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# W15b

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Staff: Brian O'Neill - SC  
Staff Report: 10/14/2016  
Hearing Date: 11/2/2016

## STAFF REPORT: CDP HEARING

**Application Number:** 3-16-0420

**Applicant:** City of Monterey Office of the Harbor Master

**Project Location:** Monterey Harbor/Marina and Del Monte Beach in the City of Monterey (Monterey County).

**Project Description:** Dredge up to 10,000 cubic yards of sediment during each dredge season (i.e. October 1 to March 31) for five years at the Monterey Harbor/Marina and deposit dredge sediments through beach nourishment at two Del Monte Beach receiver sites.

**Staff Recommendation:** Approval with Conditions.

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## SUMMARY OF STAFF RECOMMENDATION

The City of Monterey Office of the Harbor Master proposes to dredge up to 10,000 cubic yards of sediment each dredge season for five years at the Monterey Harbor and Marina and would dispose of the dredged sediments for beach nourishment at two locations along Del Monte Beach. The Harbor Master indicates that the proposed project is necessary to maintain existing depths in the Harbor and Marina to accommodate coastal-dependent and coastal-related uses. The Commission has historically permitted dredging activities within Monterey Harbor since at least 1993. The most recent permit was for a similar dredging and beach nourishment program approved by the Commission in 2011 (Coastal Development Permit (CDP) 3-10-040) that has proven successful over the past five years. While the proposed dredging and nourishment facilitate high priority uses under the Coastal Act, the project nevertheless raises Coastal Act issues related to the protection of marine resources, coastal water quality, and public recreational

access.

The Coastal Act requires dredging projects in coastal waters to minimize adverse environmental effects and to protect marine and biological resources. To protect sensitive species such as sea otters and grunion from adverse impacts, the recommended permit conditions limit dredging activities to times when potentially affected species are not expected to be present and include management measures to ensure that dredge and nourishment operations do not otherwise adversely impact such resources. The recommended permit conditions also require proper dredge equipment maintenance to further address potential water quality issues, and also require evidence of other agency approvals.

The Coastal Act also requires that dredge material suitable for beach replenishment be used for such purposes. The proposal requires all suitable dredged sediment to be deposited at two onshore locations along Del Monte Beach. Such dredge sediments have been tested and deemed appropriate for beach nourishment in the past, and recommended conditions require the sediments to be sampled, tested, and deemed “clean” before nourishment can occur. If future testing shows otherwise, recommended conditions would require such materials to be disposed of at an appropriate inland facility.

The Coastal Act requires that public recreational access opportunities be protected and maximized. Although the project as a whole will help protect public access and recreation opportunities by nourishing beach areas, dredge operations can also displace public recreational access uses when they take place in the same areas. In this case, adverse impacts to public recreational access are limited due to the limited duration of potential dredging (i.e., between October 1 and March 31) and a requirement for dredge operation plans to avoid public recreational access areas so that they do not interfere with public access or navigation.

Finally, the Commission has historically authorized five-year dredge permits in the Central Coast area as a means of ensuring that such projects can be appropriately reassessed and modified as necessary in light of new understandings and information. Thus, in addition to allowing for minor changes subject to Executive Director review and approval for appropriate operational flexibility, Staff recommends a five-year CDP term that can be extended for additional five-year terms if the Executive Director finds that there are no changed circumstances and the terms and conditions of this CDP remain adequate to protect coastal resources.

Overall, and subject to the recommended conditions, the dredge/beach nourishment program is necessary and appropriate to protect priority uses, is essential to support commercial fishing, recreational boating, and other priority Harbor uses, will avoid adverse environmental impacts to coastal marine resources, and will protect and enhance public access and recreation.

Therefore, as conditioned, the project is consistent with the Coastal Act, and staff recommends **approval** of the CDP. The motion is found on page 4 below.

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## I. MOTION AND RESOLUTION

Staff recommends that the Commission, after public hearing, **approve** a coastal development permit for the proposed development. To implement this recommendation, staff recommends a **YES** vote on the following motion. Passage of this motion will result in approval of the CDP as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

***Motion:** I move that the Commission **approve** Coastal Development Permit Number 3-16-0420 pursuant to the staff recommendation, and I recommend a **yes** vote.*

***Resolution to Approve CDP:** The Commission hereby approves Coastal Development Permit Number 3-16-0420 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.*

## II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the Permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the Permittee to bind all future owners and possessors of the subject property to the terms and conditions.

### III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Maximum Dredge Parameters.** Dredging and disposal events shall occur seasonally between October 1 and March 31 (the dredge season) and shall not exceed 10,000 cubic yards of materials per dredge season unless authorized by the Executive Director. Unless the Executive Director determines an amendment is legally required, the Executive Director may authorize dredging outside of the identified dredge season and/or increases in dredge amounts only if they: (1) are deemed reasonable and necessary; and (2) have no potential for any adverse effect on coastal resources.
2. **Permit Expiration and Allowable Extensions.** This coastal development permit shall be valid for five full dredging seasons from the date of Commission approval (i.e., until completion of the 2020/21 dredging season on March 31, 2021). The dredging and disposal activities allowed under this CDP, as conditioned, may be extended in increments of five additional dredging seasons beyond March 31, 2021 (i.e., until March 31, 2026, March 31, 2031, etc.) subject to Executive Director review and approval every five years with verification that there are no changed circumstances associated with the dredging and disposal activities, and that the terms and conditions of this CDP remain adequate to protect coastal resources. For such extension(s), the Permittee must provide evidence that there are no changed circumstances with this approved CDP's terms and conditions, including with respect to sediment sampling and testing, water quality protections, and other agency approvals, and must request Executive Director approval prior to the end of each five-year dredging period (i.e., with the first five-year period ending March 31, 2021). If the Executive Director determines that re-review is warranted, the Permittee shall submit a complete CDP application to authorize future dredging activities.
3. **Sediment Sampling and Testing Required.** PRIOR TO THE COMMENCEMENT OF ANY DREDGING EPISODES WITHIN ANY DREDGING SEASON, the Permittee shall submit to the Executive Director for review and approval two copies of each of the following at least 180 days before the commencement of any such dredging:
  - (a) **Sampling Analysis Plan (SAP).** A SAP that clearly describes and delineates sediment sampling locations and applicable testing protocols. The SAP shall ensure that representative sample locations applicable to authorized dredging areas are tested and that they were tested within 180 days of the commencement of the dredging season and any beach nourishing event.
  - (b) **Sediment Testing.** An analysis of all sediment samples identified by the SAP (i.e., chemical, physical, and biological analyses) using the most current ACOE and EPA testing methods and procedures. If any such samples do not meet ACOE, EPA, and RWQCB dredge disposal standards, then the materials from the sampled area shall not be allowed to be deposited on beaches, but rather shall be properly disposed of at an inland location outside of the coastal zone (i.e., landfill or equivalent). All permissible dredge materials shall be deposited in the two locations identified by the Harbor Master (see Exhibit 3).

- 4. Dredge Operations Plan (DOP).** PRIOR TO THE COMMENCEMENT OF EACH DREDGING SEASON, the Permittee shall submit for Executive Director review and approval two copies of a detailed DOP that clearly identifies all dredge operations (including, at a minimum, identification of areas to be dredged, dredging depths, over-dredge depths, quantity of materials to be dredged, specific location of dredge spoils disposal, all methods for spreading/grooming beach nourishment areas, all timing (including dredge start and stop days, hours of operations, etc.), all pipeline locations, all measures to be taken to define and delineate dredge activity areas, equipment to be used, etc.). All such DOPs shall, at a minimum, incorporate the following provisions:

- (a) Dredge Prohibition Areas.** Dredging operations shall not occur outside of the identified dredge location around the Marina and in the vicinity of the Coast Guard Pier/Breakwater as shown in Exhibit 2. Prior to the commencement of dredging activities, all areas to be avoided shall be clearly demarcated with floatable buoys, or other devices which are clearly visible on surface waters, so as to allow dredge equipment operators to easily identify dredge prohibition areas.
- (b) Grunion Spawning Protection.** If disposal and/or grooming of dredge spoils will be conducted on beaches during the California grunion spawning season (i.e., from March 1st through September 1st), the affected beach area shall be monitored during all such activities by a qualified professional biologist, approved by the Executive Director, to determine if grunion runs are occurring. If grunion runs are observed, the Permittee shall cease all such beach disposal and grooming operations during any forecasted spawning period, and if any eggs are found, all activities on the beach shall cease until the grunion eggs have hatched.
- (c) Public Recreational Access Protection.** Dredging and disposal operations shall be conducted in such a manner to avoid, to the greatest extent possible, interference with public recreational access in the Monterey Harbor/Del Monte Beach area. At a minimum, all measures to be implemented to avoid public recreational access impacts due to dredge pipelines shall be identified (such measures may include, but are not limited to, uncoupling segments to allow unimpaired pedestrian movement, building small-scale sand ramps over pipelines, pipeline removal during times of peak beach use, etc.).
- (d) Equipment Maintenance.** All dredging equipment (e.g. pipelines, pumps, etc.) shall be maintained and inspected by Harbor Department staff on a regular schedule to ensure proper operation and to eliminate any potential for spills, waterway or beach access conflicts.

The Permittee shall undertake development in accordance with the approved DOPs.

- 5. Other Agency Approvals.** PRIOR TO THE COMMENCEMENT OF ANY DREDGING EPISODE ALLOWED UNDER THIS PERMIT, the Permittee shall make available to the Executive Director for review a copy of a valid permit, letter of permission, or evidence that no permit is necessary for the project authorized by this CDP from the following agencies: Army Corps of Engineers (ACOE), U.S. Environmental Protection Agency (EPA), Monterey Bay National Marine Sanctuary (MBNMS), and Regional Water Quality Control Board (RWQCB).

## IV. FINDINGS AND DECLARATIONS

### A. PROJECT LOCATION, BACKGROUND, AND DESCRIPTION

#### Project Location

The Monterey Harbor and Marina is located on the south end of Monterey Bay in the historic town of Monterey. In its current configuration, major components of the Harbor and Marina include the Coast Guard Breakwater, the tourist-oriented Fisherman's Wharf (also known as Municipal Wharf I), commercial fishing-oriented Municipal Wharf II, launch ramps, and mooring and berthing facilities, including space for approximately 450 vessels within the main portion of the Marina, and both permanent and seasonal moorings for another 140 vessels outside the main Marina basin (see **Exhibit 1** for location maps). Monterey Harbor and Marina is home to commercial fishing, diving, whale watching, and sailing charter vessels, as well as vessels with recreational fishing and sailing interests. The Harbor is also a key entry point to Monterey Bay for the research/scientific community (e.g., Monterey Bay National Marine Sanctuary, Monterey Bay Aquarium, etc.) as well as the U.S. Coast Guard.

The Harbor is bound by the Coast Guard Pier/Breakwater to the west (downcoast) and the City's Municipal Wharf II to the east (upcoast). Del Monte Beach extends upcoast past Wharf II. The Marina facilities are tucked inside the Harbor between Municipal Wharves I and II. While the Coast Guard Pier/Breakwater generally provides adequate protection from large northwesterly swells, high-energy surges can produce strong currents and movements of water within the Harbor. Shoreline dynamics at this location, such as natural littoral drift, longshore transport, and tidal action, lead to the deposition of sediment into calmer Marina and Harbor areas, eventually resulting in shoaling of the launch facilities and navigational areas. Specifically, the deposition of sediment causes shallow areas to form within the boat storage, docking and launching facilities, which interferes with the normal use of these facilities. Although shoaling within the Marina has generally been slow to occur, over time this process has created unsafe conditions at certain times, including at lower tides.

#### Project Background

The Office of the Harbor Master (Harbor Master) has historically dealt with shoaling through small-scale maintenance dredging events. In 2005, approximately 10,000 cubic yards of material were removed from five locations within the Marina, plus a sixth location near the breakwater. The material dredged from the area of the breakwater (about 500 cubic yards) was deemed unsuitable for reuse or aquatic disposal and, as such, was decanted in a plastic lined container built of K-rail and later disposed of at an upland City disposal site. The clean sandy material removed from the five Marina locations was deposited above the high tide line on Del Monte Beach and groomed with a tractor. In the four dredging episodes that have occurred since 2005 (2012, 2013, 2014, and 2016), all dredged sediment has been deemed suitable for reuse has been deposited on Del Monte Beach. Those four dredging episodes were authorized under CDP 3-10-040, which was approved on February 11, 2011 and allowed for dredging up to 10,000 cubic yards (cy) of material annually until February 11, 2016. CDP 3-10-040 required the submittal of sampling plans and analysis prior to each dredging episode, submittal of a dredge operations plan prior to each dredging episode, and required approvals from other agencies including Army Corps of Engineers (ACOE), U.S. Environmental Protection Agency (EPA), Monterey Bay National Marine Sanctuary (MBMNS), and Regional Water Quality Control Board (RWQCB).

That CDP was amended (3-10-040-A1) to extend the permit through the 2016 dredging season and subsequently expired on April 21, 2016. The Applicant has authorization from ACOE (Permit No. 2009-00221S) and RWQCB (Certification No. 32710WQ06) for the proposed dredging operations through December 31, 2021.

### **Project Description**

The Harbor has experienced shoaling and sand accumulation since the last dredging episode in March 2016, resulting in reduced water depths and unsafe navigational conditions. The National Oceanic Atmospheric Administration and the Office of Coast Survey indicate that the Monterey Harbor/Marina channels should be at -12 feet Mean Lower Low Water (MLLW) to allow for safe passage of boats; however, the main channels are now at -6 feet to -10 feet MLLW (see **Exhibit 4** for depth survey results). The Harbor Master estimates that approximately 40,000-50,000 cubic yards of material will need to be removed during the next five years to maintain safe conditions in the Harbor and Marina. The Harbor Master therefore proposes to: (1) seasonally dredge up to 10,000 cy of sediment primarily between October 1 and March 31 from within the Monterey Harbor and Marina; and (2) annually deposit up to 10,000 cubic yards of clean sandy dredge material at two locations on Del Monte Beach upcoast of Wharf II for beach nourishment purposes (see **Exhibit 2** for a map of the proposed Monterey Harbor dredging area and **Exhibit 3** for a map of the proposed beach nourishment sites). The Harbor Master will utilize an eight-inch-diameter hydraulic cutter dredge that will be inserted into the sandy substrate before activation to limit impacts to aquatic organisms and reduce turbidity. Dredged materials will be transported to one of the two designated beach nourishment sites via an eight-inch-diameter plastic pipeline and deposited above the mean high tide line in an excavated area approximately 250 feet by 50 feet. The beach will be groomed by a tractor at the end of each work day to maintain safe public access for the duration of the dredging episode.

## **B. STANDARD OF REVIEW**

The dredging area is located within State tidelands and thus is located within the Commission's retained CDP jurisdiction where the Coastal Act is the standard of review. The disposal sites are within the City's coastal zone of the City of Monterey, but the City does not have a fully-certified Local Coastal Program (LCP). The City has a Land Use Plan (LUP) specific to the Harbor area that was updated in October 2003, but the Implementation Plan (IP) portion of the LCP has not yet been certified. Because the City does not yet have a certified LCP, applicants for coastal zone development must apply to the Coastal Commission directly for a CDP. Although the certified Harbor LUP provides guidance, the standard of review for the project is the Coastal Act.

## **C. LAND USE PRIORITIES**

### **Applicable Policies**

Coastal-dependent and coastal-related developments are among the highest priority Coastal Act uses. The Coastal Act defines coastal-dependent and coastal-related as follows:

*§ 30101: "Coastal-dependent development or use" means any development or use which requires a site on, or adjacent to, the sea to be able to function at all.*

**§ 30101.3:** *"Coastal-related development" means any use that is dependent on a coastal-dependent development or use.*

Coastal Act Section 30001.5 states in part:

*The Legislature further finds and declares that the basic goals of the state for the coastal zone are to:*

- (a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources....*
- (c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.*
- (d) Assure priority for coastal-dependent and coastal-related development over other development on the coast...*

Coastal Act Sections 30234 and 30234.5 also provides specific protections for boating harbors and commercial fishing, including:

**§ 30234:** *Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.*

**§ 30234.5:** *The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.*

The Harbor LUP also includes policies to protect commercial fishing operations and encourages additional boating facilities, including:

**LUP Policy II.C.3.a.** *Consideration shall be given to proposals which safely and cost effectively increase the dockage and slip capacity in the entire harbor area.*

**LUP Policy II.C.3.m.** *The City shall continue to monitor the status of the local commercial fishing industry and provide facilities for commercial fishing as necessary, depending on demand. The City shall ensure that recreational fishing boating facilities are designed and located so as to not impede or interfere with the commercial fishing industry.*

### **Consistency Analysis**

Monterey Harbor is one of only two commercial harbors located in Monterey County (the other being in Moss Landing) and is the southernmost harbor in Monterey Bay. The next nearest harbor to the south is over 200 miles away in San Luis Obispo County. The Monterey Harbor and Marina accommodate a number of coastal-related and coastal-dependent activities related to fishing and recreation. Monterey Harbor provides docking, mooring, and commercial fish processing facilities. The Harbor is a popular sport fishing and recreational destination for the public. The Harbor also provides facilities for commercial visitor-serving endeavors (e.g., whale watching, etc.), research activities, and the U.S. Coast Guard. The proposed project includes

maintenance dredging to remove accumulated sediment from the boat berthing and launching areas, and navigational channels. The proposed dredging activities not only support coastal-dependent and related uses, but also are integral to such uses and therefore have a priority under the Coastal Act and the Harbor LUP. Accordingly, the proposed development supports high priority Coastal Act uses that are consistent with the land use priorities of Coastal Act Sections 30101, 30101.3, 30001.5, 30234, 30234.5, as well as Harbor LUP policies II.C.3.a and II.C.3.m.

Section 30234 of the Coastal Act provides that facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Section 30234.5 states that the economic, commercial, and recreational importance of fishing activities shall be recognized and protected. Commercial and recreational boating and fishing are coastal-dependent priority uses that cannot function at Monterey Harbor/Marina without sufficient harbor depths. Hence, the maintenance of adequate berthing and navigational depths in the Harbor is essential, and is considered a high priority under the Coastal Act. Therefore, the Commission finds that the project is consistent with Coastal Act Sections 30234 and 30234.5, as well as Harbor LUP policy II.C.3.m.

## **D. MARINE RESOURCES**

### **Applicable Policies**

Coastal Act Sections 30230, 30231, 30232, and 30233 afford protection of marine resources and their associated biological productivity and state:

*§ 30230: Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

*§ 30231: The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

*§ 30232: Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.*

*§ 30233: (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse*

*environmental effects, and shall be limited to the following:*

- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
  - (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
  - (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*
  - (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
  - (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
  - (6) Restoration purposes.*
  - (7) Nature study, aquaculture, or similar resource dependent activities.*
- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.*
- (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.*

The City's Harbor LUP also includes policies specifically related to the protection of marine and biological resources related to dredging, including:

***LUP Policy I.A.3.h.*** *The City shall test harbor sediments for lead contamination during dredging and disposal episodes. If Regional Water Quality Control Board (RWQCB) action levels of lead are found, the City shall cooperate with the RWQCB regarding implementation of cleanup in conjunction with the Department of Fish and Game and other responsible agencies. If action levels of lead are found, areas of contamination shall be posted to alert the public.*

***LUP Policy I.A.3.o.*** *New development shall not result in the degradation of coastal waters caused by the introduction of pollutants or by changes to the landscape that adversely impact the quality, quantity, and flow dynamics of coastal waters. Runoff shall not be discharged in a manner that adversely impacts coastal waters.*

***LUP Policy I.C.3.d.*** Spoil material from any required harbor dredging shall be utilized for beach replenishment, when feasible, subject to analysis to determine consistency with Regional Water Quality Control Board and U.S E.P.A. Clean Water Act beach disposal standards.

***LUP Policy I.C.3.h*** Diking, filling, or dredging shall be limited to the allowable uses pursuant to Coastal Act Section 30233 and may be undertaken only when there is no feasible less environmentally damaging alternative, and feasible mitigation measures have been provided to minimize adverse environmental effects. Analysis of the impact of proposed development by a qualified professional in the appropriate field using the most current information and methods shall be required prior to approval of the project.

### **Consistency Analysis**

Monterey Harbor and Marina are located at the southern end of Monterey Bay. Monterey Bay supports a diverse complex of marine and marine-related habitats including open ocean, kelp forests, rocky seashore, nearshore intertidal, sandy beaches, coastal streams, estuarine systems, and wetlands. These habitats support a wide variety of marine life, including benthic communities, marine mammals, and fish, including sensitive species such as the state threatened longfin smelt (*Spirinchus thaleichthys*), the locally rare California grunion (*Leuresthes tenuis*), the federally threatened South/Central California Coast steelhead (*Oncorhynchus mykiss irideus*), the federally threatened Chinook salmon (*Oncorhynchus tshawytscha*), and the federally threatened North American green sturgeon (*Acipenser medirostris*).

In 1992, Monterey Bay proper became part of the Monterey Bay National Marine Sanctuary, although the Monterey Harbor area was specifically excluded from this designation. Although Monterey Bay is known for its aquatic diversity and habitat value, the areas of the Harbor where the proposed dredging activities would take place are not known to be particularly sensitive. There are no creeks or tributaries that occur in the area of the Harbor, and the sandy substrate underlying the Marina area is generally devoid of sea grasses or kelp. The project area is a fully developed and functioning Harbor and Marina that has been managed and maintained for such purposes for many decades, and there is generally a lower abundance and diversity of marine life at this location due to the ongoing uses of the site for these purposes.

All dredging activities would occur within the Harbor at specifically demarcated locations around the greater marina area and immediately adjacent to the Coast Guard Pier and breakwater. No fish or shellfish habitat will be adversely impacted by the proposed dredging due to the lack of spawning areas or shell fish beds in the immediate area. The Harbor is not within the migratory route of anadromous fisheries due to the lack of nearby tributaries to upstream spawning grounds and is not known to provide habitat for sensitive species.

That said, and as indicated above, Monterey Bay waters overall do serve as fish habitat for a variety of species that spawn, feed, migrate, and breed within its waters. Seals, sea lions, sea otters, a variety of fish species, and various seabirds have been observed in the water and resting upon the docks and other structural developments within the Harbor. Coastal Act Sections 30230 and 30231, in addition to LUP Policy I.A.3.o, require protection of marine resources and their associated biological productivity. Accordingly, the proposed dredging events are timed to

coincide with periods outside the typical spawning and feeding periods for potentially affected fish species. Additionally, proposed mitigation measures include the use of a suction dredge during all dredging activities and placement of dredge spoils onshore in order to minimize hazardous plumes in the water and other impacts to the bay and its inhabitants. The proposed project also includes a qualified biological monitor to observe all dredging operations and a requirement for all dredging activities to cease if any sensitive species are observed within 50 feet of the dredging operations. In order to avoid direct impacts to marine mammals and other animals consistent with the Coastal Act, **Special Condition 4(a)** prohibits dredging from occurring outside of the areas around the Marina and adjacent to the south side of the Coast Guard Pier/Breakwater. This prohibition is necessary to avoid heavy equipment encroachment and disturbances in areas that may be frequented by sensitive marine inhabitants, such as sea lions.

Additionally, with respect to impacts at Del Monte Beach, the disposal and grooming of dredge spoils on beach areas has the potential to adversely impact seasonal California grunion (*Leuresthes tenuis*) spawning events because these activities can smother individuals or eggs, and can interfere with the grunion's affinity for a specific beach location. Grunion spawn during the highest nighttime spring tides. Female grunion swim ashore with the rising high tide and lays eggs in the sand, which are then fertilized by the male grunion. The eggs incubate in the sand for 10-14 days and then hatch on the next high tide. Although use of the adjacent Del Monte Beach for grunion spawning is rare, it is possible that proposed beach replenishment could impact such activities if they were to coincide. Thus, in order to avoid adverse impacts to grunion during spawning periods, **Special Condition 4(b)** requires biological monitoring of dredge disposal activities during grunion spawning season (March 1 – September 1) and, if spawning grunion are identified, requires that all dredge disposal activities cease until grunion spawning has been completed and any identified grunion eggs have hatched.

In addition to grunion, several state and federally listed terrestrial plant and wildlife species have the potential to occur within the Del Monte Beach nourishment areas based on general habitat types and a search of the California Natural Diversity Database (including Monterey spineflower, Sand Gilia, Tidestrom's Lupine, Smith's Blue Butterfly, Western snowy plover and others). The preferred receiver location for the dredge spoils is on Del Monte Beach immediately east of Wharf II. This is a heavily used urban beach, which is regularly groomed and maintained for public access and recreation purposes. The area is almost entirely devoid of any native plant material and is considered unsuitable habitat to support the variety of the special-status plant, invertebrate, and bird species that could potentially occur on site. The alternative receiver site is located approximately one-third of a mile to the east (upcoast) of the preferred receiver site. This location fronts a small residential subdivision and appears to have more potential for some of the identified terrestrial plant and animal species including landscape vegetation between the townhomes and the beach. The City proposes to install orange construction fencing to protect any vegetated areas at this location and to ensure that no dredge material is placed within the protected areas. These measures would eliminate the potential for adverse impacts to any of the species identified above that could potentially be present. In addition, the dredge and disposal events will occur outside the identified breeding season for Western snowy plover and thus will not affect nesting or brooding activities, should they occur in the area.

In addition to the general Coastal Act protections for marine resources that are applicable to all

types of development, dredging operations must also meet the specific three-part test of Section 30233(a) of the Coastal Act, which is reiterated in LUP Policy I.C.3.h. Dredging is only permissible when: 1) dredging is necessary to support an allowable use; 2) there is no feasible less environmentally damaging alternative; and 3) feasible mitigation measures have been provided to minimize adverse environmental effects. Under Section 30233(b) and LUP Policy I.C.3.d, the dredge spoils that are suitable for beach replenishment must be transported for such purposes to appropriate beaches or into suitable longshore current systems.

The project is an allowable use for dredging under Section 30233(a)(2) because it is for the purpose of maintaining existing berthing and launching opportunities and navigational area depths in the Monterey Harbor. Continued sediment inflows can be anticipated in this area. This can, at times, result in severe impairment of Harbor capacity and risk to vessels if no action is taken.

The second test under Section 30233(a) requires an analysis of available alternatives such as the no project alternative, other permanent solutions, or reducing/relocating the proposed dredging and related activities. Other permanent solutions to the problem might include: extending fixed groins, permanent sand retention structures, and opening the breakwater to limit sediment shoaling. All of these permanent structural solutions have significant costs associated with them, and have been ruled out by the City as being infeasible for the relatively small Harbor and Marina facility. With respect to the alternatives analysis, this leaves the Harbor Master with three feasible options: 1) allow sand to continually shoal within the Harbor and Marina unabated; 2) reduce or relocate existing Harbor facilities; or 3) continue removing sediment in the Marina and breakwater areas as it has in the past. The no project alternative is infeasible because it will not maintain facilities used by commercial fishermen and recreational boaters as required by Coastal Act Section 30234. Similarly, reduced or relocated Harbor facilities would not adequately maintain existing boating facilities, or enhance their usability by the public and commercial fishing industry, and would interfere with the objectives contained in Coastal Act Section 30234. Therefore, the proposed project, as conditioned by this permit, is considered the least environmentally damaging alternative available. As discussed below, mitigation measures to avoid and reduce adverse impacts on coastal resources are both proposed as a component of the project, and required as conditions of project approval.

The calculations that the Harbor Master used to arrive at the 10,000 cubic yard estimate per dredge season were intended to be a very rough estimate that would provide some operational flexibility. The estimate assumes that a combined 10,000 cubic yards of sediment would be removed from the Marina and/or breakwater each dredging season. This is likely an overestimate of the potential material that would need to be dredged from the site in any one dredging season given that the past four dredging episodes have all been below the proposed maximum 10,000 cubic yards and dredging has not occurred every year. Accordingly, it is unlikely that the maximum volume threshold allowed under this permit would be reached, and actual dredging may be much lower, particularly if historic dredging rates continue into the future. In any case, **Special Condition 1** limits dredging to a maximum of 10,000 cubic yards per dredge season, as that is the amount proposed and evaluated herein.

Section 30233(b) requires that dredge spoils be disposed of in a manner that avoids disruption to habitats. Dredge spoils suitable for beach replenishment must be placed on appropriate beaches or within suitable longshore currents. To be considered suitable for beach nourishment, sediment

must be free of chemical contamination and consist primarily of sand of an acceptable grain size (usually approximately 80% sand, although another commonly used “rule of thumb” is that the material should ideally fall within 10% of the percentage of sand content at the receiver beach). If placed on the dry upland portion of the beach, the grain size should ideally be compatible with the predominant grain size on the receiver beach as well.

In the past, test results have shown that the material to be dredged is almost entirely sand. Results of particle size analysis indicate that all samples can be characterized as medium grained, ranging from 96%-99% sand. On the whole, chemical contaminants have not been an issue at the Harbor. This is supported by past letters from the project biologist and the EPA’s concurrence with the ACOE’s determination that the proposed dredged materials are chemically and physically suitable for beneficial reuse as beach nourishment. Nevertheless, these results may change over time, so a precautionary approach is warranted. LUP Policy I.C.3.d also requires dredged materials to be tested to ensure consistency with current beach disposal standards. Therefore, **Special Condition 3** requires that all dredge materials be tested within 180 days before commencement of each dredging season and beach nourishing event and that they meet all ACOE, EPA, and RWQCB disposal standards. If such sampling determines that sediment does not meet the required beach disposal standards, then such sediment will be decanted and properly disposed of at an upland landfill (or equivalent). To ensure that adequate and effective mitigation measures continue to protect coastal resources during future dredging episodes, **Special Condition 4** requires submittal of dredging operations plans before commencement of each dredging season (October 1 – March 31).

Potential impacts of dredging on marine water quality include temporarily increased turbidity, reductions in dissolved oxygen, and potential re-suspension, remobilization, and redistribution of any chemical contaminants present in the sediments. While these impacts are expected to occur as a result of dredging activities, the pre-dredge-operation ambient water quality condition is expected to recur shortly after each dredging episode in this case, and thus the impact to these water quality variables is expected to be adverse but short-term and relatively minor in magnitude and scope.

To avoid potential water quality impacts associated with the proposed dredging activities, the biological, chemical and physical characteristics of the sediments must be evaluated through the sediment sample analyses described above. As described above, sediment dredged from the Marina berthing and launching areas has historically been almost entirely “clean” medium-grained sand.<sup>1</sup> However, the location of the secondary dredge site adjacent to the Coast Guard Pier and refueling dock, although also comprised of 99% medium-grained sand, has historically also exhibited higher concentrations of lead above Sediment Quality Guidelines where sediments may have adverse biological effects, and thus warrants a precautionary approach in order to ensure impacts to water quality (and related marine resources) are avoided under this current permit. Thus, **Special Condition 3** requires sediment samples to be collected from all of the proposed dredging areas and tested under the most current guidelines of ACOE, EPA, and RWQCB. To further protect water quality, **Special Condition 4(d)** requires that all dredge equipment shall be inspected and maintained on a regular schedule to ensure proper operation and eliminate the potential for spills. **Special Condition 5** requires the permittee to show

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<sup>1</sup> Grain size refers to the diameter of individual grains of sediment, including sandy sediments.

evidence of other regulatory agency approvals from the ACOE, EPA, MBNMS, and RWQCB, or show that none is necessary to ensure that all regulatory agencies have reviewed the dredging plans.

**Special Condition 2** limits the effective timeframe of the permit to five dredging seasons, with the potential to extend the permit for additional five-year dredging periods. The areas subject to dredge operations are dynamic environments that are and will continue to be subject to a variety of natural and man-made processes. There are a myriad of potential future changed circumstances that may affect the adequacy of the currently proposed measures (including potential future listing of species that occur within harbor areas; an unforeseen rise in contaminant levels of harbor sediments from new upstream land uses or spill events; new dredging technologies; beach use patterns; continued erosion and sea level rise; etc.). Therefore, if the City wishes to extend the permit beyond the next five dredging seasons, **Special Condition 2** requires the City to submit a report to the Executive Director prior to the expiration of the permit to verify that there are no changed circumstances that would necessitate Commission re-review. Special Condition 2 would allow for five-year extensions of the dredging operations for as long as there are no changed circumstances that may affect the consistency of the project with the Coastal Act.

In summary, the proposed project represents a multi-year program for dredging activities that are necessary to maintain and improve navigation channels and berthing areas for recreational boating and commercial fishing. Because there are no known feasible less environmentally damaging alternatives available to maintain adequate depths within Monterey Harbor and Marina; because feasible mitigation measures are applied through the special conditions of this approval to avoid and/or to minimize adverse environmental effects; and because suitable sediments will be conveyed to appropriate beach replenishment sites, the proposed dredging project, as conditioned, can be found consistent with the Coastal Act's and the Harbor LUP's marine resource protection policies.

## **E. PUBLIC ACCESS**

### **Applicable Policies**

Coastal Act Sections 30210 through 30224 specifically protect public recreational access opportunities. In particular:

*§ 30210: In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

*§ 30212 (a): Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects....*

*§ 30213. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred...*

*§ 30220. Coastal areas suited for water-oriented recreational activities that cannot*

*readily be provided at inland water areas shall be protected for such uses.*

*§ 30221. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

*§ 30222.5. Oceanfront land that is suitable for coastal dependent aquaculture shall be protected for that use, and proposals for aquaculture facilities located on those sites shall be given priority, except over other coastal dependent developments or uses.*

*§ 30223. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

*§ 30224. Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.*

### **Consistency Analysis**

The Coastal Act requires public recreational access opportunities to be maximized, including lower cost visitor facilities and water-oriented activities (like recreational boating), and protects areas near and at the shoreline for this purpose. Monterey Harbor provides public access and recreational opportunities of regional and statewide significance. These include boat launching, berthing for commercial vessels and recreational boats, marine-related retail/commercial businesses, kayaking, whale watching, safety and enforcement, and diving. The proposed dredging project will strongly benefit public access and recreation by restoring and maintaining adequate water depths in the Harbor's navigation channels and by directing suitable sandy dredge spoils onto nearby beach areas for beach replenishment.

Adverse impacts to public access from the dredge operations are possible (e.g., displacement of activities in dredge and disposal areas, sedimentation of nearshore waters, presence of dredge pipes impacting access, etc.). For example, the pipelines used to transport suitable dredge spoils to designated beach replenishment sites can create an impediment to navigation and pedestrian access to the beach in certain circumstances. Fortunately, these types of impacts can be minimized in this case through dredge operation design. Specifically, the pipelines are approximately eight inches in diameter, and can generally be traversed by persons walking across the beach. In addition, according to the Harbor Master, placement of these pipelines can be managed so that they do not form a continuous barrier to access, particularly for less nimble beach visitors. Similarly, the area to be taken up by the nourishment activities is generally fairly small, located in the back beach, and in an area where it will not significantly reduce the area available for typical and normal public beach recreational pursuits. Nourishment activities will be limited to weekdays during the off-peak winter months and typically last just a few weeks, further limiting impacts to public access. Also, sedimentation of the nearshore environment from beach nourishment has not been a significant impact in the past, and is not expected in this case.

Thus, public beach recreational activities should not be significantly adversely affected by the proposed project. To ensure this is the case, **Special Condition 4(c)** requires that dredging operations are conducted in such a manner as to avoid, to the greatest extent possible, interference with public recreational access in the Monterey Harbor area and adjacent Del Monte Beach. With respect to dredge pipelines specifically, such measures may include, but are not limited to, uncoupling segments to allow unimpaired pedestrian movement, building small-scale sand ramps over pipelines, and pipeline removal during times of peak beach use.

In conclusion, the dredge program is necessary to protect public access and recreational opportunities provided by the Monterey Harbor and Del Monte Beaches. Although the transport of dredge materials to beach replenishment sites may temporarily impact public access, as designed and as conditioned these impacts will be minimized to the greatest extent feasible. Therefore the project, as conditioned, is consistent with the above-cited public access and recreational policies of the Coastal Act.

## **F. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

Section 13096 of Title 14 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment.

The City of Monterey determined that the project is categorically exempt from the requirements of CEQA under the CEQA Guidelines, Section 15304(g) for maintenance dredging where the dredge material is deposited in an area authorized by all applicable state and federal regulatory agencies. The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. The preceding coastal development permit findings discuss the relevant coastal resource issues with the proposal related to the protection of marine resources and public access, and the permit conditions identify appropriate modifications to avoid and/or lessen any potential for adverse impacts to said resources.

As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects which approval of the proposed project, as conditioned, would have on the environment within the meaning of CEQA. Thus, if so conditioned, the proposed project will not result in any significant environmental effects for which feasible mitigation measures have not been employed consistent with CEQA Section 21080.5(d)(2)(A)

## **APPENDIX A – SUBSTANTIVE FILE DOCUMENTS**

*Sediment Sampling Plan for the Monterey Harbor Maintenance Dredging Project, City of Monterey, August 17, 2016.*

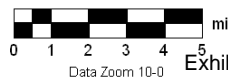
*Programmatic Consultation and Conference for Listed Coastal Species, Ventura, Santa Barbara, San Luis Obispo, Monterey, and Santa Cruz (1-8-96-F-11), United States Fish and Wildlife Service, August 29, 1997.*



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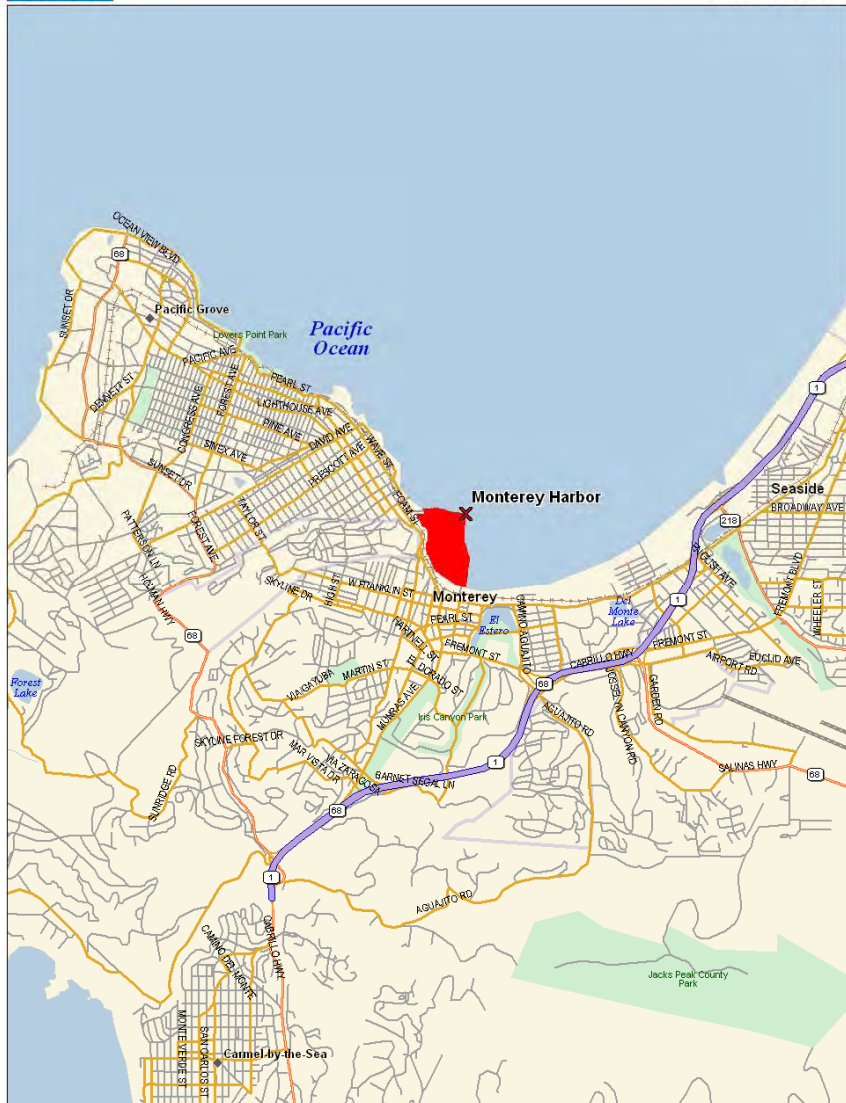
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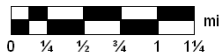
Exhibit 1  
3-16-0420 (Monterey Harbor Dredging)  
1 of 4



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Exhibit 1  
3-16-0420 (Monterey Harbor Dredging)  
3 of 4





**Olberding Environmental, Inc.**  
 3170 Crow Canyon Place, Suite 260  
 San Ramon, California 94583  
 Phone: (925) 866-2111

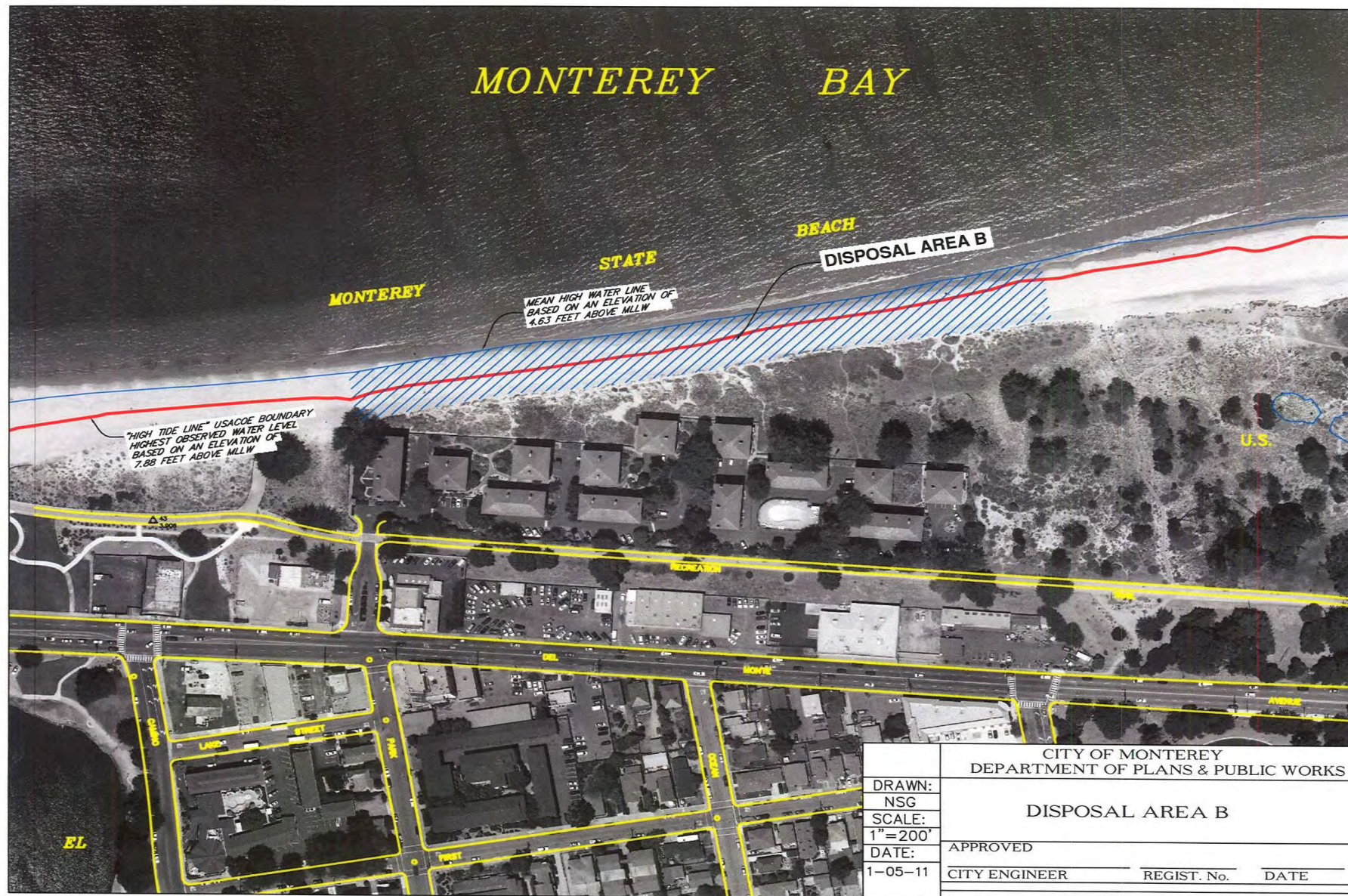
This document is not intended for detail design work.

**Figure 9**  
**Project Site Overview Map of the Monterey Harbor Property**  
 Monterey County, California





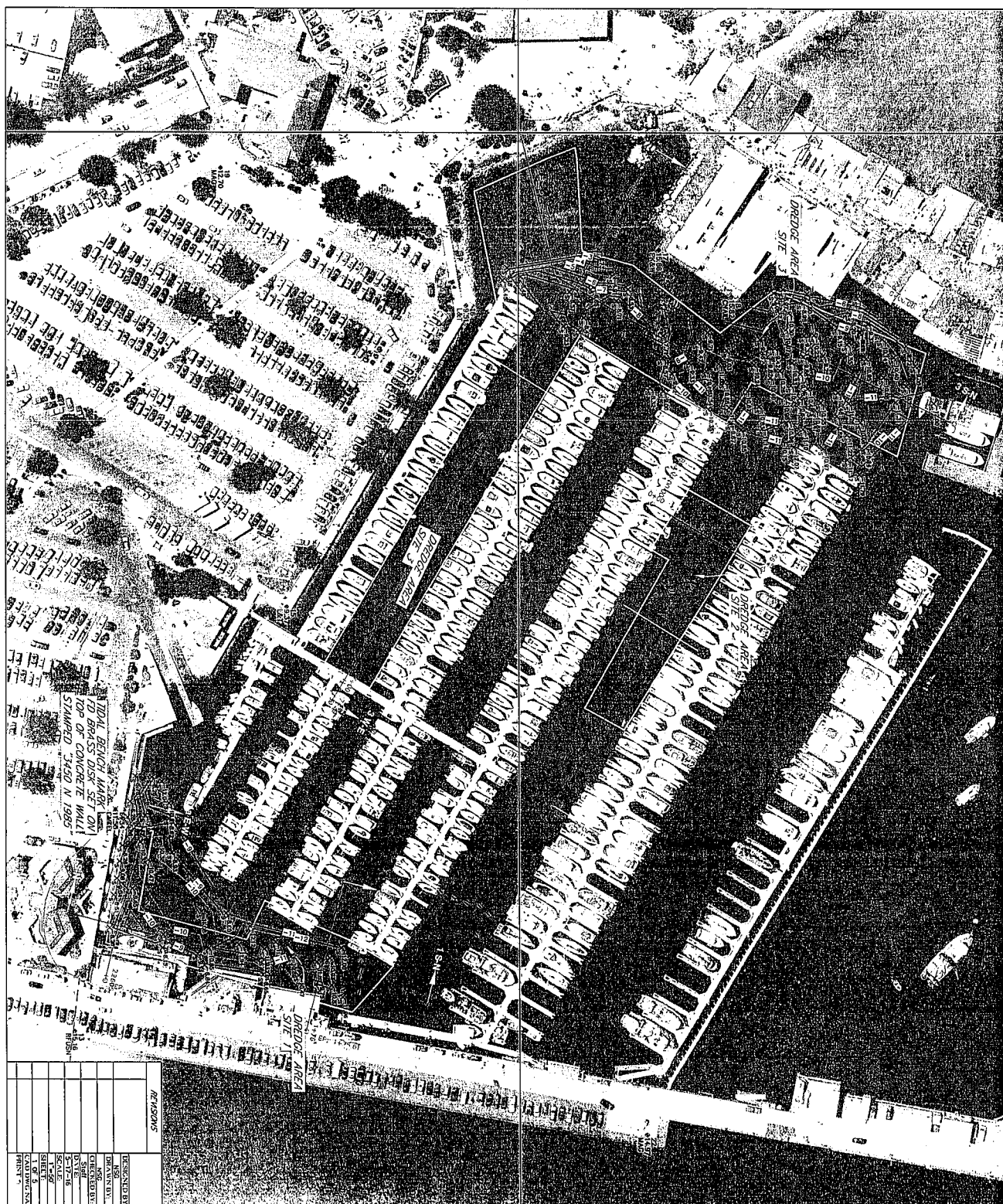
**Figure 10a**  
**Dredge Material Disposal Site Alternatives A**  
Monterey County, California



**Olberding Environmental, Inc.**  
 3170 Crow Canyon Place, Suite 260  
 San Ramon, California 94583  
 Phone: (925) 866-2111

This document is not intended for detail design work.

**Figure 10b**  
**Dredge Material Disposal Site Alternatives B**  
 Monterey County, California

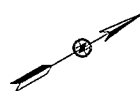
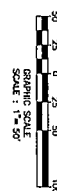


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**SURVEY NOTES:**

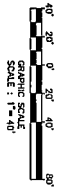
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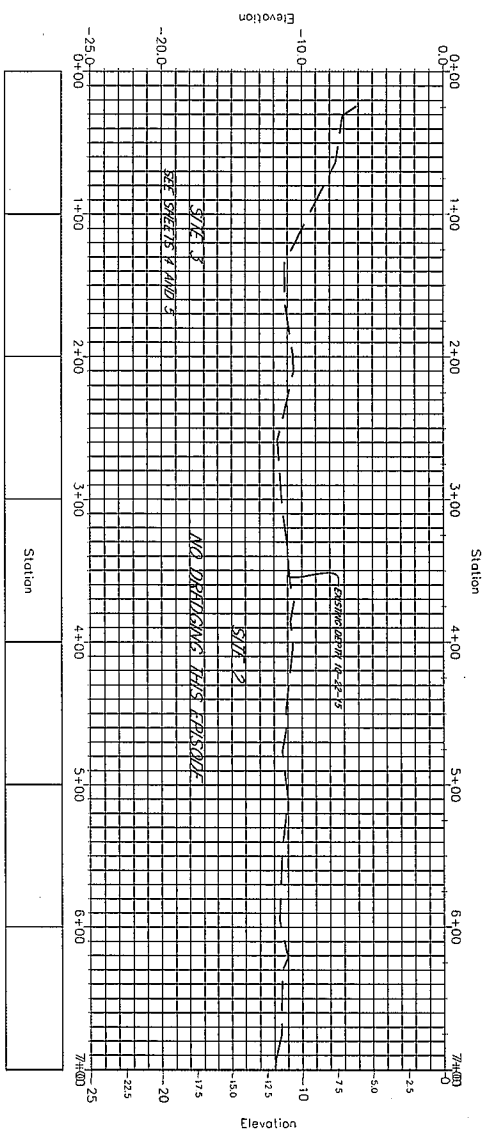




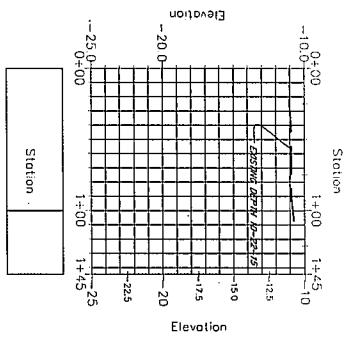
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  2. SEE SHEET 2 FOR SECTION 1 TYPICAL SECTION MONITORING
  3. SEE SHEET 3 FOR ESTIMATED DREDGING CALCULATIONS
  4. SEE SHEET 4 FOR ESTIMATED DREDGING CALCULATIONS
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  9. SEE SHEET 9 FOR ESTIMATED DREDGING CALCULATIONS
  10. SEE SHEET 10 FOR ESTIMATED DREDGING CALCULATIONS



**PLAN VIEW**  
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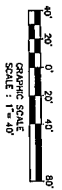
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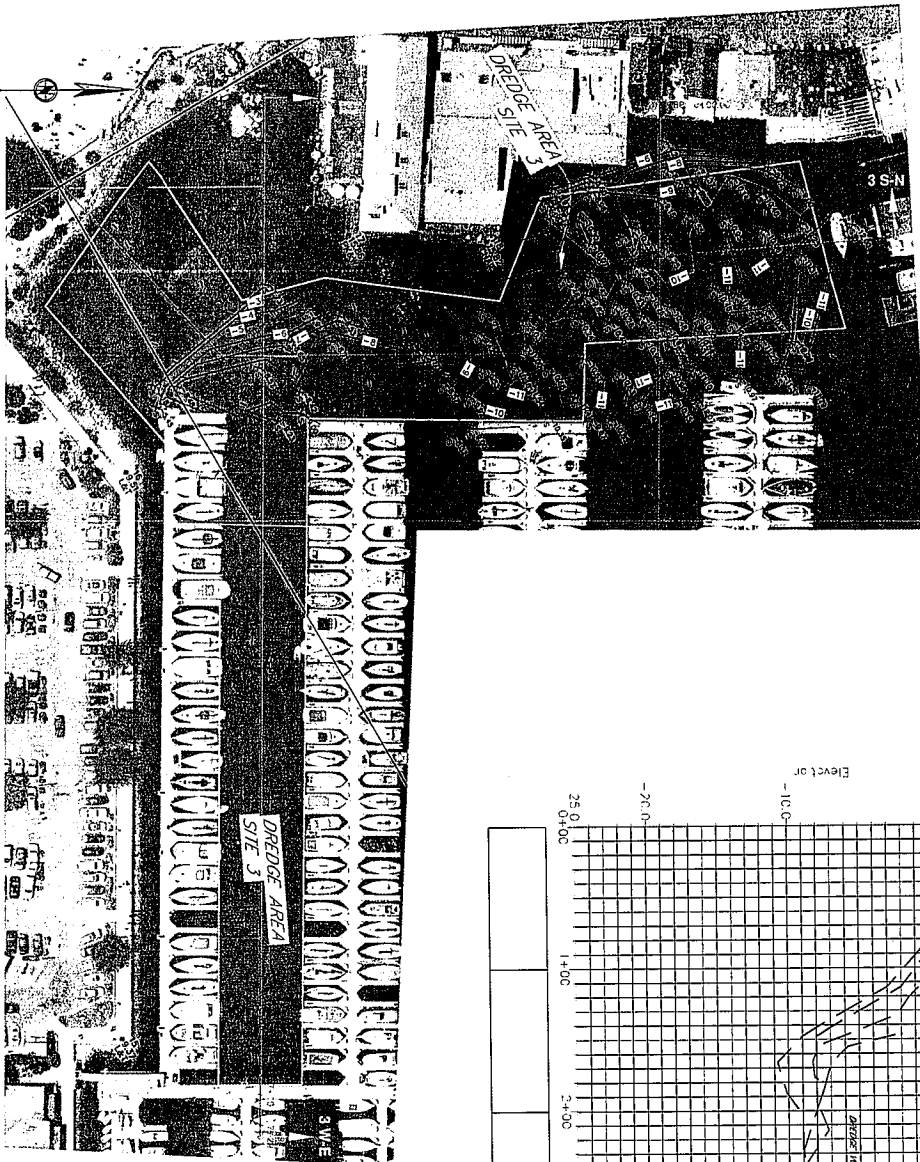
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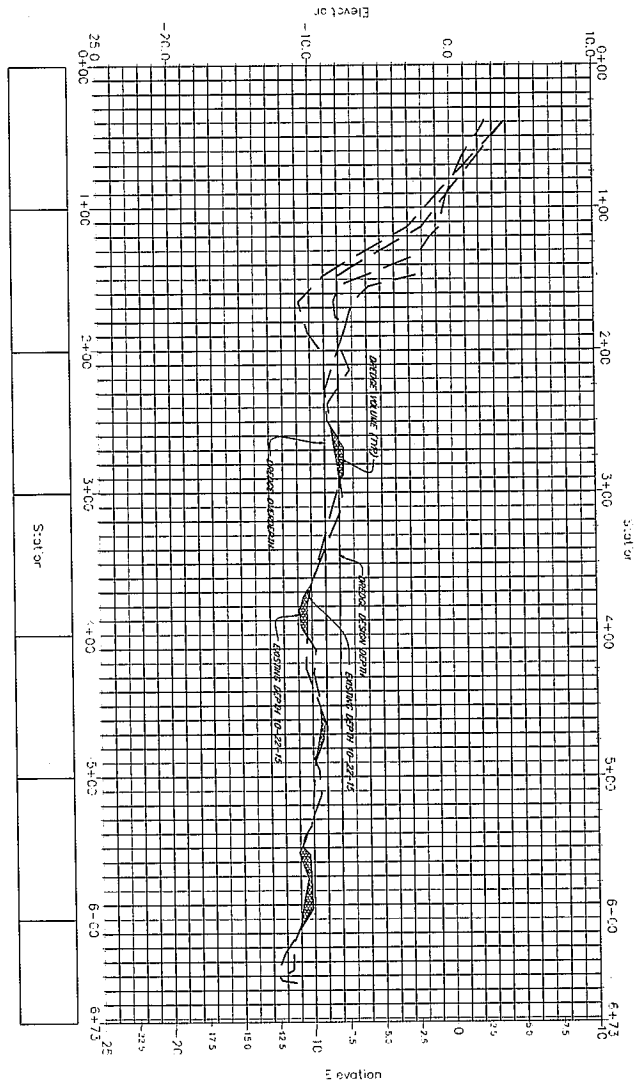
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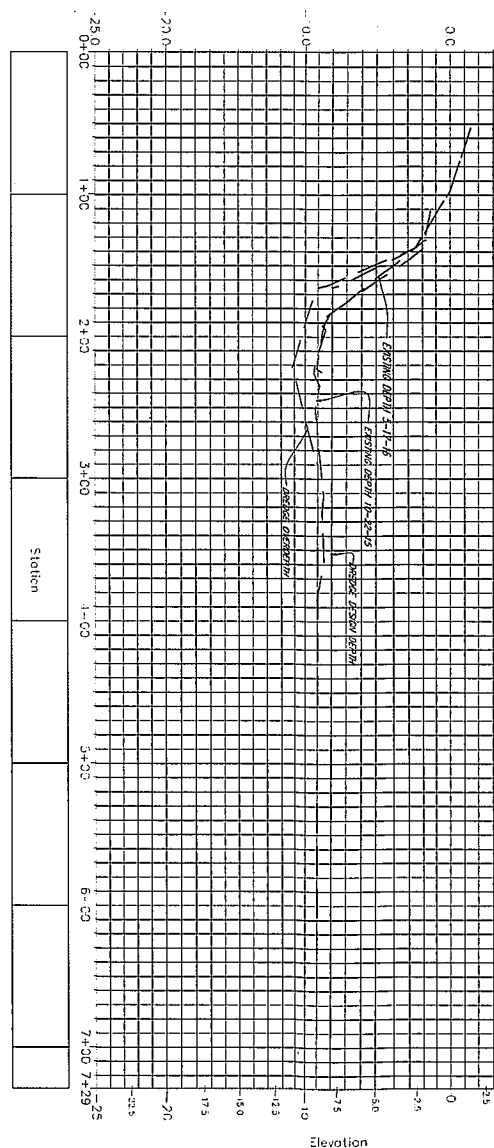
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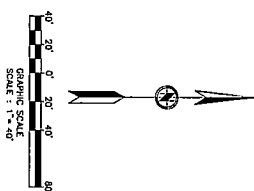
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7	PROJECT NO.		
8	PROJECT NAME		
9	PROJECT NUMBER		
10	PROJECT DATE		
11	PROJECT TIME		
12	PROJECT COST		
13	PROJECT BENEFIT		
14	PROJECT RISK		
15	PROJECT IMPACT		
16	PROJECT SUSTAINABILITY		
17	PROJECT RESILIENCE		
18	PROJECT ADAPTABILITY		
19	PROJECT TRANSFORMABILITY		
20	PROJECT INCLUSIVE GROWTH		



SECTION VIEW  
△ SITE 3 W-E  
 HORIZ SCALE: 1"=40'  
 VERT SCALE: 1"=4'



PLAN VIEW  
HORIZ SCALE: 1"=40'

**SUMMARY OF ESTIMATED QUANTITY CALCULATIONS:**

DESIGN DEPTH DRAINAGE	QUANTITY REDUCED
SITE 1 305 CU YARDS	150 CU YARDS
SITE 2 NO DRAINAGE THIS EPISODE	
SITE 3 614 CU YARDS	720 CU YARDS
TOTAL 1,029 CU YARDS	1070 CU YARDS

**NOTES:**

1. SET SHEET 1 FOR SITE GRAY AND SAFETY NOTES
2. SET SHEETS 2 THROUGH 5 FOR SECTION MARKS
3. SET SHEET 5 FOR ESTIMATED QUANTITY CALCULATIONS
4. THIS POST-CONCRETE SURVEY IS INTENDED TO CORRECT ANY  
MISPLACEMENTS OF CONCRETE REINFORCEMENTS PERMIT NO. 2009-002915  
DRAFTED BY: DCEC AND 4

NOTE REGARDING ESTIMATED QUANTITY CALCULATION:

THE DESIGN DEPTH, VOLUME, QUANTITIES, SHOWN HEREON ARE BASED ON THE DEFERENCE OF THE DEPTHS MEASURED BY FIELD SURVEY ON OCTOBER 22, 2015 AND THE DEPTHS MEASURED BY A FIELD SURVEY ON MAY 12, 2016. THE ACTUAL QUANTITIES WILL VARY DUE TO MOVEMENT OF SAND BY CURRENTS IN THE MARINA AND BY SAND SLUMPING INTO AND FILLING IN THE DREDGED AREAS.

[illegible]