STATE OF HAWAI\'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
Honolulu, Hawai\'i

180-Day Exp. Date: May 22, 2013

April 26, 2013

Board of Land and Natural Resources
State of Hawai\'i
Honolulu, Hawai\'i

REGARDING: Conservation District Use Application (CDUA) HA-3651
Pier 4 of the Interisland Cargo Terminal

APPLICANT: State Department of Transportation (DOT)
Harbors Division

LANDOWNER: State of Hawai\'i, Set Aside to DOT-Harbors Division

LOCATION: Kūhiō Bay, Waiākea, South Hilo, Hawai\'i
Submerged Land Ma\'ā of Tax Map Keys: (3) 2-1-007:011 & (3) 2-1-009:007

SUBZONE: Resource

BACKGROUND:
On December 17, 1993, the Board of Land and Natural Resources approved the Department of Transportation's (DOT) Conservation District Use Permit (CDUP) SH-2658 for the subdivision of submerged lands for 7 Commercial Harbors located on 5 islands. The purpose of CDUP SH-2658 was to clarify jurisdiction of submerged lands at State commercial harbors to facilitate expeditious processing of development authorizations. However the Pier 4 site was not included with this action. Thus, the DOT has been required to obtain a CDUP (Exhibit 1).

In the November 23, 2000 issue of the Office of Environmental Quality Control's (OEQC) Environmental, the Environmental Impact Statement Preparation Notice for the Hawaii Commercial Harbors 2020 Master Plan was published. The objectives of the 2020 Master Plan are to optimize the use of harbor lands and water resources; plan facility development in an efficient, safe and secure manner and minimize the impacts on activities bordering the harbors (Exhibit 2& 3).

According to the 2020 Master Plan proposed improvements at Hilo Harbor include dry bulk cargo staging area; inter-island cargo terminal at Pier 4; overseas container terminal at Pier 1; passenger terminal at proposed Pier 5; Ocean Research Facility at proposed Pier 6; dredging pier 3-6 berths; and berths for commercial fishing, Coast Guard, visiting and research boats and access roadways.
On February 23, 2003, Executive Order (EO) 3962 set aside additional submerged land to the Department of Transportation that included the approved delineated area of Hilo Bay under SH-2658 and also included additional lands of the Pier 4 site and the Ocean View Lease Lots to the west. The set aside for Hilo Harbor was subject to “compliance with all requirements of the federal, state, and county authorities, and observance of all county ordinances and state and federal statutes, rules, and regulations, now in force or which may hereinafter be in force” (Exhibit 4).

DESCRIPTION OF AREA (Exhibits 5, 6, 7 & 8)
The project site is located on the windward side of the island of Hawai‘i at the shoreline and submerged land of Kūhiō Bay, Waiākea, South Hilo, ma kai of TMKs: (3) 2-1-007:011 & (3) 2-1-009:007 within the Resource subzone of the Conservation District. The project site is adjacent and to the west of Pier 3 and to the east of State leased residential lots with industrial uses to the south (ma uka). Neighboring land uses within the vicinity include warehouses, UH-Hilo’s Pacific Aquatic Research Center, Petroleum Storage and Keaukaha Hawaiian Homelands.

Leased State properties around the harbor are currently used for a variety of uses such as light industrial and commercial operations, product storage and residences along a portion of the shoreline known as the Ocean View Lease Lots or 'Baker’s Beach, a white sand beach created between 1925 and 1930 with coral spoil material dredged from the Hilo Harbor basin that fronted businessman, Adam Baker’s large residence. In the 1960’s, this man-made beach eventually eroded as no natural process of sand replenishment exists to restore the lost material. The leases to these nearby residences are set to expire in 2015. Harbor improvements are proposed to extend into this area in accordance with the 2020 Harbor Master Plan.

According to the EIS, Hilo Harbor lies in Flood Zone V27-an area inundated by 100-year flooding with velocity hazard (wave action) and in Lava Flow Hazard Zone 3 of a scale of 1-9 with 1 being the most severe hazard zone. The lava formation beneath the Hilo Harbor area appears to be a pahoehoe flow. The basalt formation in the area are permeable rock and can transmit water horizontally and vertically readily.

Rainfall is about 150-inches/year and temperatures range from 74-84 degrees. Hilo Bay receives surface water runoff from several streams and most likely from domestic nonpoint pollution. The existing breakwater decreases circulation of the Bay and it is well known that the Bay has impaired waters. It is likely that major sediment deposits have accrued over the years in the project area.

No prehistoric archaeological sites or features were present in the project area. Historic concrete features related to past wharf activities were documented then demolished to create the apron for the pier. A prehistoric Heiau exists at the west end of the Ocean View Lots and may have been disassembled under the direction of Queen Ka‘ahumanu. The Heiau has been identified as an Ipo Lono, believed to be used for fishing and agricultural ceremonies. Historic maps of the area indicate boat moorings was once present along the Bay in this area.

The application and the EIS lists fishing as a traditional use and states the commercial harbor area is open to the public and encourages recreational fishing off of the piers when the piers are not in use or at night with a ‘fishing permit.’ The application states that Pier 4 will be an
additional pier that could be utilized for recreational fishing. However, upon contacting the Harbors Division Hawaii District Office, it was stated that Commercial Harbors do not allow recreational fishing on controlled access piers.

A survey of marine biology was completed by AECOS, Inc. in September 2000. Within Hilo Bay, the largest numbers of organisms were observed in the project site. Two of the only four octo-coralts that occur in Hawaii were found in this area but not seen elsewhere along shoreline. Other invertebrates recorded were various species of sponges and two hard corals. Only one threatened species was observed in the Bay, a green sea turtle.

The project site has been dredged in 2011 and an Articulating Concrete Block (ACB) revetment has been installed recently under a US Army Corp permit. Therefore, according to the applicant, there are no natural or cultural resources that will be impacted in the project site.

PROPOSED USE (Exhibits 9, 10, 11, 12 & 13)

The proposed land use entails the construction of Pier 4 to provide berthing space for the Interisland Cargo Terminal. The pier design is a combination of bulkhead (sheet piles with backfill) with concrete piles and deck. The project includes constructing a new approximately 602 linear-ft. by 50-ft wide reinforced concrete pier. The pier will be composed of 7" thick cast-in-place concrete slab on top of precast pre-stressed 11" thick concrete plank. The entire concrete pier deck will be protected by 1" thick asphalt concrete pavement.

The pier deck will be supported by two hundred eight-seven 20" precast/stressed octagonal concrete piles and fifty-nine 60" Ø drilled shaft piles. Multiple piles will be installed through the existing ACB revetment. A permanent steel sheet pile and a 12-inch thick concrete wall will be installed on the mauka side of the pier prior to the shaft drilling activities. After the installation of the drilled shafts, pile cap construction will proceed that includes the installation of a landside temporary steel sheet pile and bulkhead concrete work.

Repair of the existing and new ACB mattresses with geotextile filter cloth will be installed on the 200-ft submerged slope. The last 12’ of the slope will be used for armor stone coverage. Octagonal crib piles will be used horizontally above and below the armor stone facing. The armor stone will be placed over the existing ACB revetment.

Silt curtains and other silt containment devices will be deployed around barges, cranes, and associated vessels. A temporary silt curtain will be placed around construction activities to confine and isolate the disturbed areas. Silt curtains will be placed prior to any construction activity in the water. The silt curtains will be installed to completely enclose the piling operations and backfill placement. Silt curtains will be maintained in conformance with the manufacturer’s specification.

Silt curtains will also be utilized to create a barrier to protect endangered sea life from entering an area of potential harm. Coordination with the US Fish & Wildlife Services and National Marine Fisheries will be maintained during project planning and construction.

To mitigate against coastal hazards, the design of facilities will be to present codes. The design of the pier considered impacts of harbor surge and wind conditions. Pier 4 will create 30,900 ft²
of impervious surface that will increase surface runoff. In accordance with the EIS, Harbors Division will investigate and implement proper methods to mitigate discharge of oil from vehicles such as subsurface catchment systems or permanent floating oil booms.

Unavoidable but temporary noise impacts may occur during construction. Pile driving may not only generate noise above standards but also induce ground vibrations.

Regarding scenic resources, no mitigation measures would completely alleviate the visual impacts from the east-facing Banyan Drive hotels resulting from the construction of additional piers. However the EIS noted that watching harbor activities—the coming and goings of ships are popular for hotel guests.

The threat of alien species thru increasing cargo capacity at Hilo Harbor is negligible as all goods destined for Hawai‘i are received and inspected at Honolulu Harbor and then transferred to interisland vessels to transport to harbors on the island of Hawaii.

According to the FEIS, commercial harbor improvements are driven by two factors: the increase in shipping and cargo volume and the need for cruise ship berthing and passenger accommodations. The purpose of Pier 4 is: 1) to provide cargo, passenger and research vessel berths in response to the demand for space and facilities to handle increases in shipping and cargo volume at Hilo Harbor to serve the increasing resident population and the growing diversified agricultural industry; and 2) to create cruise passenger harbor facilities to accommodate multiple cruise ships and to provide passenger amenities. Future facilities must keep up with modifications to cargo handling changes such as accommodation of longer and heavier shipping containers.

Alternatives Considered
A number of alternatives were considered in regards to Hilo Harbor improvements: the no action alternative; the delayed action alternative; alternative development; and alternative locations. The no action was rejected due to the economic consequences of lost revenue opportunity to Hawaii Island and increased importation costs (airline transportation). The delayed action alternatives would have the same economic consequences as the no action alternative. Development alternatives include installing crane rails, shifting proposed operations to Pier 1, consolidated cement storage operations to Kawaihae, lengthening Pier 1, and filling in Radio Bay. Each of these alternatives had short comings and would not alleviate the lack of capacity to bring in cargo and passengers. Alternative locations were not seriously considered given the existing infrastructure at the harbor and the fact that these commercial harbor sites were chosen and selected to offer the most advantageous conditions for harbor location.

SUMMARY OF COMMENTS
The Office of Conservation and Coastal Lands referred this application to the following agencies for review and comment: the US Fish and Wildlife Service and the Department of the Army; the State-Department of Health; the Office of Hawaiian Affairs; the Office of Environmental Quality Control; the Department of Land and Natural Resources Divisions of: Aquatic Resources; Conservation and Resource Enforcement; Boating and Ocean Recreation; and the Hawaii District Land Office; the County of Hawaii- Department of Planning and the Keaukaha
Community Association. In addition, the CDUA was also sent to the Hilo Public Library to make this information readily available to those who may wish to review it and a member of the general public whom requested to review the CDUA.

Comments were received by the following and summarized by Staff:

THE STATE

Department of Land and Natural Resources

Division of Boating and Ocean Recreation
No comments

Division of Conservation and Resource Enforcement
No comments

Hawaii District Land Office
No comments

COUNTY OF HAWAII

General Public 1
A packet of information entitled “Broken Promises” was received from a member of the public. Enclosed were:

- OCCLs Acceptance letter/request for comments for the project;
- A request for DLNR to review the Board approved Memorandum of Agreement (MOA) and the signed MOA regarding the placement of Day Use Moorings as mitigation for the completed dredge work of the site;
- A number of ‘Request to Access A Government Record’ and responses to/from the Department of Transportation;
- A Tribune Herald article regarding a proposed artificial reef in the Ocean Recreational Management Area of Hilo Harbor that is no longer being considered and OCCL’s comments regarding the proposal;
- Statements that DOT Harbors ‘promised’ to engage Hilo stakeholders but never came back; and
- DOT’s response to comments regarding the Department of Health Water Quality Certification for the artificial reef proposal.¹

At the Public Hearing, held on January 16, 2013 in Hilo, Hawai‘i, this individual requested a fishing permit as it was stated in the CDUA that the DOT issues fishing permits.

Applicant’s response
The MOA between BLNR and DOT calls for $300,000 to be utilized for the Day Use Moorings Statewide.

¹ As a matter of clarification, DOT was authorized to dredge and place a revetment at this site under a federal Army Corp. permit. With the exception of the first bullet item, ALL of these items are in reference to DOT’s dredging of the site and NOT to the CDUA for Pier 4.
Regarding your comment about acquiring a permit to fish in Hilo Harbor, a permit was required in the past but unfortunately, the current policy of the DOT Harbors is to not allow anyone to fish within the harbor operations area because of Homeland Security access control requirements.

**Staff notes:** Upon receipt of the applicant’s response, this member of the general public contacted staff and expressed that he was not satisfied with the applicant’s response. Staff notified the consultant and the following response was generated to the commenter:

*It appears you were not satisfied with our response to your comments. However, most of the documents you sent dealt with the dredging of Hilo Harbor which is already completed and the compensatory mitigation which is going to be implemented by DLNR. The MOA for the compensatory mitigation is for Hilo Harbor dredging and NOT Pier 4. If you have specific comments related to Pier 4 construction in relation to the CDUA please let me know what other questions you would like us to answer.*

In response to the applicant’s additional comments, a memorandum was generated by this individual to staff requesting DOT purchasing, operate and providing staff for a ‘Super –Sucker’ or plan and design an artificial reef offshore of Liliuokalani Gardens or Nihon Restaurant. Staff forwarded these comments to DOT’s consultant.

Regarding mitigation for the Hilo Harbor dredging activities and engaging stakeholders, the Department is hosting public meetings to solicit user’s feedback for the proposed placement of day use mooring buoys.

**ANALYSIS**

After reviewing the application, by correspondence dated November 28, 2012, the Department has found that:

1. The proposed use is an identified land use in the Resource subzone of the Conservation District, pursuant to the Hawaii Administrative Rules (HAR) §13-5-22, P-6 PUBLIC PURPOSE USES, Not for profit land uses undertaken in support of a public service by an agency of the county, state, or federal government. Examples of public purpose uses may include but are not limited to public roads, marinas, harbors, airports, trails, water systems and other utilities, energy generation from renewable sources, communication systems, flood or erosion control projects, recreational facilities, community centers, and other public purpose uses, intended to benefit the public in accordance with public policy and the purpose of the conservation district. Please be advised, however, that this finding does not constitute approval of the proposal;

2. Pursuant to §13-5-40, HAR, a Public Hearing will be required;

3. In conformance with Chapter 343, Hawaii Revised Statutes (HRS), as amended, and Chapter 11-200, HAR, the Final Environmental Impact Statement (FEIS) for the Hawaii Commercial Harbors 2020 Master Plan was accepted by the Office of the Governor on
August 20, 2001 and notice was published in the August 23, 2001 issue of the Environmental Notice.

4. By correspondence dated June 9, 2011, the County of Hawaii Planning Department determined that no County or Special Management Area permits are required.

Notice of the application was published in the December 8, 2012 issue of the Environmental Notice.

A public hearing was held on January 16, 2013 in Hilo, Hawai‘i to receive public testimony. About 17 individuals were in attendance. Testimony given discussed a nearby Heiau, recently named Ho’opakele that was noted as the last Heiau in Hilo. A community group has been taking care of the Heiau and expressed their desire to protect and preserve the site.

Other individuals from the Keaukahā community expressed their frustration and lack of notification in regards to the recently completed dredging. Apparently a portion of dredged material was dumped off shore at the Hilo Dredged Material Ocean Disposal Site and the sediment came back to shore or was encountered by fishermen, divers and “polluted the fishing grounds.” Individuals questioned why the Clean Water Act was not adhered to and why didn’t the DOT work with the County of Hawai‘i to utilize the dredged material for fill for County projects. A portion of the dredge was also retained to be utilized as fill for harbor improvements.

CONSERVATION CRITERIA

The following discussion evaluates the merits of the proposed land use by applying the criteria established in §13-5-30, HAR:

1) The proposed use is consistent with the purpose of the Conservation District.

The objective of the Conservation District is to conserve, protect and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety and welfare.

The project is considered an identified land use in the subject area of the Conservation District; as such, it is subject to the regulatory process established in Chapter 183C, HRS and detailed further in Chapter 13-5, HAR. This process provides for the application of appropriate management tools to protect the relevant resources, including objective analysis and thoughtful decision-making by the Department and Board of Land and Natural Resources.

The proposed pier is a public purpose use to improve and provide berthing space for cargo ships to deliver goods to Hawaii Island. The proposed use will contribute to insure sustainability and public health safety and welfare. The proposed pier site is located in an industrial setting adjacent to Hilo Commercial Harbor and is the first improvement for harbor expansion. The site has been recently dredged under a federal permit that included best management practices to mitigate the potential effects on natural resources. The action does not harm any important natural or cultural resources.
Due to this recent dredging activity, impacts to the Conservation District would be incremental. The project area is not of high conservation value. Best Management Practices will be observed during construction.

2) The proposed land use is consistent with the objectives of the Subzone of the land on which the use will occur.

The objective of the Resource Subzone is to ensure with proper management, the sustainable use of the natural resources of those areas. The proposed use is an identified land use in the Resource subzone of the Conservation District, pursuant to the Hawaii Administrative Rules (HAR) §13-5-22, P-6 PUBLIC PURPOSE USES, Not for profit land uses undertaken in support of a public service by an agency of the county, state, or federal government. Examples of public purpose uses may include but are not limited to public roads, marinas, harbors, airports, trails, water systems and other utilities, energy generation from renewable sources, communication systems, flood or erosion control projects, recreational facilities, community centers, and other public purpose uses, intended to benefit the public in accordance with public policy and the purpose of the conservation district. Staff believes through the implementation of best management practices, marine life and waters will be reasonably protected.

3) The proposed land use complies with the provisions and guidelines contained in Chapter 205A, HRS entitled "Coastal Zone Management", where applicable.

Staff believes the proposal will comply with the provisions and guidelines of Chapter 205A, HRS as a Hawaii Coastal Zone Management (CZM) Program Federal Consistency Review is required. As this is a disturbed industrial waterfront area, the proposed use does not conflict with CZM objectives and policies to protect such resources and activities such as recreational use, scenic and open space, coastal ecosystems, and beach protection. Regarding other CZM objectives, the planning for the proposal is consistent with the historic resources objective as historic features were identified and documented. As far as economic uses, the proposed pier is part of the Commercial Harbor expansion and is important to the State's economy; the pier has been designed to withstand coastal hazards and is part of the managed development of Hilo's Commercial Harbor. The DOT, the OCCL, DOBOR and the Army Corps have had or shall be conducting public meetings or hearings and have solicited for public comments in regards to harbor improvements.

4) The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.

Staff believes the proposed land use will not cause substantial adverse impacts to existing natural resources within the surrounding area, community or region. The pier site has been recently dredged under an Army Corp permit that will be utilizing 'Day Use Moorings' to mitigate the effects of the dredge. Due to this recent dredging activity, impacts to the Conservation District would be incremental. The project area is not of
high conservation value. Best Management Practices will be observed during construction.

5) The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

The proposed additional pier is consistent with other uses of the Commercial Harbor area. The proposed land use is compatible with the locality and surrounding area and is appropriate to the physical conditions and capabilities of the partially submerged site. The proposal does not change the existing use of the area as an industrial waterfront.

6) The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable.

The area has been heavily industrialized and it is unlikely that this project will create adverse impacts to the existing physical and environmental aspect of the land.

7) Subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.

No subdivision of land is proposed.

8) The proposed land use will not be materially detrimental to the public health, safety and welfare.

The proposed location is an industrial waterfront area. BMPs and other mitigation measures shall be implemented during construction and operation of the facility to minimize impacts to the surrounding environment including the use of silt and dust fencing, berms, storm water and industrial BMPs and other practices as required by Federal, State and County regulations.

**Traditional Uses**

Prehistoric uses likely included habitation, fishing and collecting of marine resources, burial and rituals. According to the Hawaii Commercial Harbors 2020 Master Plan (2001) Haun & Associates did an archaeological survey of Hilo Harbor. The only traditional Hawaiian site identified is a heiau to the west. The absence of traditional sites is attributed to two destructive tsunamis of 1947 and 1960 and extensive disturbance caused by construction activities associated with the breakwater, port facilities and adjacent residence of Ocean View lease lots.

No cultural artifacts or burial remains were uncovered or discovered nor have any been observed during periods of investigation of the site. Traditional or culturally significant resources are not expected in the project site area. The project will be conditioned that if cultural finds are discovered, all work will cease and SHPD will be notified.

During the processing of this application, no comments were received from native practitioners, the Office of Hawaiian Affairs or the Historic Preservation Division. To the extent to which
traditional and customary native Hawaiian rights are exercised, the proposed action does not appear to affect traditional Hawaiian rights; it is believed that no action is necessary to protect these rights.

DISCUSSION
Presently Hilo Harbor has 3 commercial piers, Piers 1-3, that serve as the berthing and loading/unloading of ships, barges, and small boats and also for the berthing of passenger cruise ship and dry cargo operations. In addition to what was submitted by the applicant, staff also reviewed the Hawai‘i Island Commercial Harbors 2035 Master Plan Update.

According to the 2035 Master Plan Update, Pier 4 facilities will have ten acres of yard area, upgraded utilities and lighting, a new comfort station, perimeter security fencing and a new terminal gate. With the completion of the 602’ x 50’ Pier 4, berth capacity will increase 26% and storage space will increase 16%.

Staff notes that the newly named Ho'opakele Heiau was correctly located on parcel 11 and the recognition that a local group wishes to document and preserve the Heiau was also mentioned in the 2035 Update. Although not in the project site, this is of worthy mention as the significance of the Heiau was gradually reduced in the pages of the 2020 FEIS Master Plan completed in 2001 and future harbor improvements are proposed adjacent to the Heiau site.

The undeveloped shoreline area has already been irretrievably changed in shape and character through existing harbor facilities and prior dredging of the site. Adverse impacts that cannot be avoided during construction include increased noise, construction–related traffic; degraded water quality; generation of construction waste and vibration from pile driving. The DOT will mitigate adverse impacts as much as possible through the implementation of best management practices.

As Hawaii is dependent on imported goods entering the State, Hawaii's harbors are crucial infrastructure to facilitate and insure shipments of essential commodities. Expanding Harbor operations will support businesses by providing a means to deliver needed supplies, and goods. The pier will provide more berthing space for cruise ships, cargo handling activity, delivery of goods and also increase capacity to export products.

Staff believes that the construction of Pier 4 is an acceptable use of the Conservation District at this location.

RECOMMENDATION

Based on the preceding analysis, Staff recommends that the Board of Land and Natural Resources APPROVE this application for Pier 4 of the Interisland Cargo Terminal by the Department of Transportation Harbors Division Located at Kūhiō Bay, Waiākea, South Hilo, Hawai‘i upon submerged land ma kai of Tax Map Keys: (3) 2-1-007:011 & (3) 2-1-009:007, subject to the following conditions:

1. The permittee shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of this chapter;
2. The permittee shall comply with all applicable department of health administrative rules;

3. Before proceeding with any work authorized by the department or the board, the permittee shall submit four copies of the construction plans and specifications to the chairperson or an authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three of the copies will be returned to the permittee. Plan approval by the chairperson does not constitute approval required from other agencies;

4. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within two years of the approval of such use, in accordance with construction plans that have been signed by the chairperson, and shall be completed within three years of the approval of such use. The permittee shall notify the department in writing when construction activity is initiated and when it is completed;

5. All representations relative to mitigation set forth in the accepted environmental impact statement for the proposed use are incorporated as conditions of the permit;

6. The permittee understands and agrees that the permit does not convey any vested right(s) or exclusive privilege;

7. In issuing the permit, the department and board have relied on the information and data that the permittee has provided in connection with the permit application. If, subsequent to the issuance of the permit such information and data prove to be false, incomplete, or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;

8. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;

9. Obstruction of public roads, trails, lateral shoreline access, and pathways shall be avoided or minimized. If obstruction is unavoidable, the permittee shall provide alternative roads, trails, lateral beach access, or pathways acceptable to the department;

10. During construction, appropriate mitigation measures shall be implemented to minimize impacts to off-site roadways, utilities, and public facilities;

11. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary, or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawaii, and by Hawaii statutory and case law;

12. Should historic remains such as artifacts, burials or concentration of charcoal be encountered during construction activities, work shall cease immediately in the vicinity of the find, and the find shall be protected from further damage. The Historic
Preservation Division shall be contacted (692-8015), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary;

13. When the Department is notified that an individual activity deviates from the scope of work approved by this authorization or activities are adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the permittee to undertake corrective measures to address the condition affecting these resources. The permittee must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;

14. No contamination of the marine or coastal environment (trash or debris) shall result from project-related activities authorized under this permit;

15. The Office of Conservation and Coastal Lands shall be notified (587-0377) in advance of the anticipated construction dates and shall be notified immediately if any changes to the scope of work are anticipated;

16. Other terms and conditions as may be prescribed by the Chairperson; and

17. Failure to comply with any of these conditions shall render this Conservation District Use Permit null and void.

Respectfully submitted,

K. Tiger Mills, Staff Planner
Office of Conservation and Coastal Lands

William J. Aila, Jr., Chairperson
Board of Land and Natural Resources
### TABLE 3
Summary of Planned Improvements to 2020
Hilo Harbor

<table>
<thead>
<tr>
<th>Project</th>
<th>Timing</th>
<th>Area [[K=1,000]]</th>
<th>New Pier</th>
<th>Dredging Alongside Piers*</th>
<th>Clearing, Grading &amp; Paving</th>
<th>Utilities</th>
<th>Shed</th>
<th>Access Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piers 2/3 Dolphins</td>
<td>2002</td>
<td>0.18 acres</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pier 1 Interim Passenger Terminal (Renovate existing shed)</td>
<td>2002</td>
<td>1.7 Acres</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
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<tr>
<td>Dry Bulk Cargo Staging Area</td>
<td>2003</td>
<td>1 Acre</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
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<tr>
<td>Piers 4 Interisland Cargo Terminal</td>
<td>2005</td>
<td>21 Acres</td>
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<tr>
<td>Piers 1 Overseas Cargo Terminal</td>
<td>2010</td>
<td>20 Acres</td>
<td></td>
<td></td>
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<td>Piers 5 Passenger Terminal</td>
<td>2015</td>
<td>0.8-0.9 Acres</td>
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<tr>
<td>Ocean Research Facility</td>
<td>2015</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

* Harbors Division is responsible for dredging from the pier face to the Federal Project Line, where the jurisdiction of the Army Corps of Engineers (ACOE) begins. The ACOE is responsible for dredging of the harbor channel and turning basin area within the harbor.
HILO HARBOR
PART 1
1097.554 ACRES,
MORE OR LESS
(C.S.F. 23.388)

EXHIBIT A
Map Scale: 1 inch = 200 feet

EXHIBIT B
Map Scale: 1 inch = 200 feet

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
SURVEY DIVISION
Randel M. Hashimoto - State Land Surveyor
HILO HARBOR
PARTS 1 AND 2
Waiakea, South Hilo, Island of Hawaii, Hawaii

Order No. 3962
November 12, 2002

Project Site
Executive Order 3962
EXISTING SITE

Prior 2010

January 2013

Pier 4 Hilo Harbor
Views of the shoreline where Pier 4 would be constructed.
Figure 10
2020 Master Plan Improvements
Bulwark with Sheet Pile
Hilo & Kawaihae Harbors
Source: Quim

Not to Scale
Hawaii Commercial Harbors
2020 Master Plan
PEIS

R.M. Towill Corporation

EXHIBIT 9
General Site Plan – Hilo Harbor Interisland Cargo Terminal Facility
CONSTRUCTION SEQUENCE (S3.01)

1. Drive 20' long, prestressed concrete pile at grid lines "E" and "C".
2. Drive steel sheet piles at grid line "E" and "C".
3. Construct 5 feet dia. drill shaft at grid line "E".
4. Backfill the space between grid lines "E" and "C" with Type 3 backfill material up to the bottom of concrete basehead.
5. Place basehead concrete up to horizontal construction joint.
6. Backfill the space between existing grade and finish grade level of slope under the pier as shown on section 1/2 with Type 1 imported crushed rock material (12 inch maximum and 6 inch minimum sizes).
7. Add Type 2 backfill material (imported coarse aggregate conforming size range of Nos. 2 and 3) at each grid line "E" to 17" diameter hole.
8. Install geotextile filter cloth on backfill material.
9. Install 20 inch octagonal crib pile at grid line "E" and anchor stone at grid lines "B" and "C".

Typical Cross-section Plan (A) – Hilo Harbor Interisland Cargo Terminal Facility
INTERISLAND SHIPROR TERMINAL FACILITY

CONSTRUCTION SEQUENCE (IN OUT)

1. INSTALL NORTH PART MACHORS AS SHOWN IN SECTION A.
2. PLACE PRD. PRECAST SETTE MASHARDS ADJACENT TO CONCRETE PILE AS SHOWN ON PLAN.
3. INSTALL 20 100000 RAIL CANS AT GRID "B", TIP - TIP AT ORPH An AT ORH LINES O ARS C.
4. DRIVE 20 518. PRECAST PILES TO CONCRETE PILE AT ORPH LINES 0 AT ORH.
5. REPAIR SAIANOEII 000 NOTIRESS ADLACERI TO CONCRETE P 5145+408 ON SECTION - N.
6. DRIVE 07001 SHEET POLES AT 5810 LINE "O" IN B.
7. REN000 DIISORO CONCRETE MONT NRASS ON GRID LIRE "O" TO ORH.

Typical Cross-section Plan (B) – Hilo Harbor

Interisland Cargo Terminal Facility

EXHIBIT 13