State of Hawaii
Department of Health
Clean Water Branch

CWB USE ONLY
WQC No.: _____ Engineer: _____
Date Received: _____

CWB-WQC Application

2012 NOV 16 9:06AM

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 96813-5097

   Contact Person & Title: Misako Mimura, HDOT Project Manager

   Phone No.: (808) 692-7589 Fax No.: (808) 692-7555

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

   Name: To be submitted within seven (7) calendar days before the project commencement date

   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: State of Hawaii Department of Transportation, Highways Division

      Contact Person & Title: Pratt Kinimaka, Oahu District Engineer

      Phone No.: (808) 831-6703 Phone No.: (808) 831-6725

   b. Company/Organization Name: To be submitted within seven (7) calendar days before the project commencement date

      Contact Person & Title: Contractor, Project Manager

      Phone No.: (____) TBD Phone No.: (____) TBD

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

Project Name: Interstate Route H1, Aiea Stream Erosion Control

Government Project/Job No. (as applicable): Project No. H1E-01-11MR

Street Address: Aiea Shopping Center, Vicinity of Interstate Route H-1

City, State and Zip+4 Code: Aiea, HI 98701

Contact Person & Title: Teodoro Sumibcay, Civil Engineer III

Phone No.: (808) 483-7295 Fax No.: (808) 483-7290

Island: Oahu

Tax Map Key Number(s)			
Zone	Section	Plat	Parcel(s)
9	9	042	059
9	9	042	027

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: An application for a Section 404 Nationwide Permit No.13 (Bank Stabilization) has been submitted concurrently with the Section 401 Water Quality Certification Application. A jurisdictional determination (POH-2009- 00312) was provided by the Corps and will be updated once this 401 WQC application is submitted (see Attachment A - DA Jurisdictional Determination).

During construction of the cut-off wall, the contractor will be required to transport any wet excavated material to be removed from the project site in watertight trailer beds. Spoils will go directly to a facility permitted to receive solid waste. After the contractor has been selected, a facility will be identified and submitted to DOH within seven (7) calendar days before the project commencement date. Project specifications will not allow contractor to discharge dewatering water or spoils into the stream.

b. Section 402 NPDES Permit: The project area is approximately 33,000 square feet, including staging areas. Because it is less than 1 acre in size, a CWB NOI Form C for Discharge of Storm Water Associated with Construction Activities is not needed.

If water accumulates on the work site, and discharge of dewatering effluent is required the Contractor will be responsible for obtaining a NDPES Permit for discharge of dewatering effluent during construction prior to discharge. If the Contractor decides not to discharge, the Contractor will inform HDOT and provide a alternative method for handling dewatering effluent. HDOT will then submit the alternative proposal to DOH for review and acceptance.

c. RCRA Permit (Hazardous Wastes): N/A

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

e. Other (Specify): SCAP not needed per DLNR Commission on Water Resource Management determination. See Attachment B – SCAP Determination.

Coastal Zone Management – A consistency review to determine whether the project meets the conditions associated with the CZM for the Nationwide Permit No. 13 will be conducted as part of the DA permit process.

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

a. Name: Aiea 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):

Aiea Stream is classified as an intermittent stream. It only flows during active rainfall runoff events. Aiea Stream conveys surface runoff from the Aiea Stream watershed, which is approximately three and one-half miles long with a total area of approximately 834 acres. While the upper reaches of the watershed is mixed forest, the area surrounding the project is very urban consisting of mostly residences, which contribute runoff to the stream. Runoff from areas adjacent to the stream is discharged downstream to Aiea Bay of Pearl Harbor (See Attachment C – Watershed Map).

Just prior to reaching the project area, Aiea Stream flows under the H-1 Freeway double cell box culvert bridge. The elevation of the stream bed falls from about 45 feet at the exit of the freeway culvert to about 35 feet, 200 feet downstream.

Within the project site, the stream conveys the discharges from the double cell H-1 box culvert and receives runoff from Aiea Shopping Center and from properties on its east bank (See Attachment D – Location Plan). The stream does not have recreational uses in the vicinity of the project site. Aiea Stream is not navigable, not tidal and is not used for recreational purposes at the project site.

Aiea Stream is on the State's list of water quality limited segments. Criteria of concern include trash, turbidity, total nitrogen (TN) and nitrate+nitrite nitrogen (N+N). Both TN and N+N are in exceedance by two times the standard. No anti-degradation analysis is necessary, as the work area is isolated and contained.

b. Name: N/A

Classification: (check the appropriate space(s))

Inland: Class 1 _____	Class 2 _____	Estuary _____
Marine: Class AA _____	Class A _____	Embayment _____

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

_____

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

a. Project Site Coordinates (NAD 1983 HARN)

Latitude: 21° 22' 45" N Longitude: 157° 55' 44" W

Latitude: 21° 22' 43" N Longitude: 157° 55' 45" W

b. Describe the overall project scope and activities

The project involves the construction of a Shotcrete Wall to stabilize an eroding stream bank slope on the Aiea Shopping Center property. The Shotcrete Wall is approximately 180 feet in length (see Attachment E–Shotcrete Wall Construction Plan.)

The proposed project would stabilize a portion of the Ewa bank of Aiea Stream by installing soil nails which are connected to the shotcrete facing. Soil nails are installed by drilling small diameter holes into the slope, inserting approximately 25 to 35 -foot long high strength steel bars (nails) into the hole and then grouting. Shotcrete, which is concrete mixed with coarse aggregate, is pneumatically applied to the bank slope surface using high velocity spray from a hose and nozzle. Shotcrete is applied at specified angles at a close range to the surface in order to ensure proper adhesion and compaction. These specifications also create an application process where fugitive shotcrete or overspray is limited to the immediate work surface. The contractor will develop a Spill Prevention Plan that includes measures to prevent and address spills once they've occurred. The Spill Prevention Plan will be submitted to DOH within seven (7) calendar days before the project commencement date.

The project limits would start on the Ewa bank of Aiea Stream at the existing H-1 Freeway double cell box culvert, and to a point approximately 180 feet downstream. The proposed soil nail wall would be within the privately owned Aiea Shopping Center, where the severely eroded stream bank requires protection to prevent further undercutting.

c. Describe the "discharge" activity and the purpose of the proposed discharge activity

Discharge activities during construction include:

- Installation of temporary BMPs (to isolate and contain the work area)
- Removal of temporary BMPs (to restore site to the maximum extent practicable)
- Construction of Shotcrete Wall (to stabilize stream bank)
- Construction of Cut-off wall (to support Shotcrete Wall)

Sandbags and Silt Fences will be used to separate work areas and contain disturbed work areas from discharging pollution into the stream flow.

More detail is provided in Attachment K – Site-Specific BMP Plan.

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

Installation of the following:

- Temporary BMPs (see Attachment K – Site-Specific BMP Plan)
- Permanent Structures
    - Shotcrete Wall (above & below the OHWM)
    - Cut-off Wall (below the OHWM)

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

Potential pollutants associated with the BMPs themselves are minimal. None of the BMPs are composed of material that could leach chemicals into the stream or introduce invasive plants. The sandbags, which are made of pervious material, will be wrapped with an impervious sheeting to prevent seepage discharge from the construction work area into the stream.

Potential pollutants associated with Construction Activities include oil and grease and cement, which will be managed by proper application procedures and adherence to the Spill Prevention Plan (which will be submitted to DOH within seven (7) calendar days before the project commencement date). Dirt is also a potential pollutant during the installation of BMPs, however, prior to installation of BMPs, a silt fence will be placed at the downstream end of the work area and is to remain in place until the installation of BMPs is complete (See Sheet EC-2 in Appendix B of Attachment K – Site-Specific BMP Plan and see Attachment 1, Sheet SR-1, in Attachment H – Site Restoration Plan). Additionally, a silt fence and sandbag

barrier will be placed between the bypass pipes and the construction access to isolate and contain the work area.

Potential pollutants associated with the permanent structures, the Shotcrete Wall and Cut-off Wall, include concrete, wire mesh (rebar cage) encased in concrete, and steel rebar (soil nails) encased in concrete. There are no expected pollutants that would result from these structures. See Attachment K – Site-Specific BMP Plan for more information.

Potential pollutants associated with Site Restoration include dirt from the removal of BMPs, which will be managed by a silt fence and fiber rolls. Also, grassing includes the use of fertilizers and may include some nitrogen and phosphorus.

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

Please refer to the attached Final Environment Assessment (See Attachment I) for details of the existing environment and potential environmental effects.

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

Aiea Stream will be impacted by the installation of temporary pipes and installation of the temporary construction access road (stream crossing) as shown on Erosion Control Plan, (See Attachment F). The Contractor will be notified that he must construct the temporary BMP's and temporary construction access road as shown in Attachment F, otherwise any modification or deviation from the plans will require resubmittal to DOH-CWB of the 401 WQC. The Contractor will be instructed per these plans that he will not be granted any form of contract extension due to a resubmittal to DOH-CWB for a new 401 WQC.

After construction is complete, the Contractor will implement the Site Restoration Plan (Attachment H) to restore the existing grade to the maximum extent practicable.

Water quality monitoring samples will be collected before, during, and after construction. Additionally, due to DOH's concern that the shotcrete wall and/or cut-off wall may exacerbate erosion immediately downstream, erosion will be monitored after construction. Please see the Applicable Monitoring and Assessment Plan in Attachment J – Aiea Stream Water Quality Monitoring and Assessment Plan.

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

Aiea Stream is on the list of water quality limited segments. Construction of the Shotcrete Wall on the severely eroded bank will reduce sediment pollutant discharge from the eroding soils.

A hydraulic analysis for the Proposed Project was conducted using the computer model, HEC-RAS version 4.0 to identify the existing flood risks during various storm frequencies from 2-year to a 100-year storm. Additionally, the analysis identified the stream's flow velocities at various cross-sections. For purposes of the analysis, the study area extended beyond the project site to an upstream location approximately 150 feet mauka of Ulune Street and a downstream location approximately 400 feet makai of the project site or 300 feet mauka of Moanalua Road. The hydraulic analysis is provided as an Appendix to the Final EA.

The hydraulic analysis was applied to Aiea Stream under the Existing and Proposed Project conditions. Proposed Project conditions simulated in the hydraulic model included a Shotcrete Wall along the Ewa bank within the project site. The Shotcrete Wall will have a rock facing with a friction factor higher than that of smooth concrete due to its roughened texture. The model predicts that the flow velocity near the new Ewa bank (Shotcrete Wall) will be about five feet per second faster than what the model predicts under Existing conditions at the Shotcrete Wall.

Despite the velocity increase at the face of the proposed Shotcrete Wall, the model predicts the same or very similar flow velocities under both the existing and Build scenarios at the Diamond Head bank and at the sections downstream of the wall. Since the flows at the opposite bank and downstream would be similar, the proposed project is not anticipated to create any further or exacerbate any existing erosion conditions.

Water quality monitoring samples will be collected before, during, and two weeks after construction. Erosion monitoring will also be conducted for two years after construction. The Applicable Monitoring and Assessment Plan, Attachment J – Aiea Stream Water Quality Monitoring and Assessment Plan, provides further detail on monitoring activities.

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

Aiea Stream is a degraded intermittent stream adjacent to Aiea Shopping Center. The stream's slope consists of overgrown bushes and trees. No animals or fish are observed in the area.

d. Describe the Existing Uses and Its Potential Effects

Aiea Stream conveys concentrated flow discharging to Pearl Harbor, this function will remain unchanged.

4. 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:

April 2013 to October 2013 (Water quality monitoring will begin 10 weeks prior to start of construction)

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

April 2013 to October 2013

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

The Site-Specific BMP Plan is attached (See Attachment K)

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

The Applicable Monitoring and Assessment Plan is attached (Attachment J)

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 Attachment J – Aiea Stream Water Quality Monitoring and Assessment Plan

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

See Attachment J – Aiea Stream Water Quality Monitoring and Assessment Plan

c. Reporting requirements

See Attachment J – Aiea Stream Water Quality Monitoring and Assessment Plan

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 Attachment J – Aiea Stream Water Quality Monitoring and Assessment Plan

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

The project does not involve discharges that affect special aquatic sites as noted in 40 CFR sections 230.40-230.45.

To prevent sediment from entering the stream, no vehicles (i.e. crane, backhoe, etc.) will be fueled or cleaned within the stream. All construction equipments will be maintained in operational condition.

8. 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.	Final Environmental Assessment/FONSI for Aiea Stream Erosion Control	July 23, 2010
b.	Aiea Stream Erosion Control Project Design Drawings	Sept 2012

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

10. 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. _____

11. 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: State of Hawaii Department of Transportation, Highways Division

Street Address: 869 Punchbowl Street, Room 513

City, State and Zip Code+4: Honolulu, Hawaii 96813-5097

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: N/A

Street Address: N/A

City, State and Zip Code+4: N/A

Authorized Person & Title: N/A

Phone No.: ( ) N/A Fax No.: ( ) N/A

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: State of Hawaii Department of Transportation, Highways Division

Street Address: 727 Kakoi Street

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

Authorized Person & Title: Pratt Kinimaka, Oahu District Engineer

Phone No.: (808) 831-6703 Fax No.: (808) 831-6725

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

17. 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. NOV 02 2012

Signature: _____ Date: _____

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

Company/Organization Name: State of Hawaii Department of Transportation

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	previously submitted
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)	n/a