WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Kaiser Aluminum Trentwood Site Interim Actions

2. Name of applicant:

Kaiser Aluminum Washington, LLC
15000 E Euclid Ave
Spokane Valley, WA 99215

3. Address and phone number of applicant and contact person:

Bernard P (Bud) Leber, Jr.
Kaiser Aluminum Washington, LLC
PO Box 15108
Spokane Valley, WA 99216
(509) 927-6554

4. Date checklist prepared:

August 1, 2012

5. Agency requesting checklist:

Department of Ecology
Toxics Cleanup Program
Eastern Regional Office

6. Proposed timing or schedule (including phasing, if applicable):

Interim Actions are expected to begin in 1Q 2013 and to be completed in 4Q 2014.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

An addendum to this checklist regarding the Walnut Shell Filtration pilot scale testing described under item 11 will be prepared once the work plan is approved by Ecology. This addendum will provide additional details of the pilot study and will include the discharge points for the treated groundwater, and permit requirements.

Additional Interim Actions may be required to be followed by Final Actions.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

A Remedial Investigation and a Feasibility Study have been completed under Agreed Order No. 2692. The Remedial Investigation includes a Sitewide Groundwater Investigation and a Sitewide Soil Investigation as well as a Human Health and Ecological Risk Assessment. The Feasibility Study includes a Technical Memorandum as well as the Feasibility Study including Addendums.

Interim Action Work Plans, Engineering Design Reports, Construction Plans and Specifications, and Completion Reports will be prepared.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

Kaiser is not aware of any.

10. List any government approvals or permits that will be needed for your proposal, if known.

Approval by Ecology and potentially other agencies of Work Plans, Engineering Design Reports, Construction Plans and Specifications, and Completion Reports will be required.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

Interim Actions at the site will include contaminated soil excavations with off-site disposal, capping of contaminated soil in place, installation and operation of free phase product recovery systems for hydrocarbons, and treatability / pilot testing of PCB removal technology.

<u>Soil Excavations with Off-site Disposal and Capping in Place</u>

Attached Figures 2-3and 3-1 identify the site locations where contaminated soil will be excavated and disposed of off-site at permitted landfills or where contaminated soil will be capped in place. If contaminated soil is confined to approximately the top 20 feet below grade, excavation and off-site disposal will be utilized. If contaminated soil extends deeper than approximately 20 feet below grade, and combination of some excavation and capping will be utilized. Figures 2-4 through 2-10 provide location specific details.

Hydrocarbon Product Recovery

Attached Figures 4-6 and 4-7 identify the site locations where existing recovery wells are being operated, where previously recovery wells will be reactivated, and where a new recovery well will be added. The recovery system involves the pumping of deeper, clean groundwater for facility use and the use of a recovery well that contains a belt type skimmer which collects any free phase product and brings it to the surface for recovery. While the deep groundwater wells operate continuously to hold the hydrocarbons in place, skimmers are only operated between approximately July and October when free phase product removal efficiency can be maximized.

Treatability / Pilot Scale Testing

This action involves two types of activities related to physical/chemical treatment for PCBs in groundwater and biological degradation of PCBs:
(1) The physical /chemical treatment involves the testing of an ex-situ process, Black Walnut Shell Filtration, for the removal of PCBs from groundwater. This technology is currently used for the treatment of PCBs in the facility's water discharge to the Spokane River. The pilot scale system for the treatment of PCBs is currently expected to be a skid mounted test unit less than 2 feet in diameter treating an estimated 50 gallons per minute (gpm) groundwater extracted west of the Re-melt building between wells HL-MW-29S and HL-MW-14S. Discharge points of treated groundwater will be determined upon future discussions with Ecology.
(2) The biological degradation testing involves, if possible, determining if biological degradation of PCBs is occurring, and if possible, the rate at which it is occurring.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The Interim Actions will be performed on the Kaiser Aluminum Trentwood Site located at 15000 E Euclid Avenue in Spokane Valley. The site is located in Township 25 North, Range 44 East, Section 2 (South ½), Section 3 (Southeast ¼), Section 10 (Northeast ¼), and Section 11 (North ½).

TO BE COMPLETED BY APPLICANT

EVALUATION FOR AGENCY USE ONLY

B. ENVIRONMENTAL ELEMENTS

1. **Earth**

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other . . . . . .

The majority of the areas involved in the Interim Action are flat.

b. What is the steepest slope on the site (approximate percent slope)?

Zero percent slope in most of the areas.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

The site is mainly sand and gravel.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

None are known of.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

One of the Interim Actions involves the potential excavation of some 33,000 cubic yards of contaminated soil from multiple locations. Backfilling with screened out +2 inch material from excavations on site and off-site clean fill will be required. Surfaces will be returned to their approximate original contours.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No. The impacted areas are in flat terrain in the operating area of the facility. The screening, stockpiling, and load out area for soil are within a contained area with erosion barriers in place from a previous Interim Action.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

The facility already has over 65 acres under roof or paved on the 512 acre site. It is estimated that less than one additional acre will be covered by an impervious surface from these Interim Actions.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

No additional measures are planned.

a. **Air**

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Exhaust from heavy earth moving equipment and some fugitive dust from soil screening, stockpiling, and load out activity. Amounts are not known.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

None based on previous similar Interim Actions.

TO BE COMPLETED BY APPLICANT

EVALUATION FOR AGENCY USE ONLY

3. **Water**

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes, Spokane River at approximately River Mile 86.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

No groundwater will be withdrawn. Stormwater generally infiltrates ` into the ground.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Stormwater generally infiltrates into the ground.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

No additional measures proposed.

4. **Plants**

a. Check or circle types of vegetation found on the site:

☒ deciduous tree: alder, maple, aspen, other
☒ evergreen tree: fir, cedar, pine, other
☒ shrubs
☒ grass
☐ pasture
☐ crop or grain
☐ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
☐ water plants: water lily, eelgrass, milfoil, other
☒ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

None.

c. List threatened or endangered species known to be on or near the site.

None are known of.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None.

5. **Animals**

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other: pheasant, chucker
mammals: deer, bear, elk, beaver, other: coyote, moose, rabbit, marmot
fish: bass, salmon, trout, herring, shellfish, other: large scale sucker

b. List any threatened or endangered species known to be on or near the site.

None are known of.

c. Is the site part of a migration route? If so, explain.

Unknown.

d. Proposed measures to preserve or enhance wildlife, if any:

None are known of.

6. **Energy and natural resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

None.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Not applicable.

7. **Environmental health**

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

The contaminant removal work will be accomplished by trained workers under a Health and Safety Plan that is approved by Ecology. The worker Health and Safety Plan will be designed to conform to State and Federal requirements for worker health and safety.

1) Describe special emergency services that might be required.

Existing emergency response agreements are in place for the facility.

2) Proposed measures to reduce or control environmental health hazards, if any:

These measures will be addressed in the site specific Health and Safety Plan to be approved by Ecology.

b. **Noise**

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Project area is located on an existing industrial site.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Heavy earth moving equipment will be operating during daylight hours during the implementation of the Interim Actions on a short term basis.

3) Proposed measures to reduce or control noise impacts, if any:
No additional measures. Most work will be near existing industrial operations.

8. **Land and shoreline use**

a. What is the current use of the site and adjacent properties?
Existing heavy industrial operations.

b. Has the site been used for agriculture? If so, describe.
Site was an agricultural are prior to the facility being built in 1942.

c. Describe any structures on the site.
Over 65 acres of the 512 acre site is covered by existing manufacturing buildings with an approximate height of 40 feet.

d. Will any structures be demolished? If so, what?
No.

e. What is the current zoning classification of the site?
Heavy Industrial

f. What is the current comprehensive plan designation of the site?
Unknown

g. If applicable, what is the current shoreline master program designation of the site?
Pastoral

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
Unknown

i. Approximately how many people would reside or work in the completed project?
None

j. Approximately how many people would the completed project displace?
None

k. Proposed measures to avoid or reduce displacement impacts, if any:
Not applicable

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
Not applicable

9. **Housing**

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Not applicable

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Not applicable

c. Proposed measures to reduce or control housing impacts, if any:

Not applicable

10. **Aesthetics**

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Not applicable

b. What views in the immediate vicinity would be altered or obstructed?

None

c. Proposed measures to reduce or control aesthetic impacts, if any:

Not applicable

11. **Light and glare**

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Not applicable

c. What existing off-site sources of light or glare may affect your proposal?

None

d. Proposed measures to reduce or control light and glare impacts, if any:

Not applicable

12. **Recreation**

a. What designated and informal recreational opportunities are in the immediate vicinity?

Mirabeau Park (across the river) and State of Washington Parks Department property

b. Would the proposed project displace any existing recreational uses? If so, describe.

No. Interim Actions will be taken on an existing heavy industrial site.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None

13. **Historic and cultural preservation**

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

Unknown

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

There is no record of any landmarks or evidence of historical, archaeological, scientific, or cultural importance being located on the site.

c. Proposed measures to reduce or control impacts, if any:

None

14. **Transportation**

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Existing industrial site served by Euclid and Sullivan

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No. Nearest public transit stop is about six blocks.

c. How many parking spaces would the completed project have? How many would the project eliminate?

Not applicable

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Not applicable

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

None

g. Proposed measures to reduce or control transportation impacts, if any:

Not applicable

15. **Public services**

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No

b. Proposed measures to reduce or control direct impacts on public services, if any.

Not applicable

16. **Utilities**

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other: steam generation

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Not applicable

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Bernard A. Tolva Jr.

Date Submitted: August 1, 2012

TO BE COMPLETED BY APPLICANT

EVALUATION FOR
AGENCY USE ONLY

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Proposed measures to avoid or reduce such increases are:

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

3. How would the proposal be likely to deplete energy or natural resources?

Proposed measures to protect or conserve energy and natural resources are:

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Proposed measures to protect such resources or to avoid or reduce impacts are:

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EVALUATION FOR
AGENCY USE ONLY

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

Proposed measures to avoid or reduce shoreline and land use impacts are:

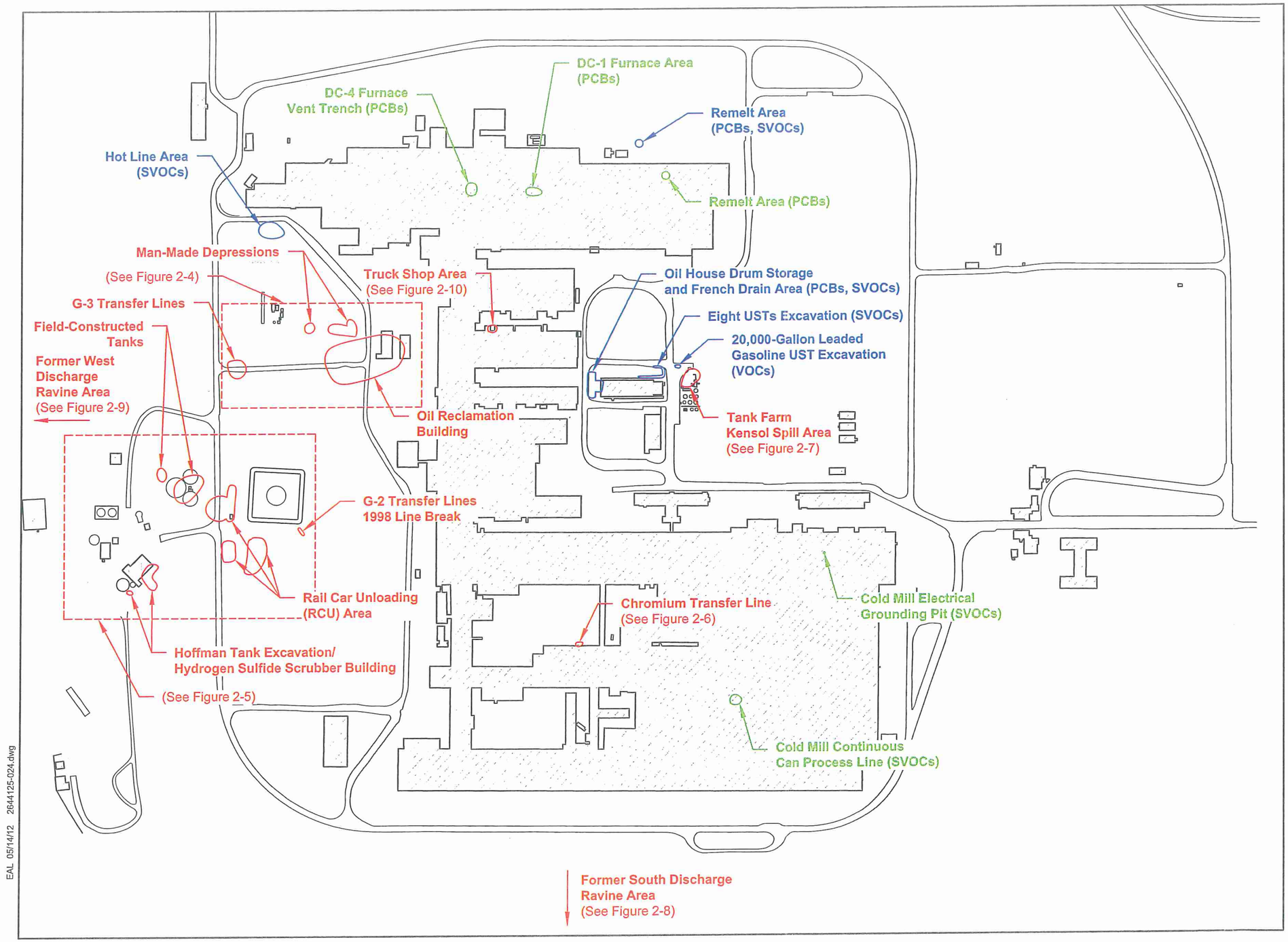
6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Proposed measures to reduce or respond to such demand(s) are:

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

Attachments

Near-Surface Soil AOCs - Potential Capping, Excavation, or Pavement Repair Areas



Existing Paved Area

Existing Building

Approximate Area of Potential Capping, Pavement Repair, or Excavation

Approximate Area of Potential Pavement Repair Only

Approximate Area Beneath Building Floor Slab

Note: See referenced figure for detail of area of concern.

N

0 400 800

Scale in Feet

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Figure 2-3

Near-Surface Soil AOCs - Potential Capping, Excavation, or Pavement Repair Areas

Oil Reclamation Building and Surrounding Areas

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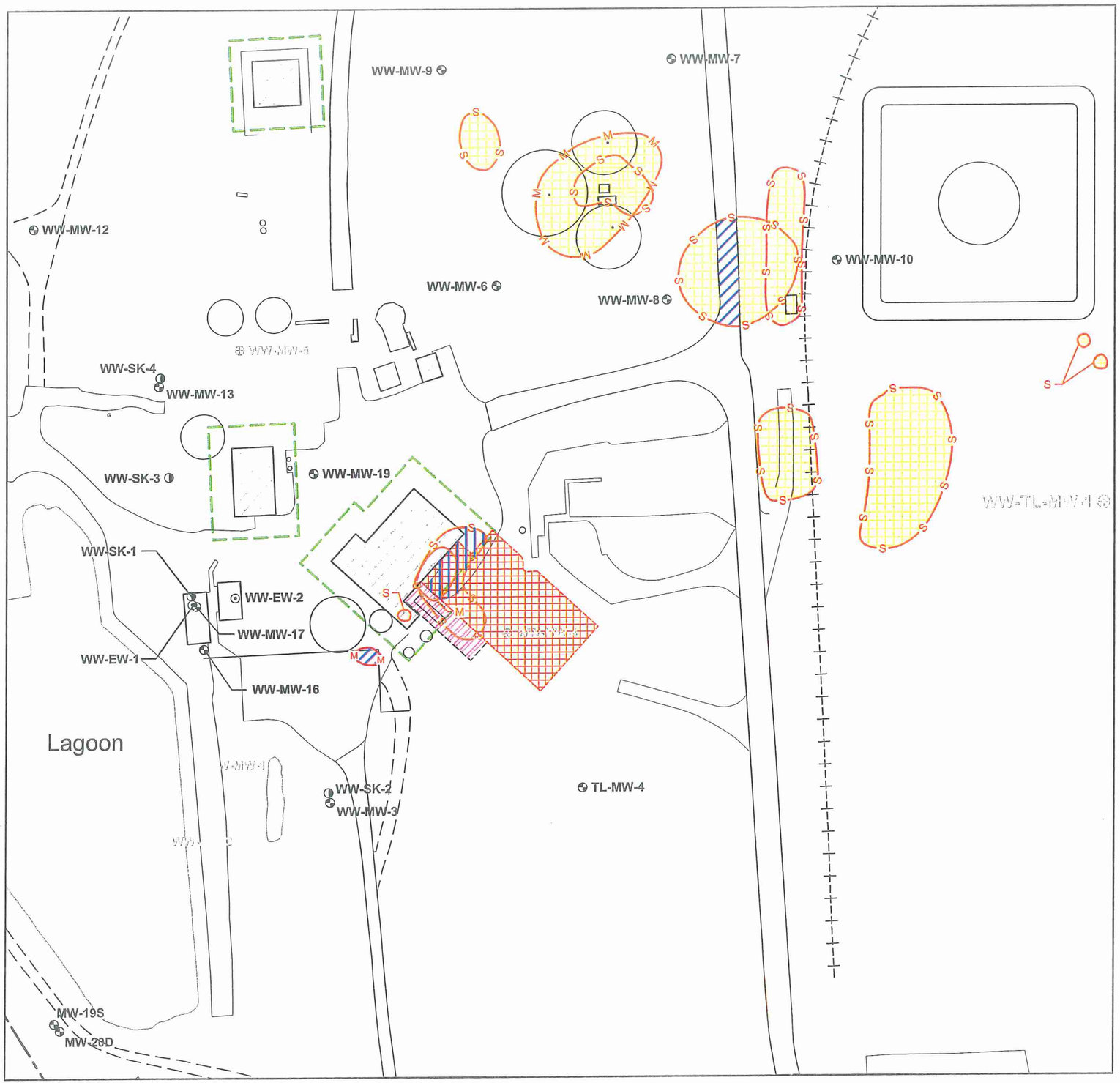
Figure 2-4

Near-Surface Soil AOCs - Potential Capping, Excavation, or Pavement Repair Areas

Wastewater Treatment/Rail Car Unloading (RCU) Areas



Exploration Location and Number

- OH-EW-1 — Extraction Well
- OH-MW-04 — Monitoring Well
- TL-MW-3 — Abandoned Monitoring Well
- OH-SK-1 — Skimming Well
- TF-EW-1-US — Upper Screen Well
- OH-SB-1 — Soil Boring
- Near-Surface Soil
- Near-Surface and Deep Vadose Zone Soil
- —S— SVOC (Heavy Oil, Diesel, cPAHs, or TPH) Area of Screening Level Exceedance
- —M— Metal (Arsenic) Area of Screening Level Exceedance
- 20-Foot No Excavation Zone Buffer Adjacent to Existing Building or Structure Foundation
- Existing Paved Area
- Existing Building
- Existing Former Hoffman Tank Area Multi-Layer Cap
- Potential Cap or Excavation
- Potential Pavement Repair
- Potential Cap Only

0 100 200
Scale in Feet

N

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Figure 2-5

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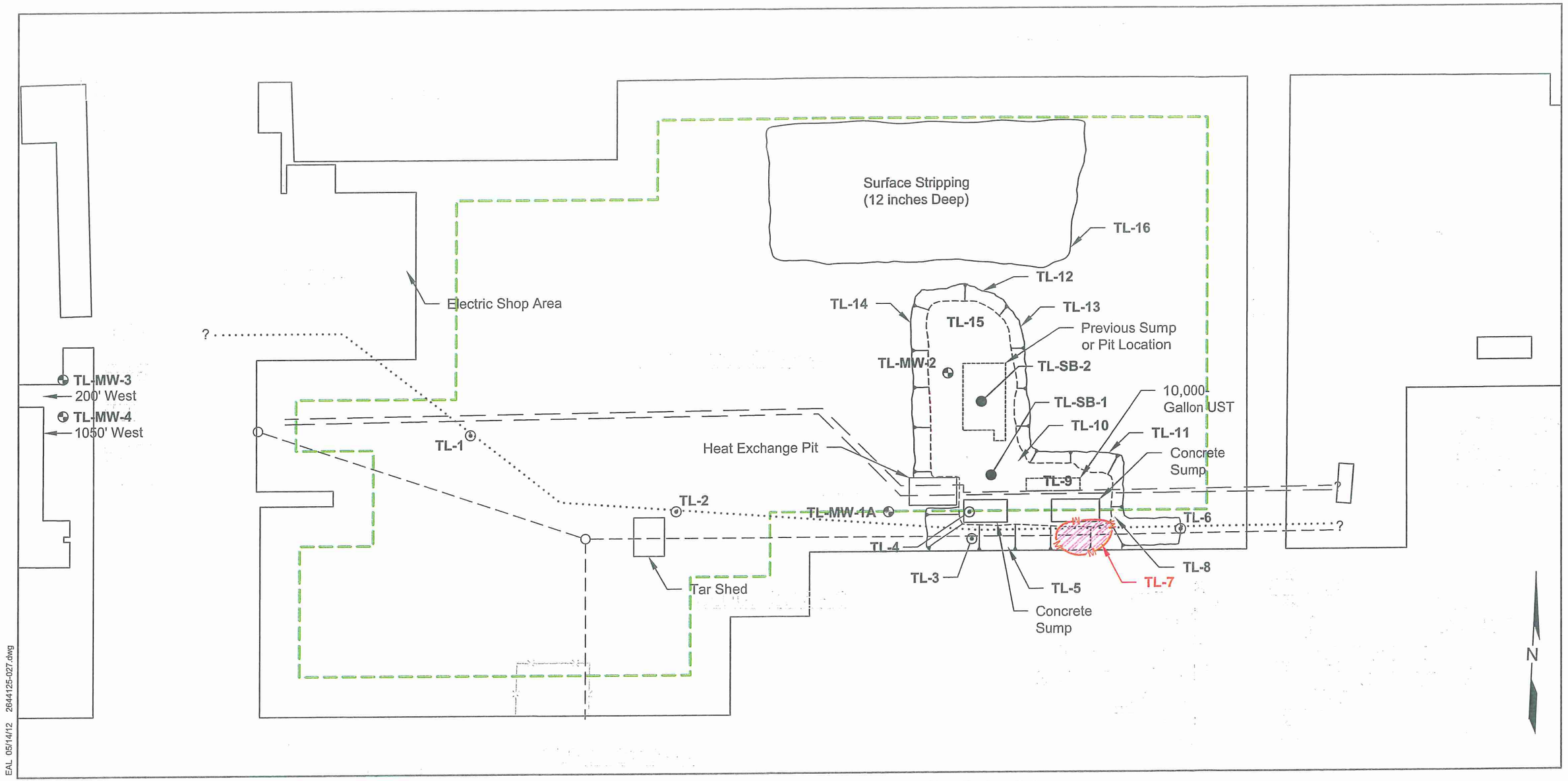
Near-Surface Soil AOCs - Potential Capping Areas

Chromium Transfer Line



Exploration Location and Number

TL-7 Soil Sampling Location with Screening Level Exceedance

TL-MW-2 Monitoring Well (October 16, 1980)

TL-SB-2 Soil Boring (October 16, 1980)

TL-6 Discrete Soil Sample

TL-15 Composite Soil Sample

Manhole

Chromium Transfer Line

Existing Gravity Lines for Phosphate-Bearing Waste

Storm Sewer Line

Near-Surface Soil

M Metal (Chromium) Area of Screening Level Exceedance

20-Foot No Excavation Zone Buffer Adjacent to Existing Building or Structure Foundation

Potential Cap Only

Note: Gray shading denotes area of historical excavation.

0 50 100

Scale in Feet

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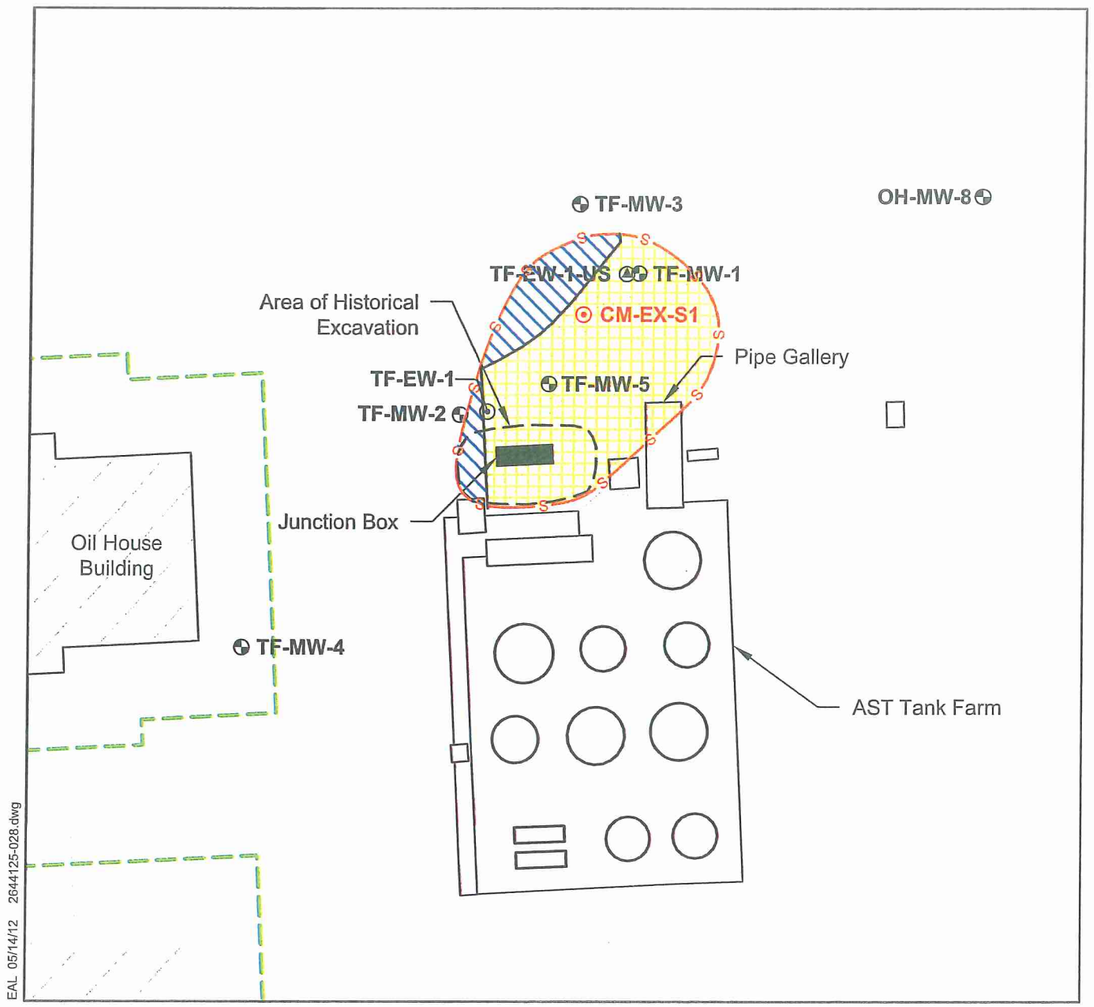
Figure 2-6

Near Surface Soil AOCs - Potential Capping, Excavation, or Pavement Repair Areas

Tank Farm Kensol Spill Area



Exploration Location and Number

TF-EW-1 Extraction Well

TF-MW-4 Monitoring Well

TF-EW-1-US Groundwater Recirculation Well

CM-EX-S1 Sample with Screening Level Exceedance

Near-Surface Soil

S SVOC (TPH) Area of Screeing Level Exceedance

Potential Cap or Excavation

Potential Pavement Repair

Aboveground Storage Tank

20-Foot No Excavation Zone Buffer Adjacent to Existing Building or Structure Foundation

N

0 40 80

Scale in Feet

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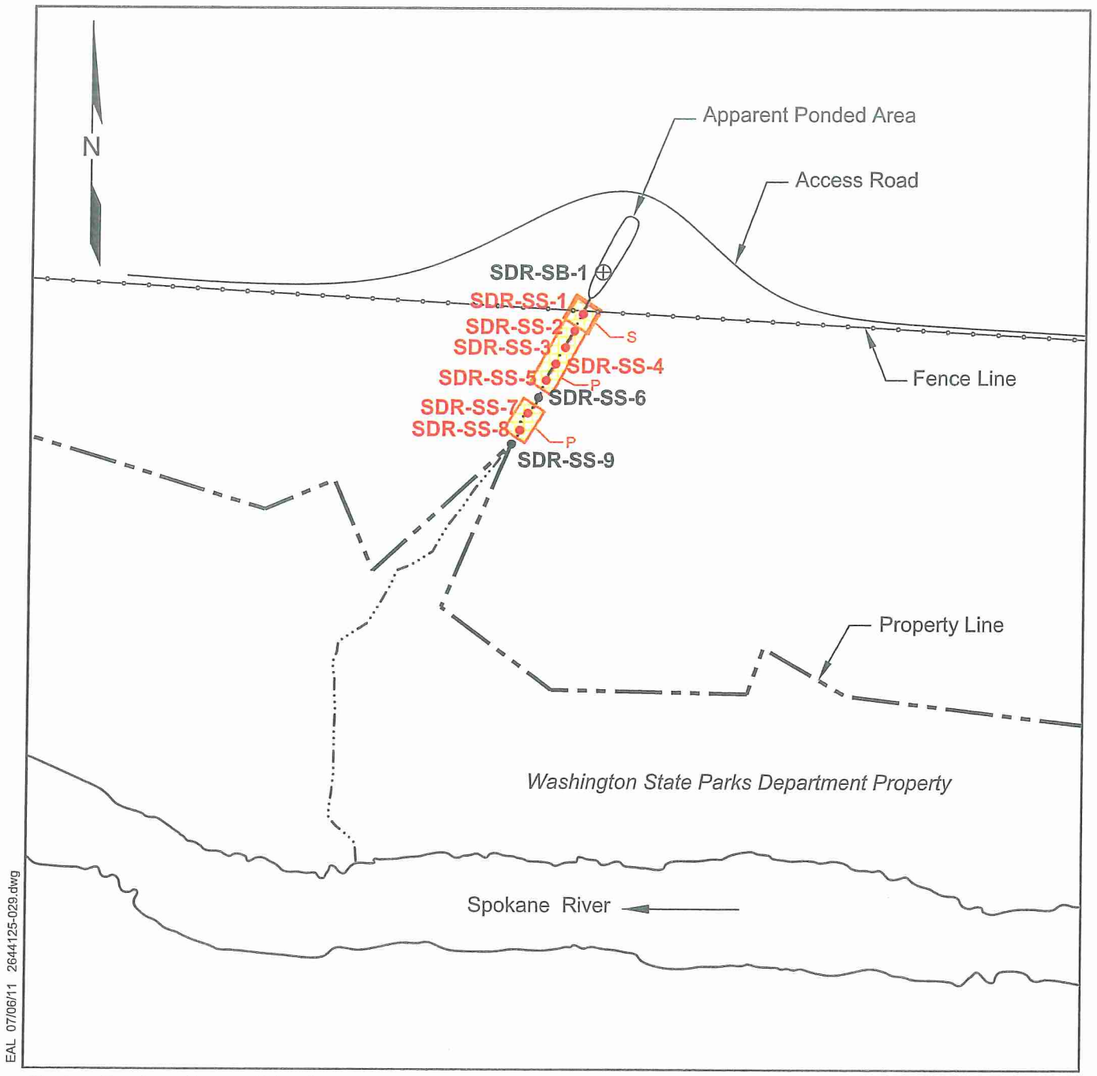
Figure 2-7

Near-Surface Soil AOCs - Potential Capping or Excavation Areas
Former South Discharge Ravine



Exploration Location and Number

SDR-SB-1 ⊕ Boring

SDR-SS-6 ● Surface Soil Sample

SDR-SS-1 ● Sample Location with Screening Level Exceedance

—S— SVC (Heavy Oil) Area of Screening Level Exceedance

—P— PCB Area of Screening Level Level Exceedance

Near-Surface Soil

Potential Cap or Excavation

0 200 400

Scale in Feet

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Figure 2-8

Near-Surface Soil AOCs - Potential Capping or Excavation Areas

Former West Discharge Ravine

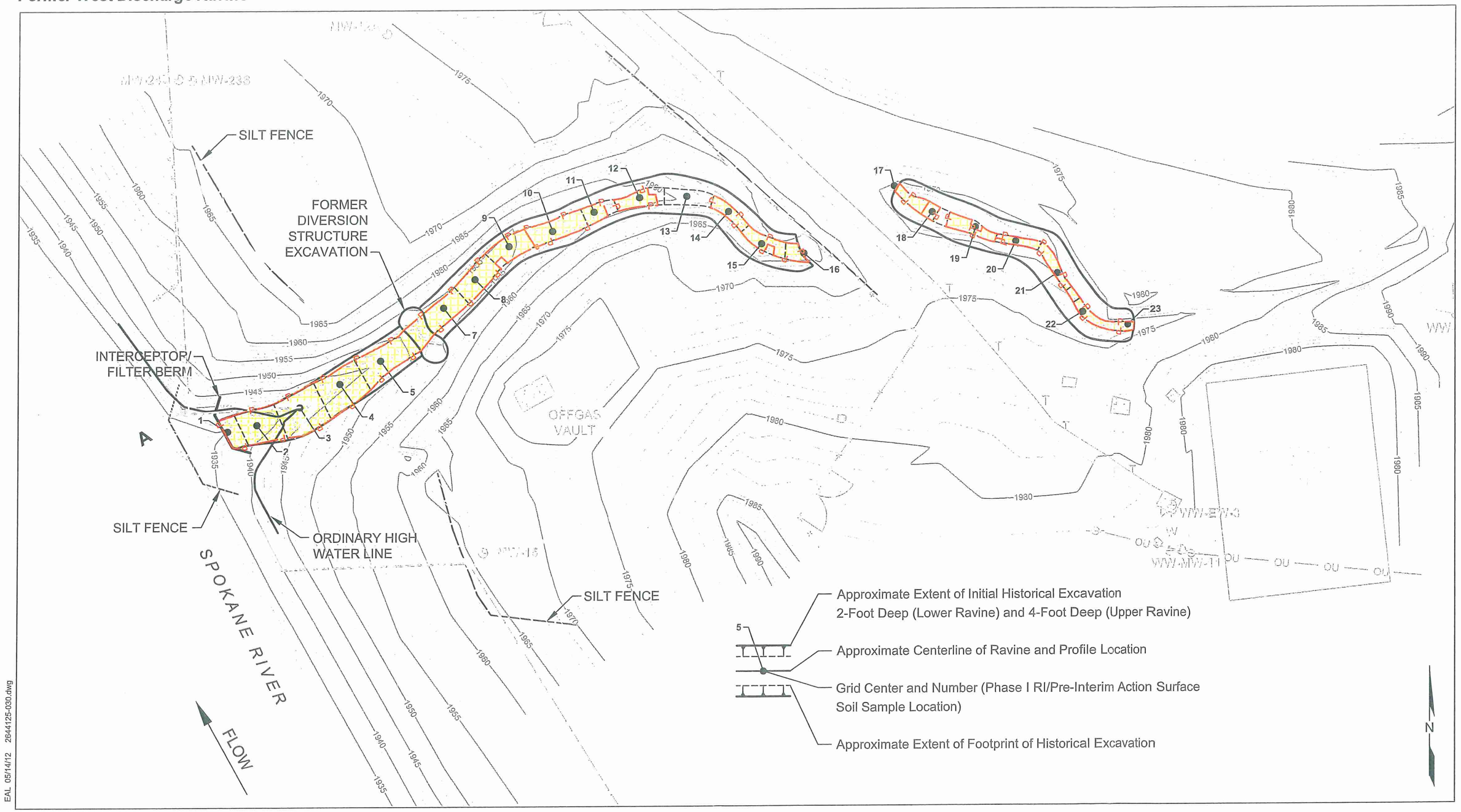

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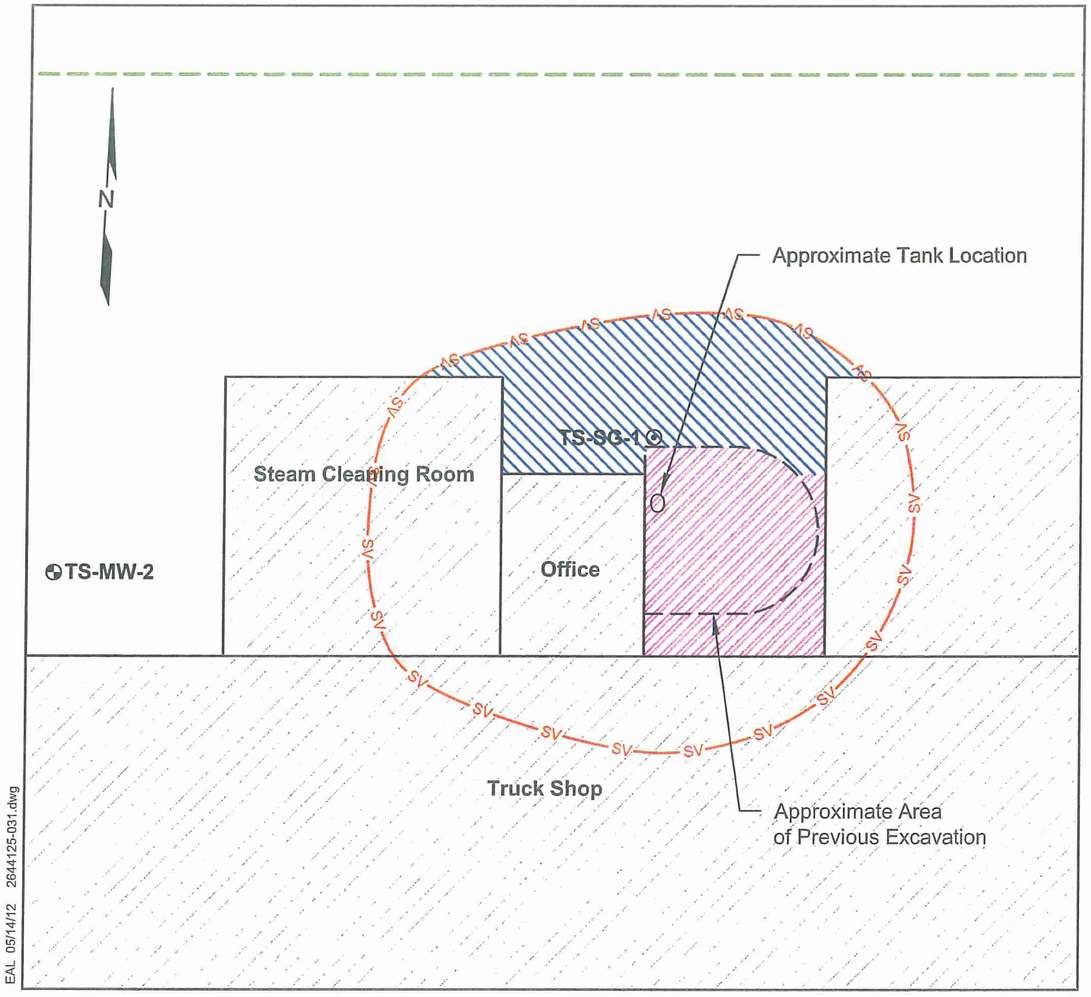
Figure 2-9

Near-Surface Soil AOCs - Potential Capping or Pavement Repair Areas

Truck Shop Area



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Potential Cap Only

Potential Pavement Repair

Near-Surface and Deep Vadose Zone Soil

—v— VOC (Stoddard Solvent) Area of Screening Level Exceedance

—s— SVOC (Heavy Oil) Area of Screening Level Exceedance

20-Foot No Excavation Zone Buffer Adjacent to Existing Building or Structure Foundation

Existing Paved Area

Existing Building

Exploration Location and Number

TS-MW-2 Monitoring Well

TS-SG-1 Soil Gas Probe

0 10 20

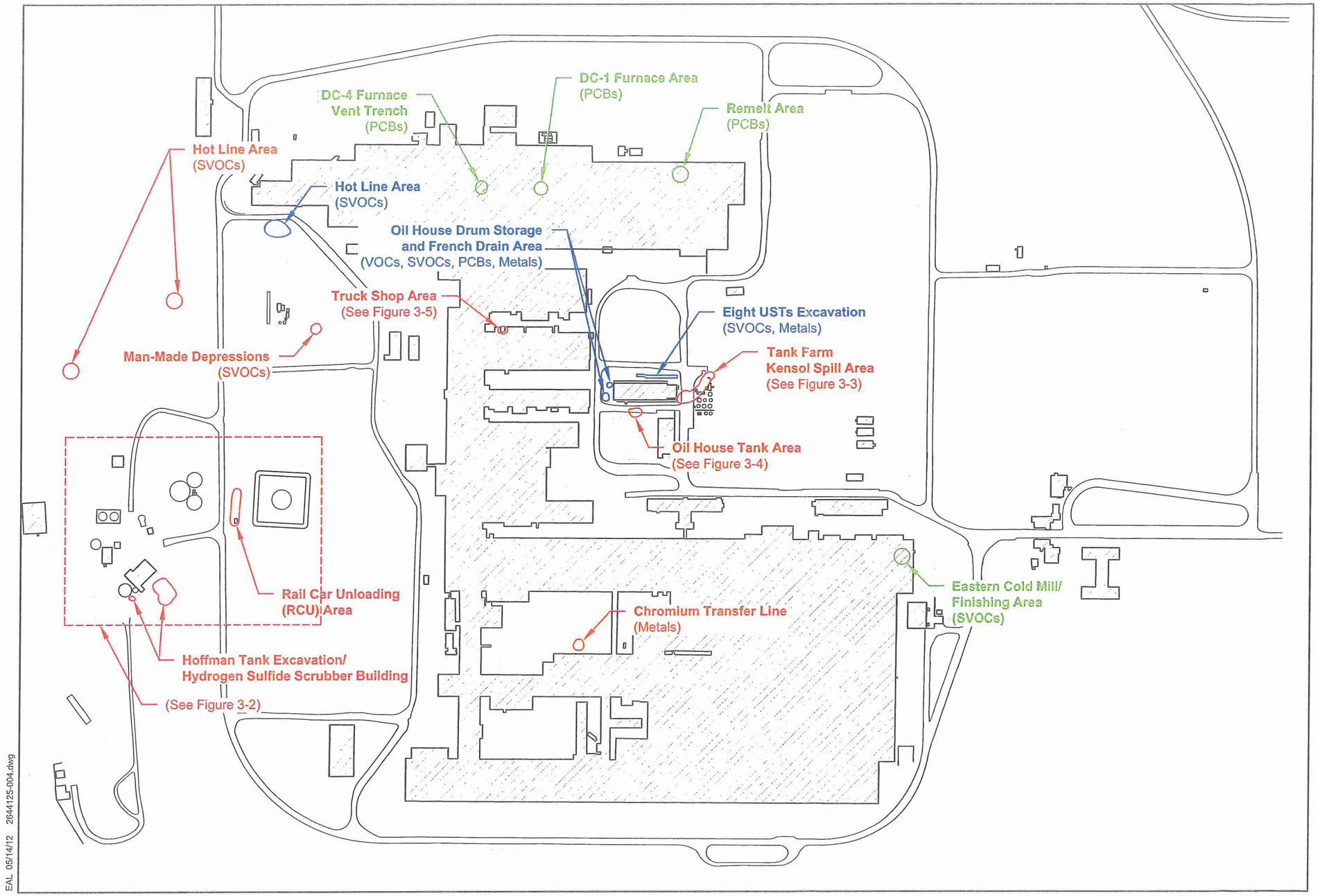
Scale in Feet

HARTCROWSER

2644-125 *5/12*

Figure 2-10

Alternative B2 - Potential Capping or Pavement Repair Areas



Existing Paved Area

Existing Building

Approximate Area of Potential Capping or Pavement Repair

Approximate Area of Potential Pavement Repair Only

Approximate Area Beneath Building Floor Slab

Note: See referenced figure for detail of area of concern.

N

0 400 800

Scale in Feet

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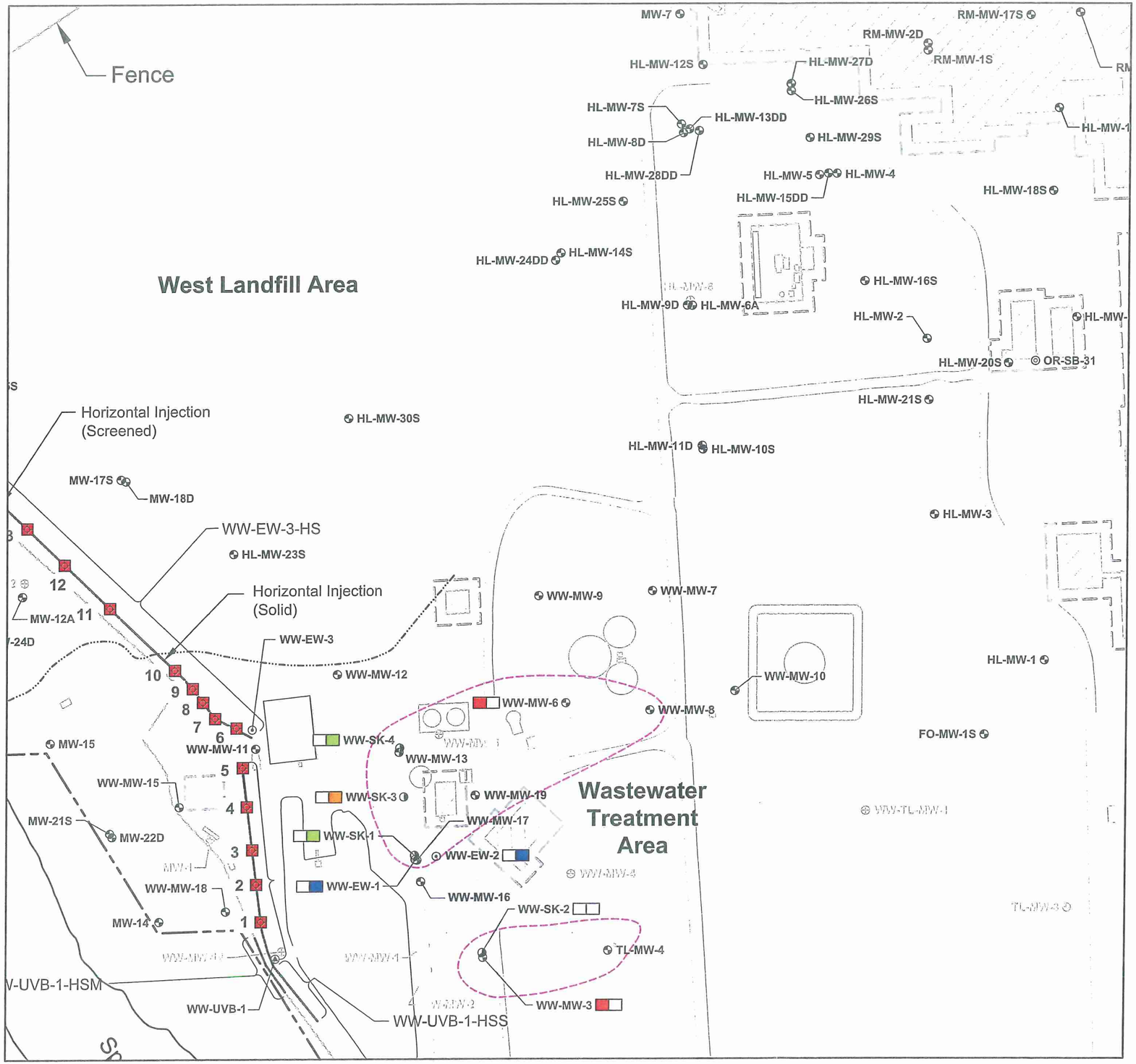
Figure 3-1

Existing and Proposed FPP Recovery Location Plan
West Area



Exploration Location and Number

OH-EW-1 Extraction Well

OH-MW-03 Monitoring Well

TL-MW-3 Abandoned Monitoring Well

OH-SK-1 Skimming Well

TF-EW-1-US Upper Screen Well

Proposed Skimming Well

Inferred Extent of Free Phase Petroleum in 2009

20-Foot No Excavation Zone Buffer Adjacent to Existing Building or Structure Foundation

Existing Paved Area

Existing Building

Well Type

Free Phase Product Thickness

Wells with Significant Product Thickness[a]

Groundwater Extraction Well (Current)

Skimming Well Currently Running

Previous Skimming Well

Previous Skimming Well to be Restarted as Part of Alternative C2

Note a: For basis of determination of significant product thickness, see Section 4.1.2.3.

0 200 400
Scale in Feet

N

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Figure 4-6

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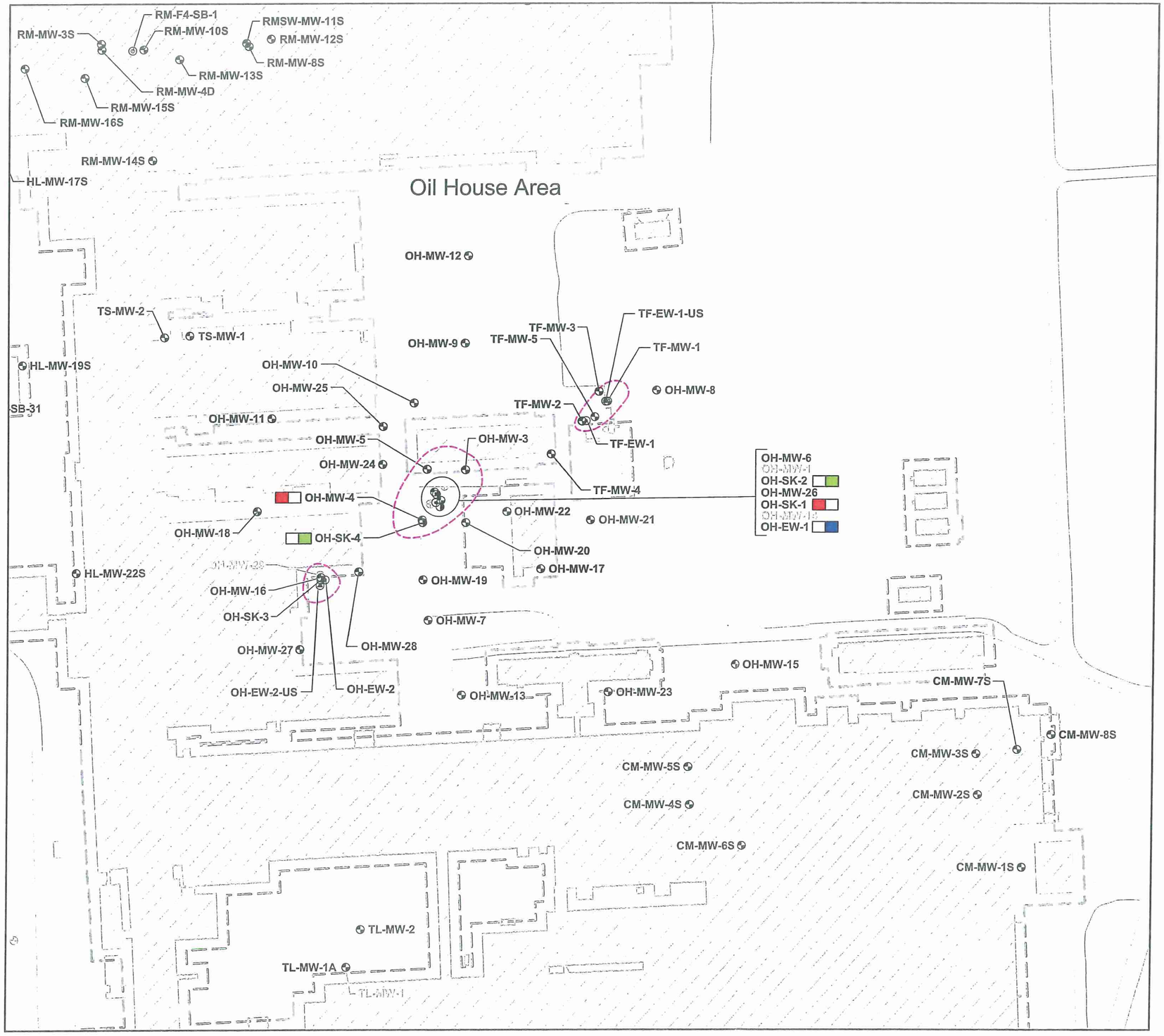
Existing and Proposed FPP Recovery Location Plan
East Area



Exploration Location and Number

- OH-EW-1 — Extraction Well
- OH-MW-03 — Monitoring Well
- [illegible] — Abandoned Monitoring Well
- OH-SK-1 — Skimming Well
- TF-EW-1-US — Upper Screen Well
- Inferred Extent of Free Phase Petroleum in 2009
- 20-Foot No Excavation Zone Buffer Adjacent to Existing Building or Structure Foundation
- Existing Paved Area
- Existing Building

Well Type

Free Phase Product Thickness

- Wells with Significant Product Thickness[a]
- Groundwater Extraction Well (Current)
- Skimming Well Currently Running
- Previous Skimming Well
- Previous Skimming Well to be Restarted as Part of Alternative C2

Note a: For basis of determination of significant product thickness, see Section 4.1.2.3.

0 200 400

Scale in Feet

N

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Figure 4-7

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