

Appendix B

Photographs

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

Photo No: 1	
Photo Date: July 18, 2022	
Orientation: Northwest	
Description: Excavating increment location in DU-1.	

Photo No: 2	
Photo Date: July 18, 2022	
Orientation: East	
Description: Typical drilling 0-1 foot interval at increment in DU-1.	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

Photo No: 3	
Photo Date: July 18, 2022	
Orientation: Northwest	
Description: Typical drilling 1-2 foot interval at increment in DU-1.	
Photo No: 4	
Photo Date: July 18, 2022	
Orientation: Northwest	
Description: Typical drilling 1-2 foot interval at increment in DU-1.	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

Photo No: 5	
Photo Date: July 19, 2022	
Orientation: East	
Description: Marking increment sample locations in DU-5 using GPS.	

Photo No: 6	
Photo Date: July 28, 2022	
Orientation: East	
Description: Drilling 0-1 foot interval in DU-6.	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

Photo No: 7	
Photo Date: July 28, 2022	
Orientation: West	
Description: Sample process station set up on utility ATV.	

Photo No: 8	
Photo Date: August 1, 2022	
Orientation: North	
Description: Increment location in DU-2 prepared for sampling.	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

Photo No: 9	
Photo Date: August 5, 2022	
Orientation: North	
Description: Typical sampled 2-3 foot interval in DU-8.	

Photo No: 10	
Photo Date: August 10, 2022	
Orientation: NA	
Description: Weighing increment sample in DU-11 (typical).	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

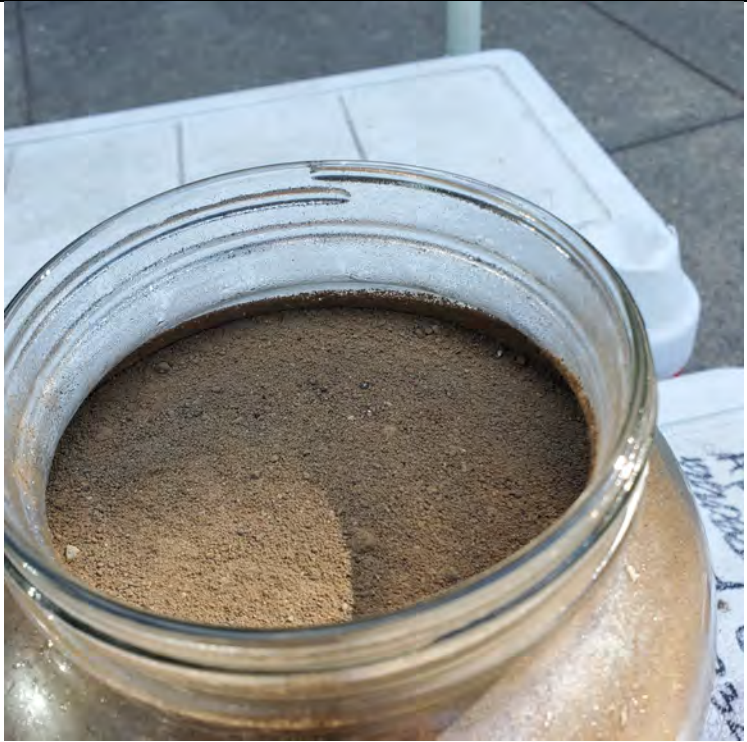
Photo No: 11	
Photo Date: August 10, 2022	
Orientation: NA	
Description: One-gallon sample jar with all increments included.	

Photo No: 12	
Photo Date: August 19, 2022	
Orientation: West	
Description: Increment location in DU-15 relocated to edge of gravel (recent fill) road	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

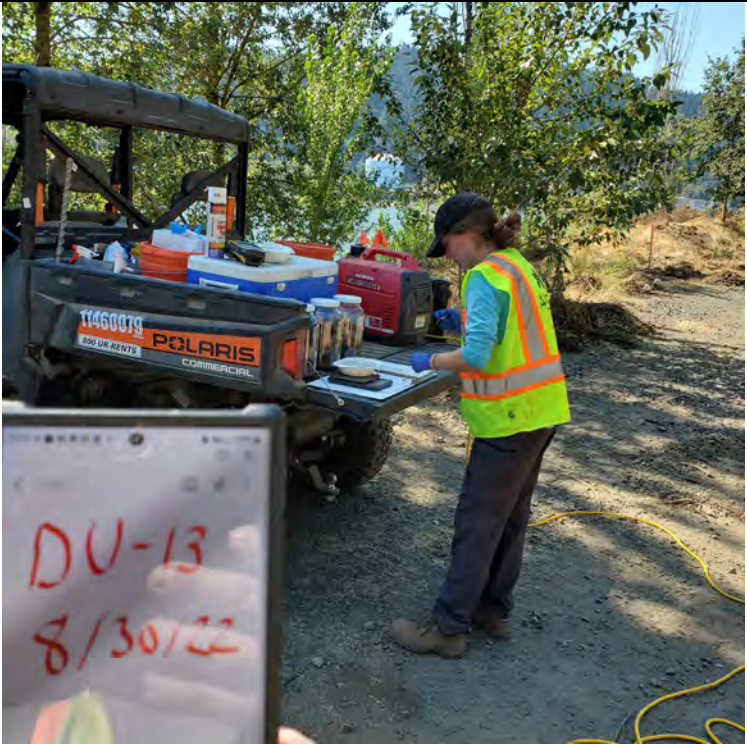
Photo No: 13	
Photo Date: August 29, 2022	
Orientation: NA	
Description: Sample processing area with scale, sample recording sheet and partially filled sample jars.	

Photo No: 14	
Photo Date: August 29, 2022	
Orientation: North	
Description: Concrete structure in DU-16.	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

Photo No: 15	
Photo Date: August 29, 2022	
Orientation: West	
Description: Concrete structure and a portion of concrete slab in DU-16. Concrete slab became DU-42.	

Photo No: 16	
Photo Date: August 30, 2022	
Orientation: Northwest	
Description: Typical sample processing in DU-13.	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

Photo No: 17	
Photo Date: September 2, 2022	
Orientation: Southwest	
Description: Typical sample increment collected in bucket in DU-19.	

Photo No: 18	
Photo Date: September 6, 2022	
Orientation: West	
Description: Small area burned in DU-37 (original configuration). Burned area was approximately 1,000 square feet.	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

Photo No: 19	
Photo Date: September 19, 2022	
Orientation: NA	
Description: Increment location in DU-33. Note concrete debris.	

Photo No: 20	
Photo Date: September 19, 2022	
Orientation: NA	
Description: Poison oak in DU-33.	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

Photo No: 21	
Photo Date: September 30, 2022	
Orientation: West	
Description: Burned area in DU-18. Approximately 10,000 square feet was burned on July 18, 2022.	

Photo No: 22	
Photo Date: September 30, 2022	
Orientation: North	
Description: Asphalt pavement in DU-20.	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

Photo No: 23	
Photo Date: October 26, 2022	
Orientation: East	
Description: Sample processing set up for wet weather. Location is in DU-41.	
Photo No: 24	
Photo Date: November 4, 2022	
Orientation: Southwest	
Description: Installation of straw wattles along top of riverbank prior to heavy precipitation.	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

Photo No: 25	
Photo Date: November 7, 2022	
Orientation: Southwest	
Description: Coring concrete slab in DU-42.	

Photo No: 26	
Photo Date: November 14, 2022	
Orientation: South	
Description: Increment location in DU-38. Note brick fragments. BNSF Railway track is in background.	

PHOTOGRAPH LOG

Project Name: Port of Portland Willamette Cove Remedial Design Investigation **Client:** Port of Portland
Project Number: 22007576 **Location:** Portland, OR

Photo No: 27	
Photo Date: November 29, 2022	
Orientation: East	
Description: Sampling composite location beneath concrete slab in DU-39.	

Appendix C

Weekly Reports and Field Audit Form



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #1

Date: Week of 7/11/22

TO: Dwight Leisle/Port of Portland
Katy Weil/ Metro

COPIES: Erin McDonnell/ DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather observed.

Apex Project Staffing

Steve Misner, Robert Schettler

Site Visitors

Organization and Name: None

Safety

Issues Encountered and Resolution: None

Activities Performed

- Participated in RDI field sampling kickoff meeting with DEQ, set up RDI sampling staging area, initiated layout of decision unit increment locations.

Samples Collected

Samples collected include: No samples collected

Upcoming Planned Activities

RDI sampling scheduled to begin on Monday 7/18/22

General Issues/Comments

None.

Photographs



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #2

Date: Week of 7/18/22

TO: Dwight Leisle/Port of Portland
Katy Weil/ Metro

COPIES: Erin McDonnell/ DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather observed.

Apex Project Staffing

Steve Misner, Robert Schettler

Site Visitors

Organization and Name: Jennifer Peterson (DEQ) and Katy Weil (Metro) 7/19/2022
Paul Slyman and Katy Weil (Metro) 7/22/2022

Safety

Issues Encountered and Resolution: None

Activities Performed

- Completed layout of DU-1 and DU-5 increments and began collection of ISM samples.
- Completed layout of DU-6 increments.

Samples Collected

- Collected ISM samples from all increment locations in DU-1
- Collected ISM samples from all of the 0-1 foot intervals and 9 of the 1-2 foot intervals in DU-5, including replicates.

Upcoming Planned Activities

Continue collection of ISM samples.

General Issues/Comments

Higher than normal temperatures are expected week of 7/25 and heat illness prevention is being implemented including an earlier start time, adjusting work/rest cycles, emphasis on hydration, access to shade, etc.

Photographs



DU-1 increment excavation



0-1 foot interval sampling in DU-1



1-2 foot interval sampling in DU-1



2-3 foot interval sampling in DU-1



ISM sample staging area in DU-1



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #3

Date: Week of 7/25/22

TO: Dwight Leisle/Port of Portland
Katy Weil/ Metro

COPIES: Erin McDonnell/ DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: An excessive heat warning was in effect during the week of 7/25/22. Heat illness prevention measures taken included adjusting work schedule with an earlier start time, modification to work/rest cycle, emphasis on hydration and monitoring each other for signs of heat illness.

Apex Project Staffing

Steve Misner, Robert Schettler

Site Visitors

Organization and Name: Tom Stubblefield, adjacent property owner visited site on Monday 7/25

Safety

Issues Encountered and Resolution: None other than heat illness prevention described above.

Activities Performed

- Completed layout of DU-5, DU-6, DU-7, and DU-2
- Completed sampling of DU-5, DU-6 and DU-7

Samples Collected

- Collected ISM samples from all increment locations in DU-5 (including replicates), DU-6 and DU-7

Upcoming Planned Activities

Continue collection of ISM samples in the West Parcel.

General Issues/Comments

Rate of ISM sample collection is increasing as efficiencies in sample collection methods are realized.

Photographs



DU-5 increment 23 2-3 foot interval



DU-5 increment 21 2-3 foot interval



DU-6 0-1 foot interval, typical



DU-6 vegetation clearing



Utility ATV sampling setup



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #4

Date: Week of 8/1/22

TO: Dwight Leisle/Port of Portland
Katy Weil/Metro

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions were observed.

Apex Project Staffing

Steve Misner, Robert Schettler

Site Visitors

Organization and Name: Dwight Leisle visited the site on Wednesday 8/3/2022
Erin McDonnell and Jennifer Peterson of DEQ visited the site on Thursday 8/4/2022

Safety

Issues Encountered and Resolution: None.

Activities Performed

- Completed sampling DU-2, DU-3, DU-4 and DU-8
- Initiated sampling of DU-9
- Completed layout of DU-9
- Conducted a field audit on Wednesday 8/3/2022

Samples Collected

See Activities performed

Upcoming Planned Activities

Complete collection of ISM samples in the West Parcel and move into the Central Parcel.

General Issues/Comments

Field Change Request (FCR) numbers 1 and 2 are being prepared under separate emails. FCR No.1 addresses

relocating increment locations that fall on gravel roadways where recent fill material has been deposited. FCR No. 2 requests a change from Level 4 to Level 2A laboratory data package.

Changes in sample locations:

- Increment 04-20 was relocated 4 ft WNW of original due to fiber optics and large concrete barriers. New coordinates recorded and location renamed 4-20r on GPS.
- Increment 04-25 was relocated for the same reasons as above 16 ft W of original. New coordinates recorded and location renamed 4-25r on GPS.

Photographs



Typical daily safety meeting



DU-3 typical 2-3 foot interval



DU-2 1-2 foot interval, typical



DU-8 1-2 foot interval, typical



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #5

Date: Week of 8/8/22

TO: Dwight Leisle/Port of Portland
Katy Weil/Metro

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions were observed.

Apex Project Staffing

Steve Misner, Robert Schettler

Site Visitors

Organization and Name: No visitors this week.

Safety

Issues Encountered and Resolution: None.

Activities Performed

- Completed sampling DU-9 (completing West Parcel sampling), DU-11 (including replicates) and DU-10

Samples Collected

See Activities performed

Upcoming Planned Activities

- Complete collection of ISM samples in DU-12, DU-14 and DU-15
- A site visit by the Port and DEQ is planned for Wednesday August 17th

General Issues/Comments

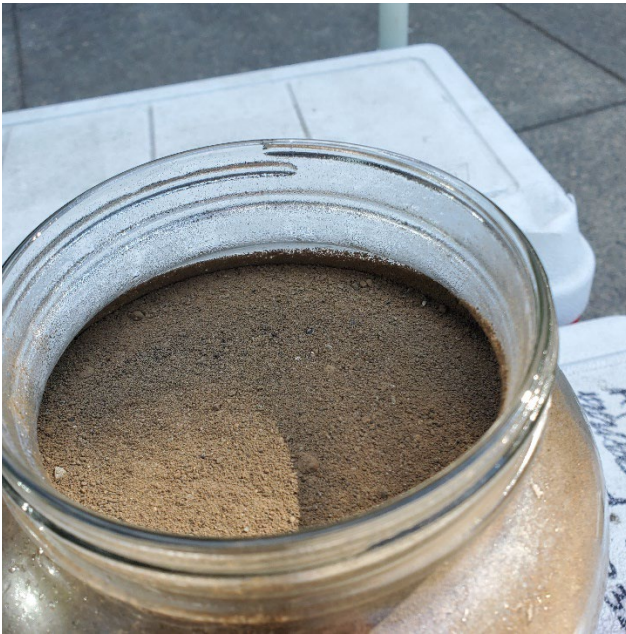
- DEQ approved Field Change Requests (FCR) #1 and #2 by email dated 8/10/2022 with additional input by DEQ possible
- DEQ is planning a site visit for EPA and possibly other DEQ folks: date and time TBD.
- The Port provided the confidential and proprietary laboratory SOP for Representative Sampling Methodology to DEQ on 8/10/22

- The lab has asked that we pause on sample submittal for a few days to allow them to catch up on sample processing. Apex will continue sampling through the week of August 15th (DU-12, DU-14 and DU-15, none of these have replicates) and will not collect any samples the week of August 22nd which should allow the lab to get caught up.

Photographs



Sampling DU-11 2-3 foot interval – typical increment



Filled sample jar – typical level for all samples



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #6

Date: Week of 8/15/22

TO: Dwight Leisle/Port of Portland
Katy Weil/Metro

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions were observed.

Apex Project Staffing

Steve Misner, Robert Schettler

Site Visitors

Organization and Name: Erin McDonnell and Jennifer Peterson (DEQ, Paul Slyman (Metro) and Dwight Leisle (Port) visited the site on Wednesday August 17, 2022.

Safety

Issues Encountered and Resolution: Significantly more poison oak (both growing and previously cut) is observed in the Central Parcel than the West Parcel and the team is proceeding with caution to avoid contact poison oak as both living and dead plants can cause rashes.

Activities Performed

- Completed sampling DU-12, DU-14 and DU-15. None of these DUs have replicate samples.
- Initiated collection of DU-13 samples. Replicates samples will be collected in DU-13.

Samples Collected

See Activities performed

Upcoming Planned Activities

- No samples will be collected during the week of August 22 to allow the laboratory to process submitted samples.
- Sampling will resume on Monday August 29, 2022 in DU-13

General Issues/Comments

- DEQ provided the RDI Work Plan approval letter to the Port on Tuesday August 16, 2022
- DEQ is planning a site visit for EPA and possibly other DEQ folks: date and time TBD.

Photographs



Sampling DU-12 0-1 foot interval – typical increment



Excavating increment for DU-14



Sampling in DU-15 2-3 foot interval - typical



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #7

Date: Week of 8/22/22

TO: Dwight Leisle/Port of Portland
Katy Weil/Metro

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: N/A

Apex Project Staffing

N/A

Site Visitors

Organization and Name: N/A

Safety

Issues Encountered and Resolution: N/A

Activities Performed

No sampling was conducted during the week of August 22, 2022.

Samples Collected

None

Upcoming Planned Activities

Sampling will resume on Monday August 29, 2022 in DU-13

General Issues/Comments

DEQ is planning a site visit for EPA and possibly other DEQ folks: date and time TBD.



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #8

Date: Week of 8/29/22

TO: Dwight Leisle/Port of Portland
Katy Weil/Metro

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions observed.

Apex Project Staffing

Steve Misner, Robert Schettler

Site Visitors

Organization and Name: Dwight Leisle (Port) visited site on Wednesday August 31, 2022

Safety

Issues Encountered and Resolution: The mini-excavator operator (Apex Subcontractor Wes Noel of AEC, LLC) injured his ankle while exiting the machine. Initial treatment included applying ice to ankle. The injury was not serious and Wes was able to continue working and no lost time resulted.

Activities Performed

- Completed sampling DU-13 (including replicates), DU-17 and the 0-1 foot interval of DU-19
- Initiated staking out of DU-18

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Collection of ISM samples in DU-19, DU-21, and DU-20
- A site visit by the Port and DEQ is anticipated for the week of September 12, 2022.

General Issues/Comments

DEQ is planning a site visit for EPA: date and time TBD.



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #9

Date: Week of 9/5/22

TO: Dwight Leisle/Port of Portland
Katy Weil/Metro

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: A Red Flag Warning was in effect from Friday, September 9 through Saturday, September 10. Motorized equipment was not utilized, and sampling was not conducted during this time due to increased fire risk.

Apex Project Staffing

Steve Misner, Robert Schettler

Site Visitors

Organization and Name: No visitors this week.

Safety

Issues Encountered and Resolution: While staking sample locations in DU-24, the crew was swarmed by yellow jackets and two crew members were stung. Self-applied first aid was administered, and no additional adverse symptoms were noted after a period of monitoring. Vector Control will address with yellow jacket issue on Monday, September 12.

Activities Performed

- Completed sampling in DU-19 and DU-21.
- Staking completed in DU-16.
- Delineated paved areas in DU-20, DU-22, and DU-23.
- Performed reconnaissance of remaining DUs to determine areas where sampling may be inhibited by hard surfaces or poison oak.

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Collection of ISM samples in DU-16 (includes field replicates).

General Issues/Comments

The Port had a call with the DEQ on 9/7/22. The following items were discussed.

- How to collect the 0-1 foot interval in areas that have burned recently. DEQ agreed with our approach to sweep the ash from the ground surface at the 0-1 sample location prior to sample collection to reduce inclusion of ash material in the sample.
- Collection of samples in the area where pavement is present (spanning the edges of DU-22 and DU-23). We will hold off on collecting sample in these two DUs until DEQ and the Port have resolution on the paved area. The options discussed were: separate out the paved area from the DUs and sample as a separate DU (one 5 point composite for each depth interval); or sample the soil beneath the pavement in the one increment that is in the center of the paved area and move the other increments that are near the edge of the pavement off the pavement. We will also hold off on sampling DU-20 where additional pavement is present.

DEQ is planning a site visit for EPA: date and time TBD.



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #10

Date: Week of 9/12/22

TO: Dwight Leisle/Port of Portland
Katy Weil/Metro

COPIES: Erin McDonnell/DEQ

FROM: Kelsi Evans/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions observed.

Apex Project Staffing

Kelsi Evans, Robert Schettler

Site Visitors

Organization and Name: No visitors this week.

Safety

Issues Encountered and Resolution: None.

Activities Performed

- Completed sampling in DU-16 for the 0-1 foot interval (including field replicates).
- Completed sampling in DU-28 and DU-29 for all intervals.
- Staked perimeter of DU-30.
- Delineated hard surfaces in DU-16 and DU-27.

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Collection of ISM samples in DU-30, DU-32, and DU-33.

General Issues/Comments

Sampling could not be completed below 1 foot in DU-16 due to buried concrete. Additional concrete and gravel surfaces were encountered in DU-27. Maps of these areas are forthcoming.

Vector control sprayed one yellow jackets nest in DU-24/25 on Thursday 9/15. The SDS was received, reviewed, and sent to the laboratory. Semi-volatile organics in the spray may interfere with PAH analysis and we are currently working to assess whether the sprayed area is subject to sampling.



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #11

Date: Week of 9/19/22

**TO: Dwight Leisle/Port of Portland
Katy Weil/Metro**

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions observed.

Apex Project Staffing

Kelsi Evans, Robert Schettler

Site Visitors

Organization and Name: No visitors this week.

Safety

Issues Encountered and Resolution: Yellow jackets were encountered in a couple of places and were sprayed. None of the sprayed areas are near increment sample locations.

Activities Performed

- Completed sampling in DU-24, DU-25, DU-32 and DU-33
- Evaluated areas where concrete/pavement have been observed for potential impact on sampling locations.

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Continue collection of ISM samples in decision units that do not have areas of concrete or pavement.

General Issues/Comments

- The Port and DEQ discussed reconfiguration of several DUs based on observed presence of concrete/pavement.
 - Reconfigured DU-16 to exclude the concrete area and sample as a separate DU using a five-

- point composite approach similar to DU-39 and DU-40.
 - Reconfigured DU-20, DU-22 and DU-23 where significant paved area is observed. The paved area will be separated out and sampled as a separate DU and DU-22 and DU-23 will be expanded to cover the area in DU-20 that does not include paved surface.
 - Concrete present in a linear feature in DU 27. Increments that are located on the feature were moved slightly to the northwest.
 - The Port will be providing updated maps of these decision units.
- The Port and DEQ will meet on site on Wednesday September 28. The primary purpose of this site meeting is to observe and discuss the concrete and paved surfaces.



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #12

Date: Week of 9/26/22

TO: Dwight Leisle/Port of Portland
Katy Weil/Metro

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions observed.

Apex Project Staffing

Steve Misner, Robert Schettler

Site Visitors

Organization and Name: Dwight Leisle (Port), Jennifer Peterson (DEQ) and Paul Slyman (Metro) visited the site on Wednesday September 28, 2022 to observe pavement and concrete present in some of the DUs.

Safety

Issues Encountered and Resolution: None.

Activities Performed

- Completed sampling in DU-24, DU-25, DU-32 and DU-33
- Evaluated areas where concrete/pavement have been observed for potential impact on sampling locations.

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Continue collection of ISM samples
- Submit reconfigured DU maps for DU-20, 22, and 23 based on DEQ comments and submit a reconfigured map for DU-16 for DEQ approval.
- Evaluate extent of concrete or pavement in other DUs and reconfigure if necessary.

General Issues/Comments

- The Port and DEQ met on site on Wednesday September 28. The primary purpose of this site meeting was to observe and discuss the concrete and paved surfaces. Suggested revisions to the reconfigured DU-20, 22 and 23 were provided by DEQ.

Sampling Progress as of September 30, 2022

DUs Completed	DUs Remaining
West Parcel: DU-1 through DU-9	None
Central Parcel: DU-10 through DU-15, DU-17, DU-18, DU-19, DU-21, DU-24, DU-25	DU-16, DU-20, DU-22, DU-23, DU-26
East Parcel: DU-28 through DU-30, DU-32, DU-33, DU-34	DU-27, DU-31, DU-35 through DU-41

Photographs



Paved area in DU-22 extending into DU-20, view is to northeast.



Edge of pavement in DU-23. Pavement is approximately 2-3 inches thick and easily removed using the excavator.



Concrete in DU-16. Slab in foreground appears to be continuous to the north beneath the rubble in background, view is to north.



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #13

Date: Week of 10/3/22

TO: Dwight Leisle/Port of Portland
Katy Weil/Metro

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions observed.

Apex Project Staffing

Steve Misner, Robert Schettler

Site Visitors

Organization and Name: No visitors this week.

Safety

Issues Encountered and Resolution: None.

Activities Performed

- Completed sampling in DU-18 (including replicates), DU-27 and DU-35
- Evaluated areas where concrete/pavement have been observed for potential impact on sampling locations and updated field maps
- Submitted reconfigured maps for DU-20, DU-22 and DU-23 to DEQ and DEQ approved them

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Continue collection of ISM samples
- Submit proposed reconfigured maps for DU-16, DU-26, DU-31, DU-36, DU-37 and DU-38, where concrete or other obstructions are observed, for DEQ approval

General Issues/Comments

- None

Sampling Progress as of October 7, 2022

DUs Completed	DUs Remaining
West Parcel: DU-1 through DU-9	None
Central Parcel: DU-10 through DU-15, DU-17, DU-18, DU-19, DU-21, DU-24, DU-25	DU-16, DU-20, DU-22, DU-23, DU-26
East Parcel: DU-27 through DU-30, DU-32, DU-33, DU-34, DU-35	DU-31, DU-36 through DU-41



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #14

Date: Week of
10/10/22

TO: Dwight Leisle/Port of Portland
Katy Weil/Metro

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions observed.

Apex Project Staffing

Steve Misner, Robert Schettler, Alex Evernden

Site Visitors

Organization and Name: No visitors this week.

Safety

Issues Encountered and Resolution: None.

Activities Performed

- Completed sampling in DU-23 and DU-22, including replicates
- Submitted maps for DU-16, DU-31, DU-36, DU-37 and DU-38 to DEQ with a proposed approach for sampling these DUs that have significant concrete or other obstructions

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Continue collection of ISM samples
- Discuss and resolve the approach with DEQ for sampling DU-16, DU-26, DU-31, DU-36, DU-37 and DU-38
- Initiate concrete coring for sampling beneath concrete slabs

General Issues/Comments

- None

Sampling Progress as of October 14, 2022

DUs Completed	DUs Remaining
West Parcel: DU-1 through DU-9	None
Central Parcel: DU-10 through DU-15, DU-17, DU-18, DU-19, DU-21, DU-22, DU-23, DU-24, DU-25	DU-16, DU-20, DU-26
East Parcel: DU-27 through DU-30, DU-32, DU-33, DU-34, DU-35	DU-31, DU-36 through DU-41



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #15

Date: Week of
10/17/22

TO: Dwight Leisle/Port of Portland
Katy Weil/Metro

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions observed.

Apex Project Staffing

Steve Misner, Robert Schettler, Alex Evernden

Site Visitors

Organization and Name: No visitors this week.

Safety

Issues Encountered and Resolution: Sampling was suspended for health and safety reasons on Wednesday and Thursday 10/19 and 10/20 due to unhealthy air quality.

Activities Performed

- Completed sampling in DU-20
- Initiated sampling in DU-41, including replicates
- Discussed and resolved the approach with DEQ for sampling DU-16, DU-26, DU-31, DU-36, DU-37 and DU-38

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Continue collection of ISM samples
- Submit reconfigured DU maps for DEQ approval
- Initiate concrete coring for sampling beneath concrete slabs
- Submit a Field Change Request to document the reconfigured DUs

General Issues/Comments

- None

Sampling Progress as of October 21, 2022

DUs Completed	DUs Remaining
West Parcel: DU-1 through DU-9	None
Central Parcel: DU-10 through DU-15, DU-17, DU-18, DU-19, DU-20, DU-21, DU-22, DU-23, DU-24, DU-25	DU-16, DU-26, new DU-42 (concrete within DU-16 area)
East Parcel: DU-27 through DU-30, DU-32, DU-33, DU-34, DU-35	DU-31, new DU-43 (concrete within DU-31 area), DU-36, new DU-44 (concrete within DU-36 area), DU-37 through DU-41



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #16

**Date: Week of
10/24/22**

**TO: Dwight Leisle/Port of Portland
Katy Weil/Metro**

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions observed.

Apex Project Staffing

Steve Misner, Robert Schettler, Alex Evernden, Franklin Sullivan

Site Visitors

Organization and Name: No visitors this week.

Safety

Issues Encountered and Resolution: None

Activities Performed

- Completed sampling in DU-41, including replicates
- Staked the increment locations of DU-36
- Cored the concrete at all increment locations in DU-39 and DU-40
- Marked out the remaining concrete core locations in DU-42, DU-43 and DU-44

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Continue collection of ISM samples
- Complete concrete coring for sampling beneath concrete slabs
- Submit a Field Change Request to document the reconfigured DUs

General Issues/Comments

- None

Sampling Progress as of October 28, 2022

DUs Completed	DUs Remaining
West Parcel: DU-1 through DU-9	None
Central Parcel: DU-10 through DU-15, DU-17, DU-18, DU-19, DU-20, DU-21, DU-22, DU-23, DU-24, DU-25	DU-16, DU-26, new DU-42 (concrete within DU-16 area)
East Parcel: DU-27 through DU-30, DU-32, DU-33, DU-34, DU-35, DU-41	DU-31, new DU-43 (concrete within DU-31 area), DU-36, new DU-44 (concrete within DU-36 area), DU-37 through DU-40



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #17

**Date: Week of
10/31/22**

**TO: Dwight Leisle/Port of Portland
Katy Weil/Metro**

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: Sampling was suspended on Friday November 4 due to heavy rain and high winds.

Apex Project Staffing

Steve Misner, Robert Schettler, Alex Evernden

Site Visitors

Organization and Name: Dwight Leisle and Katy Weil conducted a site visit on Thursday November 3, primarily to discuss a plan for post-sampling erosion control measures.

Safety

Issues Encountered and Resolution: See Weather above.

Activities Performed

- Completed sampling in DU-36 and DU-31
- Staked the increment locations of DU-16
- Cored the concrete at all remaining increment locations (DU-37, DU-42, DU-43 and DU-44)
- Installed erosion control (approximately 420 linear feet of straw wattles) in areas along the top of bank where soil has been disturbed from sampling activities in anticipation of heavy rain (see photographs).

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Continue collection of ISM samples
- Collect composite samples under concrete slabs
- Submit a Field Change Request to document the reconfigured DUs

General Issues/Comments

- None

Sampling Progress as of November 4, 2022

DUs Completed	DUs Remaining
West Parcel: DU-1 through DU-9	None
Central Parcel: DU-10 through DU-15, DU-17, DU-18, DU-19, DU-20, DU-21, DU-22, DU-23, DU-24, DU-25	DU-16, DU-26, new DU-42 (concrete within DU-16 area)
East Parcel: DU-27 through DU-30, DU-31, DU-32, DU-33, DU-34, DU-35, DU-36, DU-41	New DU-43 (concrete within DU-31 area), new DU-44 (concrete within DU-36 area), DU-37 through DU-40

Photograph



Installation of straw wattles near top of bank



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #18

Date: Week of 11/7/22

TO: Dwight Leisle/Port of Portland
Katy Weil/Metro

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions observed.

Apex Project Staffing

Steve Misner, Robert Schettler, Alex Evernden

Site Visitors

Organization and Name: No site visitors this week.

Safety

Issues Encountered and Resolution: On November 9, a Metro security person notified the sampling team that a verbally aggressive houseless camper was encountered and subsequently evicted. The sampling team avoided the area where this person was and reminded by the field lead to be vigilant in observing surroundings.

Activities Performed

- Completed sampling of DU-16 and DU-26, including replicates
- Staked out increment locations in DU-38, the final ISM DU.

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Continue and complete collection of ISM samples (anticipated completion date of Thursday, November 17, 2022)
- Collect composite samples under concrete slabs (anticipated start date of Friday November 18, 2022)
- Submit a Field Change Request to document the reconfigured DUs

General Issues/Comments

- None

Sampling Progress as of November 11, 2022

DUs Completed	DUs Remaining
West Parcel: DU-1 through DU-9	None
Central Parcel: DU-10 through DU-15, DU-16, DU-17, DU-18, DU-19, DU-20, DU-21, DU-22, DU-23, DU-24, DU-25, DU-26	New DU-42 (concrete within DU-16 area)
East Parcel: DU-27 through DU-30, DU-31, DU-32, DU-33, DU-34, DU-35, DU-36, DU-41	New DU-43 (concrete within DU-31 area), new DU-44 (concrete within DU-36 area), revised DU-37 (concrete in original DU-37 area), DU-38, DU-39 (concrete), DU-40 (concrete)



Willamette Cove Upland Facility – Weekly Field Report

Remedial Design Investigation

Port of Portland

Report: #19

**Date: Week of
11/14/22**

**TO: Dwight Leisle/Port of Portland
Katy Weil/Metro**

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions observed.

Apex Project Staffing

Steve Misner, Robert Schettler, Alex Evernden

Site Visitors

Organization and Name: No site visitors this week.

Safety

Issues Encountered and Resolution: None

Activities Performed

- Completed sampling of the final ISM DU (DU-38), including replicates
- Completed sampling of composite DU-40 (southern portion of large concrete slab)
- Completed backfilling of all DU excavations
- Installed additional straw wattles in areas with potential for soil erosion
- Demobilized the excavator and other equipment no longer needed

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Continue collecting composite samples under concrete slabs
- Anticipate completion of sampling on Tuesday November 29, 2022
- Submit a Field Change Request to document the reconfigured DUs

General Issues/Comments

- None

Sampling Progress as of November 18, 2022

DUs Completed	DUs Remaining
West Parcel: DU-1 through DU-9	None
Central Parcel: DU-10 through DU-15, DU-16, DU-17, DU-18, DU-19, DU-20, DU-21, DU-22, DU-23, DU-24, DU-25, DU-26	New DU-42 (concrete within DU-16 area)
East Parcel: DU-27 through DU-30, DU-31, DU-32, DU-33, DU-34, DU-35, DU-36, DU-38, DU-40, DU-41	New DU-43 (concrete within DU-31 area), new DU-44 (concrete within DU-36 area), revised DU-37 (concrete in original DU-37 area), DU-39 (concrete)



Willamette Cove Upland Facility – Weekly Field Report Remedial Design Investigation Port of Portland

Report: #20

**Date: Week of
11/21/22**

**TO: Dwight Leisle/Port of Portland
Katy Weil/Metro**

COPIES: Erin McDonnell/DEQ

FROM: Steve Misner/Apex

This weekly field report provides a summary of completed field activities, collected samples, safety issues and other significant issues for the Willamette Cove Upland Facility Remedial Design Investigation.

Weather

Conditions: No adverse weather conditions observed.

Apex Project Staffing

Steve Misner, Robert Schettler, Alex Evernden

Site Visitors

Organization and Name: No site visitors this week.

Safety

Issues Encountered and Resolution: None

Activities Performed

- Completed sampling of composite DU-43
- Initiated sampling of composite DU-37 (sampling conducted on 11/21 only due to short holiday week)

Samples Collected

See Activities Performed.

Upcoming Planned Activities

- Continue collecting composite samples under concrete slabs
- Anticipate completion of sampling on Wednesday November 30, 2022
- Submit a Field Change Request to document the reconfigured DUs

General Issues/Comments

- None

Sampling Progress as of November 21, 2022

DUs Completed	DUs Remaining
West Parcel: DU-1 through DU-9	None
Central Parcel: DU-10 through DU-15, DU-16, DU-17, DU-18, DU-19, DU-20, DU-21, DU-22, DU-23, DU-24, DU-25, DU-26	New DU-42 (concrete within DU-16 area)
East Parcel: DU-27 through DU-30, DU-31, DU-32, DU-33, DU-34, DU-35, DU-36, DU-38, DU-40, DU-41, DU-43	New DU-44 (concrete within DU-36 area), revised DU-37 (concrete in original DU-37 area), DU-39 (concrete)



3015 SW First Avenue
Portland, Oregon 97201-4707
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Field Audit Checklist

Project Number: 7576-00
Project Name: WC RDE Implementation
Project Location: Port of Portland W. Mainette
Client: Port of Portland
Project Manager: Steve Mizer
Field Audit Number: 1
Page 1 of 2
Date: 8/3/22

Field Auditor Name: Steve Mizer

Item to be Evaluated	Yes	No	N/A	Comments
Part 1: Record Keeping				
Are there SOPs for field activities and are they accessible to everyone on the sampling team?	X			
Are COC forms filled out completely and legibly using black, waterproof ink?	X			
Are all errors in documentation corrected and initiated without obliteration?	X			
Part 2: Safety				
Is the Health and Safety Plan on site?	X			
Are tailgate safety meetings being conducted at the beginning of each work day and when site conditions change?	X			
Is there documentation that everyone on the sampling team has read and understands the HASP?	X			
Does the HASP include emergency contact information and the route to hospital?	X			
Are proper lifting techniques being used?	X			
Is the correct PPE being worn?	X			
Are gloves being worn when collecting and/or handling samples?	X			
Are new gloves being used for each sample collected?	X			
Are proper procedures being followed when operating equipment with moving or rotating parts?	X			
Are the proper tools being used for sampling?	X			
Are proper procedures being followed when working in confined spaces?	X		X	
Are all injuries or accidents being reported immediately to the appropriate supervisor?			X	No injuries or accidents to date (8/3/2022)
Are all traffic laws and posted signs being obeyed?	X			



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Field Audit Checklist Continued

Project Number:

7576-00

Project Name:

WC RPI Implementation

Page

2

of

2

Date:

8/31/2022

Item to be Evaluated	Yes	No	N/A	Comments
Part 3: Sampling Equipment				
Is the correct sampling equipment being used for the project?	X			
Is the sampling equipment inspected before use and repaired/replaced when needed?	X			
Is the sampling equipment properly cleaned before each use following decontamination procedures in the SAP?	X			
Is the sampling equipment properly stored when not in use?	X			
Is an equipment blank being performed?	X			will be collected for each sampling method
Part 4: Sampling				
Are sample containers the correct material, correct size, in good condition and contain the correct preservation?	X			
Are samples collected for all required analyses?	X			
Are samples being collected using the appropriate sampling method?	X			
Is care taken to avoid sample contamination?	X			
Part 5: Sample Handling				
Are samples uniquely identified to ensure no confusion regarding identity of such samples at any time?	X			
Are samples placed on ice immediately after collection?	X			
Are samples recorded on the chain-of-custody form immediately following collection?	X			
Are samples stored and transported on ice?	X			
Are samples protected from breakage and cross-contamination during transport?	X			
Are samples shipped in a timely manner?	X			
Additional Notes: Sampling methods have become more efficient since sampling began while maintaining sample integrity.				

Appendix D

As Sampled Increment Locations

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-1	1	706904.2	7624994
	2	706871.3	7624976
	3	706878.1	7625002
	4	706838.3	7624957
	5	706845.2	7624984
	6	706852	7625010
	7	706858.9	7625036
	8	706812.3	7624965
	9	706819.1	7624992
	10	706826	7625018
	11	706832.8	7625044
	12	706839.7	7625071
	13	706779.3	7624947
	14	706786.2	7624973
	15	706793.1	7624999
	16	706799.9	7625026
	17	706806.8	7625052
	18	706813.6	7625078
	19	706746.4	7624928
	20	706753.3	7624955
	21	706760.1	7624981
	22	706767	7625007
	23	706773.9	7625034
	24	706780.7	7625060
	25	706727.2	7624962
	26	706734.1	7624989
	27	706740.9	7625015
	28	706747.8	7625041
	29	706708	7624997
	30	706714.9	7625023
	1	706799.3	7625096
	2	706765.8	7625078
	3	706773.6	7625104
	4r	706768.5	7625133
	5	706732.4	7625060
	6	706740.1	7625086
	7	706747.9	7625111
	8	706755.6	7625137
	9	706698.9	7625042
	10	706706.7	7625068

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-2	11	706714.4	7625093
	12	706722.1	7625119
	13	706729.9	7625145
	14r	706726.5	7625165
	15	706673.2	7625050
	16	706680.9	7625075
	17	706688.7	7625101
	18	706696.4	7625127
	19	706704.1	7625153
	20	706711.9	7625178
	21r	706705.6	7625190
	22	706655.2	7625083
	23	706662.9	7625109
	24	706670.7	7625135
	25	706678.4	7625160
	26	706686.2	7625186
	27	706637.2	7625117
	28	706645	7625142
	29	706652.7	7625168
	30	706619.2	7625150
DU-3	1	706681.5	7625204
	2	706689.7	7625227
	3	706649.6	7625188
	4	706657.9	7625212
	5	706666.1	7625235
	6	706617.8	7625173
	7	706626	7625196
	8	706634.3	7625220
	9	706642.5	7625244
	10	706650.7	7625267
	11	706594.2	7625181
	12	706602.4	7625205
	13	706610.6	7625228
	14	706618.9	7625252
	15	706627.1	7625276
	16	706578.8	7625213
	17	706587	7625237
	18	706595.3	7625260
	19	706603.5	7625284
	20	706611.7	7625307

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
	21	706563.4	7625245
	22	706571.7	7625268
	23	706579.9	7625292
	24	706588.1	7625316
	25	706539.8	7625253
	26	706548.1	7625277
	27	706556.3	7625300
	28	706564.5	7625324
	29	706524.4	7625285
	30	706532.7	7625308
DU-4	1r	706570.7	7625344
	2	706557.3	7625346
	3r	706559.3	7625363
	4	706531.5	7625323
	5	706532.8	7625348
	6	706534	7625372
	7r	706528.6	7625392
	8	706505.7	7625300
	9	706507	7625324
	10	706508.2	7625349
	11	706509.4	7625373
	12	706510.7	7625398
	13r	706510.2	7625418
	14	706482.4	7625325
	15	706483.6	7625350
	16	706484.9	7625375
	17	706486.1	7625399
	18	706487.3	7625424
	19r	706484.8	7625441
	20r	706461.1	7625347
	21	706460.3	7625376
	22	706461.5	7625400
	23	706462.8	7625425
	24	706464	7625450
	25r	706471.2	7625459
	26	706437	7625402
	27	706438.2	7625426
	28	706439.4	7625451
	29	706413.6	7625427
	30	706414.9	7625452

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-5	1	706736.2	7624920
	2	706701	7624903
	3	706709.9	7624929
	4	706718.8	7624956
	5	706665.7	7624886
	6	706674.6	7624912
	7	706683.6	7624938
	8	706692.5	7624964
	9	706701.4	7624991
	10	706630.4	7624868
	11	706639.4	7624894
	12	706648.3	7624921
	13	706657.2	7624947
	14	706666.2	7624973
	15	706675.1	7625000
	16	706595.2	7624851
	17	706604.1	7624877
	18	706613	7624903
	19	706622	7624930
	20	706630.9	7624956
	21	706639.8	7624982
	22	706568.9	7624860
	23	706577.8	7624886
	24	706586.7	7624912
	25	706595.7	7624939
	26	706604.6	7624965
	27	706551.5	7624895
	28	706560.4	7624921
	29	706569.3	7624948
	30	706534.1	7624930
	1	706673.7	7625024
	2	706638.1	7625008
	3	706647.7	7625034
	4	706657.2	7625060
	5	706602.5	7624991
	6	706612.1	7625017
	7	706621.7	7625043
	8	706631.2	7625069
	9	706640.8	7625095
	10	706567	7624975

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-6	11	706576.5	7625001
	12	706586.1	7625027
	13	706595.7	7625053
	14	706605.2	7625079
	15	706614.8	7625105
	16	706624.4	7625131
	17	706531.4	7624959
	18	706541	7624985
	19	706550.5	7625011
	20	706560.1	7625037
	21	706569.7	7625063
	22	706579.2	7625089
	23	706515	7624994
	24	706524.5	7625020
	25	706534.1	7625046
	26	706543.7	7625072
	27	706489	7625004
	28	706498.5	7625030
	29	706508.1	7625056
	30	706472.6	7625039
DU-7	1	706606.1	7625131
	2	706571.5	7625116
	3	706581.3	7625141
	4	706591.1	7625166
	5	706536.9	7625101
	6	706546.7	7625126
	7	706556.4	7625151
	8	706566.2	7625176
	9	706502.3	7625086
	10	706512	7625111
	11	706521.8	7625136
	12	706531.6	7625161
	13	706541.4	7625186
	14	706551.1	7625210
	15	706467.7	7625071
	16	706477.4	7625096
	17	706487.2	7625121
	18	706497	7625146
	19	706506.7	7625171
	20	706516.5	7625195

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
	21	706526.3	7625220
	22	706452.6	7625106
	23	706462.4	7625131
	24	706472.1	7625155
	25	706481.9	7625180
	26	706491.7	7625205
	27	706437.5	7625140
	28	706447.3	7625165
	29	706457	7625190
	30	706412.7	7625150
DU-8	1	706537.4	7625234
	2	706504.7	7625220
	3	706513.6	7625243
	4	706472	7625205
	5	706480.9	7625228
	6	706489.8	7625252
	7	706498.7	7625276
	8	706439.4	7625190
	9	706448.2	7625214
	10	706457.1	7625237
	11	706466	7625261
	12	706474.9	7625285
	13	706483.8	7625309
	14	706406.7	7625175
	15	706415.6	7625199
	16	706424.4	7625222
	17	706433.3	7625246
	18	706442.2	7625270
	19	706451.1	7625294
	20	706460	7625318
	21	706391.8	7625207
	22	706400.6	7625231
	23	706409.5	7625255
	24	706418.4	7625279
	25	706427.3	7625303
	26	706376.9	7625240
	27	706385.7	7625264
	28	706394.6	7625288
	29	706353.1	7625249
	30	706361.9	7625273

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-9	1	706436.5	7625339
	2	706445.1	7625362
	3	706404.5	7625324
	4	706413.1	7625347
	5	706421.7	7625371
	6	706372.5	7625309
	7	706381.1	7625333
	8	706389.7	7625356
	9	706398.3	7625379
	10	706406.9	7625403
	11	706332	7625271
	12	706340.6	7625294
	13	706349.2	7625318
	14	706357.8	7625341
	15	706366.3	7625365
	16	706374.9	7625388
	17	706383.5	7625411
	18	706392.1	7625435
	19	706317.2	7625303
	20	706325.8	7625326
	21	706334.4	7625350
	22	706343	7625373
	23	706351.6	7625397
	24	706360.2	7625420
	25	706302.4	7625335
	26	706311	7625358
	27	706319.6	7625382
	28	706328.2	7625405
	29	706287.6	7625367
	30	706296.2	7625390
	1	706454.9	7625487
	2	706421.3	7625470
	3	706429.5	7625495
	4	706387.6	7625453
	5	706395.9	7625478
	6	706404.1	7625503
	7	706412.3	7625529
	8	706370.5	7625486
	9	706378.7	7625512
	10	706386.9	7625537

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-10	11r	706378.4	7625557
	12	706353.3	7625520
	13	706361.5	7625545
	14	706369.8	7625571
	15	706336.2	7625554
	16	706344.4	7625579
	17r	706347.5	7625597
	18	706310.8	7625562
	19	706319	7625587
	20	706327.2	7625613
	21	706293.6	7625596
	22	706301.8	7625621
	23r	706304.7	7625637
	24	706276.4	7625629
	25	706284.7	7625655
	26r	706289.8	7625676
	27	706259.3	7625663
	28	706267.5	7625688
	29r	706273.4	7625713
	30	706242.1	7625696
DU-11	1	706373.6	7625447
	2	706338	7625430
	3	706347.1	7625456
	4	706356.2	7625482
	5	706302.3	7625412
	6	706311.5	7625439
	7	706320.6	7625465
	8	706329.8	7625492
	9	706266.7	7625395
	10	706275.9	7625421
	11	706285	7625448
	12	706294.2	7625474
	13	706303.3	7625501
	14	706312.5	7625527
	15	706258.6	7625457
	16	706267.7	7625483
	17	706276.9	7625510
	18	706286	7625536
	19	706295.1	7625563
	20	706241.2	7625493

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
	21	706250.4	7625519
	22	706259.5	7625545
	23	706268.7	7625572
	24r	706273.1	7625596
	25	706223.9	7625528
	26	706233.1	7625555
	27	706242.2	7625581
	28	706251.4	7625608
	29	706215.7	7625590
	30	706224.9	7625617
DU-12	1	706240.3	7625717
	2	706249.8	7625740
	3	706217	7625726
	4	706226.5	7625749
	5r	706234.5	7625766
	6	706203.1	7625759
	7	706212.6	7625782
	8r	706211.2	7625808
	9	706189.2	7625792
	10	706198.7	7625815
	11r	706192.7	7625836
	12	706175.3	7625825
	13	706184.8	7625848
	14r	706181.4	7625874
	15	706161.4	7625857
	16	706170.9	7625881
	17r	706171.8	7625904
	18	706157	7625914
	19	706166.5	7625937
	20	706143.1	7625946
	21r	706139.3	7625974
	22	706129.3	7625979
	23r	706133	7626004
	24	706115.4	7626012
	25r	706110.9	7626037
	26r	706109.4	7626069
	27	706097.1	7626101
	28r	706094.4	7626119
	29	706083.2	7626134
	30	706092.6	7626157

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-13	1	706245.4	7625641
	2	706209.2	7625627
	3	706220.1	7625652
	4	706194.9	7625663
	5	706205.8	7625688
	6	706180.6	7625699
	7	706191.5	7625725
	8	706155.4	7625710
	9	706166.3	7625735
	10r	706166.5	7625760
	11	706141.1	7625746
	12	706152	7625772
	13r	706157.9	7625798
	14	706126.8	7625783
	15	706137.7	7625808
	16r	706130.4	7625834
	17	706112.5	7625819
	18	706123.4	7625844
	19r	706117.6	7625869
	20	706145.3	7625894
	21	706109.1	7625880
	22r	706107.4	7625905
	23	706131	7625931
	24	706094.8	7625916
	25r	706098.6	7625941
	26	706116.7	7625967
	27	706080.5	7625952
	28	706091.4	7625978
	29	706102.4	7626003
	30	706066.2	7625989
	1	706073.8	7626183
	2	706091.2	7626201
	3	706072.8	7626218
	4	706071.9	7626254
	5	706053.5	7626272
	6	706070.9	7626290
	7	706052.6	7626307
	8	706070	7626326
	9	706051.6	7626343
	10r	706062.5	7626361

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-14	11	706033.3	7626361
	12	706050.7	7626379
	13	706068.1	7626397
	14	706032.3	7626396
	15	706049.7	7626415
	16	706067.2	7626433
	17	706031.4	7626432
	18	706048.8	7626450
	19	706066.2	7626469
	20	706030.5	7626468
	21	706047.9	7626486
	22	706065.3	7626505
	23	706029.5	7626504
	24	706046.9	7626522
	25	706064.3	7626540
	26	706081.7	7626559
	27	706046	7626558
	28	706063.4	7626576
	29	706080.8	7626594
	30	706045	7626594
DU-15	1	706097.9	7626019
	2	706061.2	7626011
	3	706075.4	7626033
	4	706089.6	7626056
	5	706052.9	7626048
	6	706067.1	7626070
	7	706081.3	7626093
	8	706044.8	7626085
	9	706058.8	7626107
	10	706073	7626129
	11	706036.3	7626121
	12	706050.5	7626143
	13	706064.6	7626166
	14	706028	7626158
	15	706042.1	7626180
	16	706056.3	7626203
	17	706019.6	7626194
	18	706033.8	7626217
	19	706048	7626239
	20	706011.3	7626231

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
	21	706025.5	7626253
	22	706039.7	7626276
	23	706017.2	7626290
	24	706031.4	7626313
	25	706008.9	7626327
	26	706023	7626349
	27	706000.5	7626364
	28	706014.7	7626386
	29	705992.2	7626400
	30	705969.7	7626414
DU-16	1	705983.2	7626423
	2r	706013.4	7626433
	3	706019.9	7626454
	4	705967.6	7626442
	5	705985.9	7626457
	6	706004.3	7626473
	7	706022.7	7626488
	8	705952	7626460
	9	705970.4	7626476
	10	705988.7	7626491
	11	706007.1	7626507
	12	706025.5	7626522
	13	705991.5	7626525
	14r	705946	7626496
	15	706028.3	7626556
	16	705976	7626543
	17	705994.3	7626559
	18	706012.7	7626575
	19	706031.1	7626590
	20r	705913.8	7626525
	21	705978.8	7626577
	22	705997.1	7626593
	23r	705973	7626580
	24r	706022.6	7626602
	25	705963.2	7626596
	26	705981.6	7626611
	27	705910.8	7626583
	28	705929.2	7626599
	29r	705953.8	7626617
	30	705913.6	7626617

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-17	1	706060.1	7626606
	2	706082.5	7626621
	3r	706049.4	7626628
	4	706067	7626643
	5	706089.4	7626659
	6r	706057.8	7626664
	7	706073.9	7626681
	8	706096.3	7626697
	9r	706066.4	7626703
	10	706080.8	7626719
	11	706103.1	7626735
	12r	706073.5	7626743
	13	706087.7	7626757
	14	706110	7626772
	15r	706078.7	7626779
	16	706094.6	7626795
	17	706116.9	7626810
	18r	706083.3	7626817
	19	706101.4	7626833
	20	706123.8	7626848
	21r	706091.4	7626857
	22	706108.3	7626870
	23	706130.7	7626886
	24r	706098.2	7626894
	25	706115.2	7626908
	26	706137.6	7626924
	27r	706104.5	7626931
	28	706122.1	7626946
	29	706144.5	7626962
	30r	706117	7626968
	1r	706026.8	7626619
	2	705982.6	7626621
	3r	705986.7	7626646
	4	706016.5	7626656
	5	706033.4	7626674
	6	705981.8	7626655
	7	705998.7	7626673
	8	706015.7	7626691
	9	706032.6	7626708
	10	706049.5	7626726

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-18	11	705981	7626690
	12r	706008.5	7626715
	13	706014.9	7626725
	14	706031.8	7626743
	15	706048.8	7626761
	16	705980.3	7626724
	17	705997.2	7626742
	18	706014.1	7626760
	19	706031	7626778
	20	706048	7626795
	21	706064.9	7626813
	22	705979.5	7626759
	23	705996.4	7626777
	24	706013.3	7626795
	25	706030.3	7626812
	26	706047.2	7626830
	27	705978.7	7626794
	28	705995.6	7626811
	29	706012.5	7626829
	30	705977.5	7626829
DU-19	1	705962.4	7626628
	2	705924	7626627
	3	705942.6	7626647
	4	705961.2	7626667
	5	705904.2	7626646
	6	705922.8	7626666
	7	705941.4	7626685
	8	705960	7626705
	9	705921.6	7626704
	10	705940.2	7626724
	11	705958.8	7626744
	12	705920.3	7626742
	13	705939	7626762
	14	705957.6	7626782
	15	705919.1	7626781
	16	705937.7	7626801
	17	705956.4	7626821
	18	705917.9	7626819
	19	705936.5	7626839
	20	705955.1	7626859

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
	21	705916.7	7626858
	22	705935.3	7626878
	23	705953.7	7626897
	24	705915.4	7626896
	25	705934.1	7626916
	26	705952.7	7626936
	27	705914.3	7626935
	28	705932.9	7626955
	29	705951.5	7626974
	30	705913.1	7626973
DU-20	1	706171.4	7627096
	2	706137.4	7627092
	3	706152.7	7627111
	4	706167.9	7627130
	5	706183.1	7627148
	6	706103.5	7627089
	7	706118.8	7627108
	8	706134	7627126
	9	706149.2	7627145
	10	706174.6	7627154
	11	706174.9	7627183
	12	706194.9	7627201
	13	706069.6	7627085
	14	706084.9	7627104
	15	706100.1	7627123
	16	706161	7627198
	17	706150.9	7627216
	18	706193.4	7627230
	19	706066.2	7627119
	20	706161.1	7627251
	21	706188	7627269
	22	706203.2	7627287
	23	706184.5	7627303
	24	706199.8	7627321
	25	706215	7627340
	26	706196.3	7627355
	27	706211.5	7627374
	28	706192.9	7627389
	29	706208.1	7627408
	30	706223.3	7627427

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-21	1	706061.5	7626850
	2	706076.8	7626868
	3	706028.3	7626847
	4	706043.2	7626865
	5	706058	7626883
	6	706072.9	7626902
	7	706087.7	7626920
	8	705995.1	7626843
	9	706010	7626861
	10	706024.8	7626880
	11	706039.7	7626898
	12	706054.5	7626916
	13	706069.4	7626935
	14	706084.2	7626953
	15	705976.8	7626858
	16	705991.6	7626876
	17	706006.5	7626895
	18	706021.3	7626913
	19	706036.2	7626931
	20	706051	7626950
	21	706065.9	7626968
	22	705973.3	7626891
	23	705988.1	7626909
	24	706003	7626928
	25	706017.9	7626946
	26	706032.7	7626964
	27	705969.8	7626924
	28	705984.7	7626943
	29	705999.5	7626961
	30	705966.3	7626958
	1	706132.1	7626964
	2	706156.5	7626981
	3	706091.2	7626972
	4	706115.6	7626988
	5	706140	7627005
	6	706164.4	7627022
	7	706025.8	7626963
	8	706050.2	7626980
	9	706074.6	7626996
	10	706099	7627013

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-22	11	706123.4	7627029
	12	706147.8	7627046
	13	706172.2	7627063
	14	705984.8	7626971
	15	706009.2	7626987
	16	706033.6	7627004
	17	706058	7627021
	18	706082.4	7627037
	19	706106.8	7627054
	20	706131.2	7627070
	21	705968.2	7626995
	22	705992.6	7627012
	23	706017	7627028
	24	706041.4	7627045
	25	706065.8	7627062
	26	706090.2	7627078
	27	705976	7627036
	28	706000.4	7627053
	29	706024.8	7627069
	30	705959.4	7627061
DU-23	1	706019.2	7627079
	2	706040.3	7627096
	3	706061.3	7627112
	4	706082.3	7627129
	5	706103.4	7627146
	6	706124.4	7627163
	7	706145.4	7627180
	8	705981.4	7627083
	9	706002.5	7627100
	10	706023.5	7627117
	11	706044.5	7627133
	12	706065.6	7627150
	13	706086.6	7627167
	14	706107.6	7627184
	15	706128.7	7627201
	16	705964.7	7627104
	17	705985.7	7627121
	18	706006.7	7627138
	19	706027.8	7627155
	20	706048.8	7627171

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
	21	706069.8	7627188
	22	706090.9	7627205
	23	705968.9	7627142
	24	705990	7627159
	25	706010.8	7627175
	26	706032	7627192
	27	705952.2	7627163
	28	705973.2	7627180
	29	705994.2	7627197
	30	705956.4	7627201
DU-24	1	706122.7	7627238
	2	706143.6	7627253
	3	706164.6	7627267
	4	706087.4	7627245
	5	706108.3	7627259
	6	706129.2	7627274
	7	706150.2	7627288
	8	706171.1	7627302
	9	706093.9	7627280
	10	706114.9	7627295
	11	706135.8	7627309
	12	706156.8	7627323
	13	706177.7	7627338
	14	706079.6	7627301
	15	706100.5	7627315
	16	706121.5	7627330
	17	706142.4	7627344
	18	706163.3	7627359
	19	706184.3	7627373
	20	706086.1	7627336
	21	706107.1	7627351
	22	706128	7627365
	23	706149	7627380
	24	706169.9	7627394
	25	706092.7	7627372
	26	706113.7	7627386
	27	706134.6	7627400
	28	706155.6	7627415
	29	706176.5	7627429
	30	706078.4	7627393

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-25	1	706068.2	7627239
	2	706032.2	7627235
	3	706048.5	7627255
	4	706064.8	7627274
	5	705996.3	7627232
	6	706012.6	7627251
	7	706028.9	7627271
	8	706045.2	7627291
	9	706061.4	7627310
	10	705960.4	7627228
	11	705976.7	7627248
	12	705993	7627268
	13	706009.3	7627287
	14	706025.5	7627307
	15	706041.8	7627327
	16	706058.1	7627346
	17	706074.4	7627366
	18	705957.1	7627264
	19	705973.4	7627284
	20	705989.6	7627304
	21	706005.9	7627323
	22	706022.2	7627343
	23	706038.4	7627363
	24	706054.7	7627382
	25	705953.7	7627300
	26	705970	7627320
	27	705986.3	7627340
	28	706002.5	7627359
	29	706018.8	7627379
	30	705950.4	7627336
	1	705934.8	7626993
	2	705954	7627012
	3	705915.9	7627012
	4	705935.2	7627031
	5	705954.3	7627050
	6	705916.3	7627050
	7	705935.5	7627069
	8	705954.7	7627088
	9	705916.6	7627088
	10	705935.8	7627107

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-26	11	705955	7627126
	12	705916.9	7627126
	13	705936.1	7627145
	14	705917.3	7627164
	15	705936.5	7627183
	16	705898.4	7627183
	17	705917.6	7627202
	18	705936.8	7627221
	19	705898.8	7627221
	20	705917.9	7627240
	21	705937.1	7627259
	22	705899.1	7627259
	23	705918.3	7627278
	24	705937.5	7627297
	25	705899.4	7627298
	26	705918.6	7627316
	27	705937.8	7627335
	28	705880.6	7627317
	29	705899.8	7627336
	30	705918.9	7627354
DU-27	1	706114.7	7627521
	2	706132.7	7627536
	3	706150.8	7627552
	4	706168.8	7627568
	5	706186.9	7627583
	6	706204.9	7627599
	7	706223	7627615
	8	706099	7627539
	9	706117.1	7627554
	10	706135.1	7627570
	11	706153.2	7627586
	12	706171.2	7627601
	13	706189.3	7627617
	14	706207.3	7627633
	15	706083.3	7627557
	16	706101.4	7627573
	17	706119.5	7627588
	18	706137.5	7627604
	19	706155.6	7627620
	20	706173.6	7627635

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
	21	706191.7	7627651
	22	706209.7	7627666
	23	706067.7	7627575
	24	706085.7	7627591
	25	706103.8	7627606
	26	706121.8	7627622
	27	706139.9	7627638
	28	706158	7627653
	29	706176	7627669
	30	706194.1	7627685
DU-28	1	706180.5	7627702
	2	706188.8	7627725
	3	706140.4	7627663
	4	706148.6	7627686
	5	706156.9	7627710
	6	706165.2	7627734
	7	706173.4	7627757
	8	706108.5	7627648
	9	706116.8	7627671
	10	706125.1	7627695
	11	706133.3	7627718
	12	706141.6	7627742
	13	706149.9	7627765
	14	706158.1	7627789
	15	706166.4	7627813
	16	706093.2	7627679
	17	706101.5	7627703
	18	706109.7	7627727
	19	706118	7627750
	20	706126.3	7627774
	21	706134.5	7627797
	22	706142.8	7627821
	23	706151.1	7627845
	24	706077.9	7627711
	25	706086.1	7627735
	26	706094.4	7627758
	27	706102.7	7627782
	28	706110.9	7627806
	29	706062.5	7627743
	30	706070.8	7627767

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-29	1	706128.2	7627840
	2	706132.2	7627864
	3	706136.3	7627889
	4	706099.8	7627819
	5	706103.8	7627844
	6	706107.8	7627868
	7	706111.8	7627893
	8	706115.8	7627917
	9	706119.8	7627942
	10	706071.3	7627799
	11	706075.3	7627823
	12	706079.3	7627848
	13	706083.3	7627872
	14	706087.3	7627897
	15	706091.3	7627921
	16	706095.3	7627946
	17	706042.8	7627778
	18	706046.8	7627803
	19	706050.8	7627827
	20	706054.8	7627852
	21	706058.8	7627876
	22	706062.8	7627901
	23	706066.8	7627925
	24	706022.3	7627807
	25	706026.3	7627831
	26	706030.3	7627856
	27	706034.3	7627880
	28	706038.4	7627905
	29	706005.9	7627860
	30	706009.9	7627884
	1	706105.1	7627971
	2	706076.6	7627951
	3	706080.8	7627975
	4	706085.1	7628000
	5	706048.1	7627931
	6	706052.4	7627955
	7	706056.6	7627980
	8	706060.8	7628004
	9	706065.1	7628028
	10	706069.3	7628052

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-30	11	706019.7	7627911
	12	706023.9	7627935
	13	706028.1	7627960
	14	706032.4	7627984
	15	706036.6	7628008
	16r	706044.8	7628020
	17r	706049.5	7628049
	18	705991.2	7627891
	19	705995.4	7627915
	20	705999.7	7627940
	21	706003.9	7627964
	22	706008.1	7627988
	23	706012.4	7628012
	24r	706020.3	7628029
	25	705971.2	7627920
	26	705975.4	7627944
	27	705979.7	7627968
	28	705983.9	7627992
	29	705988.1	7628017
	30	705955.4	7627972
DU-31	1	706094.6	7627627
	2	706095.6	7627648
	3	706075.8	7627670
	4	706076.8	7627691
	5	706054.9	7627671
	6	706055.9	7627692
	7	706056.9	7627713
	8	706034	7627672
	9	706035	7627693
	10	706036	7627714
	11	706037.1	7627735
	12	706038.1	7627756
	13	706011.1	7627631
	14	706012.1	7627652
	15	706013.1	7627673
	16	706014.1	7627694
	17	706015.2	7627715
	18	706016.2	7627736
	19	705989.2	7627612
	20	705990.2	7627633

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
	21	705991.2	7627653
	22	705992.3	7627674
	23	705993.3	7627695
	24	705994.3	7627716
	25	705969.3	7627634
	26	705970.4	7627654
	27	705971.4	7627675
	28	705972.4	7627696
	29	705949.5	7627655
	30	705950.5	7627676
DU-32	1	706033.6	7627767
	2	706019.2	7627788
	3	706004.8	7627809
	4	705990.4	7627831
	5	705976	7627852
	6	706012.3	7627752
	7	705997.9	7627774
	8	705983.5	7627795
	9	705969.1	7627816
	10	705954.7	7627838
	11	705991	7627738
	12	705976.6	7627759
	13	705962.2	7627781
	14	705947.8	7627802
	15	705933.4	7627823
	16	705969.7	7627724
	17	705955.3	7627745
	18	705940.9	7627766
	19	705926.5	7627787
	20	705912.1	7627809
	21	705948.4	7627709
	22	705934	7627730
	23	705919.6	7627752
	24	705905.2	7627773
	25	705890.8	7627794
	26	705927.1	7627695
	27	705912.7	7627716
	28	705898.3	7627737
	29	705883.9	7627759
	30	705869.5	7627780

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-33	1	705972.1	7627876
	2	705972.3	7627900
	3	705948.1	7627852
	4	705948.2	7627876
	5	705948.4	7627900
	6	705948.6	7627924
	7	705948.7	7627948
	8	705924.2	7627852
	9	705924.3	7627876
	10	705924.5	7627900
	11	705924.7	7627924
	12	705924.8	7627948
	13	705900.1	7627829
	14	705900.3	7627853
	15	705900.4	7627877
	16	705900.6	7627900
	17	705900.8	7627924
	18	705876.1	7627805
	19	705876.2	7627829
	20	705876.1	7627853
	21	705876.5	7627877
	22r	705882.8	7627892
	23	705852.2	7627805
	24	705852.3	7627829
	25	705852.5	7627853
	26	705852.6	7627877
	27	705828.4	7627829
	28r	705835	7627848
	29	705828.7	7627877
	30	705804.7	7627853
	1	706015.1	7627559
	2r	705985.3	7627606
	3	705991.2	7627563
	4	705995	7627587
	5r	705951.4	7627553
	6	705963.5	7627543
	7	705967.3	7627567
	8	705971.1	7627591
	9r	705946.6	7627542
	10	705935.8	7627523

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-34	11	705939.6	7627547
	12	705943.4	7627571
	13	705947.2	7627594
	14	705951.1	7627618
	15	705911.9	7627527
	16	705915.7	7627550
	17	705919.5	7627574
	18	705923.3	7627598
	19	705927.2	7627622
	20	705931	7627646
	21	705888	7627530
	22	705891.8	7627554
	23	705895.6	7627578
	24	705899.4	7627602
	25	705903.3	7627626
	26	705907.1	7627650
	27	705867.9	7627558
	28	705871.7	7627582
	29	705875.5	7627606
	30	705847.8	7627586
DU-35	1	705905.8	7627670
	2	705909.9	7627694
	3	705874.3	7627628
	4	705878.4	7627651
	5	705882.4	7627674
	6	705886.4	7627698
	7	705890.4	7627721
	8	705846.8	7627608
	9	705850.9	7627632
	10	705854.9	7627655
	11	705858.9	7627679
	12	705863	7627702
	13	705867	7627725
	14	705871	7627749
	15	705823.4	7627612
	16	705827.4	7627636
	17	705831.4	7627659
	18	705835.5	7627683
	19	705839.5	7627706
	20	705843.5	7627729

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
	21	705847.6	7627753
	22	705804	7627640
	23	705808	7627663
	24	705812	7627687
	25	705816	7627710
	26	705820.1	7627733
	27	705784.5	7627667
	28	705788.6	7627691
	29	705792.6	7627714
	30	705765.1	7627695
DU-36	1	705839.5	7627766
	2	705844.4	7627787
	3	705814.3	7627751
	4	705819.2	7627771
	5	705824.1	7627792
	6	705828.9	7627812
	7	705789.1	7627735
	8r	705747	7627696
	9	705798.9	7627776
	10	705803.7	7627796
	11	705808.6	7627817
	12	705768.8	7627740
	13	705773.7	7627761
	14	705778.5	7627781
	15	705783.4	7627801
	16r	705768.4	7627703
	17	705748.5	7627745
	18r	705749.1	7627765
	19	705708.6	7627669
	20	705683.4	7627653
	21	705688.3	7627674
	22	705668	7627679
	23	705672.8	7627699
	24	705647.6	7627683
	25	705627.3	7627688
	26	705622.4	7627668
	27	705601.8	7627673
	28	705597.2	7627653
	29	705572	7627637
	30	705546.8	7627622

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-37	1	705943.3	7627359
	2r	705890.7	7627365
	3	705863.9	7627427
	4	705875.1	7627472
	5r	705849.9	7627465
DU-38	1	705890.9	7627514
	2	705853.4	7627507
	3	705869	7627529
	4	705815.8	7627501
	5	705831.5	7627523
	6	705847.2	7627545
	7	705794	7627517
	8	705809.6	7627539
	9	705825.3	7627561
	10	705841	7627583
	11	705772.1	7627533
	12	705787.8	7627554
	13	705803.4	7627576
	14	705819.1	7627598
	15	705750.2	7627548
	16	705765.9	7627570
	17	705781.6	7627592
	18	705797.3	7627614
	19	705744.1	7627586
	20	705759.7	7627608
	21	705775.4	7627630
	22	705722.2	7627602
	23	705737.9	7627623
	24	705753.5	7627645
	25	705769.2	7627667
	26	705700.3	7627617
	27	705716	7627639
	28	705731.7	7627661
	29	705747.4	7627683
	30	705694.1	7627655
DU-39	1	706221	7627564
	2	706172.1	7627521
	3	706123.2	7627478
	4	706080.4	7627527
	5	706074.2	7627435

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-40	1	706041.5	7627401
	2	706009.3	7627457
	3r	705984.6	7627512
	4	705985	7627369
	5	705952.8	7627425
DU-41	1r	705943.3	7626499
	2	706213.7	7627685
	3r	705926.9	7626520
	4	706214.8	7627739
	5	706193.6	7627750
	6	706204.8	7627772
	7	706183.5	7627783
	8	706194.8	7627804
	9	706173.5	7627815
	10	706184.7	7627837
	11	706163.4	7627848
	12	706174.7	7627869
	13	706153.4	7627880
	14r	706148.8	7627893
	15	706143.3	7627913
	16	706154.6	7627934
	17	706133.3	7627946
	18	706144.6	7627967
	19	706123.2	7627978
	20	706134.5	7628000
	21	706101.9	7627989
	22	706113.2	7628011
	23	706124.5	7628032
	24	706091.9	7628022
	25	706103.2	7628043
	26r	706111.7	7628057
	27	706081.8	7628055
	28r	706089.6	7628065
	29	706104.4	7628097
	30r	706056.9	7628092
DU-42	1	705943	7626483
	2r	705957.1	7626508
	3	705924.5	7626504
	4	705945.6	7626523
	5	705927.2	7626544

Table D-1
Actual GPS Coordinates
Willamette Cove Upland Facility
Portland, Oregon

Decision Unit	Increment Number	Northing	Easting
DU-43	1	706012.3	7627586
	2	706034.5	7627605
	3	706056.7	7627625
	4	706078.9	7627644
	5r	706034.2	7627628
DU-44	1	705729.2	7627706
	2r	705685.3	7627724
	3r	705691.5	7627740
	4r	706069.8	7627645
	5	705790.4	7627823

Note

r = Revised from original proposed location

Appendix E

Field Change Requests



PROJECT NUMBER 7576
FIELD REPORT NUMBER 1
PAGE 1 OF 1
DATE 8/10/2022

Description of modification:	ISM sample increment location modification in areas where recent fill material has been emplaced on gravel roads. Based on discussions with DEQ, the Port is proposing to relocate ISM increment sample locations that fall within areas of recent fill material out of the recent fill to the nearest location where surface material type matches surrounding grade.
Reason for modification:	Including recent fill material in the ISM sample may bias the sample and the sample would not be representative of the entire decision unit.
Reference to Work Plan/SAP/QAPP (pg # and section):	Remedial Design Investigation Work Plan, Section 6.3.1

Review comments:			
Approval documentation:			
_____ Port (email or phone)	Date: _____	Port Personnel: _____	
_____ DEQ (email)	Date: _____	DEQ Personnel: _____	
Approval comments/notes:			



PROJECT NUMBER 7576
FIELD REPORT NUMBER 2
PAGE 1 OF 1
DATE 8/10/2022

Description of modification:	Report analytical laboratory data as Level 2A data packages instead of Level 4 data packages as stated in Appendix C, Sampling and Analysis Plan.
Reason for modification:	The typical data quality review includes a level 2A evaluation, which uses the standard lab report and analytical batch quality assurance samples to evaluate the usability of the data. For evaluation of the Willamette Cove samples, a standard level 2A report and data quality review will be sufficient for the intended use of the data. If a data quality issue arises that cannot be resolved through the Level 2A evaluation, the Port will discuss with DEQ and potentially request a Level 4 data package for that specific data report.
Reference to Work Plan/SAP/QAPP (pg # and section):	RDI Work Plan, Appendix C, Section 11.4.3

Review comments:	
Approval documentation:	
_____ Port (email or phone)	Date: _____ Port Personnel: _____
_____ DEQ (email)	Date: _____ DEQ Personnel: _____
Approval comments/notes:	

FIELD CHANGE REQUEST FORM

Apex Companies, LLC

15618 SW 72nd Ave

Tigard, Oregon 97224

PROJECT NUMBER 7576

FIELD REPORT NUMBER 3

PAGE 1 OF 1

DATE 2/16/2023

PROJECT **Willamette Cove RDI Sampling**

APEX PROJECT MANAGER Steve Misner

LOCATION **Port of Portland Willamette Cove Upland Facility**

CLIENT Port of Portland

Description of modification: Reconfigure nine decision units (DU-16, DU-20, DU-22, DU-23, DU-26, DU-31, DU-36, DU-37 and DU-38) and add three new decision units (DU-42, DU-43 and DU-44) due to the presence of unanticipated significant areas of pavement or concrete. These modifications were discussed with and approved by DEQ.

Reason for modification: The following summarizes the reconfigurations and additions:

- DU-20, DU-22 and DU-23 were reconfigured so that the paved surface in this area is entirely within DU-20. The layout of the 30 increments in each of these DUs was realigned to match the new DU shapes and ISM samples in DU-20 were collected beneath the pavement.
- New DU-42 (concrete area within DU-16), new DU-43 (concrete area within DU-31) and new DU-44 (concrete area within DU-36) are five-point composite samples accessed through holes cored through the concrete.
- The 30 increment locations in the remaining portions of DU-16, DU-31 and DU-36 were realigned.
- Existing DU-37 was converted to a five-point composite sample accessed through holes cored through the concrete.
- The eastern portion of former DU-37 was added to DU-26 and the western portion of DU-37 was added to DU-38 and the 30 increment locations in DU-26 and DU-38 were realigned.
- Replicate samples were eliminated from DU-16 due to uneven topography and presence of debris and replicates were added to DU-26 as a replacement.
- Replicate samples were eliminated from DU-37 because it was converted to a five-point composite DU and replicates were added to DU-41 as a replacement.
- The southeastern portion of original DU-38 was identified to be below the top of bank and this portion of the DU was eliminated.

Reference to Work Plan/SAP/QAPP (pg # and section): RDI Work Plan, Appendix C, Section 11.4.3 and Appendix C Figures C1-C44

REVIEW AND APPROVAL

Review comments:

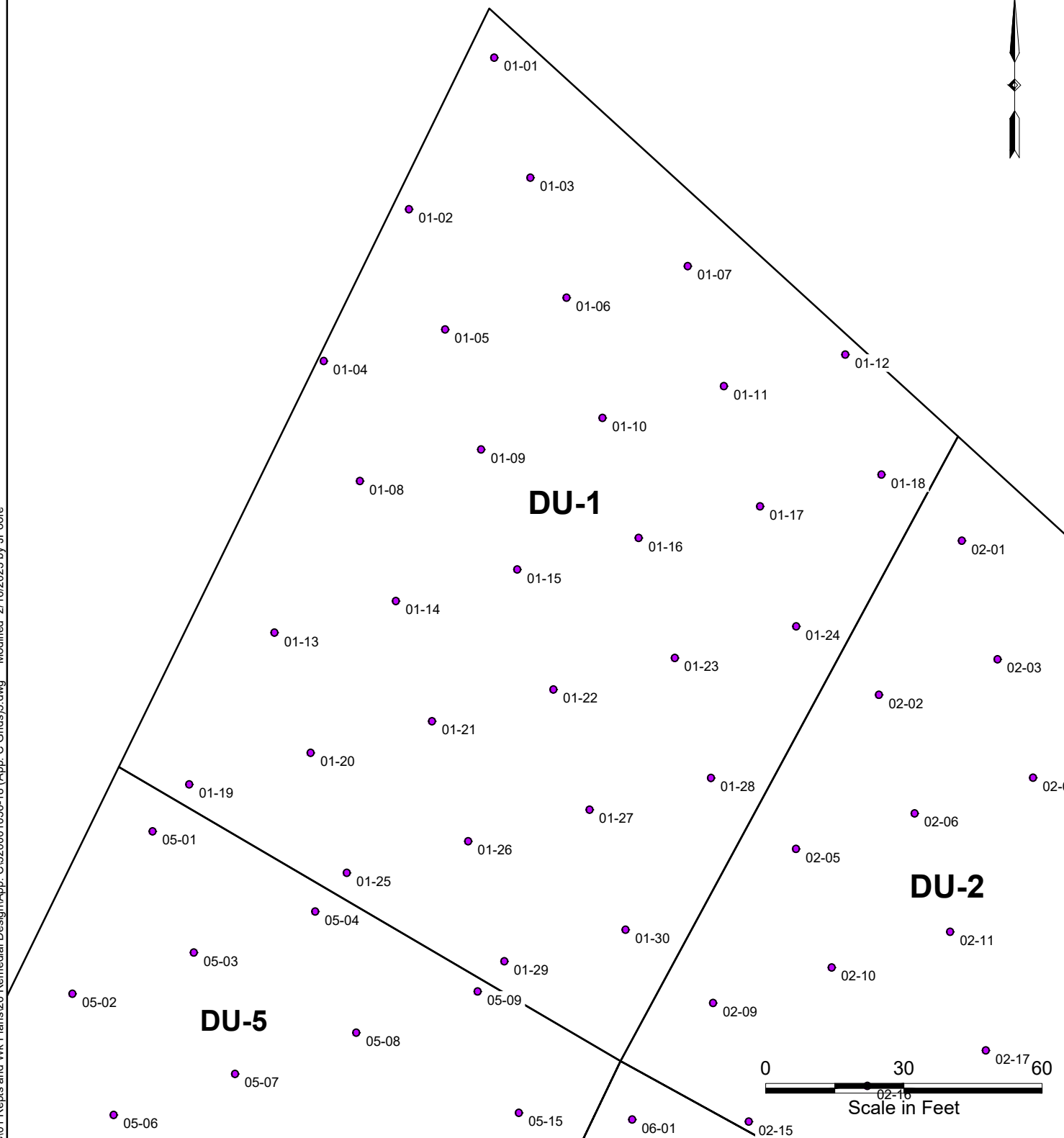
Approval documentation:

_____ Port (email or phone) Date: _____ Port Personnel: _____

_____ DEQ (email) Date: _____ DEQ Personnel: _____

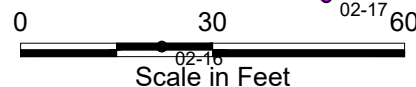
Approval comments/notes:

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Legend:

● Increment Sample Location



DU-1 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

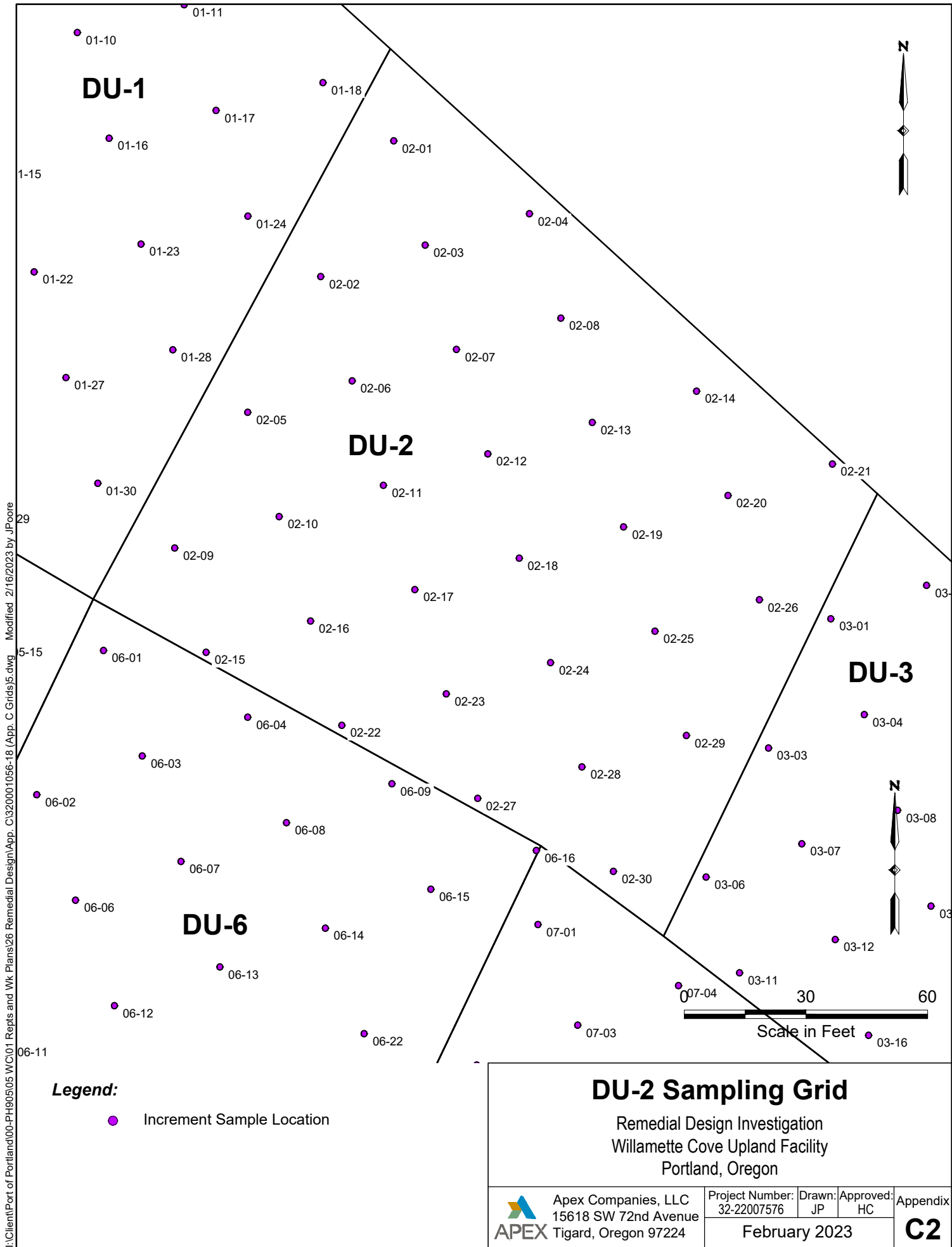
Drawn:
JP

Approved:
HC

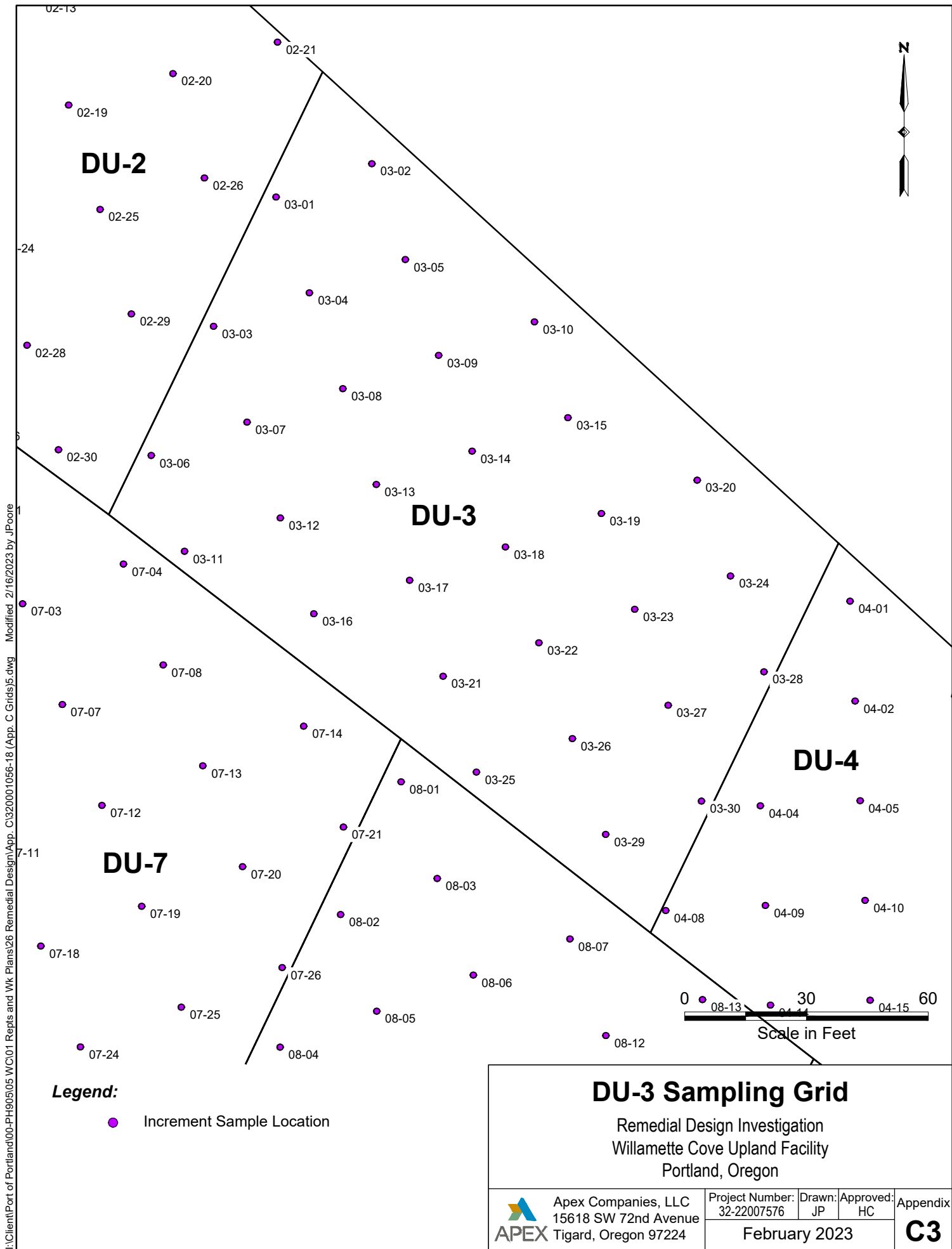
February 2023

Appendix

C1

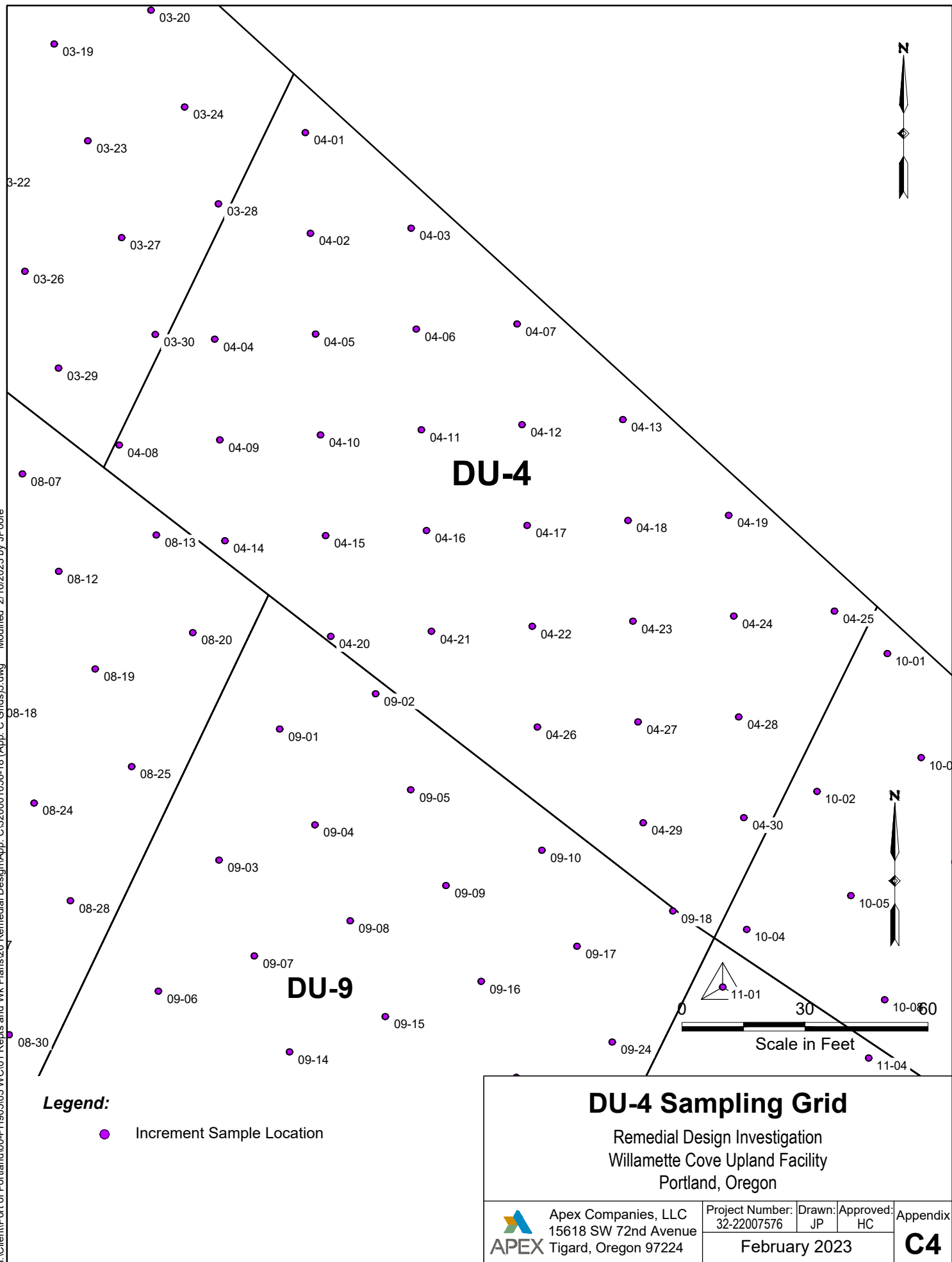


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I:\Client\Port of Portland\00-PH905\05 W\01 Repts and Wk Plans\26 Remedial Design\App. C\320001056-18 (App. C Grids)\5.dwg Modified 2/16/2023 by JPoore

I:\Client\Port of Portland\00-PH905\05 W\01 Repts and Wk Plans\26 Remedial Design\App. C\320001056-18 (App. C Grids)\5.dwg Modified 2/16/2023 by JPoore



Legend:

● Increment Sample Location

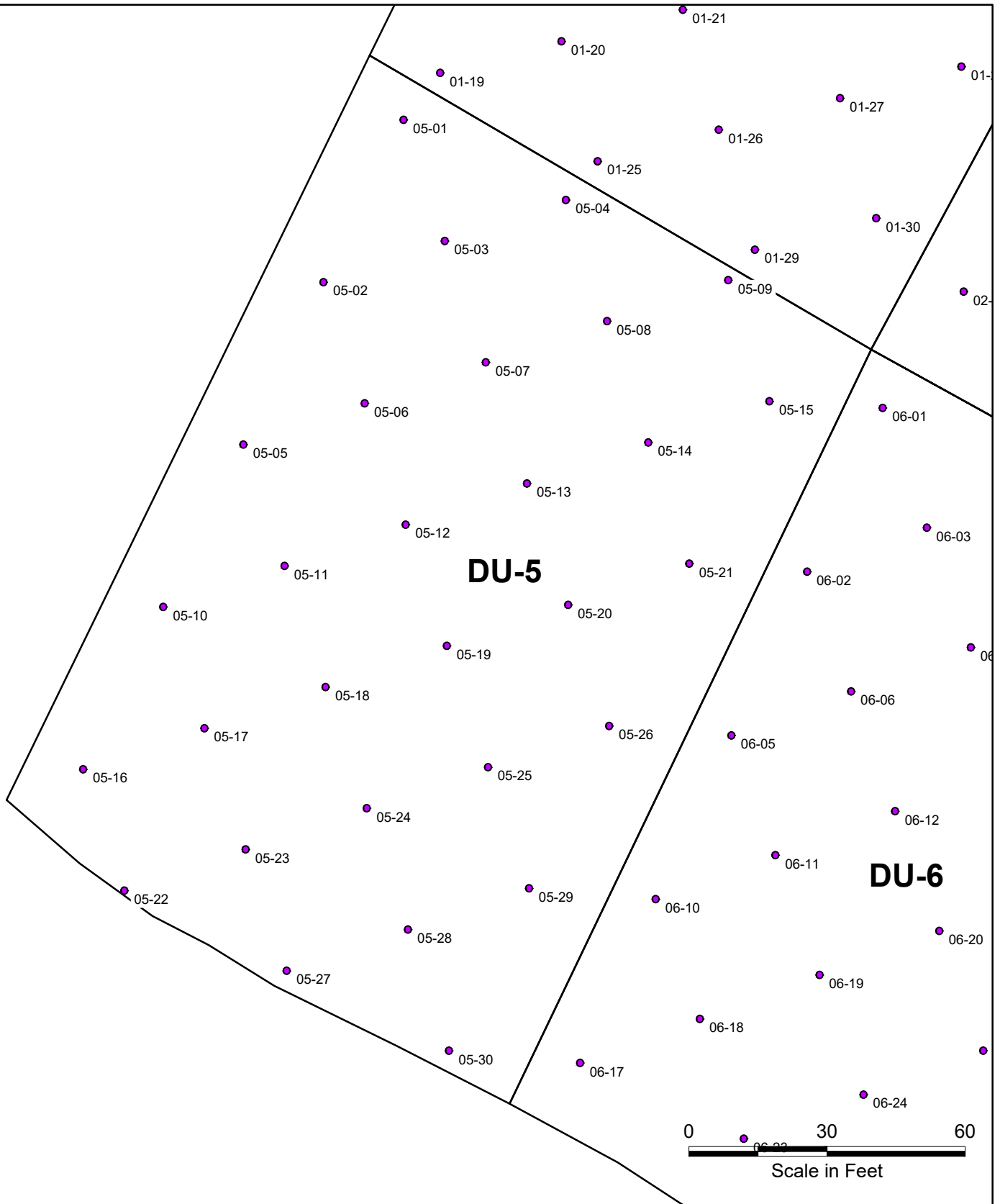
DU-4 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon

 Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number: 32-22007576	Drawn: JP	Approved: HC	Appendix C4
February 2023			

I:\Client\Port of Portland\00-PH905\05 W\01 Repts and Wk Plans\26 Remedial Design\App - C\320001056-18 (App. C Grids)\5.dwg Modified 2/16/2023 by JPoore



Legend:

● Increment Sample Location

DU-5 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

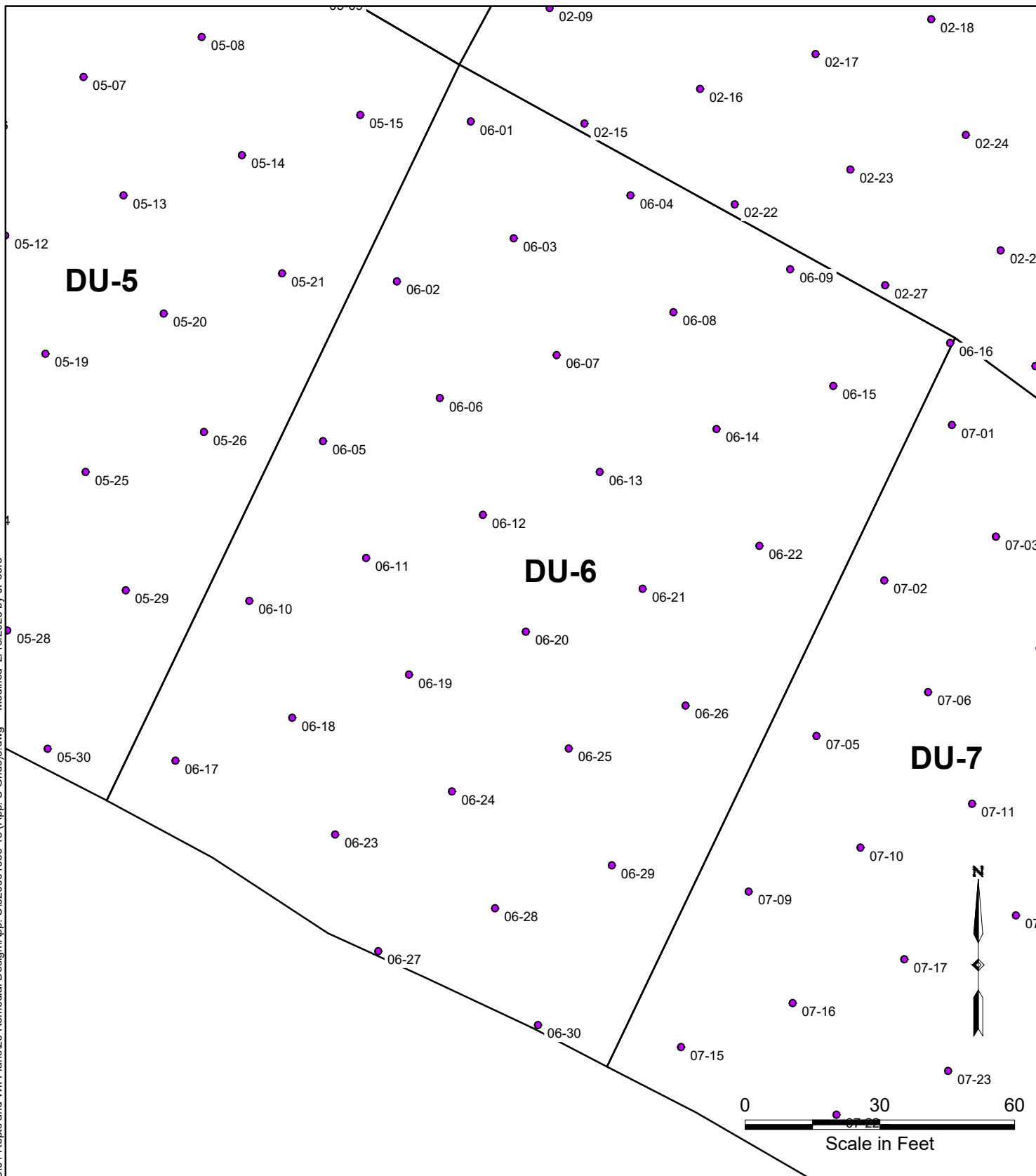
Approved:
HC

February 2023

Appendix

C5

I:\Client\Port of Portland\00-PH905\05 WC\01 Repts and Wk Plans\26 Remedial Design\App. C\320001056-18 (App. C Grids)\5.dwg Modified 2/16/2023 by JPoore



Legend:

● Increment Sample Location

DU-6 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

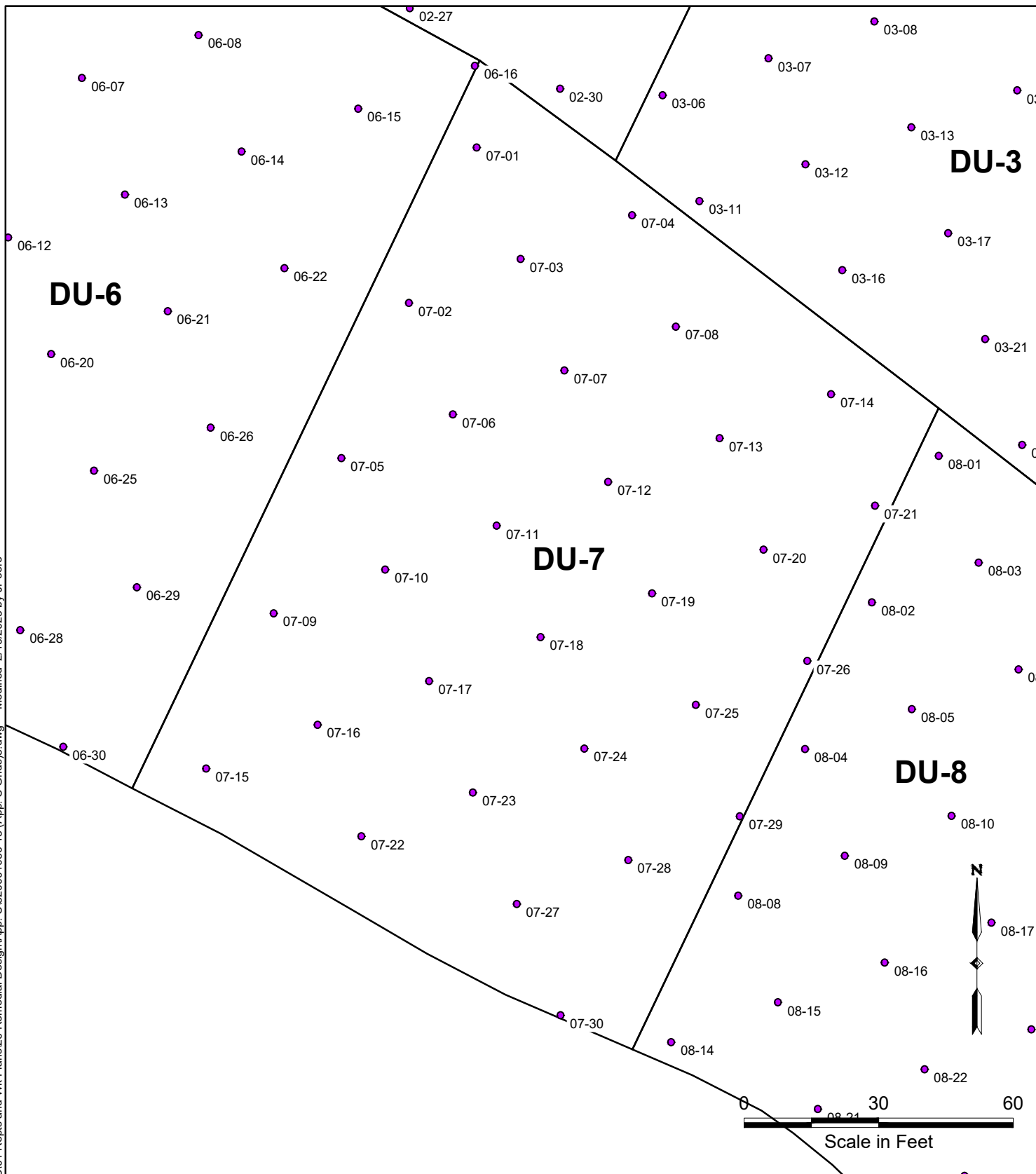
Approved:
HC

February 2023

Appendix

C6

I:\Client\Port of Portland\00-PH905\05 W\01 Repts and Wk Plans\26 Remedial Design\App. C\320001056-18 (App. C Grids)\5.dwg Modified 2/16/2023 by JPoore



Legend:

● Increment Sample Location

DU-7 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

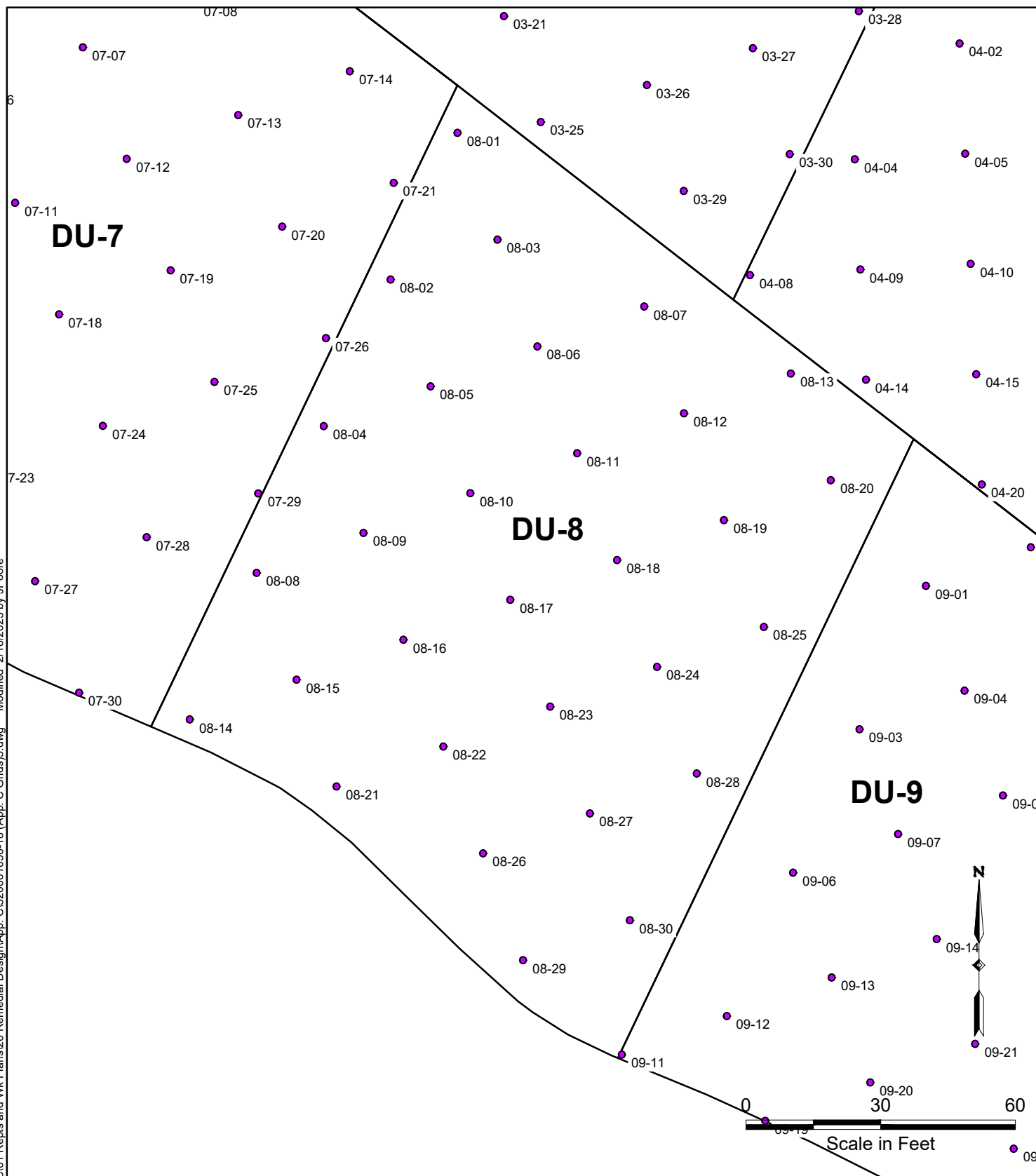
Approved:
HC

February 2023

Appendix

C7

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Legend:

● Increment Sample Location

DU-8 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

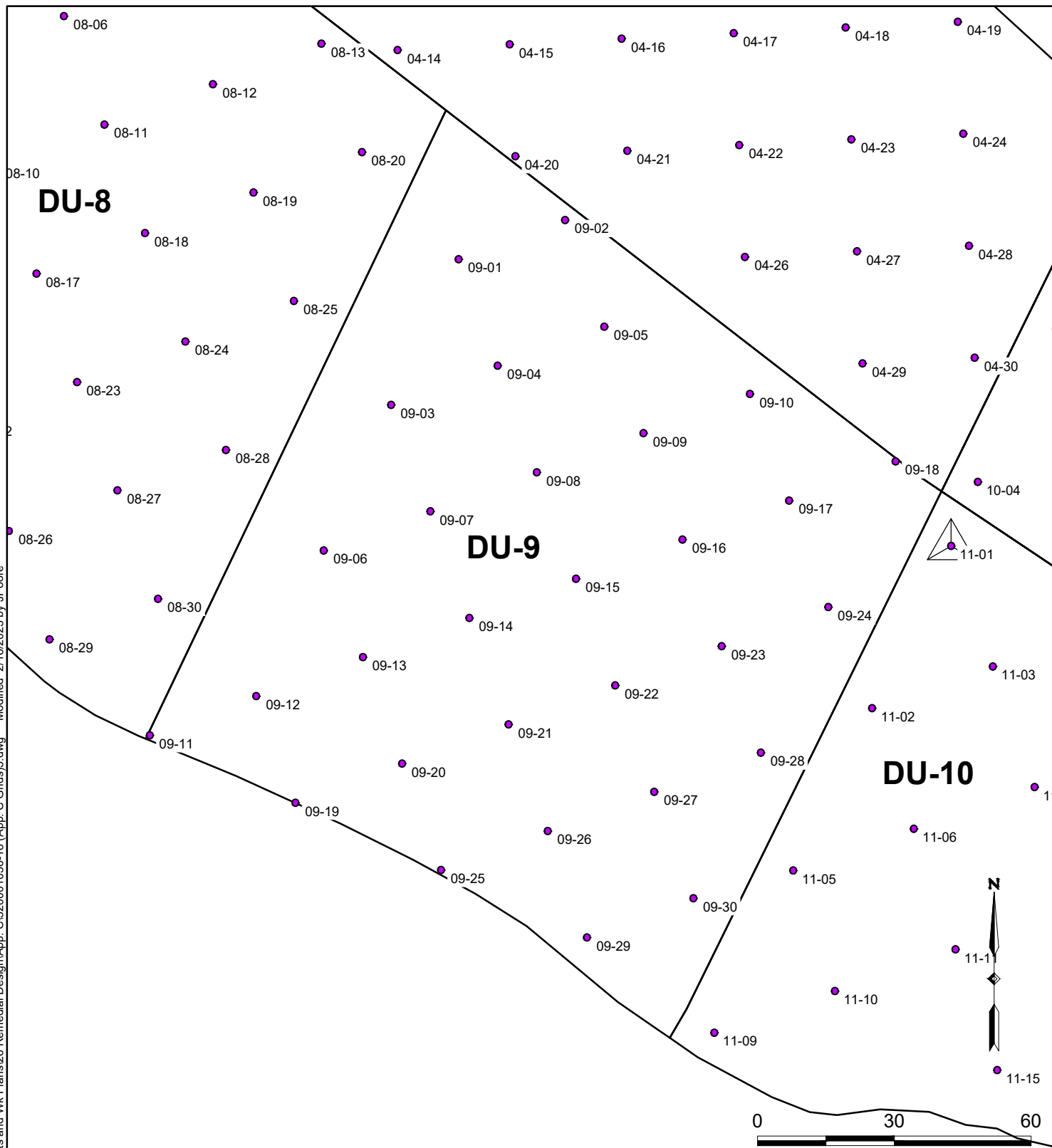
Approved:
HC

February 2023

Appendix

C8

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Legend:

● Increment Sample Location

DU-9 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

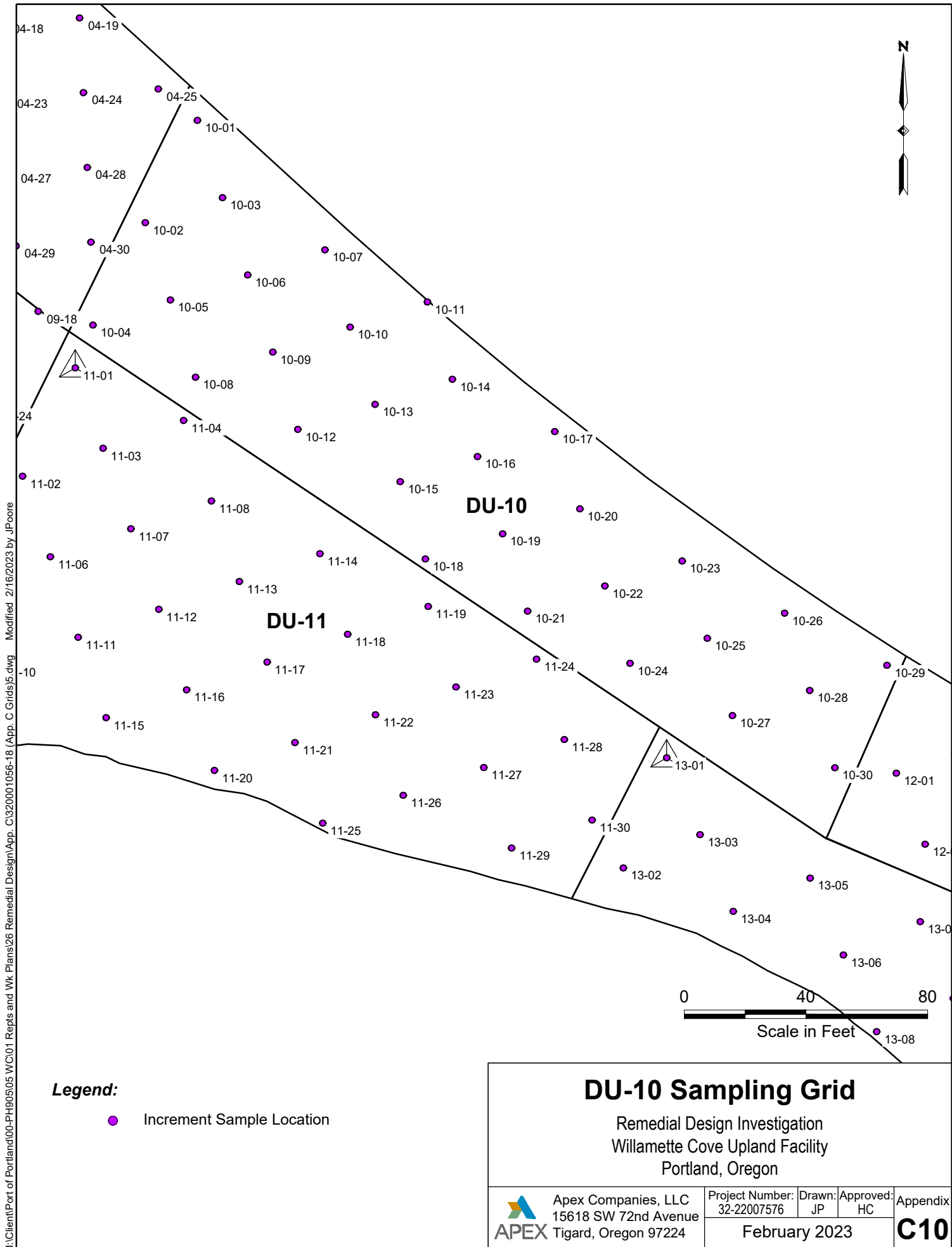
Drawn:
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Approved:
HC

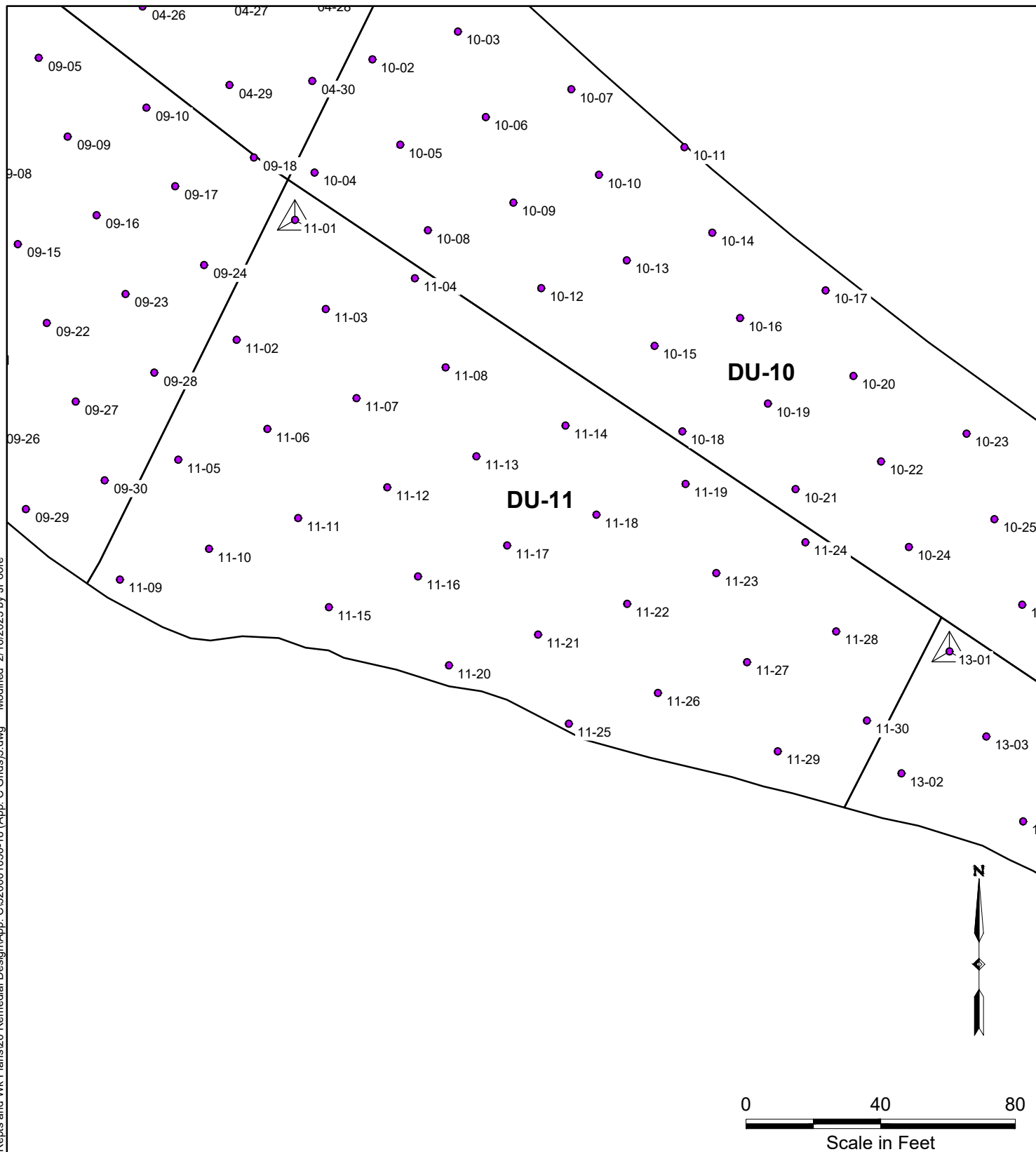
February 2023

Appendix

C9



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Legend:

- Increment Sample Location
- △ Offset Sample Location

DU-11 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

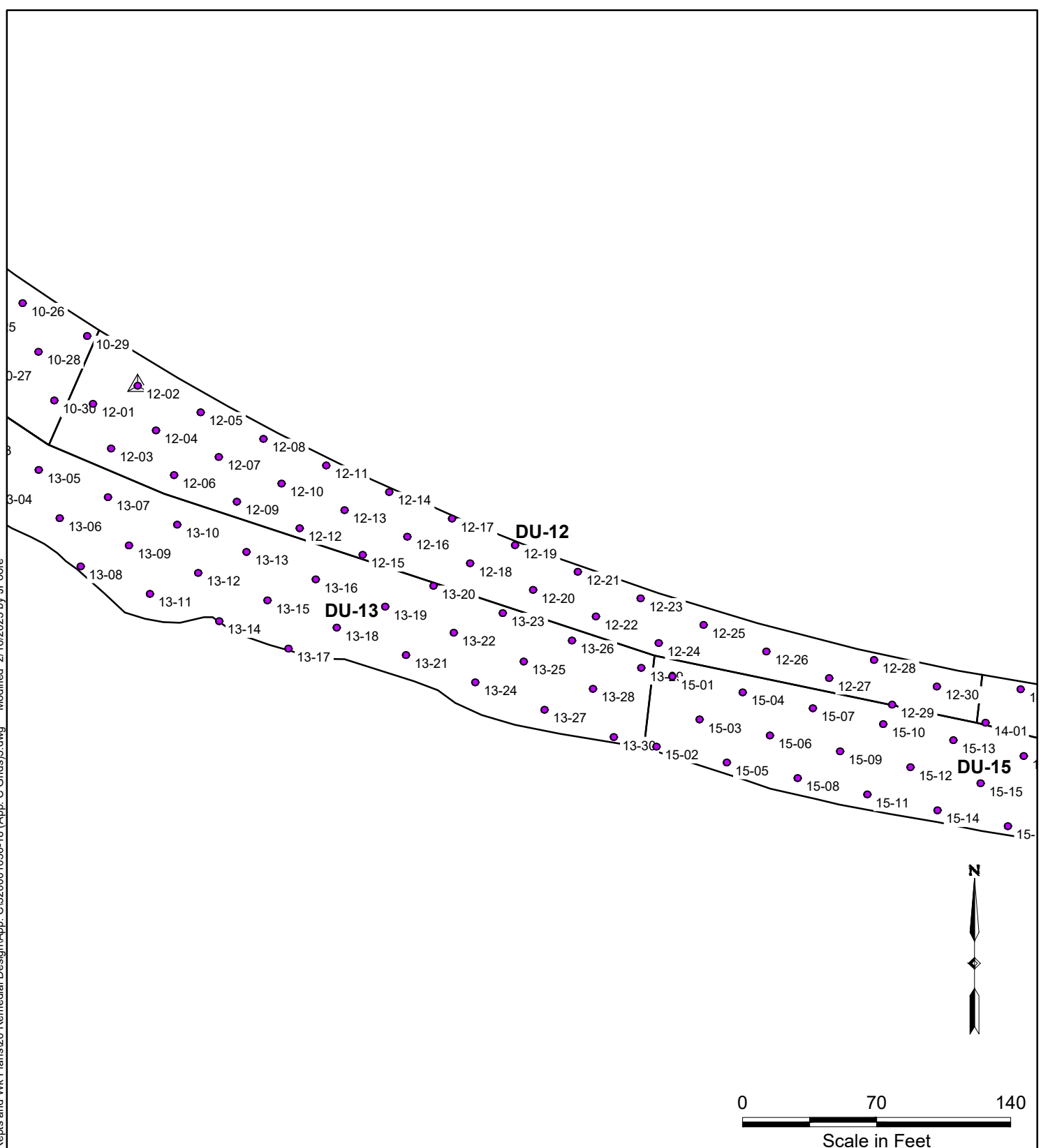
Approved:
HC

February 2023

Appendix

C11

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Legend:

- Increment Sample Location
- △ Offset Sample Location

DU-12 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

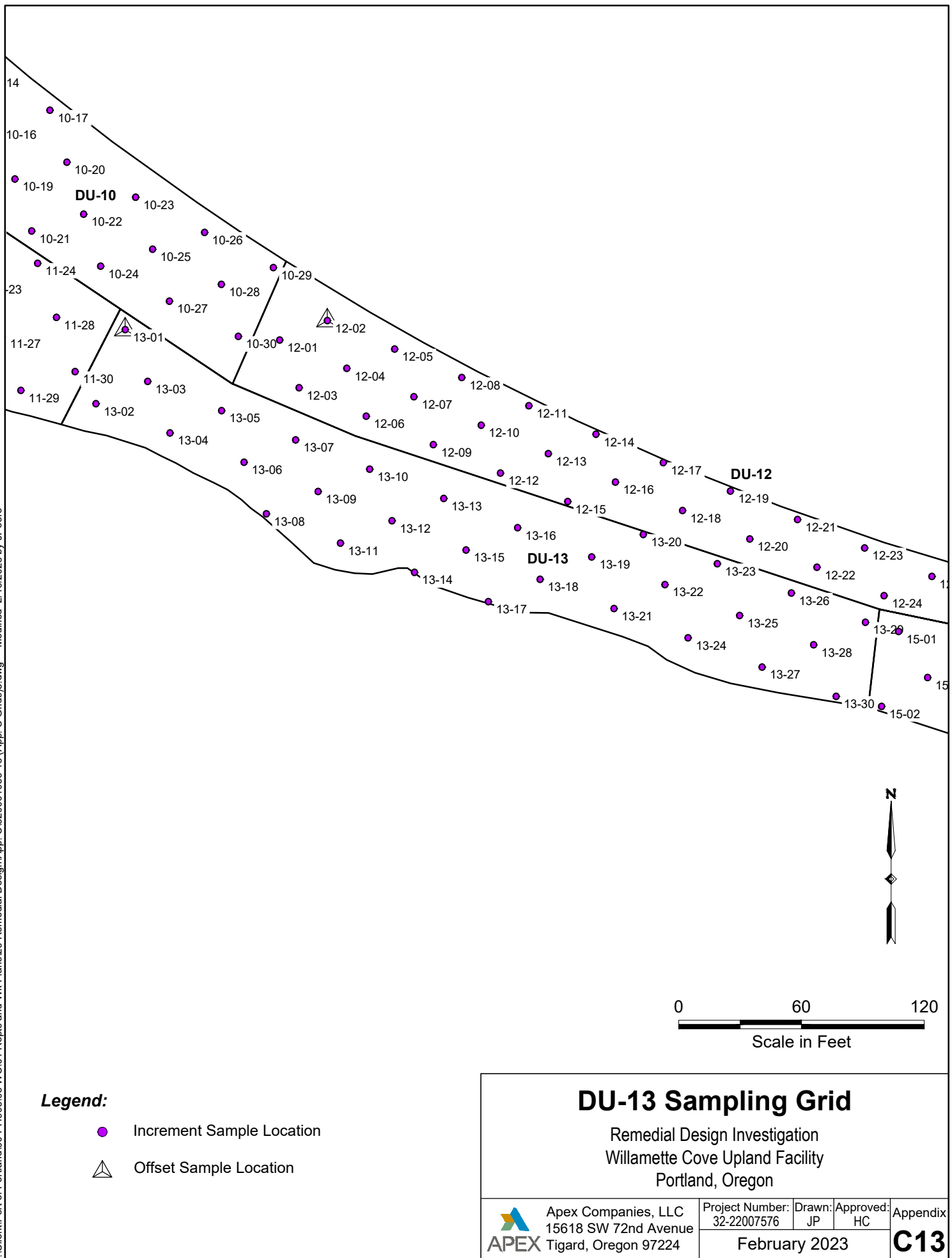
Approved:
HC

February 2023

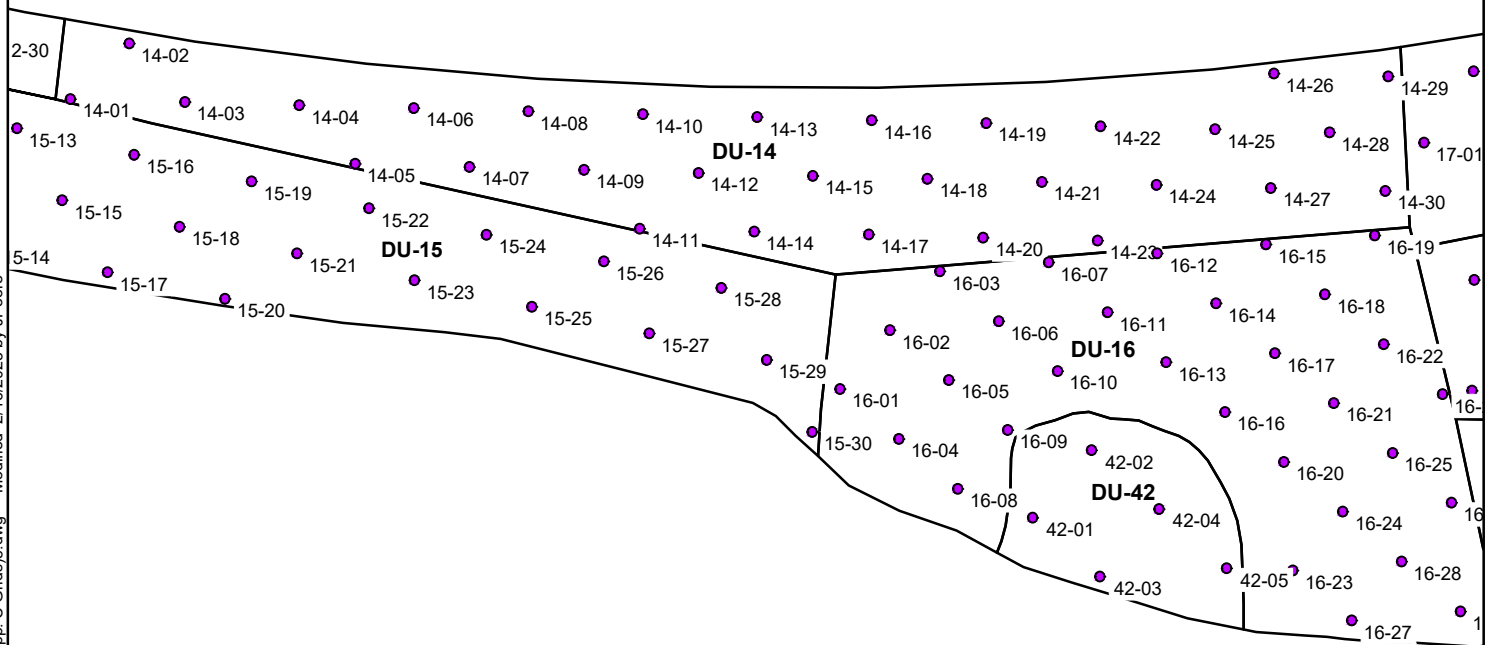
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C12

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I:\Client\Port of Portland\00-PH905\05 WC\01 Repts and Wk Plans\26 Remedial Design\App- C\320001056-18 (App. C Grids)\5.dwg Modified 2/16/2023 by JPoore



Legend:

● Increment Sample Location

DU-14 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

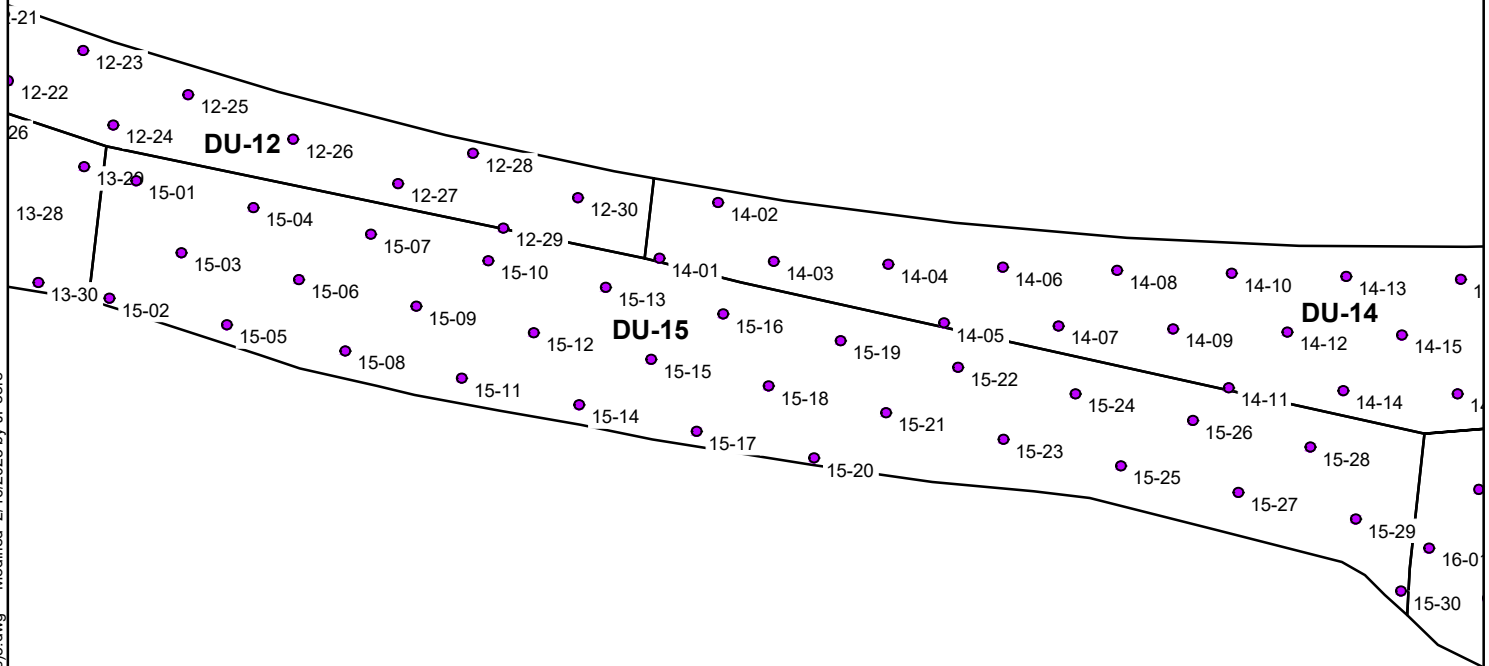
Approved:
HC

February 2023

Appendix

C14

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Legend:

● Increment Sample Location

DU-15 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

Approved:
HC

February 2023

Appendix

C15

DU-14

DU-16

DU-42

Legend:

● Increment Sample Location

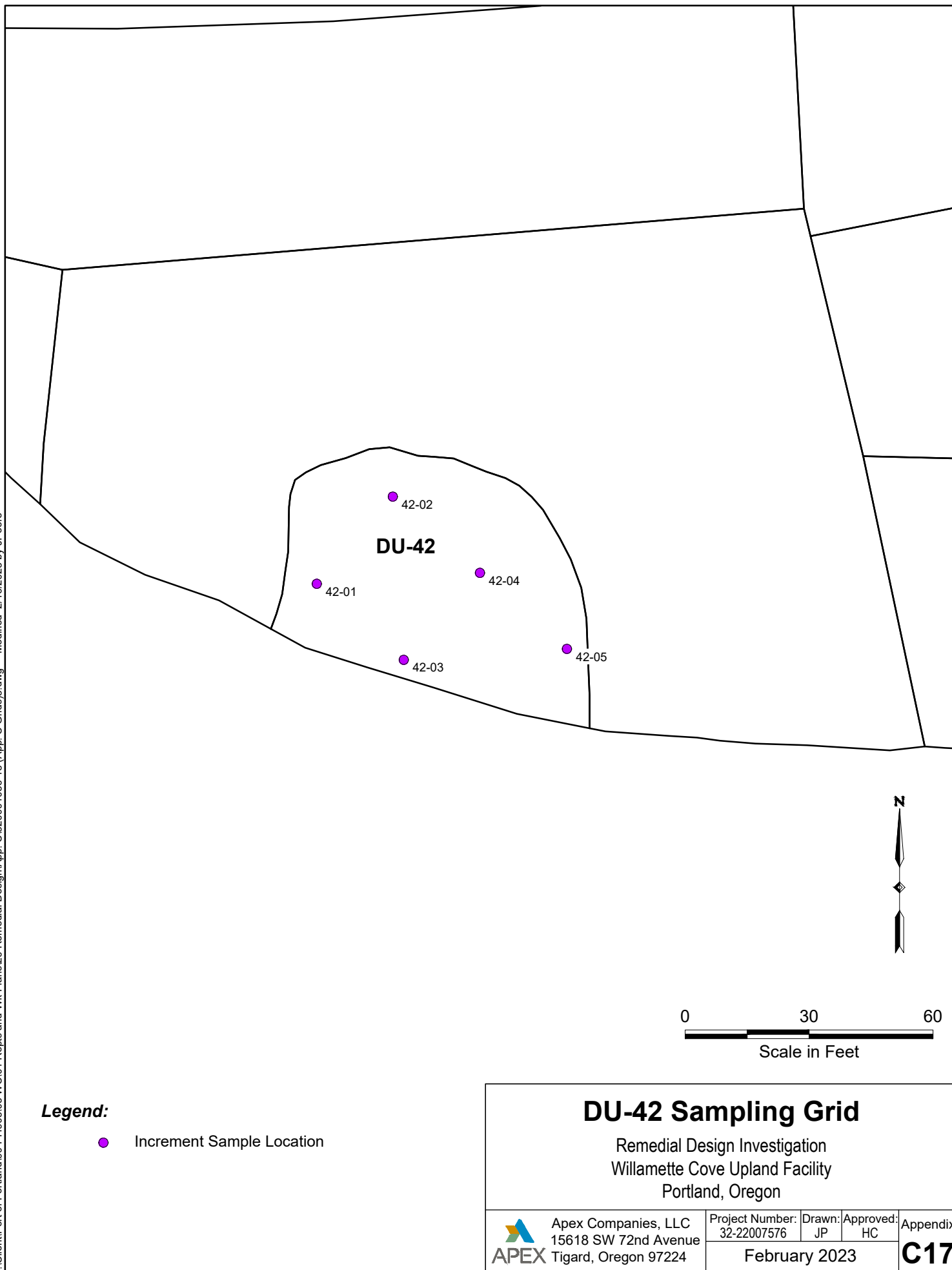
DU-16 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon

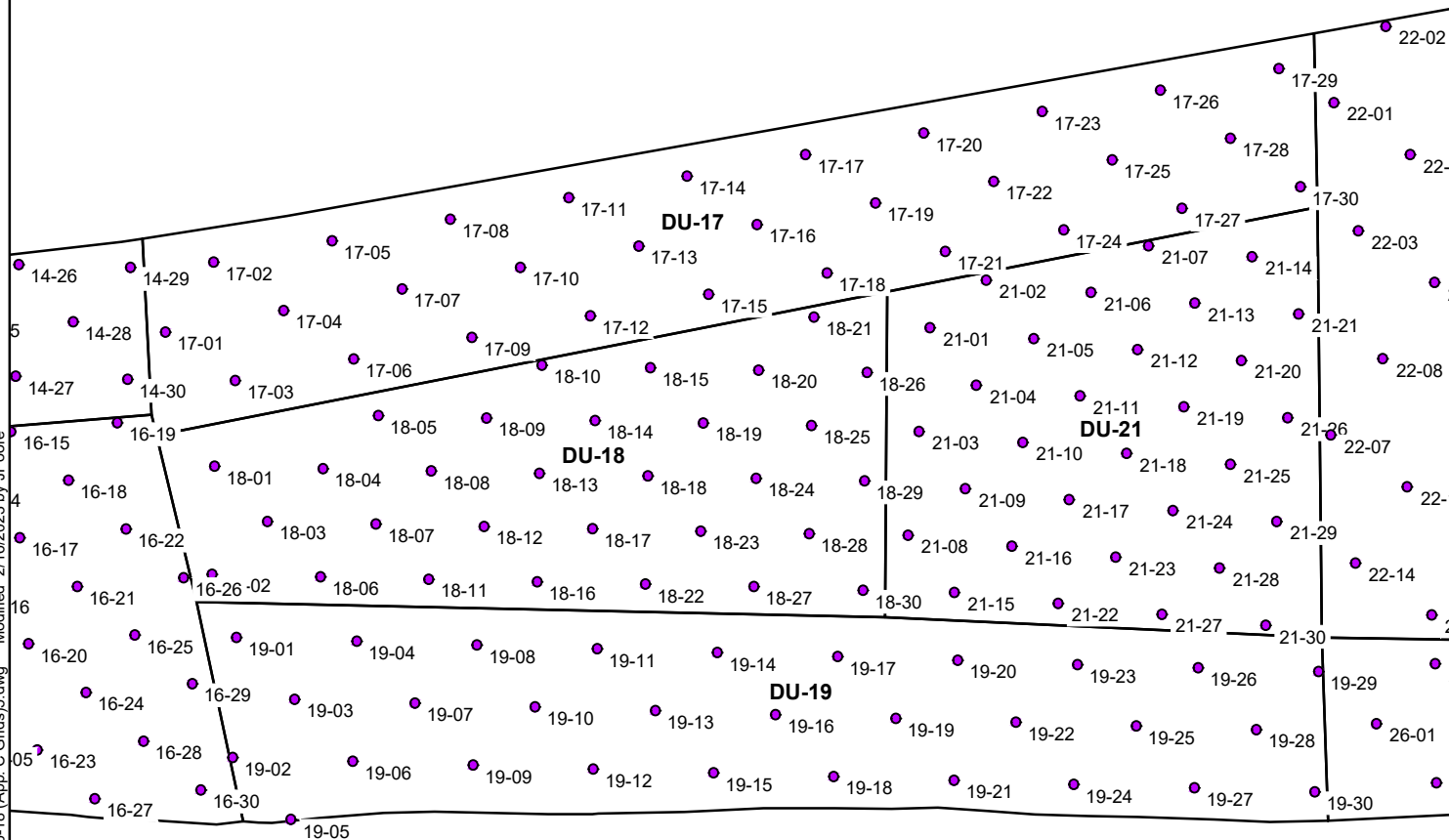
 Apex Companies, LLC 15618 SW 72nd Avenue Tigard, Oregon 97224	Project Number: 32-22007576	Drawn: JP	Approved: HC	Appendix
	February 2023			C16

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Legend:

● Increment Sample Location

DU-17 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

Approved:
HC

February 2023

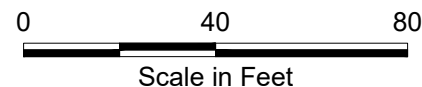
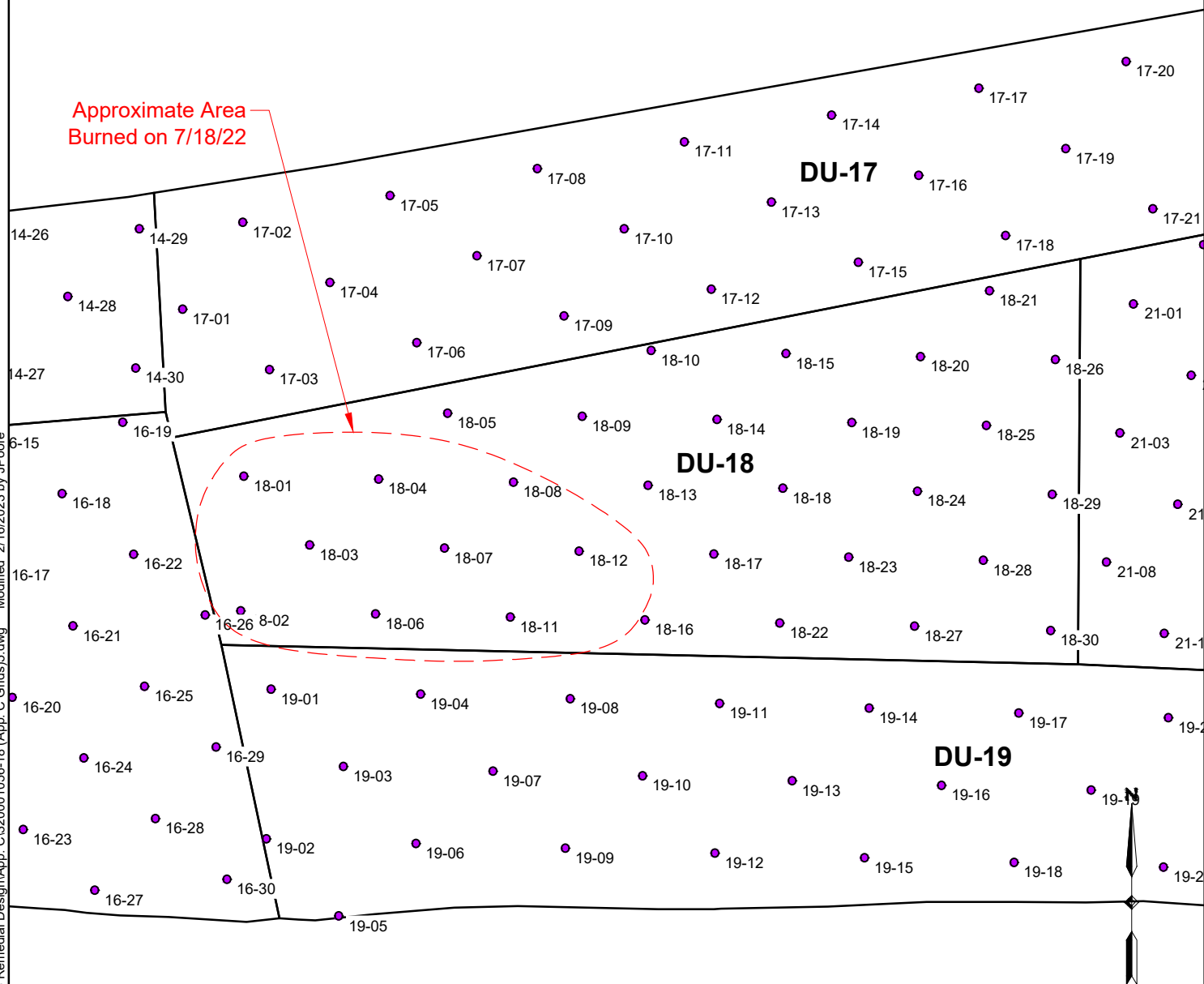
Appendix

C18

DRAFT

Approximate Area
Burned on 7/18/22

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Legend:

● Increment Sample Location

DU-18 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

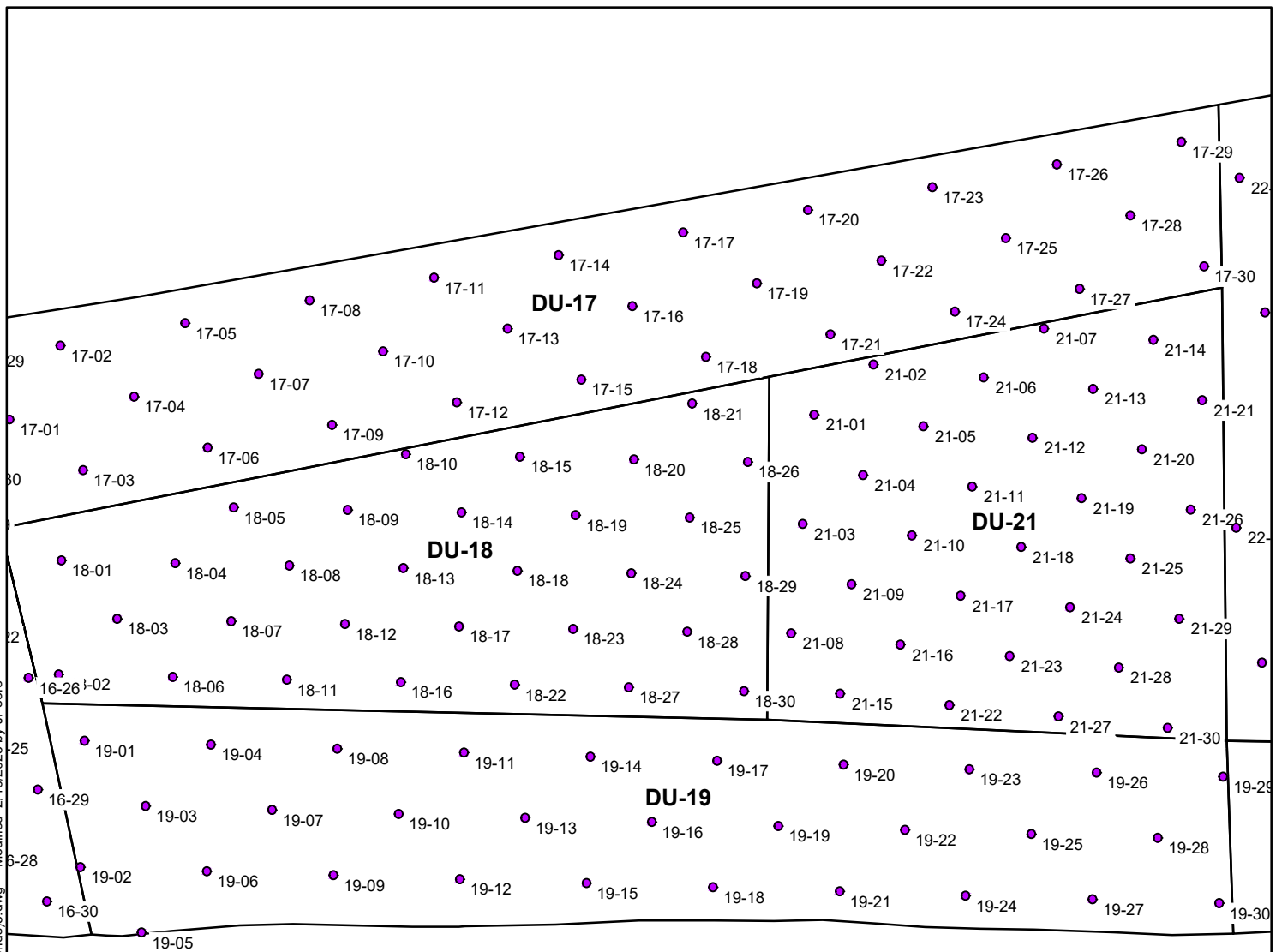
Approved:
HC

February 2023

Appendix

C19

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Legend:

● Increment Sample Location

DU-19 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

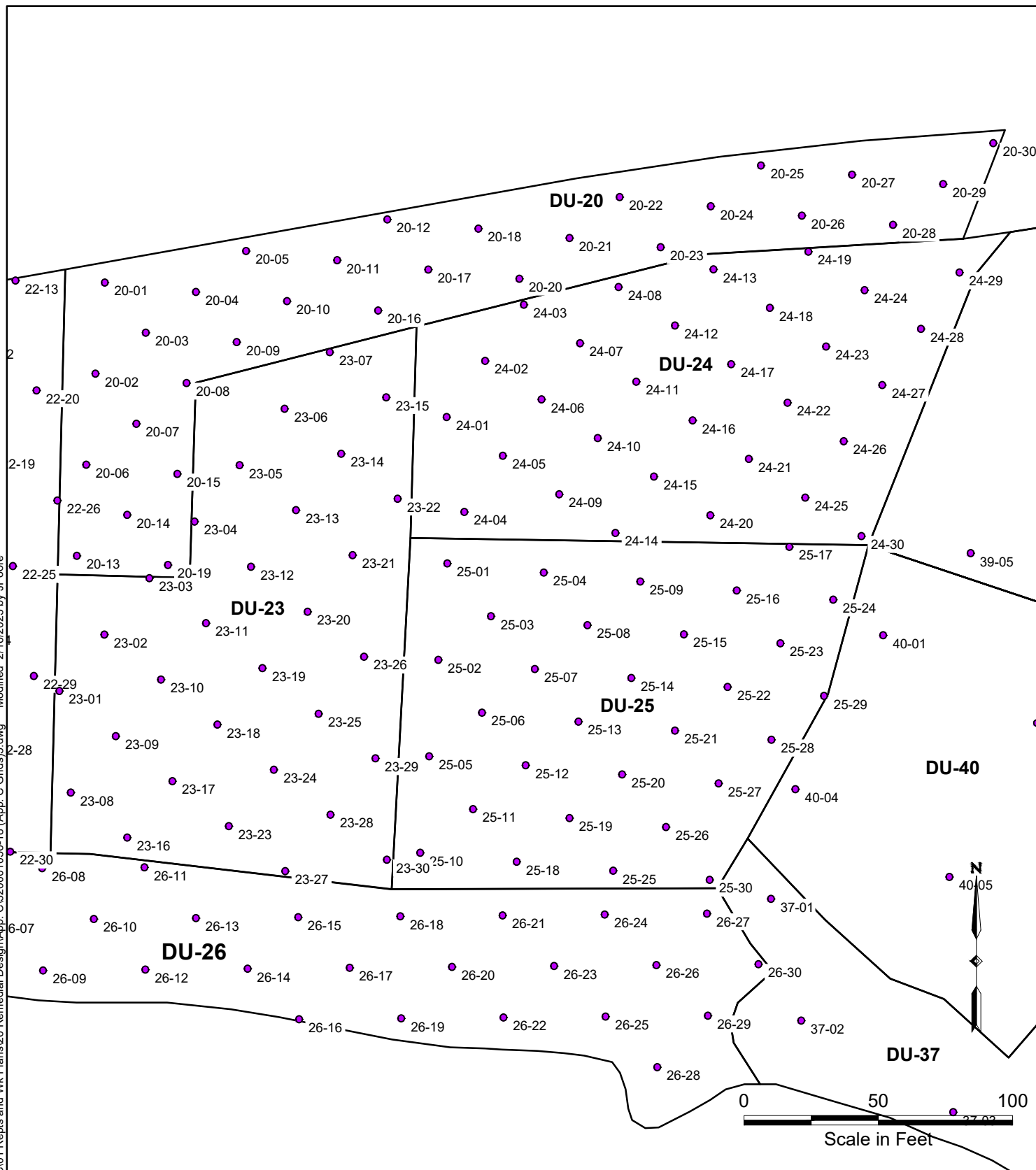
Approved:
HC

February 2023

Appendix

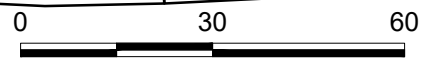
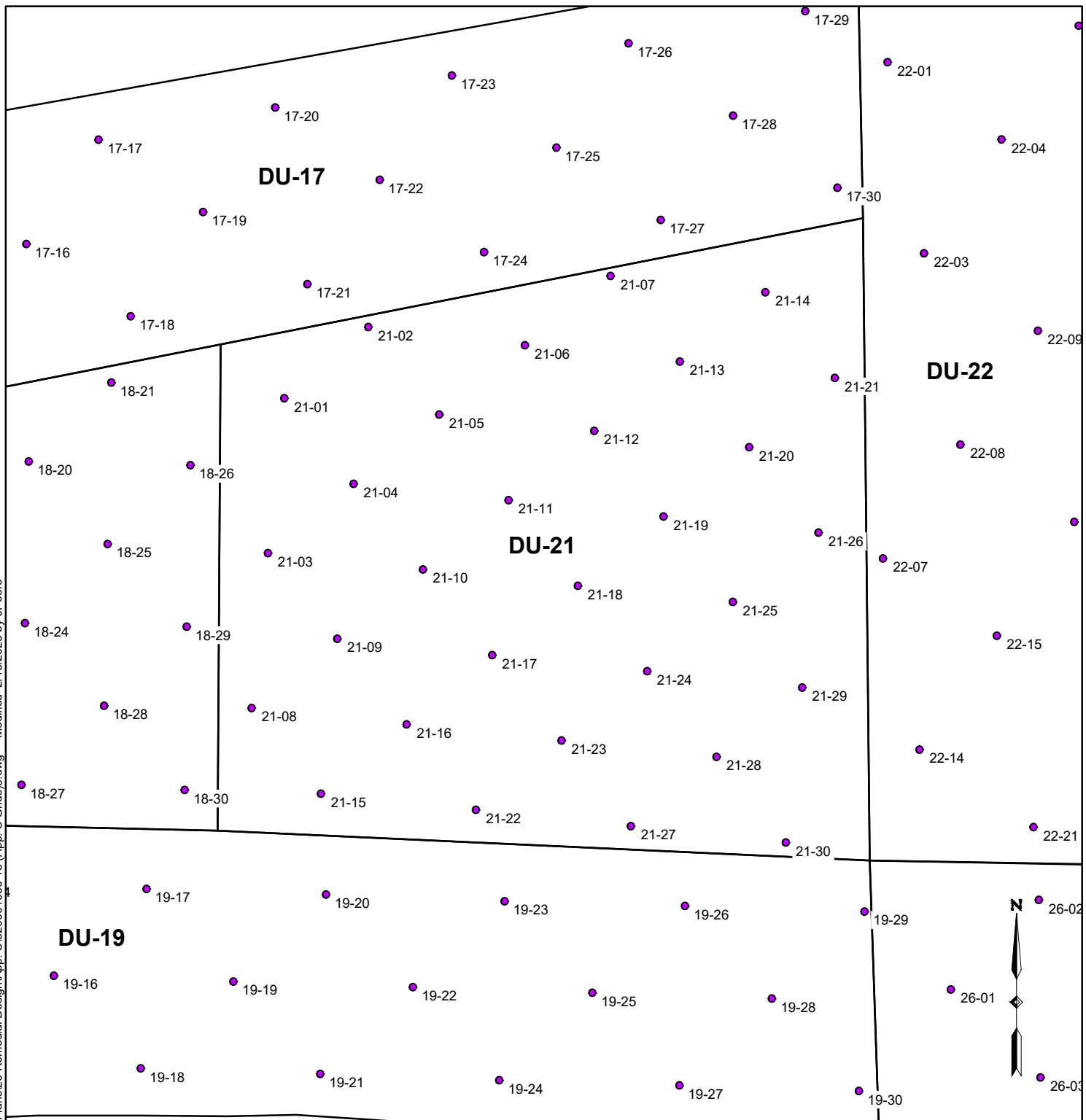
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DU-20 Sampling Grid Remedial Design Investigation Willamette Cove Upland Facility Portland, Oregon				
 Apex Companies, LLC 15618 SW 72nd Avenue Tigard, Oregon 97224	Project Number: 32-22007576	Drawn: JP	Approved: HC	Appendix
	February 2023			C21

I:\Client\Port of Portland\00-PH905\05 W\01 Repts and Wk Plans\26 Remedial Design\App. C\320001056-18 (App. C Grids)\5.dwg Modified 2/16/2023 by JPoore



Scale in Feet

Legend:

● Increment Sample Location

DU-21 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

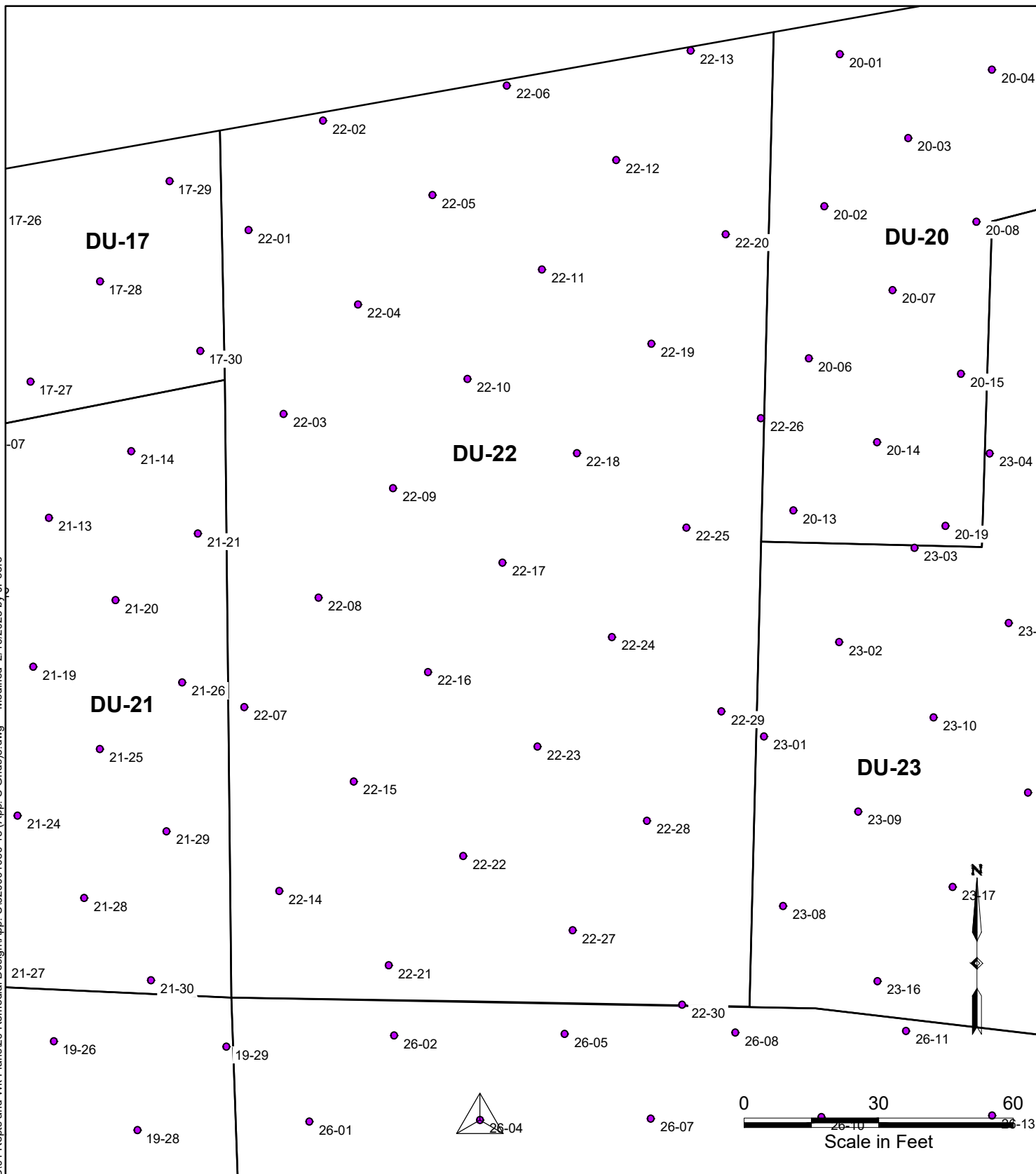
Approved:
HC

February 2023

Appendix

C22

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Legend:

- Increment Sample Location
- △ Offset Sample Location

DU-22 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

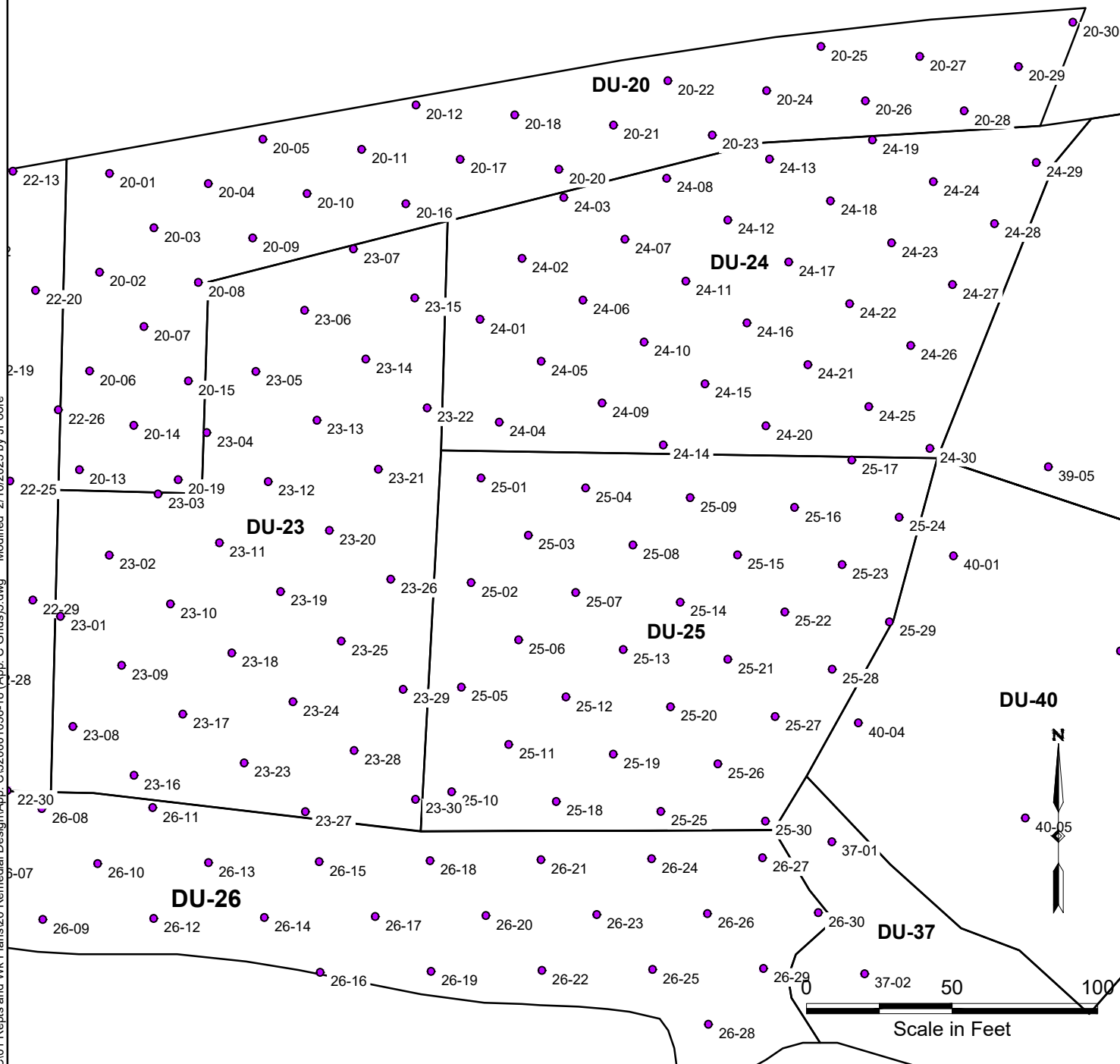
Approved:
HC

February 2023

Appendix

C23

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Legend:

● Increment Sample Location

DU-23 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

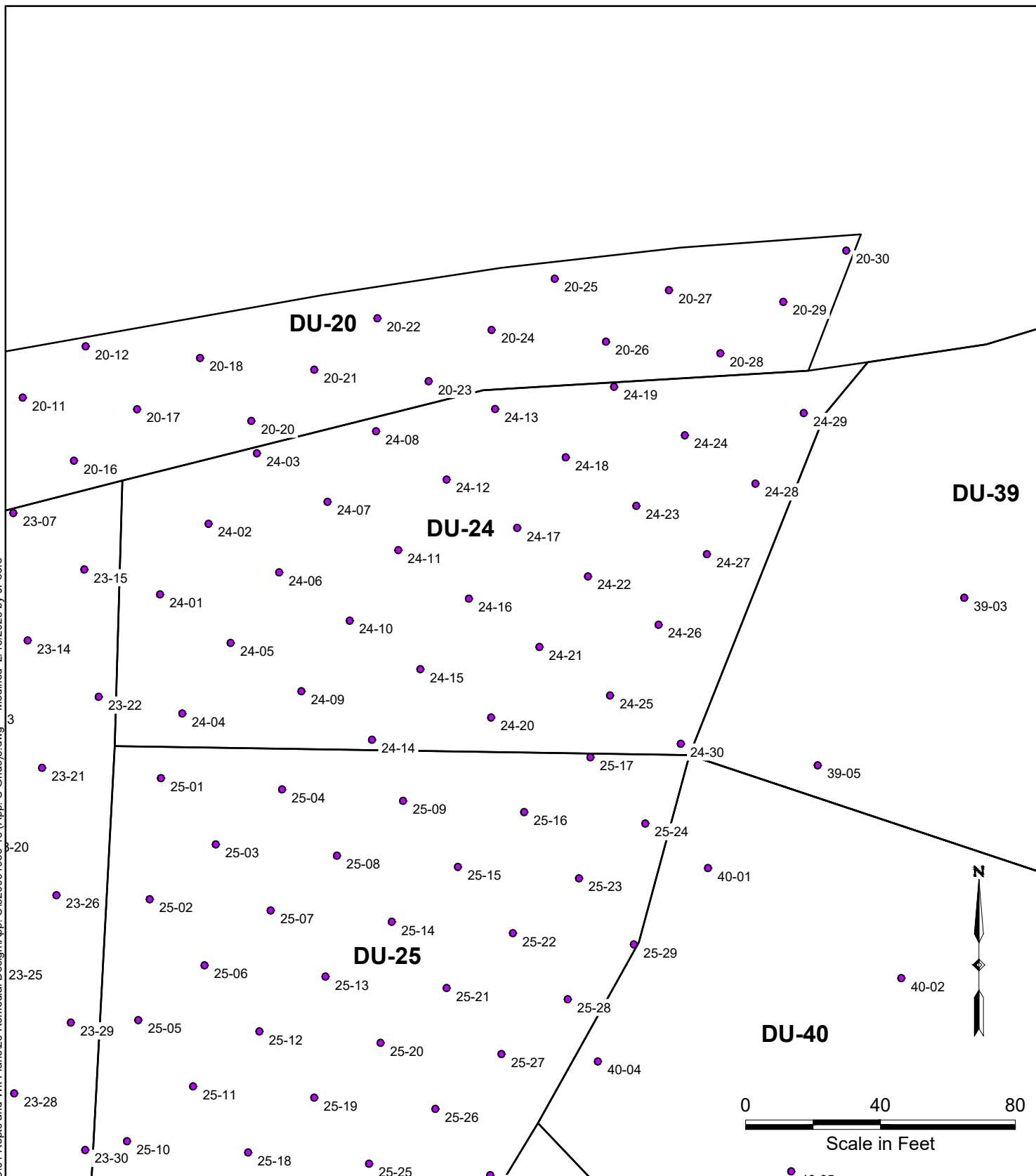
Approved:
HC

February 2023

Appendix

C24

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● Increment Sample Location

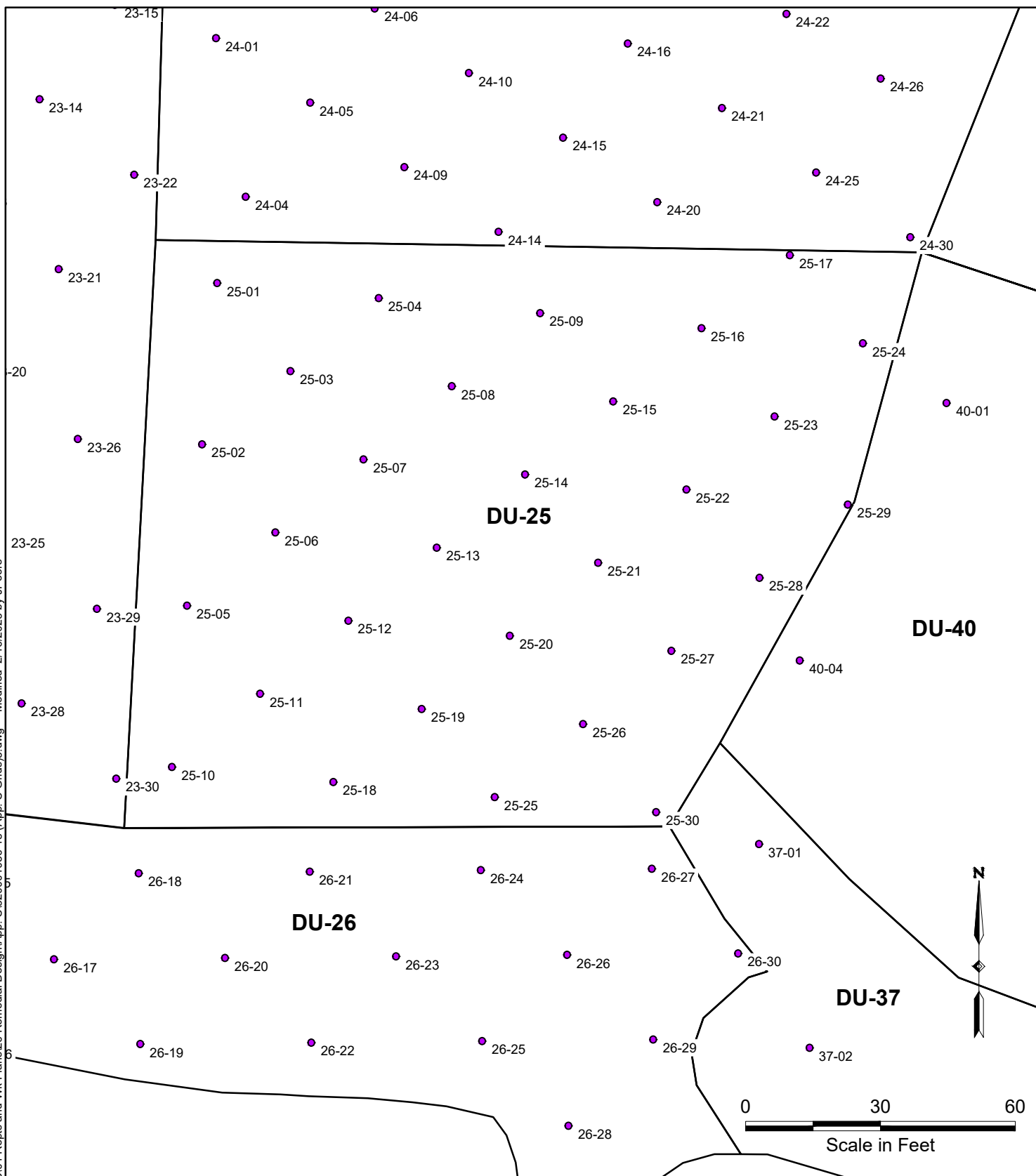
DU-24 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon

 Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number: 32-22007576	Drawn: JP	Approved: HC	Appendix C25
February 2023			

I:\Client\Port of Portland\00-PH905\05 W\01 Repts and Wk Plans\26 Remedial Design\App. C\320001056-18 (App. C Grids)\5.dwg Modified 2/16/2023 by JPoore



Legend:

● Increment Sample Location

DU-25 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

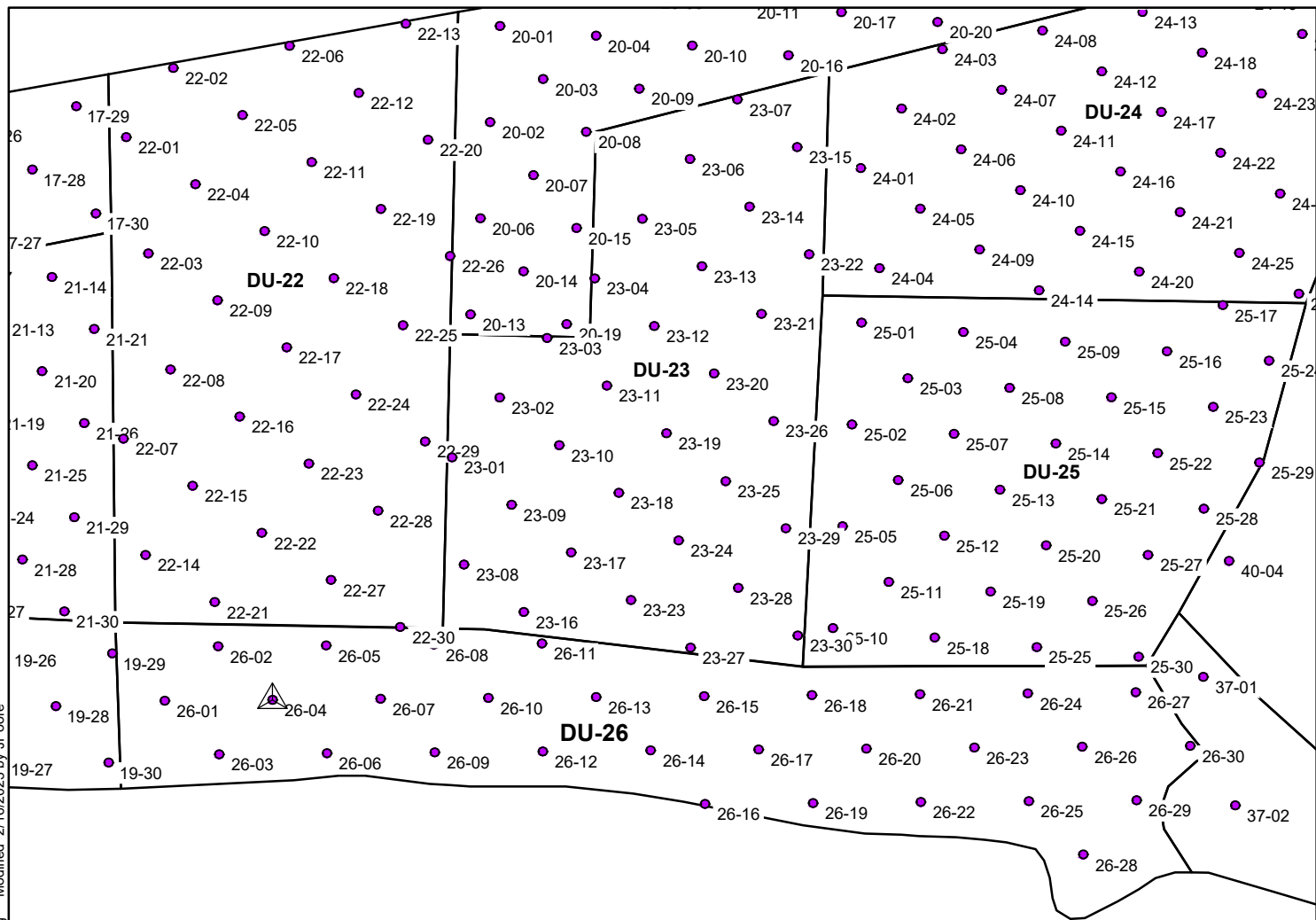
Approved:
HC

February 2023

Appendix

C26

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Legend:

- Increment Sample Location
- △ Offset Sample Location

DU-26 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

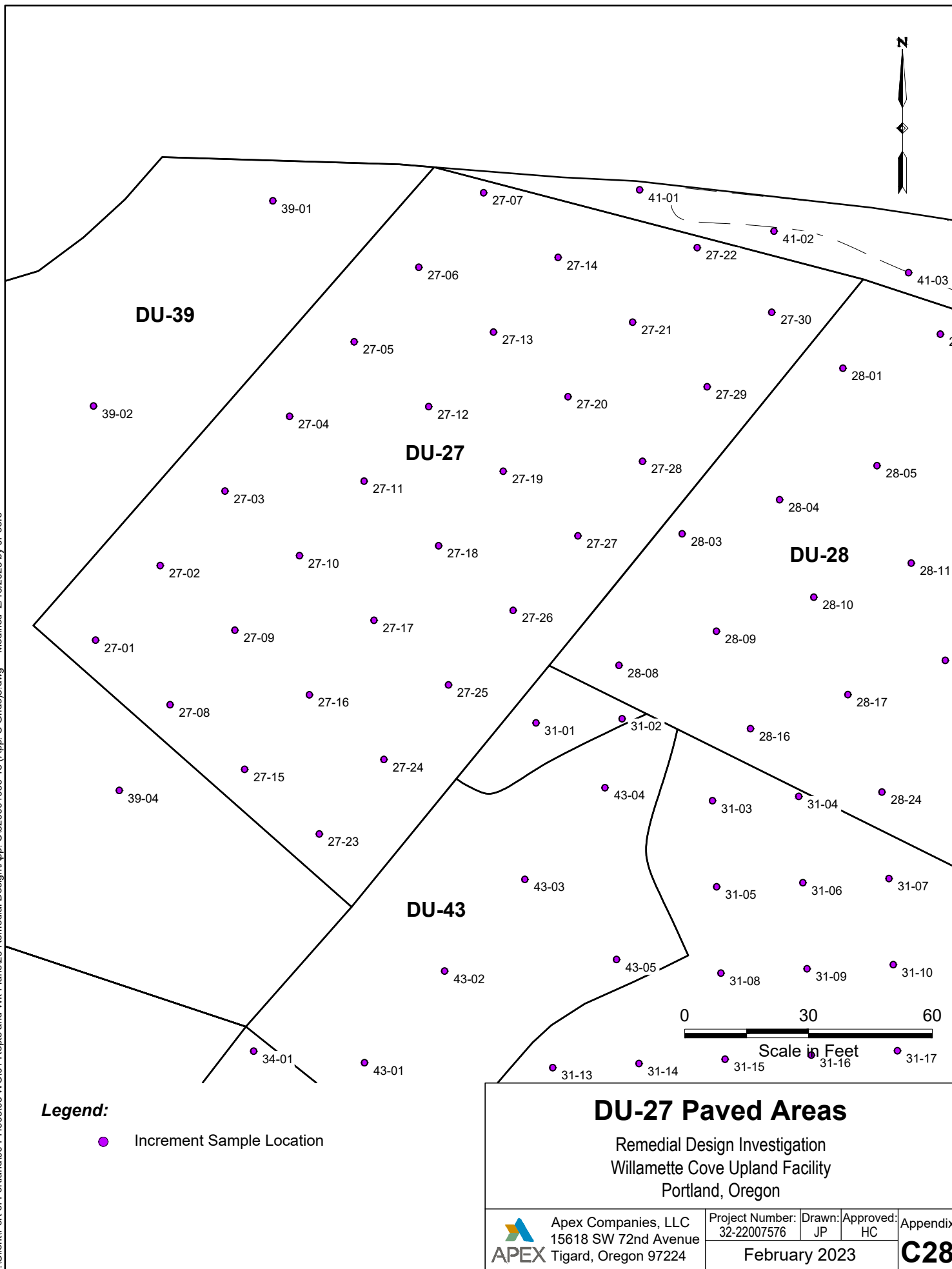
Approved:
HC

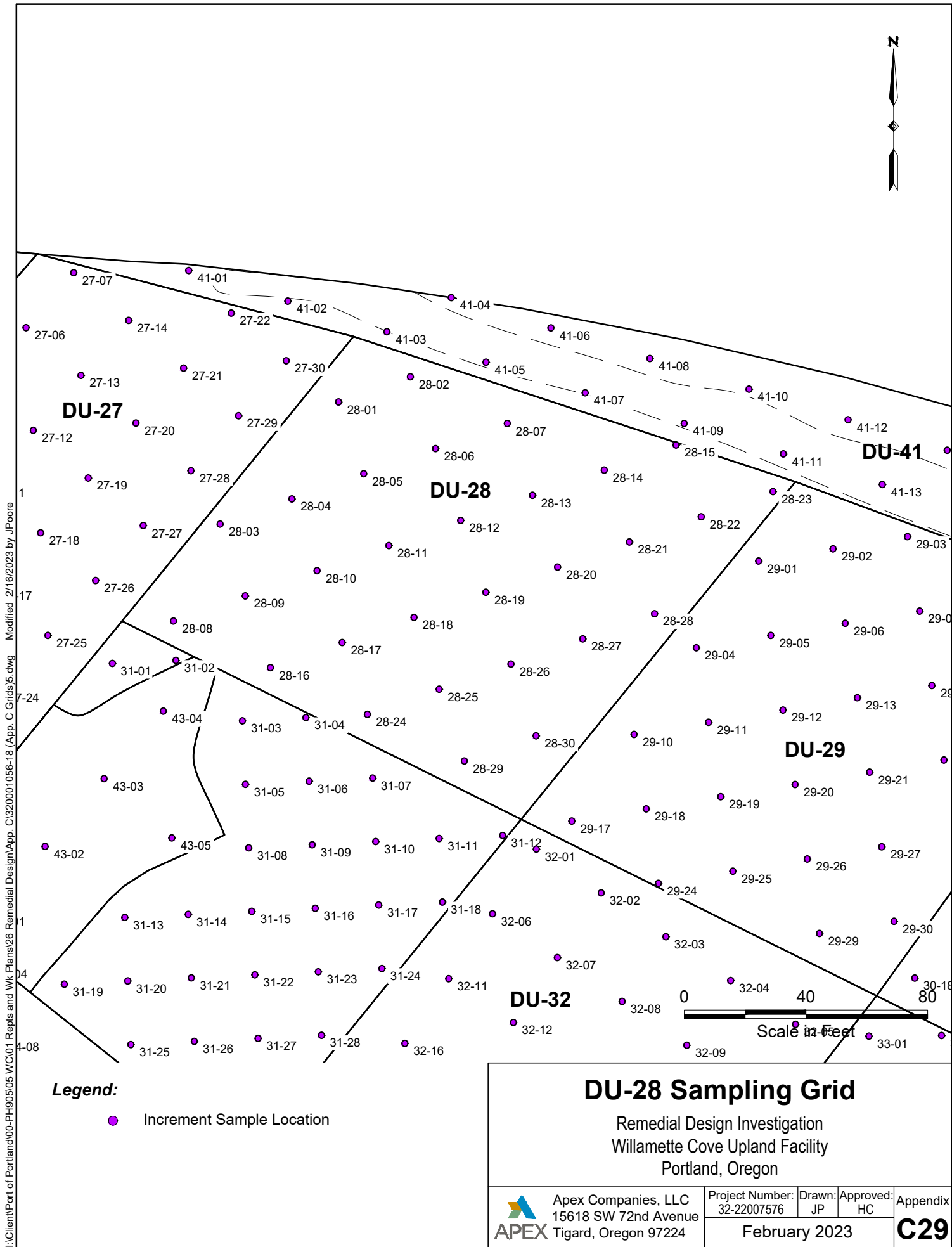
February 2023

Appendix

C27

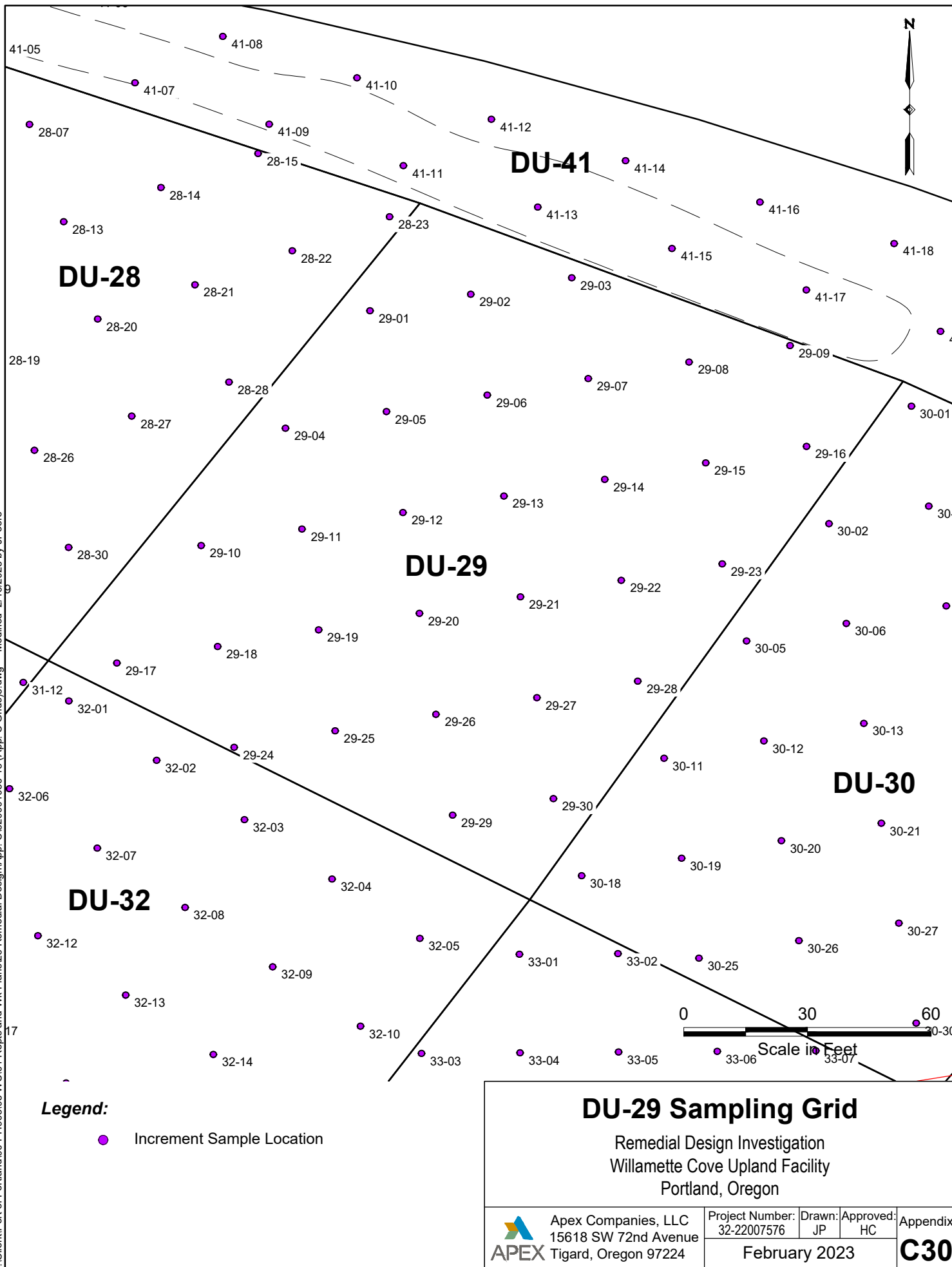
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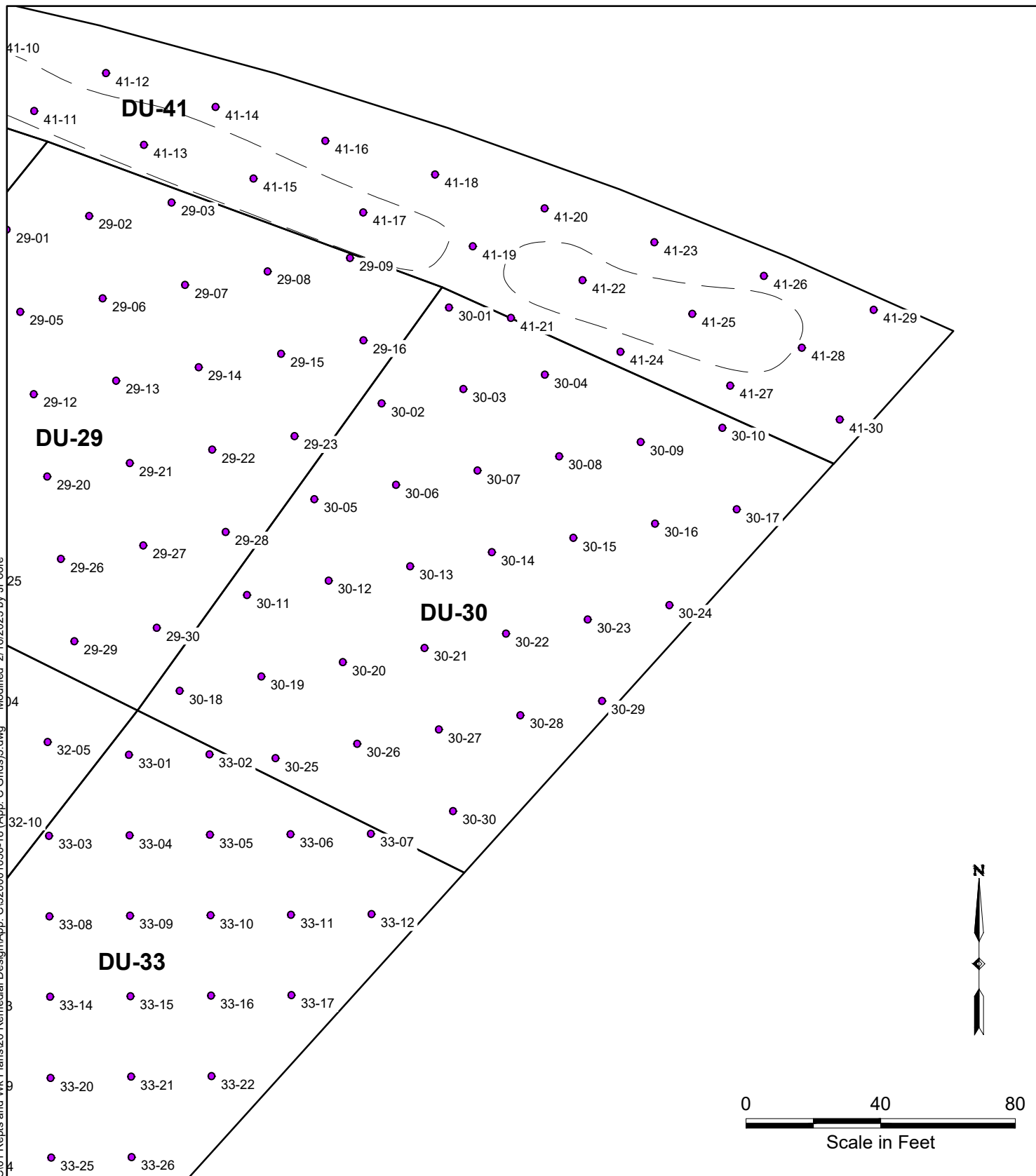


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Legend:

● Increment Sample Location

DU-30 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

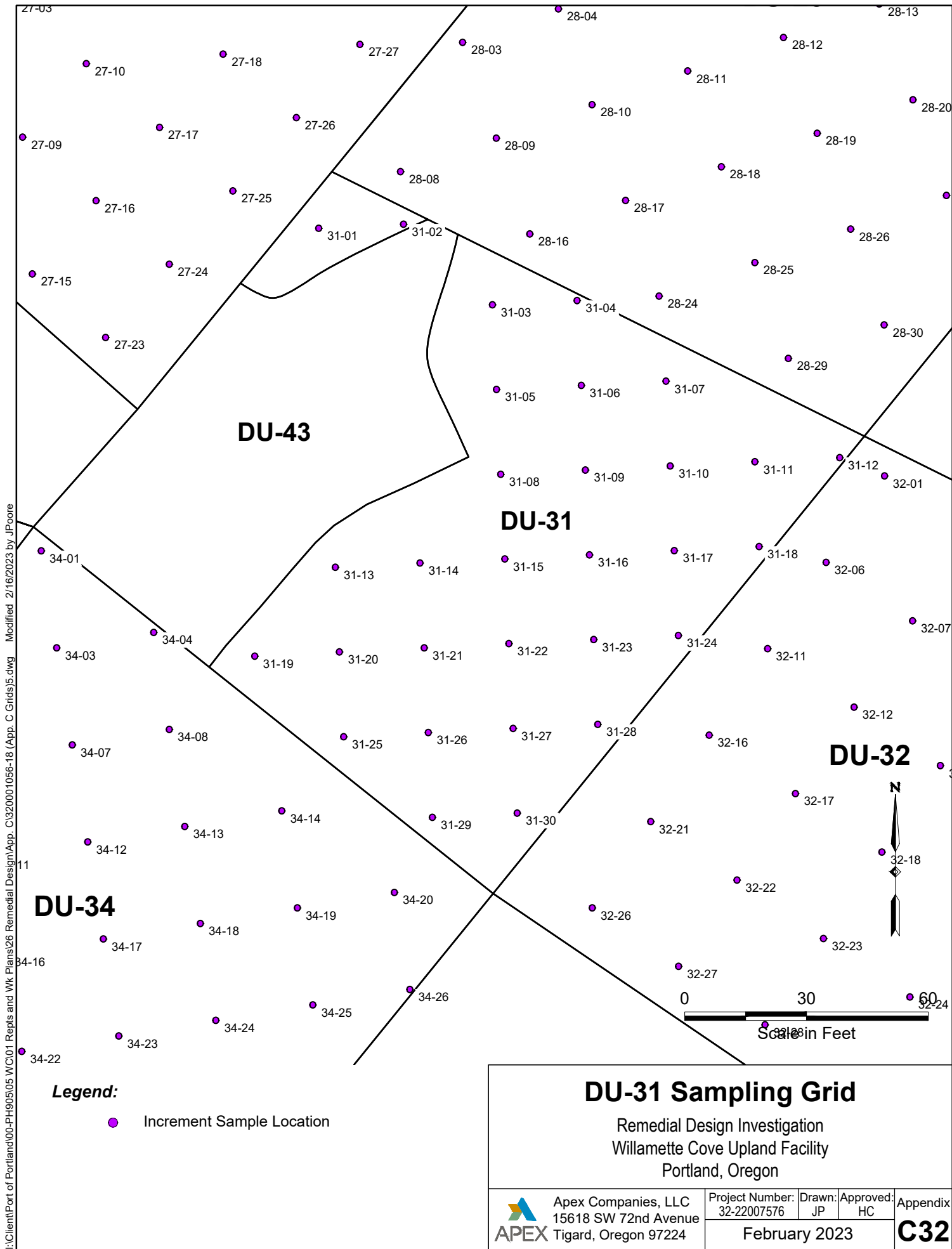
Drawn:
JP

Approved:
HC

February 2023

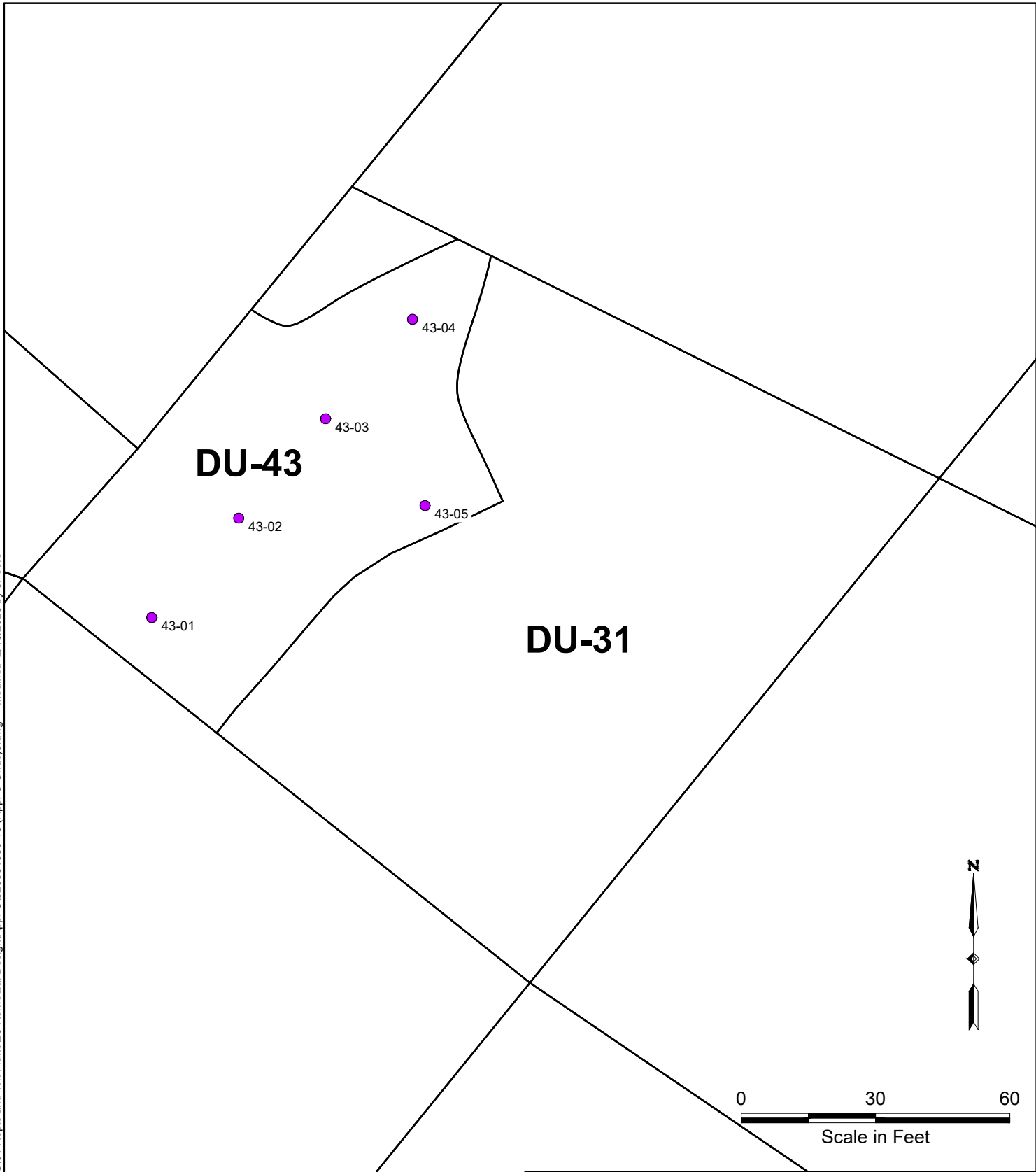
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C31



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Legend:

● Increment Sample Location

DU-43 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

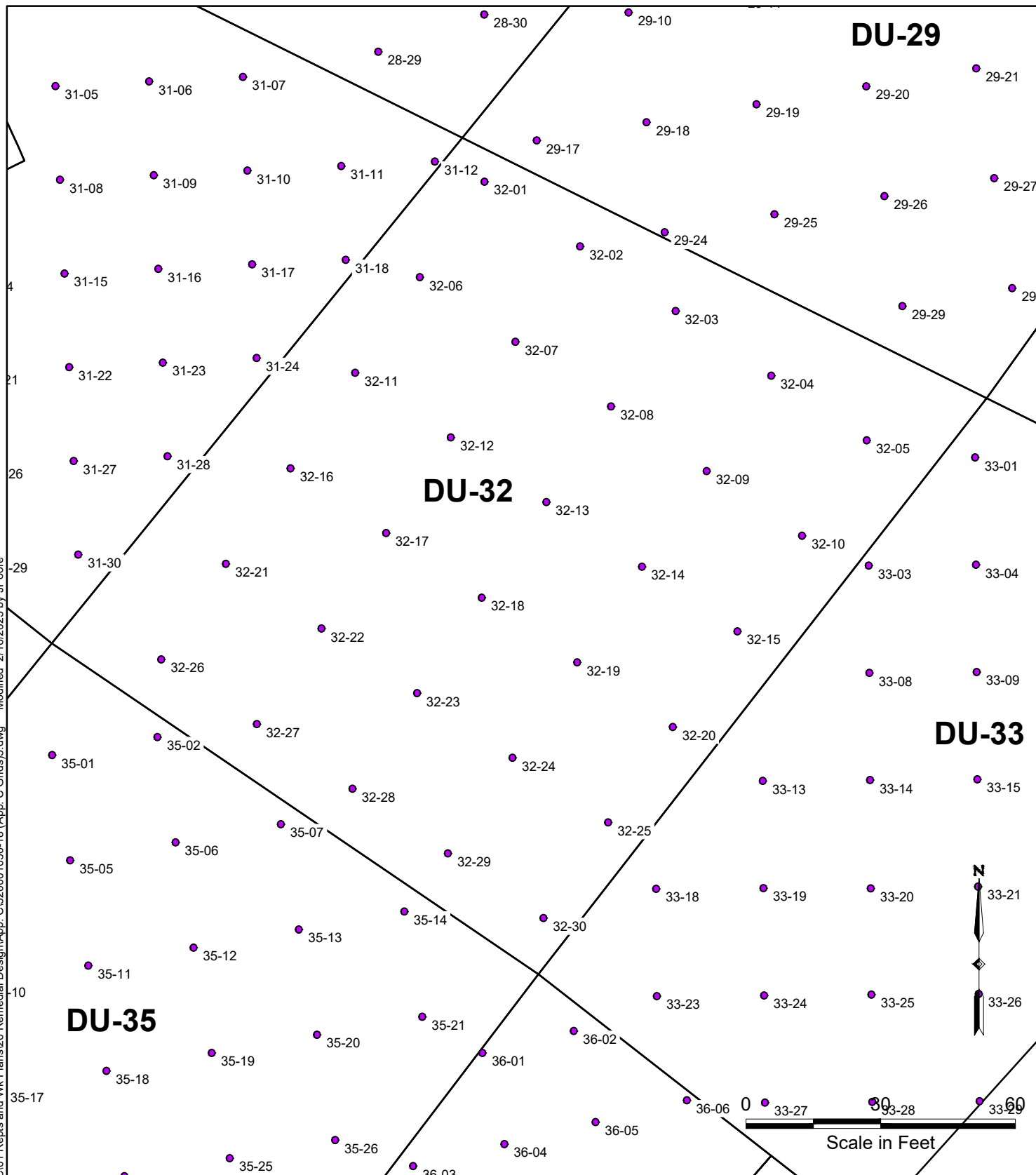
Approved:
HC

February 2023

Appendix

C33

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Legend:

● Increment Sample Location

DU-32 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

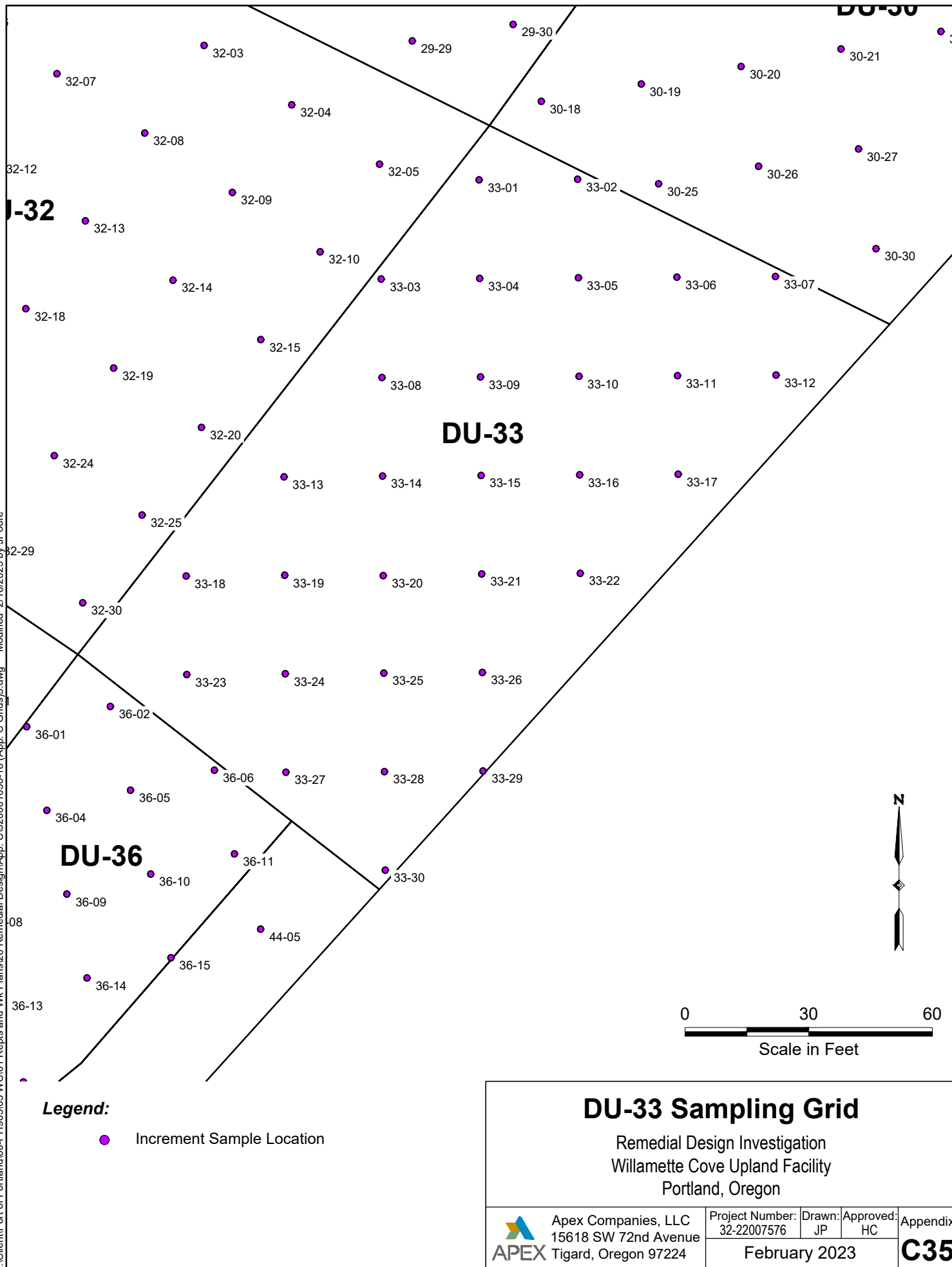
Approved:
HC

February 2023

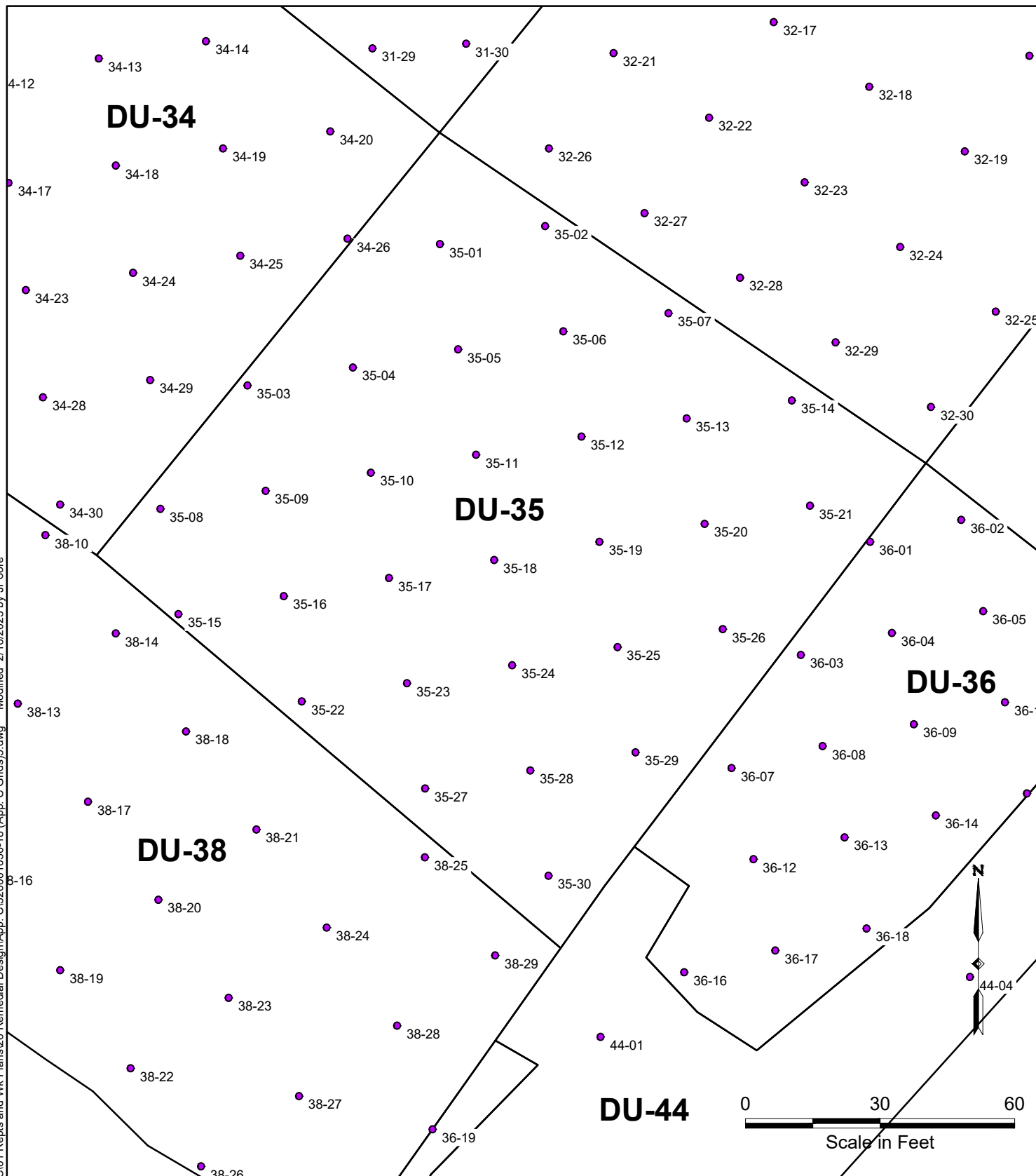
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C34

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Legend:

● Increment Sample Location

DU-35 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

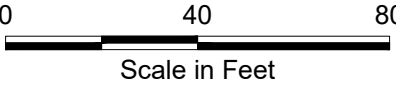
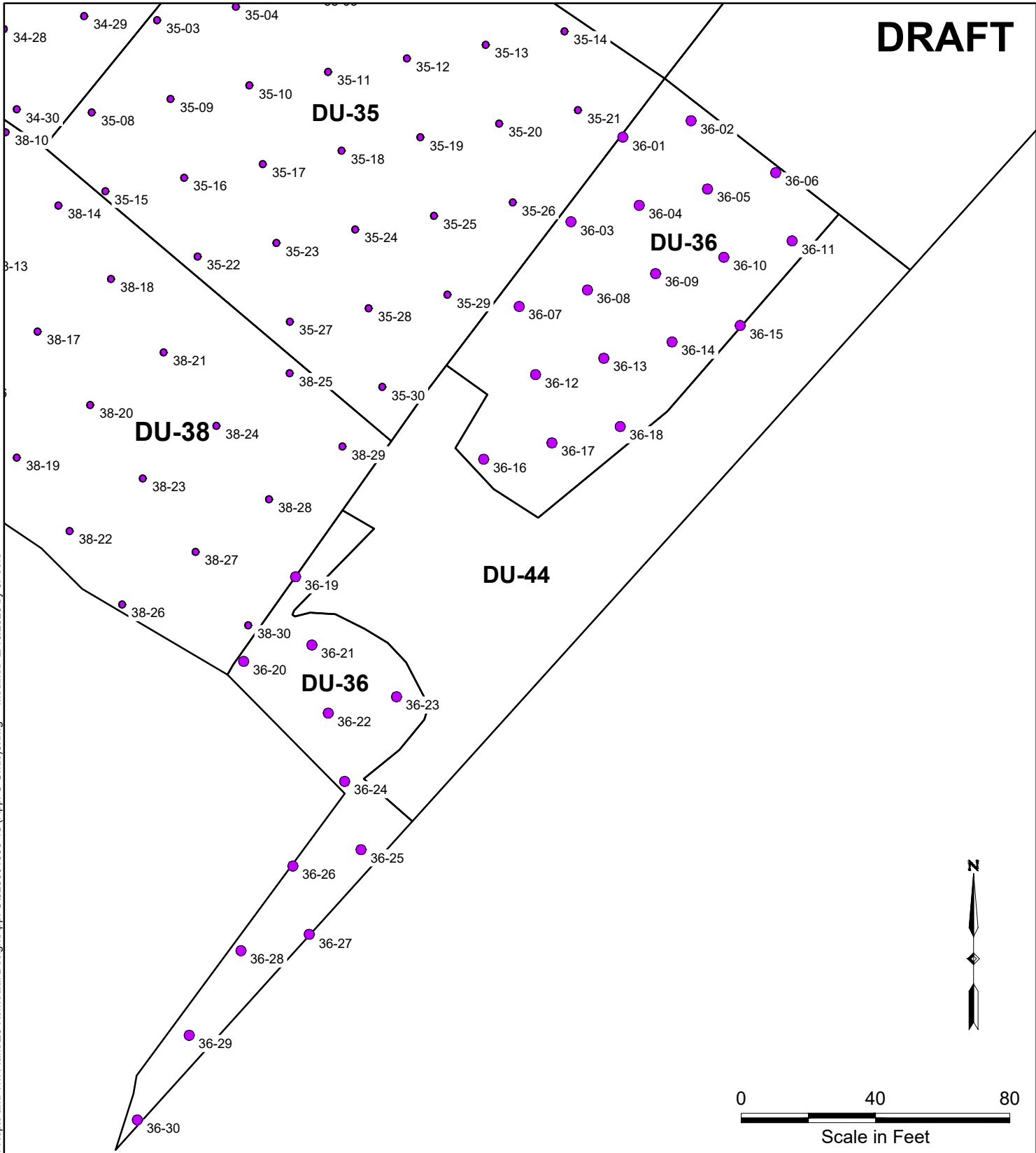
Approved:
HC

February 2023

Appendix

C37

DRAFT



Legend:

● Increment Sample Location

DU-36 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon

 Apex Companies, LLC 15618 SW 72nd Avenue Tigard, Oregon 97224	Project Number: 32-22007576	Drawn: JP	Approved: HC	Appendix
	February 2023			C38

I:\Client\Port of Portland\00-PH905\05 W\01 Repts and Wk Plans\26 Remedial Design\App- C\320001056-18 (App- C Grids)\5.dwg Modified 2/16/2023 by JPoore

DU-38

DU-36

DU-44

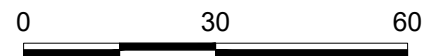
44-05

44-04

44-01

44-03

44-02



Scale in Feet

Legend:

● Increment Sample Location

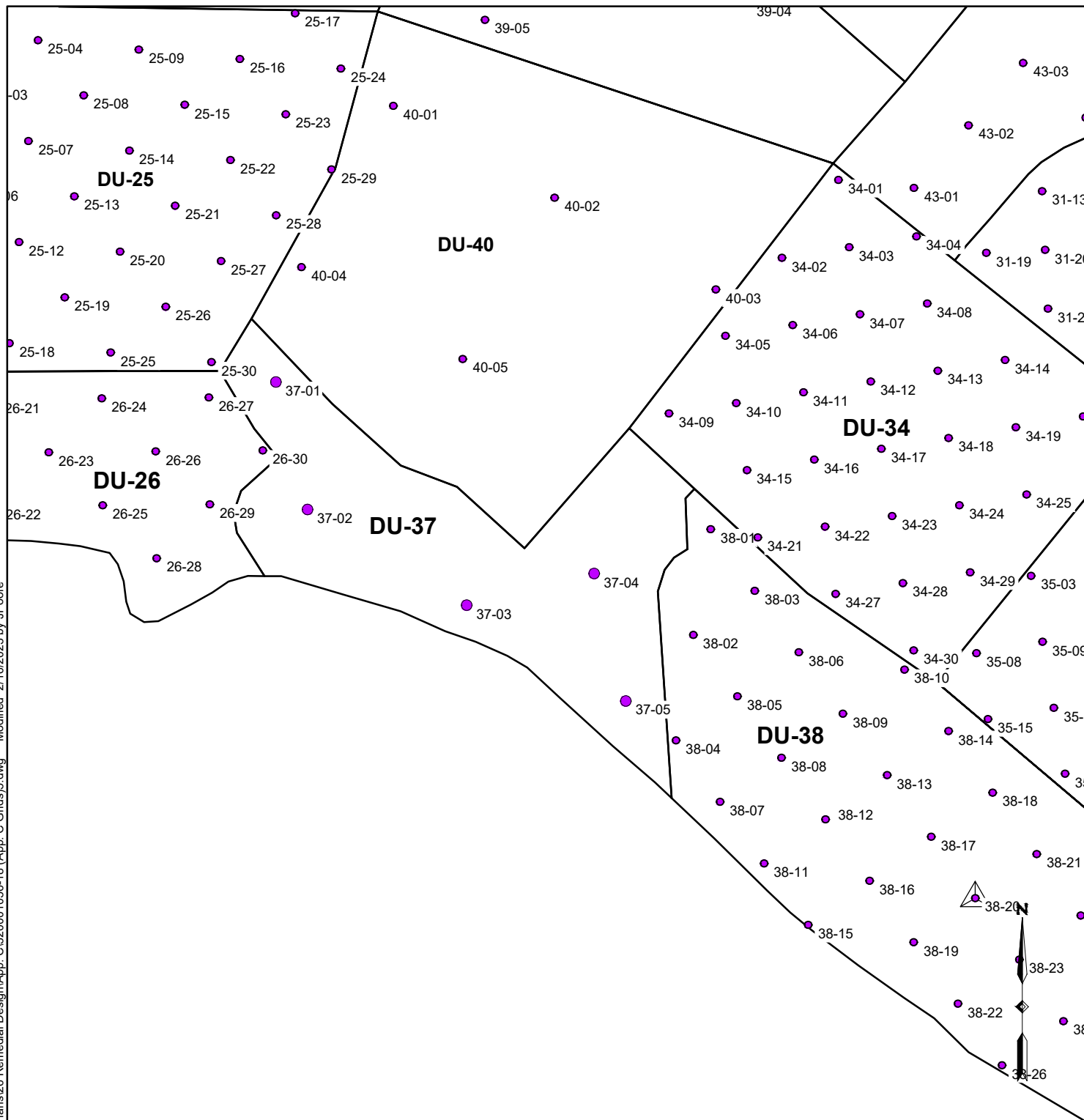
DU-44 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon

 Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number: 32-22007576	Drawn: JP	Approved: HC	Appendix C39
February 2023			

I:\Client\Port of Portland\00-PH905\05 WC\01 Repts and Wk Plans\26 Remedial Design\App. C\320001056-18 (App. C Grids)\5.dwg Modified 2/16/2023 by JPoore



Legend:

● Increment Sample Location

DU-37 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

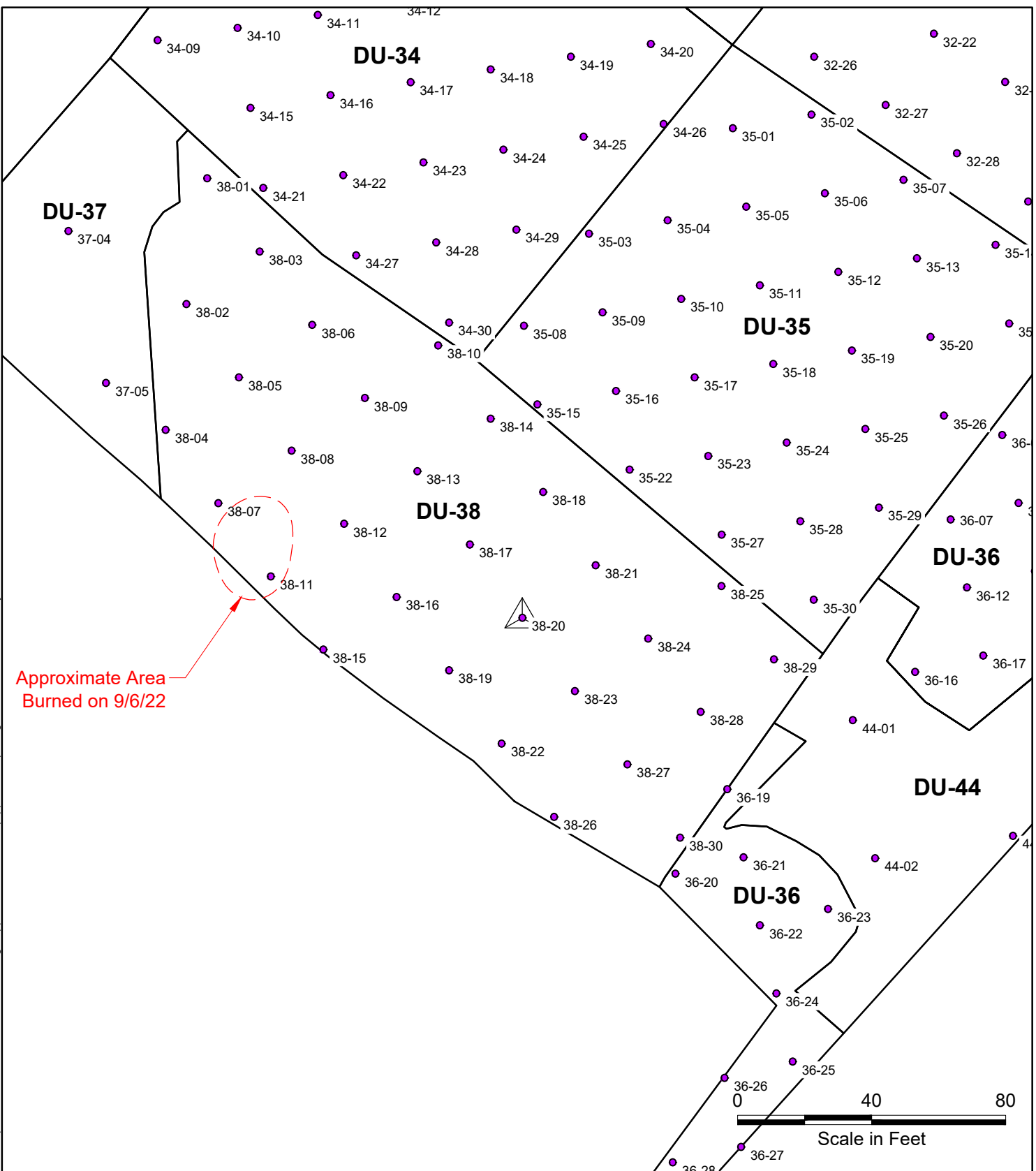
Approved:
HC

February 2023

Appendix

C40

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Legend:

- Increment Sample Location
- △ Offset Sample Location

DU-38 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

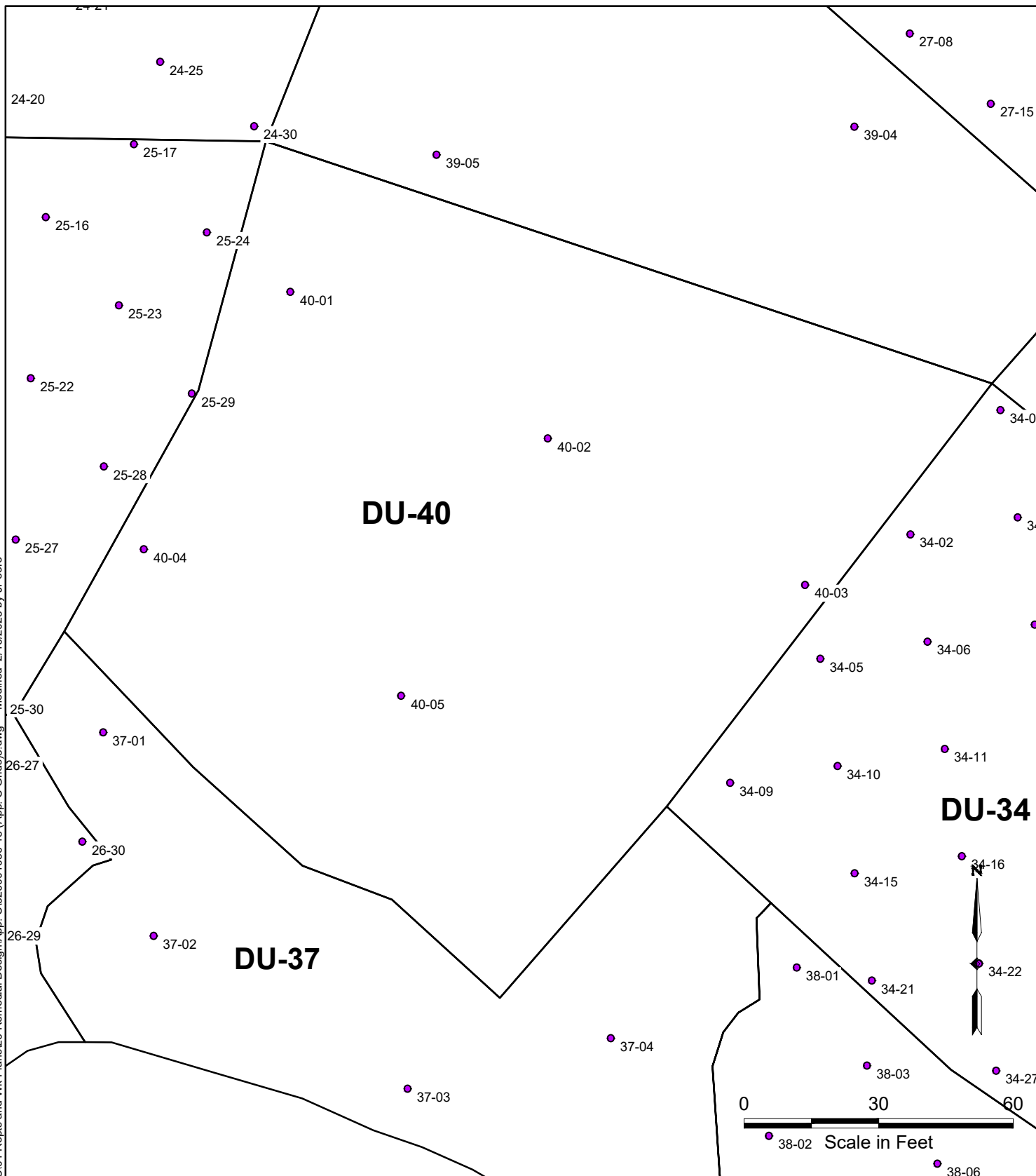
Approved:
HC

February 2023

Appendix

C41

I:\Client\Port of Portland\00-PH905\05 W\01 Repts and Wk Plans\26 Remedial Design\App. C\320001056-18 (App. C Grids)\5.dwg Modified 2/16/2023 by JPoore



Legend:

● Increment Sample Location

DU-40 Sampling Grid

Remedial Design Investigation
Willamette Cove Upland Facility
Portland, Oregon



Apex Companies, LLC
15618 SW 72nd Avenue
Tigard, Oregon 97224

Project Number:
32-22007576

Drawn:
JP

Approved:
HC

February 2023

Appendix

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