Appendix D

Jurisdictional Delineation

Jurisdictional Delineation Report
Los Angeles International Airport
Proposed Runway 6L-24R and Runway 6R-24L
Safety Area and Associated Improvements Project

Submitted to:
RICONDO & ASSOCIATES, INC.
20 North Clark Street
Suite 1500
Chicago, Illinois 60602

Prepared for:
LOS ANGELES WORLD AIRPORTS
1 World Way
Los Angeles, California 90045

Prepared by:
SAPPHOS ENVIRONMENTAL, INC.
430 North Halstead Street
Pasadena, California 91107

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1.0 INTRODUCTION

1.1 Project Location

Los Angeles International Airport (LAX) is located in the southwestern portion of the County of Los Angeles, adjacent to the Santa Monica Bay and 14 miles southwest of downtown Los Angeles (Figure 1.1-1, *Regional Vicinity Map*). The LAX airfield is located entirely in the City of Los Angeles, Los Angeles County, California, as depicted on the United States Geological Survey (USGS) Venice Quadrangle, within the boundaries of Township 2 South and Township 3 South and Range 14 West and Range 15 West. The airfield lies within the Sausal Redondo Land Grant Boundary and is bordered to the north by Westchester Parkway, to the east by Aviation Boulevard, to the south by Interstate 105, and to the west by Dockweiler Beach State Park. Cities surrounding LAX include Los Angeles to the north, Inglewood to the east, and El Segundo to the south. LAX encompasses approximately 3,350 acres with a field elevation of 126 feet above mean sea level.

The northern airfield complex at LAX incorporates Runway 6L-24R, the northernmost runway, and Runway 6R-24L, the inboard runway. In addition, there are a number of taxiways and airfield operations roadways located within the north airfield area. The Argo Ditch lies just north of the eastern edge of Runway 6L-24R (see Figure 1.1-2, *Local Vicinity Map*).

1.2 Existing Conditions

The Argo Ditch was constructed in 1949 as a flood control structure. The primary source of Argo Ditch's water supply is from runoff. Several concrete culverts and drainage features exist throughout the Argo Ditch. Surface water runoff enters a gated outlet structure where a concrete box section transitions to an open ditch and a series of side drainages/culverts along the length of the ditch (6 on the northern slope and 9 on the southern slope). Many of the plant species that have been documented within the Argo Ditch are nonnative species, typically associated with disturbed sites. The integrity of the Argo Ditch has also been significantly affected by maintenance activities conducted along the flood control structure over the last 50 years, beginning in 1957. These activities, which included the cleanout of vegetation and debris, have altered its original design. Moreover, the continual development of the airport has resulted in the removal of native upland plant communities and loss of habitat, meaning that any plant communities present within the ditch are likewise degraded and have little wildlife value.

1.3 Project Description

The Los Angeles World Airports (LAWA) is planning Runway Safety Area (RSA) improvements and associated improvements of Runway 6L-24R and RSA improvements of Runway 6R-24L at LAX in response to the requirements of *The Transportation, Treasury, Housing and Urban Development, the Judiciary, The District of Columbia, and Independent Agencies Appropriations Act* (*Public Law 109-115*).[1] This act states that all RSAs at 14 Code of Federal Regulations (CFR) Part 139 certified airports (such as LAX) must meet Federal Aviation Administration (FAA) design standards by December 31, 2015. As the RSAs of Runways 6L-24R and 6R-24L do not meet current FAA standards, LAWA is proposing to improve the Runway 6L-24R RSA to meet FAA design standards

[1] The Transportation, Treasury, Housing and Urban Development, the Judiciary, the District of Columbia, and Independent Agencies Appropriations Act, 2006. Public Law [P.L. 109-115). 30 Nov. 2005.

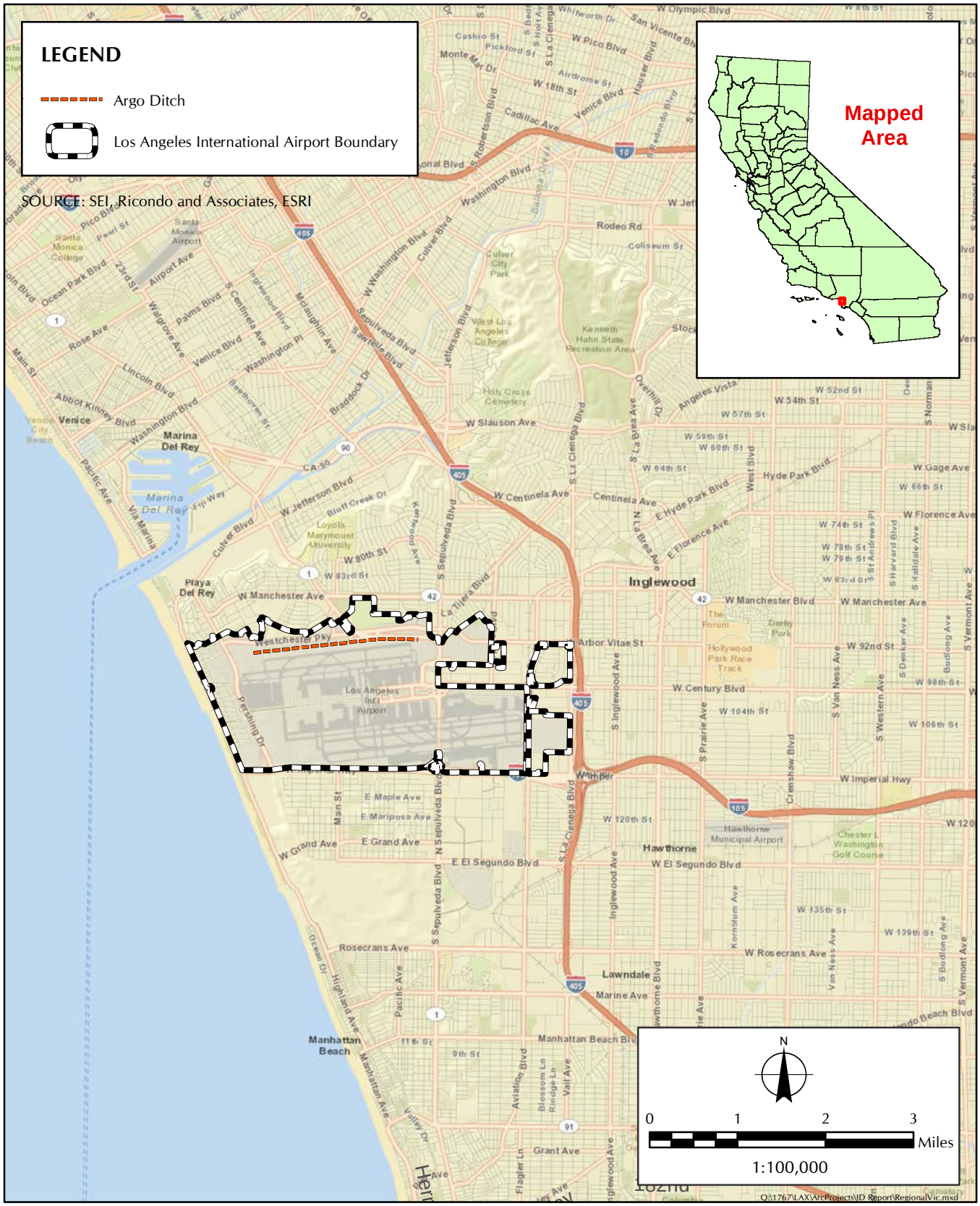

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FIGURE 1.1-1

Regional Vicinity Map

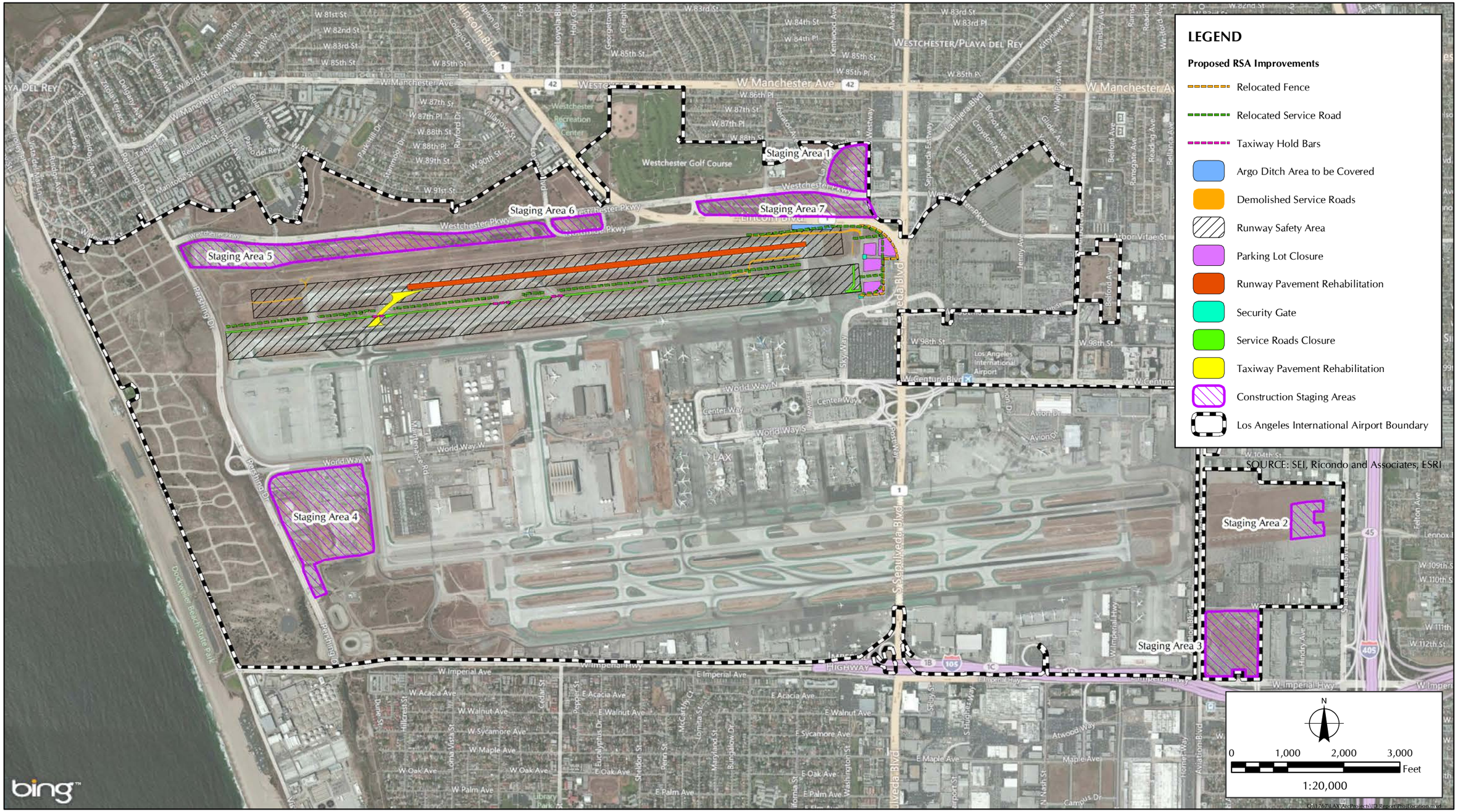

FIGURE 1.1-2
Local Vicinity Map

and is proposing to implement improvements to Runway 6R-24L that can be implemented by December 31, 2015. LAWA is also evaluating additional RSA improvements to Runway 6R-24L that would be implemented after December 31, 2015, which would be the subject of a separate environmental evaluation. The components of the proposed undertaking related to Runways 6L-24R and 6R-24L RSA improvements are:

- Implementation of declared distances on Runways 6L-24R and 6R-24L
- Service roads would be relocated, closed or realigned outside the RSA
- Relocate navaid service roads
- Pavement rehabilitation
- Cover a segment of the Argo Ditch
- Relocate security gate(s)
- Relocate Air Operations Area Fence
- LAWA equipment parking area closures
- Realignment of taxiway holdbars
- Construction staging areas

As a part of the improvements, an approximately 2,900-foot-long on-airport service road segment, situated within the RSA and north of the Runway 6L-24R, would be relocated north of the RSA. Due to the proximity of Lincoln Boulevard in this area, a portion of this on-airport service road, located north of the Runway 24R threshold, would be relocated over the Argo Ditch. As a result, approximately 1.17 acres of the eastern portion of the ditch will be covered (see Figure 1.1-2).

2.0 REGULATORY FRAMEWORK

2.1 Section 404 of the Clean Water Act

Impacts on wetlands (including marsh, riparian, or vernal pools) or other "waters of the United States" are defined in Section 404 of the Clean Water Act of 1977, as amended (40 CFR 230.10). This section authorizes the Secretary of the Army, acting through the Chief of Engineers, to exert jurisdiction over wetlands. Section 404 requires the United States Army Corps of Engineers (USACOE) to regulate discharges of dredge or fill material into "waters of the United States." Activities that result in the discharge of dredge or fill material into "waters of the United States" or wetlands are subject to permit by USACOE. USACOE may issue permits for the discharge of dredge or fill material under Section 404 in compliance with Section 404(b)(1) guidelines established by the U.S. Environmental Protection Agency. Section 404(b)(1) requires project proponents to document measures in order to avoid or minimize negative effects on wetlands in a stepwise manner. The guidelines require permits to be issued only in the absence of practical alternatives to the proposed discharge that would have less adverse impacts on aquatic ecosystems. USACOE requires an individual permit for any activity that will affect an area in excess of 10 acres of "waters of the United States".

On August 2, 2013, USACOE stated to LAWA that a permit may likely be required for the proposed project based on USACOE records. Sapphos Environmental, Inc. and LAWA met with USACOE for a pre-application meeting on August 13, 2013 to discuss the project history and previous mitigation. In response, USACOE notified Sapphos Environmental, Inc. and LAWA that the proposed project would qualify for Nationwide Permit No. 39 for Commercial and Institutional Developments because the proposed project results in the permanent loss of 500 linear feet (0.093 acre) of aquatic resources. Normally, projects that result in impacts of less than 0.5 acre and 300 linear feet of streambed for "waters of the United States" can be conducted pursuant to Nationwide Permit No. 39. Given that the proposed impacts result in the permanent loss of more than 300 linear feet, the district engineer (USACOE) will need to waive the linear foot requirement by making a written determination concluding that the discharge will result in minimal adverse effects. Further, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (General Condition 31) for USACOE to verify all proposed uses of Nationwide Permit No. 39. Given that the proposed impacts would result in the permanent loss of more than 300 linear feet, the permittee must also provide: (1) a narrative description of the stream; (2) measures taken to avoid and minimize losses, including alternative methods of constructing the proposed project; (3) an analysis of the proposed impacts to the water body in accordance with General Condition 31 and Regional Condition 3; and (4) a compensatory mitigation plan describing how the unavoidable losses are proposed to be compensated, in accordance with 33 CFR Part 332.

Nationwide Permit No. 39

The following information is required to be submitted to USACOE for review, pursuant to Regional Condition #9 and to provide evidence of minimal adverse effects:

1. Description of the waterway, which should include known information on:
   a. Volume and duration of flow
   b. Dimensions of the waterway (length, width, and depth), characters observed associated with an Ordinary High Water Mark (e.g. bed and bank, wrack line, or scour marks)
   c. A description of the surrounding vegetation communities and land use
   d. A statement regarding the wetland status of the associated vegetation community (i.e. wetland, non-wetland)
   e. Water quality
   f. Cumulative impacts in the watershed and any other relevant information
2. Analysis of the proposed impacts to the waterway in accordance with General Condition 31 and Regional Condition #3
3. Practices taken to minimize or avoid loss of wetlands, including other methods of constructing the proposed project
4. A compensatory mitigation plan describing how the unavoidable losses are proposed to be compensated or were compensated, in accordance with 33 CFR Part 332

Under the Regional Supplement to the Corps of Engineers Wetland Delineation Manual (WDM), Arid West Region (Version 2.0)[2], hereafter "Regional Supplement WDM", wetlands must have:

1. Hydrophytic vegetation present: To consider the site as having wetland plants, the location must pass either a Dominance Test or Prevalence Index, in which $>50\%$ of the dominant species are wetland plants or the Prevalence Index of wetland plants is ≤ 3.0.
2. Wetland hydrology present: Standing water, high water table, and saturation may be present; however, hydrology indicators apart from observed water also may be present, which may indicate the area has water pooling for more than 14 days, the minimum number of days required to classify the area as a wetland.
3. Hydric soil present: Soils may exhibit physical and chemical characteristics that indicate inundation or saturation by water; however, areas where soils are disturbed may constitute an atypical situation and fall under a classification of "Problematic hydric soils".[3]

[2] U.S. Army Corps of Engineers. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0),* ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

[3] U.S. Army Corps of Engineers. 2008. "Chapter 5, Difficult Wetland Situations in the Arid West", *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0),* ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

2.2 Section 1600 of the State Fish and Game Code

Activities in stream courses are subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW; formerly California Department of Fish and Game [CDFG]) pursuant to Section 1600 of the State Fish and Game Code. This jurisdiction includes all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream or lake in California that supports fish or wildlife resources. Under the State Fish and Game Code, a stream is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Included are watercourses with surface or subsurface flows that support or have supported riparian vegetation. The jurisdiction of the CDFW within altered or artificial waterways is based on the value of those waterways to fish and wildlife. The CDFW must be contacted for a Streambed Alteration Agreement (SAA) for any project that may impact a streambed or wetland. The CDFW has maintained a "no net loss" policy regarding potential impact and has required the replacement of lost wetlands on at least an acre-for-acre ratio.

3.0 METHODS

3.1 Literature Review

In support of writing this jurisdictional delineation report, Sapphos Environmental, Inc. consulted previous delineations and reports of the Argo Ditch, letters of correspondence with CDFW and USACOE, and reports documenting the satisfactory completion of compensatory mitigation in the form of habitat restoration and revegetation of wetlands at the Harbor Malloy Regional Park. These documents included:

- FAA, Record of Decision: Proposed LAX Master Plan Improvements[4]
- The LAX Master Plan Final Environmental Impact Report / Environmental Impact Statement (EIR/EIS)[5]
- Biological Assessment Technical Report for the LAX Master Plan EIR/EIS[6]
- Updated Biological Assessment Technical Report for the LAX Master Plan Supplement to the EIR/EIS[7]
- Jurisdictional Delineation for the LAX Specific Plan Amendment Study[8]
- Final EIR for the LAX Specific Plan Amendment Study[9]
- Memorandum for the Record (MFR) regarding Preliminary Results of the 1997 delineation of the Argo Ditch[10]
- MFR regarding Recommendations for Addressing Regulatory Compliance issues of the ditch[11]
- USACOE Nationwide Permit Authorization[12]

[4] U.S. Department of Transportation. 20 May 2005. Federal Aviation Administration, Western–Pacific Region. Record of Decision: Proposed LAX Master Plan Improvements (2005 Final EIS).

[5] Federal Aviation Administration. January 2005. Final Environmental Impact Statement for the Proposed Master Plan Improvements at LAX.

[6] Los Angeles World Airports. January 2001. *LAX Master Plan EIS/EIR. Appendix J1. Biological Assessment Technical Report.* Prepared by: Sapphos Environmental, Inc.

[7] Los Angeles World Airports. June 2003. *LAX Master Plan Supplement to the Draft EIS/EIR. S-H. Updated Biological Assessment Technical Report.* Prepared by: Sapphos Environmental, Inc.

[8] Los Angeles World Airports. July 2012. *LAX Specific Plan Amendment Study. Appendix D-2. Jurisdictional Delineation.* Prepared by: Glenn Lukos Associates.

[9] Los Angeles World Airports. January 2013. *LAX Specific Plan Amendment Study Final EIR.*

[10] Sapphos Environmental, Inc. Preliminary Results of Delineation of Areas Subject to the Jurisdiction of the U.S. Army Corps of Engineers and the California Department of Fish and Game at Argo Ditch, Los Angeles International Airport, City of Los Angeles, California.

[11] Sapphos Environmental, Inc. 4 Sept. 1997. Recommendations for Addressing Regulatory Compliance Issues Related to Areas Subject to the Jurisdiction of the U.S. Army Corps of Engineers and the California Department of Fish and Game at Los Angeles International Airport, City of Los Angeles, California.

[12] U.S. Army Corp of Engineers. 7 Jan. 1998. Letter to Mr. Driscoll regarding the Department of the Army Nationwide Permit Authorization.

- CDFG, Notification No. 5-480-97 (revision 2), Agreement Regarding Proposed Alteration to Argo Ditch.[13]
- CDFG, Amendment Regarding SAA[14]
- Cultural Resources Technical Report regarding potential impacts to sensitive cultural resources[15]
- Biological Assessment regarding potential impacts to sensitive biological resources[16]
- MFR regarding meetings and communications with USACOE and permit application under Nationwide Permit 39

3.2 Historic Maps and Timeline Review

During the jurisdictional delineation of the Argo Ditch, a series of historic topographic maps[17] of the LAX airfield and immediate surrounding areas was reviewed, as was a series of historic aerial photographs. This review served to document the history of the Argo Ditch as a man-made feature. Historic aerial photographs and topographic maps were reviewed for the following years:

1923 USGS Topographic Map: The location of the current Argo Ditch and LAX consisted of vernal pools (and native grasslands), with City Coast Boulevard traversing the pools southwest of the present Argo Ditch. The Argo Ditch is not evident and there is no natural drainage at that location.

1924 USGS Topographic Map: Defiance Street (now Manchester Avenue) was constructed to traverse the vernal pools (and native grasslands) in an east-west orientation north of the current Argo Ditch location. The Argo Ditch is not evident and there is no natural drainage at that location.

1928: Mines Field is chosen as the site for an airport for the City of Los Angeles.

1934 USGS Topographic Map: Defiance Street was renamed Manchester Avenue and residential suburbs were developed on the northern side of Manchester Avenue. Lincoln Boulevard traversed the vernal pools (and native grasslands) and the current Argo Ditch site in a diagonal northwest-southeast orientation. The Argo Ditch is not evident and there is no natural drainage at that location.

1942 USGS Topographic Map: Century Boulevard crossed the vernal pools (and native grasslands) south of the current Argo Ditch location. Except for Lincoln and Century Boulevards, no

[13] California Department of Fish and Game. 9 Feb. 1998. Notification No. 5-480-97 (revision 2). Agreement Regarding Proposed Alteration to Argo Ditch. Executed by Mr. John Driscoll, Executive Director, Los Angeles World Airports, and Ms. Leslie McNair, Environmental Specialist II, California Department of Fish and Game.

[14] California Department of Fish and Game. 28 Jan. 1998. Amendment Regarding Proposed Stream or Lake Agreement.

[15] Sapphos Environmental, Inc. 18 Oct. 2013. Los Angeles International Airport Proposed Runway 6L-24R Runway Safety Area and Associated Improvements Project Cultural Resources Technical Report. Pasadena, CA.

[16] Sapphos Environmental, Inc. 18 Oct. 2013. Los Angeles International Airport Proposed Runway 6L-24R Runway Safety Area and Associated Improvements Project Biological Assessment. Pasadena, CA.

[17] U.S. Geologic Survey. Accessed 22 August 2013. "USGS Topo and Historic Topographic Maps Collection: Venice, California". PDF from website. Available at: http://geonames.usgs.gov/pls/topomaps/

topographic alterations had been made to the vernal pools between Manchester Avenue and Coast Boulevard. The Argo Ditch is not evident and there is no natural drainage at that location.

1950 USGS Topographic Map: The Argo Ditch site location was dramatically transformed, with the ditch acting as a northern boundary between the existing vernal pools and the re-graded airport expansion area. Significant residential expansion to the northeast and south of the airport expansion area reduced the vernal pool (and native grassland) territory to a zone north and west of the Argo Ditch, with the land southwest of the airport expansion area being drilled for oil. The Argo Ditch is now evident at the site location.

1964 USGS Topographic Map: The land immediately surrounding the airport to the north and south had been developed for residential use, including the land directly north of the Argo Ditch. The Argo Ditch is delineated as a dotted blue line. Imperial Highway had been constructed south of the airport, and Coast Boulevard was renamed Pershing Drive.

1969: Runway 6L-24R is constructed.

1972 USGS Topographic Map: The land directly south of Argo Ditch had been developed into an additional runway for the airport. The Argo Ditch is delineated as a dotted blue line.

1981 USGS Topographic Map: A golf course was constructed north of the Argo Ditch site (north of Lincoln Boulevard). The Argo Ditch is delineated as a dotted blue line.

Aerial Photographs from 1994-2002: Large shrubs growing in the Argo Ditch have been removed.[18]

2012 USGS Topographic Map: The Argo Ditch is delineated as a solid blue line. Between 1981 and 2012, Westchester Parkway and Northside Parkway were constructed as east-west oriented roads directly north of Argo Ditch, shifting residences farther away from the airport.
Further, Sapphos Environmental, Inc. reviewed the historic maps and data included within the LAX Master Plan EIR/EIS, which also included potential vernal ponds in the vicinity of the Argo Ditch. In addition, Sapphos Environmental, Inc. reviewed soil data maps from the Natural Resources Conservation Service and the National Wetland Inventory map for the LAX area.

3.3 Field Surveys

Sapphos Environmental, Inc. conducted a jurisdictional delineation within the ditch on August 8 and August 13, 2013, in conformance with the USACOE 1987 Wetland Delineation Manual[19] and the Regional Supplement WDM[20]. The delineation was supervised by a wetland delineator certified by the Wetland Training Institute. The vegetation communities of the Argo Ditch had been previously mapped on May 8, 2013; minor refinements were made to the boundaries of the

[18] This aerial photograph was obtained through Google Earth Imagery.

[19] Environmental Laboratory. 1987. "Corps of Engineers wetlands delineation manual," Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS. NTIS No. AD A176 912 (Note: Appendix C information is outdated and must be obtained from regional Wetlands offices).

[20] U.S. Army Corps of Engineers. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0),* ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

plant communities during delineation surveys. A biological and cultural assessment of potential impacts to the Argo Ditch was conducted on May 8 and June 14, 2013 to assess potential impacts to biological and cultural resources within the Argo Ditch.[21,22] Sampling was conducted from the easternmost end of the Argo Ditch to the westernmost end. Sapphos Environmental, Inc. established sampling points every 100 feet for the first 4,000 feet of the Argo Ditch, which includes the area that is proposed to be directly altered by the RSA improvements. Downstream of the affected project area, from 4,000 to 9,900 feet, sampling points were established in the middle of each potential wetland and in the adjacent upland areas, within 100 feet of the visual boundary of each potential wetland. There were a total of 53 sampling points along the Argo Ditch (Figure 3.3-1, *Sampling Location Map*). Potential wetlands were determined by the presence of wetland plant species. The geospatial coordinates for the wetland units mapped during the plant community mapping were documented with a handheld Global Positioning System unit (Figure 3.3-1).

At each sampling location, two qualified biologists (one wetland delineator and one biologist) recorded vegetation, soil, and hydrology data as outlined in the standard Wetland Determination Data Form--Arid West (Appendix A, *Wetland Determination Data Forms*). Hydric soil and wetland hydrology indicators were consistent with the methods and classifications outlined in the Regional Supplement WDM. Hydrophytic vegetation classification was determined with quantitative transects. Transects were positioned along the width of the channel to the edges of the continuous plant community. Percent cover by species was determined by measuring the proportion of the transect occupied and by visual estimation. Each sampling point was classified as wetland or non-wetland based on the presence of hydrophytic plants, hydric soil, and wetland hydrology.

[21] Sapphos Environmental, Inc. 18 Oct. 2013. Los Angeles International Airport Proposed Runway 6L-24R Runway Safety Area and Associated Improvements Project Cultural Resources Technical Report. Pasadena, CA.

[22] Sapphos Environmental, Inc. 18 Oct. 2013. Los Angeles International Airport Proposed Runway 6L-24R Runway Safety Area and Associated Improvements Project Biological Assessment. Pasadena, CA.

FIGURE 3.3-1

Sampling Location Map

4.0 RESULTS

4.1 Literature Review

The Argo Ditch is a man-made flood control structure that was constructed circa 1949.[23] The Argo Ditch does not connect to any river, stream, or lake but has been determined to flow into the Pacific Ocean through connections with the City of Los Angeles storm drain system.[24]

1997 Delineation

A jurisdictional delineation of the Argo Ditch was completed in support of emergency channel maintenance activities in October 1997. Sampling occurred every 100 feet for wetland vegetation, hydrology, and soil for a total of 99 locations. During the 1997 delineation of the Argo Ditch, Sapphos Environmental, Inc. found "riparian and wetland habitat created in association with the Argo Ditch".[25] Wetlands were found within the man-made ditch in limited areas (~1 acre in total), mostly within the eastern portions of the Argo Ditch (Figure 4.1-1, *1997 Delineation of the Argo Ditch*). Sapphos Environmental, Inc. also documented riparian vegetation dominated by willows but lacking wetlands in the mid-portions of the Argo Ditch.

USACOE exerted jurisdiction over isolated wetlands in the Argo Ditch that resulted from a lack of routine operations and maintenance activities over an approximate 20-year period. LAWA and the FAA consulted with USACOE and CDFW in order to perform annual clearing of vegetation and mitigation for the loss of wetlands. USACOE authorized emergency operations and maintenance activities pursuant to Nationwide Permit No. 31.[26] Further, CDFW issued an agreement on February 9, 1998 which stated that LAWA intended to remove vegetation on a regular basis and continually maintain the Argo Ditch to be "clear of vegetation until a permanent solution can be established"[27]. This agreement also required mitigation for the loss of wetland vegetation. To mitigate for the loss of 0.99 acre of wetlands delineated in 1997, a restoration site was created at Ken Malloy Harbor Regional Park (KMHRP). USACOE determined that mitigation for this impact was complete and successful on December 9, 2004.[28]

[23] Federal Aviation Administration. January 2005. Final Environmental Impact Statement for the Proposed Master Plan Improvements at LAX.

[24] Bapna, Victor. August 2000. County of Los Angeles Department of Public Works. Personal Communication.

[25] Sapphos Environmental, Inc. Preliminary Results of Delineation of Areas Subject to the Jurisdiction of the U.S. Army Corps of Engineers and the California Department of Fish and Game at Argo Ditch, Los Angeles International Airport, City of Los Angeles, California.

[26] U.S. Army Corp of Engineers. 7 Jan. 1998. Letter to Mr. Driscoll regarding the Department of the Army Nationwide Permit Authorization.

[27] California Department of Fish and Game. 9 Feb. 1998. Notification No. 5-480-97 (revision 2). Agreement Regarding Proposed Alteration to Argo Ditch. Executed by Mr. John Driscoll, Executive Director, Los Angeles World Airports, and Ms. Leslie McNair, Environmental Specialist II, California Department of Fish and Game.

[28] U.S. Army Corp of Engineers. 9 Dec. 2004. Letter to Mr. Brown regarding the status of wetland mitigation.

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LEGEND

1997 Wetlands

FIGURE 4.1-1
1997 Delineation of the Argo Ditch

2011 Delineation

On July 7, 2011, a second delineation was conducted by Glenn Lukos Associates (GLA) at 15 locations along the Argo Ditch in support of the LAX Specific Plan Amendment Study. Wetlands determined by GLA occurred primarily within the eastern portions of the Argo Ditch. This delineation identified a total of 3.78 acres of wetlands, of which approximately 2.45 acres consisted of non-wetland waters of the United States, and approximately 1.33 acres consisted of jurisdictional wetlands (Figure 4.1-2, *2011 Delineation of the Argo Ditch*). The delineation concluded that water within the ditch originated from "storm discharge and nuisance flow" and "the wettest areas are concentrated at the discharge points".[29] Further, potential areas subject to CDFW jurisdiction was 3.97 acres, of which 1.52 acres consisted of riparian vegetation.

4.2 Historic Maps and Timeline Review

Pre-Argo Ditch

1923: The location of the current Argo Ditch and Los Angeles airport consisted of vernal pools and native grasslands, with Coast Boulevard traversing the pools southwest of the present Argo Ditch (Figure 4.2-1, *1923 Topographic Map of Future LAX*).

1924: Defiance Street was constructed to traverse the vernal pools and native grasslands in an east-west orientation north of the current Argo Ditch location (Figure 4.2-2, *1924 Topographic map of future LAX*).

1928: An airport was built on 640 acres, called Mines Aviation Field, without a terminal building.[30]

1929: The first hangar was built on the Mines Aviation Field and faced north-south. The hangar was located east of Arizona Avenue and the future site of the Argo Ditch.

1930: The airport was named the Los Angeles Municipal Airport.

1934: Defiance Street was renamed Manchester Avenue and residential suburbs were developed on the northern side of Manchester Avenue. Lincoln Boulevard traversed the vernal pools and native grasslands and the future Argo Ditch site in a diagonal northwest-southeast orientation (Figure 4.2-3, *1934 Topographic Map of Municipal Airport*).

1937: The City of Los Angeles purchased the municipal airport.[31]

1942: Lincoln Boulevard was expanded and crossed the future site of the Argo Ditch. Except for Pershing Drive and Lincoln and Century Boulevards, no topographic alterations had been made to the vernal pools between Manchester Avenue and Coast Boulevard (Figure 4.2-4, *1942 Topographic Map of Municipal Airport*).

1943: Development was put on hold from 1943-1945 during World War II.[32]

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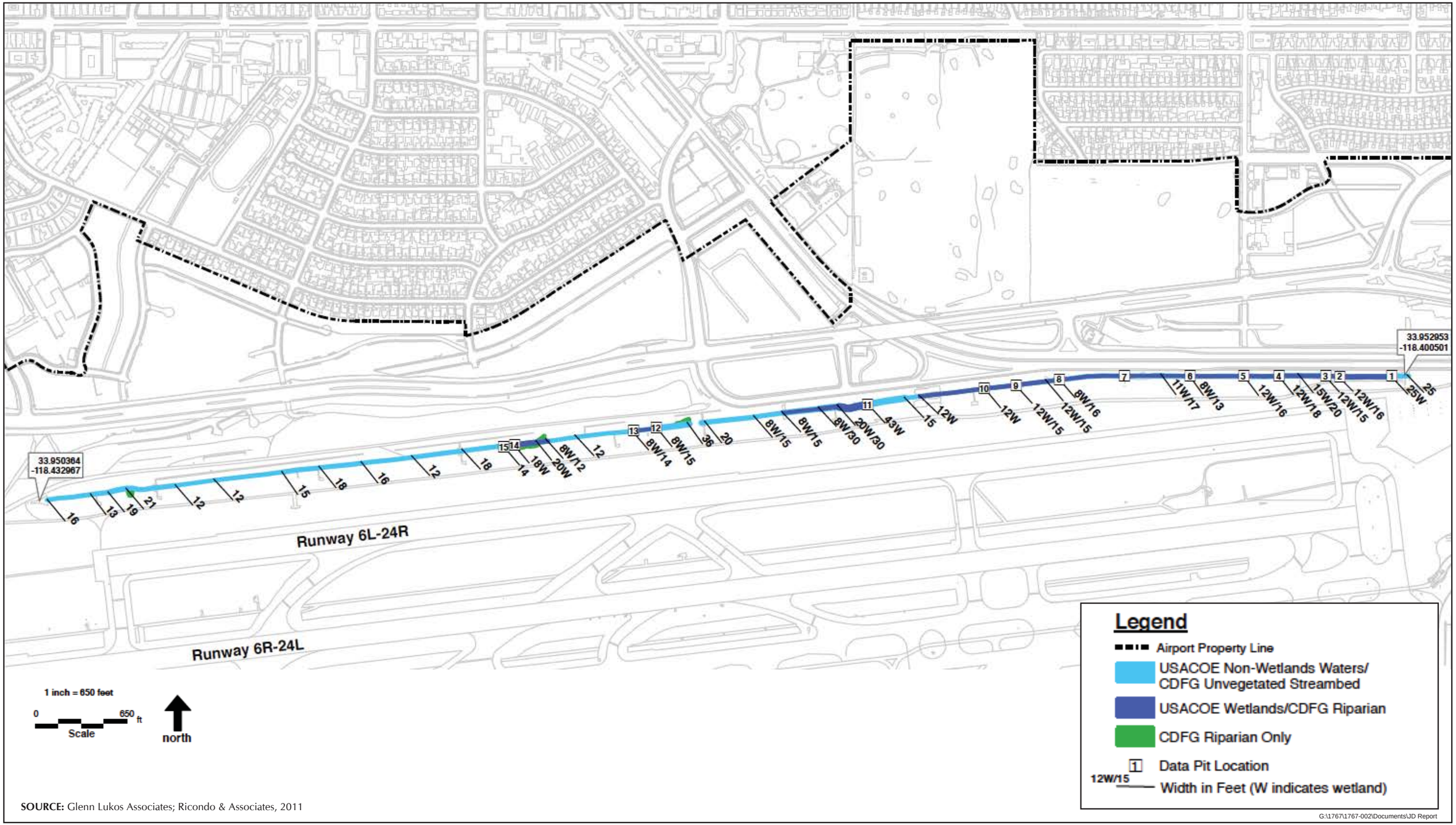
[29] Los Angeles World Airports. July 2012. LAX Specific Plan Amendment Study. Appendix D-2. Jurisdictional Delineation. Prepared by: Glenn Lukos Associates.

[30] Los Angeles International Airport. Accessed 22 August 2013. "History of Los Angeles International Airport". Website last updated 2012. Available at: http://losangelesinternationalairport.us/history-of-los-zangeles-international-airport/

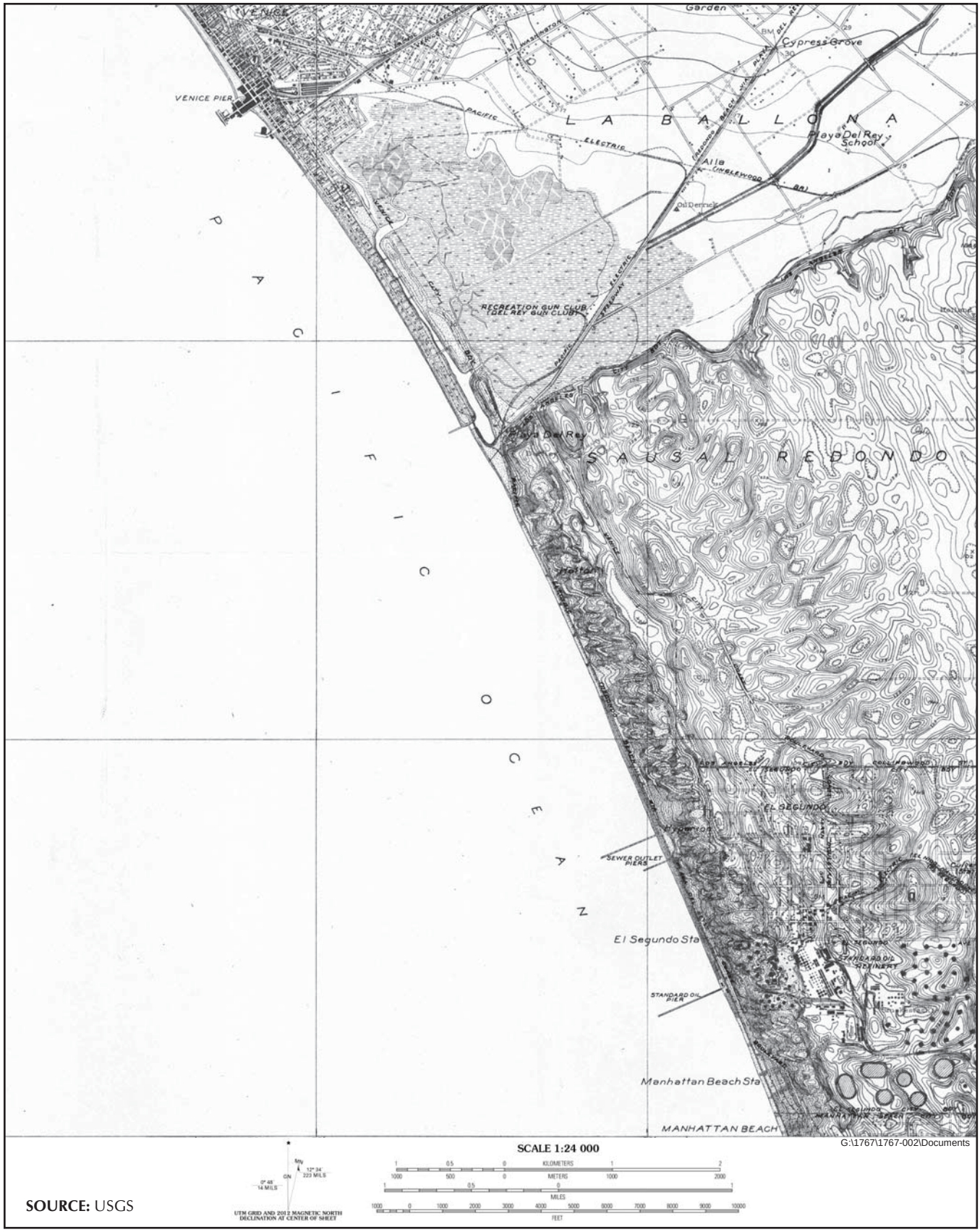
[31] Los Angeles International Airport. Accessed 22 August 2013. "History of Los Angeles International Airport". Website last updated 2012. Available at: http://losangelesinternationalairport.us/history-of-los-angeles-international-airport/

[32] Los Angeles International Airport. Accessed 22 August 2013. "History of Los Angeles International Airport". Website last updated 2012. Available at: http://losangelesinternationalairport.us/history-of-los-angeles-international-airport/



SOURCE: Glenn Lukos Associates; Ricondo & Associates, 2011

FIGURE 4.1-2
2011 Delineation of the Argo Ditch

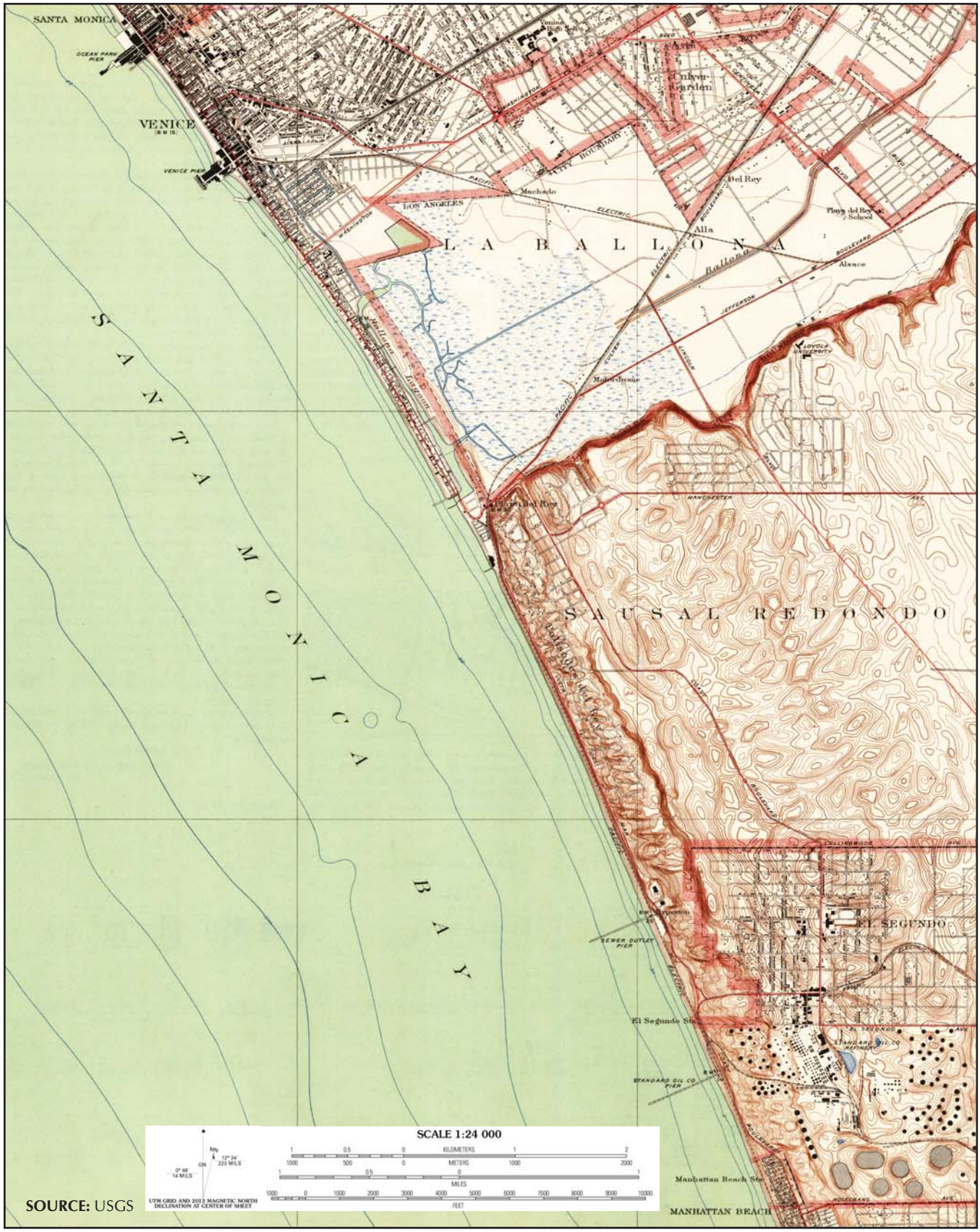


SOURCE: USGS

FIGURE 4.2-1
1923 Topographic Map of Future LAX

SOURCE: USGS

FIGURE 4.2-2
1924 Topographic Map of Future LAX



SOURCE: USGS

FIGURE 4.2-3
1934 Topographic Map of Municipal Airport

SOURCE: USGS

FIGURE 4.2-4
1942 Topographic Map of Municipal Airport

1946: After the war, five airlines had started their commercial operations from Los Angeles Municipal Airport.

Post-Argo Ditch, Pre-mitigation

1949: The municipal airport was renamed the Los Angeles International Airport. This year is a good estimate for the beginning of construction of the Argo Ditch.

1950: The Argo Ditch site location was dramatically transformed, with the ditch acting as a northern boundary between the existing undeveloped lands to the north and the airport expansion area to the south. Coast Boulevard was renamed (in part) to Century Boulevard and Pershing Street. Significant residential expansion to the northeast and south of the airport expansion area and oil drilling southwest of the airport reduced the vernal pools and native grasslands to areas north and west of the Argo Ditch (Figure 4.2-5, *1950 Topographic Map of LAX and the Argo Ditch*).

1952: International flights began.[33]

1964: Many of the runways existing at the airport today were operational. Land immediately surrounding the airport to the north and south had been developed for residential use, including previously undisturbed land directly north of the Argo Ditch. Residential development occurred west of the Argo Ditch in the El Segundo Dunes. Imperial Highway had been constructed south of the airport and Coast Boulevard was renamed Pershing Drive along the entire stretch west of LAX (Figure 4.2-6, *1964 Topographic Map of LAX and the Argo Ditch*).

1969: Construction of Runway 6L-24R.

1972: By 1972, the land directly south of Argo Ditch had been developed into a runway for the airport (Figure 4.2-7, *1972 Topographic Map of LAX and the Argo Ditch*).

1981: By 1981, a golf course was constructed north of the Argo Ditch site and north of Lincoln Boulevard. Aerial photographs indicate that the eastern terminus of the Argo Ditch and the associated retention basin were buried sometime between 1981 and 1997 (Figure 4.2-8, *1981 Topographic Map of LAX and the Argo Ditch*).

1994: From 1994-1997, large shrubs and vegetated areas can be seen growing within the Argo Ditch.[34]

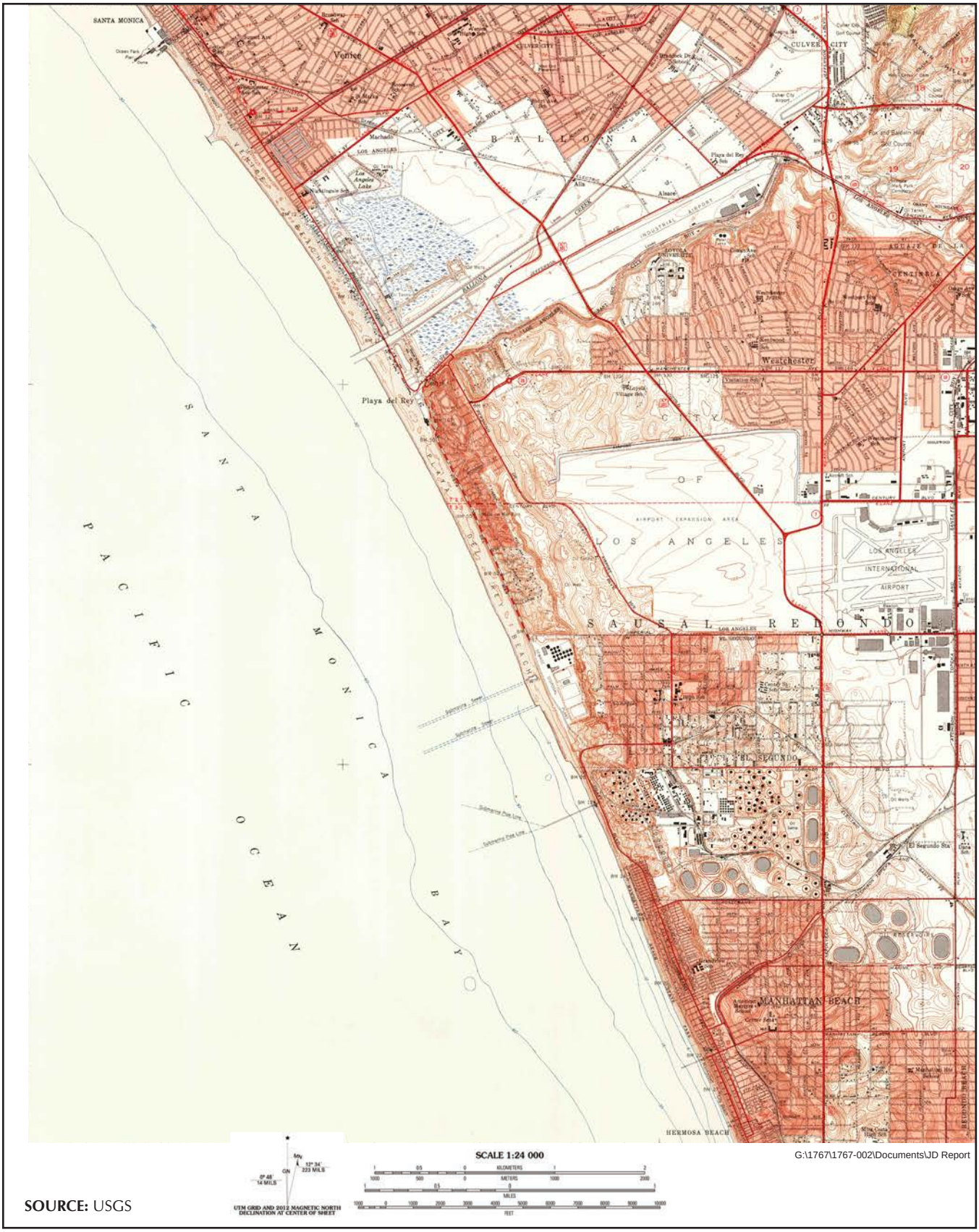
1997: Technical studies in support of the LAX Master Plan EIR/EIS began. First delineation of the Argo Ditch was conducted by Sapphos Environmental, Inc.

1998: LAWA issued an agreement with CDFW, formerly CDFG, and Nationwide Permit No. 31 to perform emergency maintenance of the Argo Ditch.

1999: Mitigation of the impacted wetland areas in the Argo Ditch began at KMHRP.

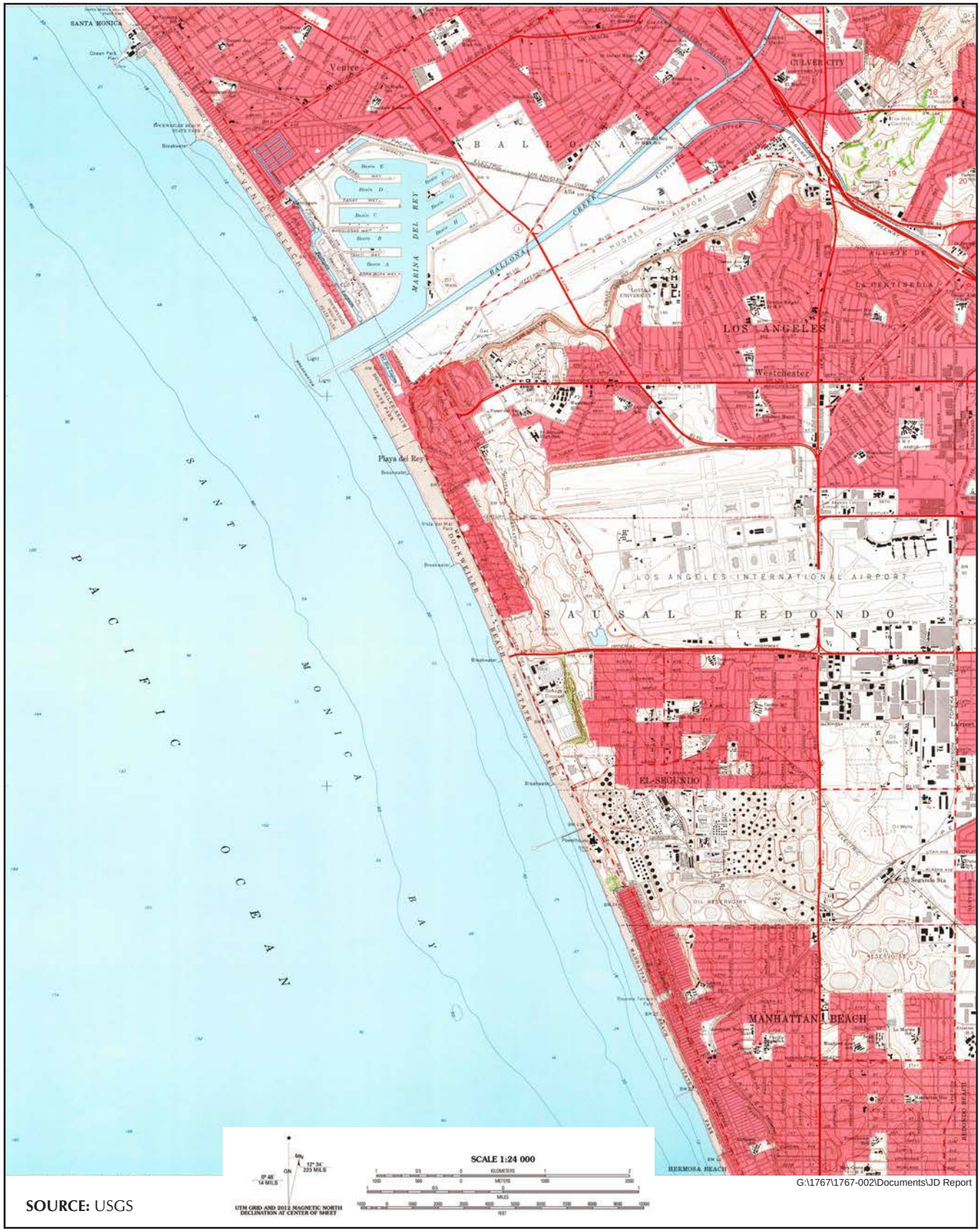
[33] Los Angeles International Airport. Accessed 22 August 2013. "History of Los Angeles International Airport". Website last updated 2012. Available at: http://losangelesinternationalairport.us/history-of-los-angeles-international-airport/

[34] This aerial photograph was obtained through Google Earth Imagery.



SOURCE: USGS

FIGURE 4.2-5
1950 Topographic Map of LAX and the Argo Ditch



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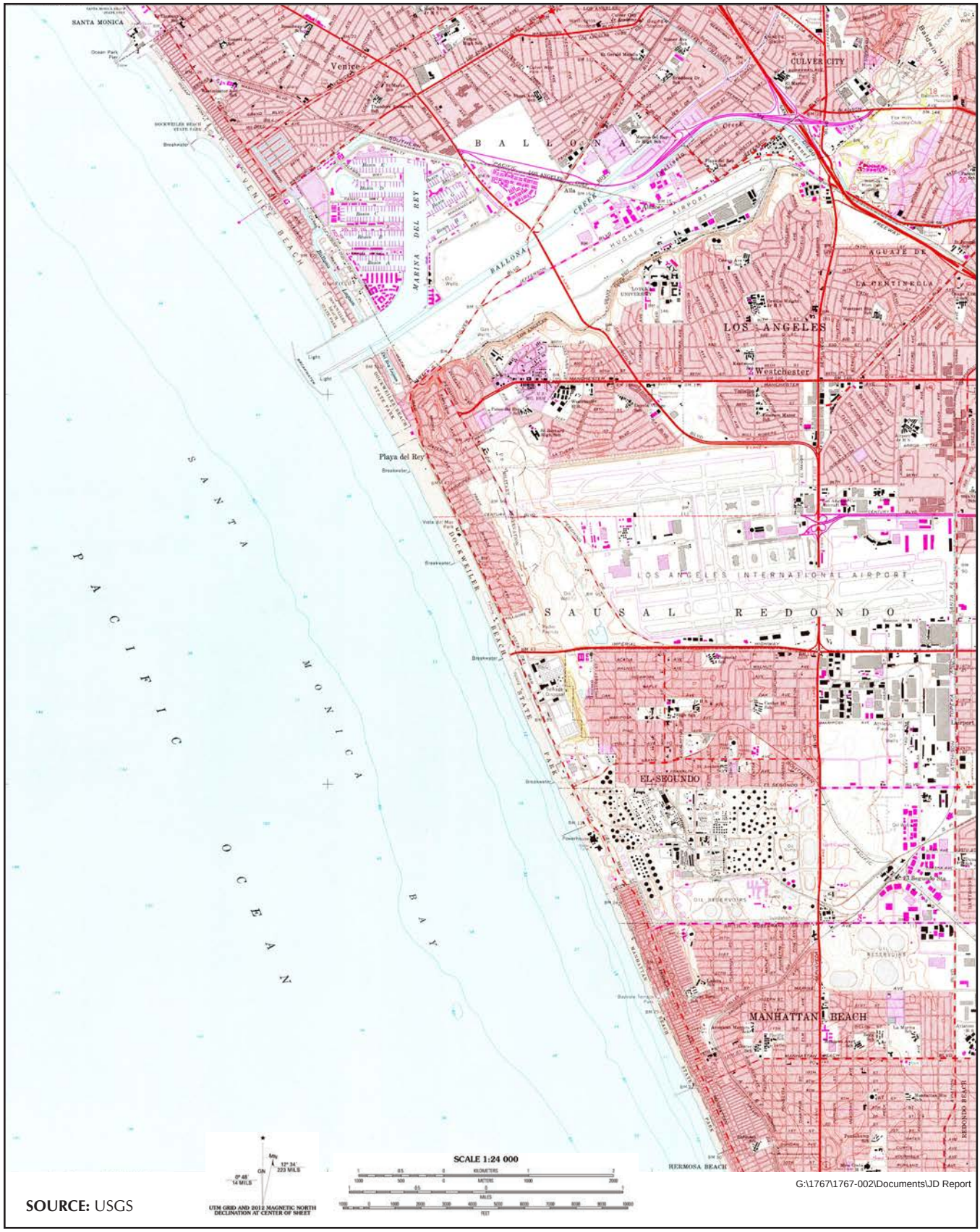
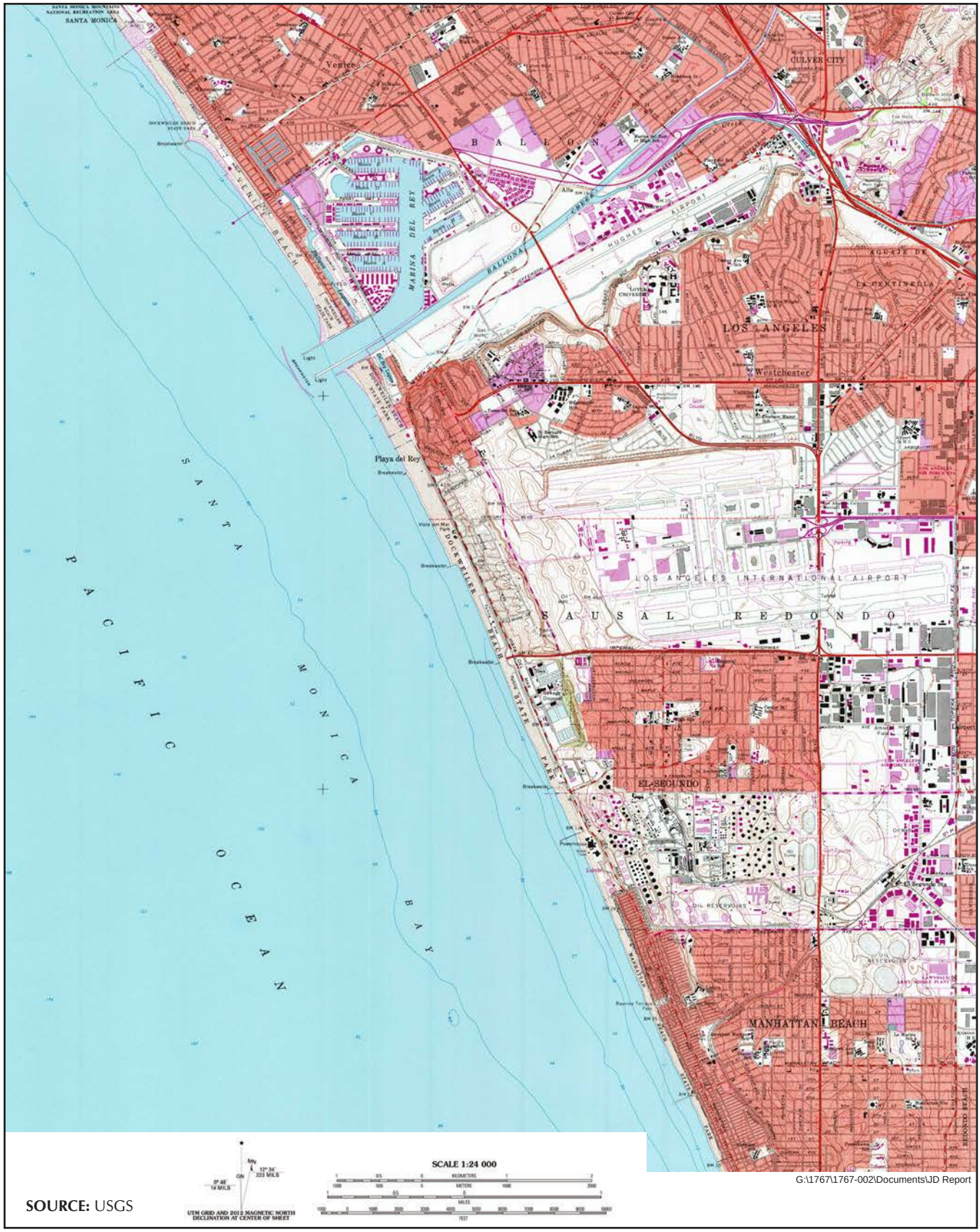
SOURCE: USGS

FIGURE 4.2-6
1964 Topographic Map of LAX and the Argo Ditch



SOURCE: USGS

FIGURE 4.2-7
1972 Topographic Map of LAX and the Argo Ditch



SOURCE: USGS

FIGURE 4.2-8
1981 Topographic Map of LAX and the Argo Ditch

Post-Argo Ditch, Post-mitigation

2002: Aerial photographs document clearing of vegetation within the Argo Ditch.[35] Mitigation occurring at KMHRP, but vandalism occurred within restoration sites.
2004: USACOE is satisfied with mitigation compliance for impacted wetlands in the Argo Ditch.
2011: Second delineation of the Argo Ditch by GLA.
2013: Third delineation of the Argo Ditch by Sapphos Environmental, Inc.

4.3 Field Surveys

Six plant communities were detected during the field surveys. Eighteen of the 53 sampled points were classified as wetlands. Of these 18 points, only 2 had hydric soil indicators and the remainder had indicators for Problematic Hydric Soils, such as standing water in August. Sixteen of the wetland points were classified as wetlands based on the Problematic Hydric Soils section of the Regional Supplement WDM.

Sapphos Environmental, Inc. delineated seven wetlands within the man-made Argo Ditch (Figure 4.3-1, *Wetlands within the Man-Made Argo Ditch*). Most of these wetlands were associated with culverts or concrete areas within the Argo Ditch. All of these wetlands were within the man-made ditch and subjected to periodic clearing of vegetation under current permits. Six plant communities also were detected within the Argo Ditch (Figure 4.3-2, *Plant Community Map*). Details on each wetland are as follows:

Wetland #1

Location Description: This wetland was located from 0–200 feet from the easternmost end of the Argo Ditch, immediately adjacent to a grate that was approximately 7–8 feet high and 16 feet wide. Most of this wetland had a concrete apron along the sides and bottom of the Argo Ditch with some soil accumulation on top of the concrete apron. During the 1997 wetland delineation, a wetland was documented in this area, up to 734 feet from the easternmost end of the Argo Ditch.

Hydrophytic Plants: The most dominant plant within this wetland was a nonnative variety of barnyard grass (*Echinochloa* sp.). Other plants detected within this wetland included native tall flat sedge (*Cyperus eragrostis*), dock-leaf smartweed (*Persicaria lapathifolia*), nonnative golden-crown grass (*Paspalum dilatum*), perennial rye-grass (*Festuca perrenis*), and yellow bristle grass (*Setaria pumila*). The area immediately within the boxed inlet was dominated by native broad-leaf cattail (*Typha latifolia*).

Hydric Soil: Hydric soil indicators were not identified; however, the presence of surface water in August, the dry season, would indicate that the area is inundated for at least 2 weeks during the growing season, which satisfies as an indicator for Problematic Hydric Soils of seasonally ponded soils.

Wetland Hydrology: Standing water and saturation were present.

[35] This aerial photograph was obtained through Google Earth Imagery.

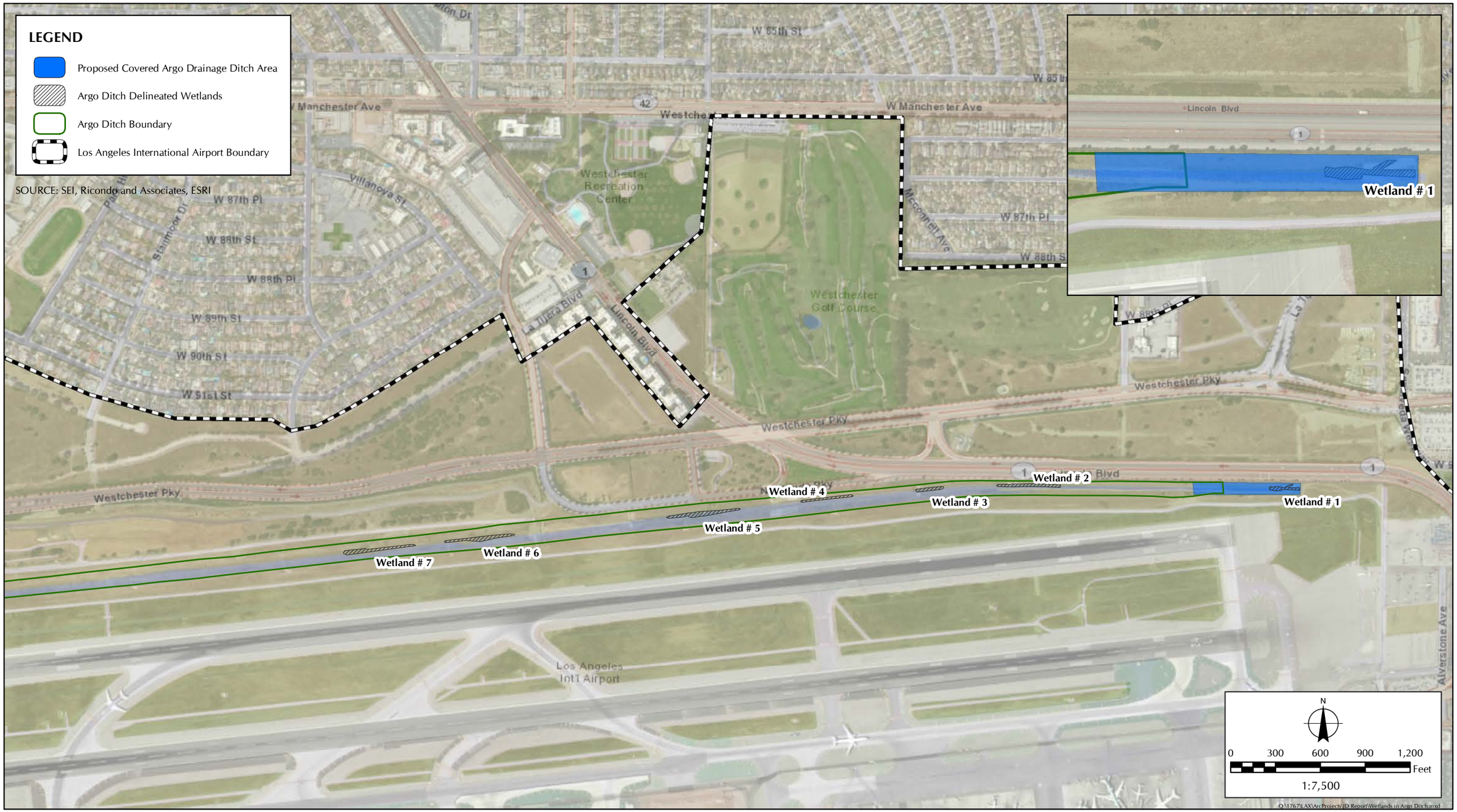


FIGURE 4.3-1

Wetlands within the Man-Made Argo Ditch

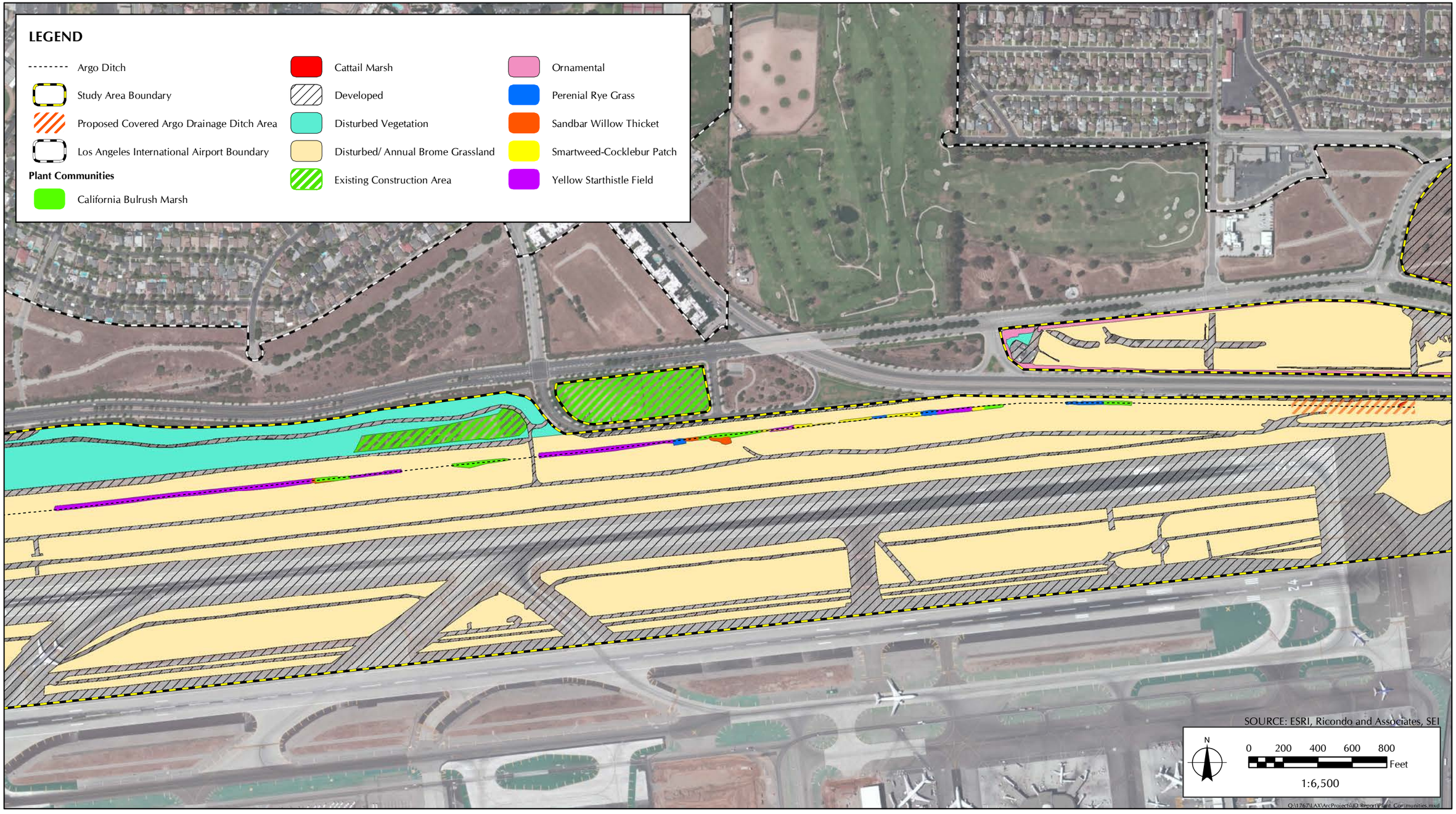


FIGURE 4.3-2

Plant Community Map

Notes: Vegetation within the wetland was cleared in 2013 and all growth has occurred within 2 months. Trash noted within the channel.

Upland area between Wetlands #1 and #2: Some hydrophytic plants and/or wetland hydrology were present; however, in most cases the hydrophytic vegetation was not dominant and these areas lacked hydric soils. Much of this area showed positive indicators for wetland hydrology, most likely due to periodic water overflow from the two adjacent wetlands.

Wetland #2

Location Description: This wetland was located from 1,600 feet to 2,000 feet from the eastern end of the Argo Ditch. A concrete apron and culvert was located on the north slope of the channel between sampling points at 1,900 and 2,000 feet, where standing water was observed. Runoff from this culvert was likely a driving factor in creating this wetland. During the 1997 delineation, a wetland was documented from 1,565 to 1,994 feet from the easternmost end of the Argo Ditch.

Hydrophytic Plants: Nonnative perennial ryegrass, yellow bristle grass, and native dock-leaf smartweed were present around the edges of the wetland. Duckweed was observed within the open, standing water. Dominant plants observed within the wetter portions included nonnative barnyard grasses and native tall flat sedge and California bulrush (*Schoenoplectus californicus*).

Hydric Soil: Hydric soil indicators were not identified; however, the presence of surface water in August, the dry season, would indicate that the area is inundated for at least 2 weeks during the growing season, which satisfies as an indicator for Problematic Hydric Soils of seasonally ponded soils.

Wetland Hydrology: Standing water and saturation were present.

Notes: There was evidence that vegetation had been cleared on the eastern end of this wetland, but the vegetation had grown back.

Upland area between Wetlands #2 and #3: Approximately 400 feet of the Argo Ditch between Wetlands #2 and #3 were dominated by upland vegetation, including yellow starthistle (*Centaurea solstitialis*) and species of brome (*Bromus* sp.). There was no evidence of wetland hydrology or water flow between these two wetlands.

Wetland #3

Location Description: This wetland was located from 2,400 feet to 2,550 feet from the eastern end of the Argo Ditch. There was a concrete apron on both slopes of the channel on the western end of the wetland, which likely contributed to the presence of the wetland at this location. During the 1997 delineation, a wetland was documented from 2,400 to 2,650 feet from the easternmost end of the Argo Ditch.

Hydrophytic Plants: Dock-leaf smartweed dominated most of this wetland, growing up to 5

feet high. In addition, California bulrush and small patches of cattail (*Typha* sp.) were observed growing within 25 feet of the concrete apron.

Hydric Soil: A depleted matrix was documented at one of the two soil pits within this wetland.

Wetland Hydrology: The soil was saturated at sampling points 2,400 and 2,500.

Notes: Smartweed, which is an early successional wetland species, was dominant throughout most of this wetland.

Upland area between Wetlands #3 and #4: Yellow star-thistle dominated the area approximately 200 feet west of Wetland #3. Dock-leaf smartweed was present in varying abundance throughout the area between Wetlands #3, #4, and #5. Evidence of riverine hydrology in portions of the area between Wetlands #3 and #5 may indicate that flow and pooling water between these wetlands resulted in the establishment of Wetland #4.

Wetland #4

Location Description: This wetland was located from 3,000 feet to 3,300 feet from the eastern end of the Argo Ditch. Between sampling points 3,100 and 3,200, there was a concrete drainage feature for runway runoff on the south side of the Argo Ditch.

Hydrophytic Plants: Native dock-leaf smartweed and nonnative perennial ryegrass were the only two dominant wetland species, but nonnative English plantain (*Plantego lanceolata*) also was present. The bottom of the Argo Ditch in this section was less channelized near the bottom of the ditch and the slopes on the north and south side of the wetland were a gentle grade with brome and yellow starthistle.

Hydric Soil: No hydric soil indicators were identified. This area was classified under Problematic Hydric Soils as outlined in the Regional Supplement WDM.

Wetland Hydrology: Soil surface cracks were evident at three of the wetland sampling points. The westernmost sampling point within this wetland had two secondary indicators.

Notes: Smartweed at this location was dying back; perennial ryegrass had already completed its growth cycle.

Upland area between Wetlands #4 and #5: As stated above, evidence of riverine hydrology in portions of the area between Wetlands #3 and #5 may indicate that flow and pooling water between these wetlands resulted in the establishment of Wetland #4. As such, upland areas are dominated by dock-leaf smartweed and yellow star-thistle.

Wetland #5

Location Description: This wetland was located from 3,800 feet to 4,100 feet from the eastern end of the Argo Ditch. Downstream from 4,100 there was a concrete drainage feature for runway runoff on the south side of the Argo Ditch. The channel was bifurcated

in the upland area east of this wetland at 3,700 feet. The 1997 delineation documented riparian vegetation at 3,800 to 4,000 feet with some standing water.

Hydrophytic Plants: This wetland had a larger diversity of wetland plant species than most of the other wetlands. Native dock-leaf smartweed was present only at the eastern and western boundary of this wetland. The most dominant plants within this wetland were native California bulrush, broad-leaf cattail, tall flat sedge, common spikerush (*Eleocharis* cf. *macrostachya*), nonnative golden-crown grass, yellow bristle grass, and Bermuda grass (*Cynodon dactylon*). Narrow-leaf willow (*Salix exigua* cf. var. *hindsiana*) was common around the edges, but a single arroyo willow (*Salix lasiolepis*) was also observed. Several other plants were observed within this wetland including duckweed, barnyard grasses, English plantain, and curly dock (*Rumex crispss*).

Hydric Soil: Hydric soil indicators were not identified; however, the presence of surface water in August, the dry season, would indicate that the area is inundated for at least 2 weeks during the growing season, which satisfies as an indicator for Problematic Hydric Soils of seasonally ponded soils.

Wetland Hydrology: Standing water and saturation were present. One pit dug on August 8, 2013 had been inundated with water by the August 13, 2013 visit.

Notes: Open water with duckweed was observed near sampling point 4,000.

Upland area between Wetlands #5 and #6: There was a culvert with dock-leaf smartweed present. Sampling indicated that this was not a wetland. All areas sampled between Wetlands #5 and #6 were classified as upland.

Wetland #6

Location Description: This wetland was located from 5,250 feet to 5,700 feet from the eastern end of the Argo Ditch. Upstream was a bridge that crosses the Argo Ditch with concrete tunnels. Downstream from Station 5,700 there was a concrete drainage feature for runway runoff on the south side of the Argo Ditch. During the 1997 delineation, a dense stand of riparian vegetation was documented at 5,000 to 5,534 feet from the easternmost end of the Argo Ditch; however, willows were generally lacking from this location in the 2013 delineation.

Hydrophytic Plants: There was dense vegetation within the center of the wetland and a long shelf on the western end with wetland hydrology and scattered wetland plants. Native California bulrush and dock-leaf smartweed were present only at the eastern and western boundary of this wetland. The most dominant plants within this wetland were native California bulrush with perennial ryegrass. Arroyo willow and English plantain were present around the edges of the wetland.

Hydric Soil: A depleted matrix was documented at one of the two soil pits within this wetland.

Wetland Hydrology: The soil was saturated. Surface soil cracks were evident around the edges of the wetland.

Notes: Surface soils cracks were evident up to the sampling point at 5,800, but this point did not have enough hydrophytic vegetation for this point to be classified as a wetland. Dense hydrophytic plants ended at around 5,600 feet.

Upland area between Wetlands #6 and #7: There was a narrow band of upland vegetation with yellow starthistle that also lacked hydrology indicators.

Wetland #7

Location Description: This wetland was located from 6,000 feet to 6,450 feet from the eastern end of the Argo Ditch. During the 1997 delineation, willows were documented at 6,154 to 6,250, but no wetlands were documented.

Hydrophytic Plants: This wetland had dense and tall southern cattail (*Typha domingensis*) and California bulrush, with cattail being more dominant in the wettest areas. Narrow-leaf willow surrounded the edges of this wetland. Nonnative golden-crown grass also was present within the wetland and Bermuda grass and iceplant (*Carpobrotus edulis*) were dominant in the understory in the upland areas around the edges of the wetland.

Hydric Soil: Hydric soil indicators were not identified; however, the presence of surface water in August, the dry season, would indicate that the area is inundated for at least 2 weeks during the growing season, which satisfies as an indicator for Problematic Hydric Soils of seasonally ponded soils.

Wetland Hydrology: The soil was saturated; there was standing water, and a high water table within this wetland.

Upland area between Wetland #7 and the western end of the Argo Ditch (9900-foot mark): No other wetlands were detected west of Wetland #7.

5.0 CONCLUSIONS

The proposed project would result in impacts to 0.093 acre of jurisdictional wetlands that were previously mitigated in conjunction with the channel clearing that was authorized by USACOE pursuant to Nationwide Permit No. 31 in 1998.

The Argo Ditch is a man-made flood control structure that falls under the jurisdiction of USACOE and CDFW. In 1998, USACOE had exerted jurisdiction over the Argo Ditch because it ultimately discharges to the storm drainage system, which outfalls to the Pacific Ocean, a navigable water body pursuant to Section 404 of the Clean Water Act. USACOE and CDFW agreed to allow LAWA to perform clearance of 0.99 acre of vegetation within the Argo Ditch and to maintain the ditch clear of vegetation. Compensatory mitigation at 3:1 was required as a condition of approval, but USACOE approved a roughly 2:1 restoration given vandalism at the site and significant coverage of target species at the restoration sites in KMHRP.[36] On August 13, 2009, USACOE acknowledged the impacts had been mitigated for and no further mitigation was required.

Despite regular clearing outside of the breeding season for birds, vegetation periodically regrows. Many of the wetland plants growing within the Argo Ditch are nonnative or weedy species or are associated with early successional wetlands. Further, hydric soils were absent in all but two of the seven wetlands; however, four additional wetlands had standing water, which satisfied requirements as an indicator for Problematic Hydric Soils, and one wetland met classification based on the Problematic Hydric Soils section of the Regional Supplement WDM.

The proposed project would convert the easternmost portion of the Argo Ditch from a partially earthen-bottom ditch with a 720-foot long concrete apron to a concrete box channel. As a result of the 2013 delineation, the proposed project would result in removal of 0.09 acre of wetland vegetation within the area previously cleared for channel clearing (Table 5-1, *Acres of Wetland in the Argo Ditch and Project Area*).

TABLE 5-1
Acres of Wetland in the Argo Ditch and Project Area

	Total Acres of Wetland 2013 in Argo Ditch	Wetlands within Project Impact Area	Previously Mitigated Acres in the Argo Ditch
Argo Ditch	1.02	0.09	0.99

The proposed project would be an allowable activity pursuant to Nationwide Permit No 39. Proceeding under Nationwide Permit No 39 would require a pre-construction notification to be submitted to the USACOE, supported by a jurisdictional delineation and documentation that the required mitigation was completed pursuant to the 1998 authorization to complete channel clearing pursuant to Nationwide Permit No. 31.

[36] U.S. Army Corp of Engineers. 9 Dec. 2004. Letter to Mr. Brown regarding the status of wetland mitigation.

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APPENDIX A
WETLAND DETERMINATION DATA FORMS

ditch in leveled land

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 6000

Investigator(s): CAMPBELL / BIELFELT Section, Township, Range: T 2 S, R 14 W SAUSAL REDONDO GRANT

Landform (hillslope, terrace, etc.): V-BROW DITCH Ditch Local relief (concave, convex, none): FLAT bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 370594.52 Long: 375 7822.016 Datum: GCS NAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No N/A (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology ____ significantly disturbed? YES Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.) MAN-MADE CHANNEL ANNUAL VEGETATION REMOVED

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area within a Wetland? Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks: LOCATION WHERE ARGO DITCH DAYLIGHTS FROM A CONCRETE BOX CHANNEL TO AN OPEN SOIL BOTTOM CHANNEL W/ CONCRETE REVETTED SIDE SLOPES NO.8 inches of water present - U/Non runoff

VEGETATION – Use scientific names of plants.

Recently cleared of vegetation and surface soil (ditch cleaned 1949)

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. ~~Grasses Wetland Obligate~~	33%		
2. Invasive (Dry upland)	30%		
3. Exposed Sandy silty matrix			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 16 ft transect)			
1. Echinochloa muricata	30%	DOM	FACW
2. Paspalum dilatum	5%		FAC
3. Cyperus Eragrostis	5%		FACW
4. Bromus sp	20%	Dom	UPL
5.			
6.			
7.			
8.			
.5=30 .2=12	60	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 1/2 = 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species	35	x 2 =	70
FAC species	5	x 3 =	15
FACU species		x 4 =	
UPL species	10	x 5 =	50
Column Totals:	60 (A)		135 (B)

Prevalence Index = B/A = 2.25

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

Concrete apron with water on top

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 6/19/2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 0001 0102

Investigator(s): Campbell / Belfit Section, Township, Range: T 2 S, R 14 W Sawtel Redondo Land grant

Landform (hillslope, terrace, etc.): ~~Broke~~ Ditch Local relief (concave, convex, none): flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 3705641.057 Long: 375822.461 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
The area is a man-made ditch (1949) that has recently been cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: ____)			
1. ~~Wetland vegetation & grass~~	~~100%~~	X	
2. cleared concrete on slope			
3. ~~Echinochloa muricata~~	~~80%~~		
4. Setaria pumila	~~20%~~ 15%		
5.			
	= Total Cover		

Herb Stratum (Plot size: 12.5 sq ft transect)			
1.	~~100%~~	Y	
2. Echinochloa muricata	80%	Dom	FACW
3. Setaria pumila	15%		
4.			
5.			
6.			
7.			
8.			
.5 = 47.5 .2 = 19	95	= Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 1/1 = 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:
Nearly 100% of the grass cleared on either side of the vegetation exposed concrete side slope

cleared concrete on slopes

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 08/08/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 0200 (2002 LANDPLOT)

Investigator(s): MCC, ECC Charlton/Rex Section, Township, Range: T 2 S, R 14 W SAUSAL REDONDO GRANT

Landform (hillslope, terrace, etc.): ~~terrace~~ Ditch in Levee/Jane Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 370533.58T Long: 3757872.906 Datum: GCSNAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation Yes, Soil Yes, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes ~~X~~ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ~~X~~	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No ~~X~~	
Wetland Hydrology Present?	Yes X	No ~~X~~	

Remarks:
The area is a man-made ditch (1949) that has recently been cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: Visual estimate)			
1. Non-native ~~herb~~ grass	80		
2. herbaceous plant curly dock	20		
3. Echinacea muricata	40	DOM	FACW
4. Persicaria lapathifolia	20	DOM	FACW
5.			
6.			
7.			
8.			
.5=50 .2=20	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 2/2 = 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 08/18/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~D200~~ ~~D203~~ D300

Investigator(s): ~~MCC, ECC~~ Charlton/Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~V-Bruter~~ Ditch in/out/land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 370503.110 Long: 3757823.352 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ~~X~~	No X	**Is the Sampled Area within a Wetland?** Yes ~~X~~ No X
Hydric Soil Present?	Yes ~~X~~	No X	
Wetland Hydrology Present?	Yes X	No ~~X~~	

Remarks:
The area is a man-made ditch (1949) that has recently been cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		

Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		

Herb Stratum (Plot size: Visual estimation)			
1. ~~Herbaceous vmk.~~	20%		
2. Erigeron canadensis	20%	DOM	FACU
3.			
4.			
5.			
6.			
7.			
8.			
.5=10 .2=4	20 = Total Cover		

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% = 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	_____	x 3 =	_____
FACU species	20	x 4 =	80
UPL species	_____	x 5 =	_____
Column Totals:	20 (A)		80 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

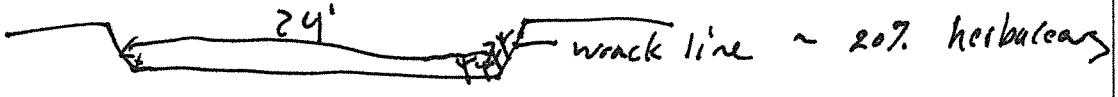
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 08/08/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 8400 South

Investigator(s): ~~MCC, ECC~~ Charlton / Rex Section, Township, Range: T 2 S, R 14 W Source: Redondo Land Grant 10400

Landform (hillslope, terrace, etc.): ~~X Bottes~~ Ditch, infilled land Local relief (concave, convex, none): flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 3704 72.6416 Long: 375 7823.797 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Y significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation X, Soil X, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.) Man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No X	**Is the Sampled Area within a Wetland?** Yes X No X
Hydric Soil Present?	Yes X	No X	
Wetland Hydrology Present?	Yes X	No ~~X~~	

Remarks: The area is a man-made ditch (1949) that has recently been cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: Visual estimation)			
1. 10% herbaceous			
2. Erigeron canadensis	10%	Dom	FACU
3.			
4.			
5.			
6.			
7.			
8.			
.5 = 5 .2 = 2	10 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0/1 = 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	_____	x 3 =	_____
FACU species	10	x 4 =	40
UPL species	_____	x 5 =	_____
Column Totals:	10 (A)		40 (B)

Prevalence Index = B/A = 40/10 = 4

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

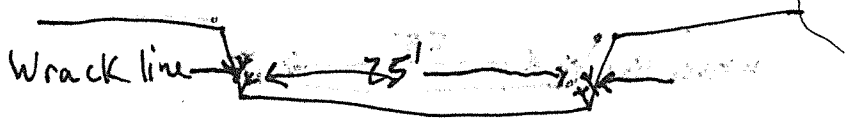
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~005~~ 002 OSD

Investigator(s): Campbell/Bieltelt Section, Township, Range: T 2 S, R 14 W Sawsel Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~V-Brooks~~ Ditch/levee/fill Local relief (concave, convex, none): Flat bottom Slope (%): 0–1%

Subregion (LRR): C Lat: 3704442.176 Long: 3757824.243 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.) man made drainage/ veg removed

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ~~X~~	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No ~~X~~	
Wetland Hydrology Present?	Yes X	No ~~X~~	

Remarks: The area is a man-made ditch (1949) that has recently been cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. ~~Ficus~~			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 22 ft transect)			
1. Setaria pumila	14	DOM	FAC
2. Polygonum persicaria kapthitolia	9	DOM	FACW
3.			
4. ~~Bare ground~~			
5.			
6.			
7.			
8.			
,5=11.5 ,2=4.6	23	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 2/2 = 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

veg had herbicide application (dying)

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/16/2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~00~~600

Investigator(s): Campbell / Belfelt Section, Township, Range: T 2 S, R 14 W Sansal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~Brook~~ ditch in leveled bas Local relief (concave, convex, none): Flat bottom Slope (%): ______

Subregion (LRR): C Lat: 370411.705 Long: 3757824.688 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil X , or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.) Man made ditch veg cleared

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X
Hydric Soil Present?	Yes ____	No X
Wetland Hydrology Present?	Yes X	No ~~X~~

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks: Litter - chip bags + ice cream wrappers throughout. 1/4 inch sporadic clay deposition material on side slopes at 3ft above channel bottom

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
		= Total Cover	
Sapling/Shrub Stratum (Plot size: ____)			
1. 0			
2. 0			
3.			
4.			
5.			
		= Total Cover	
Herb Stratum (Plot size: 26 ft transect)			
1. 0 Bromus sp	33%	Dom	~~Facu~~ Upl
2. 0 ~~Hor~~ Erigeron canadensis	11%	Dom	Fac
3. Bare			
4.			
5.			
6.			
7.			
8.			
.5 = 22.5 .2= 8.8	44%	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ~~5~~ 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species	~~11~~	x 3 = ~~33~~
FACU species	~~33~~ 11	x 4 = ~~132~~ 44
UPL species	~~33~~ 33	x 5 = ~~165~~ 165
Column Totals:	44 (A)	~~165~~ (B) ~~198~~ 209

Prevalence Index = B/A = ~~3.75~~ 4.75

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: Transect 26ft 35% in 1st 6ft 6-16 ft bare 16-22.5ft → dead Bromus invasive grasses 22.5-26ft 90% cover herbicide applied veg dying ~~dead~~ ~~shrub~~ 10% start this ~~grass~~ 80% of the plant

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13 0700

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 0700 ~~0007~~

Investigator(s): ~~MCC, EEC~~ Carleton / RLX Section, Township, Range: T 2 S, R 14 W Sansal Rodeo de Land Grant

Landform (hillslope, terrace, etc.): V-back ditch/inlet Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 370381.235 Long: 3757825.133 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No X	**Is the Sampled Area within a Wetland?** Yes X No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: visual estimate of 25 ft transect)			
1. ~~Non native herbaceous Unk~~		25%	
2. ~~Sedge~~ (Plantago lagopus)		10%	
3. Erigeron canadensis	25	Dom	FacU
4. Plantago lanceolata	10	Dom	Fac
5.			
6.			
7.			
8.			
.5 = 17.5 .22 7%	35	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 ~~100~~ (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	10	x 3 =	30
FACU species	25	x 4 =	100
UPL species	_____	x 5 =	_____
Column Totals:	35 (A)		130 (B)

Prevalence Index = B/A = 3.3

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

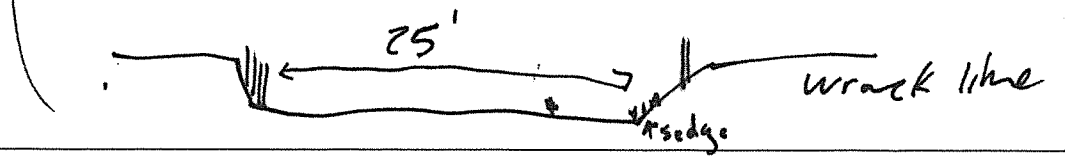
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 08/15/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 0800 0808 0806

Investigator(s): MCC ECE - Charelton/Rea Section, Township, Range: T 2 S, R 14 W Sawsal Redondo Landfill

Landform (hillslope, terrace, etc.): ~~V-banks~~ Ditch w/ cleared lands Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 370350.764 Long: 3757825.579 Datum: GCSNAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Y/O significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ~~X~~	No ~~X~~ X	**Is the Sampled Area within a Wetland?** Yes ~~X~~ No X
Hydric Soil Present?	Yes ~~X~~	No X	
Wetland Hydrology Present?	Yes X	No ~~X~~	

Remarks: The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: Visual estimate)			
1. Erigeron canadensis	10	Dom	FACU
2. Perstearia lapathifolia	5	Dom	FACW
3.			
4.			
5.			
6.			
7.			
8.			
.5-7.5'.	15 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ~~1~~ 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ~~100~~ 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	____	x 1 =	____
FACW species	5	x 2 =	10
FAC species	____	x 3 =	____
FACU species	10	x 4 =	40
UPL species	____	x 5 =	____
Column Totals:	15 (A)		50 (B)

Prevalence Index = B/A = 3.33

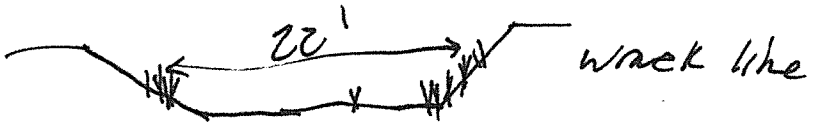
Hydrophytic Vegetation Indicators:

- ~~X~~ Dominance Test is >50%
- ____ Prevalence Index is ≤3.0[1]
- ____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ~~X~~ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 08/08/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 1900

Investigator(s): MCC, ECC Charlton/Rex Section, Township, Range: T 2 S, R 14 W Sansal Redondo Land 0900

Landform (hillslope, terrace, etc.): Argo's ditch in level land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 37032.0.294 Long: 3757826.024 Datum: GCSNAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.) Man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. Sam @ 45 0800.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: visual estimate)			
1. Erigeron canadensis	10	Dom	FACU
2. Persicaria lapathifolia	5	Dom	FACW
3.			
4.			
5.			
6.			
7.			
8.			
15 = 7.5%	15 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	5	x 2 =	10
FAC species	_____	x 3 =	_____
FACU species	10	x 4 =	40
UPL species	_____	x 5 =	_____
Column Totals:	15 (A)		50 (B)

Prevalence Index = B/A = 3.3

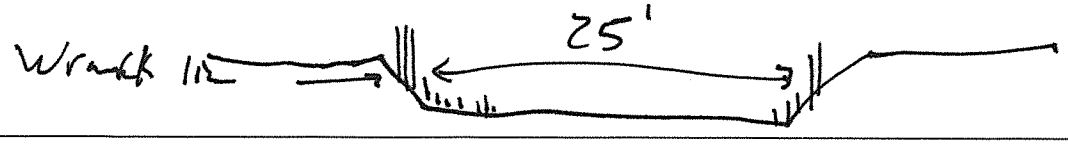
Hydrophytic Vegetation Indicators:

- X Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/6/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 6000 ~~0000~~

Investigator(s): ~~MCC, EEC~~ charlton/flex Section, Township, Range: T 2 S, R 14 W Sawal Redondo Land Grant

Landform (hillslope, terrace, etc.): V-Bottom Ditch in leveled area Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 3702289.824 Long: 3757826.469 Datum: GCSNAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.) Man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ~~X~~	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: visual estimate)			
1. ~~Sm 45 0900~~			
2. Erigeron canadensis	10%	Dom	FACU
3. persicaria lapathifolia	5%	N/A	FACW
4.			
5.			
6.			
7.			
8.			
0.5	15 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species 5	x 2 = 10
FAC species _____	x 3 = _____
FACU species 10	x 4 = 40
UPL species _____	x 5 = _____
Column Totals: 15 (A)	50 (B)

Prevalence Index = B/A = 3.3

Hydrophytic Vegetation Indicators:

~~X~~ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ~~X~~ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 1100

Investigator(s): [illegible] Campbell / Belfelt Section, Township, Range: T 2 S, R 14 W Sawal Rancho de Los Ang Grant

Landform (hillslope, terrace, etc.): Artificial Ditch in leveled area Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): Lat: 3702 59.353 Long: 3757 826.915 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ' (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.)

man made ditch w/ veg removed

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes X	No ____	

Remarks: The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		

Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		

Herb Stratum (Plot size: 28ft transect)			
1. Erigeron Canadensis	20%	Dom	FACU
2. Bromus sp	12%	Dom	FACU/UPL
3. Raphanus sativus	7%		UPL
4. Plantago lanceolata	5%		FAC
5.			
6.			
7.			
8.			
.52 22 .25 8.4	44 = Total Cover		

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species ____	x 1 = ____	
FACW species ____	x 2 = ____	
FAC species 35	x 3 = 105	
FACU species 20	x 4 = 80	
UPL species 19	x 5 = 95	
Column Totals: 44 (A)	185 (B)	

Prevalence Index = B/A = 4.2

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: 25 25 23 20.5 20 12 13 9 ft 0 28 ft

~50% cover

50% tall Erigeron

40% bassia L- annual grass

L- ANGRASS

L- plantago

5ft 35% unk tall gr

10% annual grass

Raphanus <5%

herb 5% plantago

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 4/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 1200 ~~0052~~

Investigator(s): ~~MCC, EGG~~ Charlton Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): V-Broken Ditch in leveled LS Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 370228.883 Long: 3757827.360 Datum: GCSNAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ~~X~~	**Is the Sampled Area within a Wetland?** Yes ~~X~~ No X
Hydric Soil Present?	Yes _____	No ~~X~~	
Wetland Hydrology Present?	Yes X	No ~~X~~	

Remarks: The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: Visual estimate)			
1.			
2. Same as 1000			
3. Erigeron Canadensis	10	Dom	FacU
4. Pericaria lapathifolia	5	Dom	FacW
5.			
6.			
7.			
8.			
	15 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	5	x 2 =	10
FAC species	_____	x 3 =	_____
FACU species	10	x 4 =	40
UPL species	_____	x 5 =	_____
Column Totals:	15 (A)		50 (B)

Prevalence Index = B/A = 3.3

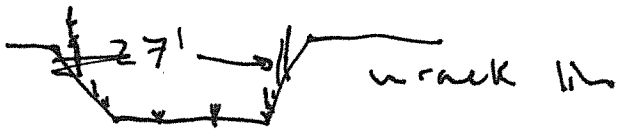
Hydrophytic Vegetation Indicators:

- ~~X~~ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ~~X~~ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 6/4/13 1300

Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~1300~~ 0013

Investigator(s): ~~MCC, ECC~~ Charlton/Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~V-Bottom~~ Ditch in levee (2nd Ca) Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 3701908.412 Long: 3757827.780 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation ~~X~~ Soil X, or Hydrology Y significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? no (If needed, explain any answers in Remarks.) Man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ~~X~~	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: visual estimate)			
1. Sum as 1200			
2. Erigeron canadensis	10%	Dom	Fac
3. Persicaria lapathifolia	5%	Dom	FACW
4.			
5.			
6.			
7.			
8.			
√Z = 3	15 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	~~15~~	x 2 =	10
FAC species	_____	x 3 =	_____
FACU species	10	x 4 =	40
UPL species	_____	x 5 =	_____
Column Totals:	15 (A)		50 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

~~X~~ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

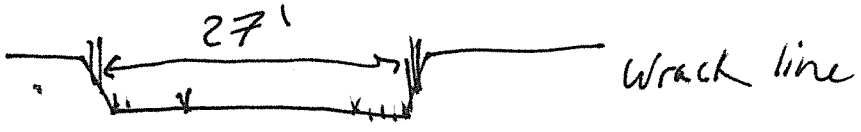
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ~~X~~ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 061400

Investigator(s): Campbell / Bielfelt Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): V-bottom ditch in levee (at levee) Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 370167.94 Long: 3757825.187 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.) Man made ditch/ in levee removed

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes X	No ____	

Remarks: fast food trash The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. 0			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 26ft transect)			
1. All species <5%			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: ____ (A)

Total Number of Dominant Species Across All Strata: ____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

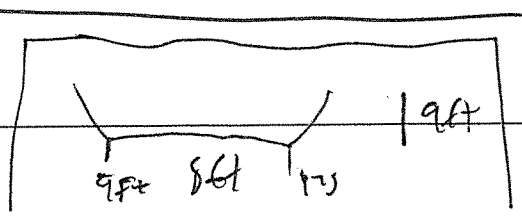
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~1~~ 150

Investigator(s): MCC, ECC Cheriton/Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): Argo Brooks ditch alluvial fan Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 37037.470 Long: 3757828.594 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? no (If needed, explain any answers in Remarks.) Man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ~~X~~	No X	**Is the Sampled Area within a Wetland?** Yes _____ No ~~X~~ X
Hydric Soil Present?	Yes _____	No ~~X~~ X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		

Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		

Herb Stratum (Plot size: Visual estimate)			
1. ~~Grass~~ Bromus sp.	20%	Pra	~~FACU~~ UPL
2. ~~Lactuca Unkn~~ Perscaria lapathifolia	15%	Dom	FACW
3.			
4.			
5.			
6.			
7.			
8.			
.5 = 17.5 .2 = 7	35	= Total Cover	

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	15	x 2 =	30
FAC species	_____	x 3 =	_____
FACU species	~~20~~	x 4 =	~~80~~
UPL species	~~20~~ 20	x 5 =	~~100~~ 100
Column Totals:	35	(A)	~~130~~ 130 (B)

Prevalence Index = B/A = 3.7

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

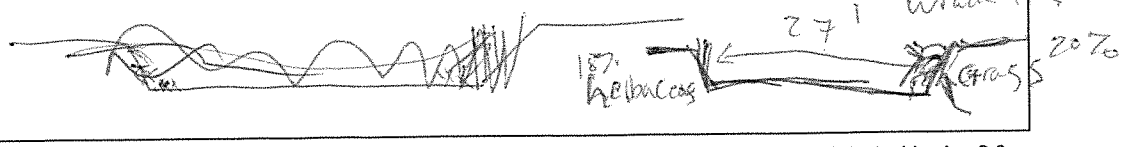
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch   City/County: City of Los Angeles   Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles   State: CA   Sampling Point: ~~[illegible]~~ 1600

Investigator(s): ~~MCC~~, ECC, [illegible] Cheretun / Apa   Section, Township, Range: T 2 S, R 14 W Sausal Redondo

Landform (hillslope, terrace, etc.): V-bottom ditch, [illegible]   Local relief (concave, convex, none): Flat bottom   Slope (%): 0-1%

Subregion (LRR): C   Lat: 370106.999   Long: 3757829.000   Datum: GCS NAD 83

Soil Map Unit Name: No Data   NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed?   Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO   (If needed, explain any answers in Remarks.) Man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ~~X~~		Is the Sampled Area within a Wetland? Yes X No ~~X~~
Hydric Soil Present? Yes X No ~~X~~		
Wetland Hydrology Present? Yes X No ~~X~~		

Remarks: The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: Visual estimate)			
1. 20% annual grass			
2. 10% Unk herbaceous perennials			
3. ~~Echinochloa [illegible]~~ Festuca	20	Dom	FACW
4. Erigeron canadensis	10	Dom	FACU
5.			
6.			
7.			
8.			
.5=15 .2=6	30 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____   % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ~~100~~ 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species	20	x 2 = 40
FAC species		x 3 =
FACU species	10	x 4 = 40
UPL species		x 5 =
Column Totals:	30 (A)	80 (B)

Prevalence Index = B/A = 2.7

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

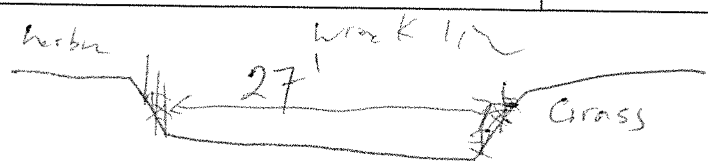
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:



Hydric Soil Indicators Remarks:

The following is justification for a positive problematic hydric soil determination: the landscape setting of this ditch is concave, which is a landscape position that is likely to collect or concentrate water. The area is periodically disturbed to remove vegetation. The area has positive indicators for wetland hydrology and hydrophytic vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 4/18/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 001700

Investigator(s): Campbell / Brelfelt Section, Township, Range: T 2 S, R 14 W Sawal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~V-broke~~ Ditch w/ levee/berm Local relief (concave, convex, none): flat bottom Slope (%): 0-1%

Subregion (LRR): ~~V-broke ditch~~ C Lat: 370076.528 Long: 3751829.407 Datum: GCSNAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.) man made ditch veg cleared

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ~~X~~	**Is the Sampled Area within a Wetland?** Yes X No ~~X~~
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks: litter / trash clay cracking on sides 1ft above channel bottom to 4 ft above channel. The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 19 ft transect)			
1. Persicaria lapathifolia	33%	Dom	FACW
2. Bromus sp.	13%	Dom	~~FACU~~ UPL
3. Setaria pumila	8%	Dom	~~FACU~~ FAC
4.			
5.			
6.			
7.			
8.			
.5 C 17 .25 6.5	34 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: ~~3/3~~ 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species 13	x 2 = 26
FAC species 8	x 3 = 24
FACU species ~~13~~	x 4 = ~~52~~
UPL species ~~13~~ 13	x 5 = ~~65~~
Column Totals: 34 (A)	~~117~~ 125 (B)

Prevalence Index = B/A = ~~3.4~~ 3.7

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

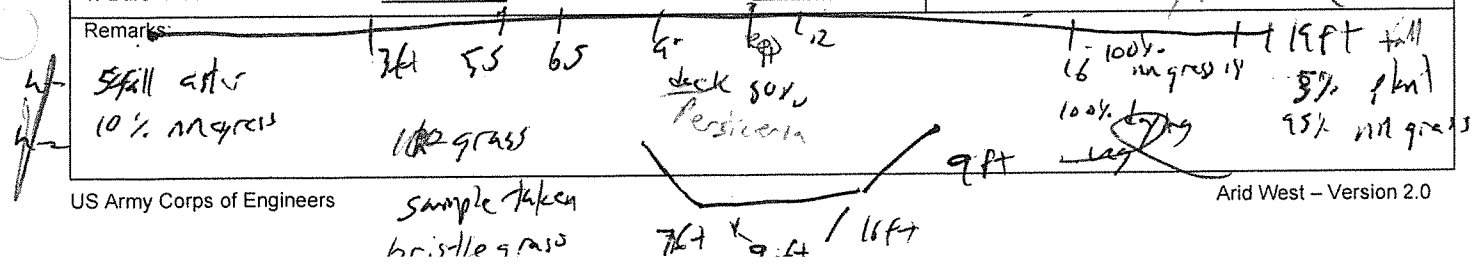
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ~~X~~

Remarks:



Hydric Soil Indicators Remarks:

The following is justification for a positive problematic hydric soil determination: the landscape setting of this ditch is concave, which is a landscape position that is likely to collect or concentrate water. The area is periodically disturbed to remove vegetation. The area has positive indicators for wetland hydrology and hydrophytic vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~0018~~ 1900

Investigator(s): Campbell / Bielfelt Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grnt

Landform (hillslope, terrace, etc.): ~~drainage~~ ditch Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 370046.057 Long: 3757829.776 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.) Man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?**	**Yes X No _____**
Hydric Soil Present?	Yes X No _____		
Wetland Hydrology Present?	Yes X No _____		

Remarks: This area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil. Bench road dips down here

VEGETATION – Use scientific names of plants.

photo 30

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
.5= .2=	_____ = Total Cover		
Herb Stratum (Plot size: 1A ft transect)			
1. Persicaria lapathifolia	35%	Dom	Facw
2. Setaria pumila	5%	I	Fac
3. Plantago lanceolata	5%		Fac
4.			
5.			
6.			
7.			
8.			
.5=47.5 .2=19 .5=2.5 .2=9.8	49 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species _____	x 1 =	_____
FACW species _____	x 2 =	_____
FAC species _____	x 3 =	_____
FACU species _____	x 4 =	_____
UPL species _____	x 5 =	_____
Column Totals: _____ (A)		_____ (B)

Prevalence Index = B/A = _____

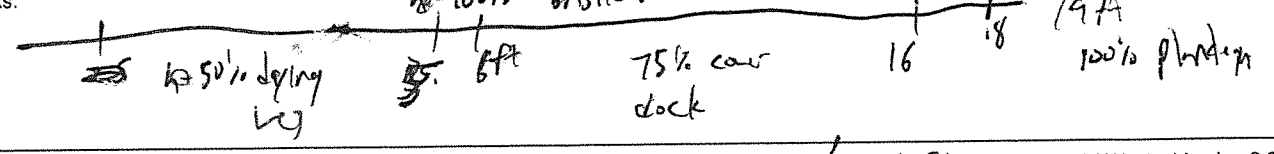
Hydrophytic Vegetation Indicators:

- X Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:



10Ft 15Ft

Hydric Soil Indicators Remarks:

The following is justification for a positive problematic hydric soil determination: the landscape setting of this ditch is concave, which is a landscape position that is likely to collect or concentrate water. The area is periodically disturbed to remove vegetation. The area has positive indicators for wetland hydrology and hydrophytic vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/15 1900

Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~1900~~ 0019

Investigator(s): ~~MCC, ECC~~ Charlton / Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~Hillslope~~ Ditch in level land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 370015.584 Long: 3757829.678 Datum: GCSNAD 83

Soil Map Unit Name: No Data NWI classification: R4SRAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology YES significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: Duck weed present 3-8" tall Grass 6-10" standing water

The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. duck weed	15%		
2. ~~Grass~~	~~40%~~		
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: Sausal estate)			
1. duck weed	15	Dom	OBL
2. ~~Echinochloa Muricata~~	40	Dom	FACW
3. Festuca perrenis			
4.			
5.			
6.			
7.			
8.			
:5 = 27.5%, .2 = 11 %.	55	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

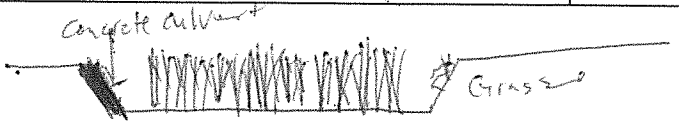
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:



Hydric Soil Indicators Remarks:

The following is justification for a positive problematic hydric soil determination: the landscape setting of this ditch is concave, which is a landscape position that is likely to collect or concentrate water. The area is periodically disturbed to remove vegetation. The area has positive indicators for wetland hydrology and hydrophytic vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/4/17

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 2080 2020 2000

Investigator(s): ~~MCC, ECC~~ Charlton/Rex Section, Township, Range: T 2 S, R 14 W Sunset Redondo Land(s)

Landform (hillslope, terrace, etc.): ~~V-broke~~ ditch in leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 33.969851.110 Long: -118.375.7829.580 Datum: GCSNAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation ~~X~~, Soil X, or Hydrology Yes significantly disturbed? ~~Yes~~ Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? ~~regular clearing~~ No (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?**	**Yes** X **No** _____
Hydric Soil Present?	Yes X No _____		
Wetland Hydrology Present?	Yes X No _____		

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. ~~Yellow Tall Grass~~			
2. Tall annual grass			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 1 square foot)			
1. Echinochloa muricata	40%	Dom	FACW
2. Brassica sp	10%	Dom	~~FACU~~ UPL
3.			
4.			
5.			
6.			
7.			
8.			
1,525 y. 1220	50 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	40	x 2 =	80
FAC species	_____	x 3 =	_____
FACU species	~~10~~	x 4 =	~~40~~
UPL species	~~10~~	x 5 =	~~50~~ 50
Column Totals:	50 (A)		~~130~~ 130 (B)

Prevalence Index = B/A = ~~2.6~~ 2.6

Hydrophytic Vegetation Indicators:

_____ Dominance Test is >50%

X Prevalence Index is ≤3.0[1]

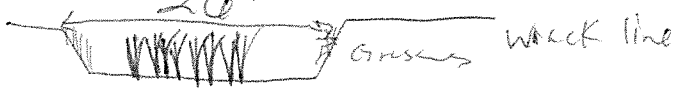
_____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:



Hydric Soil Indicators Remarks:

The following is justification for a positive problematic hydric soil determination: the landscape setting of this ditch is concave, which is a landscape position that is likely to collect or concentrate water. The area is periodically disturbed to remove vegetation. The area has positive indicators for wetland hydrology and hydrophytic vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 002100

Investigator(s): Campbell / Bielfelt Section, Township, Range: T 2 S, R 14 W Sunset Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~Ag~~ Ditch in leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369954.657 Long: 3757829.482 Datum: GCS NAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 8 ft transect)			
1. Bromus sp	88%	Dom	FACU
2. Persicaria lapathifolia	6%		FACW
3.			
4.			
5.			
6.			
7.			
8.			
~~8~~ 18	94 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	6	x 2 =	12
FAC species	_____	x 3 =	_____
FACU species	~~8~~	x 4 =	~~32~~
UPL species	~~88~~ 88	x 5 =	~~440~~ 440
Column Totals:	94	(A)	~~452~~ 367 (B)

Prevalence Index = B/A = ~~4.81~~ 3.94

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

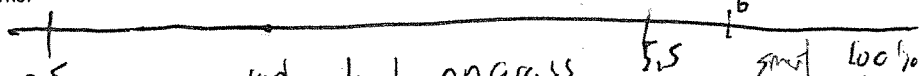
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:



5 -

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/4/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 002200

Investigator(s): Campbell / Belfelt Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~V-floor~~ Ditch/channel Local relief (concave, convex, none): Flat bottom Slope (%): 0-1 %

Subregion (LRR): C Lat: 369924.163 Long: 3757829.385 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4BSA x - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.) Man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 8ft transect)			
1. Bromus sp	75%	Dom	Upl FACU
2. Persicaria lapathifolia	13%		FACW
3. Centaurea Solstitialis	8%		UPL
4.			
5.			
6.			
7.			
8.			
.52 = 48% .2 = 192	96	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	13	x 2 =	36
FAC species	_____	x 3 =	_____
FACU species	28	x 4 =	_____
UPL species	83	x 5 =	415
Column Totals:	96 (A)		451 (B)

Prevalence Index = B/A = 4.7

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

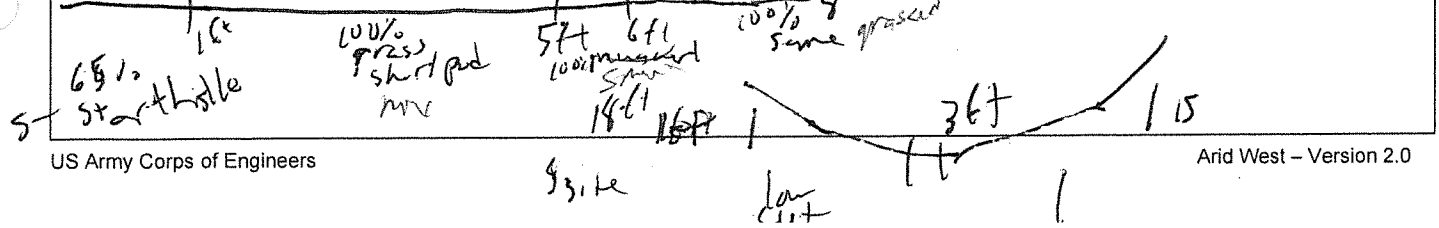
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 3/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 2300

Investigator(s): MGC, EEC Charleton / Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~U~~ Broles Ditch in leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369893.716 Long: 3757828.636 Datum: ECSNAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.) Man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes ~~X~~ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: visual estimate of 9ft transect)			
1. ~~Grasses~~	50%		
2. ~~Weeds herbaceous~~	5-10		
3. Centaurea solstitialis	40	Dom	Upl
4. ~~6.~~ Festuca perrenis	50	Dom	Fac
5. Persicaria Lapathifolia	5		Fac
6.			
7.			
8.			
.5= 47.5 .2= 19	95	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	5	x 2 =	10
FAC species	50	x 3 =	150
FACU species	_____	x 4 =	_____
UPL species	40	x 5 =	200
Column Totals:	95 (A)		360 (B)

Prevalence Index = B/A = ~~360~~ 3.8

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

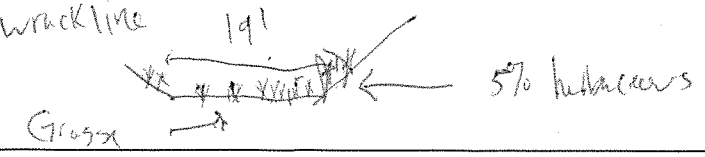
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 2400

Investigator(s): ~~MCC, ECC~~ Charlton / Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~V-Brates~~ Ditch in lowland Local relief (concave, convex, none): (concave) Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369863.330 Long: 3757826.320 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____
Hydric Soil Present?	Yes X	No ____
Wetland Hydrology Present?	Yes X	No ____
Is the Sampled Area within a Wetland?	Yes X	No ____

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
= Total Cover			
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
= Total Cover			
Herb Stratum (Plot size: visual estimation of 23 ft transect)			
1. ~~tall herbaceous~~	~~40%~~		
2. Persicaria lapathifolia	40%	Dom	Facw
3.			
4.			
5.			
6.			
7.			
8.			
= Total Cover	40		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
= Total Cover			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100%	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	____	x 1 = ____
FACW species	____	x 2 = ____
FAC species	____	x 3 = ____
FACU species	____	x 4 = ____
UPL species	____	x 5 = ____
Column Totals:	____ (A)	____ (B)

Prevalence Index = B/A = ____

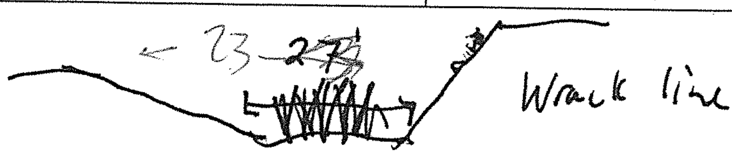
Hydrophytic Vegetation Indicators:

X Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:



Hydric Soil Indicators Remarks:

The following is justification for a positive problematic hydric soil determination: the landscape setting of this ditch is concave, which is a landscape position that is likely to collect or concentrate water. The area is periodically disturbed to remove vegetation. The area has positive indicators for wetland hydrology and hydrophytic vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 6825 00

Investigator(s): Campbell / Briekelt Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~[illegible]~~ drainage ditch in leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369832.945 Long: 3757924.005 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X man-made ditch

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____
Hydric Soil Present?	Yes X	No ____
Wetland Hydrology Present?	Yes X	No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 23.5 ft transect)			
1. Schoenoplectus californicus	46%	Dom	Obl
2. Persicaria lapathifolia	34%	Dom	FACW
3.			
4.			
5.			
6.			
7.			
8.			
S=40% .2=16%	80 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- X Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: 0 | 8 | 14 | 19 | 23.5

S - mud/dock 100% 20% ~~[illegible]~~ | Ki 80% [illegible] ~~f-4u litter~~ | D: Junca 100% Sch ~~junca 30%~~ 30% litter | S: 90 Junca W- litter 90% 10 % mag

126 ft N

14 sub 23.5 ft chan

9 ft tall vegetation

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug 2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 2680

Investigator(s): ~~MCC, EEC~~ Bielski, Guzman, Kraetz Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~V-Broke~~ Ditch, inleveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369802.637 Long: 3757820.877 Datum: GCS NAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 16 ft transect)			
1. Centaurea Solstitialis	55%	Dom	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	55 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species 55	x 5 = 275
Column Totals: 55 (A)	275 (B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

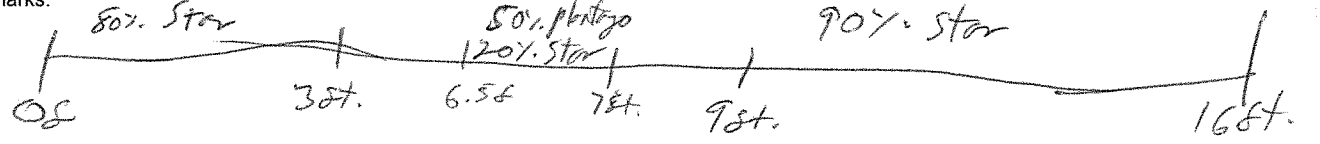
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 2700

Investigator(s): ~~MCC, ECC~~ Charlton / Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): Ditch in leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369772.371 Long: 3757817.327 Datum: GCSNAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. Thistle type	30		
2. ~~(Grass)~~ Herbaceous Unk.	10%		
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: Visual estimate of 25ft transect)			
1. Centaurea solstitialis	30%	Dom	UPL
2. Pennisetum lopatifolia	10%	Dom	FACU
3.			
4.			
5.			
6.			
7.			
8.			
15=20 20=8	40%	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species 10	x 2 = 20
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species 30	x 5 = 150
Column Totals: 40 (A)	170 (B)

Prevalence Index = B/A = 4.2

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

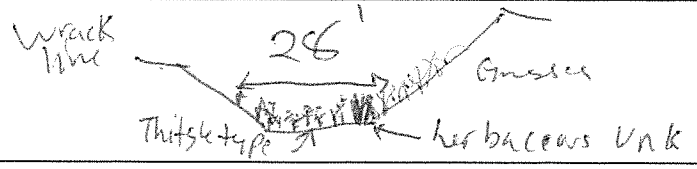
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 28

Investigator(s): ~~MCC, ECC~~ Charlton / Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~it-broto~~ Ditch in leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369742.105 Long: 3757813.776 Datum: GCSNAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.) Man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?**	**Yes** _____ **No** X
Hydric Soil Present?	Yes _____ No X		
Wetland Hydrology Present?	Yes _____ No X		

Remarks:
The area is a man-made ditch (R4SB) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: _____)			
1. 80% grass	80%		
2. [illegible] thistle	5%		
3. Unk. herbaceous	5%		
4.			
5.			
	= Total Cover		

Herb Stratum (Plot size: Visual estimate of 25' transect)			
1. Festuca perennis	80%	Dom	FAC
2. Centaurea solstatialis	5%	N	
3. Persicaria lapathifolia	5	N	
4.			
5.			
6.			
7.			
8.			
.5 = 40 .2 = 10	90	= Total Cover	

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species _____	x 1 =	_____
FACW species _____	x 2 =	_____
FAC species _____	x 3 =	_____
FACU species _____	x 4 =	_____
UPL species _____	x 5 =	_____
Column Totals: _____ (A)		_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

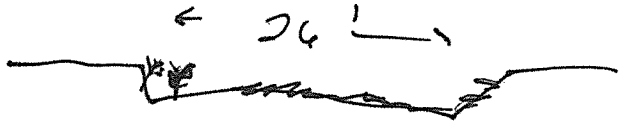
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/18/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~DS~~ 2900

Investigator(s): Campbell / Bielfelt Section, Township, Range: T 2 S, R 14 W Sans/ Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~D~~ Bot ditch in levee/ bot Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 33971.839 Long: 375781 0.226 Datum: GCSNAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 18' transect)			
1. Pergicaria lapathifolia	11%	Dom	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	11 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

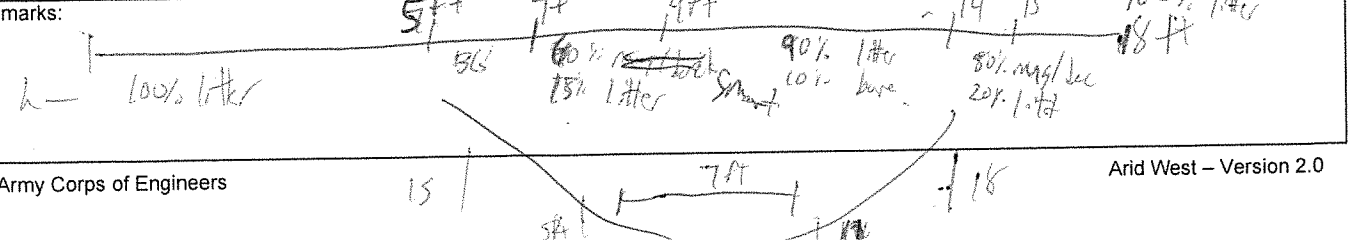


Photo 41

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 09/28/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~00~~ 300

Investigator(s): Campbell/Belfelt Section, Township, Range: T 2 S, R 14 W Sunsal Redondo Land Grant

Landform (hillslope, terrace, etc.): V shaped ditch in level land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369681.573 Long: 3757806.675 Datum: GCSNAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 17' transect)			
1. Persicaria lapathifolia	5%	Dom	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	5 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

2 — 85% litter

4 — 5% shrubs, 5% herbs, 90% litter

12 — 75% mag, 25% litter

11 ft

17 — 90% litter

5 ft

75 ft

Hydric Soil Indicators Remarks:

The following is justification for a positive problematic hydric soil determination: the landscape setting of this ditch is concave, which is a landscape position that is likely to collect or concentrate water. The area is periodically disturbed to remove vegetation. The area has positive indicators for wetland hydrology and hydrophytic vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/16/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 3100

Investigator(s): MCC, ECG Carleton Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~Levee~~ Ditch in levee/berm Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369651.309 Long: 3757803-125 Datum: GRSNAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation ~~X~~, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ~~X~~	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No ~~X~~	
Wetland Hydrology Present?	Yes X	No ~~X~~	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. ~~Re~~ Thistle	10%		
2. Grass	80%		
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: ~~Lateral 15'~~) visual estimate of 20' transect			
1. Festuca perrenis	80%	Dom	Fac
2. Centaurea solstitialis	10%		
3.			
4.			
5.			
6.			
7.			
8.			
.5=45 .2=18	90	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

11'

Thistle Grass

Hydric Soil Indicators Remarks:

The following is justification for a positive problematic hydric soil determination: the landscape setting of this ditch is concave, which is a landscape position that is likely to collect or concentrate water. The area is periodically disturbed to remove vegetation. The area has positive indicators for wetland hydrology and hydrophytic vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 3200

Investigator(s): ~~MEC, ECC~~ Cherlton / Rex Section, Township, Range: T 2 S, R 14 W Sansal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~V-Banks~~ Ditch in levee Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369621.041 Long: 375799.575 Datum: GCSNAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology yes significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ~~X~~	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. 15% Thistle	15		
2. 25% Unk. herbaceous	25		
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: W. est. of 35' transect)			
1. Perskeuria lapathifolia	25	Dom	FACW
2. Centaurea solstitialis	15%	Dom	UPL
3.			
4.			
5.			
6.			
7.			
8.			
.5 = 20 . 2 = 8	40	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	____	x 1 =	____
FACW species	25	x 2 =	50
FAC species	____	x 3 =	____
FACU species	____	x 4 =	____
UPL species	15	x 5 =	75
Column Totals:	40 (A)		125 (B)

Prevalence Index = B/A = 3.1

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50% 50%

___ Prevalence Index is ≤3.0[1] 3.1

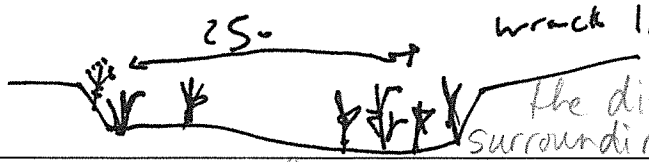
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ~~X~~

Remarks:



The Vegetation indicators are borderline. Because of the disturbance history, the surroundings of wetlands, and the historical delineation as wetlands, this area should be considered wetland.

Hydric Soil Indicators Remarks:

The following is justification for a positive problematic hydric soil determination: the landscape setting of this ditch is concave, which is a landscape position that is likely to collect or concentrate water. The area is periodically disturbed to remove vegetation. The area has positive indicators for wetland hydrology and hydrophytic vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug 2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 3300

Investigator(s): MCC, ECC Bilkelt/Guzman/Knott Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~V-Boats~~ Ditch in levee/berm Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369590.766 Long: 3757796.096 Datum: GCS NAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology N/A significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?**	**Yes X No ____**
Hydric Soil Present?	Yes X No ____		
Wetland Hydrology Present?	Yes X No ____		

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ~~5ft~~ 16.5' transect)			
1. Persicaria lapathifolia	24	Dom	FACW
2. Festuca perrenis	8	Dom	FAC
3.			
4.			
5.			
6.			
7.			
8.			
.22 6.4%	32 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species ____	x 1 =	____
FACW species ____	x 2 =	____
FAC species ____	x 3 =	____
FACU species ____	x 4 =	____
UPL species ____	x 5 =	____
Column Totals: ____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

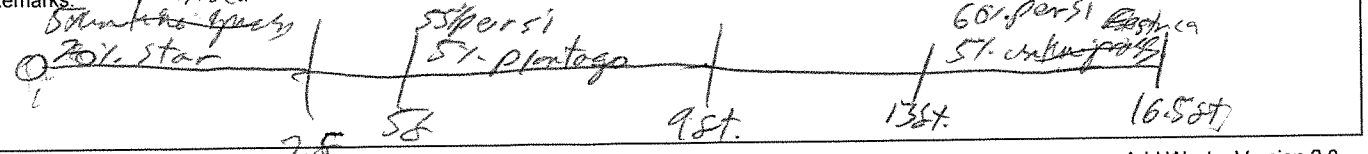
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:



Hydric Soil Indicators Remarks:

The following is justification for a positive problematic hydric soil determination: the landscape setting of this ditch is concave, which is a landscape position that is likely to collect or concentrate water. The area is periodically disturbed to remove vegetation. The area has positive indicators for wetland hydrology and hydrophytic vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug 2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 3400

Investigator(s): ~~MCG, ECG~~ Bielfelt, Guzman, Kmett Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~Basin~~ Ditch in leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369560.976 Long: 3757792.760 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? NO (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Festuca perrenis	20	Dom	Fac
2. Persicaria lapathifolia	18	Dom	Facw
3. Cyperus eragrostis	14	Dom	Facw
4. Setaria pumila	5		
5.			
6.			
7.			
8.			
.5=28.5 .2=11.4	57 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species _____	x 1 =	_____
FACW species _____	x 2 =	_____
FAC species _____	x 3 =	_____
FACU species _____	x 4 =	_____
UPL species _____	x 5 =	_____
Column Totals: _____ (A)		_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: Festuca 60% unk grass 10% persi | 60% persi 30% sedge | 10% persi 5% plantago 70% sedge | 30% persi 40% seta | 30% unk grass Festuca | veg. is dying

Sept 3ft 5ft 7.5ft 9ft 10.5ft 13ft

US Army Corps of Engineers

vegetation dying

Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 3500

Investigator(s): ~~MEC, ECC~~ Charlton/Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc): ~~V-Brook~~ Ditch in levee Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369530.185 Long: 375789.425 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?**	**Yes ____ No X**
Hydric Soil Present?	Yes ____ No X		
Wetland Hydrology Present?	Yes ____ No X		

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. 40% Unk. herb.	40		
2. 5% thistle	5		
3. 10% Grass	10		
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: v/s est. of 32' transect)			
1. Persicaria lapathifolia	40	Don	FACW
2. Festuca perrenis	10		FACW
3. Centaurea solstitialis	5		UPL
4.			
5.			
6.			
7.			
8.			
55% .5 = 27.5 .2 = 11%	55	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species ____	x 1 =	____
FACW species ____	x 2 =	____
FAC species ____	x 3 =	____
FACU species ____	x 4 =	____
UPL species ____	x 5 =	____
Column Totals: ____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

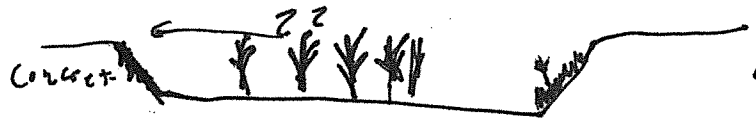
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: P600

Investigator(s): ~~MCC, ECG~~ Charlton/Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~V-Bottom~~ Ditch Levee (man) Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369499.894 Long: 375786.089 Datum: GCS NAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? no (If needed, explain any answers in Remarks.) Man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. 20% Hyalite			
2. 15% Unk. herbs			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: visual est of 28' transect)			
1. Centaurea solstitialis	20	Dom	Upl
2. Persicaria lapathifolia	15	Dom	Facw
3.			
4.			
5.			
6.			
7.			
8.			
.5 = 17.5 .2 = 7%	35	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species 15	x 2 = 30
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species 20	x 5 = 100
Column Totals: 35 (A)	130 (B)

Prevalence Index = B/A = 3.7

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

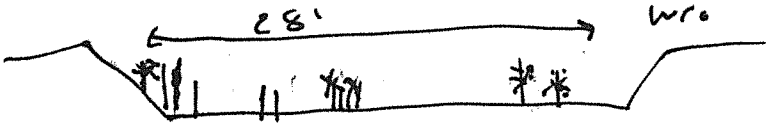
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 9/18/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 0037 OD

Investigator(s): Campbell / Bielfelt Section, Township, Range: T 2 S, R 14 W Survey/Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~Knoll~~ ditch in floodplains Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 33.977 Long: 82.753 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBA x - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation & surface soil bifurcated Channel

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 22 ft transect)			
1. Centaurea solstitialis	42%	Dom	upl
2. Persicaria lapathifolia	6		FACW
3.			
4.			
5.			
6.			
7.			
8.			
.5 = 21%, .2 = 9.6%	48	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	____	x 1 =	____
FACW species	6	x 2 =	12
FAC species	____	x 3 =	____
FACU species	____	x 4 =	____
UPL species	42	x 5 =	210
Column Totals:	48 (A)		222 (B)

Prevalence Index = B/A = 4.6

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

5 65 Stcr 2ft 100% litter 5ft 5-50 litter 40 50 litter 95 100 stcr 13 18 100% litter 22 100% stcr

h- 90 litter 20 20

1/13 1/17

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~DD~~ 3800

Investigator(s): Campbell / Bielfelt Section, Township, Range: T 2 S, R 14 W San Sal Redondo Land Grant

Landform (hillslope, terrace, etc.): toe of Brooks Ditch on levee Local relief (concave, convex, none): flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 33.943373 Long: -118.375729.418 Datum: ~~GCS~~ NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ~~N/A~~	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 30 ft transect)			
1. Setaria pumila	40	Dom	Fac
2. Paspalum dilatatum	26	Dom	Fac
3. Eleocharis sp cf. macrostachya	20	Dom	~~Fac~~ Obl
4. Cynodon dactylon	7		Facu
5. Schoenoplectus cal. Purshianus	5		Obl
6.			
7.			
8.			
.5 = 49%. .2 = 19.6%.	98	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

100% grasses 7ft 8.5 100% Phalaris 10% Cynodon 30% Paspalum 20% Eleocharis 10% Paspalum 100% 50% Setaria 30% Eleocharis 10% Cynodon 30 ft 23.5 100% grass 30 ft 70 % Paspalum 30% Setaria Salty ground 40 Setaria 7ft Sedg height 20 2ft grass height 20

Hydric Soil Indicators Remarks:

The following is justification for a positive problematic hydric soil determination: the landscape setting of this ditch is concave, which is a landscape position that is likely to collect or concentrate water. The area is periodically disturbed to remove vegetation. The area has positive indicators for wetland hydrology and hydrophytic vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/8/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 2700 4000 4000

Investigator(s): ~~MGC, ECC~~ Charlton/Rex Section, Township, Range: T 2 S, R 14 W Sansi/Redondo Unit

Landform (hillslope, terrace, etc.): ~~V-Brooks~~ Ditch in leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369378.732 Long: 375772.746 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.) man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No ~~X~~	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. ~~Willow~~ Willow	~~30~~ 30		
2. Salix exigua	30%	Dom	
3.			
4.			
5.			
.5= 15%	30	= Total Cover	
Herb Stratum (Plot size: visual est)			
1. ~~Sedges~~	~~30~~		
2. Cattail	30	Dom.	
3. ~~duck weed~~			
4. typha angustifolia	30%	Dom	
5. Schoenoplectus californicus	30%	Dom	
6.			
7.			
8.			
.5= 30%	60%	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: ~~Saturated~~ mark line

3" of water on top of muck

12' high willow

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8-13-13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 4250 ECC TMK

Investigator(s): MCC, ECC Chrishon/Rowett Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~tributes~~ Ditch on leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 3694482-533 Long: 3757783.280 Datum: ECS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? NO (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 22ft transect)			
1. Yellow Star Thistle	40	Dom	Upl
2. ~~Brassica~~	50	Dom	Upl
3. Festuca perrenis	50	Dom	Fac
4. Centaurea solstitialis	46	Dom	Upl
5.			
6.			
7.			
8.			
.5 = 45 .2 = 18%	90	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	____	x 1 =	____
FACW species	____	x 2 =	____
FAC species	50	x 3 =	150
FACU species	____	x 4 =	____
UPL species	90	x 5 =	~~450~~ 200
Column Totals:	96	(A)	350 (B)

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

20' west of edge, Ray, dead branches
22' width, 40% star Thistle, 1% smartweed,

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug, 2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 4450

Investigator(s): ~~MCC, ECC~~ Bielfelt/Guzman Section, Township, Range: T 2 S, R 14 W

Landform (hillslope, terrace, etc.): ~~flat~~ V-shaped ditch in lake bed Local relief (concave, convex, none): flat bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 369250.245 Long: 375775.8214 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBAx - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil X, or Hydrology ~~X~~ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? No (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks: The area is a man-made ditch (playa) that is periodically cleared of vegetation and surface soil.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 7Pt transect)			
1. Centaurea solstitialis	24%	Dom	upl
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	24 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species 24	x 5 = 120
Column Totals: 24 (A)	120 (B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

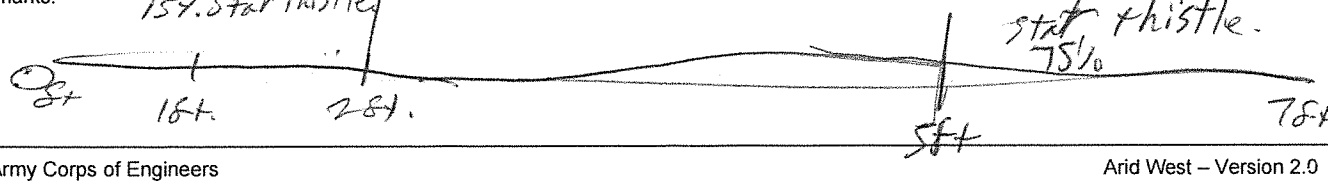
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:



~~4500~~ 4500S

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug. 2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~4500~~ 4500S

Investigator(s): ~~MCC, ECC~~ Bielfelt / Guzman Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): V brook - ditch in levee/dam Local relief (concave, convex, none): Flat. Slope (%): 0-1%

Subregion (LRR): C Lat: 33.9229.330 Long: 375-7755.643 Datum: GCS NAD83

Soil Map Unit Name: No Data NWI classification: R4SBA x riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes Y No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) Concrete culvert

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks: water dripping in from culvert above the plants

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 19 ft transect)			
1. Persicaria lapathafolia	30%	DOM	FACW
2. Echinochloa ~~crus-galli~~ muricata	22%	DOM	FACW
3. Setaria pumila	6%		FAC
4.			
5.			
6.			
7.			
8.			
.5=29 .2=11.6	58 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 2/2 = 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: 5Y. persi
10Y. Seta
85. Ech 2
085. 2nd sample collected 5 ft.

10Y. Seta
90Y. Persi
118ft.

Dead Aster.
176ft.
196ft

~~4500~~ 4550

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug 2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~0006~~ 4550

Investigator(s): ~~MCG, EEC~~ Bielfelt/Guzman Section, Township, Range: T 2 S, R 14 W Sawal Redondo Land Grant

Landform (hillslope, terrace, etc.): ~~to~~ Ditch in levee/dam Local relief (concave, convex, none): Flat, bottom Slope (%): 0-1%

Subregion (LRR): C Lat: 3692 10.444 Long: 375753.662 Datum: GCS NAD 83

Soil Map Unit Name: No Data NWI classification: R4SBA x - riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 6' transect)			
1. Centaurea solstitialis	27%	Dom	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	27 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	____	x 1 =	____
FACW species	____	x 2 =	____
FAC species	____	x 3 =	____
FACU species	____	x 4 =	____
UPL species	27	x 5 =	135
Column Totals:	27 (A)		135 (B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

90% Star / 70% Star.

Oz 16ft 5 Gf.

54/150

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8-13-13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: Sag basin center

Investigator(s): MCC, ~~ECC~~ Charlton/Kogett Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): V-Broter Ditch, a Levee Local relief (concave, convex, none): Flat Slope (%): 0-1%

Subregion (LRR): C Lat: 36894877 9 Long: 375 7724.330 Datum: GCS NAD83

Soil Map Unit Name: No Data NWI classification: R4SBA x Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. Calif. Buckwheat ?'	95% mixed		
2. Bush?	50%		
3. Plantis	1%		
4. Horsweed	5%		
5.			
	100% = Total Cover		
Herb Stratum (Plot size: Visual estimate)			
1. Schoenoplectus californicus	95	Dom	Obl
2. Festuca perrenis	50	Dom	Fac
3. Erigeron canadensis	5		
4.			
5.			
6.			
7.			
8.			
15=75% .02=3%	150 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species ____	x 1 =	____
FACW species ____	x 2 =	____
FAC species ____	x 3 =	____
FACU species ____	x 4 =	____
UPL species ____	x 5 =	____
Column Totals: ____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: Center of wetland

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug 2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: SP00

Investigator(s): MCC, ~~ECC~~ BJ, GH, Guzman Section, Township, Range: T 2 S, R 14 W

Landform (hillslope, terrace, etc.): ~~V~~ ditch in levee/flat land Local relief (concave, convex, none): flat Slope (%): _____

Subregion (LRR): C Lat: 36 8633.549 Long: 375 27 12.427 Datum: _____

Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No X	**Is the Sampled Area within a Wetland?** Yes X No X
Hydric Soil Present?	Yes X	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: MA transect)			
1. Centaurea solstitialis	7%	Dom	UPL
2. Setaria ~~pla~~ pumila	7%	Dom	FAC
3. Festuca perrenis	6%	Dom	Fac
4. Erigeron canadensis	5%	Dom	Facu
5.			
6.			
7.			
8.			
.5=12.5 .2=5	25 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x 1 =	_____
FACW species	_____	x 2 =	_____
FAC species	13	x 3 =	39
FACU species	5	x 4 =	20
UPL species	7	x 5 =	35
Column Totals:	25 (A)		194 (B)

Prevalence Index = B/A = 4.2

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

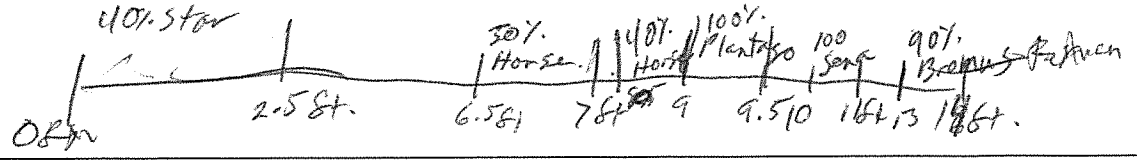
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug 2013
Applicant/Owner: City of Los Angeles State: CA Sampling Point: ~~[illegible]~~ 5901
Investigator(s): ~~MCC, ECC~~ Bielefelt/Guzman Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
Landform (hillslope, terrace, etc.): V-broad ditch on leveled land Local relief (concave, convex, none): flat Slope (%): 0-1%
Subregion (LRR): C Lat: 368803.256 Long: 3757709.110 Datum: GCS NAD83
Soil Map Unit Name: No Data NWI classification: R4SBA Riverine
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.) Manmade ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
= Total Cover			
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
= Total Cover			
Herb Stratum (Plot size: 16' transect)			
1. Plantago lanceolata	9	Dom	Fac
2. Centaurea solstitialis	8	Dom	Upl
3. Festuca perennis	6	Dom	Fac
4.			
5.			
6.			
7.			
8.			
.52 USK .2= 4.6% = Total Cover	23		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
= Total Cover			

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

50% Star; 80%+ Plantago; 30% Bermuda; dallisgrass grass (collected); 100% Plantago
0; 2.3; 3.5 8ft; 4ft; 7; 7.5; 10; Festuca; 11.5; 15; 16ft

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug 2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 6006

Investigator(s): MCC, ~~ECC~~ Biel/Selt./Guzman Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant

Landform (hillslope, terrace, etc.): V-bottom ditch w/ leveled land Local relief (concave, convex, none): flat Slope (%): 0-1

Subregion (LRR): C Lat: 368772.963 Long: 3757705.792 Datum: GCS NAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 13' transect)			
1. Centaurea solstitialis	25%	Dom	Upl
2. Festuca perrenis	7%	Dom	Fac
3. Setaria pumila	6%	Dom	Fac
4.			
5.			
6.			
7.			
8.			
2=5 7.6	38 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

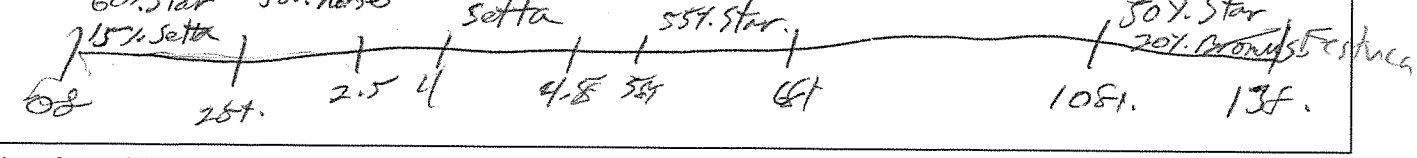
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:



Hydric Soil Indicators Remarks:

The following is justification for a positive problematic hydric soil determination: the landscape setting of this ditch is concave, which is a landscape position that is likely to collect or concentrate water. The area is periodically disturbed to remove vegetation. The area has positive indicators for wetland hydrology and hydrophytic vegetation.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug 2013

Applicant/Owner: City of Los Angeles Bielfelt/Guzman State: CA Sampling Point: 6400

Investigator(s): MCC, ECC ~~Chertkov/Kenneth~~ Section, Township, Range: T 2 S, R 14 W Sáucal Redondo Land Grant

Landform (hillslope, terrace, etc.): Ditch/broken terrace Local relief (concave, convex, none): Flat Slope (%): 0-1

Subregion (LRR): C Lat: 368657.787 Long: 375692.573 Datum: CCSNAD83

Soil Map Unit Name: No Data NWI classification: R4SBA x riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation X, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) man made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. Salix exigua	20	Dom	OBL
2.			
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: 3 ft transect)			
1. Typha domingensis	35%	Dom	OBL
2. ~~Salix exigua~~	20%	Dom	OBL
3. Carpobrotus edulis	6%		FACU
4. Cynodon dactylon	5%		FACU
5.			
6.			
7.			
8.			
.5 < 33% · .2 = 18.2	46 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

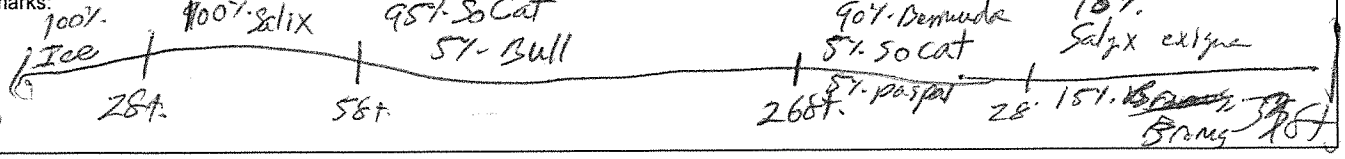
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Appli: LAX Runway Safety Area/Argo Ditch | City/County: City of Los Angeles | Sampling Date: 13 Apr 2017
Owner: City of Los Angeles | State: CA | Sampling Point: 6500
ator(s): ~~MCC, ECC~~ Nicl Zeltt / Guzman | Section, Township, Range: T 2 S, R 14 W Sawal Redondo Land Grant
orm (hillslope, terrace, etc.): ~~Knoll~~ ditch inlet | Local relief (concave, convex, none): flat. | Slope (%): 0-1
region (LRR): C | Lat: 3768621.491 | Long: 375768 9.788 | Datum: GCS NAD83
oil Map Unit Name: No Data | NWI classification: R4SBAx riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.) manmade ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 5' transect)			
1. Centaurea solstitialis	26	Dom	UP
2. Festuca perennis	17	Dom	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	43 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species 17	x 3 = 51
FACU species ____	x 4 = ____
UPL species 26	x 5 = 130
Column Totals: 43 (A)	181 (B)

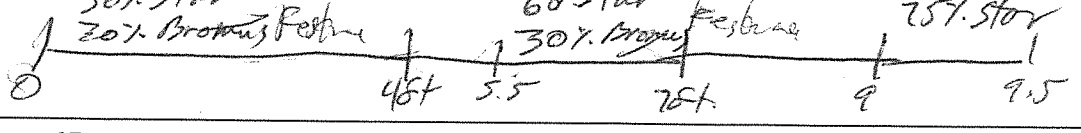
Prevalence Index = B/A = 4.2

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/13/13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 9150

Investigator(s): ~~MCG, EGC~~ Charlton/Kossoff Section, Township, Range: T 2 S, R 14 W Sansal Redondo Landfill

Landform (hillslope, terrace, etc.): ~~V-Banks~~ Ditch in leveled area Local relief (concave, convex, none): flat Slope (%): 0-1%

Subregion (LRR): C Lat: 367815.935 Long: 375762.168 Datum: GCSNAD83

Soil Map Unit Name: No Data NWI classification: R4SBAx Manmade

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Bermuda Cynodon dactylon			FACU
2. Phalaris Plantago lanceolata			FAC
3.			
4.			
5.			
6.			
7.			
8.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 1/2 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species ____	x 1 =	____
FACW species ____	x 2 =	____
FAC species ____	x 3 =	____
FACU species ____	x 4 =	____
UPL species ____	x 5 =	____
Column Totals: ____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: Willows 10 ft up Southern bank from base around runway drain

—bare ground—

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8-13-13

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 9250

Investigator(s): ~~MCC, ECC~~ ECC THK Charlton/Kentt Section, Township, Range: T 2 S, R 14 W Sunset Redond. Land Grant

Landform (hillslope, terrace, etc.): V-Banks Ditch, a levee/berm Local relief (concave, convex, none): Flat Slope (%): 0-1

Subregion (LRR): C Lat: 367786.699 Long: 3757603.093 Datum: GCS NAD83

Soil Map Unit Name: no Data NWI classification: R4SBAx Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) manmade ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ~~X~~	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. mulefat	2%		
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: visual estimate)			
1. All Plants < 2%			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	= Total Cover		

Sand bare

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

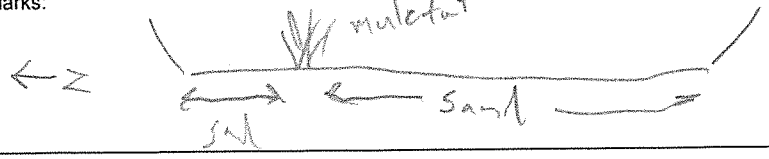
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:



WETLAND DETERMINATION DATA FORM – Arid West Region

9800

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug. 2013

Applicant/Owner: City of Los Angeles State: CA Sampling Point: 2nd to last point from 9800 west end

Investigator(s): AAL + JRM Section, Township, Range: T 2 S, R 14 W

Landform (hillslope, terrace, etc.): Ditch w/leveled bed Local relief (concave, convex, none): Flat Slope (%): 0-1%

Subregion (LRR): C Lat: 33.962157 Long: -118.375580, 944 Datum: GCSNAD 83

Soil Map Unit Name: No Data NWI classification: R4SB/A x Nwwww

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation ✗, Soil _____, or Hydrology _____ significantly disturbed? No Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No (If needed, explain any answers in Remarks.) Man-made ditch

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 10m transect)			
1. Avena barbata	17	Dom	UPL
2. Erodium circutarium	17	Dom	UPL
3. Centaurea solstitialis	12	Dom	UPL
4. Festuca myuros	8		
5. Salsola tragus	2		
6. Bromus madritensis	2		
7. Bromus diandrus	1		
8. Heterotheca grandiflora	1		
.5=30 .2=12	60 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0/3 = 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species _____	x 1 =	_____
FACW species _____	x 2 =	_____
FAC species _____	x 3 =	_____
FACU species _____	x 4 =	_____
UPL species _____	x 5 =	_____
Column Totals: _____ (A)		_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✗

Remarks: