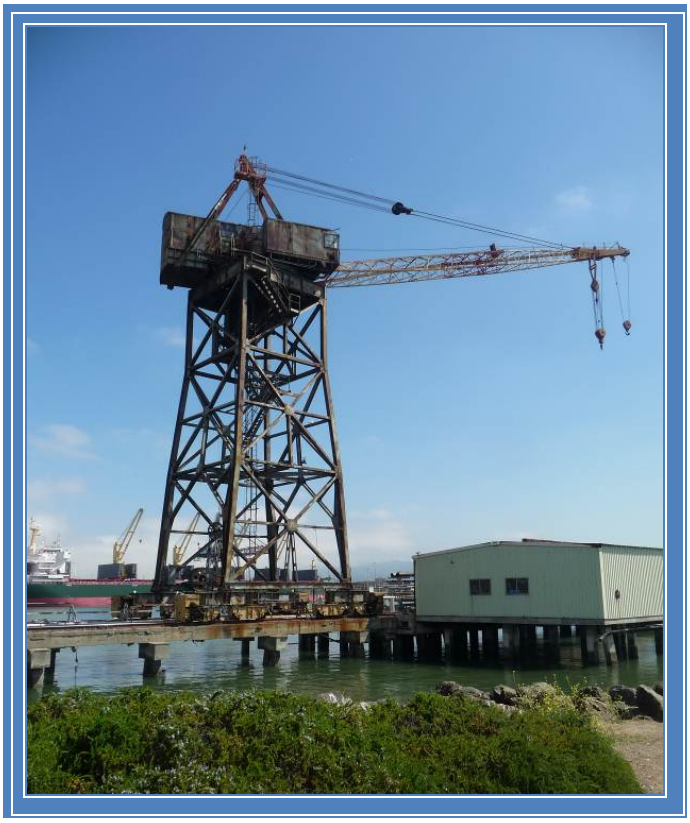
SCH # 2012012049

ENVIRONMENTAL IMPACT REPORT

Todd Shipyard Crane Demolition Project



Prepared for

City of Alameda

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February 2012

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1.0 INTRODUCTION

The City of Alameda (City) proposes to demolish a crane located in the United Engineering Shipyard, commonly known also as the "Todd Shipyard". This draft Environmental Impact Report (draft EIR) provides an assessment of the potential for physical environmental effects to result from the proposed demolition of the crane.

The Todd Shipyard is located at 2900 Main Street in Alameda. The crane rests on a pier over the waters of the Oakland Estuary immediately north of the shipyard. The terminal for the Oakland/Alameda ferry is located immediately adjacent, providing commuter service to San Francisco. The ferry also provides emergency lifeline service in the event of a natural disaster that compromises the use of one or more of the bridges/tubes connecting the Island of Alameda to the mainland.

In 2011, the City entered into an agreement with the Water Emergency Transportation Authority (WETA) to transfer the operation and maintenance of the City's the ferry services.[1] As part of the approval, WETA required the City to analyze the structural stability of the crane out of concern for the long-term safety of ferry service. Specifically, WETA is concerned that parts of the crane could become dislodged due to a boat colliding into the pier, severe weather, a seismic or other catastrophic natural disaster, or simple aging. The potential dislodging of the crane would threaten the safety of ferry passengers and affect WETA's mission to provide emergency life line services in Alameda at a time when it is most needed. In the agreement, the City committed to examine the crane and enact a program to ensure ongoing safe ferry operations, subject to appropriate review of the program under CEQA. Options initially considered included restoration and stabilization, partial demolition, complete demolition, and relocation.

The City contracted with a qualified structural engineering company to perform an analysis of both the crane and the pier to determine the crane's structural safety. The analysis concluded that substantial and expensive rehabilitation of both the

[1] WETA is an agency of the State of California, established by SB 976. WETA is charged with providing not only a public water transportation system for regular use but also lifeline service throughout the Bay Area in the event of an emergency that makes area roadways, bridges, or tunnels inaccessible.

crane and pier would be necessary in order to ensure long-term stability. Even with such rehabilitation, removal of the crane's boom would still be required due to excessive instability. The estimated price range to adequately stabilize the crane spans from more than $300,000 to more than $1 million, exclusive of ongoing maintenance and other critical costs. Please see Chapter 5, Alternatives, for a more complete discussion of estimated costs associated with preservation/rehabilitation of the crane.

Taking into consideration the costs associated with preserving and maintaining the crane at a level that would ensure safety for ferry users (as well as adjacent maritime uses), and the need to ensure that emergency life line services can be provided to the residents and businesses on the main island of Alameda, the City concluded that such efforts would be economically prohibitive and infeasible. Therefore, the City determined that removal, demolition, and safe disposal of the crane was the only feasible option to ensure long-term safety of ferry passengers.

1.1 PURPOSE OF THE DRAFT EIR

This draft EIR is intended to describe the environmental consequences that could occur if the project was approved and the crane was demolished. As the Lead Agency for the environmental review of this project, the City has prepared this draft EIR in compliance with the California Environmental Quality Act (CEQA).[2] CEQA requires that all state and local government agencies consider and fully disclose the consequences to the natural and human environment of any project proposed for approval.

Consistent with CEQA, this draft EIR:

- Discloses the significant environmental impacts of the project
- Identifies mitigation measures that avoid or minimize these effects
- Identifies where significant impacts cannot be mitigated to a less-than-significant level
- Discusses any growth-inducing impacts associated with project approval

[2] Regulations for CEQA are set forth in California laws known as the CEQA Statutes (California Public Resources Code Section 21000 et seq) and the *State CEQA Guidelines* (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 et seq), as amended.

- Describes any effects found not to be significant
- Identifies feasible alternatives to the project that meet most project objectives while avoiding or reducing any identified impacts
- Describes cumulative impacts of the project: effects that may not be significant for the project alone, but may be significant when considered in combination with past, present, and reasonably foreseeable future projects

This draft EIR is an informational document intended to provide public disclosure of the environmental consequences of a project, including both adverse and beneficial effects. It is not the purpose of an EIR to recommend approval or denial of a project or to otherwise comment on the merits of a project. However, prior to taking an action to approve, conditionally approve, or deny the project, the lead agency (in this case, the City) must first certify the EIR as adequate in its characterization of the project's potential environmental effects.

1.2 ENVIRONMENTAL REVIEW PROCEDURE

Typically, a lead agency will commence the CEQA process by preparing an "Initial Study" using the checklist of environmental topic areas provided in Appendix G of the State *CEQA Guidelines*. Following completion of the Initial Study, the lead agency will take one of the following actions:

- If the project is found to have no significant environmental effects, the lead agency can subsequently adopt a *negative declaration*.
- If the lead agency finds that the project has some significant environmental effects but those effects can be feasibly mitigated to a less-than-significant level, the lead agency can then adopt a *mitigated negative declaration*.
- If the lead agency finds that the project has significant environmental effects that may not be feasibly mitigated to a less-than-significant level, CEQA compels the lead agency to prepare an environmental impact report (EIR).

CEQA also gives lead agencies the discretion to omit preparation of an initial study and move directly to preparing an EIR. This course of action is advisable if there is a reasonable basis to conclude that the project will have significant environmental effects (CEQA Section §15060(d)). As the crane is known to be a contributing element to a historical resource, its demolition is considered to be a significant environmental effect. On this basis, the City has opted to move directly to the preparation of this EIR.

As noted in *CEQA Guidelines* Section 15146, the degree of specificity in an EIR will correspond to the degree of specificity in the underlying activity. Based on the specificity of the project plans (see **Chapter 3.0, Project Description**), this EIR provides a project-level analysis of the proposed action. The level of analysis contained in this EIR will be sufficient to proceed with project implementation without further environmental review.

1.3 SCOPE OF THIS DRAFT EIR

This EIR evaluates each of the environmental topics identified in Appendix G of the *CEQA Guidelines* (Title 14, Chapter 3, California Code of Regulations, Section 15000-15387).

The scope of the draft EIR was informed by comments submitted in response to transmittal of a Notice of Preparation (NOP). **Appendix A** includes copies of materials related to the NOP.[3] Following circulation of the NOP, the City received a total of three written comment letters regarding the scope and content of the draft EIR. These comments were taken into consideration in the preparation of the draft EIR. A summary of comments received during the scoping period is provided in **Chapter 2.0, Executive Summary**. A copy of each letter submitted in response to the NOP is appended as **Appendix A** to this EIR.

1.4 REPORT ORGANIZATION

This document is organized into the following chapters:

Chapter 1.0, Introduction provides an introduction and overview of the purpose of this draft EIR and describes the environmental review process.

[3] The City transmitted the NOP twice, each time for the required 30-day period. The first transmittal, in August 2011, went to a list of state and local agencies and interested parties, included within **Appendix A**. The second transmittal, in January 2012, was sent just to the State Office of Planning and Research/OPR and the related California State Clearinghouse, in fulfillment of CEQA Guidelines Section 15082(a). The first transmittal yielded comments from the San Francisco Bay Conservation and Development Commission and the Port of Oakland. The second transmittal led to a comment letter from the Native American Heritage Commission. All of this correspondence is included within **Appendix A**.

Chapter 2.0, Executive Summary provides a summary of the potential environmental impacts related to implementation of the project, and also describes the project alternatives. This chapter provides a summary table that identifies the significant impacts, mitigation measures, and the level of significance of an impact before and after the mitigation measure is incorporated.

Chapter 3.0, Project Description describes the project, including the project setting, project characteristics.

Chapter 4.0, Setting, Impacts, and Mitigation Measures describes the environmental setting; applicable plans and policies; an analysis of the environmental impacts of the project; and mitigation measures that would reduce their significance. For this project, the City concluded that for all but two of the environmental topic areas in Appendix G of the *CEQA Guidelines*, the project would not result in any significant environmental effects. Accordingly, two topic areas (Cultural Resources and Hazards/Hazardous Materials) are addressed in complete, detailed chapters. All other environmental topic areas (for which no significant environmental effects were identified) are addressed in summary fashion within a single section of **Chapter 4.0, Setting, Impacts, and Mitigation Measures**. The summary discussions in Chapter 4.0 are similar to the level of detail that would appear in an Initial Study.

Chapter 5.0, Alternatives considers alternatives to the project and compares the impacts of these alternatives to the project.

Chapter 6.0, CEQA Required Assessment Conclusions provides a summary discussion of project-related effects, including the effects found not to be significant, unavoidable significant effects, cumulative effects, and a discussion of the project's potential to induce growth in the area.

Chapter 7.0, Report Preparation identifies all parties involved in the preparation of this EIR.

The Appendices include the NOP, copies of the comments received on the NOP, and technical reports prepared by environmental and technical specialists for the evaluation of the project.

1.5 ENVIRONMENTAL REVIEW PROCESS

Comments on the draft EIR can be submitted until April 16 at the following address:

ATTN: Margaret Kavanaugh-Lynch
Planning Services Manager
City of Alameda
Community Development Department
2263 Santa Clara Avenue, Room 190
Alameda, CA 94501

Reviewers are encouraged to focus on the document's adequacy in identifying and analyzing effects on the environment and on the ways in which any significant effects might be avoided or mitigated.

Following the close of the public comment period, responses will be prepared and published as a separate document. The draft EIR text and appendices, together with the responses to comments document, will constitute the final EIR.

1.6 CITY DECISION-MAKING

The project involves the proposed demolition of a structure built before 1942. City regulations stipulate that any such demolition permits are first subject to the review and approval of the City's Historical Advisory Board (HAB). Accordingly, before the City Community Development Department can issue a demolition permit, the HAB must first issue a Certificate of Approval. The HAB will consider the issuance of such a certificate at a public meeting during or following the public comment period on the Draft EIR. The HAB's issuance would be subject to the Planning Board's certification of this EIR.

Following the publication of the final EIR, the City Planning Board will hold a public hearing to consider the adequacy of the EIR in describing the environmental consequences of the project. In reaching a decision, the Planning Board will consider comments received during the public review process. If the Planning Board determines the EIR to be adequate, it will certify the EIR and adopt a resolution including findings of fact and a mitigation monitoring and reporting program. Following certification occurs, the HAB's Certificate of Approval would be considered final and complete, and other permits for the project could move forward.

2.0 EXECUTIVE SUMMARY

This draft EIR has been prepared in accordance with the provisions of the CEQA to evaluate the potential impacts of the proposed Todd Shipyard Crane Demolition Project (project). This chapter presents an overview of the environmental analysis of the project. Section 15123 of the *CEQA Guidelines* requires that an EIR summary include: 1) each significant impact with proposed mitigation measures and alternatives that would reduce or avoid that impact; 2) areas of controversy known to the Lead Agency, including issues raised by agencies and the public; and 3) issues to be resolved, including choice among alternatives and whether or how to mitigate the significant impacts.

2.1 PROJECT UNDER REVIEW

The City proposes to demolish, remove, and safely dispose of the Todd Shipyard Crane (crane).

2.2 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

The City published A Notice of Preparation (NOP) on August 8, 2011 (included in **Appendix A**) to solicit comments regarding the final scope and content of the EIR. **Appendix B** includes these comments. Commenters were the Bay Conservation and Development Commission (BCDC) and the Port of Oakland.

The Port of Oakland raised questions regarding the potential for the project to result in adverse effects to the adjacent historic district, insofar as the crane is understood to be a contributing element to this district. **Section 4.1**, **Cultural Resources,** of this EIR, as well as **Appendix C**, provide an in-depth review of the project's potential impacts to historical resources.

The BCDC noted that the project area is within the BCDC's jurisdiction and accordingly, a permit from the BCDC would be required. Table 3-1 of this EIR notes that the project requires a permit (an "abbreviated regionwide permit") from the BCDC before demolition can commence.

2.3 SIGNIFICANT ENVIRONMENTAL IMPACTS

According to the *State CEQA Guidelines*, a "significant effect on the environment" means a substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance (*State CEQA Guidelines* Section 15382). The summary table provided in **Section 2.6**, **Summary of Environmental Impacts**, below identifies the environmental impacts of the project prior to and following mitigation. As shown in the table, implementation of the project would have the potential to generate significant environmental impacts to cultural resources and hazards and hazardous materials prior to mitigation.

2.4 ALTERNATIVES TO THE PROJECT

State CEQA Guidelines Section 15126(d) requires the Lead Agency to consider alternatives to the project that meet the project's basic objectives, while avoiding or reducing significant impacts. CEQA also requires consideration of the No Project (No Action) alternative and identification of an environmental superior alternative.

2.4.1 Alternative 1 – No Action Alternative

Under the No Project Alternative, the project site would remain in its existing condition, and the crane would not be demolished. As the crane is in an advanced state of disrepair, it would continue to degrade and the existing asbestos, lead-based paint, and other corrosive materials would continue to be dispersed into the Estuary. In the event of a major seismic event, the crane could pose a hazard to the safety of ferry passengers, and could also affect WETA's mission to provide life line services to the residents and businesses on the island of Alameda.

2.4.2 Alternative 2 – Demolition with Partial Salvage

As suggested by **Mitigation Measure 4.1-1g** in **Section 4.1, Cultural Resources,** of this EIR, this alternative would utilize pieces of the crane in some form of a public display or public artwork, either at the Todd Shipyard or at a suitable alternative location in the community, such as a museum or other public location. Such a display or artwork, if appropriately commissioned, could provide viewers with a tangible, visual reminder of the crane.

This alternative is considered feasible insofar as the space requirement for such an artwork or display is not excessive and that the cost of conditioning a sufficient amount of crane pieces to create a display would not be onerous.

2.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of the environmentally superior alternative among the alternatives to the project. The environmentally superior alternative must be an alternative to the project that causes the least amount of damage to the environment, even if the project would be more costly with this alternative. Identification of the environmentally superior alternative may not be that which best meets the goals or needs of the project. Additionally, if the No Project (No Action) alternative is determined to be the least damaging to the environment, CEQA requires that the EIR identify an environmentally superior alternative among the other alternatives (*State CEQA Guidelines* Section 15126.6(e)).

The criteria for selection of the environmentally superior alternative are based on comparison of the alternatives that would most substantially reduce or avoid significant and potentially significant impacts identified for the project. A comparison analysis is provided in detail in **Chapter 5.0**, **Alternatives**, of this EIR.

Based on a comparison of potential impacts, it appears that Alternative 2 would be the environmentally superior impact in that it somewhat lessens the adversity of impacts to the historic architectural resources relative to the project. Notwithstanding, both Alternative 2 and the project would each result in significant unavoidable impacts to historic architectural resources.

2.6 SUMMARY OF ENVIRONMENTAL IMPACTS

Table 2-1 provides a summary of environmental impacts of the project, measures identified in this draft EIR to mitigate any significant impact, and the level of significance after implementation of the mitigation measures. The table is arranged in four columns: 1) environmental impacts; 2) level of significance before mitigation; 3) mitigation measures; and 4) level of significance after mitigation. **Chapter 4.0**, **Setting, Impacts and Mitigation Measures** provides a comprehensive analysis of significant and less-than-significant impacts of the project.

Table 2-1 Summary of Environmental Impacts

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Cultural Resources			
Impact 4.1-1: The project will demolish the United Engineering Company Shipyard crane, a contributing element to the United Engineering Company Shipyard Historic District, a historical resource as defined in *CEQA Guidelines* Section 15064.5.	Significant	**Mitigation Measure 4.1-1:** To lessen impacts of demolishing the crane, undertake the following steps that would complement mitigation undertaken previously as part of the Harbor Project. **Mitigation Measure 4.1-1a.** *Reevaluation of the United Engineering Company Shipyard Historic District for the NRHP and CRHR.* Architectural historians meeting the Secretary of the Interior's standards for professional qualifications shall reevaluate the remaining features of the historic district to ascertain if, as a group, the remaining contributing resources retain sufficient integrity to convey the historic district's historical significance as previously determined by the Corps and SHPO. As part of this effort, if a historic district remains, the qualified architectural historians shall consider revising the boundary of the historic district. Reevaluation shall be completed on a California Department of Parks and Recreation (DPR) 523 form with appropriate photographs, site and sketch maps. Prior to the demolition of the crane, large-format (four by five inch, or larger, negative size) black and white photographs shall be taken showing the above buildings in context, as well as details of its historic features. The photographs taken for this mitigation measure shall be processed for archival permanence in accordance with the HAER photographic specifications. If necessary, each view should be perspective corrected and fully captioned. Archival photographs and negatives shall be retained by the City's HAB, and shall also be offered in printed and electronic form to SHPO, the	Significant and Unavoidable

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Cultural Resources, continued.			
Impact 4.1-1, continued.		Bancroft Library, Oakland History Room of the Oakland Public Library, the National Maritime Museum in San Francisco, the Alameda Public Library, Alameda Historical Museum in Alameda, the California Historical Society in San Francisco, and the Port of Oakland Archives to supplement the existing HAER documentation previously provided to these agencies. **Mitigation Measure 4.1-1b.** *Archival, Large format Photographs.* The Historic American Engineering Record (HAER) dataset currently in the Library of Congress for the historic district contains no large format photographs for Building/Structure Nos. 2, 3, 4, 6, and 10; instead the field record for this data set includes enlargements from archival-processed 6x6 cm medium format negatives. The HAER dataset for Building 5 includes no photographs. **Mitigation Measure 4.1-1c.** *Oral History Project.* Prior to any structural demolition and removal activities, historians meeting the Secretary of the Interior's standards for professional qualifications shall assemble important personal histories of persons who worked at United Engineering Company Shipyard. An oral history project to record their stories would be a valuable resource and would assist with future interpretative and educational exhibits. The City, the Alameda Historical Museum, and other local museum and historical societies shall be given the opportunity to comment on the research design for any oral history project. The research design would identify anticipated informants, research goals, and protocols. Any oral history research and interviews shall be conducted in conformance with the Principles for Oral History and any oral history project shall be recorded on archive quality discs,	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Cultural Resources, continued.			
Impact 4.1-1, continued.		such as archival gold CD-Rs, and disseminated to the repositories such as the Bancroft Library, Oakland History Room of the Oakland Public Library, the National Maritime Museum in San Francisco, the Alameda Public Library, Alameda Historical Museum in Alameda, the California Historical Society in San Francisco, and the Port of Oakland Archives. This recordation would supplement the existing HAER documentation previously provided to these agencies. **Mitigation Measure 4.1-1d**. *Interpretive Exhibits and written documentation for public display and/or publication on a website*. The City shall prepare or direct the preparation of one or more interpretive exhibits that provide information regarding the history of United Engineering Company Shipyard and the function of the crane. The interpretive exhibits shall utilize images, narrative history, drawings, or other material produced for the mitigation described above, including the HAER datasets already completed, or other archival resources. The interpretive exhibits may be in the form of, but are not necessarily limited to: interpretive display panels, and / or printed material for dissemination to the public. The interpretive exhibits may be installed at local libraries, historical societies, or public buildings, such as the Alameda Ferry Terminal. This interpretive material may also be produced for publication on a website hosted by the City of Alameda.	
Impact 4.1-2: The demolition of the crane, in combination with the previous loss of the other contributing resources in the historic district from the Harbor Navigation Improvement Project, would result in cumulative impacts to historical resources.	Significant	Despite implementation of **Mitigation Measures 4.1-1** through **4.1-4**, above, these measures cannot mitigate this adverse impact to a less-than-significant level. Therefore, the cumulative impact is significant and unavoidable.	Significant and Unavoidable

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Hazardous Materials			
Impact 4.2-1: The project could result in the release of lead and/or asbestos into the air and bay waters during demolition activities, resulting in significant impacts to the environment and significant health hazards for workers.	Significant	**Mitigation Measure 4.2-1**: Conform with appropriate local and regional regulations to avoid or minimize the release of lead, asbestos or other hazardous materials into the environment. All identified lead or asbestos-containing materials identified in the survey shall be removed from the site and properly disposed of in accordance with all state and local requirements, detailed below. Asbestos: ▪ Identify asbestos containing materials: At least fifteen days prior to issuance of a demolition permit, a state certified contractor shall complete an asbestos and lead-based paint survey for all structures proposed for demolition. This survey shall comport with the National Emissions Standard for Hazardous Air Pollutants (NESHAP) mandated by the United States Environmental Protection Agency (EPA) and locally enforced by the BAAQMD. ▪ Non-friable materials identified as asbestos containing, such as concrete, window putty and caulkings, if not made friable by the demolition process, can be disposed of as non-hazardous waste, per CalEPA and EPA regulations. Trace asbestos materials require precautions to prevent undue exposure of demolition workers to such materials. These precautions include use of wet demolition methods and avoiding any dry sweeping of residue debris. ▪ The asbestos survey shall inform preparation of a detailed abatement specification that will outline additional specific requirement for the protection of human health and the environment from release of asbestos or asbestos containing material. Specifications shall describe the work practices for	Less-than-significant

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Hazardous Materials, continued.			
Impact 4.2-1, continued.		removal of the identified hazardous materials, likely including preparation of a temporary platform from which to perform work, isolation of the work zones, and appropriate decontamination procedures. The abatement specification shall be authored and subsequently peer reviewed by a certified industrial hygienist prior to implementation. Lead: Similar to asbestos, a detailed abatement specification shall be prepared by a certified industrial hygienist Lead Project Designer that fully characterizes all lead-based paint on the crane. Recommendations of this specification shall be implemented by the demolition contractors. The Specification is anticipated at a minimum to include: ▪ A temporary construction platform from which work would be performed ▪ Measures to prevent any paint chips or other materials from entering the Estuary water, including drop cloths, polyethylene sheeting, and any other methods deemed effective and appropriate within the abatement specification. ▪ To comply with Cal/OSHA lead in construction regulations, all coated surfaces are assumed to contain some lead above 600 ppm. The abatement specification shall include provisions for lead air monitoring, respiratory protection, and safe work practices that are triggered by the presence of even very low levels of lead. ▪ Any welding or torching of building components or structures that contain paint or coatings require the removal of the paint or coating at least 6 inches on all sides of the point of impact.	

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measure	Level of Significance After Mitigation
Hazardous Materials, continued.			
Impact 4.2-1, continued.		▪ Intact lead-based paint found to be secure (not flaking, peeling or cracked) may be discarded along with demolition debris during the demolition of the structure. ▪ Loose and peeling paint shall be disposed of as state and/or federal hazardous waste if the concentration of lead exceeds applicable waste thresholds. ▪ Hazardous wastes shall be appropriately managed, labeled, transported, and disposed of by trained workers in accordance with local requirements. ▪ Other hazardous materials associated with buildings, such as fluorescent lights and electrical switches, shall be disposed of in accordance with DTSC hazardous waste regulations.	

Source: Circlepoint, 2011.

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3.0 PROJECT DESCRIPTION

3.1 INTRODUCTION

The City proposes to demolish, remove, and safely dispose of the Todd Shipyard Crane (crane).

As described in further detail within **Chapter 5.0**, **Alternatives**, of this document, the City considered several alternatives to demolition, but found that each alternative would be infeasible for various reasons.

3.2 PROJECT SETTING AND LOCATION

As shown in **Figure 3-1,** the project site is part of the area known as the Todd Shipyard, located at 2900 Main Street in the City of Alameda, in the northwestern portion of Alameda Island. The project site is located approximately 1,000 feet south of the Port of Oakland, across the Oakland Estuary.

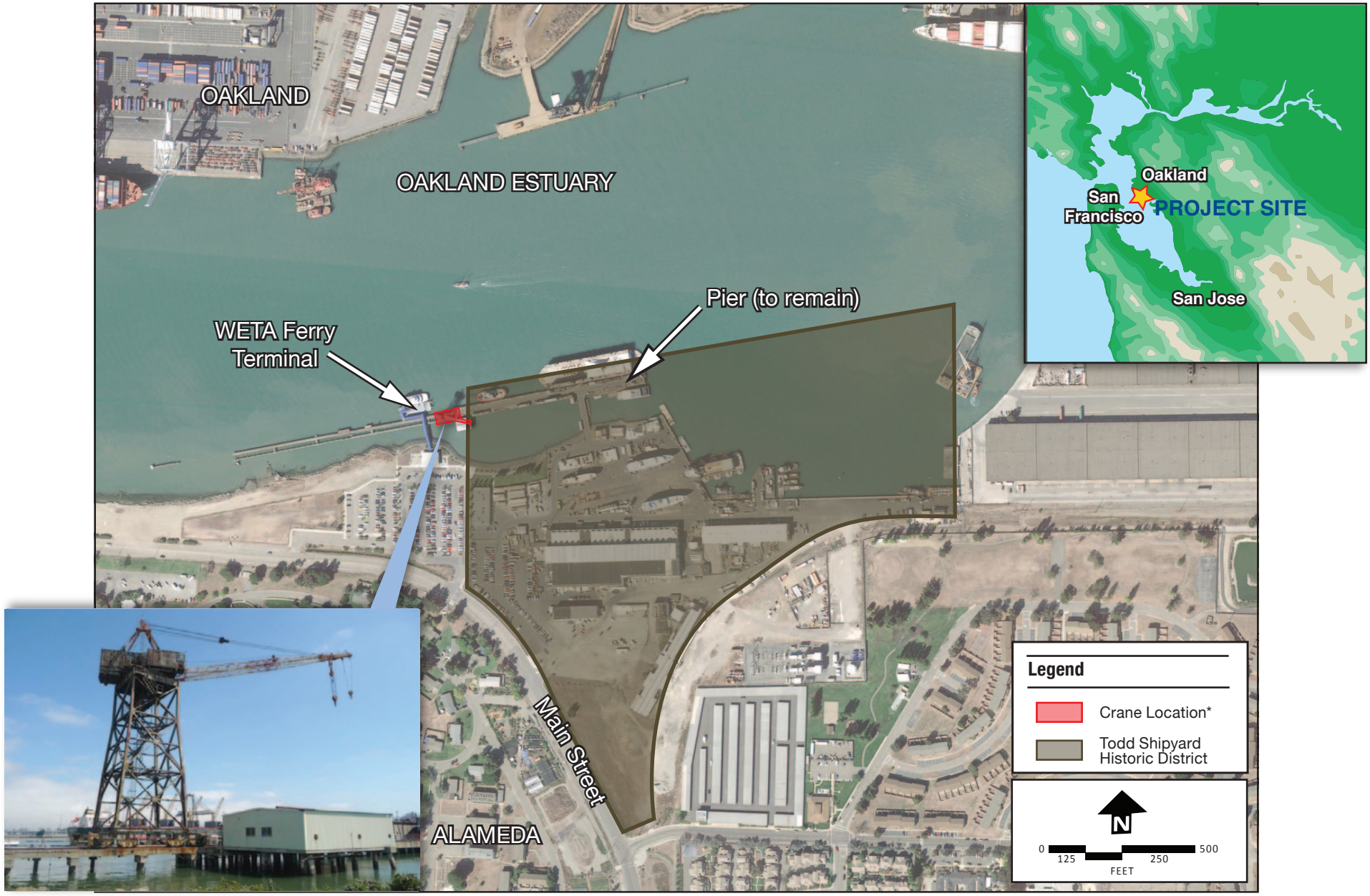
The crane is located on rails that rest on a concrete and wooden pier that juts into the Oakland Estuary. At present, the crane is located immediately adjacent to the ferry terminal.

3.3 PROJECT BACKGROUND AND CHARACTERISTICS

Historical Background

The former United Engineering Company Shipyard complex was founded on the original site of the Southern Pacific Company's West Alameda Rail Yard. The rail yard was established in 1911 to provide staging, storage, and maintenance for the Southern Pacific commuter rail system.[1]

[1] This summary historic context condenses information originally presented in the Historic American Engineering Record, United Engineering Company Shipyard, HAER No. CA-295, prepared by Jody Stock and Michael R. Corbett in 2001.



* Note: The crane rests on rails- the map and the photo at left reflect its current location.

Project Location

Figure 3-1

Source: Google Earth; Circlepoint, 2011.

The Southern Pacific system included a network of electric inter-urban trains, street cars, and ferries that provided service to the cities between Richmond and San Leandro. This system competed with the Key System from 1911 until 1941, when Southern Pacific abandoned operations.

During the period from 1911 to 1941, the 35-acre rail facility included numerous tracks and sidings and more than two dozen buildings and structures. Of these original structures, three are still in existence today: the inspection and repair shop (Building 1), a boiler house (Building 4) and a substation (Building 12).

United Engineering Company, a private shipbuilding company founded in the 1890s in San Francisco, purchased the former rail complex in 1941, shortly after Southern Pacific ceased its inter-urban service. United Engineering immediately began converting the rail buildings for use in shipbuilding and repair, and also began constructing additional buildings, ways, wharfs, piers, and dredging. Because the U.S. Navy was the first to issue a contract for construction of new vessels at this facility, the Navy financed many of these early improvements and retained ownership of these facilities, in turn leasing them back to United Engineering. By 1944, the shipyard converted its primary operations to ship repair. From 1941 to 1945, over 20 Navy tugboats were constructed here; hundreds of other ships were repaired. At the height of operations, nearly 2,000 people worked at the shipyard.

United Engineering constructed the crane in 1941 as part of the transformation of the facility to ship repair. The entire facility was eventually acquired by Todd Shipyards, which continued to operate the facility until 1981. As further detailed in Section 4.1 (Cultural Resources), portions of the shipyard property came to comprise a defined historic district, known as the United Engineering Company Shipyard Historic District (historic district). The historic district was found eligible for the National Register of Historic Places and was listed on the California Register of Historic Resources. The crane was noted as a contributing structure (or element) to the historic district's character.

Following the identification of the historic district but at an uncertain date (believed to be the early 2000s), the crane was relocated from near the eastern end of the pier to its current, central-pier location immediately east of the ferry terminal structure. The crane's current location happens to be immediately outside the historic district's defined boundaries. Despite the relocation, the crane is nonetheless considered to remain as a contributing element to the historic district.

Crane Characteristics

As shown in **Figure 3-2**, the crane rises approximately 86 feet above the pier. The crane's main components are its steel trussed tower, the car, and a boom.

- The truss tower measures about 63 feet in height and rests on a wheeled base atop the pier. The underlying pier is composed of concrete girder beams, pile caps, and concrete piles driven into the soil at the bottom of the Estuary.
- The crane car is constructed with sheet metal mounted on a steel frame. The car is supported on two 36" deep wide-flange steel beams that are, in turn, supported by a circular steel revolving platform on top of the truss tower.
- The boom extends out about 90 feet from the end of the crane car. There are two hoists at the end of the boom that provided leverage. A boom line runs from the end of the boom to the steel framed pyramid on top of the crane car.

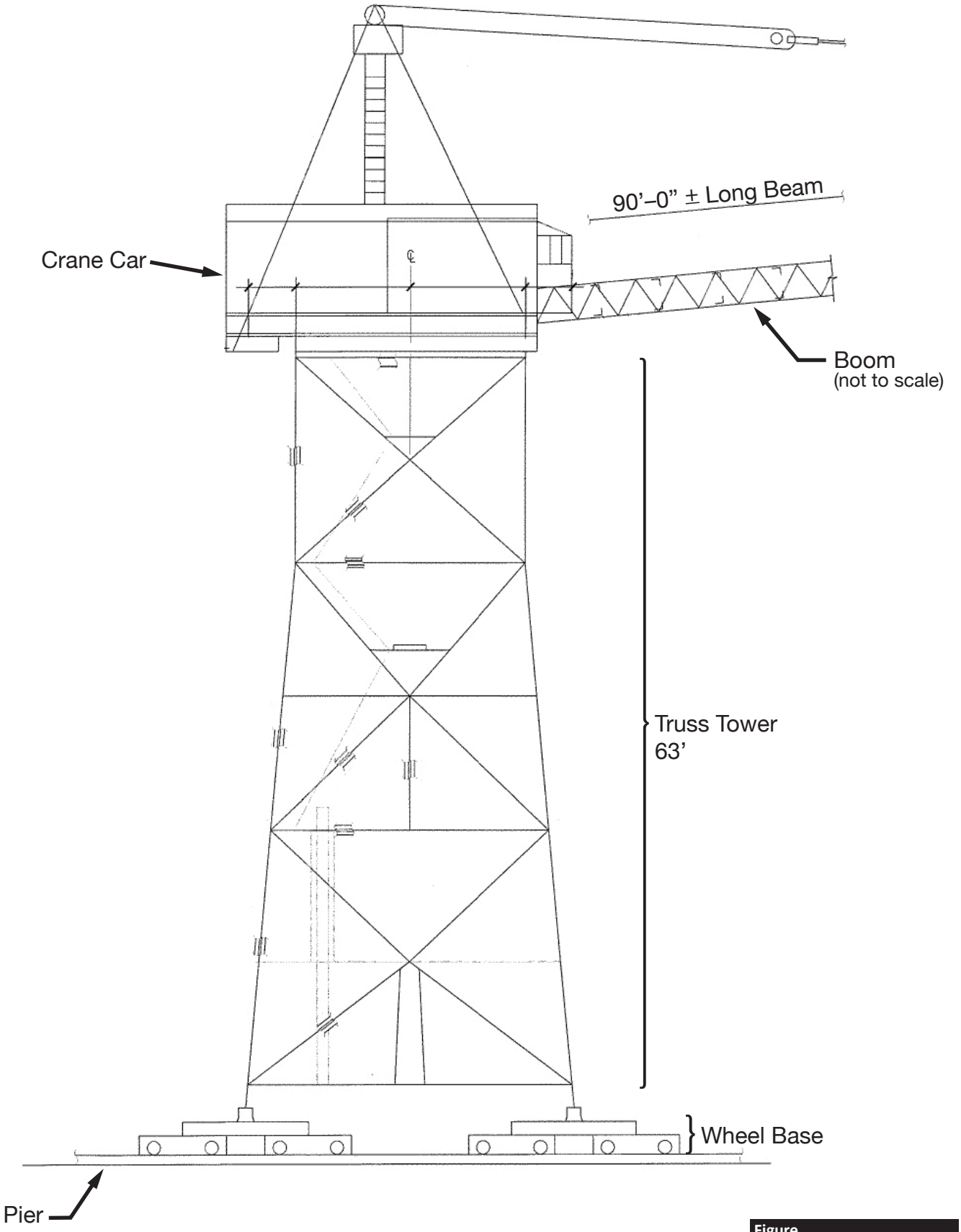
The crane cannot readily be moved to the eastern end of the pier, as any tracks that once allowed such movement have either been removed or are now covered by asphalt.

The Crane and the Ferry Terminal

The crane currently rests about 150 feet east of the Oakland/Alameda ferry terminal. The ferry provides commuter and recreational services to San Francisco. Critically, the ferry is also intended to provide emergency lifeline service in the event of a natural disaster, particularly in the likelihood that such a disaster compromises one or more of the bridges and tubes connecting Alameda to the mainland.

In 2011, the City entered into an agreement with the Water Emergency Transportation Authority (WETA), under which the City transferred to WETA full responsibility for operations of ferry service and maintenance of the ferry terminal.[2] As part of the agreement, WETA requested and the City agreed to analyze the structural safety of the crane out of concern for the long-term viability of ferry service. Specifically, WETA is concerned that parts of the crane could become dislodged due to a seismic event, boat collision, severe weather, some other

[2] The transfer was mandated in the legislation that created the WETA (SB 976 and SB 1093). The legislation requires consolidation of all public transportation ferry services in the San Francisco Bay Area under WETA, with the exception of such services operated by the Golden Gate Bridge Highway and Transportation District).



Crane, Section View

Figure 3-2

Source: Baseline Design, Inc., 2010.

catastrophic event, or simple aging. Any of these events could not only threaten the safety of ferry passengers, but could also affect WETA's mission to provide life line services in Alameda at a time when such services would be most needed.

In the agreement, as owner of the underlying property, the City committed to examine and then enact a program to address concerns about the crane and ensure ongoing safe ferry operations, subject to environmental review under CEQA. Options initially contemplated by the City included restoration and stabilization, partial demolition, complete demolition, and relocation.

Crane Structural Investigation

The City duly contracted with a qualified structural engineering company (Baseline Designs, Inc. of Alameda) to perform an analysis of both the crane and the pier to determine whether any measures would be needed to address the crane's structural safety. **Appendix B** includes the findings of this structural investigation. **Figure 3-3** shows selected photographs depicting existing conditions; **Appendix B** also includes several additional photographs taken as part of the structural evaluation of the crane.

As depicted in **Figure 3-3**, and in the photographs comprising **Appendix B**, the condition of the crane varies by component (truss tower, crane car, and boom).

- The truss tower is generally in fair condition with moderate surface rust and chipping occurring randomly throughout the structure. Given the age of the crane, it is assumed the chipping paint is lead-based. Noticeable bents and rotation were observed in two of the horizontal steel members in the tower. The concrete pile caps of the pier are in poor condition with moderate to severe spalling.[3] Enough concrete has eroded from the piers such that exposed rebar can be observed.

  Although the truss tower was found to be in fair condition, the investigation noted that the tower had no anchorage into the supporting substructure. The tower is attached to wheel bases that sit atop the pier's steel rails, similar to a train's wheels. This design has allowed the crane to be moved to various locations along the pier. However, this also means that the crane can move or shift on its own. With no fixed, secure connection to the underlying pier, the crane is highly susceptible to movement that could be introduced by a major seismic event. The structural investigation concluded

[3] "Spalling" describes the phenomenon of flakes or chunks of concrete falling off a concrete structure.

that any rehabilitation of the crane and pier would need to include some type of permanent securing of the crane to the pier so as to better ensure safety.

- The crane car was found to be in poor condition with severe rusting and deterioration on the sheet metal skin.
- The boom is generally in fair condition with moderate surface rust and chipping occurring randomly throughout the structure. Notwithstanding, the structural investigation concluded that removal of the boom would be required due to the crane's overall excessive instability.

Options for Ensuring Public Safety

Based on preliminary findings of the structural investigation, the City asked the engineers to consider different options that would address the identified deficiencies and in so doing, ensure long-term safety of ferry operations. The options considered included:

1. Stabilize crane in place
2. Partial demolition
3. Relocate crane to west end of pier
4. Relocate crane off-pier to nearby land location
5. Request WETA to move ferry terminal away from crane
6. Demolish crane

Options 1-5 are discussed more extensively within **Chapter 5.0**, **Alternatives**.

Options 1-3 would all require anchoring the tower to the pier, encapsulating lead paint on the tower, and at minimum, repairing the crane cab, which was found to be suffering from most deterioration.

Hard cost estimates for Options 1-3 range from a low of about $325,000 to more than $1 million, exclusive of permitting, environmental, and ongoing maintenance costs. Such additional costs could be considerable. Options 1 -3 would require placing new concrete piers into the floor of the Bay. Working in the water would introduce other costs associated with permitting and mitigation. Maintenance costs were estimated at about $175,000 over a ten year period, which would allow for routine inspections, improvement, and painting of the crane at appropriate intervals.

Notably, none of the options considered would make the crane operational again but would instead simply address safety issues. It is understood that the crane has been non-operational for approximately 30 years, around the time Todd Shipyards ceased operations.

For a number of reasons, the City did not request a detailed cost estimate to make the crane operational once again. It can be safely assumed that the costs of such an endeavor would far exceed the highest cost estimates for stability work, as both stabilization and mechanical repair would be required. Moreover, the City is unaware of any market interest in a refurbished crane. The crane was initially constructed for wartime ship building; there is no other immediately apparent use for a refurbished crane. Bay Ship and Yacht, a ship building and repair business continues to operate at the eastern side of the shipyard, but has not conveyed to the City any interest in the refurbishment of the crane.

Taking into consideration the capital and ongoing maintenance costs associated with options 1-5, the City concluded that all such options were prohibitively expensive so as to be economically infeasible.

The City is thus proposing demolition of the crane as the only feasible option that can ensure long-term safety in the area within fiscal constraints. Please see **Chapter 5.0, Alternatives**, for more discussion of alternatives considered.

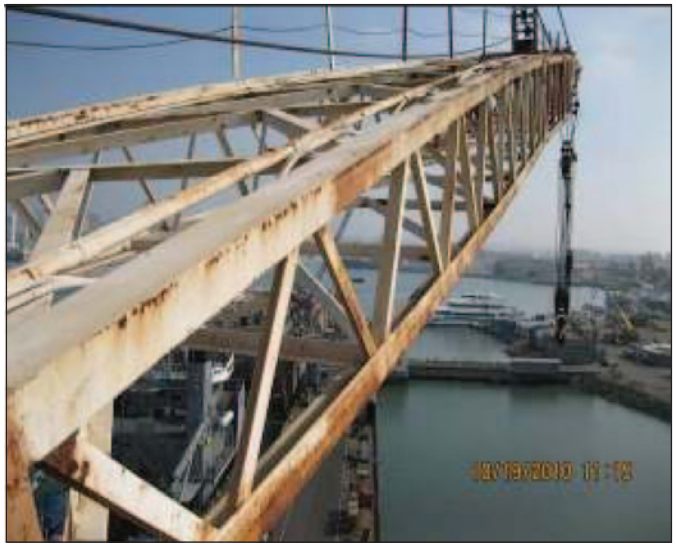
Demolition Methods

The City has not to date identified a demolition contractor to dismantle and dispose of the crane. However, for information purposes, the structural engineer provided a conceptual demolition methodology.

A floating crane could be barged to and moored alongside the existing crane. The existing crane's boom and car could be cut free and then hoisted by the floating crane onto the floating crane's barge. Subsequently, pieces of the truss tower could be similarly cut free and placed into a receiving barge. Alternatively or in a complementary manner, land-based trucks could also be used to collect debris for reprocessing or disposal.

Materials designated as potentially hazardous (such as asbestos containing materials (ACM)) would need to be taken to a facility sanctioned to accept such materials.

Non-hazardous scrap metal could be taken to any of several metal recycling facilities in the Bay Area, one of which is Schnitzer Steel at the Port of Oakland. Other major metal recycling facilities in the Bay Area are located near the Ports of Richmond and



Boom

Underside of Hoist

Interior of Crane Car

Revolving Platform

Existing Conditions Figure **3-3**

Source: Baseline Design, Inc., 2010.

Redwood City. The Bay Area Seaport Plan of the Bay Conservation and Development Commission (BCDC), notes that these and other facilities located throughout the region process scrap metal for export.

In consultation with the structural engineer and the City Public Works Director, this EIR assumes that all demolition activities could be completed well within 2 months.

3.4 PROJECT OBJECTIVES

The City has developed the following primary objectives to satisfy the requirements of the CEQA Statute and Guidelines Section 15124(b).

- Comply with the terms of operating agreement between the City and the WETA, within fiscal limitations.
- Ensure ongoing safe operations of ferry services and adjacent maritime uses.
- Given the likelihood of a catastrophic seismic event, take action necessary to ensure that WETA would be able to provide emergency life line service, particularly to and from the island of Alameda.
- Balance the broad City goals of preserving historical resources with ensuring public safety and wise use of limited financial resources.

3.5 INTENDED USES OF THIS EIR

This EIR identifies the significant environmental impacts that would occur if the project were approved and implemented. The EIR does not recommend approval or denial of a project.

The City is the Lead Agency under CEQA and is responsible for review and certification of the EIR. The Lead Agency is required to consider the information in this EIR, along with any other relevant information, in approving or denying the project.

The environmental review and certification process includes:

- Publication and circulation of the Draft EIR for a 45-day public review period;
- Preparation of a Final EIR that includes written responses to comments received on the Draft EIR, and any errata or revisions to the Draft EIR.

The City must certify the Final EIR before taking any action to approve or deny the project. The project will require approvals from the City and other agencies, as shown in **Table 3-1** below.

Table 3-1 Required Permits and Approvals

Agency		Permit/Approvals
City of Alameda Boards and Departments		
	Historical Advisory Board (HAB)	Certificate of Approval for proposed demolition of a historical monument
	Planning Board	Certification of Environmental Impact Report
	Community Development Department	City demolition permit, Waste Management Plan
Bay Area Air Quality Management District		Demolition permit
Bay Conservation and Development Commission (BCDC)		Abbreviated Regionwide Permit

Notes:

City of Alameda regulations stipulate that any demolition permit for a structure built before 1942 is subject to the review and approval of the City's Historical Advisory Board (HAB).

In consultation with the BCDC, the "Abbreviated Regionwide Permit" is understood to be the appropriate permit given the circumstances of the proposed demolition.

Source: Circlepoint, 2011; Personal Communication with Jamie Michaels of BCDC, December 5, 2011.

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4.0 SETTING, IMPACTS AND MITIGATION MEASURES

This chapter evaluates the potential project-related environmental impacts that would occur with demolition, removal and disposal of the Todd Shipyard Crane (crane). The EIR provides a particular focus on cultural resources effects, as the crane was previously identified as a contributing resource to the historic district. In addition, the EIR examines potential effects related to hazardous materials. Given the age of the crane, demolition and disposal could release harmful substances, such as lead-based paint, asbestos, and/or other substances. As a result, this draft EIR focuses on potential impacts for two key environmental topics: cultural resources and hazards and hazardous materials. The remaining topics are grouped into a single section and are discussed at a lesser level of detail.

Sections 4.1, **Cultural Resources,** and **4.2**, **Hazardous Materials**, of this EIR are devoted to two main environmental issue areas: cultural resources and hazards and hazardous materials, respectively. Each of these sections include a full discussion of the existing environmental conditions in the project area, the project's consistency with regulations, the impacts resulting from implementation of the project, and mitigation measures to reduce significant impacts of the project, to the extent feasible. **Section 4.3**, **Other Resources**, of this EIR addresses the remaining environmental issue areas (i.e., air quality, noise, etc.) at a lesser level of detail.

FORMAT OF ISSUE SECTIONS

In general, the analysis of each environmental issue consists of five subsections: Existing Conditions, Regulatory Setting, Analysis of Potential Impacts, Cumulative Impacts, and References. An overview of the information included in these sections is provided below.

EXISTING CONDITIONS

Existing conditions describe the current physical setting of the project area. The draft EIR provides information on existing resources and, when appropriate, discusses the methodology that was used to determine these existing conditions.

REGULATORY SETTING

The regulatory setting section provides a description of the relevant regulations and guidelines that pertain to the issue area. The section may contain information from a variety of sources, such as from the City of Alameda General Plan or other local, regional, state, or federal agency guidelines or regulations.

ANALYSIS OF POTENTIAL IMPACTS

The analysis of potential impacts begins with a listing of the applicable significance criteria, followed by an evaluation of impacts that would result from implementation of the project.

Significance Criteria

Under CEQA Section 21068, a significant effect is defined as a substantial, or potentially substantial, adverse change in the environment. The *CEQA guidelines* direct that this determination be based on scientific and factual data. The significance criteria have been developed using Appendix G of the *CEQA Guidelines* as a foundation, with some refining of the criteria based on local regulations and other applicable federal, state, and local agencies' guidelines and regulations.

Evaluation of Impacts

The evaluation of impacts considers the significance criteria, the level of environmental impact, and makes a determination as to whether there is: "no impact," a "less-than-significant impact," or a "significant impact."

A "no impact" designation is used for an issue that would not be affected by project implementation. For example, since the project site is not located on an area designated to have mineral resources, the project would not result in the loss of any known mineral resources. "Less-than-significant" impacts are those project related effects that would not reach a level of significance. For example, for a sensitive

biological species, project impacts would be significant if there was a potential to harm members of the species, or to reduce their habitat. Conversely, impacts would usually be considered less than significant if the habitats and species affected were common and widespread in the region and in the state, and ample habitat remained. A "significant" designation is used under circumstances where the environmental impacts would meet or exceed one of the significance criteria identified in Appendix G.

Any identified impacts are numbered and shown in bold type. For significant impacts, mitigation measures are provided that would reduce the effects of these impacts. Following the discussion of mitigation measures, there is an evaluation of the "Significance after Mitigation."

CUMULATIVE IMPACTS

CEQA requires an evaluation of a project's contribution to cumulative environmental impacts. According to Section 15355 of the *CEQA Guidelines*, cumulative impacts are defined as "two or more individual effects which, when taken together, are considerable, or which can compound or increase other environmental impacts." As stated in the Guidelines, an individual project may not have significant impacts; however, in combination with other related projects, these cumulative effects may be considerable.

When evaluating cumulative impacts, CEQA recommends one of two methods:

1. Projects to consider in the cumulative analysis include any past, present, and probable future projects producing related or cumulative impacts, including projects outside the control of the lead agency, or
2. The cumulative analysis would consider projections contained in an adopted local, regional, or statewide plan, or would use a prior environmental document which has been adopted or certified for such a plan.

CEQA's recommendations regarding the evaluation of cumulative impacts are generally best-suited for construction-related projects or other projects that will have long-term, potentially adverse operational period effects.

However, the proposed project under consideration here is a one-time demolition with limited long-term adverse operational period impacts beyond those noted for historic resources.

In the project vicinity, the City anticipates development of the nearby Alameda Point area commensurate with the current Reuse Plan. The Reuse Plan includes expansive office, commercial, and retail development, and also includes construction of new residential homes along Main Street, opposite the Todd Shipyard. At present, these lands are in still possession of the United States Navy as the conveyance process to the City is not yet complete.

REFERENCES

This subsection lists the references used to prepare the environmental setting and impact analysis for each section of the EIR.

4.1 CULTURAL RESOURCES

This section discusses known historical resources that may be present on or near the project site, and the potential effects of demolition on these resources. The discussion is based on a CEQA Impact Analysis prepared by JRP Historical Consulting, LLC (2011), contained in **Appendix C**. This discussion also relies upon a Preservation and Maintenance Plan (Preservation Plan) for the Historic District, included as **Appendix D**.

4.1.1 Existing Conditions

Historic Setting

The former United Engineering Company Shipyard complex (also commonly known as the Todd Shipyard) was founded on the original site of the Southern Pacific Company's West Alameda Rail Yard.[1] The rail yard was established in 1911 to provide staging, storage, and maintenance for the Southern Pacific electrified commuter rail system. This rail system competed with the Key System from 1911 to 1941, when Southern Pacific abandoned operations in the face of dwindling profits caused by increasing reliance on the automobile.

The Southern Pacific system included a network of electric interurban trains, street cars, and ferries that linked provided service to the cities between Richmond and San Leandro. During the period from 1911 to 1941, the 35-acre rail facility included numerous tracks and sidings and more than two dozen buildings and structures. Of these original structures, three are still in existence today: the inspection and repair shop (Building 1), a boiler house (Building 4) and a substation (Building 12).

United Engineering Company, a private shipbuilding company founded in the 1890s in San Francisco, purchased the former rail complex in 1941, shortly after Southern Pacific ceased its interurban service. United Engineering immediately began converting the rail buildings for use in shipbuilding and repair, and also began constructing additional buildings, ways, wharfs, piers, and dredging, etc. Because the U.S. Navy was the first to issue a contract for construction of new vessels at this facility, the Navy financed many of these early improvements and retained ownership of these facilities, in turn leasing them back to United Engineering. By 1944, the shipyard converted its primary

[1] This summary historic context condenses information originally presented in the Historic American Engineering Record, United Engineering Company Shipyard, HAER No. CA-295, prepared by Jody Stock and Michael R. Corbett in 2001.

operations to ship repair. Between 1941 and 1945, United Engineering constructed over twenty Navy tugboats and repaired hundreds of ships at this yard while employing nearly 2,000 workers at the height of its operations.

After an unsuccessful attempt to purchase the Navy-owned facilities at the shipyard, United Engineering sold its interests, in 1946, to Matson Navigation Company, a passenger and freight shipping company. During Matson's short tenure at the site, the shipyard's sole function was the maintenance of Matson's fleet. In 1948, Matson agreed to a 10-year lease of its shipyard by Todd Shipyard Corporation.

Although the shipbuilding industry collapsed in the post-war era, and local shipyards closed or were converted to other uses, Todd Shipyard Corporation maintained Navy contracts through the Korean and Vietnam conflicts, and the shipyard remained one of the major employers in the local area. Todd Shipyard Corporation purchased Matson's interest in the site in 1959 and obtained the Navy-owned facilities in 1970. Todd Shipyard Corporation continued operation until 1981.

Previous Surveys of the Project Area Built Environment

The former United Engineering Company Shipyard has been inventoried and evaluated for the National Register of Historic Places (NRHP) on two separate occasions.

Survey 1 (1988)

In 1988, as part of a City -funded survey, Michael Corbett and Mary Hardy evaluated the shipyard site for its eligibility for listing on the NRHP. At that time, the complex included 27 building and structures. The survey concluded that the Southern Pacific Shop (Building No. 1) appeared individually eligible for the NRHP because of its association with early transportation history in the San Francisco Bay Area, and as a representative example of an early twentieth century industrial building. The survey also concluded that while the overall 50-acre complex was less than 50 years old at that time, it would become eligible as a district for the NRHP by about 1991, the then-future date at which the complex would reach 50 years of age. The evaluation noted the United Engineering Company Shipyard was a major Bay Area shipyard during World War II. Architecturally, the evaluation found that the shipyard site was distinguished by its variety of surviving structures including administrative, security, design, storage, fabrication, and assembly buildings, including marine structures.

Contributing elements as of 1988 included 23 buildings and structures:

- No. 1 (Southern Pacific Shop)
- Nos. 2 through 12 (Office Building, Time Keeper's Office/Gatehouse, Boiler House, Small Warehouse/Garage, Storage Building/Warehouse, Water Tank, Outhouse, Shed, Power Substation/Electrical Services and Switching Station, Office and Substation, respectively)

- No. 14 (Seaway Transportation Building/Control House for Drydock)
- No. 15 (East Pier)
- No. 17 (Wet Basin)
- Nos. 18 through 23 (Sheet Metal Shop/Engineering Building, two Flange Shops/Bending Shops and Ovens, Office and Firehouse, Way 1, and Way2)
- No. 25 (Boiler Maker's House)
- No. 27 (Crane)

Non-contributing elements included building/structure nos. 13 (Warehouse), 16 (Pier 2), 24 (Paint Shop), and 26 (Wharf).[2] As with many evaluations conducted during the 1980s, there was little standardization in the process of evaluating historic resources. No specific NRHP criteria, periods of significance, levels of significance, or character-defining features of these historic properties were cited. Similarly, no historic district boundary was identified as part of Survey 1. (As discussed below, Survey 2 established such a boundary.)[3]

Survey 2 (1998)

In April 1998, Basin Research Associates completed a second inventory and evaluation of the shipyard, presumably for the channel dredging and widening associated with the Oakland Harbor Navigation Improvement Project (Harbor Project). These improvements were conducted by the U.S. Army Corps of Engineers (Corps) and the Port of Oakland (Port).

This historic survey identified that some buildings had been demolished:

- Building No. 8 (Outhouse)
- Building No. 9 (Shed)
- Partial removal of Structures Nos. 15 (East Pier) and 17 (Wet Basin).

Consistent with the 1988 survey, Basin found that Building No. 1 (Southern Pacific Shop) appeared individually eligible for the NRHP under Criterion A, for its association with early Bay Area transportation history, and under Criterion C, for its early 20th century industrial architecture. Basin also noted that Building No. 12 (Office and Substation), which was constructed as part of the Southern Pacific Company's rail yard, could become individually eligible for the NRHP. Basin provided no explanation as to why

[2] Please refer to the Table 1 in **Appendix C** for the names, dates of construction, and current status of these resources.

[3] Basin Research Associates, Department of Parks and Recreation (DPR) 523 Form, "Todd-United Engineering Company, Shipyard, Alameda and West Alameda Yard, Southern Pacific," April 1998.

Building No. 12 was not conclusively eligible for the NRHP. Although the shipyard was over 50 years old at that time, Basin concluded that "most of the other structures may become eligible . . . as contributing properties."

The 1998 survey established boundaries for the historic district. The boundary, shown on **Figure 3-1**, was described as bounded by

- Oakland Estuary to the north;
- The former Alameda Faculty of the Naval Supply Center on the east;
- The Southern Pacific Tracts along the southeast;
- Singleton Avenue on the south;
- Main Street on the southwest; and
- The Oakland-Alameda Ferry Facility on the west.

The period of significance was cited as 1910-1963; however, no information substantiating these dates was provided. Furthermore, this evaluation identified no level of significance or character-defining features for either historical resource.[4]

In June 1998, the Corps requested concurrence from the State Historic Preservation Officer (SHPO) on its determination of eligibility for the historic district and Building No. 1. SHPO determined that the United Engineering Company Shipyard was eligible for the NRHP as a historic district under Criterion A and Criterion C.[5] SHPO determined the district included 21 contributing structures and buildings, one of which was number 27, the crane.[6] SHPO also concurred with the Corps determination that Building No. 1 was individually eligible under Criterion A and C. **Appendix A** includes a copy of the SHPO concurrence letter.

Because SHPO concurred with the Corps determination of eligibility, the historic district and Building No. 1 were automatically listed in the California Register of Historical Resources. [7]

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[4] Michael Corbett and Mary Hardy, Historic Resources Inventory Form, "Todd Shipyard", 1988; Michael Corbett and Mary Hardy, Historic Resources Inventory Form, "Shop Building, Todd Shipyard," 1988.

[5] In making this determination, SHPO noted that "the district has strong associations with the development of World War II-era civilian shipbuilding and repair facilities that arose in the Bay Area to serve the needs of the US war effort. The district also retains a great degree of the design, setting, feeling, and association with its historical period of significance (1941-1946)."

[6] The other contributing structures were Number 1 through 12; 14, 15, 17 through 23, and 25. SHPO determined that the following were non-contributing structures: Number 8, 13, 16, 24, and 26. SHPO did not indicate that Building 12 was individually eligible for the NRHP.

[7] Cherilyn Widell, State Historic Preservation Officer, Letter to Richard G. Thompson, Lieutenant Colonel, Department of the Army, Corps of Engineers, June 9, 1998 (COE97080A).

Finding of Effects Documentation (1999)

In 1999, a finding of effects document was prepared as part of the Harbor Project, in compliance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR Part 800). The Corps determined that the Harbor Project would have an adverse effect on the historic district because it would demolish seven contributing buildings or structures to the district.[8] The document proposed mitigation, including altering the project design so that the site would continue its historic use as shipyard; rehabilitation of contributing buildings and structures, and/or relocation to other locations within the historic district boundary; Historic American Building Survey/Historic American Engineering Record (HABS/HAER) recordation; and the development of preservation maintenance plan for the historic district.[9]

Memorandum of Understanding and Preservation Plan (1999)

As a result of this project, a Memorandum of Agreement (MOA) between the Corps and SHPO was implemented in compliance with Section 106. This MOA is included as **Appendix D**. Per the MOA, Basin Research Associates prepared a Historic American Engineering Record (HAER) data set for the historic district and Building No. 1.[10] Other measures taken included the installation of interpretive signage, and modifications to the Harbor Project, that would allow the shipyard site to continue in its historic use.

Additionally, the MOA stipulated the preparation of a Preservation Maintenance Plan (Preservation Plan) to oversee the ongoing upkeep of the remaining contributing structures, which included the crane. The Preservation Plan identified the City of Alameda's Historical Advisory Board (HAB) as the agency responsible for the plan's implementation and enforcement.

The main goals of the Preservation Plan are to:

- Ensure compliance with federal and local laws and regulations with respect to the historic district;

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[8] It should be noted that the effects document identified the period of significance as 1941-1946 and also as 1941 to 1948, "which would include all the buildings and structures now considered contributors to the district."

[9] Basin Research and Associates and Michael R. Corbett, "Draft Finding of Effects and Mitigation of Adverse Effects, Southern Pacific West Alameda Yard and United Engineering Company Shipyard, Oakland Harbor Navigation Improvements by The Corps of Engineers and Port of Oakland," February 1999, revised November 1999.

[10] The HAER program is a joint effort of the National Park Service (United States Department of the Interior) and the American Society of Civil Engineers. HAER data sets document historic engineering and mechanical artifacts. A permanent collection of HAER archives is housed at the Library of Congress.

- Ensure compatibility and continuity of the continued historic use of the property as a shipyard;
- Provide guidance for the management of surviving historic buildings and structures that contribute to the historic district's significance.

At the time of its completion, the plan noted the district contained 13 extant contributing buildings and structures (Nos. 1 through 6, 10, 12, 13, 17 through 21, and 25 through 27 – the crane) and two (Nos. 17 and 18) slated for demolition. Of those contributors, the plan ranked Building/Structure Nos. 1, 2, 4, 10, 11, and 27 (the crane) of highest importance to the district as they were considered central to the interpretation of the historic district.[11]

Existing Historical Resources

In summary, there are two historical resources located on or near the project site: the Historic District itself and Building No. 1. As noted above, these historical resources were inventoried and evaluated in 1988 and 1998, and were determined eligible for the National Register of Historic Places by the Corps and the California SHPO in 1998. Both historical resources are listed in the California Register of Historical Resources and the City's Historical Building Study List.

United Engineering Company Shipyard Historic District.

The United Engineering Company Shipyard Historic District is located on a 50-acre site on the north end of Alameda Island (see **Figures 4.1-1 and 4.1-2**). The property currently serves a variety of commercial and industrial functions, including a yard for shipbuilding and repair, a winery, and office space. Since 1998, the property has undergone substantial alteration, including dredging and redesign of the shoreline by the Corps within the historic district boundary. As a result of the various activities and other projects that have been undertaken at the site, ten buildings and structures that were previously identified as contributors to the historic district have been demolished. Currently, the historic district includes nine buildings and structures (including the crane and Building No. 1), which contribute to the district's historical significance, as well as several other non-contributing buildings and structures.

[11] "Memorandum of Agreement between the US Army Corps of Engineers – San Francisco District and the California State Historic Preservation Officer Regarding the Oakland Harbor Navigation improvement Project, Alameda County, California," 2001; ENTRIX, Inc., "Final Preservation Maintenance Plan for the United Engineering Company Shipyard (Todd Shipyard) Historic District," October 2, 2002. Structures 22 and 23 were identified during the HAER recordation as non-contributing structures to the historic district.

Figure 4.1-1 United Engineering Company Shipyard Historic District

Figure 4.1-2 United Engineering Company Shipyard Historic District

The crane (**Figure 4.1-3**) is sited on a pier just outside the boundary of the historic district. Constructed circa 1941-3, the crane is supported by concrete girder beams, pile caps and concrete piles with a steel-frame car clad in sheet metal. The car sits on a revolving platform atop the crane tower with a boom (with steel hoists) that extends approximately 90 feet.

The remaining extant contributing resources are clustered around Building No. 1. The contributing buildings are a mixture of wood-frame and steel-frame, reinforced concrete buildings. Three buildings were constructed in 1911, during Southern Pacific Company's tenure on this site, while the other structures were built during the 1940s for United Engineering.

Figure 4.1-3 United Engineering Company Shipyard Crane

As previously noted, SHPO determined that the United Engineering Company Shipyard was eligible for the NRHP as a historic district under Criterion A and Criterion C.[12] SHPO determined the district included 21 contributing structures and buildings, one of which was number 27, the crane.[13] SHPO also concurred with the Corps' determination that Building No. 1 was individually eligible under Criterion A and C.

Character-defining features of the historic district include the layout, size and shape of site, its setting along the waterfront, and the historic integrity and relationship of its contributing elements (including but not limited to the crane). As a contributing element of the historic district, the character-defining features of the crane include its setting on top of a pier, its size and massing, and its relationship to the other contributing buildings within the historic district.

[12] In making this determination, SHPO noted that "the district has strong associations with the development of World War II-era civilian shipbuilding and repair facilities that arose in the Bay Area to serve the needs of the US war effort. The district also retains a great degree of the design, setting, feeling, and association with its historical period of significance (1941-1946)."

[13] The other contributing structures were Number 1 through 12; 14, 15, 17 through 23, and 25. SHPO determined that the following were non-contributing structures: Number 8, 13, 16, 24, and 26. SHPO did not indicate that Building 12 was individually eligible for the NRHP.

Building No. 1 (Southern Pacific Company Shop).

This building consists of a steel-frame with reinforced concrete, wood and metal windows, wood doors, and a sawtooth roof. The building was constructed in 1911 by the Southern Pacific Company and currently operates as a warehouse/shop for the extant shipyard and the Rosenblum winery. For more information regarding the historic character of Building No. 1, please see **Appendix C**.

4.1.2 Regulatory Setting

National Historic Preservation Act

Section 106 of the NHPA requires federal agencies to take into consideration the potential effects of proposed undertakings on cultural resources listed on or determined eligible for inclusion in the NRHP, and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on the proposed undertaking.[14] The current project includes no federal agency action. However, federal laws and regulations have established eligibility criteria for cultural resources that have applicability to the environmental review process under CEQA.

Determining the NRHP eligibility of a site or district is guided by the specific legal context of the site's significance as set out in 36 CFR Part 60.4. The NHPA authorizes the Secretary of the Interior to expand a National Register of districts, sites, buildings, structures and objects of significance in American history, architecture, archaeology, engineering and culture. A property is considered eligible for listing in the NRHP if it meets evaluation criteria set forth at 36 CFR 60.4. These criteria are:

> The quality of significance in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association and:
>
> Criterion A: that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> Criterion B: that are associated with the lives of persons significant in our past; or

[14] The regulations implementing Section 106 are promulgated by the Secretary of the Interior, as codified in Title 36 Code of Federal Regulations (CFR) Part 800.

Criterion C: that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D: that have yielded, or may be likely to yield, information important in prehistory or history.[15]

These criteria are relevant insofar as the project has the potential to affect the historical significance of the United Engineering Company Shipyard Historic District, as noted above, a resource previously determined to be eligible for the NRHP under various criteria.

California Register of Historic Resources

The California Office of Historic Preservation (OHP) administers the California Register of Historical Resources (CRHR), which was established in 1992 though amendments to the Public Resources Code, to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties should be protected from substantial adverse change.

The CRHR includes resources that have been formally determined eligible for, or listed in, the NRHP, State Historical Landmarks and eligible Points of Historical Interest. Other resources require nomination for inclusion in the CRHR. These may include resources contributing to the significance of a local historic district, individual historical resources, historical resources identified in historic resources surveys conducted in accordance with OHP procedures, historic resources or districts designated under a local ordinance consistent with the State Historical Resources Commission (SHRC) procedures, and local landmarks or historic properties designated under local ordinance.

PRC Section 5024.1 requires evaluation of historical resources to determine their eligibility for listing on the CRHR. The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, described above.

As defined by Section 15064.5(a)(3)(A-D) of the *CEQA Guidelines*, a resource shall be considered historically significant if the resource meets the following criteria:

Criterion 1: It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

[15] This category is largely applied to archaeological sites and, therefore, is not used in the evaluation of most historic architectural resources.

Criterion 2: It is associated with the lives of persons important in our past;

Criterion 3: It embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

Criterion 4: It has yielded, or may be likely to yield, information important in prehistory or history.[16]

Automatic CRHR listings include historic properties determined eligible for or listed in the NRHP (either by the Keeper of the NRHP or through a consensus determination on a project review).

California Environmental Quality Act

CEQA, as well as California Public Resources Code (PRC) Section 5024.1 (which established the CRHR), requires that projects take potential impacts on historical resources into account.

CEQA equates a substantial adverse change in the significance of a historical resource with a significant effect on the environment[17] and defines substantial adverse change as demolition, destruction, relocation, or alteration that would impair historical significance.[18] PRC Section 21084.1 stipulates that any resource listed in, or eligible for listing in the CRHR is presumed to be historically or culturally significant.

Resources listed in a local historic register or deemed significant in a historical resource survey, as provided under Section 5024.1(g), are also presumed historically or culturally significant unless the preponderance of evidence demonstrates they are not. A resource that is not listed in, or determined to be eligible for listing in the CRHR, is not included in a local register of historic resources, or not deemed significant in a historical resource survey may nonetheless be historically significant.[19] Even absent a formal eligibility determination, a lead agency "generally" shall consider a resource to be "historically significant" if the resource meets the criteria for listing on the CRHR (see California Register of Historical Resource section of this document for criteria).

[16] This category is largely applied to archaeological sites and, therefore, is not used in the evaluation of most historic architectural resources. California Public Resource Code, Sections 4850 through 4858, California Office of Historic Preservation, "Instructions for Nominating Historical Resources to the California Register of Historical Resources," August 1997.

[17] Section 21084.1 of the Public Resources Code

[18] Section 5020.1

[19] Section 21084.1 and Section 21098.1

CEQA mandates that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. While demolition and destruction are fairly obvious significant impacts, it is more difficult to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The *CEQA Guidelines* provide that a project that demolishes or alters those physical characteristics of a historical resource that convey its historical significance (i.e., its character-defining features) can be considered to materially impair the resource's significance. However, a project that conforms to the Secretary of the Interior's Standards for the Treatment of Historic Properties can generally be considered a project that will not cause a significant impact.[20]

City Of Alameda General Plan and Policies

Several elements of the City's General Plan contain policies relevant to cultural resources in the City.

Open Space and Conservation Element

5.6a: Protect historic sites and archaeological resources for their aesthetic, scientific, educational, and cultural values.

5.6.b: Working in conjunction with the California Archaeological Inventory, review proposed development projects to determine whether the site contains known prehistoric or historic cultural resources and/or to determine the potential for discovery of additional cultural resources.

5.6.c: Require that areas found to contain significant historic or prehistoric archaeological artifacts be examined by a qualified consulting archaeologist or historian for appropriate protection and preservation.

City Design Element

3.3.c Maintain strong demolition control for historic properties.

3.3.e Develop detailed design guidelines to ensure protection of Alameda's historic, neighborhood, and small-town character. Encourage preservation of all buildings, structures, areas and other physical environment elements having architectural, historic or aesthetic merit, including restoration of such elements

[20] Kay D. Weeks and Anne E Grimmer, *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, (*Washington D.C.: 1995, US Department of the Interior, National Park Service); Kay D. Weeks and Anne E Grimmer, T*he Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*, (Washington D.C.: 1995, US Department of the Interior, National Park Service)

where they have been insensitively altered. Include special guidelines for older buildings of existing or potential architectural, historical or aesthetic merit which encourage retention of original architectural elements and restoration of any missing elements. The design guidelines include detailed design standards for commercial districts.

3.3.i Preserve all City-owned buildings and other facilities of architectural, historical or aesthetic merit. Prepare a list of these facilities and develop an Historic Facilities Management Plan that provides procedures for preserving their character-defining elements, including significant interior features and furnishings. Include in the Management Plan design guidelines or standards and a long-term program to restore significant character-defining elements which have been altered.

Project Consistency

CEQA Guidelines Section 15125(d) states that an EIR must discuss any inconsistencies between a proposed project and any applicable general plan, specific plan, and regional plan.

The proposed project is generally **consistent** with policy 5.6.a. Although the project would lead to the demolition of a contributing element to the historic district, mitigation measures included in this document would lessen such impacts in a manner that would promote the cultural/historical values associated with the crane and the district as a whole.

The project is generally **consistent** with policy 5.6.b. As set forth in this section, the City has reviewed the project site and immediate area for historic resources. Please see **Section 4.3**, **Other Resources**, for a discussion of archaeological resources.

The project is generally **consistent** with policy 5.6.c. The City engaged a professional architectural historian to review the project area historic context and to make recommendations, incorporated herein, to mitigate the project's significant environmental effects.

The project is generally **consistent** with policy 3.3.c. Section 13.21 of the Alameda Municipal Code requires a Certificate of Approval from the City's Historical Advisory Board prior to the demolition of any significant historic resource (or per Section 13 of the Municipal Code, any "historical monument"). The Historical Advisory Board has the discretion to impose conditions of approval as part of a certificate of approval. The project conforms with this demolition permit procedure.

The project is generally **inconsistent** with policy 3.3.e. This policy encourages the preservation of "**all** [*emphasis added*] buildings, structures, areas and other physical environment elements having . . . historic . . . merit[.]" As detailed below, the project

would have a significant and unavoidable impact on an identified historical resource (the Historic District). However, the City will undertake several *feasible* mitigation measures to lessen this impact.

The project is generally **inconsistent** with policy 3.3.i, which calls for the preservation of *all* City-owned historical resources. The project would demolish a structure that is recognized as an integral part of a historic district that was determined eligible for the NRHP and is listed on the CRHR.

Many of the aforementioned General Plan policies concerning cultural resources are incorporated within Section 13.21 of the City's Municipal Code. This code section includes procedures for designating and preserving "Historical Monuments", including the maintenance of historical resources (Historical Monuments, contributing structures in district designated as a Historical Monument, or resources listed on the Historical Building Study List).

Additionally, the ordinance outlines the duties of the City's Historical Advisory Board (HAB). The HAB is responsible for the issuance of Certificates of Approval for any alteration, demolition, or removal of a Historical Monument; demolition or removal of any building or structure constructed prior to 1942; and demolition or removal of structures listed in the Historical Building Study List.

The project will comply with all regulations within Section 13.21 regarding historical resources. Notably, the City included within Section 13.21 detailed procedures related to the demolition of historical monuments. This is a tacit acknowledgement that preservation and retention of such resources is not always feasible (notwithstanding the language of General Plan policy 3.3.1) in part because the result could be a conflict with larger City responsibilities of protecting the health, safety, welfare, and/or convenience of the community.

Other General Plan policies directly recognize this larger City role of protecting the health, safety, welfare, and convenience of the community and are directly relevant to the project. Specifically, Safety Element Policy 8.1.f calls on the City to provide for the identification and evaluation of existing structural hazards, and abatement of such hazards to an acceptable level of risk. The Transportation Element includes several policies supporting multi-modal travel, including 4.1.2.e, which calls on the City to enhance cross-estuary travel. The project is clearly **consistent** with both of these policies insofar as it would abate an identified hazard that imperils both public safety as well as multi-modal travel (both regular and emergency-period passenger ferry service).

4.1.2 Impacts and Mitigation Measures

Significance Criteria

Appendix G of the *CEQA Guidelines* identifies environmental issues to be considered when determining whether a project could have significant effects on the environment. A project would have a significant impact on cultural resources if it would:

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or

d) Disturb any human remains, including those interred outside of formal cemeteries.

Criterion a) above (historical resources) is addressed in this section. The project does not have the potential to result in any significant effects with regard to criteria b, c, and d. Therefore, these issues are addressed in briefer fashion in **Section 4.3**, **Other Resources**.

Section 15064.5 of the *CEQA Guidelines* defines significant impacts for historical resources as follows:

- *Substantial adverse change in the significance of a historical resource* means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired [Section 15064.5(b)(1)].

The significance of a historical resource would be materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics that convey its historic significance or justify its inclusion in, or eligibility for, the NRHP, CRHP, or local registers [Section 15064.5(b)(2)(A–C)]. *CEQA Guidelines* Section 15355 defines a cumulative impact as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

a) The individual effects may be changes resulting from a single project or a number of separate projects.

b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Discussion of Less-than-Significant Impacts

Building No. 1 (Southern Pacific Company Shop). The demolition of the crane would not cause any direct or indirect substantial adverse changes to Building No. 1, as an individual historical resource. While the crane is visible from Building No. 1, its removal would not adversely alter the view shed from the shop as the shop building is located more than 500 feet northeast of the crane, and is separated by modern buildings. The character-defining features of this historical building would remain unchanged; its eligibility for the NRHP would not be affected.

For additional information regarding the historic status and significance of this historical resource, please refer to Section 2 of the CEQA Impact Analysis found in **Appendix C** of this document.

Discussion of Significant Impacts

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

Impact 4.1-1: The project will demolish the United Engineering Company Shipyard crane, a contributing element to the United Engineering Company Shipyard Historic District, a historical resource as defined in *CEQA Guidelines* Section 15064.5. (Significant)

United Engineering Company Shipyard Historic District. The project would demolish the crane, a structure found to contribute to the historical significance of the United Engineering Company Historic District. The demolition of this structure would clearly constitute a direct and substantial adverse change to the crane itself. In addition, demolition of the crane would materially impair a character-defining feature of the historic district. As noted previously in **Section 4.1.1**, **Existing Conditions**, above and in the Preservation Maintenance Plan for the historic district (see **Appendix D**), the crane is one of six contributing resources which help to convey the historical significance of the district and are central to the interpretation of this historical resource.

Therefore, the project would result in a direct substantial adverse change to the historic district. For additional information regarding the historic status and significance of this historical resource, please refer to Section 2 of the CEQA Impact Analysis found in **Appendix C** of this document.

As further detailed in **Sections 3.3**, **Project Background and Characteristics**, and **5.6**, **Alternatives Considered But Rejected**, of this document, the City has concluded that measures to rehabilitate and/or preserve the crane in place are infeasible. Notwithstanding, CEQA imposes an obligation on a lead agency to implement *feasible* mitigation measures or *feasible* project alternatives that mitigate significant adverse environmental effects. Accordingly, this EIR incorporates a detailed, feasible mitigation measure as recommended by the City's professional architectural historian (see **Appendix C**).

Mitigation Measure 4.1-1: To lessen impacts of demolishing the crane, undertake the following steps that would complement mitigation undertaken previously as part of the Harbor Project.

Mitigation Measure 4.1-1a. *Reevaluation of the United Engineering Company Shipyard Historic District for the NRHP and CRHR.*

Architectural historians meeting the Secretary of the Interior's standards for professional qualifications shall reevaluate the remaining features of the historic district to ascertain if, as a group, the remaining contributing resources retain sufficient integrity to convey the historic district's historical significance as previously determined by the Corps and SHPO. As part of this effort, if a historic district remains, the qualified architectural historians shall consider revising the boundary of the historic district. Reevaluation shall be completed on a California Department of Parks and Recreation (DPR) 523 form with appropriate photographs, site and sketch maps.

Mitigation Measure 4.1-1b. *Archival, Large format Photographs.* The Historic American Engineering Record (HAER) dataset currently in the Library of Congress for the historic district contains no large format photographs for Building/Structure Nos. 2, 3, 4, 6, and 10; instead the field record for this data set includes enlargements from archival-processed 6x6 cm medium format negatives. The HAER dataset for Building 5 includes no photographs.

Prior to the demolition of the crane, large-format (four by five inch, or larger, negative size) black and white photographs shall be taken showing the above buildings in context, as well as details of its historic features. The photographs taken for this mitigation measure shall be processed for archival permanence in accordance with the HAER photographic specifications. If necessary, each view should be perspective corrected and fully captioned. Archival photographs and negatives shall be retained by the City's HAB, and shall also be offered in printed and electronic form to SHPO, the Bancroft Library, Oakland History Room of the Oakland Public Library, the National Maritime Museum in San Francisco, the Alameda Public Library, Alameda Historical Museum in Alameda, the California

Historical Society in San Francisco, and the Port of Oakland Archives to supplement the existing HAER documentation previously provided to these agencies.

Mitigation Measure 4.1-1c. *Oral History Project.* Prior to any structural demolition and removal activities, historians meeting the Secretary of the Interior's standards for professional qualifications shall assemble important personal histories of persons who worked at United Engineering Company Shipyard. An oral history project to record their stories would be a valuable resource and would assist with future interpretative and educational exhibits. The City, the Alameda Historical Museum, and other local museum and historical societies shall be given the opportunity to comment on the research design for any oral history project. The research design would identify anticipated informants, research goals, and protocols. Any oral history research and interviews shall be conducted in conformance with the Principles for Oral History and Best Practices for Oral History, October 2009.[21] CDs prepared during any oral history project shall be recorded on archive quality discs, such as archival gold CD-Rs, and disseminated to the repositories such as the Bancroft Library, Oakland History Room of the Oakland Public Library, the National Maritime Museum in San Francisco, the Alameda Public Library, Alameda Historical Museum in Alameda, the California Historical Society in San Francisco, and the Port of Oakland Archives. This recordation would supplement the existing HAER documentation previously provided to these agencies.

Mitigation Measure 4.1-1d. *Interpretive Exhibits and written documentation for public display and/or publication on a website.* The City shall prepare or direct the preparation of one or more interpretive exhibits that provide information regarding the history of United Engineering Company Shipyard and the function of the crane. The interpretive exhibits shall utilize images, narrative history, drawings, or other material produced for the mitigation described above, including the HAER datasets already completed, or other archival resources. The interpretive exhibits may be in the form of, but are not necessarily limited to: interpretive display panels, and / or printed material for dissemination to the public. The interpretive exhibits may be installed at local libraries, historical societies, or public buildings, such as the Alameda Ferry Terminal. This interpretive material may also be produced for publication on a website hosted by the City of Alameda.

Significance after Mitigation: While implementation of the mitigation measures above would be in concert with the Preservation Plan, these measures cannot completely mitigate adverse impacts to a less-than-significant level. To be clear, short of rehabilitating the crane in place and keeping it structurally intact, there are

[21] "Principles for Oral History and Best Practices for Oral History" is available online at: http://www.oralhistory.org/do-oral-history/principles-and-practices/.

no mitigation measures that could lessen the adverse impact to a less-than-significant level. In theory, there may be other efforts the City could undertake with regard to historic resources in the shipyard area.

Any number of additional efforts would be ineffective in reducing the impact to a less-than-significant level unless such efforts included substantial rehabilitation of the crane and/or its preservation in place. For all the reasons articulated throughout this document, particularly in Chapter 5, Alternatives, the City has found that substantial rehabilitation and preservation in place are infeasible. Therefore, there are no other *feasible* mitigation measures that could lessen the identified impacts to a less-than-significant level. Even with the implementation of **Mitigation Measure 4.1-1**, this project would have a **significant and unavoidable** impact on the historic district.

Cumulative Effects

The cumulative impact area for historical resources is the Todd Shipyard as well as lands immediately adjacent. As noted below, the cumulative analysis is based on consideration of past projects.

Impact 4.1-2: The demolition of the crane, in combination with the previous loss of the other contributing resources in the historic district from the Harbor Navigation Improvement Project, would result in cumulative impacts to historical resources. (Significant and Unavoidable)

No other projects are contemplated or foreseeable in or near the historic district that could affect the district's integrity. A cumulative effect might occur if other contributors to the historic district were removed or altered over time, or if Building No. 1 was altered or removed, but no such undertakings are known to be planned at this time. However, CEQA declares that cumulative impact could occur as the result of combining a proposed action with either future or past actions. Accordingly, the project, when combined with *previous* actions in and around the historic district, results in a significant cumulative impact.

Despite implementation of **Mitigation Measure 4.1-1** above, no measure short of rehabilitation and/or preservation in place can mitigate this adverse impact to a less-than-significant level. As previously noted, the City has found such efforts to be infeasible. Therefore, the cumulative impact is significant and unavoidable.

References

Basin Research Associates, Department of Parks and Recreation (DPR) 523 Form. Todd-United Engineering Company, Shipyard, Alameda and West Alameda Yard, Southern Pacific, April 1998

Basin Research and Associates and Michael R. Corbett. Draft Finding of Effects and Mitigation of Adverse Effects, Southern Pacific West Alameda Yard and United Engineering Company Shipyard, Oakland Harbor Navigation Improvements by The Corps of Engineers and Port of Oakland, February 1999, revised November 1999

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Final Preservation Maintenance Plan for the United Engineering Company Shipyard Historic District, 2002

Memorandum of Agreement between the US Army Corps of Engineers – San Francisco District and the California State Historic Preservation Officer Regarding the Oakland Harbor Navigation improvement Project. Alameda County, California, 2001

Michael Corbett and Mary Hardy,Historic Resources Inventory Form. Shop Building, Todd Shipyard, 1988

Michael Corbett and Mary Hardy Historic Resources Inventory Form. Todd Shipyard, 1988

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Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, 1995

Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, 1995

4.2 HAZARDOUS MATERIALS

This section discusses environmental effects related to the potential release of hazardous materials during crane demolition activities. The discussion is based on the Hazardous Materials Survey Report prepared for the project by a certified industrial hygienist, contained in **Appendix E**. Information in this section has also been drawn from the structural investigation (**Appendix B**), completed by registered structural engineers.

This section focuses on whether the project could result in the release of hazardous materials. The City determined that the project would have no impact on any of the other CEQA checklist questions related to hazards and hazardous materials; accordingly these other CEQA checklist questions are addressed in **Section 4.3**, **Other Resources**.

4.2.1 Existing Conditions

General Conditions

Asbestos

Because of safety concerns, the industrial hygienist was not granted access to all parts of the crane.[1] No asbestos was found on those portions of the crane that were accessible, but it is assumed that certain elements do contain asbestos. In particular, asbestos was commonly used in elements of the crane car such as putty associated with window glazing, caulking at sheet metal seams, and flooring, paints, mastics and caulks on the interior.

Lead-based Paint

The hazardous materials survey report and the structural investigation each found levels of lead above the 5,000 parts per million (ppm) "action level" set by Guidelines of the United Stated Department of Housing and Urban Development (HUD). Portions of the crane registered from 10,000 ppm to 150,000 ppm.

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[1] Portions accessible for testing included fiberglass pipe insulation, paint on the wooden railing, woven electrical wiring, gray paint on the crane's exterior, black mastic on the electrical conduit at the crane electoral box and flat rope on a spool at the north crane side.

Two samples of paint from the pier—the wooden structural beams and the white paint on the wooden pier railing—also contain lead but at lower levels. These elements are not slated for removal, but could be disturbed during demolition activities.

4.2.2 Regulatory Setting

United States Environmental Protection Agency

The United States Environmental Protection Agency (EPA) regulates the use and exposure of asbestos under 40 CFR 763. EPA has also established National Emissions Standards for Hazardous Air Pollutants (NESHAP), which are locally enforced by the Bay Area Air Quality Management District (BAAQMD).

With regard to lead paint, EPA regulations do not require lead-based-paint to be removed prior to demolition, unless loose and peeling. Accordingly, provided that the paints are securely adhered, disposal of intact demolition debris can generally be handled as non-hazardous waste.

CAL/OSHA

The California Division of Occupational Safety and Health, better known as Cal/OSHA enforces California's Asbestos Standards in Construction (8 CCR Section 1529), Shipyards (8 CCR Section 8358) and General Industry (8 CCR Section 5208). Cal/OSHA also regulates asbestos removal technicians. Further, CAL/OSHA also oversees regulations regarding lead in construction and demolition activities in an effort to ensure worker safety and limit the release of hazardous materials into the atmosphere.

California Environmental Protection Agency

The California Environmental Protection Agency (CAL EPA) has established regulations regarding disposal protocols for demolition debris containing lead paint. Loose and/or peeling lead based paint require characterization and testing for leachability.[2] The regulations establish appropriate disposal methods depending on the concentration of lead in the particular debris.

[2] Leachability is the potential to enter the atmosphere or water

Bay Area Air Quality Management District

The Bay Area Air Quality Management District (BAAQMD) is the regional air pollution control agency with jurisdiction over the nine counties of the San Francisco Bay Area. BAAQMD is a public regulatory agency responsible for monitoring sources of air pollution within the regional air basin.

BAAQMD established the following regulations to ensure proper handling and disposal of lead-based paint and asbestos during demolition or renovation of buildings and structures:

- Regulation 11, Rule 1 sets strict limits on the amount of lead that can be released into the atmosphere from various activities.
- Regulation 11, Rule 2 limits asbestos emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste material generated or handled during these activities.

Rule 2 requires the lead agency and its contractors to notify BAAQMD of any regulated renovation or demolition activity, including a description of structures and the methods that were utilized to determine whether asbestos-containing materials are potentially present. All asbestos-containing material found on the site must be removed prior to demolition or renovation activity, including specific requirements for surveying, notification, removal, and disposal of material containing asbestos.

By complying with BAAQMD Regulation 11, Rule 2, projects minimize the release of airborne asbestos emissions, ensuring that demolition activities do not result in a significant impact to air quality.

San Francisco Bay Conservation and Development Commission

The San Francisco Bay Conservation and Development Commission, BCDC, has regulatory responsibility over development in San Francisco Bay and along the Bay's nine-county shoreline. BCDC is guided by the McAteer-Petris Act, the San Francisco Bay Plan, and other planning documents related to San Francisco Bay. The Bay Plan includes policies regarding the protection of bay water from pollution, primarily from projects proposing new construction, but also from other activities, including demolition, occurring within BCDC’s jurisdictional area.

City of Alameda General Plan and Policies

The general plan contains several policies designed to reduce the risk of hazardous waste releases. These policies govern the safe handling and disposal of hazardous materials and the protection of surface waters from potential impacts.

Open Space and Conservation Element

Implementing Policies: Open Space for the Preservation of Natural Resources

5.1.s Participate in the Non-Point Source Control Program (NPSC).

Although not fully designed, the NPSC Program is anticipated to include measures for prevention of contamination and source control of pollutants. Treatment of urban runoff, while potentially effective, is costly, and prevention and source control are the preferred methods of abatement. The main objective of the NPSC Program is to ensure that only storm water enters the storm drains, which will involve eliminating illegal connections and strict surveillance and enforcement of "no dumping" mandates. Educational as well as regulatory strategies are under consideration.

As a part of the NPSC Program, by mid-1991 the City will prepare a report for submittal to the RWQCB, characterizing local pollutant types and amounts, and a plan for implementing a control program.

5.1.u Participate in the County Hazardous Waste program and/or consider establishment of hazardous waste and/or oil disposal or transfer sites.

Health and Safety Element

Implementing Policies: Hazardous Materials and Waste Management

8.4.f Continue to rely on the mutual aid services of Alameda County to reduce the potential for hazardous materials accidents.

Policy Consistency Analysis

The project will be subject to all of the federal, state, and local regulations listed above. With the implementation of **Mitigation Measure 4.2-1** discussed below, demolition of the crane including its components containing hazardous materials would follow all pertinent regulations and would not result in any significant release of hazardous materials into the atmosphere or the waters of the Estuary.

4.2.3 Analysis of Potential Impacts

CEQA Significance Criteria

The project would have a significant impact related to hazards and hazardous materials if it would:

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Discussion of Significant Impacts Related to Hazardous Materials

Impact 4.2-1: The project could result in the release of lead and/or asbestos into the air and bay waters during demolition activities, resulting in significant impacts to the environment and significant health hazards for workers. (Less-than-significant with mitigation incorporated)

Preliminary hazardous materials screening performed as part of the pre-renovation Hazardous Materials Survey Report concluded that materials associated with the crane contain lead-based paint at level exceeding the action levels set by HUD.

Additionally, the report concluded that putty associated with window glazing, caulking at sheet metal seams, and flooring, paints, mastics and caulks on the interior of the crane car should be assumed to contain asbestos.

Demolition activities would upset both lead-based paint and asbestos, resulting in the potential release of these hazardous materials into the underlying surface water and air, causing a significant impact to the surrounding environment. If not mitigated, the potential release of these materials during demolition presents a health concern for workers and members of the public.

Mitigation Measure 4.2-1: Conform with appropriate local and regional regulations to avoid or minimize the release of lead, asbestos or other hazardous materials into the environment.

All identified lead or asbestos-containing materials identified in the survey shall be removed from the site and properly disposed of in accordance with all state and local requirements, detailed below.

Asbestos:

- Identify asbestos containing materials: At least fifteen days prior to issuance of a demolition permit, a state certified contractor shall complete an asbestos and lead-based paint survey for all structures proposed for demolition. This survey shall comport with the National Emissions Standard for Hazardous Air Pollutants (NESHAP) mandated by the United States Environmental Protection Agency (EPA) and locally enforced by the BAAQMD.
- Non-friable materials identified as asbestos containing, such as concrete, window putty and caulkings, if not made friable by the demolition process, can be disposed of as non-hazardous waste, per CalEPA and EPA regulations. Trace asbestos materials require precautions to prevent undue exposure of demolition workers to such materials. These precautions include use of wet demolition methods and avoiding any dry sweeping of residue debris.
- The asbestos survey shall inform preparation of a detailed abatement specification that will outline additional specific requirement for the protection of human health and the environment from release of asbestos or asbestos containing material. Specifications shall describe the work practices for removal of the identified hazardous materials, likely including preparation of a temporary platform from which to perform work, isolation of the work zones, and appropriate decontamination procedures. The abatement specification shall be authored and subsequently peer reviewed by a certified industrial hygienist prior to implementation.

Lead:

Similar to asbestos, a detailed abatement specification shall be prepared by a certified industrial hygienist Lead Project Designer that fully characterizes all lead-based paint on the crane. Recommendations of this specification shall be implemented by the demolition contractors. The Specification is anticipated at a minimum to include:

- A temporary construction platform from which work would be performed
- Measures to prevent any paint chips or other materials from entering the Estuary water, including drop cloths, polyethylene sheeting, and any other methods deemed effective and appropriate within the abatement specification.

- To comply with Cal/OSHA lead in construction regulations, all coated surfaces are assumed to contain some lead above 600 ppm. The abatement specification shall include provisions for lead air monitoring, respiratory protection, and safe work practices that are triggered by the presence of even very low levels of lead.
- Any welding or torching of building components or structures that contain paint or coatings require the removal of the paint or coating at least 6 inches on all sides of the point of impact.
- Intact lead-based paint found to be secure (not flaking, peeling or cracked) may be discarded along with demolition debris during the demolition of the structure.
- Loose and peeling paint shall be disposed of as state and/or federal hazardous waste if the concentration of lead exceeds applicable waste thresholds.
- Hazardous wastes shall be appropriately managed, labeled, transported, and disposed of by trained workers in accordance with local requirements.
- Other hazardous materials associated with buildings, such as fluorescent lights and electrical switches, shall be disposed of in accordance with DTSC hazardous waste regulations.

Significance after Mitigation: Impacts related to hazardous materials would be reduced to a less-than-significant level. Preparation of detailed abatement specifications adhering to all of the above procedures and regulations will avoid or minimize the release of hazardous materials into the atmosphere or Estuary water. As noted in the regulatory subsection of this section, the BAAQMD enforces Regulation 11, Rule 2 with the intention of limiting asbestos emissions from demolition projects. This project will comply with Regulation 11, Rule 2. BAAQMD stipulates that no further analysis of the demolition of asbestos containing materials is necessary beyond the measures of this regulation.

Cumulative Impacts

The cumulative impact area for hazardous materials is the immediate project area. Hazardous materials assessments investigating below-ground contaminants will typically look to some distance beyond the project site, given the potential for hazardous materials to travel below ground. For this project, however, the crane stands atop a pier that will remain; there are no other known demolitions planned for the project vicinity at the same time as the proposed project.

Potential hazards related to hazardous materials discussed in this section would therefore be expected to affect only the immediate environment. Other ongoing activities in the project vicinity, including port operations, ship repair, and other maritime activities may release hazardous materials into the atmosphere or water, posing a potential cumulative impact. However, the project's contribution to this impact is less than considerable, given the project's mitigation that would avoid or minimize any hazardous material entering the atmosphere and/or water.

References

Alameda General Plan, Health and Safety Element, Open Space and Conservation Element

Bay Area Air Quality Management District Website:

http://www.baaqmd.gov/Divisions/Planning-and-Research/Rules-and-Regulations.aspx

San Francisco Bay Conservation and Development Website:

http://www.bcdc.ca.gov/publications/library.shtml

4.3 OTHER RESOURCES

Pursuant to CEQA Section 15128, this section provides a brief explanation of potential effects of the project that were found to be less than significant. This section is based on the Notice of Preparation (NOP), dated August 8, 2011, and contained in **Appendix A** of this Draft EIR. The NOP was prepared to identify the potentially significant effects of the proposed project and was circulated for public review between August 8 and September 6, 2011.

Section 4.1, **Cultural Resources**, and **Section 4.2**, **Hazardous Materials**, address in greater detail the topics where the project could have the greatest potential environmental effect. Based on the comments received in response to the NOP, as well as subsequent analysis conducted as part of this EIR, the project would result in less than significant impacts in all of the other CEQA topic areas. For each of these 'Other Resources', a brief setting and discussion of potential impacts is provided below.

4.3.1 Aesthetics

Project Setting

The visual character of the project area is a combination of man-made and natural features. The crane sits atop a wooden wharf in the Oakland Estuary; the Port of Oakland is about 1000 feet across the water. Structures in the immediate vicinity include the WETA ferry terminal and numerous accessory buildings associated with shipyard activities. The Port of Oakland contains numerous modern cranes designed for containerized shipping, and large container ships move through the Estuary on a daily basis. Existing lighting sources in the project area include the ferry terminal, adjacent parking lots, and exterior lighting on shipyard buildings.

Scenic Vistas

Beneficial Impact. The Alameda General Plan Draft EIR (2008) identifies views of the Coast Range and east bay hills as a countywide scenic vista. Views of the east bay hills are available from the project site, and demolition of the crane would incrementally expand these views. Therefore, the project would have a small beneficial effect with regard to scenic vistas.

State Scenic Highways

Less-than-Significant Impact. According to Caltrans, Interstate 580 (I-580) in Alameda County from State Route 24 to the San Leandro city limits is designated a state scenic highway.[1] The project site is located approximately 2.7 miles southwest of I-580 and is not visually prominent to drivers because of the intervening development and the density of other maritime uses in the area. Demolition of the crane would not directly affect any resources within the state highway system, nor would it substantially affect the visual character experienced by drivers along this stretch of I-580. No mitigation is required.

Visual Character

Less-than-Significant Impact. The demolition of the crane would not substantially degrade the maritime character of the project area and its surroundings. The continued operation of the Port of Oakland, the WETA ferry terminal and other nearby maritime uses would maintain a strong maritime visual character. No mitigation is required.

Light and/or Glare

No Impact. The project does not include any new permanent or temporary lighting and would have no effect on day or nighttime views. No impacts would occur.

4.3.2 Agriculture and Forestry Resources

Project Setting/Analysis

According to the California Department of Conservation, the project site and adjacent lands are designated as Urban and Built-up Land and do not contain Prime Farmland, Unique Farmland, or Farmlands of Statewide Importance.[2] Neither the project site nor any adjacent lands are under a Williamson Act contract or zoned for any agricultural or forestry use. No impacts to agriculture or forestry would occur.

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[1] California Department of Transportation. California Scenic Highway Mapping System. Accessed on July 20, 2011 at http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm

[2] Alameda County Important Farmland 2010. State of California Department of Conservation, Farmland Mapping and Monitoring Program. Available at: ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2010/ala10.pdf. Accessed on July 20, 2011.

4.3.3 Air Quality

Project Setting

The project site is located within the San Francisco Air Basin (Basin), and regulatory oversight of the Basin is provided by the Bay Area Air Quality Management District (BAAQMD). BAAQMD oversees Basin compliance with both the federal Clean Air Act (CAA) and the California Clean Air Act. The Basin is considered a non-attainment area for ground-level ozone and fine particulate matter ($PM_{2.5}$) under both the federal and California Clean Air Acts. The Basin is also considered a non-attainment area for respirable particulate matter (PM_{10}) under the California Clean Air Act.

a) Air Quality Plan

No Impact. The *Bay Area 2010 Clean Air Plan (CAP)* was adopted by BAAQMD in September 2010, and is the current regional Clean Air Plan under the federal CAA.

To address the region's non-attainment status for ozone, the CAP explains how the Air Basin will achieve compliance with the California Ambient Air Quality Standards (CAAQS) for one-hour ozone and eight-hour ozone, and also explains how the region will reduce transport of ozone and ozone precursors to neighboring air basins. To achieve these state and federal standards, the CAP contains mobile and stationary source controls, transportation control measures, land use and local impact measures, and energy and climate measures to be implemented throughout the region. The CAP is based on regional population, housing, and employment projections through 2020 compiled by the Association of Bay Area Governments (ABAG). As such, a project would conflict with or obstruct implementation of the regional air quality plan if it would be inconsistent with the regional growth assumptions, in terms of population, employment, or regional growth in Vehicle Miles Traveled (VMT).

The project involves the demolition and removal of an existing crane that has been out of operation for more than a decade. The project would not result in any increase in population or employment in the region as the project does not include any housing and would not result in any permanent new jobs.

Since the project would not directly increase the population or create a substantial change in the VMT, the project would not conflict with the regional air quality planning for the area. This is considered a less-than-significant impact and no mitigation is required.

b) Air Quality Standards or Existing Violations

Less-than-Significant Impact. Upon completion, the project would not result in any new stationary source of air pollutant emissions and would not generate new traffic that might increase mobile source emissions. The only potential emissions, therefore, are those associated with demolition activities. Such activities include transport of demolition equipment to and from the project site as well as the potential release of regulated hazardous materials that are understood to comprise parts of the crane itself.

Construction equipment related emissions: As the Basin is in non-attainment for ozone and particulate matter, pollutants of concern include reactive organic gases (ROG) and nitrogen oxides (NOx), both precursors to ozone. BAAQMD has established significance thresholds for these air pollutant emissions for project construction and operation. Demolition activities associated with the project would result in emissions of criteria air pollutants from the use of a floating barge and/or trucks and related power equipment needed to demolish and dispose of the crane. BAAQMD's own CEQA Guidelines establish screening criteria to help lead agencies determine if a given project could result in a significant air quality impact. BAAQMD's CEQA Guidelines do not contemplate a project fundamentally comparable to the proposed demolition of the crane, but several types of projects nonetheless provide for a reasonable comparative basis owing to the physical extent and temporal duration of emissions-producing activities. BAAQMD's screening criteria indicate that grading a project site for 114 single family homes would be the minimum sized project that would have potentially significant emissions. Projects smaller than this would typically be considered to have less-than-significant project-level emissions. Given that the project would not involve any earth movement (a substantial source of particulate matter emissions), would likely transfer most materials only to nearby Schnitzer Steel for processing/repurposing, and would be complete within 2 months of initiation, the City has concluded that the project falls beneath the level of activity associated with BAAQMD's screening criteria and therefore would not result in any substantial pollutant emissions.

Asbestos: BAAQMD directly regulates the demolition of structures which may contain asbestos (BAAQMD Regulation 11, Rule 2). BAAQMD requires that a survey be performed prior to demolition of any buildings or structures (constructed prior to 1978) to determine the presence of Regulated Asbestos Containing Material (RACM). Please refer to **Section 4.2**, **Hazardous Materials**, for further discussion on asbestos removal.

BAAQMD Regulation 11, Rule 2 requires that a project proponent notify BAAQMD at least 10 working days prior to commencement of demolition activities, regardless if the surveyor finds asbestos in the structure. Compliance with **Mitigation Measure 4.2-1**, would avoid or minimize any potential release of RACM, reducing potential effects associated with asbestos to a less-than-significant level. No further mitigation is required.

c) Cumulative Effects

Less-than-Significant Impact. According to the BAAQMD CEQA Guidelines, if a project resulted in significant construction period or operational emissions, such effects are automatically deemed cumulatively considerable. As discussed above in item b) *Air Quality Standards or Existing Violations*, the project would not result in any substantial project-level emissions during construction and would have no operational emissions. Therefore, the project would not cause or contribute to an ambient air quality violation or have a cumulatively considerable net increase of an ozone precursor pollutant or particulate matter (i.e., PM_{10} or $PM_{2.5}$). No mitigation is required.

d) Sensitive Receptors

Less-than-Significant Impact. There are no sensitive receptors (such as residences or schools) in the immediate vicinity of the project area. The closest sensitive receptors in the project area are residences along Barbers Point Road, approximately 500 feet to the south. During demolition, sensitive receptors could be exposed to a variety of airborne emissions including those from demolition equipment. However, due to the limited scale and the short duration of the project, crane demolition and removal would not expose sensitive receptors to substantial permanent pollutant concentrations. Furthermore, adherence to **Mitigation Measure 4.2-1** as well as Regulation 11, Rule 2, as described above under Air Quality Standards or Existing Violations, would ensure that nearby receptors would not be exposed to asbestos-containing materials. No further mitigation is required.

e) Objectionable Odors

Less-than-Significant Impact. Objectionable odors are typically associated with landfills, sewer treatment plants, waste, other industrial land uses, as well as some commercial uses like restaurants. Some construction activities, including roofing and the use of heavy power equipment also have the potential to generate localized odors.

Project activities could produce occasional odors related to demolition equipment, but emissions would be highly localized and temporary and would dissipate substantially before reaching sensitive receptors along Barbers Point Road. Given the limited potential for odors and the distance between the project site and sensitive receptors, the project would result in a less-than-significant impact relative to odors. No mitigation is required.

4.3.4 Biological Resources

Project Setting

The Estuary has the potential to support protected plant and animal species. The crane itself is not known to support any protected biological species, such as protected birds or mammals (eg, roosting bats). On the land side, the ferry terminal parking lot and immediate environs are fully urbanized and are not known to support any significant biological resources. Some trees are located in the shipyard and parking area, which could serve as potential habitat for migratory birds.

a) and b) Sensitive Natural Communities or Riparian Habitats

Less-than-Significant Impact: The removal of the crane would not disturb any land or aquatic resources. **Mitigation Measure 4.2-1** includes the use of protective measures to ensure that demolition is self-contained and would not result in any paint chips, asbestos, or other materials entering the Estuary. No further mitigation is required.

c) Wetlands and Jurisdictional Features

Less-than-Significant Impact. The Oakland Estuary is understood to be a navigable waterway and is therefore considered “waters of the United States” and thus subject to pertinent provisions of the Clean Water Act. However, the project would not remove, fill, interrupt, or otherwise disturb adjacent waterways. With the provisions of **Mitigation Measure 4.2-1**, the potential for hazardous materials to enter the water would be reduced a less-than-significant level. Given the nature of the project and the protections associated with **Mitigation Measure 4.2-1**, the project would not result in any substantial impact to federally protected wetlands. No mitigation is required.

d) Wildlife or Fish Movement/Nursery Sites

Less-than-Significant Impact. As described above, demolition would not permanently disturb the waters of the Oakland Estuary, and the project would have no potential to substantially interfere with the movement of migratory fish.

The project area is an active working waterfront with transportation and ship repair uses occurring in close proximity. These and related activities currently transmit noise and vibration into the Estuary waters. The proposed demolition activities would temporarily generate noise and vibration within the parameters of this existing context. Demolition equipment would access the crane by land and/or floating barge, with no permanent disturbance to any land or aquatic species. Based on this approach, the project would have minimal to no impact to protected fish and wildlife species. No mitigation is required.

e) and f) Local Policies, Ordinances, or Conservation Plans

No Impact. The project does not include the removal of any trees, and would not therefore conflict with city regulations regarding tree protection. No Habitat Conservation Plans or Natural Community Conservation Plans have been adopted that encompass the project site. Therefore, the project would not result in any related impacts.

4.3.5 Cultural Resources

No Impact. Archaeological resources, including human remains, and paleontological resources could be located in soils below the existing ground surface, including the soils underlying the waters of the Oakland Estuary. Such resources are at times uncovered during construction projects as land is graded and otherwise prepared for construction. However, the project does not entail any ground disturbance whatsoever, either on land or at the bottom of the Estuary. The crane will be removed from the overwater pier without any soil disturbance above or below the surface of the water. Therefore, the project could not have any impact to archaeological resources, including buried human remains, or to paleontological resources.

4.3.6 Geology and Soils

Project Setting

Information in this section was drawn from a limited geotechnical investigation performed for the project site as part of the structural investigation (see **Appendix B**).

The project site is located on the east side of San Francisco Bay in the Coast Ranges geomorphic province of California. There are no active faults in the immediate project area; the closest known fault zone is associated with the Hayward Fault, located approximately 6 miles to the northeast.

The soils underlying the project site are believed to consist of artificial fill of varying degrees of compaction over bay mud. According to maps associated with the Association of Bay Area Government's (ABAG's) Earthquake and Hazards Program, the entire City of Alameda is to have a high liquefaction hazard level in the event of a substantial earthquake along the Southern Hayward fault. While ABAG's mapping does not predict liquefaction hazards for any overwater areas, such as the project site, it is assumed that liquefaction risk increases in saturated soils and muds that underlie the Oakland Estuary and the project site.

Given the relatively flat topography of the project area and the City in general, landslides are understood to be of minimal concern.

a) i and ii. Seismic Risks

Beneficial Impact. No known active or potentially active faults cross the project site. The closest known fault is the Hayward fault, approximately 6 miles northeast. The project site is not located within any Alquist-Priolo Earthquake Zone. Because no active faults cross the project site, the project would not expose people or buildings to known risks of fault rupture and therefore impacts would be less-than-significant. No mitigation is required.

The project entails the demolition and removal of an existing crane in a compromised condition of safety. Removal of the crane would reduce the current risk of crane failure in the event of strong seismic ground shaking. Therefore, the project would have a beneficial effect with regard to ground shaking.

a) iii. Liquefaction

Beneficial Impact. The project would remove the crane from the project site; the hazard risk presented by liquefaction would be reduced relative to existing conditions.

a) iv. Landslide Risk

No Impact. According to the United States Geological Survey (USGS), the project site is not located in an area with a high potential for landslides.[3] The flat topography of the project area reduces the potential for landslides to a negligible degree. Moreover, the project involves removal of a structure, not any new construction that could place people or property at risk. Therefore, no impact related to landslides would occur.

b) Soil Erosion

No Impact. The project does not include any soil removal or ground disturbance, and would not therefore be exposed to any risks associated with soil erosion. No impacts would occur.

c) Subsidence, Lateral Spreading, and Collapse

Beneficial Impact. The project would remove the crane from the project site; the hazard risk presented by subsidence, lateral spreading, and/or collapse would be reduced relative to existing conditions.

d) Expansive Soil

No Impact. The project does not include any soil removal or ground disturbance, and would not therefore be exposed to any risks associated with expansive soil. No impacts would occur.

e) Septic Tanks or Alternative Wastewater Disposal Systems

No Impact. The project does not propose the demolition, installation, or use of septic tanks or alternative wastewater disposal systems. Therefore, no impacts will occur.

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[3] U.S. Geologic Survey. San Francisco Bay Region Landslide Information. Available at http://pubs.usgs.gov/of/1997/of97-745/al-sef.pdf. Accessed on July 21, 2011.

4.3.7 Greenhouse Gas Emissions

Project Setting

Regulatory Setting

Global climate change, the warming of the earth's temperature, is caused by the emission of greenhouse gases (GHGs) into the atmosphere. Naturally occurring GHGs include the following:

- carbon dioxide (CO_2), commonly emitted through the burning of fossil fuel;
- methane (CH_4), typically emitted through agriculture (animal waste) and the out-gassing of landfills; and
- nitrous oxide (N_2O), emitted through the burning of fossil fuel and agricultural soil management.[4]
- Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are primarily products of specialized industrial activities.

Chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs), and halons are stratospheric ozone depleting substances. Other fluorine containing substances, including hydroflurocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6), do not deplete stratospheric ozone, but are considered powerful GHGs. When these gases are released into the atmosphere, they block heat and energy from being radiated back into space, and deflect this energy back to the earth's surface in what is known as the greenhouse effect.

Although the greenhouse effect is a naturally occurring process, the release of GHGs associated with human activities is increasing the amount of heat and energy deflected back to the earth, and therefore increasing the earth's overall temperature to abnormally high levels.

According to the California Air Resources Board (CARB), California is the 15th largest emitter of GHGs in the world, producing 478 million gross metric tons of CO2 equivalent (CO2e) in 2008. The transportation sector in California is the greatest contributor to GHG emissions, representing 36 percent of average emissions in

[4] California Health and Safety Code, Section 38505. (January 2009); California Assembly Bill 32, California Global Warming Solutions Act of 2006. (2006); CEQA Guidelines, Section 15364.5.

2008. Following the transportation sector, the energy sector represents 24 percent, the industrial sector represents 19 percent, and the commercial and residential sector represents 9 percent of GHG emissions during this same time period.

Assembly Bill (AB 32) codified California's goal of reducing statewide emissions of greenhouse gases to 1990 levels by 2020. This reduction is proposed to be accomplished through an enforceable statewide cap on global warming emissions that will be phased in starting in 2012 to achieve maximum technologically feasible and cost-effective GHG emissions reductions. Pursuant to AB 32, CEQA now requires quantitative assessment of GHG emissions directly or indirectly caused by a project.

As the precise causal link between an individual project's emissions and global climate change has not yet been developed, it is generally accepted that an individual development project cannot, by itself, generate sufficient GHG emissions to independently affect global climate change. The combination of individual projects can, however, cumulatively impact global climate change, especially when a project is taken in combination with all other past, present, and reasonably foreseeable future projects.

Potential effects relative to GHG are measured in terms of the amount of "CO2 equivalent" (CO2e) that a project may produce. CO2e is a figure that enables all GHG emissions to be considered as a group despite their varying global warming potential.

The Bay Area Air Quality Management District (BAAQMD) regulates emissions from both "stationary" and "non-stationary" sources. BAAQMD defines a "stationary source" as a fixed, non-mobile producer of pollution, usually an industrial or commercial facility, while "non-stationary sources" are those that involve vehicular traffic in their operations.

In 2010, BAAQMD adopted GHG emission thresholds as part of their updated CEQA Guidelines. These thresholds apply to the operation-period of projects and do not apply to construction-period emissions. For stationary sources, BAAQMD adopted the threshold of 10,000 metric tons CO_2e per year. The BAAQMD adopted two types of non-stationary operational-related GHG emission thresholds:

(1) A total project emission threshold of 1,100 metric tons of CO_2e per year, or

(2) An efficiency threshold of 4.6 metric tons CO_2e per service population (residents + employees) per year.

a) Generate Greenhouse Gas Emissions

Less-than-Significant Impact. The project involves the demolition and removal of an existing non-operational crane. As discussed in **Section 4.3.2**, **Agriculture and Foresty** above, temporary emissions of air pollutants would occur from equipment and vehicles used for removing the crane. The BAAQMD has not established greenhouse gas emission thresholds for temporary emissions (i.e., construction, or in this case demolition activities).

The project would not result in population growth or vehicle trips that could result in an increased permanent level of greenhouse gas emissions relative to existing conditions. Therefore, the impact would be less-than-significant. No mitigation is required.

b) Consistency with GHG-reducing Plans, Policies, or Regulations

Less-than-Significant Impact. The City of Alameda adopted the Local Action Plan for Climate Protection in February 2008 to help guide Alameda in reaching a greenhouse gas emissions reduction goal of 25 percent below 2005 levels by 2020. The Local Action Plan is divided into four categories of initiatives which are aimed to help achieve the reduction target: transportation and land use; energy; waste and recycling; and community outreach and education. The CAP did not establish specific thresholds for determining the level of significance of GHG emissions of proposed projects.

As discussed above, the project would not result in any operational GHG emissions and so would be within the BAAQMD adopted GHG emissions screening thresholds of significance. As such, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases.

The goal of the County CAP is to reduce greenhouse gas emissions a minimum of 15 percent to 30 percent by 2020. The intent of the City of Alameda Local Action Plan is to reduce City-wide GHG emissions 25 percent below 2005 levels by 2020. Since there would be no GHG emissions associated with project operation and the project would fall under the threshold that was adopted to maintain conformity with the reduction targets set by AB 32, the project would not interfere with the City's emissions reduction goal as no new use is contemplated that could in turn result in

a new permanent source of GHG emissions. Thus, the project would not conflict with applicable plans and polices adopted to reduce GHG emissions and the project would have a less-than-significant impact. No mitigation is required.

4.3.8 Hazards/Hazardous Materials

a) Routine Transport, Use, or Disposal of Hazardous Materials

No Impact. **Section 4.2**, **Hazardous Materials**, of this EIR focuses on potential hazards related to the *demolition* period. Following demolition, there would be no other use on the crane site and thus no new potential to transport, use, or dispose of hazardous materials. No impacts would occur.

c) Exposure of Schools to Hazardous Materials

No Impact. The nearest schools to the project site are Ruby Bridges Elementary School at 351 Jack London Avenue, and Island High School at 1900 Third Street, both located approximately one mile to the south. No schools are located within 0.25 mile of the project site. This condition precludes the possibility of activities associated with the proposed project exposing schools within a 0.25-mile radius of the project site to hazardous materials. Furthermore, **Mitigation Measure 4.2-1** in **Section 4.2**, **Hazardous Materials**, identifies protocols to ensure that the components of the dismantled crane can be safely transported from the site to an appropriate landfill, without significantly impacting any sensitive receptors that may be along a haul route if any materials are indeed removed over land. Following demolition, there would be no other use on the crane site and thus no new potential to emit hazardous emissions or handle hazardous materials. No impacts would occur.

d) Hazardous Materials Sites

No Impact. The project does not entail any ground disturbance whatsoever with the potential to release any such materials. Therefore, no impacts would occur.

e) and f) Airport Safety Hazards

No Impact. The project area is not located within an airport land use plan or within the vicinity of a public use airport or private airstrip. The Alameda Naval Air Station is located approximately one mile west of the project site; this airport closed in 1997. Oakland International Airport, the closest operational airport to the project

area, is located approximately five miles to the southeast of the project area. Due to the distance from the most proximate airport to the project area, the project would not impact air traffic patterns. No impacts would occur.

g)Emergency Response/Evacuation Plans

Beneficial Impact. The demolition of the crane is directly intended to improve a transportation system (the ferry) that could be used for emergency evacuation. WETA has a dual mission: providing daily, regular ferry service and providing lifeline service in the event that a catastrophe impairs regional bridges, roads, or tunnels. For the island City of Alameda, this issue is particularly acute, as a major seismic event could result in the impairment of one or more bridges or tubes connecting the City to the mainland, leading to potentially serious consequences.

The demolition of the crane removes a potential hazard to the long-term viability of ferry operations at 2900 Main Street. If the crane were to topple, there is substantial risk of damage to the WETA facility, boats, and certainly any people that may be within such facilities. Therefore, removal of the crane would remove a potential impediment to WETA's mission of providing emergency transportation service. During demolition, crane debris would be transported from the site to a landfill via a barge or via conventional trucks that would use local roadways. Such temporary uses would not foreseeably impair emergency access or emergency evacuation.

h) Wildland Fire Hazards

No Impact. The project site is urbanized and is not located in any reasonable proximity to wildlands such that there is any risk of fires related to the urban-wildland interface. No impacts would occur.

4.3.9 Hydrology and Water Quality

a) Water Quality Standards and Waste Discharge Requirements

Less-than-Significant Impact. The demolition of the crane would not entail any ground disturbance and would not result in any change to the quality or quantity of water/wastewater in the City. Implementation of **Mitigation Measure 4.2-1** set forth in **Section 4.2**, **Hazardous Materials**, would ensure that during demolition, any potential contaminants that might be dislodged from crane components would not enter the Estuary. Over the long term, the demolition of the crane reduces the

potential risk associated with a catastrophic failure of the crane – parts of the crane known to contain contaminants such as lead would not enter the water. Impacts to water quality/waste discharge would thus be less-than-significant, and no mitigation is required.

b) Groundwater Supplies and Recharge

No Impact. The project does not include withdrawal of groundwater. No impacts would occur.

c), d), e), and f) Changes in drainage patterns affecting soil erosion, flooding, and degradation of water quality

No Impact. No ground disturbance or grading is needed to accomplish the proposed demolition. Therefore, the project would not alter drainage patterns or have any effect on surface runoff that would result in flooding or degrade water quality. No impacts would occur.

g), h), and i) Flood Hazards

No Impact. According to a review of the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Maps (FIRM), the project site is designated as "Zone AE", a Special Flood Hazard Area (SFHA) that is within the 100-year storm event flood area. ABAG's Earthquakes and Hazards database indicates that there are no dam inundation risk areas anywhere in the City.

The project does not involve the construction of housing and so would increase any risk of people or structures in a flood zone. Removal of the crane would reduce any potential for the structure to impede or redirect flood flows. No impacts would occur.

j) Seiche, Tsunami, or Mudflow

Beneficial Impact. ABAG's Earthquake and Hazards Information database identifies the immediate project vicinity as a tsunami inundation area, due to its proximity to San Francisco Bay and low-lying adjacent lands. Demolition of the crane would remove this structure from the tsunami inundation area and thus reduce the on-site risks associated with a potential tsunami.

4.3.10 Land Use and Planning

a) Division of an Established Community

No Impact. Removal of the crane would not create any physical division and surrounding residential neighborhoods would maintain the same relationship to the Ferry Terminal and Estuary. No impacts would occur.

b) Land Use Plans and Policies

No Impact. The project area is subject to the Alameda General Plan and other related Alameda planning documents. The project does not involve any new land use. If any future use of the pier is contemplated at the project site, such use would be subject to pertinent City land use regulations in addition appropriate review under CEQA. Therefore, the project does not conflict with the City of Alameda's General Plan policies and the zoning designation of the project site. No impacts would occur.

c) Conservation Plans

No Impact. There are no habitat conservation plans or natural community conservation plans on the project site, in the immediate project vicinity, or in the entire City. Therefore, the project would not impact or conflict with a habitat conservation plan. No impacts would occur.

4.3.11 Mineral Resources

Loss of Mineral Resources

No Impact. The project site is located on a wharf and does not include any ground disturbance that could result in any impacts to mineral resources. No impacts would occur.

4.3.12 Noise

Project Setting

Noise can be described as any unwanted or objectionable sound. Noise is typically generated by transportation, specific land uses, and on-going human activity. The effect of noise on individuals and communities varies with the duration of the noise

source, its intensity and frequency, and the tolerance level of those exposed to the sound. The standard unit of measurement of the loudness of sound is the decibel (dB).

The Community Noise Equivalent Level (CNEL) is a 24-hour energy equivalent expressed in decibels (dB), and is derived from a variety of single-noise events. To account for increased sensitivity to noise during the nighttime hours, the CNEL calculation penalizes evening and nighttime sound levels. The decibel (dB) scale is logarithmic; a 3 dB difference is barely discernible to most people, and a 10 dB increase is subjectively heard as a doubling of noise.

The project site is in an industrial area that is not known to include any people or land uses like housing that would be considered “sensitive receptors.”

Policy 8.7h of the General Plan states that in making a determination of impact under the California Environmental Quality Act (CEQA), the City should consider the following impacts to be "significant":

- An increase in noise exposure of 4 or more dB if the resulting noise level would exceed that described as normally acceptable for the affected land use, as indicated in Table 8-1 of the General Plan.
- Any increase of 6 dB or more, due to the potential for adverse community response.

Although temporary and intermittent, noise generated from construction activities can be intrusive because of its high output and repetitive nature. Construction noise would occur due to the use of demolition equipment, including heavy trucks and power equipment. At 50 feet from the source of such equipment, noise levels can range from 80 – 88 dBA.[5] Construction would be temporary and last approximately two months.

Construction scheduling requirements are established by the City to ensure that such noise is limited in duration and occurs only during weekday daytime hours. Section 4-10.5 of the City of Alameda Municipal Code limits construction activities to the hours of 7 AM and 7 PM on weekdays, and between 8 AM and 5 PM on Saturdays. Construction on Sundays is prohibited. It is understood that these measures are equally applicable to demolition activities.

[5] Source: Federal Transit Administration, 2006

a) and d) Demolition Noise (temporary noise generation relative to acceptable levels)

Less-than-Significant Impact. Noise associated with demolition may temporarily surpass the normally acceptable noise levels. The project would comply with the City's construction scheduling requirements to ensure that such noise is limited in duration and would only occur between 7 AM and 7 PM on weekdays, and between 8 AM and 5 PM on Saturdays (no demolition would be allowed on Sundays).

The closest sensitive noise receptors to the project area are the single-family residences on Barbers Point Road located approximately 500 feet southwest of the project site. The existing noise environment in the project area is dominated by noise generated by shipyard activities and the Alameda Ferry Terminal, and the temporary noise associated with demolition would not substantially increase the ambient noise levels in the project vicinity. Thus, this impact is considered less-than-significant; no mitigation is required.

b) Groundborne Vibration or Noise Levels

Less-than-Significant Impact. The project site is an industrialized area that is actively used for maritime purposes. The project would not utilize methods or equipment that generate excessive vibration (pile driving, grading, vibratory compacting, blasting, etc). Some power equipment and trucks will be used in the demolition, but such equipment is consonant with the industrialized nature of the project area and would not represent a substantial new source of vibration. Notwithstanding, demolition would be limited to the City's regular construction hours. Therefore, project impacts would be less than significant, and no mitigation is required.

c) Permanent Increases in Ambient Noise

No Impact. The project would include the demolition and removal of an existing crane. Following demolition, no new use would be in place of the crane. Therefore, the project could not result in a permanent increase in ambient noise levels. No impacts would occur.

e) and f) Airport Noise

No Impact. The project includes temporary activities associated with demolition of a structure, and would not introduce any new residents or other sensitive receptors to the project site. Moreover, the site is located outside the Oakland International Airport land use planning area. No impacts would occur.

4.3.13 Population and Housing

Project Setting

ABAG provides growth projections for the San Francisco Bay Area. According to the 2009 ABAG population projections for Alameda, population is expected to grow at a rate of 5 percent from 2010 to 2020, from 31,770 individuals in 2010 to 33,410 individuals in 2020. ABAG projects that the region will continue to grow through 2030 to 34,750 people, an increase of 4 percent from 2020.[6]

a), b), and c) Growth Inducement and/or Displacement of Persons or Housing

No Impact. Demolition and removal of the crane would not displace existing housing or people either during construction or following completion of the project. Demolition would take place in a controlled environment on the Todd Shipyard, away from existing homes. The project does not include constructing new homes or creating new businesses and therefore would not directly or indirectly induce population growth. No impacts would occur.

4.3.14 Public Services and Recreation

Project Setting

Alameda Fire Department

Fire protection services to the project area are provided by the Alameda Fire Department (AFD). The AFD is comprised of five fire stations, two ladder truck companies, five engine companies, four ambulances, one fireboat, one water rescue boat, and one confined space rescue vehicle. Station Five, located at 950 West

[6] ABAG Projections, 2009.

Ranger Road, approximately 0.7 miles southwest of the project site, is the closest AFD facility to the project area. However, Station Five is currently closed until further notice. The next closest station is Fire Station Two, located at 635 Pacific Avenue, approximately 1.3 miles southeast of the project site. The AFD has a staff of 116 employees and has a minimum of 28 people on duty daily.

Alameda Police Department

The Alameda Police Department provides polices services to the project area. The Police Department employs 92 sworn officers and 45 non-sworn full-time personnel. The Department is headquartered at 1555 Oak Street, approximately 3.2 miles southeast of the project site.

The City of Alameda is divided into five sectors which are patrolled 24 hours a day by between one and four officers at any given time. The five sectors are divided into 25 beats which are assigned to individual officers.

Schools

The project area is located in the Alameda Unified School District (AUSD). The AUSD serves nearly 10,000 students and operates 10 elementary schools, two middle schools, and three high schools, and a college preparatory school in the City.

Parks

Please refer to **Section 4.3.13**, **Population and Housing** above for a discussion of parks and recreational facilities in the project area.

Fire and Police Protection

Less-than-Significant Impact. The project would not adversely affect the AFD's response times or ability to provide fire protection services to the project area and would have no effect on police service levels. Implementation of the project would not develop any permanent structures that would generate a residential population requiring additional fire protection or police services. However, in demolishing the crane, the project would remove the existing risk it poses to ferry services and nearby structures, thereby decreasing the likelihood of future involvement by first responders such as fire and police. Impacts would thus be less than significant and somewhat beneficial.

Schools

No Impact. The project would demolish and remove an existing crane. Because the project would not develop any permanent structures that would generate a residential population, the project would not introduce additional students into the Alameda Unified School District. No impacts would occur.

Parks and Other Public Facilities

No Impact. Parks and other public facilities are typically provided to serve a residential population. The project would demolish and remove an existing crane. As the project would not develop any permanent structures that would generate a residential population, the project would not create additional demand for parks and public facilities in the project area. Therefore, no impacts to parks or public facilities would occur.

4.3.15 Recreation

Project Setting

There are no parks or recreational facilities on the project site. Woodstock Park, approximately 1 mile southeast of the project site is the closest City-owned park, maintained by Alameda Recreation and Park Department (ARPD).

A portion of the Bay Trail extends through the Todd Shipyard and nearby Main Street. The Bay Trail is a network of paths along the perimeter of the San Francisco Bay shoreline that, when complete, will encircle San Francisco and San Pablo Bays with a continuous 500-mile network of bicycling and hiking trails. Approximately 310 miles, or 60 percent, of the Bay Trail is currently complete.

a) and b) New or Expanded Recreational Facilities

No Impact. The demolition and removal of the crane would not result in an increase in the population of the City of Alameda. There would be no increase in demand for recreational facilities, nor would removal of the off-shore crane have any long-term adverse impact on the Bay Trail or its users.

As the project would not affect population, it would not result in any increased use of existing parks or other recreational facilities in the area, nor would it require the construction or expansion of any recreational facilities. No impact to recreation facilities would occur.

4.3.16 Transportation and Traffic

Project Setting

Regional and Local Access

The following is a brief description of roadways that provide access to the City of Alameda and to the project site.

- **Main Street** is a four-lane regional arterial which begins west of the project site and curves to the south at the Alameda Ferry Terminal. Main Street continues north-south until it ends at West Pacific Avenue. Main Street is a local truck route as designated by the City.
- **Webster Street Tube** is a two-lane underwater tunnel which provides access to Alameda from Oakland. Vehicles enter the tunnel at 4th Street in Oakland and emerge on Webster Street just south of Marina Village Parkway in Alameda.
- **Posey Tube** is a two-lane underwater tunnel which provides access from Alameda to Oakland. Vehicles travelling north on Webster Street in Alameda enter Posey Tube just south of Marina Village Parkway in Alameda and emerge on Harrison Street just south of Interstate-680 in Oakland.
- **Webster Street** is a four-lane north-west regional arterial which extends from Central Avenue in the south and to the Webster Street Tube for incoming traffic and the Posey Tube for outgoing traffic in the north. Webster Street is a local truck route as designated by the City.
- **Atlantic Avenue** is a four-lane east-west regional arterial which runs from Ferry Point in the west to Eagle Point in the east. Atlantic Avenue is a local truck route as designated by the City.

Existing Transit Facilities

The City of Alameda is serviced by Alameda-Contra Costa Transit (AC Transit) bus service and ferry service from WETA, as noted in the project description. AC Transit links Alameda neighborhoods and business district to destinations throughout the East Bay. Route 31 provides bus service along Main Street and West Midway Avenue, to the south of the project site. Route 663 provides bus service from the Alameda Ferry Terminal to eastern Alameda.

Pedestrian and Bicycle Facilities

As noted in the Recreation discussion above, a portion of the Bay Trail extends across the Todd Shipyard, near the project site.

There is an existing Class I bikeway which begins at the Alameda Ferry Terminal and goes south on Main Street. There is an existing Class II bikeway along Singleton Avenue. There is a proposed Class I bikeway which would begin at the west end of Main Street and extend east, running along the Estuary, past the project site. A Class II bikeway is proposed running slightly inland from the Estuary, eventually connecting to an existing Class II bikeway on Marina Village Parkway.

a) and b) Level of Service Standards and Congestion Management

Less-than-Significant Impact. The Alameda County Transportation Commission (ACTC) is responsible for ensuring local government conformance with the countywide congestion management program. According to ACTC, a traffic analysis is not required for development projects generating less than 100 PM peak-hour trips. Given that the project would not develop any permanent structures and would generate minimal associated truck haul trips, a traffic analysis is not required for this project.

If trucks are used for removal of debris, the number of truck haul trips associated with the project would be limited: it is estimated that the project would generate a maximum of 8-10 daily truckloads of debris over a two month period. Moreover, truck haul trips from the project area to the landfill would primarily occur during non-peak traffic hours when traffic volumes are lower. The timing and frequency of truck trips reduce the potential for the project to result in any significant traffic impacts.

Only local and state-designated truck routes would be utilized to remove debris. The small number of truck haul trips associated with the project would not deteriorate levels of service along the roadways. The project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system or an applicable congestion management program and project impacts would be less than significant.

c) Air Traffic Patterns

No Impact. The project area is not located within an airport land use plan or within the vicinity of a public use airport or private airstrip. Oakland International Airport, the closest operational airport to the project area, is located approximately five miles to the southeast of the project area. Due to the distance to the most proximate airport, the project would not impact air traffic patterns. No impacts would occur.

d) Design Feature Hazards

No Impact. The project would not change the design of any local streets or intersections in the City of Alameda. Traffic generated by the project would use designated state and local haul routes during non-peak hours. No impacts would occur.

e) Emergency Access

Beneficial Impact. In removing the crane, the project would enhance emergency access. Given the crane's proximity to the WETA ferry terminal and the compromised state of the crane, the crane has the potential to interfere with emergency access if it were to collapse. Demolition and removal of the crane would enhance the ability of WETA to provide service during an emergency.

f) Public Transit, Bicycle, and Pedestrian Facilities

Beneficial Impact. The project would increase the safety of ongoing ferry operations by removing a potential hazard. The project would not conflict with any policies, plans, or programs adopted in support of bicycle and pedestrian facilities or public transit services in the project area. Crane demolition and removal activities would be site-specific. The project site is located offshore and does not contain sidewalks or bike paths. The project would not interrupt public transit services or deteriorate bicycle facilities in the project area as only local and state-designated truck routes would be utilized to remove debris. No impacts would occur.

4.3.17 Utilities and Service Systems

Project Setting

Domestic Water and Water Treatment

Water to the project area is provided by the East Bay Municipal Utility District (EBMUD). EBMUD's water supply system collects, transmits, treats, and distributes water from the Mokelumne River and local runoff water to parts of Alameda and Contra Costa County. EBMUD's water rights allow for delivery of up to 325 million gallons per day from the Mokelumne River watershed which collects melting snowpack in the Sierra Nevada. Local runoff water amounts collected fluctuate between wet and drought years; average local supply is approximately 10 to 15 million gallons per day during wet years and near zero during drought conditions. In total, EBMUD has the rights to a water supply of approximately 335 to 340 million gallons per day.

Solid Waste

California State Law Assembly Bill 939 (AB 939), also known as the Integrated Waste Management Act, was passed in 1989 to address the increases in the state waste stream and decrease in landfill capacity. As a result, AB 939 mandates a reduction of waste being disposed; jurisdictions were required to meet diversion goals of 50 percent. In 2008, California Senate Bill 1016 (SB 1016), also known as the Solid Waste Disposal Measurement System Act, was passed to change the way in which diversion is measured and reported for jurisdictions. AB 939 would still require jurisdictions to divert 50 percent of solid waste from landfill disposal; SB 1016 would require the 50 percent diversion requirement to be calculated in a per capita disposal rate equivalent.

The California Department of Resources Recycling and Recovery (CalRecycle) has set the following targets for the City of Alameda:

- Per Resident Disposal Target Rate: 5.5 pounds/person/day (PPD)
- Per Employee Disposal Target Rate : 11.6 PPD

In 2009, Alameda reported an annual per capita per resident disposal rate of 3.2 PPD and per employee disposal rate of 11.6 PPD. The City of Alameda implements 45 waste diversion programs, including composting, recycling, policy incentives, and public education to help the community reach the target goals set by CalRecycle.

a) Wastewater Treatment

No Impact. The project would not develop any permanent structures that would create a population requiring wastewater treatment services. Thus, the project would not exceed wastewater treatment requirements. No impacts would occur.

b) New or Expanded Water or Wastewater Facilities

No Impact. Implementation of the project would not result in any permanent structures, and the project does not include the introduction of any residents that would require domestic water and wastewater disposal services. The project would therefore not result in the need for any expansion or construction of new water or wastewater treatment facilities. No impacts would occur.

c) New or Expanded Stormwater Facilities

No Impact. The project site is located on a wharf without any storm water drainage facilities. As the project would not alter the rate or volume of stormwater runoff discharged from the project site, no new or expanded storm water drainage facilities would need to be constructed. No impacts would occur.

d) Water Supplies

No Impact. No population would be created by this project, and there would be no demand for domestic water services. Thus, no new or expanded water entitlements are needed for the project. No impacts would occur.

e) Wastewater Treatment Capacity

No Impact. No population would be created by this project, and there would be no demand for wastewater disposal and treatment services. Thus, the project would not create any service demand above existing commitments. No impacts would occur.

f) and g) Landfill Capacity

Less-than-Significant Impact. The project would not build any permanent structure that would generate solid waste. Thus, project operations would not exceed the capacity of a landfill.

Demolished aspects of the crane could be recycled or repurposed. Steel components of the crane could be sold for scrap metal. Schnitzer Steel, located at the nearby Port of Oakland, is one such facility where crane components could be sold as scrap and then processed for repurposing. Some components would require

disposal at an appropriate landfill (in other words, one capable of accepting materials potentially containing hazardous materials). Several such landfills are located in Alameda and Contra Costa Counties, each with ample capacity to accept demolition debris from the project, according to databases maintained by CalRecycle.

However, during demolition, the project would be required to comply with the City of Alameda Waste Management Plan Ordinance requirements. The Ordinance requires projects valued at over $100,000 to prepare and submit a Waste Management Plan (WMP) to the City Department of Public Works for review and approval. The plan would include the estimated total volume or weight of waste to be generated during demolition and means for diverting the waste, including the facilities to be used. The project would be in compliance with federal, state, and local regulations related to solid waste, including AB 939, SB 1016, and the City of Alameda Waste Management Plans Ordinance. No mitigation is required.

4.3.18 Energy

A discussion of potential energy impacts of a project is required by Appendix F of the *State CEQA Guidelines* to be included in an EIR. During demolition, energy would be consumed by power equipment and heavy trucks that would take the demolition debris to an approved landfill. Following demolition, the project would entail no further expenditure of energy. Furthermore, the project would not generate a need for new or altered energy infrastructure. Therefore, impacts related to energy would be less than significant.

4.3.19 Cumulative Analysis

The cumulative analysis of cultural resources and hazards and hazardous materials is provided in **Sections 4.1**, **Cultural Resources**, and **Section 4.2**, **Hazardous Materials**, respectively. The potential cumulative effect of the project on all other resources is discussed below.

Cumulative development includes past, present, and reasonably foreseeable development that could affect the same as the project in such a way that a combined physical impact could occur.

The project would demolish an existing structure. Following demolition, the project would not have any long-term effects in any of the environmental topic areas identified in Appendix G of the CEQA Guidelines, excepting historical resources, as further discussed in **Section 4.1**, **Cultural Resources**. All other project effects identified in this section would be confined to the two month period of demolition.

Because the project would have either no effect or less-than-significant effects confined to the two month demolition period, the project's contribution to any cumulative impact upon all but historical architectural resources *would not* be considerable.

4.3.20 References

ABAG Earthquake and Hazard Mapping.

City of Alameda General Plan.

City of Alameda *1999 Bicycle Master Plan* (Updated 2010).

5.0 ALTERNATIVES

5.1 INTRODUCTION

In accordance with CEQA Guidelines Section 15126.6, this EIR contains a comparative impact assessment of alternatives to the proposed project. The primary purpose of this section is to provide decision makers and the general public with a range of reasonable project alternatives that could feasibly attain most of the basic project objectives, while avoiding or substantially lessening any of the project's significant adverse environmental effects. Important considerations for these alternatives analyses are noted below.

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify a reasonable range of potentially feasible alternatives, clarifying as appropriate if any such alternatives were rejected as infeasible during the environmental review process;
- Reasons for rejecting an alternative include:
  - Failure to meet most of the basic project objectives;
  - Infeasibility; or
  - Inability to avoid significant environmental effects.

CEQA further requires that a No Project (No Action) alternative be considered. The purpose of describing and analyzing a No Action alternative is to allow decision-makers to compare the impacts of approving the project with the impacts of not approving the project. The State CEQA Guidelines state that the No Action alternative is the circumstance under which the project would not proceed. If the No Action alternative would not result in the preservation of existing conditions, the consequences of not approving the project along with the environmental changes that would result should also be addressed.

The State CEQA Guidelines require that an *environmentally superior* alternative be identified when compared to the project and other alternatives. If the alternative with the least environmental impact is determined to be the No Action alternative, the EIR must designate the next best alternative as the environmentally-superior alternative. The analysis of the environmentally superior alternative is provided in **Section 5.6**, **Alternatives Considered But Rejected**, below.

5.1.1 Significant and Unavoidable Impacts

The proposed project would result in the following significant unavoidable impacts:

- **Project-level impact to historical resources:** The project will demolish the United Engineering Company Shipyard crane, a contributing element to the United Engineering Company Shipyard Historic District, a historical resource as defined in *CEQA Guidelines* Section 15064.5.
- **Cumulative impact to historical resources**: The demolition of the crane, in combination with the previous loss of the other contributing resources in the historic district from the Harbor Navigation Improvement Project, would result in a cumulative impact to historical resources.

5.1.2 Alternatives to the Proposed Project

The following summarizes the feasible alternatives to the project identified by the City.

- **No Project Alternative**

  This alternative assumes that the crane would remain in place; neither demolition nor removal would occur.

- **Partial Salvage and Repurposing of Material**

  This alternative entails demolition of the crane as proposed, but would utilize some limited number of pieces of the crane in some form of a public display.

5.2 PROJECT OBJECTIVES

As stated in **Chapter 3.0, Project Description**, the objectives of the project are to:

- Comply with the terms of operating agreement between the City and the WETA, within fiscal limitations.
- Help ensure ongoing safe operations of ferry services and adjacent maritime uses, particularly given the likelihood of a catastrophic seismic event in the region.
- Balance the broad City goals of preserving historic resources with ensuring public safety and wise use of limited financial resources.

5.3 ALTERNATIVE 1: NO PROJECT ALTERNATIVE

Under the No Project Alternative, the project site would remain in its existing condition, and the crane would not be demolished. As the crane is in an advanced state of disrepair, it would continue to degrade and the existing asbestos, lead-based paint, and other corrosive materials would continue to be dispersed into the Estuary. In the event of a seismic event, the crane would continue to pose a hazard to emergency response and the safety of ferry passengers.

5.3.1 Impact Analysis

The proposed project would result in one significant unavoidable impact associated with demolition of a historic resource, which would be avoided by the No Project Alternative. The project would also result in a potentially significant impact related to hazardous materials which could be mitigated to a level of less than significant. As discussed above, the No Project Alternative would maintain the crane in its existing state and would not include treatment and disposal of the associated hazardous materials.

5.3.2 Conclusion

The No Project Alternative would avoid the project's significant and unavoidable impact to historical resources, but would not include the benefit that the project provides in treating and disposing of hazardous materials associated with the crane's current state of disrepair. The No Project Alternative also would not advance any of the project objectives, including taking action in support of WETA's mission to provide emergency life line services for residents and emergency responders during a catastrophic event.

5.4 ALTERNATIVE 2: PARTIAL SALVAGE AND REPURPOSING OF MATERIAL

As suggested by **Mitigation Measure 4.1-1g** in **Section 4.1, Cultural Resources**, of this EIR, this alternative would utilize pieces of the crane in some form of a public display or public artwork. Such a display or artwork, if appropriately commissioned, could provide visitors to the shipyard with a tangible, visual reminder of the crane albeit at a much smaller scale than the original. Materials could be drawn entirely from the truss tower—provided that all lead-based paint is first removed and disposed.

This alternative is considered feasible insofar as space is available for a crane-inspired artwork or display, and that the cost of conditioning a sufficient amount of truss tower pieces to create a display would not be onerous.

5.4.1 Impact Analysis

Aesthetics: Because the Partial Salvage Alternative includes demolition of the crane, it would have the same impacts as the project associated with scenic vistas, scenic resources, visual quality, and light and glare.

Agriculture and Forestry: The project site does not contain any farmland or forestry resources. Neither the project nor this alternative would result in any impacts to agriculture or forestry resources.

Air Quality: This alternative would have same demolition-related emissions as the project.

Biological Resources: This alternative would entail the same mitigation as the project, thereby offering similar protection to the Estuary during demolition activities to prevent hazardous materials (lead pain, asbestos) from entering bay waters.

Cultural Resources: This alternative would result in the same significant and unavoidable impact to historic architecture as the project. However, by requiring development of a visual, tangible reminder of the crane on the site of the historic district, this alternative would offer a slightly greater level of mitigation. Similar to the project, this alternative would not have any potential to affect archaeological or paleontological resources.

Geology and Soils: By removing the crane, this alternative would have a similar risk-reducing impact related to seismic safety as the project.

Greenhouse Gas Emissions: This alternative would have the same demolition-period and operational-period emissions as the project.

Hazards/Hazardous Materials: This alternative would include the same mitigation as the project to ensure all hazards would be reduced below a level of significance. This alternative would likely require some additional evaluation and mitigation to ensure that repurposed pieces of the crane had safe residual levels of lead paint or other hazardous substances.

Hydrology and Water Quality: This alternative would have same mitigation to protect the waters of the Estuary from potential contamination during demolition. Neither this alternative nor the project would have any foreseeable impact relative to groundwater. In addition, this alternative would result in the same beneficial reduction of risk associated with a tsunami.

Land Use and Planning: Similar to the project, this alternative would have no impact to land use and planning considerations, as it would not divide a community, conflict with any applicable land use plan, or affect a habitat conservation plan. This alternative would provide a historical/recreational amenity along the waterfront, encouraging public access to the shoreline in a manner consistent with BCBC policy.

Noise: This alternative would have same demolition noise impacts as the project. Following demolition, neither the project nor this alternative would result in any further noise.

Population and Housing: Similar to the project, this alternative would not have any adverse effect with regard to population and housing. Removal of the crane would not introduce any new residents or have any growth inducing effect.

Public Services: Similar to the project, this alternative would not conceivably increase demand for any public service such that new facilities would need to be constructed.

Recreation: Similar to the project, this alternative would not conceivably increase demand for recreational facilities, nor would it introduce a substantial number of new users to local recreational facilities.

Transportation: Similar to the project, this alternative would require that crane components are transported off-site to a landfill. The truck traffic associated with this effort would be minor in nature and would not foreseeably result in any significant traffic impacts. Also, this alternative would have the beneficial impact of enhancing access to existing ferry transit services, as well as enhancing emergency access plans. Similar to the project, this alternative would enhance WETA's mission to provide emergency lifelines service by removing a potential hazard (the crane) to such service.

Utilities and Service Systems: Similar to the project, this alternative would not increase demand for water, wastewater, stormwater or related infrastructure. Both the project and this alternative would result in similar effects relative to landfill needs.

5.4.2 Conclusion

The Partial Salvage Alternative would still include demolition of the crane and would thus continue to result in a significant and unavoidable impact to historical resources. The salvaging and repurposing of a portion of the crane as a public art display would provide a greater benefit to future generations by providing an opportunity for learning about the history of the shipyard, thereby lessening but not completely avoiding impacts to historical resources. This alternative would also include the benefit of treating and disposing of hazardous materials associated with the crane's current state of disrepair.

5.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of the Environmentally Superior Alternative among the alternatives to the project. The Environmentally Superior Alternative is the alternative that would avoid or substantially lessen, to the greatest extent, the environmental impacts associated with the project. Additionally, if the No Action alternative is determined to be the Environmentally Superior Alternative, CEQA requires that the EIR identify an Environmentally Superior Alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)).

The identification of the Environmentally Superior Alternative results from a comparison of the impacts associated with each alternative, as summarized above. In comparing the two feasible project alternatives, the Partial Salvage Alternative is considered environmentally superior because it would result in many of the same beneficial impacts of the project, while somewhat lessening (but not fully mitigating) the project's impacts to historical resources.

5.6 ALTERNATIVES CONSIDERED BUT REJECTED

The City initially considered the following alternatives, but rejected each from further consideration for the reasons described below.

5.6.1 Preservation in Place

This alternative entails renovations and upgrades to the crane so that it is stabilized and would presumably no longer pose a significant risk to ferry operations and nearby maritime uses. As discussed below, this alternative was found to be infeasible because of the expense associated with rehabilitation and ongoing maintenance, the schedule included in the agreement with WETA, and the fact that even with

rehabilitation the crane would not be operational and would not generate any revenue to offset the ongoing cost associated with preservation in perpetuity.

The structural investigation included as **Appendix B** of this EIR advised that preservation in place would require permanent anchoring of the truss tower to the pier to stabilize the crane in the possibility of a seismic event. The crane is "connected" to the pier only insofar as its wheelbase rests atop the pier's rails. The structural investigation recommends permanently affixing the crane to the pier to limit the potential of toppling in a seismic event. Finally, the structural investigation further concluded that the concrete girders supporting the pier are inadequate to support the loads of the crane.

The City's consulting structural engineer estimated that the cost associated with anchoring the crane to the pier and upgrading the pier itself could cost up to $1 million. Rehabilitation of the deficient portions of the crane – namely, repair of the corroded crane car and crane beam -- was estimated to cost an additional $200,000.

Neither estimate takes into consideration the cost associated with ongoing, long-term maintenance of the crane. There is no immediately discernible long-term economic return that could reasonably be associated with such investments in the crane. Even if stabilized/preserved in place, the crane would not be operational and would thus have essentially no economic value that might offset the costs of rehabilitation and/or long-term maintenance. In an addendum to the structural investigation, the consulting engineer estimated that maintenance could entail expenditures of about $175,000 every ten to fifteen years, or about $12,000 to $17,000 per year in perpetuity.

The City has not programmed funds in its Capital Improvement Program for rehabilitation of the crane; there is no discernible path for any such investment to be recouped through operating revenues.

Given the terms of the agreement with WETA, the City must take action on the crane by early 2013. Even if it were found to be desirable to rehabilitate the crane and repair the pier as described above, there is considerable uncertainty that adequate funds could be raised for rehabilitation and ongoing maintenance. A considerable investment of City resources would be necessary to apply for any number of highly competitive historic rehabilitation grant or loan programs. Moreover, these programs typically include a local match requirement which, given the estimated cost of rehabilitation, could be considerable.

Moreover, the $1.2 million cost estimate does not include the cost of any staff time, permits, environmental review, or mitigation that would be reasonably expected to be associated with doing any work within the waters of the Estuary. Repair of the

pier could have substantial, potentially significant environmental effects as work would need to be performed within the waters of the Estuary. Mitigation for such measures could entail substantial added costs.

Given all of the above factors, the City deemed this alternative infeasible and precluded any further consideration.

In addition to being infeasible, rehabilitation would require substantial abatement of existing lead paint and assumed asbestos within the crane car. This mitigation would be at least equal if not greater in intensity to that required for the project. Moreover, this alternative would introduce new environmental effects associated with the stabilization effort, notably in the water of the Estuary in the effort to fix the concrete foundations of the pier.

5.6.2 Partial Demolition

Initially, the City considered the possibility of leaving the crane tower and car in place but removing the crane boom, a feature that contributes substantially to the crane's instability.

In an addendum to the structural investigation, the consulting engineer concluded that so-called "partial demolition" would entail at least the following operations, estimated to entail about $325,000 in hard engineering costs:

- Dismantle existing boom, sell for scrap metal
- Repair crane cab, including corroded exterior metal sheeting
- Improve existing pier structure by driving new piles into the Bay
- Encapsulate flaking lead paint on steel tower
- Geotechnical investigation and testing

As with the estimate for preservation in place, this engineering cost estimate does not include the cost of any staff time, permits, environmental review, or mitigation that would be reasonably expected to be associated with doing any work within the waters of the Estuary. Repair of the pier could have substantial, potentially significant environmental effects as work would need to be performed within the waters of the Estuary. Mitigation for such measures could entail substantial added costs.

More critically, this alternative would not avoid the significant effects of the project identified in this EIR. The removal of the crane car and boom would continue to have an adverse effect to historic resources. The crane boom is a critical visual identifier that signifies the purpose of the crane. Removal of this feature would leave a truss tower and car that would no longer visually "read" as a crane. Therefore, this alternative would still adversely affect the integrity of the historic district as a whole, similar to the project. Moreover, hazardous material abatement efforts would be

similar to if not in excess of those required for the project. And as noted above, repair or replacement of the pier's concrete foundation would introduce a host of new environmental effects above and beyond those associated with the project.

As with the preservation in place option, the City has not programmed capital or maintenance funds to provide for the initial costs or ongoing costs of upkeep.

For all of the reasons articulated above, the City concluded that this alternative was inadequate in terms of avoiding significant environmental effects and was also economically infeasible.

5.6.3 Relocate Crane to West End of Pier or Adjacent Land

As shown on **Figure 5-1**, the structural investigation considered two alternative sites for the crane:

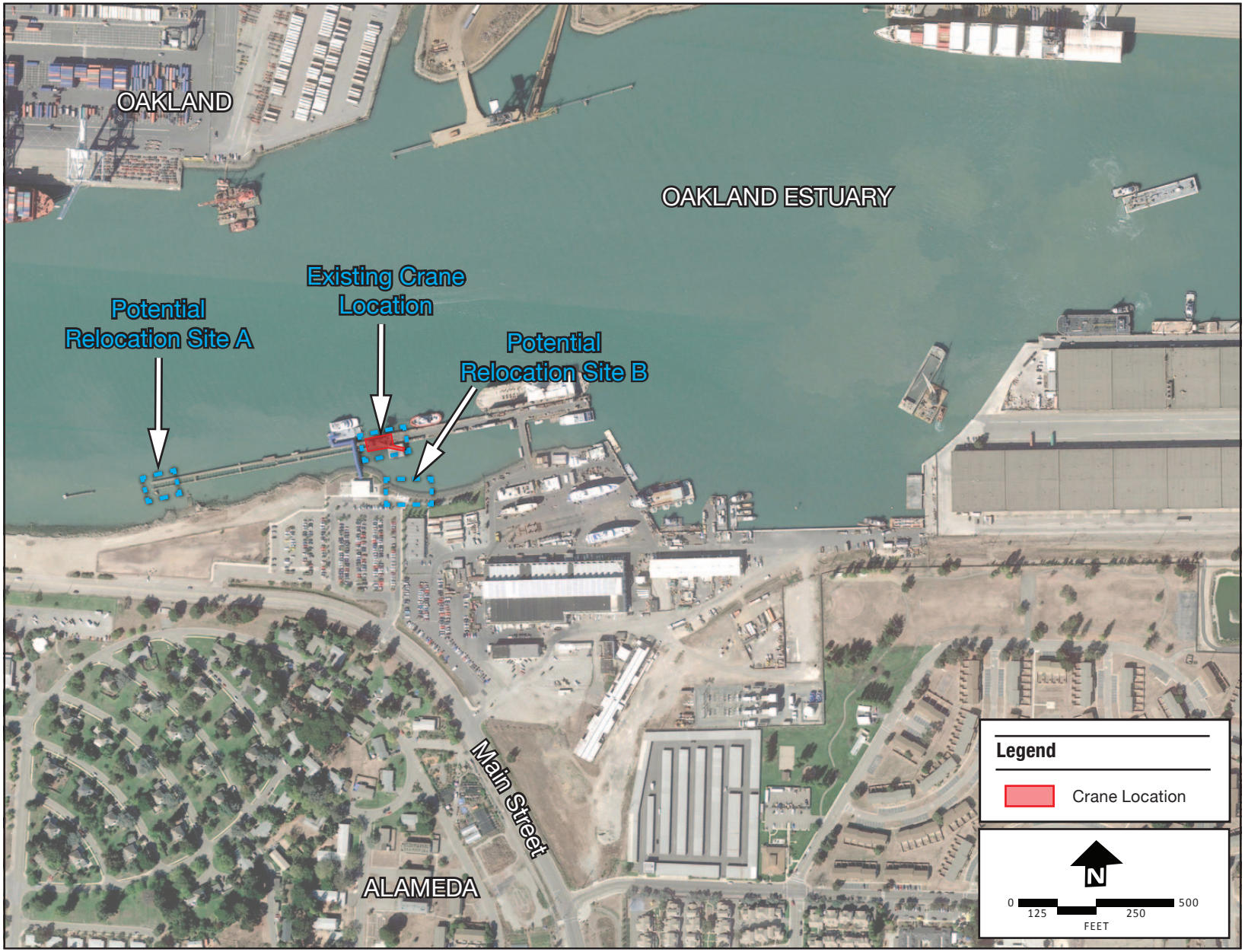
- Site A: at the west end of the pier
- Site B: on land adjacent to the ferry terminal

The City deemed Site A infeasible insofar as it would require a similar level of effort as that associated with preservation in place (about $1.2 million in capital costs alone). As articulated in **Section 5.6.1**, **Preservation In Place**, above, the City deemed these costs prohibitively expensive and thus infeasible.

Moreover, moving the crane on the rail pier past the ferry terminal would risk damage to the terminal during transport of the crane. At minimum, this alternative would require temporary closure of the ferry terminal, and temporary removal and replacement of the ferry terminal gangways to avoid any risk to ferry passengers or other people in the vicinity.

Given the identified corrosion of the car and boom, moving the crane could pose the highest degree of risk to the ferry terminal of all options considered. Furthermore, although moving the crane further away from the shipyard would lessen the effect of demolition, it would not completely avoid the adverse effect, as the crane would be further separated from the district, and its integrity as a contributing element to the historic district would be substantially reduced. Moreover, the alternative would introduce new environmental effects associated with pier repair.

For all the reasons above, the City deemed this alternative infeasible.



Potential Alternative Locations

Figure 5-1

Source: Circlepoint, 2011.

In terms of relocating the crane to a land-based site (such as Site B in **Figure 5-1**), the City has deemed this alternative infeasible as it would entail much of the same cost associated with the alternatives discussed above. The crane's structural deficiencies would still need to be addressed, the hazardous materials and corrosion would still need to be abated, and a new, more stable land-based foundation would need to be constructed.

5.6.4 Relocation of the Ferry Terminal

The City considered asking WETA to relocate the ferry terminal some distance west so as to be outside any immediate "danger zone" associated with a potential failure of the crane. However, unless this alternative included efforts to stabilize the crane it would be unsatisfactory in the long term, since the existing corrosion and instability of the crane would remain, along with the safety concerns associated with the adjacent maritime uses.

In a scenario in which the ferry terminal is simply moved without stabilization of the crane, the ferry terminal and ferry passengers would likely face less risk, but the crane would still be at a high risk for failure -- meaning that it could collapse, releasing its hazardous materials into the Estuary waters in an uncontrolled manner, and likely requiring costly emergency response and repair. Moreover, the pier itself could be substantially damaged in such an event, possibly resulting in indirect damage to the ferry terminal. The City concluded that this alternative did not adequately reduce the level of risk to the ongoing provision of ferry service, particularly in emergency situations.

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6.0 CEQA REQUIRED ASSESSMENT CONCLUSIONS

As required by the California Environmental Quality Act (CEQA), this chapter provides a discussion of effects not found to be significant, unavoidable significant impacts, significant irreversible environmental changes, and impacts related to growth inducement. The focus of this chapter is on the environmental effects of both construction and operation of the project.

6.1 EFFECTS NOT FOUND TO BE SIGNIFICANT

CEQA requires a brief discussion of the potential effects of a project that have been determined not to be significant and, therefore, not evaluated in detail in the EIR. Because of the nature of the project and its location on rails over open water, the project has little potential for significant impacts. **Section 4.3**, **Other Resources**, of this EIR includes a discussion of all environmental resources that would not be significantly affected by the project. These resource areas include aesthetics, agriculture, air quality, biological resources, geology, greenhouse gas emissions, hydrology, land use, mineral resources, noise and vibration, population and housing, public services, recreation, transportation, and utilities.

6.2 SIGNIFICANT UNAVOIDABLE IMPACTS

CEQA Section 15126.2(b) requires that an EIR disclose all significant impacts including those that cannot be mitigated to a less-than-significant level, where no feasible mitigation measures exist to further reduce these impacts. Throughout this draft EIR, mitigation measures have been identified that would reduce all of the potential environmental impacts of the project to a less-than-significant level, with the exception of impacts to cultural resources.

CEQA Section 15092 prohibits lead agencies from approving a project unless the agency has “eliminated or substantially lessened all significant effects on the environment where feasible.” California Supreme Court case law has affirmed that lead agencies have a duty to mitigate significant environmental impacts to the

extent possible when mitigations are feasible, even if the mitigations will not reduce impacts to a less-than-significant level and the agency intends to adopt a Statement of Overriding Considerations.

Chapter 4.0, **Settings, Impacts, and Mitigation Measures**, provides a full discussion of all environmental impacts of the project. According to the evaluation of all the topical sections in this draft EIR, the project would not result in any significant and unavoidable impacts.

6.3 SIGNIFICANT IRREVERSIBLE CHANGES

CEQA Section 15126.2(c) requires that an EIR discuss any environmental changes that would be irreversible if the project were implemented. CEQA defines irreversible environmental changes as either an irretrievable commitment of resources and/or irreversible damage resulting from environmental accidents. Irreversible changes may include current or future uses of non-renewable resources, and secondary or growth inducing impacts that commit future generations to similar uses. The *CEQA Guidelines* describe three distinct categories of significant irreversible changes, including changes in land use that would commit future generations; irreversible changes from environmental actions; and consumption of non-renewable resources.

6.3.1 Changes in land use that would commit future generations

The project consists of the demolition and removal of an existing crane, and does not propose new urban development within the project area. No new land use is proposed that would commit the city of future generations to any specific course of action.

6.3.2 Irreversible changes from environmental actions

The project would not change any land uses in the project area. Non-renewable resources such as fossil fuels would be required for demolition or removal of the crane. The associated commitment of non-renewable resources necessary for construction would be irreversible.

6.3.3 Consumption of non-renewable resources

The project would result in the consumption of some nonrenewable resources during demolition and removal, such as electricity, natural gas and petroleum products.

6.4 GROWTH INDUCEMENT

CEQA requires a discussion of the ways in which a project could be growth inducing. *CEQA Guidelines* Section 15126.2(d) identifies a project as growth inducing if it would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. For example, new population from residential development represents a direct form of growth. A project could also indirectly induce growth by attracting additional population or new economic activity to an area.

According to the *CEQA Guidelines*, the project would have potential to induce growth if it would:

- directly encourage population growth, through the construction of additional housing in the surrounding environment;
- result in the economic expansion either through the addition of substantial commercial space or by providing longer-term jobs (including construction) that could induce people to move to the area
- remove obstacles to growth, such as by building a road in a formerly inaccessible area, or through the provision of infrastructure or service capacity that would accommodate population growth beyond the levels currently anticipated by local or regional plans and polices;
- increase population such that existing community facilities and services are inadequate and the expansion of existing facilities or the construction of new facilities is required; or
- through a precedent-setting action, such as a General Plan Amendment or removal of a restrictive zoning requirement such that growth would be permitted in new areas or at a higher density than previously planned for.

In general, a project could be considered growth inducing if it directly or indirectly affects the ability of agencies to provide needed public service, or if it can be demonstrated that the potential growth significantly affects the environment in some other way. However, *CEQA Guidelines* do not require a prediction or speculation of where, when, and in what form such growth would occur.[1]

According to the *CEQA Guidelines*, it must not be assumed that growth in any area is necessarily detrimental, beneficial, or of no significance to the environment. CEQA does not require separate mitigation for growth inducement as it is assumed that these impacts are already captured in the analysis of environmental impacts (**Chapter 4.0**, **Settings, Impacts, and Mitigation Measures**, of this draft EIR).

The project entails the demolition of a crane. Following demolition, no further activities would occur; the project does not include any operational period effects. The project would not therefore have any growth inducing effect or ability to influence or encourage population growth.

[1] CEQA Guidelines, Section 15145.

7.0 REPORT PREPARATION

Table 7-1 presents the organizations and individuals involved in the preparation of this draft EIR.

Table 7-1 List of Preparers of the Draft EIR

Preparer	Topic/Role	Contact
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Source: Circlepoint, 2011.

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