

General Legend for SAP Figures

Existing Soil and Groundwater Locations (Figures 4 to 21)

- Historical Soil Sample Location all samples have been excavated
- Historical Soil Sample Location not all samples have been excavated
- Groundwater Monitoring Well will be sampled during RI
 - Groundwater Monitoring Well will not be sampled during RI

Proposed RI Sample Locations (Figures 4 to 21)

Groundwater Monitoring Well

Soil Boring

Soil Vapor Point

Proposed RI Sample Location Abbreviations (Figures 4 to 21)

GTSP – Georgetown Steam Plant NGW – NBF Groundwater Monitoring Well

PEL – Propulsion Engineering Laboratory SB – Soil Boring

NFA – North Flightline Area VP – Vapor Point

CFA – Central Flightline Area SFA – South Flightline Area

Boundaries

Site Boundary and Subdivision Boundary (five subdivisions of NBF-GTSP Site)

Area of Concern (AOC) Boundary (Figures 3 to 21)

Storm Drain Structures

Manhole

☐ Catch Basin
■ Oil/Water Separator

☐ Drain☐ Plug☐ Vault

Roof Drains

Storm Drain Lines

→ North Lateral → South Lateral

→ North-Central Lateral → Building 3-380 Area
→ South-Central Lateral → Parking Lot Area

King County Bypass Line

MH130A Conveyance

GTSP Flume Replacement Line

Storm Drain Line Submerged During High Water Table

Other Features

Building/Structure

Former Building

RI Surface Debris Sampling Locations near Buildings/Structures (Figures 23, 24)

RI Surface Debris Sampling Locations near SD Structures (Figures 23, 24)

RI Surface Debris Sampling Locations hear 5D Structures (Figures 23, 24)

Groundwater Flow Direction

Excavation Boundary

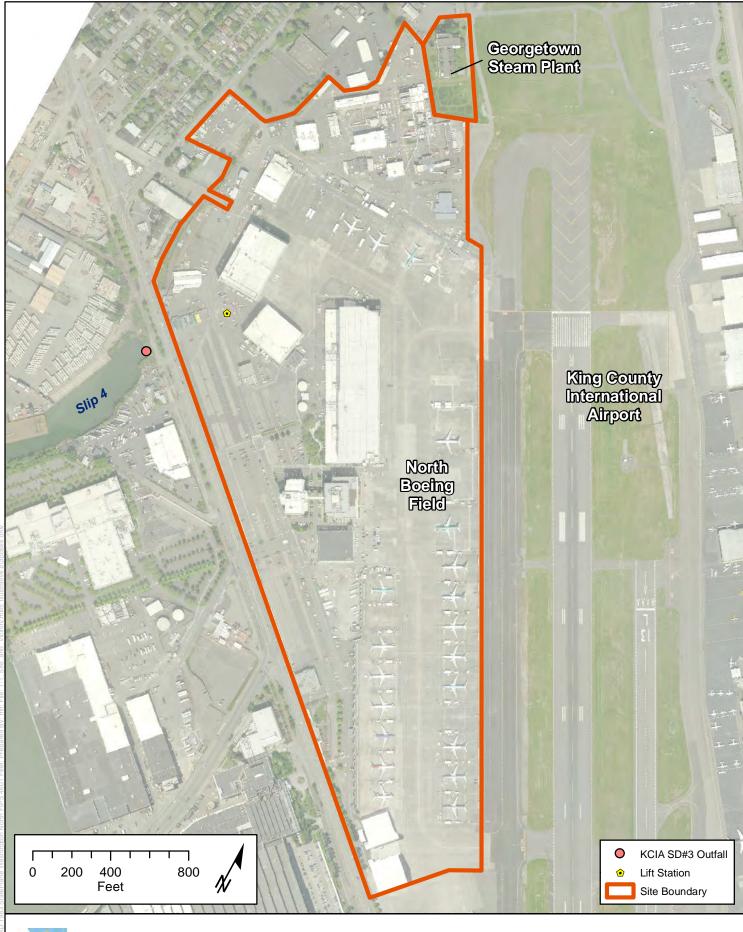




Figure 1. NBF-GTSP Site and Vicinity



Phase I: Storm Drain Solids and Surface Debris Sampling 1a. Storm Drain Solids Grab Sampling¹ For SD structures located within or near an interim action conducted since the beginning of 2010: Was the most Are COPC levels recent SDS sample SDS sampling elevated in the most collected before proposed recent sample of completion of the SDS? interim action? No SDS sampling No SDS sampling 1b. Storm Drain Solids Grab Sampling¹ For SD structures sampled since 2004 (not generally near interim action areas): Is the SD structure Are COPC levels Was the most recent Are COPC levels Are nearby AM located near or elevated in the most SDS sample **SDS** sampling elevated in nearby downgradient areas adequately recent SDS collected before proposed with potentially characterized? AM samples? 2010? samples? contaminated AM? SDS sampling No SDS sampling No SDS sampling No SDS sampling No SDS sampling proposed 1c. Storm Drain Solids Grab Sampling For SD structures not sampled since 2004 (not generally near interim action areas): Is the SD structure SDS sampling along a main lateral proposed* line at a tributary? Are COPC levels SDS sampling elevated in nearby proposed AM samples? No SDS sampling 2a. Surface Debris Sampling For surface debris in proximity to SD structures: Are COPC levels Is the SD structure Have SDS samples elevated in the most located near or been collected from recent SDS sample downgradient of No surface debris the nearby SD (including Phase I areas with surface sampling structure(s) since samples) from debris adequately 2004? nearby structures? characterized? Surface debris No surface debris sampling sampling proposed[^] Are COPC levels Surface debris elevated in nearby sampling samples of AM other proposed^ than surface debris? No surface debris sampling 2b. Surface Debris Sampling For surface debris along base of buildings or large structures: Is the building or Is the SD structure structure near or located near or Are COPC levels Was the building upgradient of one or downgradient of No surface debris constructed before or elevated in the most more SDS samples areas with surface sampling during 1985? ecent SDS sample? collected since debris adequately 2004? characterized? Surface debris No surface debris No surface debris sampling sampling sampling proposed Is the SD structure

Notes:

1. SD structures CB173, CB261, MH181A, and MH652 are included for SDS sampling due to significantly elevated levels of PCB or mercury in 2012 sampling.

AM - Anthropogenic media SD - Storm drain
COPCs - Contaminants of potential concern SDS - Storm drain solids
"Elevated" COPC levels are generally considered to be exceedance factor ranges >25.

located near or

downgradient of areas with surface

debris adequately characterized?

Are AM on building

or structure

adequately

characterized?

Surface debris

sampling

proposed

- * SDS sampling will be proposed at selected locations along the main lateral line at tributaries.
- ^ Many areas on the flightline are unlikely to contain sampleable amounts of surface debris, and determination of amounts will be made in the field.

No surface debris

sampling

Are COPC levels

elevated in the AM

samples?

No surface debris

sampling





= Yes

= No

Surface debris

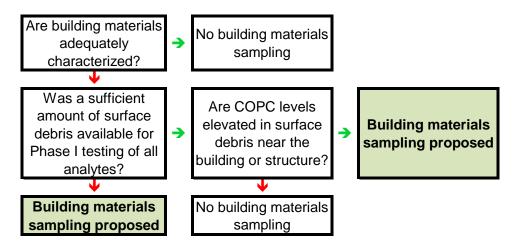
sampling

proposed

Phase II: Anthropogenic Media Sampling

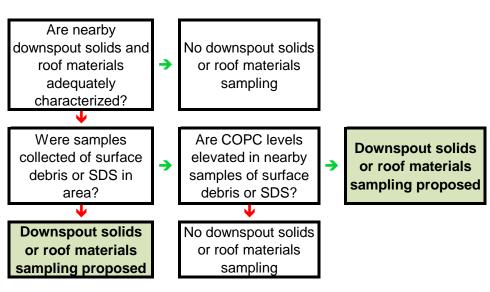
1. Building Materials

For surface debris along base of buildings or large structures built/renovated before or during 1985:



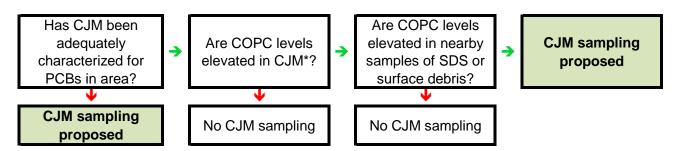
2, 3. Downspout Solids and Roof Materials

For areas with downspout solids or roof materials/debris:



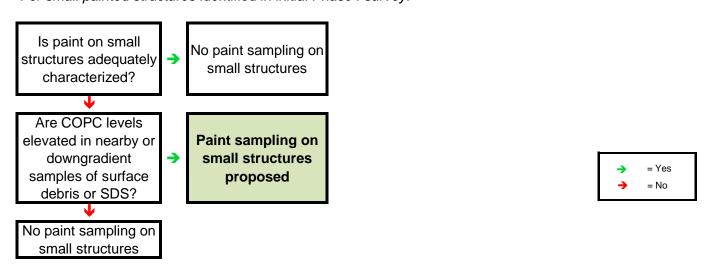
4. CJM

For CJM mostly in flightline areas:



5. Paint on Small Structures

For small painted structures identified in initial Phase I survey:



Notes:

Building materials include paint on buildings or large structures, caulk, or other exterior materials.

Downspout solids include material from the roof that is discharged to the ground surface (or to a primary catch basin) from a downspout. Small structures include bollards, PIVs, etc.

AM - Anthropogenic media SD - Storm drain

COPCs - Contaminants of potential concern SDS - Storm drain solids

"Elevated" COPC levels are generally considered to be exceedance factor ranges >25.

^{*} Excludes CJM recently installed as part of the 2010-2012 CJM removal interim actions; PCBs at elevated levels in older removed CJM could resorb into replaced CJM.





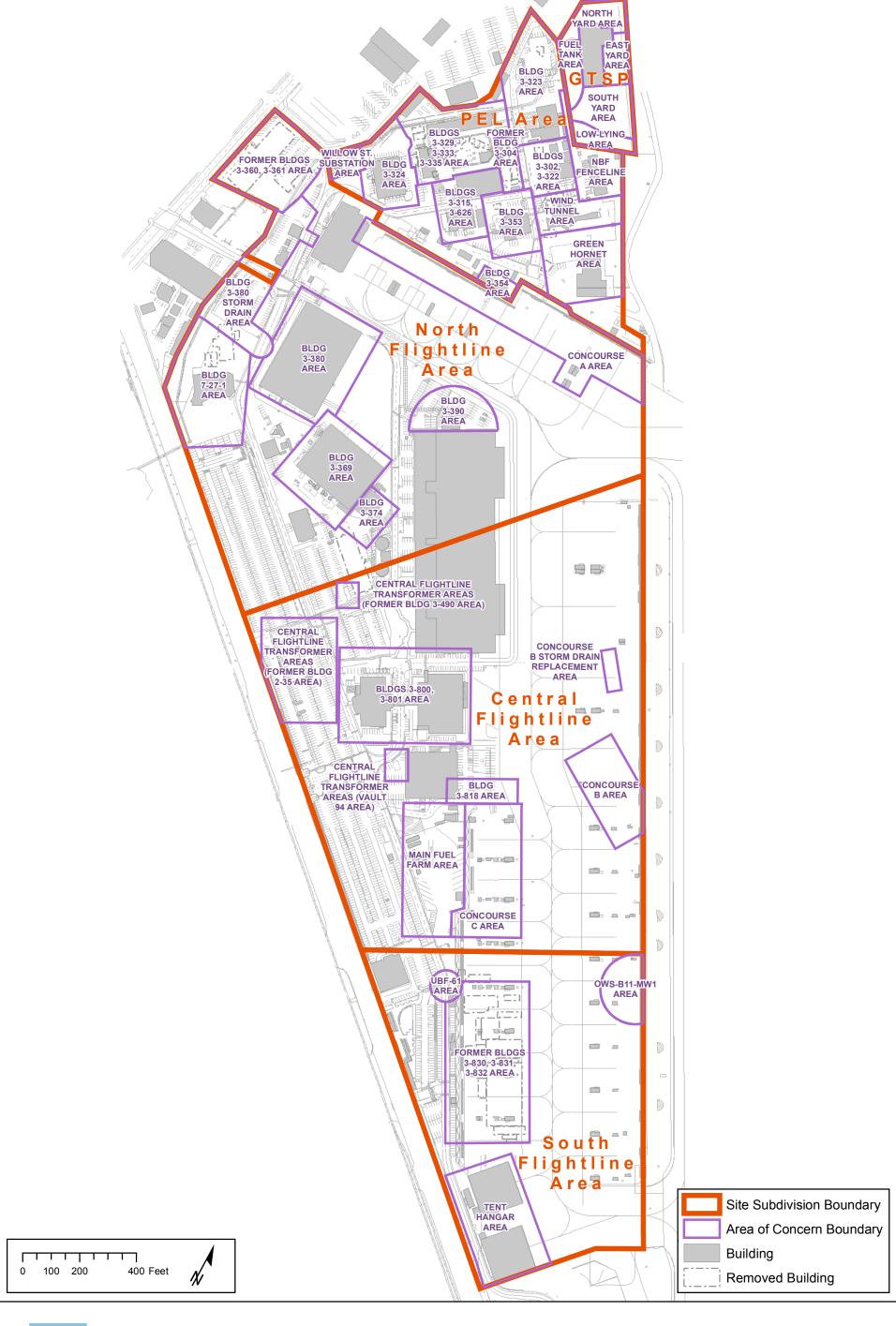




Figure 3. Site Subdivisions and Areas of Concern for Soil and Groundwater Activities at NBF-GTSP



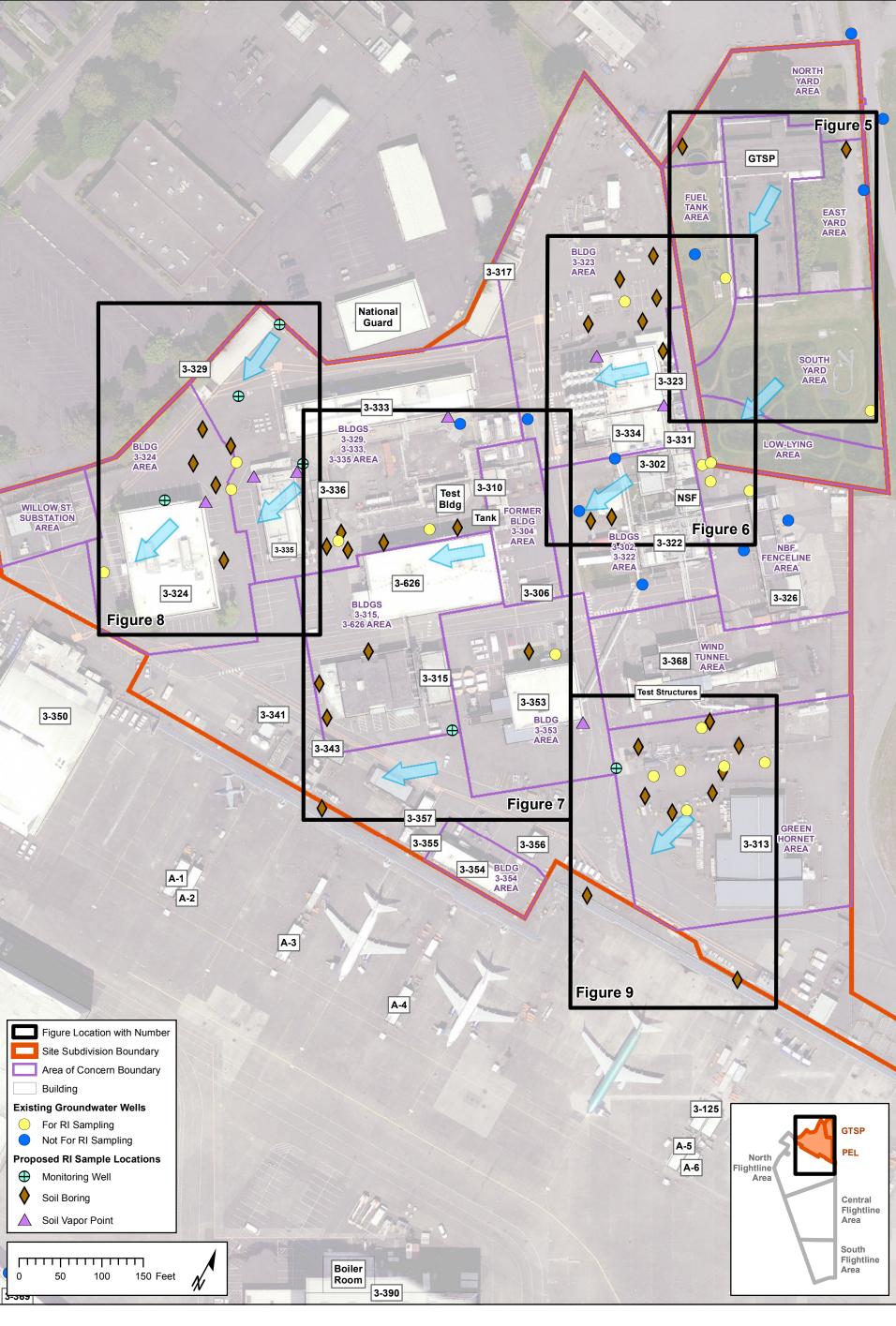


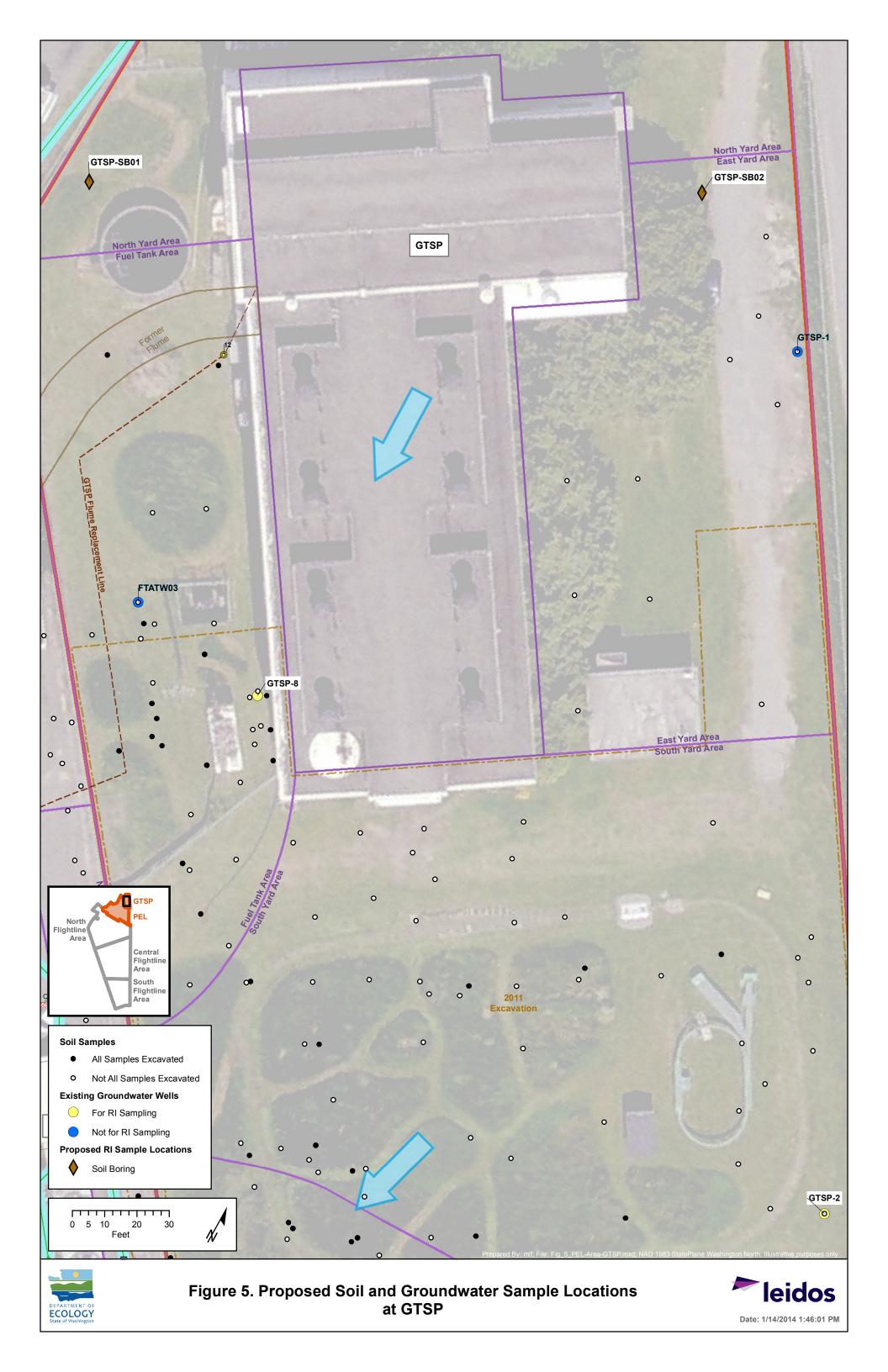


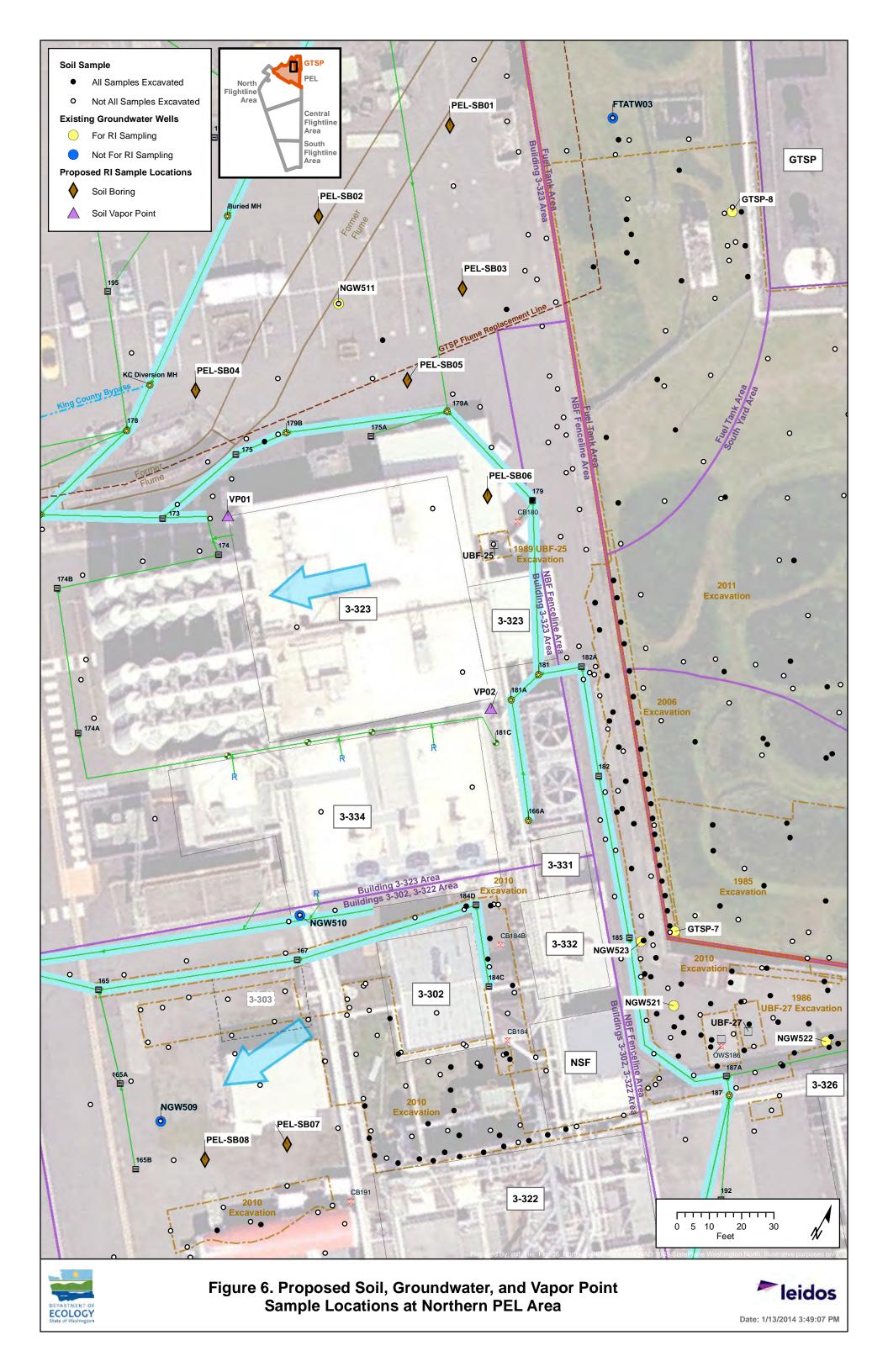
Figure 4. Proposed Soil, Groundwater, and Vapor Point Sample Locations at GTSP and PEL Area

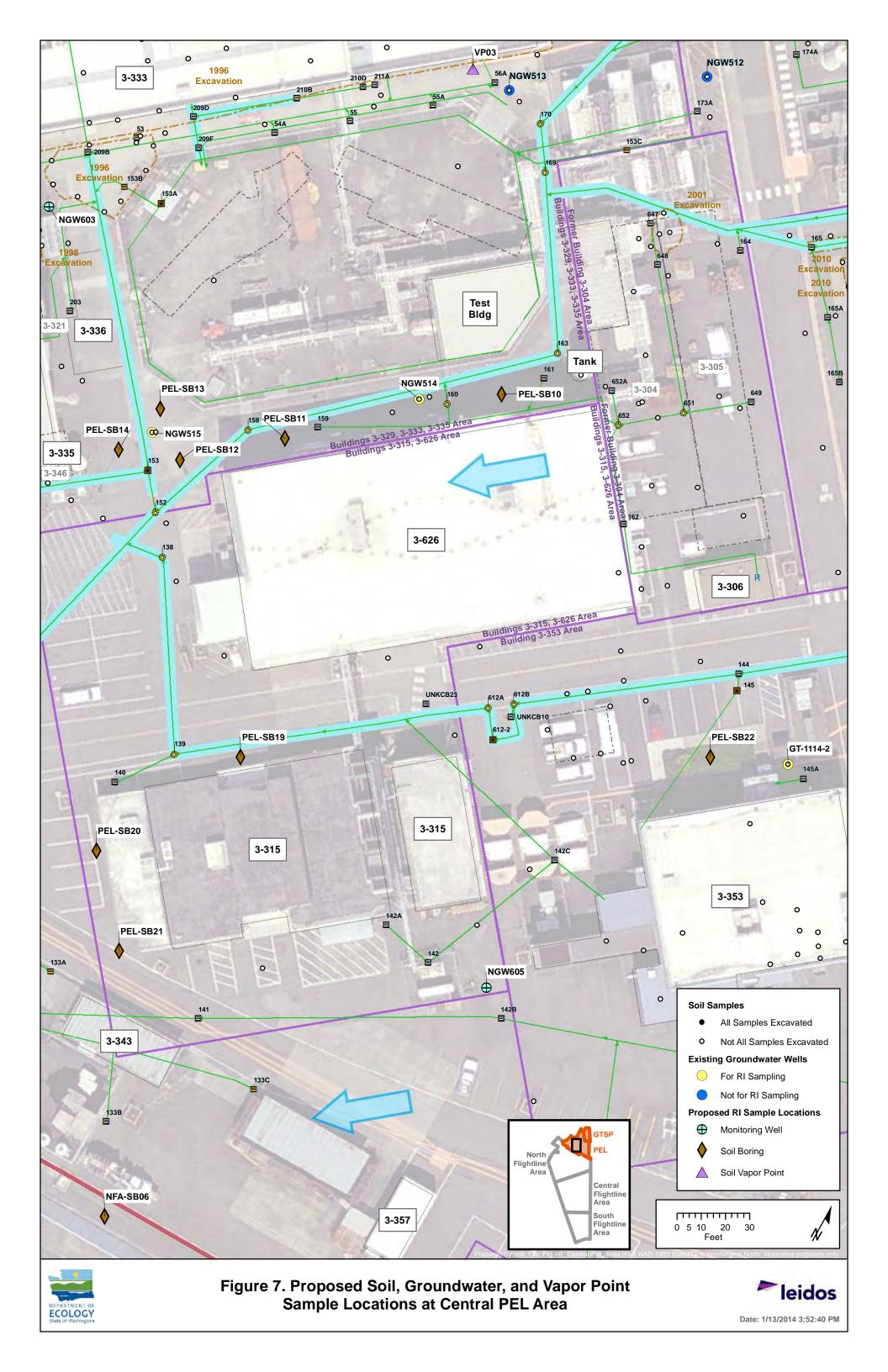


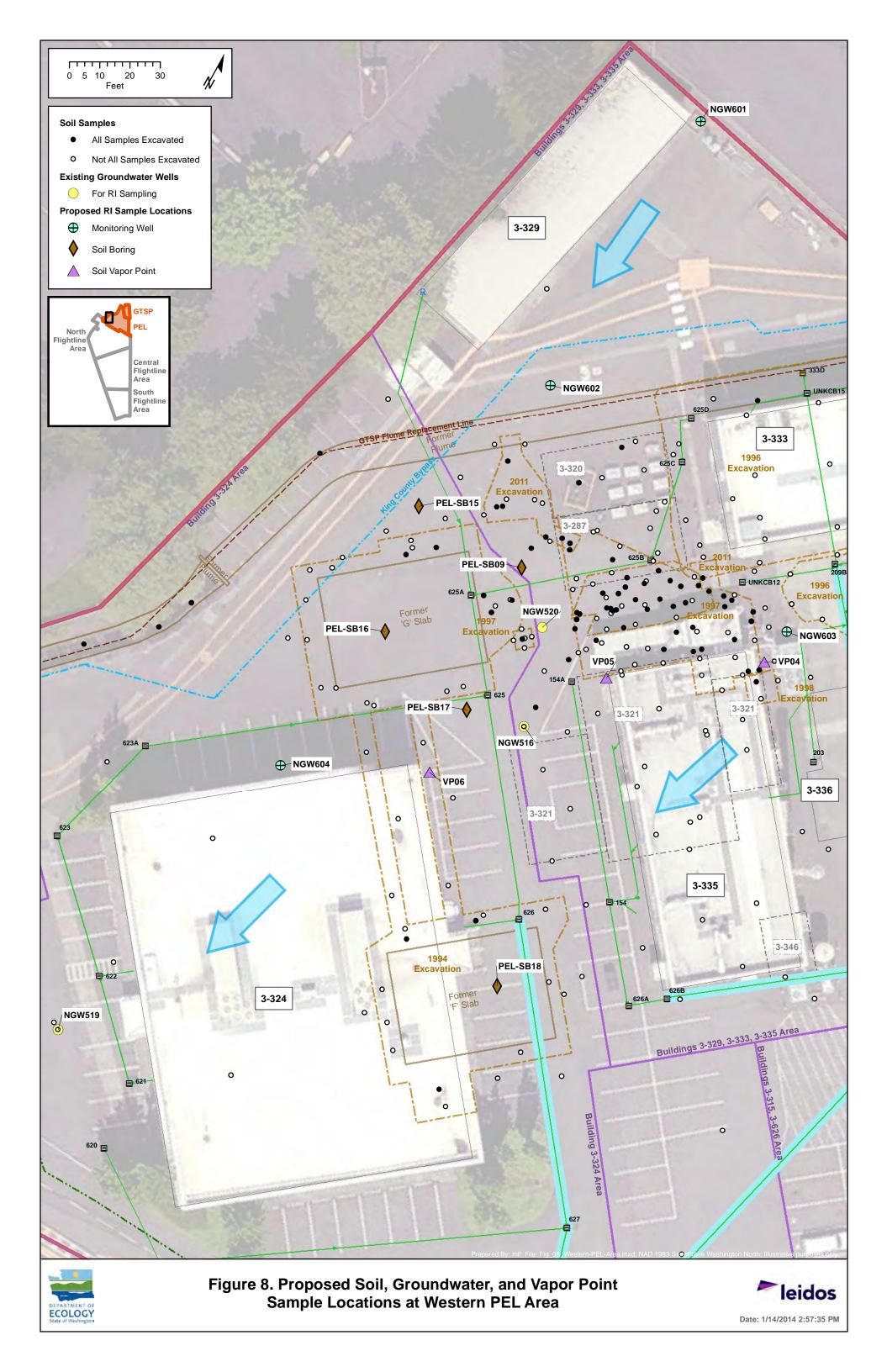
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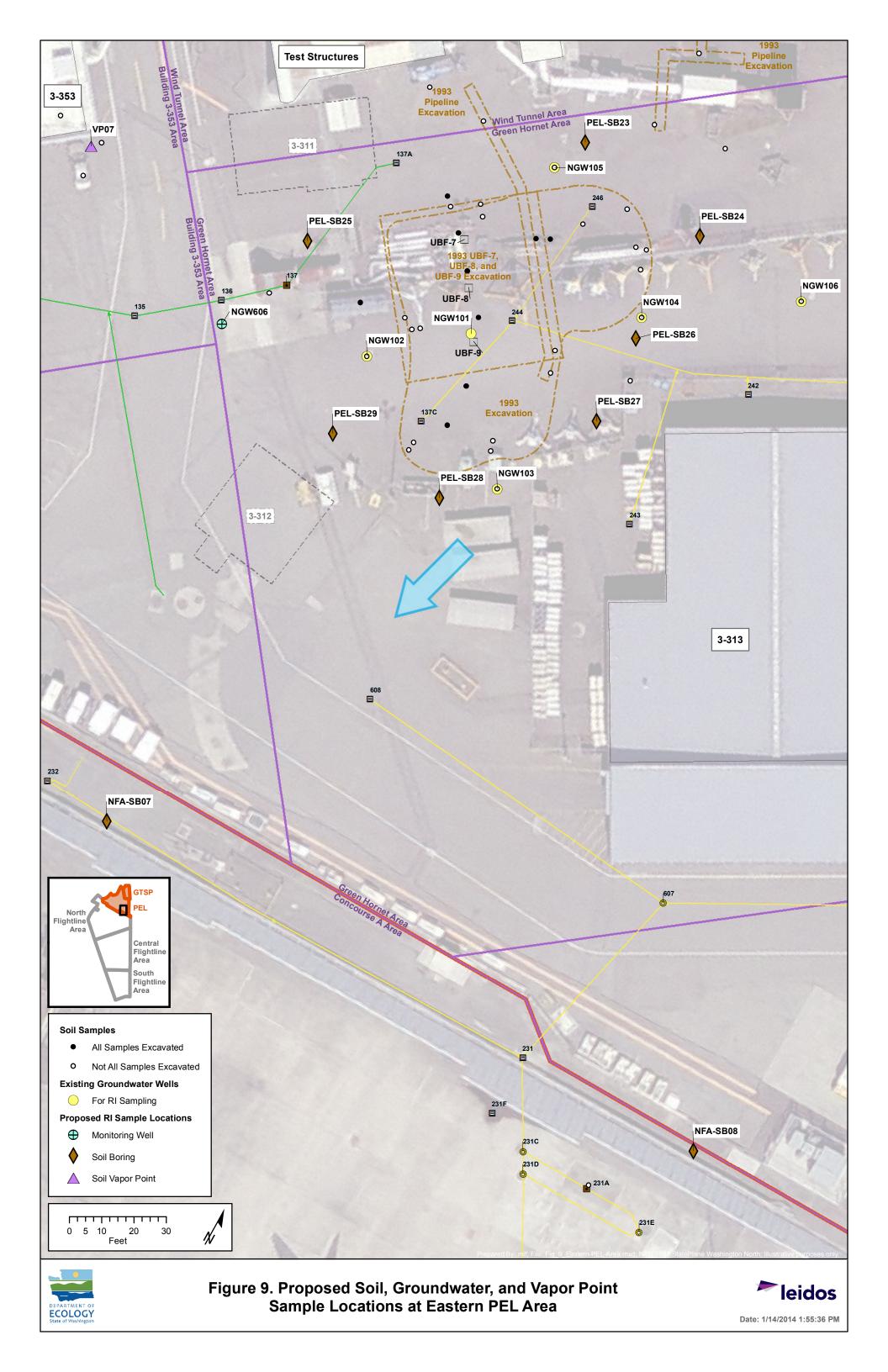
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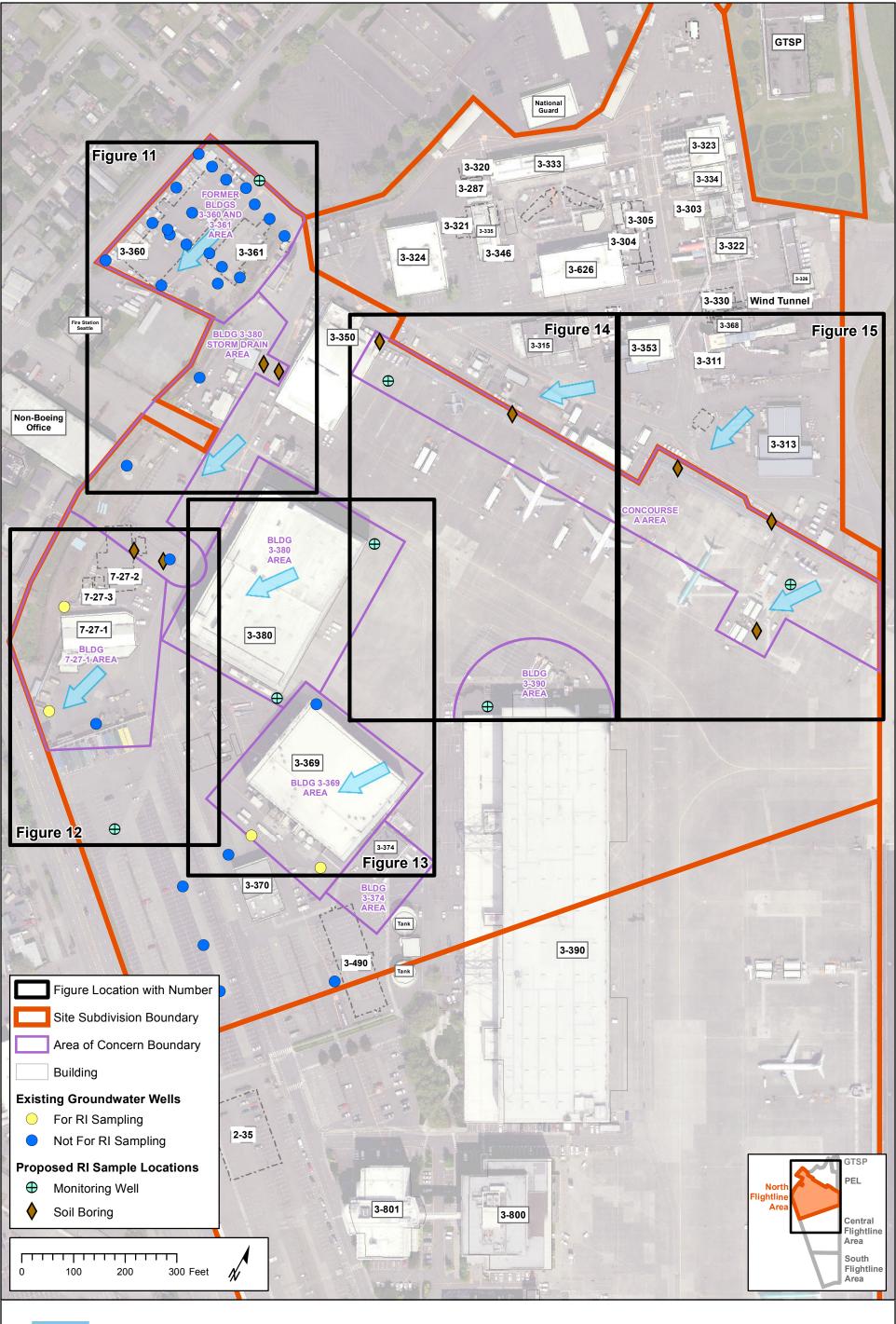


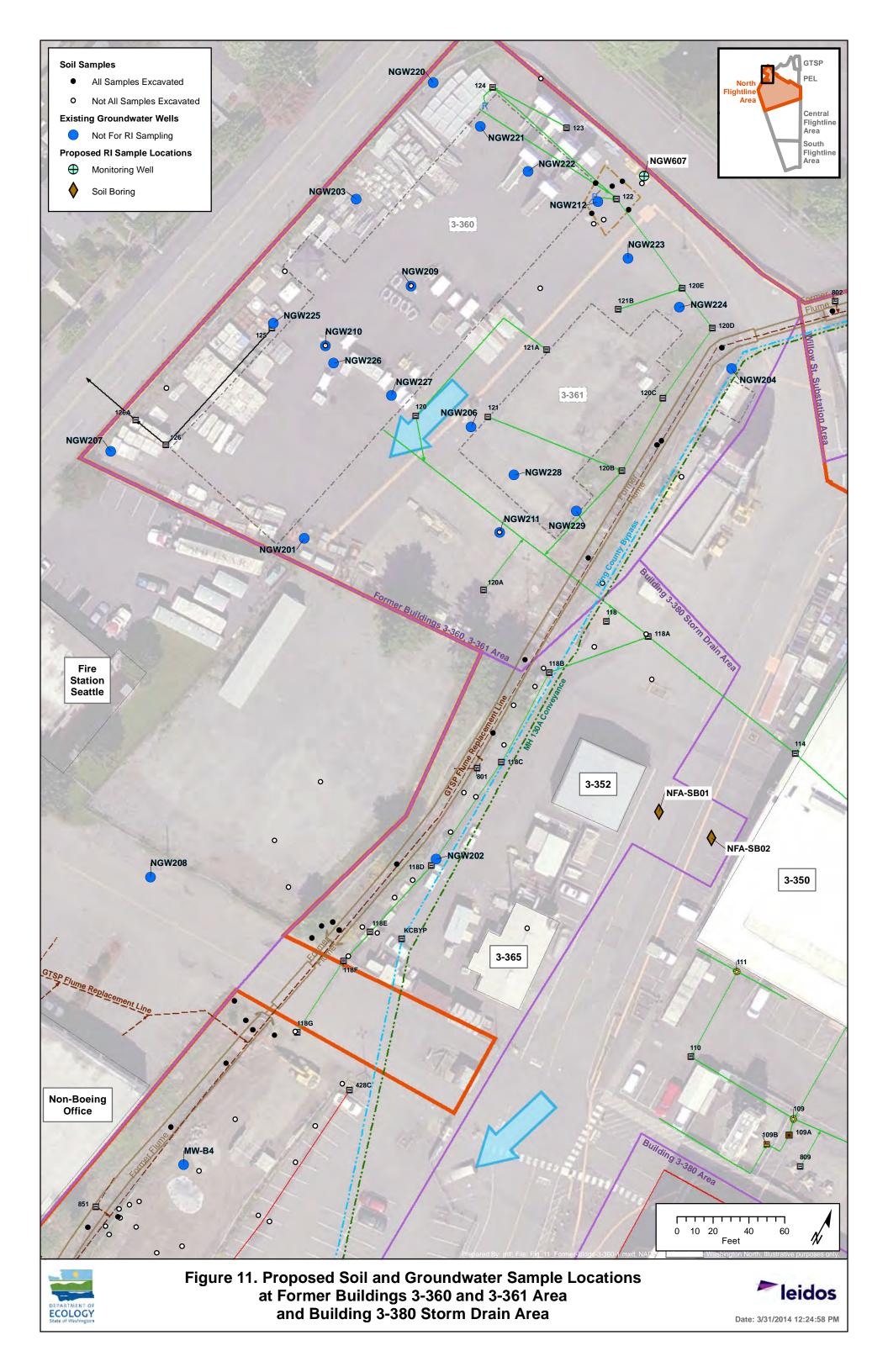


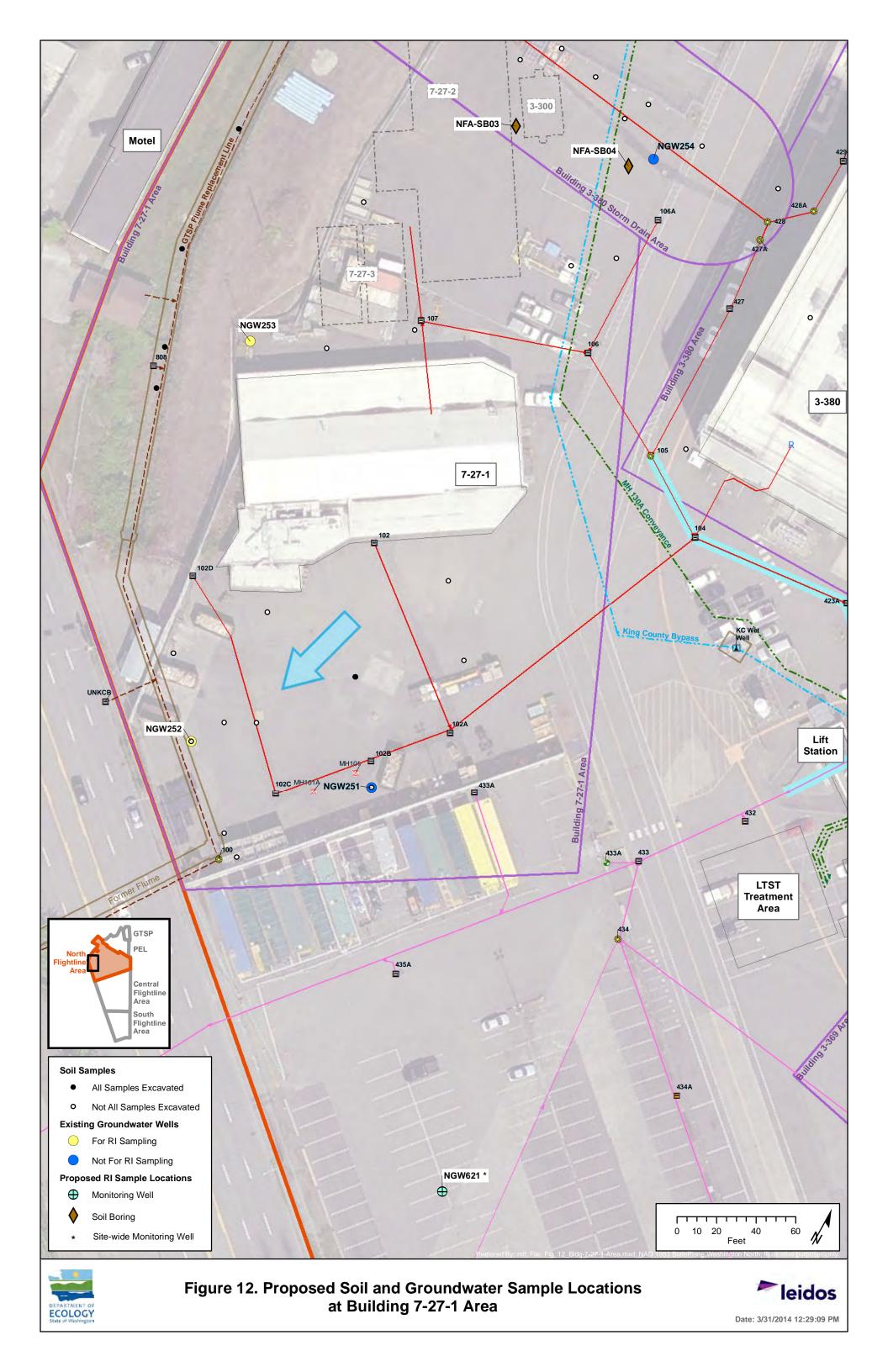
Figure 10. Proposed Soil and Groundwater Sample Locations at North Flightline Area

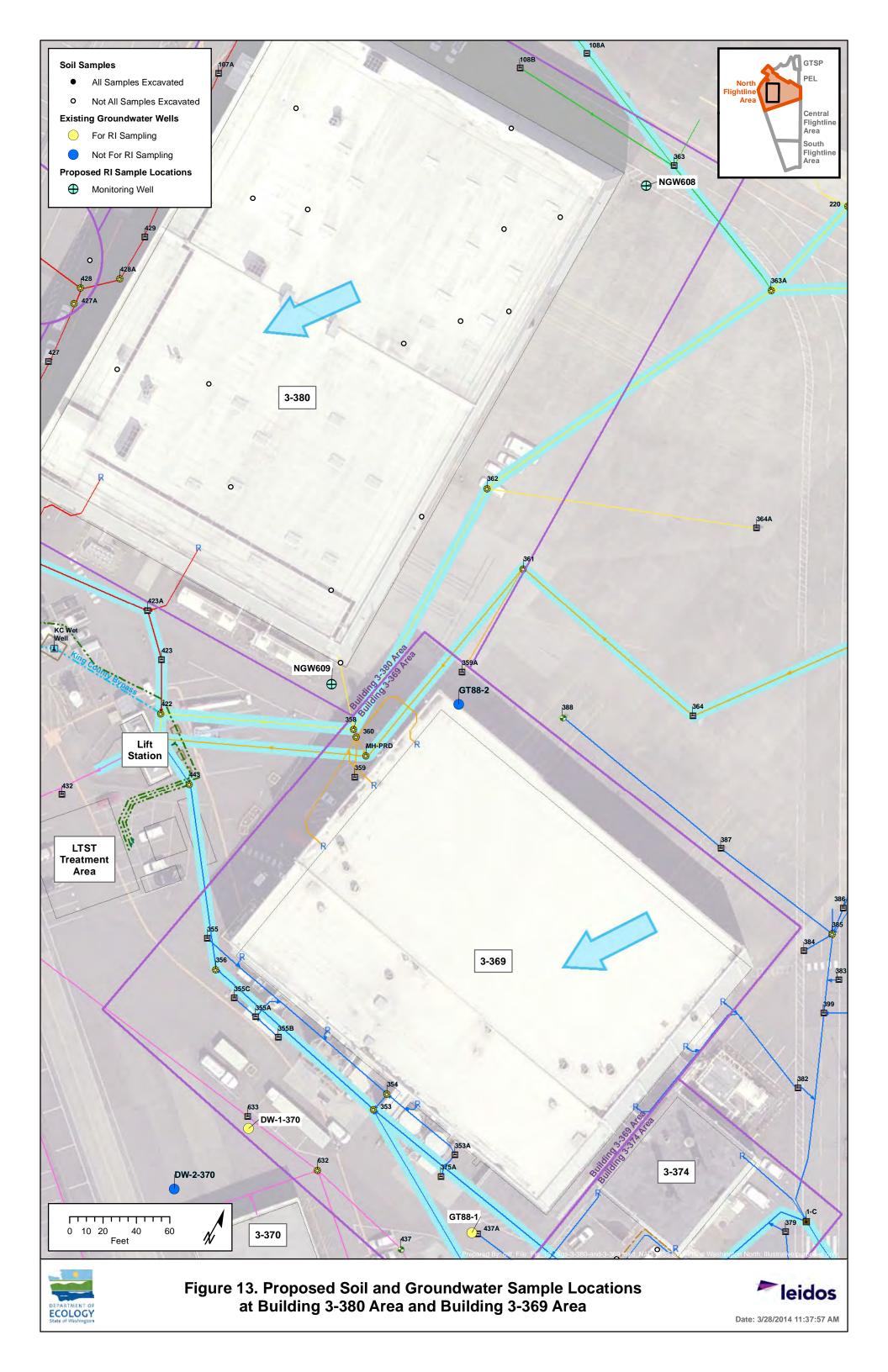


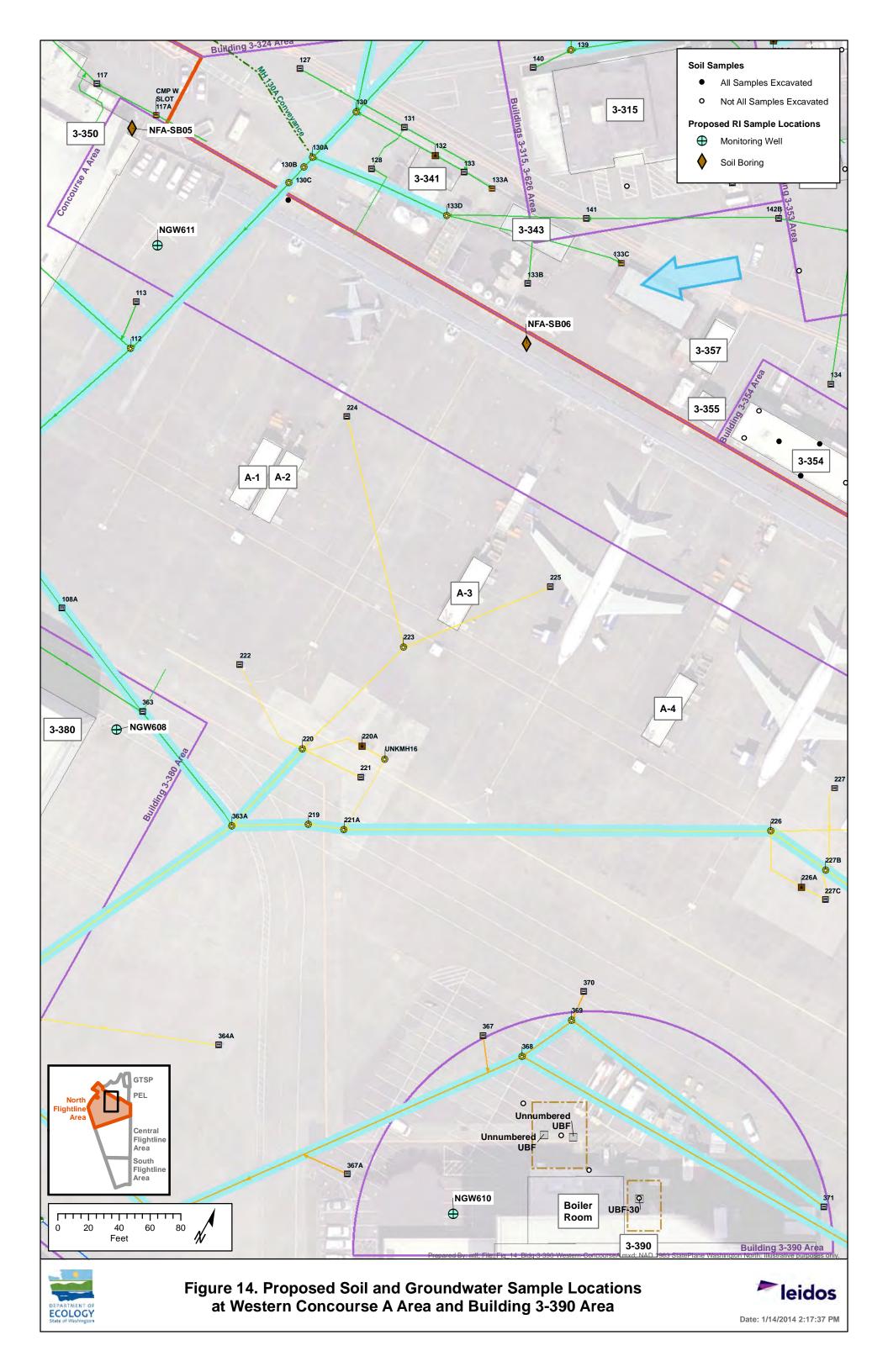
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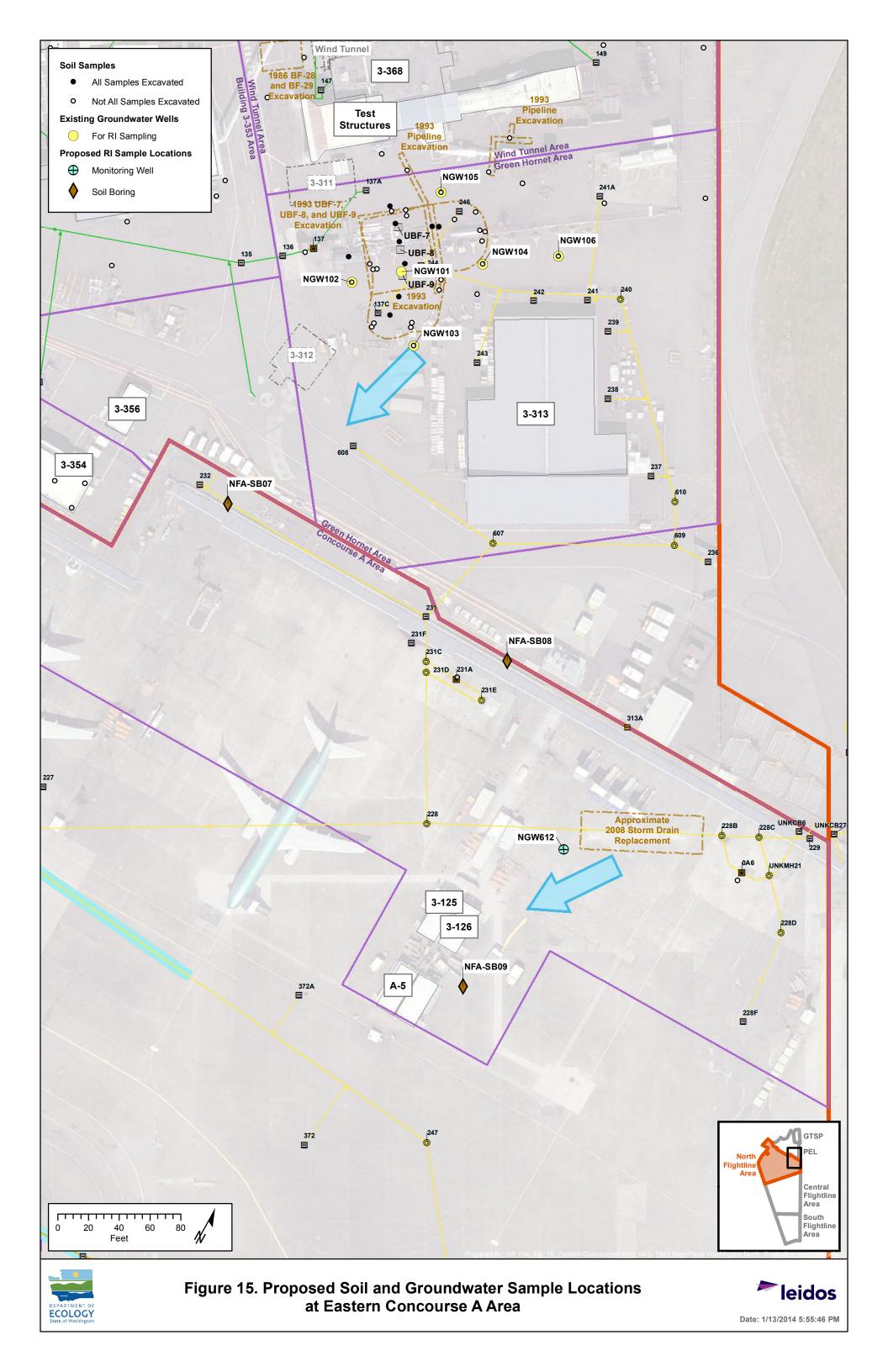
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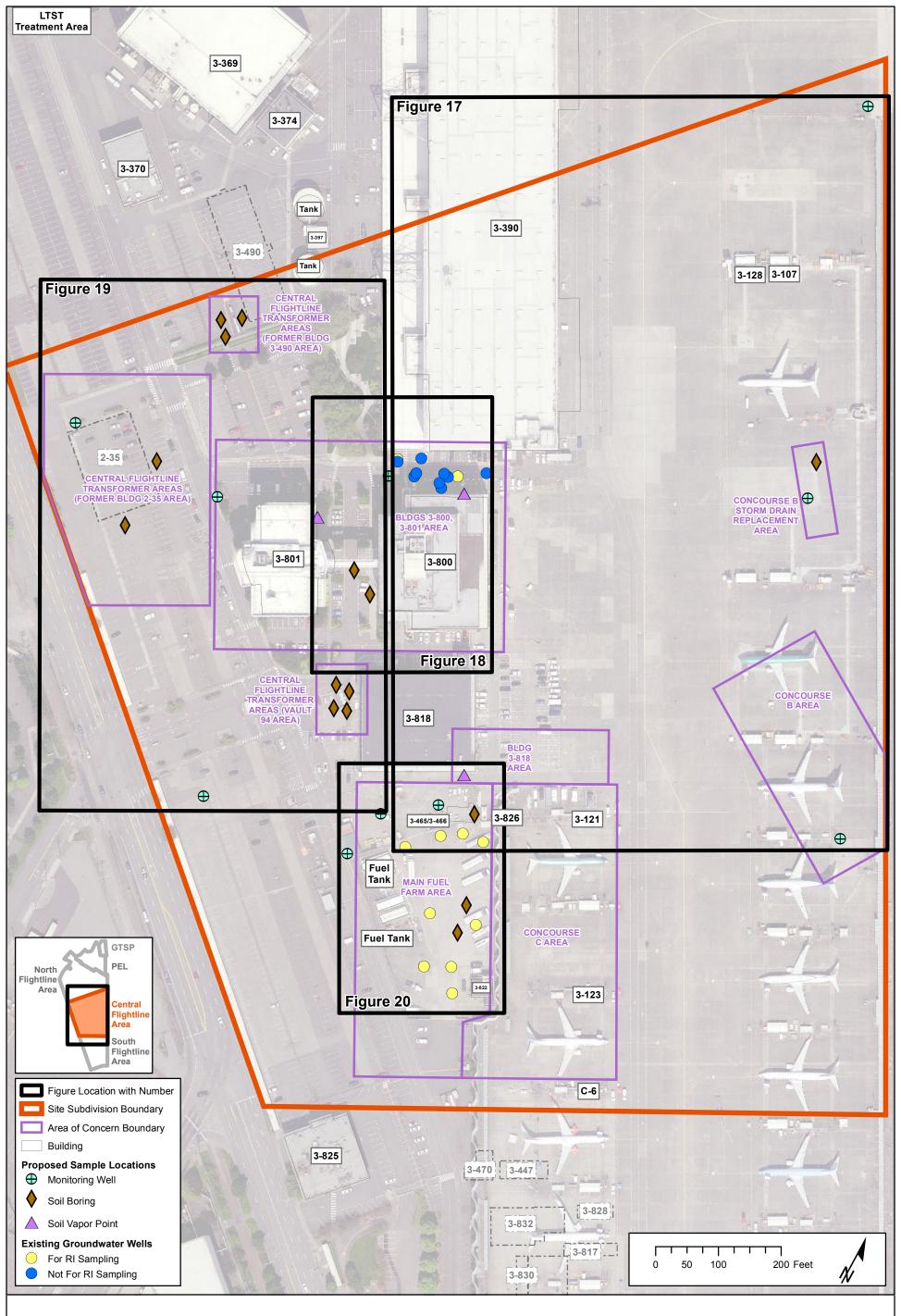
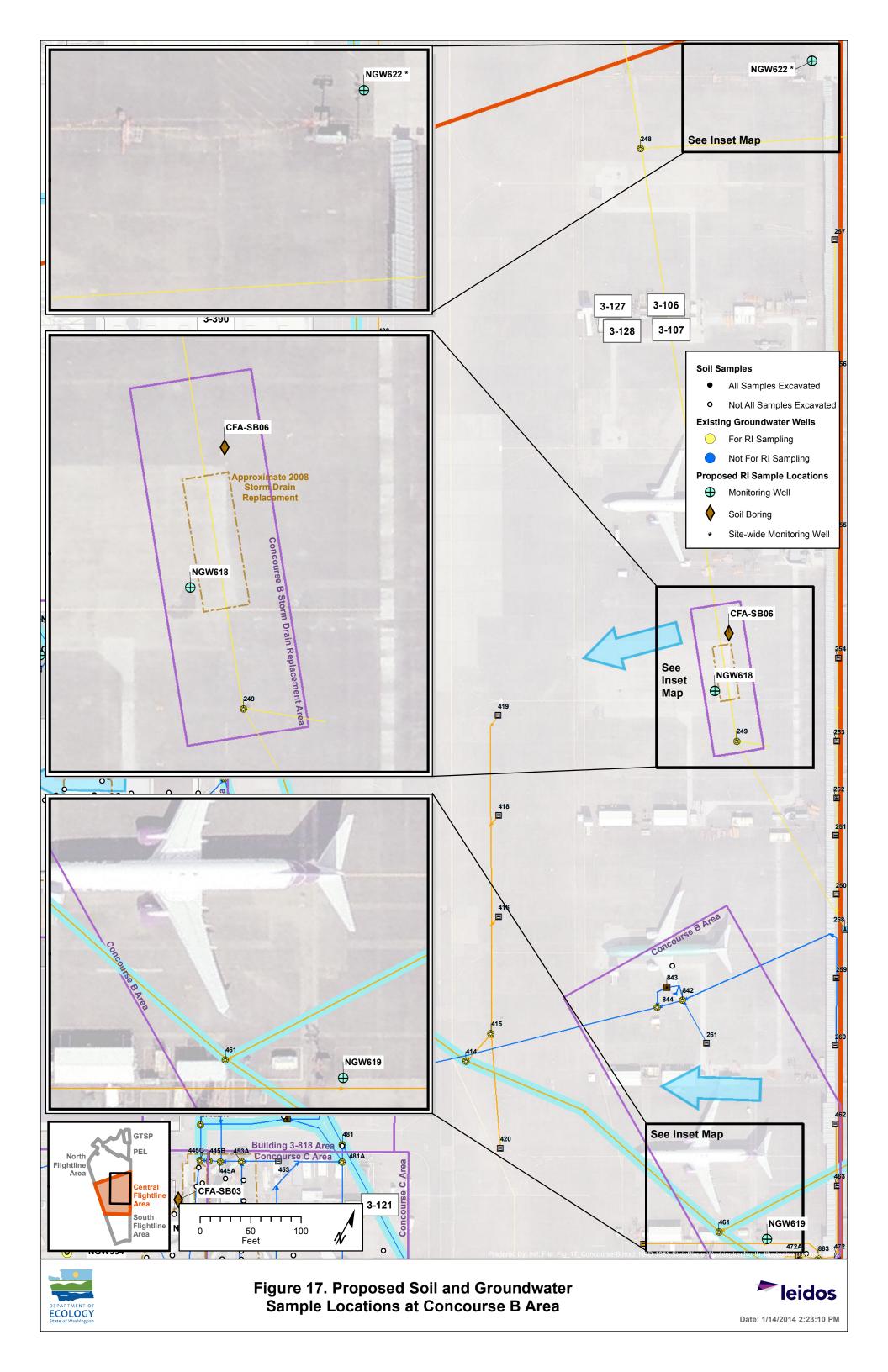
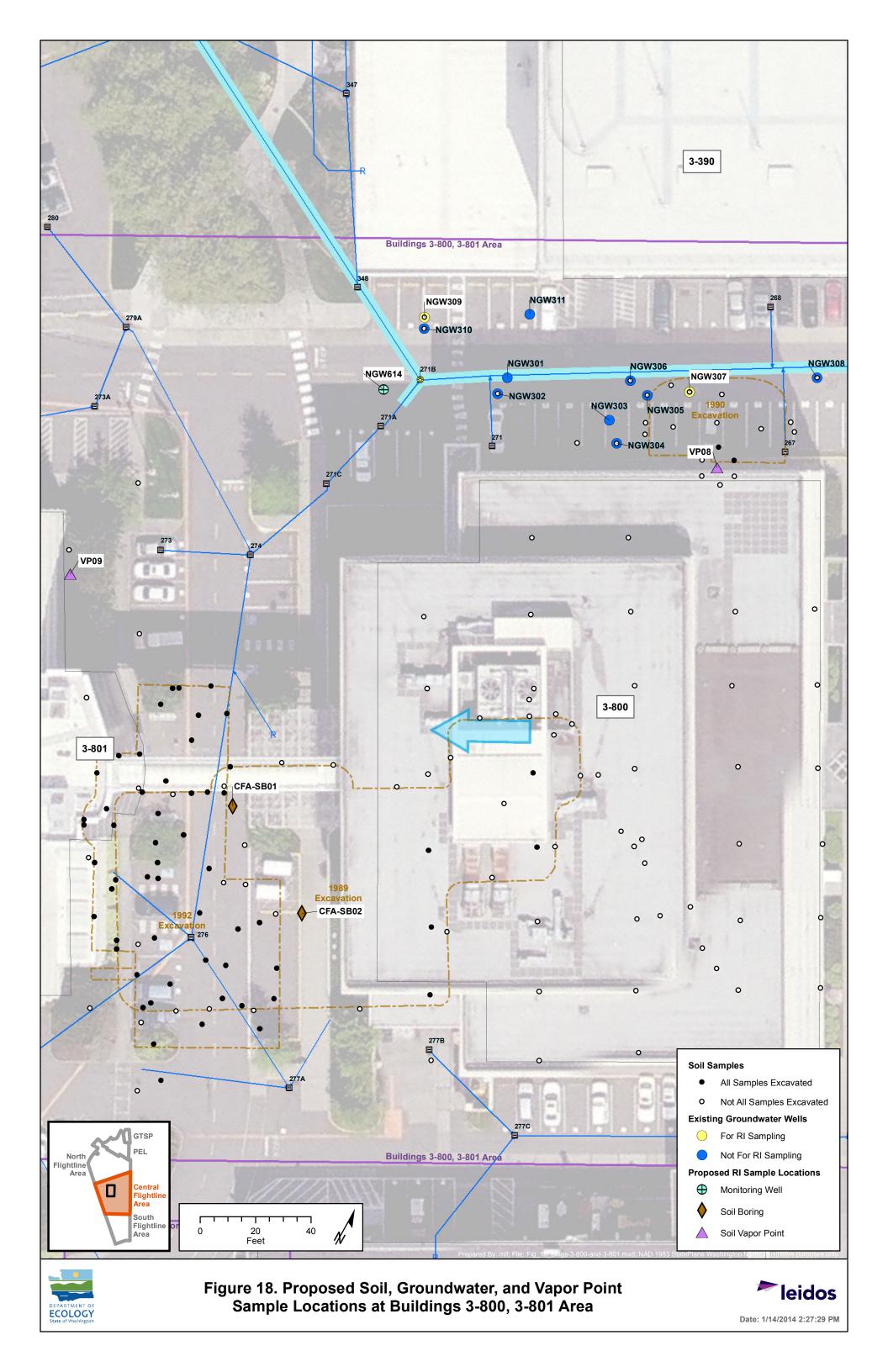


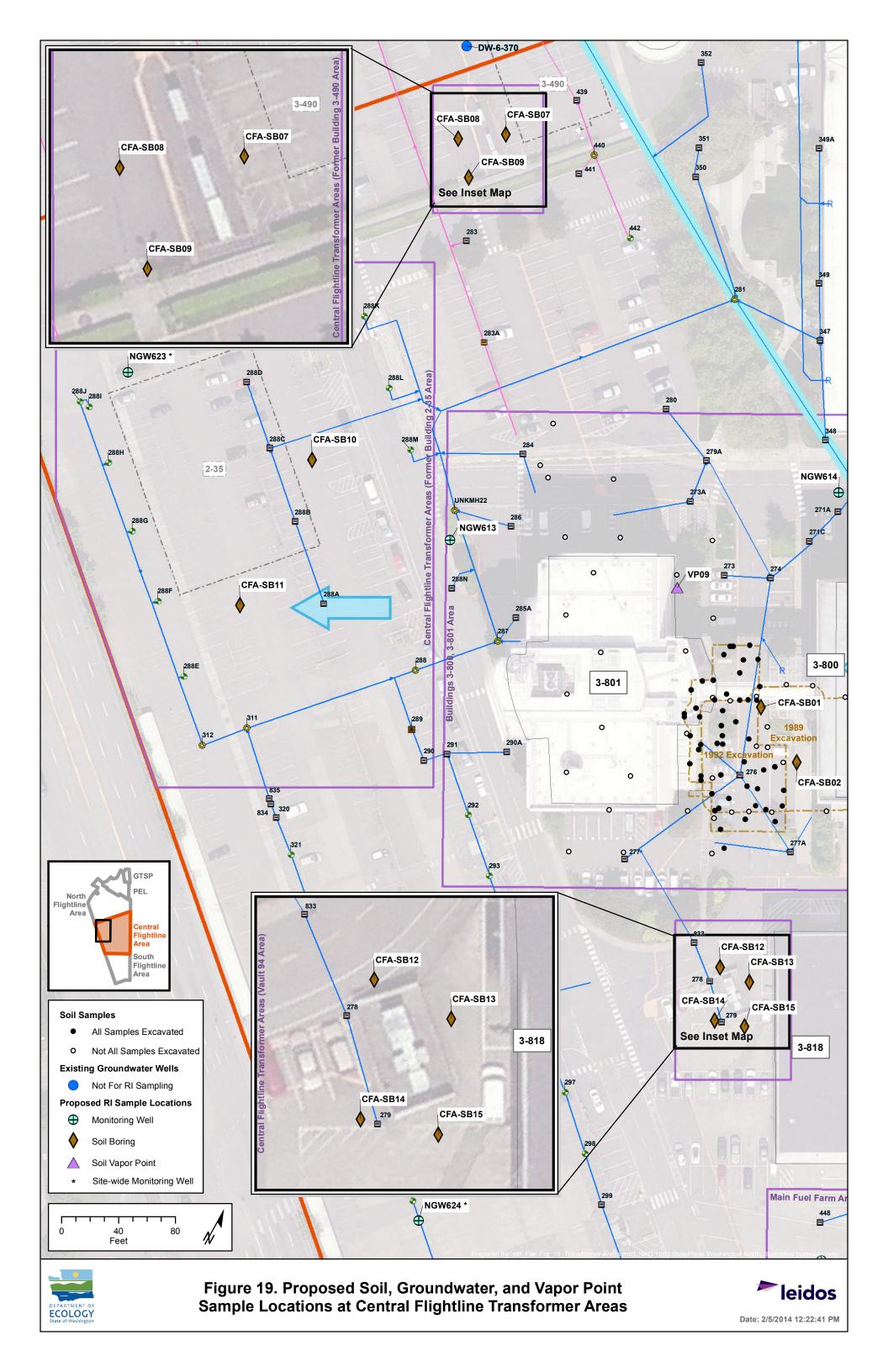


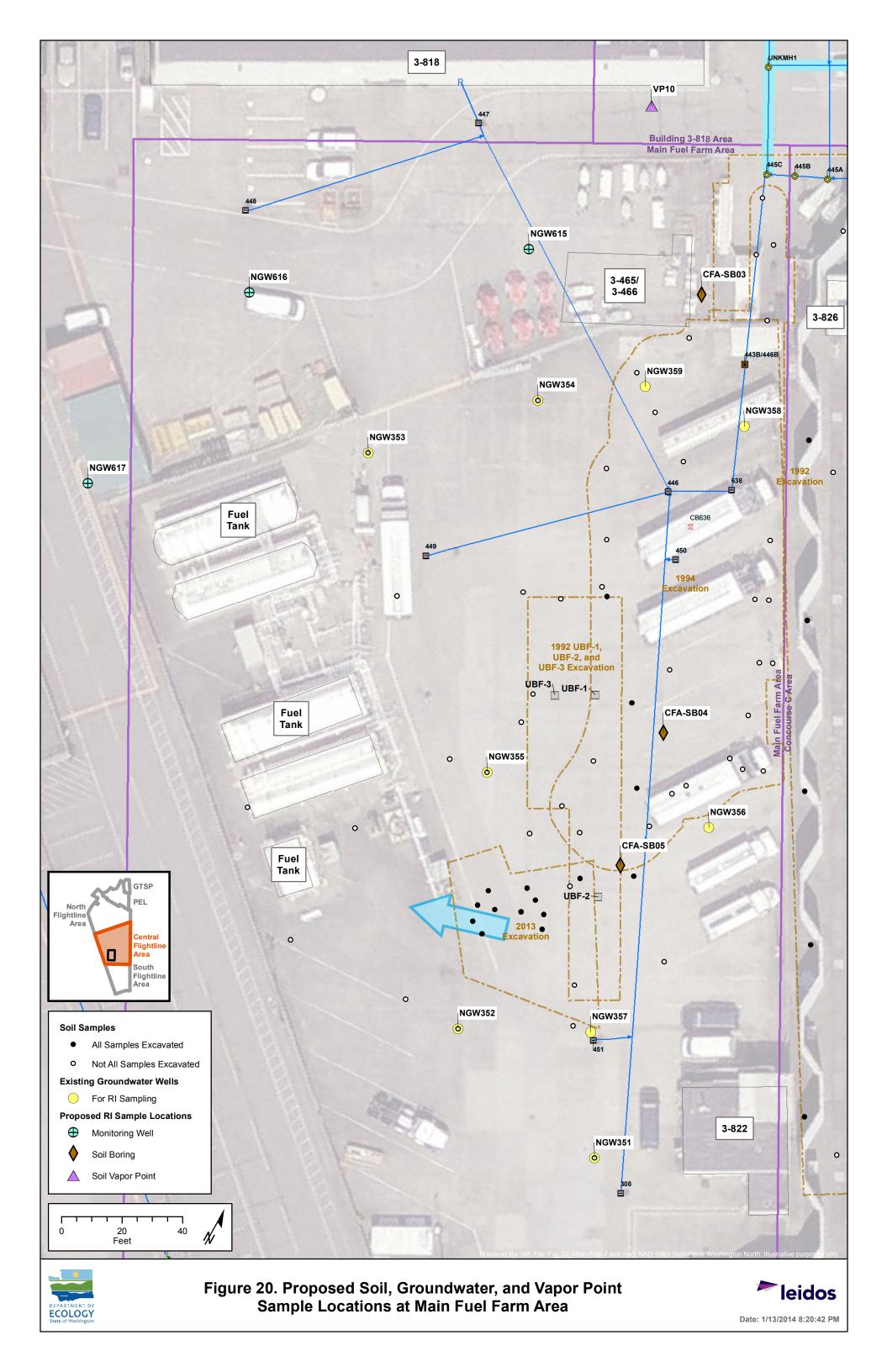
Figure 16. Proposed Soil, Groundwater, and Vapor Point Sample Locations at Central Flightline Area











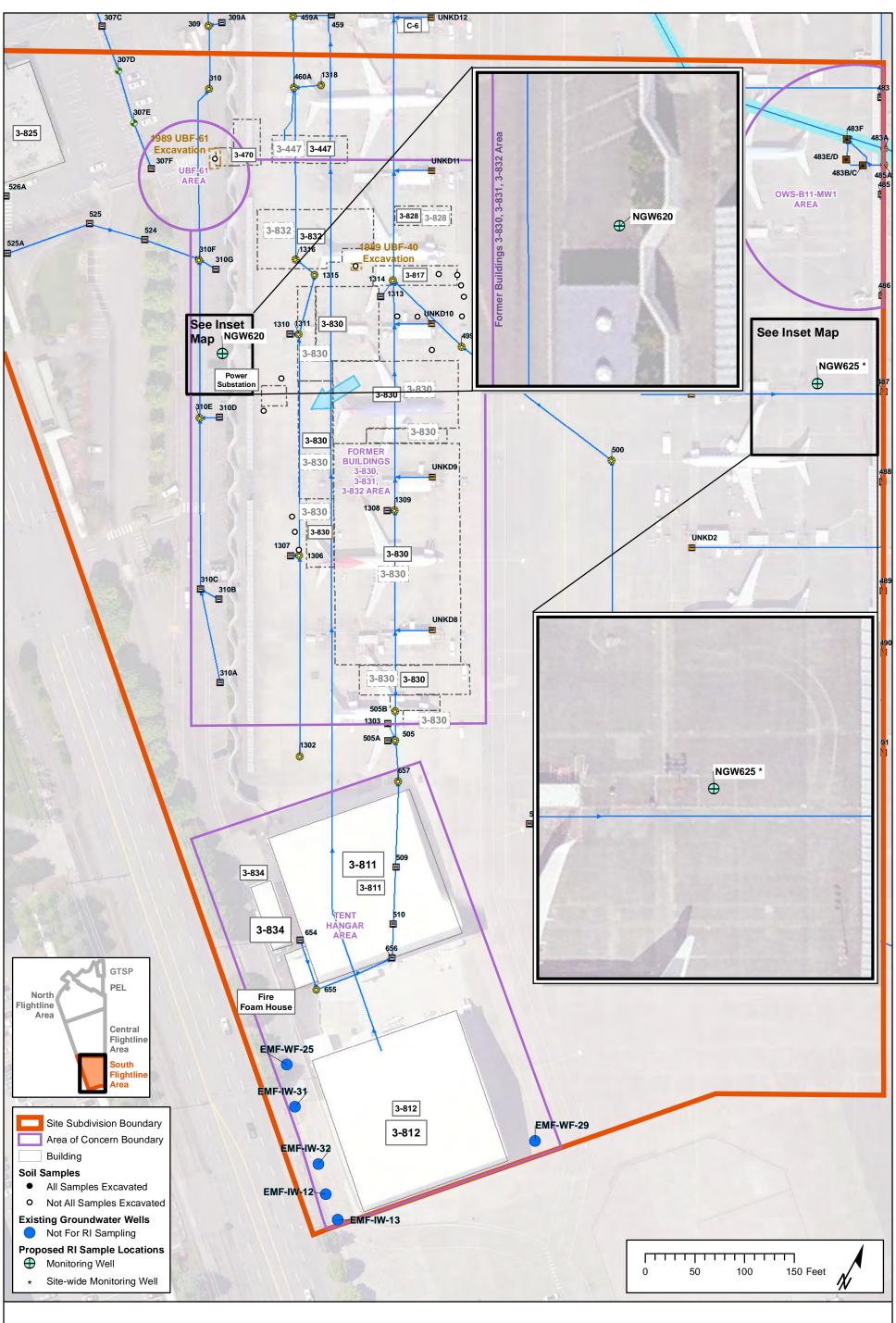


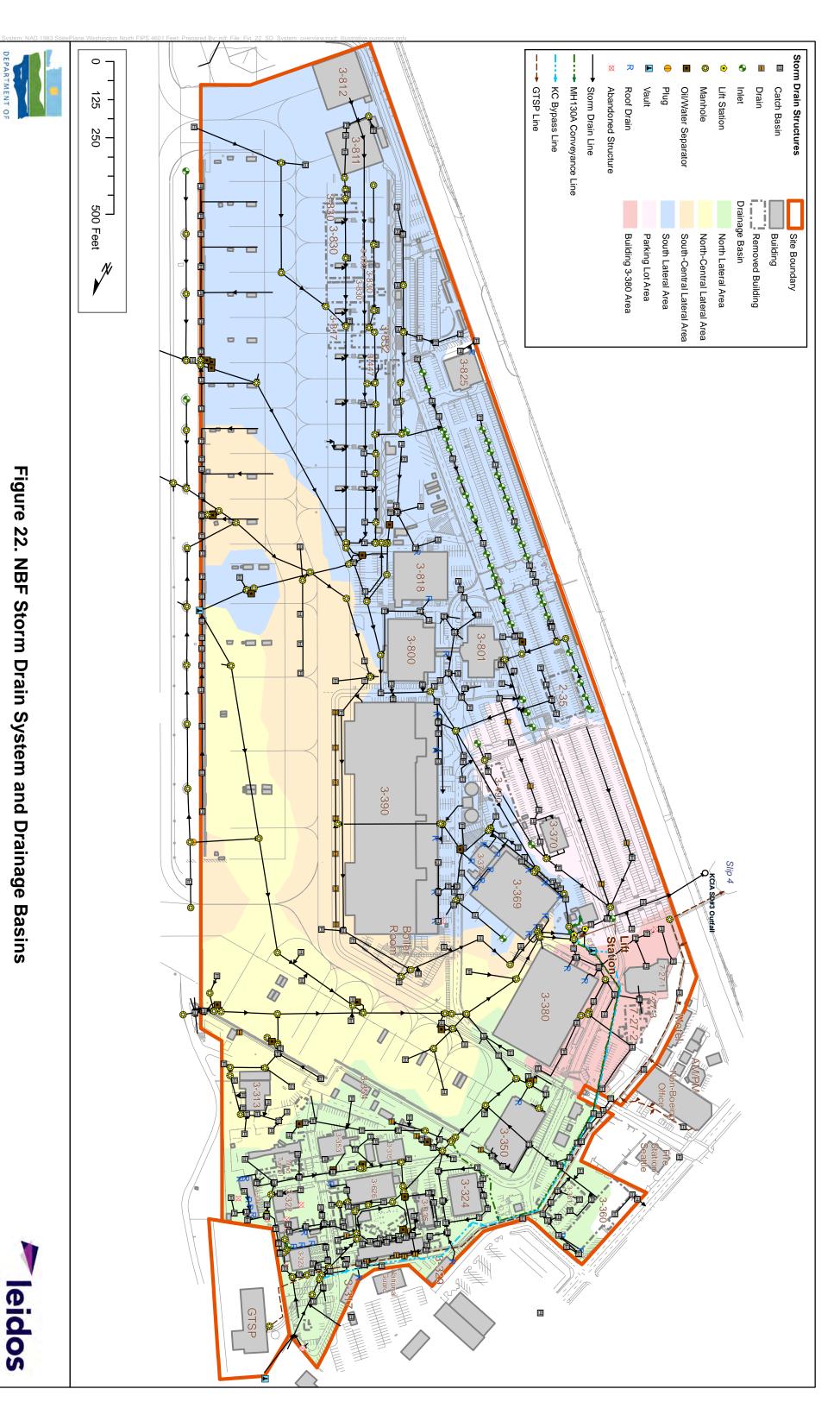


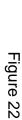
Figure 21. Proposed Soil and Groundwater Sample Locations at South Flightline Area



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State of Washington

Figure 22. NBF Storm Drain System and Drainage Basins

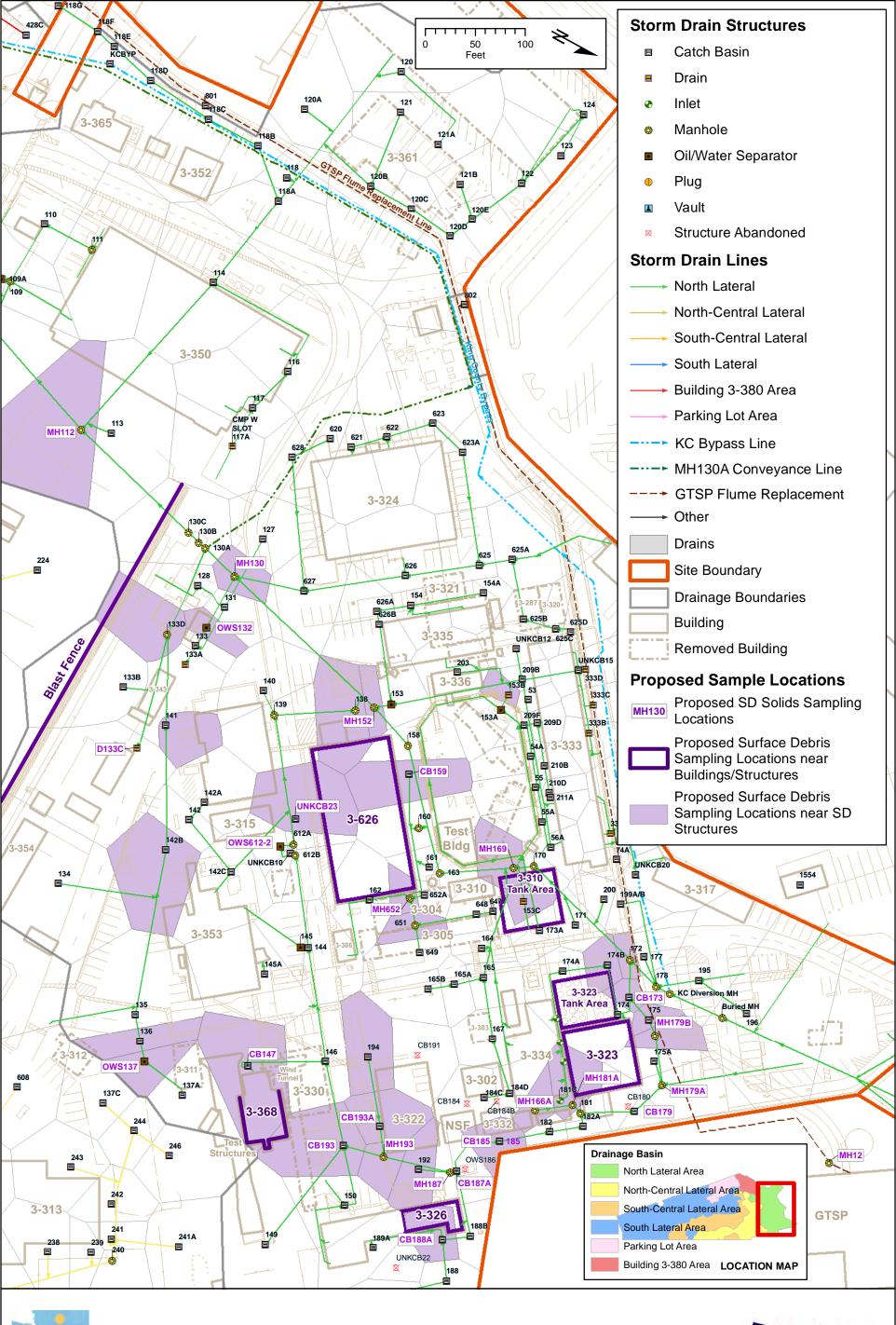




Figure 23. Proposed Storm Drain Solids and Surface Debris Sample Locations at GTSP and PEL Area



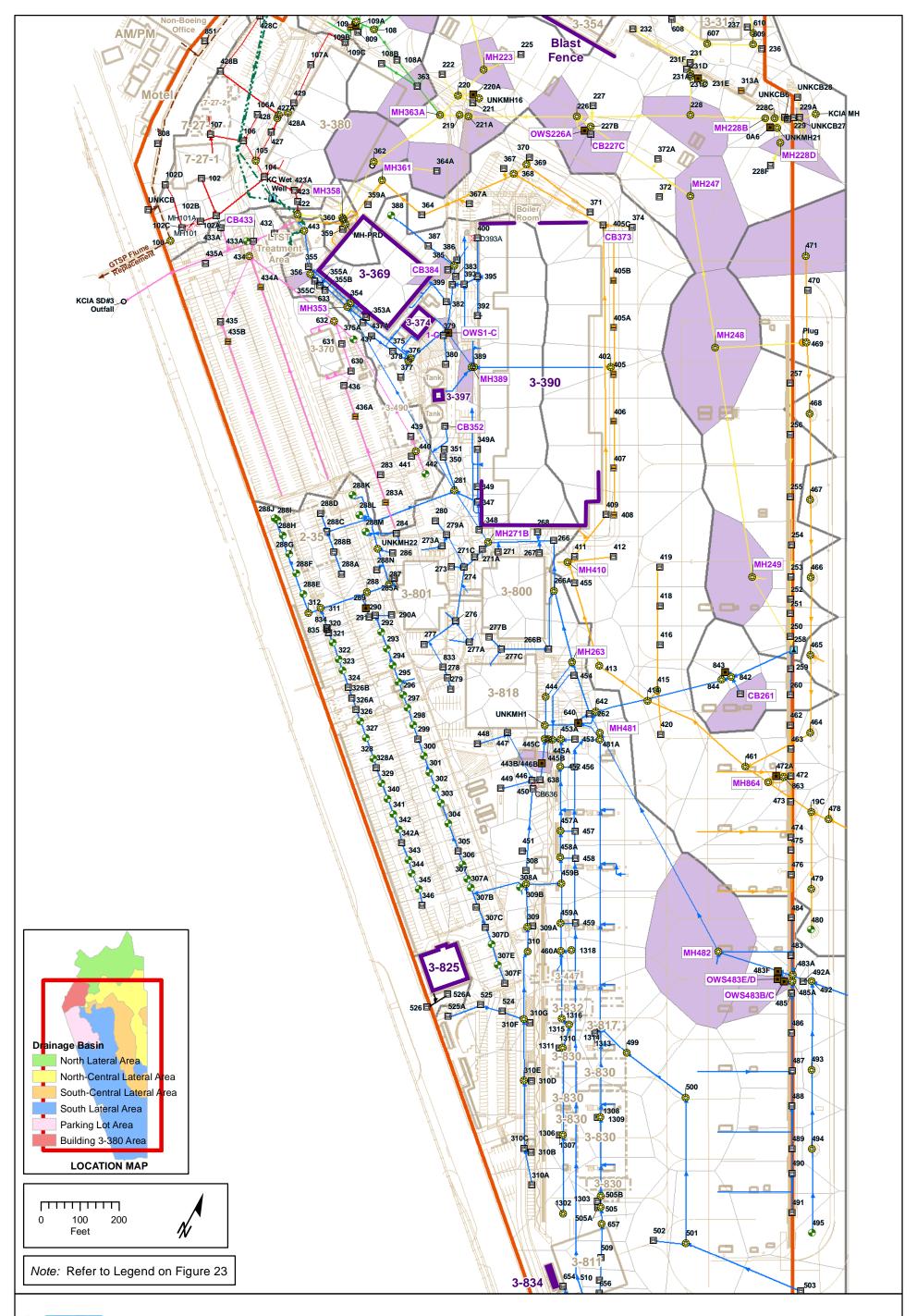




Figure 24. Proposed Storm Drain Solids and Surface Debris Sample Locations at Southern Portion of NBF-GTSP



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