November 2023 Work Plan

Focused Site Investigation

Industrial Property

2700 SE Tacoma Street
Portland, Oregon

November 3, 2023

Prepared for:

Clear Sky Capital
4300 E Camelback Road
Phoenix, Arizona 85018

In care of:

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Project No. 1816-23001-04

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1.0 INTRODUCTION

EVREN Northwest, Inc. (ENW) has prepared this Work Plan for a Focused Subsurface Investigation (FSI) at the above-referenced property (Figures 1 and 2; subject site). The proposed scope of work in this work plan will be conducted in conjunction with upcoming redevelopment of the subject site to assess current site conditions in areas where earthwork may encounter contamination that was previously inaccessible. ODEQ previously issued a No Further Action (NFA) for the subject site and new sampling data provided by proposed work will allow ODEQ sufficient information to determine if the new redevelopment plans, including new infrastructure and buildings, will continue to adequately protect human health and the environment. Ultimately, the objective of the site investigation, as implemented, is to supplement the previous NFA determination for the Site.

1.1 BACKGROUND

The subject property is in an industrial-zoned district of SE Portland, Oregon and was the site of Pacific Hoe Saw and Knife Company (Pacific Hoe) and later Simmonds International (Simmonds) from 1954 through 2020. These companies were involved in the manufacture of band saws, circular saws, and industrial knives for the wood products industry. Historical industrial use of the subject property resulted in the presence of total petroleum hydrocarbons, heavy metals, polychlorinated biphenyls (PCBs) and other contaminants in soil, ground water and storm water at the subject property.

Between 2004 and 2013, multiple phases of investigation were completed, with work addressing soil, ground water and stormwater under the direction of ODEQ, which lists the site on the Environmental Cleanup Information (ECSI) database as site number 6561.[1] One of the primary environmental concerns was a flood control berm constructed of manufacturing waste (or 'swarf') containing elevated concentrations of PCBs and metals. Under a work plan approved by ODEQ, the berm was removed in 2008 and replaced with clean soil materials. ODEQ issued a No Further Action determination in May of 2014 following the removal and restoration of the berm area adjacent to Johnson Creek and assessment in areas not covered by paving or warehouses. Previous remedial actions, including historical sample locations and laboratory analytical results are available on ODEQ's ECSI database and summarized in a remedial investigation report prepared by others.[2]

[1] A former ECSI number for the site was 3884. ECSI No. 6561 was assigned to address issue with the northern portion of 3884 after Clear Sky entered into a Voluntary Cleanup Agreement with ODEQ.
[2] Hahn and Associates, Inc. April 30, 2013. Remedial Investigation Report

Clear Sky Capital, Inc. is in the process of demolishing existing buildings in preparation for site re-development into a new public storage facility.[3] ENW understands ODEQ has indicated the previous NFA may not be applicable to areas of the subject property previously covered with hardscape (building and asphalt) that will be disturbed and/or exposed during planned development activities and seeks to ensure the site conditions remain protective of human health and the environment.

As part of a negotiated Voluntary Cleanup Agreement between Clear Sky Capital and ODEQ, additional information will be provided to allow ODEQ to track progress and eventually re-issue a NFA for the site.

The scope of this FSI Work Plan was developed to provide additional data and risk screening for:

- Areas of newly exposed soil that could pose a risk of direct exposure or contaminate surface runoff, and
- Areas where deeper soil will be disturbed during upcoming construction/redevelopment activities.

2.0 PROPOSED SCOPE OF WORK

The following work is proposed to assess current levels of potential residual petroleum and metals impacts in areas where earthwork may expose or disturb impacted soils during demolition and construction. Work methods and procedures are described in Section 3.0.

2.1 Surface Soil Sampling

ENW proposes surface soil sampling to screen for shallow petroleum-related contaminants and total metals in soil in the proposed area of exposed soils in the eastern portion of the site. The purpose of surface soil sampling is to screen for contaminants in shallow soils where the former warehouse will be removed, and landscaping is planned.

To obtain comprehensive surface soil data, four (4) decision units (DUs) have been defined in the planned exposed soil areas in the eastern portion of the site (Figure 3), e.g.:

- DU01 – surface soils in northwest quadrant of planned exposed soil area.
- DU02 – surface soils in northeast quadrant of planned exposed soil area.
- DU03 – surface soils in southwest quadrant of planned exposed soil area.
- DU04 – surface soils in southeast quadrant of planned exposed soil area.

Surface soil samples will be collected from the locations shown on Figure 3 using the Incremental Sampling Method (ISM) developed by the Interstate Technology & Regulatory Council (ITRC).[4]

[3] Clear Sky Capital Tacoma Street Self Storage LP is an affiliate of Clear Sky Capital, Inc. and the work proposed under this workplan and under the Voluntary Cleanup Agreement with ODEQ is intended for the benefit of both parties.

[4] The Interstate Technology & Regulatory Council (ITRC). October 2020. Incremental Soil Sampling Methodology (ISM) Update.

ISM soil samples will be initially screened for the presence of total petroleum hydrocarbons and analyzed for select total metals. If petroleum or elevated metals are detected, additional follow up analysis will be requested, as appropriate (See Table 3-1).

2.2 Soil Boring Investigation

The scope of work includes the installation of 10 temporary borings to assess subsurface soils in areas planned for excavation and to potentially further define the vertical extent of impacts that may be identified in surface soils.

Proposed locations have been selected based on the following systematic sampling strategy:

- Borings around the perimeter of the proposed building will be sited along the planned foundation and associated foundation drain where grading plans call for soils to be disturbed down to at least 7 feet below ground surface (bgs).
    - Note, one boring will be sited coincident with the former location of the Swarf waste decant area, see Figure 3.
- One boring is located in the approximate center of the proposed building footprint.
- One boring is sited in the approximate center of a planned lined concrete storm water feature that will require excavation of soils down to at least 6 feet bgs.
- One boring is sited in the middle of each of the four decision units in the eastern portion of the site to characterize deeper soils and to vertically delineate surface soil impacts, if detected during ISM surface soil sampling.

Discrete soil samples will be collected from each soil boring as outlined in Section 3.4. In general:

- Except for borings within the four decision units, a shallow soil sample will be collected from each boring at a depth between 0.5- and 3-feet depth bgs. Shallow soil samples will be collected below surface pavement structure such as asphalt and concrete and their associated subgrade aggregate, where present.
- Deeper subsurface soil samples will be collected approximately two feet above the soil/water interface, which is estimated to be present at 12 to 15 feet bgs. Sample collection depths may be field justified, as outlined in Section 3.4.1, based on field screening.

2.3 Report Preparation

The results of the work proposed above will be described in a report. At a minimum, the report will:

- Document investigative methods and procedures used.
- Present pertinent information on maps, boring logs, and field sample data sheets.
- Present findings and conclusions of the field work;
- Chain-of-custody records and analytical reports;
- Risk screening for previously identified complete pathways and receptors;
- Identification of data gaps, if any.

During the course of this investigation, should results indicate a need for additional work, ODEQ will be consulted regarding proposed actions.

3.0 METHODS AND PROCEDURES

3.1 General

All work will be performed by employees and subcontractors trained and licensed to work with hazardous materials. Safety procedures will be strictly enforced through the use of a Health and Safety Plan. A utility clearance will be obtained for all proposed boring locations prior to work initiation.

3.2 Incremental Sampling Method

ISM consists of collecting many small increments of soil (discrete soil samples) from a given DU and compositing them into one larger sample. The relatively large soil sample is thoroughly homogenized and subsampled in the laboratory. The resulting contaminant concentrations represent the average concentration for the entire DU. This sampling procedure will minimize effects of heterogeneity (micro scale and short scale) in the soil to provide a more accurate representation of contaminant concentrations within each DU. Technology Regulatory Council[4] and State of Hawaii[5] guidance will be followed.

3.2.1 Increment Sampling Locations and Depths (Surface Soil)

The decision unit boundaries are illustrated in Figure 3. Each decision unit will be divided equally into a grid pattern consisting of 50 grids forming a regular pattern across the DU. Decision units DU01 through DU04 will encompass each of the four quadrants defining the area to be landscaped with exposed soil in the eastern portion of the project site.

Soil increments from decision units DU01-DU04 will be collected between approximately 0 and 0.5 feet bgs. Increments will be of equal mass and will be collected from the approximate center node of each increment grid (grid-center systematic sampling), resulting in collection of 50 soil increments from each DU to ensure that the entire decision unit population is equally represented in the final multi-increment sample.

Soil increments will be sampled with a stainless-steel push probe and/or hand auger. Wood debris and large rocks will be removed from each soil increment prior to combining in a laboratory-provided sample container.

In addition to the primary incremental samples, two replicate increment samples from one of the decisions units will be collected for quality assurance/quality control purposes. As with the primary samples, replicate samples will consist of 50 increments each collected from between 0 and 0.5 feet bgs will be offset several feet, in two directions, from primary increment locations.

[5] State of Hawaii Department of Health, July 2021. Characterization of Decision Units. https://health.hawaii.gov/heer/tgm/section-04/#4.2.5

3.2.2 Laboratory Sub-Sampling and Compositing

All laboratory subsampling and sample preparations will be conducted in accordance with ITRC protocols (air dried, sieved, subsampled, and composited) by Friedman & Bruya, Inc. (F&BI) of Seattle, Washington.

3.3 Soil Borings

Ten temporary soil borings (EB01 through EB10) are proposed to assess surface and subsurface soil at the site and will be sited in the locations illustrated on Figure 3. Drilling will be directed by ENW and performed by Cascade Drilling using a direct-push drill rig. All sampling equipment will be decontaminated prior to use.

Soil borings are not anticipated to be completed beyond the first observed water table which is anticipated at approximately 12 to 15 feet bgs. Continuous soil cores will be collected to total depth in each boring within five (5)-foot long cellulose acetate butyrate (CAB) sample tubes and evaluated, sampled, and analyzed according to the protocol and sampling plan described below. Each five (5)-foot CAB sample tube will be sliced lengthwise to expose the soil core for observations and logging.

All soil cores will be logged by an ENW Geologist onto field boring logs with lithology described using the Unified Soil Classification System (USCS).

3.3.1 Soil Assessment

Field Screening. Recovered soil cores will be inspected continuously for the presence of impacts. Field headspace screening of soil cores at regular intervals will be collected from grab samples from the drilling core and readings recorded per the discrete sample depth on the boring log. Field headspace will be measured at 5-foot or shorter intervals by placing an aliquot of soil to be tested in a resealable plastic bag and inserting the tip of a photoionization detector (PID) into the bag and reading headspace volatiles in parts per million by volume (ppmv).

Soil Sampling. Based on field screening results, soil samples will be collected from discrete depths without homogenization, i.e., compositing, directly from the 5-foot soil core using new nitrile gloves. The discrete grab sample will be placed directly into a laboratory prepared 4-ounce sample jar with Teflon-lined lid. The discrete depths of samples will be recorded on boring logs and in field notes. No composite sampling is planned. The discrete sampling depth may be modified in the field based on the results of field screening, where soil with obvious indications of impacts will be preferentially sampled. Soil sampling will continue to roughly two feet above the soil/water interface where the final soil sample will be collected. The samples will be labeled as follows:

- Sample Designation, or Identification
- Date and time of collection
- Project number
- Preservation (if applicable).

Samples will be immediately placed in cooled storage until they are delivered to the contracted project laboratory following chain-of-custody protocols.

Soil Logging. Soil samples will be described using appropriate geologic nomenclature and Unified Soil Classification System (USCS) to the extent practical. Information such as percentage of gravel, sand, and fines; particle size range, shape, and angularity; and plasticity, cohesiveness, strength, and dilatancy will be recorded, as appropriate. In addition, the presence of odors, moisture, sedimentary structure, weathering, and interpretation of stratigraphic unit will be documented.

The format to be recorded on boring logs is shown below:

- Light brown silty SAND (SM) – fine sand, subrounded, micaceous, silty fines with low plasticity, dense, wet, some organic debris, and petroleum-like odor.

3.4 Laboratory Analyses

All soil samples will be analyzed according to the Analysis Plan shown in Table 3-1, below. Sample containers, preservatives, and holding times for each analytical method are provided on Table 3-2.

Table 3-1. Proposed Analysis Plan

Analytical Method	Constituents	Soil
NWTPH-Dx	Total Petroleum Hydrocarbons (TPH) quantification – Diesel-Range Organics (DRO) and Residual (Oil)-Range Organics (RRO)	All
Metals (EPA 6020B)	Total Resource Conservation and Recovery Act (RCRA) 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver)	All
Metals (EPA 7196A)	Total Chromium VI	Samples with total chromium above regional background concentration
PCBs (EPA 8082-SIM)	Polychlorinated biphenyls (PCBs) (as Aroclors)	All
EPA 8270	Polycyclic Aromatic Hydrocarbons (PAHs)	Select samples, based on the magnitude of combined DRO+RRO concentration detected (if over 500 mg/Kg)
EPA 5035\8260	Volatile organic constituents	Select samples, based on field screening (if PID > 20 ppmv) or the magnitude of combined DRO+RRO concentration detected (if over 500 mg/Kg).

EPA = U.S. Environmental Protection Agency

Table 3-2. Analytical Protocol

Analyte(s)	Analytical Method	Container and preservative	Holding Time	Preservation
Soil:				
DRO	NWTPH-Dx/Dx Ext.	8-oz Clear wide mouth glass, zero or minimum headspace	14-days*	ice
Total RCRA 8 Metals	EPA Method 6020/200.8	4-oz Clear wide mouth glass, minimum headspace	14-days	Ice
Total Chromium VI	EPA Method 7196A	4 oz. glass jar with Teflon lined lid	14-days*	Ice
PCBs	EPA 8082-SIM	2.5-oz (discrete) or 1-gallon (ISM) clear wide mouth glass	14-days	Ice
PAHs	EPA 8270	4-oz Clear wide mouth glass, minimum headspace	14-days	Ice
VOCs	EPA Method 8260 Field sampling: EPA 5035	**Fine-grained soil:** Laboratory pre-tared syringes	14-days	Ice/Methanol
		Coarse-grained soil: 4-oz Clear wide mouth glass, minimum headspace	14-days	Ice

3.5 Decontamination Procedures

Drill tooling and sampling equipment will be decontaminated by using a sequential wash of Alconox® solution, rinsed in tap water from a known source (e.g., municipal water), and subjected to a final rinse with distilled or deionized water. Solid waste generated during sampling activities (gloves, paper towels, etc.) will be appropriately disposed.

3.6 Equipment Calibration

Monitoring equipment used during sampling (e.g., photoionization detector [PID]) will be calibrated according to manufacturer's specifications at the beginning of each sample day. Meter calibration will be checked at least twice during a sample day (middle and end of day) or when meter drift is suspected. The meters will be calibrated with gases or buffered solutions closest to known field parameters (VOC concentration = 100 $\mu g/m^3$ methane or heptane for PID calibration).

3.7 Investigation-Derived Waste Storage and Disposal

Potentially impacted investigation-derived waste (IDW) may be generated during this investigation. Characterization of all waste will be necessary to properly treat/dispose of generated waste.

3.7.1 Soil Cuttings, and Cores

Soil cuttings derived from temporary borings will be placed in drums, sealed, and labeled as to the a) nature of the contents, b) date contents sealed, and c) responsible party. Sample data will be evaluated to determine proper method of disposition.

3.7.2 Decontamination Water

Water associated with decontamination of sampling equipment will be drummed, sealed, and labeled.

Upon receipt of analytical data, the disposal requirements of the drummed fluid investigation-derived waste will be evaluated. It is anticipated that all waste generated will be handled as a hazardous

material and will not be characteristic of hazardous waste. However, water waste determined to be impacted with contaminants at levels regulated under Oregon Hazardous Waste Regulations (OAR 340-100) as characteristic (hazardous waste) must be disposed or treated in a manner consistent with regulatory guidance.

3.8 Field Documentation

Comprehensive field documentation will be made to aid in the interpretation of analytical results. For soil sampling, field documentation, at a minimum, will include the date, time, location, and a description of the weather. Sample collection information, such as how the sample was collected and any problems that occurred during collection, visual sample observations, and any other unusual circumstances that may affect the analytical results will be noted. All field measurements, including color, odor, texture, etc., will also be recorded. All field work will be photographically documented in a photographic log.

3.9 Sample Transport and COC Procedures

Immediately following collection, all samples will be placed in a cooler with chilling material (ice or equivalent) and subsequently transported to the analytical laboratory under Chain-of-custody (COC) procedures.

3.10 Quality Assurance Project Plan

This Quality Assurance Project Plan (QAPP) presents the quality assurance and quality control (QA/QC) program to be conducted as part of this investigation. The purpose of this QAPP is to describe the field and laboratory procedures that will be undertaken during this investigation to assure that data collected are suitable for their intended purposes. This QAPP has been developed in general accordance with the EPA Quality Assurance Guidance for Conducting Brownfields Site Assessments. The subject investigation will utilize the procedures included in the QAPP for the following elements:

- Project Management – Quality objectives and criteria for measurement data and documentation, and records.
- Data Generation and Acquisition – Sample process design; sampling methods; analytical methods; quality control; instrument/equipment testing, inspection, and maintenance; inspection/acceptance of supplies and consumables; non-direct measurements; and data management.
- Assessment and Oversight – Assessment and response actions, and routine reporting.
- Data Validation and Usability – Procedures and methods for data quality review, verification, validation, and reconciliation.

Field QA/QC samples will be used to assess data quality in terms of precision and accuracy and monitor whether sampling procedures, equipment cleaning, packaging, and shipping are compromising sample integrity or validity of sample data. Such QA/QC samples are prepared in the field to monitor the various phases of the sampling process.

- **Field Duplicates (ISM replicates):** The field QA/QC activities will include collection of field duplicated soil samples. Two field duplicates for surface soil will be collected for one of the

decision units, following guidance for replicate sampling. Each field replicate sample will be collected, handled, and analyzed in the same manner as its paired primary field sample.

- Results from field replicates are useful in determining potential sampling variability. Greater than expected differences between duplicates may occur due to variability within the sample matrix. Field replicates shall be used as a quality control measure to monitor precision of sample collection methods.
- Precision is independent of the error (accuracy) of the analyses and reflects only the degree to which the measurements agree with one another, not the degree to which they agree with the "true" value for the parameter measured. Precision is calculated in terms of Relative Percent Difference (RPD), which is expressed as:

$$RPD = \frac{|X_1 - X_2|}{(X_1 + X_2) / 2} \times 100$$

Where X1 and X2 represent the individual values found for the target analytes in the duplicate analyses. RPDs for field duplicate samples include the additional variability of field sampling methods and sample homogeneity. Therefore, RPDs for field duplicate samples will be evaluated against an acceptance criterion of 50 percent for quantitative data.

Analytical QA/QC will be monitored through laboratory quality control checks. Laboratory data, including analytical results for laboratory control samples (LCSs), LCS duplicate samples, and matrix spike (MS), MS duplicate, and method blank samples, will undergo verification and validation to EPA level 2B.

Data quality objectives will be developed prior to report preparation, and with the concurrence of ODEQ, to ensure the collection of useful data for the risk screening. The data quality objectives for the project include the utilization of laboratory method reporting limits that are sufficiently low to allow for evaluation of results against established ODEQ cleanup levels.

4.0 Report Preparation

A report will be prepared documenting the work conducted as described in Section 2.3. During the course of this investigation, should results indicate a need for additional work, ODEQ will be consulted regarding proposed actions.

5.0 Proposed Schedule

Onsite investigation can begin as soon as practical following ODEQ approval of this Work Plan, and subsequent approval of an access agreement with the property owner. The first phase of investigation is anticipated to occur in November 2023 and will include ISM sampling and subsurface soil boring investigation.

6.0 Certification

This Work Plan has been prepared under the supervision of the following Oregon-registered Certified Engineering Geologist and Geologist.

EVREN Northwest, Inc.

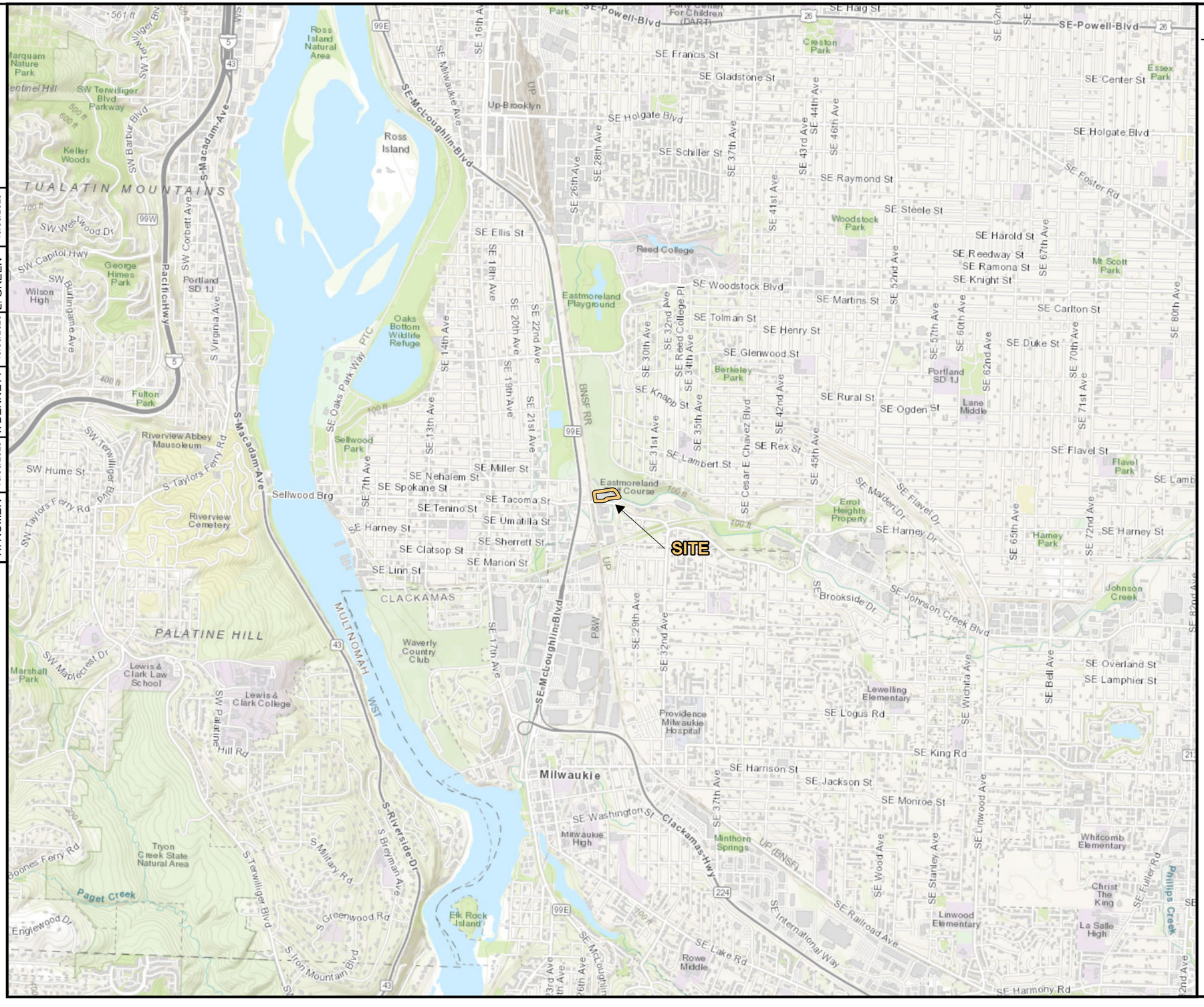
Evan Bruggeman, R.G.
Principal Field Geologist

Lynn Green, R.E.G.
Principal Engineering Geologist

EXP. 2/1/2024

FIGURES

DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
H. ROMER 10/30/2023	T. BENNETT 10/30/2023	L. GREEN 10/30/2023	1816-23001(V01)



LEGEND:

SUBJET PROPERTY BOUNDARY

NOTES:

1. BASE MAP DEVELOPED BY ESRI (1:30000, 2023)

0 1,650 3,300 6,600

Feet

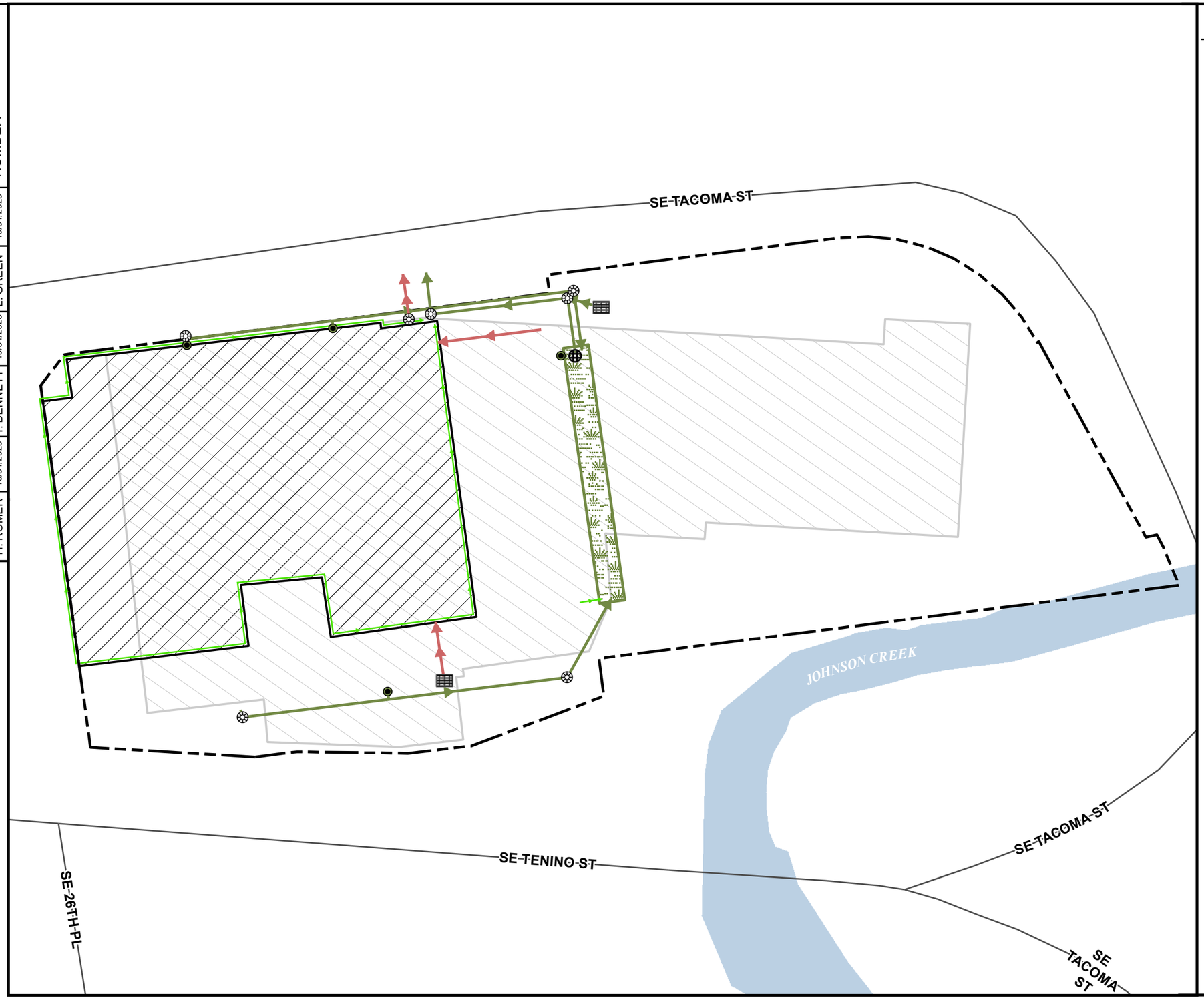
EVREN NORTHWEST INC.
environmental natural resource consultants

FIGURE 1

SITE VICINITY MAP

INDUSTRIAL PROPERTY
2700 SE TACOMA STREET
PORTLAND, OREGON

DRAWN BY		CHECKED BY		APPROVED BY		DRAWING NUMBER
H. ROMER	10/31/2023	T. BENNETT	10/31/2023	L. GREEN	10/31/2023	1816-23001(V01)



LEGEND:

- SUBJET PROPERTY BOUNDARY
- FORMER BUILDING FOOTPRINT
- NEW BUILDING FOOTPRINT
- WATERWAY
- STORMWATER PLANTER
- FOUNDATION DRAIN
- SANITARY SEWER LINE
- STORMWATER LINE
- BEEHIVE OVERFLOW
- CATCH BASIN
- CLEAN OUT
- ROOF DRAIN

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2021 AND ENW FIELD NOTES.

2. ALL BUILDING, STREET, AND FEATURE LOCATIONS ARE APPROXIMATE.

3. SYMBOLS REPRESENT LOCATION AND DO NOT ALWAYS REPRESENT EXACT SHAPE, SIZE, OR ORIENTATION

0 40 80 160 Feet

N

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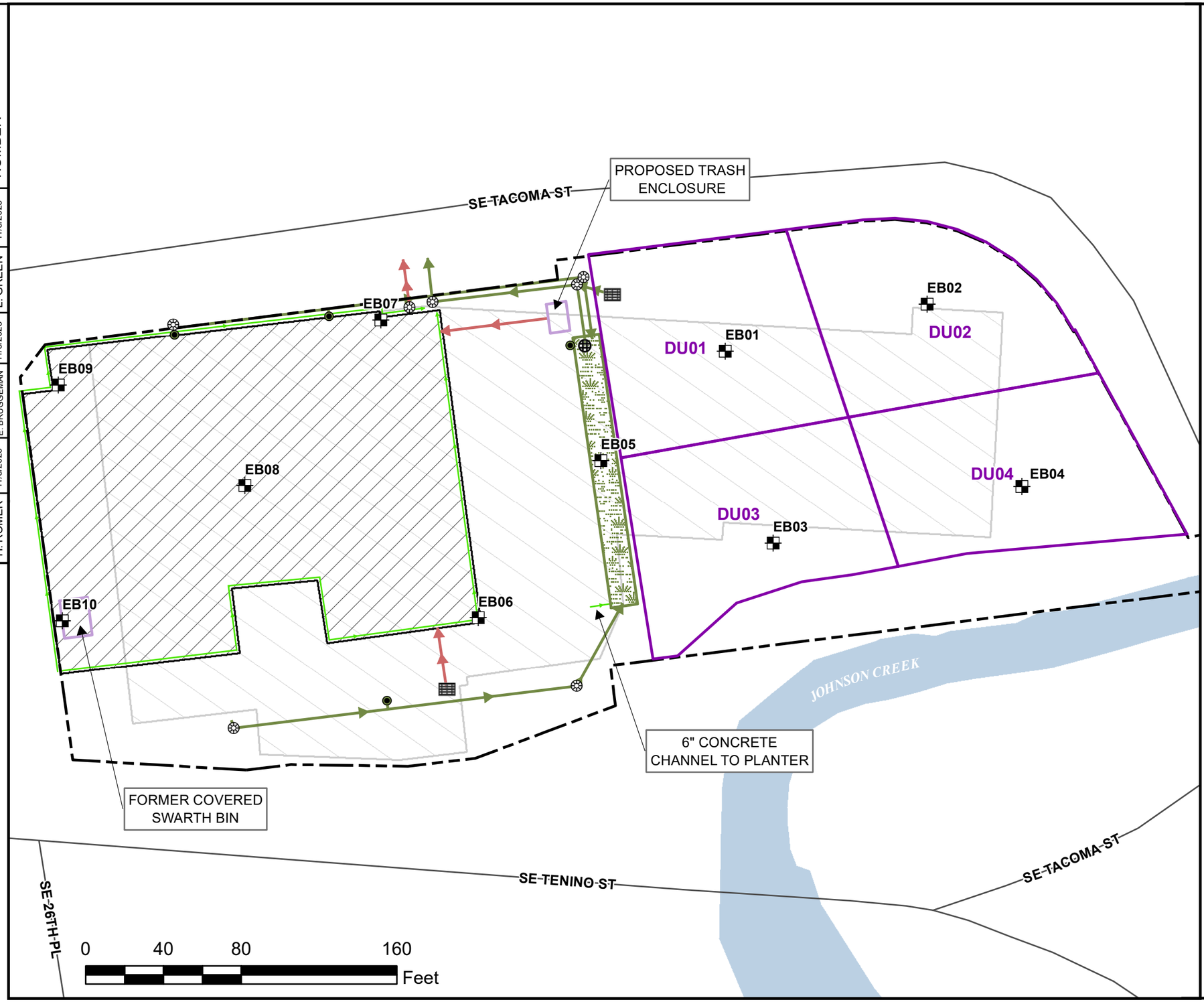
environmental & natural resource consultants

FIGURE 2

SITE PLAN

INDUSTRIAL PROPERTY
2700 SE TACOMA STREET
PORTLAND, OREGON

DRAWN BY H. ROMER 11/3/2023
CHECKED BY E. BRUGGEMAN 11/3/2023
APPROVED BY L. GREEN 11/3/2023
DRAWING NUMBER 1816-23001(V01)



LEGEND:

- SUBJET PROPERTY BOUNDARY
- FORMER BUILDING FOOTPRINT
- NEW BUILDING FOOTPRINT
- DECISION UNIT
- WATERWAY
- STORMWATER PLANTER
- FOUNDATION DRAIN
- SANITARY SEWER LINE
- STORMWATER LINE
- BEEHIVE OVERFLOW
- CATCH BASIN
- CLEAN OUT
- ROOF DRAIN
- PROPOSED BORING

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2021 AND ENW FIELD NOTES.
2. ALL BUILDING, STREET, AND FEATURE LOCATIONS ARE APPROXIMATE.
3. SYMBOLS REPRESENT LOCATION AND DO NOT ALWAYS REPRESENT EXACT SHAPE, SIZE, OR ORIENTATION

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FIGURE 3

SAMPLE LOCATION DIAGRAM

INDUSTRIAL PROPERTY
2700 SE TACOMA STREET
PORTLAND, OREGON