Biotic Report

City of Pacific Grove
Point Piños Lighthouse Restoration
Site Improvements
APN 007-001-02
Pacific Grove, California

Prepared for:
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Prepared

By

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1.0 INTRODUCTION

This Biotic Report has been prepared by Rana Creek on behalf of the City of Pacific Grove in connection with the proposed site improvements on the Point Piños lighthouse grounds (APN 007-001-02), located west of Asilomar Boulevard in Pacific Grove, California (**Map 1**). The purpose of this study is to ensure that the plant community and habitat on site is adequately characterized prior to construction and any sensitive biological resources are protected and/or avoided.

1.1 Location and Proposed Project

The project site lies within the area immediately surrounding the Point Piños lighthouse (**Map 2**). The majority of the proposed site improvement activities will occur inside of the existing degraded asphalt pathway, which encircles the lighthouse. The only part of the proposed project that extends outside of this area is the removal of an existing 4-footwide concrete path and installation of a new 4-foot-wide concrete path that will provide access to the lighthouse from the existing gravel parking area adjacent to the 10th tee at the Pacific Grove Golf Course. None of the proposed activities will affect the area associated with the ongoing dune restoration project at the nearby City of Pacific Grove Golf Course, which is being implemented under the Biological Assessment and Restoration of Dune Habitat Plan (Rana Creek, 2004).

According to the site drawings prepared by Douglas Howe Architect, dated October 11, 2010, the proposed site improvements are as follows:

- Removal and replacement of approximately 65 feet of existing 4-foot-wide concrete pathway at the entrance to the lighthouse building;
- Construction of a single story gift shop (approximately 165 square feet) and a restroom (approximately 165 square feet) at a location approximately 45 feet and 20 feet northeast of the lighthouse entrance, respectively;
- Landscaping, intended to reflect the condition of the lighthouse garden as it was around the turn of the 20th century in the area around the lighthouse building and within the asphalt path that encircles the building (Note: Plans state that botanist Vern Yadon involved in development of Landscape Plan)
- Removal and replacement of approximately 120 feet of 4-foot-wide concrete pathway, construction of a new wooden gate and site entrance, near the parking area adjacent to the 10th tee of the golf course, and removal of a dead Monterey pine (*Pinus radiata*); and
- Re-paying of the existing degraded asphalt path that encircles the lighthouse

It should be noted that a new wood fence, which is shown on the October 11, 2010 plans, has been covered under a separate permit application through the Coastal Commission. This fence, when constructed, will follow the inside edge of the existing degraded asphalt path that encircles the lighthouse and the immediately surrounding area.

2.0 BOTANICAL SURVEY & HABITAT EVALUATION

2.1 Methods

The botanical survey and habitat evaluation thoroughly evaluated the proposed location of the proposed site improvements and the immediately surrounding areas in order to identify the plant community present, identify and inventory any special status plant species, identify all native and non-native plants, and identify notable wildlife habitat within the project area.

2.2 Timing

The survey was performed on August 8, 2011. Although many of the plants present on site could be identified during the survey, the timing of the survey did not coincide with the typical blooming period of many annual plant species and therefore was not sufficient to detect all species that could potentially occur (see Discussion).

2.3 Findings

2.3.1 Plant Community

All areas of the proposed site improvements are developed or ruderal in nature. The developed areas associated with the lighthouse are surrounded towards the south and southeast by dune scrub dominated by mock heather (*Ericameria ericoides*). However, this area will not be disturbed by the project. The ruderal vegetation that lies within the project area consists primarily of non-native annual grasses such as ripgut brome (*Bromus diandrus*) and slender wild oat (*Avena barbata*) and other annual weedy species. Within the work area only several native plants were found, including three California poppies (*Eschscholzia californica*) and one yellow bush lupine (*Lupinus arboreus*).

2.3.2 Special Status Plants

No special status plants were detected during the survey. The nearest known population of special status plants is located approximately 500 feet towards the northwest and southwest within dune habitat.

2.3.3 Wildlife Habitat

Although legless lizards (*Anniella pulchra*), a State species of special concern are known to occur in the area, the quality of wildlife habitat within the proposed work area is very poor. One area with low to moderate potential for legless lizards is the 120-foot section of 4-foot-wide path at the entrance to the site. This area is covered in non-native annual grass, but does contain relatively loose sand and is adjacent to the intact dune scrub habitat towards the southeast. Legless lizards have been discovered in similar habitat on the adjacent golf course property. All other areas of the site do not provide any suitable habitat for legless lizards.

The site does contain a number of Monterey cypress (*Cupressus macrocarpa*) trees that could provide nesting opportunities for migratory birds. Although no tree removal or trimming is proposed, construction activities or removal of the dead Monterey pine snag

could disturb nesting birds if conducted during the nesting season (February 15 – September 1).

3.0 DISCUSSION & RECOMMENDATIONS

The proposed project occurs entirely within currently developed or ruderal areas and will not result in a loss of native habitat. As such, a landscape restoration and monitoring plan is not proposed as a mitigation measure for the project. However, due to the summer timing of the botanical survey, the site should be visited again during Spring 2012 to verify that no special status plants are present.

The proposed landscaping plan contains mostly non-native ornamental species in order to mimic the landscaping of the lighthouse grounds as it was approximately 50 to 100 years ago. The plant palette has been developed with local botanist Vern Yadon, and does not contain any species that have the potential to invade the adjacent dune habitat. However, it is not specified on the plans what type of turf grass will be used. Care should be exercised to not introduce or promote the spread of any grass that has a high likelihood of invading adjacent areas. Construction of the proposed improvements around the lighthouse and the landscaping activities will not have a significant effect on biotic resources provided that the following avoidance, minimization, and mitigation measures are followed:

3.1 Avoidance, Minimization, and Mitigation Measures

- Spring survey The site shall be visited by the project biologist during Spring 2012 to verify that no special status plants are present on site. A letter shall be submitted to the Coastal Commission documenting results of the spring survey.
- Pre-construction survey— Due to the potential presence of legless lizards at the location of the entrance walkway and nesting birds in the Cypress trees, a pre-construction survey shall be performed within two weeks of the start of construction. The legless lizard survey should be conducted using the three pass method specified by California Department of Fish & Game (DFG). Any legless lizards discovered during the three-pass pre-construction survey shall be handled in accordance with DFG guidelines and transported to suitable habitat within the existing dune scrub, south of the lighthouse grounds. If construction of the pathways and structures is to occur between February 15 and September 1, the pre-construction survey shall also include a search for active bird nests in the cypress trees and the dead Monterey pine snag that is proposed for removal. If active nests are found, DFG shall be consulted for avoidance measures (typ. 100 to 200 buffer zone).
- Staging of equipment and materials Equipment and materials shall not be operated or stored within the native dune scrub that occurs adjacent to the

lighthouse grounds. No waste products shall be disposed of or stored in the native dune scrub area.

• Turf Areas: Eradicate any existing Kikuyu grass (*Pennisetum clandestinum*) within the proposed landscaping area prior to construction using glyphosate herbicide. Do not plant turfgrasses that have the potential to spread via runner/tillers into adjacent dune habitat.

4.0 REFERENCES

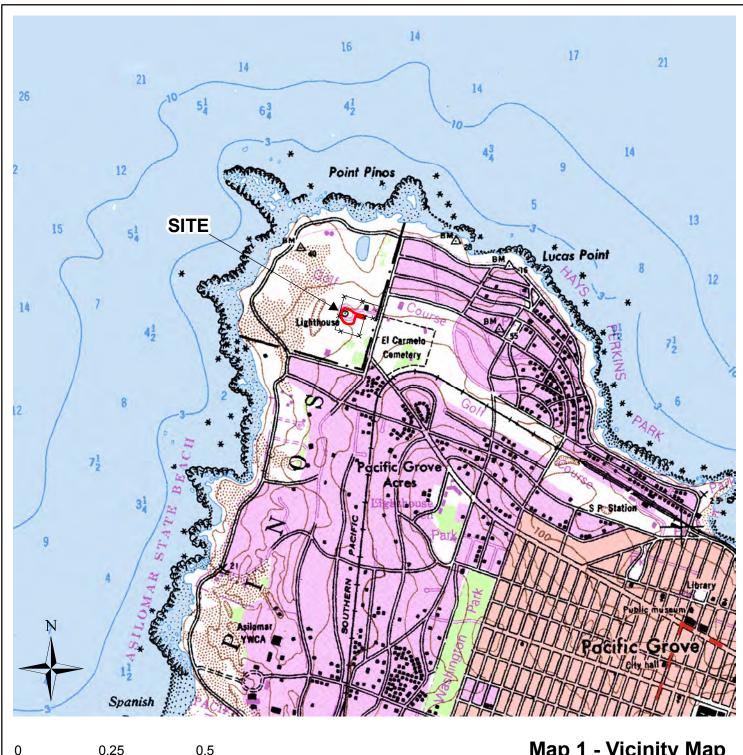
California Department of Fish & Game. 2000. California Wildlife Habitat Relationships System: California Legless Lizard (*Anniella pulchra*) Life History Account.

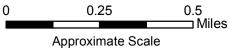
Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial and Natural Communities of California: Unpublished Report, State of California Resources Agency, Department of Fish & Game.

Matthews, M.A. 2006. An Illustrated Field Key to the Flowering Plants of Monterey County: California Native Plant Society.

Rana Creek, 2004. Biological Assessment and Restoration of Dune Habitat Plan, City of Pacific Grove Golf Course, City of Pacific Grove, dated May 17, 2004.

Roberson, D. and Tenney, C. 1993. Atlas of the Breeding Birds of Monterey County: Monterey Peninsula Audubon Society.





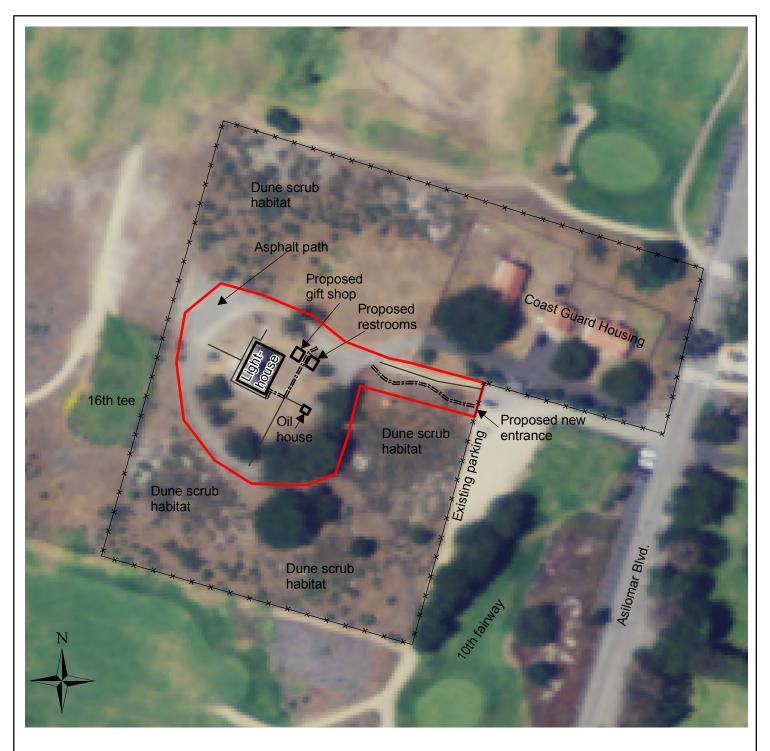
Legend

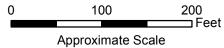
Project Area

Map 1 - Vicinity Map Point Pinos Lighthouse Pacific Grove, CA

Date:August, 2011 Prepared by: JW







Legend

Paths Project Area * * Fence

===== Replacement Path Structures

Existing Path

Map 2 - Site Plan Point Pinos Lighthouse Pacific Grove, CA

Date:August, 2011 Prepared by: JW





Photo 1: Lighthouse and grounds where landscaping is proposed (view west)



Photo 3: View of lighthouse grounds looking north (section of concrete walk to remain)

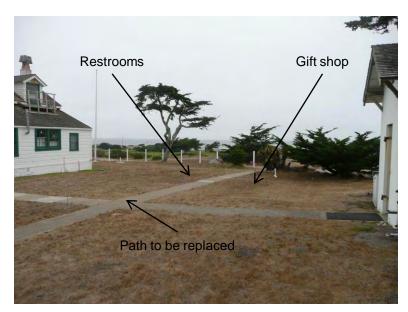


Photo 2: Location of proposed gift shop and restrooms (view northwest)



Photo 3: Existing degraded asphalt path encircling lighthouse (view northwest)

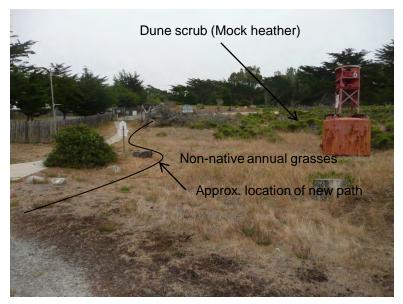


Photo 5: Existing entry path and proposed location of new entry path (view east)



Photo 7: Marginal legless lizard habitat near proposed new entry path



Photo 6: Existing entry path (view west)



Photo 8: Dead Monterey pine proposed for removal

Appendix B - August 2011 Plant Species List Point Piños Lighthouse

| Family | Species Name | Common Name | Native |
|-----------------|--|----------------------------|--------|
| Aizoaceae | Carpobrotus edulis | Hottentot fig | n |
| Aizoaceae | Tetragonia tetragonioides | New zealand spinach | n |
| Amaryllidaceae | Amaryllis hallii | Naked ladies | n |
| Asteraceae | Achillea millefolium | Common yarrow | y |
| Asteraceae | Conyza bonariensis | South American conyza | n |
| Asteraceae | Gnaphalium luteo-album | Weedy cudweed | n |
| Asteraceae | Sonchus oleraceus | Common sow-thistle | n |
| Asteraceae | Taraxacum officinale | Common dandelion | n |
| Asteraceae | Ericameria ericoides | Mock heather | y |
| Asteraceae | Erigeron glaucus | Seaside daisy | y |
| Caryophyllaceae | Spergularia rubra | Purple sand spurrey | n |
| Cupressaceae | Cupressus macrocarpa | Monterey cypress | y |
| Ericaceae | Euphorbia peplus | Petty spurge | n |
| Fabaceae | Medicago polymorpha | Bur clover | n |
| Fabaceae | Lupinus arboreus | Yellow bushlupine | y |
| Festuceae | Vulpia myuros | Rat-tail fescue | n |
| Geraniaceae | Erodium circutarium | Red-stemmed filaree | n |
| Papaveraceae | Eschscholzia californica var. maritima | California poppy (Coastal) | y |
| Pinaceae | Pinus radiata | Monterey pine | y |
| Plantaginaceae | Plantago coronopus | Cut-leaved plantain | n |
| Poaceae | Avena barbata | Slender wild oat | n |
| Poaceae | Briza maxima | Rattlesnake grass | n |
| Poaceae | Bromus diandrus | Ripgut grass | n |
| Poaceae | Bromus hordeaceus | Soft chess | n |
| Poaceae | Hordeum murinum | Foxtail | n |
| Poaceae | Pennisetum clandestinum | Kikuyu grass | n |
| Primulaceae | Anagallis arvensis | Pimpernel | n |