GLENN LUKOS ASSOCIATES

Regulatory Services

November 9, 2012

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SUBJECT: Jurisdictional Delineation Report for the San Jacinto MDP Line C Stage 2, B and C-5 Project, City of San Jacinto, Riverside County, California.

Dear Ms. DeGano:

This letter report summarizes our preliminary findings of U.S. Army Corps of Engineers (Corps) and California Department of Fish and Game (CDFG) jurisdiction for the above-referenced property.

The San Jacinto Master Drainage Plan (MDP) Line C Stage 2, B, and C-5 Project (the "Project") is located in the City of San Jacinto, Riverside County, California [Exhibit 1 – Regional Map]. The Project is located approximately at 33.763649° north latitude and 116.961667° west longitude within an unsectioned portion of Township 5 south, and Range 1 west and is generally bounded by Esplanade Avenue to the north, Menlo Avenue to the south, San Jacinto Street to the east, and Buena Vista Street to the west. The Project contains no blue-line drainages (as depicted on the U.S. Geological Survey (USGS) topographic maps San Jacinto, California (dated 1953 and photorevised in 1979) [Exhibit 2 – Vicinity Map].

On February 15, 2011 and July 26, 2012, regulatory specialists of Glenn Lukos Associates, Inc. (GLA) examined the Project site to determine the potential limits of (1) Corps jurisdiction pursuant to Section 404 of the Clean Water Act (CWA), (2) Regional Board jurisdiction pursuant to Section 401 of the CWA and Section 13260 of the California Water Code (CWC), the Porter-Cologne Act, and (3) CDFG jurisdiction pursuant to Division 2, Chapter 6, Sections 1600-1616 of the Fish and Game Code. Enclosed are 125-scale maps [Exhibit 3A & 3B] that depict the areas of potential Corps and CDFG jurisdiction. Photographs to document the topography, vegetative communities, and general widths of each of the waters are provided as Exhibit 4. A soil map is provided as Exhibit 5. Wetland data sheets are attached as Appendix A.

The Project site contains approximately 0.21 acre of potential Corps, Regional Board, and CDFG jurisdiction, of which 0.002 acre consists of wetlands/riparian vegetation, representing 1,808 linear feet of streambed.

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I. PROJECT DESCRIPTION

The proposed Project involves the construction of four storm drain lines identified in the San Jacinto Master Drainage Plan as: Line C, Line C-5, Line C-4, and Line B [Exhibit 3 – Proposed Project]. The Line C alignment will connect to an existing Riverside County Flood Control and Water Conservation District (District)-maintained, double reinforced concrete box (RCB) on Esplanade Avenue (existing Line C) and continue south and south easterly through undeveloped parcels to the intersection of Santa Fe Street and Midway Street, and then east along Midway Street to the intersection of San Jacinto Street and Midway Street. Line B will continue south along San Jacinto Street from Line C at the intersection of San Jacinto Street and Midway Street and end just east of the intersection of Menlo Avenue and San Jacinto Street. Line C-5 will connect to Line C at approximately 1,700 feet south of Esplanade Avenue, continue east and terminate at Santa Fe Street. Line C-4 will connect to Line C at the intersection of Santa Fe Street and Midway Street and continue south for 260 feet along Santa Fe Street before termination. The proposed facilities will alleviate the flooding issues experienced by the residents and community within the area generally bounded by Esplanade Avenue to the north, San Jacinto Avenue to the east, Menlo Avenue to the south, and Buena Vista Avenue to the west by collecting sheet flows in an underground reinforced concrete box (RCB) system that will ultimately discharge into the San Jacinto River.

Proposed Line C will collect flows from an existing watershed area that currently drains to the intersection of Midway Street and San Jacinto Avenue. In the existing condition, an artificially-created roadside ditch extends east-west for approximately 1,250 linear feet along the south side of Midway Street between San Jacinto Avenue and Santa Fe Street. The ditch collects flows from an approximately 500-acre watershed to the southeast, and conveys those flows west to the southeast corner of the intersection of Midway Street and Santa Fe Street [Exhibit 4]. At the intersection, flows currently exit the ditch, crossing Santa Fe Street to a large vacant lot located on the west side of the street. Flows continue for approximately 3,500 feet in a northerly direction in a broad swale across undeveloped parcels west of Santa Fe Street to the District's existing Line C at Esplanade Avenue. Line C, a double reinforced concrete box, conveys flows northerly for approximately 1,050 feet to the District's Buena Vista Retention Basin. Buena Vista Retention Basin is an earthen basin that covers about 18 acres. Storms flows exit the basin westerly in the District's San Jacinto Line E Channel. Line E is a rectangular concrete channel from the basin to the west side of State Street (700 feet) and continues as an earthen trapezoidal channel for approximately 2 miles in a northwesterly direction to the San Jacinto Reservoir. The approximately 150-acre San Jacinto Reservoir is owned and operated by Eastern Municipal Water District (EMWD) for groundwater recharge. The Reservoir retains flows prior to discharging over a spillway to the west. Flows that manage to release from the Reservoir flow in a northwesterly direction over large undeveloped parcels and farmland for about 3 miles before reaching the San Jacinto River.

As described above, the proposed Line C will start at the intersection of San Jacinto Street and Midway Street, and extend west along Midway Street to the intersection of Santa Fe Street and Midway Street. From the intersection, proposed Line C will extend northwest and then north through undeveloped parcels, and then connect with existing Line C at Esplanade Avenue. The proposed Project will replace the Midway Street roadside ditch with an underground concrete storm drain that will connect to the existing Line C.

II. METHODOLOGY

Prior to beginning the field delineation an aerial photograph, and the previously cited USGS topographic map, were examined to determine the locations of potential areas of Corps, CDFG , and Regional Board jurisdiction. Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Potential wetland habitats on the site were evaluated using the methodology set forth in the *U.S. Army Corps of Engineers 1987 Wetland Delineation Manual*[1] (Wetland Manual) and the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*[2]. The OHWM was evaluated using the methodology set forth in the 2008 *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States*[3]. While in the field the limits of Corps, CDFG, and Regional Board jurisdiction were recorded onto a 125-scale color aerial photograph using visible landmarks and a global positioning system unit.

The Soil Conservation Service (SCS)[4] has mapped the following soil types as occurring in the general vicinity of the project site [Exhibit 5 – Soil Map]:

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[1] Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.
[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. Lichevar, 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. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. R.W. Lichevar, and S.M. McColley. ERDC/CRREL TR-08-12. Hanover, NH: Cold Regions Research and Engineering Laboratory, U.S. Army Engineer Research and Development Center.
[4] SCS is now known as the National Resource Conservation Service or NRCS.

Grangeville Sandy Loam, 0 to 5 Percent Slopes (GrB), Grangeville Fine Sandy Loam, 0 to 2 Percent Slopes and Grangeville Fine Sandy Loam Saline-Alkali, 0 to 5 Percent Slopes

The Grangeville series consists of moderately well drained to poorly drained soils on alluvial fans and flood plains. These soils developed in alluvium from granitic materials. Slopes are 0 to 15 percent. Vegetation typically associated with the Grangeville soils includes annual grasses, saltgrass, and forbs but includes some cottonwoods. In a typical profile, the surface layer is grayish-brown (2.5Y 5/2 when dry, 2.5Y 3/2 when moist) loamy fine sand and loamy very fine sand about 17 inches thick. The underlying layers are stratified and range from grayish brown (2.5Y 5/2 when dry, 2.5Y 3/2 when moist) to light brownish gray (2.5Y 6/2 when dry, 2.5Y 4/2 when moist) in color and from loamy fine sand to very fine sandy loam in texture. Depth to the water table in the Grangeville soils is from 20 to more than 48 inches. Grangeville soils are used for dryland grain, for irrigated alfalfa, truck crops, and pasture, and for homesites.

San Emigdio Fine Sandy Loam, 0 to 2 Percent Slopes (SeA), San Emigdio Fine Sandy Loam, 8 to 15 Percent Slopes (SeD2), San Emigdio Fine Sandy Loam, Deep 0 to 2 Percent Slopes (SfA), San Emigdio Loam, 0 to 2 Percent Slopes (SgA) and San Emigdio Loam, 2 to 8 Percent Slopes (SgC)

The San Emigdio series are well-drained soils on alluvial fans. Slopes range from 0 to 15 percent. These soils developed in alluvium from weakly consolidated sedimentary formations. Vegetation typically associated with San Emigdio soils includes annual grasses, forbs, and chamise. In a typical profile, the surface layer is light brownish-gray (2.5Y 6/2 when dry, 2.5Y 4/2 when moist) fine sandy loam about 8 inches thick. The next layer, of similar color and texture, is about 14 inches thick. Underlying this and extending to a depth of more than 60 inches is light-gray (2.5Y 7/2 when dry, 2.5Y 5/3 when moist) fine sandy loam. The San Emigdio soils are used for dryland grain and pasture and for irrigated citrus, walnuts, alfalfa, apricots, and truck crops. They are also used as sites for homes and schools and for other nonfarm purposes.

Traver Loamy Fine Sand, Eroded (Tp2) and Traver Find Sandy Loam, Eroded (Tt2)

The Traver series are moderately well drained soils on valley plains and in basins. Slopes range from 0 to 5 percent. These slightly to strongly saline-alkali soils developed in alluvium predominately from granitic materials. The A horizons range in color from gray, light brownish gray to very pale brown in 10YR and 2.5Y hues with values of 5 to 7 and chromas of 1 to 3. Structure is massive and consistence is slightly hard to hard; in texture from loamy fine sand to loam; in reaction from slightly to strongly alkaline and calcareous with increasing pH with depth. The Bt horizons range in color from grayish brown, yellowish brown, light brownish gray to very pale brown in 10YR and 2.5Y hues with values of 5 to 7 and chromas of 2 to 4; in texture

from fine sandy loam to loam and silt loam (<18 percent clay); in reaction from strongly to very strongly alkaline and slightly to moderately calcareous; in structure from weak to medium blocky; in consistence from hard to very hard. The C horizons are similar to the Bt horizons but of lighter texture but may be stratified with fine sandy loam to silty clay loam textures.
Used mainly for early spring pasture. Where reclaimed they are used for general field crops such as cotton, sugar beets, and alfalfa as well as irrigated pasture. Vegetation is salt-grass and salt-tolerant weeds; occasional spots are nearly bare of vegetation.

None of these soil units are identified as hydric in the SCS's publication, Hydric Soils of the United States[5]. The evaluation for the presence of hydric soils was made in accordance with the Regional Supplement (Version 2.0).

It is important to note that under the Arid West Supplement, the presence of mapped hydric soils is no longer dispositive for the presence of hydric soils. Rather, the presence of hydric soils must now be confirmed in the field.

III. JURISDICTION

A. Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as:

> *(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
> *(2) All interstate waters including interstate wetlands;*
> *(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:*
> > *(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*

[5] United States Department of Agriculture, Soil Conservation Service. 1991. Hydric Soils of the United States, 3rd Edition, Miscellaneous Publication Number 1491. (In cooperation with the National Technical Committee for Hydric Soils.)

(ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purpose by industries in interstate commerce...

(4) All impoundments of waters otherwise defined as waters of the United States under the definition;

(5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;

(6) The territorial seas;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

(8) Waters of the United States do not include prior converted cropland.[6] Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

[6] The term "prior converted cropland" is defined in the Corps' Regulatory Guidance Letter 90-7 (dated September 26, 1990) as "wetlands which were both manipulated (drained or otherwise physically altered to remove excess water from the land) and cropped before 23 December 1985, to the extent that they no longer exhibit important wetland values. Specifically, prior converted cropland is inundated for no more than 14 consecutive days during the growing season...." [Emphasis added.]

1. Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.

Pursuant to Article I, Section 8 of the U.S. Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s the Corps interpreted the interstate commerce requirement in a manner that restricted Corps jurisdiction on isolated (intrastate) waters. On September 12, 1985, EPA asserted that Corps jurisdiction extended to isolated waters that are used or could be used by migratory birds or endangered species, and the definition of "waters of the United States" in Corps regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* (SWANCC). In this case the Court was asked whether use of an isolated, intrastate pond by migratory birds is a sufficient interstate commerce connection to bring the pond into federal jurisdiction of Section 404 of the Clean Water Act.

The written opinion notes that the court's previous support of the Corps' expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc.*) was for a wetland that abutted a navigable water and that the court did not express any opinion on the question of the authority of the Corps to regulate wetlands that are not adjacent to bodies of open water. The current opinion goes on to state:

> *In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.*

Therefore, we believe that the court's opinion goes beyond the migratory bird issue and says that no isolated, intrastate water is subject to the provisions of Section 404(a) of the Clean Water Act (regardless of any interstate commerce connection). However, the Corps and EPA have issued a joint memorandum which states that they are interpreting the ruling to address only the migratory bird issue and leaving the other interstate commerce clause nexuses intact.

2. Rapanos v. United States and Carabell v. United States

On June 5, 2007, the U.S. Environmental Protection Agency (EPA) and Corps issued joint guidance that addresses the scope of jurisdiction pursuant to the Clean Water Act in light of the Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* ("Rapanos"). The chart below was provided in the joint EPA/Corps guidance.

For project sites that include waters other than Traditional Navigable Waters (TNWs) and/or their adjacent wetlands or Relatively Permanent Waters (RPMs) tributary to TNWs and/or their adjacent wetlands as set forth in the chart below, the Corps must apply the significant nexus standard, that includes the data set forth in the *Approved Jurisdictional Determination Form.*

For "isolated" waters or wetlands, the joint guidance also requires an evaluation by the Corps and EPA to determine whether other interstate commerce clause nexuses, not addressed in the SWANCC decision are associated with isolated features on project sites for which a jurisdictional determination is being sought from the Corps. The information pertaining to isolated waters is also included on the *Approved Jurisdictional Determination Form.*

The agencies will assert jurisdiction over the following waters:

- Traditional navigable waters
- Wetlands adjacent to traditional navigable waters
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months)
- Wetlands that directly abut such tributaries

The agencies will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short duration flow)
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters
- Significant nexus includes consideration of hydrologic and ecologic factors

3. Corps Preliminary Jurisdictional Determination

A *Corps Preliminary Jurisdictional Determination Form* may be used to concede Corps jurisdiction where all streambeds within the project area are considered Corps jurisdictional waters. The project would be able to move forward pursuant to Corps Regulatory Guidance Letter (RGL) 08-02, issued on June 26, 2008, which allows the Corps to issue preliminary jurisdictional determinations (Preliminary JD) for a project. A Preliminary JD allows a project to move forward by setting aside/voluntarily waiving questions regarding CWA jurisdiction over drainages on site in the interest of expeditiously obtaining a Section 404 Permit.

As stated in RGL 08-02:

> *While a landowner, permit applicant, or other affected party can elect to request and obtain an approved JD, he or she can also decline to request an approved JD, and instead obtain a Corps individual or general permit authorization based on either a preliminary JD, or, in appropriate circumstances (such as authorizations by non-reporting nationwide general permits), no JD whatsoever. The Corps will determine what form of JD is appropriate for any particular circumstance based on all the relevant factors, to include, but not limited to, the applicant's preference, what kind of permit authorization is being used (individual permit versus general permit), and the nature of the proposed activity needing authorization.*

The Corps typically completes Preliminary JDs within 60 days of receipt of the request for such a determination. If the Corps project manager cannot complete the Preliminary JD within the 60-day timeframe, they must provide their supervisor, who would also provide the applicant, with a schedule to complete the determination (i.e., unlike the Rapanos significant nexus guidelines, there is a specific timeframe to complete the Preliminary JD and move forward with the jurisdictional determination, without uncertainty, and the EPA will not be involved with the Preliminary JD process as the Corps is not required to coordinate with the EPA to review Preliminary JDs).

4. Wetland Definition Pursuant to Section 404 of the Clean Water Act

The term "wetlands" (a subset of "waters of the United States") is defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the 1987 Wetland Delineation Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual and Supplement provide great detail in methodology

and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands[7]);

- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and

- Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with "problematic hydrophytic vegetation", which require a minimum of 14 days of ponding to be considered a wetland.

B. Regional Water Quality Control Board

Subsequent to the SWANCC decision, the Chief Counsel for the State Water Resources Control Board issued a memorandum that addressed the effects of the SWANCC decision on the Section 401 Water Quality Certification Program.[8] The memorandum states:

> *California's right and duty to evaluate certification requests under section 401 is pendant to (or dependent upon) a valid application for a section 404 permit from the Corps, or another application for a federal license or permit. Thus if the Corps determines that the water body in question is not subject to regulation under the COE's 404 program, for instance, no application for 401 certification will be required...*
>
> *The SWANCC decision does not affect the Porter Cologne authorities to regulate discharges to isolated, non-navigable waters of the states....*
>
> *Water Code section 13260 requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the state to*

[7] Reed, P.B., Jr. 1988. National List of Plant Species that Occur in Wetlands. U.S. Fish and Wildlife Service Biological Report 88(26.10).

[8] Wilson, Craig M. January 25, 2001. Memorandum addressed to State Board Members and Regional Board Executive Officers.

> *file a report of discharge (an application for waste discharge requirements)." (Water Code § 13260(a)(1) (emphasis added).) The term "waters of the state" is defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." (Water Code § 13050(e).) The U.S. Supreme Court's ruling in SWANCC has no bearing on the Porter-Cologne definition. While all waters of the United States that are within the borders of California are also waters of the state, the converse is not true—waters of the United States is a subset of waters of the state. Thus, since Porter-Cologne was enacted California always had and retains authority to regulate discharges of waste into any waters of the state, regardless of whether the COE has concurrent jurisdiction under section 404. The fact that often Regional Boards opted to regulate discharges to, e.g., vernal pools, through the 401 program in lieu of or in addition to issuing waste discharge requirements (or waivers thereof) does not preclude the regions from issuing WDRs (or waivers of WDRs) in the absence of a request for 401 certification....*

In this memorandum the SWRCB's Chief Counsel has made the clear assumption that fill material to be discharged into isolated waters of the United States is to be considered equivalent to "waste" and therefore subject to the authority of the Porter Cologne Water Quality Act. However, while providing a recounting of the Act's definition of waters of the United States, this memorandum fails to also reference the Act's own definition of waste:

> *"Waste" includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.*

The lack of inclusion of a reference to "fill material," "dirt," "earth" or other similar terms in the Act's definition of "waste," or elsewhere in the Act, suggests that no such association was intended. Thus, the Chief Counsel's memorandum signals that the SWRCB is attempting to retain jurisdiction over discharge of fill material into isolated waters of the United States by administratively expanding the definition of "waste" to include "fill material" without actually seeking amendment of the Act's definition of waste (an amendment would require action by the state legislature). Consequently, discharge of fill material into waters of the State not subject to the jurisdiction of the Corps pursuant to Section 404 of the Clean Water Act <u>may</u> require authorization pursuant to the Porter Cologne Act through application for waste discharge requirements (WDRs) or through waiver of WDRs, despite the lack of a clear regulatory imperative.

C. California Department of Fish and Game

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the CDFG regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFG defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFG's definition of "lake" includes "natural lakes or man-made reservoirs."

CDFG jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. CDFG Legal Advisor has prepared the following opinion:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects and riparian vegetation will be treated like natural waterways...

- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses, should be treated by [CDFG] as natural waterways...

- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions...

Thus, CDFG jurisdictional limits closely mirror those of the Corps. Exceptions are CDFG's exclusion of isolated wetlands (those not associated with a river, stream, or lake), the addition of artificial stock ponds and irrigation ditches constructed on uplands, and the addition of riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status.

IV. RESULTS

A. Corps Jurisdiction

The Project site contains approximately 0.22 acre of potential Corps jurisdiction, of which 0.002 acre consists of wetlands, representing a total of 1,808 linear feet of streambed. Two drainage features were identified within the Project alignments and are described below as Drainage A and B. The locations of potential Corps jurisdictional waters are depicted on the enclosed map [Exhibit 3A & 3B]. Potential Corps jurisdiction is summarized in Table 1 below.

1. Drainage A

Approximately 0.02 acre of potential Corps jurisdiction is associated with Drainage A, none of which consists of wetlands. Drainage A consists of a swale that occurs southeast of the intersection of Menlo Avenue and San Jacinto Street. The swale originates offsite to southeast where the swale collects water from a man-made drainage channel. The swale extends northwesterly for approximately 115 feet through the Project site until it reaches Menlo Avenue. At that point, the runoff sheet flows across the street before exiting the Project site where the runoff eventually flows north along the gutters of San Jacinto Street before draining into a drainage ditch (Drainage B) along the south side of Midway Street, west of San Jacinto Street. As sheet flow is not regulated by the Corps, flows along the curb and gutter of each of these streets would not be regulated by Section 404 of the CWA; however, the gutters connect other potential jurisdictional waters, such as Drainage A and B, as noted in the Rapanos Guidance. The ordinary high water mark (OHWM) within Drainage A ranges from six to eight feet wide, with physical flow indicators consisting of bent vegetation, debris racks, sediment deposits and defined channels with shelving.

Dominant vegetation within Drainage A consists of upland species such as red brome (*Bromus madritensis* subsp. *rubens*; NI), common fiddleneck (*Amsinckia intermedia*, UPL), red-stemmed filaree (*Erodium cicutarium*, UPL), and ripgut brome (*Bromus diandrus*, UPL).

No soil pits were excavated within Drainage Feature A due to the lack of hydrophytic vegetation.

2. Drainage B

Approximately 0.19 acre of potential Corps jurisdiction is associated with Drainage B, of which 0.002 acre consists of wetlands. As noted above, Drainage B consists of a roadside drainage ditch that receives flows from the gutters along San Jacinto Street, as well as surrounding developed areas. The runoff extends west for 1,693 linear feet before exiting the Project alignment, crossing Midway Street via sheet flow, and entering a roadside ditch along the eastern side of Santa Fe Street.

The OHWM within Drainage B ranges between one and 10 feet wide, with physical flow indicators consisting of the destruction of terrestrial vegetation, change in soil characteristics, and distinct shelving in places. The western portion of Drainage B is contained within deep, incised banks, but as the ditch extends west along Midway Street, its banks broaden and distinct signs of flow become less discernible. Soil pits were excavated in two locations within the drainage. A small area of wetland was identified at the eastern end of the ditch, near the intersection of Midway Street and San Jacinto Street. Vegetation within the wetland includes southern cattails (Typha domingensis, OBL), rabbitsfoot grass (Polypogon monspeliensis, FACW), curly dock (*Rumex crispus,* FACW) and tall flatsedge (*Cyperus eragrostis,* FACW).

Upland vegetation associated with Drainage B includes red brome, common fiddleneck, red-stemmed filaree, ripgut brome, and perennial ryegrass (*Festuca perennis*).

Table 1. Summary of Corps Jurisdiction

Drainage Feature	Non-Wetland Waters (Acres)	Wetlands (Acres)	Total Corps Jurisdiction	Length of Drainage (Linear Feet)
A	0.02	0	0.02	115
B	0.20	0.002	0.202	1,693
Total	**0.22**	**0.002**	**0.222**	**1,808**

B. Regional Water Quality Control Board Jurisdiction

The onsite drainage features have been determined to be potential Corps jurisdictional waters subject to regulation pursuant to Section 401 and 404 of the CWA and do not need to be addressed separately pursuant to Section 13260 of the CWC, the Porter-Cologne Act.

C. CDFG Jurisdiction

The Project site contains approximately 0.22 acre of potential CDFG jurisdiction, of which 0.002 acre supports emergent riparian vegetation. Areas of potential CDFG jurisdiction are identical to that of potential Corps jurisdiction discussed above. The boundaries of potential CDFG jurisdiction are depicted on Exhibit 3A & 3B. Total potential CDFG jurisdiction is summarized in Table 2 below.

Table 2. Summary of CDFG Jurisdiction

Drainage Features	Unvegetated Streambed (Acres)	Riparian Vegetation (Acres)	Total CDFG Jurisdiction	Length of Drainage (Linear Feet)
A	0.02	0	0.02	115
B	0.20	0.002	0.202	1,693
Total	**0.22**	**0.002**	**0.222**	**1,808**

If you have any questions about this letter report, please contact either Glenn Lukos or David Moskovitz at (949) 837-0404.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

David F. Moskovitz
Regulatory Specialist

s:0640-35b.rpt.docx

Source: ESRI World Street Map

NORTH

0 2 4 8 Miles

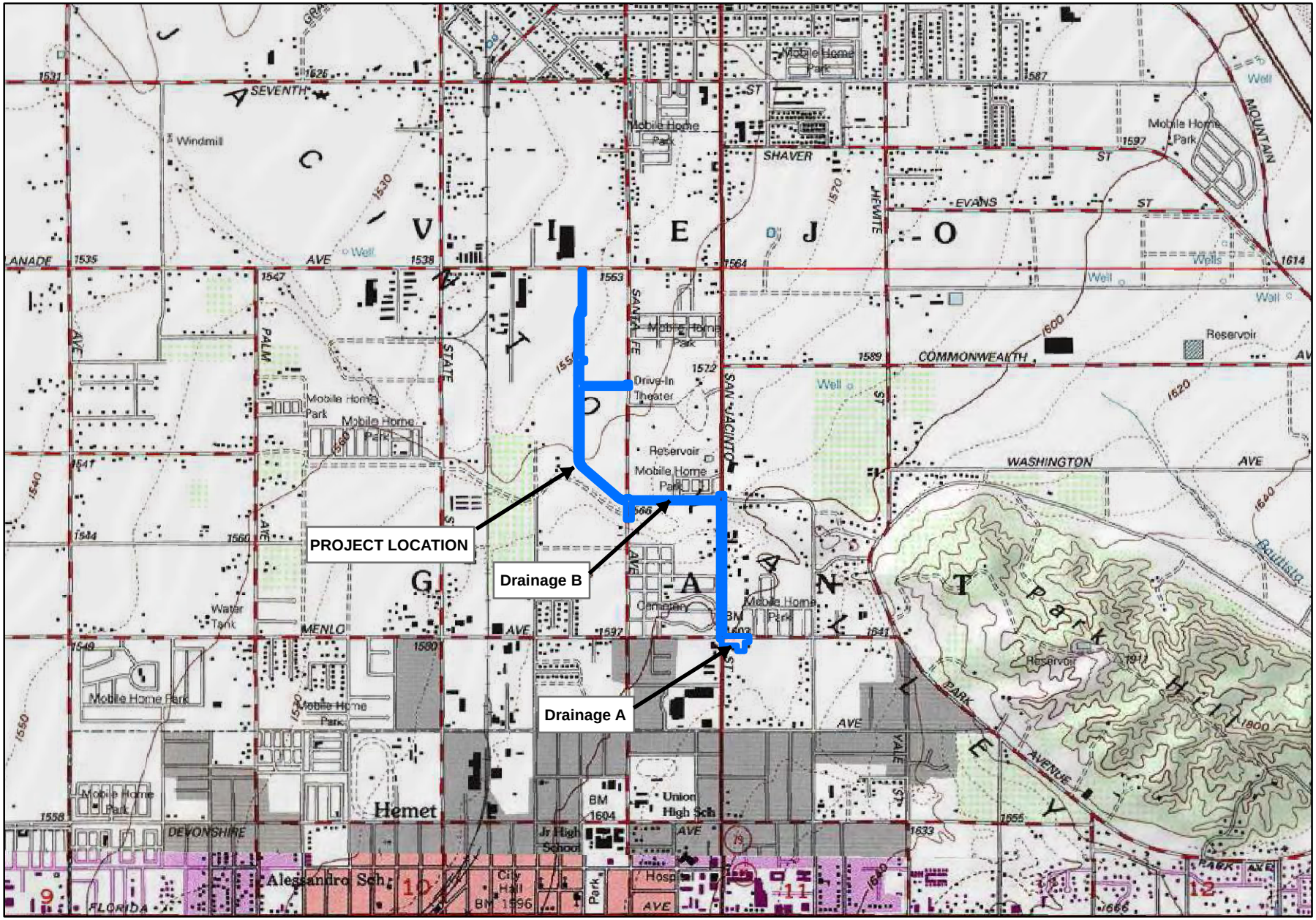
SAN JACINTO MDP LINE C
STAGE 2, B, AND C-5 PROJECT

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1

Adapted from USGS San Jacinto, CA quadrangle



NORTH

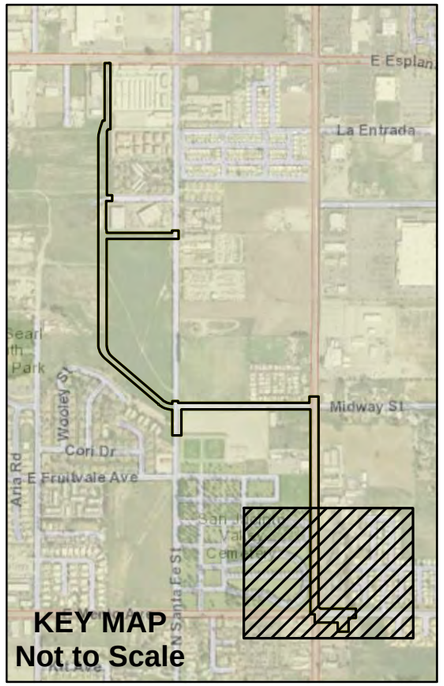
0 1,000 2,000 4,000 Feet

SAN JACINTO MDP LINE C
STAGE 2, B, AND C-5 PROJECT

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2



Legend

- Project Alignment
- Potential Corps & RWQCB Non-Wetland Waters/ CDFG Unvegetated Streambed

N

0 62.5 125 250
Feet

1 inch = 125 feet

Reference Elevation Datum: State Plane 6 NAD 83
Aerial Photo: ESRI Basemaps
Map Prepared by: K. Kartunen, GLA
September 7, 2012

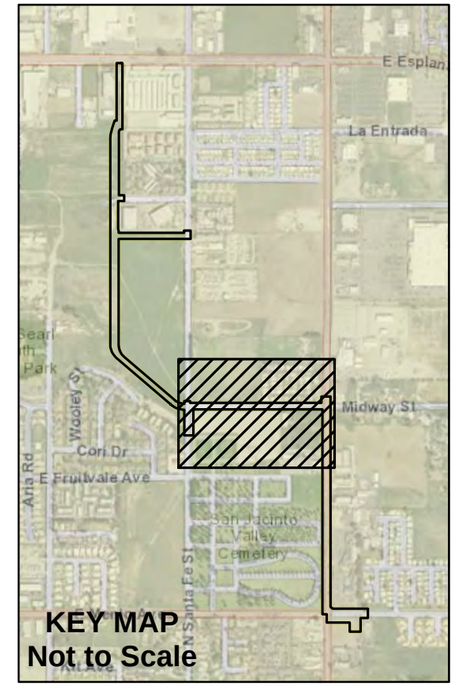
SAN JACINTO MDP LINE
STAGE 2, B, & C-5 PROJECT

Potential Jurisdictional Waters

GLENN LUKOS ASSOCIATES

Exhibit 3A

X:\0363-THE REST\0640-35MDPL\640-35_GIS\DelineationGIS\640-35Delineation3B.mxd



Legend

- Project Alignment
- Potential Corps & RWQCB Wetland/CDFG Riparian
- Potential Corps & RWQCB Non-Wetland Waters/CDFG Unvegetated Streambed
- NoOHWM

N

0 62.5 125 250
Feet

1 inch = 125 feet

Reference Elevation Datum: State Plane 6 NAD 83
Aerial Photo: ESRI Basemaps
Map Prepared by: K. Kartunen, GLA
September 7, 2012

SAN JACINTO MDP LINE
STAGE 2, B, & C-5 PROJECT

Potential Jurisdictional Waters

GLENN LUKOS ASSOCIATES

Exhibit 3B

X:\0363-THE REST\0640-35MDPL\640-35_GIS\DelineationGIS\640-35Delineation3A.mxd

Photograph 1. View of Drainage A looking south. Photo taken July 26, 2012.

Photograph 2. View of Drainage A looking south from the edge of Menlo Avenue. Photo taken July 26, 2012.

GLENN LUKOS ASSOCIATES

Exhibit 4

SAN JACINTO MDP LINE C STAGE 2, B AND C-5

Site Photographs

Photograph 3. View of Midway Street ditch (Drainage B) looking east towards the intersection of Midway Street and San Jacinto Street. Photo taken February 15, 2011.

Photograph 4. View of Midway Street ditch (Drainage B) looking east towards the intersection of Midway Street and San Jacinto Street. Photo taken July 26, 2012.

GLENN LUKOS ASSOCIATES

Exhibit 4

SAN JACINTO MDP LINE C STAGE 2, B AND C-5

Site Photographs

Photograph 5. View of Drainage B looking west along Midway Street from the intersection with San Jacinto Street. Photo taken February 15, 2011.

Photograph 6. View of Drainage B looking east, taken in the opposite direction from photo 5. Photo taken July 26, 2012.

GLENN LUKOS ASSOCIATES

Exhibit 4

SAN JACINTO MDP LINE C STAGE 2, B AND C-5

Site Photographs

Photograph 7. This photo depicts the western portion of the Drainage B ditch. The photo was taken in August 2011, and compared with the photo below (taken July 26, 2012) shows that the roadside drainage area is maintained during the non-rainy season, and then re-establishes from runoff.

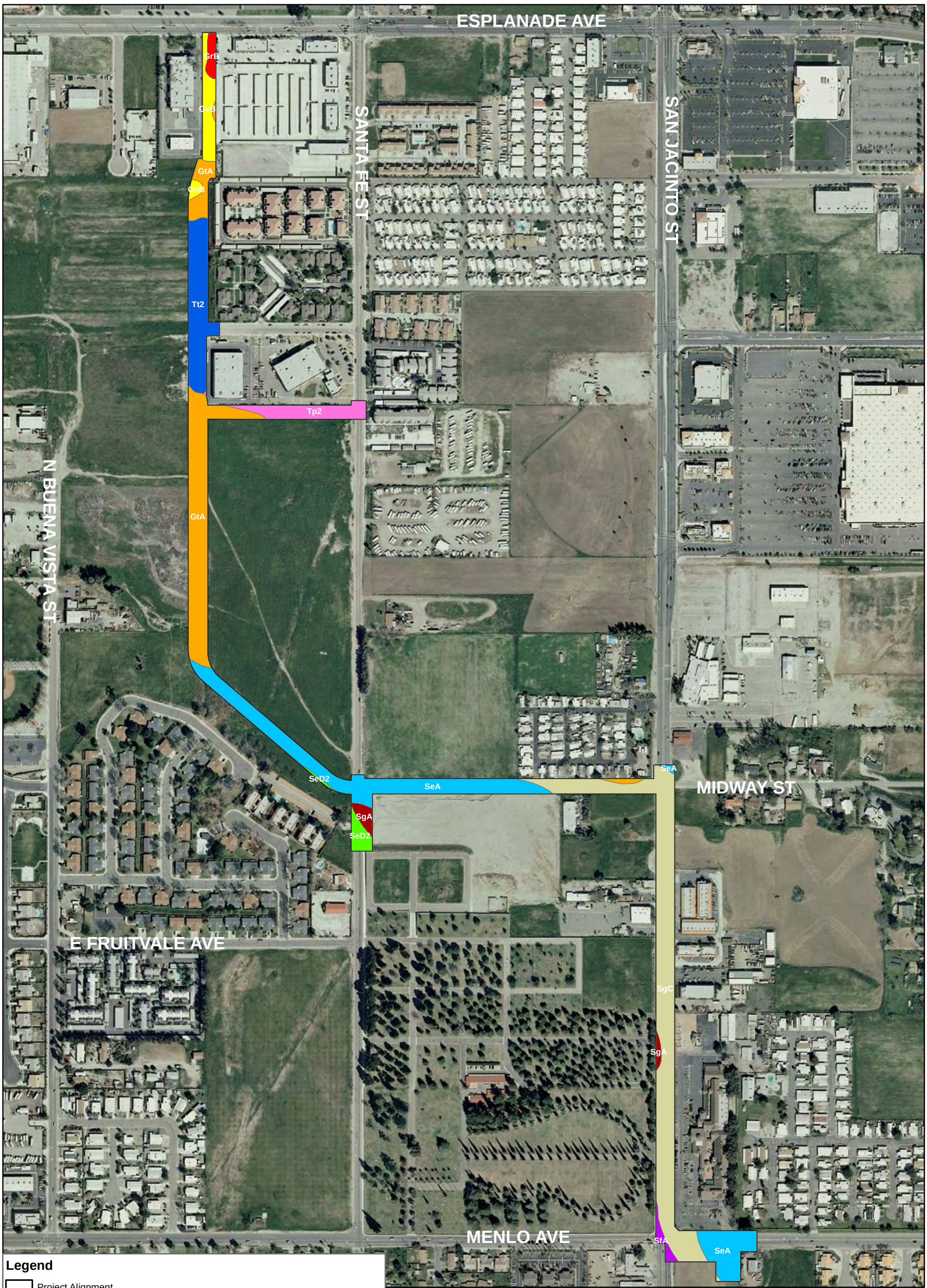
Photograph 8. View of Drainage B looking west along Midway Street towards Santa Fe Street.

GLENN LUKOS ASSOCIATES

Exhibit 4

SAN JACINTO MDP LINE C STAGE 2, B AND C-5

Site Photographs



Legend

- Project Alignment
- GrB - Grangeville sandy loam, sandy substratum, drained, 0 to 5 percent slopes
- GtA - Grangeville fine sandy loam, drained, 0 to 2 percent sl opes
- GvB - Grangeville fine sandy loam, saline-alkali, 0 to 5 perc ent slopes
- SeA - San Emigdio fine sandy loam, 0 to 2 percent slopes
- SeD2 - San Emigdio fine sandy loam, 8 to 15 percent slopes, eroded
- SfA - San Emigdio fine sandy loam, deep, 0 to 2 percent slopes
- SgA - San Emigdio loam, 0 to 2 percent slopes
- SgC - San Emigdio loam, 2 to 8 percent slopes
- Tp2 - Traver loamy fine sand, eroded
- Tt2 - Traver loamy fine sand, saline-alkali, eroded

N

0 200 400 800
Feet

SAN JACINTO MDP LINE C
STAGE 2, B, AND C-5 PROJECT

Soils Map

GLENN LUKOS ASSOCIATES

Exhibit 5

X:\0363-THE REST\0640-35MDPL\640-35_GIS\SoilsGIS\640-35SoilsMap.mxd
August 21, 2012

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 640-35MDL City/County: San Jacinto, Riverside Sampling Date: 7/26/2012

Applicant/Owner: State: CA Sampling Point: 1

Investigator(s): K.Livergood Section, Township, Range: Unsectioned, T5S, R1W

Landform (hillslope, terrace, etc.): Ditch Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): C Lat: 33.764728 Long: -116.965151 Datum: NAD86

Soil Map Unit Name: San Emigdio fine sandy loam (SeD2, SeA) NWI classification: None

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.)

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. Typha domingensis	30	Y	OBL
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Polypogon monspeliensis	75	D	FACW
2. Cyperus eragrostis	20	D	FACW
3. Rumex crispus	5		FAC
4.			
5.			
6.			
7.			
8.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	100 = Total Cover		

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

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

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

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-12	G1 2.5/N	100	n/a				Sandy loa	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ✓ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ✓ No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ✓ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): 3"

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: _____ City/County: San Jacinto, Riverside Sampling Date: 7/26/2012

Applicant/Owner: _____ State: CA Sampling Point: 2

Investigator(s): K. Livergood Section, Township, Range: Unsectioned, T5S, R1W

Landform (hillslope, terrace, etc.): Roadside Ditch Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR): C Lat: 33.763829° Long: -116.962807° Datum: NAD86

Soil Map Unit Name: San Emidio fine sandy loam (SeD2, SeA) NWI classification: None

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.)

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

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. Leptochloa fusca uninerva	25	D	FACW
2. Helianthus annuus	10	D	FACU
3. Salsola australis	5		FACU
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Tribulus terrestris	5		--
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	45 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

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

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species	25	x 2 = 50
FAC species		x 3 =
FACU species	15	x 4 = 60
UPL species		x 5 =
Column Totals:	40 (A)	110 (B)

Prevalence Index = B/A = 2.75

Hydrophytic Vegetation Indicators:

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

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

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

Approxiamtely 55% of area contains open water.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 6/2	100	----				Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✓ No ___ Depth (inches): 2"

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): 0-12+"

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Hydrology is the result of runoff (irrigation) from the adjacent cemetary.
On a follow-up visit surface runoff was not present and surface water at the pit location was not present either. Under the conditions observed during the follow-up visit, no wetland hydrology was present.