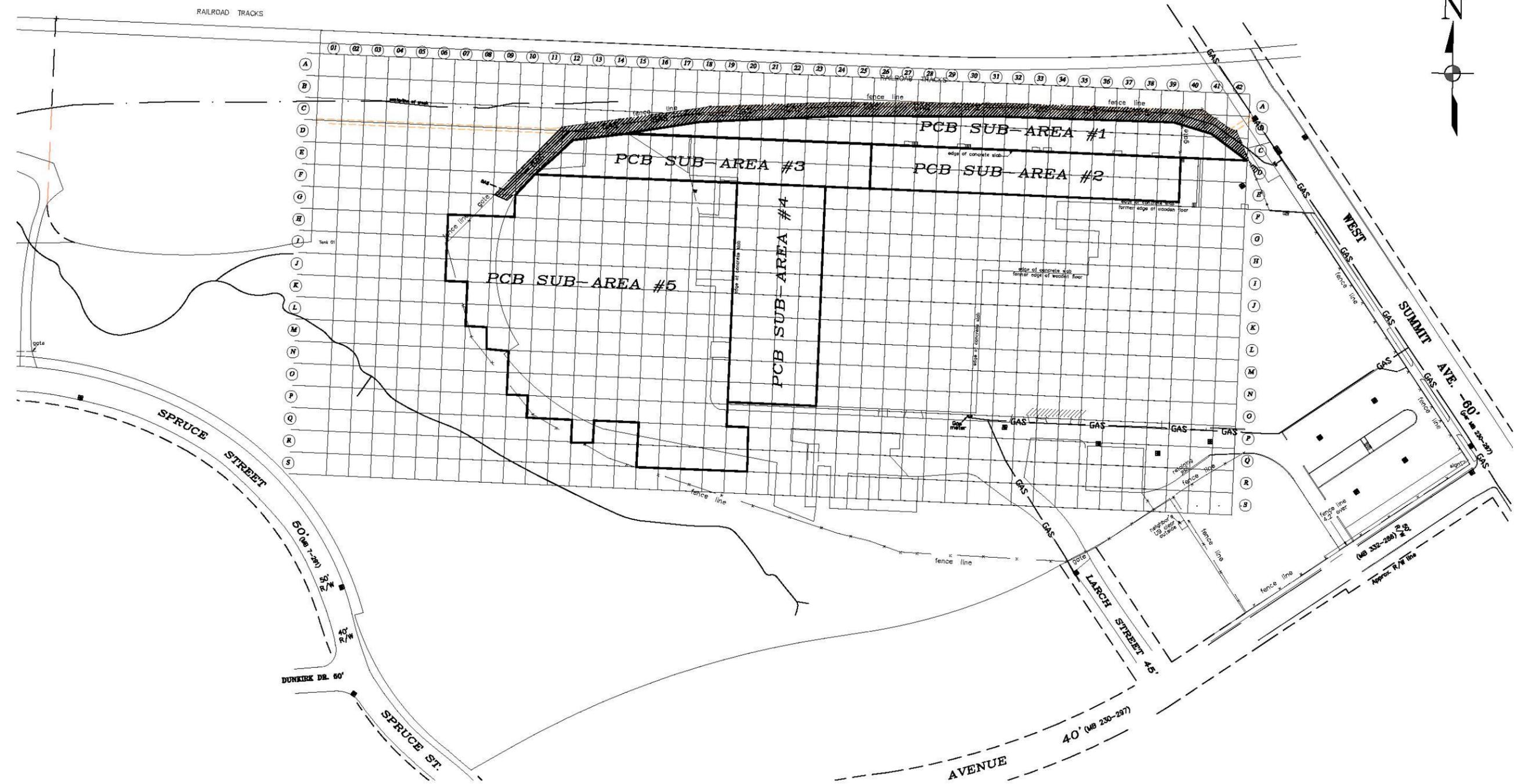
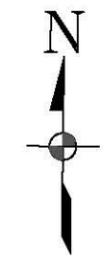
Infiltration Gallery Section A-A'



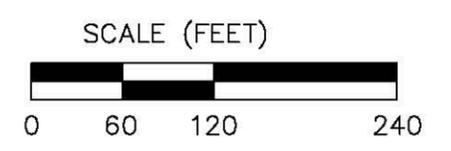
Note: Dimensions are preliminary and subject to final design and field verification.

DRAWING #R-09
 INFILTRATION GALLERY - AOC #21
 FORMER COPES-VULCAN FACILITY
 REMEDIAL ACTION PLAN - STEP TWO
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC

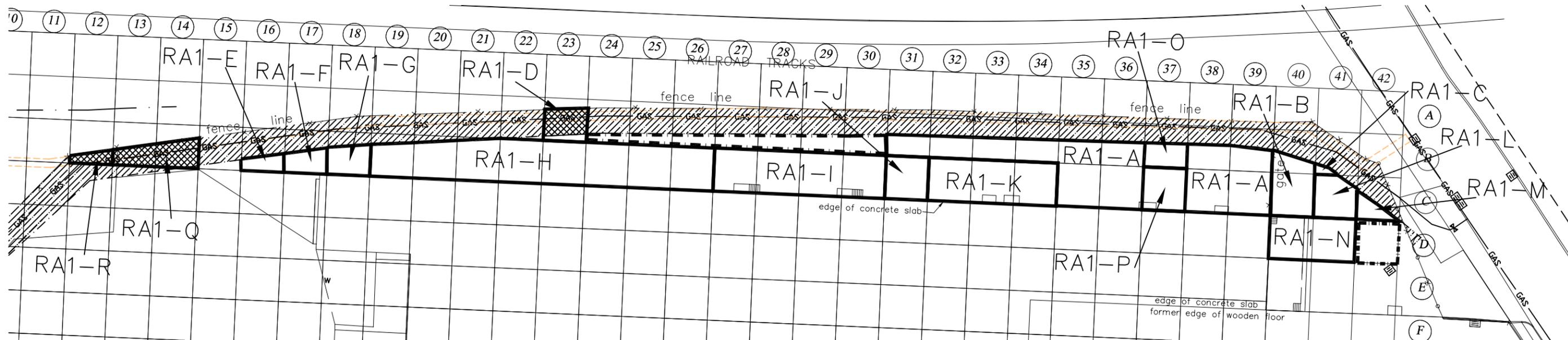
Infiltration Gallery Section A-A'



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DRAWING #R-10
SITE PLAN
PCB SOIL REMOVAL AREAS
REMEDIAL ACTION PLAN - STEP TWO
FORMER COPEX-VULCAN FACILITY
601 WEST SUMMIT AVENUE
CHARLOTTE, NC



NOTES:

1. All dimensions are approximate & subject to field verification by Owner's Consultant.
2. Characterization and disposal may be modified by Owner's Consultant based on observation and testing during work.
3. Soil removal conducted within the limits of the gas line offset should be coordinated with Piedmont Gas.

LEGEND

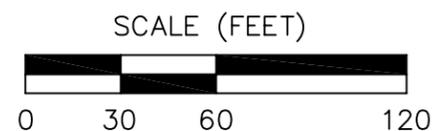
-  NO REMOVAL (BELOW TEST LIMITS)
-  NO REMOVAL (GAS LINE OFFSET)
-  REMOVAL WITH PIEDMONT GAS COORDINATION

TSCA – Represents soil and other media for removal & offsite disposal in a TSCA permitted solid waste landfill

NON-TSCA – Represents soil and other media for removal & offsite disposal in an EPA Subtitle D municipal soil waste landfill

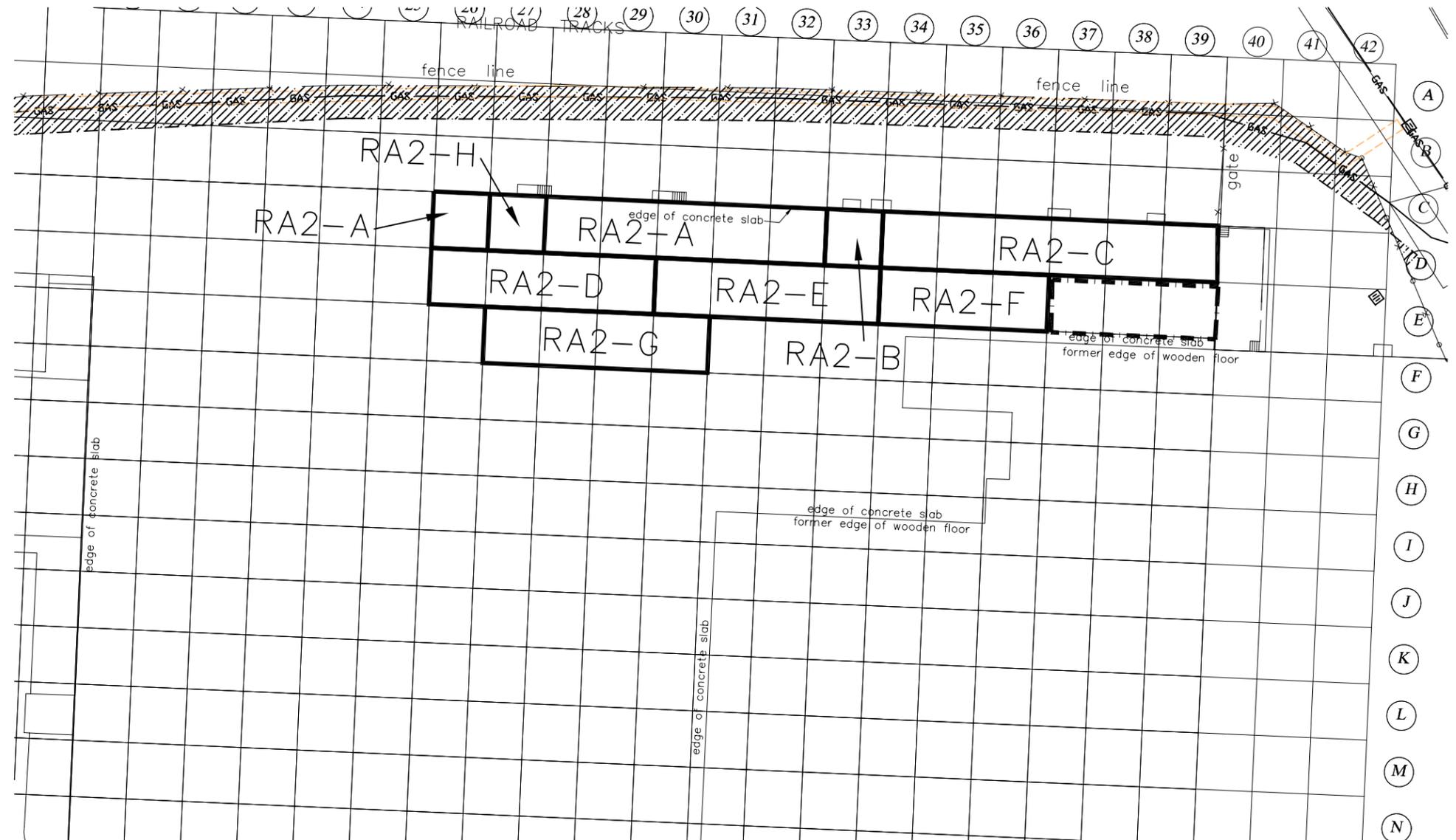
Area	Removal	
	Depth (feet)	Characterization
RA1-A	0-2	Non-TSCA
RA1-B	0-3	Non-TSCA
RA1-C	0-2	Non-TSCA
RA1-D	0-1	Non-TSCA
RA1-E	0-2	Non-TSCA
	2-3	TSCA
	3-5	Non-TSCA
RA1-F	0-5	Non-TSCA
RA1-G	0-2	Non-TSCA
	2-3	TSCA
	3-5	Non-TSCA
RA1-H	0-3	Non-TSCA

Area	Removal	
	Depth (feet)	Characterization
RA1-I	0-3	Non-TSCA
	3-4	TSCA
	4-5	Non-TSCA
RA1-J	0-3	TSCA
	3-4	Non-TSCA
RA1-K	0-1	TSCA
	2-4	Non-TSCA
RA1-L	0-1	TSCA
RA1-M	0-3	Non-TSCA
RA1-N	0-1	TSCA
	1-4	Non-TSCA
RA1-O	0-4	TSCA
	4-6	Non-TSCA
RA1-P	0-1	TSCA
	1-4	Non-TSCA
RA1-Q	0-3	Non-TSCA
	3-7	Pending
RA1-R	0-7	Pending



DRAWING #R-11
 PCB SOIL REMOVAL
 SUB-AREA #1
 REMEDIAL ACTION PLAN - STEP TWO
 FORMER COPEX-VULCAN FACILITY
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC

Area	Removal	
	Depth (feet)	Characterization
RA2-A	0-2.5	Non-TSCA
	2.5-4.5	TSCA
	4.5-5.5	Non-TSCA
RA2-B	0-4.5	TSCA
	4.5-5.5	Non-TSCA
RA2-C	0-2.5	Non-TSCA
	2.5-4.5	TSCA
	4.5-5.5	Non-TSCA
RA2-D	0-2.5	Non-TSCA
	2.5-5.5	TSCA
	5.5-6.5	Non-TSCA
RA2-E	0-4.5	Non-TSCA
	4.5-5.5	TSCA
	5.5-6.5	Non-TSCA
RA2-F	0-5.5	Non-TSCA
RA2-G	0-6.5	Non-TSCA
RA2-H	0-2.5	Non-TSCA
	2.5-4.5	TSCA
	4.5-5.5	Non-TSCA
	5.5-8	Pending



LEGEND

NO REMOVAL (BELOW TEST LIMITS)

NO REMOVAL (GAS LINE OFFSET)

TSCA – Represents soil and other media for removal & offsite disposal in a TSCA permitted solid waste landfill

NON-TSCA – Represents soil and other media for removal & offsite disposal in an EPA Subtitle D municipal soil waste landfill

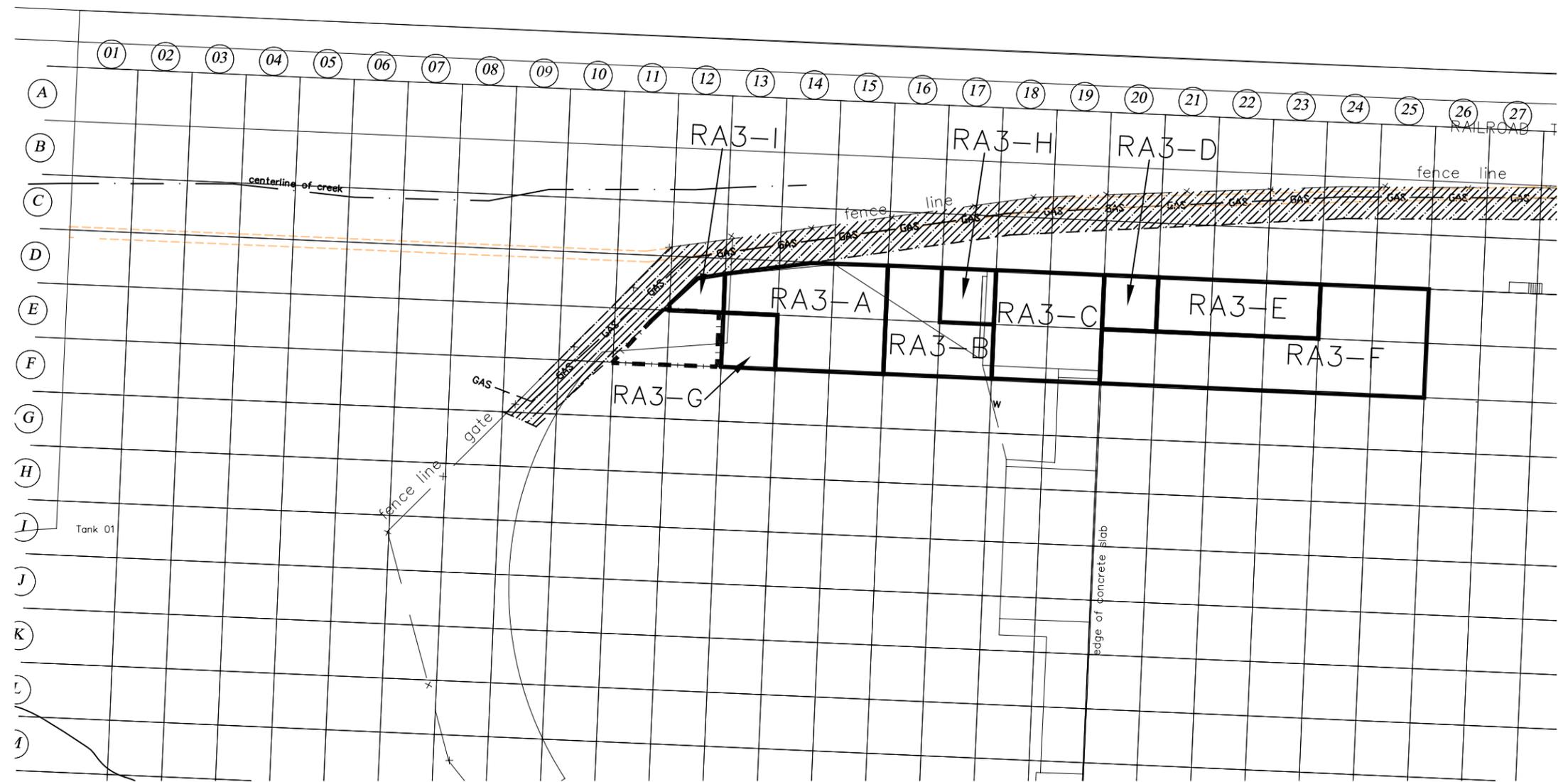
NOTES:

1. All dimensions are approximate & subject to field verification by Owner's Consultant.
2. Characterization and disposal may be modified by Owner's Consultant based on observation and testing during work.



DRAWING #R-12
 PCB SOIL REMOVAL
 SUB-AREA #2
 REMEDIAL ACTION PLAN – STEP TWO
 FORMER COPES-VULCAN FACILITY
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC

Area	Removal	
	Depth (feet)	Characterization
RA3-A	0-4	Non-TSCA
RA3-B	0-5	Non-TSCA
RA3-C	0-6	Non-TSCA
RA3-D	0-2.5	Non-TSCA
	2.5-4	TSCA
	4-8	Pending
RA3-E	0-6.5	Non-TSCA
RA3-F	0-9.5	Non-TSCA
RA3-G	0-2	Non-TSCA
RA3-H	0-5	Non-TSCA
	5-8	Pending
RA3-I	0-8	Pending



LEGEND

NO REMOVAL (BELOW TEST LIMITS)

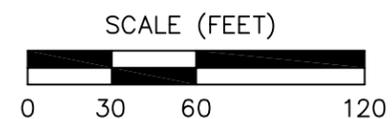
NO REMOVAL (GAS LINE OFFSET)

TSCA – Represents soil and other media for removal & offsite disposal in a TSCA permitted solid waste landfill

NON-TSCA – Represents soil and other media for removal & offsite disposal in an EPA Subtitle D municipal soil waste landfill

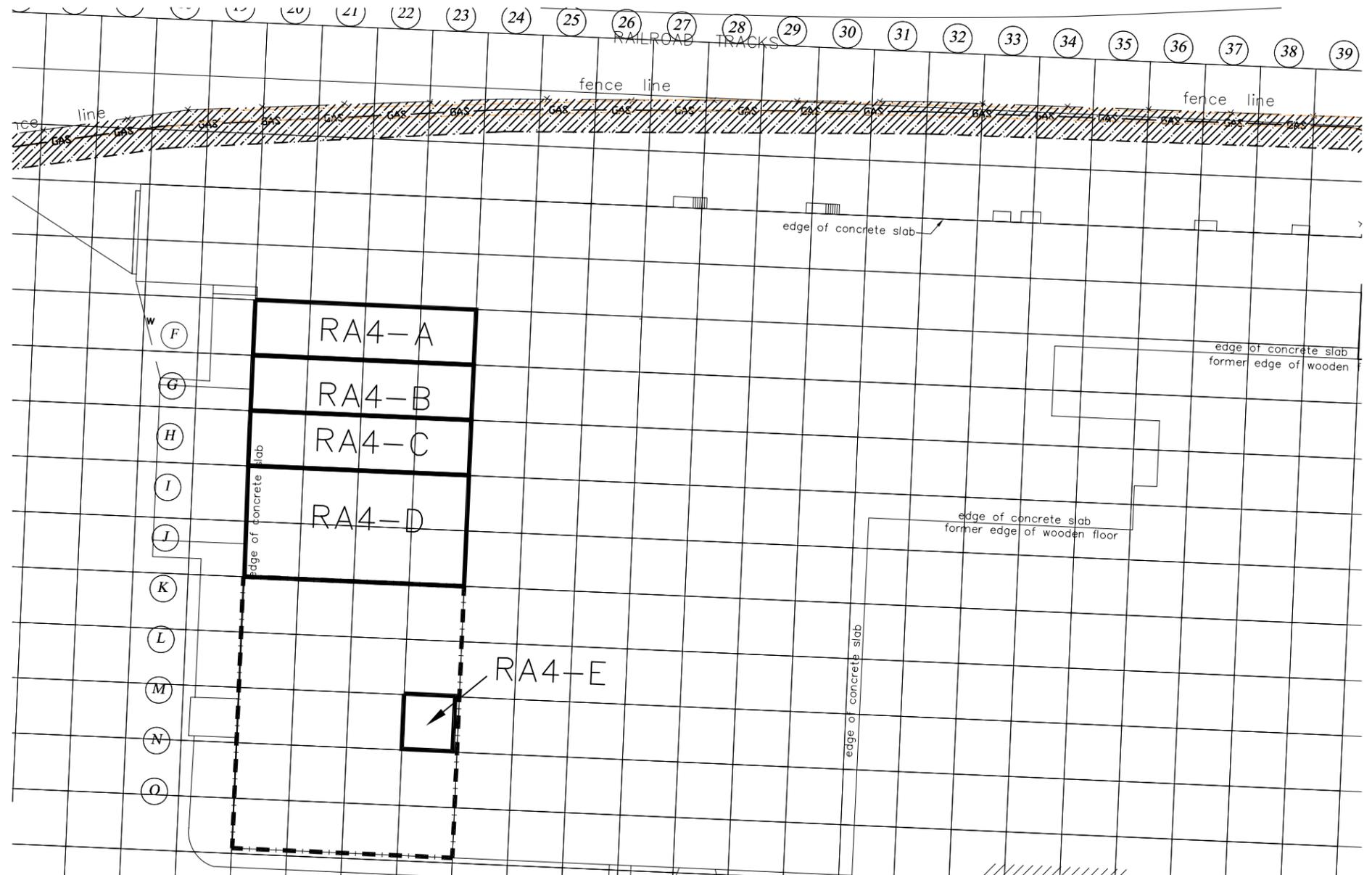
NOTES:

1. All dimensions are approximate & subject to field verification by Owner's Consultant.
2. Characterization and disposal may be modified by Owner's Consultant based on observation and testing during work.



DRAWING #R-13
 PCB SOIL REMOVAL
 SUB-AREA #3
 REMEDIAL ACTION PLAN – STEP TWO
 FORMER COPES-VULCAN FACILITY
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC

Area	Removal	
	Depth (feet)	Characterization
RA4-A	0-5	Non-TSCA
RA4-B	0-3	Non-TSCA
RA4-C	0-6	Non-TSCA
RA4-D	0-3	Non-TSCA
RA4-E	0-3	Non-TSCA



LEGEND

 NO REMOVAL (BELOW TEST LIMITS)

 NO REMOVAL (GAS LINE OFFSET)

TSCA – Represents soil and other media for removal & offsite disposal in a TSCA permitted solid waste landfill

NON-TSCA – Represents soil and other media for removal & offsite disposal in an EPA Subtitle D municipal soil waste landfill

NOTES:

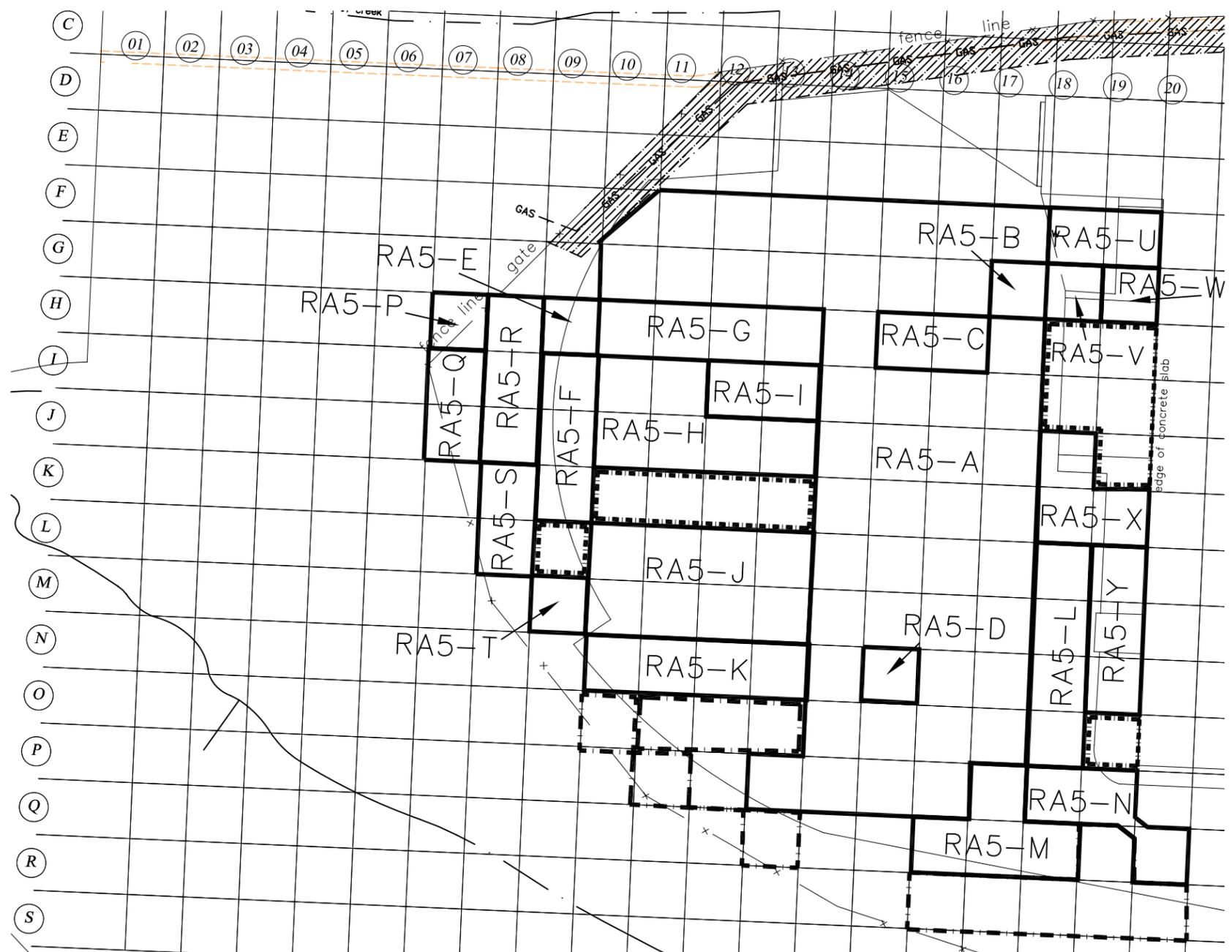
1. All dimensions are approximate & subject to field verification by Owner's Consultant.
2. Characterization and disposal may be modified by Owner's Consultant based on observation and testing during work.



DRAWING #R-14
 PCB SOIL REMOVAL
 SUB-AREA #4
 REMEDIAL ACTION PLAN – STEP TWO
 FORMER COPES-VULCAN FACILITY
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC

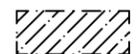
Area	Removal	
	Depth (feet)	Characterization
RA5-A	0-3.5	Non-TSCA
RA5-B	0-0.5	Non-TSCA
	0.5-1.5	TSCA
	1.5-3.5	Non-TSCA
RA5-C	0-0.5	Non-TSCA
	0.5-1.5	TSCA
	1.5-3.5	Non-TSCA
RA5-D	0-1.5	Non-TSCA
	1.5-2.5	TSCA
	2.5-3.5	Non-TSCA
RA5-E	0-3.5	Non-TSCA
RA5-F	0-1.5	Non-TSCA
	1.5-3.5	TSCA
RA5-G	0-2.5	Non-TSCA
RA5-H	0-1.5	Non-TSCA
RA5-I	0-0.5	Non-TSCA
	0.5-1.5	TSCA
	1.5-13	Pending
RA5-J	0-2.5	Non-TSCA
RA5-K	0-2.5	Stockpile for fill
	2.5-3.5	Non-TSCA
RA5-L	0-2.5	Non-TSCA
RA5-M	0-1.5	Non-TSCA
RA5-N	0-0.5	Non-TSCA

Non-Paved Areas		
Area	Removal	
	Depth (feet)	Characterization
RA5-P	0-4	Stockpile/Non-TSCA
	4-10	Non-TSCA
RA5-Q	0-4	Stockpile/Non-TSCA
	4-8	Non-TSCA
RA5-R	0-2	Non-TSCA
	2-8	TSCA
	8-10	Non-TSCA
RA5-S	0-6	Non-TSCA
	6-8	TSCA
	8-10	Non-TSCA
RA5-T	0-4	Non-TSCA
RA5-U	4-6	TSCA
	0-2	TSCA
RA5-V	0-2	Non-TSCA
	2-4	TSCA
RA5-W	0-2	Non-TSCA
RA5-X	0-2	Non-TSCA
RA5-Y	0-2	Non-TSCA



LEGEND

 NO REMOVAL (BELOW TEST LIMITS)

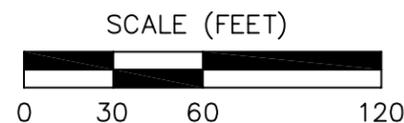
 NO REMOVAL (GAS LINE OFFSET)

TSCA – Represents soil and other media for removal & offsite disposal in a TSCA permitted solid waste landfill

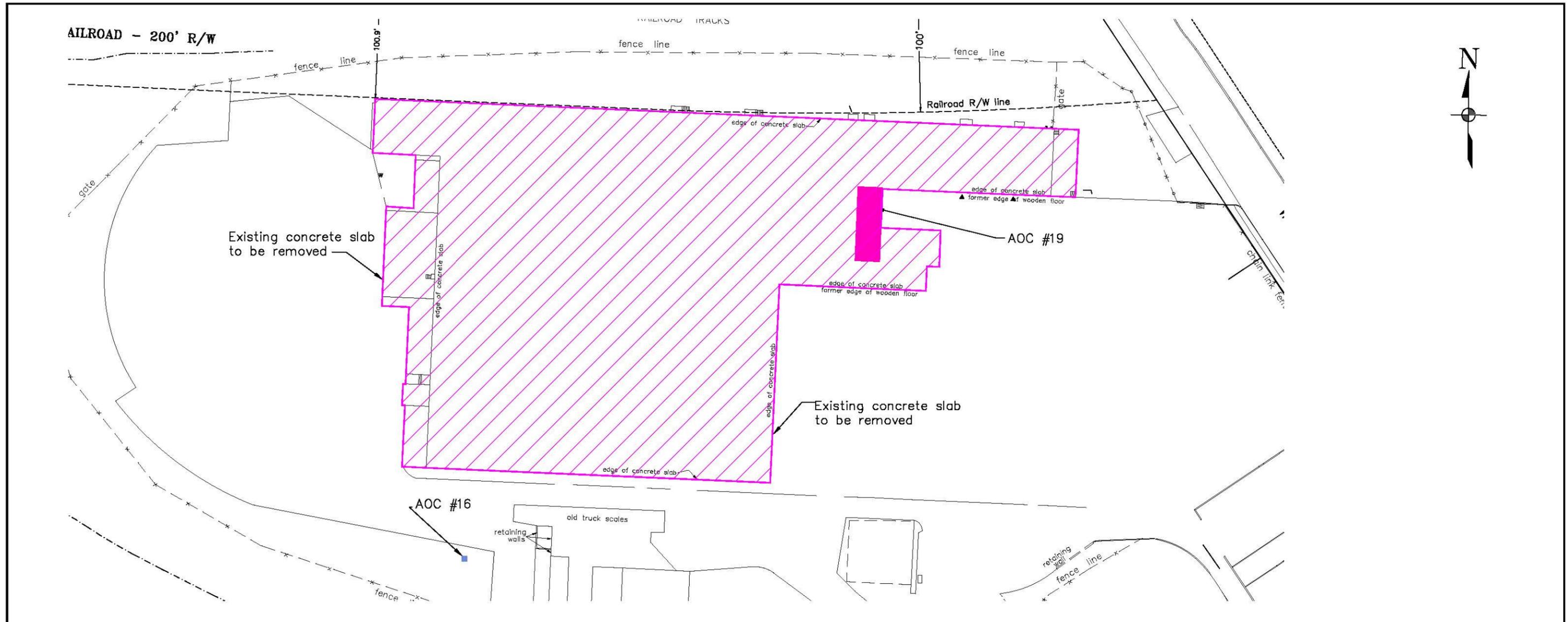
NON-TSCA – Represents soil and other media for removal & offsite disposal in an EPA Subtitle D municipal soil waste landfill

NOTES:

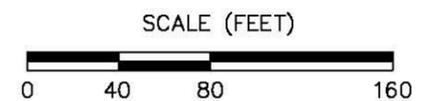
1. All dimensions are approximate & subject to field verification by Owner's Consultant.
2. Characterization and disposal may be modified by Owner's Consultant based on observation and testing during work.



DRAWING #R-15
 PCB SOIL REMOVAL
 SUB-AREA #5
 REMEDIAL ACTION PLAN – STEP TWO
 FORMER COPES-VULCAN FACILITY
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC



AOC	Excavation Limits (approximate)	Excavation Interval (approximate)	Characterization & Disposal
16	4.0 ft (N-S) 4.0 ft (E-W)	0-12.0 ft	Non-contaminated, use for backfill
		12.0 ft-16.0 ft	Dispose as non-TSCA, non-RCRA waste
19	60.0 ft (N-S) 20.0 ft (E-W)	0-15.0 ft (0 ft to limits of pit + 1.0 ft)	Dispose as non-TSCA, non-RCRA waste



NOTES:

- All dimensions are approximate & subject to field verification by Owner's Consultant.
- Characterization and disposal may be modified by Owner's Consultant based on observation and testing during work.



DRAWING #R-16
 SITE PLAN
 REMAINING AREAS OF CONCERN
 FORMER COPES-VULCAN FACILITY
 REMEDIAL ACTION PLAN - STEP TWO
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC



Sewer Type	Excavation Width (approximate, ft)	Excavation Interval	Characterization & Disposal
Main Sanitary	2.5	0 ft to top of pipe	Non-contaminated, use for backfill
		Top of pipe to base + 0.5 ft	Disposal as non-TSCA, non-RCRA waste
Main Storm	4.0	0 ft to top of pipe	Non-contaminated, use for backfill
		Top of pipe to base + 0.5 ft	Disposal as non-TSCA, non-RCRA waste
Secondary Sewer	2.5	0 ft to top of pipe	Non-contaminated, use for backfill
		Top of pipe to base + 0.5 ft	Disposal as non-TSCA, non-RCRA waste

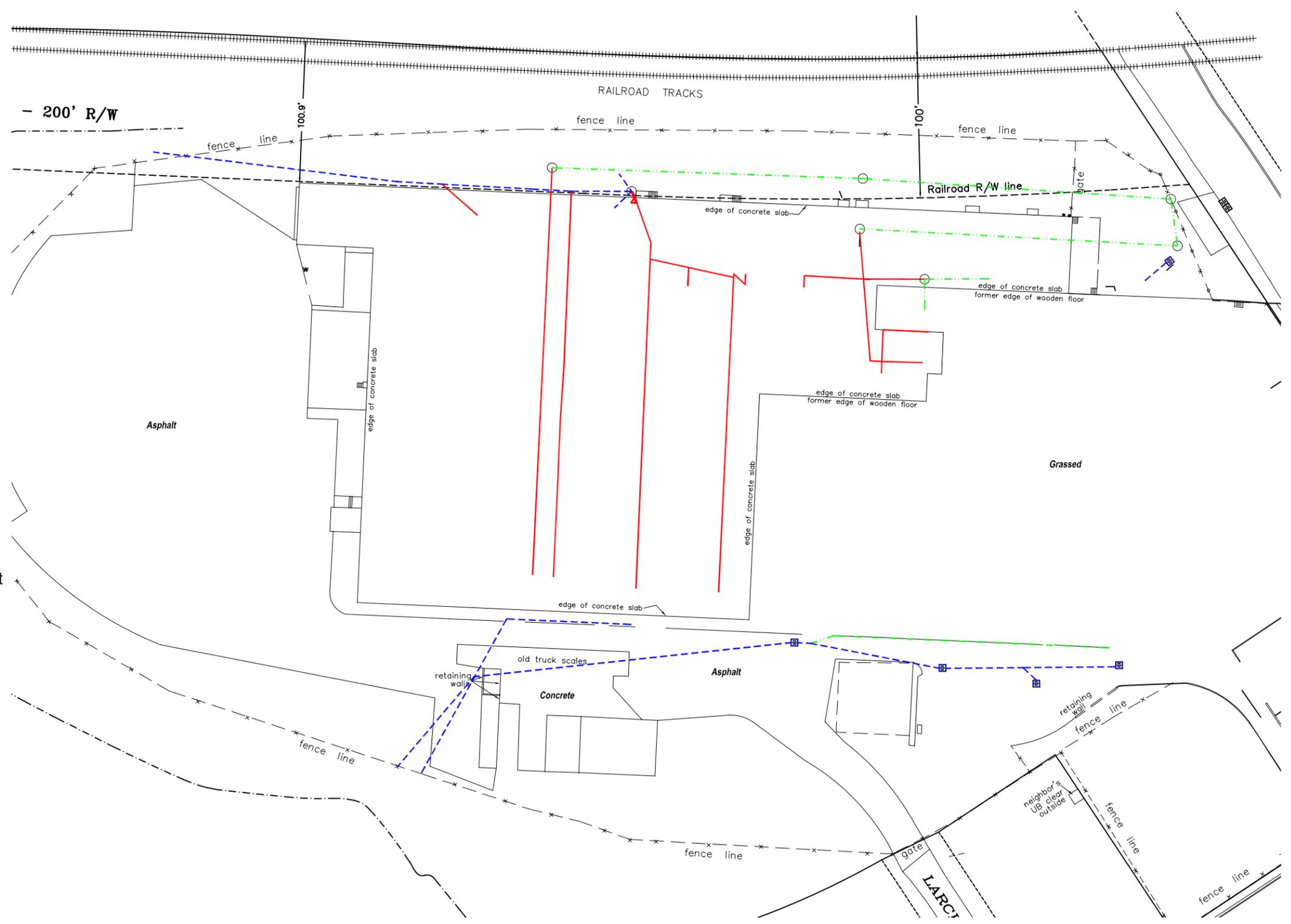
NOTES:

1. All dimensions are approximate & subject to field verification by Owner's Consultant.
 2. Characterization and disposal may be modified by Owner's Consultant based on observation and testing during work.
- * Refer to PCB Soil Removal figures for sewers located within PCB-impacted areas with TSCA disposal requirements.

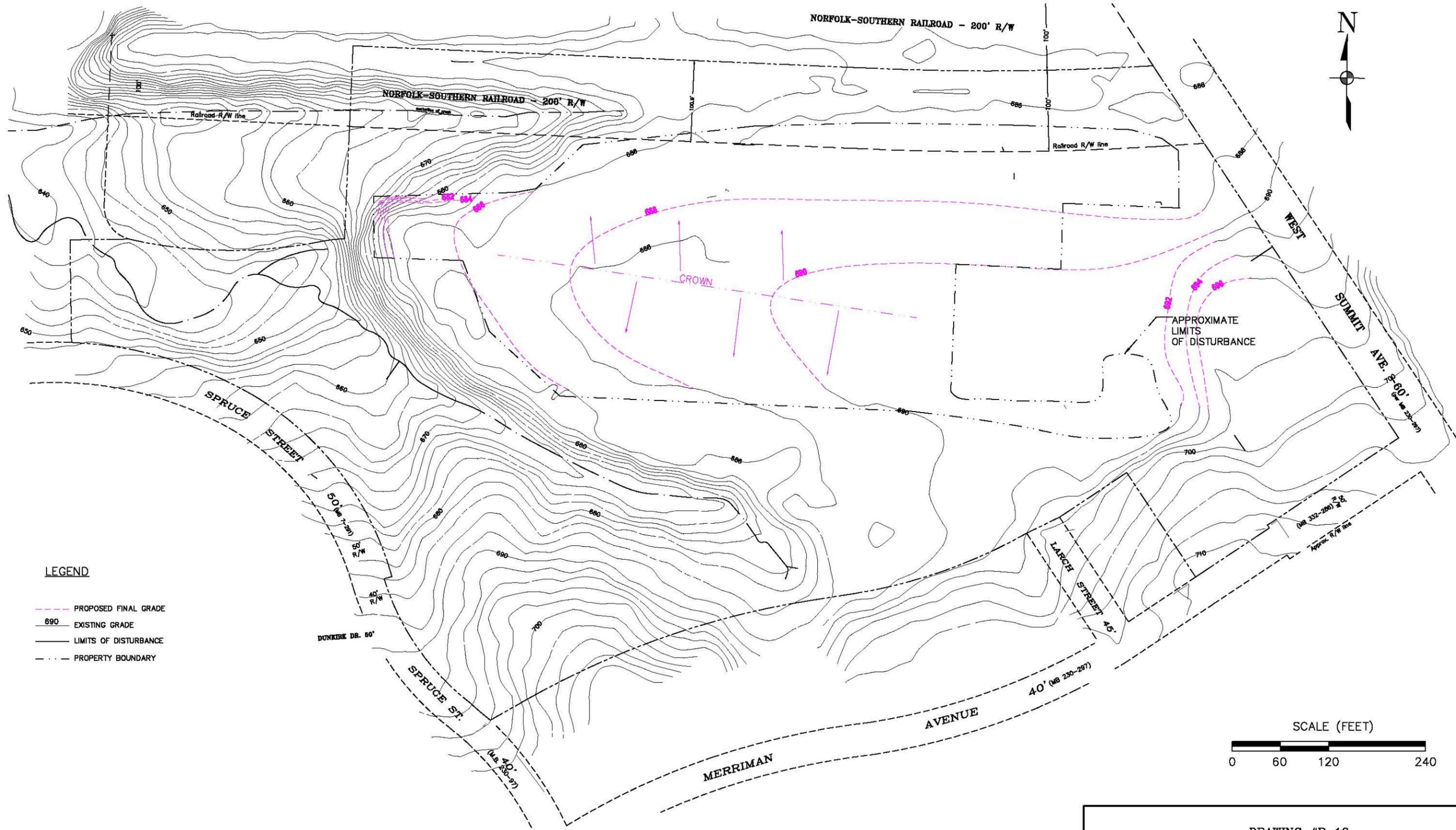
LEGEND

- Main Sanitary Line
- Main Storm Line
- Secondary Sewer Line
- Storm Inlet
- Sanitary Manhole

SCALE (FEET)

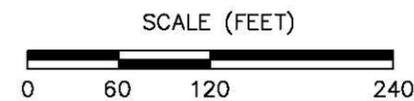


DRAWING #R-17
 SITE PLAN
 STORM & SANITARY SEWER LOCATIONS
 FORMER COPES-VULCAN FACILITY
 REMEDIAL ACTION PLAN - STEP TWO
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC



LEGEND

- PROPOSED FINAL GRADE
- 690 EXISTING GRADE
- LIMITS OF DISTURBANCE
- - - PROPERTY BOUNDARY



KELLY-BUCK
 COMPANY
 Civil & Environmental Engineers
 2130 Superior Ave., Suite 3-A
 Cleveland, OH 44114
 (216) 861-1716

DRAWING #R-18
 PROPOSED GRADING PLAN
 FORMER COPES-VULCAN FACILITY
 REMEDIAL ACTION PLAN - STEP TWO
 601 WEST SUMMIT AVENUE
 CHARLOTTE, NC