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Staff:	E. Lavine - SF
Staff Report:	7/25/2014
Hearing Date:	8/15/14

STAFF REPORT: REGULAR CALENDAR

Application Number:	2-14-0214
Applicant:	Marin County Department of Public Works
Project Location:	County-owned right-of-way along Wharf Road, adjacent to Bolinas Lagoon in Bolinas, Marin County.
Project Description:	Installation of a new 126-foot-long steel sheet-pile seawall on the seaward side of an existing vertical concrete seawall to modify and improve the existing seawall; installation of 46 concrete piles within the roadbed and steel tie rods to connect the concrete piles to the sheet-pile seawall; and repaving of project-disturbed areas of the roadbed.
Staff Recommendation:	Approval with Conditions.

SUMMARY OF STAFF RECOMMENDATION

The Marin County Department of Public Works proposes to modify an existing concrete vertical seawall by installing a 126-foot-long sheet-pile seawall immediately adjacent to the seaward side of the existing seawall located along Wharf Road, within Bolinas Lagoon, in the unincorporated community of Bolinas in western Marin County. The proposed project also includes the installation of 46 concrete piles within the roadbed of Wharf Road to which the new sheet-pile seawall would be tethered by steel tie rods. The existing seawall, built circa 1960, has been destabilized over time by tidal fluctuations and wave action from winter storms and portions of the backfill have already been washed away, creating voids in the roadway. Thus, the project is

necessary to protect Wharf Road from continued erosion and destabilization. Wharf Road provides the main road connection between downtown Bolinas and the community's public beach, as well as public parking for beachgoers.

The installation of the sheet-pile seawall will result in fill of 84 square feet of coastal wetlands. The Commission typically will only authorize this type of wetland fill when the applicant has demonstrated that it is a permissible use. Although the proposed project is not one of the permissible uses for wetland fill and is inconsistent with the marine resource protection policies of the Coastal Act, staff is nonetheless recommending the project for approval based on Section 30235 of the Coastal Act, which instructs the Commission approve seawalls required to protect existing structures in danger of erosion if specific criteria are satisfied.

In addition to demonstrating that the expansion of the seawall is required to protect a road that directly facilitates public access, the Applicant has also demonstrated that there are no feasible less environmentally damaging alternatives that would avoid fill (e.g., in this case, replacement within the existing seawall footprint or landward replacement of the seawall). The Applicant considered other alternatives to the proposed project, including replacement of the seawall within the existing footprint, but rejected this alternative because the construction methods involved would be more disruptive than the subject proposal. In order to mitigate for the fill of coastal wetlands caused by the proposed project, the Applicant proposes to restore disturbed wetlands adjacent to the project site and elsewhere in Bolinas Lagoon at a ratio of 4:1. The Applicant also proposes measures to avoid and minimize construction-related environmental impacts, and Staff is recommending special conditions to prevent adverse impacts to marine resources and water quality consistent with the relevant policies of the Coastal Act.

Staff recommends approval of the coastal development permit (CDP) application as conditioned. 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 2-14-0214 pursuant to the staff recommendation, and I recommend a yes vote.*

Resolution to Approve CDP: *The Commission hereby approves Coastal Development Permit Number 2-14-0214 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with Coastal Act policies. 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 or 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. **Construction Plan**. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Permittee shall submit two sets of a Construction Plan to the Executive Director for review and approval. The Construction Plan shall, at a minimum, include the following:

   (a) Construction Areas. The Construction Plan shall identify the specific location of all construction areas, all staging areas, and all construction access corridors in site plan view. All such areas within which construction activities and/or staging are to take place shall be minimized to the maximum extent feasible in order to have the least impact on coastal resources and public access, including by using inland areas for staging and storing construction equipment and materials, as feasible. Construction (including but not limited to construction activities, and materials and/or equipment storage) is prohibited outside of the defined construction, staging, and storage areas.

   (b) Construction Methods and Timing. The Construction Plan shall specify the construction methods to be used. All erosion control/water quality avoidance and mitigation measures or best management practices to be implemented during construction and their location shall be noted. No work shall occur during the summer peak months (i.e., from the Saturday of Memorial Day weekend through Labor Day, inclusive) unless, due to extenuating circumstances (such as tidal issues or other environmental concerns), the Executive Director authorizes such work.

   (c) Property Owner Consent. The Construction Plan shall be submitted with written evidence indicating that the owners of any properties on which construction activities are to take place, including properties to be crossed in accessing the site, consent to such use of their properties.

   (d) Construction Site Documents. The plan shall provide that copies of the signed CDP and the approved Construction Plan be maintained in a conspicuous location at the construction job site at all times, and that such copies are available for public review upon request. All persons involved with the construction shall be briefed on the content and meaning of the CDP and the approved Construction Plan, and the public review requirements applicable to them, prior to commencement of construction.

   (e) Construction Coordinator. The Construction Plan shall provide that a construction coordinator be designated to be contacted during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies), and that contact information (i.e., address, phone numbers, etc.) including, at a minimum, a telephone number that will be made available 24 hours a day for the duration of construction, is conspicuously posted at the job site where such contact information is readily visible from public viewing areas, along with an indication that the construction coordinator should be contacted in the case of questions regarding the construction (in case of both regular inquiries and emergencies). The construction coordinator shall record the name, phone number, and nature of all complaints

received regarding the construction, and shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry.

(f) Notification. The Permittee shall notify permit staff of the Coastal Commission's North Central Coast District Office at least 3 working days in advance of initiating construction activities, and immediately upon completion of construction work.

(g) Construction Requirements. The Construction Plan applies to initial construction as well as future maintenance as described in **Special Condition 4**. The Construction Plan shall include the following construction requirements specified by written notes on the Construction Plan. Minor adjustments to the following construction requirements may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.

- All work shall take place during daylight hours and lighting of the intertidal and tidal areas is prohibited.
- Construction work or equipment operations shall not be conducted below the mean high tide line unless tidal waters have receded from the authorized work areas.
- Grading of intertidal areas is prohibited.
- All construction materials and equipment shall be stored beyond the reach of tidal waters. The only other exceptions shall be for erosion and sediment controls and/or construction area boundary fencing where such controls and/or fencing are minimized in their extent.
- Construction (including but not limited to construction activities, and materials and/or equipment storage) is prohibited outside of the defined construction, staging, and storage areas.
- Equipment washing shall not take place over coastal waters or in an area that drains to the lagoon; refueling and/or servicing of equipment shall be allowed only at a designated location as noted on the Plan. Appropriate best management practices shall be used to ensure that no spills of petroleum products or other chemicals take place during these activities.
- The construction site shall maintain good construction site housekeeping controls and procedures (e.g., clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain, including covering exposed piles of soil and wastes; dispose of all wastes properly, place trash receptacles on site for that purpose, and cover open trash receptacles during wet weather; remove all construction debris; etc.).
- All erosion and sediment controls shall be in place prior to the commencement of construction as well as at the end of each workday.

- Any debris that enters the lagoon or intertidal area must be removed at the end of each workday.

All requirements above and all requirements of the approved Construction Plan shall be enforceable components of this CDP. The Permittee shall undertake development in accordance with the approved Construction Plan.

2. **Assumption of Risk, Waiver of Liability, and Indemnity Agreement.** BY ACCEPTANCE OF THIS PERMIT, THE PERMITTEE ACKNOWLEDGES AND AGREES (i) that the site may be subject to hazards from storm waves, surges, erosion, and flooding; (ii) to assume the risks to the Permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

3. **Other Agency Review and Approval.** PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Permittee shall submit to the Executive Director written evidence that all necessary permits, permissions, approvals, and/or authorizations for the approved project have been granted by all applicable agencies. Any changes to the approved project required by these agencies shall be reported to the Executive Director. No changes to the approved project shall occur without a Commission amendment to this CDP unless the Executive Director determines that no amendment is legally necessary.

4. **Future Maintenance Authorized.** This coastal development permit authorizes future maintenance subject to the following:

   (a) Maintenance. "Maintenance," as it is understood in this special condition, means development that would otherwise require a coastal development permit whose purpose is to repair and/or to maintain the project in its approved state (see **Exhibit 4** for project plans). Maintenance does not include an enlargement or expansion of the approved project beyond its existing footprint.

   (b) Maintenance Parameters. Maintenance shall only be allowed subject to the approved project parameters. Any proposed modifications to the approved project parameters associated with any maintenance event shall be reported to planning staff of the Coastal Commission's North Central Coast District Office with the maintenance notification (described below), and such changes shall require a coastal development permit amendment unless the Executive Director deems the proposed modifications to be minor in nature (i.e., the modifications would not result in additional coastal resource impacts).

(c) Other Agency Approvals. The Permittee acknowledges that these maintenance stipulations do not obviate the need to obtain permits from other agencies for any future maintenance episodes.

(d) Maintenance Notification. At least two weeks prior to commencing any future maintenance event, the Permittee shall notify, in writing, planning staff of the Coastal Commission's North Central Coast District Office. The notification shall include: a detailed description of the maintenance event proposed; any plans, engineering and/or geology reports describing the event; other agency authorizations; and any other supporting documentation (as necessary) describing the maintenance event. The maintenance event shall not commence until the Permittee has been informed by planning staff of the Coastal Commission's North Central Coast District Office that the maintenance event complies with this coastal development permit. If the Permittee has not been given a verbal response or sent a written response within 14 days of the notification being received in the North Central Coast District Office, the maintenance event shall be authorized as if planning staff affirmatively indicated that the event complies with this coastal development permit. The notification shall clearly indicate that the maintenance event is proposed pursuant to this coastal development permit, and that the lack of a response to the notification within 14 days constitutes approval of it as specified in this CDP. In the event of an emergency requiring immediate maintenance, the notification of such emergency episode shall be made as soon as possible, and shall (in addition to the foregoing information) clearly describe the nature of the emergency.

(e) Maintenance Coordination. Maintenance events shall, to the degree feasible, be coordinated with other maintenance events proposed in the immediate vicinity with the goal being to limit coastal resource impacts, including the length of time that construction occurs in and around public access areas and shoreline access points. As such, the Permittee shall make reasonable efforts to coordinate the Permittee's maintenance events with other adjacent events, including adjusting maintenance event scheduling as directed by planning staff of the Coastal Commission's North Central Coast District Office.

(f) Noncompliance Provision. If the Permittee is not in compliance with the terms and conditions of any Coastal Commission coastal development permits or other coastal authorizations that apply to the subject property at the time that a maintenance event is proposed, then the maintenance event that might otherwise be allowed by the terms of this future maintenance condition shall not be allowed by this condition until the Permittee is in full compliance with those terms and conditions.

(g) Emergency. In addition to the emergency provisions set forth in subsection (d) above, nothing in this condition shall serve to affect the specified rights that may exist in cases of emergency pursuant to Coastal Act Section 30611, Coastal Act Section 30624, and Subchapter 4 of Chapter 5 of Title 14, Division 5.5, of the California Code of Regulations (Permits for Approval of Emergency Work).

(h) Duration and Scope of Covered Maintenance. Future maintenance under this coastal development permit is allowed subject to the above terms until August 15, 2024. Maintenance can be carried out beyond the 10-year period if the Permittee requests an extension prior to August 15, 2024 and the Executive Director extends the maintenance term in writing. The intent of this permit is to regularly allow for 10-year extensions of the maintenance term unless there are changed circumstances that may affect the consistency of this maintenance authorization with the policies of Chapter 3 of the Coastal Act and thus warrant a re-review of this permit.

5. **Duration of Armoring Approval.** This CDP authorizes the project in its approved state (see **Exhibit 4** for project plans) until the time when the currently existing development requiring armoring (Wharf Road) is (1) no longer present or (2) no longer requires armoring, whichever occurs first. If, during the duration of armoring approval, some portion of the existing development requiring armoring is removed, while some portion is retained, the revetment shall be reduced or modified so that it is the minimum necessary to protect the portion of development that is retained. When the existing development requiring armoring is removed or no longer requires armoring, the Permittee shall submit a complete CDP amendment application to the Coastal Commission to remove the approved armoring and to appropriately restore the affected area.

IV. COASTAL DEVELOPMENT PERMIT DETERMINATION

The proposed project involves development both in an area of the Commission's retained coastal development permit (CDP) jurisdiction as well as development in an area of CDP jurisdiction delegated to Marin County by the Commission through certification of the County's Local Coastal Program (LCP). Coastal Act Section 30601.3 authorizes the Commission to process a consolidated CDP application in such cases when the local government, the applicant, and the Executive Director all agree to such consolidation. The standard of review for a consolidated CDP application is the policies of Chapter 3 of the Coastal Act. The local government's certified LCP may also be used as non-binding guidance.

The proposed development would occur within public tidelands (on the lagoon side of the existing seawall) and within the roadway located immediately inland of the seawall. The public tidelands of Bolinas Lagoon are within the Commission's original jurisdiction and a portion of the proposed project that is situated inland of the existing seawall falls within the County's permitting jurisdiction. The County and the Applicant have requested, and the Commission has agreed, that the Commission review the entire project (including the portion within the County's LCP jurisdiction) together as one combined and consolidated coastal development permit application as allowed in Section 30601.3 of the Coastal Act. Thus, the standard of review for the proposed project is the Chapter 3 policies of the Coastal Act, with the Marin LCP providing guidance.

A. PROJECT LOCATION

The proposed project is located in the unincorporated community of Bolinas, Marin County. The project site is located within the right-of-way of the County-maintained Wharf Road, along the western shore of Bolinas Lagoon (**Exhibit 1**). The site is bounded by APNs 193-082-19, 193-082-20, and 193-082-21 on the lagoon side of the road, and APNs 193-081-13 and 193-081-14 on the inland side of the road (**Exhibit 2)**. Wharf Road is the main arterial road running between downtown Bolinas and Bolinas' public beach, which is located about 800 feet southeast of the proposed project site. The roadway serves as the main pedestrian route to the beach and provides parking for the public beach. A public dock operated by the College of Marin is located adjacent to the existing seawall near its western edge.

Bolinas Lagoon, adjacent to and within the project area, is an ecologically significant tidal estuary that provides habitat for shorebirds, waterfowl, fish, invertebrates, and special-status plants and animals. Bolinas Lagoon contains sub-tidal channels, intertidal mudflats, islands, and emergent salt marsh. A portion of the proposed project would occur within Bolinas Lagoon intertidal mudflats. The mudflats located in this shoreline area are generally unsuitable for walking.

B. PROJECT DESCRIPTION

The proposed project would modify an existing, failing concrete seawall (126-feet long and 5-feet high) that supports Wharf Road. The Applicant proposes to attach a series of 0.2-inch-thick steel sheet piles laid end-to-end along the face of the existing failing seawall, resulting in 84 square feet of fill occurring within the lagoon. The proposed wall would be constructed of interlocking z-pile sheets (**Exhibit 5**), which would be installed flush to the wall and extend up to 9 inches seaward of the wall at its widest point. The sheet-pile wall would cover the full height of the existing seawall face (approximately 5 feet) and would also be embedded between 15 and 20 feet below the toe of the existing wall. The sheet-pile wall would be tethered to new concrete pilings via steel tie rods, which would be built under the roadway to support the wall (**Exhibit 4**). In addition, the area of the roadway disturbed by construction would be repaved.

The Applicant has incorporated Avoidance and Minimization Measures (AMMs) into the project description to avoid or minimize environmental impacts (**Exhibit 6**). The measures and conditions proposed by the Applicant impose restrictions on construction in order to avoid and minimize potential negative impacts to water quality, habitat, and special-status species that have some potential to occur within the project area or to be impacted by the project. The Applicant also proposes to remove debris covering an area of 336 square feet found in the intertidal area adjacent to the project site and elsewhere within the Bolinas Lagoon environment (including removal of utility poles and other woody debris treated with creosote, plastic debris, or other construction and marine-related debris). This debris removal is proposed as mitigation for the loss of 84 square feet of wetlands habitat, and would restore at a ratio of 4:1 areas of disturbed wetlands that are not now functioning as wetlands due to fill or interruption of tidal flow.

C. CDP REQUIREMENT

Applicable Policies

Section 30610 of the Coastal Act states:

…no coastal development shall be required pursuant to this chapter for the following types of development and in the following areas:

…

(d) Repair or maintenance activities that do not result in an addition to, or enlargement or expansion of, the object of those repair or maintenance activities; provided, however, that if the commission determines that certain extraordinary methods of repair and maintenance involve a risk of substantial adverse environmental impact, it shall, by regulation, require that a permit be obtained pursuant to this chapter….

Analysis

The proposed project would modify an existing seawall that supports the County-maintained Wharf Road. The project is required to protect the roadway because the existing seawall is being undermined by tidal action and storm surges, and the roadway is in the process of collapsing. Certain repair and maintenance activities constitute development that does not require a CDP. Development that does not require a CDP under Coastal Act Section 30610(d) includes repair or maintenance activities that do not result in an addition to, or enlargement or expansion of, the object of those repair or maintenance activities. Because the proposed project would result in an addition to the existing seawall structure, it requires a CDP.

Conclusion

The proposed project does not constitute development that may be authorized without a CDP under Coastal Act Section 30610(d). The proposed project is therefore considered to be new development that requires a CDP.

D. GEOLOGIC CONDITIONS AND HAZARDS

Applicable Policies

Section 30235 of the Coastal Act states:

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.

Section 30253 of the Coastal Act states, in part:

New development shall do all of the following:

(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Although not the standard of review, on the topic of Shoreline Protection and Hazards Areas the Marin County LCP states in part:

5. The following policy from Section 30235 of the Coastal Act is incorporated into the County LCP: Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline process shall be permitted when required to serve coastal-dependent uses or to protect existing structures (constructed before adoption of the LCP), or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply.

9. In the absence of an overall wave hazard/shoreline erosion study, any permit application for seawalls, riprap or other protective structures on beaches, shall be accompanied by engineering reports stating the nature and extent of wave erosion hazard along the beach area and an explanation of how the proposed protective works will mitigate the hazard, both on and off the project site. This policy shall not apply to emergency permit applications applied for within three years of the date of adoption of the LCP. Emergency permit applications after that date shall be subject to report requirement or shall specifically establish why the need for such protective devices was not foreseen.

Analysis

The proposed project would expand an existing seawall that protects Wharf Road as a publically maintained road. The existing seawall, built circa 1960, has been destabilized over time by tidal fluctuations and wave action from winter storms. As a result, the existing seawall is in the process of collapsing and slumps moderately toward Bolinas Lagoon, causing destabilization of the adjacent roadway. According to the geotechnical report submitted by the Applicant, the upper foot of backfill behind the seawall has washed out into the lagoon in some areas along the existing seawall. The 5-foot-wide asphalt paved shoulder of Wharf Road immediately adjacent to the seawall slopes down 1 to 2 feet from the top of the seawall, and contains several voids (**Exhibit 3**).

Coastal Act Sections 30235 and 30253 acknowledge that seawalls, revetments, cliff retaining walls, groins and other such structural or "hard" methods designed to forestall erosion also alter natural landforms and natural shoreline processes. Accordingly, with the exception of new coastal dependent uses, Section 30235 limits the construction of shoreline protective works to those required to protect existing structures or public beaches in danger from erosion. The Coastal Act provides these limitations because shoreline structures can have a variety of negative impacts on coastal resources including adverse effects on marine resources and overall shoreline beach dynamics.

The proposed armoring is inconsistent with several Chapter 3 policies of the Coastal Act and, as detailed herein, will cause impermissible adverse impacts to marine resources that are protected by the Coastal Act, including but not limited to Coastal Act Sections 30230-30231, 30240(b) and 30233. Additionally, although special conditions can help mitigate marine resource impacts, shoreline ecosystem impacts can never be entirely eliminated or mitigated.

As stated above, the only applicable basis for the Commission to approve proposed armoring such as this that is otherwise inconsistent with the Coastal Act is pursuant to Section 30235 of the Coastal Act because it is required to protect an existing structure in danger from erosion. If there was no existing structure in danger from erosion and the armoring was not required to protect it, the armoring would be denied. Therefore, the proposed project must satisfy the tests of Section 30235 in order to be authorized despite its other impacts.

Under Coastal Act Section 30235, shoreline protective structures can be authorized if: (1) there is an existing structure; (2) the existing structure is in danger from erosion; (3) shoreline altering construction is required to protect the existing threatened structure; and (4) the required protection is designed to eliminate or mitigate the adverse impacts on shoreline sand supply. The proposed project is required to protect and provide continued structural support for Wharf Road, which connects the unique downtown of Bolinas to its public beach located at the end of the road, and which is heavily utilized by both local residents and visitors. Materials submitted by the Applicant state that if the existing seawall is not modified as proposed, wave action from the lagoon will cause the seawall to collapse and destabilize the roadway. If the existing seawall were to fail, large amounts of debris would be discharged into the adjacent intertidal zone, causing severe adverse impacts on coastal resources including the quality of coastal waters and the biological productivity of habitat in the intertidal mudflats. In addition, destabilization of the roadway would adversely affect continued public access to Bolinas' public beach, as Wharf Road is the main arterial connecting downtown Bolinas to the beach and provides public parking for beachgoers.

Further, the existing seawall, in its deteriorated state, poses a risk to life and property. The proposed project will provide improved structural support to the seawall and the public road and thereby reduces risk to life and property. The project has been designed to account for seismic loading, and will not increase the potential for damages due to flooding or wave run-up. In terms of recognizing and assuming the hazard risks for shoreline development, the Commission's experience in evaluating proposed developments in areas subject to hazards has been that development has continued to occur despite periodic episodes of heavy storm damage and other such occurrences. Development in such dynamic environments is susceptible to damage due to such long-term and episodic processes. Past occurrences statewide have resulted in public costs (through low interest loans, grants, subsidies, direct assistance, etc.) in the millions of dollars. As a means of allowing continued development in areas subject to these hazards while avoiding placing the economic burden for damages onto the people of the State of California, Applicants are regularly required to acknowledge site hazards and agree to waive any claims of liability on the part of the Commission for allowing the development to proceed. Accordingly, this approval is conditioned for the Applicant to assume all risks for developing at this location (see **Special Condition 2**). To provide for necessary maintenance, repair, changes or modifications, **Special**

Condition 4 authorizes the Applicant to maintain the project in its approved state, subject to the terms and conditions identified by the special conditions.

Finally, the proposed project would have an insignificant impact on local shoreline sand supply, as the project would not alter coastal bluffs or displace beach area, consistent with Coastal Act Section 30235.

Duration of Armoring

Section 30235 only authorizes shoreline protection devices when necessary to protect an existing structure in danger of erosion, and shoreline protective devices are no longer authorized by Section 30235 after the existing structures they protect are no longer present or no longer require armoring. As discussed herein, the proposed armoring is inconsistent with marine resource protection policies of the Coastal Act and will cause impermissible adverse impacts to marine resources that are protected by the Coastal Act. In this circumstance, the only applicable basis for the Commission to approve proposed armoring such as this, which is otherwise inconsistent with the Coastal Act, is pursuant to Section 30235 because it is required to protect an existing structure in danger from erosion. Here, if there was no existing structure in danger from erosion and the armoring was not required to protect it, the proposed armoring would be denied. Thus, the only way the project satisfies the Section 30235 tests, as described above, is because it is based on the existence of a legally authorized existing structure that the armoring is required to protect. Absent the existing endangered structures, approval of the proposed project pursuant to Section 30235 would no longer be warranted.

Accordingly, it is necessary to limit the length of a shoreline protective device's development authorization to ensure that the armoring being authorized under Section 30235 is only being authorized as long as it is required to protect the legally authorized existing structure. Once the existing structure that the armoring is required to protect is no longer present or no longer requires armoring, the armoring is no longer authorized by Section 30235 of the Coastal Act.

Therefore, the Commission authorizes the armoring in this case coincident with the existing structure it is authorized to protect, and requires removal of the armoring when the road it was authorized to protect is no longer present or no longer requires armoring. **Special Condition 5** thus requires the Applicant (or its successors) to submit a complete permit amendment application to remove the armoring when Wharf Road is either no longer present or no longer requires armoring.

Conclusion

The proposed project is necessary to continue protection of Wharf Road, in danger from erosion. Although, as discussed below, the proposed project is not one of the permissible uses for wetland fill and is inconsistent with other marine resource protection policies of the Coastal Act, the project qualifies for approval based on Section 30235 of the Coastal Act, which instructs the Commission to approve seawalls required to protect existing structures if specific criteria are satisfied.

E. FILL OF WETLANDS

Applicable Policies

The proposed project includes development in the intertidal mudflats of Bolinas Lagoon, which are wetlands according to the definition of Coastal Act. Section 30121 defines wetlands as:

> *…land within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.*

Coastal Act Section 30233 limits fill in wetlands except for certain purposes. Section 30233 further limits fill activities to instances where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. Section 30233(a) states:

> *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.*

Although not the standard of review, the Marin County LCP states the following regarding filling of Bolinas Lagoon as part of its Lagoon Protection policies:

> *The diking, filling, dredging and other alterations of these wetlands shall occur only for minor public works projects and shall be in conformance with Coastal Act Section 30233.*

The construction of physical improvements along the Bolinas Lagoon parklands is not consistent with these Lagoon policies.

Analysis

The proposed project involves modifying and retaining an existing concrete seawall by constructing a new steel sheet-pile seawall adjacent to the existing seawall on the side adjacent to Bolinas Lagoon. The steel sheet-pile wall that the Applicant proposes to place seaward of the existing seawall is considered to be fill because the structure would displace 84 square feet of existing intertidal mudflats. Section 30233 requires that fill of coastal waters must be 1) an allowable use, 2) the least environmentally damaging feasible alternative, and 3) provide adequate mitigation.

Allowable Uses

The purpose of the proposed 84 square feet of fill is to modify the existing seawall in order to protect an existing roadway. This type of modification is not one of the seven allowable uses enumerated under Section 30233. However, as described above, Section 30235 requires the Commission to approve seawalls and other similar structures (such as the proposed project) when such protective devices are necessary to protect existing primary structures in danger from erosion and provided that the protective devices are designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Although the proposed project meets the requirements of Section 30235, it still must be the least environmentally damaging alternative and feasible mitigation measures must be incorporated into the project to minimize adverse environmental effects consistent with Coastal Act Section 30233.

Least Environmentally Damaging Feasible Alternative

The Applicant analyzed several project alternatives for the necessary seawall modification project. Alternatives to the proposed project include 1) the replacement of the existing seawall with a concrete seawall in the same alignment of the existing seawall, and 2) installation of a rock rip-rap buttress on the lagoon side of the existing seawall.

The first project alternative considered by the Applicant would involve the removal of the existing seawall and construction of a new concrete cast-in-drilled-holes retaining wall within the footprint of the existing seawall. This design would result in no new permanent fill to Bolinas Lagoon. However, the Applicant has rejected this alternative because it would be more disruptive to the intertidal habitat adjacent to the project site. To allow for the removal of the existing seawall, a temporary sand bag dam would need to be installed in the lagoon channel to create a water barrier to allow for roadway excavation required to pour the new concrete seawall. The intertidal area inland of the sand bag dam would have to be dewatered during the construction process. Further, this alterative would result in greater adverse impacts to public access because the project would require significant removal of the existing roadway and would take longer to construct than the proposed project (at least 2 to 3 months compared to 6 to 8 weeks for the proposed project). Finally, the overall project cost would be significantly more expensive utilizing this alternative rather than the proposed project, with an estimated cost of $1,200,000 compared to $500,000 for the proposed project.

The second project alternative considered by the Applicant would consist of installing a rock rip-rap buttress in front of the existing seawall. This design would allow the existing wall to remain in place, and would be inexpensive relative to the proposed project ($150,000). However, this alternative would result in approximately 882 square feet of fill to Bolinas Lagoon, and would cause significant and permanent disruption to the intertidal habitat. For this reason, the Applicant has rejected the alternative.

The alternatives considered by the Applicant would both result in greater impacts to the marine environment than would the proposed project. The proposed project has been designed using narrow 0.2-inch sheet-piles to minimize the fill of coastal waters. The proposed project also provides the least amount of impacts to the intertidal habitat. No temporary structures (e.g., sand bags) are anticipated to be necessary as all work could be performed at low tide events and the anticipated radius of construction impacts within the lagoon would be 1 meter or less. If future maintenance or modifications to the seawall were required, this design would allow for the work to be performed on the inland side of the sheet-pile seawall, avoiding potential future disruption to intertidal habitat. Because of the significant impacts to marine resources involved with alternatives to the proposed project discussed above, the Applicant's preferred design can be considered to be the least environmentally damaging feasible alternative.

Mitigation

As with other projects in the marine environment, development of this sort has the potential to lead to direct and indirect impacts on coastal resources. The Applicant has incorporated Avoidance and Mitigation Measures (AMMs) into the proposed project to avoid or minimize potential environmental impacts. These include AMMs to avoid or minimize construction-related adverse impacts to the marine environment and water quality, as well as to special-status wildlife species that are considered to have some potential to occur within or nearby the project site. Additional construction BMPs can be readily applied to minimize and mitigate for potential impacts. **Special Condition 1** imposes additional construction requirements to ensure that environmental effects will be minimized, including through construction parameters that limit the area of construction, clearly fence off the minimum construction area necessary, keep equipment out of coastal waters, and require equipment and material storage away from tidal waters during non-construction times.

To mitigate for the loss of 84 square feet of wetland habitat, the Applicant proposes to remove debris including woody debris treated with creosote (e.g. old utility poles), plastic debris, and other construction and marine-related debris found in the intertidal area adjacent to the project site and elsewhere within the Bolinas Lagoon environment. The amount of debris removed would total 336 square feet. Thus, the proposed mitigation would restore at a ratio of 4:1 areas of disturbed wetlands within the lagoon that are not now functioning as wetlands due to fill or interruption of tidal flow.

Conclusion

While Section 30233 permits fill of wetlands only for seven enumerated uses, the Commission is required to approve seawalls (such as the proposed project) consistent with the provisions of Section 30235. In addition, in conformance with Section 30233, the proposed project, as conditioned, is the least environmentally damaging alternative and incorporates feasible

mitigation measures to minimize adverse environmental effects. Thus, as conditioned, the proposed project is consistent with the requirements of the Coastal Act and Marin County LCP.

F. MARINE RESOURCES AND WATER QUALITY

Applicable Policies

Coastal Act Section 30230 requires that marine resources be maintained, enhanced, and restored. New development must not interfere with the biological productivity of coastal waters or the continuance of healthy populations of marine species. Coastal Act Section 30230 states:

> *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.*

Coastal Act Section 30231 requires that the productivity of coastal waters necessary for the continuance of healthy populations of marine species shall be maintained and restored by minimizing waste water discharges and entrainment and controlling runoff. Coastal Act Section 30231 states:

> *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 waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30240(b) is the appropriate policy to consider the proposed project's impacts to adjacent environmentally sensitive habitat areas and parks and recreation areas. Section 30240 requires development to be sited and designed to protect environmentally sensitive habitat areas and public parks. Section 30240(b) of the Coastal Act states:

> *(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Analysis

The proposed project involves development within and adjacent to the intertidal mudflats of Bolinas Lagoon that has the potential to adversely impact marine resources, including wetlands and water quality. The shallow waters and wetlands of Bolinas Lagoon provide habitat and food sources for marine flora and fauna, which make use of both the aquatic and terrestrial

environments provided in this area of the lagoon. Bolinas Lagoon is located along the Pacific Flyway, and is an important wintering area for thousands of bird species. Protected sand bars and islands provide pupping grounds and haul-out sites for harbor seals. Subtidal areas provide nursery and feeding habitat for resident and migratory fish.

Coastal armoring, including seawalls, has been shown to reduce intertidal beach widths through the processes of placement loss, passive erosion, and increased erosion directly seaward of structures. These changes to the physical environment translate directly into adverse impacts to shoreline ecosystems. For example, exposed intertidal beach areas can provide important sources of prey for shorebirds during migration and wintering. Loss of beach due to encroachment and/or increased erosion related to shoreline armoring will reduce prey abundances, foraging opportunities, and habitat values for shorebirds, and may ultimately reduce the diversity and abundance of the avian fauna at a site.

Special conditions can reduce but do not completely eliminate project impacts to marine habitat and shoreline ecosystems. Therefore, the Commission finds that the proposed project is inconsistent with Sections 30230, 30231 and 30240(b), since the shoreline armoring will continue to disrupt the shoreline habitats and fails to increase or enhance marine resources. However, Section 30235 requires the Commission to approve shoreline protective devices even where coastal resources will be adversely impacted if the requirements of Section 30235 are met. As discussed above, the project, as conditioned, meets the criteria of Section 30235. Therefore, the Commission finds the proposed project consistent with Sections 30230, 30231 and 30240(b) of the Coastal Act, to the maximum extent feasible consistent with the requirements of Section 30235 of the Coastal Act .

Regarding construction activities, the proposed construction activities associated with the development could lead to adverse impacts on adjacent intertidal mudflats and Bolinas Lagoon resources, including through run-off from the project site that could potentially result in adverse impacts to Bolinas Lagoon water quality. Because of the sensitivity of the Bolinas Lagoon habitat, water quality issues are essential in review of this project. It is therefore necessary to ensure that construction activities will be carried out in a manner that will not adversely impact water quality or marine resources. The potential adverse impacts to water quality and marine resources include discharges of contaminated runoff into the lagoon from the construction site and the use of heavy construction equipment (due to potential fuel and oil leaks).

The Applicant has incorporated Avoidance and Mitigation Measures (AMMs) into the proposed project to avoid or minimize potential construction impacts to water quality and habitat (see **Exhibit 6**). All work to install the sheet piles will be conducted during low tide, all equipment will be staged away from the roadway, and no equipment is to be operated within the wet environment of Bolinas Lagoon. Additional AMMs incorporated into the project include measures to control runoff, including timing construction activities to avoid sediment run-off due to precipitation events and storage of construction materials away from the lagoon and storm drains to the lagoon. The proposed project also includes measures to avoid or minimize impacts to special-status wildlife species that have some potential to occur within the project work area, or that may be impacted from the project due to the presence of suitable habitat (see **Exhibit 6**).

In addition to the Applicant's proposed AMMs, **Special Condition 1** requires that impacts to water quality, habitat, and marine resources be minimized by limiting the area of construction, clearly fencing off the minimum construction area necessary, keeping equipment out of coastal waters, and requiring that equipment and material be stored away from coastal waters during non-construction times. To further protect marine resources and offshore habitat, **Special Condition 3** requires the Applicant to obtain all necessary permits, permissions, approvals, and/or authorizations required by all other applicable federal and state agencies. Thus, as proposed and conditioned, feasible mitigation measures have been provided to minimize the adverse environmental effects associated with potential construction-related impacts to water quality.

Conclusion

Therefore, the Commission finds that the proposed project is inconsistent with Sections 30230, 30231 and 30240(b), since the shoreline armoring will continue to disrupt shoreline habitats and fails to increase or enhance marine resources. However, Section 30235 requires the Commission to approve shoreline protective devices even where coastal resources will be adversely impacted if the requirements of Section 30235 are met. As discussed above, the project, as conditioned, meets the criteria of Section 30235. Therefore, the Commission finds the proposed project consistent with Sections 30230, 30231 and 30240(b) of the Coastal Act, to the maximum extent feasible consistent with the requirements of Section 30235 of the Coastal Act .

G. PUBLIC ACCESS AND RECREATION

Applicable Policies

The public access and recreation policies of the Coastal Act require that maximum access and recreational opportunities shall be provided and that development shall not interfere with such access.

Coastal Act Section 30210 states:

> *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.*

Coastal Act Section 30211 states:

> *Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Coastal Act Section 30213 states, in part:

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

Coastal Act Section 30221 states:

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.

Although not the standard of review, the Marin County LCP states on the issue of public access, in relevant part:

Construction of shoreline protection measures otherwise permitted by LCP policies shall accommodate previously existing shoreline access.

Analysis

A portion of the proposed project would occur within Bolinas Lagoon intertidal mudflats. The mudflats located in this shoreline area are generally unsuitable for walking so public recreational access will not be significantly impacted. Further, the proposed project will result in the continuation and improvement of public access and recreation in the community of Bolinas by ensuring the future structural integrity of the main arterial road connecting downtown Bolinas to the public beach. Wharf Road is used by beachgoers to reach the beach on foot and by car, and it provides public parking for the beach.

The paved shoulder adjacent to the existing seawall is currently highly degraded and has voids in the pavement that make it unsuitable for pedestrian traffic. The road repairs that would result from the proposed project would allow for the continuance and would enhance public access by improving the degraded roadway, which in its current state presents a potential safety concern to the public viewing the lagoon from Wharf Road or walking along the roadway to and from the public beach.

The proposed project will create short-term, temporary impacts to public access through construction activities. However, the Applicant states that pedestrian, bicycle, and vehicular access to and from the public beach will be maintained at all times during construction. **Special Condition 1** requires the Applicant to submit a Construction Plan which identifies all public pedestrian access corridors within the project area, and minimizes, to the maximum extent feasible, construction encroachment on these areas in order to have the least impact on public access overall. The condition further limits construction work during summer peak visitation months to minimize adverse impact on public access to and from the public beach, unless the Executive Director authorizes such work due to extenuating circumstances.

Conclusion

Project conditions avoid and minimize impacts to public access to the maximum extent feasible

consistent with the requirements of Section 30235 of the Coastal Act. The project will ensure long-term stability of a roadway that provides access to public parking and serves as Bolinas' main accessway to its public beach. Repairs to the shoulder of Wharf Road along the seawall will improve the condition of the road for the public that use it to access the public beach or to view Bolinas Lagoon. Short-term impacts to public access from construction will be minimized to the maximum extent feasible. As conditioned, the project is consistent with the Coastal Act to the maximum extent feasible consistent with the requirements of Section 30235 of the Coastal Act.

H. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 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 which the activity may have on the environment.

The Marin County Department of Public Works, acting as lead agency, found the project to be categorically exempt under CEQA. 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 Commission has reviewed the relevant coastal resource issues associated with the proposed project, and has identified appropriate and necessary modifications to address adverse impacts to such coastal resources. The preceding coastal development permit findings in this staff report has discussed the relevant coastal resource issues with the proposal, and the permit conditions identify appropriate mitigations to avoid and/or lessen any potential for adverse impacts to said resources consistent with the requirements of Section 30235 of the Coastal Act. All public comments received to date have been addressed in the findings above. All above findings are incorporated herein in their entirety by reference.

The Commission finds that only as modified and conditioned by this permit will the proposed project avoid significant adverse effects on the environment within the meaning of CEQA. As such, there are no additional feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse environmental effects that approval of the proposed project, as modified, would have on the environment within the meaning of CEQA. If so modified, 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

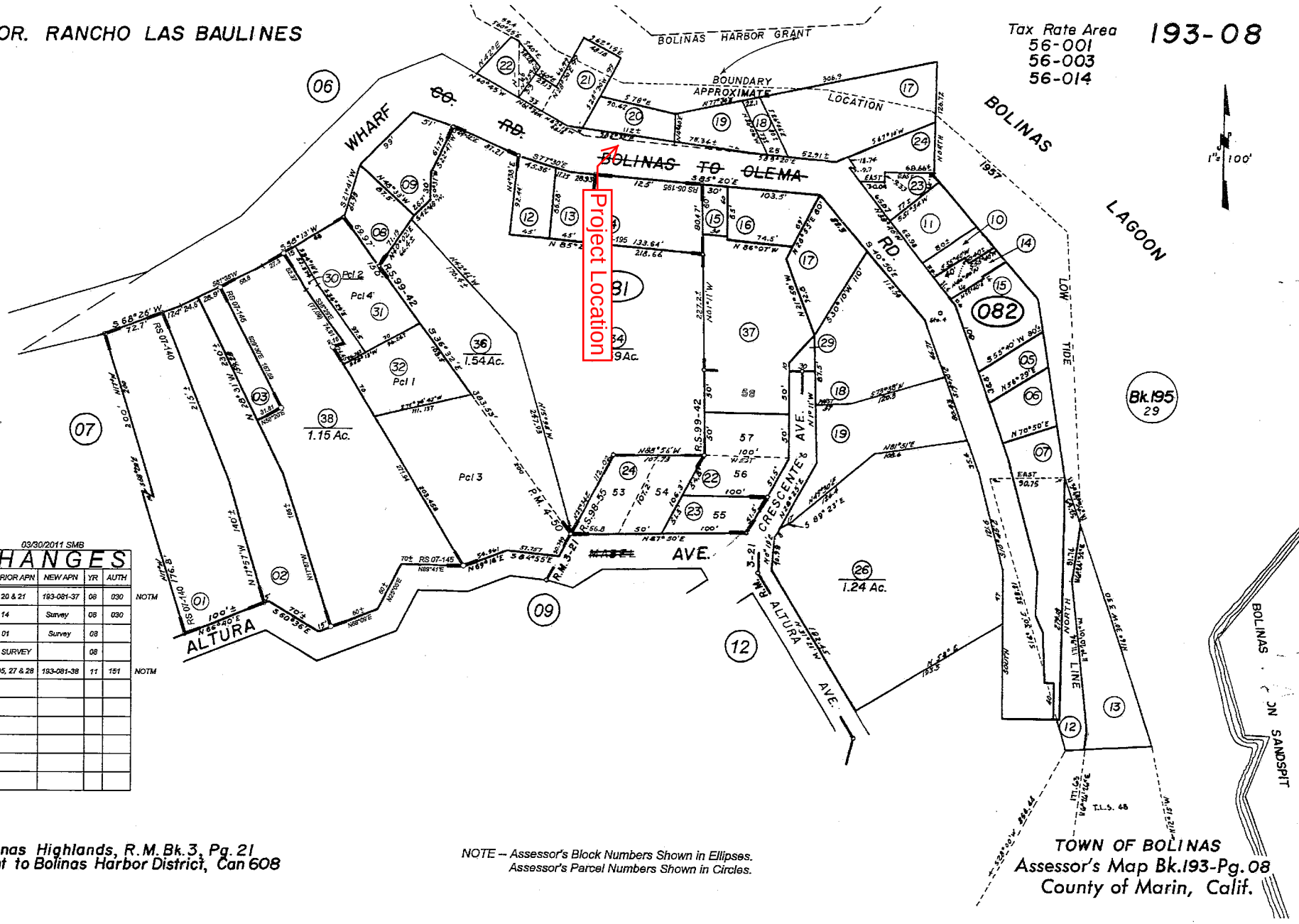
1. Marin County Public Works Department. January 1, 2014. San Francisco Bay Area Joint Aquatic Resource Permit Application.

2. Miller Pacific Engineering Group. September 9, 2013. Geotechnical Investigation, Wharf Road Seawall Design, Bolinas, California.

3. Working Group of the Sanctuary Advisory Council for the Gulf of the Farallones National Marine Sanctuary, August 2008. Bolinas Lagoon Ecosystem Restoration Project: Recommendations for Restoration and Management.

Vicinity Map

200 ft

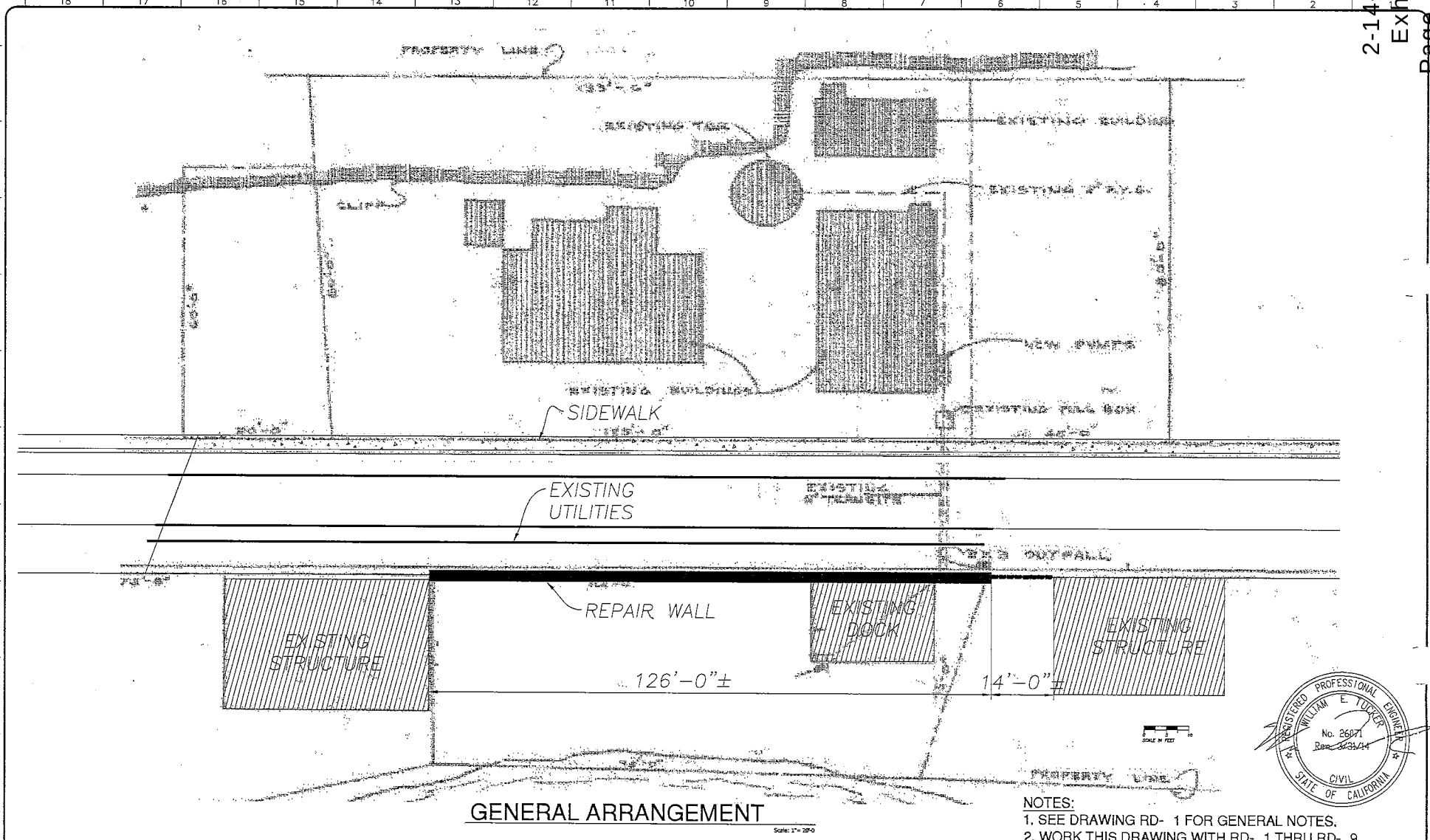


03/30/2011 SMB

CHANGES

BLK	PRIOR APN	NEW APN	YR	AUTH	
081	20 & 21	193-081-37	08	030	NOTM
081	14	Survey	08	030	
081	01	Survey	08		
081	SURVEY		08		
081	05, 27 & 28	193-081-38	11	151	NOTM

Wharf Road, Bolinas
Project will place steel plates against existing concrete seawall; the plates will be tied to concrete pilings placed under the roadway. Project length is 200 feet; all work to take place from the roadway.



GENERAL ARRANGEMENT

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2. WORK THIS DRAWING WITH RD- 1 THRU RD- 9.

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REVISIONS			
NUMBER	DATE	INITIALS	DESCRIPTION
REV 0	12/10/13	WET	90% DESIGN

SCALE:	AS SHOWN
DESIGNER:	WET
DATE:	OCT 2013
DRAWN BY:	WET
CHECKED BY:	WET

REPAIR OF WHARF ROAD
BOLINAS, CALIFORNIA

SHEET CONTENTS
REPAIR OF ROADWAY
GENERAL ARRANGEMENT

JOB # 789
DRAWING NUMBER RD- 2
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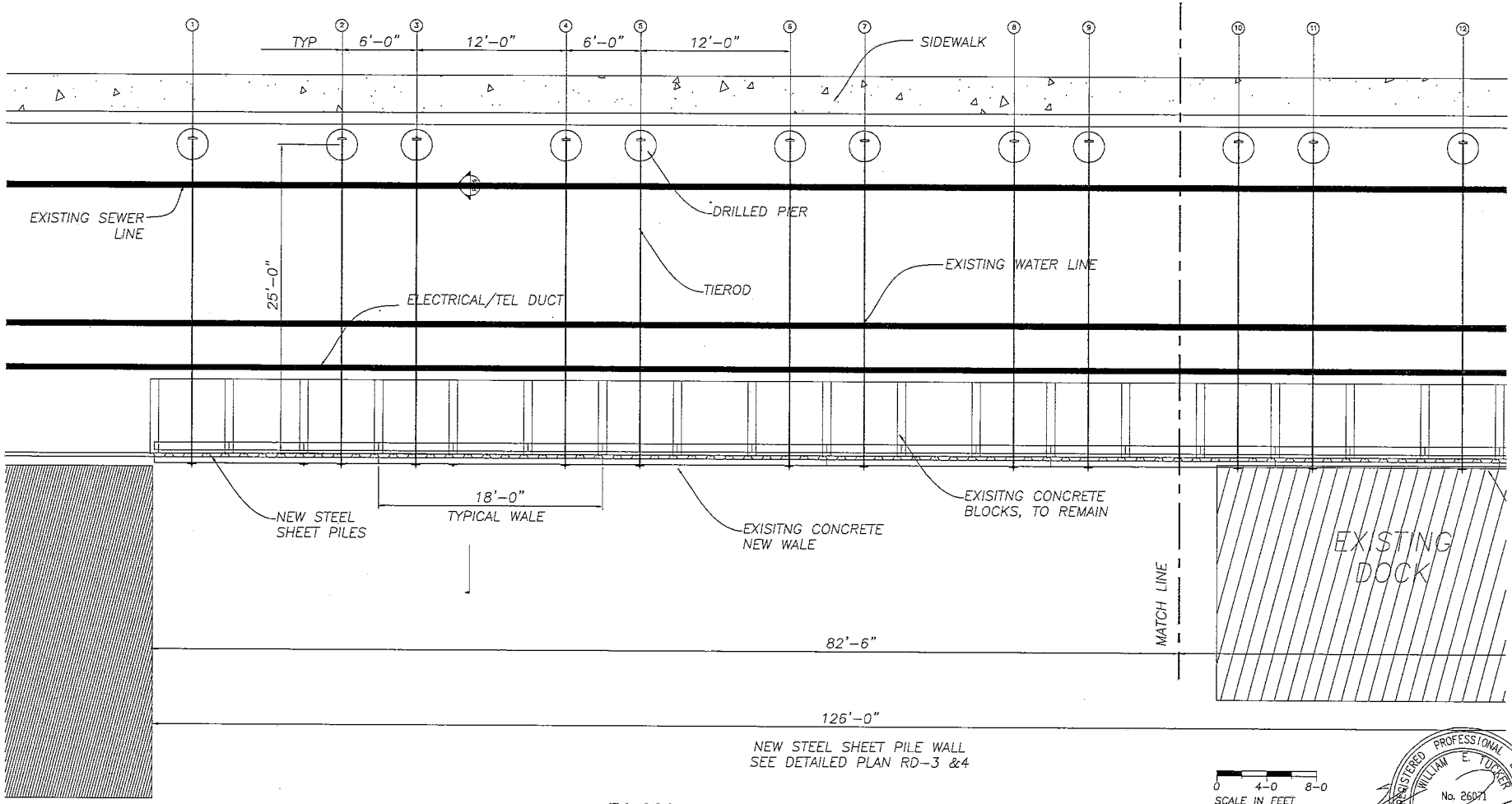

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2. WORK THIS DRAWING WITH RD- 1 THRU RD- 9.

PLAN
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REPAIR OF WHARF ROAD
BOLINAS, CALIFORNIA

SHEET CONTENTS
REPAIR OF ROADWAY
PLAN

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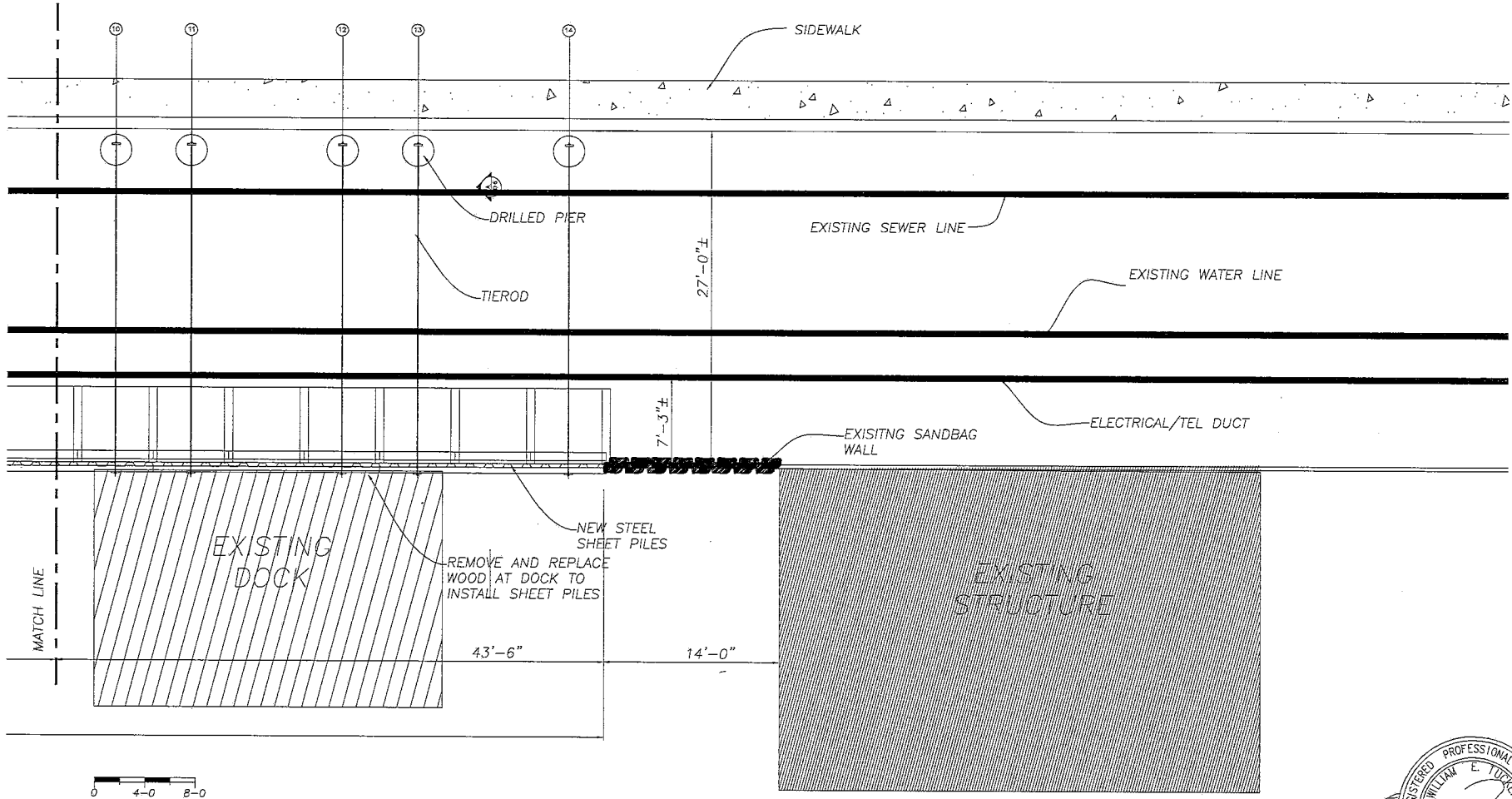

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PLAN
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REPAIR OF WHARF ROAD
- BOLINAS, CALIFORNIA

SHEET CONTENTS
REPAIR OF ROADWAY
PLAN

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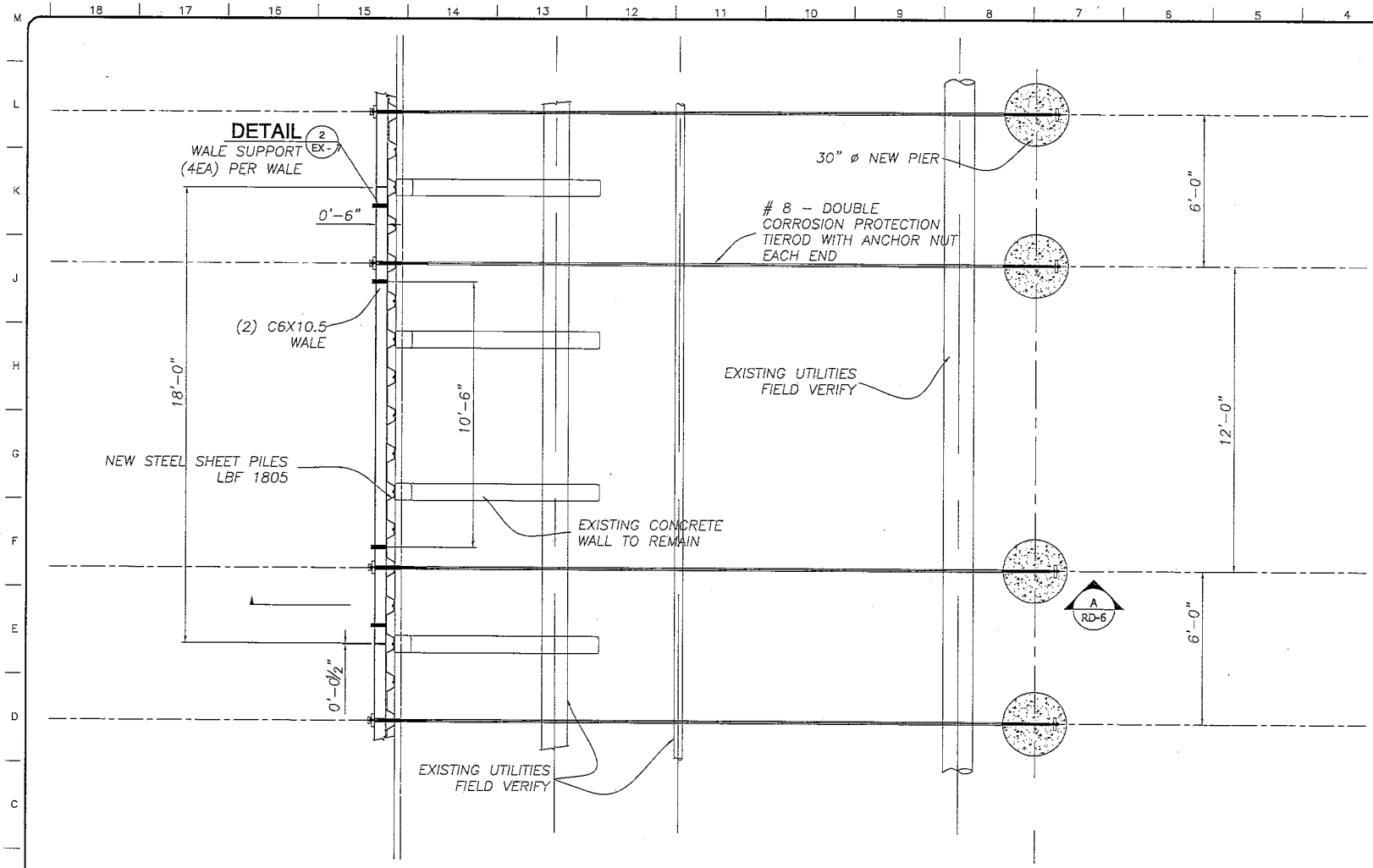

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REPAIR OF WHARF ROAD
BOLINAS, CALIFORNIA

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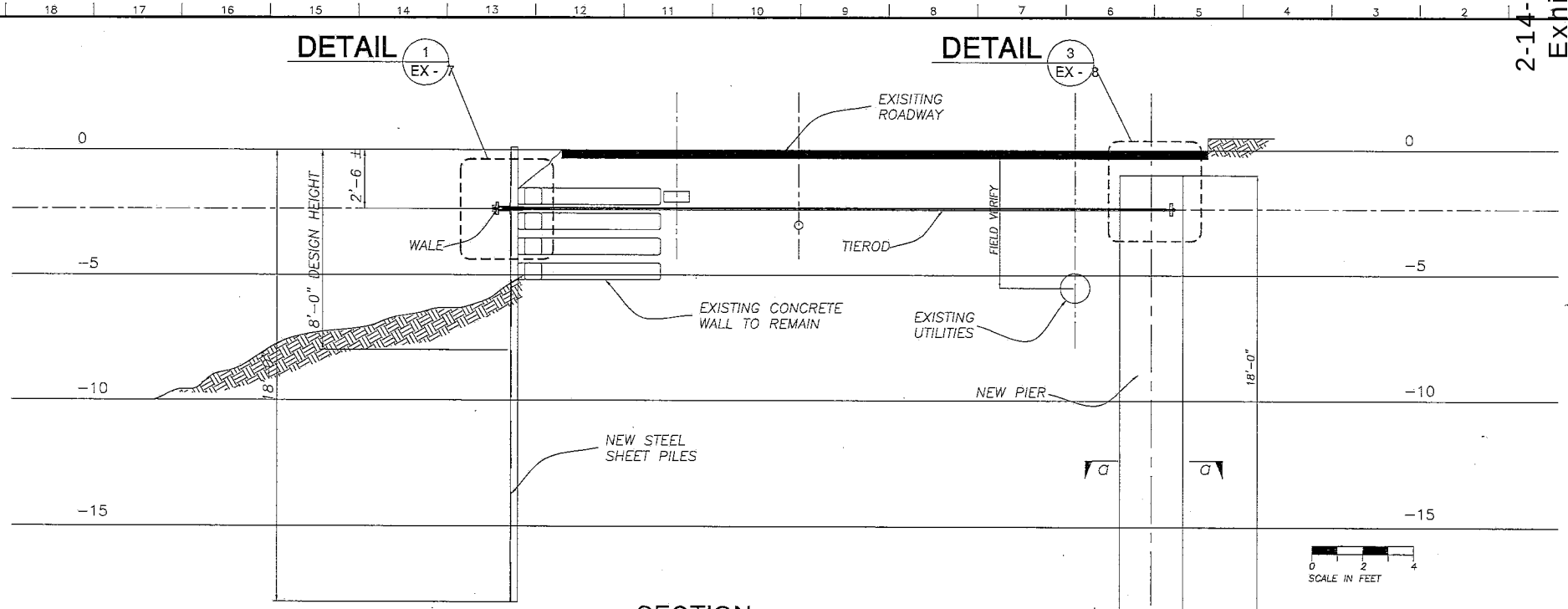

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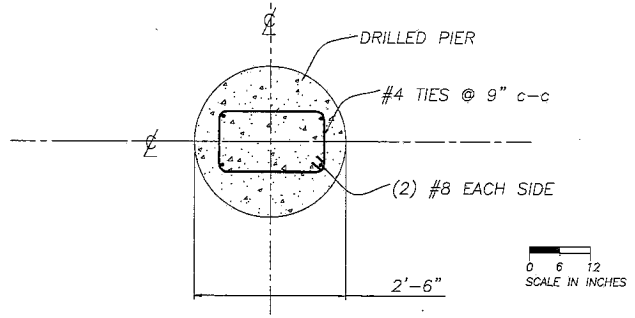

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REPAIR OF WHARF ROAD
BOLINAS, CALIFORNIA

SHEET CONTENTS
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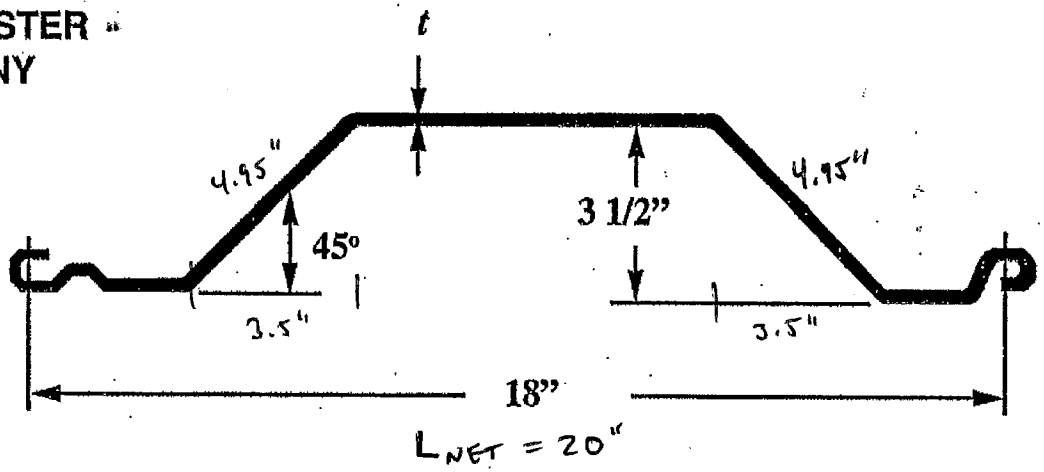

LBF 1800 SERIES SPECIFICATIONS

Section No.	Gauge	t Nominal Thickness	Weight		Section Modulus In^3/ft. of wall	Moment of Inertia In^4/ft, of wall
			#/LF	#/SF		
1805	5	.209	16.9	11.3	3.4	5.7
1806	6	.194	15.8	10.5	3.2	5.3
1807	7	.179	14.4	9.6	2.9	4.9
1808	8	.164	13.2	8.8	2.72	4.5
1810	10	.134	10.8	7.2	2.2	3.7
1812	12	.104	8.4	5.6	1.72	2.9

Sections are available in black, coated or galvanized. Material Specification: ASTM A857 GR36

Note: Drawings, Specifications and data have been taken from manufacturers' specifications, which L.B. Foster Company cannot warrant. However, sources are recognized as being reliable and are customarily used for these products.

1-800-255-4500

Type of Water Body	Temporary impacts (LF)	Temporary impacts (acres)	Permanent impacts (LF)	Permanent impacts (acres)
Bolinas Lagoon mudflat immediately adjacent to roadway cribwall	126	.00048	126	.00048
Total area of impact	126	.00048	126	.00048

* Overlap- the LF/area of permanent impacts occurs in the same area as LF/acres of temporary impacts

SECTION 1- BOX 11- AVOIDANCE OF IMPACTS

The following Avoidance and Minimization Measures (AMMs) will be implemented during the proposed project and have been incorporated into the project description to avoid or minimize environmental impacts to a level of less-than-significant.

General AMMs and Conditions for Performing the Work:

1) Pre-construction surveys: Prior to construction, County biologists will conduct all wildlife pre-construction surveys in a timely manner as stipulated in the Avoidance and Minimization Measures developed for this project and included as part of this permit application.

2) All work to install the sheet piles will be conducted during low tide and all equipment will be staged form the roadway.

3) If a maintenance activity may cause the introduction of sediments into the lagoon, seventy-two hour weather forecasts from the National Weather Service shall be consulted prior to starting any phase of the project that may result in sediment run-off to the lagoon. All associated erosion control measures must be kept on-site and be in place prior to the onset of precipitation.

4) No debris, soil, silt, sand, cement, concrete, or washings thereof, or other construction related materials or wastes, oil or petroleum products or other organic or earthen material shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into directly into the lagoon or into storm drains that connect to the lagoon. When operations are completed, any excess material shall be removed from the work area where such material may be washed into the lagoon.

Special Status Species

Special-status animal species include those listed by the USFWS under the federal Endangered Species Act (1996a, 1999) and by the CDFG under the California Endangered Species Act (2003c, d). The following is a brief discussion of those special-status wildlife species that are considered to have some potential to occur within the project work area or would be impacted from the project due to the presence of suitable habitat.

Salmonids

Steelhead trout (Oncorhynchus mykiss) are known to migrate through the Bolinas Lagoon during spawning and outmigration times of the year and coho salmon (Oncorhynchus kisutch) have the potential to migrate through the lagoon to get in and out of Pine Gulch Creek during spawning and outmigration times of year. Because of the need to protect these species, the following AMMs are prescribed for this project:

AMMs for Salmonids

- The project will be implemented between the dates of June 15th - Oct. 15th of any given year, unless approved by a Fish and Game biologist. The work window for this project is established to minimize any potential impact on steelhead trout or coho salmon that may be present in the project area.

- No equipment is to be operated within the wetted environment of Bolinas Bay. All work to install the sheet piles will occur at low tide and no equipment will be placed or operated below the level of the roadway or on the mudflat of the lagoon. There will be no need to dewater or relocate fish during any part of the project.

California clapper rail and California black rail

The California clapper rail (Rallus longirostris obsoletus, federally- and state-listed Endangered) occurs in the south bay in remnant salt marshes such as Bair and Greco Islands, San Mateo County, Dumbarton Point, Alameda County and in scattered locations in Santa Clara County. In the east bay scattered populations of California clapper rail occur primarily in near creek mouths in northern Alameda County, western Contra Costa County. A small population is also known to persist at Southampton Marsh along the Carquinez Strait (Goals Project 2000). They occur within tidally-influenced salt and brackish marsh habitat, typically dominated by dense stands of cordgrass and pickleweed in salt marsh habitat and bulrush in brackish marshlands. California clapper rail utilize both the lower and upper marsh zones; the lower zone typically consisting of sparse vegetation and tidal sloughs used for foraging, and the upper zone typically consisting of dense vegetation required for cover, breeding and high tide refugia (Albertson 1996, Goals Project 2000). Networks of tidal channels are the most important element of foraging habitat for California clapper rail, where they feed on invertebrates including mussels, clams, crabs, snails, amphipods, worms, spiders, insects and fish (Albertson 1996, Goals Project 2000). Critical Habitat has not been designated for this species. Although the clapper rail is not widely reported in Marin County, it has been reported near the southern portion of the study corridor at Bolinas Lagoon.

The California black rail (Laterallus jamaicensis coturniculus, state-listed Threatened and a federal Special Concern Species) occurs in low elevation tidal salt marsh heavily vegetated with pickleweed, and freshwater and brackish marshes (Zeiner 1990). The black rail breeds within salt or brackish marsh habitats, and occasionally in freshwater marsh or wet meadows. They typically nest on the ground in grasses or salicornia (Baicich and Harrison 1997). They are a year-round resident in the greater Bay Area. The California black rail has been reported throughout western Marin County (CDFG 2003f).

If work occurs during the non-nesting season between September 1st and January 31st, then avoidance has been achieved and work can proceed. When working within 250 ft. of salt or brackish marshland during the period February 1st through August 31st, presence for either rail species shall be assumed and the following Avoidance and Minimization Measures shall be implemented.

AMMs for California clapper rail and California black rail

- Work shall be scheduled to occur between 8:00 AM and 4:00 PM in order to avoid early morning and late afternoon/evening hours when rails are most active.

- Work shall be scheduled to avoid periods of high tides, as the high water reduces the amount of refugial habitat for the rails. No work shall occur near salt marsh habitats within two hours before or after predicted extreme high tides of 6.5 ft. above the National Geodetic Vertical Datum (NGVD), as measured at the Golden Gate Bridge, and adjusted to the timing of local extreme high tide events at the project sites.

- Activities shall proceed as quickly as possible to reduce disturbance from noise, dust, etc.

- Removal or disturbance of emergent tidal marsh vegetation shall be avoided, and removal or disturbance of vegetation at the tidal marsh/upland interface shall be avoided to provide a buffer of refugial habitat within as wide a swath as possible (3 meter minimum) from the Mean Higher High Water (MHHW) line. If removal is necessary, the work shall be scheduled outside of the breeding season (February 1 – August 31st); all vegetation shall be removed by hand, and shall be salvaged and retained for replacement after work is completed.

Raptors and wading birds

While the work site and immediate area surrounding the project do not support breeding habitat for raptors or wading birds, these birds could forage or rest in or near the site. Although none of these species are listed, they are protected by the Migratory Bird Act, and impacts to them shall be minimized.

AMMs for Raptors and wading birds

- If work occurs after the nesting season (August 1st – January 31st), then avoidance has been achieved and work can proceed.

- During nesting season, (February 1st – July 31st), the Environmental Compliance Coordinator shall walk the area of proposed activity each day before maintenance activities begin to determine presence of nesting raptors and wading birds. If none are observed, avoidance can be assumed and work can proceed. If a nest is observed any removal of trees or shrubs or maintenance activities in the vicinity of active bird nests could result in nest abandonment, nest failure or premature fledging. If removal of trees or shrubs occurs, or maintenance begins between February 1st and July 31st (includes

nesting season for passerine or non-passerine birds, and raptors), a nesting bird survey shall be performed within 14 days prior to the removal or disturbance of potential nesting trees or shrubs. All trees with active nests shall be flagged and a non-disturbance buffer zone of 50-90 feet shall be established around the nesting tree, or the site shall be avoided until it has been determined that the young have fledged

Special Status Passerines and Non-Passerine land birds protected by the Migratory Bird Act

Birds in this category that have the potential to occur in the Bolinas Lagoon area include great blue heron, great egret, California yellow warbler, and saltmarsh common yellowthroat (CDFG 2003). The project site is along the Bolinas Lagoon waterfront, between a roadway and the water's edge, and there is no habitat which would support passerine and non-passerine birds within the project footprint. Never-the-less, any maintenance activities in the vicinity of active bird nests, could result in nest abandonment, nest failure, or premature fledging. Destruction or disturbance of active nests would violate the federal Migratory Bird Treaty Act (MBTA) and California Department of Fish and Game (CDFG) Code.

AMMs Passerines and Non-Passerine land birds

- Avoidance will be achieved if maintenance activities are scheduled for August 1st to January 31st to avoid the nesting season (February 1st to July 31st).

- If removal of trees or shrubs occurs, or maintenance begins between February 1st and July 31st (includes nesting season for passerine or non-passerine birds, and raptors), a nesting bird survey shall be performed within 14 days prior to the removal or disturbance of potential nesting trees or shrubs. All trees with active nests shall be flagged and a non-disturbance buffer zone shall be established around the nesting tree, or the site shall be avoided until it has been determined that the young have fledged. Buffer zones typically range between 50-90 ft. for passerines and non-passerine land birds. Active nests shall be monitored to determine when the young have fledged and are feeding on their own.

Special Status Plant Species

The project area does not remove suitable habitat for any of the listed special status plant species in Marin County, and no vegetation will be removed as part of this project; therefore no special AMMs for vegetation are prescribed for this project.

Invasive Species

1) The County shall ensure that the spread or introduction of invasive animals and plants shall be avoided to the maximum extent possible. As a precaution against invasive quagga and zebra mussels, if rubber boots or waders are used in maintenance activities, crew will wash and dry them off-site prior to using them in another creek or tributary or elsewhere in the Bolinas Lagoon.

SECTION 1- Box 12- Mitigations

The proposed project as described in this application will be implemented utilizing the General Conditions and Avoidance and Minimization Measures (AMMs) outlined in Section 1- Box 11 above. The application of these AMMs will mitigate potential environmental impacts to a less-than-significant level; therefore no further mitigations are applicable or necessary for this project.

CALIFORNIA COASTAL COMMISSION
NORTH CENTRAL COAST DISTRICT OFFICE
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105
PHONE: (415) 904-5260
FAX: (415) 904-5400
WEB: WWW.COASTAL.CA.GOV

Memorandum **August 13, 2014**

To: Commissioners and Interested Parties

FROM: Dan Carl, North Central Coast District Deputy Director
North Central Coast District

Re: ***Additional Information for Commission Meeting***
Friday, August 15, 2014

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F10a &F10b	**A-2-SMC-09-006 Michael F. Johnson/ A-2-SMC-09-008 James M. Shook**	**Correspondence, Lennie Roberts**	**1-6**
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		Correspondence, Jennifer Blackman	**12**

F11a

COUNTY OF MARIN

DEPARTMENT OF PUBLIC WORKS

Quality, Excellence, Innovation

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Disability Access

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Flood Control & Water Resources

Land Development

Purchasing

Real Estate

Reprographic Services

Road Maintenance

Stormwater Program

Transportation & Traffic Operations

Waste Management

Ethan Lavine
Coastal Planner
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

July 29, 2014

Dear Mr. Lavine,

This letter is sent to confirm that our staff has reviewed the staff report for CDP Application # 2-14-0214; filed on July 23, 2014, for the repair of the seawall along Wharf Road in Bolinas, West Marin, CA. We have no issues with the findings in the report and are in agreement with the staff recommendations for the permitting of this project.

Please contact me at your earliest convenience if anything else arises in relation to this project. Thank you for your assistance with the permitting process on this project.

Sincerely,

Ernest Klock; Principal Civil Engineer
Marin County Public Works
3501 Civic Center Dr. San Rafael, CA 94913
(415) 473-6552

CC: Craig Parmley; Superintendent of Roads Maintenance
RJ Suokko; Project Engineer

BOLINAS COMMUNITY PUBLIC UTILITY DISTRICT

BCPUD BOX 390 270 ELM ROAD BOLINAS CALIFORNIA 94924 415 868 1224

F11a

August 12, 2014

Agenda Item F 11a
Application No. 2-14-0214
Bolinas Community Public Utility District
In Favor of the Project

VIA FACSIMILE: (415) 904-5400

California Coastal Commission
North Central Coast District Office
45 Fremont Street
Suite 2000
San Francisco, California 94105-2219

ATTN: Ethan Lavine
Coastal Program Analyst

Re: Wharf Road Seawall Modification Permit Application

Dear Commissioners:

On behalf of the Bolinas Community Public Utility District ("BCPUD"), I am writing this letter at the request of our Board of Directors to express the BCPUD's strong support for the above-referenced Project. The BCPUD is a small public utility district located in the unincorporated town of Bolinas in west Marin County, providing water, sewer and related utility services to the residents of the community. We are very familiar with the condition of the Wharf Road seawall that is the subject of this application and can attest to the need for this Project to protect the collapsing roadway above it, as well as ensure continued public access to the beach via Wharf Road.

This project will have the additional benefits of protecting the BCPUD's public utilities located within the Wharf Road right-of-way at the Project location and preserving the sole means of access to thirteen homes and two community facilities. This district is very grateful to the County of Marin Department of Public Works for undertaking this Project on behalf of our community. To the best of our knowledge, Bolinas residents very much support the proposed improvement of the existing seawall at this location and we respectfully urge the Commission to approve the permit application

Please contact me if you have any questions or would like to discuss any aspect of this letter.

Very truly yours,

Jennifer Blackman
General Manager

cc: Marin County Department of Public Works