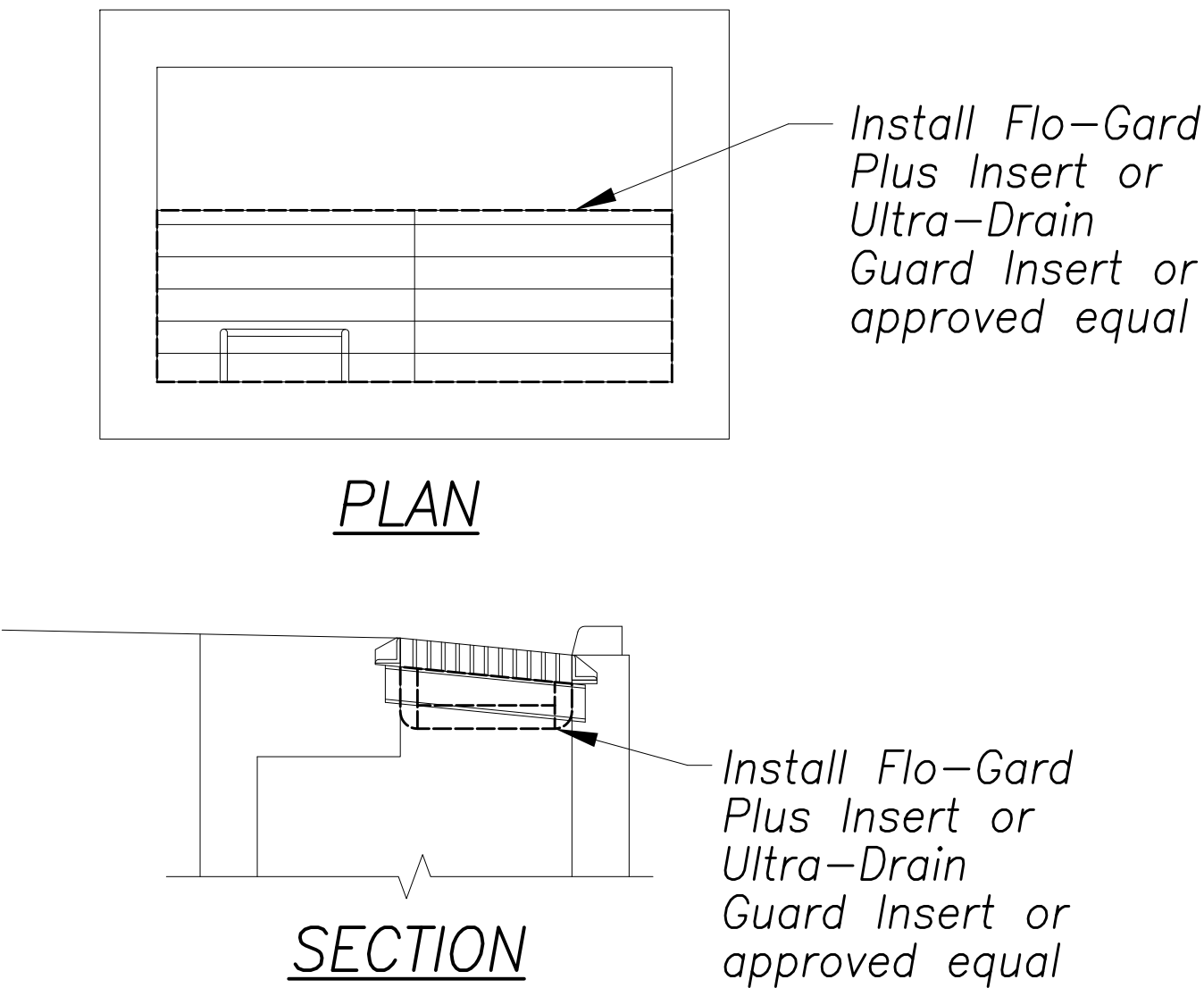
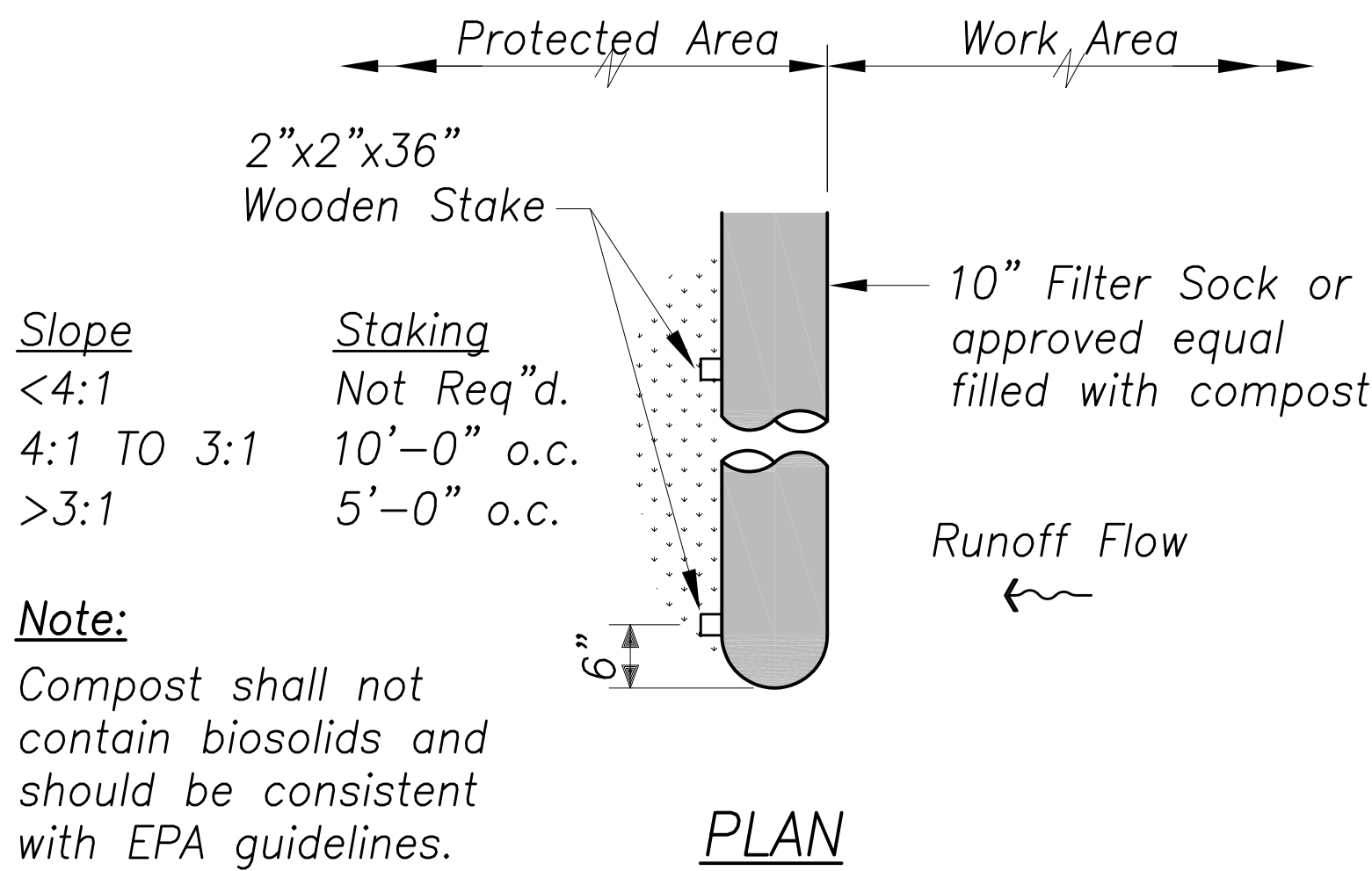
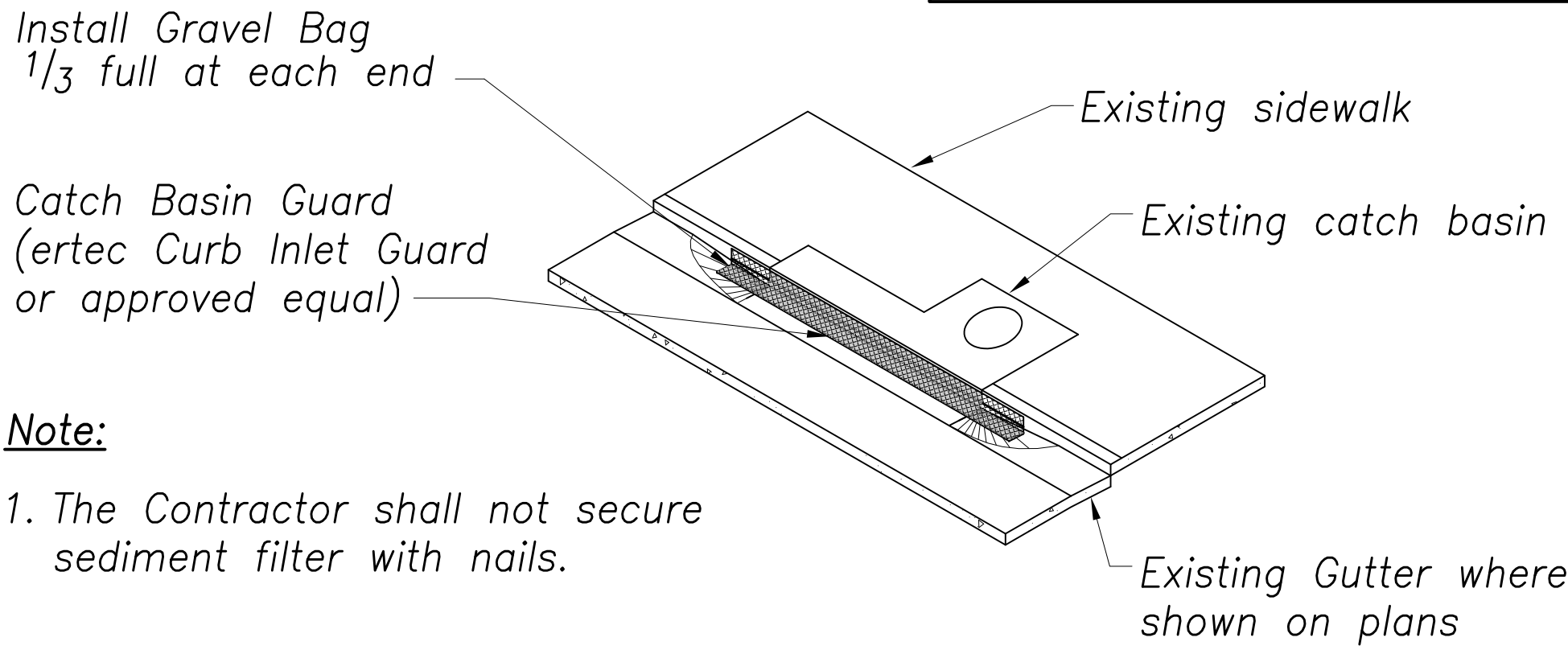


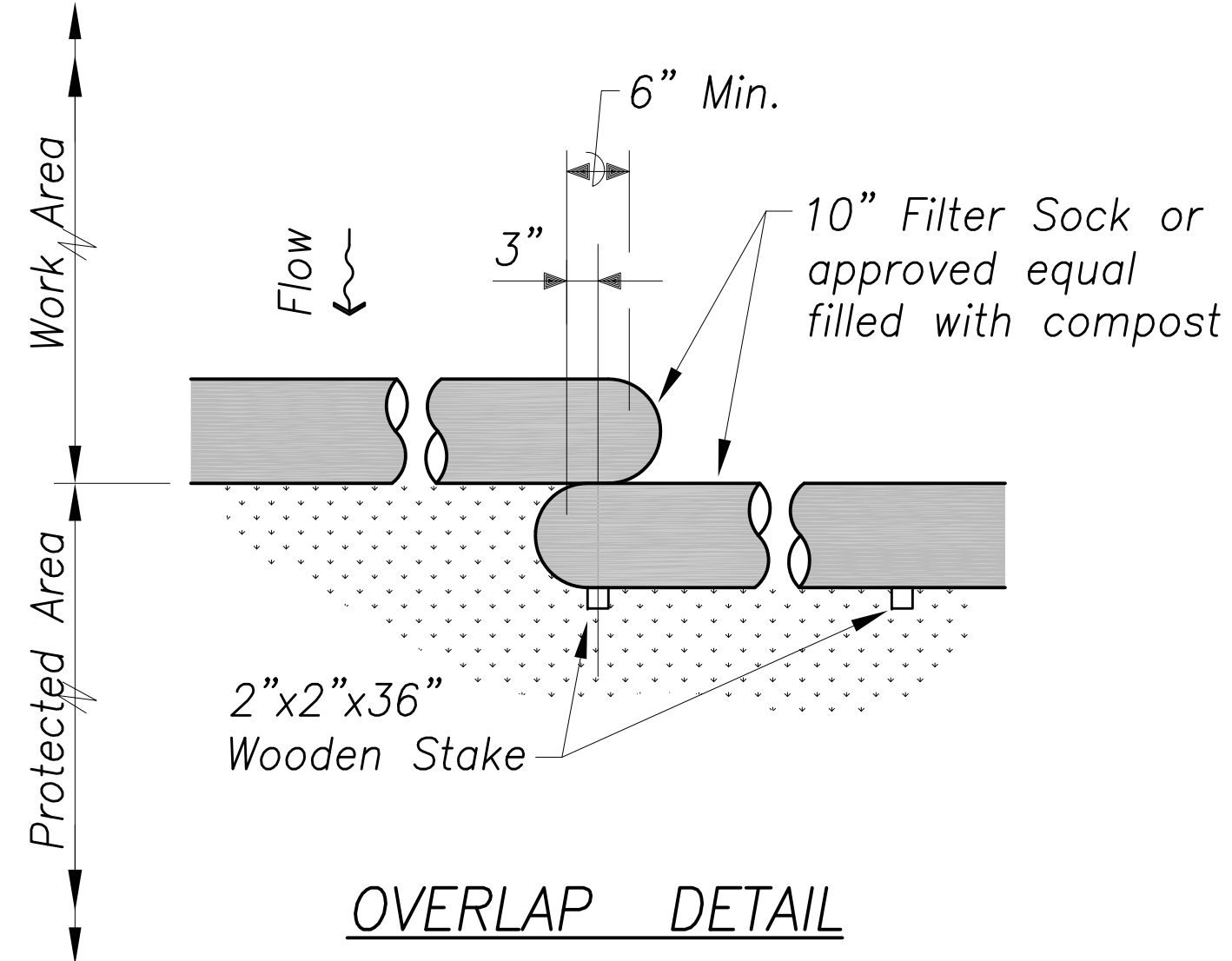
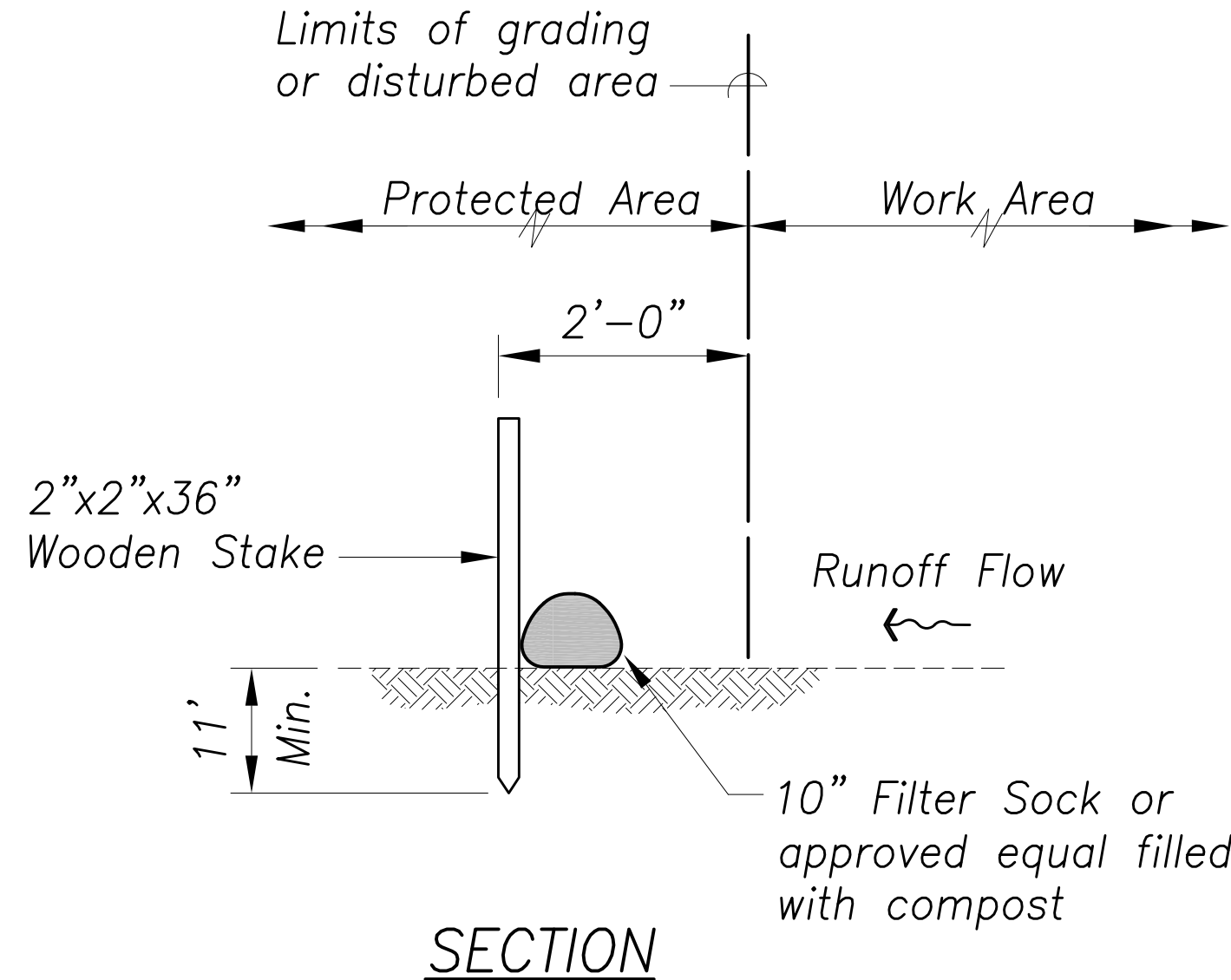
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)	2020	19	284



GDI PROTECTION DETAIL B
No Scale 14,15,16,17,18|19



CATCH BASIN PROTECTION DETAIL C
No Scale 14,15,16,17,18|19



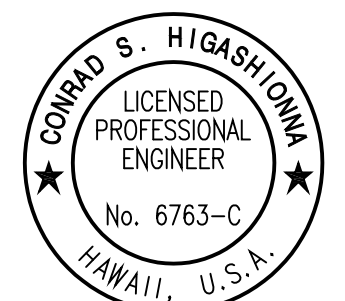
COMPOST FILTER SOCK DETAIL A
No Scale 15,17,18|19

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
No.	

Aug 28, 2020-5:50pm
N:\GAG\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\019 ESDP Details.dwg

Approved By: _____ Date _____

Chief, Civil Engineering Branch, DPP
(For construction in City ROW only)



License Expiration Date 04-30-22

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN HAWAII TITLE 16, CHAPTER 115, RULES OF THE BOARD OF PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS, STATE OF HAWAII.

Conrad Higashimura

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**EROSION & SEDIMENT
CONTROL PLAN DETAILS**

Traffic Signal Modernization,
Oahu, Phase 1
Federal-Aid Project No. STP-0300(163)
Scale: none Date: July 2020
SHEET No. D-6 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)	2020	20	284

EROSION AND SEDIMENT CONTROL NOTES
(FOR WORK WITHIN CITY RIGHT-OF-WAY):

- The Contractor shall follow the guidelines in the City and County of Honolulu’s “Rules Relating to Water Quality.”
- Measures to control erosion and other pollutants shall be in place before any construction is initiated.
- Regularly inspect and maintain all erosion and sediment controls to ensure continued performance.
- PERMANENT STABILIZATION

All disturbed areas shall be permanently stabilized using vegetative covering, pavement, or equivalent, prior to removing erosion and sediment measures. Trapped sediment and areas of disturbed soil which result from the removal of the temporary measures shall be immediately and permanently stabilized.

- PERIMETER CONTROLS

Perimeter controls are required down slope of equipment/ vehicle staging areas at the end of each business day and around material stockpiles that are not actively being used. Stockpiles are not allowed in the City right-of-way.

- INLET PROTECTION

- All storm drain inlets onsite and those offsite which may receive runoff from the site shall use an inlet protection device unless they are directed to a sediment basin.
- Sediment levels may not exceed one third of the height of a sediment barrier or inlet protection device at any point along the length of the sediment barrier or the inlet protection device.
- Sediment barriers and inlet protection devices must be unclogged and cleaned when performance is compromised.
- Torn, weathered or sagging sediment barriers or inlet protection devices must be repaired or replaced immediately.

- TRACKING CONTROL

- Minimize sediment track-out onto off-site streets, other paved areas, and sidewalks from vehicles exiting the construction site by restricting vehicle traffic to properly designated areas and using additional controls to remove sediment from vehicle tires prior to exiting the site.
- Vehicular parking and movements on project sites must be confined to paved surfaces or predefined parking areas and vehicle paths, which shall be marked with flags or boundary fencing.
- All pollutants and materials that are dropped, washed, tracked, spilled, or otherwise discharged from a project site to off-site streets, other paved areas, sidewalks or the MS4 must be cleaned using dry methods such as sweeping or vacuuming.

- Washing pollutants and materials that are discharged from the project site to the MS4 into drain inlets or catch basins is prohibited unless the material is sediment and the inlets are directed to a sediment basin or sediment trap.
- Best management practices (BMPs) shall not be removed until final stabilization is complete for that phase.
 - Refer to City and County of Honolulu Best Management Practices Manual–Construction for more information on BMPs.
 - The following BMP’s were determined to not be applicable based on the site-specific conditions. As construction progresses, revisions may be necessary and will be provided to DPP inspectors.
 - Dewatering practices are not applicable.
 - Diversion BMPs to divert runoff from upstream areas around disturbed areas of the site are not applicable.
 - Velocity dissipation devices are not applicable.
 - Sediment barriers are not applicable.
 - An ESCP coordinator must be designated using the form in Appendix A of the Rules Relating to Water Quality prior to permitting.
 - Notify DPP in writing of project start date two weeks prior to starting work.
 - Practice good housekeeping measures throughout the duration of construction.
 - Inspections will be performed weekly.

PROJECT SEQUENCE:

- Install inlet protection and perimeter controls around staging areas and material stockpiles as needed.
- Proceed with construction with least possible disturbance of vegetative areas and temporary structures.
- Install perimeter controls around active work areas at the end of each business day if not stabilized.
- Plant permanent ground cover according to the landscaping plan as soon as possible.
- Remove or dismantle temporary erosion control structures after permanent stabilization.

RAIN RESPONSE PLAN:

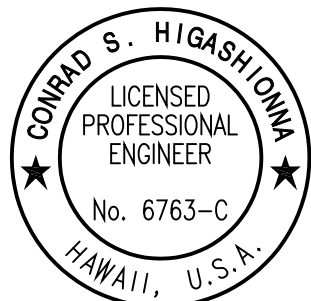
The following will be performed when rain is imminent or is forecasted in the next 48 hours:

- Temporary suspension of active trenching.
- Inspect all perimeter controls and inlet protection devices and maintain as needed. Reinstall any perimeter controls that were removed due to active work in the area. If severe storm is expected, remove inlet protection devices to prevent flooding on surrounding streets.
- Cover or relocate material stockpiles and liquid material containers to avoid contact with rainwater.
- Place spill pans or oil-only spill pads under construction vehicles to prevent runoff from contacting any spilled petroleum products. Properly dispose of any accumulated oily water after the rain event.
- Re-inspect after the approaching heavy rains, tropical storm or hurricane and replace or maintain BMPs as needed.

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

Aug 28, 2020--5:50pm
N:\CAO\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\020 ESDP Notes 1.dwg

Approved By:	
Chief, Civil Engineering Branch, DPP (For construction in City ROW only)	Date



License Expiration Date: 04-30-22
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN HAWAII TITLE 16, CHAPTER 115, RULES OF THE BOARD OF PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS, STATE OF HAWAII.
Conrad Higashimura

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
EROSION & SEDIMENT CONTROL PLAN NOTES	
Traffic Signal Modernization, Oahu, Phase 1	
Federal-Aid Project No. STP-0300(163)	
Scale: none	Date: July 2020
SHEET No. D-7 OF 17 SHEETS	

GOOD HOUSEKEEPING BMPs:

1. STREET SWEEPING AND VACUUMING

All pollutants discharged from construction site to off-site areas must be swept or vacuumed each day before leaving the job site.

2. MATERIALS DELIVERY, STORAGE AND USE MANAGEMENT

Prevent, reduce, or eliminate the discharge of pollutants from material delivery, storage, and use to the storm water system or watercourses by minimizing the storage of hazardous materials onsite, storing materials in a designated area, installing secondary containment. Construction materials, waste, toxic and hazardous substances, stockpiles and other sources of pollution shall not be stored in buffer areas, near areas of concentrated flow, or areas abutting the MS4, receiving waters, or drainage improvements that discharge off-site. Primary and secondary containment controls and covers shall be implemented to the MEP.

3. SPILL PREVENTION AND CONTROL

Create and implement spill prevention and response plans to eliminate and minimize the discharge of pollutants to the MS4 and receiving waters from leaks and spills by reducing the chance for spills, absorbing, containing, and cleaning up spills and properly disposing of spill materials. At a minimum, all projects shall cleanup all leaks and spills immediately.

4. HAZARDOUS MATERIALS

Prevent or reduce the discharge of pollutants to storm water from hazardous waste through proper material use and waste disposal. In the event that hazardous materials are discharged to the MS4, the property owner or ESCP coordinator shall immediately notify the Department of Facilities Maintenance, Honolulu Fire Department, and Honolulu Police Department of the discharge by telephone. A written report describing the pollutants that were discharged, the reasons for the discharge, and the measures that have been taken or will be taken to prevent a reoccurrence of the discharge shall be submitted to the director no less than 3 days after notification by phone.

5. NONHAZARDOUS MATERIALS

In the event that nonhazardous materials are discharged to the MS4, the property owner or ESCP coordinator shall notify the City Department of Facilities Maintenance by telephone no later than the next business day. A written report describing the pollutants that were discharged, the reasons for the discharge, and the measures that have been taken or will be taken to prevent a reoccurrence of the discharge shall be submitted to the director no less than 3 days after notification by phone.

6. VEHICLE AND EQUIPMENT CLEANING

Eliminate and minimize the discharge of pollutants to storm water from vehicle and equipment cleaning operations by using off-site facilities when feasible, washing in designated, contained areas only, and eliminating discharges to the storm drain system by evaporating and/or treating wash water, as appropriate or infiltrating wash water for exterior cleaning activities that use water only.

7. VEHICLE AND EQUIPMENT FUELING

Prevent fuel spills and leaks by using off-site facilities, fueling only in designated areas, enclosing or covering stored fuel, and implementing spill controls such as secondary containment and active measures using spill response kits.

8. VEHICLE AND EQUIPMENT MAINTENANCE

Eliminate and minimize the discharge of pollutants to storm water from vehicle and equipment maintenance operations by using off-site facilities when feasible, performing work in designated areas only, using spill pads under vehicles and equipment, checking for leaks and spills, and containing and cleaning up spills immediately.

9. SOLID WASTE MANAGEMENT

Prevent or reduce discharge of pollutants to the land, groundwater, and in storm water from solid waste or construction and demolition waste by providing designated waste collection areas, collect site trash daily, and ensuring that construction waste is collected, removed, and disposed of only at authorized disposal areas.

10. SANITARY/SEPTIC WASTE MANAGEMENT

Temporary and portable sanitary and septic waste systems shall be mounted or staked in, well-maintained and scheduled for regular waste disposal and servicing. Sources of sanitary and/or septic waste shall not be stored near the MS4 or receiving waters.

11. STOCKPILE MANAGEMENT

Stockpiles shall not be located in drainage ways, within 50 feet from areas of concentrated flows, and are not allowed in the city right-of-way. Sediment barriers or silt fences shall be used around the base of all stockpiles. Stockpiles shall not exceed 15 feet in height. Stockpiles greater than 15 feet in height shall require 8-foot wide benching in accordance with ROH Chapter 14, Article 15. Stockpiles must be covered with plastic sheeting or a comparable material if they will not be actively used within 7 days.

12. LIQUID WASTE MANAGEMENT

Liquid waste shall be contained in a controlled area such as a holding pit, sediment basin, roll-off bin, or portable tank of sufficient volume and to contain the liquid wastes generated. Containment areas or devices must be impermeable and leak free and should not be located where accidental release of the contained liquid can discharge to water bodies, channels, or storm drains.

13. CONCRETE WASTE MANAGEMENT

Prevent or reduce the discharge of pollutants to storm water from concrete waste by conducting washout offsite or performing onsite washout in a designated area constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations. Plastic lining material should be a minimum of 10-millimeter polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material. Containment areas or devices should not be located where accidental release of the contained liquid can discharge to water bodies, channels, or storm drains. Washout facilities must be cleaned, or new facilities must be constructed and ready for use once the washout is 75 percent full. Once concrete wastes are washed into the designated area and allowed to harden, the concrete should be broken up, removed, and disposed of as solid wastes.

14. CONTAMINATED SOIL MANAGEMENT

At minimum contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheeting. Contaminated soil should be disposed of properly in accordance with all applicable regulations.

15. DUST CONTROL

Dust from the project site shall not be transported or discharged to off-site areas.

16. DEWATERING OPERATIONS

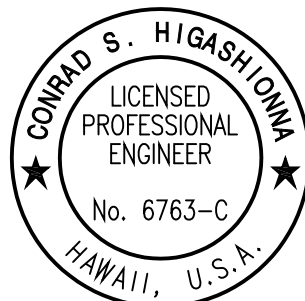
Non-storm water from dewatering operations cannot be discharged from the site without prior notice and approval from the DPP and Department of Health. Dewatering discharges shall be kept onsite using a sediment basin, sediment trap, weir tank, dewatering tank, filtration system or other manufactured system.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)	2020	21	284

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

Aug 28, 2020--5:50pm
N:\CAO\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\021 ESCP Notes 2.dwg

Approved By:	
Chief, Civil Engineering Branch, DPP	Date
(For construction in City ROW only)	



License Expiration Date: 04-30-22
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN HAWAII TITLE 16, CHAPTER 115, RULES OF THE BOARD OF PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS, STATE OF HAWAII.
Conrad Higashinoma

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EROSION & SEDIMENT
CONTROL PLAN NOTES

Traffic Signal Modernization,
Oahu, Phase 1
Federal-Aid Project No. STP-0300(163)

Scale: none Date: July 2020

SHEET No. D-8 OF 17 SHEETS