



Joint Permit Application

This is a joint application, and must be sent to both agencies, who administer separate permit programs. Alternative forms of permit applications may be acceptable; contact the Corps and DSL for more information.

Date Stamp

	U.S. Army Corps of Engineers Portland District		Oregon Department of State Lands
Corps Action ID Number		DSL Number	

(1) TYPE OF PERMIT(S) IF KNOWN (check all that apply)

Corps: Individual Nationwide No.: 38 Regional General _____ Other _____

DSL: Individual General Permit No State Permit Required Waiver

(2) APPLICANT AND LANDOWNER CONTACT INFORMATION

	Applicant	Property Owner (if different)	Authorized Agent (if applicable) <input checked="" type="checkbox"/> Consultant <input type="checkbox"/> Contractor
Name (Required)	Robert Wyatt		Elizabeth Greene
Business Name	NW Natural	Oregon Department of State Lands	Anchor QEA
Mailing Address 1	250 SW Taylor Street	775 Summer Street NE	6720 S Macadam Avenue
Mailing Address 2		Suite 100	Suite 125
City, State, Zip	Portland, Oregon 97204	Salem, Oregon 97301	Portland, Oregon 97219
Business Phone	503-610-7656	503-986-5200	707-633-6094
Cell Phone			503-460-7504
Fax		503-378-4844	
Email	robert.wyatt@nwnatural.com		egreene@anchorqea.com

(3) PROJECT INFORMATION

A. Provide the project location.

Project Name Former Portland Gas Manufacturing (PGM) Long-Term Monitoring and Contingency Action	<u>Latitude & Longitude*</u> 45.5264, -122.6701
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Project Address / Location Willamette River Mile (RM) 12.1 to 12.3, NW Everett Street and SR 99 West (Steel Bridge)	City (nearest) Portland	County Multnomah
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Township 1N	Range 1E	Section 34	Quarter / Quarter	Tax Lot 1200
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Brief Directions to the Site:
A public boat ramp is available at Willamette Park. This launch point is accessible from SW Macadam Avenue at SW Nebraska Street. From the Willamette Park Boat Launch at RM 15.7, travel downstream to RM 12.2, just downstream of the Burnside Bridge, along the left (west) bank of the river (Figure 1).

B. What types of waterbodies or wetlands are present in your project area? (Check all that apply.)

River / Stream Non-Tidal Wetland Lake / Reservoir / Pond
 Estuary or Tidal Wetland Other Pacific Ocean

Waterbody or Wetland Name** Willamette River	River Mile 12.1 to 12.3	6th Field HUC Name Balch Creek-Willamette River	6th Field HUC (12 digits) 170900120202
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* In decimal format (e.g., 44.9399, -123.0283)
** If there is no official name for the wetland or waterbody, create a unique name (such as "Wetland 1" or "Tributary A").

C. Indicate the project category. (Check all that apply.)		
<input type="checkbox"/> Commercial Development	<input type="checkbox"/> Industrial Development	<input type="checkbox"/> Residential Development
<input type="checkbox"/> Institutional Development	<input type="checkbox"/> Agricultural	<input type="checkbox"/> Recreational
<input type="checkbox"/> Transportation	<input type="checkbox"/> Restoration	<input type="checkbox"/> Bridge
<input type="checkbox"/> Dredging	<input type="checkbox"/> Utility lines	<input checked="" type="checkbox"/> Survey or Sampling
<input type="checkbox"/> In- or Over-Water Structure	<input type="checkbox"/> Maintenance	<input checked="" type="checkbox"/> Other: Remedial Action
(4) PROJECT DESCRIPTION		
A. Summarize the overall project including work in areas both in and outside of waters or wetlands.		
<p>The proposed project is to continue to conduct post-remediation long-term monitoring at the former Portland Gas Manufacturing (PGM) site and to implement contingency material placement actions (i.e., cap and cover repair and/or augmentation) if the monitoring results indicate a need to do so. The proposed project site is located on approximately 2.4 acres of submerged land near RM 12.2 along the left (west) bank of the Willamette River in downtown Portland (Figure 1). In July through October 2020, NW Natural completed a successful remedial action in accordance with the selected remedy in the Record of Decision (ROD; DEQ 2017) issued by the Oregon Department of Environmental Quality (DEQ) on July 3, 2017. The remedial action included dredging, in situ treatment with granular activated carbon (GAC), armoring where needed, dredge residuals cover, monitored natural recovery (MNR), and enhanced monitored natural recovery (EMNR) (Figure 2). The most recent Year 2 monitoring data showed that surface sediments, transition zone water, porewater, and surface water were already meeting site cleanup levels over 90% to 100% of the site, and the few remaining areas with low-level exceedances were on track to achieve cleanup levels within a short period of time.</p> <p>The site is currently undergoing long-term monitoring to ensure that the remedy is functioning as intended and that remedial action objectives (RAOs) are being met. Long-term monitoring activities include high-resolution bathymetry surveys, surface sediment grab samples, transition zone water samples, porewater samples, and surface water samples, as described in the DEQ-approved <i>Long-Term Monitoring and Maintenance Plan</i> (Anchor QEA 2020, Appendix F). Long-term monitoring locations are shown in Figure 3, and cross sections through the remediation areas are shown in Figures 4a and 4b. Chemical monitoring activities occurred in Year 0, immediately following construction (2020), and more recently in Year 2 (2022), and future monitoring events are scheduled to occur in Year 5 (2025) and Year 10 (2035) post-remediation. Contingency monitoring events would also be conducted following the occurrence of a design flood event, a design seismic event, or a large-vessel grounding incident.</p> <p>The Willamette River is a dynamic environment. All capped areas have been stable; however, there has been some movement of placed cover materials (sand and sand amended with GAC) observed at the site. In addition, propeller wash associated with the docking and undocking of Navy vessels during the Rose Festival Fleet Week has the potential to disturb the riverbed, as well as caps and covers placed on the riverbed. Therefore, DEQ is requiring additional bathymetric surveys prior to the scheduled Year 5 event, including Year 3 (2023), and if significant new areas of cap or cover erosion are identified, targeted follow-up sampling and analysis work may also be required to determine if any response actions are warranted.</p>		

B. Describe work within waters and wetlands.

The proposed project includes the following elements: 1) perform DEQ-required long-term monitoring activities; and 2) place up to 1,970 cubic yards (cy) of clean imported material on the riverbed for contingency repairs and/or augmentations of remedial caps and covers, if repairs or augmentations are determined to be needed based on the long-term monitoring record. Both of these elements will occur below ordinary high water in the Willamette River. Further details on this work are described in Section 4C. No work would occur within a wetland or wetland buffer.

Fill Activities

Placement of clean imported material (GAC-amended caps and covers, armor rock as needed, and sand covers) would occur as in-water work. The material would be loaded into decontaminated barges from a nearby upland staging area and transported to the PGM site (the Work Site). The material barges would be positioned for placement with the assistance of tugboats and placed using the methods described in Section C.

C. Construction Methods. Describe how the removal and/or fill activities will be accomplished to minimize impacts to waters and wetlands.

Monitoring Activities

Long-term monitoring activities include bathymetry surveys; surface sediment grab samples; diver-assisted surface sediment samples; and transition zone water, porewater, and surface water samples as described in more detail in the following list (Anchor QEA 2020, Appendix F).

- **Bathymetry Surveys:** A licensed survey contractor will use high-resolution, multibeam equipment on a boat for scheduled and contingency hydrographic inspection surveys.
- **Surface Sediment Grab Samples:** Sixteen composited surface sediment samples (LTM-01 through LTM-16) will be collected for chemical characterization at the locations shown in Figure 3. DEQ may add additional contingency sediment sampling stations based on the results of the bathymetry survey for that monitoring year. At each of the sampling stations, three replicate samples will be collected in a triangular pattern, with each replicate separated by approximately 25 feet, and the three replicates will be composited for laboratory analysis. Surface sediment grab samples will be collected from the top 4 inches (10 centimeters) of sediment. Surface sediment grab samples will be collected using a clamshell-type grab sampler. If suitable grab samples cannot be collected due to limited accumulation of newly deposited material or refusal of the grab sampler by cap armor materials or other obstructions, diver-assisted surface samples (push cores or other) may be attempted, as described in the next bullet.
- **Diver-Assisted Surface Sediment Samples:** Four monitoring locations (LTM-13 through LTM-16) are sited in armored cap areas, as shown in Figure 3. At these locations, diver assistance may be needed to collect surface sediment samples, especially during the early monitoring rounds, until sufficient new sediment has accumulated to allow traditional boat-based sampling. Diver-operated 4-inch-diameter hand core samplers will be used to collect surface sediment samples. Other comparable diver-assisted surface sediment samplers may also be considered.
- **Transition Zone Water (TZW), Porewater (PW), and Surface Water (SW) Sampling:** Eight collocated TZW (or PW) and SW samples (LTM-09 through LTM-16) will be collected for chemical characterization at the locations shown in Figure 3. DEQ may add additional contingency TZW, PW, or SW sampling stations based on the results of the bathymetry survey for that monitoring year. TZW samples will be extracted from existing or newly deposited surface sediments, whereas PW samples will be extracted from an

artificial sand column placed in manhole-type sampling ports that were installed through the rock armor layer during sediment remediation in 2020. It will generally be necessary to collect PW samples in lieu of TZW samples during the early monitoring events in sediment decision units C1 and E (i.e., stations LTM-13 through LTM-16). However, once sufficient new sediment (i.e., 12 inches, equal to the TZW point of compliance) has accumulated over the rock armor layer at these stations, TZW samples will be collected from the newly deposited sediment using a push-probe sampler, as described in the following paragraph.

A stainless-steel push probe sampler with a standard screen interval of 7 to 12 inches below the mudline connected to a low-flow peristaltic pump will be used to collect TZW and PW samples. The push probe sampler may be deployed from a boat with rods or by a diver. SW will be collected from 12 inches above the mudline concurrent with the collection of TZW/PW samples.

Contingency Material Placement Activities

Contingency material placement activities include cap and cover repair and/or augmentation if the monitoring results indicate a need to do so. Clean cap and/or cover augmentation materials would be placed as needed and as described in the following paragraphs.

Stockpiles of clean imported sand and, if needed, armor stone or supersacks of GAC would be maintained at an off-site upland staging area at a location to be confirmed prior to material placement but at a previously disturbed site, such that no new effects would be generated by use of the staging area for the contingency remedial action. The material staging area could include, for example, a quarry, an aggregate distributor, or a contractor's yard. Imported material may include sand and gravelly sand (used for EMNR cover areas), sand or gravelly sand amended with GAC (used for in situ treatment areas), and sand/gravel/cobble mix (armor rock).

The capping materials would be loaded onto deck barges with an excavator or crane, and a tugboat would then tow the material barges to the PGM site and position them for placement using a clamshell bucket or long-reach excavator. The operator would load the bucket with the appropriate material and make a short sweep with the bucket while it is partially open to distribute the materials evenly on the riverbed with minimal disturbance. The operator would place the sand, GAC-amended sand, and armor layers to the specified extents, thicknesses, and elevations, tracking the progress of the capping operations using precision location control software (e.g., Dredgepack), bathymetric progress and final surveys, and material placement quantities.

GAC products for amendment would be stored in a dry, covered location at either the source quarry or the upland staging area. GAC and sand would be blended at one of these facilities to the specified dry weight mix determined by DEQ and the Project Engineer. The GAC and sand would either be blended mechanically in a containment area using a front-end loader, or alternatively, using mixing hoppers and a conveyor. The GAC would be presoaked, either before or after blending, and would be maintained in a saturated condition until placement to encourage faster settling through the water column.

D. Describe source of fill material locations if known.

Imported clean materials would be sourced from clean, contaminant-free sources. NW Natural’s preference will be to use the same material sources that were used during the 2020 remedial action for which physical and chemical suitability for cap or cover placement has already been established. If new material sources are identified, they would need to be sampled and tested to verify the physical and chemical suitability of the material for use at the PGM site, as specified in the PGM *Construction Quality Assurance and Control Plan* (Anchor QEA 2020, Appendix E), prior to shipping the materials to the PGM site. The imported materials would be staged at an off-site upland location and transported by barge to the Work Site.

E. Construction timeline.

Long-term bathymetric and chemical monitoring activities are scheduled to occur in Year 5 (2025) and Year 10 (2035) post-remediation. Additional bathymetric surveys prior to the scheduled Year 5 event, including Year 3 (2023) and Year 4 (2024) will also be conducted, and if significant new areas of cover erosion are identified, targeted follow-up sampling and analysis work may be required prior to Year 5 to determine if any contingency response actions are warranted. Bathymetry surveys and sediment, TZW, PW, and SW sampling for long-term monitoring purposes could occur at any time of year. Contingency material placement activities would occur during the regulatory approved in-water work window for the Lower Willamette River between July 1 and October 31 of any year covered by the permit.

What is the estimated project start date?	July 1, 2023 (in-water work)
What is the estimated project completion date?	October 31, 2026
Is any of the work underway or already complete? If yes, please describe.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

F. Removal Volumes and Dimensions (if more than 7 impact sites, include a summary table as an attachment)

Wetland / Waterbody Name *	Removal Dimensions					Duration of Impact**	Material***
	Length (ft.)	Width (ft.)	Depth (ft.)	Area (sq.ft. or ac.)	Volume (c.y.)		
Lower Willamette River	1	2		0.006 ¹	7 ¹	Temp ¹	Existing substrate – mix of sand and gravel material
Lower Willamette River					0.1 ¹	Perm ¹	Existing substrate – mix of sand and gravel material

G. Total Removal Volumes and Dimensions

Total Removal to Wetlands and Other Waters	Length (ft.)	Area (sq. ft or ac.)	Volume (c.y.)
Total Removal to Wetlands			
Total Removal Below Ordinary High Water		0.006 acre ¹	Temporary ¹ : 7 cy Permanent ¹ : 0.1 cy
Total Removal Below <u>Highest Measured Tide</u>			
Total Removal Below <u>High Tide Line</u>			
Total Removal Below <u>Mean High Water Tidal Elevation</u>			

H. Fill Volumes and Dimensions (if more than 7 impact sites, include a summary table as an attachment)

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Wetland / Waterbody Name*	Fill Dimensions					Duration of Impact**	Material***
	Length (ft.)	Width (ft.)	Depth (ft.)	Area (sq. ft. or ac.)	Volume (c.y.)		
Willamette River	TBD	TBD	0 to 1.5 to 3.0 ²	0 to 0.64 acre ²	0 to 1,970 ²	Perm	Sand or gravelly sand, sand or gravelly sand amended with GAC, or gravel/cobble armor, in any combination as required by DEQ for contingency repairs

(4) PROJECT DESCRIPTION (CONTINUED)

I. Total Fill Volumes and Dimensions

Total Fill to Wetlands and Other Waters	Length (ft.)	Area (sq. ft. or ac.)	Volume (c.y.)
Total Fill to Wetlands			
Total Fill Below Ordinary High Water		Up to 0.64 acre ²	Up to 1,970 ²
Total Fill Below Highest Measured Tide			
Total Fill Below High Tide Line			
Total Fill Below Mean High Water Tidal Elevation			

¹ There will be temporary and permanent volumes of material removed from the river as part of the monitoring activities. Temporary removal includes the removal of the material to collect the sample, then the material not used for the sample will be returned to the river. The sample volume is the permanent removal volume. The following are the surface sediment sampling volumes/area calculations:

- Temporary Removal Volume (based on 11.8-gallon grab sampler, 3 grabs per station) = 4.74 cubic feet per station x 20 stations (16 standard + 4 contingency) = 94.8 cubic feet = 3.5 cubic yards per monitoring event; assuming 2 monitoring events, the total temporary removal volume is expected to be 7 cubic yards
- Temporary Removal Area (grab sampler clamshell approximately 1 foot x 2 feet, 3 grabs per station) = 6 square feet x 20 stations = 120 square feet = 0.003 acre per monitoring event; assuming 2 monitoring events, the total temporary removal area is expected to be 0.006 acre
- Permanent Removal Volume = 0.07 cubic feet x 20 stations = 1.4 cubic feet = 0.05 cubic yards per monitoring event; assuming 2 monitoring events, the total permanent removal volume is expected to be 0.1 cubic yards

² The proposed project is long-term monitoring, which may include potential contingency material placement actions (i.e., cap or cover repairs). Such actions could occur in any of the remedial technology application areas shown in Figure 2 of the JPA (Areas A through G). The proposed placement actions would be contingency actions that would be triggered by the future monitoring activities and results. No contingency actions are currently warranted based on the monitoring record we have to date. Therefore, it is not currently known whether there will be a need to place contingency material, and if so, where exactly it would need to be placed. Any placement actions would be determined in consultation with DEQ based on what is observed in the continuing physical and chemical monitoring program. As a conservative worst-case, it is estimated that approximately 0.64 acre might require some sort of cap or cover repair. The lower-end estimate would be zero acres, zero cubic yards, and no repairs needed. The average placement thickness, if required, would be 1 foot plus 0.5 foot of contractor over placement allowance, for a total of 1.5 feet. A more complex 2-layer cap repair (i.e., repair of cap isolation layer plus armor layer), which is quite unlikely, could be as thick as 3 feet. However, the placement thickness is expected to be zero over most or all of the project site.

*If there is no official name for the wetland or waterbody, create a unique name (such as "Wetland 1" or "Tributary A").

**Indicate the days, months or years the fill or removal will remain. Enter "permanent" if applicable. For DSL, permanent removal or fill is defined as being in place for 24 months or longer.

*** Example: soil, gravel, wood, concrete, pilings, rock etc.

(5) PROJECT PURPOSE AND NEED

Provide a statement of the purpose and need for the overall project.

The purpose of continuing the long-term monitoring and maintenance program is to verify the effectiveness of the remedy that was implemented in 2020 consistent with DEQ's July 2017 ROD (DEQ 2017) and to demonstrate that RAOs are being attained. Additional clean cover material placement of up to 1,970 cy may also occur as a contingency to address any deficiencies identified by the long-term monitoring activities that could impede the attainment of long-term RAOs.

(6) DESCRIPTION OF RESOURCES IN PROJECT AREA

A. Describe the existing physical and biological characteristics of each wetland or waterbody. Reference the wetland and waters delineation report if one is available. Include the list of items provided in the instructions.

The Work Site is characterized by degraded baseline environmental conditions as a result of the history of alterations to the Lower Willamette River, historical sediment and groundwater contamination, and the presence of the City of Portland seawall. The Work Site is located entirely below ordinary high water within the Willamette River and is immediately adjacent to the City of Portland seawall to the west (which armors the west bank of the Willamette River between RMs 11.7 and 13.3). Due to the presence of the seawall, the entire project site consists of deep-water habitat, with elevations ranging from approximately -20 feet City of Portland datum (COP) near the seawall to -40 feet COP in the main body of the river, approximately 300 feet to the east.

Substrates in the Work Site include finer-grained silty and sandy sediments near the seawall and coarser-grained sand and gravel deposits farther from the seawall. Clean import material, including sand, gravelly sand, and armor-layer cobbles, was placed within the Work Site during site remediation in 2020, as shown in Figure 2. The habitat quality has been degraded by historical residual sediment and groundwater contamination that was addressed by the 2020 remediation work, as well as historical building demolition debris and modern trash and debris (e.g., bikes and scooters). Habitat quality has also been degraded by historical construction disturbances, including the construction of the Steel Bridge (1910 to 1912), the City of Portland seawall (1927 to 1929), municipal sanitary force-main sewers (early 1950s), and City of Portland berth maintenance dredging (1989). The river bottom in the Work Site and surrounding areas contains piles of assorted anthropogenic debris (e.g., concrete, brick and mortar, timber, sheet metal, and pipe).

The existing aquatic habitat is also affected by the presence of the seawall, which precludes a natural sloping shoreline and connected riparian buffer. The associated lack of shallow-water habitat or riparian vegetation results in aquatic habitat that is considered degraded or not properly functioning. Despite the degraded habitat conditions, the Willamette River is known to contain several Endangered Species Act (ESA)-listed fish species and provides habitat for a wide variety of other fish and wildlife. ESA-listed fish that may use the Work Site for migration or rearing include Chinook salmon (*Oncorhynchus tshawytscha*, Upper Willamette River Evolutionary Significant Unit [ESU] and Lower Columbia River ESU), coho salmon (*O. kisutch*, Lower Columbia River ESU), steelhead salmon (*O. mykiss*, Upper Willamette River ESU and Lower Columbia River ESU), and bull trout (*Salvelinus confluentus*, Columbia River Distinct Population Segment).

Underwater utilities present within the Work Site include City of Portland pressurized sanitary sewer mains (Figure 2) that consist of a pair of 30-inch and 42-inch force mains installed approximately 5 to 7 feet below the mudline on pile-supported brackets. The sanitary sewers were installed diagonally across the river in the 1950s and are still in service.

B. Describe the existing navigation, fishing and recreational use of the waterbody or wetland.

The Work Site is within the Willamette River in the downtown Portland area and is generally used by commercial and recreational vessels throughout the year. In addition, once a year during Fleet Week in early June, docking and public exhibition of large naval vessels occurs in the Work Area. Once in 1989, the City of Portland performed maintenance dredging at this site to a depth of -30 feet Columbia River Datum (-26.7 feet COP) to maintain an adequate berthing depth for the visiting naval vessels.

Upland uses adjacent to the Work Site include Tom McCall Waterfront Park, transportation corridors (including Naito Parkway and the on-ramp to the Steel Bridge); and downtown Portland commercial districts.

Per Oregon Administrative Rule (OAR) 340-041-0340, Table 340A, this reach of the Willamette River currently supports, or could support, the following beneficial uses:

- Industrial water supply
- Irrigation
- Fish and aquatic life, as well as a migration corridor for salmon and steelhead
- Wildlife
- Fishing
- Boating
- Water contact recreation
- Aesthetic quality
- Commercial navigation and transportation

(7) PROJECT SPECIFIC CRITERIA AND ALTERNATIVES ANALYSIS

Describe project-specific criteria necessary to achieve the project purpose. Describe alternative sites and project designs that were considered to avoid or minimize impacts to the waterbody or wetland.*

The purpose of the project is to conduct long-term monitoring of the river sediment that was remediated in 2020, which reduced the toxicity of surface sediments and limited the mobility of contaminants in buried sediment and groundwater. Oregon law (OAR 340-122-0040) requires that all proposed remedies must do the following:

- Address a release or threat of release of hazardous substances in a manner that assures protection of present and future public health, safety, and welfare and the environment
- Prevent or minimize future releases and migration of hazardous substances in the environment
- Provide long-term care or management, including monitoring, operation, maintenance, and periodic review

A range of remedial action alternatives (RAAs) were developed using remedial technologies determined to be applicable to the site through a technology screening process described in the *Integrated Feasibility Study* (Anchor QEA 2016) and the ROD (DEQ 2017) and summarized in Section 4A. The RAAs were developed as follows:

- RAA-1: No Action
- RAA-2: Monitored Natural Recovery Focus
- RAA-3: Treatment Cap Focus
- RAA-4: Partial Dredge and Treatment Cap
- RAA-5: Dredging Focus

Each alternative was analyzed for its ability to meet DEQ's threshold criteria of protectiveness (OAR 340-122-0084) and preference for treatment or removal of hot spots. The No Action alternative did not meet DEQ's threshold criteria for environmental protection and hot spot treatment/removal; therefore, it was not considered further.

The remaining four RAAs were evaluated and ranked according to the State of Oregon balancing criteria, which included effectiveness, long-term reliability, ease of implementation, implementation risk, and reasonableness of cost (OAR 340-122-0090). The RAA with the highest-ranking score and overall ability to address the five balancing criteria was selected as the preferred RAA.

RAA 4 (Partial Dredge and Treatment Cap) was chosen as the selected remedy based on its high comparative rank in all categories. The remedy was implemented in 2020 under DEQ's oversight and is now required to be monitored and maintained per the DEQ-approved *Long-Term Monitoring and Maintenance Plan* (Anchor QEA 2020, Appendix F).

(8) ADDITIONAL INFORMATION

Are there state or federally listed species on the project site?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
Is the project site within designated or proposed critical habitat?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown

* Not required by the Corps for a complete application, but is necessary for individual permits before a permit decision can be rendered.

Is the project site within a national Wild and Scenic River ?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Is the project site within a State Scenic Waterway ?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Is the project site within the 100-year floodplain ?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
If yes to any of the above, explain in Block 6 and describe measures to minimize adverse effects to these resources in Block 7.			
Is the project site within the Territorial Sea Plan (TSP) Area ?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
If yes, attach TSP review as a separate document for DSL.			
Is the project site within a designated Marine Reserve ?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
If yes, certain additional DSL restrictions will apply.			
Will the overall project involve ground disturbance of one acre or more?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
If yes, you may need a 1200-C permit from the Oregon Department of Environmental Quality (DEQ).			
Is the fill or dredged material a carrier of contaminants from on-site or off- site spills?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
Has the fill or dredged material been physically and/or chemically tested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Unknown
As needed, imported fill material will be tested to confirm it is below project cleanup levels prior to placement.			
If yes, explain in Block 6 and provide references to any physical/chemical testing report(s).			
Has a cultural resource (archaeological) survey been performed on the project area?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
In-water historic debris was present at the site prior to remediation and some debris remains at the site and in the adjacent parts of the river. In compliance with Section 106 of the National Historic Preservation Act, the U.S. Army Corps of Engineers recommended review of that debris by an archaeologist. The debris was evaluated by Willamette Cultural Resources Associates, Ltd. (WCRA), and was determined not eligible for listing in the National Register of Historic Places. Archaeologists at the State Historic Preservation Office and DSL concurred with this determination (Attachment A). During remedial dredging, WCRA continued to monitor recovered debris for cultural significance and confirmed that the site status had not changed and remained not eligible for listing (Attachment A). Because the proposed project does not involve any excavation, no additional cultural resources evaluation is necessary.			
Will the project result in new impervious surfaces or the redevelopment of existing surfaces? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
If yes, the Applicant must submit a post-construction stormwater management plan to DEQ's 401 WQC program for review and approval, see http://www.deq.state.or.us/wq/sec401cert/docs/stormwaterGuidelines.pdf			
Identify any other federal agency that is funding, authorizing or implementing the project.			
Agency Name	Contact Name	Phone Number	Most Recent Date of Contact
N/A			
List other certificates or approvals/denials required or received from other federal, state or local agencies for work described in this application. For example, certain activities that require a Corps permit also require 401 Water Quality Certification (WQC) from Oregon Department of Environmental Quality (DEQ). For DEQ, please note that all projects that qualify for a Nationwide 401 WQC will be invoiced a fee. Projects that do not qualify for the Nationwide certification will be invoiced based on project complexity. See http://www.oregon.gov/deq/wq/wqpermits/Pages/Section-401-Fees.aspx			
Agency	Certificate/ approval / denial description	Date Applied	
U.S. Army Corps of Engineers	Nationwide Permit 38	Subject of this JPA	

Oregon Department of Environmental Quality	401 Water Quality Certification	Concurrent with JPA
Oregon Department of State Lands	State Lands Easement	Renewal application submitted February 2023
Oregon Department of State Lands	Removal-Fill Permit Waiver	Concurrent with JPA
National Marine Fisheries Service	Letter of Concurrence	Concurrent with JPA
U.S. Fish and Wildlife Service	Letter of Concurrence	Concurrent with JPA
City of Portland	Land Use Compatibility Statement	Anticipated 2023

Other DSL and/or Corps Actions Associated with this Site (Check all that apply.)

- Work proposed on or over lands owned by or leased from the Corps (may require authorization pursuant to 33 USC 408).
 - State owned waterway DSL Waterway Lease #
 - Other Corps or DSL Permits Corps # NWP-2009- 61591-PW, 0061743-EA, and 20-4 60510-AA
 - Violation for Unauthorized Activity Corps # NWP-2009- DSL # 20-5
 - Wetland and Waters Delineation Corps # DSL #
- Submit the entire delineation report to the Corps; submit only the concurrence letter (if complete) and approved maps to DSL. If not previously submitted to DSL, send under a separate cover letter

(9) IMPACTS, RESTORATION/REHABILITATION, AND COMPENSATORY MITIGATION

A. Describe unavoidable environmental impacts that are likely to result from the proposed project. Include permanent, temporary, direct, and indirect impacts.

The existing environmental condition of the Work Site is significantly affected by the presence of the seawall, which eliminates the possibility of shallow-water habitat. The resulting deep-water habitat precludes connection to floodplain or riparian vegetation and creates conditions that lack physical and biological features essential for salmonid rearing. The existing physical and biological conditions create low-level ecological function overall. Potential effects to aquatic organisms related to monitoring activities and the contingency placement of clean sand and armor material include short-term degradation of water quality due to localized elevated turbidity and disturbance of benthic species and associated fish foraging opportunities. Short-term effects to benthic prey species would occur as a result of the placement of in situ treatment layers or sand cover layers, which may have an indirect effect on predator/prey relationships for salmonids. The surface sediment sample collection activities are expected to result in negligible disturbances to the benthic community in the area of sample collection and minor turbidity increases that are localized to the sampling location and that resolve within minutes after sample collection. No other monitoring activities (bathymetry surveys and TZW, PW, and SW sampling) are expected to have any turbidity or benthic impacts.

The benthic species are expected to quickly recolonize the surface sediments of the sampled areas and any contingency material placement areas within the Work Site within the span of a few weeks to several months. Therefore, the surface sample collection and contingency material placement activities are expected to maintain the existing benthic habitat. The potential short-term effects to benthic forage areas would be minimal, and salmonid rearing physical and biological features would be maintained relative to baseline conditions as a result of the project. In the long term, monitoring and maintenance of the remediated sediments will improve forage conditions and aid in the recovery of listed salmonid species.

The implementation of the monitoring and contingency material placement activities will maintain existing post-remediation conditions and ensure that the remediated areas continue to function as designed. However, the overall ecological function of the Work Site will remain impaired due to the presence of the seawall and lack of shallow-water habitat or riparian areas, which are unrelated to the proposed project and remain in place in post-construction conditions.

B. For temporary removal or fill or disturbance of vegetation in waterbodies, wetlands or riparian (i.e., streamside) areas, discuss how the site will be restored after construction to include the timeline for restoration.

The monitoring and contingency material placement activities do not include any temporary removal or fill, and the Work Site does not include any riparian areas or shallow-water vegetation. Therefore, no restoration associated with temporary removal or fill actions is proposed.

No further restoration is proposed for project because the overall ecological function of the post-remediation Work Site will remain largely unchanged due to presence of the seawall and lack of shallow-water habitat or riparian areas. However, the proposed monitoring activities will ensure that the remedial action is maintained and effective.

Compensatory Mitigation

C. Proposed mitigation approach. Check all that apply:

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> Permittee-responsible Onsite Mitigation | <input type="checkbox"/> Permittee-responsible Offsite mitigation | <input type="checkbox"/> Mitigation Bank or in-lieu fee program | <input type="checkbox"/> Payment to Provide (not approved for use with Corps permits) |
|--|---|---|---|

D. Provide a brief description of mitigation approach and the rationale for choosing that approach. If you believe mitigation should not be required, explain why.

The existing ecological function of the Work Site is significantly impaired by the presence of the seawall, lack of connection to a riparian zone, and presence of anthropogenic debris. The monitoring areas and contingency material placement areas that will be or may be disturbed during surface sediment sample collection and contingency placement actions will be improved by confirming that the risk posed by contaminated sediments to aquatic life or human health through direct toxicity or bioaccumulation are being controlled and that the remedial action is functioning as designed. If not, then contingency material placement activities would occur to correct any deficiencies. The areas disturbed during surface sediment sample collection and any contingency cap or cover placement are anticipated to be recolonized quickly by benthic organisms and quickly covered with newly deposited river sediment, maintaining forage resources for ESA-listed fish and other aquatic organisms while controlling contaminant exposures. In summary, the proposed monitoring and contingency material placement activities are expected to maintain or improve the existing environmental quality and ecological benefits; however, ecological impairments related to the presence of the seawall (e.g., the lack of shallow-water habitat and disconnection from riparian habitat) remain unchanged by the remedial action. If required because of contingency cover material placement, NW Natural would purchase excavation credits from a mitigation bank authorized to sell credits (e.g., Linnton Restoration Project or similar) to offset the placement of fill and achieve balanced cut and fill to comply with the City of Portland flood protection regulations (Portland City Code Section 24.50.060(F)(8) [Balanced Cut and Fill Required in All Flood Management Areas of the City Not Addressed by

Section 24.50.060 G)). If this occurs, NW Natural would coordinate with the City of Portland to purchase excavation credits that are approved to use to comply with the balanced cut and fill requirements.

Mitigation Bank / In-Lieu Fee Information:

Name of mitigation bank or in-lieu fee project: Linnton Restoration Project, or similar
 Type of credits to be purchased: Excavation credits

If you are proposing permittee-responsible mitigation, have you prepared a compensatory mitigation plan?

- Yes. Submit the plan with this application and complete the remainder of this section.
- No. A mitigation plan will need to be submitted (for DSL, this plan is required for a complete application).

Mitigation Location Information (Fill out only if permittee-responsible mitigation is proposed)

Mitigation Site Name/Legal Description N/A	Mitigation Site Address	Tax Lot #	
County	City	Latitude & Longitude (in DD.DDDD format)	
Township	Range	Section	Quarter/Quarter

(10) ADJACENT PROPERTY OWNERS FOR PROJECT AND MITIGATION SITE

Pre-printed mailing labels <input type="checkbox"/> of adjacent property owners attached	Project Site Adjacent Property Owners	
---	---------------------------------------	--

Contact Name City of Portland Department of Parks and Recreation
Address 1 1120 SW Fifth Avenue
Address 2 No. 1302
City, ST ZIP Code Portland, Oregon 97204-1912

Contact Name Oregon Department of State Lands
Address 1 Attn: Pablo Martos
Address 2 775 Summer Street NE
City, ST ZIP Code Suite 100
Salem, Oregon 97301-1279

Contact Name City of Portland Facilities Services
Address 1 1120 SW Fifth Avenue
Address 2 No. 1204
City, ST ZIP Code Portland, Oregon 97204-1912

Contact Name Unico Properties, LLC
Address 1 Attn: UCP 38 Davis LLC
Address 2 1215 4th Avenue
City, ST ZIP Code No. 600
Seattle, Washington 98161

**(11) CITY/COUNTY PLANNING DEPARTMENT LAND USE AFFIDAVIT
(TO BE COMPLETED BY LOCAL PLANNING OFFICIAL)**

I have reviewed the project described in this application and have determined that:

- This project is not regulated by the comprehensive plan and land use regulations
- This project is consistent with the comprehensive plan and land use regulations
- This project is consistent with the comprehensive plan and land use regulations with the following:
 - Conditional Use Approval
 - Development Permit
 - Other Permit (explain in comment section below)
- This project is not currently consistent with the comprehensive plan and land use regulations. To be consistent requires:
 - Plan Amendment
 - Zone Change
 - Other Approval or Review (explain in comment section below)

An application or variance request has has not been filed for approvals required above

Local planning official name (print)	Title	City / County
Signature	Date	
Comments:		

(12) COASTAL ZONE CERTIFICATION

If the proposed activity described in your permit application is within the [Oregon coastal zone](#), the following certification is required before your application can be processed. The signed statement will be forwarded to the Oregon Department of Land Conservation and Development (DLCD) for its concurrence or objection. For additional information on the Oregon Coastal Zone Management Program and consistency reviews of federally permitted projects, contact DLCD at 635 Capitol Street NE, Suite 150, Salem, Oregon 97301 or call 503-373-0050 or click [here](#).

CERTIFICATION STATEMENT

I certify that, to the best of my knowledge and belief, the proposed activity described in this application complies with the approved Oregon Coastal Zone Management Program and will be completed in a manner consistent with the program.

Print /Type Applicant Name	Title
Applicant Signature	Date

(13) SIGNATURES

Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and, to the best of my knowledge and belief, this information is true, complete and accurate. I further certify that I possess the authority to undertake the proposed activities. By signing this application I consent to allow Corps or DSL staff to enter into the above-described property to inspect the project location and to determine compliance with an authorization, if granted. I hereby authorize the person identified in the authorized agent block below to act in my behalf as my agent in the processing of this application and to furnish supplemental information in support of this permit application. I understand that the granting of other permits by local, county, state or federal agencies does not release me from the requirement of obtaining the permits requested before commencing the project. I understand that payment of the required state processing [fee](#) does not guarantee permit issuance.

To be considered complete, the fee must accompany the application to DSL. The fee is not required for submittal of an application to the Corps.

Fee Amount Enclosed

\$

Applicant Signature (required) must match the name in Block 2

Print Name

Robert Wyatt

Title

Director, Legacy Environmental Program

Signature



Date

April 21, 2023

Authorized Agent Signature

Print Name

Elizabeth Greene

Title

Principal

Signature



Date

April 21, 2023

Landowner Signature(s)***Landowner of the Project Site (if different from applicant)**

Print Name

Title

Signature

Date

Landowner of the Mitigation Site (if different from applicant)

Print Name

Title

Signature

Date

Department of State Lands, Property Manager (to be completed by DSL)

If the project is located on [state-owned submerged and submersible lands](#), DSL staff will obtain a signature from the Land Management Division of DSL. A signature by DSL for activities proposed on state-owned submerged/submersible lands only grants the applicant consent to apply for a removal-fill permit. A signature for activities on state-owned submerged and submersible lands grants no other authority, express or implied and a separate proprietary authorization may be required.

Print Name

Title

Signature

Date

* Not required by the Corps.

(14) ATTACHMENTS

- Drawings
 - Location map with roads identified
 - U.S.G.S topographic map
 - Tax lot map
 - Site plan(s)
 - Cross section drawing(s)
 - Recent aerial photo
 - Project photos
 - Erosion and Pollution Control Plan(s), if applicable
 - DSL/Corps Wetland Concurrence letter and map, if approved and applicable
- Pre-printed labels for adjacent property owners (Required if more than 5)
- [Incumbency Certificate](#) if applicant is a partnership or corporation
- Restoration plan or rehabilitation plan for temporary impacts
- Mitigation plan
- Wetland functional assessment and/or stream functional assessment
- Alternatives analysis
- Biological assessment (if requested by Corps project manager during pre-application coordination.)
- Stormwater management plan (may be required by the Corps or DEQ)
- Other:
 -
 -

Send Completed form to:

U.S. Army Corps of Engineers

ATTN: CENWP-OD-GP
PO Box 2946
Portland, OR 97208-2946
Phone: 503-808-4373
portlandpermits@usace.army.mil

OR

U.S. Army Corps of Engineers

ATTN: CENWP-OD-GE
211 E. 7th AVE, Suite 105
Eugene, OR 97401-2722
Phone: 541-465-6868
portlandpermits@usace.army.mil

Counties:

Baker, Clackamas, Clatsop, Columbia, Gilliam, Grant, Hood River, Lincoln, Malheur, Morrow, Multnomah, Polk, Sherman, Tillamook, Umatilla, Union, Wallowa, Wasco, Washington, Wheeler, Yamhill

Counties:

Benton, Coos, Crook, Curry, Deschutes, Douglas, Jackson, Jefferson, Josephine, Harney, Klamath, Lake, Lane, Linn, Marion

Send Completed form to:

DSL - West of the Cascades:

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
Phone: 503-986-5200

OR

DSL - East of the Cascades:

Department of State Lands
1645 NE Forbes Road, Suite 112
Bend, Oregon 97701
Phone: 541-388-6112

Send all Fees to:

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279

Pay by Credit Card Online:

<https://apps.oregon.gov/dsl/EPS/>

REFERENCES

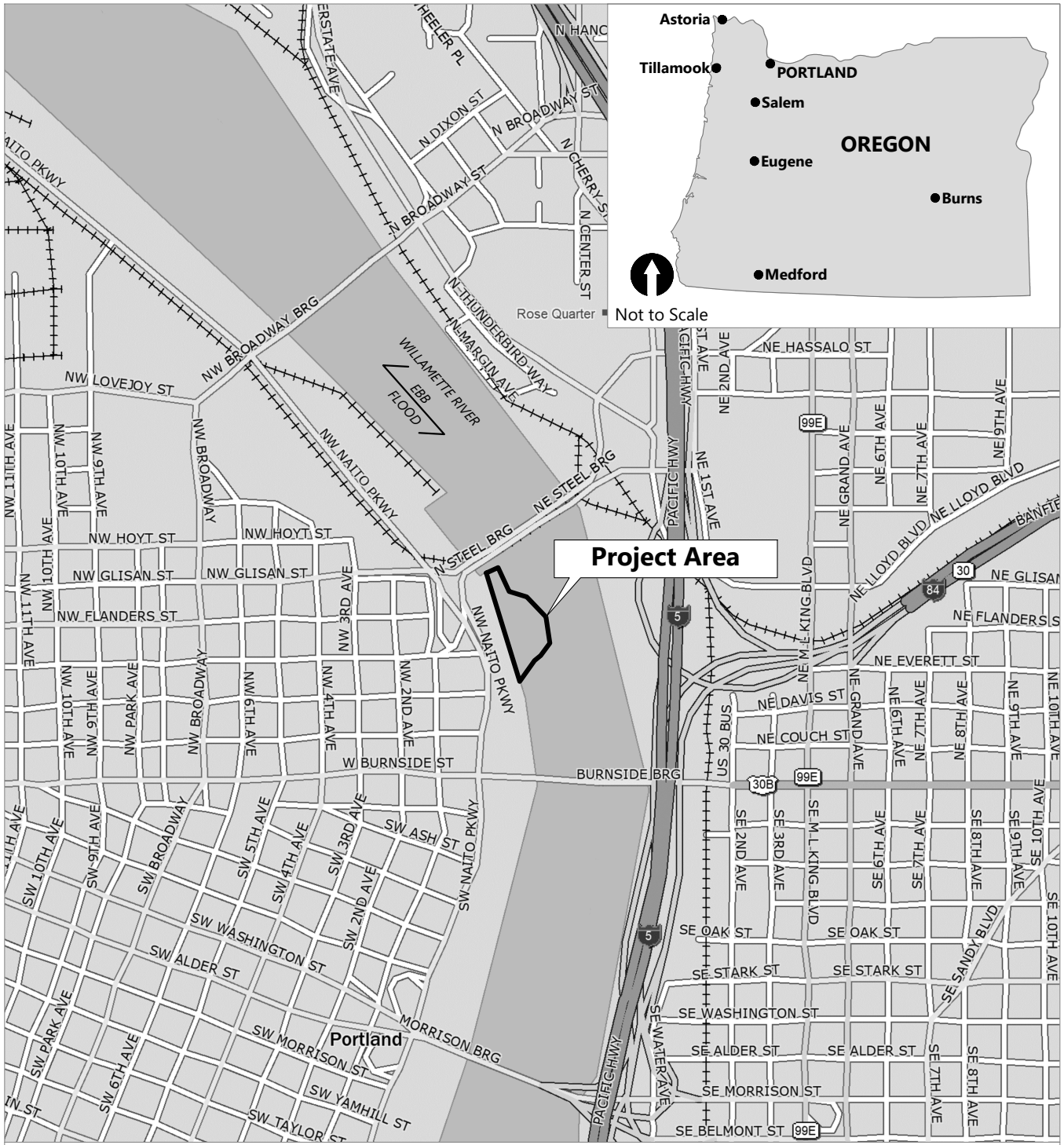
Anchor QEA (Anchor QEA, LLC), 2016. *Integrated Feasibility Study*. Former Portland Gas Manufacturing Site. Prepared for NW Natural. August 2016.

Anchor QEA, 2020. *Revised Final Design Report, Version 4*. Former Portland Gas Manufacturing Site. Prepared for NW Natural. March 2020.

DEQ (Oregon Department of Environmental Quality), 2017. *Record of Decision, Selected Remedial Action for Former Portland Gas Manufacturing, Portland, Oregon*. Prepared by the Oregon Department of Environmental Quality. June 2017.

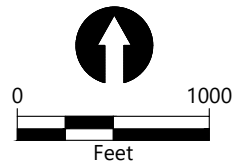
Figures

Figures



SOURCE: ©DeLorme, Topo USA®.

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 Longitude: W122° 40.1662'
 Section-Township-Range: S34-T1N-R1E



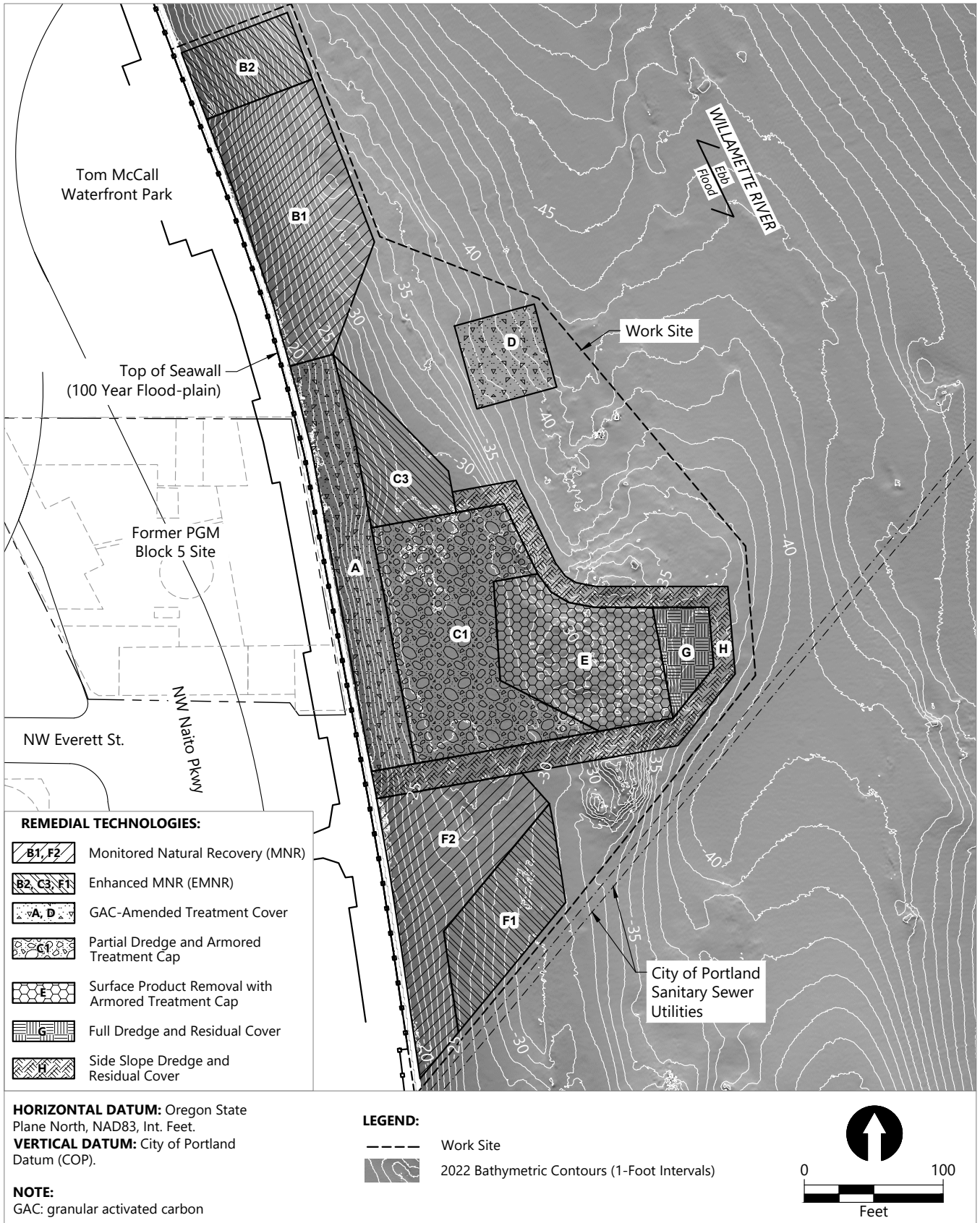
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 Filepath: K:\Projects\0029-NW Natural Gas Co\Portland Gas Manufacturing Site\Permitting\0029-PM-054 (Vicinity Map-JPA-2023).dwg Figure 1

Date: February 2023



Figure 1
Vicinity Map

Joint Permit Application
 NW Natural - Former Portland Gas Manufacturing Site Long Term Monitoring and Maintenance
 Portland, Oregon



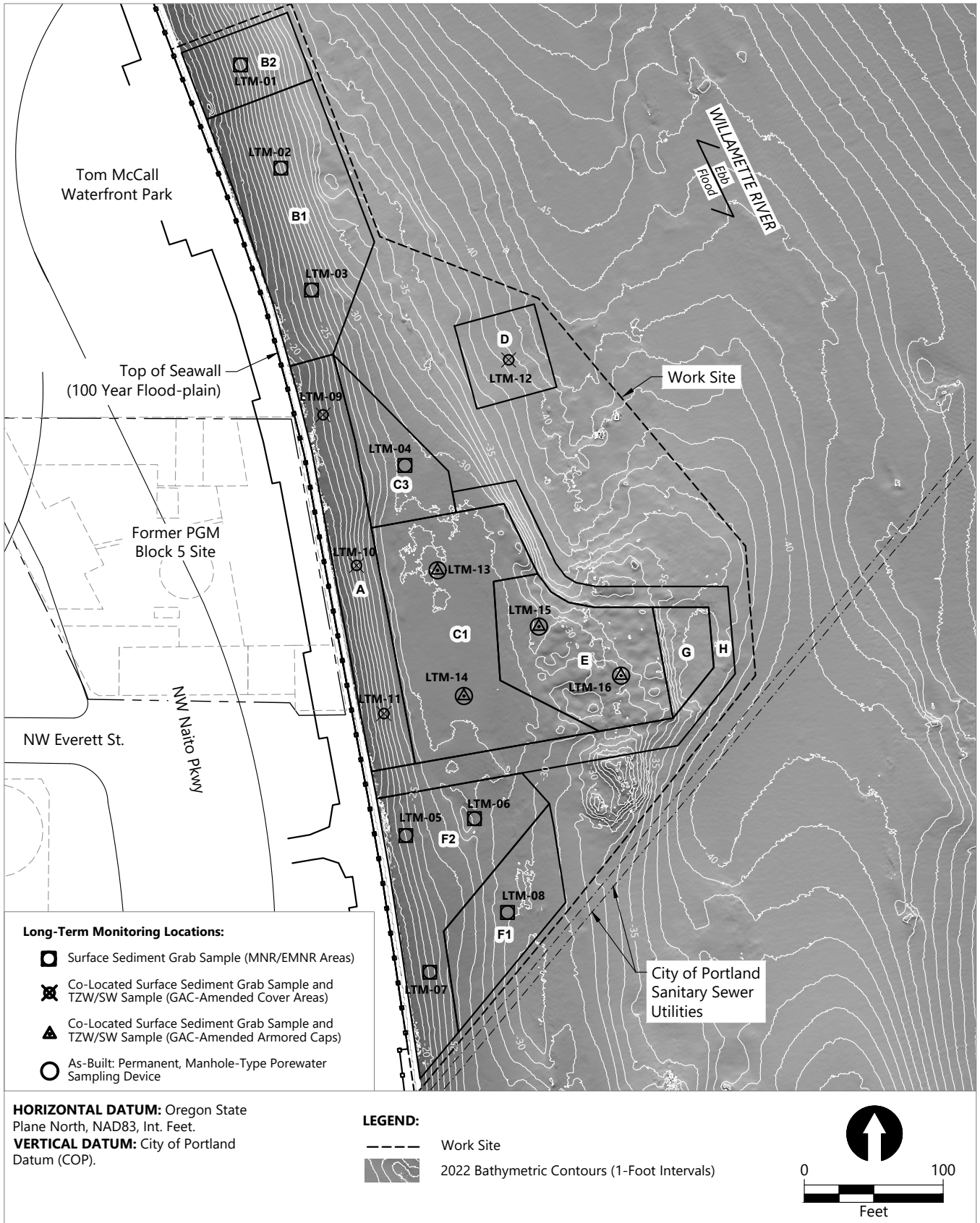
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 Filepath: K:\Projects\0029-NW Natural Gas Co\Portland Gas Manufacturing Site\Permitting\0029-PM-056 (SDUs-JPA-2023).dwg Figure 2

Date: February 2023



Figure 2
Site Map and Remedial Technology Application Areas

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 Portland, Oregon



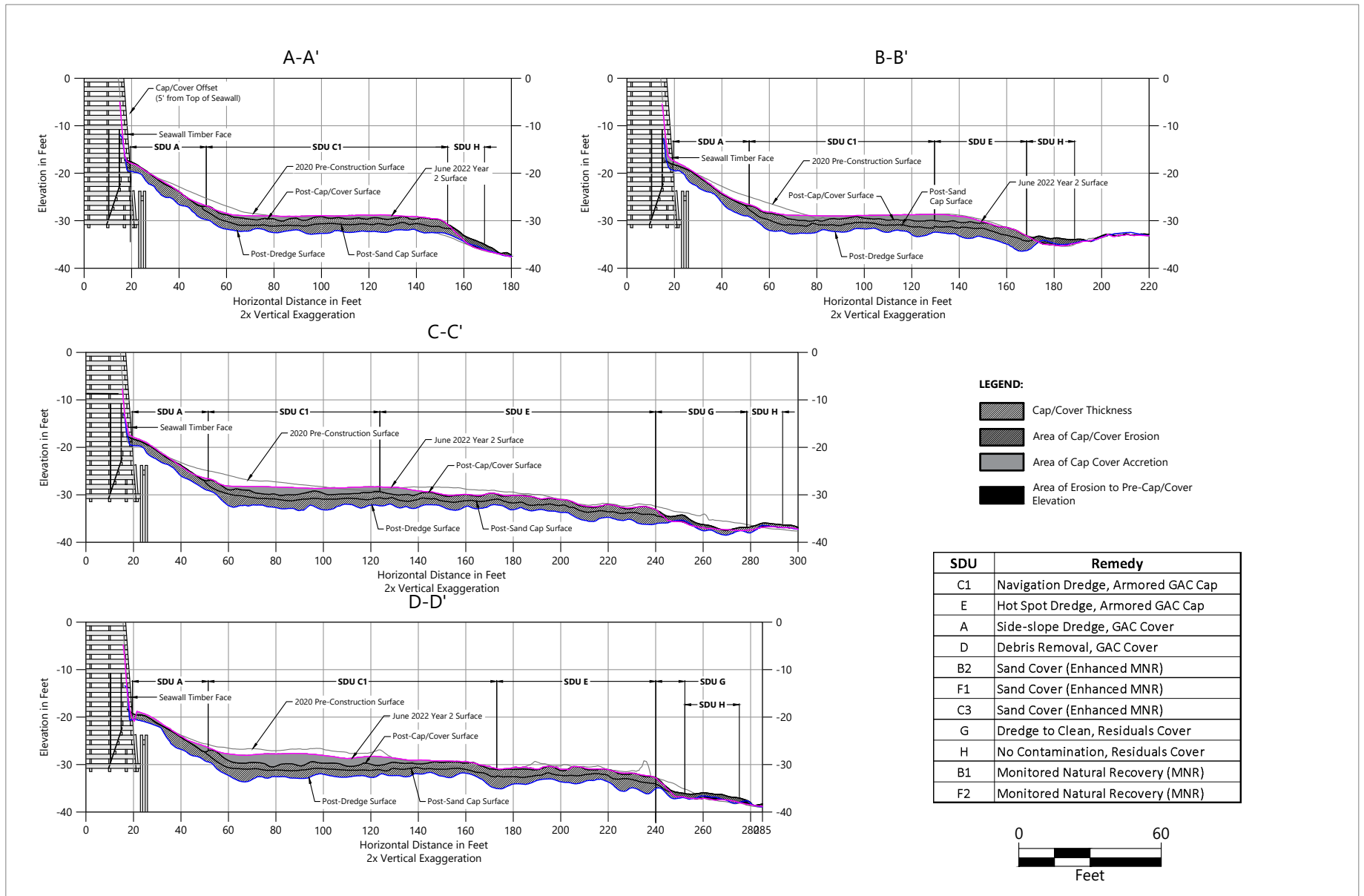
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 Filepath: K:\Projects\0029-NW Natural Gas Co\Portland Gas Manufacturing Site\Permitting\0029-PM-058 (LTM-JPA-2023).dwg Figure 3

Date: February 2023



Figure 3
Long-term Monitoring Locations

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 Portland, Oregon



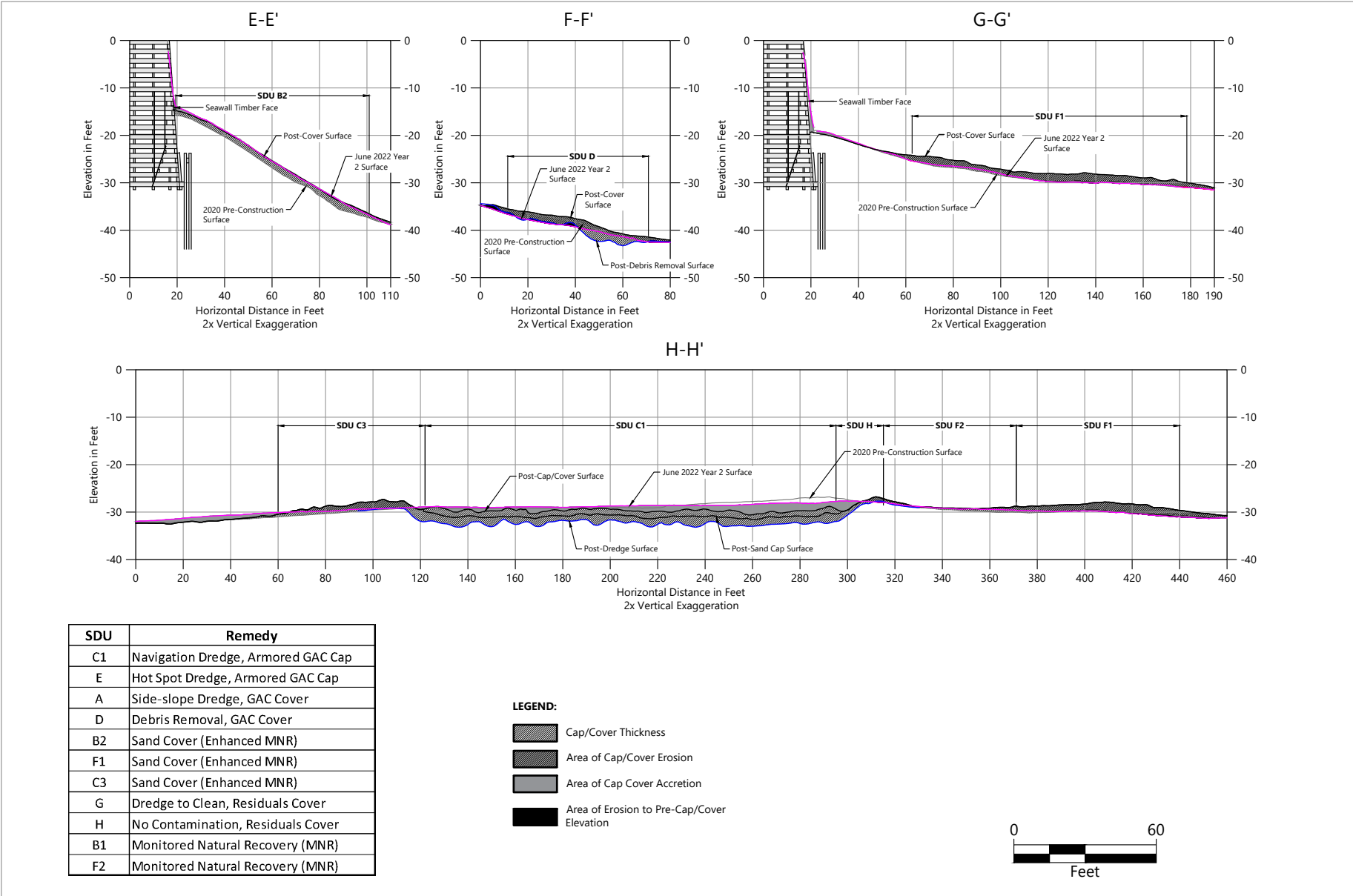
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Date: February 2023



Figure 4a
Cross Sections through the Remedial Technology Application Area

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Figure 4b
Cross Sections through the Remedial Technology Application Area

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