

# 4 | Construction Site Runoff Control Program







## 4 | CONSTRUCTION SITE RUNOFF CONTROL PROGRAM

The Construction Site Runoff Control Program (hereinafter Construction Program) is designed to reduce, to the MEP, the discharge of pollutants from Public and Private Construction Projects to the MS4.

The Construction Program includes the following objectives:

- Require Public and Private Construction Projects to execute the established standard practices.
- Maintain an inventory of construction projects.
- Conduct plan reviews for construction projects planning to perform work along or within the Maui District rights-of-way and property.
- Conduct BMP Independent Inspections of Public and Private Construction Projects.
- Implement enforcement actions for applicable Public and Private Construction Projects.
- Provide training on Construction Program BMPs.

### 4.1 PERMIT REQUIREMENTS

The Construction Program is administered in accordance with the MS4 NPDES Permit requirements referenced in Table 4-1.

**Table 4-1. MS4 NPDES Permit Requirements for the Construction Program.**

MS4 NPDES Permit Requirement	SWMP Section(s)
<b>Part 6.(a)(4):</b> <i>Construction Site Runoff Control</i> – Develop, implement, and enforce a program to reduce pollutants in stormwater runoff entering the permittee’s small municipal storm sewer system from construction activities disturbing one acre or more, including construction activities less than one acre that are part of a larger common plan of development or sale that would disturb one acre or more, that, at a minimum, includes the following.	—
<b>Part 6.(a)(4)(A):</b> Establishment of rules, ordinances, or other regulatory mechanism, including enforcement procedures and actions, that require erosion and sediment controls.	4.2, 4.6
<b>Part 6.(a)(4)(B):</b> Requirements for construction site operators to implement appropriate erosion and sediment control best management practices.	4.2, 4.3, 4.5, 4.7
<b>Part 6.(a)(4)(C):</b> Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.	4.2, 4.3, 4.4, 4.5, 4.7





**Table 4-1. MS4 NPDES Permit Requirements for the Construction Program.**

MS4 NPDES Permit Requirement	SWMP Section(s)
<b>Part 6.(a)(4)(D):</b> Procedures for site plan review which incorporate consideration of potential water quality impacts.	4.4, 4.7
<b>Part 6.(a)(4)(E):</b> Procedures for receipt and consideration of information submitted by the public.	4.3, 4.4, 4.7
<b>Part 6.(a)(4)(F):</b> Procedures for site inspection and enforcement of control measures.	4.5, 4.6, 4.7

## 4.2 CONSTRUCTION BMP IMPLEMENTATION

Maui District requires construction projects to implement BMPs and standards in accordance with established requirements described in the following:

- *Hawaii Standard Specifications for Road and Bridge Construction and/or Special Provisions*
- Hawaii Revised Statutes Chapter 342D
- *Construction Best Management Practices Field Manual* (Appendix 4.1)
- *Maintenance Activities Best Management Practices Field Manual* (Appendix 4.2)
- *Storm Water Post-Construction Best Management Practices Manual* (HWYS) (Appendix 5.1)

The standard documents are available on the websites listed below.

- *Hawaii Standard Specifications for Road and Bridge Construction and/or Special Provisions* is available on the DOT website, [www.hidot.hawaii.gov/highways/s2005-standard-specifications/2005-standard-specifications/](http://www.hidot.hawaii.gov/highways/s2005-standard-specifications/2005-standard-specifications/).
- The *Construction Best Management Practices Field Manual*, *Maintenance Activities Best Management Practices Field Manual*, and *Storm Water Post-Construction Best Management Practices Manual* are available on the Stormwater Maui website, and as Appendices 4.1, 4.2, and 5.1 respectively, to this SWMP.

Maui District will evaluate these documents periodically and update them as necessary.





### 4.3 CONSTRUCTION PROJECT INVENTORY

Maui District maintains an inventory of its construction projects as they move from the plan review phase, to the active construction phase. Utilizing Maximo or similar database, Maui District effectively tracks information relating to construction projects. Information typically includes the project type, status of plan review and approval, project size, contact information, and location. The Maximo tracking capabilities are shown in Figure 4-1.

Project Number	HDOT Permit #	Title	Route ID	Req. Frequency	Start Year	District Office	Site	Status
STP-0900(097) WO 8	MA-22-003	STP-0900(097) WO 8 Kahului Beach Road Reconstruction	3400	MONTHLY	2022	MAUI-DO	MAUI	WAPPR
MA-21-031	MA-21-031	Kihei HS Roundabout	310	ONE-TIME	2022	MAUI-DO	MAUI	WAPPR
MA-21-018	MA-21-018	Kealia Pond National Wildlife Refuge Waterline	311	ONE-TIME	2021	MAUI-DO	MAUI	WAPPR
MA-21-024	MA-21-024	Winfrey Driveway Plans	36	ONE-TIME	2021	MAUI-DO	MAUI	WAPPR
340C-01-18M	MA-21-026	340C-01-18M, Kahekili Hwy Waihee River Flood Repairs at Waihee Bridge	340	MONTHLY	2021	MAUI-DO	MAUI	WAPPR
MA-21-027	MA-21-027	Waipio Farms Driveway	36	ONE-TIME	2021	MAUI-DO	MAUI	WAPPR
STP-0340(005)	MA-22-002	STP-0340(005) Kahekili Hwy, Waiehu Beach Rd. to Camp Maluhia	340	MONTHLY	2021	MAUI-DO	MAUI	WAPPR
MA-21-008	MA-21-008	Kamehameiki Homeslead, Water Service	377	ONE-TIME	2021	MAUI-DO	MAUI	WAPPR
MA-21-022	MA-21-022	Charlene Brown Driveway, Kekaulike Hwy	377	ONE-TIME	2021	MAUI-DO	MAUI	WAPPR
STP-0900 (100)	MA-21-006	Piilani Hwy Guardrail and Shoulder Improvements	31	MONTHLY	2021	MAUI-DO	MAUI	INPRG
STP-0900(100)	MA-21-006	Kula Hwy Guardrail and Shoulder Improvements	37	MONTHLY	2021	MAUI-DO	MAUI	INPRG
IPPS WO 6	MA-21-010	Haleakala Hwy MP 0.94 - 7.76	37	MONTHLY	2021	MAUI-DO	MAUI	INPRG
MA-21-021	MA-21-021	Kahekili Hwy Waterline Improvements for Kapuna Seaside	340	ONE-TIME	2021	MAUI-DO	MAUI	WAPPR
MA 21-034	MA-21-034	Waiehu Drainline Replacement at TMK: 3-3-001-001	3400	ONE-TIME	2021	MAUI-DO	MAUI	WAPPR
MA-21-002	MA-21-002	Piilani Hwy. & Kulanihakai St. Test Borings	31	ONE-TIME	2021	MAUI-DO	MAUI	WAPPR
MA-21-011	MA-21-011	4965 Hana Hwy - Boyd-Dunker Driveway Apron	36	ONE-TIME	2021	MAUI-DO	MAUI	WAPPR
36C-01-10	MA-21-003	Hana Hwy Rockfall Mitigation MP12	360	MONTHLY	2021	MAUI-DO	MAUI	INPRG
2017-001	MA-20-002	Wailuku Civic Complex, PH 1A	32	ANNUALLY	2020	MAUI-DO	MAUI	INPRG
HSIP-031-1(013)	MA-20-012	Piilani Hwy, Guardrail and Signage, Replacing Traffic Signal Heads, Rumble Strips	31	MONTHLY	2020	MAUI-DO	MAUI	WAPPR
31A-02-17	MA-20-021	Piilani Hwy MP 5.4-5.49, Highway Improvements	31	MONTHLY	2020	MAUI-DO	MAUI	WAPPR

4-1. Maximo tracks Public and Private Construction Projects.

### 4.4 CONSTRUCTION PLAN REVIEW AND APPROVAL

Maui District implements a plan review and approval process to ensure that construction projects planning to perform work along or within the Maui District rights-of-way and property are approved to conduct such work.

#### 4.4.1 Construction Plan Review

HWY-M implements a plan review and approval process to ensure that construction projects planning to perform work along or within the HWY-M rights-of-way apply for a *Permit to Perform Work Upon State Highways* (hereinafter *Permit to Perform Work*) (Appendix 4.3). Similarly, HAR implements a plan review and approval process to ensure that construction





projects planning to perform work on HAR property apply for the proper approvals. Collectively, Maui District’s plan review and approval process ensure appropriate BMPs are implemented prior to the commencement of construction activities to prevent the discharge of pollutants in accordance with the standards and requirements described in Section 4.2 of this *SWMP*.

During the plan review process, construction projects are required to submit a Submittal Package to Maui District for review. A Submittal Package typically includes the following:

- Construction plans and specifications
- Stormwater Pollution Prevention Plan (SWPPP) or Site-Specific BMP (SSBMP) Plan
- NPDES Permit requirements (as applicable)
- *Application for a Private Storm Drain Connection and/or Discharge Permit to the State of Hawaii Highways Division Storm Drain System* (Appendix 3.3) (as applicable)

#### 4.4.2 Construction Plan Approval

HWY-M utilizes a Plan Review Checklist (Appendix 4.4), Review Comment Sheet (Appendix 4.5), and Erosion Control and Best Management Practice Notes (Appendix 4.6) to evaluate the Submittal Package during the plan approval process. HWY-M completes the review to ensure that all documents are in compliance with the applicable standards and requirements, and that necessary BMPs will be implemented. Any comments made by HWY-M or its designate must be addressed, revised, and resubmitted by the projects designate. Submittal Packages must be stamped for approval by HWY-M prior to the issuance of a *Permit to Perform Work*.

HAR utilizes the relevant design specifications and Construction Site Design Review Checklist (Appendix 4.7) when applicable to evaluate the Submittal Package during the plan approval process. HAR completes the review documents to ensure that all reviewed documents are in compliance with the applicable standards and requirements, and that necessary BMPs are being implemented. Any comments made by HAR must be addressed, revised, and resubmitted by the projects designate. Submittal Packages must be approved by HAR prior to the issuance of approvals for work.

Maui District will evaluate these documents periodically and will update them as necessary.

#### 4.5 CONSTRUCTION PROJECT BMP INSPECTIONS

Maui District requires the implementation of BMPs for all Public and Private Construction Projects. In addition, HWY-M conducts BMP Independent Inspections for construction projects regardless of whether they require NPDES Permit coverage. Independent Inspections are conducted by an Inspector who is not involved in the day-to-day operations of the project.





HAR conducts BMP inspections for all NPDES permitted (hereinafter non-exempt) construction projects.

BMP inspections are conducted as Initial, Routine, or Final BMP Inspections, and inspection requirements are summarized in Table 4-2.

**Table 4-2. Construction Project BMP Inspection Applicability.**

Project Type	Initial BMP Inspection	Routine BMP Inspection	Final BMP Inspection
Public Construction Projects	✓	✓	✓
Private Construction Projects		✓	✓

#### 4.5.1 Initial BMP Inspections

##### *Public Construction Projects*

Following the issuance of the Notice to Proceed (NTP), but prior to the commencement of construction activities and issuance of the Start Work Date, Maui District conducts an Initial BMP Inspection for Public Construction Projects and completes the standard inspection form, Construction Project Inspection Report (Appendix 4.8). Prior to this inspection, the soil may only be disturbed to the extent that is required to install BMPs.

During the Initial BMP Inspection, Maui District verifies that BMPs identified in the approved Submittal Package are properly installed and in the correct locations. Maui District identifies site conditions that have the potential to result in the discharge of pollutants and requires corrective action from the projects designate. Maui District does not issue the Start Work Date until all deficiencies observed by the Inspector during the Initial BMP Inspection are addressed by the projects designate and documented by Maui District.

#### 4.5.2 Routine BMP Inspections

##### *Public Construction Projects*

Following the Initial BMP Inspection, Maui District conducts Routine BMP Inspections. During the Routine BMP Inspections, Maui District evaluates whether the site conditions are adhering to the approved Submittal Package and that BMPs are properly maintained and effective in containing potential pollutants. Maui District identifies site conditions that have the potential to result in the discharge of pollutants and requires corrective action from the projects designate. HWY-M conducts monthly Routine BMP Inspections for all Public Construction Projects and completes the Construction Project Inspection Report. HAR conducts Routine BMP







Inspections for all non-exempt Public Construction Projects once every two weeks from October to March, and once every two months from April to September.

The inspection frequency for a specific project may be decreased to quarterly if, upon three successive monthly Routine BMP Inspections, the following criteria are met:

- No critical or major deficiencies
- Less than six minor deficiencies
- No more than three minor deficiencies in one month

However, if while under a quarterly inspection frequency, Maui District identifies at least one critical or major deficiency, or a total of three or more minor deficiencies, the inspection frequency of the Public Construction Project immediately returns to no less than monthly.

If deficiencies are not addressed within the timeframes identified in Table 4-3, Maui District may escalate enforcement in accordance with Section 4.6 of this *SWMP*.

**Table 4-3. Timeframes for Deficiency Corrective Actions.**

Project Type	Critical Deficiency	Major Deficiency	Minor Deficiency
Public Construction Projects	End of same day of inspection	Within seven (7) calendar days from day of inspection	Within ten (10) calendar days from day of inspection
Private Construction Projects			

Maui District reserves the right to grant extensions for corrective actions as deemed appropriate. Maui District also allows Public Construction Projects to remove inlet protection measures in the event of flood conditions where safety or loss of property is of concern, or to prevent erosion.

*Private Construction Projects*

All Private Construction Projects with a *Permit to Perform Work* are inspected by HWY-M at least once during the life of the project, or once annually, whichever comes first. HAR conducts Routine BMP Inspections for all non-exempt Private Construction Projects once every two weeks from October to March, and once every two months from April to September. During the Routine BMP Inspection, Maui District verifies that the BMPs identified in the approved Submittal Package are properly installed, in the correct locations, and are effective in containing potential pollutants. Additionally, Maui District identifies site conditions that have the potential to result in the discharge of pollutants and requires corrective action from the projects designate. Routine BMP Inspections for Private Construction Projects are limited to





the construction limits impacting the Maui District rights-of-way, or property, and are documented on the Construction Project Inspection Report.

If deficiencies are not addressed within the timeframes identified in Table 4-3, Maui District may escalate enforcement in accordance with Section 4.6 of this *SWMP*.

Maui District reserves the right to grant extensions for corrective actions as deemed appropriate. Maui District also allows Public Construction Projects to remove inlet protection measures in the event of flood conditions where safety or loss of property is of concern, or to prevent erosion.

### 4.5.3 Final BMP Inspections

#### *Public Construction Projects*

Following the completion of construction activities, but prior to the removal of temporary BMP measures and site closure, Maui District conducts a Final BMP Inspection for Public Construction Projects and completes the standard form, Final Construction Project Inspection Report (Appendix 4.9).

During the Final BMP Inspection, Maui District ensures that post-construction BMPs are installed (as applicable), construction activities are completed, disturbed soil is stabilized, and final site conditions are similar to pre-construction conditions with no negligible impact to stormwater runoff or the MS4. If post-construction BMPs have been installed, the Inspector follows the standards and requirements in accordance with Chapter 5 of this *SWMP*.

Temporary BMP measures are not allowed to be removed by the projects designate until all deficiencies observed by the Inspector during the Final BMP Inspection are addressed by the projects designate and documented by Maui District.

#### *Private Construction Projects*

Following the completion of construction activities, but prior to the removal of temporary BMP measures and site closure, HAR conducts a Final BMP Inspection for non-exempt Private Construction Projects.

During the Final BMP Inspection, HAR ensures that post-construction BMPs are installed (as applicable), construction activities are completed, disturbed soil is stabilized, and final site conditions are similar to pre-construction conditions with no negligible impact to stormwater runoff or the MS4. If post-construction BMPs have been installed, the Inspector follows the standards and requirements in accordance with Chapter 5 of this *SWMP*.

Temporary BMP measures are not allowed to be removed by the projects designate until all deficiencies observed by the Inspector during the Final BMP Inspection are addressed by the projects designate and documented by Maui District.







#### 4.6 ENFORCEMENT

Maui District enforces its construction standards and requirements in accordance with the corresponding *Enforcement Response Plan* (hereinafter *ERP*) (Appendix 4.10). The *ERP* describes the procedures for enforcement and follow-up actions, including assessment of penalties when a construction project is not in compliance with the standards and requirements described in Section 4.2 of this *SWMP*. The *ERP* ensures a consistent response by Maui District for compliance and provides a framework to implement enforcement actions on construction projects, when necessary.

#### 4.7 TRAINING

Maui District conducts annual training for its program staff on BMPs, such as maintaining an inventory of construction projects, conducting plan reviews, conducting BMP Independent Inspections of construction projects, and implementing enforcement actions when necessary.

#### 4.8 MEASURING PROGRAM EFFECTIVENESS

Maui District assigns each Construction Program BMP an Outcome Level, anticipated frequency over the permit term, data collection method, and assessment parameter, as shown in Table 4-4.

**Table 4-4. Measuring Effectiveness of the Construction Program.**

Construction Program BMP	Outcome Level <sup>1</sup>	Anticipated Frequency	Data Collection Method	Assessment Parameter
<b>Construction BMP Implementation</b>	1	Continuous	Completion	Permit compliance
<b>Construction Project Inventory</b>	1	Continuous	Confirmation	Permit compliance
<b>Construction Plan Review and Approval</b>	3	Continuous	Tabulation	No. of construction plans reviewed
<b>Construction Project BMP Inspections</b>	3	Continuous	Tabulation	No. of deficiencies (Critical, Major, Minor)
<b>Enforcement</b>	2	Continuous	Tabulation	No. of enforcement actions
<b>Training</b>	2	Annually	Tabulation	No. of events and event attendees





**Table 4-4. Measuring Effectiveness of the Construction Program.**

Construction Program BMP	Outcome Level <sup>1</sup>	Anticipated Frequency	Data Collection Method	Assessment Parameter
<p><sup>1</sup>Outcome Levels:</p> <ol style="list-style-type: none"> <li>1- <b>Permit Compliance.</b> Many program activities are conducted as a direct requirement of the MS4 NPDES Permit. Therefore, Level 1 outcomes may take the form of yes/no answers. Level 1 outcomes are assumed to be beneficial to water quality, but are not considered Direct Outcomes as it lacks the casual effect to support this assumption.</li> <li>2- <b>Knowledge and Awareness.</b> Outcomes at this level gauge whether educational efforts are progressing toward changes in knowledge and awareness. Measuring these outcomes is achieved through observation of involvement from target audiences. Similar to Outcome Level 1, Level 2 outcomes are assumed to be beneficial to water quality but are considered Indirect Outcomes.</li> <li>3- <b>Behavioral Changes.</b> Outcomes at this level measure the effectiveness of programs in motivating target audiences to change their behaviors and implement appropriate BMPs. These behavioral changes are tracked using site inspections and tabulating changes in program involvement. Outcomes at Level 3 are considered Indirect Outcomes.</li> </ol>				

