State of Hawaii Department of Health Clean Water Branch	CWB USE ONLY WQC No.: _____ Engineer: _____ Date Received: _____
CWB-WQC Application	
Information Required for the Section 401 Water Quality Certification (WQC)	

Before completing this form, read the Guidelines for CWB-WQC Application.
If mail is not received at the street address, provide the mailing address(es) in Item 14, Additional Information.

1. Owner Information (see Guidelines for CWB-WQC Application - Note 1)

Legal Name: State of Hawaii, Department of Transportation

Street Address : 869 Punchbowl Street

City, State and Zip+4 Code: Honolulu, Hawaii 96813

Contact Person & Title: Kevin Ito, DOT Project Manager

Phone No.: (808) 692-7548 Fax No.: (808) 692-7555

2. General Contractor Information (see Guidelines for CWB-WQC Application - Note 2)

Name: TO BE PROVIDED TO DOH NO LATER THAN 30 DAYS AFTER CONTRACT AWARD

Street Address : _____

City, State and Zip+4 Code: _____

Contact Person & Position Title: _____

Phone No.: ( ) Fax No.: ( )

3. Emergency Contact Information (see Guidelines for CWB-WQC Application - Note 3)

a. Company/Organization Name: Department of Transportation, Highways Division

Contact Person & Title: Pratt M. Kinimaka, Oahu District Engineer

Phone No.: (808) 831-6750 Phone No.: (808) 831-6725

b. Company/Organization Name: CONSTRUCTION ENGINEER (TBD NO LATER THAN 30 DAYS AFTER CONTRACT AWARD)

Contact Person & Title: _____

Phone No.: ( ) Phone No.: ( )

4. Project Site Information (see Guidelines for CWB-WQC Application - Note 4)

Project Name: Farrington Highway Replacement of Maipalaoa Bridge

Government Project/Job No. (as applicable): Federal Aid Project No. BR-093-1(21)

Street Address : 200 feet north of intersection between Farrington Hwy and Maipalaoa Road

City, State and Zip+4 Code: Waianae, Hawaii 96792-0000

Contact Person & Title: Robyn Ito, SSFM Project Manager

Phone No.: (808) 356-1276 Fax No.: (808) 521-7348

Island: Oahu

Tax Map Key Number(s)			
Zone	Section	Plat	Parcel(s)
8	7	005	003; 004; 005 (parcels adjacent to Farrington Hwy)
8	7	023	001; 002; 037; 039; 049; 058; 059 (parcels adjacent to Farrington Hwy)

5. Associated Permits or Licenses (see Guidelines for CWB-WQC Application - Note 5)

Provide the type(s), status, corresponding file number(s), and legal authorization(s) of any existing or pending permits or licenses:

a. Department of the Army (DA) Permit or License: NWP No. 14 (PCN submitted on April 4, 2012)

b. Section 402 NPDES Permit: NOI Form C and Form G

c. RCRA Permit (Hazardous Wastes): Not Applicable

d. Facility on SARA 313 List (identify SARA 313 chemicals on site):

Not Applicable

e. Other (Specify): City Special Management Area (minor) Permit and Minor Shoreline Structure Approval; DLNR Site Plan Approval; Stream Channel Alteration Permit (All permits to be applied for in 2012)

6. Receiving State Water Information (see Guidelines for CWB-WQC Application - Note 6)

a. Name: Maili Stream

Classification: (check the appropriate space(s))

Inland: Class 1 _____ Class 2 __X__ Estuary _____

Marine: Class AA _____ Class A _____ Embayment _____

Describe the associated existing uses at the "discharge" location(s):

Recreational fishing and adjacent to Ulehawa Beach Park (City and County of Honolulu)

7. Project Description (see Guidelines for CWB-WQC Application - Note 7)

a. Project Site Coordinates

(Northern Discharge Point) Latitude: 21° E 24‘ 33.54“ N Longitude: 158° E 10‘ 37.80“ W

(Southern Discharge Point) Latitude: 21° E 24‘ 32.14“ N Longitude: 158° E 10‘ 38.08“ W

b. Describe the overall project scope and activities

The project involves the demolition and replacement of Maipalaoa Bridge. The existing bridge and central piers will be replaced with a new single-span bridge. Existing central piers of the current bridge will be demolished and grouted. The project also includes the construction of new drainage outlet structures for existing MS4 drainage facility. An existing 8-inch waterline will be relocated to the makai edge of the bridge. Approximately 360 feet of new pavement roadway approaches will be constructed. A temporary pedestrian walkway will be constructed on the mauka side of the bridge and will be removed after construction of the new bridge.

c. Describe the “discharge” activity and the purpose of the proposed discharge activity

The discharge activities included in this application include the installation of BMP measures and dewatering. The existing central piers and pier caps will be demolished and removed. The removal and grouting of demolished piers will require dewatering.

d. List all “discharge” activities that the owner is seeking coverage for under this WQC application

Installation of sediment and erosion control measures (BMPs) within Maili Stream.

Installation of a water diversion wall for dewatering activities.

Installation of individual caisson systems around the twenty-one (21) existing central piers.

Removal of sediment from within each caisson with dewatering of each pier to be removed.

Activities associated with dewatering equipment used to remove water from caissons.

e. Specify physical, chemical, biological, thermal, and any other pertinent characteristic of the “discharge” activity

No pertinent chemical, biological, or thermal characteristics are associated with the listed discharge activities. Discharge activities consist of BMP measures and use of a caisson dewatering pump.

8. Description of the Existing Environment and Potential Environmental Effects from the Construction Activities (see Guidelines for CWB-WQC Application - Note 8)

a. Describe the Existing Physical Environment and Potential Physical Environmental Effects

The project site (Maipalaoa Bridge) crosses Maili Stream, which is a short, highly modified second order perennial stream that originates in the coastal plain of leeward Oahu and discharges into the Pacific Ocean at Ulehawa Beach Park.

The new bridge will be constructed as a single-span bridge and therefore will not require new piers within the stream channel, which is currently lined with concrete. Earthwork and other construction activities could create impacts from sedimentation and erosion if care is not taken. There will be no piles driven within the Maili Stream channel. The existing central piles will be removed by chipping away and patching the existing lining to remove the central pier from the point where it intersections with the concrete lining of the stream to the point where it intersects with the bridge deck.

During construction, temporary degradation of water quality in intermittent waterways is possible due to sedimentation from disturbance to banks of waterways and increased sediment in storm water runoff. These disturbed areas may also cause an increase in suspended solids and nutrient loading from exposed areas. Construction activities may also introduce pollutants such as oil and grease from construction equipment.

b. Describe the Existing Chemical Environment and Potential Chemical Environmental Effects

Water quality was sampled at three water quality monitoring stations in Maili Stream on March 23, 2009 designated with the names “Upstream”, “Bridge”, and “Reef” The samples were later processed in a laboratory. Additionally, the “Bridge” station sample provided data for a source water quality assessment (SWQA) that will be used for a National Pollutant Discharge Elimination System (NPDES) permit application. The location of the water quality stations are shown on Figure 3 8: Locations Sampled for Water Quality in the Final EA.

During the survey, the tidal stage was low and rising. Thus some parameters were measured by field meter and others in the samples collected. Dissolved oxygen (DO), pH, salinity, and temperature were measured in situ at each of the three stations.

Chapter 11-54 Water Quality Standards, Hawaii Administrative Rules (HAR) sets forth water

quality standards for the State of Hawaii. The existing Hawaii Water Quality Standards for estuaries require certain criteria; turbidity, chlorophyll α, and nutrients; be measured over a period of time. As there are no previous samples available, survey results cannot be compared with established criteria to determine compliance with existing water quality standards.

Water quality characteristics of Maili Stream are fairly poor. The "Upstream" station is greatly influenced by freshwater while the "Bridge" and "Reef" stations were more typical of marine water. Chlorophyll α, turbidity, suspended sediments, and nutrient levels were elevated at all three stations. Additionally, water at all three stations were supersaturated with respect to dissolved oxygen. Results of the water quality are found in Table 3 14: Results of Water Quality Sampling in Maili Stream, March 23, 2009 in the Final EA.

c. Describe the Existing Biological Environment and Potential Biological Environmental Effects

A biological reconnaissance and water quality survey of Maili Stream (also called the City and County of Honolulu's M-4 Drainage Channel) was conducted on March 23, 2009 to identify biological resources and collect water quality samples. The full study of the fieldwork and background research for this study is found in Appendix C: Water Quality and Aquatics of the Final EA.

No federally and state listed threatened or endangered plants were observed during the survey. Flora of the project area is comprised of flowering plants and dominated by non-native species. Six indigenous plants were observed: beach morning glory, salt heliotrope, naupaka kahakai, akiaki, akulikuli, and uhaloa. These plants are common lowland plants from dry leeward and coastal sites throughout the Pacific islands. A listing of plant species observed during the survey is included in Final EA Table 3-12: Checklist of Plants and Relative Abundances near the Maipalaoa Bridge.

No federally and state listed threatened or endangered animals were observed during the survey of Maili Stream. Aquatic biota observed underneath the bridge and mauka of Farrington Highway is comprised mainly of native algae, macroinvertebrates, and fish. Aquatic biota observed mauka of Farrington Highway is comprised mainly of introduced fish species.

In 1998, the Hawaii Biological Survey (HBS) determined the biodiversity of the freshwater,

estuarine, and marine communities in Maili Stream as part of a larger study of introduced species along the south and west shores of O'ahu (Englund, et al., 2000).

The results of both the 2009 survey and the 1998 survey are shown in the Final EA Table 3-13: Aquatic Biota Observed From Maili Stream in 1998 and 2009 Field Visits. Many insects and smaller crustaceans that were not noted in the 2009 survey were identified and recorded in the HBS survey.

With the new bridge there will be no significant impacts on flora resources. No federal or state listed rare, threatened, or endangered plants were observed during the survey.

Similarly, there will be no significant impacts on fauna resources. No federal or state listed rare, threatened, or endangered aquatic species were observed during the survey. Three native oopu: Eleotric sandwicensis, Awaous guamensis, and Stenobobious hawaiiensis (oopu akupa, oopu nakea, and oopu naniha, respectively) reside in Maili Stream. Their life cycle is spent in both fresh and salt water, thus migration to and from Maili Stream and the Pacific Ocean cannot be disrupted. The design of the replacement bridge will not impede the migration of the oopu to and from Maili Stream.

d. Describe the Existing Uses and Its Potential Effects

Maipalaoa Bridge is along Farrington Highway and is an existing four-lane highway corridor. Land uses that abut corridor include park/open space, residential, and commercial properties. Construction of the new bridge would have temporary construction effects associated with construction activities, but travel along Farrington Highway will not be impacted due to construction scheduling.

9. Project Schedule (see Guidelines for CWB-WQC Application - Note 9)

a. Provide the estimated date or dates on which the activity will begin and end:

Estimated Project Start Date: July 2013

Estimated Project Completion Date: May 2015

b. Provide the date or dates that the discharge(s) will take place:

Same as above

10. Site-Specific Best Management Practices (BMP) Plan (see Guidelines for CWB-WQC Application - Note 10)

The BMPs Plan shall, at a minimum, include the following:

a. Maps are attached _X_ Yes ___ No

Attachment C: Location Map
Attachment D: Existing Condition, Demolition, and Erosion Control Plan (2 pages)
Attachment E: Site Plan
Attachment F: Dewatering Plan
Attachment G: Sample Dewatering, Sediment, Oil, and Grease Removal Operations

b. Site Characterization

Existing soil within the project area primarily consists of Keaau clay, saline Soil Type (KmbA). Surrounding land use along the roadway corridors is mixed residential and commercial along the mauka side of the roadway corridor while the makai side is a City beach park. Maili Stream (City and County MS4 drainage channel) runs directly under the bridge. The project does not impact any special aquatic sites, such as a wetlands.

c. Construction Sequence and Duration

The construction sequence for in-water work will begin the installation of Best Management Practice (BMP) devices for Maili Stream, and thereafter a water diversion wall is to be constructed and dewatering activities are to be conducted. It is at this time that the invert concrete lining will be inspected and the decision whether or not to replace it will be made. The makai portion of the bridge will be demolished and new abutment and drilled shafts will be installed behind existing abutments. This sequence will repeat for three different phases to minimize the impact to traffic flow.

d. Construction Method

Methods involve demolition of center piers, pier caps, and the capping and grouting of cut piers at the areas to be dewatered. A caisson system occupying no more than 8-feet of the width of the stream is to be use to divert water in Maili Stream around each pier.

e. Characteristics of the discharge and potential pollutants associated with the proposed construction activity

Source	Composition	Quantity	Duration
Installation of sediment and erosion control measures (BMPs) within Maili Stream	Materials associated with erosion control devices	Unknown	Installation of erosion control will last approximately 1 month, total
Installation of a water diversion wall for dewatering activities	Materials associated with the operation and maintenance of dewatering equipment (i.e. caissons)	Unknown	Installation of materials related to dewatering will last approximately 6 weeks, total
Removal of sediment from within each caisson with dewatering of each pier to be removed	Existing sediment, effluent	Unknown	Work associated with dewatering will last approximately 2 weeks, total

f. Characteristics of the dredged/excavated material

Source	Composition	Quantity	Duration
Materials removed from within caissons	Existing soil and water	14,994 cuft	Stockpiles and general grading will be performed throughout the entire construction period, outside of Maili Stream
Existing pier demolitions	concrete	200 cuft	Throughout phased construction

g. Proposed control measures and/or treatment

The dewatering system is designed for full containment and discharge into the ground.

11. Applicable Monitoring and Assessment Plan (see Guidelines for CWB-WQC Application - Note 11)

The Applicable Monitoring and Assessment Plan shall, at a minimum, include the following:

a. Description of the methods and means being used or proposed to monitor the quality and characteristics of the discharge

See attached Applicable Monitoring and Assessment Plan (Attachment H)

b. Description of the methods and means being used to monitor/maintain all pollutant control measures

See attached Applicable Monitoring and Assessment Plan (Attachment H)

c. Reporting requirements

See attached Applicable Monitoring and Assessment Plan (Attachment H)

d. A narrative of how the monitoring results will be used to demonstrate whether or not the project construction activity was in compliance with the applicable State water quality standards

See attached Applicable Monitoring and Assessment Plan (Attachment H)

12. Mitigation/Compensation Plan (see Guidelines for CWB-WQC Application - Note 12)

Not Applicable.

13. Supporting Documents (see Guidelines for CWB-WQC Application - Note 13)

List and submit applicable maps, plans, specifications, copies of associated permits or licenses, federal applications, Environmental Assessments or Environmental Impact Statements, as applicable, etc.

	Document Title	Document Date
a.	Pre-Final Design Plans	February 2012
b.	Final Environmental Assessment and Section 4(F) Evaluation (CD)	September 2011
c.	Location Map	January 2012
d.	Existing Condition, Demolition, and Erosion Control Plan (2 pages)	July 2011
e.	Site Plan	February 2012
f.	Dewatering Plan	February 2012
g.	Sample Dewatering, Sediment, Oil, and Grease Removal Operations	February 2012
h.	Applicable Monitoring and Assessment Plan	January 2012
i.	SMA(m) and Minor Shoreline Structure Approval Letter	March 15, 2012

14. **Additional Information (see Guidelines for CWB-WQC Application - Note 14**)

a. Mailing Address: State Department of Transportation, Attn: Kevin Ito, Highways Division 601 Kamokila Blvd., Room 688, Kapolei, Hawaii 96707

15. Statement of Choice of Publication (see Guidelines for CWB-WQC Application - Note 15)

Check One:

_X_ Public Notice of Proposed Action

___ Public Notice of Public Hearing

___ Not Applicable. The applicant is seeking WQC coverage under authorization of WQC File No. _____ for a DA permit authorization under the following (provide applicable information):

DA NWP No. _____

DA GP No. _____

DA PGP No. _____

16. Authorization of Representative (see Guidelines for CWB-WQC Application - Note 16)

Check one and complete the appropriate space(s). Alteration of this item will result in the invalidation of the authorization statement(s).

a. This statement authorizes the named individual or any individual occupying the named position of the company/organization listed below to act as our representative to process the required Section 401 WQC Application to discharge to navigable waters from the subject project. The Owner hereby agrees to comply with and be responsible for all Section 401 WQC conditions.

Company/Organization Name: Department of Transportation, Highways Division

Street Address : 869 Punchbowl Street

City, State and Zip Code+4: Honolulu, Hawaii 96813

Authorized Person & Title: Alvin A. Takeshita, Administrator, Highways Division

Phone No.: (808) 587-2220 Fax No.: (808) 587-2340

b. This statement authorizes the named individual or any individual occupying the named position of the company/organization listed below to act as our representative to process the required Section 401 WQC Application to discharge to navigable waters from the subject project. Our representative is further authorized to fulfill all conditions of the Section 401 WQC. The Owner hereby agrees to comply with and be responsible for all Section 401 WQC conditions.

Company/Organization Name: NA

Street Address :

City, State and Zip Code+4:

Authorized Person & Title:

Phone No.: ( ) Fax No.: ( )

c. This statement authorizes the named individual or any individual occupying the named position of the company/organization listed below to act as our representative to fulfill all conditions of the Section 401 WQC for the subject project. The Owner hereby agrees to comply with and be responsible for all Section 401 WQC Conditions.

Company/Organization Name: Department of Transportation

Street Address : 727 Kakoi Street

City, State and Zip Code+4: Honolulu, Hawaii 96819-2017

Authorized Person & Title: Pratt M. Kinimaka, Oahu District Engineer

Phone No.: (808) 831-6750 Fax No.: (808) 831-6725

d. A separate statement is attached. Yes _____ No _____

Certification (see Guidelines for CWB-WQC Application - Note 17)

Alteration of this item will result in the invalidation of this application. **The person certifying this CWB-WQC Application must meet one of the following descriptions and be employed by the owner listed in Item 1.**

___ I certify that for a municipal agency, I am a principal executive officer or ranking elected official.

_X_ I certify that for a state agency, I am a principal executive officer or ranking elected official.

___ I certify that for a federal or other non-federal public agency, I am a principal executive officer or ranking elected official.

___ I certify that for a federal agency, I am the chief executive officer of the agency, or I am the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

___ I certify that I am a general partner for a partnership.

___ I certify that I am the proprietor for a sole proprietorship.

___ I certify that for a corporation or association, I am the President, Vice President, Secretary, or Treasurer of the corporation or association and in charge of a principal business function, or I perform similar policy or decision making functions for the corporation or association:

___ I certify that for a corporation, I am the Manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), and authority to sign documents has been assigned or delegated to me in accordance with corporate procedures.

___ I certify that for a trust, I am a trustee.

In accordance with the State of Hawaii, Department of Health, Water Quality Standards, there is reasonable assurance that the proposed activity will be conducted in such a manner which will not violate the basic water quality criteria applicable to all waters and the specific water quality criteria applicable to the class of navigable waters where the proposed "discharge" would take place.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: MAR 28 2012

Printed Name & Title: Glenn M. Okimoto, Ph.D., Director of Transportation

Company/Organization Name: Department of Transportation, Highways Division

Phone No.: (808) 587-2150 Fax No.: (808) 587-2167

CWB-WQC Application Checklist		
If any item is listed as "no," attach a sheet with the reason for its exclusion from the Section 401 WQC Application submittal.		
Item Number	**Description**	**Is item addressed? (yes/no)**
1.	Owner Information	Yes
2.	General Contractor Information	Yes
3.	Emergency Contact Information	Yes
4.	Project Site Information	Yes
5.	Associated Permits or Licenses	Yes
6.	Receiving State Water Information	Yes
7.	Project Description	Yes
8.	Description of the Existing Environment and Potential Environmental Effects from the Construction Activities	Yes
9.	Project Schedule	Yes
10.	Site-Specific BMPs Plan	Yes
11.	Applicable Monitoring and Assessment Plan	Yes
12.	Mitigation/Compensation Plan	Yes
13.	Supporting Documents	Yes
14.	Additional Information	Yes
15.	Statement of Choice of Publication	Yes
16.	Authorization of Representative	Yes
17.	Certification	Yes
18.	Filing Fee ($1000.00) is attached	Yes
19.	Number of copies with supporting documents submitted	
	a. One (1) copy for projects on Oahu with owner's original signature	Yes
	b. Two (2) copies for projects on islands other than Oahu (one with owner's original signature)	