
Special Management Area Use Permit and
Shoreline Setback Variance Application

Area B:
Maintenance and Storage Facility

Honolulu Rail Transit Project
June 2013

APPLICATION MATERIALS

Area B: Maintenance and Storage Facility (MSF)

I. GENERAL INFORMATION

A. Applicant (Name, Address, Phone)

Honolulu Authority for Rapid Transportation
1099 Alakea Street, Suite 1700
Honolulu, Hawaii 96813
(808) 768-6159

B. Recorded Fee Owner (Name, Address, Phone)

Within the Area B: Maintenance and Storage Facility (MSF) portion of the Project, two underground utility lines, one sanitary sewer, and one stormwater outfall are to be installed within one parcel:

(1) 9-4-008:030: Owned by the City and County of Honolulu
Department of Parks and Recreation
1000 Uluohia Street, Suite 309
Kapolei, HI 96707
(808) 768-3003

The stormwater outfall drain line will extend to near the shoreline and will cross two more Tax Map Keys (TMKs) within Area B: MSF:

(1) 9-6-003:001: Owned by the United States of America, Department of the Navy
258 Makalapa Drive, Suite 100
Pearl Harbor, HI 9860-3134

(1) 9-6-001:001: Owned by the United States of America, Department of the Navy

The construction of the stormwater outfall drain line will require the reconstruction of a portion of the bike path which will disturb areas in two TMKs:

(1) 9-3-002:001: Owned by the United States of America, Department of the Navy

(1) 9-4-008:002: Owned by the Hawaiian Electric Company, Inc.
P.O. Box 2750
Honolulu, Hawaii 96840-0001

In addition, other project features in the Area B: MSF portion of the Project are just outside the SMA but are adjacent to the SMA. The MSF will be constructed within two TMKs that are adjacent to the SMA that will be acquired by the City prior to construction:

- (1) 9-4-008:010: Owned by the Department of Hawaiian Home Lands (DHHL)
91-5420 Kapolei Parkway
Kapolei, HI 96707
(808) 620-9500
- (1) 9-6-003:044: Owned by DHHL

C. Agent

Honolulu Authority for Rapid Transportation
1099 Alakea Street, Suite 1700
Honolulu, HI 96813
(808) 768-6159

D. Tax Map Key

The Project will result in development on three TMKs within the Area B: MSF portion of the Project.

- (1) 9-4-008:030: The Project will require the installation of two underground utility lines: one sanitary sewer and one stormwater outfall drain within this TMK, which will result in a total project encroachment of 6,400 square feet, or 0.147 acre; the total land area is 3.103 acres.
- (1) 9-6-003:001: The stormwater outfall drain line will be extended toward the shoreline and cross into this TMK, which will result in a total project encroachment of 400 square feet, or 0.009 acre; the total land area is 3.25 acres.
- (1) 9-6-001:001: The stormwater outfall drain line will be extended toward the shoreline and cross into this TMK, which will result in a total project encroachment of 400 square feet, or 0.009 acre; the total land area is 148.328 acres.

Construction, primarily to reconstruct the bike path, will also disturb areas within two TMKs:

- (1) 9-3-002:001 and
- (1) 9-4-008:002: The Project will require the existing bike path to be raised about two feet where it crosses the box culvert to cover and protect the culvert. The land areas are 195.887 acres and 1.984 acres, respectively.

The City will acquire two parcels directly adjacent to the Area B: MSF area for construction of the MSF:

- (1) 9-4-008:010: The Project will require a full take of this parcel; the total land area is 23.665 acres.
- (1) 9-6-003:044: The Project will require a full take of this parcel; the total land area is 32.177 acres.

E. Lot Area

Please see Item D above.

F. Agencies Consulted in Making Assessment

Please see the Introduction to this SMA Use Permit Application for the agencies consulted, and Attachment 2 to this Application for copies of correspondence. Some public outreach activities listed did occur near the Area B: MSF portion of the Project. This included public meetings at Waipahu Elementary School.

II. DESCRIPTION OF THE PROPOSED ACTION

A. General Description

A National Environmental Policy Act (NEPA) and Hawai'i Revised Statutes (HRS) Chapter 343 compliant Final Environmental Impact Statement (EIS) has been prepared for the Project. The information in this application is drawn from preparation of that document, including the technical reports referenced within it that include detailed information concerning the studies performed to support the Final EIS.¹

1. Narrative Description of the Proposed Project in Area B

The Project proposes installing a 280 foot-long, 60-inch-diameter drain line (stormwater outfall) for the MSF near Leeward Community College (LeeCC). The MSF will be constructed on TMK 9-4-008:010 and 9-6-003:044. The stormwater outfall drain line/culvert will extend from the makai property line of the MSF, through TMK 9-4-008:030, 9-6-003:001 and 9-6-001:001, then discharge into Pearl Harbor Middle Loch. Within the 40-foot shoreline setback area, the drain line/culvert will cross TMK 9-6-001:001 and 9-6-003:001. Construction, primarily to reconstruct the bike path, will also disturb areas within TMK 9-3-002:001 and 9-4-006:002. See Attachments B2 and B4.

Drainage within the MSF will be collected internally and flow primarily into a detention basin, which will allow collected stormwater to percolate into the ground and/or flow through a sand filter and discharge through an extended detention outlet structure into the stormwater outfall drain line/culvert. The 280-foot-long stormwater outfall drain line/culvert will be installed underground within an easement. The drain line will be a 60-inch diameter round pipe that transitions to a 2- by 8.5-foot box culvert in order to pass beneath the bike path. This drain line will be designed to handle outfall from the extended detention outlet structure and will drain into the Middle Loch of Pearl Harbor. Structural elements of the stormwater outfall will not be placed in State waters or Waters of the United States (U.S.), and any discharge entering Pearl Harbor will have gone through a permanent oil/water/sand separator prior to reaching the outfall in order to meet water quality requirements for the estuary.

The shoreline was certified on June 19, 2013, by the Chairperson of the Board of Land and Natural Resources as following the top of the bank in the area. See Attachment B3. The portion of the Project within the shoreline setback area consists of an underground drain line with an approximately 4-foot thick layer of backfill, relocation of utility lines, and the restoration of the existing bike path above the drain line.

About 30 cubic yards of material will be required to raise the bike path about 2 feet where it crosses the box culvert. This rise is necessary to provide the necessary cover to protect the box culvert. The bike path grade will taper back to

¹ Note that while a Draft Supplemental EIS/Section 4(f) Evaluation was published for the Project on May 30, 2013, it was a limited scope document which addressed certain Section 4(f) matters as required by the U.S. District Court for the District of Hawaii. See *HonoluluTraffic.com v. FTA*, Civ. No. 11-00307 AWT, 2012 WL 5386595 (D. Haw. Nov. 1, 2012). Section 4(f) is a matter of federal law.

the existing grade of the bike path as illustrated on the Bike Path Profile included in Attachment B4. The section of the bike path temporarily occupied during construction will be fully restored. The City will provide a temporary crossing over the trench to maintain bikeway continuity during construction. After construction, the bike path will be repaved, and the disturbed area will be revegetated with native shrub plantings as required by the Landscape Architecture Design Criteria for the Project.

About 20 feet of the drain line/culvert and outfall will extend makai of the certified shoreline. The City has received a letter, dated July 14, 2011, from the Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands, stating that the project is not in the Conservation District, and a Conservation District Use Application (CDUA) is not required. The letter is included as Attachment B5. HART will obtain all necessary State and/or Federal approvals for the work makai of the certified shoreline.

This portion of the Project will not affect beach processes because it will not extend into the water, except during very high tide events and storm surges or other unusual natural events. All structures will be back from the ordinary high water line above the mean high-high tide elevation (1.4 feet above mean sea level). Even during the highest tides only the lowest few inches of the outfall structure will be submerged. Due to the estuarine nature of the area, there are no significant current, such as long shore currents, or wave energy that the outfall structure could impact. Similar outfall structures already exist in the nearby area and have not been observed to have any impact on coastal process. The Project will not interfere with the natural shoreline, public pedestrian access laterally along the shoreline to the sea, public views, or open space along the shoreline because all structures will be underground except for the outfall headwall, which will be small and will not rise above the surrounding grade. The Project is being undertaken by a public agency and is in the public interest.

2. Relation of Project to Special Management Area

This package discusses the Area B: MSF portion of the Project, which begins at the southwestern corner of TMK 9-6-003:044 and follows the property line northeasterly for approximately 250 feet. This portion of the Project consists of appurtenances for the MSF. Items may change slightly during Final Design. The following features are planned to be built within the SMA in this area:

1. A 280-foot-long, 60-inch diameter, stormwater outfall drain line (stormwater outfall) for the MSF will be installed underground within an easement covering an area of 5,600 square feet. Structural elements of the stormwater outfall will not be placed in Waters of the U.S. or State, and any discharge entering Pearl Harbor will have gone through a permanent oil/water/sand separator prior to reaching the outfall in order to meet water quality requirements for the estuary.
2. An 80-foot-long, 12-inch diameter, sanitary sewer drain line (sewer line) for the MSF will be installed underground within an easement covering an area of 800 square feet. This sewer line will connect to an existing sewer line.

In addition to the project features within the SMA, other project features are adjacent to or abutting the SMA. The following adjacent/abutting features are also illustrated on figures in Attachment B4, and are discussed in this package:

3. The MSF site will contain an Operations and Service Building (approximately 131,500 square feet and 62 feet high), a Maintenance of Way Building (approximately 36,200 square feet and 37 feet high), a Train Wash Facility (approximately 15,600 square feet and 27 feet high), a Wheel Truing Facility (approximately 2,100 square feet and 24 feet high), a system control center, other small buildings, retaining walls, and parking for maintenance employees. In total, the floor area of all buildings will be approximately 187,000 square feet and a building area of about 129,000 square feet. The site will be graded such that all buildings and storage track will be at an elevation of approximately +85 feet above mean sea level (MSL). It will also include areas for operation and maintenance of trains, including storage for approximately 100 vehicles, a vehicle-wash area, and storage track. Drainage within the MSF will be collected internally and flow in a detention basin; the detention basin will allow collected stormwater to percolate into the ground and/or flow through a sand filter and discharge through an extended detention outlet structure into the stormwater outfall drain line discussed above.
4. Approximately 1,400 linear feet of at-grade guideway as it crosses through the MSF.
5. Utility relocations.

3. Location Map

Figure 1 illustrates the location of the Area B: MSF portion of the overall Project. Detail maps of the Project in Area B: MSF are provided in Attachment B1.

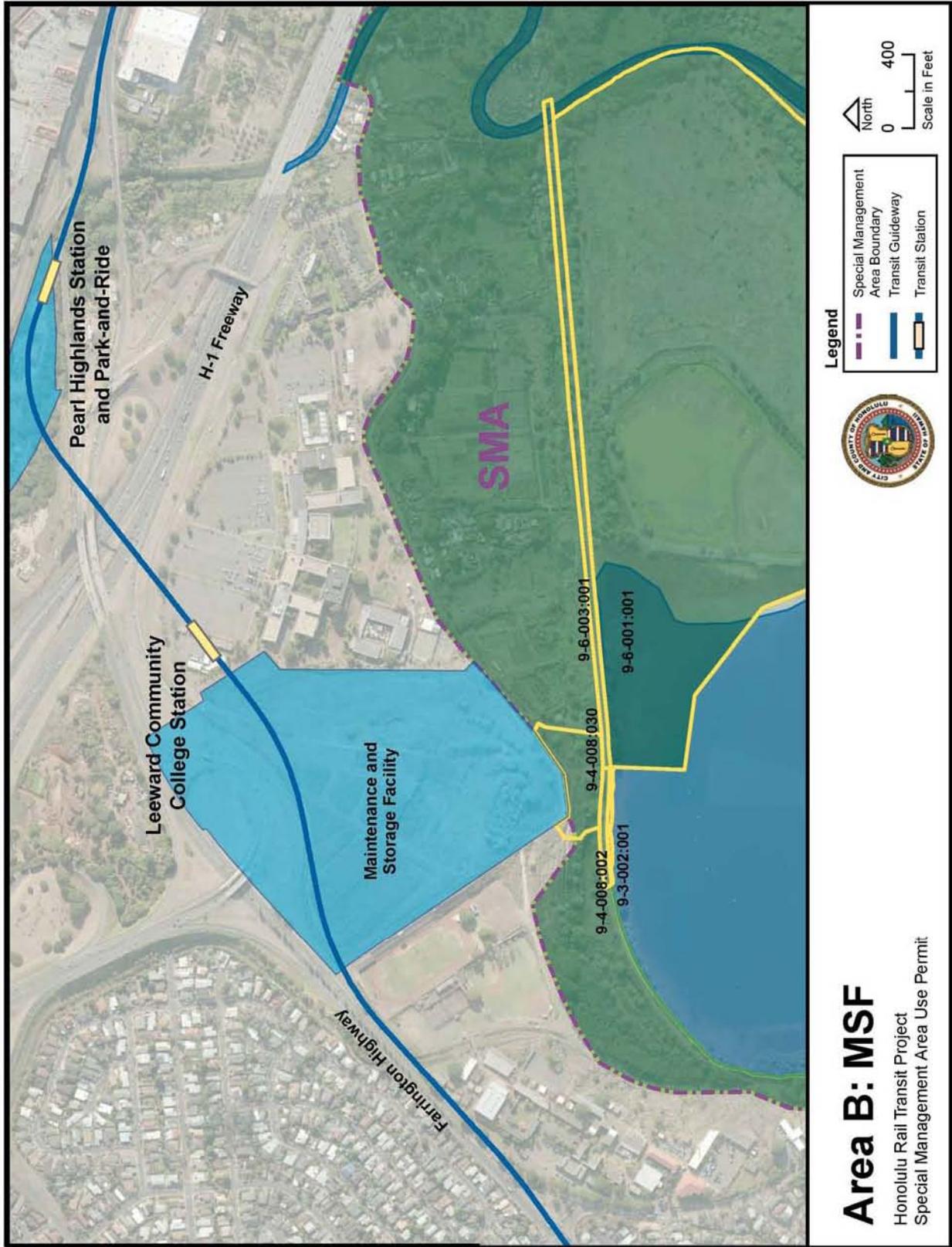


Figure 1: Overview of Area B: MSF Portion of the Project

4. Land Use Approvals Granted and/or Approvals Required

The following land use approvals and other permits are required for Project construction or operation within the Area B: MSF area.

State

- Clean Water Act (CWA) Section 402, National Pollutant Discharge Elimination System (NPDES) Notice of General Permit Coverage received October 20, 2011.
- CWA Section 402, NPDES Permit for dewatering discharges: To be prepared and submitted by contractors as needed
- CWA Section 402, NPDES Permit for hydrotesting discharges: To be prepared and submitted by contractors as needed
- Community Noise Permit for first construction segment, which includes Area B: MSF, was issued August 26, 2009.
- Community Noise Variance for first construction segment, which includes Area B: MSF, was issued April 13, 2010.

County

- Special Management Area: On January 26, 2011, the City Council approved SMP No. 2010/SMA-57, Resolution No. 11-07, CD1, for portions of the Project in the SMA. The proposed stormwater outfall drain line and drain outfall culvert was approved under this SMP.
- Shoreline Setback Variance: On September 13, 2011, the Director of DPP approved SSV No. 2011/SV-3 for the construction of a stormwater outfall drain line/culvert for the MSF for the H RTP in the shoreline setback area.
- Shoreline Setback Variance: On December 20, 2011, the Director of DPP approved SSV No. 2011/SV-7 affirming the approval of the preceding SSV No. 2011/SV-3. The application was initiated by the DPP to address a deficiency identified in the processing of 2011/SV-3 relating to public notification requirements.
- Grading, grubbing, stockpiling, trenching: To be prepared and submitted by contractors
- Final Design phase one-time review of construction plans by various City agencies
- Final Design Easement: City to submit easements for stormwater and sewer drain lines when Final Design is complete and before construction of segment begins
- Building Permit: For work outside of right-of-way (ROW): To be submitted by contractor by construction segment as designs become available

Shoreline Setback

Within the Area B: MSF, construction will occur within the 40-foot shoreline setback area. The Project seeks a variance from Section 23-1.5, ROH, "Prohibitions within the shoreline area"; (b) "Structures and activities are

prohibited within the shoreline area.” The Project is therefore submitting a Shoreline Setback Variance (SSV) application concurrently with the SMP.

Environmental Review

The following documents have been published in compliance with HRS Chapter 343 and/or NEPA:

- An EIS Preparation Notice was published in the Environmental Notice dated December 8, 2005 (RTD 2005)
- The Alternatives Analysis was completed in October 2006 (RTD 2006)
- A Notice of Intent to prepare an EIS was published in the Federal Register in March 2007 (RTD 2007)
- The Draft EIS was published in the Environmental Notice dated November 23, 2008, and in the Federal Register dated November 21, 2008 (RTD 2008u)
- The notice of availability for the Final EIS was published in the Environmental Notice dated July 8, 2010 and in the Federal Register dated June 25, 2010 (RTD 2010)
- The governor of the State of Hawaii accepted the Final EIS on December 16, 2010. Notice of this determination was published in the January 8, 2011 issue of *The Environmental Notice*.
- The Federal Transit Administration (FTA) completed its review of the public and interagency comments on the Final EIS from the H RTP and issued a Record of Decision (ROD) for the H RTP on January 18, 2011. As stated in the ROD, the H RTP must incorporate all the mitigations for adverse effects presented in the Final EIS, the Section 106 Programmatic Agreement (PA), and the ROD. The PA was executed in January 2011.

Project Consistency with General and Development Plans

The Area B: MSF portion of the Project is within the Central O’ahu Sustainable Communities Plan area, and it, as well as the entire Project, is consistent with applicable objectives and policies of the City and County of Honolulu General Plan (as amended) (DPP 2002a) and the Central O’ahu Sustainable Communities Plan (DPP 2002). The following sections describe the Project’s consistency with a variety of plans. Attachment 3 is Appendix J of the Final EIS and provides a detailed review of the Project’s consistency with land use plans.

City and County of Honolulu General Plan (as amended)

As required by the City Charter, the General Plan for the City and County of Honolulu establishes long-range objectives that focus on the social, economic, environmental, and design objectives for the general welfare and prosperity of the residents of O’ahu. The General Plan also establishes broad policies designed to achieve these objectives. Please see Table 7 of Attachment 3 for details.

Central O'ahu Sustainable Communities Plan

The Central O'ahu Sustainable Communities Plan is the vision document for the area of Central O'ahu that includes the protection of agricultural and preservation areas, revitalization of Waipahu and Wahiawa, and continued development of master planned communities in Mililani, Royal Kunia, Koa Ridge, and Waiawa. The Project is consistent with land use objectives included in this plan.

Protected views and vistas, including mauka and makai views and views of prominent landmarks in the study corridor, are identified in City development plans, including the Central O'ahu Sustainable Communities Plan. Protected views and vistas identified in the Central O'ahu Sustainable Communities Plan include views of Pearl Harbor from Farrington Highway near Waipahu High School. Currently, the quality of makai views from Farrington Highway in the vicinity of Waipahu High School vary from low to moderate, with the campus and occasional groupings of shrubs and small trees obstructing most of these views. The MSF, between the high school and LeeCC, will consist of buildings, paved parking areas, a complex of storage tracks and service bays, and site lighting. The major multistory buildings will be sited at various locations, with the tallest building, about 62 feet high, near the base of the property's slope, and a smaller building, about 37 feet high, 'Ewa of the LeeCC Station. The train wash facility will be makai of the guideway and Farrington Highway; this building will be about 27 feet high. These multistory buildings sited on the slope between the two educational institutions will be highly visible and dominant elements of makai views from the highway. Views of Pearl Harbor are of relatively short duration and intermittent while traveling along this section of Farrington Highway, so changes in views of the shoreline and harbor are not expected to be dramatic. Tables 10 and 11 of Attachment 3 include details.

Land Use Ordinance

The Project will be consistent with the City and County of Honolulu Land Use Ordinance (LUO). The Project is considered a "public use and structure," for the purposes of the LUO, which is a permitted principal use in all zoning districts.

Other Plans

Additional land use plans and policies that promote transit-oriented development patterns, pedestrian-friendly environments, and an inter-modal transportation network include the following:

- Hawai'i Statewide Transportation Plan (HDOT 2002)
- O'ahu Regional Transportation Plan 2030 (OahuMPO 2007)

Summary of Relationship to Land Use Plans, Policies, and Controls

Within the Area B: MSF area, the Project will link Honolulu with outlying developing areas and activity centers that have been designated for future residential and employment growth through the land use plans discussed above.

B. Technical Characteristics

1. Use Characteristics

The portion of the Project in the Area B: MSF area is part of the support system for the 20-mile fixed guideway transit system between East Kapolei and Ala Moana Center. The two drain lines in the Area B: MSF area will be connected to and support the operation of the MSF, in turn supporting the overall transit system. All drain line structures will be underground except the stormwater outfall structure at the end of the stormwater outfall drain line. There will be no long-term “use” evident within the Area B: MSF area. Section 2.5 of the Final EIS (Attachment 1) provides additional detail on overall Project operation.

2. Physical Characteristics

Plans of the Area B: MSF portion of the Project are provided in Attachments B1 to B4. These plans generally illustrate the placement of the two drain lines and any connections to be made to existing and proposed utilities. The two drain lines are as follows:

1. A 280-foot-long stormwater outfall drain line (stormwater outfall) for the MSF. The line will be underground and will be a 60-inch-diameter round pipe that transitions to a 2-foot by 8.5-foot box culvert. The line will end in an outfall structure just makai of the shoreline.
2. An 80-foot-long sanitary sewer drain line (sewer line) for the MSF. It will be installed underground, will be 12-inches in diameter, and will connect to an existing sewer line.

The MSF, which abuts the SMA, will occupy the lot just mauka of the two drain lines. The MSF will contain an Operations and Service Building (approximately 131,500 square feet and 62 feet high), a Maintenance of Way Building (approximately 36,200 square feet and 37 feet high), a Train Wash Facility (approximately 15,600 square feet and 27 feet high), a Wheel Truing Facility (approximately 2,100 square feet and 24 feet high), a system control center, other small buildings, retaining walls, and parking for maintenance employees. In total the floor area of all buildings will be approximately 187,000 square feet and a building area of about 129,000 square feet. The site will be graded such that all buildings and storage track will be at an elevation of approximately +85 feet above MSL. It will also include areas for operation and maintenance of the trains, including storage for approximately 100 vehicles, a vehicle-wash area, and storage track. Drainage within the MSF will be collected internally and flow in a detention basin. The detention basin will allow collected stormwater to percolate into the ground and/or flow through a sand filter and discharge through

an extended detention outlet structure into the stormwater outfall drain line discussed above.

The fixed guideway of the Project will also cross the MSF parcel in the mauka portion of the lot. Unlike other portions of the fixed guideway, within the MSF parcel the fixed guideway will be at-grade. Similar to the rest of the fixed guideway, it will consist of two parallel tracks.

3. Construction Characteristics

Construction of the Project in the Area B: MSF area will occur within two parcels in the SMA. Construction work details will be developed during Preliminary Engineering and Final Design. The following primary construction activities will occur:

- Drain line installation, including trenching for the placement of the underground lines. This will be accomplished using backhoes and excavators.

Construction of the drain lines within the SMA will occur in concert with construction of the MSF on the neighboring parcel that abuts the SMA. Grading of that parcel to achieve a large level area at elevation of approximately +85 feet MSL and a drainage basin will occur first. Once the drainage basin is complete, the drain lines within the SMA will likely be installed. Other improvements within the MSF parcel will also proceed once the site is graded.

4. Utility Requirements

The 80-foot-long sewer line within the SMA will connect MSF facilities to an existing sewer line. The Area B: MSF portion of the Project will not require other utility connections within the SMA. The MSF will require connections to water and electricity, but those connections will occur outside the SMA area.

5. Liquid Waste Disposal

The Project will require connection to the municipal sewer system within the Area B: MSF area for the sewer drain line that will be installed.

6. Solid Waste Disposal

During operation, the Project will not generate solid waste within the Area B: MSF area. There are no stations within the SMA in this portion of the Project. The MSF is adjacent to, but not within the SMA, and the facility will be fenced to minimize the potential for solid waste to blow into adjacent properties. The guideway is approximately 1,300 feet mauka of the SMA boundary, and train windows will not open, so items cannot be thrown from the train as it passes the Area B: MSF area. Because waste will not be generated within this portion of the Project, disposal is not anticipated to occur within the Area B: MSF portion of the Project.

Prior to construction, the contractor will be required to prepare the following plans and implement them during construction to mitigate potential construction impacts related to wastes:

- Construction Safety and Security Plan
- Construction Health and Safety Plan
- Construction Contaminant Management Plan
- Construction Contingency Plan
- Solid Waste Management Plan

7. Access to Site

During operation there will be no regular access to the “site”, the drain lines within Area B: MSF. Once the drain lines have been installed, there will be no need for regular access to them. Access to the MSF adjacent to the SMA during construction and operation will primarily be from Ala Ike Street. Access to the operating transit system will be at stations, the nearest station is located on the LeeCC campus. During construction, access to the site within the SMA will be from Ala Ike Street.

Within the Area B: MSF area, two recreation properties will experience temporary impacts during construction: the future Middle Loch Park and the Pearl Harbor Bike Path.

The City and County of Honolulu has set aside land for a new 12.8-acre park mauka of Middle Loch, adjacent to the Pearl Harbor Bike Path, which will contain a portion of TMK 9-4-008:030, the parcel in which the two drain lines will be installed. Only the stormwater outfall drain line extends through the future Middle Loch Park, which is planned as a passive recreational area with benches and restrooms. The guideway will be mauka of the future park in the median of Farrington Highway and will not require any direct use of the park.

The stormwater outfall drain line pipe will be laid in a trench and buried under the future Middle Loch Park, which will be under the jurisdiction of the City and County of Honolulu Department of Parks and Recreation (DPR), and the existing Pearl Harbor Bike Path, which is under the jurisdiction of DTS. The City will maintain public access to and use of the bike path during construction, and once construction is complete, the bike path will be repaved in the affected area and any planting disturbed by construction will be restored. The future Middle Loch Park is currently vacant land. The area disturbed during construction will be restored and vegetated similar to the existing conditions.

8. Other Pertinent Information

A Final EIS compliant with NEPA and HRS Chapter 343 has been prepared for the Project. The information herein is drawn from information used for preparation of that document, including the technical reports that contain detailed information concerning project-specific field studies performed to support the EIS process.

C. Economic and Social Characteristics

1. Estimated Cost and Time Phasing of Construction

Estimated Costs

It is estimated that the cost of construction for the entire 20-mile alignment will be about \$5.16 billion. Construction within the SMA will exceed \$500,000.

Time Phasing of Construction

Construction on the Project commenced in April 2012. However, construction is currently halted due to the Hawaii State Supreme Court lawsuit. Project construction will resume when all necessary approvals are obtained.

2. Other Pertinent Information

A Final EIS compliant with NEPA and HRS Chapter 343 has been prepared for the Project. The information herein is drawn from information used for preparation of that document, including the technical reports that contain detailed information concerning project-specific field studies performed to support the Final EIS.

D. Environmental Characteristics

1. Soils

In the Area B: MSF portion of the Project the two soil types found in the area of the drain lines are Waipahu Silty Clay (WzC) and Pearl Harbor Clay (Ph). Waipahu Silty Clay is typical of terraces, has slopes of 6 to 12 percent, is well-drained, and transmits water moderately well. Pearl Harbor Clay is typical of coastal plains, has slopes of 0 to 2 percent, is poorly drained, and has a fairly low capacity to transmit water. The Area B: MSF portion of the Project work area is relatively undeveloped, although largely surrounded by development.

2. Topography

In the Area B: MSF portion of the Project the topography is generally flat with some slight slopes. No major grading activities will occur within the Area B: MSF portion of the Project. Existing topography will remain largely unchanged. The MSF, adjacent to but outside the SMA, will require significant grading to achieve the required topography for the MSF. The grading on the MSF facility site will generally consist of cutting the higher/northern portion of the existing site and filling the lower/southern portion of the existing site. This will create a large relatively flat area for storage of transit system vehicles and maintenance activities.

3. Surface Runoff, Drainage, and Erosion Hazard

Runoff in the area of the two drain lines within the Area B: MSF area generally flows overland and into Pearl Harbor. There is no stormwater drain system in the immediate area. The surrounding upland area is developed, and surface runoff in these upland areas travels to a drainage system. The Farrington Highway and the H-1 Freeway stormwater drain system is extensive and under the control of HDOT. The City and County of Honolulu also has an extensive storm drain system that serves the surrounding community. The low slopes of lands in this area, combined with the soil types and high level of vegetative cover, contribute to a minimal erosion threat.

The MSF, adjacent to but outside the SMA, will also have its own internal drainage system. The MSF drainage is illustrated on the Drainage Plan sheets included in Attachment B2 and includes the direction of on-site stormwater to a retention basin (indicated as a "Future Water Quality Basin" in Attachment B2).

The proposed project will not affect shoreline processes because except for the outfall, the drain line will be underground and is perpendicular to the wave action. The area is not a beach, and the drain line will not extend into the water, except during very high tide events and storm surges or other unusual natural events. All structures will be back from the ordinary high water line above the mean high-tide elevation (1.4 feet above mean sea level). Even during the highest tides only the lowest few inches of the outfall structure will be submerged. Due to the estuarine nature of the site area, there are no significant currents, such as long-shore currents, or wave energy that the outfall structure could impact. Similar outfall structures already exist in the nearby area and have not been observed to have any impact on coastal processes.

4. Federal FIRM Zone, Land Use Ordinance (LUO) Flood Hazard District, Other Geological Hazards

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 15003C0239G, revised January 19, 2011, shows the project site in Flood Zones VE and X. The outfall structure will extend slightly into this flood zone. Figure B-FZ in Attachment B1 illustrates the location of this flood zone. Definitions of the flood zones are listed below. The Project will not adversely impact or interfere with this floodplain and its functions.

- Flood Zone VE: The flood insurance rate zones that correspond to areas along the coasts subject to inundation by the 100-year floodplains with additional hazards due to storm-induced velocity wave action. In most instances, base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.
- Flood Zone X: Areas determined to be outside of the 500-year flood plain.

The proposed structure is an underground drainage structure and, therefore, should not be threatened by floods. In regard to the Land Use Ordinance (LUO) Flood Hazard District compliance, documents will be submitted as required to

comply with Flood Hazard District Regulation (Article 9. Special District Regulations, Section 21-9.10) before construction of a segment begins.

Floods, hurricanes, earthquakes, and tsunamis can all affect Hawai'i. The International Building Code and the American Association of State Highway and Transportation Officials provide minimum design criteria to address the potential for damages caused by these hazards. The Project will be designed to meet design standards related to natural hazards. Tsunamis are a concern for coastal portions of O'ahu. The State Civil Defense publishes a series of maps showing areas that should be evacuated in the event of a tsunami warning.

A portion of the Project within the Area B: MSF is within the tsunami evacuation zone. The portion within the evacuation zone is limited to the underground stormwater drain pipe and outfall makai of the bike path (a roughly 50 linear foot portion of the pipe and the outfall). Because the only Project facility within the tsunami evacuation zone in Area B: MSF is the storm drain pipe and outfall structure, tsunamis are not anticipated to affect the Project in this area.

5. Other Pertinent Information

A survey of street trees was conducted in the project corridor to identify species, size, maturity, condition, and the Project's probable effect on each tree. This information is presented in Section 4.15 of the Final EIS and in the Honolulu High-Capacity Transit Corridor Project Street Trees Technical Report. Trees were also listed as "Notable" or "Excellent," if applicable. Notable trees are those deemed to be important to the urban landscape character, while Excellent trees are mature trees, without any plantings nearby, that have been allowed to expand to their fullest possible canopy and have not been pruned or affected in such a manner to take away from their appearance.

Coordination with the DPR Division of Urban Forestry and community groups was initiated at the start of the HRS Chapter 343/NEPA process to identify Exceptional Trees along the guideway alignment. Coordination is ongoing as the Project progresses. Results of the survey revealed that there are no street trees in the Area B: MSF portion of the Project.

III. AFFECTED ENVIRONMENT

This section discusses both the affected environment and the Project's impacts to the various resources discussed.

A. Brief Description of Subject Site in Relation to Surrounding Area and Description of Surrounding Area

The project site is makai of the proposed MSF (the former U.S. Navy's Ewa Junction Fuel Drum Facility, also known as the Navy Ewa Drum property). The topography generally slopes toward the Middle Loch of Pearl Harbor with some flat areas. At the proposed drainage outlet location, land behind the shore has been built up with soil and boulder fill, and was formerly the Oahu Railroad and Land Company (OR&L) railroad bed. The route selected for the drain line follows a piece of elevated land presently supporting a dirt road connection between the Cane Haul Road and the upland Navy parcel, avoiding all spring-fed wetlands in the general area. A littoral wetland system was identified in the area, however, the stormwater outfall will be outside the delineated wetland boundary and impacts to the littoral wetland are not anticipated.

The area in which the drain line discharges the nearshore waters, supported until recently, a mangrove forest, and the area is now being recolonized by juvenile mangrove plants. The mangroves were recently removed because they are considered an invasive species. The ordinary high water mark (the mean reach of the higher high tides) constitutes the upper limit of Waters of the U.S. and State. The outlet structure of this drain line/culvert will be placed above and inland of the ordinary high water mark. There will not be a substantial impact to the mangrove wetland.

The project site is in the P-1 Restricted Preservation and P-2 General Preservation Districts and is currently vacant. The Pearl Harbor bike path traverses the site. Surrounding lands are zoned A-2 Medium Density Apartment District and AG-2 General Agricultural District.

In the uplands near the Area B: MSF area are the following land uses, from Koko Head to 'Ewa: Leeward Community College (LeeCC), a former Navy facility (now vacant), and Waipahu High School. None of these uses are within the SMA area. These uses are described below:

- LeeCC is a 50-acre public school operated by the University of Hawai'i system and near the Waiawa Interchange, close to Farrington Highway and H-1. This two-year college enrolls approximately 6,000 students each semester. The school's grounds include outdoor eating areas, children's tot lot, tennis courts, and basketball courts. These resources are outside the SMA to the northeast of the Project in Area B: MSF, just north of the MSF parcel.
- The former Navy facility, known as the "Navy Drum Site," was used to store fuel and place it in 55-gallon drums for use in other areas by the Navy. The Navy conducted an extensive cleanup of the facility and turned it over the State of Hawai'i. The site is currently owned by the Department of Hawaiian Home Lands (DHHL). The site is outside of the SMA and the location of the MSF.

- Waipahu High School is a public school operated by the State Department of Education located at 94-1211 Farrington Highway. This high school serves grades 9 through 12 and is attended by approximately 2,500 students. The school, and its resources, is outside of the SMA to the west of the Project in Area B: MSF, just south of the MSF parcel.

Within the Area B: MSF area much of the land is not actively used, although there are some agricultural and recreational uses. Some ponds in the general area are used for agriculture, and near the shoreline is the Pearl Harbor Bike Path. The Project will involve the installation of two underground drain lines, which is expected to have little impact on the area and surrounding uses. The SMA boundary lies along the makai edge of the former Navy facility proposed for the MSF.

B. Project Site in Relation to Publicly Owned or Used Beaches, Parks, and Recreation Areas; Rare, Threatened, or Endangered Species and Their Habitats; Wildlife and Wildlife Preserves; Wetlands, Lagoons, Tidal Lands, and Submerged Lands; Fisheries and Fishing Grounds; Other Coastal/Natural Resources

1. Publicly Owned Beaches, Parks, and Recreation Areas

There is one existing publicly owned recreation resource in the Area B: MSF area, the Pearl Harbor Bike Path, and one planned publicly owned park, the future Middle Loch Park.

The City and County of Honolulu has set aside land for a new 12.8-acre park mauka of Middle Loch, adjacent to the Pearl Harbor Bike Path, which will contain a portion of TMK 9-4-008:030, the parcel in which the two drain lines will be installed. Only the stormwater outfall drain line extends through the future Middle Loch Park, which is planned as a passive recreational area with benches and restrooms. The guideway will be mauka of the future park, in the median of Farrington Highway and will not require any direct use of the park.

The stormwater outfall drain line pipe will be laid in a trench and buried under the future Middle Loch Park, which will be under the jurisdiction of the DPR, and the existing Pearl Harbor Bike Path, which is under the jurisdiction of DTS. The City will maintain public access to and use of the bike path during construction. Once construction is complete, the bike path will be repaved in the affected area and any planting disturbed by construction will be restored. The future Middle Loch Park is currently vacant land. The area disturbed during construction will be restored and vegetated similar to existing conditions.

There will be no permanent adverse physical impacts to either of these resources, which results in a “no use” determination under Section 4(f).

2. Rare, Threatened, or Endangered Species and Their Habitats/Wildlife and Wildlife Preserves

No rare, threatened, or endangered species were observed in the Area B: MSF area, and coordination with governmental agencies and the literature review indicate that there are no designated critical habitats or wildlife preserves either.

The nearest such habitat is the Pearl Harbor National Wildlife Refuge Waiawa Unit, which is designated as core habitat for four endangered water birds. The Waiawa Unit is more than 1,000 feet southeast of the MSF location.

The species described below were reported as being present or potentially present near the Area B: MSF area:

Fauna

Four water birds are listed as endangered: the Hawaiian coot (*Fulica alai*), Hawaiian duck (*Anas wyvilliana*), Hawaiian common moorhen (*Gallinula chloropus sandvicensis*), and Hawaiian stilt (*Himantopus mexicanus knudseni*). These four species are generally restricted to wetlands (and stream and estuarine areas in some cases) but will visit temporarily flooded areas. The environments in the study corridor where some or all of these species have been observed previously include the Pearl Harbor National Wildlife Refuge; however, none of these water birds were observed in the Area B: MSF area during the project survey.

The Black-crowned night heron (*Nycticorax nycticorax hoactii*) is a protected migratory water bird. This species is protected by the Migratory Bird Treaty Act, although it is not threatened or endangered. Local colonies are known to roost and nest in mangrove trees within Pearl Harbor, which are generally remote from the study corridor. Mangrove stands in this area are being removed because the mangrove is regarded as an invasive plant species.

Flora

There are no rare, threatened, or endangered floral species in the Area B: MSF area. The only endangered plant known in the study corridor is ko'olua'ula (*Abutilon menziesii*), which does not occur within this area.

3. Wetlands, Lagoons, Tidal Lands, and Submerged Lands

The 60-inch stormwater outfall drain line in Area B: MSF area will flow to the shore of Pearl Harbor at Middle Loch. The area in which the drain line discharges is a mangrove wetland. The nearshore waters supported, until recently, a mangrove forest, and the area is now being recolonized by juvenile mangrove plants. The mangroves were recently removed because they are considered an invasive species. The ordinary high water mark—recognized in this instance as the mean reach of the higher high tides—constitutes the upper limit of Waters of the U.S. and State. The outlet structure and riprap of this drain line will be placed above and inland of the ordinary high water mark. There will not be a substantial impact to this mangrove wetland.

4. Fisheries and Fishing Grounds

The Project in the Area B: MSF area will not impact the use or availability of coastal or stream-based fishing grounds because of the length of coastline available in comparison to the small area that will experience construction impacts during installation of the stormwater outfall drain line. No streams are

located in the Area B: MSF area. Once construction is complete, access will return to normal, and there will be no long-term impact to fisheries and fishing grounds.

The proposed project will not affect shoreline processes because except for the outfall, the drain line will be underground and is perpendicular to the wave action. The area is not a beach, and the drain line will not extend into the water, except during very high tide events and storm surges or other unusual natural events. All structures will be back from the ordinary high water line above the mean high-high tide elevation (1.4 feet above mean sea level). Even during the highest tides, only the lowest few inches of the outfall structure will be submerged. Due to the estuarine nature of the site area, there are no significant currents, such as long-shore currents, or wave energy that the outfall structure will impact. Similar outfall structures already exist in the nearby area and have not been observed to have any impact on coastal processes.

The stormwater outfall will not interfere with public access, public views, or open space along the shoreline. Further, the existing bike path provides lateral access along the shoreline. Except for the outfall, all structures will be underground and not visible once construction is complete. The outfall will be visible, but will not rise above the surrounding grade.

5. Other Coastal/Natural Resources

The Project will not adversely affect opportunities for public enjoyment and use of any recreational, coastal, or natural resources within the Area B: MSF area.

C. Relation to Historic, Cultural, and Archaeological Resources

1. Archaeological

The archeological inventory survey (AIS) for the first construction phase of the Project included Area B: MSF, and was approved by SHPD on April 19, 2010. The archaeological inventory survey investigation for the first construction phase did not identify any archeological resources within Area B: MSF. The AIS report is available at <http://www.honolulutransit.org>.

The site proposed for the MSF, which is adjacent to the Area B: MSF area, was formerly used by the military and has been previously disturbed; therefore unknown archaeological resources are not expected to be encountered or adversely affected by construction. There is a moderate chance of encountering burials, as well as pre- and post-contact (A.D. 1778) archaeological resources in the Area B: MSF area. Subsurface features and deposits, including iwi kupuna or Hawaiian burials, that have not been previously identified may be affected by the Project.

If, in the unlikely event that subsurface cultural deposits or human skeletal remains are encountered during construction, all work in the immediate area will stop and the State Historic Preservation Officer (SHPO) will be notified in

accordance with Federal and State law. If archaeological resources are identified during construction, the City will minimize impacts.

2. Cultural

Archival and ethnographic research shows that most traditional cultural resources within the Project in the Area B: MSF area have been heavily damaged or destroyed through previous development. Short-term effects are related to site work or construction-related activity and usually only temporarily affect access or operation of identified resources. Potential long-term effects on cultural resources include permanent modification, such as displacement, damage, or destruction.

HART completed Traditional Cultural Property (TCP) studies for the first three construction phases of the project (East Kapolei to Middle Street). In July 2012, the FTA determined that there are no adverse effects on eligible TCPs for the Project between East Kapolei and Middle Street. No adverse effects as a result of the Project have been identified for any previously identified cultural resources in Area B: MSF. No new National Register-eligible Traditional Cultural Properties have been identified within Area B: MSF.

The fixed guideway will cross Waiawa Stream, a cultural water resource, approximately 1,700 feet mauka of the SMA boundary and approximately 3,200 feet from Area B: MSF. Waiawa Stream could experience potential long-term adverse effects as a result of the Project. Potential effects on traditional cultural practices associated with Waiawa Stream will be mitigated through the mitigation commitments at Waiawa Stream, which include the following:

- Enhancement of the stream to restore and/or improve ecological and aquatic function
- Establishment of water quality basins
- Enhancement of floodway capacity conveyance to achieve a zero rise in flood zone by removal of fill and an increase in stream area
- Extension of the existing culvert to Waiawa Stream to correct existing ponding
- Ecological restoration with native Hawaiian plantings and use of non-invasive species

In addition, any cultural resources that are uncovered will be assessed through collaborative consultation with appropriate cultural practitioners and/or community groups in accordance with the PA developed pursuant to Section 106 of the National Historic Preservation Act.

Because the site proposed for the MSF was formerly used by the military, it has been previously disturbed and cultural resources are not anticipated to be adversely affected by construction.

3. Historical

Through agency coordination, the Project's Area of Potential Effects was defined generally as one parcel deep from the fixed guideway alignment in the Area B: MSF portion of the Project. The Area of Potential Effects also includes parcels adjacent to all facilities associated with the fixed guideway system, including the traction power substations.

Historical Resources within the Area B: MSF

One historical resource is located in the Area B: MSF. Watercress of Hawai'i (Tax Map Key 9-6-003:026); however, the Project will not adversely affect this resource. Figure B-HR in Attachment B1 illustrates the location of this historic resource. Through agency coordination it was determined that this property could be significant as a rural historic landscape site under Criterion "A" for its association with the history of diversified agriculture in the Waiawa Spring area. However, the grid-pattern watercress plots are not a historic feature, which lowers the farm's integrity by changing the design, setting, and feeling of the site from what it was during the historic period when historic photos show crops were grown in contoured plots.

Historical Resources in the Vicinity of Area B: MSF

The U.S. Naval Base Pearl Harbor National Historic Landmark (Tax Map Key various) is adjacent to the Area B: MSF area. The U.S. Naval Base Pearl Harbor National Historic District was listed in the National Register of Historic Places in 1974 (with boundaries accepted in 1978) and designated as a National Historic Landmark (NHL) in 1964. This property includes the USS Arizona Memorial and the USS Bowfin. Portions of Pearl Harbor were designated as part of the World War II Valor in the Pacific National Monument in 2008. These designations attest to Pearl Harbor's national significance, its critical support of the U.S. Navy fleet, and establishment of the U.S. as a major power in the Pacific. The NHL nomination specifically states that the national significance of Pearl Harbor stems from its continuing function rather than its physical facilities and those physical changes required to support this mission are "necessary, normal, and expected." The elevated guideway will not substantially impair the visual and aesthetic qualities of the NHL property that qualify it for protection under Section 4(f), as the primary views of the NHL and lochs are from ground level. Although there will be no direct use of this resource, through agency coordination, it has been determined that the Project will cause undefined effects to the integrity of the setting, feeling, and association of this resource. Therefore, the Project will have an adverse effect on this resource under Section 106, but there will be no constructive use of the resource under Section 4(f).

A PA was developed pursuant to Section 106 of the National Historic Preservation Act. The Section 106 consulting parties are identified in the Introduction (Section I.4). The Section 106 process identified historic properties potentially affected by the Project, assessed effects, and sought ways to avoid, minimize, or mitigate any adverse effects on any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP. The PA records the terms and conditions agreed upon to resolve

potential adverse effects. The FTA, SHPO, and the Advisory Council on Historic Preservation, in coordination with the invited signatories, executed the PA in January 2011.

D. Coastal Views from Surrounding Public Viewpoints and from the Nearest Coastal Highway Across the Site to the Ocean or Coastal Landform

The portion of the Project within Area B: MSF are the two underground drain lines. No visual impact is anticipated as a result of these components. Adjacent to the Area B: MSF area, the MSF and guideway will be on vacant and undeveloped property between Waipahu High School and LeeCC. Farrington Highway and the Farrington Highway/H-1 Freeway interchange are mauka of the site, and a single-family residential neighborhood is located farther mauka.

Section 4.8 of the Final EIS discusses the SMA permit criteria related to coastal view effects within the SMA. The Project will pass along coastal roadways identified in the Coastal View Study with intermittent and continuous views along parts of Farrington Highway. The quality of makai views from Farrington Highway in the vicinity of Waipahu High School vary from low to moderate, with the campus and occasional groupings of shrubs and small trees obstructing most of these views.

The MSF, between the high school and LeeCC, will consist of buildings, paved parking areas, a complex of storage tracks and service bays, and site lighting. The major multistory buildings will be sited at various locations, with the tallest building, about 62 feet high, near the base of the property's slope, and a smaller building, about 36 feet high, 'Ewa of the LeeCC Station. The train wash facility will be makai of the guideway and Farrington Highway; this building will be about 24 feet high. These multistory buildings sited on the slope between the two educational institutions will be highly visible and dominant elements of makai views from the highway. Views of Pearl Harbor are of relatively short duration and intermittent while traveling along this section of Farrington Highway, so changes in views of the shoreline and harbor are not expected to be dramatic.

Figure B-CS1 in Attachment B1 provides a site plan illustrating two cross sections that extend from Farrington Highway and the Farrington Highway-Kamehameha Highway interchange to the Pearl Harbor shoreline through the MSF. Figure B-CS2 in Attachment B1 illustrates the proposed finished grade, planned MSF buildings, and the existing ground level along the two cross sections. These figures illustrate that the MSF buildings will appear in the view toward the shoreline in some areas, but also that the view toward the shoreline from portions of the highways will not be affected by the MSF. Minimizing or avoiding light spillage onto adjacent properties and eliminating night sky pollution will be achieved by using full cut-off luminaires (fixture and lamp design) and low reflective surfaces.

E. Quality of Receiving Waters and Ground Water (Including Potable Water) Resources. Describe Effects on the Groundwater Recharge Cycle within the Groundwater Control Area, Show Existing and Proposed Well Locations with Pumping Estimates. Describe Effects on Receiving Waters – Streams and Ocean Waters

Streams

The Project will not cross any stream in the Area B: MSF area. Outside of the SMA, but nearby, the Project will cross Waiawa Stream, which is listed on the Hawai'i State Department of Health's (HDOH) 303(d) List of Impaired Waters (HDOH 2008). The Project will not have a direct impact on this stream, and accordingly, there will be no adverse impacts to this stream.

Marine Waters

The Project's MSF stormwater outfall drain line will discharge into Pearl Harbor, a Class 2 Inland Water/Estuary, in the Area B: MSF area. Any discharge entering Pearl Harbor will meet water quality requirements for this estuary, as it will have been treated by a permanent oil/water/sand separator prior to reaching the outfall. Impacts will be limited to infrequent flows generated by storms, and these treated flows will contribute fresh water to Middle Loch. Pearl Harbor has existing associated inlets of point-source discharges and streams, and is on HDOH's 303(d) List of Impaired Waters (HDOH 2008). The Project stormwater outfall drain line is not anticipated to adversely affect Pearl Harbor.

Flood Zones

The Project will be partially within one flood zone in the Area B: MSF area, as illustrated in Figure B-FZ in Attachment B1. The outfall structure will slightly extend into flood zone VE, associated with storm-induced velocity wave action. The Project will not cause significant floodplain encroachment as defined by U.S. Department of Transportation Order 5650.2. The outfall structure will be built below ground level. The outfall structure could have minor effects on the floodplain; however any such changes caused by the Project will be mitigated through design to comply with current flood zone regulations. There will be no notable adverse impacts on natural and beneficial floodplain values, and there will be no impact to water levels in flood zones.

Groundwater

In the Area B: MSF area the Project overlies the Pearl Harbor Aquifer Sector of the Southern O'ahu Basal Aquifer (SOBA). The Project meets the coordination requirements of Section 1424(e) of the Safe Drinking Water Act, in accordance with the 1984 Sole Source Aquifer Memorandum of Understanding between the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Transportation. A Water Quality Impact Assessment was reviewed by EPA, which concurred that contamination of the SOBA will not occur (letter dated March 27, 2009, located in Attachment 2). The construction methods and best management practices (BMPs) employed and the presence of an upward hydraulic gradient in the area will protect the groundwater, and there will be no adverse effect to groundwater quality. Caprock overlies the SOBA and impedes the escape of groundwater from this basaltic aquifer. Water in the caprock is brackish and not potable, although water in the upper portion of the caprock has a low enough salinity to be used for irrigation. Beneath the caprock and underlying all of southern O'ahu, the SOBA is heavily used because it contains large supplies of fresh water. The boundary between non-drinking water aquifers and underground sources of drinking water is referred to as the Underground Injection Control line by HDOH. In the Area B: MSF area, the Project will be mauka of

the Underground Injection Control line. The Project alignment will be downgradient of active drinking water wells on the island, and the overall groundwater flow direction is seaward. HDOH's Safe Drinking Water Branch publishes groundwater contamination maps, and included in that report are the locations of water wells. Most of these water wells are mauka of the alignment, and all wells makai of the alignment are either inactive or used for irrigation. Potential contamination from the guideway will not migrate to drinking water wells. These wells are drawing from a depth of several hundreds of feet below ground surface, and the shafts for the Project will not penetrate anywhere near those depths.

Subsurface conditions in the Area B: MSF generally consist of typical caprock, alluvial and marine deposits, and residual soils interlayered with coralline materials and/or basalt bedrock. Based on existing ground elevations that range from 0 to +90 feet MSL, the depth of groundwater for areas where the Project overlies basalt is expected to vary from 20 feet below ground surface to tens of feet below ground surface. Where existing ground elevations are elevation 20 feet or less, groundwater elevations are expected within 10 feet of the ground surface.

In the Area B: MSF area, the alignment and site improvements will generally be at grade. No deep foundations will be required for support of the guideway through this area. Any deep foundations for support of the MSF structures and appurtenant facilities are expected to be less than 50 feet deep. Most piers will only penetrate surficial materials or the caprock overlying the basalt aquifer. In places where the piles or shaft will extend into the basalt, the penetration will only be a few tens of feet at most; piers or piles will never penetrate deep into the basalt. Drinking water pumped from the SOBA comes from depths much greater than those anticipated or practical for pile foundations.

Groundwater in the excavations for foundations and drain lines could be contaminated with petroleum products or other chemicals. These contaminants will be removed from water pumped from the excavations in accordance with standards established by the HDOH. Petroleum products could require the use of oil/water separators, strippers, or other remediation techniques. Water removed from the excavations must either be returned to the groundwater system or added to the stormwater drainage system. Any water discharged into the drainage system and surface waterbodies will require an NPDES Dewatering Permit. This discharge must meet water quality standards, and a monitoring program will ensure compliance with these standards. An NPDES Construction Stormwater Permit has been obtained by the Project and will ensure proper handling of hazardous materials and other pollutants.

Construction-derived wastes will be managed in accordance with prevailing regulations. Uncontrolled releases will not be allowed. No contaminated soils will be disposed of in the Sole Source Aquifer area. No long-term impacts to the SOBA are anticipated. Potable water is currently limited on O'ahu and is delivered by the City and County of Honolulu Board of Water Supply. Potable water will be required to support the MSF, although the Project is not expected to be a major water consumer. To the extent available, the Project will use recycled water at the MSF, at stations, and for irrigation of landscaped areas.

The Project will not increase impermeable surfaces in the Area B: MSF area. Once the underground drain lines are installed, vegetation will grow over them, and the only area to be paved will be the section of the Pearl Harbor Bike Path that was disrupted during

construction. The Project will slightly increase impermeable surfaces near the Area B: MSF area, primarily as a result of the MSF buildings and roads. By installing permanent BMPs, primarily consisting of a settling basin within the MSF site, most runoff will be directed back into the ground to recharge the groundwater system, resulting in little change in the amount of infiltration. In this way, although runoff from surrounding surfaces may enter the groundwater system along a different path than previously, the groundwater recharge needed to sustain the aquifer system will continue. Therefore, the Project will not result in any long-term changes to groundwater levels. Runoff from the guideway is expected to be relatively free of pollutants and will not threaten groundwater quality.

F. Include Suitable and Adequate Location and Site Maps

Please see Attachments B1, B2 and B4.

G. Other Pertinent Information

A Final EIS compliant with NEPA and HRS Chapter 343 has been prepared for the Project. The information herein is drawn from information used for preparation of that document, including the technical reports that include detailed information concerning the Project-specific field studies performed to support the Final EIS.

IV. PROJECT IMPACTS

This section discusses impacts within the Area B: MSF area specifically. The Introduction portion of the SMA application provides a project-wide discussion of impacts related to Coastal Zone Management objectives and SMA guidelines.

A. Coastal Zone Management Objectives

The text in italics below is copied directly from HRS Section 205A-2, Coastal Zone Management Program; Objectives and Policies.

1. Recreational Resources

A. *Provide coastal recreational opportunities accessible to the public.*

Section 4.5 of the Final EIS (Attachment 1) describes the Project's effect on parks and recreation areas. Please see Section III.B.1 for details regarding publicly owned beaches, parks, and recreation areas and Section III.B.5 for details regarding other coastal/natural resources in the Area B: MSF area.

While the portion of the Project in the Area B: MSF area does not provide any new coastal recreational opportunities for the public, it will not adversely affect the existing coastal recreational resources or their uses by the public. All project facilities in Area B will be underground, except for the small outfall structure, and will not affect coastal recreational opportunities. The MSF, adjacent but outside of the SMA, will not adversely affect any coastal recreational opportunities or their use by the public. Overall the Project will improve the availability of access to existing and future parks and recreational facilities along the alignment.

2. Historic Resources

A. *Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.*

Section 4.16 of the Final EIS (Attachment 1) discusses the Project's effect on archaeological, cultural, and historic resources. Please see Section III.C for details regarding historic resources in the Area B: MSF area.

There is a moderate chance of encountering burials, as well as pre- and post-contact archaeological resources in the Area B: MSF area. Historic Watercress of Hawai'i is within the Area B: MSF area, but the Project will have no direct impact to this resource, and there will be no adverse effect on it. The United States Naval Base, Pearl Harbor NHL is near the Area B: MSF area. Although there will be no direct use of this resource, through agency coordination, it has been determined that the Project will

cause undefined effects to the integrity of the setting, feeling, and association of this resource. The Project will have an adverse effect on this resource under Section 106 of the National Historic Preservation Act. Because the Project will result in an adverse effect and avoidance is not possible, a PA was prepared in consultation with the SHPO and the Section 106 consulting parties to outline measures to minimize and mitigate the Project's effects on these resources.

3. Scenic and Open Space Resources

- A. *Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.*

Section 4.8 of the Final EIS (Attachment 1) identifies the Project's impacts and mitigation measures related to protected views. Please see Section III.D for details regarding coastal views in the Area B: MSF area.

Scenic impacts associated with the Project in and near Area B: MSF include a potential change in the setting of two historic resources (Pearl Harbor National Historic Landmark and Watercress of Hawai'i), alteration of 'Ewa-Koko Head and mauka-makai views, and the introduction of project components that are out of scale or character with their setting. The Project MSF and guideway will be makai of the Farrington/ Kamehameha Highway interchange near Waipahu High School and LeeCC, but mauka of the SMA line. The multistory MSF buildings will be highly visible and dominant elements of makai views from the highway. However, views of Pearl Harbor are of relatively short duration and intermittent while traveling along this section of Farrington Highway; therefore changes in views of the shoreline and harbor are not expected to be dramatic. The only project components actually within the Area B: MSF area are the two underground drain lines that will not have any effect on coastal scenic and open space resources.

4. Coastal Ecosystems

- A. *Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.*

Section 4.14 of the Final EIS (Attachment 1) discusses the Project's effect on water quality, which could impact coastal ecosystems. Please see Section III.B.4 and III.B.5 for details regarding coastal/natural resources in the Area B: MSF area.

The Project will not have an adverse impact on coastal ecosystems. The Project is being designed so as to ensure minimal environmental impacts along the alignment through the use of construction and permanent BMPs. In the Area B: MSF area, the only project element in the SMA will be the two underground drain lines, and only the stormwater outfall drain line will drain into Pearl Harbor; the sewer drain line will connect to an existing sewer line. The outfall is being designed so that any discharge entering Pearl Harbor will have been treated with a permanent

oil/water/sand separator in order to meet water quality requirements for the estuary.

5. Economic Uses

- A. *Provide public or private facilities and improvements important to the State's economy in suitable locations.*

Section 4.3 of the Final EIS (Attachment 1) discusses the Project's effect on economic activity. To accomplish the economic development objectives for O'ahu's urban corridor, suitable infrastructure must be developed. The Project will improve infrastructure and provide long-term benefits to residents, businesses, and commuters. The portion of the Project within the Area B: MSF area will not adversely affect coastal-dependent economic activities.

6. Coastal Hazards

- A. *Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.*

A small portion of the Project within the Area B: MSF area is in a tsunami evacuation zone based on new maps issued by State Civil Defense in 2010. The only Project facility within the tsunami evacuation zone in the Area B: MSF area is a portion of the underground stormwater discharge pipe and outfall structure; therefore, tsunamis are not anticipated to affect the Project in this area. The Project is being designed to applicable standards and specifications regarding storm weather and associated risks. Erosion is not anticipated to be an issue in this area because of the slight slopes, as well as the soil types and level of vegetative cover. Sea level rise may impact the Project because of its fairly low elevation, but that impact is not expected to occur until sometime in the future. According to Project engineers' estimates, based on a general analysis of the topography and contours in the area, sea level would have to rise more than 4 feet to reach the top of the headwall at the outfall, and more than 38 feet to impact the detention basin adjacent to the portion of the Project in the Area B: MSF area. Subsidence is not expected to be an issue in the area, according to initial geological findings. Project foundations, the columns on which the guideway sits, will be installed to a depth sufficient to prevent subsidence. The Project is not expected to increase pollution.

7. Managing Development

- A. *Improve the development review process, communication, and public participation in the management of coastal resources and hazards.*

The Project will require State and City permits and approvals that include provisions for public participation and ensure protection of coastal resources, as described in Section 4.21 of the Final EIS (Attachment 1). The Project will also provide necessary infrastructure to accommodate

existing and planned future travel demand. The Project is consistent with the transportation and land use elements of adopted State and Local government plans.

8. Public Participation

- A. *Stimulate public awareness, education, and participation in coastal management.*

Chapter 8 of the Final EIS (Attachment 1) discusses the Project's public outreach activities. Agencies, non-governmental groups, and the public have been engaged throughout the Project's planning process, as required by Federal and State law. Various public outreach activities were held near the Area B: MSF area, as discussed in Section I.F.6.

9. Beach Protection

- A. *Protect beaches for public use and recreation.*

The portion of the Project within the Area B: MSF area is not adjacent to or abutting a beach, and the Project will not affect coastal erosion in this area.

10. Marine Resources

- A. *Promote the protection, use, and development of marine and coastal resources to assure their sustainability.*

The portion of the Project within the Area B: MSF area is abutting a shoreline but will not adversely affect marine resources. The Project stormwater outfall drain line will discharge into the Middle Loch of Pearl Harbor, but the water discharged by the system will have been treated with a permanent oil/water/sand separator prior to reaching the outfall, and any discharge entering Pearl Harbor will meet water quality requirements for the estuary. Impacts will be limited to infrequent flows generated by storms, and these treated flows will contribute fresh water to Middle Loch. The Project stormwater outfall drain line is not expected to adversely affect Pearl Harbor or any of its associated marine resources.

B. SMA Guidelines

The text in italics below is copied directly from ROH Chapter 25-3.2, Review Guidelines.

The following guidelines shall be used by the council or its designated agency for the review of developments proposed in the SMA.

- a) *All development in the special management area shall be subject to reasonable terms and conditions set by the council to ensure that:*
- 1) *Adequate public access, by dedication or other means, to and along the publicly owned or used beaches, recreation areas and natural reserves is provided to the extent consistent with sound conservation principles;*

Please see Section III.B.1 for details regarding publicly owned beaches, parks, and recreation areas in the Area B: MSF area.

The portion of the Project within the Area B: MSF area will not adversely affect access to and along publicly owned beaches, recreation areas, and natural reserves. Temporary modifications to access public recreation areas will be required for public safety during construction; however, public access will be maintained. There will be a temporary disruption of the existing Pearl Harbor Bike Path during construction as a trench must be dug across the path to install the stormwater outfall drain line. A temporary crossing over the trench will be provided to maintain bikeway access during construction; once construction is complete, the path will be returned to its existing alignment. As a result, no long-term adverse effects are anticipated on the bicycle path.

Construction in this area will also temporarily impact the Pearl Harbor NHL; however, no long-term adverse impacts are expected.

The Future Middle Loch Park is planned as a passive recreational area with benches and restrooms. The guideway and MSF, as well as the sewer drain line to be installed, will be mauka of the future park and will not require any direct use of the park; only the underground stormwater outfall drain line will be within the eastern end of the park's boundaries. If the park is developed prior to project construction in the Area B: MSF area, the Project will maintain access to the extent possible. These resources will remain open and accessible during construction and operation of the Project.

Once constructed, the Project will increase mobility and improve options to access public recreation areas, such as public beaches and parks.

- 2) *Adequate and properly located public recreation areas and wildlife preserves are reserved;*

The portion of the Project within the Area B: MSF area will not adversely affect or diminish the quality of public recreation areas or wildlife preserves.

- 3) *Provisions are made for solid and liquid waste treatment, disposition and management which will minimize adverse effects upon special management area resources; and*

For the portion of the Project within the Area B: MSF area HART will ensure that proper containment, treatment, and disposal methods for solid and liquid wastes are followed during construction and operation of the Project in accordance with Federal, State, and Local regulations as discussed in the Final EIS (Attachment 1) Section 4.12 Hazardous Waste and Materials. There will be no adverse impacts to SMA resources.

- 4) *Alterations to existing land forms and vegetation; except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, wind damage, wave damage, storm surge, landslides, erosion, sea level rise, siltation or failure in the event of earthquake.*

The portion of the Project within the Area B: MSF area is not expected to have an adverse effect on water resources. During construction (as describe in the Final EIS (Attachment 1) Section 4.18.10 Construction Phase Effects Water Resources), temporary BMPs for the management of stormwater will be designed, installed, and maintained to reduce the potential for impacts to water resources from erosion and other construction activities. Permanent BMPs also will be designed and installed on all stormwater outfall structures associated with the Project, in particular the MSF. The permanent BMPs associated with the MSF include oil/water/sand filters and a retention pond. The Project will avoid or minimize impacts on recreational and scenic amenities where reasonable. The Project will not impact floodways, cause wind damage, wave damage, storm surges, landslides, erosion of coastal resources, sea level rise, or siltation. The Project is designed to meet seismic standards and other natural hazards as applicable.

- b) *No development shall be approved unless the council has first found that:*

- 1) *The development will not have any significant adverse environmental or ecological effect except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health and safety, or compelling public interest. Such adverse effect shall include but not be limited to the potential cumulative impact of individual developments, each one of which taken in itself might not have a significant adverse effect and the elimination of planning options;*

In the Area B: MSF area, there will be no significant adverse environmental or ecological impacts due to the Project. The Project design includes measures to avoid and minimize impacts to the environment, and there will be no significant cumulative impact from the Project within the SMA. The Project's impacts are outweighed by the Project's benefit of providing additional mobility in the study corridor, as

well as improving corridor travel reliability, access, and transportation equity.

- 2) *The development is consistent with the objectives and policies set forth in Section 25-3.1 and area guidelines contained in HRS Section 205A-26;*

The portion of the Project within the Area B: MSF area is consistent with the objectives and policies set forth for SMAs. The Project is acquiring a Shoreline Setback Variance for work within 40 feet of the shoreline.

- 3) *The development is consistent with the county general plan, development plans and zoning. Such a finding of consistency does not preclude concurrent processing where a development plan amendment or zone change may also be required;*

The portion of the Project within the Area B: MSF area is consistent with all plans and zoning, as discussed in Section II.A.4 and Attachment 3.

- 4) *That the development has been adequately planned to minimize the risk from coastal hazards such as tsunamis, hurricanes, wind, storm waves, flooding, erosion, and sea level rise; and*

A portion of the Project within the Area B: MSF area is located in the tsunami evacuation zone, based on revised maps published by State Civil Defense in 2010. The only Project facility within the tsunami evacuation zone in the Area B: MSF area is a portion of the underground stormwater discharge pipe and the outfall structure; the Project has been adequately planned and designed to the extent practical to minimize the risk from coastal hazards, including tsunamis. The Project design meets applicable standards and specifications regarding storm weather and construction in floodplains. Temporary and permanent BMPs will minimize the risk to coastal areas from erosion. According to project engineers' estimates, based on a general analysis of the topography and contours in the area, the sea level would have to rise more than 4 feet to reach the top of the headwall at the outfall, and more than 38 feet to impact the detention basin adjacent to the portion of the Project in the Area B: MSF area.

- 5) *That the development does not impede public access to the shoreline or beach area.*

The portion of the Project within the Area B: MSF area will not impede public access to the shoreline or beach because it requires only the installation of two underground drain lines. Conversely, the Project will increase mobility and thereby access to such areas outside of the Area B: MSF area.

- c) *The council shall seek to minimize, where reasonable:*

- 1) *Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough or lagoon;*

The Project will not require any of the above activities in the Area B: MSF area.

- 2) *Any development which would reduce the size of any beach or other area usable for public recreation;*

There are no beaches in the Area B: MSF area. In addition, the Project will not reduce or impact any other areas usable for public recreation because it requires only the installation of two underground drain lines.

- 3) *Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the special management area and the mean high tide line where there is no beach;*

The portion of the Project within the Area B: MSF area will not reduce or restrict public access to tidal and submerged lands, beaches, portions of rivers and streams within the SMA, or the mean high tide line where there is no beach. The Project does not cross any stream in the Area B: MSF area. Public access to the shoreline in this area will not be reduced or restricted by the Project because the Project only requires the installation of two underground drain lines.

- 4) *Any development which would substantially interfere with or detract from the line of sight toward the sea from the state highway nearest the coast; and*

The portion of the Project within the Area B: MSF area requires the installation of two underground drain lines that will not affect coastal scenic and open space resources. In the Area B: MSF area, the MSF and guideway will be makai of the Farrington/Kamehameha Highway interchange near Waipahu High School and LeeCC. Both the Project MSF and guideway will be mauka of the SMA boundary. The multistory MSF buildings will be highly visible and dominant elements of makai views from the highway. However, the site slopes down from the highway toward the ocean. To mitigate potential impacts, the tallest building, about 62 feet in height, will be constructed near the base of the property.

Views of Pearl Harbor are of relatively short duration and intermittent while traveling along this section of Farrington Highway; therefore changes in views of the shoreline and harbor are not expected to be dramatic. Overall, the Project has minimized its visual intrusion to the extent possible.

An evaluation of the SMA Coastal Views is provided in Section 4.8 of the Final EIS (Attachment 1; page 4-103).

- 5) *Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential*

fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.

The portion of the Project within the Area B: MSF area will not adversely affect water quality in this area. Section 4.14 and 4.18.10 of the Final EIS (Attachment 1) discuss BMPs to be employed during operation and construction of the Project, respectively, to limit water quality impacts. The stormwater outfall is being designed so that water will have been treated by a permanent oil/water/sand separator prior to reaching the outfall, and any discharge entering Pearl Harbor will meet water quality requirements for the estuary. Existing and potential fishing grounds along the coast will not experience any interference due to the Project. The Project will not have an adverse effect on any wildlife habitats or potential or existing agricultural uses of land due to its small disturbance area in this location.

C. SSV Criteria

ROH Section 23-1.8(b)(2) states that the director may grant a variance upon the finding that, based upon the record presented, the proposed structure or activity meets the following standard of this section:

(2) **Public Interest Standard.** A variance may be granted for an activity or structure that is necessary for or ancillary to facilities or improvements by a public agency or by a public utility regulated under HRS Chapter 269, or necessary for or ancillary to private facilities or improvements that are clearly in the public interest; provided that the proposal is the practicable alternative which best conforms to the purpose of this chapter and the shoreline setback rules. Public interest shall mean principally of benefit to the general public, as determined by the director.

The applicant is the Honolulu Authority for Rapid Transportation, a semi-autonomous agency of the City and County of Honolulu. The portion of the project in the shoreline setback area (the stormwater outfall drain line and drain culvert outfall) will be a supporting structure to the MSF. The MSF, in turn will support the overall 20-mile rapid transit project, which will benefit the general public by reducing traffic volumes and travel time on public roadways, and by providing an alternative means of reliable transportation.

The Project is located in the Central Oahu Sustainable Communities Plan (SCP) area and it, as well as the entire rapid transit project, is consistent with applicable objectives and policies of the City and County of Honolulu General Plan (as amended) (DPP 2002a) and the Central Oahu Sustainable Communities Plan (DPP 2002). The Project is reflected on both the Map A3: Public Facilities Map that is part of the Central Oahu Sustainable Communities Plan, as well as the Public Infrastructure Map for Central Oahu (Resolution No. 03-63, CD1, dated March 19, 2003). On May 7, 2008, the City Council adopted Resolution No. 08-97, CD1, approving the revision of the Ewa, Central Oahu, and Primary Urban Center Public Infrastructure Maps (PIM) to include symbols for the rapid transit corridor, transit stations, corporation yards, and park and ride facilities for the HHCTC Project.

The Project is also consistent with the transportation and land use elements of adopted State and Local government plans applicable to the area. The transit system will link Honolulu with outlying developing areas and activity centers that have been designed to receive increasing amounts of future residential and employment growth. The system will provide reliable rapid transit within the study corridor that will serve all population groups, improve transit links, and offer an alternative to the use of private automobiles. The proposed stormwater outfall drain line and culvert are necessary components of the drainage system for the MSF. The MSF will have its own on-site stormwater collection system. The system will control stormwater runoff with on-site catch basins and connecting underground pipes that will drain the bulk of the stormwater to a detention basin. If there is above-normal rainfall, stormwater from the detention basin will be piped through an underground pipe/culvert to the Middle Loch of Pearl Harbor. The outfall structure will be built below ground level. Impacts will be limited to infrequent flows generated by large storms. These treated flows will contribute fresh water to the Loch.

The stormwater outfall drain line/culvert will be underground and perpendicular to the shoreline, so it will not adversely affect the natural shoreline, public pedestrian access laterally along the shoreline, or open space along the shoreline. The existing bike path also provides for lateral access along the shoreline. Further, there are no sandy beaches in the area.

V. MITIGATION MEASURES

The Project Mitigation Monitoring Program is included as Attachment 4.

Attachment B1: SMA Plans

- B-00 to B-02: SMA Line Plan Sheets
- B-HR: Historic Resources
- B-CS1: Cross Section Plans
- B-CS2: Cross Sections
- B-FZ: Flood Zones

Attachment B2: Shoreline Setback Line Maps

- Figures 1a and 1b: Site Location
- Figure 2: Storm Drain Outfall, Certified Shoreline, Setback, and OHWM
- Figures 3a and 3b: Nearby Outfalls

Attachment B3: Certified Shoreline Survey

Attachment B4: Site Drawings/Plans

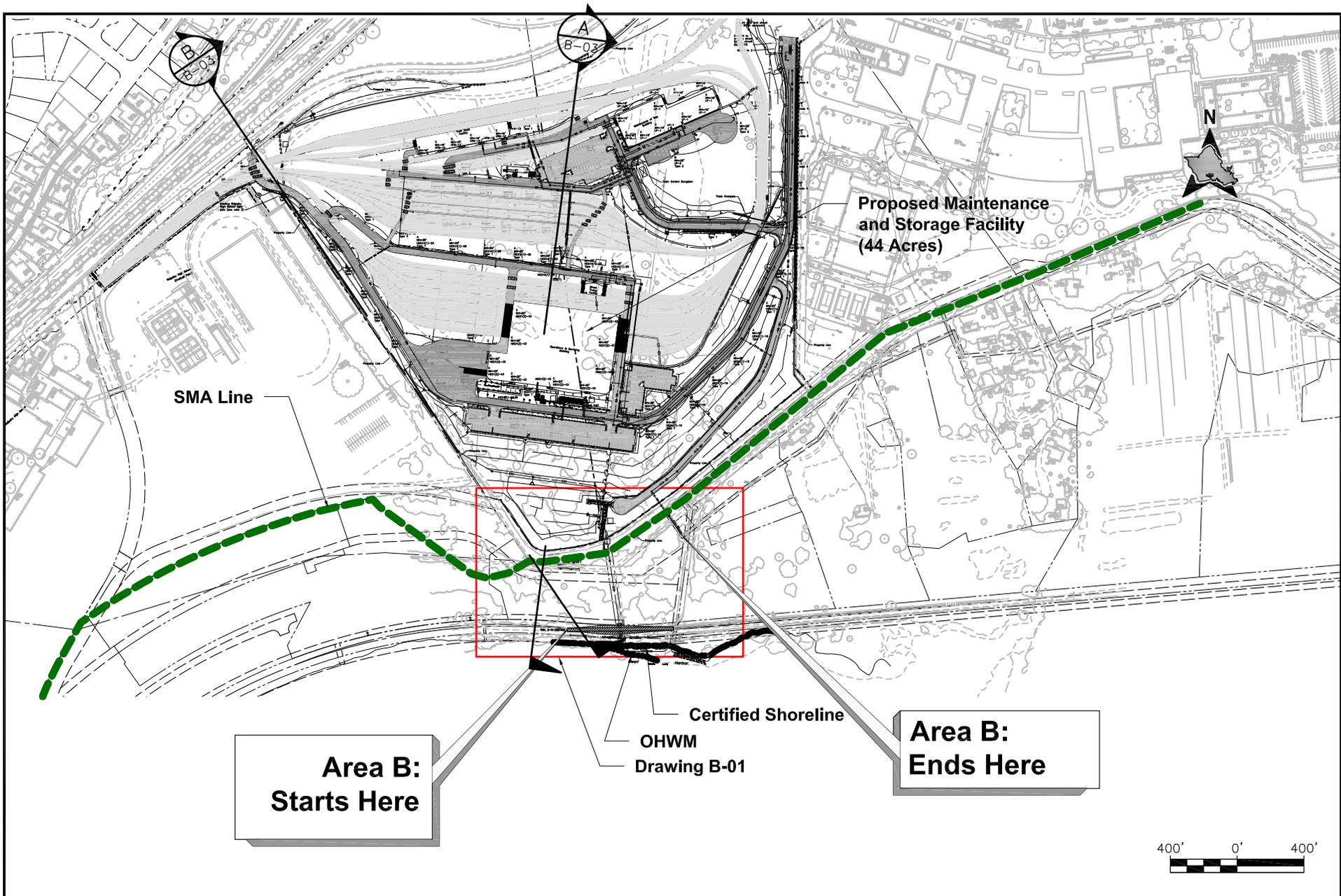
- Maintenance and Storage Facility Storm Drain Outfall – Site Location
- Sheet 1: Maintenance and Storage Facility Pearl Harbor Outfall Plan
- Sheet 2: Maintenance and Storage Facility Pearl Harbor Outfall Details
- Bike Path Profile

Attachment B5: DLNR-OCCL Correspondence

Special Management Area Use Permit and Shoreline Setback Variance Application

Attachment B1: Area B SMA Plans

Honolulu Rail Transit Project
June 2013



**HONOLULU
RAIL TRANSIT PROJECT**

SPECIAL MANAGEMENT AREA
**AREA B
OVERVIEW**

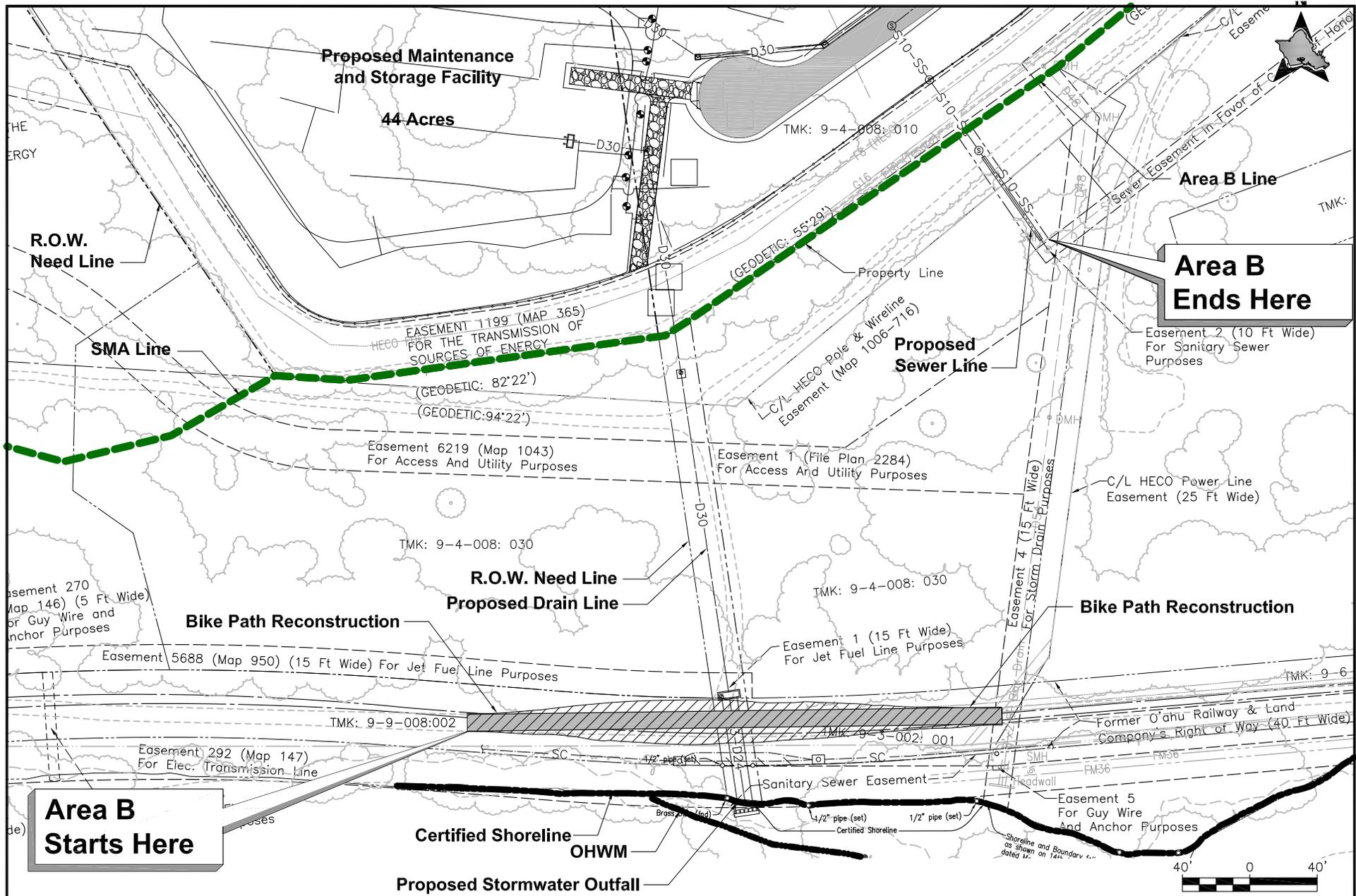
MAINTENANCE AND STORAGE FACILITY (MSF)

Drawing No:

B-00

Date:

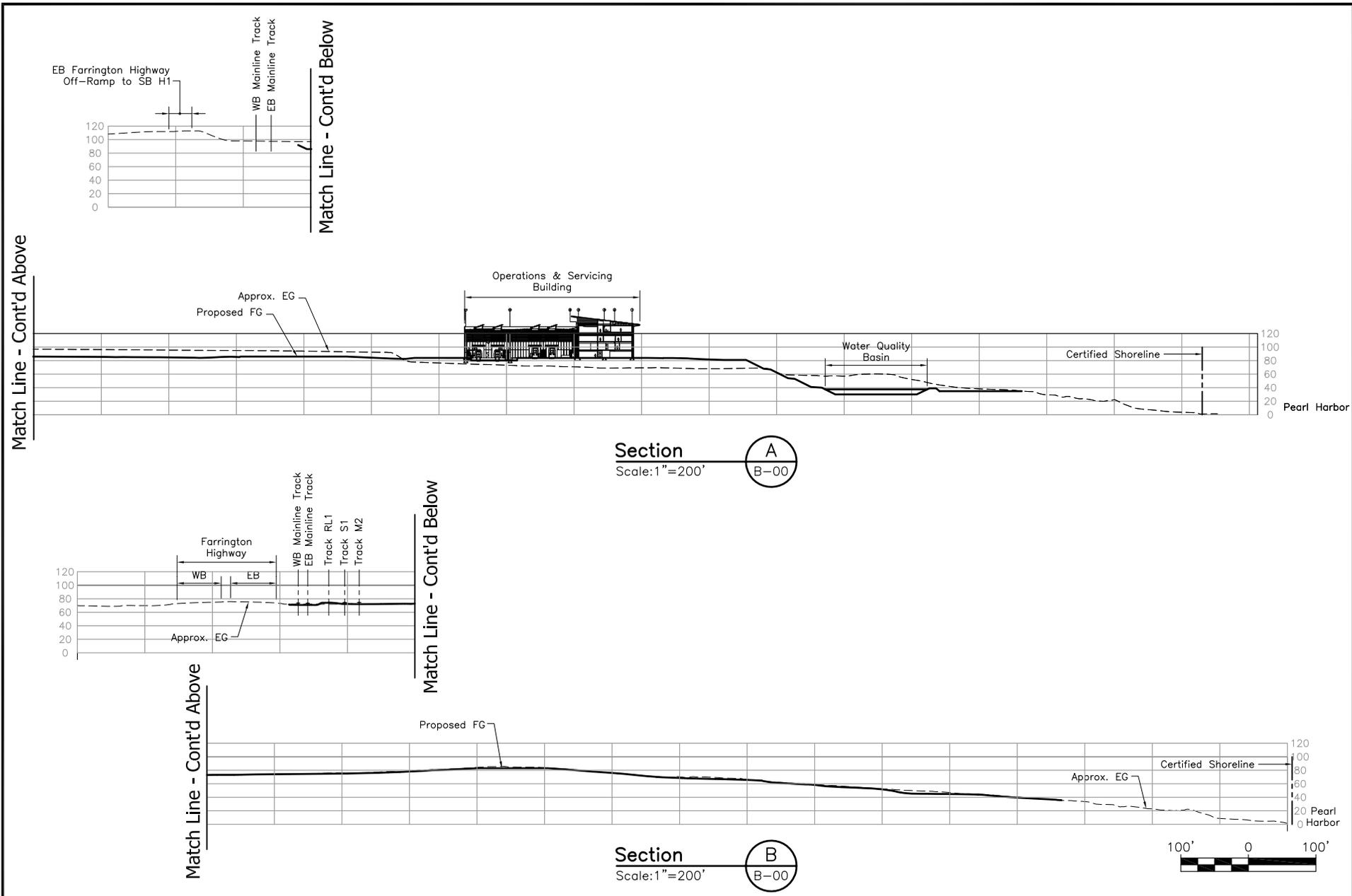
06-20-2013



HONOLULU RAIL TRANSIT PROJECT

SPECIAL MANAGEMENT AREA
AREA B PLAN
MAINTENANCE AND STORAGE FACILITY (MSF)

Drawing No:
B-01
Date:
06-20-2013



**HONOLULU
RAIL TRANSIT PROJECT**

SPECIAL MANAGEMENT AREA
AREA B
 SITE SECTIONS
 MAINTENANCE AND STORAGE FACILITY (MSF)

Drawing No:
B-03
 Date:
 06-20-2013



Proposed Maintenance
and Storage Facility
(44 Acres)

Historic Resource:
Watercress Of Hawaii Inc.

SMA Line

Certified Shoreline
OHWM

Area B
Starts Here

Area B
Ends Here



HONOLULU
RAIL TRANSIT PROJECT

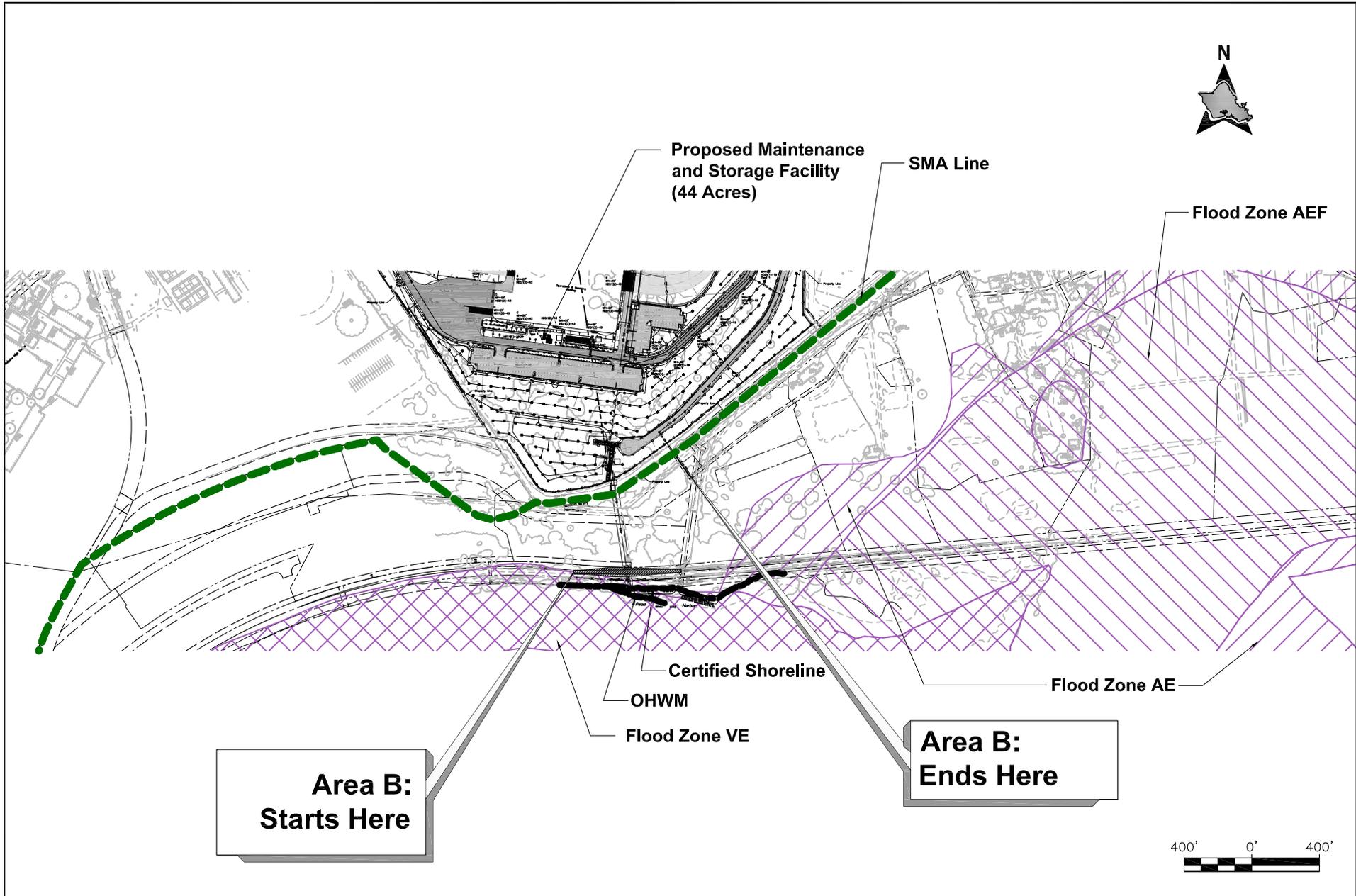
SPECIAL MANAGEMENT AREA
AREA B
HISTORIC RESOURCES
MAINTENANCE AND STORAGE FACILITY (MSF)

Drawing No:

B-HR

Date:

06-20-2013



**HONOLULU
RAIL TRANSIT PROJECT**

SPECIAL MANAGEMENT AREA
AREA B
FLOOD ZONES (2011)
MAINTENANCE AND STORAGE FACILITY (MSF)

Drawing No:

B-FZ

Date:

06-20-2013

Special Management Area Use Permit and Shoreline Setback Variance Application

Attachment B2: Shoreline Setback Maps

Honolulu Rail Transit Project
June 2013

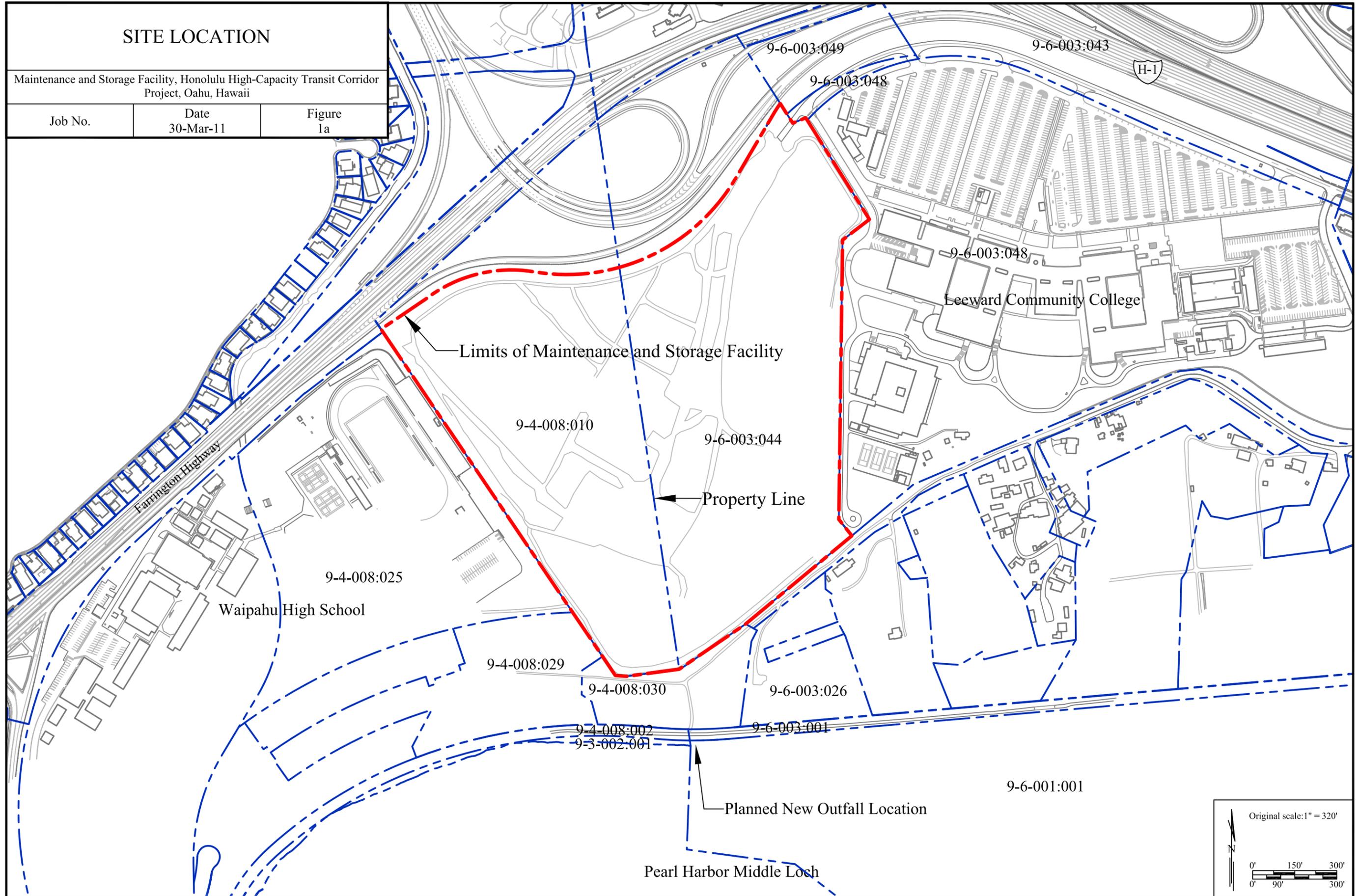
SITE LOCATION

Maintenance and Storage Facility, Honolulu High-Capacity Transit Corridor
Project, Oahu, Hawaii

Job No.

Date
30-Mar-11

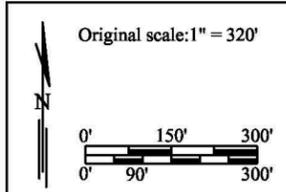
Figure
1a



SITE LOCATION

Maintenance and Storage Facility, Honolulu High-Capacity Transit Corridor
Project, Oahu, Hawaii

Job No.	Date	Figure
	30-Mar-11	1b



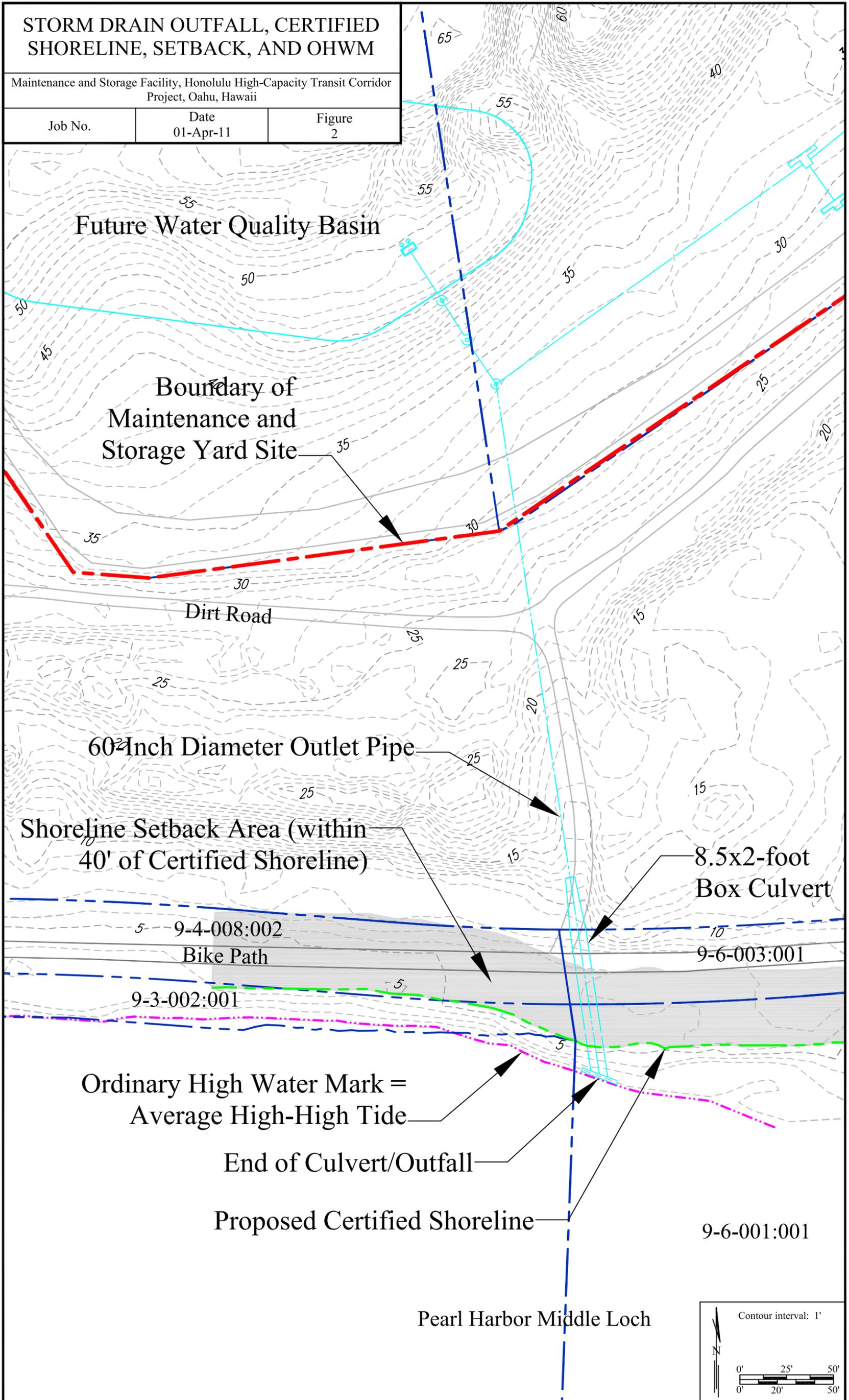
**STORM DRAIN OUTFALL, CERTIFIED
SHORELINE, SETBACK, AND OHWM**

Maintenance and Storage Facility, Honolulu High-Capacity Transit Corridor
Project, Oahu, Hawaii

Job No.

Date
01-Apr-11

Figure
2



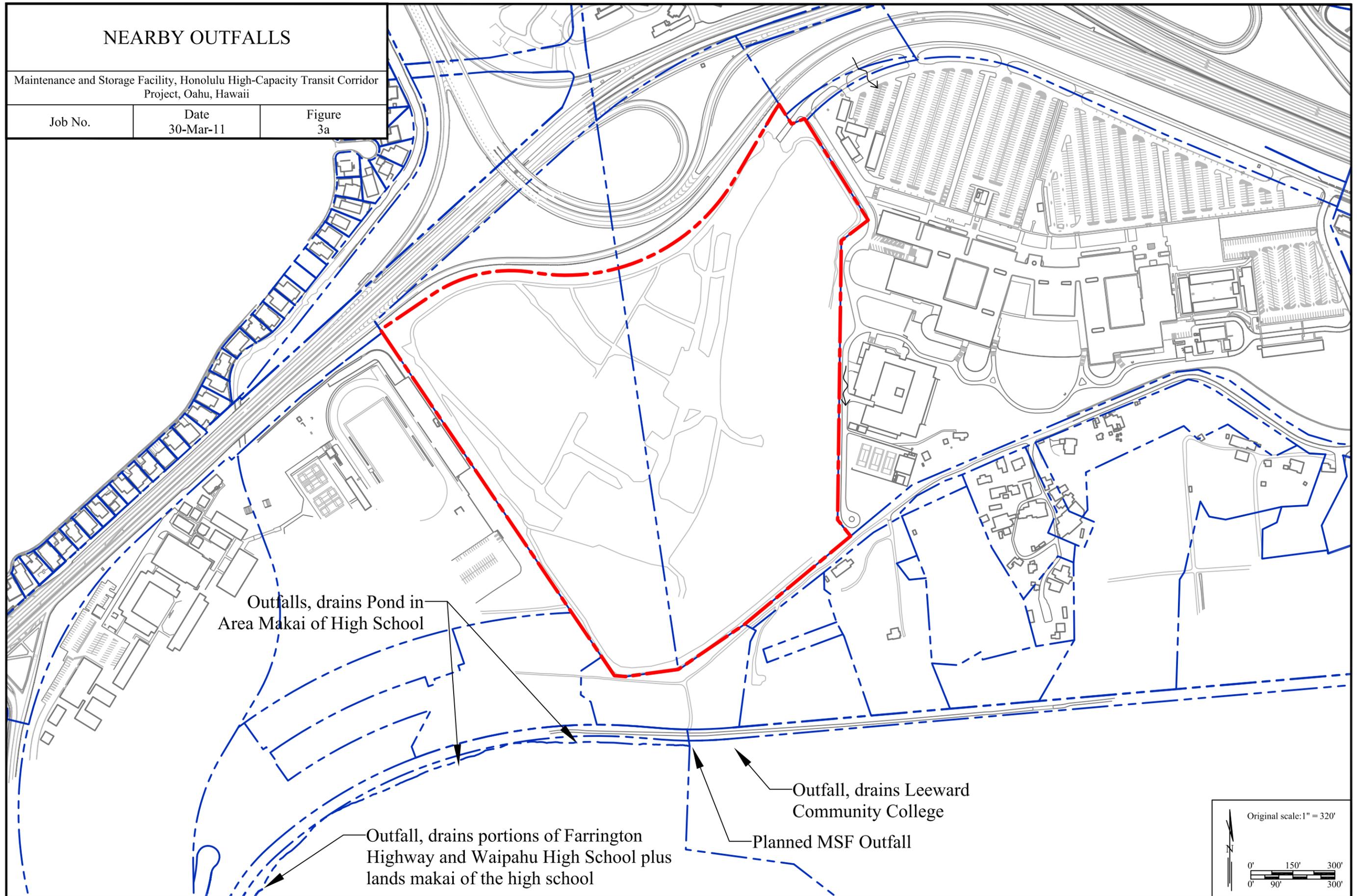
NEARBY OUTFALLS

Maintenance and Storage Facility, Honolulu High-Capacity Transit Corridor
Project, Oahu, Hawaii

Job No.

Date
30-Mar-11

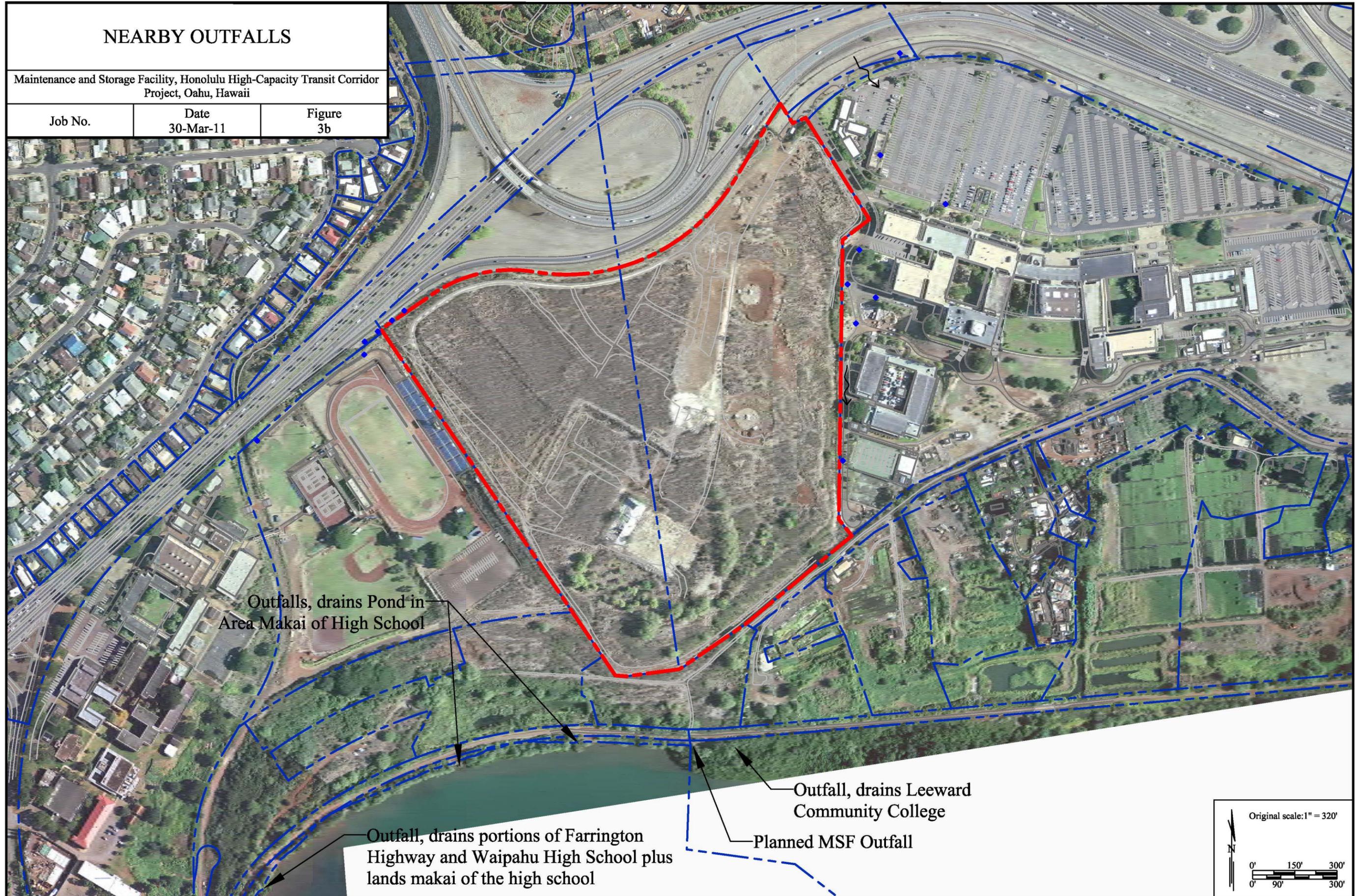
Figure
3a



NEARBY OUTFALLS

Maintenance and Storage Facility, Honolulu High-Capacity Transit Corridor
Project, Oahu, Hawaii

Job No.	Date	Figure
	30-Mar-11	3b



Special Management Area Use Permit and Shoreline Setback Variance Application

Attachment B3: Certified Shoreline

Honolulu Rail Transit Project
June 2013



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

June 20, 2013

File No.: OA-1528

ControlPoint Surveying, Inc.
1150 South King Street, Suite 1200
Honolulu, Hawaii 96814

Dear Applicant:

Subject: Transmittal of Signed Shoreline Certification Maps
Owner(s): Department of the Navy, Naval Facilities Engineering
Command Hawaii
Tax Map Key: (1) 9-6-001:001

Enclosed please find three (3) copies of the certified shoreline survey maps for the subject property.

If you have any questions, please feel free to call us at (808) 587-0420. Thank you.

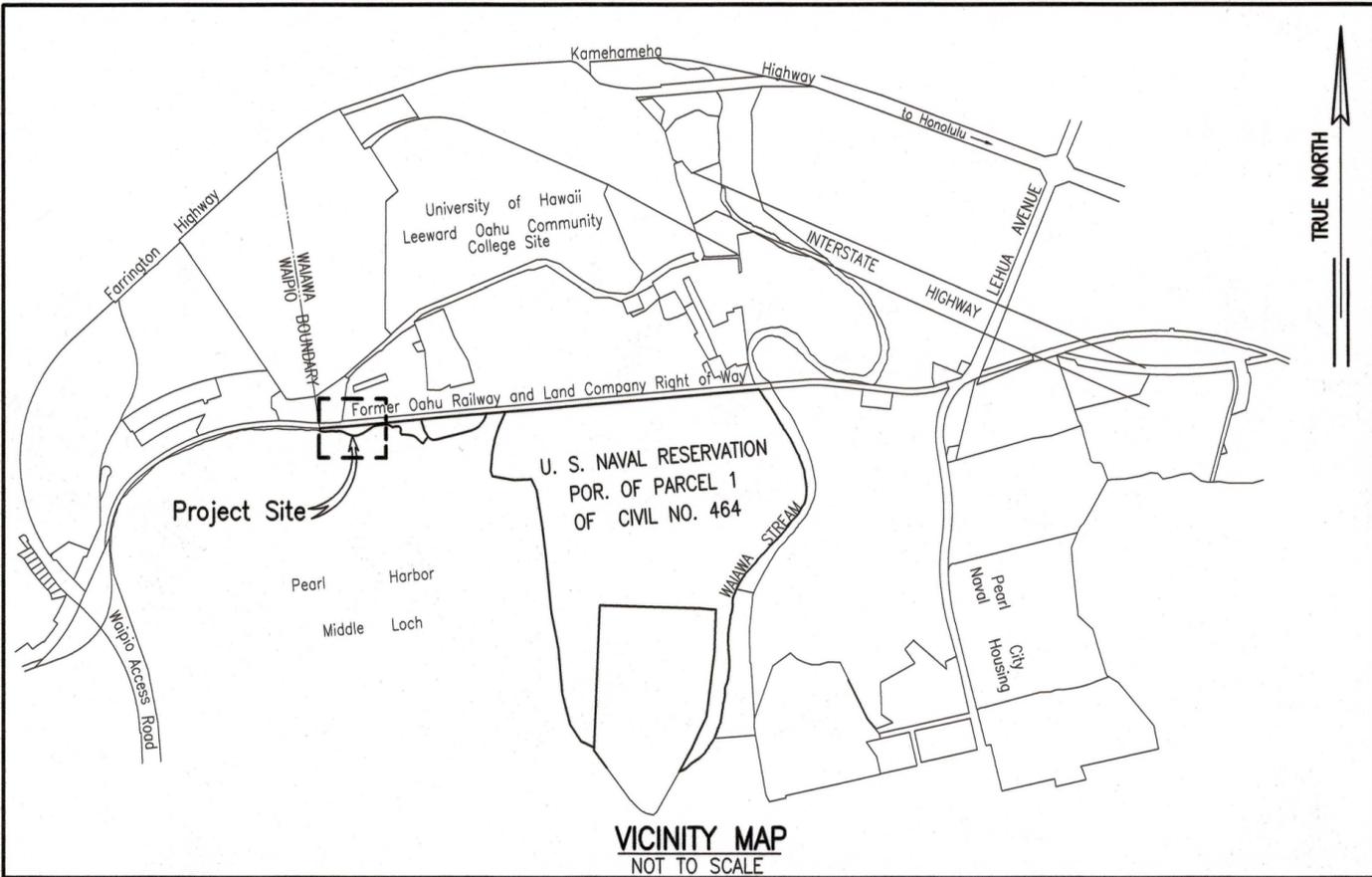
Sincerely,

A handwritten signature in black ink, appearing to read "Ian M.", written over a horizontal line.

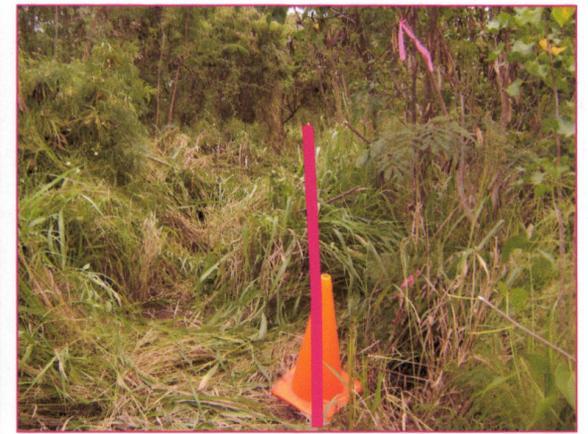
Ian Hirokawa
Project Development Specialist

Enclosures

cc: DAGS



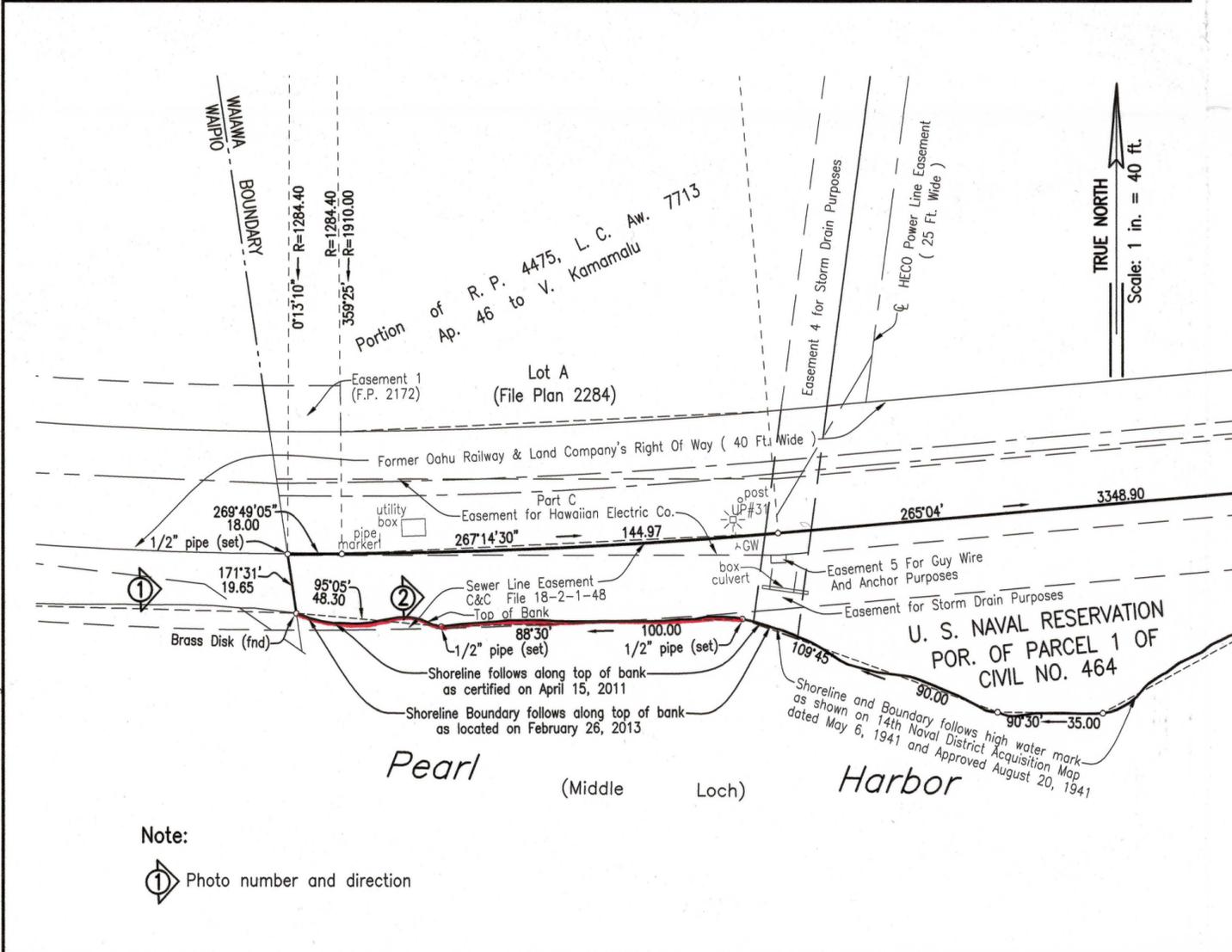
①



②

PHOTO INDEX

Photo taken: February 26, 2013
Time: 12:00 Noon



**SHORELINE SURVEY
OF A PORTION OF U. S. NAVAL RESERVATION
PORTION OF PARCEL 1 OF CIVIL NO. 464**

AT WAIAWA, EWA, OAHU, HAWAII

The shoreline as delineated in red is hereby certified as the shoreline as of

JUN 19 2013

Wilfred Y.K. Chin
Chairperson, Board of Land and Natural Resources



This work was prepared by me or under my direct supervision

By: *Wilfred Y.K. Chin*
Licensed Professional Land Surveyor
Certificate Number 3499
License Expires 4/14

Owner:
United States of America
Department of the Navy

Property Address:
Pear Harbor
Middle Loch

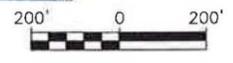
FN: 07009-1B_shore_2-28-13.dwg



Special Management Area Use Permit and Shoreline Setback Variance Application

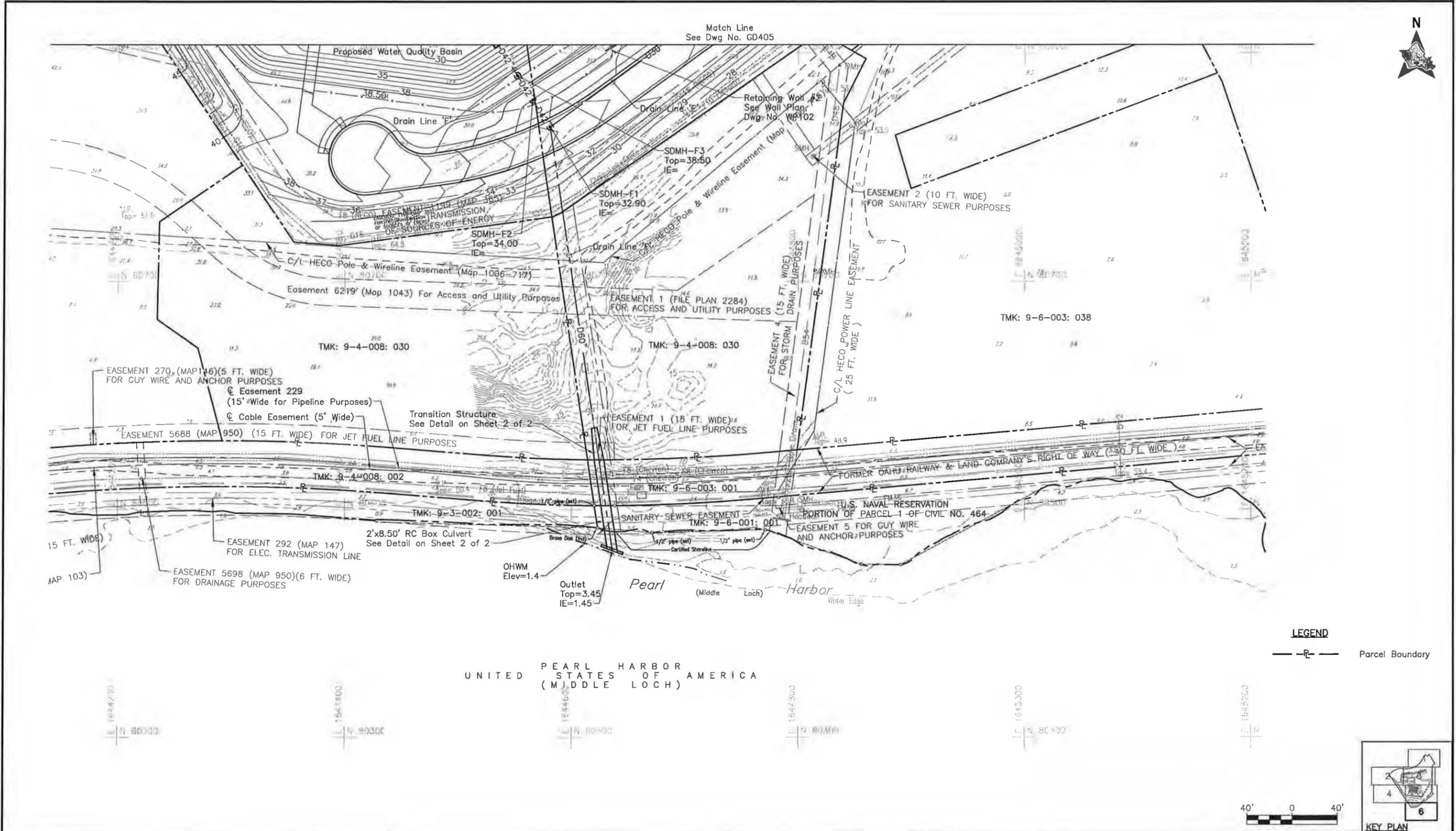
Attachment B4: Site Drawings and Plans

Honolulu Rail Transit Project
June 2013



Designed:	HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT		Contract No.:
Drawn:	CITY & COUNTY OF HONOLULU - DEPARTMENT OF TRANSPORTATION SERVICES - RAPID TRANSIT DIVISION		
Checked:	JD	Prime Consultant:	CADD File:
Approved:		PB PARSONS BRINCKERHOFF	Outfall on Aerial
Date:	April 2011	1003 Bishop Street, Suite 2250 - Honolulu, HI 96813	Drawing No.:
		For reduced prints, original page size in inches:	Rev.:
			Scale:
			Varies
			Page No.:
			of

**MAINTENANCE & STORAGE FACILITY
STORM DRAIN OUTFALL**



LEGEND
 -R- Parcel Boundary

UNITED STATES OF AMERICA
 PEARL HARBOR (MIDDLE LOCH)



Date Saved: Fri, 17 Jun 2011 11:00am
 CAO File Name: K:\CAD\Permitting\401 WAO\SCY-B16-GD400-Pearl Harbor Outfall Moos.dwg
 Last Plot Date: 06/17/09



CITY & COUNTY OF HONOLULU
 DEPARTMENT OF TRANSPORTATION SERVICES
 RAPID TRANSIT DIVISION

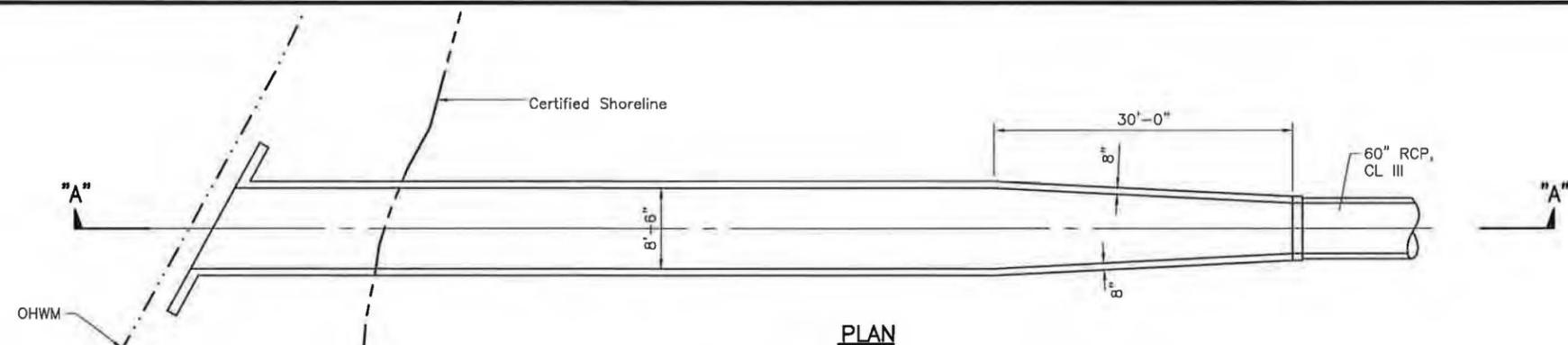
HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

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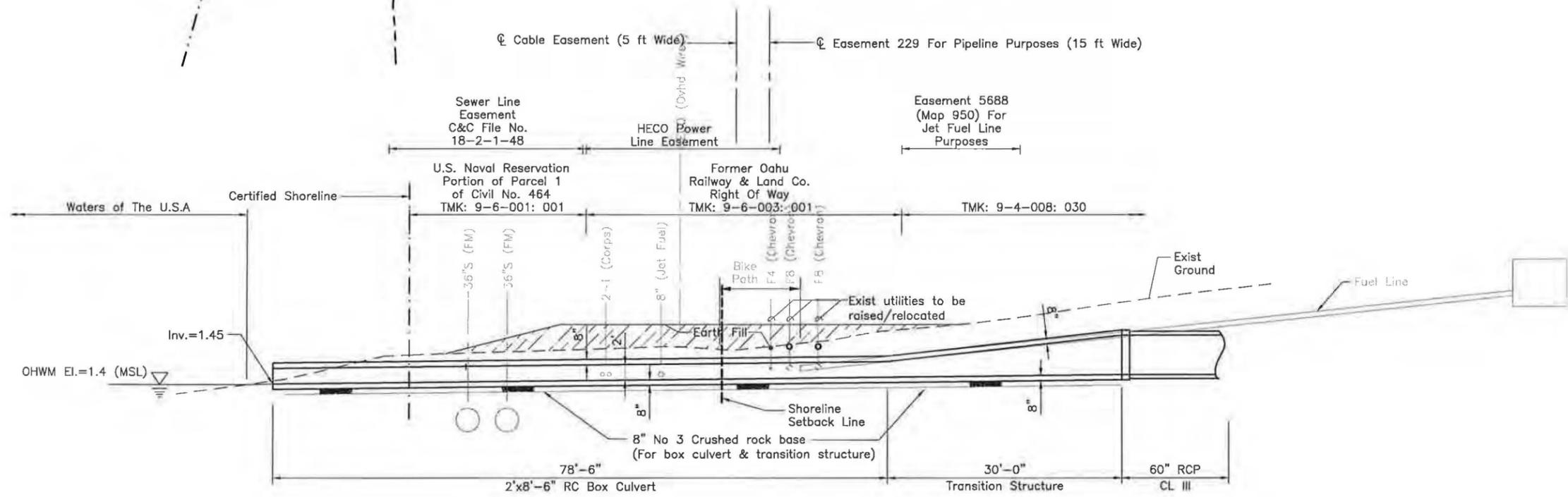
**PRELIMINARY PLANS AND DETAILS
 FOR SHORELINE SETBACK PERMIT
 MAINTENANCE AND STORAGE FACILITY
 PEARL HARBOR OUTFALL PLAN**

SHEET 1 OF 2

Page No. of
 Drawing No:
 Date:



PLAN

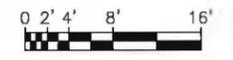


SECTION "A-A"

RC BOX CULVERT & TRANSITION STRUCTURE
1/8"=1'-0"

NOTES:

1. Existing utilities shown in detail Section "A-A" are for schematic purposes only. Design-Builder shall verify locations of existing utility lines in conflict with the Drain or box Culvert.
2. Design-Builder shall relocate or raise any utility lines obstructing Drain or Box Culvert.
3. Design-Builder shall ensure adequate cover over all drainage structures and utilities.
4. This detail is for reference only. Design-Builder shall verify actual drain line slopes and existing conditions.



Date Saved: Fri, 17 Jun 2011 11:06am
CAD File Name: K:\CADD\Permitting\401 WOC\SCY-B17-GD500-pearl Harbor Outfall Modis.dwg
Last Plot Date: 06/17/09



CITY & COUNTY OF HONOLULU
DEPARTMENT OF TRANSPORTATION SERVICES
RAPID TRANSIT DIVISION

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT

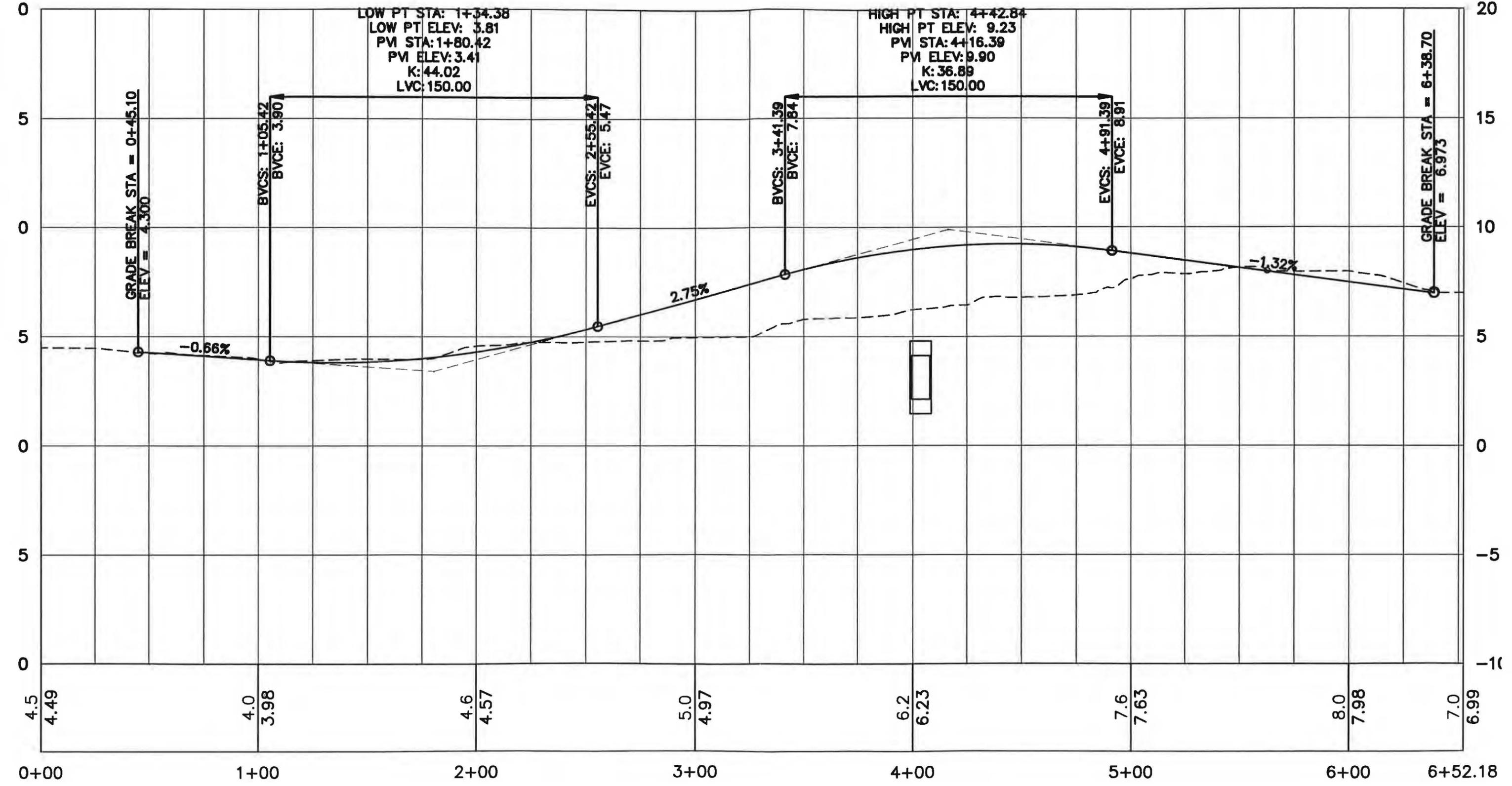
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**PRELIMINARY PLANS AND DETAILS
FOR SHORELINE SETBACK PERMIT
MAINTENANCE AND STORAGE FACILITY
PEARL HARBOR OUTFALL DETAILS**

SHEET 2 OF 2

Page No.	of
Drawing No.	
Date:	

Bike Path PROFILE



Special Management Area Use Permit and
Shoreline Setback Variance Application

Attachment B5:
Department of Land and Natural
Resources Correspondence

Honolulu Rail Transit Project
June 2013

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY H. KAULUKUKUI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

REF:OCCL:DH

Correspondence: OA-12-01

Wayne Y. Yoshioka, Director
Department of Transportation Services
City and County of Honolulu
650 South King Street, 3rd Floor
Honolulu, Hawaii 96813

JUL 14 2011

Dear Mr. Yoshioka,

SUBJECT: Regarding Proposed Maintenance and Storage Facility Stormwater Outfall for the Honolulu High-Capacity Transit Corridor Project Located in Pearl City, Honolulu, Island of Oahu, Subject Parcel TMK: (1) 9-6-001:001

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) is in receipt of your letter, dated June 30, 2011, seeking concurrence that a CDUA is not required for the proposed Maintenance and Storage Facility Stormwater Outfall for the Honolulu High-Capacity Transit Corridor Project located in Pearl City, Honolulu, Island of Oahu, Subject Parcel TMK: (1) 9-6-001:001.

According to your information, the City and County of Honolulu is developing a 20-mile transit system from east Kapolei to Ala Moana Center called the Honolulu High Capacity Transit Corridor Project. The project includes a Maintenance and Storage Facility (MSF), which incorporates a storm water outfall in the Middle Loch of Pearl Harbor. Approximately 20 feet of the culvert and outfall are located makai of the certified shoreline. The end of the culvert and outfall are within TMK: (1) 9-6-001:001, which is owned by the United States Navy.

The OCCL notes after careful analysis of the information provided it does not appear that the proposed project will take place in the Conservation District. The OCCL has no objections to the proposed project. Should you have any questions, please feel free to contact Dawn Hegger, Senior Planner of our Office of Conservation and Coastal Lands at 587-0380.

Sincerely,

A handwritten signature in black ink, appearing to read "Samuel J. Lemmo", written over a circular stamp or seal.

Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

c: ODLO
City and County of Honolulu
Planning and Permitting Department