

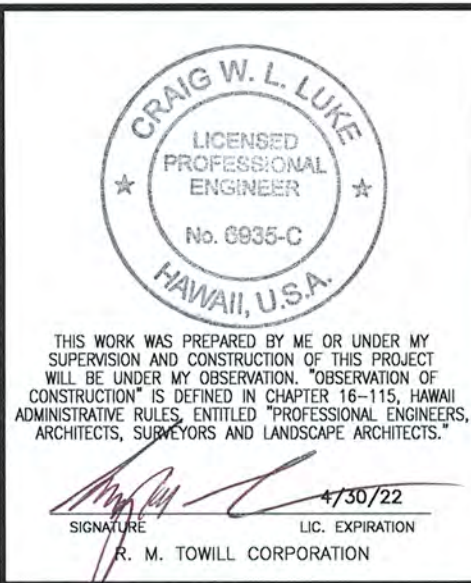
GENERAL NOTES

1. The scope of work for this project includes constructing a new weigh station facility consisting of a weigh station building, static scale, weigh-in-motion scale, travel lane, inspection area, and supporting infrastructure.
2. The Contractor is reminded of the requirements of Subsection 105.16 – Subcontracts, which requires him to perform work amounting to not less than 30 percent of the total contract cost less deductible items. Noncompliance with this Subsection may be grounds for rejection of bid.
3. The Contractor’s attention is directed to the following sections of the Special Provisions: Subsection 104.09 – Maintenance of Traffic; Subsection 104.11 – Utilities and Services; Subsection 107.06 – Contractor Duty Regarding Public Convenience; and Subsection 645 – Work Zone Traffic Control.
4. At the end of each day’s work, the Contractor shall remove all equipment and other obstructions and provide signage to permit free and safe passage of public traffic.
5. The existence and location of underground utilities, manholes, monuments, buried railroad tracks and concrete pavements, and other structures as shown on the plans are from the latest available data but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall make an independent check on the ground by probing and/or with the various utility companies and governmental agencies to verify the exact locations and depths of the existing utilities and obstructions. The Contractor shall exercise proper care in excavating and cold planing in the area. Whenever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavating for the new lines. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of their operations.
6. The Contractor shall notify the Engineer in writing, at least three (3) weeks prior to starting operations.
7. Existing drainage system will be functional at all times during construction. The Contractor shall furnish materials, equipment, labor, tools and incidentals necessary to maintain drainage flow. This includes all drainage runoff entering and leaving the project. This work shall be considered incidental to various contract items.
8. The contractor shall provide vehicular access to and from all existing side streets and driveway at all times.
9. Contractor shall dispose of all construction debris at a state approved dump site.
10. The Contractor shall be held liable for any damages incurred to the existing landscaping as a result of their operations.
11. After the project is completed, the Contractor shall restore landscaping in the project limits to pre-construction condition or better.
12. All existing utilities, whether or not shown on the plans, shall be protected at all times by the Contractor during construction unless specified on the plans as abandoned. Any damage to the existing utilities shall be repaired and paid for by the Contractor.
13. The contractor shall coordinate and phase work with construction of the 18” fuel line by Hawaii Fueling Facilities Corporation (HFFC) (Mr. Brian Seabaugh, phone number: (808) 954-6881). No additional costs will be paid for coordination and phasing work. Coordination and phasing costs shall be considered incidental to the various items of work.
14. The contractor shall coordinate and phase work in the vicinity of the existing fuel lines with Island Energy Services. The contact person for Island Energy Services is Mr. Wilson Rivera, phone number: (808) 682-2259.

15. Unless relocation is called for on the plans, existing utilities shall remain in service and in place at all times. If relocation of the existing utilities is required for the Contractor’s convenience, interruption of service shall be kept to a minimum and shall be done at the Contractor’s expense only with the prior written approval of the affected utility company and Engineer.
16. The Contractor shall field verify the operational status of all existing utilities to be removed or abandoned in place. Any discrepancy shall be brought to the attention of the Engineer.
17. The Contractor shall verify all dimensions and details shown on the drawings prior to the start of construction. Any discrepancy shall be immediately brought to the attention of the Engineer.
18. Construction outside the Hawaii Department of Transportation (HDOT) right-of-way is subject to permission of the affected owner as verified by HDOT.
19. For structures to be abandoned in place, the top 4’ below finish grade shall be removed and backfilled with approved material.
20. All construction work shall be done in accordance with the standards and specifications of the State Department of Transportation as amended, unless otherwise specified by the contract plans and specifications.
21. The Contractor shall notify the Engineer and contact the State Historic Preservation Division upon uncovering any potential historical artifacts or items of archaeological significance. See Section 107.13 in the 2005 State Standard Specifications.
22. The existing improvements on the premises and in adjacent area that are not to be removed shall be preserved and protected. Any and all damages resulting from the Contractor’s construction operations shall be replaced and repaired to original condition, to the satisfaction of the owner at no cost to the State.
23. For benchmark, see sheet C-1.
24. All drainage shall be marked as directed by the Engineer.
25. Azimuths and coordinates are referred to State Plane. Topographic survey done by R.M. Towill Corp. on 4/29/2016, 5/4/2016 – 5/5/2016, 5/13/2016, 5/17/2016, and 6/1/2016. Topographic survey done to National Mapping Standards.
26. Elevations shown on these plans are referenced to Mean Lower Low Water (MLLW).
27. Existing survey control markers published by NGS/NOAA and/or belonging to the City and County of Honolulu and the State of Hawaii that may be disturbed or destroyed shall be referenced by or under the direct supervision of a professional land surveyor licensed in the State of Hawaii prior to any construction activity. The Contractor shall notify the Engineer prior to any action and the marker name and type shall be reported to the Engineer. It is the responsibility of the Contractor to obtain the appropriate referencing procedure from the various agencies. Replacement markers shall be installed according to the various agency standards and procedures and copies of field notes, sketches, descriptions, and values of the replaced markers shall be sent to the various agencies for review and approval prior to final acceptance of the project. Payment items shall be considered incidental to the various contract items.

28. All steel plates shall be flat and have a non-skid surface and shall emit no objectionable noise when crossed. The contractor shall safely maintain non-skid surface plate at all times. The work material shall be considered incidental to Traffic Control.
29. The Contractor shall coordinate, if applicable, construction of electrical, telephone, cable television, water, and sewer relocation work with Hawaiian Electric Company, Hawaiian Tel Com, Spectrum Cable, Board of Water Supply, and Department of Environmental Services, respectively. Coordination shall be considered incidental to roadway excavation work.
30. The Contractor shall notify Matson Navigation and Pasha Hawaii prior to the commencement of any lane closures on Sand Island Access Road. The contract person for Matson Navigation is Ms. Enriqueta Tanaka, phone number: (808) 848-1241. The contact person for Pasha Hawaii is Mr. Todd Iida, phone number: (808) 842-5379.
31. The Contractor shall coordinate all training and testing requirements with the HDOT Motor Vehicle Safety Office. The contact person for the HDOT Motor Vehicle Safety Office is Mr. Scott Haneberg, phone number: (808) 692-7650

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-064-1(010)	2018	4	120



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

Sand Island Access Road
Truck Weigh Station
Federal Aid Project No. NH-064-1(010)

TMK: (1) 1-2-025: 002

Scale: As Noted Date: February 2021

SHEET No. G-4 OF 120 SHEETS

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	WM/JS
DRAWN BY	CWL
DESIGNED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
No.	

WATER POLLUTION AND EROSION CONTROL NOTES

- A. GENERAL:
- See Special Provisions Section 209 – Water Pollution and Erosion Control. Section 209 describes but is not limited to: submittal requirements; scheduling of a water pollution and erosion control conference with the Engineer; construction requirements; method of measurement; and basis of payment. In addition, Appendix A lists potential pollutant sources and corresponding BMPs used to mitigate the pollutants.
 - Follow the guidelines in the current HDOT Construction Best Management Practices Field Manual in developing, installing and maintaining the Best Management Practices (BMP) for the project. For any conflicting requirements between the Manual and applicable bid documents, the applicable bid documents will govern. Should a requirement not be clearly described within the applicable bid documents, the Contractor shall notify the Engineer immediately for interpretation. For the purposes of clarification under Note A.2, "applicable bid documents" include the construction plans, standard specifications, Special Provisions, Permits, and the Storm Water Pollution Prevention Plan (SWPPP) when applicable.
 - Follow the guidelines in the Honolulu's City & County "Rules Relating to Soil Erosion Standards and Guidelines" along with applicable Soil Erosion Guidelines for projects on Maui, Molokai, Kauai, and Hawaii.
 - The Engineer may assess liquidated damages of up to \$TBD for non-compliance of each BMP requirement and each requirement stated in Section 209 and special provisions, for every day of non-compliance. There is no maximum limit on the amount assessed per day.
 - The Engineer will deduct the cost from the progress payment for all citations received by the Department for non-compliance, or the Contractor shall reimburse the State for the full amount of the outstanding cost incurred by the State.
 - If necessary, install a rain gage prior to any field work including the installation of any site-specific best management practices. The rain gage shall have a tolerance of at least 0.05 inches of rainfall. Install the rain gage on the project site in an area that will not deter rainfall from entering the gage opening. Do not install in a location where rain water may splash into rain gage. The rain gage installation shall be stable and plumbed. Do not begin field work until the rain gage is installed and site-specific best management practices are in-place.
 - Submit Site-Specific BMP Plan to the Engineer along with a completed Site-Specific BMP Review Checklist within 30 calendar days of contract execution. The Site-Specific BMP Review Checklist may be obtained from http://www.stormwaterhawaii.com/swmp_wp/wp-content/uploads/2014/10/D.2_SSBMP-Plan-SWPPP-Review-Checklist.pdf.
- B. WASTE DISPOSAL:
- Waste Materials: Collect and store all waste materials in a securely lidded metal dumpster or roll off container with cover to keep rain out or loss of waste during windy conditions. The dumpster shall meet all local and State solid waste management regulations. Deposit all trash and construction debris from the site in the dumpster. Empty the dumpster weekly or when the container is two-thirds full, whichever is sooner. Do not bury construction waste materials onsite. The Contractor's supervisory personnel shall be instructed regarding the correct procedure for waste disposal. Post notices stating these practices in the office trailer, on a weatherproof bulletin board, or other accessible location acceptable to the Engineer. The Contractor shall be responsible for seeing that these procedures are followed. Submit the Solid Waste Disclosure Form for Construction Sites to the Engineer within 30 calendar days of contract execution. Provide a copy of all the disposal receipts from the facility permitted by the Department of Health to receive solid waste to the Engineer monthly. This should also include documentation from any intermediary facility where solid waste is handled or processed.
 - Hazardous Waste: Dispose all hazardous waste materials in the manner specified by local or State regulations and by the manufacturer. The Contractor's site personnel shall be instructed in these practices and shall be responsible for seeing that these practices are followed.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NO. _____	DRAWN BY	_____/_____/____
	DESIGNED BY	_____/_____/____
	CHECKED BY	_____/_____/____

WATER POLLUTION AND EROSION CONTROL NOTES (CONT.)

- Sanitary Waste: Collect all sanitary waste from the portable units a minimum of once per week, or as required. Position sanitary facilities where they are secure and will not be tipped over or knocked down.
- EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:
 - For projects with an NPDES Permit for Construction Activities, inspect at the following intervals. For construction areas discharging to nutrient or sediment impaired waters, inspect all control measures at least once each week and within 24 hours of any rainfall event of 0.25 inches or greater within a 24 hour period. For construction areas discharging to waters not impaired for nutrient or sediments, inspect all control measures weekly. Inspections are only required during the project's normal working hours. The discharge point water classification may be found in the SWPPP.
 - For projects without an NPDES Permit for Construction Activities, inspect all control measures weekly.
 - Maintain all erosion and sediment control measures in good working order. If repair is necessary, initiate repair immediately and complete by the close of the next work day if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance. When installation of a new erosion or sediment control or a significant repair is needed, install the new or modified control or complete the repair no later than 7 calendar days from the time of discovery. "Immediately" means the Contractor shall take all reasonable measures to minimize or prevent discharge of pollutants until a permanent solution is installed and made operational. If a problem is identified at a time in the day in which it is too late to initiate repair, initiation of repair shall begin on the following work day.
 - Remove built-up sediment from silt fence when it has reached one-third the height of the fence. Remove sediment from other perimeter sediment control devices when it has reached one-half the height of the device.
 - Inspect silt screen or fence for depth of sediment, tears, to verify that the fabric is securely attached to the fence posts or concrete slab and to verify that the fence posts are firmly in the ground. Inspect and verify the bottom of the silt screen is buried a minimum of 6 inches below the existing ground.
 - Inspect temporary and permanent seeding and planting for bare spots, washouts and healthy growth.
 - Complete and submit to the Engineer a maintenance inspection report within 24 hours after each inspection.
 - Provide a stabilized construction entrance at all points of exit onto paved roads to reduce vehicle tracking of sediments. Include stabilized construction entrance in the Water Pollution, Dust, and Erosion Control submittals. Minimum length should be 50 feet. Minimum width should be 30 feet. Minimum depth should be 12 inches or as recommended by the soils engineer and underlain with geo-textile fabric. If minimum dimensions cannot be met, provide other stabilization techniques that remove sediment prior to exit. Clean the paved street adjacent to the site entrance daily or as required to remove any excess mud, cold-planed materials, dirt or rock tracked from the site. Do not hose down the street without containing or vacuuming wash water. Cover dump trucks hauling material from the construction site with a tarpaulin. Remove sediment tracked onto the street, sidewalk, or other paved area by the end of the day in which the track-out occurs.
 - Include designated Concrete Washout Area(s) in the Water Pollution, Dust, and Erosion Control submittals.
 - Submit the name of a specific individual designated responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.
 - Personnel selected for the inspection and maintenance responsibilities shall receive training from the Contractor. They shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.

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WATER POLLUTION AND EROSION CONTROL NOTES (CONT.)

- Contain, remove, and dispose slurry generated from saw cutting of pavement in accordance with approved BMP practices. Do not allow discharge into the drainage system or State waters.
 - For projects with an NPDES Permit for Construction Activities, immediately initiate stabilizing exposed soil areas upon completion of earth-disturbing activities for areas where earth-disturbing activities have permanently or temporarily ceased. Earth-disturbing activities have permanently ceased when clearing and excavation within any area of the construction site that will not include permanent structures has been completed. Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future. For construction areas discharging into waters not impaired for nutrients sediments, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities. For construction areas discharging into nutrient or sediment impaired waters, complete initial stabilization within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities. Classification of water at the discharge point may be found in the SWPPP.
 - For projects without an NPDES Permit for Construction Activities, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.
- D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:
- Materials Pollution Prevention Plan
 - Applicable materials or substances listed below are expected to be present onsite during construction. Other materials and substances not listed below shall be added to the inventory.

Concrete	Cleaning Solvents
Detergents	Wood
Paints (enamel and latex)	Masonry Block
Metal Studs	Herbicides and Pesticides
Tar	Curing Compounds
Fertilizers	Adhesives
Petroleum Based Products	
 - Use Material Management Practices to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. Make an effort to store only enough product as is required to do the job.
 - Store all materials stored onsite in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.
 - Keep products in their original containers with the original manufacturer's label.

CRAIG W. L. LUKE

LICENSED PROFESSIONAL ENGINEER

No. 0936-C

HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. "OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES, ENTITLED PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS.

SIGNATURE

4/30/22

LIC. EXPIRATION

R. M. TOWILL CORPORATION

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

WATER POLLUTION & EROSION CONTROL NOTES – 1

Sand Island Access Road

Truck Weigh Station

Federal Aid Project No. NH-064-1(010)

TMK: (1) 1-2-025: 002

Scale: As Noted

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- e. Do not mix substances with one another unless recommended by the manufacturer.
- f. Whenever possible, use a product up completely before disposing of the container.
- g. Follow manufacturer's recommendations for proper use and disposal.
- h. Conduct a daily inspection to ensure proper use and disposal of materials onsite.
2. *Hazardous Material Pollution Prevention Plan*
 - a. Keep products in original containers unless they are not resealable.
 - b. Retain original labels and Safety Data Sheets (SDS), formerly Material Safety Data Sheets (MSDS).
 - c. Dispose of surplus products according to manufacturers' instructions and local and State regulations.
3. *Onsite and Offsite Product Specific Plan*

The following product specific practices shall be followed onsite:

 - a. *Petroleum Based Products:* Monitor all onsite vehicles for leaks and perform regular preventive maintenance to reduce the chance of leakage. Store petroleum products in tightly sealed containers which are clearly labeled. Apply asphalt substances used onsite according to the manufacturer's recommendation.
 - b. *Fertilizers:* Apply fertilizers used only in the minimum amounts recommended by the manufacturer and federal, state, and local requirements. Avoid applying just before a heavy rain event. Apply at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth. Once applied, work fertilizer into the soil to limit exposure to storm water. Do not apply to storm conveyance channels with flowing water. Storage shall be in a covered shed or in an area where fertilizer will not come into contact with precipitation or stormwater. Transfer the contents of any partially used bags of fertilizer to a sealable plastic bin to avoid spills.
 - c. *Paints:* Seal and store all containers when not required for use. Do not discharge excess paint to the drainage system, sanitary sewer system, or State waters. Dispose properly according to manufacturers' instructions and State and local regulations.
 - d. *Concrete Trucks:* Washout or discharge concrete truck drum wash water only at a designated site as far as practicable from storm drain inlets or State waters. Do not discharge water in the drainage system or State waters. Disposal by percolation is prohibited. Clean disposal site as required or as requested by the Engineer.
4. *Spill Control Plan*
 - a. Post a spill prevention plan to include measures to prevent and clean up each spill.
 - b. The Contractor shall be the spill prevention and cleanup coordinator. Designate at least three site personnel who shall receive spill prevention and cleanup training. These individuals shall each become responsible for a particular phase of prevention and cleanup. Post the names of responsible spill personnel in the material storage area on a weatherproof bulletin board or other accessible location acceptable to the Engineer and in the office trailer onsite.
 - c. Clearly post manufacturers' recommended methods for spill cleanup. Make site personnel aware of the procedures and the location of the information and cleanup supplies.

- d. Keep ample materials and equipment necessary for spill cleanup in the material storage area onsite.
- e. Clean up all spills immediately after discovery.
- f. Keep the spill area well ventilated. Personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- g. Report spills of toxic hazardous material to the appropriate State or local government agency, regardless of the size. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, the Contractor shall notify the Engineer as soon as the Contractor has knowledge of the discharge. The Engineer will notify the National Response Center (NRC) at (800) 424-8802, the Clean Water Branch during regular business hours at 586-4309, and the Hawaii State Hospital Operator at 247-2191 and the Clean Water Branch (DOH-CWB) via email at cleanwaterbranch@doh.hawaii.gov during non-business hours immediately. The Contractor shall also provide to the Engineer, within 7 calendar days of knowledge of the release, a description of the release, the circumstances leading to the release, and the date of the release. The Engineer will provide this information to the DOH-CWB. The Engineer will provide information to the NRC if requested.

E. PERMIT REQUIREMENTS:

1. A National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activities of one acre or more of disturbed area is required for this project. If the Contractor requires extra land disturbance, including staging and storage areas, that is not covered by the NPDES Permit obtained by the State, the Contractor shall be responsible for obtaining the required NPDES Construction Activities Permit to cover this additional disturbed area. See Hawaii Administrative Rules Chapter 11-55, Appendix C for definition of land disturbance. The Contractor's attention is directed to the applicable NPDES Permit documents on the bid package compact disc.
2. Comply with all applicable State and Federal Permit conditions. Permits may include, but not limited to the following:
 - a. NPDES Permit for Construction Activities
 - b. NPDES Permit for Construction Dewatering
 - c. NPDES Permit for Hydrotesting Waters
 - d. Water Quality Certification
 - e. Stream Channel Alteration Permit
 - f. Section 404 Army Corps of Engineer Permit

F. SITE-SPECIFIC BMP REQUIREMENTS:

Each BMP below is referenced to the corresponding section of the current HDOT Construction Best Management Practices Field Manual and appropriate Supplemental Sheets. The Manual may be obtained from the HDOT Statewide Stormwater Management Program Website at <http://www.stormwaterhawaii.com/resources/contractor-and-consultants/> under Construction Best Management Practices Field Manual. Supplemental BMP sheets are located at <http://stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swpp/> under Concrete Curing and Irrigation Water.

The requirements for Water Pollution, Dust, and Erosion Control submittals are included in Section 209 of the Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and applicable Special Provisions. A list of pollutant sources and corresponding BMP used to mitigate the pollutants are included in Section 209 of the Special Provisions under Appendix A.

F. (Continued)
Follow the requirements below:

1. Protect all Drainage Inlets receiving runoff from disturbed areas (SC-2).
2. Contain on-site runoff using Perimeter Sediment Controls
 - a. SC-1 Silt Fence
 - b. SC-5 Vegetated Filter Strips and Buffers
 - c. SC-8 Compost Filter Berm
 - d. SC-13 Sandbag Barrier
 - e. SC-14 Brush or Rock Filter
3. Control offsite runoff from entering construction area
 - a. EC-8 Run-On Diversion
 - b. SC-6 Earth Dike
 - c. SC-7 Temporary Drains and Swales
4. Incorporate applicable Site Management BMP
 - a. SM-1 Employee Training
 - b. SM-2 Material Delivery and Storage
 - c. SM-3 Material Use
 - d. SM-4 Protection of Stockpiles
 - e. SM-6 Solid Waste Management
 - f. SM-7 Sanitary/Septic Waste Management
 - g. SM-9 Hazardous Waste Management
 - h. SM-10 Spill Prevention and Control
 - i. SM-11 Vehicle and Equipment Cleaning
 - j. SM-12 Vehicle and Equipment Maintenance
 - k. SM-13 Vehicle and Equipment Refueling
 - l. SM-14 Scheduling
 - m. SM-15 Location of Potential Sources of Sediment
 - n. SM-16 Preservation of Existing Vegetation
 - o. SM-18 Dust Control
5. Contain pollutants within the Construction Staging/Storage Area BMP with applicable Perimeter Sediment Controls and Site Management BMP. Include a Stabilized Construction Entrance/Exit (EC-2) for all areas which exit onto a paved street. Restrict vehicle access to these points.
6. Manage Concrete Waste including installing a Concrete Washout Area (SM-5) and properly disposing of Concrete Curing Water (California Stormwater BMP Handbook NS-12 Concrete Curing).
7. Remove saw cut slurry and hydrodemolition water from the site by vacuuming. Provide storm drain protection and/or perimeter sediment controls during saw cutting and hydrodemolition work.

1. Contractor shall obtain NPDES permit for off-site staging area to assemble post-tensioned sections.

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
NOTE BOOK	DRAWN BY _____	WM./JS _____
	TRACED BY _____	_____
	DESIGNED BY _____	CTL _____
	QUANTITIES BY _____	_____
	CHECKED BY _____	_____
No. _____	_____	_____

 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. PROFESSIONAL ENGINEERS ARE NOT RESPONSIBLE FOR THE DESIGN OR ADMINISTRATIVE RULES ENTITLED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES, ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS." <i>[Signature]</i> 4/30/22 _____ SIGNATURE LIC. EXPIRATION R. M. TOWILL CORPORATION	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION <u>WATER POLLUTION &</u> <u>EROSION CONTROL NOTES - 2</u> <u>Sand Island Access Road</u> <u>Truck Weigh Station</u> <u>Federal Aid Project No. NH-064-1(010)</u> TMK: (1) 1-2-025: 002 Scale: As Noted Date: February 2021 SHEET No. G-6 OF 120 SHEETS
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BOARD OF WATER SUPPLY NOTES

1.

Unless otherwise specified, all construction activities affecting Board of Water Supply (BWS) facilities in this project shall be in accordance with the "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", dated 1994, as amended, of the Hawaii Highways Division, Department of Transportation, and the City and County of Honolulu Board of Water Supply's "WATER SYSTEM STANDARDS", dated 2002, the "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS, VOLUME 3", dated 1991, and all subsequent amendments and additions.
2.

All plans approved by the Board of Water Supply are based solely on the adequacy of the water supply. All other features of the water system, such as lines, grades, fittings, drainage, etc., and other features of improvements shall not be the responsibility of the Board of Water Supply.
3.

Test pressure shall be 150 psi. During the 30-minute pressure test, the pressure shall not drop more than 10 psi.
4.

The Contractor shall notify BWS Capital Projects Division, Construction Section in writing and submit six (6) sets of approved construction plans one week prior to commencing work on the water system.
5.

After installation of tapping sleeve and valve prior to actual tapping operations, the assembly shall be tested at 150 psi. on both sides of the valve.
6.

The Contractor shall chlorinate the entire inside surface of each pipe and fitting with disinfection solution of 5 ounces of sodium hypochlorite mixed with 10 gallons of water. (for connection only)
7.

The Contractor shall be responsible for the protection of all water lines during construction. The Contractor shall be especially careful when excavating behind water lines, tees, and bends wherever there is a possibility of water line movement due to the removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measures necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction method.
8.

The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy or the encountering of other obstacles during the course of work. The Contractor shall be responsible and shall pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.
9.

Prior to installation, the Contractor shall submit for approval by Board of Water Supply, the manufacturer's certification that all cast iron (gray or ductile) fittings for the project conform in all respects to the Water System Standards, dated 2002.
10.

Polygon shape for mechanical joint glands as described in AWWA Standard C111 shall be "straight-sided" or an approved equal on a job-to-job basis.
11.

Re-approval shall be required if this project is not under construction within a period of two (2) years.
12.

Contractor shall cut and plug all existing unused laterals at the main whether or not shown on the plans. The damaged area shall be repaired to an equal or better condition than the immediate area. All work shall be done at the expense of the Contractor.
13.

The Contractor/developer shall obtain a NPDES permit prior to chlorination and/or dewatering. A copy of the permit shall be submitted to the Board of Water Supply, Capital Projects Division, Construction Section.
14.

Pipe cushion shall be of high resistivity material. The Contractor shall submit a soil certification that high resistant cushion material has a resistivity greater than 5,000 ohm-cm. Remainder of the backfill material shall be as specified in the water system standards. Pipe cushion and backfill material shall contain no hazardous substances above regulatory action levels including but not limited to lead, asbestos, mercury, chromium, cadmium, zinc, strontium, and polychlorinated biphenyls (pcb).

BOARD OF WATER SUPPLY NOTES (CONT.)

15.

Cleaning shall be by the use of "pigs" introduced into the pipeline and run completely through all installed pipelines and all branch lines for fire hydrants. "Pigging" of service laterals is not required. Bare foam "pigs" shall be used to swab piping clean as each length of the pipeline is installed. Each "pig" shall consist of a cylindrical piece of polyurethane foam with a density of 3-7 pounds per cubic foot and a vinyl-coated nose. Outside diameter of the "pig" shall be equal to 1-1/4 to 1-1/2 times the inside diameter of the pipe being installed. The length of the "pig" shall be 1-1/2 to 2 times its diameter. Prior to use, the "pig" shall be submerged in a chlorine solution of 1 oz. of 5% chlorine bleach in 5 gallons of water. "Pigging" of the pipeline shall be considered incidental to the installation of the new pipeline.
16.

Ball corp and ball stop shall be used in lieu of a corporation stop and stopcock, respectively.
17.

Install 4 mil thick, non-metallic, blue colored, 6 inches wide warning tape over centerline of the pipe and below the base course along the entire length of trench. Tape should be marked with "caution water line buried below".
18.

The Contractor shall install electronic markers to all mains and test the electronic markers prior to installations to verify proper operation. BWS personnel shall verify the number and locations of placed electronic markers before final paving of the project.
19.

For ductlines crossing existing or new waterline:
A the electrical/signal ductline water crossings, adjust all electrical/signal ductline elevations to maintain 12" vertical clear separation from all waterlines at no cost to the board of water supply.

Maintain 3'-0" min. horizontal clear separation between all waterline systems and nearest electrical/signal ductlines paralleling the water system at no cost to the board of water supply.

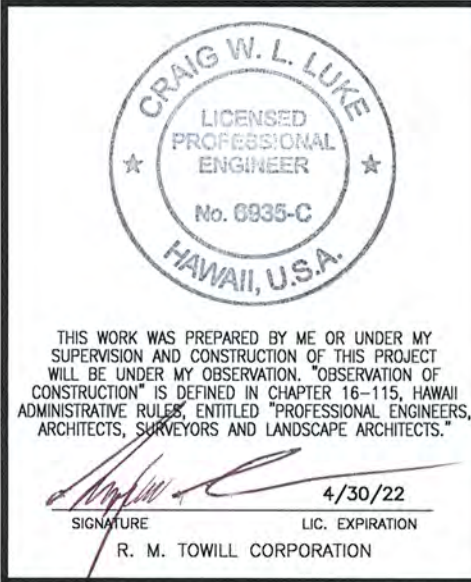
Maintain 3'-0" min. horizontal clear separation between street light/traffic signal, standards (including any modular units) and the nearest water system. Contractor shall field verify for any conflicts at each street light/traffic signal standard location. Where conflicts occur, the contractor shall coordinate with the project engineer to revise the street light/traffic signal standard to provide the required clearances at no cost to the BWS.
20.

For cut-in connection to existing:
All waterline construction requiring shutdown connection shall be scheduled for after working hours at six (6) hours maximum downtime.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-064-1(010)	2018	7	120

ORIGINAL PLAN	No.	SURVEY PLOTTED BY	DATE
		DRAWN BY	
		TRACED BY	
		DESIGNED BY	
NOTE BOOK	No.	QUANTITIES BY	
		CHECKED BY	

APPROVED:	
Manager and Chief Engineer, BWS (for work affecting BWS facilities State R/W & BWS easements only)	DATE



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
WATER NOTES - 1	
Sand Island Access Road Truck Weigh Station	
Federal Aid Project No. NH-064-1(010)	
TMK: (1) 1-2-025: 002	
Scale: As Noted	Date: February 2021
SHEET No. G-7 OF 120 SHEETS	

BOARD OF WATER SUPPLY NOTES (CONT.)

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-064-1(010)	2018	8	120

21. Board of Water Supply approval of these plans does not constitute a water commitment. Availability of water will be determined when building permit is presented to the department. Water commitment will depend upon the status of the water system at that time. Should water service be made available, the water commitment will be effective when the project receives an approved building permit from the building department. All water commitments will be canceled in the event the building permit is canceled.
22. Prior to any excavating, the Contractor shall verify in the field, the location of existing waterlines and appurtenances.
23. Any adjustments to the existing water system required during construction, to meet the requirements of the BWS Standards, whether shown on the plans or not, shall be done by the Contractor at no cost to the Board.
24. The project shall pay the applicable water system facilities and/or one-time service charge and for the meter which will be furnished by BWS and installed by the Contractor when the lateral is installed.
25. The project shall be subject to the Board of Water Supply's Cross-Connection Control requirements prior to issuance of the building permit.
26. The installation, chlorination, and testing of the water main and facilities after the meter shall not be the responsibility of the Board of Water Supply.
27. The backflow preventer device must be installed before the meter is issued.
28. The Contractor shall furnish and install polyethylene wrap, 3 feet minimum at all taps (for DI pipe and copper lateral combination only).
29. All ductile iron pipe, fittings, and valves shall be wrapped with two layers of 8 mil. polyethylene wrap. The inside surface of the polyethylene wrap to be in contact with the pipe exterior shall be infused with a blend of an antimicrobial to mitigate microbiologically influenced corrosion and a volatile corrosion inhibitor to control galvanic corrosion.
30. All ductile iron pipe and fittings, including sections requiring reinforced concrete jacketing, shall be ductile iron class 53, and coated as per the BWS Water System Standards.
31. All fire hydrants to be adjusted and/or relocated shall be replaced with new fire hydrants, unless otherwise directed by BWS.
32. Two-way blue reflective hydrant markers Type DB shall be installed at all new fire hydrant installations. Contractor shall very the exact locations of hydrant markers with the nearest Honolulu Fire Department Battalion Chief.
33. The Contractor shall furnish and install polyethylene wrap, 3 feet minimum at all taps (for DI pipe and copper lateral combination only).

PROJECTS IN CONFLICT WITH BWS PROJECTS

1. The contractor shall notify BWS Capital Projects Division, Construction Section (748-5730) sixty (60) days prior to construction at or near areas in conflict with the BWS project, "Sand Island Water System Improvements", to avoid delays and conflict during construction. The Contractor shall allow BWS's contractor to install new water mains prior to any resurfacing work at areas in conflict. BWS shall not be liable for any delays due to the contractor's failure to coordinate the construction schedule for this project.

ORIGINAL PLAN	SURVEY PLATTED BY	DATE
	DRAWN BY	WM/JS
	TRACED BY	CWL
	NOTED BY	
NOTE BOOK No.	QUANTITIES BY	
	CHECKED BY	

APPROVED:

Manager and Chief Engineer, BWS
(for work affecting BWS facilities
State R/W & BWS easements only)

DATE



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER NOTES - 2

Sand Island Access Road
Truck Weigh Station
Federal Aid Project No. NH-064-1(010)

TMK: (1) 1-2-025: 002
Date: February 2021

Scale: As Noted

SHEET No. G-8 OF 120 SHEETS