#### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

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Clean Water Act Section 401 Water Quality Certification and Waste Discharge Requirements for Discharge of Dredged and/or Fill Materials

Reg. Meas. ID: 369722

Place ID: 806903

Party ID: 547037 Person ID: 547038

#### PROJECT: Kona Kai Seawall Repair Project Certification Number R9-2014-0060 WDID: 9 000002723

#### APPLICANT: Westgroup Kona Kai, LLC 600 South 6<sup>th</sup> Street Kirkland, WA 98033

#### ACTION:

Order for Low Impact Certification	Order for Denial of Certification
<ul> <li>Order for Technically-conditioned</li></ul>	<ul> <li>Waiver of Waste Discharge</li></ul>
Certification	Requirements
☑ Enrollment in SWRCB GWDR	Enrollment in Isolated Waters Order
Order No. 2003-017-DWO	No. 2004-004-DWQ

#### **PROJECT DESCRIPTION**

An application dated June 6, 2014 was submitted by Westgroup Kona Kai, LLC (hereinafter Applicant), for Water Quality Certification pursuant to section 401 of the Clean Water Act (33 U.S.C. § 1341) for the proposed Kona Kai Seawall Repair Project (Project). The Applicant has also applied for a Clean Water Act section 404 permit from the United States Army Corps of Engineers for the Project (USACE File No. SPL-2014-00354-RRS).

The Project is located within the City of San Diego, San Diego County, California on Shelter Island Drive, adjacent to San Diego Bay. The Project center reading is located at latitude 32.709605 and longitude -117.232357. The Applicant has paid all required fees for this Certification in the amount of \$2,150.00. On June 6, 2014, the San Diego Water Board provided public notice of the Project application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the Project on the San Diego Water Board's web site and providing a period of twenty-one days for public review and comment. No comments were received.

The Applicant proposes to remove and replace approximately 79 feet of existing seawall and adjacent landscape with in-kind construction. This will consist of the removal of existing sidewalk/flatwork behind the wall, demolition and installation of a new wall on the existing footing, backfilling behind the new wall with a sand cement slurry mix, and installing a new sidewalk/flatwork. During demolition, a soils engineer will core sample the existing footing in three locations to evaluate the concrete quality, strength, and depth of the footing and embedment materials at the bottom of the three cores. If the existing footing does not have

sufficient strength or embedment to support the new wall, the footing will be augmented in accordance with the engineering plans provided by the Applicant (see Exhibit 5 in Attachment 2). This Certification does not allow for installation of a new footing for the seawall.

During Project construction, dirt stockpiles and storage and maintenance areas will be located at least 100 feet from San Diego Bay. Project construction will be performed with a backhoe to break and lift concrete masonry pieces from the wall and a small bobcat to move the debris to stockpiles in the parking lot. The demolition, removal, and replacement of the seawall will be performed during low tide and from the land side only; there will be no in-water Project construction. The expected duration of the Project is approximately 8 weeks.

Project construction will permanently impact 0.007 acre (79 linear feet) of coastal waters of the United States and/or State. The Applicant reports that the Project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impacts to aquatic resources considering all potential practicable alternatives, such as the potential for alternate available locations, designs, reductions in size, configuration or density.

Additional Project details are provided in Attachment 2 of this Certification.

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#### Attachments:

- 1. Definitions
- 2. Project Figures and Plans

#### I. STANDARD CONDITIONS

Pursuant to section 3860 of title 23 of the California Code of Regulations, the following three standard conditions apply to <u>all</u> water quality certification actions:

- A. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and chapter 28, article 6 (commencing with title 23, section 3867), of the California Code of Regulations.
- B. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to California Code of Regulations title 23, section 3855 subdivision (b), and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. This Certification action is conditioned upon total payment of any fee required under title 23, chapter 28 (commencing with section 3830) of California Code of Regulations and owed by the applicant.

#### II. GENERAL CONDITIONS

- A. Term of Certification. Water Quality Certification No. R9-2014-0060 (Certification) shall expire upon a) the expiration or retraction of the Clean Water Act section 404 (33 U.S.C. §1344) permit issued by the U.S. Army Corps of Engineers for this Project, or b) five (5) years from the date of issuance of this Certification, whichever occurs first.
- B. **Duty to Comply.** The Applicant must comply with all conditions and requirements of this Certification. Any Certification noncompliance constitutes a violation of the Water Code and is grounds for enforcement action or Certification termination, revocation and reissuance, or modification.
- C. General Waste Discharge Requirements. The requirements of this Certification are enforceable through Water Quality Order No. 2003-0017-DWQ, Statewide General Waste Discharge Requirements for Discharges of Dredged or Fill Material that have Received State Water Quality Certification (Water Quality Order No. 2003-0017-DWQ). This provision shall apply irrespective of whether a) the federal permit for which the Certification was obtained is subsequently retracted or is expired, or b) the Certification is expired. Water Quality Order No. 2003-0017-DWQ is accessible at:

http://www.waterboards.ca.gov/water\_issues/programs/cwa401/docs/generalorders/go\_wdr401regulated\_projects.pdf.

D. **Project Conformance with Application**. All water quality protection measures and BMPs described in the application and supplemental information for water quality certification are incorporated by reference into this Certification as if fully stated herein.

Notwithstanding any more specific conditions in this Certification, the Applicant shall construct, implement and comply with all water quality protection measures and BMPs described in the application and supplemental information. The conditions within this Certification shall supersede conflicting provisions within the application and supplemental information submitted as part of this Certification action.

- E. Project Conformance with Water Quality Control Plans or Policies. Notwithstanding any more specific conditions in this Certification, the Project shall be constructed in a manner consistent with the Basin Plan and any other applicable water quality control plans or policies adopted or approved pursuant to the Porter Cologne Water Quality Act (Division 7, commencing with Water Code Section 13000) or section 303 of the Clean Water Act (33 U.S.C §1313).
- F. **Project Modification**. The Applicant must submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this Certification, to the San Diego Water for prior review and written approval. If the San Diego Water Board is not notified of a significant change to the Project, it will be considered a violation of this Certification.
- G. **Certification Distribution Posting.** During Project construction, the Applicant must maintain a copy of this Certification at the Project site. This Certification must be available at all times to site personnel and agencies. A copy of this Certification shall also be provided to any contractor or subcontractor performing construction work, and the copy shall remain in their possession at the Project site.
- H. **Inspection and Entry**. The Applicant must allow the San Diego Water Board or the State Water Resources Control Board, and/or their authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents as may be required under law, to:
  - 1. Enter upon the Project premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Certification;
  - 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification;
  - 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Certification; and
  - 4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance, or as otherwise authorized by the Clean Water Act or Water Code, any substances or parameters at any location.
- I. **Enforcement Notification**. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law

authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.

- J. **Certification Actions**. This Certification may be modified, revoked and reissued, or terminated for cause including but not limited to the following:
  - 1. Violation of any term or condition of this Certification;
  - 2. Monitoring results indicate that continued Project activities could violate water quality objectives or impair the beneficial uses of San Diego Bay;
  - 3. Obtaining this Certification by misrepresentation or failure to disclose fully all relevant facts;
  - 4. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
  - 5. Incorporation of any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

The filing of a request by the Applicant for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Certification condition.

- K. **Duty to Provide Information**. The Applicant shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Certification or to determine compliance with this Certification.
- L. **Property Rights**. This Certification does not convey any property rights of any sort, or any exclusive privilege.
- M. **Petitions**. Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with the California Code of Regulations, title 23, sections 3867 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Certification. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

<u>http://www.waterboards.ca.gov/public\_notices/petitions/water\_quality</u> or will be provided upon request.

#### III. STORM WATER BEST MANAGEMENT PRACTICES

- A. **Approvals to Commence Construction**. The Applicant shall not commence Project construction until all necessary federal, state, and local approvals are obtained.
- B. General Construction Storm Water Permit. Prior to start of Project construction, the Applicant must, as applicable, obtain coverage under, and comply with, the requirements of State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity, (General Construction Storm Water Permit) and any reissuance. If Project construction activities do not require coverage under the General Construction Storm Water Permit, the Applicant must develop and implement a runoff management plan (or equivalent construction best management practice (BMP) plan) to prevent the discharge of sediment and other pollutants during construction activities.
- C. **Personal Education.** Prior to the start of the Project, and annually thereafter, the Applicant must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response measures, and BMP implementation and maintenance measures.
- D. **Spill Containment Materials.** The Applicant must, at all times, maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the United States and/or State.
- E. Waste Management. The Applicant must properly manage, store, treat, and dispose of wastes in accordance with applicable federal, state, and local laws and regulations. Waste management shall be implemented to avoid or minimize exposure of wastes to precipitation or storm water runoff. The storage, handling, treatment, or disposal of waste shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050. Upon Project completion, all Project generated debris, building materials, excess material, waste, and trash shall be removed from the Project site(s) for disposal at an authorized landfill or other disposal site in compliance with federal, state and local laws and regulations.
- F. Waste Management. Except for a discharge permitted under this Certification, the dumping, deposition, or discharge of trash, rubbish, unset cement or asphalt, concrete, grout, damaged concrete or asphalt, concrete or asphalt spoils, wash water, organic or earthen material, steel, sawdust or other construction debris waste from Project activities directly into waters of the United States and or State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited.
- G. **Construction Equipment.** All equipment must be washed prior to transport to the Project site and must be free of sediment, debris, and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g.,

motors, pumps, generator, etc.) shall be positioned over drip pans or other types of containment.

- H. Process Water. Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or State or placed in locations that may be subjected to storm water runoff flows. Pollutants discharged to areas within a stream diversion must be removed at the end of each work day or sooner if rain is predicted.
- Hazardous Materials. Except as authorized by this Certification, substances hazardous to aquatic life including, but not limited to, petroleum products, unused cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each Project activity involving hazardous materials.
- J. Limits of Disturbance. The Applicant shall clearly define the limits of Project disturbance to waters of the United States and/or State using highly visible markers such as flag markers, construction fencing, or silt barriers prior to commencement of Project construction activities within those areas.
- K. Beneficial Use Protection. The Applicant must take all necessary measures to protect the beneficial uses of San Diego Bay. This Certification requires compliance with all applicable requirements of the Basin Plan. If at any time, an unauthorized discharge to surface waters (including rivers or streams) occurs or monitoring indicates that the Project is violating, or threatens to violate, water quality objectives, the associated Project activities shall cease immediately and the San Diego Water Board shall be notified in accordance with Notification Requirement VII.A of this Certification. Associated Project activities may not resume without approval from the San Diego Water Board.

#### IV. PROJECT IMPACTS

A. **Project Impacts.** Unavoidable Project impacts to San Diego Bay within the Pueblo San Diego Hydrologic Unit must not exceed 0.007 acre (79 linear feet).

#### V. MONITORING AND REPORTING REQUIREMENTS

- A. Final Project Completion Report. The Applicant must submit a Final Project Completion Report to the San Diego Water Board within 30 days of completion of the Project. The final report must include the following information:
  - 1. Date of construction initiation;
  - 2. Date of construction completion;
  - 3. As-built drawings of the Project, no bigger than 11"X17";

- 4. Photo documentation of implemented post-construction BMPs and all areas of permanent and temporary impacts, prior to and after project construction. Photo documentation must be conducted in accordance with guidelines posted at <u>http://www.waterboards.ca.gov/sandiego/water\_issues/programs/401\_certification/d</u> <u>ocs/StreamPhotoDocSOP.pdf.</u> In addition, photo documentation must include Global Positioning System (GPS) coordinates for each of the photo points referenced; and
- 5. A description of each incident of noncompliance during the monitoring period and its cause, the period of the noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- B. Reporting Authority. The submittal of information required under this Certification, or in response to a suspected violation of any condition of this Certification, is required pursuant to Water Code section 13267 and 13383. Civil liability may be administratively imposed by the San Diego Water Board for failure to submit information pursuant to Water Code sections 13268 or 13385.
- C. Electronic Document Submittal. The Applicant must submit all reports and information required under this Certification in electronic format via e-mail to <u>SanDiego@waterboards.ca.gov</u>. Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc and delivered to:

California Regional Water Quality Control Board San Diego Region Attn: 401 Certification No. R9-2014-0060:PIN 806903 2375 Northside Drive, Suite 100 San Diego, California 92108

Each electronic document must be submitted as a single file, in Portable Document Format (PDF) format, and converted to text searchable format using Optical Character Recognition (OCR). All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted. Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. R9-2014-0060:PIN 806903.

- D. **Document Signatory Requirements**. All applications, reports, or information submitted to the San Diego Water Board must be signed as follows:
  - 1. For a corporation, by a responsible corporate officer of at least the level of vice president.
  - 2. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.

- 4. A duly authorized representative may sign applications, reports, or information if:
  - a. The authorization is made in writing by a person described above.
  - b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
  - c. The written authorization is submitted to the San Diego Water Board Executive Officer.

If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Project, a new authorization satisfying the above requirements must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative.

E. **Document Certification Requirements**. All applications, reports, or information submitted to the San Diego Water Board must be certified as follows:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

#### VI. NOTIFICATION REQUIREMENTS

- A. **Twenty Four Hour Non-Compliance Reporting.** The Applicant shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the San Diego Water Board within **24 hours** from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
- B. **Anticipated Noncompliance**. The Applicant shall give advance notice to the San Diego Water Board of any planned changes in the Project which may result in noncompliance with Certification conditions or requirements.

- C. **Transfers.** This Certification is not transferable in its entirety or in part to any person or organization except after notice to the San Diego Water Board in accordance with the following terms:
  - 1. **Transfer of Property Ownership:** The Applicant must notify the San Diego Water Board of any change in ownership of the Project area. Notification of change in ownership must include, but not be limited to, a statement that the Applicant has provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the certification requirements and the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the San Diego Water Board within 10 days of the transfer of ownership.
  - 2. Transfer of Post-Construction BMP Maintenance Responsibility: The Applicant assumes responsibility for the inspection and maintenance of all post-construction structural BMPs until such responsibility is legally transferred to another entity. At the time maintenance responsibility for post-construction BMPs is legally transferred the Applicant must submit to the San Diego Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer specifications. The Applicant must provide such notification to the San Diego Water Board within 10 days of the transfer of BMP maintenance responsibility.

Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Applicant will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Applicant of this Certification in the event that a transferee fails to comply.

D. **Discharge Commencement**. The Applicant must notify the San Diego Water Board in writing **at least 5 days prior to** the start of Project construction.

#### VII. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

A. The San Diego Unified Port District is the Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000, et seq.) section 21067, and CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.) section 15367, and has determined that the Project is categorically exempt.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> 14 CCR section 15302

- B. The San Diego Water Board is a Responsible Agency under CEQA (Public Resources Code section 21069; CEQA Guidelines section 15381). The San Diego Water Board has independently determined that the Project is categorically exempt because the project replaces an existing structure located on the same site and will have substantially the same purpose and capacity as the structures being replaced.<sup>2</sup>
- C. As a Responsible Agency under CEQA, the San Diego Water Board will file a Notice of Exemption in accordance with CEQA Guidelines section 15062.

#### VIII. SAN DIEGO WATER BOARD CONTACT PERSON

Lisa Honma, Environmental Scientist Telephone: (619) 521-3367 Email: Lisa.Honma@waterboards.ca.gov

#### IX. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the Kona Kai Seawall Repair Project (Certification No. R9-2014-0060) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)," which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017-DWQ is conditional and, should new information come to our attention that indicates a water guality problem, the San Diego Water Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited to, and all proposed mitigation being completed in strict compliance with, the applicants' Project description and/or the description in this Certification, and (b) compliance with all applicable requirements of the Basin Plan.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Certification No. R9-2014-0060 issued on March 24, 2015.

The Chan

DAVID W. GIBSON Executive Officer San Diego Water Board

<u>3/24/2015</u> Date

<sup>2</sup> 14 CCR 15302

#### ATTACHMENT 1

#### DEFINITIONS

**Activity** - when used in reference to a permit means any action, undertaking, or project including, but not limited to, construction, operation, maintenance, repair, modification, and restoration which may result in any discharge to waters of the state.

**Buffer** - means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

**California Rapid Assessment Method (CRAM) -** is a wetland assessment method intended to provide a rapid, scientifically-defensible and repeatable assessment methodology to monitor status and trends in the conditions of wetlands for applications throughout the state. It can also be used to assess the performance of compensatory mitigation projects and restoration projects. CRAM provides an assessment of overall ecological condition in terms of four attributes: landscape context and buffer, hydrology, physical structure and biotic structure. CRAM also includes an assessment of key stressors that may be affecting wetland condition and a "field to PC" data management tool (eCRAM) to ensure consistency and quality of data produced with the method.

**Compensatory Mitigation Project** - means compensatory mitigation implemented by the Applicant as a requirement of this Certification (i.e., applicant -responsible mitigation), or by a mitigation bank or an in-lieu fee program.

**Discharge of dredged material** – means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States and/or State.

**Discharge of fill material** – means the addition of fill material into waters of the United States and/or State.

**Dredged material** – means material that is excavated or dredged from waters of the United States and/or State.

**Ecological Success Performance Standards** – means observable or measurable physical (including hydrological), chemical, and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

**Enhancement** – means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

**Establishment** – means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist. Creation results in a gain in aquatic resource area.

**Fill material** – means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body.

**Isolated wetland** – means a wetland with no surface water connection to other aquatic resources.

**Mitigation Bank** – means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing mitigation for impacts authorized by this Certification.

**Preservation** - means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

**Re-establishment** - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/ historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

**Rehabilitation** - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/ historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

**Restoration** - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

**Start of Project Construction** - For the purpose of this Certification, "start of Project construction" means to engage in a program of on-site construction, including site clearing, grading, dredging, landfilling, changing equipment, substituting equipment, or even moving the location of equipment specifically designed for a stationary source in preparation for the fabrication, erection or installation of the building components of the stationary source within waters of the United States and/or State.

**Uplands** - means non-wetland areas that lack any field-based indicators of wetlands or other aquatic conditions. Uplands are generally well-drained and occur above (i.e., up-slope) from nearby aquatic areas. Wetlands can, however, be entirely surrounded by uplands. For example, some natural seeps and constructed stock ponds lack aboveground hydrological connection to other aquatic areas. In the watershed context, uplands comprise the landscape matrix in which aquatic areas form. They are the primary sources of sediment, surface runoff, and associated chemicals that are deposited in aquatic areas or transported through them.

**Water quality objectives and other appropriate requirements of state law** – means the water quality objectives and beneficial uses as specified in the appropriate water quality control plan(s); the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act; and any other appropriate requirement of state law.

Westgroup Kona Kai, LLC Kona Kai Seawall Repair Project Certification No. R9-2014-0060

#### ATTACHMENT 2 PROJECT FIGURES AND PLANS

- Exhibit 1: Regional Vicinity
- Exhibit 2: Site Vicinity
- Exhibit 3: Project Site
- Exhibit 4: Map of Equipment Access and Storage Area
- Exhibit 5: Engineering Plans Sheets S1 and S2





not to scale

kona kai seawall repair project **Regional Vicinity** 

Exhibit 1



KONA KAI SEAWALL REPAIR PROJECT **Site Vicinity** 

0 



5/30/14 JN 141606-20251 MAS

Exhibit 2





Feet

KONA KAI SEAWALL REPAIR PROJECT **Project Site** 



# GENERAL NOTES FOR MASONRY RETAINING WALLS

#### DESIGN CONDITIONS:

Walls are to be used for the loading conditions shown for each type wall. Design H shall not be exceeded. Footing key is required except as shown otherwise or when found unnecessary by the Engineer. Special footing design is required where foundation material is incapable of supporting toe pressure listed in table.

#### DESIGN DATA:

Reinforced Concrete: Fc=8.3 Mpa (1200 psi) F'c=20.7 Mpa (3000 psi) Fs=138 Mpa (20,000 psi) n=10

Reinforced Masonry: F'm=41.4 Mpa (600 psi) Fm=1.4 Mpa (200 psi) Fs=138 Mpa (20,000 psi) n=50

Earth=1922 kg/cu m (120 pcf) and Equivalent Fluid Pressure=1.76 kg/sg m (36 psf) per 305mm (foot) of height. Walls shown for 1 1/2:1 unlimited sloping surcharge

are designed in accordance with Rankline's formula for unlimited sloping surcharge with a  $\phi = 33^{\circ} 13m(42')$ . **REINFORCEMENT:** 

Intermediate grade, hard grade, or rail steel deformation shall conform ASTM A615, A616, A617.

Bars shall lap 40 diameters, where spliced, unless otherwise shown on the plans. Bends shall conform to the Manual of Standard Practice, A.C.1. Backing for hooks is four diameters. All bar

#### embedments are clear distances to outside of bar. Spacing for parallel bars is center to center bars.

MASONRY:

All reinforced masonry retaining walls be

constructed of regular or light weight standard units conforming to the "Standard Specifications for Public Works Construction." JOINTS:

Vertical control joints shall be placed at 9.75m (32') intervals maximum. Joints shall be designed to resist shear and other lateral forces while permitting longitudinal movement. Vertical expansion joints shall be placed at 29.3m (96') intervals maximum.

#### CONCRETE:

Footing concrete shall be 332 kg/M<sup>3</sup>-C-22Mpa (560-C-3250), using Type B aggregate when placing conditions permit.

#### BACKFILL

No backfill material shall be placed against masonry retaining walls until grout has reached design strength or until grout has cured for a minimum of 28 days. Compaction of backfill material by jetting or ponding with water will not be permitted. Each layer of backfill shall be moistened as directed by the Engineer and thoroughly tamped, rolled or otherwise compacted until the relative compacting is not less than 90%.

## FENCING:

Safety fencing shall be installed at the top of the wall as required by the agency. INSPECTIONS:

## Call for inspections as follows:

- A. When the footing has been formed, with the steel tied securely in final position, and is ready for the concrete to be placed.
- B. Where cleanout holes are not provided: (1) After the blocks have been laid up to a height
- of 1.22m (4') or full height for walls up to 1.52m (5'), with steel in place but before the grout is poured, and.....
- (2) After the first lift is properly grouted, the blocks have been laid up to the top of the wall with the steel tied securely in place but before the upper lift is grouted. Where cleanout holes are provided:
- After the blocks have been laid up to the top of the wall, with the steel tied
- securely in place, but before grouting. C. After grouting is complete and after rock or
- rubble wall drains are in place but before earth backfill is placed.
- D. Final inspection when all work has been completed.

## CONCRETE GROUT AND MORTAR MIXES:

Concrete grout shall attain a minimum compressive strength of 13.8 Mpa (2,000 psi) in 28 days and mortar shall attain 12.4 Mpa (1,800) psi in 28 days. All cells shall be filled with grout. Rod or vibrate consolidation. Bring grout within 10 minutes of pouring to insure grout to a point 51mm (2") from the top of masonry units when grouting of second lift is to be continued at another time.

### MORTAR KEY:

To insure proper bonding between the footing and the first course of block, a mortar key shall be formed by embedding a flat 2 x 4 flush with and at the top of the freshly poured footing. The 2 x 4 should be removed after the concrete has started to harden (approximately 1 hour). A mortar key may be omitted if the first course of block is set into the fresh concrete when the footing is poured, and a good bond is obtained.

WALL DRAINS: Wall drains shall be provided in accordance with Standard Drawing C-8.

#### SOIL:

All footings shall extend at least 305mm (12") into undisturbed natural soil or approved compacted fill. Soil should be dampened prior to placing concrete in footings.





#### GENERAL NOTES/REQUIREMENTS

- ON THE DRAWINGS.

### FOUNDATION

- 1. SOILS INVESTIGATION: REPORT No.: 7192.1 DATED: SEPTEMBER 24, 2013 BY: HETHERINGTON ENGINEERING, INC.
- 2. FOUNDATION MATERIAL: BAY DEPOSITS OVER BAY POINT FORMATION
- 3. MINIMUM FOUNDED DEPTH & WIDTH OF FOOTINGS: BELOW ROUGH PAD GRADE ...... WIDTH .....
- 4. FOUNDING OF FOOTINGS & SLABS: ON FIRM UNDISTURBED NATURAL SOILS OR APPROVED COMPACTED SOILS.
- 5. SOIL PRESSURES:
- SOIL BEARING ....

COEFFICIENT OF FRICTION ...... PASSIVE PRESSURE .... CANTILEVER ACTIVE (LEVEL)......

### SCOPE OF WORK

- BY EXISTING ON-SITE THOROUGHFARES.

**SPECIFICALLY THE FOLLOWING WORK IS TO BE DONE:** 

- 1. REMOVE EXISTING SIDEWALK / FLATWORK BEHIND WALL TO BE REPLACED.
- 2. REMOVE BIKE RACK BEHIND WALL TO BE REPLACED.
- 3. REMOVE (1) LIGHT POLE AT AREA OF WALL REPAIR.

# SPECIAL INSPECTIONS

- AND DEPTH OF FOOTING.
- OF THE THREE CORES.
- WATERS OR DEBRIS WILL BE DISCHARGED INTO THE BAY.

- - 4. REMOVE (4) PALM TREES AT AREA OF WALL REPAIR.

  - 6. INSTALL WATERPROOFING & PERFORATED PIPE SYSTEM.
  - 7. BACKFILL BEHIND NEW WALL W/ 2-SAC SAND CEMENT SLURRY.
  - 8. REINSTALL LIGHT POLE.
  - 9. REPLANT 4 PALM TREES.
  - 10. REINSTALL 4" FLATWORK, FINISH TO ARCHITECT'S SPECIFICATIONS.

  - EPOXY AT REINFORCING STEEL.





