Scope of Work for Soil Excavation at the DeLaval Property Located at Rinaldi Boulevard, City of Poughkeepsie, New York NYSDEC ERP Site No. B00190-3 ESI File: GP02179.71

Introduction

This Scope of Work (SOW) is prepared by Ecosystems Strategies, Inc. (ESI) on behalf of Ginsburg Development Corporation (GDC) for the purpose of outlining procedures to be followed during construction activities at the DeLaval waterfront redevelopment project. GDC will extend a sanitary sewer line (and associated utilities) onto the DeLaval parcel from the adjoining property to the east and build a small pump house. In addition, GDC will extend a storm sewer line onto and across the DeLaval Site, terminating at the Hudson River. Fieldwork will be restricted solely to excavation and utility installation activities.

The location of the Site is shown generally in Figure 1 of the Attachment. The specific area of work is shown in Figure 2 of the Attachment.

Known Environmental Conditions

Previous environmental investigations (conducted by Clough Harbour & Associates [CHA]) have identified site-wide PAH and metals contamination of surface soils on the DeLaval property, and significant subsurface contamination in several areas of concern (AOC). The proposed excavation area (the "Site") will pass through and near "AOC-4", the least contaminated AOC, where only low-level PAH contamination has been documented in subsurface soils. Odorous soils and groundwater containing a slight sheen were previously identified in AOC 4; no VOC contamination, however, has been found in these soils, and analyte concentrations in downgradient groundwater do not exceed guidance levels. This SOW only addresses requirements for managing soil and groundwater at the Site (no activities will be conducted in or near other AOCs at the DeLaval property).

Description of Proposed Excavation Activities

The excavation trench will extend from the adjoining Hudson Pointe property, westward beneath the Metro-North Railroad tracks into AOC-4 on the DeLaval property, to a proposed pump house. The excavation area at the pump house will be no more than approximately 15 feet square. Current plans anticipate excavation to 6.5 feet below surface grade, or 1.5 feet (+/-) below mean high tide.

Compliance with Soil & Water Management Plan

The DeLaval property will be remediated under the NYSDEC Environmental Restoration Program and all site-wide fieldwork activities are subject to the requirements of the <u>Soil & Water</u> <u>Management Plan (SWMP</u>) prepared by CHA and approved by the NYSDEC, which specifies protocols for project phasing, pre-excavation sampling, site controls, excavation, confirmatory sampling, and site restoration. Fieldwork activities followed by GDC and its subcontractors will be in compliance with the requirements of the <u>SWMP</u>, with the exceptions detailed below (these deviations from the overall requirements of the <u>SWMP</u> are warranted, based on a lack of significant Site contamination, and will serve to protect the health and safety of construction personnel and the public, and the environment). The approved Community Air Monitoring Plan, plus periodic monitoring with a photoionization detector for the presence of volatile compounds, will be implemented.

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Procedures for Handling Excavated Soils

Excavated materials may contain low levels of PAHs, at levels similar to the concentrations of these compounds in surface soils. Excavated materials may therefore be stockpiled directly on the ground surface, unless they contain separable or grossly contaminated materials, in which case such materials will be stockpiled on plastic sheeting according to the <u>SWMP</u> (all stockpiled materials will be covered by plastic sheeting in order to prevent errosional transport of any contaminated soil). The NYSDEC will be notified immediately if any grossly contaminated soils are encountered. The area of proposed stockpiling is shown in Figure 2 of the Attachment.

Excavated soil will be stockpiled for either use as backfill (subsurface fill at the base of the pump house or for use on other portions of the DeLaval property) or for off-site disposal. In no case will any stockpiled material be utilized for backfill in the excavated utility trenches (only certified clean materials, separated from *in situ* soils by an approved demarcation layer, will be used).

Procedures for Backfilling Excavation Areas

Areas adjoining the pump station (non-piping areas) will be backfilled with previously excavated soils from AOC-4. Backfill will occur to an elevation no greater than one foot below final surface grade. A minimum of one foot of certified clean backfill will be used to complete the proposed finished grade (this final work will be completed by GDC). The areal extent of this clean cover layer will be properly recorded, so that the clean soil cover for the overall site remedy can be incorporated at the time of remedial construction (final grades will be determined in consultation with the City of Poughkeepsie). The final graded area will be seeded in order to establish a cover of grass sufficient to prevent erosion.

Backfilling of the utility pipe trenches will be in accordance with pipe installation specifications and City engineering requirements. In addition to these specifications, a demarcation layer will be placed beneath and surrounding all areas of imported clean material (including substrate stone), in order to clearly distinguish between imported clean materials and remaining AOC-4 soils.

Procedures for Handling Encountered Groundwater

Excavation activities will extend approximately two feet below the expected level of groundwater in the vicinity of the Site. No significant environmental contaminants are likely to be present in water entering the excavation and dewatering activities are therefore not likely to warrant any extraordinary measures (oil absorbent pads and booms will be staged on-site in the unlikely event that petroleum or other contaminants are encountered). Water will be pumped from the excavation into a nearby bermed holding area and allowed to naturally seep back into the subsurface. In the event that overt signs of groundwater contamination are observed (strong odors, sheens, free product), all wastewater will be stored in an on-site Frac tank or otherwise treated prior to disposal, according to a NYSDEC approved method.

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Decontamination Procedures

Given the absence of significant soil contamination in AOC 4, the establishment of a contamination reduction zone (as specified in the <u>SWMP</u>) is not warranted. Decontamination procedures may be accomplished within the confines of the Site, and rinse water may be discharged directly to the ground surface (water accumulated in containers should be discharged to the bermed holding area, and any significantly contaminated water should be handled in the manner established for contaminated groundwater). Vehicles leaving the DeLaval property should be cleaned according to <u>SWMP</u> protocols.

Preparation of Final Summary Report

A Final Summary Report will be prepared at the conclusion of all fieldwork activities. The report will include all fieldwork records, and survey information on the depth and location of the utility trench, sewer pipe, clean backfill, and demarcation layer, and the areal extent of the clean soil backfill around the pump station building.

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