Technical Memorandum
Biological Reconnaissance at the Proposed Event Center and Mixed-Use Development at Mission Bay Blocks 29-32, San Francisco, California

October 1, 2015

The purpose of this technical memorandum is to provide the results of biological reconnaissance site visits at the proposed development at Mission Bay Blocks 29-32, at the corner of 16th and 3rd Streets, in the Mission Bay District of the City of San Francisco. This memorandum follows up on earlier reconnaissance site visits by Environmental Science Associate (ESA) biologists during the preparation of the NOP-IS in August 2014.

The site visits examined biological conditions present at the site, including an excavated ponded depression located in the western portion of the site. Based on those site visits, this memo describes vegetation conditions, avian use of the site, as well as the potential occurrence of regional rare plants and two special-status wildlife species: California red-legged frog (CRLF; *Rana draytonii*) and steelhead trout (*Oncorhynchus mykiss*).

Site visits were completed on September 24, 2014, and September 10, 2015. The September 24, 2014 site visit documented general biological conditions on site, including vegetation communities and site connectivity to surrounding areas. The entire site was traversed on foot, with plant species and vegetation communities noted. A site survey was completed by WRA wildlife biologist Claire Woolf on the morning of September 10, 2015 from 11:00 AM to 12:05 PM. The weather during the 2015 site visit was approximately 70°F, partly cloudy skies, and winds of approximately 2-3 mph. The excavated depression and surrounding vegetation was observed specifically for wildlife species utilization continuously for 45 minutes, documenting the general water quality, amount and type of vegetation, etc.) as well as the number, species, and activity of all animals seen.

Overview of site conditions showing poor habitat quality, extensive disturbance, and surrounding development.

Site Vegetation Communities and Rare Plant Species

General site conditions are representative of the history of urban industrial land use, and much of the site today remains paved. The area was historically a rail yard, cannery and industrial

manufacturing facilities. Soils on site consist of fill imported during the historic industrial development of the area in the late nineteenth and early twentieth centuries. Additional soil disturbance and import of fill occurred between 2005 and 2007, during site remediation completed under an order from the Regional Water Quality Control Board.

Ruderal upland vegetation community on site.

The site is dominated by non-native invasive species common of disturbed locations, including, stinkwort (*Dittrichia graveolens*), foxtail brome (*Bromus madritensis*), ripgut brome (*Bromus diandrus*), Italian rye grass (*Festuca perennis*), rattail fescue (*Festuca myuros*), Bermuda grass (*Cynodon dactylon*), coyote bush (*Baccharis pilularis*), fennel (*Foeniculum vulgare*), pampas grass (*Cortaderia jubata*), bristly ox tongue (*Helminthotheca echioides*), black mustard (*Brassica nigra*), cut leaf plantain (*Plantago coronopus*), and cheeseweed (*Malva parviflora*). In the western portion of the site is a depression that contained water during both site visits. Dominant vegetation in the depression is brass buttons (*Cotula coronopifolia*), saltgrass (*Distichlis spicata*) and fat-hen (*Atriplex prostrata*). Alkali bullrush (*Bolboschoenus maritimus*) is present in a patchy distribution at the margins of the depression. At the time of the site visits, the depression was predominately choked with filamentous algae and lacked substantial cover by vascular vegetation. Water depths in the depression were estimated at 6-8 inches. No direct connection (i.e., drainage outfall, weir) is present between the depression and San Francisco Bay, or to other areas on site or off-site. Based on historical aerial photographs reviewed for the site, all water present in the depression is contained within the depression.

Ponded depression showing filamentous algae, sparse cover by bulrush, and dominant cover by low growing herbaceous vegetation.

All vegetation on site has become established recently, following site disturbance for remediation activities, which entailed excavation and earth work over the entire site. Based on this recent disturbance, the extremely disturbed soil conditions present on site, the land use history, and current land use of surrounding areas, the site has no potential to support special status plant species. The excavated areas were created by the recent remediation of the site.

Wildlife Utilization

No wildlife species were observed in the excavated area during the September 2015 site visit. One black phoebe (*Sayornis nigricans*) was observed foraging in the vegetation at the margins of the depression, and one Eurasian collared-dove (*Streptopelia decaocto*) was observed foraging in the unvegetated portions of the site, approximately 50 feet east of the depression. Both of these species are commonly found in urban areas, and do not

have any special regulatory status with the federal or state governments.

CRLF was not observed on site, and there is virtually no potential for CRLF to be present on the site. The depression does contain standing water and some emergent vegetation; however, the site is located within an area of intense, long-term urban development, which is inhospitable for and is considered a barrier to dispersal (USFWS 2006). The depression is a man-made feature and was created by recent remediation of the site. CRLF would not be able to colonize it from elsewhere due to the surrounding urban development and lack of nearby documented CRLF occurrences. The California Natural Diversity Database (CNDDB) contains the locations of current and historic observations of many special-status species. According to the CNDDB, CRLF has only been documented in west San Francisco in Golden Gate Park, Lincoln Park, the Presidio, and the Lake Merced areas, all of which are greater than 2 miles from the site. CRLF can disburse to distances up to two miles (CDFW 2015, USFWS 2006); however, they are not known to disperse through city streets and other intensely urban development present within the City of San Francisco.

Similarly, conditions in the ponded depression are completely inhospitable to steelhead. Steelhead have no potential to occur on site. No aquatic connection exists between the depression and San Francisco Bay, and conditions are not conducive to the survival of steelhead due to elevated temperatures and low oxygen conditions evident by the dominance of filamentous algae in the depression. Steelhead would not be able to survive conditions such as those present in the depression.

Conclusion

Based on observations during the site visits, the site contains very poor habitat for plants, birds and special-status wildlife. The site is unlikely to support bird species unadapted to urban environments due to its lack of dense vegetation, low water levels choked with algae, and its position in an urban area surrounded by development on all sides. Moreover, the intense urban development, and lack of connectivity to other suitable habitats effectively preclude CRLF and steelhead from the site. Last, based on the history of recent site disturbance and soil conditions on site, there is no potential for the presence of special status plant species on site.

References:

[CDFW] California Department of Fish and Wildlife. 2015. California Natural Diversity Database (CNDDB). California Department of Fish and Wildlife. Biogeographic Data Branch, Vegetation Classification and Mapping Program, Sacramento, CA. Accessed: September 2015.

[USFWS] U. S. Fish and Wildlife Service. 2006. Designation of Critical Habitat for the California Red-Legged Frog, and Special Rule Exemption Associated With Final Listing for Existing Routine Ranching Activities; Final Rule. Federal Register 71(71): 19243-19346. April 13.