

Public Meeting
December 3, 2020

Idaho Pole Superfund Site

Meeting Agenda

- Redevelopment Concerns
- Five Year Review Overview
- Feasibility Study Overview

Meeting is structured to allow for ample time to ask questions or provide comments

Redevelopment Concerns

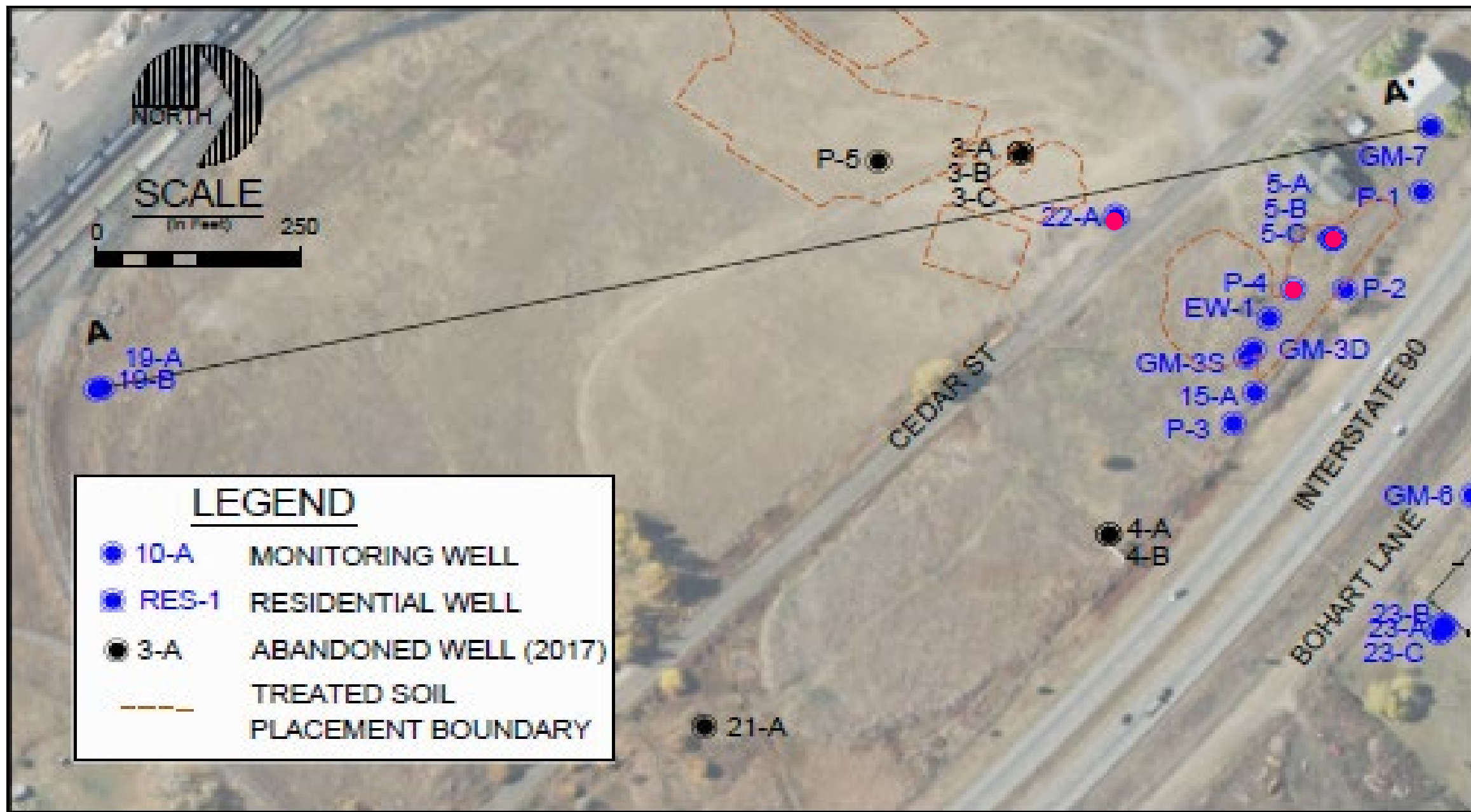
- Infrastructure Installation
 - Excavations that reach groundwater (water and sewer installation)
 - Excavations that do not reach groundwater (i.e., building foundations, streets)
 - Construction Equipment and the Treated Soils Area
- Insufficient soil samples taken
- Depth of samples recently collected do not represent excavations anticipated for redevelopment
- What do recent soil sample results mean with regard to redevelopment?
- If residential use is allowed what does the process look like to allow this use?
- Zoning designation M1 and M2 have permitted uses that are incompatible with the Institutional Controls. Which take precedence?
- Why were Institutional Controls lifted to allow residential use on properties north of I90?
- Future liability considerations

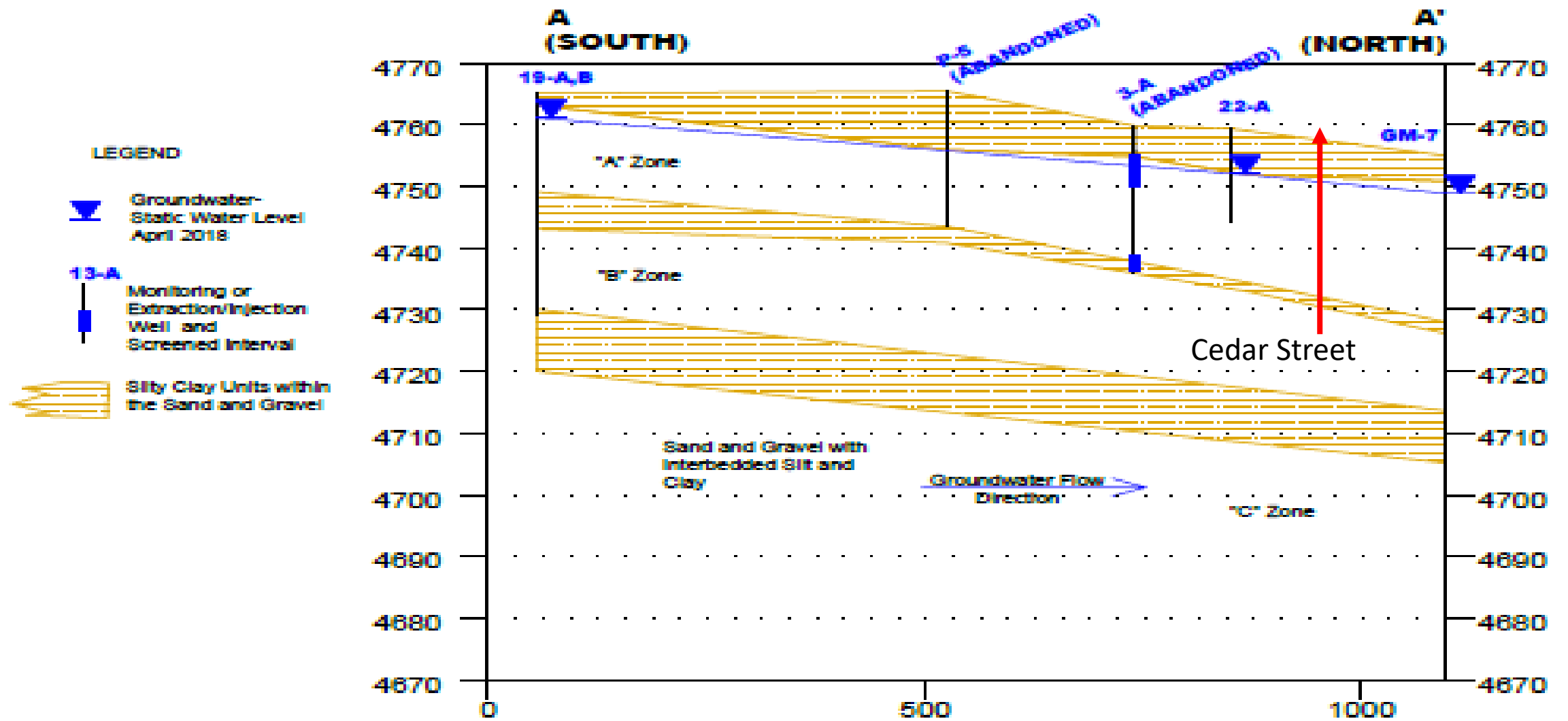
Infrastructure Installation

“Sewer and water can act as a conduit for contaminated groundwater”

“Building construction and utility installation are an important consideration in terms of potential for encountering impacted saturated soils and groundwater”

Hypothetical Utility Installation South of I90



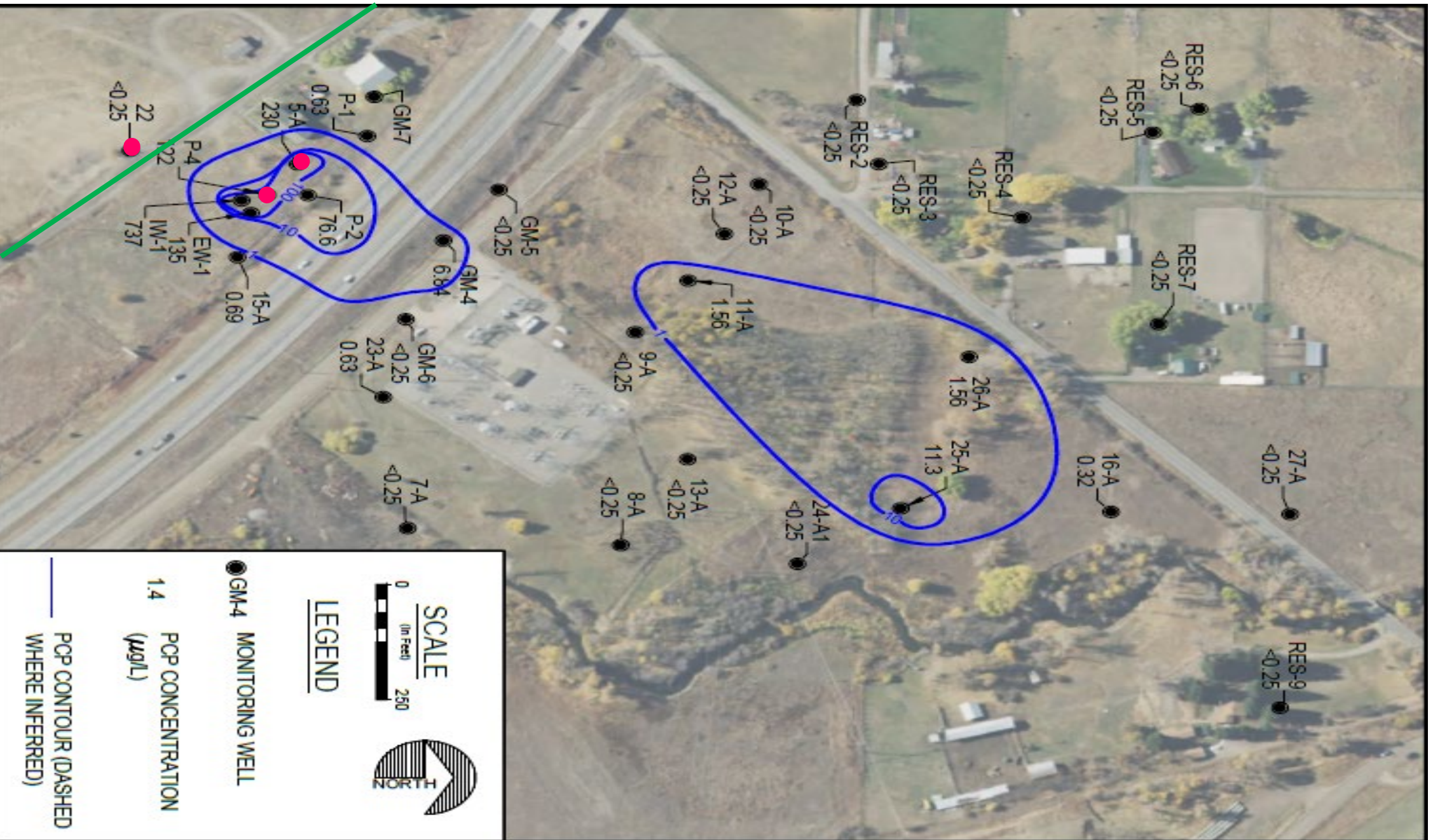


IDAHO POLE COMPANY
BOZEMAN, MONTANA

CROSS SECTION A

FIGURE

1



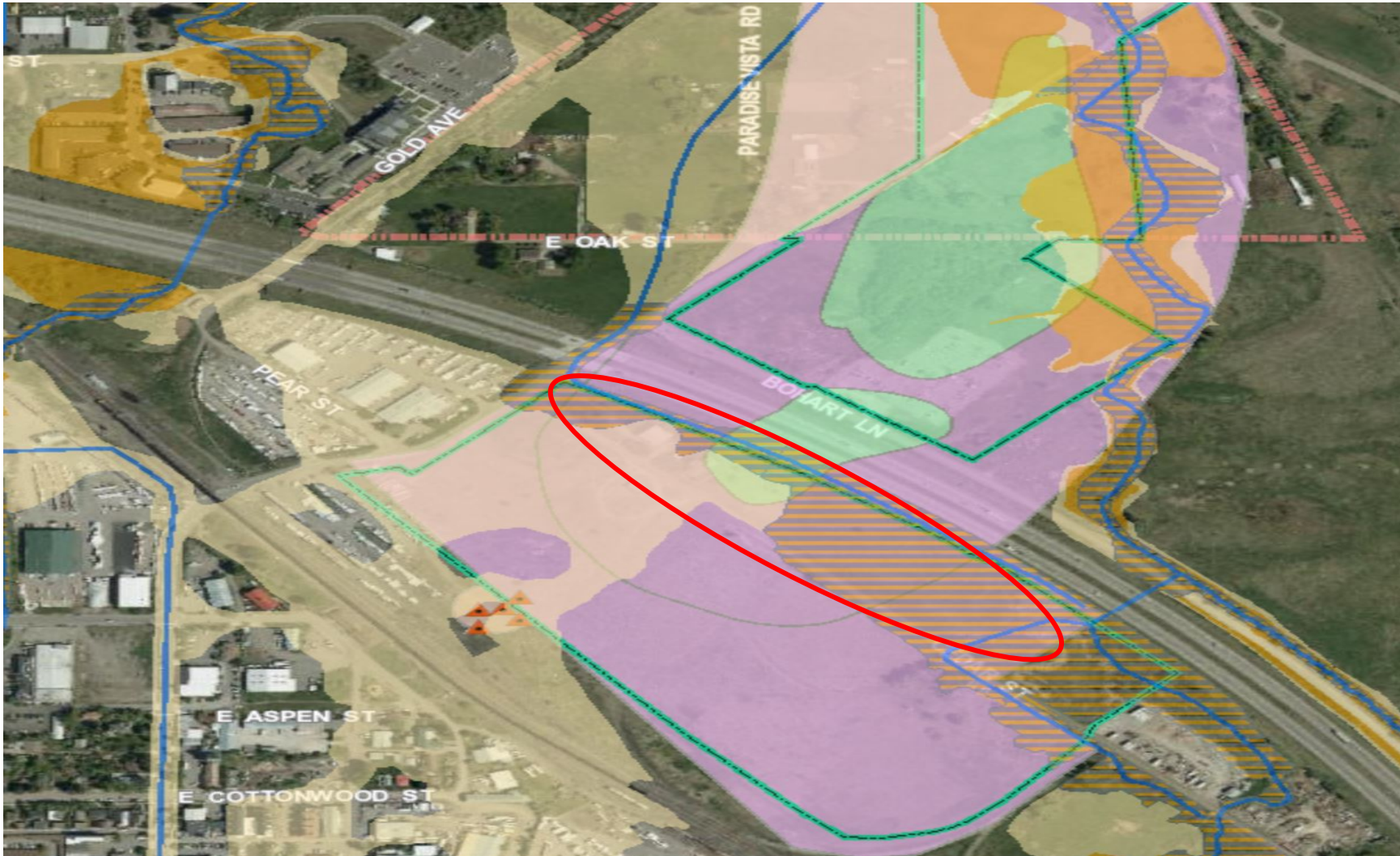
IDAHO POLE COMPANY
Bozeman, Montana
5029.300

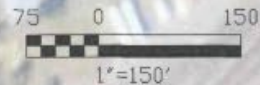
PCP ISOCONTOURS IN "A" WELLS
OCTOBER 2019

FIGURE

2-7

Parcel Between Cedar Street and I90 is Within 100 Year Floodplain





PROPOSED ENVIRONMENTAL COVENANT BOUNDARY

POINT ID	EASTING	NORTHING
1	1,579,020.77	528,277.92
2	1,579,082.01	528,196.76
3	1,579,185.98	528,336.49
4	1,579,223.07	528,421.69
5	1,579,188.60	528,480.84
6	1,579,100.64	528,205.82
7	1,579,209.85	528,233.85
8	1,579,270.10	528,167.14
9	1,579,330.00	528,230.68
10	1,579,406.33	528,346.74
11	1,579,403.53	528,417.64
12	1,579,351.27	528,523.73
13	1,579,281.04	528,550.27
14	1,579,254.18	528,409.29
15	1,579,404.83	528,497.27
16	1,579,480.38	528,474.55
17	1,579,514.63	528,577.92
18	1,579,440.97	528,606.62
19	1,579,373.58	528,551.92
20	1,579,405.13	528,586.27
21	1,579,427.37	528,617.85
22	1,579,399.51	528,674.03
23	1,579,342.27	528,671.00
24	1,579,322.20	528,628.37
25	1,579,360.98	528,600.70
26	1,579,348.40	528,583.37
27	1,579,336.02	528,518.38
28	1,579,348.53	528,546.71
29	1,579,318.30	528,609.94
30	1,579,303.12	528,598.64
31	1,579,552.91	528,766.87
32	1,579,616.09	528,817.68
33	1,579,636.47	528,886.31
34	1,579,419.63	529,063.08
35	1,579,393.67	529,036.18
36	1,579,431.57	528,953.51
37	1,579,524.07	528,906.11
38	1,579,465.37	528,889.50
39	1,579,437.31	528,845.10
40	1,579,479.66	528,776.40

TREATED SOIL AREA

POINT ID	EASTING	NORTHING
A	1,579,009.22	528,276.25
B	1,579,370.36	528,797.96
C	1,579,556.23	528,606.93
D	1,579,499.51	528,478.59
E	1,579,286.09	528,147.16
F	1,579,183.15	528,218.19
G	1,579,080.16	528,182.24
H	1,579,392.37	528,827.95
I	1,579,446.40	528,909.90
J	1,579,386.47	529,031.90
K	1,579,431.50	529,125.85
L	1,579,697.35	528,942.78
M	1,579,569.25	528,641.91

BOUNDARY OF TREATED LIO SOIL
SOIL MANAGEMENT AREA

PASTURE AREA

MPC
EAST GALLATIN
SUB-STATION

IDAHO POLE COMPANY
BOZEMAN, MONTANA
5029-200

TREATED SOIL AREA

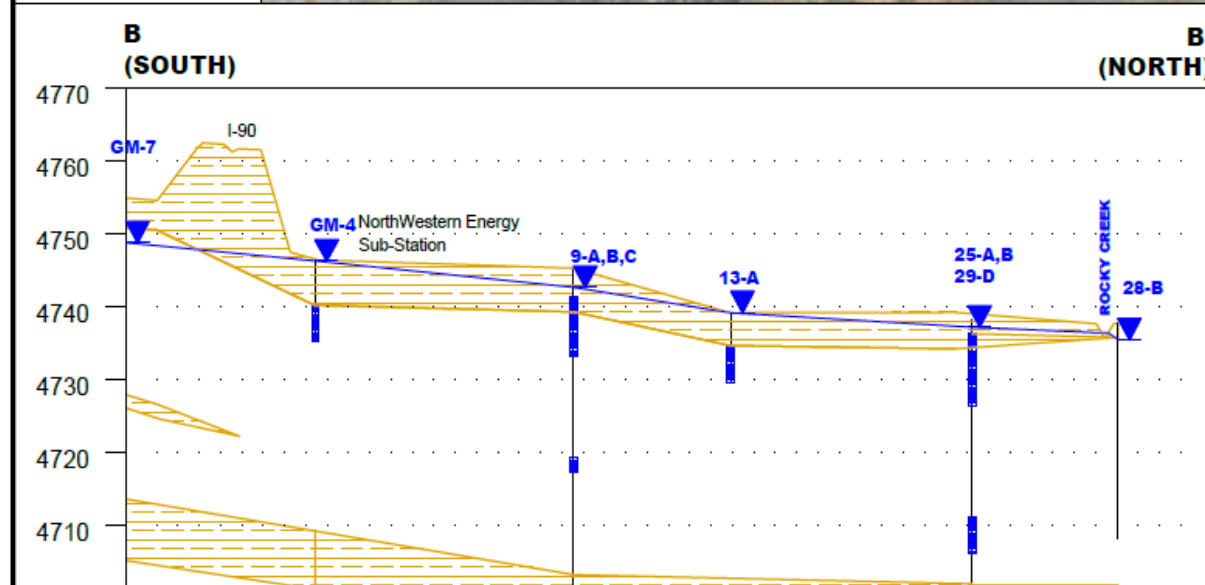
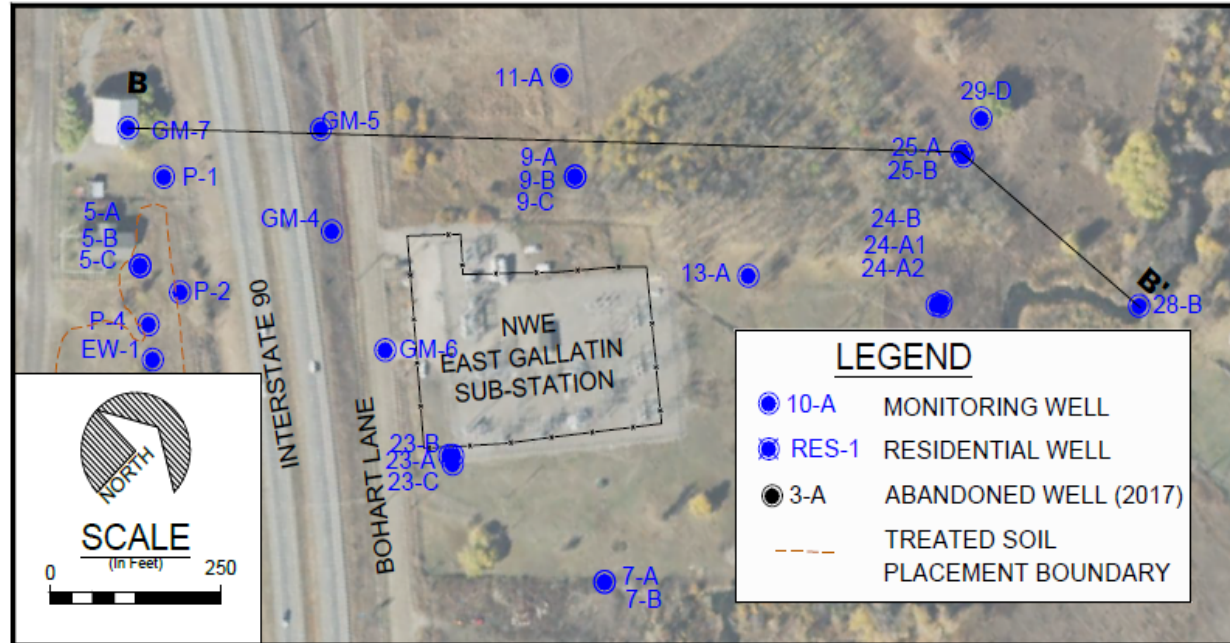
FIGURE

1-2

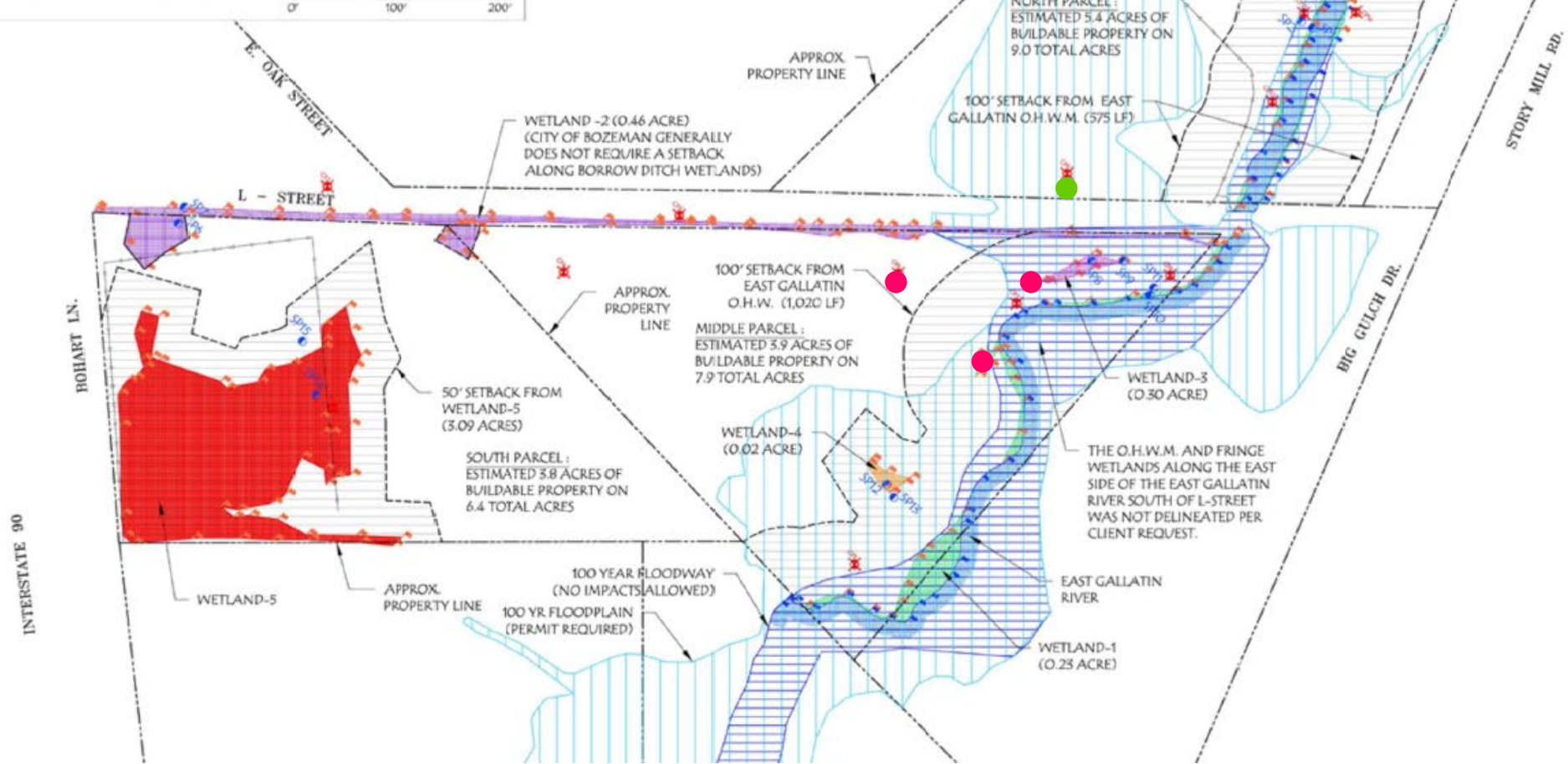
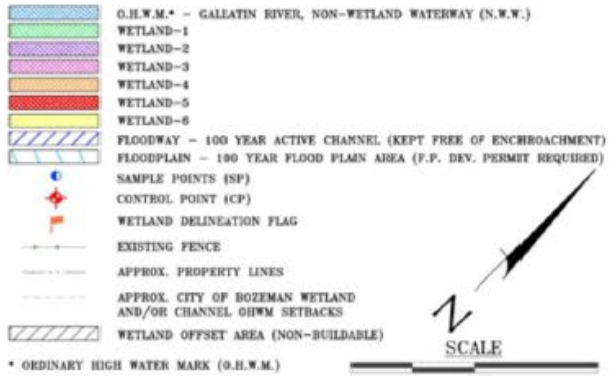
To ensure protection of human health and to minimize contaminant migration, Paragraph 10(d) of the Institutional Controls restricts excavation that reach groundwater within the Controlled Groundwater Area unless authorized by EPA and DEQ.

Restriction on Excavation within Controlled Ground Water Area. In addition to the Restriction on Excavation within the TSAs, above, no excavation shall be allowed on the Property within Controlled Ground Water Area (Decision 41H-114172) where that excavation reaches saturated soil or groundwater, except where the Owner meets the requirements of CERCLA, as amended, 42 U.S.C. § 9601, *et seq.*; CECRA, as amended, Title 75, Chapter 10, Part 7 MCA, including Section 75-10-727 MCA, and Title 85, Chapter 2, Part 5 MCA, including Sections 85-2-506 and 508, MCA (pertaining to Controlled Ground Water Areas) and the Occupational Safety and Health Administration, including 29 C.F.R. 1910.120 *et seq.*; and where the excavation is accomplished in compliance with the Site soils and groundwater management plan or except as otherwise authorized by EPA and DEQ.

Hypothetical Utility Installation North of I90



LEGEND



Prepared by:
 Spanish Peaks Engineering & Consulting, LLC
 Structural Civil Aquatic
 P.O. Box 114 Bozeman, Montana 59711 • 404.587.4051 office • 404.587.4053 fax

PRELIMINARY AQUATIC RESOURCES DELINEATION MAP IDAHO POLE COMPANY PROPERTIES BOZEMAN, MONTANA

date: 11/16
 drawn by: DMS
 checked by:
 In Association With:

 Delineation Conducted
 November 1, 2016
 Prepared for:
 IDAHO POLE CO.
 FIGURE - R

Infrastructure Installation That Requires Excavations That May Not Reach Saturated Soils or Groundwater

- Paragraph 10(c) of the Institutional Controls restricts excavation in the Treated Soils Area unless authorized by EPA and DEQ
- I would prefer to “not excavate” in the Treated Soils Area without a compelling reason
 - Cost savings is not a compelling reason

Restriction on Excavation within the TSAs. No excavation deeper than 12 inches shall take place on the TSAs, unless authorized in writing by EPA and DEQ and conducted in compliance with the March 2011 Agency-approved Soil Management Plan that is in EPA’s site file for the Idaho Pole Superfund Site, or such other soils and groundwater management plan that may be approved by EPA and DEQ (“Soil Management Plan”). Owner shall maintain a protective cover of at least 12 inches of clean soil over the TSAs. A 12 inch gravel layer, gravel and asphalt overlay, or other cover that prevents erosion and which maintains the integrity of the remedy can be substituted for clean soil.

Infrastructure Installation That Requires Excavations That May Not Reach Saturated Soils or Groundwater (Cont)

- Other than the treated soils area, there are no Institutional Controls that restrict excavations on site that do not reach groundwater
 - As part of property transfer, EPA and DEQ may request revisions to the deed restrictions to address this deficiency
- EPA and DEQ have not been approached by a developer
 - The earlier that EPA and DEQ are informed of possible redevelopment options the better prepared we are to understand the type of characterization required
- Any proposed redevelopment will require additional soil sampling to determine what is required to ensure protection of workers involved in site construction
 - Construction worker involved in utility placement or building foundations
 - May also require air samples be collected during site development (wind dispersion) and/or confirmation sampling once infrastructure is in place (i.e., bringing deep soils to the surface through excavation and dispersing these soils at surface for final grading)

Construction Equipment and the Treated Soils Area



Construction Equipment and the Treated Soils Area

- EPA and DEQ will ensure that best management practices (BMPs) are in place during any construction activities.
- BMPs might include simple engineering controls such as signs to more complex controls such as placing additional road base on top of the 12 inch protective layer or fencing around the TSA

Insufficient Soil Samples/Depth of Soil Samples

- Soil samples collected to date represent sufficient spatial coverage when added to the historical dataset
- Soil sample depths also represent current use of property and existing exposure pathways
 - A 0 to 12-inch depth is considered appropriate for current site workers because deeper disturbances would not be anticipated
- I acknowledge that further characterization is required before property development can proceed and that sampling may be required during construction

What does the process look like to allow for residential use?

Each circumstance is unique and there is not a process that works in every situation.

However, I anticipate that the process will evolve over time and will involve significant coordination between EPA, DEQ, City of Bozeman, the community and the developer

What does the process look like to allow for residential use?

Anticipate mixed-use development that includes some residential use

EPA's standard risk assessment practices for residential receptors are intentionally conservative and assume prolonged contact with soil

A resident in Miami has more potential for prolonged contact with soil than a resident in Bozeman (climate)

Direct contact with soil is the primary exposure pathway associated with residential use, residential zoning (i.e., single detached home with a yard) is associated with much more soil exposure via ingestion, skin contact and inhalation.

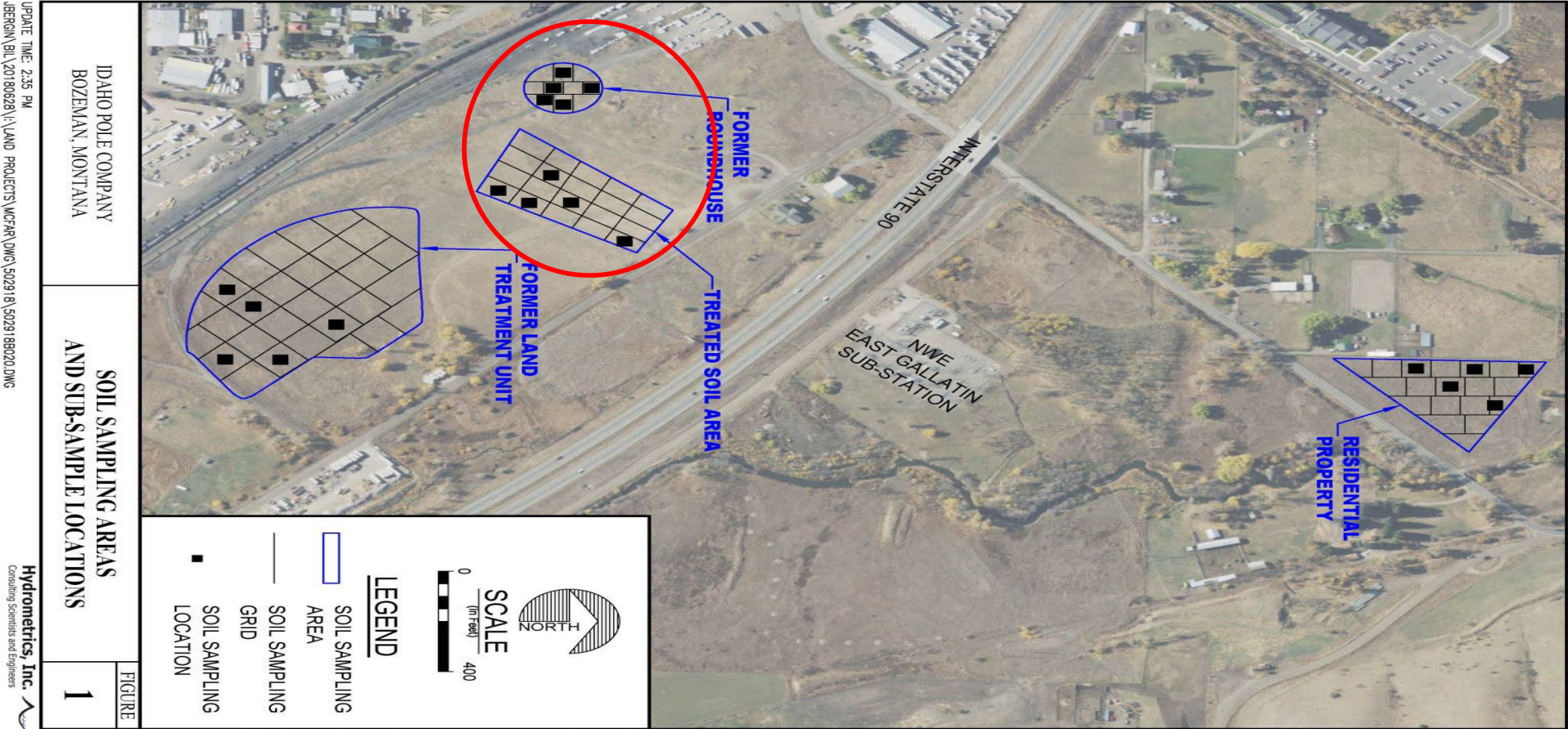
In a mixed-use residential scenario, the lack of a yard and significant capping (parking lots, roads, sidewalks) would prevent homeowners coming into more contact with the soil.

Possible Steps Before Residential Use is Allowed

- Additional sampling will be required
 - Requires approval of a Sampling and Analysis Plan that follows EPA and DEQ guidance before sampling can proceed
 - Sampling locations will be guided by potential exposures and anticipated land use
 - Future commercial/industrial worker
 - Future resident
- A revision to the remedy may be needed if a change in land use results in an increased potential for exposure to site-related contaminants
 - Human Health Risk Assessment may be conducted
 - Proposed Plan and public comment period will be required for a remedy revision
- Institutional Controls will need to be modified
- Process could take more than 2 years to complete and allows for community participation

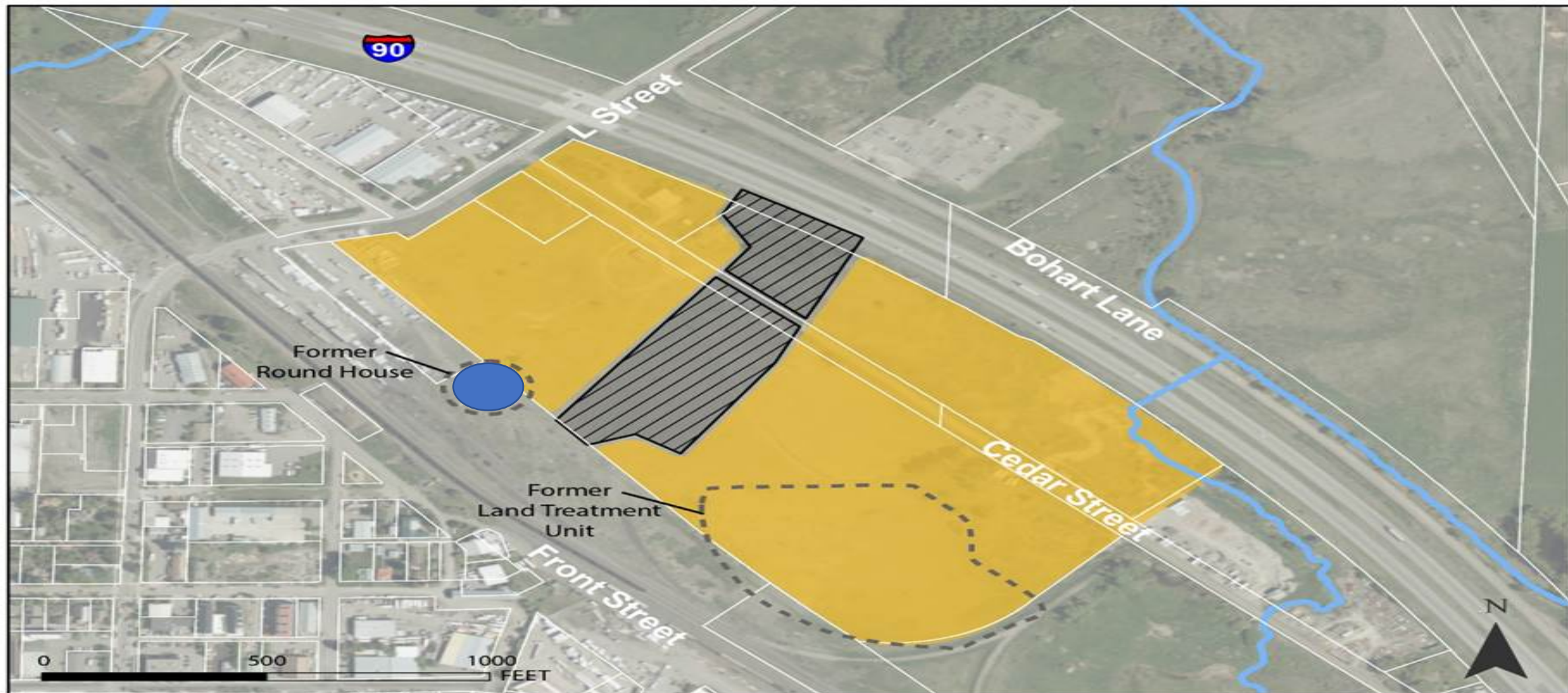
What do Existing Soil Sample Results Mean with Regard to Redevelopment?

“Dioxin samples from the former Roundhouse Area and the Treated Soils Area result in noncancer Hazard Quotient that exceed the threshold of 1 with HQs of 11 and 4, respectively”



What do recent soil sample results mean with regard to redevelopment? (cont)

- Pentachlorophenol and petroleum hydrocarbon concentrations in recently collected soils samples are below conservative screening levels
- The concentrations of dioxins in soils in the former roundhouse area and the treated soil area (TSA) are 11 and 4 times greater than the threshold for a level of concern for the default residential scenario.
- **“EPA’s standard methods for assessing risk in a residential exposure scenario are intentionally conservative and assume frequent and prolonged contact with the soil.”**
- These Hazard Quotients are also based on the maximum concentrations of dioxins in soils collected in these areas and represent a relatively small acreage of the site.



Potential for Mixed Use Redevelopment
*Avoid soils below water table.
Restricted groundwater access.*



Limited Structural Development
*Treated Soil Area.
May be suitable for parking or slab on
grade (i.e. court sports).
Soils below clean soil cover should not
be disturbed due to residual
contamination.*



Remediated Soil Areas
*Areas where contaminated
soils were removed.*

City zoning designations M1 and M2 have permitted uses that are incompatible with the Institutional Controls. Which take precedence?

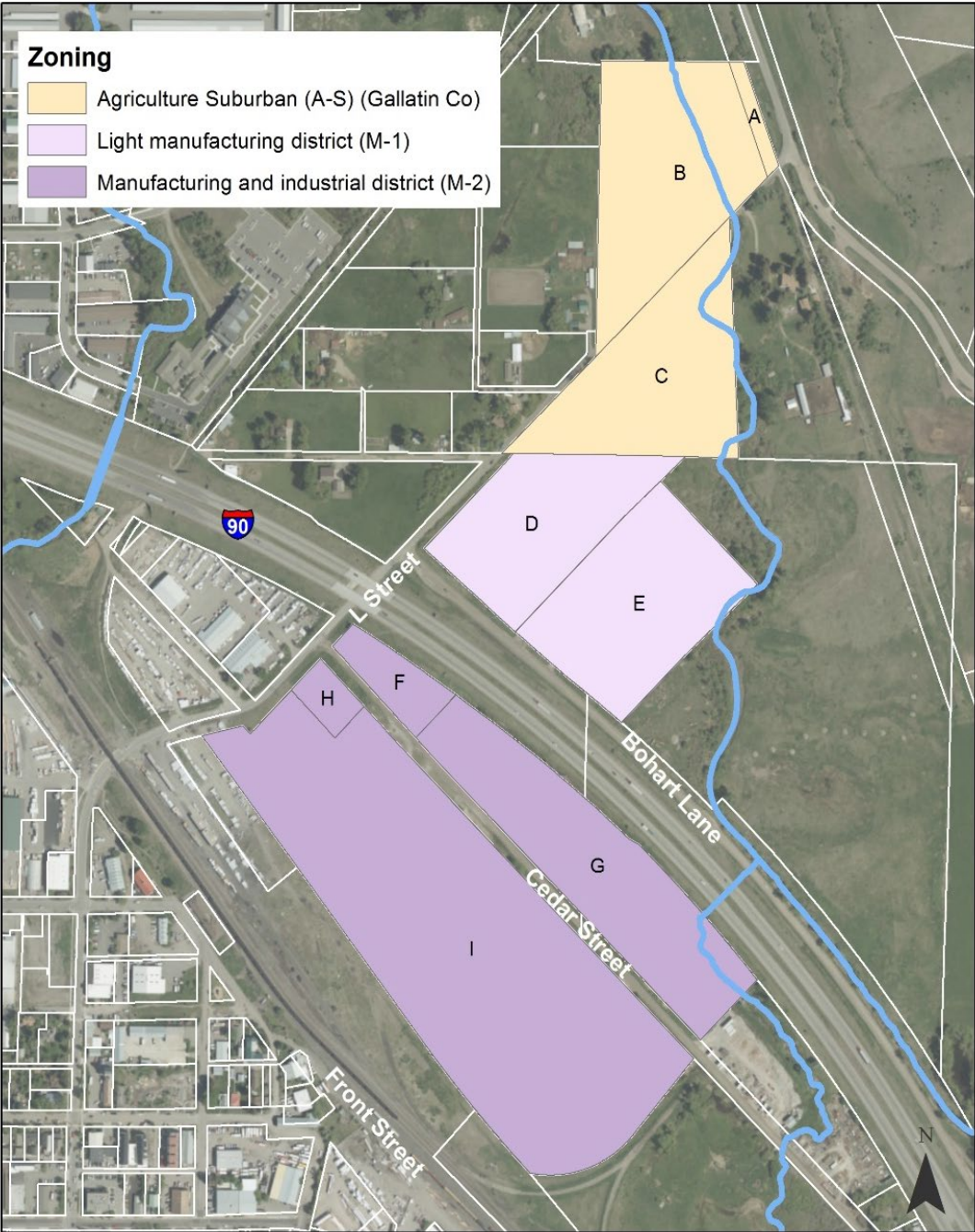
The current local zoning designations prescribe allowable land uses while paragraph 10(b) of the Institutional Controls specifically restrict land uses as follows:

- b. Residential Development or Use Prohibited. No residential development or residential use of the property is allowed, unless approved by EPA and DEQ. “Residential” includes, but is not limited to, permanent residential use; temporary residential use; limited residential use; short-term residential use; children’s day care; mobile homes used for residential use (as contrasted to temporary on-site construction office or the like that is not used as a dwelling or for residential use) with or without footings; mobile home used for residential use (as contrasted to temporary on-site construction office or the like that is not used as a dwelling or for residential use) with or without a pad; and camping. It is Idaho Pole Company’s intent that this limitation be construed as broadly as possible to prohibit any type of residential use whatsoever.

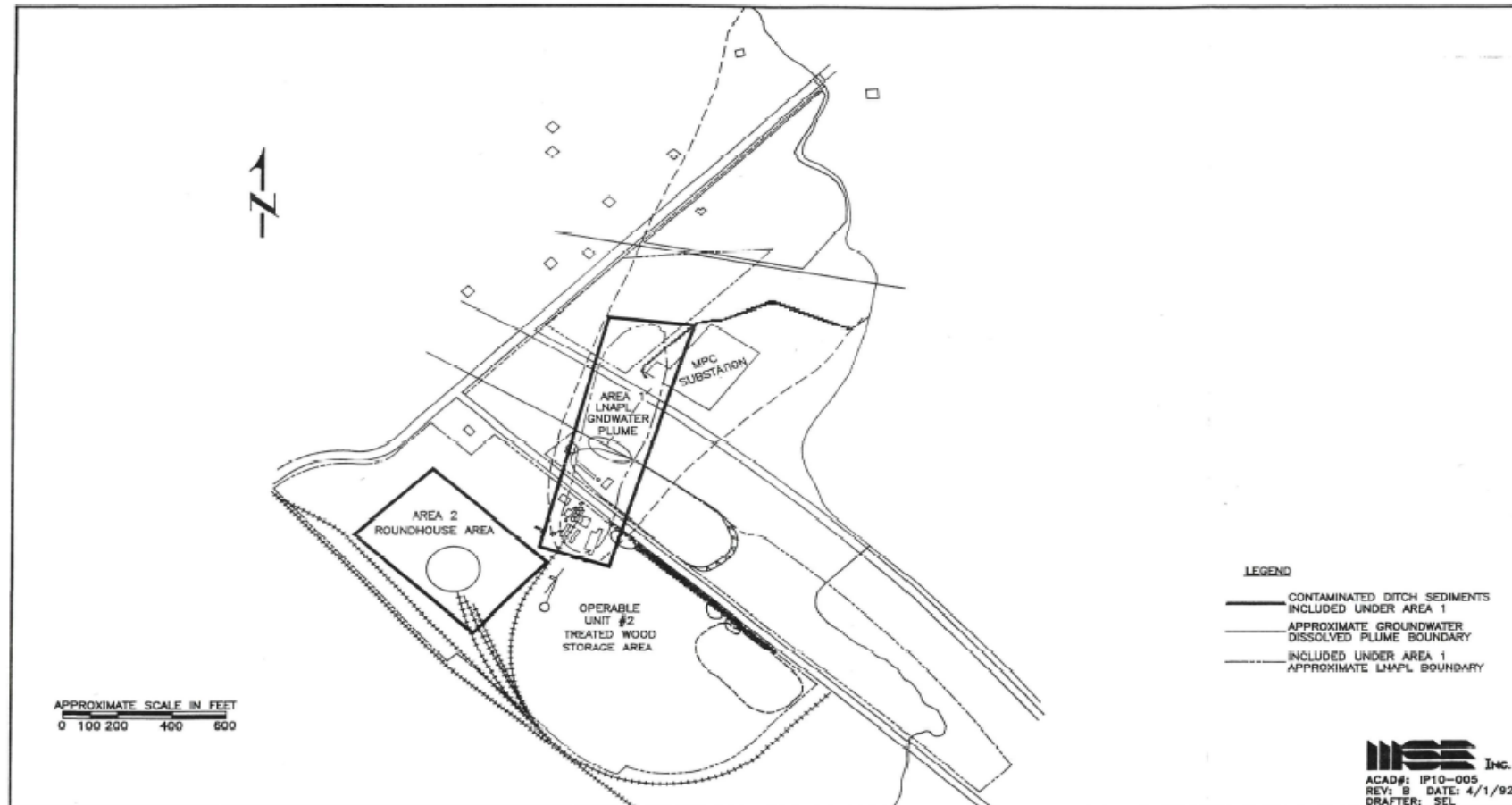
Why were Institutional Controls lifted to allow residential use on properties north of I90?

The parcels in question weren't associated with facility operations, and no surface soil contamination was found on these parcels based on samples collected during the remedial investigation and in 2017.

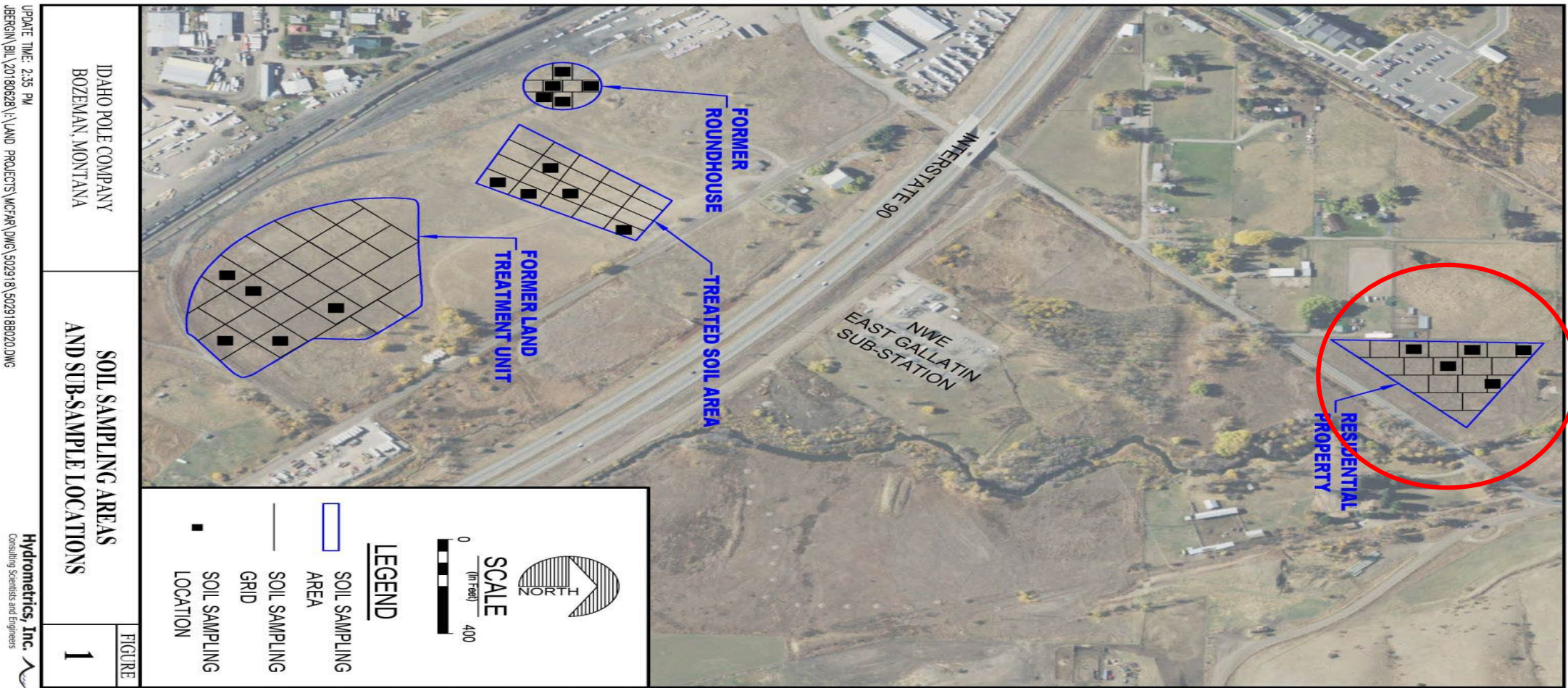
Residential use only
applies to Parcels A - C



Extent of Soil Contamination



Soil sample collected below residential screening level for dioxin

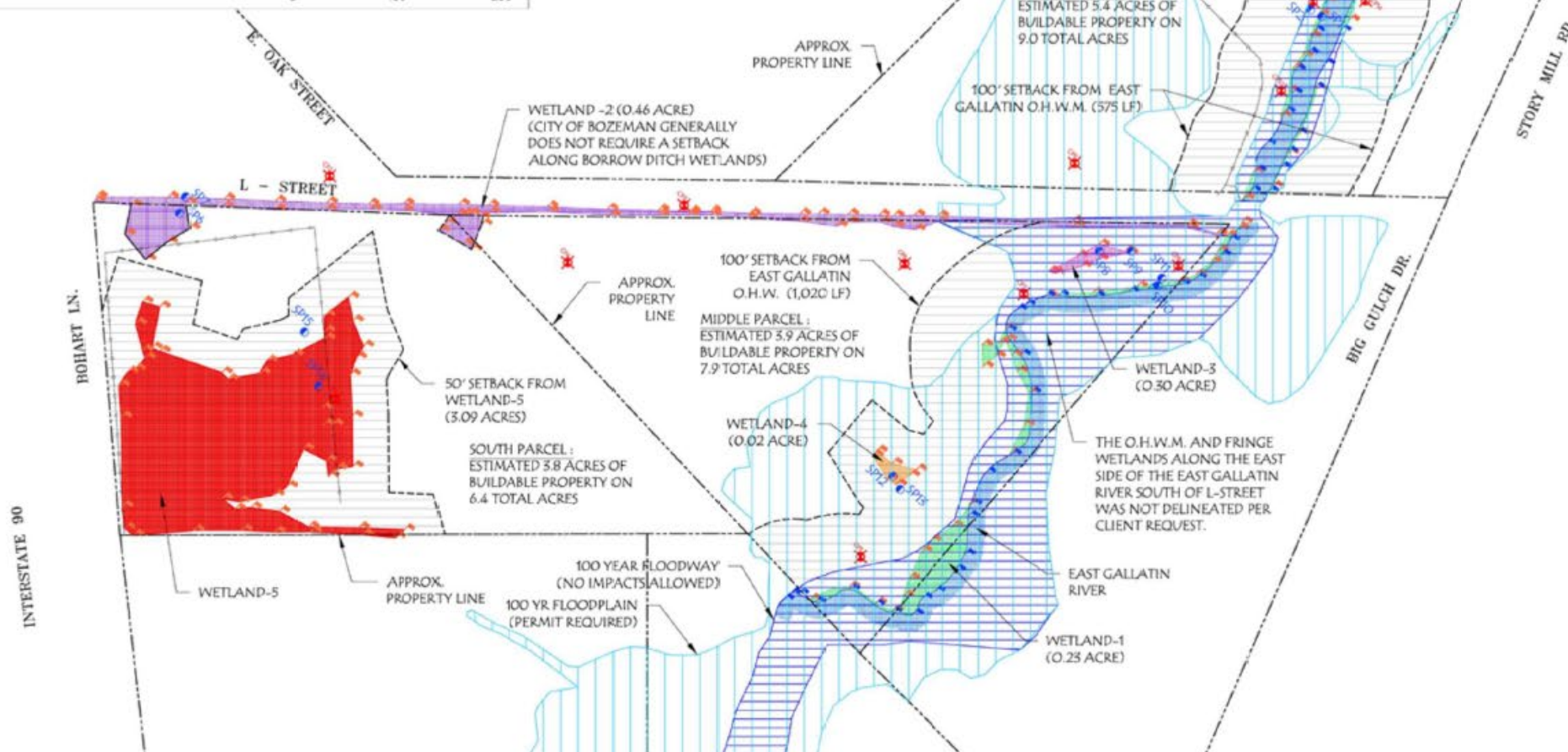


LEGEND

- O.H.W.M.* - GALLATIN RIVER, NON-WETLAND WATERWAY (N.W.W.)
- WETLAND-1
- WETLAND-2
- WETLAND-3
- WETLAND-4
- WETLAND-5
- WETLAND-6
- FLOODWAY - 100 YEAR ACTIVE CHANNEL (KEPT FREE OF ENCHROACHMENT)
- FLOODPLAIN - 100 YEAR FLOOD PLAIN AREA (F.P. DEV. PERMIT REQUIRED)
- SAMPLE POINTS (SP)
- CONTROL POINT (CP)
- WETLAND DELINEATION FLAG
- EXISTING FENCE
- APPROX. PROPERTY LINES
- APPROX. CITY OF BOZEMAN WETLAND AND/OR CHANNEL OHWM SETBACKS
- WETLAND OFFSET AREA (NON-BUILDABLE)

* ORDINARY HIGH WATER MARK (O.H.W.M.)

SCALE
0' 100' 200'



Prepared by:
Spanish Fork Engineering & Consulting, LLC
Structural Civil Aquatic
P.O. Box 114 Bozeman, Montana 59711 • 404.587.4031 office • 404.587.4033 fax

PRELIMINARY AQUATIC RESOURCES DELINEATION MAP IDAHO POLE COMPANY PROPERTIES BOZEMAN, MONTANA

date: 11/18
drawn by: DMS
checked by:

In Association With:



Delineation Conducted
November 1, 2018

Prepared for:
IDAHO POLE CO.

FIGURE - B

Future Liability Considerations

- Congress amended CERCLA (Superfund) in 2002 to exempt certain parties who buy contaminated or potentially contaminated properties from CERCLA liability if they qualify as a Bona Fide Prospective Purchaser (BFPP)
 - The BFPP provision provides that a person meeting the criteria of CERCLA §§ 101(40) and 107(r)(1), and who purchases the property after January 11, 2002, will not be liable as an owner or operator under CERCLA
 - Could they become liable if they exacerbate the problem?
- The Agency has issued several guidances discussing the BFPP criteria including guidance issued in June 2020 that provides liability framework and protections that may apply to local government acquisitions of contaminated property
 - Through these guidances, EPA is clarifying its enforcement intentions by describing circumstances when it may exercise its discretion to not pursue enforcement actions against certain parties that may fall within a category of liable parties under Section 107 of CERCLA

Other Issues

Five Year Review

Five Year Review

- The Five-Year Review is a regular checkup on a Superfund site to ensure that cleanup decisions continue to protect people and the environment.
- The September 2020 Five Year Review represents the fifth Five-Year Review at the Idaho Pole Site.
- The review has determined that the remedy currently protects human health and the environment because institutional controls are in place such as a deed restriction on IPC property and a controlled groundwater area that restricts potable use of the groundwater.

Five Year Review (cont)

In order to be protective in the long term, the following actions were identified:

- 1) Revise the operation and maintenance plan which identifies a formal schedule for inspection and how any identified deficiencies will be addressed
- 2) Install and sample additional wells in the downgradient portion of the plume
- 3) Complete the Focused Feasibility Study and modify the remedy to address residual source area contamination

“The five year review indicates the controlled groundwater remedy is not functioning properly and more wells need to be installed”

The review concluded that the Controlled Groundwater Use Area is functioning properly. The review also identified the need to install additional groundwater sampling wells at the boundary of the Controlled Groundwater Use Area to collect additional information

Wells were installed in early October

Samples collected from these new wells are below cleanup standards

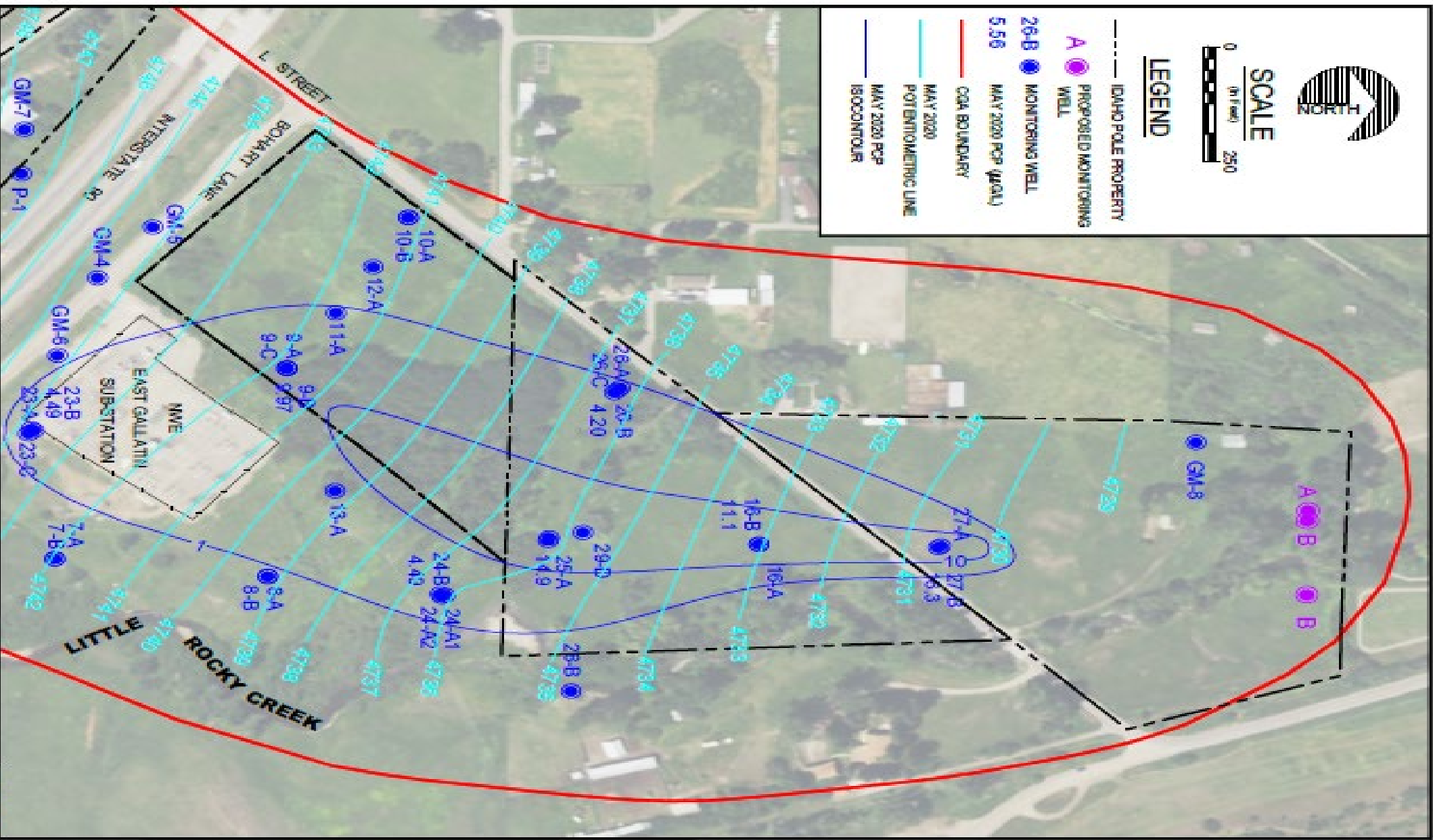


SCALE

0 250
(in feet)

LEGEND

- IDAHO POLE PROPERTY
- PROPOSED MONITORING WELL
- MONITORING WELL
- MAY 2020 POP (µg/L)
- COA BOUNDARY
- MAY 2020
- POTENTIOMETRIC LINE
- MAY 2020 POP
- ISOCONTOUR



IDAHO POLE COMPANY
BOZEMAN, MONTANA
5029-300

PROPOSED
MONITORING WELL LOCATIONS

2

“Groundwater samples collected from monitoring wells north of I90 show PCP levels above the cleanup levels for the site”

- Concentrations in samples will vary over time due to precipitation and groundwater levels
- EPA and DEQ continually evaluates sample data and site conditions and will take appropriate actions if information indicates significant changes over time
 - Installation of wells in October is most recent example
- Exposure to contaminated groundwater is restricted through the Controlled Groundwater Use Area and excavation restrictions

“Can you explain why the soil remedy currently protects human health and the environment despite the fact that residual soil contamination is feeding a plume?”

- The soil remedy is functioning and protective when combined with the site’s institutional controls including the Controlled Groundwater Use Area and land use restrictions.
 - The Controlled Groundwater Use Area prohibits the use of groundwater beneath the site, preventing exposure and ensuring protection of human health
 - Permanent enforceable land use restrictions minimize potential for human exposure to contaminated soil and protect the integrity of the soil and groundwater remedies
- Remediation cannot remove all residual compounds; therefore, we rely on monitoring, Five Year Reviews and periodic re-evaluation of the remedy as new information becomes available to ensure contaminants are being reduced and risks are adequately characterized and managed according to site cleanup goals

Focused Feasibility Study

Focused Feasibility Study

- The purpose of this focused feasibility study is to assemble and evaluate remedial alternatives for the groundwater component of the site including the residual soil contamination
 - Extracting and treating groundwater no longer deemed best alternative
- Three alternatives are being considered:
 - No Action serves as the baseline to compare the other two alternatives against
 - In Situ Treatment and Monitored Natural Attenuation with Institutional and Engineering Controls
 - Monitored Natural Attenuation and contingency In Situ Treatment with Institutional and Engineering Controls