

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**

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Appendix A Wetland Determination Data Forms

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.

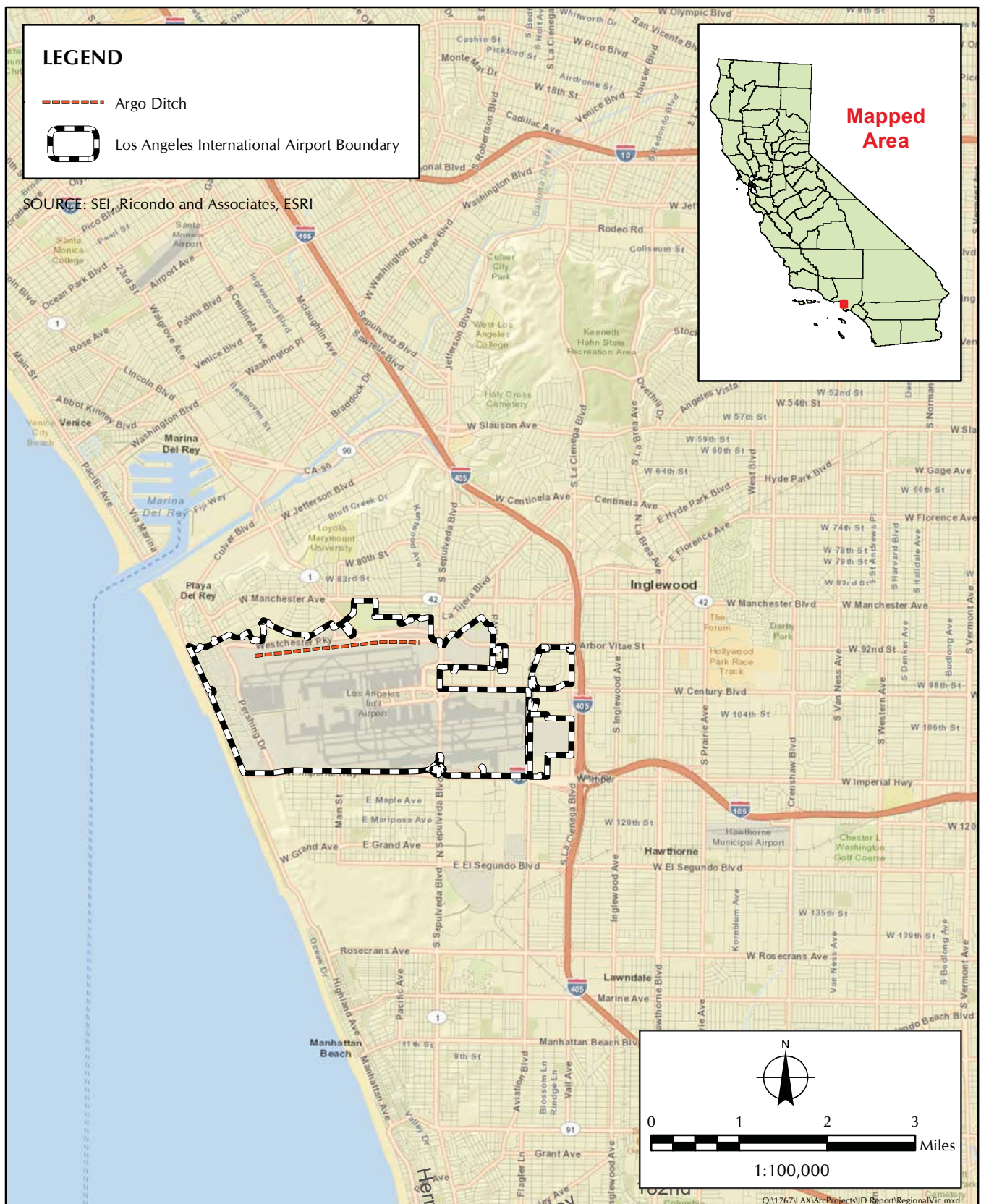


FIGURE 1.1-1
Regional Vicinity Map

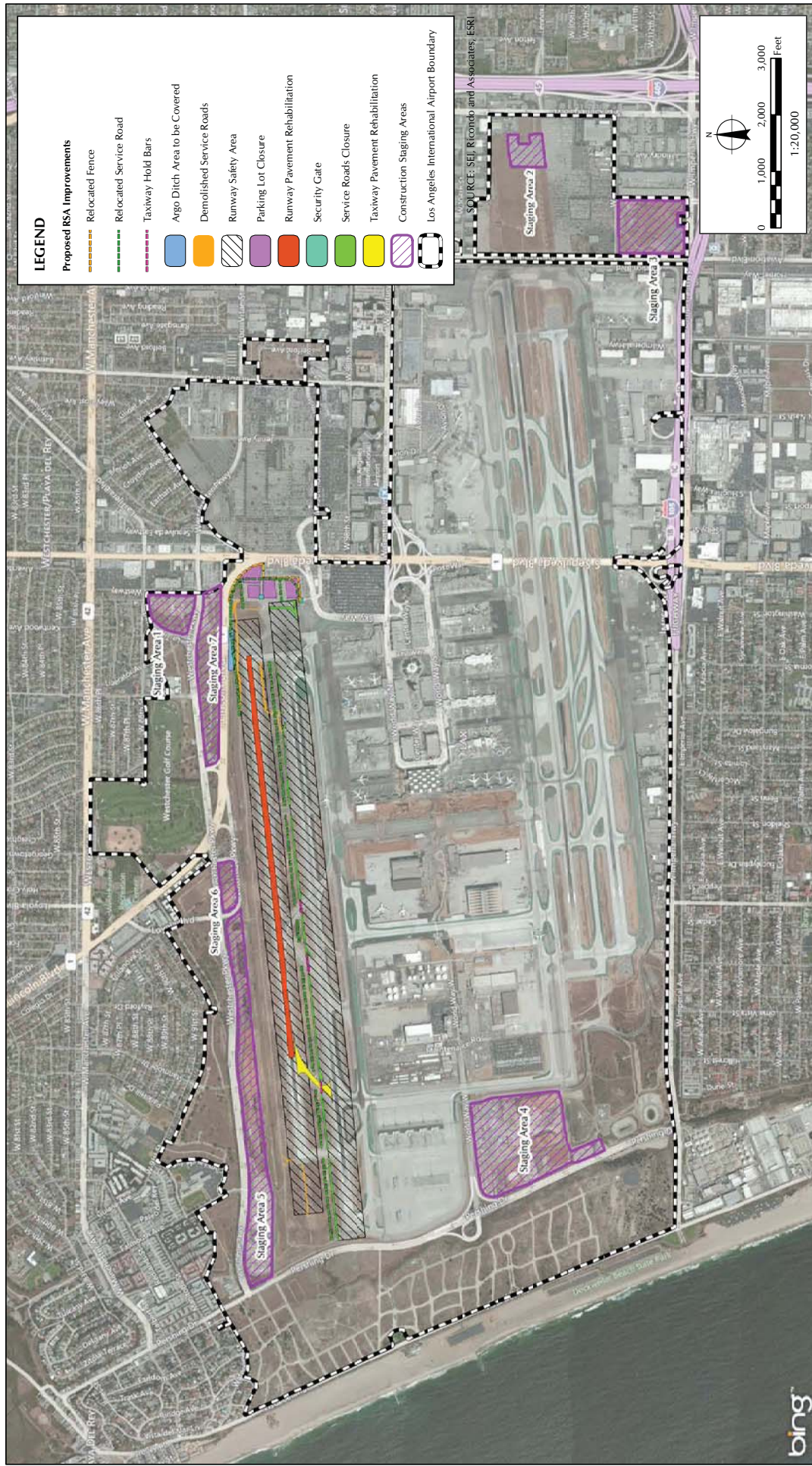


FIGURE 1.1-2
Local Vicinity Map



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 Improvements⁴
- The LAX Master Plan Final Environmental Impact Report / Environmental Impact Statement (EIR/EIS)⁵
- Biological Assessment Technical Report for the LAX Master Plan EIR/EIS⁶
- Updated Biological Assessment Technical Report for the LAX Master Plan Supplement to the EIR/EIS⁷
- Jurisdictional Delineation for the LAX Specific Plan Amendment Study⁸
- Final EIR for the LAX Specific Plan Amendment Study⁹
- Memorandum for the Record (MFR) regarding Preliminary Results of the 1997 delineation of the Argo Ditch¹⁰
- MFR regarding Recommendations for Addressing Regulatory Compliance issues of the ditch¹¹
- USACOE Nationwide Permit Authorization¹²

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 SAA¹⁴
- Cultural Resources Technical Report regarding potential impacts to sensitive cultural resources¹⁵
- Biological Assessment regarding potential impacts to sensitive biological resources¹⁶
- 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 maps¹⁷ 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 Manual¹⁹ and the Regional Supplement WDM²⁰. 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.



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.

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

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-angeles-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/>

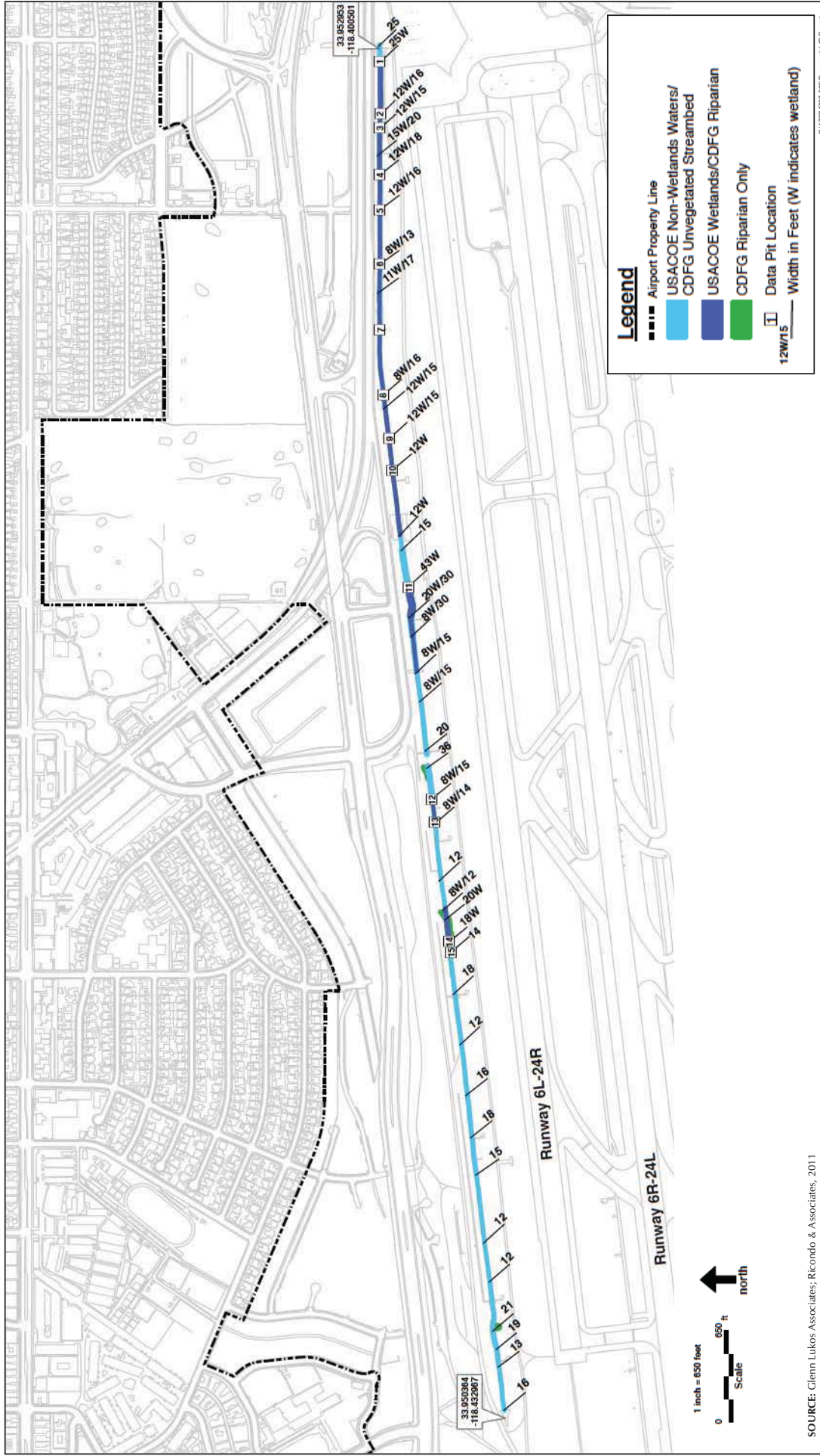


FIGURE 4.1-2
2011 Delineation of the Argo Ditch

SOURCE: Glenn Lukos Associates; Ricondo & Associates, 2011



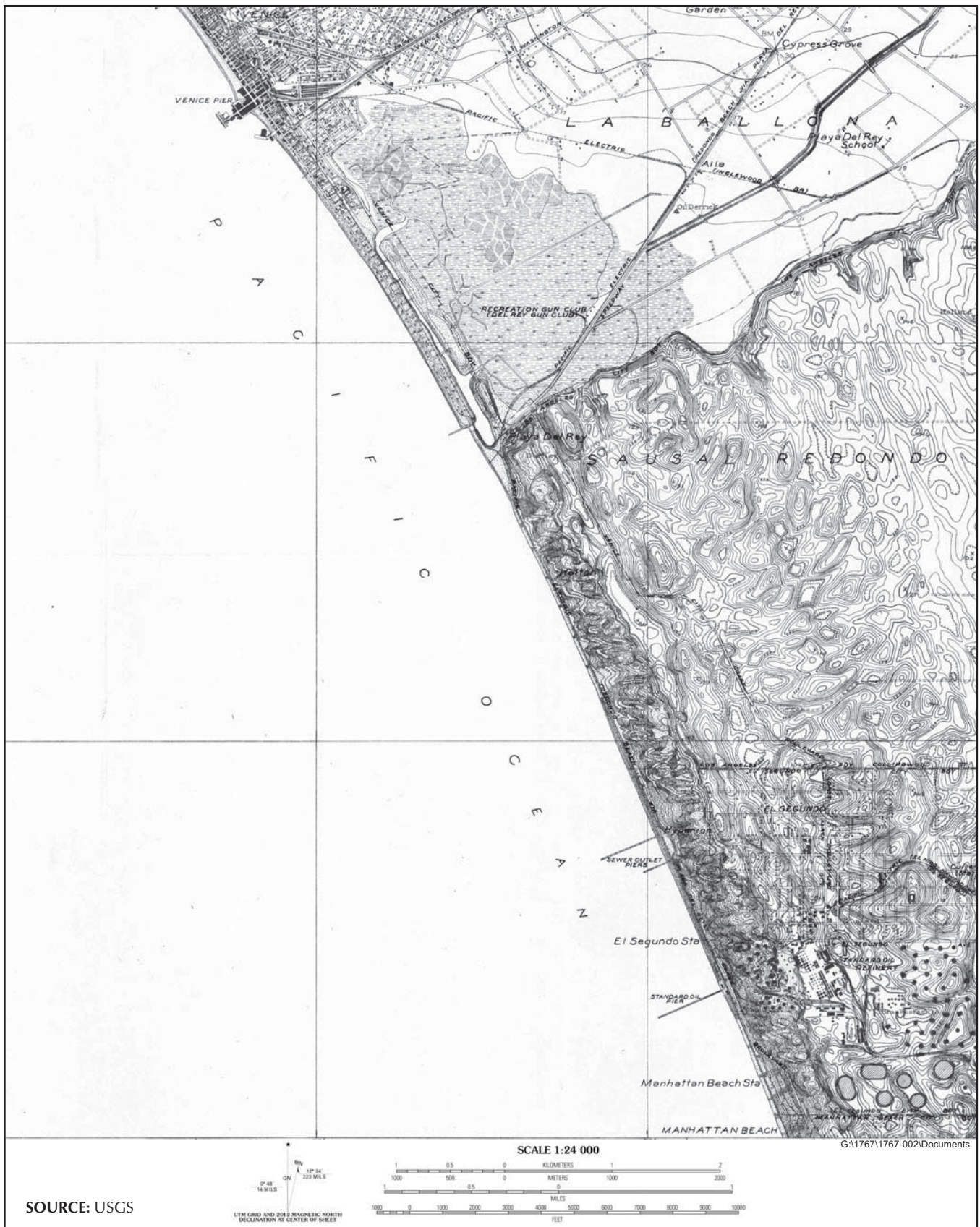


FIGURE 4.2-1
1923 Topographic Map of Future LAX

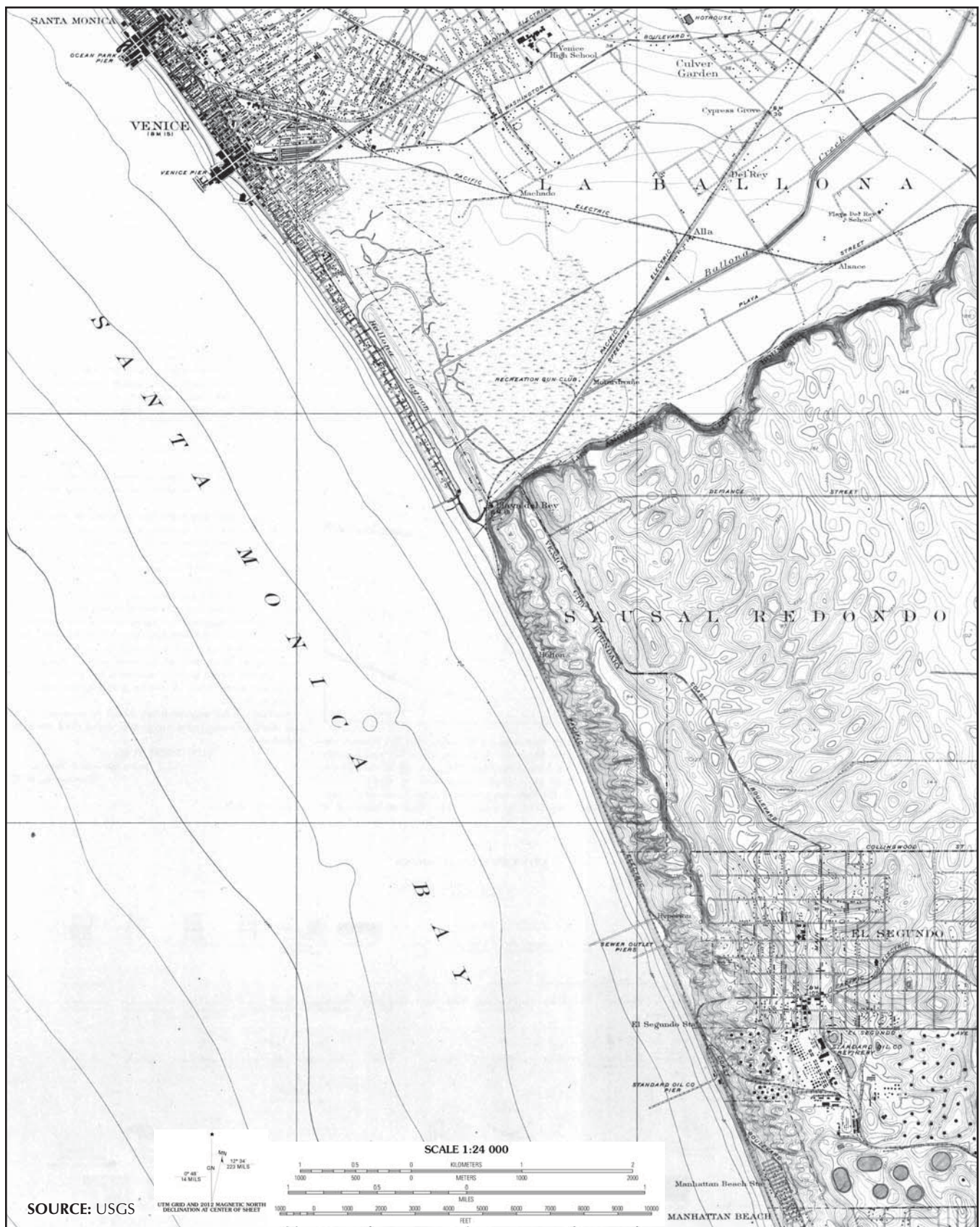


FIGURE 4.2-2
1924 Topographic Map of Future LAX

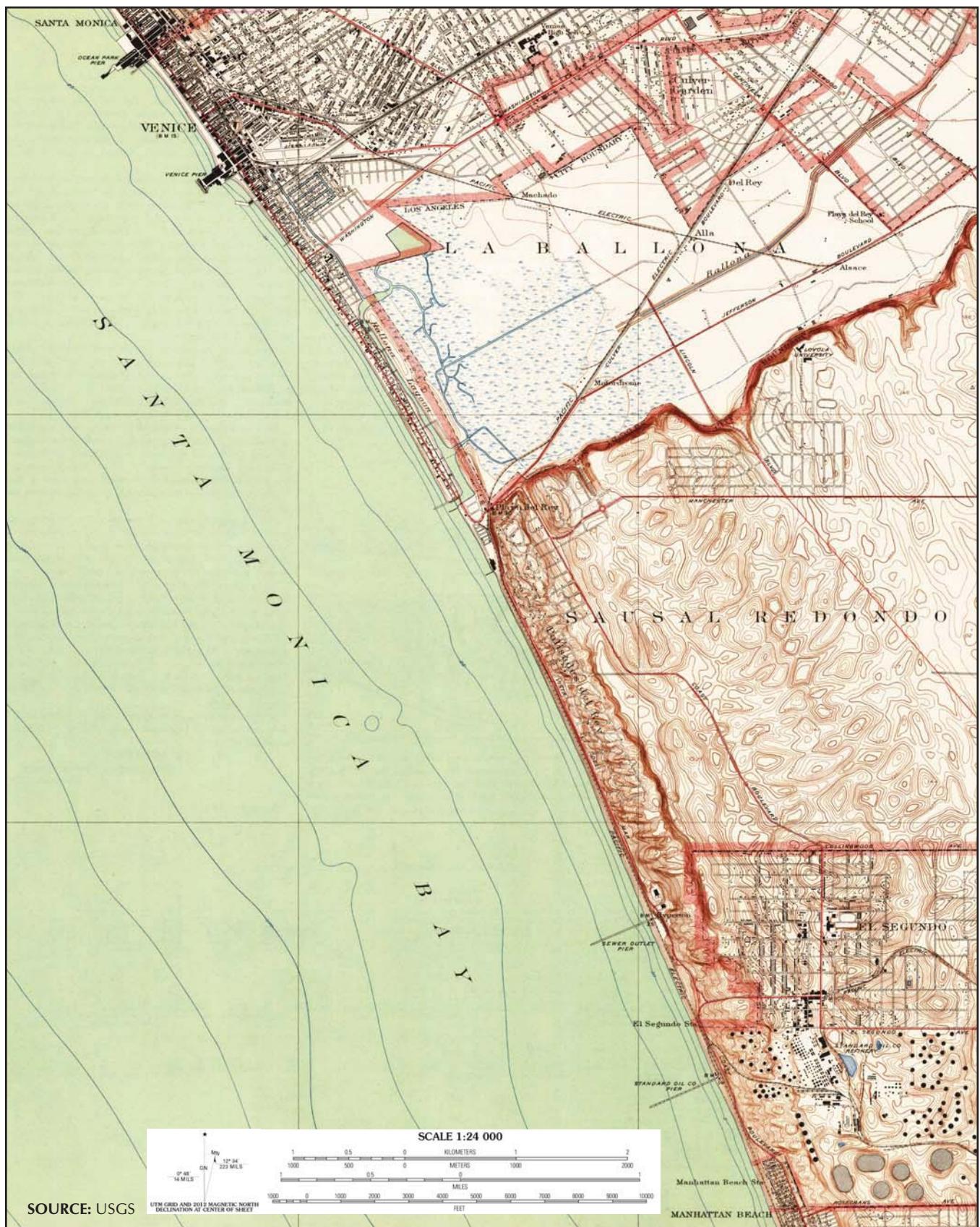


FIGURE 4.2-3
1934 Topographic Map of Municipal Airport



FIGURE 4.2-4
1942 Topographic Map of Municipal Airport

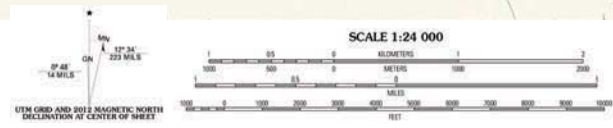
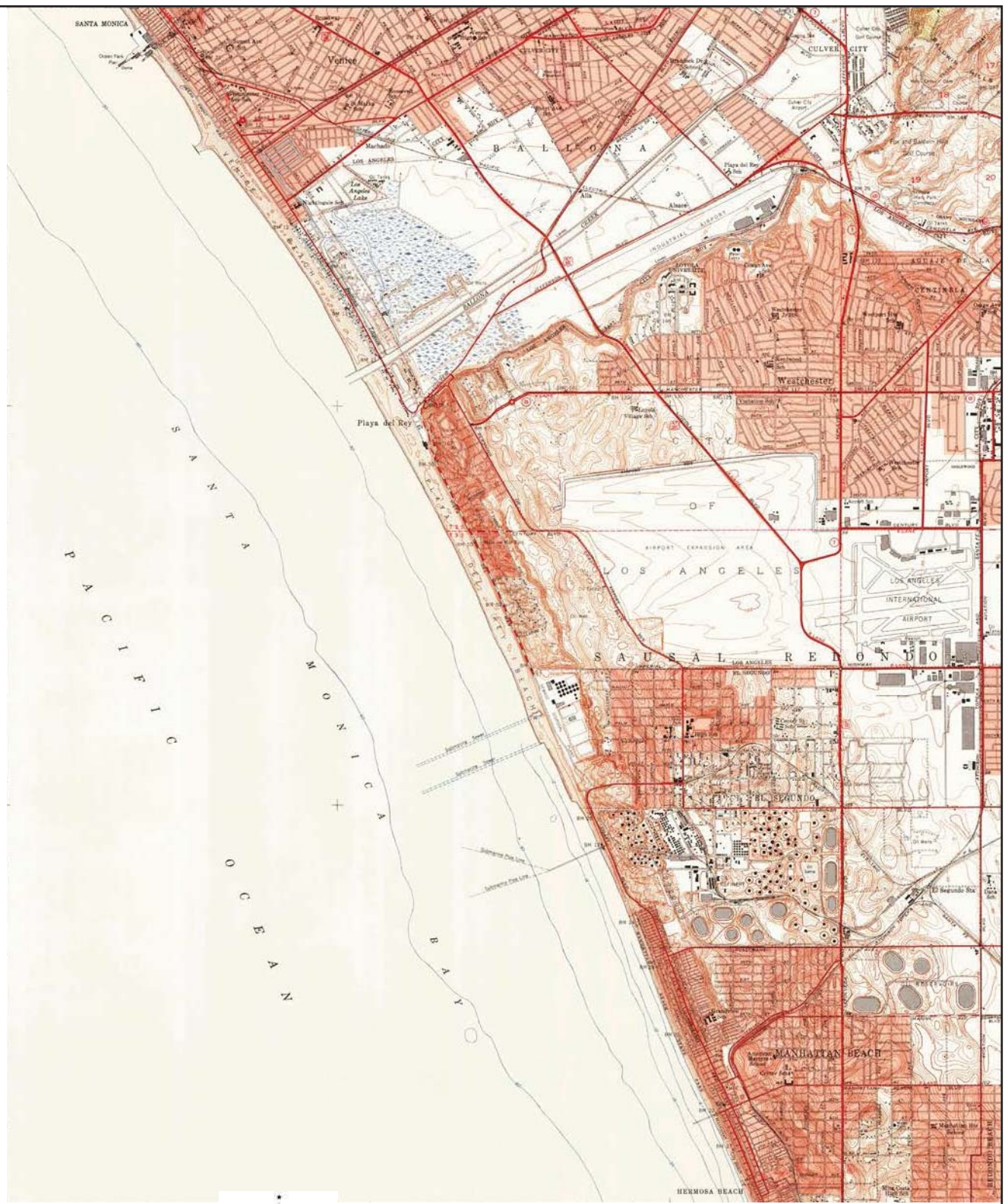
1946: After the war, five airlines had started their commercial operations from Los Angeles Municipal Airport.

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

G:\1767\1767-002\Documents\JD Report



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

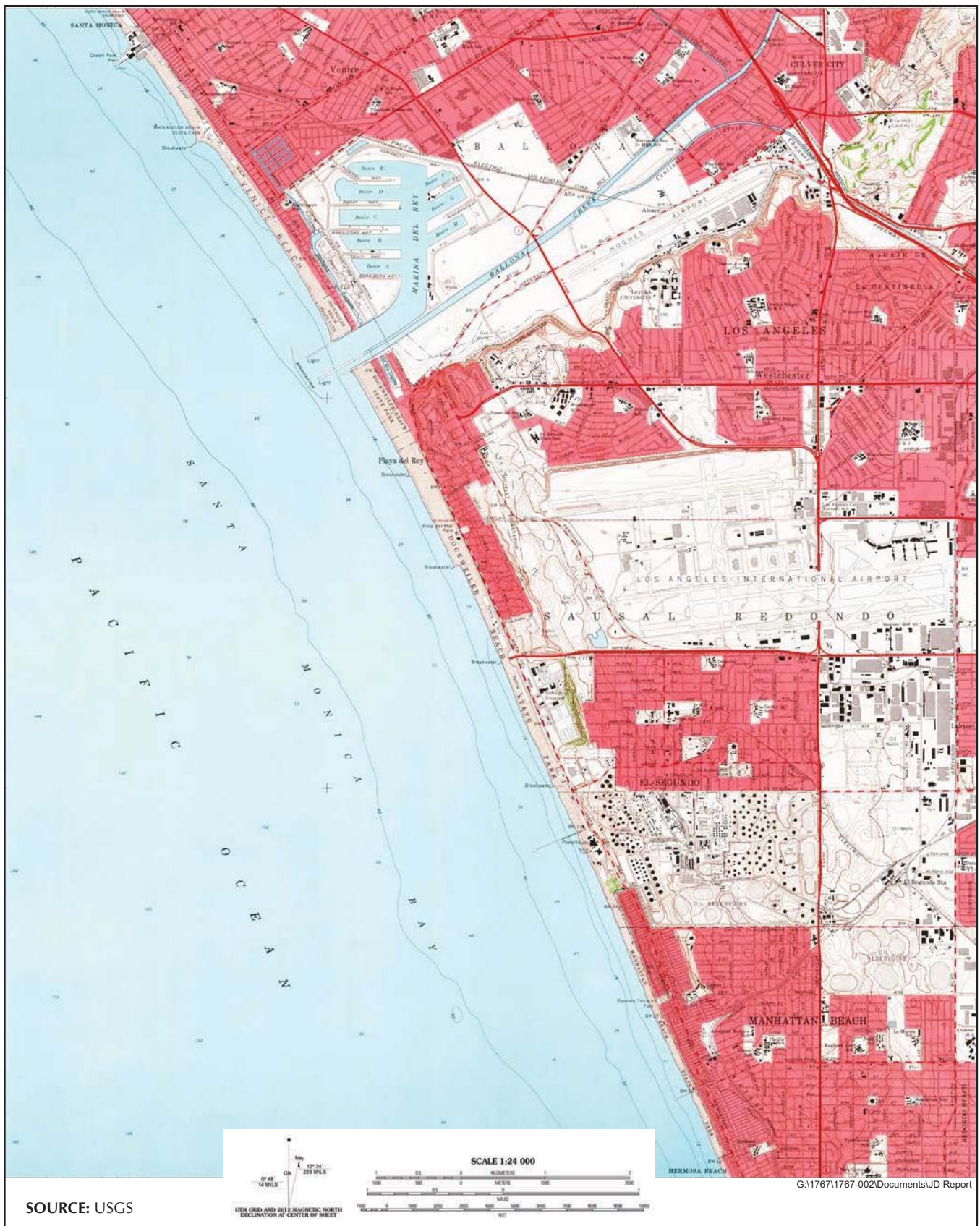


FIGURE 4.2-6
1964 Topographic Map of LAX and the Argo Ditch



FIGURE 4.2-7
1972 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 dilatatum*), 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

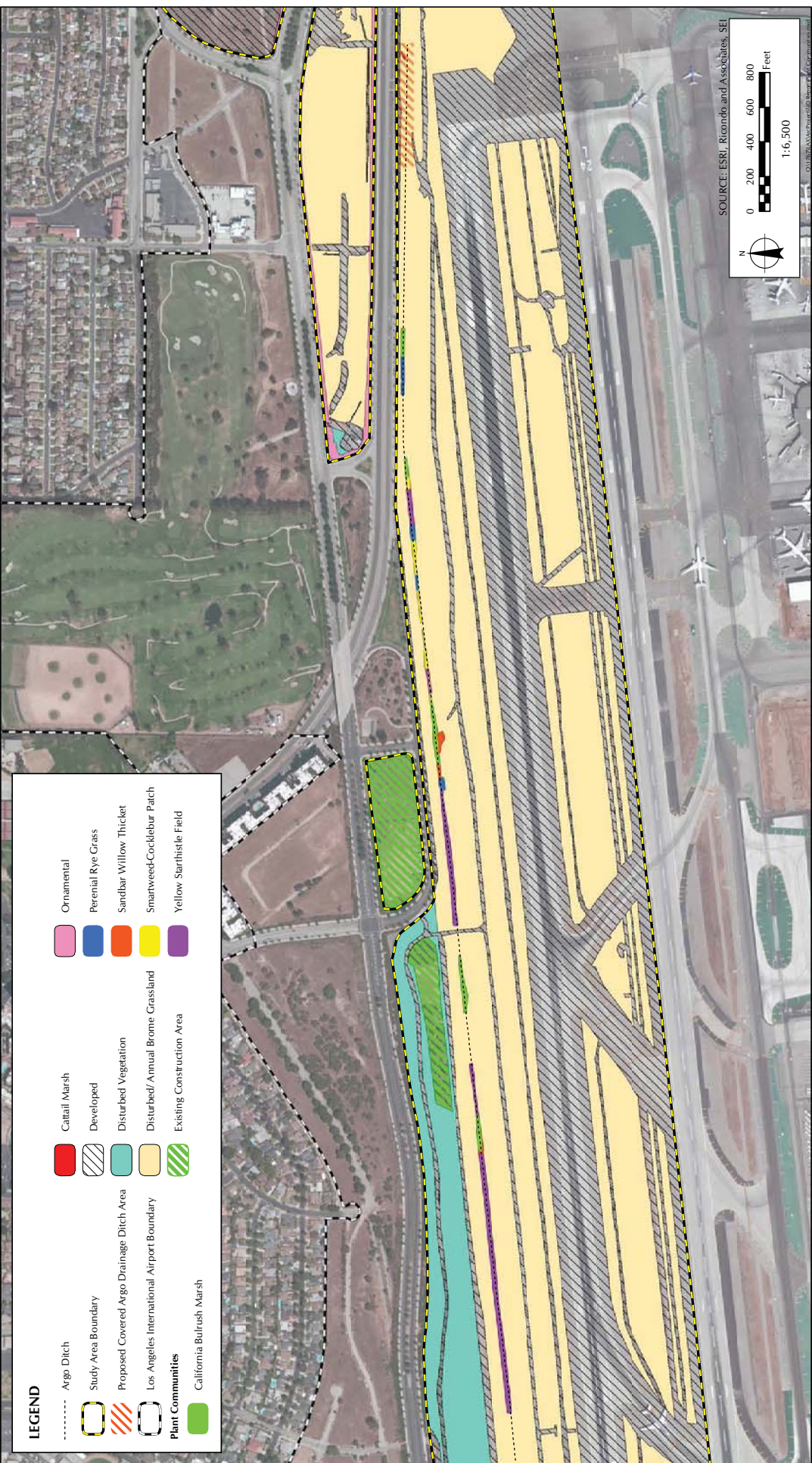


FIGURE 4.3-2
Plant Community Map



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 (*Plantago 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 crispus*).

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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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 LAND
 Investigator(s): CAMPBELL / BIELFELT Section, Township, Range: T 2 S, R 14 W SAUSAL REDONDO GRANT
 Landform (hillslope, terrace, etc.): V-BROW DITCH Local relief (concave, convex, none): FLAT bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370594.527 Long: 375 7822.016 Datum: GCS NAD83
 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 X (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology significantly disturbed? Yes No X
 Are Vegetation , Soil , or Hydrology naturally problematic? No (If needed, explain any answers in Remarks.) MAN-MADE CHANNEL
ANNUAL FLOODING - RETURN

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>LOCATION WHERE ARGO DITCH DAYLIGHTS FROM A CONCRETE BOX CHANNEL TO AN OPEN SOIL BOTTOM CHANNEL w/ CONCRETE REINFORCED SIDE SLOPES</u> <u>NO. 8 inches of water present - U/Obn runoff</u> <u>Recently cleared of vegetation and surface soil.</u> <u>ditch cleared in 1949</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u>	(A)
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Number of Dominant Species Across All Strata: <u>2</u>	(B)
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>1/2 = 50%</u>	(A/B)
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u> </u> = Total Cover					
Sapling/Shrub Stratum (Plot size: <u> </u>)					
1. <u>Grasses Wetland Obligate</u>	<u>33%</u>	<u> </u>	<u> </u>	Prevalence Index worksheet:	
2. <u>Invasive (Dry upland)</u>	<u>30%</u>	<u> </u>	<u> </u>	Total % Cover of:	Multiply by:
3. <u>Exposed sandy clay matrix</u>	<u> </u>	<u> </u>	<u> </u>	OBL species <u> </u> x 1 = <u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u>35</u> x 2 = <u>70</u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species <u>5</u> x 3 = <u>15</u>	
<u> </u> = Total Cover				FACU species <u> </u> x 4 = <u> </u>	
				UPL species <u>10</u> x 5 = <u>50</u>	
				Column Totals: <u>60</u> (A) <u>135</u> (B)	
				Prevalence Index = B/A = <u>2.25</u>	
Herb Stratum (Plot size: <u>16 ft transect</u>)					
1. <u>Echinochloa muricata</u>	<u>30%</u>	<u>DOM</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators:	
2. <u>Paspalum dilatatum</u>	<u>5%</u>	<u> </u>	<u>FAC</u>	<u>X</u> Dominance Test is >50%	
3. <u>Cyperus Eragrostis</u>	<u>5%</u>	<u> </u>	<u>FACW</u>	<u>X</u> Prevalence Index is ≤3.0 ¹	
4. <u>Bromus sp</u>	<u>20%</u>	<u>Dom</u>	<u>UPL</u>	<u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u>15 = 30 2 = 12 160 = Total Cover</u>				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	
Woody Vine Stratum (Plot size: <u> </u>)					
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>		
<u> </u> = Total Cover					
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>					

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: 6/4/2013
 Applicant/Owner: City of Los Angeles State: CA Sampling Point: 00010/000
 Investigator(s): Campbell/Belfelt Section, Township, Range: T 2 S, R 14 W Sausal Redondo Level ground
 Landform (hillslope, terrace, etc.): Brooks Ditch Local relief (concave, convex, none): flat bottom Slope (%): 0-1%
 Subregion (LRR): C ditch in leveled land Lat: 370564.051 Long: 3757822.461 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>The area is a man-made ditch (1949) that has recently been cleared of vegetation and surface soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>1/1 = 100%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>12.5 ft transect</u>)				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. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u>		% Cover of Biotic Crust <u> </u>		

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
 Investigator(s): MCC, ECC, Charleston/Rex Section, Township, Range: T.2 S, R.14 W SAUSAL REDONDO GRANT
 Landform (hillslope, terrace, etc.): 1-2' deep ditch in level land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370533.581 Long: 375762.906 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
 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 <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
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: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>2/2 = 100%</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>Visual estimate</u>) 1. <u>Non-native native grass</u> <u>80</u> 2. <u>herbaceous plant curly dock</u> <u>20</u> 3. <u>Echinocloa muricata</u> <u>80</u> <u>DOM</u> <u>FACW</u> 4. <u>Pennisetum setaceum</u> <u>20</u> <u>DOM</u> <u>FACW</u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> <u>5 = 50, 2 = 20</u> <u>100</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				

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: 0200-2003
 Investigator(s): MCC, ECC, Charlton, Alex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant D300
 Landform (hillslope, terrace, etc.): V-Brake Ditch in level land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370503.116 Long: 3757823.352 Datum: GCSNAD83
 Soil Map Unit Name: No Data NWI classification: R45BAx - 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 <u>X</u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u>X</u>
Hydric Soil Present?	Yes <u>X</u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u>X</u>			
Remarks: <u>The area is a man-made ditch (1949) that has recently been cleared of vegetation and surface soil.</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0% = 0%</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u>20</u> (A) <u>80</u> (B) Prevalence Index = B/A = <u>4</u>
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>Visual estimation</u>)				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.
1. <u>Phytolacca urtica</u>	<u>20%</u>			
2. <u>Erigeron canadensis</u>	<u>20%</u>	<u>DOM FACU</u>		
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
<u>15 = 10 12 = 4 20 = Total Cover</u>				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u>	% Cover of Biotic Crust <u> </u>			Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
Remarks: <u>24' track line ~ 20% herbaceous</u>				

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: 0400
 Investigator(s): MCC, EGG, Charlton / Rex Section, Township, Range: T 2 S, R 14 W Source: Google Earth
 Landform (hillslope, terrace, etc.): Brooks Ditch in wetland Local relief (concave, convex, none): flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370472.646 Long: 3757823.797 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 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 <u>X</u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u>X</u>	
Remarks: <u>The area is a man-made ditch (1949) that has recently been cleared of vegetation and surface soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0/1 = 0%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u>10</u> x 4 = <u>40</u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u>10</u> (A) <u>40</u> (B) Prevalence Index = B/A = <u>40/10 = 4</u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Indicators: <u> </u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>visual estimation</u>)				
1. <u>10% herbaceous</u>	<u>10%</u>	<u>DOM</u>	<u>FACU</u>	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
2. <u>ERigeron canadensis</u>	<u>10%</u>	<u>DOM</u>	<u>FACU</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks: <u>Wrack line ← 25'</u>
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>.5 = 5, .2 = 2</u> <u>10</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u>	% Cover of Biotic Crust <u> </u>			

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: 00500 0500
 Investigator(s): Campbell/Bretfelt Section, Township, Range: T 2 S, R 14 W Seussel Redondo Land Grant
 Landform (hillslope, terrace, etc.): 1/2 brooks Ditch in level bottom Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370442.176 Long: 3757824.243 Datum: GCSNAD83
 Soil Map Unit Name: No Data NWI classification: R45BAx - riparian


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 channel / veg removed

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

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>The area is a man-made ditch (1949) that has recently been cleared of vegetation and surface soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>2/2 = 100%</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
= Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>) 1. <u>IPEDAS</u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u>				
= Total Cover				
Herb Stratum (Plot size: <u>22 ft transect</u>) 1. <u>Setaria pumila</u> <u>14</u> <u>DOM</u> <u>FAC</u> 2. <u>Persicaria korthofia</u> <u>9</u> <u>DOM</u> <u>FACW</u> 3. <u> </u> 4. <u>Bare ground</u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> <u>15 = 11.5 12 = 4.6</u> <u>23</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> = Total Cover				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				
Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>				

Remarks:  veg had herbicide application (dy, n, g)

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: 00600
 Investigator(s): Campbell/Belfelt Section, Township, Range: T 2 S, R 14 W Sensal Redondo Land Grant
 Landform (hillslope, terrace, etc.): Argo ditch on leveled lot Local relief (concave, convex, none): Flat bottom Slope (%):
 Subregion (LRR): C Lat: 370411.705 Long: 3757824.688 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? (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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>Little - chip bags & ice cream wrappers throughout.</u> <u>1/4 inch sporadic clay deposition material on side slopes</u> <u>at 3 ft above channel bottom</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>10%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Hydrophytic Vegetation Indicators: <u> </u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>				

Sapling/Shrub Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u> = Total Cover			

Herb Stratum (Plot size: <u>26 ft transect</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>0 Bromus sp</u>	<u>33%</u>	<u>Dom</u>	<u>FacU</u>
2. <u>0 Briza Brizopyrum canadensis</u>	<u>11%</u>	<u>Dom</u>	<u>FacU</u>
3. <u>0 Bromus</u>	<u> </u>	<u> </u>	<u> </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>
8. <u>0 5 - 22 ft, 22 ft, 8</u>	<u>44%</u>	<u> </u>	<u> </u>
<u> </u> = Total Cover			

Woody Vine Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u> = Total Cover			

% Bare Ground in Herb Stratum % Cover of Biotic Crust

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 / Rix Section, Township, Range: T 2 S, R 14 W Seussal Rodado Land Grant
 Landform (hillslope, terrace, etc.): V-back ditch in flat land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370381.235 Long: 3757825.133 Datum: GCSNAD83
 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 <u>X</u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u>X</u>	
Remarks: <u>The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> <u>100%</u> (A/B)
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2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>25</u> x 4 = <u>100</u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u>35</u> (A) <u>130</u> (B) Prevalence Index = B/A = <u>3.3</u>
<u> </u> = Total Cover				
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<u> </u> = Total Cover				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
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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: 05000008
Investigator(s): MCC ECE Chanelton/Ror Section, Township, Range: T 2 S, R 14 W Sausal Redondo Blvd
Landform (hillslope, terrace, etc.): V-bank Ditch in field Local relief (concave, convex, none): Flat bottom Slope (%): 0-10%
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 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

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/>	No <input checked="" type="checkbox"/>			

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

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: <u>visual estimate</u>)				
1. <u>Erigeron canadensis</u>	<u>10</u>	<u>Dom</u>	<u>FACU</u>	
2. <u>Persicaria leptophylla</u>	<u>5</u>	<u>Dom</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>.5 = 7.5%</u>			<u>15</u> = 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:	<u>11</u> (A)
Total Number of Dominant Species Across All Strata:	<u>2</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100/50</u> (A/B)
Prevalence Index worksheet:	
Total % Cover of:	Multiply by:
OBL species _____ x 1 = _____	
FACW species <u>5</u> x 2 = <u>10</u>	
FAC species _____ x 3 = _____	
FACU species <u>10</u> x 4 = <u>40</u>	
UPL species _____ x 5 = _____	
Column Totals: <u>15</u> (A) <u>50</u> (B)	
Prevalence Index = B/A = <u>9.33</u>	
Hydrophytic Vegetation Indicators:	
<input checked="" type="checkbox"/> Dominance Test is >50%	
<input type="checkbox"/> Prevalence Index is ≤3.0 ¹	
<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <u>X</u>	

Remarks:

wreck line

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: 2720 900
 Investigator(s): MCC, ECC Charlton/Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land 0100
 Landform (hillslope, terrace, etc.): Grass ditch in level land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370320.294 Long: 3757826.024 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 <u>X</u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u>5</u> x 2 = <u>10</u> FAC species <u> </u> x 3 = <u> </u> FACU species <u>10</u> x 4 = <u>40</u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u>15</u> (A) <u>50</u> (B) Prevalence Index = B/A = <u>3.3</u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
<u> </u> = Total Cover				
<u> </u> = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				Hydrophytic Vegetation Present? Yes <u>X</u> No <u>X</u>
Remarks: <u> </u>				

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: 1000 000000
 Investigator(s): MCC-EEC charlton/lex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): V-bank Ditch in road Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370289.824 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 <u>X</u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		
Remarks: <u>The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u>5</u> x 2 = <u>10</u> FAC species <u> </u> x 3 = <u> </u> FACU species <u>10</u> x 4 = <u>40</u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u>15</u> (A) <u>50</u> (B) Prevalence Index = B/A = <u>3.3</u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				Hydrophytic Vegetation Present? Yes <u>X</u> No <u>X</u>
Remarks: <u> </u>				



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: 001100
Investigator(s): R. Campbell / J. Helfelt Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
Landform (hillslope, terrace, etc.): 1-15% Ditch in leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
Subregion (LRR): _____ Lat: 370259.353 Long: 3757926.915 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

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>		
Wetland Hydrology Present?	Yes <u>X</u> No _____		
Remarks: The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.			

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: 28 ft forset)						
1.	<i>Eriogonum Canadensis</i>	20%	Dom	FACW		
2.	<i>Bromus sp</i>	12%	Dom	FACW		
3.	<i>Raphanus sativus</i>	7%		UPL		
4.	<i>Plantago lanceolata</i>	5%		Fac		
5.						
6.						
7.						
8.						
5 = 22 20 = 8.4				44 = Total Cover		
Woody Vine Stratum (Plot size: _____)						
1.						
2.						
				_____ = Total Cover		
% Bare Ground in Herb Stratum _____		% Cover of Biotic Crust _____				
Remarks: 28 ft 75 23 2.5/20 14 plantago 13 9 ft 28 ft 35% ink tall or 10% an grass						

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 <u>25</u>	x 3 = <u>75</u> 10
FACU species <u>12</u> 20	x 4 = <u>48</u> 80
UPL species <u>19</u> 19	x 5 = <u>95</u> 95
Column Totals: <u>44</u> (A)	<u>138</u> 140 (B) 145

Prevalence Index = B/A = 3.6 28 4.2

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0¹

___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present?

Yes _____ No X

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 0012
 Investigator(s): MCC, EGG, Chilton, Rex Section, Township, Range: T. 2 S, R. 14 W Sausal Redondo land Grm
 Landform (hillslope, terrace, etc.): U-Brook Ditch in level AS Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370228.883 Long: 3757827.360 Datum: GCSNAD83
 Soil Map Unit Name: No Data NWI classification: R4S BAX - 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 <u>X</u>	No <u>X</u>	Is the Sampled Area within a Wetland?
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u>	No <u>X</u>	
Remarks: <u>The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100/50</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u>5</u> x 2 = <u>10</u> FAC species <u> </u> x 3 = <u> </u> FACU species <u>10</u> x 4 = <u>40</u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u>15</u> (A) <u>50</u> (B) Prevalence Index = B/A = <u>3.3</u>
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>Vernal estuary</u>)				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u> </u>				
2. <u>3m as 1000</u>				
3. <u>Erigeron canadensis</u>	<u>10</u>	<u>Dom</u>	<u>FACU</u>	
4. <u>Pericaria lapathifolia</u>	<u>5</u>	<u>Dom</u>	<u>FACW</u>	
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
<u>15</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u>	% Cover of Biotic Crust <u> </u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u>X</u>		
Remarks: <u> </u>				



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: 200-0013
 Investigator(s): MCC, ECC Charlton/Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Lindero
 Landform (hillslope, terrace, etc.): V-bank Ditch in level land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370190.412 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 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 <u>X</u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0' <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>visual estimate</u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u>X</u>
2. <u>Erigeron canadensis</u>	<u>10%</u>	<u>Dun</u>	<u>FAC</u>	
3. <u>Persicaria lapathifolia</u>	<u>5%</u>	<u>Dun</u>	<u>FACW</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				

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: 681400
 Investigator(s): Campbell / Belfelt Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): Bank Ditch in low 1st level Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370/67.94 Long: 3757828.187 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 0 (If no, explain in Remarks.)
 Are Vegetation X, Soil X, or Hydrology Yes significantly disturbed? Are "Normal Circumstances" present? Yes 0 No X
 Are Vegetation 0, Soil 0, or Hydrology 0 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 <u>0</u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u>0</u> No <u>X</u>
Hydric Soil Present?	Yes <u>0</u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u>0</u>	
Remarks: <u>fast food trash</u> 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	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)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ = Total Cover				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 = _____
Sapling/Shrub Stratum (Plot size: _____)				
1. <u>0</u>	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____ = Total Cover				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.
Herb Stratum (Plot size: <u>26ft transect</u>)				
1. <u>All species <5%</u>	_____	_____	_____	
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 _____		

Remarks: 0
5ft 10% tall ash 5ft 26ft 50ft tall ash
10% 10% 10% 19ft 22 25 10% dead but
9ft 8ft 125 R= dead with 40% R= 10% dead but

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: 1500 001500
 Investigator(s): MCC, ECC Cheriton/Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): Brooks ditch elevated bank Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370137.470 Long: 3757828.594 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 <u>X</u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	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.
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>Visual estimate</u>)				
1. <u>an. grass Bromus sp.</u>	<u>20%</u>	<u>Pom</u>	<u>OBL</u>	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
2. <u>Lythrum latifolium</u>	<u>15%</u>	<u>Dun</u>	<u>FACW</u>	
3. <u>Lupinus</u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>5 = 17.5 2 = 7 35 = Total Cover</u>				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				
Remarks: <u>271 track 1</u> <u>157. herbaceous</u> <u>20%</u>				

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: 1000 ft / 1600
 Investigator(s): MCC, ECC, J. Chertkoff / R. Chertkoff Section, Township, Range: T 2 S, R 14 W Sausal Redondo
 Landform (hillslope, terrace, etc.): Argo Ditch / low / flat Local relief (concave/convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): E Lat: 370106.999 Long: 3757829.000 Datum: GCS NAD 83
 Soil Map Unit Name: No Data NWI classification: R4 SBAx - 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 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 <u>X</u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u>X</u>
Hydric Soil Present?	Yes <u>X</u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u>X</u>			
Remarks: <u>The area is a man-made ditch (1949) that has recently been cleared of vegetation and soil.</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u>X</u> Prevalence Index is ≤3.0' <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>Visual estimate</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>20% annual grass</u>	<u>20</u>	<u>Dom</u>	<u>FACU</u>	
2. <u>10% Unk herbaceous perennials</u>	<u>10</u>	<u>Dom</u>	<u>FACU</u>	
3. <u>Echinocystis macrocarpa</u>	<u>20</u>	<u>Dom</u>	<u>FACU</u>	
4. <u>Erigeron canadensis</u>	<u>10</u>	<u>Dom</u>	<u>FACU</u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>15 = 15 10 = 10 30 = Total Cover</u>				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u>	% Cover of Biotic Crust <u> </u>			
Remarks: <u>herbaceous 27' grass</u>				

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: 4/8/13
 Applicant/Owner: City of Los Angeles State: CA Sampling Point: 201700
 Investigator(s): Campbell/Brettle Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): V-Brooks Ditch in level land Local relief (concave, convex, none): flat bottom Slope (%): 0-1%
 Subregion (LRR): V-Brooks 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 <u>X</u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		
Remarks: <u>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</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>2/3 = 67%</u> (A/B)																																				
1. <u> </u>																																								
2. <u> </u>																																								
3. <u> </u>																																								
4. <u> </u>																																								
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u>13</u> x 2 = <u>26</u> FAC species <u>8</u> x 3 = <u>24</u> FACU species <u>13</u> x 4 = <u>52</u> UPL species <u>2</u> x 5 = <u>10</u> Column Totals: <u>34</u> (A) <u>125</u> (B) Prevalence Index = B/A = <u>3.7</u>																																				
<u> </u> = Total Cover																																								
<u> </u> = Total Cover																																								
<u> </u> = Total Cover																																								
<u> </u> = Total Cover																																								
Herb Stratum (Plot size: <u>19 ft transect</u>) <table border="1"> <thead> <tr> <th>1. <u>Panicum laetifolium</u></th> <th>13%</th> <th>Dom</th> <th>FACW</th> </tr> </thead> <tbody> <tr> <td>2. <u>Bromus sp.</u></td> <td>13%</td> <th>Dom</th> <th>FACW</th> </tr> <tr> <td>3. <u>Setaria pumila</u></td> <td>8%</td> <th>Dom</th> <th>FACW</th> </tr> <tr><td>4. <u> </u></td><td></td><td></td><td></td></tr> <tr><td>5. <u> </u></td><td></td><td></td><td></td></tr> <tr><td>6. <u> </u></td><td></td><td></td><td></td></tr> <tr><td>7. <u> </u></td><td></td><td></td><td></td></tr> <tr><td>8. <u> </u></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"><u>50 17 20 6.8</u></td> <td colspan="2"><u>34</u> = Total Cover</td> </tr> </tbody> </table>					1. <u>Panicum laetifolium</u>	13%	Dom	FACW	2. <u>Bromus sp.</u>	13%	Dom	FACW	3. <u>Setaria pumila</u>	8%	Dom	FACW	4. <u> </u>				5. <u> </u>				6. <u> </u>				7. <u> </u>				8. <u> </u>				<u>50 17 20 6.8</u>		<u>34</u> = Total Cover	
1. <u>Panicum laetifolium</u>	13%	Dom	FACW																																					
2. <u>Bromus sp.</u>	13%	Dom	FACW																																					
3. <u>Setaria pumila</u>	8%	Dom	FACW																																					
4. <u> </u>																																								
5. <u> </u>																																								
6. <u> </u>																																								
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Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover																																								
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>																																								
Remarks: <u>5 ft all over 10% m grass 100 grass 76 ft 5.4 16 ft 100% m grass 15 ft 5% plant 95% m grass</u>																																								

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.

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 Grant
Landform (hillslope, terrace, etc.): flattened ditch in leveled area Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
Subregion (LRR): C Lat: 370046.057 Long: 3757829.776 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 ☒ No _____ (If no, explain in Remarks.)

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

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? ☒ (If needed, explain any answers in Remarks.) *Non-made ditch*

Hydrophytic Vegetation Present?	Yes <u>X</u> No _____	Is the Sampled Area within a Wetland?	Yes <u>X</u> No _____
Hydric Soil Present?	Yes <u>X</u> No _____		
Wetland Hydrology Present?	Yes <u>X</u> No _____		
Remarks: This area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil. berch from dip's down here			

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

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

Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <i>Pennisetum polystachion</i>	34%	Dom	FACW	
2. <i>Setaria pumila</i>	51%	1	FAC	
3. <i>Plantago lanceolata</i>	51%		FAC	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
			= Total Cover	

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

% Bare Ground in Herb Stratum _____

% Cover of Biotic Crust _____

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:

☒ Dominance Test is >50%

☐ Prevalence Index is ≤3.0¹

☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

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

% Bare Ground in Herb Stratum _____

% Cover of Biotic Crust _____

Hydrophytic Vegetation Present?

Yes ☒ No ☐

Remarks:

US Army Corps of Engineers

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 1900
 Applicant/Owner: City of Los Angeles State: CA Sampling Point: 1900 0019
 Investigator(s): MCC, EEE Charlton / Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): U Biotis Ditch in level land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 370015.584 Long: 3757829.678 Datum: GCSNAD83
 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		

Remarks: Duck weed present
full Grass
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: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				

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.

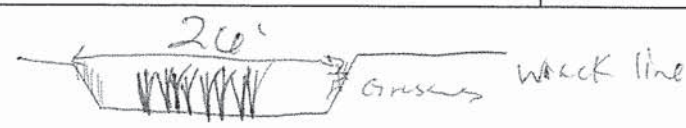
WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/4/13
 Applicant/Owner: City of Los Angeles State: CA Sampling Point: 2080 0020
 Investigator(s): MCC, FCC, Charleston/Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Level (W) 2000
 Landform (hillslope, terrace, etc.): broken ditch in leveled lot Local relief (concave, convex, none): Flatbottom Slope (%): 0-10%
 Subregion (LRR): C Lat: 36985.110 Long: 3757829.580 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? 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u>40</u> x 2 = <u>80</u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u>10/10</u> x 5 = <u>50</u> Column Totals: <u>50</u> (A) <u>130</u> (B) Prevalence Index = B/A = <u>2.6</u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>1m x 1m</u>) 1. <u>Echinochloa muricata</u> <u>40%</u> <u>Dom</u> <u>Fach</u> 2. <u>Bromus sp</u> <u>10%</u> <u>Dom</u> <u>Fach</u> 3. <u> </u> <u> </u> <u> </u> <u> </u> 4. <u> </u> <u> </u> <u> </u> <u> </u> 5. <u> </u> <u> </u> <u> </u> <u> </u> 6. <u> </u> <u> </u> <u> </u> <u> </u> 7. <u> </u> <u> </u> <u> </u> <u> </u> 8. <u> </u> <u> </u> <u> </u> <u> </u> <u>5225% 122/10</u> <u>50</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				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)
Remarks: <u>20'  water line</u>				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>

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 Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): Grates Ditch in level bed Local relief (concave, convex, none): Flat bottom Slope (%): 0-10%
 Subregion (LRR): C Lat: 369954.637 Long: 3757829.482 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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>8 ft transect</u>)				
1. <u>Bromus sp</u>	<u>88%</u>	<u>Dominant</u>	<u>FACU</u>	
2. <u>Pennisetum setosum</u>	<u>6 1/2%</u>	<u>Facu</u>	<u>Facu</u>	
3. <u> </u>				
4. <u> </u>				
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
<u>85 18.8</u> <u>94</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				

Remarks: 10% 05 100% dead angrass + short pod mixed together 5.5 100% short 100% same 8 ft short pod + angrasses dominant the bottom

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.): U-shaped ditch in level flat Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 369924.163 Long: 3757829.385 Datum: GCSNAD83
 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? (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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u>13</u> x 2 = <u>36</u> FAC species <u> </u> x 3 = <u> </u> FACU species <u>28</u> x 4 = <u> </u> UPL species <u>83</u> x 5 = <u>415</u> Column Totals: <u>96</u> (A) <u>451</u> (B) Prevalence Index = B/A = <u>4.7</u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>8 ft transect</u>) 1. <u>Bromus sp</u> <u>75%</u> <u>Dom</u> <u>Upl</u> 2. <u>Pennisetum latifolium</u> <u>15%</u> <u>Dom</u> <u>FACW</u> 3. <u>Centaurea solstitialis</u> <u>8%</u> <u>Upl</u> 4. <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> <u>92 48% 2. = 19.2</u> <u>96</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				

Remarks: 5' start hole 100% grass 5 ft 6 ft 100% grass 100% grass 36 ft 15

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: 2300
Investigator(s): MGG, EEC Charlatan / Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
Landform (hillslope, terrace, etc.): 4-6 foot Ditch integrated land Local relief (concave, convex, none): Flat bottom Slope (%): 0-10%
Subregion (LRR): C Lat: 369893.716 Long: 3757828.636 Datum: EGSNAD83
Soil Map Unit Name: No Data NWI classification: R45BAX - 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.) non made ditch

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u>_____</u> No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>		
Wetland Hydrology Present?	Yes _____ No <u>X</u>		
Remarks: The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.			

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

<u>Sapling/Shrub Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
	_____ = Total Cover		

<u>Herb Stratum</u> (Plot size: <u>Visual estimate at 19ft transect</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Cyperus</u>	50%		
2. <u>Vallisneria spiralis</u>	5%		
3. <u>Scyturus solstitialis</u>	40%	Dom	Upl
4. <u>Festuca perennis</u>	50%	Dom	Fac
5. <u>Perticaria lapathifolia</u>	5%		Fac
6. _____			
7. _____			
8. _____			
<u>.50 = 47.5 .2 = 19.6</u> _____ = Total Cover	95		

<u>Woody Vine Stratum</u> (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
	_____ = Total Cover		

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

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/5/13
 Applicant/Owner: City of Los Angeles State: CA Sampling Point: 2400
 Investigator(s): MECEG Charleston / Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): U-profile Ditch in level land Local relief (concave, convex, none): 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 <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			

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: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (AVB)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
Herb Stratum (Plot size: <u>Visual estimation of 23 ft transect</u>)				
1. <u>tall tall herbaceous B.</u>	<u>40%</u>	<u> </u>	<u> </u>	
2. <u>Pereskia latifolia</u>	<u>40%</u>	<u>Dom</u>	<u>FACW</u>	
<u> </u> = Total Cover				Remarks: 
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u>		% Cover of Biotic Crust <u> </u>		

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: 8/9/13
 Applicant/Owner: City of Los Angeles State: CA Sampling Point: 602500
 Investigator(s): Campbell / Breckert Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): broader 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: 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>23.5 ft transect</u>) 1. <u>Schoenoplectus californicus</u> <u>46%</u> <u>Dom</u> <u>OBL</u> 2. <u>Perfracta leptophylla</u> <u>34%</u> <u>Dom</u> <u>FACW</u> 3. <u> </u> 4. <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> <u>S = 40%</u> <u>2 = 6%</u> <u>80</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				
Remarks: <u>5 - mch/dact 8 100% 20%</u> <u>14/5m</u> <u>23.5 ft chen</u> <u>12ft</u> <u>9 ft tall vegetation</u>				

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): MCG, EEC, Bickel, Guzman, Kneff Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): in Argo Ditch in leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-10%
 Subregion (LRR): C Lat: 369802.637 Long: 3757820.877 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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u>55</u> x 5 = <u>275</u> Column Totals: <u>55</u> (A) <u>275</u> (B) Prevalence Index = B/A = <u>5</u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				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)
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				Remarks:
1Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				

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: 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 L, 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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u>10</u> x 2 = <u>20</u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u>30</u> x 5 = <u>150</u> Column Totals: <u>40</u> (A) <u>170</u> (B) Prevalence Index = B/A = <u>4.2</u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				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.
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> <u>15 = 20 + 2 = 8</u> <u>40%</u> = Total Cover				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
Remarks: <u>Wreck line</u> <u>28'</u> <u>Thistle type</u> <u>herbaceous unk</u>				

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: 2800
 Investigator(s): MCC, EEE Charlton / Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): 1-Brute 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

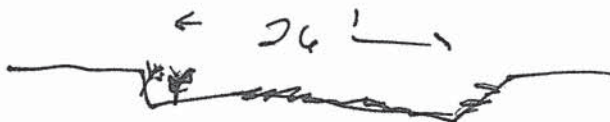
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u>80% grass</u>	<u>80%</u>	<u> </u>	<u> </u>	
2. <u>10% shrub</u>	<u>5%</u>	<u> </u>	<u> </u>	
3. <u>unk. herb</u>	<u>5%</u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>Visual estimate of 20' transect</u>)				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Festuca perennis</u>	<u>80%</u>	<u>Don</u>	<u>Fac</u>	
2. <u>Pentstemon solstitialis</u>	<u>5%</u>	<u>N</u>	<u> </u>	
3. <u>Pennisetum laetifolium</u>	<u>5%</u>	<u>N</u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				

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: 2900
 Investigator(s): Campbell / Bieffelt Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): Bar ditch Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 33.9711.839 Long: 118.17810.226 Datum: GLSNA83
 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				Remarks: <u>5 ft 100% ltr</u> <u>7 ft 50% ltr</u> <u>9 ft 60% ltr</u> <u>14 ft 90% ltr</u> <u>15 ft 50% mag/dec</u> <u>100% ltr</u> <u>18 ft 20% ltr</u>
1. <u> </u>				
2. <u> </u>				US Army Corps of Engineers
3. <u> </u>				
4. <u> </u>				Arid West – Version 2.0
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				

WETLAND DETERMINATION DATA FORM – Arid West Region

Photo
41

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 08/29/13
 Applicant/Owner: City of Los Angeles State: CA Sampling Point: 00300
 Investigator(s): Campbell/Beltz Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): brooks ditch in bed of 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u> </u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>17' transect</u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u>Persicaria lapathifolia</u>	<u>5%</u>	<u>Dom</u>	<u>FACW</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>5</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u>	% Cover of Biotic Crust <u> </u>			
Remarks: <u>2</u> <u>h- 5 ft. stork</u> <u>5 ft. bare</u> <u>90 ft. bare</u> <u>85% better</u> <u>12 75% mag 25% better</u> <u>11 ft</u> <u>9 ft 17</u> <u>5 ft</u> <u>73 ft</u>				

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: 3100
 Investigator(s): MCC, ECE Carleton / MEX Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): broader Ditch in level Local relief (concave, convex, none): Flat bottom Slope (%): 0-10%
 Subregion (LRR): C Lat: 369651.307 Long: 3757803-125 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 <u>X</u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u>X</u>			
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>1m x 1m</u>) 1. <u>Festuca perennis</u> <u>80%</u> <u>Dom</u> <u>Fac</u> 2. <u>Centaurea subterminalis</u> <u>10%</u> 3. <u> </u> 4. <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> <u>5 = 45 12 = 191</u> <u>90</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				
Remarks: <u>1'</u> <u>Thistle</u> <u>Grass</u>				

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): MCC, ECC, Charlton, Rex Section, Township, Range: T 2 S, R 14 W Jansal Redondo Land Gmt
 Landform (hillslope, terrace, etc.): V-Bottom Ditch in local relief Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 369621.047 Long: 3757799.575 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 <u>X</u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u> </u>
Hydric Soil Present?	Yes <u>X</u>	No <u> </u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)	
1. <u>15% Thick</u>	<u>15</u>				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u>25</u> x 2 = <u>50</u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u>15</u> x 5 = <u>75</u> Column Totals: <u>40</u> (A) <u>125</u> (B) Prevalence Index = B/A = <u>3.1</u>
2. <u>25% Thick</u>	<u>25</u>				
3. <u> </u>					
4. <u> </u>					
= Total Cover					
Sapling/Shrub Stratum (Plot size: <u> </u>)					
1. <u> </u>				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% <u>50%</u> ___ Prevalence Index is ≤3.0' <u>3.1</u> ___ 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.	
2. <u> </u>					
3. <u> </u>					
4. <u> </u>					
5. <u> </u>					
= Total Cover					
Herb Stratum (Plot size: <u>W. est. of 35' transect</u>)					
1. <u>Pennisetum laevifolium</u>	<u>25</u>	<u>Dom fac</u>			
2. <u>Cenchrus solstitialis</u>	<u>15%</u>	<u>Dom upl</u>			
3. <u> </u>					
4. <u> </u>					
5. <u> </u>					
6. <u> </u>					
7. <u> </u>					
8. <u> </u>					
<u>.5 = 20.2 = 8</u> <u>40</u> = Total Cover					
Woody Vine Stratum (Plot size: <u> </u>)					
1. <u> </u>				Hydrophytic Vegetation Present? Yes <u>X</u> No <u>X</u>	
2. <u> </u>					
= Total Cover					
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>					

Remarks:

25% wreck line
 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 a 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 Birkett/Guzman/Krith Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): 1/2 Banks Ditch in landscape Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 36.9590.766 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 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present? Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>16.5' transect</u>) 1. <u>Persicaria lapathifolia</u> <u>24</u> <u>Dom</u> <u>Pach</u> 2. <u>Festuca perennis</u> <u>8</u> <u>Dom</u> <u>Eal</u> 3. <u> </u> <u> </u> <u> </u> <u> </u> 4. <u> </u> <u> </u> <u> </u> <u> </u> 5. <u> </u> <u> </u> <u> </u> <u> </u> 6. <u> </u> <u> </u> <u> </u> <u> </u> 7. <u> </u> <u> </u> <u> </u> <u> </u> 8. <u> </u> <u> </u> <u> </u> <u> </u> <u>22.6.4%</u> <u>32</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u> Remarks: <u>Festuca perennis</u> <u>55 persi</u> <u>60. persi</u> <u>50% star</u> <u>51. plantago</u> <u>51. unguis</u> <u>2.5</u> <u>58</u> <u>98t.</u> <u>136t.</u> <u>16.5st</u>				

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): MCC, ECG, Biel, Selt, Guzman, Kmetz Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): Argo Ditch on leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 369560-476 Long: 3757792-760 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u> </u>) 1. <u>Festuca perennis</u> 20 Dom Fac 2. <u>Pennisetum setaceum</u> 18 Dom Fac 3. <u>Cyperus eragrostis</u> 14 Dom Fac 4. <u>Setaria pumila</u> 5 <u> </u> <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> <u>5 = 28.5 2 = 11.4 57 = Total Cover</u>				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				
Remarks: <u>Festuca 60% persi 10% persi 30% sedge 5% plantago 70% sedge 30% persi 40% seta 30% unk grass veg. is dying</u> <u>36% 58% 7.5% 9% 10.5% 13%</u> <u>vegetation dying</u>				

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): MCC, EEC, Chertlen, Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): V-Brooks Ditch in local flat Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 36°53'0.18" Long: 118°17'42.5" Datum: GCS NAD 83
 Soil Map Unit Name: No Data NWI classification: R4SBAv - 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u>40% Unk. herbs</u>	<u>40</u>	<u> </u>	<u> </u>	
2. <u>5% thistle</u>	<u>5</u>	<u> </u>	<u> </u>	
3. <u>10% grass</u>	<u>10</u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>vis. est. of 32' transect</u>)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Persicaria lapathifolia</u>	<u>40</u>	<u>OBL</u>	<u>FACW</u>	
2. <u>Festuca perennis</u>	<u>10</u>	<u> </u>	<u>FACW</u>	
3. <u>Centaurea solstitialis</u>	<u>5</u>	<u> </u>	<u>UPL</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				
Remarks: <u>Concrete</u>  <u>40% 4' high unk. herbaceous</u>				

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: 8600
 Investigator(s): MCC, EGG, Charlton/Rex Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): U-shaped Ditch in level (flat) Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 369499.894 Long: 3757786.089 Datum: GCSNAD83
 Soil Map Unit Name: No Data NWI classification: R45BAX - 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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>7 1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Indicators: <u> </u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>2090 thicket</u>	<u> </u>	<u> </u>	<u> </u>	
2. <u>1570 unk. herb</u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>Wind est of 28' transect</u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u>Centaurea solstitialis</u>	<u>20</u>	<u>Dom</u>	<u>Upl</u>	
2. <u>Persicaria lapathifolia</u>	<u>15</u>	<u>Dom</u>	<u>FACU</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>.5 = 17.5 .2 = 7%</u> <u>35</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				
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: 003700
 Investigator(s): Lampbell / Brubaker Section, Township, Range: T 2 S, R 14 W San Gabriel River
 Landform (hillslope, terrace, etc.): W. brook ditch in leveled land Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 36°46'50.4" Long: 118°17'52.75" Datum: GCS NAD 83
 Soil Map Unit Name: No Data NWI classification: R45BA 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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: <u>The area is a man-made ditch (ditch) that is periodically cleared of vegetation & surface soil. bifurcated channel</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u>6</u> x 2 = <u>12</u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u>42</u> x 5 = <u>210</u> Column Totals: <u>48</u> (A) <u>222</u> (B) Prevalence Index = B/A = <u>4.6</u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>22 ft transect</u>) 1. <u>Centaurea solstitialis</u> <u>42%</u> <u>Dom</u> <u>UPL</u> 2. <u>Perovskia latifolia</u> <u>6</u> <u> </u> <u>FACW</u> 3. <u> </u> <u> </u> <u> </u> <u> </u> 4. <u> </u> <u> </u> <u> </u> <u> </u> 5. <u> </u> <u> </u> <u> </u> <u> </u> 6. <u> </u> <u> </u> <u> </u> <u> </u> 7. <u> </u> <u> </u> <u> </u> <u> </u> 8. <u> </u> <u> </u> <u> </u> <u> </u> <u>Σ = 48%</u> <u>Σ = 9.5%</u> <u>48</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u> Remarks: <u>5-65% 2ft 100% 100% 5ft 6-50% 40-60% 100% 13 10 100% 1ft 100% star 22</u> <u>h- 90 litter 20 20</u> <u>13 4ft 17</u>				

Arid West – Version 2.0

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 4500
 Investigator(s): MCC, ECC, Cherlton/Rex Section, Township, Range: T 2 S, R 14 W Sausalito/Refugio Lind 4000
 Landform (hillslope, terrace, etc.): V-Brakes Ditch in lowland Local relief (concave, convex, none): Flat bottom Slope (%): 0-10%
 Subregion (LRR): C Lat: 369378.732 Long: 3757772.746 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
= Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u> </u>) 1. <u>Willow</u> <u>Willow</u> <u>30%</u> <u>Dom</u> 2. <u>Sedix edigna</u> <u>30%</u> <u>Dom</u> 3. <u> </u> 4. <u> </u> 5. <u> </u>				
= Total Cover				
Herb Stratum (Plot size: <u>usual est</u>) 1. <u>Sedges</u> <u>30%</u> 2. <u>Cattail</u> <u>30%</u> 3. <u>duck weed</u> 4. <u>typha angustifolia</u> <u>30%</u> <u>Dom</u> 5. <u>Scheuchzeria palustris</u> <u>30%</u> <u>Dom</u> 6. <u> </u> 7. <u> </u> 8. <u> </u>				
= Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u>				
= Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				
Remarks: <u>Sedges, willows, cattails</u> <u>3" of water on top of muck</u> <u>12' high willow</u> <u> </u>				

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 600 ECC THK
 Investigator(s): MCC, ECC, Chilton/Kerr Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): 6-Brooks Ditch on level land Local relief (concave, convex, none): Flat bottom Slope (%): 0-10%
 Subregion (LRR): C Lat: 369482-533 Long: 3757783-280 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 ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil ☒, or Hydrology ☒ significantly disturbed? 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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
1. _____				
2. _____				
3. _____				
4. _____				
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>50</u> x 3 = <u>150</u> FACU species _____ x 4 = _____ UPL species <u>90</u> x 5 = <u>450</u> Column Totals: <u>90</u> (A) <u>350</u> (B) Prevalence Index = B/A = <u>3.8</u>
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
Herb Stratum (Plot size: <u>22ft transect</u>) 1. <u>Yellow Star Thistle</u> <u>40</u> <u>Dom</u> <u>UPL</u> 2. <u>Bromus</u> <u>50</u> <u>Dom</u> <u>UPL</u> 3. <u>Festuca perennis</u> <u>50</u> <u>Dom</u> <u>FAC</u> 4. <u>Centauria solstitialis</u> <u>40</u> <u>Dom</u> <u>UPL</u> 5. _____ 6. _____ 7. _____ 8. _____ <u>.5 = 45 .2 = 18%</u> <u>90</u> = Total Cover				
Woody Vine Stratum (Plot size: _____) 1. _____ 2. _____ _____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				
Remarks: <u>20' west of edge, dry dead bromus</u> <u>22' width, 40% star thistle, 19% smartweed,</u>				

WETLAND DETERMINATION DATA FORM – Arid West Region

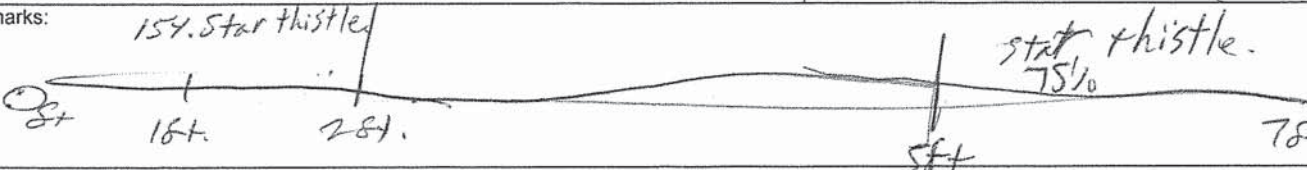
Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug, 2013
 Applicant/Owner: City of Los Angeles State: CA Sampling Point: 200A 4450
 Investigator(s): MCC, ECC, Belfelt, Guzman Section, Township, Range: T 2 S, R 14 W
 Landform (hillslope, terrace, etc.): Flat V-bottom ditch Local relief (concave, convex, none): Flat bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 36 9250.245 Long: 375 7758.214 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 <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		
Remarks: <u>The area is a man-made ditch (1949) that is periodically cleared of vegetation and surface soil.</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>12</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u>24</u> x 5 = <u>120</u> Column Totals: <u>24</u> (A) <u>120</u> (B) Prevalence Index = B/A = <u>5</u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>7ft transect</u>) 1. <u>Centaurea solstitialis</u> <u>24%</u> <u>Dom</u> <u>Upl</u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> <u>24</u> = Total Cover				Hydrophytic Vegetation Indicators: <u> </u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <u> </u> = Total Cover				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				
Remarks: <u>154 Star thistle</u> 				

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
 Investigator(s): MCC, EEC, Bielfelt / Guzman Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): 1/4 acre ditch in level Local relief (concave, convex, none): Flat Slope (%): 0-1%
 Subregion (LRR): C Lat: 36.9229.830 Long: 325.7755.648 Datum: GCS NAD83
 Soil Map Unit Name: No Data NWI classification: R4SBA x riparian

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.) Concrete culvert

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

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: <u>Water dripping in from culvert above the plants</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>2/2 = 100%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>14 ft transect</u>)				
1. <u>Persicaria lapathifolia</u>	<u>30%</u>	<u>DOM</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Echinodorus maculatus</u>	<u>22%</u>	<u>DOM</u>	<u>FACW</u>	
3. <u>Setaria pumila</u>	<u>6%</u>	<u> </u>	<u>FAC</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>19 = 29 12 = 11.6 58 = Total Cover</u>				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Remarks: <u>5% persi 10% seta dead Astar.</u> <u>10% seta 20% persi 118 ft 176 ft 195 ft</u> <u>85% Echa 5 ft. 176 ft 195 ft</u> <u>0.8% 2nd 5 ft. 176 ft 195 ft</u>
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				

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): MCC, EEC, Bielefeldt / Guzman Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): Argo Ditch in kuleland Local relief (concave, convex, none): Flat, bottom Slope (%): 0-1%
 Subregion (LRR): C Lat: 369210.444 Long: 3757753.662 Datum: GCSNAD83
 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 ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation ☒ Soil ☐ or Hydrology ☒ significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
 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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. _____				
2. _____				
3. _____				
4. _____				
				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 <u>27</u> x 5 = <u>135</u> Column Totals: <u>27</u> (A) <u>135</u> (B) Prevalence Index = B/A = <u>5</u>
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				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)
Herb Stratum (Plot size: <u>61 ft x 61 ft</u>)				
1. <u>Centaurea solstitialis</u>	<u>27%</u>	<u>Dom</u>	<u>UPL</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				
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: Seg 6.5 Age center
 Investigator(s): MCC, ETC Charlton/Konett Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): V-brake Ditch in level land Local relief (concave, convex, none): Flat Slope (%): 0-1%
 Subregion (LRR): C Lat: 36.8948779 Long: 118.17224330 Datum: GCS NAD83
 Soil Map Unit Name: No Data NWI classification: R4SBA x 1.1
 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u>Calif. Bulbous?</u>	<u>95%</u>	<u>mixed</u>		
2. <u>Bushes</u>	<u>50%</u>			
3. <u>Plants</u>	<u>1%</u>			
4. <u>House weed</u>	<u>5%</u>			
<u>100%</u> = Total Cover				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>15 x 7.5 ft</u>)				
1. <u>Schoenoplectus californicus</u>	<u>95</u>	<u>Dom</u>	<u>Obl</u>	
2. <u>Festuca perennis</u>	<u>50</u>	<u>Dom</u>	<u>Fac</u>	
3. <u>Eriogonum canadensis</u>	<u>5</u>			
4. <u> </u>				
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
<u>150</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				
Remarks: <u>center of wetland</u>				

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: 5800
 Investigator(s): MCC, ECE Bielsoth/Guzman Section, Township, Range: T 2 S, R 14 W
 Landform (hillslope, terrace, etc.): Wetlands ditch in backland Local relief (concave, convex, none): Flat Slope (%):
 Subregion (LRR): C Lat: 36.8833.549 Long: 375.7712.427 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 <u>X</u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u>X</u>	No <u>X</u>
Hydric Soil Present?	Yes <u>X</u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u>X</u>	No <u> </u>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
<u> </u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u> </u>)				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u>13</u> x 3 = <u>39</u> FACU species <u>5</u> x 4 = <u>20</u> UPL species <u>7</u> x 5 = <u>35</u> Column Totals: <u>25</u> (A) <u>94</u> (B) Prevalence Index = B/A = <u>4.2</u>
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u>1 M transect</u>)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Centauria solstitialis</u>	<u>7%</u>	<u>DOM</u>	<u>UPL</u>	
2. <u>Setaria pumila</u>	<u>7%</u>	<u>DOM</u>	<u>FAC</u>	
3. <u>Fertuca perennis</u>	<u>6%</u>	<u>DOM</u>	<u>FAC</u>	
4. <u>Ertgeron canadensis</u>	<u>5%</u>	<u>DOM</u>	<u>FACU</u>	
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
<u>.5 = 12.5 .2 = 5 25</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>				
2. <u> </u>				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				
Remarks: <u>40% star</u> <u>2.5 St.</u> <u>6.5 St.</u> <u>7.5 St.</u> <u>9.5 St.</u> <u>10.5 St.</u> <u>11.5 St.</u> <u>12.5 St.</u> <u>13.5 St.</u> <u>14.5 St.</u> <u>15.5 St.</u> <u>16.5 St.</u> <u>17.5 St.</u> <u>18.5 St.</u> <u>19.5 St.</u> <u>20.5 St.</u> <u>21.5 St.</u> <u>22.5 St.</u> <u>23.5 St.</u> <u>24.5 St.</u> <u>25.5 St.</u> <u>26.5 St.</u> <u>27.5 St.</u> <u>28.5 St.</u> <u>29.5 St.</u> <u>30.5 St.</u> <u>31.5 St.</u> <u>32.5 St.</u> <u>33.5 St.</u> <u>34.5 St.</u> <u>35.5 St.</u> <u>36.5 St.</u> <u>37.5 St.</u> <u>38.5 St.</u> <u>39.5 St.</u> <u>40.5 St.</u> <u>41.5 St.</u> <u>42.5 St.</u> <u>43.5 St.</u> <u>44.5 St.</u> <u>45.5 St.</u> <u>46.5 St.</u> <u>47.5 St.</u> <u>48.5 St.</u> <u>49.5 St.</u> <u>50.5 St.</u> <u>51.5 St.</u> <u>52.5 St.</u> <u>53.5 St.</u> <u>54.5 St.</u> <u>55.5 St.</u> <u>56.5 St.</u> <u>57.5 St.</u> <u>58.5 St.</u> <u>59.5 St.</u> <u>60.5 St.</u> <u>61.5 St.</u> <u>62.5 St.</u> <u>63.5 St.</u> <u>64.5 St.</u> <u>65.5 St.</u> <u>66.5 St.</u> <u>67.5 St.</u> <u>68.5 St.</u> <u>69.5 St.</u> <u>70.5 St.</u> <u>71.5 St.</u> <u>72.5 St.</u> <u>73.5 St.</u> <u>74.5 St.</u> <u>75.5 St.</u> <u>76.5 St.</u> <u>77.5 St.</u> <u>78.5 St.</u> <u>79.5 St.</u> <u>80.5 St.</u> <u>81.5 St.</u> <u>82.5 St.</u> <u>83.5 St.</u> <u>84.5 St.</u> <u>85.5 St.</u> <u>86.5 St.</u> <u>87.5 St.</u> <u>88.5 St.</u> <u>89.5 St.</u> <u>90.5 St.</u> <u>91.5 St.</u> <u>92.5 St.</u> <u>93.5 St.</u> <u>94.5 St.</u> <u>95.5 St.</u> <u>96.5 St.</u> <u>97.5 St.</u> <u>98.5 St.</u> <u>99.5 St.</u> <u>100.5 St.</u> <u>101.5 St.</u> <u>102.5 St.</u> <u>103.5 St.</u> <u>104.5 St.</u> <u>105.5 St.</u> <u>106.5 St.</u> <u>107.5 St.</u> <u>108.5 St.</u> <u>109.5 St.</u> <u>110.5 St.</u> <u>111.5 St.</u> <u>112.5 St.</u> <u>113.5 St.</u> <u>114.5 St.</u> <u>115.5 St.</u> <u>116.5 St.</u> <u>117.5 St.</u> <u>118.5 St.</u> <u>119.5 St.</u> <u>120.5 St.</u> <u>121.5 St.</u> <u>122.5 St.</u> <u>123.5 St.</u> <u>124.5 St.</u> <u>125.5 St.</u> <u>126.5 St.</u> <u>127.5 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<u>186.5 St.</u> <u>187.5 St.</u> <u>188.5 St.</u> <u>189.5 St.</u> <u>190.5 St.</u> <u>191.5 St.</u> <u>192.5 St.</u> <u>193.5 St.</u> <u>194.5 St.</u> <u>195.5 St.</u> <u>196.5 St.</u> <u>197.5 St.</u> <u>198.5 St.</u> <u>199.5 St.</u> <u>200.5 St.</u> <u>201.5 St.</u> <u>202.5 St.</u> <u>203.5 St.</u> <u>204.5 St.</u> <u>205.5 St.</u> <u>206.5 St.</u> <u>207.5 St.</u> <u>208.5 St.</u> <u>209.5 St.</u> <u>210.5 St.</u> <u>211.5 St.</u> <u>212.5 St.</u> <u>213.5 St.</u> <u>214.5 St.</u> <u>215.5 St.</u> <u>216.5 St.</u> <u>217.5 St.</u> <u>218.5 St.</u> <u>219.5 St.</u> <u>220.5 St.</u> <u>221.5 St.</u> <u>222.5 St.</u> <u>223.5 St.</u> <u>224.5 St.</u> <u>225.5 St.</u> <u>226.5 St.</u> <u>227.5 St.</u> <u>228.5 St.</u> <u>229.5 St.</u> <u>230.5 St.</u> <u>231.5 St.</u> <u>232.5 St.</u> <u>233.5 St.</u> <u>234.5 St.</u> <u>235.5 St.</u> <u>236.5 St.</u> <u>237.5 St.</u> <u>238.5 St.</u> <u>239.5 St.</u> <u>240.5 St.</u> <u>241.5 St.</u> <u>242.5 St.</u> <u>243.5 St.</u> <u>244.5 St.</u> <u>245.5 St.</u> <u>246.5 St.</u> <u>247.5 St.</u> <u>248.5 St.</u> <u>249.5 St.</u> <u>250.5 St.</u> <u>251.5 St.</u> <u>252.5 St.</u> <u>253.5 St.</u> <u>254.5 St.</u> <u>255.5 St.</u> <u>256.5 St.</u> <u>257.5 St.</u> <u>258.5 St.</u> <u>259.5 St.</u> <u>260.5 St.</u> <u>261.5 St.</u> <u>262.5 St.</u> <u>263.5 St.</u> <u>264.5 St.</u> <u>265.5 St.</u> <u>266.5 St.</u> <u>267.5 St.</u> <u>268.5 St.</u> <u>269.5 St.</u> <u>270.5 St.</u> <u>271.5 St.</u> <u>272.5 St.</u> <u>273.5 St.</u> <u>274.5 St.</u> <u>275.5 St.</u> <u>276.5 St.</u> <u>277.5 St.</u> <u>278.5 St.</u> <u>279.5 St.</u> <u>280.5 St.</u> <u>281.5 St.</u> <u>282.5 St.</u> <u>283.5 St.</u> <u>284.5 St.</u> <u>285.5 St.</u> <u>286.5 St.</u> <u>287.5 St.</u> <u>288.5 St.</u> <u>289.5 St.</u> <u>290.5 St.</u> <u>291.5 St.</u> <u>292.5 St.</u> <u>293.5 St.</u> <u>294.5 St.</u> <u>295.5 St.</u> <u>296.5 St.</u> <u>297.5 St.</u> <u>298.5 St.</u> <u>299.5 St.</u> <u>300.5 St.</u> <u>301.5 St.</u> <u>302.5 St.</u> 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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: 20540-0105901
Investigator(s): MCC, EEC - Biel/Belt/Guzman Section, Township, Range: T 2 S, R 14 W Sausal Redondo Lind Grant
Landform (hillslope, terrace, etc.): U-shaped ditch in level land Local relief (concave, convex, none): Flat Slope (%): 0-1%
Subregion (LRR): C Lat: 368803.256 Long: 3757709.110 Datum: GCSNAD83
Soil Map Unit Name: No Data NWI classification: R45BA 1/10/10
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.) normal ditch

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u>X</u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Remarks:	

Tree Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
		_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
		_____ = Total Cover		
Herb Stratum (Plot size: <u>161 transect</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Plantago lanceolata</u>	<u>9</u>	<u>Dom</u>	<u>Fac</u>
2.	<u>Centaurea solstitialis</u>	<u>8</u>	<u>Dom</u>	<u>Upl</u>
3.	<u>Festuca perennis</u>	<u>6</u>	<u>Dom</u>	<u>Fac</u>
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
<u>52 U.S.K. 122 9.6%</u>		<u>23</u>	_____ = Total Cover	
Woody Vine Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
		_____ = Total Cover		
% Bare Ground in Herb Stratum _____		% Cover of Biotic Crust _____		
Remarks: _____				

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: 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:

☒ Dominance Test is >50%

☐ Prevalence Index is ≤3.0¹

☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

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

Hydrophytic Vegetation Present? Yes ☒ No ☐

50% Star | 2.5% Plantago | 3.5% Plantago | 4.5% Plantago | 30% Barnyard | 7.5% Festuca | 10.5% Festuca | 11.5% Plantago | 100% Plantago | 16.5% Plantago

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug 2013
 Applicant/Owner: City of Los Angeles State: CA Sampling Point: 006000 6000
 Investigator(s): MCC, EGG, Biel Selt, Gorman Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): 1/2 brkly ditch, leveled land Local relief (concave, convex, none): flat Slope (%): 0-1
 Subregion (LRR): C Lat: 36.8772.963 Long: 3757705.792 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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Sapling/Shrub Stratum (Plot size: <u> </u>) = Total Cover				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks: <u>60% star 50% horse setta 55% star 50% star 20% Crony 5 Fescue</u> <u>15% setta 25% 2.5 4 4-8 55 61 108. 13f.</u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Woody Vine Stratum (Plot size: <u> </u>) = Total Cover
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks: <u>60% star 50% horse setta 55% star 50% star 20% Crony 5 Fescue</u> <u>15% setta 25% 2.5 4 4-8 55 61 108. 13f.</u>
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Herb Stratum (Plot size: <u>13' transect</u>) = Total Cover				Remarks: <u>60% star 50% horse setta 55% star 50% star 20% Crony 5 Fescue</u> <u>15% setta 25% 2.5 4 4-8 55 61 108. 13f.</u>
1. <u>Centaurea sulcistylis</u>	<u>25%</u>	<u>Dom</u>	<u>Upl</u>	
2. <u>Festuca perennis</u>	<u>7%</u>	<u>Dom</u>	<u>Fac</u>	Remarks: <u>60% star 50% horse setta 55% star 50% star 20% Crony 5 Fescue</u> <u>15% setta 25% 2.5 4 4-8 55 61 108. 13f.</u>
3. <u>Setaria pumila</u>	<u>6 1/2</u>	<u>Dom</u>	<u>Fac</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks: <u>60% star 50% horse setta 55% star 50% star 20% Crony 5 Fescue</u> <u>15% setta 25% 2.5 4 4-8 55 61 108. 13f.</u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks: <u>60% star 50% horse setta 55% star 50% star 20% Crony 5 Fescue</u> <u>15% setta 25% 2.5 4 4-8 55 61 108. 13f.</u>
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks: <u>60% star 50% horse setta 55% star 50% star 20% Crony 5 Fescue</u> <u>15% setta 25% 2.5 4 4-8 55 61 108. 13f.</u>
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Woody Vine Stratum (Plot size: <u> </u>) = Total Cover				Remarks: <u>60% star 50% horse setta 55% star 50% star 20% Crony 5 Fescue</u> <u>15% setta 25% 2.5 4 4-8 55 61 108. 13f.</u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks: <u>60% star 50% horse setta 55% star 50% star 20% Crony 5 Fescue</u> <u>15% setta 25% 2.5 4 4-8 55 61 108. 13f.</u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				Remarks: <u>60% star 50% horse setta 55% star 50% star 20% Crony 5 Fescue</u> <u>15% setta 25% 2.5 4 4-8 55 61 108. 13f.</u>
Remarks: <u>60% star 50% horse setta 55% star 50% star 20% Crony 5 Fescue</u> <u>15% setta 25% 2.5 4 4-8 55 61 108. 13f.</u>				

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 Belfelt/Guzman State: CA Sampling Point: 6400
 Investigator(s): MCC, ECC Chaffin/Kenneth Section, Township, Range: T 2 S, R 14 W Sausal Redondo Land Grant
 Landform (hillslope, terrace, etc.): V-brake Ditch Local relief (concave, convex, none): Flat Slope (%): 0-1
 Subregion (LRR): C Lat: 368657.787 Long: 3757692.573 Datum: GCSNAD83
 Soil Map Unit Name: No Data NWI classification: R4SBA x vltm

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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u> </u>				
2. <u> </u>				
3. <u> </u>				
4. <u> </u>				
<u> </u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u> </u> x 4 = <u> </u> UPL species <u> </u> x 5 = <u> </u> Column Totals: <u> </u> (A) <u> </u> (B) Prevalence Index = B/A = <u> </u>
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u>Salix exigua</u>	<u>20</u>	<u>Dom</u>	<u>Obl</u>	
2. <u> </u>				
3. <u> </u>				
<u>20</u> = Total Cover				
Herb Stratum (Plot size: <u>336+ transect</u>)				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <u>Typha domingensis</u>	<u>35%</u>	<u>Dom</u>	<u>Obl</u>	
2. <u>Salix exigua</u>	<u>20%</u>	<u>Dom</u>	<u>Obl</u>	
3. <u>Carpobrotus edulis</u>	<u>6%</u>	<u>FACU</u>		
4. <u>Cyperus vactylon</u>	<u>5%</u>	<u>FACU</u>		
<u>503% = 18.2</u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u> </u>				
2. <u> </u>				
<u> </u> = Total Cover				
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				
Remarks: <u>100% Ice</u> <u>100% Salix</u> <u>95% So Cat</u> <u>57% Bull</u> <u>90% Demunda</u> <u>75% Salix exigua</u> <u>26%</u> <u>56%</u> <u>5% So Cat</u> <u>28%</u> <u>15% Broom</u> <u>38%</u> <u>26%</u> <u>56%</u> <u>5%</u> <u>28%</u> <u>15%</u> <u>38%</u>				

WETLAND DETERMINATION DATA FORM – Arid West Region

LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 13 Aug 2017
 Owner: City of Los Angeles State: CA Sampling Point: 6560
 Operator(s): MCE, ECC, Nic/Solt/Guzman Section, Township, Range: T 2 S, R 14 W San Gabriel Redondo Land Grant
 Form (hillslope, terrace, etc.): Utrero ditch adjacent to road Local relief (concave, convex, none): Flat Slope (%): 0-1
 Region (LRR): C Lat: 368621.491 Long: 3757689.288 Datum: GCS NAD83
 Soil Map Unit Name: No Data NWI classification: R45BA x rising

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? Are "Normal Circumstances" present? Yes ☐ No ☒
 Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.) no/normal dte

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

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
1. _____				
2. _____				
3. _____				
4. _____				
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>17</u> x 3 = <u>51</u> FACU species _____ x 4 = _____ UPL species <u>26</u> x 5 = <u>130</u> Column Totals: <u>43</u> (A) <u>181</u> (B) Prevalence Index = B/A = <u>4.2</u>
_____ = Total Cover				
1. _____				
2. _____				
3. _____				
_____ = Total Cover				
_____ = Total Cover				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)
_____ = Total Cover				
1. _____				
2. _____				
3. _____				
_____ = Total Cover				
_____ = Total Cover				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				
Remarks:				

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: LAX Runway Safety Area/Argo Ditch City/County: City of Los Angeles Sampling Date: 8/17/13
 Applicant/Owner: City of Los Angeles State: CA Sampling Point: 9150 ECC
 Investigator(s): MCG, EGC, Char/ton/Kenneth Section, Township, Range: T 2 S, R 14 W Sausal Redondo THK
 Landform (hillslope, terrace, etc.): W-Grades Ditch Local relief (concave, convex, none): Flat Slope (%): 0-1%
 Subregion (LRR): C Lat: 367815.935 Long: 3757602.168 Datum: GCSNAD83
 Soil Map Unit Name: No Data NWI classification: R4SBA1

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 <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>		
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>		
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				Hydrophytic Vegetation Indicators: <u> </u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0' <u> </u> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
Sapling/Shrub Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Herb Stratum (Plot size: <u> </u>)				
1. <u>Bermuda Cynodon dactylon</u>	<u> </u>	<u> </u>	<u>FACU</u>	Remarks: <u>Willows 10 ft up Southern bank from base around runway drain</u> <u>—bare ground—</u>
2. <u>Plantain Plantago lanceolata</u>	<u> </u>	<u> </u>	<u>FAC</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Remarks:
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u> </u> % Cover of Biotic Crust <u> </u>				

27500

ЕСС
СТНК

man made bitch

Remarks:

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				_____ = Total Cover
Sapling/Shrub Stratum (Plot size: _____)				
1. <u>muskeget</u>	<u>2%</u>	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
				_____ = Total Cover
Herb Stratum (Plot size: <u>10m x 10m</u>)				
1. <u>All plants</u>	<u>< 2%</u>	_____	_____	
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 <u>X</u>	

Remarks:

marks:

← z

mudflat

silt sand

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 pit from road
 Investigator(s): AAL + JRM Section, Township, Range: T 2 S, R 14 W 9800 west road
 Landform (hillslope, terrace, etc.): Ditch unpaved/flat Local relief (concave, convex, none): Flat Slope (%): 0-1%
 Subregion (LRR): C Lat: 36.7620.757 Long: 3757550.944 Datum: GCSNAD 83
 Soil Map Unit Name: No Data NWI classification: R4 SB/A x Mhmm

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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	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)
1. _____				
2. _____				
3. _____				
4. _____				
				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 = _____
= Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
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)
= Total Cover				
Herb Stratum (Plot size: 10m transect)				
1. <i>Avena barbata</i>	17	DOM	UPL	
2. <i>Erodium cicutarium</i>	17	DOM	UPL	
3. <i>Centaurea solstitialis</i>	12	DOM	UPL	
4. <i>Festuca myuros</i>	8			
5. <i>Salicula tragus</i>	2			
6. <i>Bromus madritensis</i>	2			
7. <i>Bromus diandrus</i>	1			
8. <i>Heterotheca grandiflora</i>	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 _____				
Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
Remarks:				

