



DATE: March 31, 2020; Revised April 3, 2020

TO: Kailash Mozumder
Public Works Project Manager
City of Capitola
420 Capitola Avenue
Capitola, CA 95010
(via email)

RE: Proposed Rehabilitation and Repair Project, Capitola Wharf, Capitola, CA
Secretary of the Interior's Standards and Historic Integrity Review

FROM: Leslie A.G. Dill, Historic Architect

INTRODUCTION

This report represents a review of a proposed rehabilitation project for the *Capitola Wharf Resiliency and Public Access Improvement Project*. The project will repair and alter the Capitola Wharf, a historic resource. The review was undertaken to analyze potential impacts on the historic resource itself and as a contributor to the identified cultural landscape district embodied by the Capitola Beach. The review utilizes the *Secretary of the Interior's Standards for Historic Properties – Rehabilitation Standards* (Standards). The project was also reviewed for the potential impact of the project on historic integrity of the historic resource and the cultural landscape district. We understand that one of the intents of this project is to be compatible with the Standards as a way of mitigating the project to a less than significant impact under the California Environmental Quality Act (CEQA).

Executive Summary

With the recommended review of four components of the design by the City of Capitola in the future, prior to construction, the *Capitola Wharf Resiliency and Public Access Improvement Project*, as currently presented, can be found substantially compatible with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. The project, as conditioned for future review, would not substantially impact the historic integrity of the individually listed historic resource Capitola Wharf nor of the identified Capitola Beach Cultural Landscape District.

The four components that are recommended for future design review are as follows:

- Finish and texture of piles at the new addition/trestle widening
- Design and materials of the new prefabricated restroom facilities
- Design of altered decorative entrance gates
- Design of replacement security gates

Methodology

For this report, Leslie Dill of Archives & Architecture LLC referred to the 2004 Draft *Historic Context Statement for the City of Capitola* by Carolyn Swift and to the 2005 *City of Capitola Historic Structures List*. She also referred to the recently updated Capitola Wharf and Capitola Beach evaluations by Archives & Architecture LLC. These reports were prepared in advance of this project review. These evaluations include an updated documentation and evaluation of Capitola Wharf, dated March 4, 2019 and revised April 10, 2019, as well as the associated Capitola Beach Cultural Landscape District Record forms, dated March 1, 2019 and revised April 10, 2019. These evaluations are presented on California Department of Parks & Recreation 523 (DPR523) Forms.

Schematic design sketches for future alterations had been provided for comment November 2018. Possible materials options were initially presented by the City and its engineering consultants, Moffatt & Nichol, in photographs and online links in June of 2019. Ms. Dill reviewed the plan sketches and documentation as forwarded, read online sources about the rehabilitation of other historic structures, and referred to *Preservation Brief 16: The Use of Substitute Materials on Historic Building Exteriors*.¹ The alternative materials were reviewed as presented; no field research was undertaken to view these alternative materials in person. A memorandum was prepared by Leslie Dill, dated June 6, 2019, providing initial review of the design information. Character-defining features were explained, and recommendations were outlined. In addition to this written report, a series of telephone meetings were conducted where the materials alternatives were presented to Leslie Dill for her greater understanding and where additional clarifications in the drawing set were requested by Ms. Dill. The wharf was damaged by surf action early in 2020, accelerating the need for repairs and improvements, in advance of the implementation of a larger alteration plan per the 2018 sketches.

The plans reviewed consist of seven sheets (G-001 and C-100 through C-104 and C-121), dated “saved” March 18, 2020. They were accompanied by a narrative report titled “Capitola Wharf Existing Pilings and Proposed Piling Options,” dated March 12, 2020. The nine-page report includes information on potential piling materials for repairs and replacement and includes photographs of similar projects using the alternative materials. The submittal set was prepared by Moffatt & Nichol of Walnut Creek, California.

Research of Similar Projects

Historically used wood piles coated in creosote are not currently presented as an option because of the adverse environmental impact of the coating. This material is a significant character-defining feature of the wharf and other marine structures of the past. The material provides a familiar wood appearance that weathers over time in a known way; it provides a tactile surface where it is accessible to passers-by; it provides a scent of creosote that is identifiable to those who have interacted with it in the past; it even creaks and creates a known sonic tone when waves wash over it or when it is touched. The review of alternative replacement materials prompted by environmental concerns represents a loss of historic integrity of material that must be recognized. None of the alternative materials provides a fully compatible result. The substitute materials will be compatible in size, form, and approximate color only. Alternative textures are not fully identified in the application. All options allow the growth of barnacles.

Online research was conducted with the goal of finding examples of project reviews for similar historic rehabilitation projects—the replacement of wood-pile marine structures with alternative materials. Within the constraints of this process and its timeline, the research did not yield results

¹ <https://www.nps.gov/tps/how-to-preserve/briefs/16-substitute-materials.htm>

that provided a review format or documentation of the use of replacement materials for this precise sort of marine project in a historic setting.

Information was sent that includes examples of use of this replacement material at two prominent local sites listed on the National Register of Historic Places: Alcatraz and Fort Mason. A brochure also indicates that the material was used at the Statue of Liberty; however, although at a visually prominent location, it is not clear from the presentation if this use was at a historically contributing element of that site. The two local examples present very compelling evidence that other projects at historically significant structures have utilized fiberglass resin composite material in their marine repair projects. One thing observed in these photographs—and noted in online literature—is that the replacement material is not being used to replace all the wooden structural piles, but, rather, they are being used as fender pilings while the wood piles remain intact within the inner structure of the piers.

The literature shows the replacement material being a similar size and installation with regard to traditional wood piles. The piling brochure provided in 2018 included many photographs that show the replacement piles in use. In a few of the photographs, the piles could be seen to be shiny and exhibiting a very “plastic” appearance. In phone meetings with the engineering team and City of Capitola staff, it was presented that none of the alternative coatings were known to have a textured finish, but it was believed that the finish could be matte, and all options would have a somewhat smooth appearance. The color options page (Page 20) from a technical brochure, Creative Pultrusions (CP) Product Brochure “Superpile® Fiberglass Reinforced Polymer (FRP) Pipe Piles,” states that a polyurethane coating could have a “textured architectural appearance.” A textured appearance is preferable to smooth, as the texturing would provide a more compatible visual appearance with the historic material. That page is attached to this report. It is recommended in this report that textures and finishes be presented during future review of the project by the City of Capitola, with alternatives presented as available.

Per the Tech Brief 16, “Growing evidence indicates that with proper planning, careful specifications and supervision, substitute materials can be used successfully in the process of restoring the visual appearance of historic resources.” Fiberglass reinforced replacement building elements are regularly used in locations that are visible at a distance, such as cornices, trim, etc. The Tech Brief concludes: “Substitute materials must meet three basic criteria before being considered: they must be compatible with the historic materials in appearance; their physical properties must be similar to those of the historic materials, or be installed in a manner that tolerates differences; and they must meet certain basic performance expectations over an extended period of time.”

The construction capabilities of the alternative materials are not the purview of this review; however, it is important to reiterate that wooden piles are not being considered. Of the alternatives, the HDPE piles cannot be pile driven, so are not a preferred alternative for engineering reasons. The Timber/poly design with spray coating also has issues with regard to wear and environmental issues. The composite piles are highly preferred for engineering and environmental reasons.

Disclaimers

This report addresses the project plans and materials in terms of historically compatible design of the exterior of the historic structure and its setting. The consultant has not undertaken and will not undertake an evaluation or report on the structural conditions or other related safety hazards that might or might not exist at the site and building, and the consultant will not review the proposed project for structural soundness or other safety concerns. The consultant has not undertaken analysis of the site to evaluate the potential for subsurface resources.

Qualifications

Leslie A. G. Dill, Partner of Archives & Architecture LLC, has a Master of Architecture with a certificate in Historic Preservation from the University of Virginia. She is licensed in California as an architect. Ms. Dill is listed with the California Office of Historic Preservation as meeting the requirements to perform identification, evaluation, registration, and treatment activities within the professions of Historic Architect and Architectural Historian in compliance with state and federal environmental laws. The state utilizes the criteria of the National Park Service as outlined in 36 CFR Part 61.



*Detail of an Engraving of Camp Capitola, illustrating Capitola Wharf in 1879.
From Capitola Wharf DPR523. April 10, 2019.*

RESOURCE AND PROJECT

Status of the Resource

Capitola Wharf was evaluated in a 2019 DPR523 form as follows:

Capitola Beach has been identified as a potential historic resource, eligible for the California Register under Criterion (1) and the National Register under Criterion (A), as it is associated with and represents events that have made a significant contribution to the broad patterns of local and regional history. The beach and its contributing structures embody a cultural landscape, a combination resource of natural and human-designed elements. Capitola Beach represents the history of commerce and recreation in the community of Capitola and to the tourists who visit, and the Wharf, at over 160 years old, can be considered a contributor to the historic narrative by illustrating the significant human intervention that is a theme in the history of Capitola Beach. The Wharf represents the different phases of the Capitola Beach history, including being used for shipping in the mid-1800s, being used for commercial fishing from the 1870s until the 1920s, and being used for sport fishing and recreation from the 1920s until the present. As a historic built structure that helps physically and visually maintain a cultural landscape, the Capitola Wharf is a contributing element of the beach and its significance over time ...

In 1986, with limited documentation, the Capitola Wharf was listed as a significant local resource by the City of Capitola; that listing would establish it as a historic resource under the California Environmental Quality Act. Per the integrity analysis on the previous page, although heavily physically altered since its listing, the Wharf continues to maintain associations with its historical narrative and visually embodies its historical significance. Capitola Wharf is a prominent landmark in the City of Capitola, and it can be considered eligible for the California Register under Criterion (1) and the National Register under Criterion (A).

Character of the Capitola Wharf

The March 2019 description of Capitola Wharf from the DPR523 included a list of character-defining features as follows:

- Its location and orientation, including its direct connection to the end of Wharf Road
- Its visually abundant round wooden piles, some in a regular pattern and some irregular
- Its continuous-height wood-plank deck, at the height of the end of Wharf Road
- Its narrower entrance width and wider end (altered to this design in the 1950s)
- The inclusion of hoists and other technical boating and fishing equipment

The character-defining features of the Capitola Wharf include both visual appearance from afar and the experience at the beach level, directly underneath the wharf structure.

This review keeps in mind that the structure has been repaired and altered multiple times over the years using predominantly in-kind materials and conventional structural systems. The historic integrity of the structure was described as follows:

Although altered and rebuilt multiple times after years of exposure to wave and tidal damage, the Capitola Wharf retains much of its historic integrity per the National Register's seven aspects of integrity and continues to serve as a visual, functional, and recognizable part of Capitola Beach. Because long-term weathering and storm damage have prompted repair and replacement of the Wharf's piers and decking multiple times, its materials and workmanship are not readily identifiable as historic; however, the structure continues to be built of timber and display round-wood pilings related to the structural design of the past. Capitola Wharf has historical integrity with its location and setting at Capitola Beach and extending into Monterey Bay. It retains visual associations with the establishment of shipping in the Early American era and commercial and recreational fishing for over a century, and it conveys a feeling of its age and continued use over time. Per the California Register definition of integrity, the Capitola Wharf conveys adequate historic authenticity. It serves to preserve the relationship of the beach to the commercial shipping and fishing industries of Capitola's past.

Capitola Wharf is identified, also, as a contributing structure to the identified Capitola Beach Cultural Landscape District. The introductory paragraph of the Significance section of the District Record DPR523 forms for Capitola Beach Cultural Landscape District describes the larger setting of the wharf in Capitola's past:

Capitola Beach is a human-altered and maintained natural place significant to the historical development of the City of Capitola. As highlighted in the City of

Capitola Historic Context Statement by Carolyn Swift (Context Statement), Capitola Beach has been a focal point of historic commerce and recreation in the City of Capitola and region for well over one hundred seventy years. The narrative of Capitola Beach is a blend of natural beauty—the sand, the bluffs, the bay, the river—and human enterprise—shipping, fishing, tourism, and entertainment. The story of Capitola is the story of forming and reforming the beach and lagoon seasonally, as well as planning for, and recovering from, storms and tides, as well as from nearby engineering projects.

The beach's significance to the City and region is presented as follows:

Although the city boundaries also include late-twentieth-century shopping centers and residential areas outside the village, Capitola Beach is the primary scenic, cultural, and tourist focus of the City of Capitola since the 1860s. The history of the city centers around the cove and its use for commerce and recreation. Commerce has included uses for shipping and transit, but over time has included holiday resort accommodations—including camps, cabins, and hotels, recreational and entertainment enterprises—including bowling, movie houses, nightclubs, water sports and boating, fishing, and retail and restaurant buildings. All these businesses have relied on and been enriched by the sandy cove at the mouth of the Soquel River. Capitola Beach is significant for its role in the development of the city, and it is embodied in the physical boundaries and engineering structures that have enhanced and altered its natural beauty for human use. Capitola Beach is eligible for the National Register of Historic Places under Criterion (A) and for the California Register of Historical Resources under Criterion (1), for its representation of local and regional patterns of history.

Summary of Proposed Project Scope

The scope of work is outlined in the Key Notes on Sheet C-100, as follows (presented herein by whether the work item is a new addition or a repair):

New additions or alterations to existing features:

- Widen Existing wharf Trestle
- Construct [prefabricated] restroom building at foot of wharf.
- Construct [prefabricated] restroom building near restaurant building.
- Install vehicle runners on top of decking from Bent 1 to Bent 50.
- Construct security gate to match (E).
- Modify entry gate to match style of (E).
- Relocate existing utilities to top of outrigger deck on west side.

Proposed repairs or replacements of existing features:

- Replace decking along entire wharf outside of building footprints.
- Repair steel piles at south end of wharf.
- Replace/Repair damaged timber piles.

SECRETARY OF THE INTERIOR'S STANDARDS REVIEW

The *Secretary of the Interior's Standards for the Treatment of Historic Properties - Rehabilitation Standards* (Standards), originally published in 1977 and revised in 1990, include ten standards that present a recommended approach to repair, while preserving those portions or features that convey a resource's historical, cultural, or architectural values. Accordingly, Standards states that, "Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values." Following is a summary of the review with a list of the Standards and associated analysis for this project:

1. **"A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships."**

Analysis: There is no effective change of use proposed for this public property. Although there is a proposed intensification of use by providing additional restroom facilities and widening the access, these alterations have required only moderate changes to the "distinctive materials, features, spaces, and spatial relationships." The use is consistent with its historic use as a contributing structure to Capitola Beach, as well.

2. **"The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided."**

Analysis: The character-defining features of the Capitola Wharf are included in both its visual appearance from afar and the experience at the beach level, directly underneath the wharf structure.

Much of the primary historic character, massing, and spatial relationships of the resource are proposed for preservation in this project: Its location, orientation, use, and inclusion of hoists and other technical equipment will be unchanged. The continuous-height wood-plank deck will be replaced in-kind. Although proposed for widening, the wharf will continue to have a narrower entrance width and wider terminus. Its visually abundant round wooden piles will be preserved, and new piles will be added; no pile locations are proposed for permanent removal. (See also Standard 5)

In this project, the beach-level experience will be altered by the widening of the access, shading and covering more sand area. This change in size, increasing the width by 16 feet (an addition of 80% to the current width), seems in proportion to the height of the visible piles above average sand level and in keeping to the openness of the structural system overhead. The added width would continue to allow a perception of light and air from underneath the structure; views would persist to the water and to the sides. The changes can be found compatible with the character of the historic wharf. (See Standard 9 for the review of introduction of an alternate material for the new piles.)

3. **"Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other historic properties, will not be undertaken."**

Analysis: All new elements have adequate differentiation and would not create a false sense of historical development. The proposed use of new structural materials differentiates the new area of the wharf from the existing area (See also Standard 9). The restrooms are

proposed to be modern in design and materials, so would not be mistaken for historic elements.

4. “Changes to a property that have acquired historic significance in their own right will be retained and preserved.”

Analysis: No changes to the structure have yet been identified as having acquired historic significance in their own right. All elements are reviewed in this report as a single composition.

5. “Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.”

Analysis: The identified distinctive materials, features, and finishes that identify the structure are shown as substantially preserved on the proposed drawings. In this proposed project, the existing wood piles are preserved. Only a very small number of piles, under the wider terminus area, are proposed for replacement or for repair with new materials (See Standard 6). The wood deck is proposed for replacement in kind (See also Standard 6). There are no other distinctive character-defining materials or artisanship proposed for alteration in this project. (See also Standard 2)

6. “Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.”

Analysis: The scope of repair and replacement of existing features includes the replacement of the decking, the repair of the steel piles, and the repair and replacement of damaged timber piles.

The structural and decking components are identified as Douglas fir, to match “in kind.” This repair is compatible with this Standard.

The replacement and repair materials for the existing damaged and worn piles within the existing wharf area will not match in materials. The replacement materials are proposed to be similar in dimension, layout, and color of the historic pier, especially as viewed from afar, preserving the design and color of the wharf structure. The replacement piles are primarily nearer the wharf terminus, not accessible by pedestrians using the beach, but need to be found visually compatible. It is recommended that the finish of the material be reviewed as a part of the City of Capitola permitting process and that the finish and texture be presented for review, with alternative colors, finishes, and textures presented for review as available.

Note: The steel piles are not identified as character-defining features; the repair of these elements with new materials can be considered compatible with the materials and dimensions of these existing piles, as the materials are considered compatible with the overall design of the adjacent character-defining materials.

7. “Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.”

Analysis: No chemical or physical treatments (such as epoxy consolidation or painting) are shown as proposed in this project, and none are expected.

8. **“Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.”**

Analysis: Archeological resources are not evaluated in this report.

9. **“New additions, exterior alterations or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.”**

Analysis: The proposed project includes a widening of the trestle/accessway, the installation of two new restroom facilities, the alteration of the security gates and entrance gates, and the installation of wood vehicle runners on top of the decking.

The wharf footprint has changed many times through its history. Its length and width have both been altered, as has the decking and access (rail, car, foot). The general configuration of a narrow “trestle” portion that leads to a wider/larger deeper-water access area has been established as a character-defining feature. The addition of width to the current footprint will include a mix of traditional and new materials. The decking and upper structure will be wood, and the support piles are proposed to be a composite fiberglass reinforced with a plastic exterior sleeve. This mix of materials provides a clear understanding of the location of the addition adjacent to the twentieth-century wood structure. Differentiated by its base supports, it is otherwise proposed to be compatible in size, height, scale, proportion, and materials. (See also Standard 2)

It is understood that the prefabricated restroom facilities illustrated in the drawing set may not be the final model bid or provided in the construction phase of work. The current design is compatible with this Standard, as it is compatible for its use of repetitive slats of vertical wood siding and for its compact, utilitarian massing. The design is differentiated by its contemporary flat roof and exposed stainless-steel components. It is recommended that the design of the prefabricated restroom units be reviewed by the City of Capitola for compatibility with the Standards as a part of the future development of the bidding and acquisition phases of work, prior to City of Capitola permits and prior to installation.

The current project drawings do not include detailed design plans elevations, detailing, or materials for the new or altered security gates. It is understood that this design will be developed in the future. It is recommended that the design be reviewed by the City of Capitola for compatibility with the Standards in materials, scale, size, connection, etc., when the design is available, and prior to City permitting,

The current project drawings do not include detailed design plans or elevations for the altered entrance gates. It is understood that this design will be developed in the future. It is recommended that the design of the entrance gates be reviewed by the City of Capitola for compatibility with the Standards in materials, scale, size, connection, etc., when the design has been fully developed, prior to City permitting,

The addition of new wood vehicle runners is in keeping with the history of changing use of the Capitola Wharf. The materials and scale are compatible with the character of the historic resource. They are differentiated by their perpendicular installation and use.

Note: The relocation of the utilities has been presented within the drawing set as notes only. It is assumed, for the purposes of this review, that this alteration will affect only non-character-defining features and will not, for example, include new large structures such as utility boxes or shed-sized buildings.

10. **“New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.”**

Analysis: The proposed design would preserve the essential form and integrity of the historic property. The significant character-defining features of the Capitola Wharf would remain substantially unimpaired in this project.

INTEGRITY ANALYSIS

Historic integrity analysis is a component of the design review process. Integrity analysis is tied into the criteria for National Register and California Register eligibility. A project that might impact the integrity of a historic resource could impact the significance of that resource. According to the California Office of Historic Preservation Technical Assistance Series #6:

*Integrity is the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance. Historical resources eligible for listing in the California Register must meet one of the criteria of significance described above and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Historical resources that have been rehabilitated or restored may be evaluated for listing. Integrity is evaluated with regard to the retention of **location, design, setting, materials, workmanship, feeling, and association** [Emphasis added]. It must also be judged with reference to the particular criteria under which a resource is proposed for eligibility. Alterations over time to a resource or historic changes in its use may themselves have historical, cultural, or architectural significance.*

The following analysis is intended to address how the proposed repair, rehabilitation and addition project might potentially preserve or impact the historic integrity of the contributing subject property and the surrounding cultural landscape district. The analysis utilizes the seven aspects of historic integrity indicated by the National Register and State of California’s definition of authenticity of a resource.

Location: The location of the contributing historic resource is proposed to remain as-is. The historic integrity of location of the Capitola Wharf as an individual historic resource and a contributor to a historic cultural landscape would be fully preserved within this proposed project.

Setting: There is no clearly identifiable immediate setting of the wharf (e.g., there is no associated landscaping or related structures directly adjacent to the wharf, and there are no constraining elements that provide a setting of scale or dimension other than the connection of the wharf to the end of Wharf Road. There is no proposed alteration of the connection of the wharf to the road. The setting of the wharf itself would be preserved.

The integrity of the historic “setting” is also related to the project’s potential impact on the character or quality of the identified Capitola Beach Cultural Resource District and the other Capitola Beach contributors, as well as the visual impacts of the structure on the setting of other nearby historic resources. The expansion of the wharf’s width represents a slight impact on the setting of the beach by covered more sand area; however, this is a minor alteration with little discernable impact on the perception of the size or quality of the beach with regard to its historic integrity of setting. The height, length, plan, materials, and other qualities are substantially

preserved; therefore, the integrity of the Capitola Beach Cultural Landscape District setting, and the setting of adjacent resources, is not substantially impacted.

Design: The project would preserve much of the historic design integrity of the Capitola Wharf. The proposed design would preserve the visual appearance of the long deck, the multiple round support piles, and the cluster of buildings and equipment at the foot and the terminus of the pier. Although widening the accessway, this area would remain narrower than the ending area, a character-defining feature of the wharf design. The design as a contributing element of the cultural landscape would be preserved. The long deck and abundant piles would be visible from throughout the larger cultural landscape and city.

Materials: Because of the age and nature of the resource and its harsh environment, no existing materials are identified as original to the nineteenth or early twentieth centuries; however, it is understood that they represent the slow evolution of similar replacement materials used over the history of the resource. The decking and above-water features are proposed to match the existing materials. The replacement and repair of some piles that support the existing wharf area will also consist of new materials. The project shows the introduction of entirely new materials to support the new addition along the accessway portion of the wharf. These are differentiated per the Standards, but reasonably compatible in size, form, and connection, although not yet known to be compatible in texture or finish. There will be a loss of integrity of materials, but it is proposed to be minimized in this project.

Workmanship: The historic integrity of workmanship has already been lost. The proposed project does not impact this aspect of integrity.

Feeling: After the proposed alterations and addition, the historic resource would continue to convey a feeling of a historic utilitarian marine structure of long-time use.

Association: Per the Capitola Wharf evaluation, “Capitola Beach represents the history of commerce and recreation in the community of Capitola and to the tourists who visit, and the wharf, at over 160 years old, can be considered a contributor to the historic narrative by illustrating the significant human intervention that is a theme in the history of Capitola Beach. The wharf represents the different phases of the Capitola Beach history, including being used for shipping in the mid-1800s, being used for commercial fishing from the 1870s until the 1920s, and being used for sport fishing and recreation from the 1920s until the present.” These significant associations of the resource would be preserved and continued with this new project.

Integrity Analysis Summary: Substantial integrity of location, setting, design and feeling would remain. The integrity of materials has changed over the years, but the preservation or in-kind replacement of the decking, upper structural elements, and the continued use of the vast majority of the existing wood piles can be considered consistent with the original wooden resource. The introduction of new materials is proposed in a way compatible with the historic significance, without significant impact on the historic integrity. The integrity of workmanship has already been lost. The integrity of association would be maintained. The authenticity of the property would be preserved with this *Capitola Wharf Resiliency and Public Access Improvement Project*.

RECOMMENDATIONS AND CONCLUSION

Recommendations

Because of the public bidding process, some elements of the proposed project were not able to be presented with full specifications, drawings, or notations that address potential historic compatibility and potential impacts. These elements of the design are separate and distinct, and their design is recommended for future review as a part of the City of Capitola project approval

process. It was suggested that these elements be conditioned for approval, based on additional design review by the City, including public hearings, prior to issuance of the building permit. The detailing and materials of these specific elements should be reviewed for compatibility with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

It is recommended, therefore, that the following elements be conditioned for approval, based on future City of Capitola design review and approval:

- Compatible texture and finish of proposed exterior of the new piles and repaired piles
- Compatible design, scale, materials, location, etc., of the prefabricated restrooms
- Design, scale, materials, etc., of the altered entrance gates: scale, materials, etc.
- Design, scale, materials, etc., of the new security gates

Conclusion

With the recommended future review of four components of the design, the *Capitola Wharf Resiliency and Public Access Improvement Project*, as currently presented, is substantially compatible with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. The project can be found to preserve substantially the historic integrity of the historic resource and of the identified Capitola Beach Cultural Landscape District.

As conditioned for approval, the proposed project can be found to be mitigated to a less-than-significant impact on the historic resource and its surrounding identified cultural landscape per the California Environmental Quality Act.

ATTACHMENT

Creative Pultrusions (CP) Product Brochure "Superpile® Fiberglass Reinforced Polymer (FRP) Pipe Piles," Page 20.

COLOR OPTIONS



The standard color of the FRP pile is black. Custom colors are available upon request. CPI recommends that a UV protection layer be incorporated onto the pile surface if the pile is exposed to UV light and the application is architectural or cosmetic.

The UV protection is available in the form of a paint or polyurethane coating or in the form of a high density polyethylene sleeve.

Polyurethane coatings have an advantage as they provide UV and abrasion protection while exhibiting a textured architectural appearance. Polyurethane and paint coatings are offered in various colors. Consult the factory and talk to a representative to determine the best UV protection option for your installation.

BEARING AND DOCK PILES

SUPERPILE® is used extensively for bearing pile applications. The SUPERPILE® can be utilized hollow or concrete filled depending on the strength and stiffness requirements for your application.

Engineers and owners are discovering the benefits of using FRP piles in the splash zone. This exercise will significantly increase the service life of your structure.

As an example, after Hurricane Sandy, the Federal Highway Administration (FHWA) replaced the visitor and service docks on Liberty Island, NY with new docks made of FRP and wood. The FHWA engineers specified polymer piles to be used for the bearing piles in order to increase the service life of the structure. The piles were driven to refusal and filled with concrete. The dock structure was erected and the wood plank decking attached.



Visitor Center Reopens



Liberty Island Installation Site



FRP Bearing Piles

Another example of engineers and owners taking advantage of FRP materials involves the construction of an all composite fire boat dock in Jacksonville, Florida. The dock was designed for a category three hurricane direct hit, as the structure is critical for the fire department rescue team.

SUPERPILE® supports the boat lift. The substructure is made of FRP pultruded channels and beams that support the pultruded grating walkway that extends from the firehouse to the boat lifts.

