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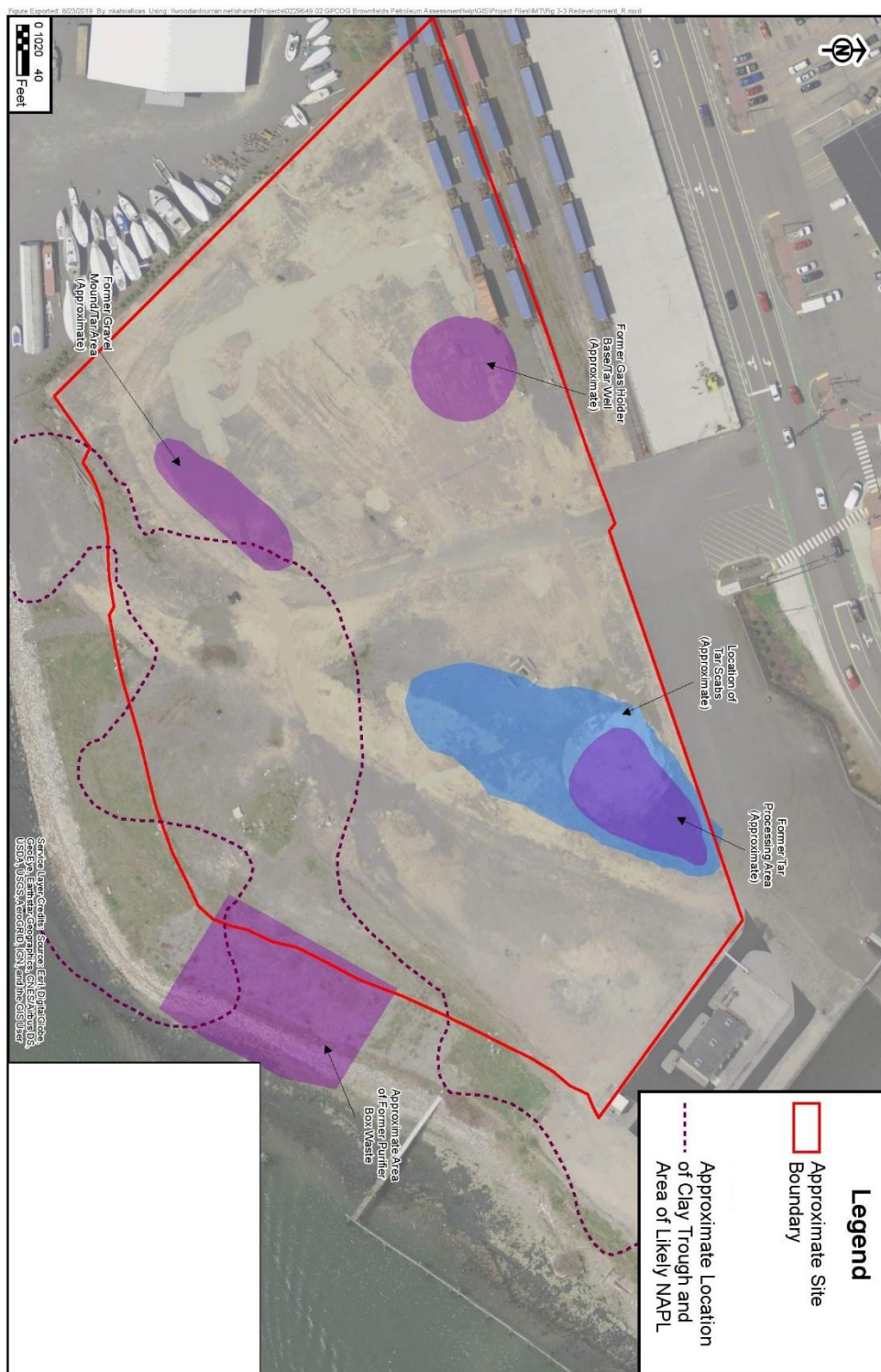


**Request for Bids: Environmental Engineering Services for
Site Engineering Services and Brownfields Cleanup Oversight**

Questions and Response 1-27-2020

- 1. Can you provide the document; July 2, 2015. Initial Engineering Review, IMT West Cold Storage Woodard & Curran, as referenced in the Brownfields Grant Application**

While the Maine Port Authority understands that having some information in regards to the proposed Cold Storage Building may be helpful, we do not believe that providing this document will be beneficial for the bid process. It is public knowledge that the Maine Port Authority is seeking an interested developer and the selected developer will have ultimate control over the specifics of the building. There will need to be coordination between the selected entity and a selected cold storage developer as the project commences. Some of the sections of the report that we do believe are relevant are excerpt below.





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2. CIVIL AND SITE DESIGN

The following serves to summarize relevant environmental, land-use permitting, and civil site development details that apply to the proposed facility and have been used to support the Design Basis.

2.1 ENVIRONMENTAL

United States Environmental Protection Agency (USEPA) involvement at the Site began in 1987 and consisted of a preliminary site inspection and site ranking, which resulted in the issuance of a no further remedial action planned (NFRAP) letter in 1995. In 1996, the National Oceanic and Atmospheric Administration (NOAA) identified an intermittent oil seep from the southwestern corner of the Site to the Fore River. Following NOAA's investigations, the U.S. Coast Guard, NOAA, USEPA, and the Maine Department of Environmental Protection (MEDEP) agreed that closure of the Site under the MEDEP Voluntary Response Action Program (VRAP) program would meet closure and cleanup objectives, and that no further federal actions were warranted. In November 1998, Northern Utilities filed a VRAP application with the MEDEP for the Site, and MEDEP accepted and approved the application in early 1999. The VRAP promotes the investigation, remediation, and redevelopment of contaminated properties by offering liability assurances/protections from state enforcement actions for applicants to the program. Site investigations conducted between 1999 and the present were in accordance with the VRAP. Remedial actions and redevelopment activities at the Site going forward will continue to be conducted under MEDEP oversight through the VRAP.

Numerous environmental investigations and remediation efforts have been completed at the Site. Available details concerning these activities were documented in a July 2, 2015, Initial Engineering Report prepared by Woodard & Curran for the Maine Port Authority.

2.1.1 Recommended Environmental Components for Building Construction

Considering the currently known details concerning environmental conditions remaining at the Site, the following is a brief description of the recommended environmental approaches that should be considered during the design of the proposed building.

2.1.1.1 Vapor Mitigation

Limited data is available concerning soil vapor conditions at the Site and how those conditions may impact future building construction and use. There are two basic options available to guide decision making relative to the proper management of risk that may be posed by vapor intrusion. These include a focused vapor assessment using multiple lines of evidence (e.g., groundwater data, geologic conditions, potential foundation design options, soil vapor sampling, and attenuation modeling) and presumptive remedies.

Given the timing and sequence of the anticipated redevelopment, current uncertainty in final building and Site design components, sensitivity of the materials that may be stored in the future building structure, and the relatively low cost for the installation of a vapor mitigation system, it is recommended that presumptive remedies be included in the preliminary design to address potential vapor intrusion risk.

The design of the vapor mitigation system should be completed by a qualified engineer. However, typical systems include the installation of the following components:

- Permeable layer of crushed stone or engineered products below the building slab;
- Sub-slab venting system consisting of vapor collection pipes and vent pipes; and
- Engineered impermeable sub-slab vapor barrier.

It is recommended that the vapor collection pipes and venting system be initially installed to discharge soil vapor through the roof of the structure using passive “whirlybird” turbines. However, this system should be pre-wired for active (powered) venting and an assessment of sub-slab soil gas and indoor air conditions should be completed following building construction. If it is later determined that additional sub-slab depressurization is required active venting of the system may be installed.

Woodard & Curran also recommends that all future Site development, construction, and facility operation be coordinated with the MEDEP VRAP and consistent with the terms of any applicable environmental covenants.

2.1.2 Next Steps for Environmental Assessment and Design

The following environmental assessment and design tasks are recommended as next steps during the pre-development phase of the Site:

- Focused assessment of soil, groundwater, soil gas, and free-phase product conditions in areas of future subsurface construction (e.g., building footprints, underground utilities).
- Environmental and geotechnical pre-characterization of soil to define available treatment, disposal, or reuse options.
- Environmental pre-characterization of groundwater to define available treatment, disposal, or reuse options.
- Design of vapor mitigation system to support building design.
- MEDEP and other required regulatory approval of anticipated construction design and future Site management techniques.

2.2 PERMITTING

Woodard & Curran has researched applicable local, state, and federal ordinances, laws, and standards that dictate design and setback requirements associated with land use, stormwater management, and natural resources, including the City of Portland (City) zoning standards and MEDEP regulations. The relevant findings of this work as they pertain to the project are summarized below.

2.2.1 City Zoning Standards

The Site is located within the Waterfront Port Development Zone (WPDZ). According to the City’s Zoning Ordinance, Division 18.5 of Chapter 14 of the City Code of Ordinances, a cold storage facility is a permitted use within this zone; the dimensional requirements are as follows:

- Minimum Lot Size: 5 acres, limited to one building greater than the maximum applicable height allowed under the permitted use dimensional standards.
- Minimum Frontage: None.
- Minimum Yard Dimensions:
 - Front Setback: None.
 - Side Setback: None.
 - Rear Setback: None.
 - Setback from Pier Line: 5 feet. The setback area may be utilized for activities related to the principal uses carried on in the structure, but shall not be utilized for off-street parking.

- Maximum Lot Coverage: 50%
- Maximum Building Height: 75 feet
- Maximum Building Length: 450 feet, except as follows:
 - Maximum building length of 300 feet within 100 feet of West Commercial Street and all areas of the WPDZ east of the Casco Bay Bridge.

The Site is adjacent to the Fore River. The Shoreland Regulations (Division 26 of Chapter 14 of the City Code) apply to all land areas, uses, structures, and land use activities within 250 feet, horizontal distance, of the normal high water line of any river. No additional setbacks are required for structures within the WPDZ.

According to the FEMA Flood Insurance Rate Map, the project site is located primarily in Zone C, which are areas of minimal flooding. However, portions of the Site are located within Zone A2, which are areas of 100-year flood; the flood elevation in these areas is 10 feet above mean sea level. The City's Flood Plain Management Regulations (Division 26.5 of Chapter 14 of the City Code of Ordinances) applies to all activities in the special flood hazard areas identified by FEMA. Any non-residential structure located within Zone A2 shall have the lowest floor elevated to at least two feet above the base flood elevation; accessory structures are be exempt from this criterion.

2.2.2 MEDEP Regulations

According to Chapter 305, the following standards apply to activities within 75 feet of the normal high water line of the Fore River:

- No activity or portion of an activity may be located within the 75-foot setback if there is a practicable alternative location on the parcel that would cause or result in less impact on the environment; and
- A 25-foot setback must be maintained between the normal high water line or upland edge of the protected natural resource and the activity. Areas that have slopes of 3 horizontal feet to 1 vertical foot (approximately 33 percent slope), or steeper, may not be counted when determining the 25 foot setback. Existing vegetation within the setback may not be disturbed except for cutting activity meeting the exemption requirements in 38 M.R.S.A. Section 480-Q(23).

2.2.3 Anticipated Land-Use Permitting Requirements

We have identified the following potential local state and federal permitting requirements for the proposed work:

- The proposed project will require the submission of a City of Portland Level III Site Plan Application and potentially a Subdivision Application based on past, current, and anticipated future land acquisitions, consolidations, or divisions; review for which would occur in parallel with Site Plan review.
- As previously noted, portions of the Site are located within Flood Zone A2, which are areas of 100-year flood. In accordance with the City's Flood Plain Management Regulations (Division 26.5 of Chapter 14 of the City Code of Ordinances), before any development can occur in any areas of special flood hazard, a flood hazard area development permit must be obtained from the building authority.
- A MEDEP Section 2 Permit-by-Rule may be required for any activities within 75-feet of the normal high water line of the Fore River.
- A Notice of Intent to comply with the Maine Construction General Permit is required for work disturbing more than one acre.