## REVISED CONCEPTUAL MITIGATION PLAN

# Sierra Vista Specific Plan

Prepared for:

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## Chapter 1

## **Summary**

The objective of this document is to conceptually describe the mitigation measures proposed as compensation for the potential impacts to wetlands and other waters of the U.S. that would result from construction of the proposed Sierra Vista Project (the "Project"). An initial conceptual mitigation plan for the Project was prepared and submitted to the Corps of Engineers (the "Corps") in February 2011. Since that time additional off-site mitigation has been proposed and the conceptual design of the on-site mitigation has been revised. The purpose of this revised conceptual plan is to incorporate these revisions and provide additional detail with respect to the proposed mitigation.

The Project is not technically subject to the provisions of the Corps and Environmental Protection Agency's (the "EPA") regulations (the "Mitigation Guidelines") regarding compensatory mitigation for losses of aquatic resources (Corps of Engineers and Environmental Protection Agency 2008) because the applications were submitted before the effective date of the Mitigation Guidelines. Nonetheless, the proposed mitigation plan has been designed to be as consistent as practicable with the Mitigation Guidelines as well as the Final Regional Compensation Mitigation Guidelines for South Pacific Division, USACE (Corps of Engineers 2015). The format of this document generally follows the Sacramento District Corps of Engineers' Habitat Mitigation and Monitoring Proposal Guidelines (Corps of Engineers 2004).

This plan is conceptual. It identifies the impacts of the proposed project and conceptually describes the mitigation measures proposed by the applicants. It does not provide a detailed description of all of the proposed mitigation measures. Final mitigation plans for each individual permit will be developed in consultation with the Corps. The final mitigation plans will provide detailed drawings for the

mitigation to be constructed on-site and will specify the number of mitigation bank credits that are to be purchased and the mitigation banks from which the credits will be purchased. The Final Mitigation Plans for each permit must be submitted to and approved by the Corps prior to initiating construction activities within waters of the U.S. pursuant to the authority of any individual permits (IPs) or regional general permit (RGP) authorizations issued for the Project.

The Project would result in direct impacts to 24.64 acres of waters of the U.S. This total is comprised of 0.88 acre of perennial stream, 0.67 acre of intermittent stream, 0.34 acre of ephemeral stream, 1.05 acres of pond, 0.85 acre of perennial marsh, 6.84 acres of vernal pool, 4.49 acres of seasonal wetland, and 9.50 acres of wetland swale.

The proposed mitigation provides for a combination of on- and offsite wetlands preservation and wetlands restoration/creation. A total of 13.688 acres of wetlands would be preserved on-site. Vernal pool preservation credits would be purchased from approved mitigation banks within their approved service areas at a ratio of 2 credits purchased for each acre of suitable fairy shrimp habitat (vernal pools, seasonal wetlands and wetland swales) directly and indirectly affected. A total of 21.24 acres of seasonal wetlands and emergent marsh would be created on-site. Vernal pool and seasonal wetland creation and/or restoration credits would be acquired from approved mitigation banks within their approved service areas at ratios approved by the Corps (see discussion of mitigation credit ratios on Chapter 4).

Although, at the current time, the applicants propose to accomplish all off-site mitigation through the purchase of credits from Corps approved mitigation banks, they wish to maintain the option to develop permittee-specific mitigation plans to provide the proposed preservation and/ or creation/ restoration mitigation measures. Where such measures are adopted, it is understood that the permittee(s) will be required to prepare site-specific mitigation and monitoring and long-term maintenance plans and that these plans must be approved by the Corps.

## Chapter 2

# **Project Description**

## **Responsible Parties**

This mitigation plan is being submitted by the applicants seeking Department of the Army Section 404 of the Clean Water Act Individual Permits (IPs) to authorize fill in waters of the United States (U.S.) associated with the Project.

The applicants, who will be responsible for implementing the provisions of this mitigation plan, included Mourier Investments, LLC (Computer Deductions, Bagley & Associates, and Wealth properties, ), KT Communities (Baseline P&R property), AKT Developments, Inc. (Baybrook property), Mourier Investments, LLC (Conley property), CGB Investments (CGB property), DF Properties, Inc. (DF property), Westpark Sierra Vista, LLC (Federico Westpark property), and Mourier Investments, LLC (Federico Mourier property).

Each of the applicants is seeking and IP for work within its respective property, which will include authorization for backbone infrastructure within that property. The combined Bagley, Computer Deductions and Wealth application by Mourier Investments also includes the infrastructure located on other properties that is necessary to develop those properties.

The Corps of Engineers has proposed issuing a RGP which would: (i) authorize construction of backbone infrastructure not located within any of the applicants' properties (off-site infrastructure); and, (ii) provide an expeditious means of transferring the Section 404 authorization for the construction of backbone infrastructure within the applicants' properties. Each applicant is required by a development agreement with the City of Roseville (City) to construct certain segments of the backbone infrastructure concurrently with development of its property, if they are not already in place. Depending on the timing and sequence of development, some of the infrastructure needed by a particular applicant may be located on its own property, on another applicant's Sierra Vista property, or offsite. In cases where the required infrastructure is located on another Sierra Vista property or offsite, the RGP would authorize the applicant to construct that infrastructure. Except for the offsite infrastructure, the RGP would not authorize any work not already authorized by IPs, but it would flexibility accommodate undetermined allow project implementation schedules, chronology and phasing.

The RGP also authorizes impacts to waters associated with on-site wetlands creation. Like the backbone infrastructure, the applicants are required to construct portions of the wetlands mitigation concurrently with development of their property, and the RGP will provide flexibility to authorize that work when it is located on another applicant's property.

## **Location of Project**

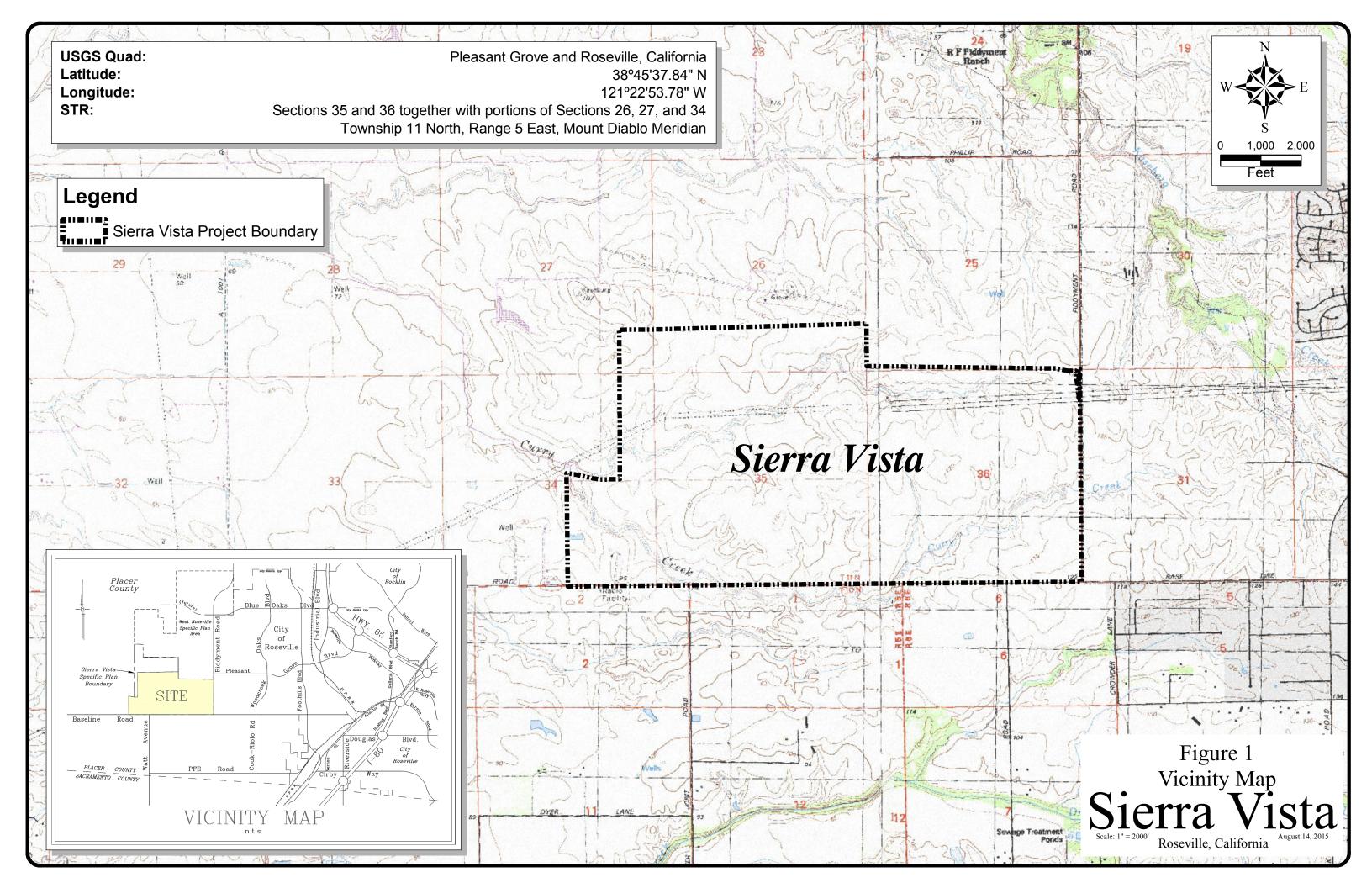
The Sierra Vista project area is approximately 1,627 acres is size. It is located north of Baseline Road and west of Fiddyment Road in Placer County, California. It is within Sections 26, 27, 34, 35 and 36, Township 11 North, and Range 5 East MDBM. The coordinates for approximately the center of the property are latitude North 38°, 45', 37.84" and longitude West 121°, 22', 53.78". Figure 1 is a vicinity map showing the location of the project area.

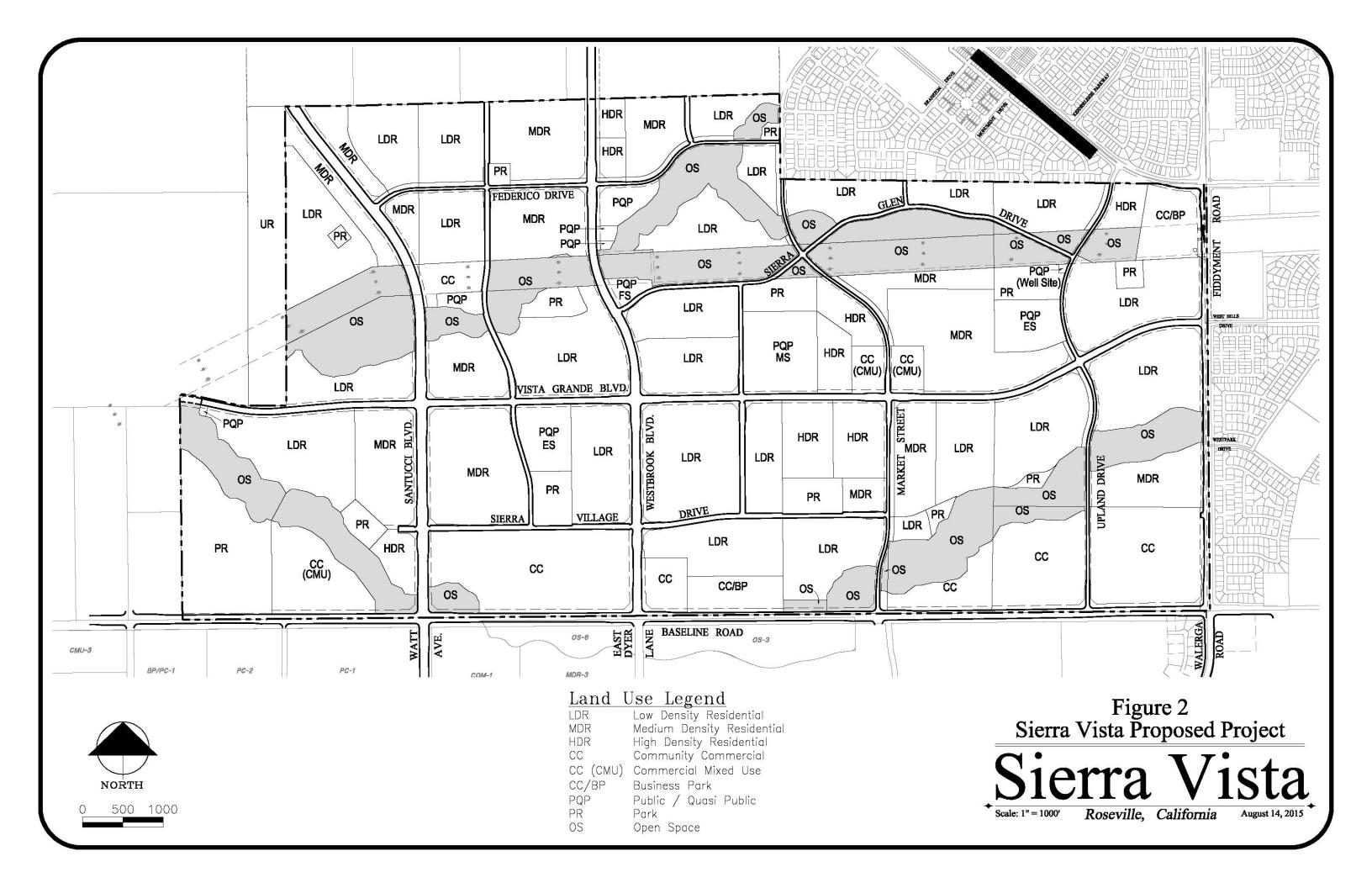
## **Description of the Proposed Project**

The Project is a proposed specific plan project that includes development of a 1,627-acre site with a mix of land uses, predominantly residential use with some commercial and office uses, public and quasi-public uses, parks, and open space, and the necessary infrastructure improvements to support these uses. Figure 2 is a map showing the Project. Appendix A includes the application drawings for each of the permit applications comprising the Project.

The Project would provide for the development of a large scale, master-planned mixed-use community, comprising about 820 acres of residential uses; 216 acres of commercial and office uses; 61 acres of public/quasi-public uses, such as schools; 91 acres of parks; 257 acres of open space; 14 acres of paseos; 49 acres of landscape corridor; and 119 acres of major roadways. The following sections provide additional detail on aspects of the development proposed under the Project.

The Project will be constructed in phases. The Project is designed to allow flexibility in the phasing of construction to allow multiple market-driven phases. The City has established performance criteria for the Project's infrastructure that will insure adequate infrastructure is constructed to serve any given phase of the Project.





### Residential Development

At buildout, the Project would provide a total of 6,650 single- and multi-family residential units, and, based on the City General Plan's assumption of 2.54 persons per household on average, is expected to generate a population of approximately 16,891 at build-out. The residential component of the Project would include low-, medium-, and high-density neighborhoods accommodating a wide range of housing types, as summarized in Table 1.

**Table 1.** Summary of Residential Uses

		Dwelling	
Land Use	Acres	Units	Description
Low Density Residential	502.4	2,524	<ul> <li>Avg. Density – 5 du/ac</li> <li>Primarily detached single-family conventional lots (4,500-6,000 ft²)</li> </ul>
Medium Density Residential	250.0	2,221	<ul> <li>Avg. density – 9 du/ac</li> <li>Variety of types including detached small-lost single-family, clustered, zero lot line, duplexes, and townhomes</li> </ul>
High Density Residential	67.9	1,650	<ul> <li>Avg. density – 20-30 du/ac</li> <li>Attached units in townhomes, condos, and apartments</li> </ul>
Commercial Mixed Use	-	255	• Avg. density – 20-30 du/ac
Total	820.3	6,650	

### Commercial Development

At build-out, the Project would provide approximately 2,235,000 square feet of commercial and employment uses, and assuming one job per 450 square feet of commercial/office space, is expected to create almost 5,000 permanent jobs over the long term (City of Roseville 2010). Most commercial and employment uses would be concentrated along Baseline Road, the future Santucci Boulevard, Fiddyment Road, and other arterial roadways to take advantage of the exposure to high-volume traffic along these principal commute corridors. Smaller commercial centers would serve adjacent residential neighborhoods and are planned to include at least some mixed-use areas offering retail goods and services in conjunction with higher-density housing.

### Public and Quasi-Public Uses, Including Schools

Three sites totaling approximately 45 acres are proposed for construction of schools to serve the new residential neighborhoods. These include two elementary schools and one middle school, all of which would be on or near the proposed new arterial Vista Grande Boulevard.

#### **Parks**

Several sites totaling about 91 acres are proposed for improved parks, including one 40-acre Citywide park located on Baseline Road adjacent to the Curry Creek open space corridor, and a number of smaller (1- to 12-acre) neighborhood parks serving local residential communities.

### **Open Space**

The Project includes approximately 227.5 acres of open space preserves. The 227.5 acres of open space preserve is comprised of 183.4 acres of primary open space and 44.1 acres of secondary open space. The open space preserves are aligned along the two main drainage courses (Curry Creek and Federico Creek) and along the Western Area Power Administration (WAPA) transmission corridor.

A total of approximately 21.57 acres of wetland habitat would be constructed within the Curry Creek and Federico Creek open space corridors as discussed in more detail in Chapter 4.

### Circulation System

The Project provides for a circulation system integrating a hierarchy of roadways, a pedestrian and bikeway network, and public transit links to existing City and regional transit systems. New public roads would be constructed within the Sierra Vista Specific Plan (SVSP) area to current City standards, consistent with the design sections included in the SVSP (City of Roseville 2010 [reference to SP]). The on-site arterials would be aligned east-west or north-south to connect to existing roadways to the north, east, and south of the project area.

Arterial roadways would range from four to eight lanes with left turn pockets where appropriate, and would provide landscape medians and corridors with Class IA bikeways or on-street Class II bike lanes. Collector streets would include Road A, Market Street, and Upland Drive. Most of the collector streets would offer two travel lanes in a 48-foot-wide right of way (ROW); on-street Class II bike lanes; and a 25-foot-wide landscape corridor with a 5-foot-wide detached sidewalk on either side of the ROW. Several collector streets would be designed to an alternative standard that reduces the street width in order to provide enhanced bicycle and pedestrian mobility elements.

A system of dedicated pedestrian paths and bikeways would provide off-street connections throughout the community and with the City's existing pedestrian and bikeway facilities to the north and east of the project area. The Project would also provide a network of paseos, or multi-use pathways intended to facilitate pedestrian and bicycle movement throughout the project area.

In addition, a new Transit Transfer Station is planned in association with commercial uses in the southern portion of the project area, and bus turnouts and shelters would be provided, as appropriate, along the roadways planned for bus routes.

The following off-site roadway improvements are also planned as part of the Proposed Action.

Baseline Road, the existing arterial roadway that forms the southern boundary of the Project, would be improved in phases, with a build-out of five travel lanes. Baseline Road improvements would include roadway widening on the south side of the existing roadway on land that is part of the Placer Vineyards project under separate application for a DA permit.

Westbrook Boulevard, a north-south arterial located in the centralwestern portion of the SVSP site, would be extended off-site to the north to connect the SVSP area to the West Roseville SP area to the north. Improvements at the Baseline Road/Watt Avenue intersection would widen Baseline Road to provide three through-travel lanes, triple left turn lanes onto northbound Santucci Boulevard, and a dedicated right turn lane onto southbound Watt Avenue.

The road crossings of Federico and Curry Creeks will be arched culverts with natural bottoms. The arched culverts will be sized so that the passage of flood flows is somewhat restricted. The purpose of this design is to desynchronize flood flow peaks in order to assure that the project will not result in an increase in post-project flood flows per the City of Roseville's requirements. The result will be a slight increase in the duration and depth of overbank flooding at some locations under some circumstances. The actual duration and depth of overbank flooding will vary depending on the duration and intensity of rainfall and the conditions of the site prior to the rainfall (e.g. whether soils are previously saturated, etc.). Depending on the location of the crossing and the intensity and duration of rainfall, the increased depth of post-project overbank flooding as compared to existing conditions will range from no increase up to approximately 2 feet. The increase in the duration of overbank flooding as compared to existing conditions will range from no increase up to approximately 2 hours.

### **Utilities and Public Services**

The utility infrastructure, which includes potable water and wastewater service, storm water management and flood protection, will be designed to serve the build-out of the Project and the improvements would be constructed in phases. The City would provide water, wastewater services, and storm water management.

Private providers would serve the Project with electricity, natural gas, and telecommunications services. Mechanical filtration systems in commercial areas, other water quality best management practices (BMPs), etc., are also included in the Project.

# **Description of Impacts to Aquatic Resources**

## **Existing Resources**

### **General Site Characteristics**

The project site is characterized by gently rolling topography and large, open annual grasslands. Approximately 90 trees are present on the site with the majority of these occurring in a eucalyptus stand and along Curry Creek in the western portion of the project area. All, or virtually all, of the project area has been disked and/or plowed in the past and some portions have been dry-farmed. The project area has been historically grazed, and portions of it are currently grazed.

Features of the human environment present on the site include four large-lot single family residences; small structures associated with ongoing dry farming agricultural activities (grazing); dirt roads and fencing; two areas along Baseline Road where strawberry fields and a fruit stand are present; and transmission lines. An approximate 400-foot wide easement that contains multiple transmission lines extends in an east-west direction through the northern portion of the site. The easement is owned by WAPA, Sacramento Municipal Utility District, and Roseville Electric. In addition, there is a 50-foot wide electrical easement that extends in a north-south direction through a portion of the site.

The principal plant community within the project area is non-native annual grassland. Dominant species comprising the non-native annual grassland include a variety of naturalized Mediterranean grasses including soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), medusa head (*Taeniatherum caput-medusae*), and wild oats (*Avena fatua*). Common herbaceous species include rose filarees (*Erodium spp.*), yellow star-thistle (*Centaurea solstitialis*), rose clover (*Trifolium hirtum*), cut-leaf geranium (*Geranium dissectum*), tarweed (*Holocarpha virgata*), Fitch's spikeweek (*Hemizonia fitchii*), common vetch (*Vicia sativa*), and hairy hawkbit (*Leontodon taraxacoides*).

The large majority of surface runoff within the project area flows to two main drainage courses that flow from east to west. The southernmost and largest is Curry Creek. The northernmost is not named on maps but is referred to as Federico Creek. Additional descriptions of these waterways are provided in the following section.

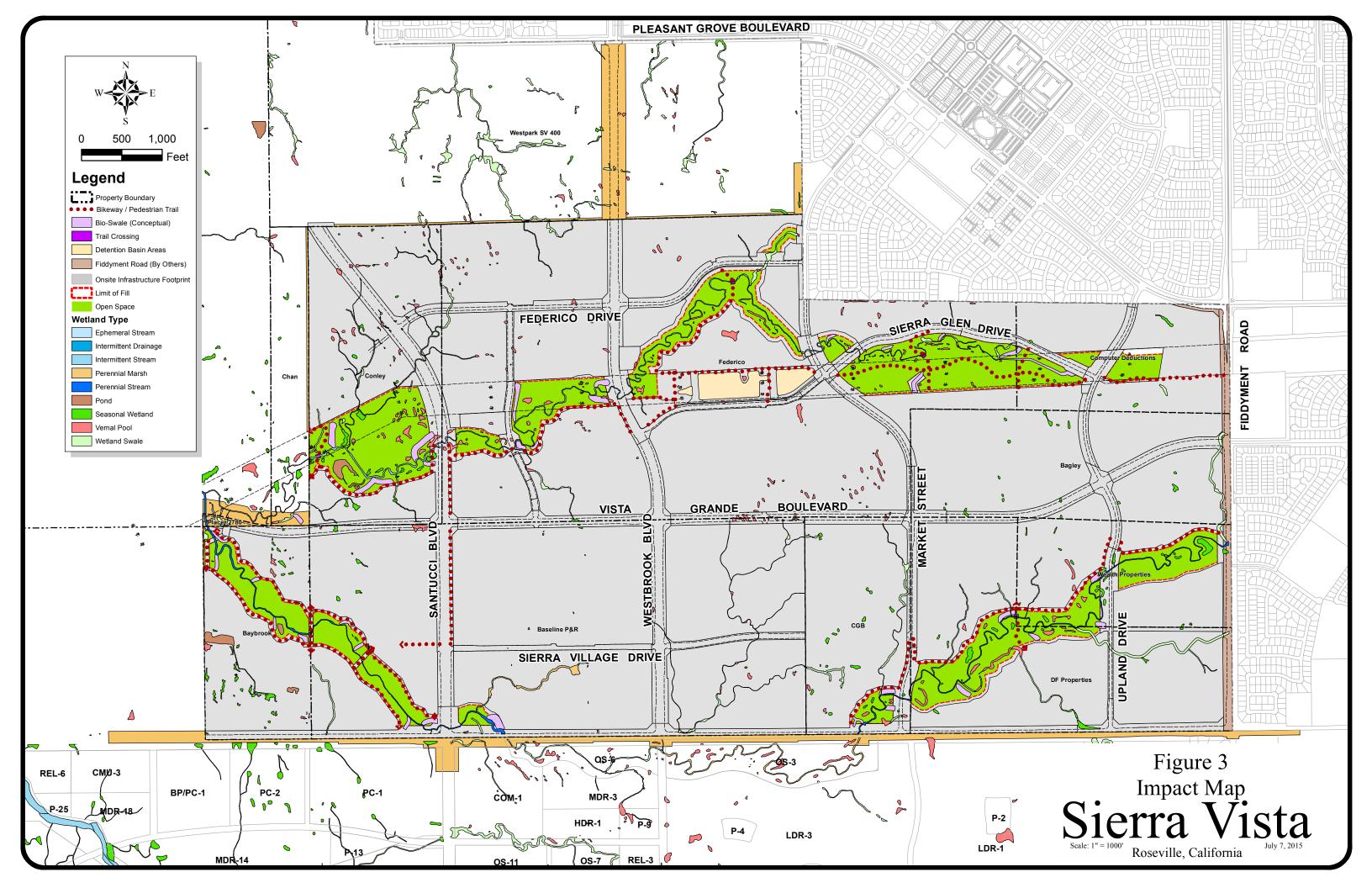
The soil mapping units within the project area include: Alamo-Fiddyment complex 0-5% slopes; Cometa-Fiddyment Complex slopes; Cometa-Ramona sandy loams, 1-5% slopes; Fiddyment loam 1-8% slopes; Fiddyment-Kaseberg loams 2-9% slopes; San Joaquin-Cometa sandy loams 1-5% slopes; and, Xerofluvents hardpan substratum (U.S.D.A. 1980). All of these soils occur on low terraces, are shallow to moderately deep, and underlain by hardpans except for Cometa which is underlain by a dense clay pan. The average depth to hard pan or clay pan in these soils ranges from 18" to 40". As stated previously, virtually all of these soils have been disked and/or plowed in the past and are not now actively grazed. As a result, the soils typically are not compacted and are well-aerated. The disking and/or plowing has eliminated much of the natural micro-topography in many areas but has not resulted in significantly truncated or buried soil profiles.

# **Aquatic Resources**

Jurisdictional delineations for the properties comprising the Project have been completed and verified by the Corps. As part of the planning for the Project, these various delineations were combined and, in some cases, modified slightly to correctly reflect property lines and overlap. In preparing the jurisdictional delineations, the various consultants used their own nomenclature for classifying the types of delineated aquatic features. To varying degrees, these classifications are not consistent. As a result, the Corps consolidated these various classifications into one consistent and condensed classification system. Table 2 is a summary of the area of the delineated aquatic features, by type, for each of the properties comprising the Project. Figure 3 is a map showing the existing waters of the U.S. within the project area. The drawings for each of the applications comprising the Project that are attached in Appendix A include a map showing the location and areal extent of these aquatic features. The following is a description of each of the types.

**Table 2**. Summary of Aquatic Areas by Type

Туре	Bagley, Wealth, & Computer Deductions	Baseline P&R	Baybrook	Conley	DF	CGB	Federico Mourier	Federico Westpark	Total
Ephemeral Stream			0.002			0.018			0.020
Intermittent Stream	0.018			0.854	0.095		1.2531	1.0388	3.259
Perennial Stream	0.989	0.932	0.868		0.715	0.36			3.864
Perennial Marsh		0.859							0.859
Pond			1.212	0.856	•				2.068
Seasonal Wetland	1.901	0.385	1.055	1.316	0.856	0.543	0.045		6.101
Vernal Pool	0.429	0.68	0.309	1.864	1.093	0.367	3.057	1.5097	9.309
Wetland Swale	0.975	1.296	0.308	2.005	2.437	1.214	0.8436	1.4392	10.518
Property Total	4.312	4.152	3.754	6.895	5.196	2.502	5.199	3.988	35.997



#### Streams

There are three types of stream channels occurring within the perennial streams, intermittent streams, and ephemeral streams. Streams are differentiated from linear wetlands (seasonal wetland swales) by the presence of defined beds and banks and an identifiable ordinary high water line. streams are subject to flowing and/or ponded water throughout the growing season in normal precipitation years. Intermittent streams flow seasonally, but for a longer duration than ephemeral streams. Intermittent streams receive hydrologic input from a seasonal perched groundwater table and, as a result, will experience flow for weeks or months after rainfall events. Ephemeral streams receive hydrologic input primarily from runoff and, as a result only experience flow during, and for a few days after, rainfall events. Generally speaking, perennial streams are more deeply incised and wider than intermittent streams which, in turn, are more deeply incised and wider than ephemeral streams.

Curry Creek is the only perennial stream in the project area. Curry Creek receives increased runoff in the form of nuisance flows from developed lands located east of Fiddyment Road. Because of the input of these nuisance flows, Curry Creek experiences flows and/or ponded water throughout the year. The hydrology of the upstream reaches of Curry Creek has been further modified by beaver activity, creating ponded conditions that persist throughout the year. The vegetation of Curry Creek is typical of emergent marshes with cattail (*Typha sp.*) being the most dominant species.

Federico Creek along with portions of several of its tributaries are intermittent streams. The upper reaches of Federico Creek as well as its tributaries are generally narrow (3 feet to 6 feet wide) and incised less than 5 feet. In its lower reaches, Federico Creek is incised 5 to 8 feet with widths ranging from 10 feet to 30 feet. Cover by hydrophytic vegetation is sparse to moderate. Where present, the dominant plants are primarily species typical of seasonal wetlands including perennial rye, creeping spike rush (*Eleocharis macrostachya*), soft rush (*Juncus effuses*), coyote

thistle (*Eryngium vaseyi*), and rabbit's-foot grass (*Polypogon monspelliensis*).

Ephemeral channels are generally incised less than 3 feet and are narrow ( $\leq$  3 feet wide). Because of their reduced hydroperiod, hydrophytic plant communities are sparse. Common species include perennial rye, Mediterranean barley (*Hordeum murinum*), and coyote thistle.

#### **Ponds**

There are five ponds existing within the project area. All of these stock ponds are located in the far western portion of the project area and were constructed by a combination of excavation and diking. One of the ponds located on the western boundary of the project area is inundated year round while the remainder of the ponds are inundated seasonally and dry up in the late summer and fall. The seasonally inundated ponds support a hydrophytic plant community after drawdown. Dominant plants include creeping spikerush, water plantain (*Alisima plantago-aquatica*), rabbit's-foot grass, curly dock (*Rumex crispus*), slender popcorn flower (*Plagiobothrys stipitatus micranthus*), and annual hairgrass (*Deschampsia danthanioides*).

#### Perennial Marsh

There is one wetland that was classified as an emergent marsh located in the south central portion of the Baseline P&R property. At the time this wetland was mapped it received irrigation runoff from adjacent agricultural fields. Since that time, the agricultural practices on adjacent lands have changed and the wetland no longer receives enough irrigation runoff to support perennial marsh. It now is inundated seasonally and supports a plant community more characteristic of seasonal wetlands and wetland swales as described below.

Conversely, subsequent to the delineation, the upstream reach of Curry Creek on the Wealth property has been hydrologically enhanced by irrigation runoff from developed lands and beaver activity. This reach of Curry Creek, now supports an emergent marsh that is inundated or saturated throughout the growing season. The dominant plant in this emergent marsh is cattail.

#### Seasonal Wetlands

The seasonal wetland classification includes depressional wetlands that are inundated in the winter and early spring but are dry throughout the summer and fall. Depths of these seasonal wetlands range from a few inches up to 2 feet. These depressional seasonal wetlands are topographically and hydrologically similar to vernal pools (described below) but their plant communities are not dominated by species considered endemic to vernal pools. Common plant species include perennial rye, Mediterranean barley, rabbit's-foot grass, mannagrass (*Glyceria declinata*), hyssop loosestrife (*Lythrum hyssopifolia*), toad rush (*Juncus bufonius*), and slender popcorn flower. These seasonal wetlands are structurally and hydrologically similar to vernal pools that don't support vernal pool plant communities.

#### Wetland Swales

Wetland swales are linear sloping seasonal wetlands that occur in topographic swales versus seasonal wetlands which occur in depressions. They are inundated in the winter and early spring during and for up to several weeks following rainfall events. They often have embedded depressions that pond water to a greater depth and duration similar to depressional seasonal wetland and vernal pools. The most common plants occurring within the wetland swales include perennial rye, Mediterranean barley, rabbit's-foot grass, and hyssop loosestrife.

#### Vernal Pools

Vernal pools are seasonally inundated wetlands occurring within topographic depression which occur both as isolated features in the landscape and in associated wetland and non-wetland swales. They typically flood to a depth of 2 inches to over 1 foot in the winter and early spring. The plant communities within vernal pools are typically dominated by vernal pool endemics, a majority of which are native annuals. These vernal pool endemics include slender popcorn flower, Vasey's coyote thistle, Carters buttercup (*Ranunculus alveolatus*), double-horned downingia (*Downingia bicornuta*), and annual hairgrass. Depending on their depth and level of disturbance, other non-native species common to seasonal wetlands may also be present as dominants or associates. Under the Corps' classification system, vernal pools are differentiated from depressional seasonal wetlands based on the dominance of vernal pool endemic plants.

## **Impacts**

Figure 3 is an impact map overlaying the Project and existing resources. The application drawings in Appendix A include impact maps for each of the properties comprising the Project. To calculate direct impacts, the limits of disturbance including slopes and construction zones were first determined and mapped. Where disturbance would occur within vernal pools and seasonal wetlands, the entire wetland polygon was presumed to be directly impacted. Where the disturbance would occur within linear features including perennial streams, intermittent streams, ephemeral streams, and wetland swales as well as ponds and emergent marsh, the direct impact was presumed to be the footprint of disturbance within the wetland polygon.

Table 3 is a summary of the direct impacts, by type, for the on-site and off-site infrastructure and for each of the properties comprising the project excluding the on-site and off-site infrastructure. A total of 24.64 acres of waters of the U.S. would be directly impacted. Table 3 overstates the total direct effects by approximately one-half

acre because the Bagley, Computer Deductions, Wealth application includes not only the infrastructure located within its property boundaries but also impacts resulting from construction of some of the infrastructure located on the Federico Mourier and Federico Westpark properties. Table 4 tabulates the infrastructure impacts included on the Bagley, Computer Deduction, Wealth application that is also included on the Federico Mourier and Federico Westpark applications.

This total impact is comprised of 0.338 acre of ephemeral stream, 0.560 of acre intermittent stream, 0.885 acre of perennial stream, 1.045 acres of pond, 0.848 acre of perennial marsh, 4.486 acres of seasonal wetland, 9.505 acres of wetland swale, and 6.837 acres vernal pool. As stated above, this total includes off-site impacts as well as on-site impacts. As a result, these impacts cannot be subtracted directly from the total acres of existing waters of the U.S. to yield the avoided waters of the United States.

Table 3. Summary of Direct Impacts to Waters of the United States

Permit/Project	PS	IS	ES	P	PM	VP	SW	WS	Total
Bagley, Computer Deductions, Wealth	0.1344	0.1422				0.3400	1.2991	1.1956	3.1113
Baseline P&R	0.3119				0.8482	0.6800	0.3611	1.2272	3.4284
Baybrook	0.0519		0.0015	1.0450		0.3086	1.0517	0.1953	2.6540
CGB	0.1311		0.0155			0.3005	0.4840	1.1964	2.1275
Conley		0.0651				0.8749	0.6623	1.5268	31291
DF	0.0240					0.4755	0.4588	2.1198	3.0781
Federico Mourier		0.3499				2.2712	0.0450	0.3335	2.9996
Federico Westpark		0.1149				1.0423		1.1307	2.2879
Off-site Infrastructure (Excluding Westbrook Blvd.)	0.2316		0.3206			0.5857	0.1235	0.5794	1.8408
Total	0.8849	0.6721	0.3376	1.0450	0.8482	6.8367	4.4855	9.5047	24.6414

 Table 4. Double-counted On-site Infrastructure Impacts

Infrastructure Segment	PS	IS	ES	P	PM	VP	SW	WS	Total
FED1								0.2233	0.2233
M1		0.0956				0.0167			0.1123
T1								0.0059	0.0059
U1		0.0379				0.0470			0.0849
U2						0.0092		0.0117	0.0209
W4						0.0421			0.0421
Total	0.0000	0.1335	0.0000	0.0000	0.0000	0.1150	0.0000	0.2409	0.4894

# Chapter 4

## **Proposed Mitigation Measures**

## **Goals and Objectives**

The overall objective of this mitigation plan is to compensate for impacts to wetlands and other waters of the U.S. The proposed mitigation measures are intended to replace both loss of wetland area and wetland function. Where replacement of wetlands on-site is not environmentally preferable, the plan provides for mitigation off-site.

# **Description of Proposed Mitigation Measures**

#### On-site Avoidance and Preservation

The Project provides for approximately 227.5 acres of naturally maintained open space preserves. These open space preserves are comprised of 183.4 acres of primary open space and 44.1 acres of secondary open space. The open space preserves were designed to place the highest priority on preserving stream corridors and those wetlands located in close proximity to these streams. The entire length of the two primary streams draining the project area, Curry Creek and Fiddyment Creek, will be preserved. At the Corps' recommendation, 100-foot buffers were established along these stream corridors to minimize indirect impacts from the proposed development.

As stated previously, virtually the entire project area has been disked and/or plowed in the past for agriculture and/or wildfire suppression. This has resulted in the muting of the micro topography of the wetlands, importation of upland soil into the wetlands and the general degradation of wetland function throughout the project area. If the project area is not developed and these corridors are not preserved and managed, it is very likely that this degradation would continue to occur in the future. Therefore, preservation and maintenance of the wetlands within the proposed open space corridors would result in enhancement of wetland function through the elimination of future disking and other disturbances.

Approximately 13.752 acres of wetlands and other waters of the U.S. would be preserved within designated open space preserves within the project area. This total is comprised of 0.003 acre of ephemeral stream, 2.700 acres of intermittent streams, 3.205 acres of perennial stream, 1.023 acres of pond, 0.011 acre of perennial marsh, 1.739 acres of seasonal wetlands, 1.834 acres of wetland swales and 3.237 acre of vernal pools.

Conservation easements over the open space preserves will be granted to the City which will be responsible for the long term maintenance of the open space preserves under the City's Open Space Preserve Overarching Management Plan. Except for those authorized activities necessary to build the Project, the conservation easements will limit activities within the open space preserves to those activities that are beneficial to the restoration, creation, and preservation of wetlands and their surrounding upland habitats and will provide funding for the long-term maintenance of the open space preserves in perpetuity.

### On-site Creation

The on-site wetland creation is intended to compensate, in part, for impacts to streams, ponds, perennial marsh, seasonal wetland swales, and a portion of the impacts to seasonal wetlands. In addition to providing partial replacement of wetland losses, it is also designed to restore, as much as possible, the function of the preserved streams which have been degraded by historic agricultural practices and upstream development. Figure 4 is a conceptual plan drawing showing the approximate layout of the wetlands to be created.

The mitigation to be constructed on-site has been divided into discrete segments or reaches (See Figure 4). Within each discrete mitigation segment, all of the mitigation must be constructed at one time. All of the mitigation within each mitigation segment must be completed within the same construction season.

A maximum total of approximately 19.95 acres of wetlands will be constructed on-site. Since the configuration of wetlands to be constructed as shown in Figure 4 is only conceptual, the final design may result in less than 19.95 acres. Of this total, approximately 2.08 acres of wetlands would be constructed within the open space preserves along Federico Creek and up to 17.87 acres would be constructed within the open space preserves along Curry Creek. As shown in Figure 4, the mitigation is divided into reaches that will be separated by roads and trails. All of the mitigation within each reach will be constructed at one time.

The wetlands to be constructed along Federico Creek are intended to be relatively shallow ( $\leq 1$  foot deep) depressional seasonal wetlands, similar to the existing depressional seasonal wetlands currently existing within the project area. They will not have a direct hydrological connection with Federico Creek and water quality bioswales will not flow into them.

Their hydrology will be based on the seasonal perched groundwater table similar to depressional seasonal wetlands and vernal pools currently existing within the project area. Their target wetland plant communities are intended to be similar to depressional seasonal wetlands existing within the project area. Plants expected to dominate these wetlands include common seasonal wetland species such as perennial rye, Mediterranean barley, rabbits-foot grass as well as some species commonly associated with vernal pools such as coyote thistle, Freemont's goldfields, and slender popcorn flower.

The wetlands to be constructed along Curry Creek will be located on low terraces excavated adjacent to the existing stream channels. They will be sited so that they are approximately 50 feet or more distant from existing wetlands to avoid indirectly affecting them. The wetlands to be constructed will be located along the inside of existing stream meanders and along relatively straight reaches so as to avoid being intercepted by the natural meandering of the creek

Table 5 is a list of plant species expected to establish within the constructed wetlands. This list was compiled based on species found within wetlands currently existing within the project area.

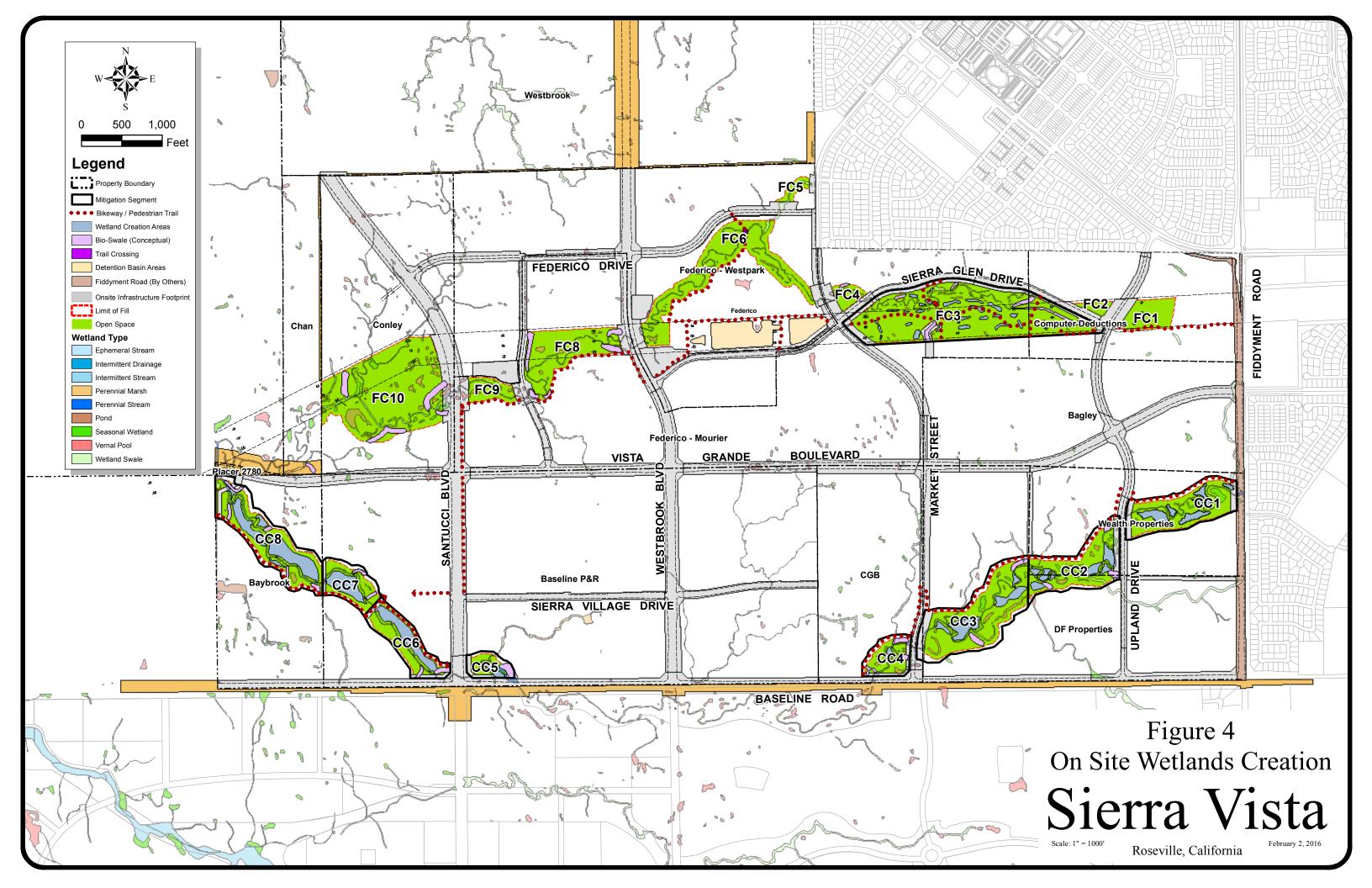


 Table 5. Plant Species Expected to Occur in Constructed Wetlands

Scientific Name	Common Name	Shallow	Medium	Deep
Agrostis avenacia	Pacific Bentgrass		Х	X
Alisima plantago-aquatica	Common Water-plantain			X
Alopecurus saccatus	Foxtail	X		
Briza minor	Lesser Quaking Grass	X		
Centromadia pungens	Spikeweed	х		
Crassula aquatica	Water Pygmyweed		Х	X
Cynodon dactylon	Bermuda Grass	х		
Cyperus eragrostis	Tall Flatsedge		Х	X
Deschampsia danthonioides	Annual Haigrass	х		
Downingia bicornuta	Double-horn Downingia	х		
Downingia ornatissima	Folded Downingia	х		
Eleocharis acicularis	Least Spikerush	х		
Eleocharis macrostachya	Creeping Spikerush		Х	X
Elymus triticoides	Creeping Wild-rye	х		
Eryngium castrense	Great Valley Coyote-thistle	х	Х	
Festuca bromoides	Six-week Fescue	х		
Festuca perennis	Perennial Rye	х	Х	
Hordeum marinum	Mediterranean Barley	х		
Juncus bufonius	Toad Rush	х		
Juncus effusus	Soft Rush			X
Juncus balticus	Baltic Rush			X
Lasthenia fremontii	Fremont's Goldfields	х		
Lupinus bicolor	Two-color Lupine	х		
Lythrum hyssopifolium	Hyssop Loosestrife	х	Х	
Marselia vestita	Hairy Water Clover		Х	X
Navarretia leucocephala	White-head Navarretia	х		
Phalaris lemmonii	Lemmon's Canary Grass	X		
Plagiobothrys greenei	Greene's Popcorn-flower	X	Х	
Plagiobothrys stipitatus	Slender Popcorn-flower	X		
Pogogyne ziziphoroides	Sacramento Mesa-mint	х		
Polypogon monspeliensis	Annual Rabbit's-foot Grass		Х	X
Psilocarphus brevissimus	Wooly Marbles	x		
Psilocarphus oregonus	Oregon Wooly Marbles	X	Х	
Ranunculus bonariensis	Carter's Buttercup	X	Х	
Salix hindsiana	Sandbar willow		X	X
Salix lasiolepis	Arroyo willow			X
Rumex crispus	Curley Dock	X	X	
Scirpus acutus	Soft-stem Bulrush			X
Typha spp.	Cattail			X

The location of outfalls and bioswales are shown in Figure 4. The number and location of these outfalls and bioswales are approximate. The location of bioswales relative to the wetlands to be constructed will be finalized in consultation with the Corps in the final mitigation plans. Where a constructed wetland will be located down-gradient of a water quality treatment features such as a bioswales, the invert of the down-gradient opening will be at approximately the same elevation as the wetland. Any openings will be protected from erosion by the use of a vegetated geotextile fabric rather than structural armoring. The interior slopes adjacent to the wetlands will typically be graded to approximately 5:1 or greater except where limited by proximity to the adjacent watercourse.

The wetlands will be constructed during the dry season when surface water is not present except possibly along certain reaches of Curry Creek where ponding may persist year-round due to alterations in the natural hydrology as explained above. In constructing the wetlands, the first 4 to 6 inches of top soil from the impacted wetlands will be salvaged and stockpiled. The wetlands will then be excavated and graded to an elevation of approximately 4 to 6 inches below design depth. The salvaged topsoil will then be placed to final grade. Once grading is completed, the slopes of the wetland will be hydro-seeded with a mixture of upland and wetland grasses and forbs. The species comprising the hydro-seed mix will be composed of native and non-invasive naturalized species. To minimize erosion, it may also be desirable to sprinkler irrigate the constructed wetlands and side slopes to promote establishment of a vegetative cover prior to the on-set of the rainy season.

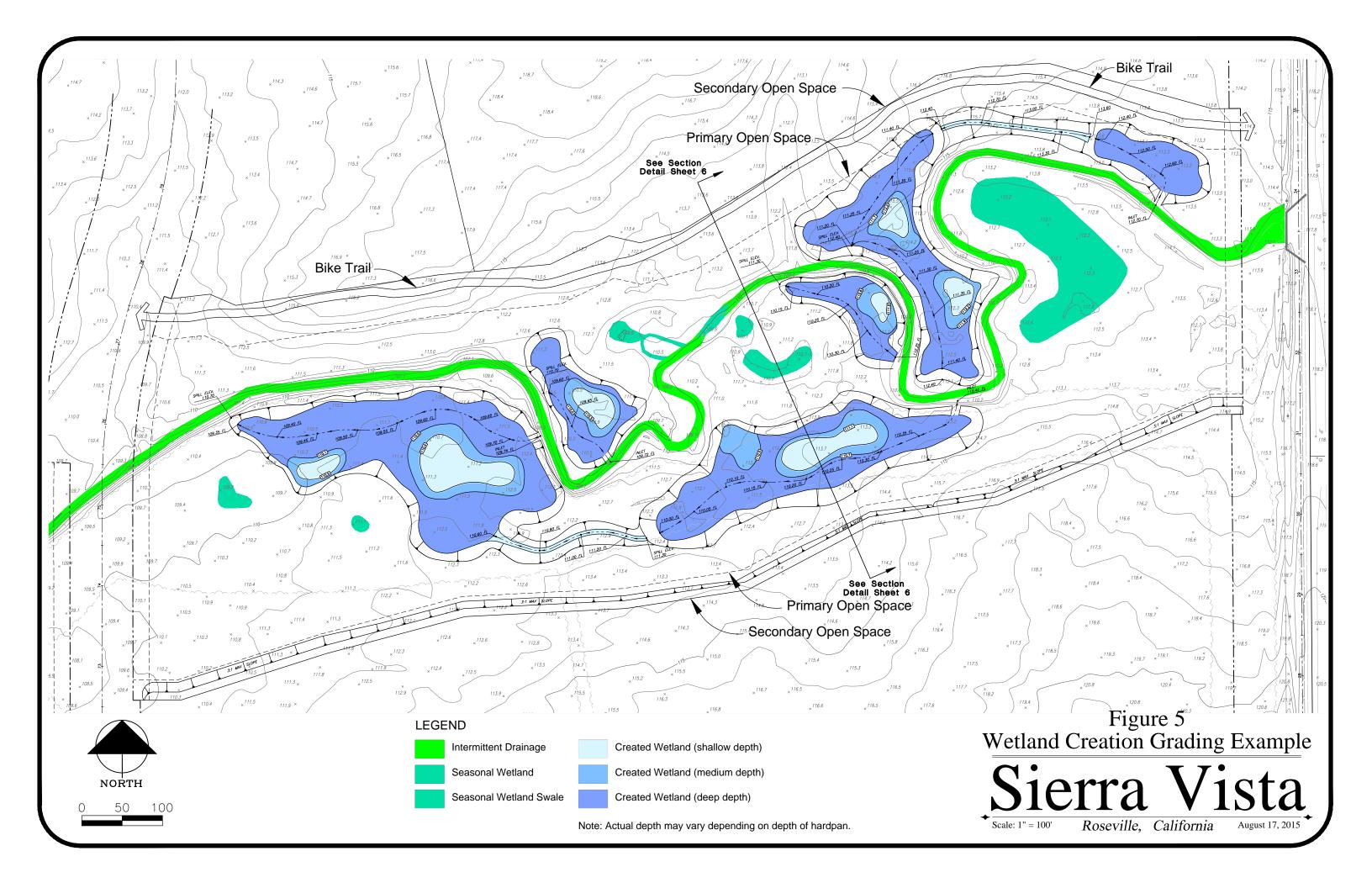
The wetlands will be designed to avoid and minimize adverse impacts to the existing low flow stream systems and existing wetlands. All stream low flow channels naturally migrate and evolve over time. It is likely that these activities will continue following construction of the Project and the on-site mitigation. The open space and mitigation designs are intended to accommodate this by setting back the development areas outside of the meander amplitude of the stream and by locating the constructed wetlands away from the outside meander of the creeks.

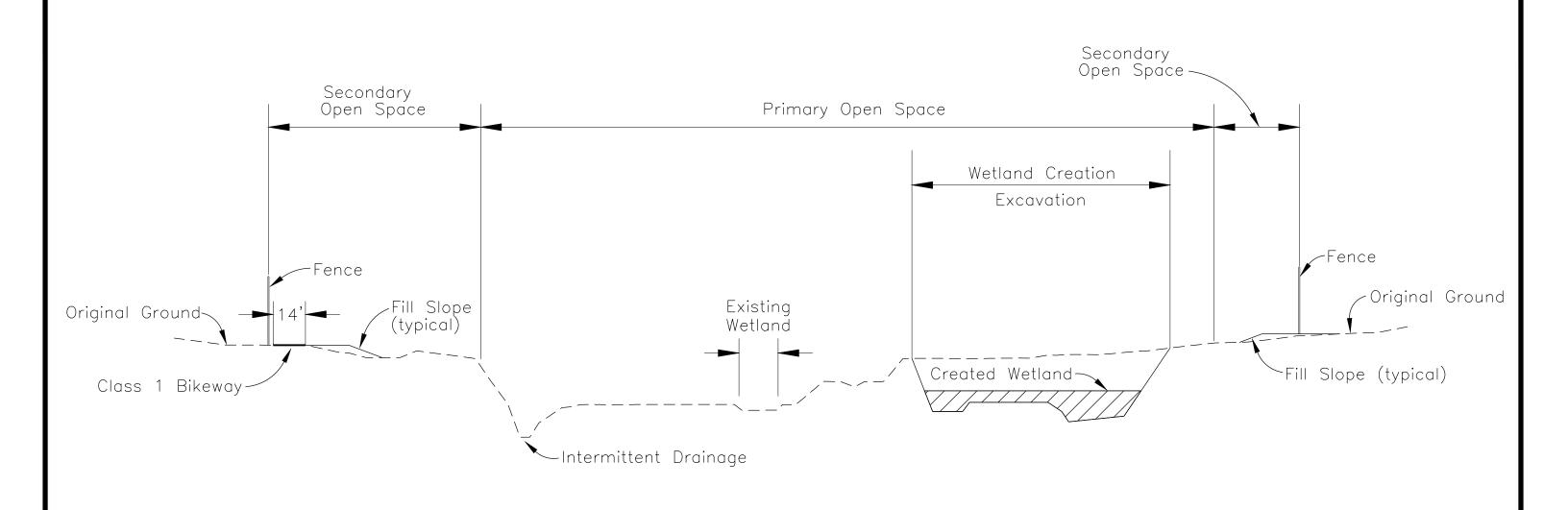
It is anticipated that these dynamic activities may, over time, pose a minor risk to the long-term viability of some of the created wetlands. However, this risk is no greater than at other natural locations where wetlands exist adjacent to streams.

The shape and configuration of wetlands to be constructed along Curry Creek as depicted in Figure 4 are conceptual. The final designs for constructing these wetlands will be refined in consultation with the Corps as part of the final mitigation plans. Figure 5 is a detailed depiction of the wetlands to be constructed within CC1 segment of the Curry Creek open space corridor. Figure 6 is a typical mitigation area cross-section drawing.

Signage will be installed around each mitigation segment noting that it is a mitigation area containing sensitive resources and restricting access to established trails. The location and language of the signage will be will be clearly identified in the final mitigation plans.

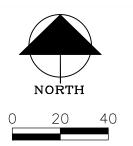
The Corps has determined that the on-site wetland creation along Federico and Curry Creeks will be credited at a compensation ratio of 0.5:1. Given that ratio, the approximately 21.28 acres of created wetlands would compensate for 10.64 acres of impacts. Table 6 lists the approximate area of wetlands to be constructed for each IP and the corresponding credit allocation.





# Typical Wetland Creation - Open Space Section

Horizontal Scale: 1" = 40' Vertical Scale: 1" = 4'





**Table 6.** Summary of On-Site Mitigation by Permit and Reach

Permit	Mitigation Reach(s)	Max. Creation (ac)	Credit @ 0.5:1 (ac)
Baseline	CC5	0.44	0.22
	CC6	2.67	1.34
	CC7	2.17	1.09
	Total	5.28	2.64
Baybrook	CC8	5.06	2.53
	Total	5.06	2.53
	CC1	2.49	1.25
Bagley, Wealth, Computer	FC1	NA	NA
Deductions	FC2	NA	NA
	Total	2.49	1.25
Conley	FC10	NA	NA
CGB	CC4	0.19	0.10
	Total	0.19	0.10
DF	CC2	2.05	1.03
	CC3	2.75	1.37
	Total	4.80	2.40
	FC3	2.08	1.04
	FC4	NA	NA
	FC8	NA	NA
Federico Mourier	FC9	NA	NA
	Total	2.08	1.04
	FC5	NA	NA
Federico Westpark	FC6	NA	NA
Total		19.95	9.75

### Purchase of Wetland Creation/Restoration Credits

The applicants propose to supplement the on-site wetlands creation with the purchase of wetland creation credits from a Corps approved mitigation bank and/or in-lieu fee mitigation fund. After subtracting the on-site mitigation credit (Table 6 above) from total impacts, approximately 14.89 acres of impacts will remain to be compensated through purchase of wetland creation credits (24.64 - 9.75).

The number of wetland creation/restoration credits needed to fully compensate for the 14.89 acres of impacts will depend on the type of wetland credits to be purchased and the location of the bank

relative to the project site. The Corps has determined the following ratios are appropriate.

### Ratios for Impacts to Vernal Pools

- Where vernal pool creation/restoration credits are purchased from an approved mitigation bank located within the same watershed as the Project, the ratio will be 1:1. The project site is within the Upper Coon Creek-Upper Auburn 8-digit HUC watershed, immediately bordering the Lower American 8-digit HUC watershed. The Corps has indicated that a mitigation bank located within either of these two 8-digit HUC watersheds will be considered to be within the same watershed as the project site for purposes of calculating mitigation ratios.
- Where vernal pool creation/restoration credits are purchased from an approved mitigation bank located in a different watershed from this project, the ratio will be 2:1 (2 acres of credits for 1 acre of impact).

Ratios for Impacts to Seasonal Wetlands, Wetland Swales, Perennial Marsh, Perennial, Intermittent and Ephemeral Streams, and Ponds.

- Where seasonal wetland creation/credits have similar hydrology and plant community characteristics as compared to the impacted seasonal wetlands are purchased from an approved mitigation bank located within the same watershed as the Project, the ratio will be 1:1.
- Where seasonal wetland creation/credits have dis-similar hydrology and plant community characteristics as compared to the impacted seasonal wetlands are purchased from an approved mitigation bank located within the same watershed as the Project, the ratio will be 2:1.
- Where seasonal wetland creation/credits have similar hydrology and plant community characteristics as compared to the impacted seasonal wetlands are purchased from an

- approved mitigation bank located within a different watershed from the Project, the ratio will be 2:1.
- Where seasonal wetland creation/credits have dis-similar hydrology and plant community characteristics as compared to the impacted seasonal wetlands are purchased from an approved mitigation bank located within a different watershed from the Project, the ratio will be 3:1.

#### Off-site Creation/Restoration.

Off-site creation and/or restoration is not currently proposed as part of this Plan, however, the Applicants wish to reserve the option to individually develop an off-site permittee-responsible mitigation to satisfy all or part of their restoration/creation mitigation obligation. Where a particular permittee decides to pursue this option, that permittee will be responsible for preparing a mitigation and monitoring plan for that mitigation site and forwarding that plan to the Corps and Service for their approval prior to beginning construction. That plan must fully comply with established Corps of Engineers standards and policies for compensatory mitigation including a long-term management plan, conservation easement and funding mechanism for long-term management.

#### Off-site Preservation

Separate from this compensatory wetland mitigation plan, the U.S. Fish and Wildlife Service has issued a biological opinion incorporating conservation measures intended to minimize impacts to Federally-listed branchiopods from the Project. Those measures include purchasing vernal pool preservation credits from Service-approved conservation banks at a ratio of 2:1 for impacts to suitable vernal pool fairy shrimp habitat.

### **Implementation**

### **Implementation Procedure**

Prior to initiating construction in waters of the U.S., each permittee shall submit a final mitigation plan for approval to the Corps. The final mitigation plan shall quantify the total area (by type) of waters of the U.S. to be impacted including any infrastructure segments located off of the permittee's property to be constructed under the authority of the RGP. The final mitigation plan shall provide detailed drawings for the on-site wetlands creation and quantify the total amount of wetlands to be constructed on-site. The final mitigation plan will list the type and amount of creation/restoration credits to be purchased and the name of the mitigation bank or in-lieu fee program from which the credits will be purchased.

### **Responsibilities for Implementing Plan**

The permittees will be responsible for preparing the final mitigation plans for their properties and submitting those plans to the Corps for approval. The permittees will be responsible for constructing the on-site wetlands creation segments specified in their final mitigation plan and for securing the off-site creation/restoration credits in the amounts specified in each of their respective final mitigation plans.

### Chapter 5

### **Monitoring**

### **Performance Standards**

The performance standards for the wetlands constructed on-site were developed from the Corps South Pacific Division Uniform Performance Standards for Mitigation Requirements. Table 7 lists the recommended performance standards. It should be noted that the performance standards for wetlands constructed along the Curry Creek open space corridor and the Federico Creek open space corridor are the same. However, as discussed in the following section, the reference wetlands will be different, resulting in effectively different performance standards.

### **Reference Wetlands**

Since the wetlands to be created within the Curry Creek open space corridor and the Federico Creek open space corridor are different, the reference wetlands for each should also be different.

The reference wetlands selected for the Federico Creek wetland construction should be shallow depressional seasonal wetlands that do not receive inflow or overbank flooding from Federico Creek and do not receive treated runoff from bioswales. The plant communities within these depressional seasonal wetlands should be typical of the depressional wetlands existing within the project area. The estimated maximum depths of inundation within these seasonal wetlands should range from approximately 2 to 4 inches up to or slightly exceeding 12 inches. Although the reference wetlands need not be located within the same mitigation reach, they should be located within the Federico Creek open space and should be situated a minimum of 50 feet away from areas that will be

disturbed by development. A minimum of 10 reference wetlands shall be selected. Although not required, it is preferable that the same reference wetlands or as many of the same reference wetlands as possible be used for all of the wetlands to be constructed along the Federico Creek open space. Where reference wetlands are being used for more than one mitigation monitoring effort, they should only be monitored once and the information should then be shared with the other monitoring efforts

Where possible the reference wetlands selected for the Curry Creek wetland construction should reflect a broader range of wetlands including both shallow and deep depressional seasonal wetlands, emergent marsh and willow scrub wetlands. If individual reference wetlands comprising the broad range of wetland types cannot be established, then reference wetlands of each type shall be established. A minimum of 10 reference wetlands shall be selected for each type of wetland created. Where appropriate, reference wetlands comprised of more than one wetland type may be used to satisfy this requirement.

The estimated maximum depths of inundation within these seasonal wetlands should range from approximately 2 to 4 inches up to or slightly exceeding 12 inches. While there are many possible reference seasonal wetlands within the Curry and Federico Creek open space corridors, potential emergent marsh and willow scrub reference wetlands are more limited. It may be necessary to locate some emergent marsh and willow scrub reference wetlands outside the project area. If this is necessary, sites should be selected that are within preserved open space and as near the project area as possible. Such sites are potentially available within the West Roseville opens space preserves located directly north of the Project.

Table 7. Performance Standards for Wetlands Constructed On-Site

		Target				
Category-No.	Performance Standard	Year 1	Year 2	Year 3	Year 4	Year 5
Hydrologic-1	The duration of inundation in the constructed wetlands will be no less than 10% less than the shortest reference wetland's duration of inundation or a minimum 14 continuous days, whichever is longer, and no more than 10% longer than the longest reference wetlands duration of inundation.	10%	10%	10%	10%	10%
Hydrologic-2	The maximum and minimum depths of inundation in the constructed wetlands will be no less than 10% less and no more than 10% more than the minimum and maximum depths of inundation in the reference wetlands.	10%	10%	10%	10%	10%
Flora-1	The absolute cover of wetland plants (OBL, FACW, and FAC) in the constructed wetlands will be $\geq 75\%$ of the average absolute cover of wetland plants in the reference wetlands.	25%	40%	60%	70%	75%
Flora 2	The absolute cover of native wetland plants (OBL, FACW, and FAC) in the constructed wetlands will be $\geq 75\%$ of the average absolute cover of native wetland plants in the reference wetlands.	25%	40%	60%	70%	75%
Flora-3	The species richness of wetland plants in the constructed wetlands will be $\geq 75\%$ of the average species richness in reference wetlands	50%	60%	60%	75%	75%

### **Monitoring Protocol**

The wetlands on-site will be monitored for a period of five years or until all performance criteria have been met for three successive years without human intervention, whichever is longer. The purpose of the monitoring is to assess the relative success of the mitigation as compared to performance criteria and to determine whether remedial actions are necessary to assure the performance criteria are met.

Monitoring of the constructed mitigation wetlands will include obtaining quantitative data on their hydrology and developing plant communities. Photo points will be established to qualitatively monitor trends in the developing plant communities. Photo points will also be established in each of the reference wetlands. The areal extent of constructed wetlands will be surveyed annually using GPS technology and/or GIS technology with georeferenced aerial photography.

The monitoring of the hydrology of the constructed wetlands and reference wetlands will be emphasized primarily in the first two growing season following construction. Data loggers to record depth and duration of inundation will be installed at the approximate deepest point in each of the constructed and reference wetlands. Water depths at each data logger will be recorded on a daily basis throughout the rainy season. Once the hydrology of the constructed wetlands has been adequately characterized, additional detailed hydrology monitoring will not be conducted over subsequent growing seasons unless specific problems are identified that warrant further monitoring.

Vegetation monitoring will be conducted during each growing season throughout the monitoring period. The plant community in each of the constructed and reference wetlands will be characterized. Each plant observed will be identified and its absolute cover will be recorded. The total cover of all species will also be estimated.

In addition to monitoring the constructed wetland mitigation, the channel of Curry Creek will also be qualitatively monitored to determine whether the erosion of its banks or bed has been increased. If increased erosion is detected, recommended remedial measures to will be identified. These recommended remedial measures will be submitted to the Corps for approval as part of the annual mitigation monitoring report. Upon approval by the Corps, these remedial measures will be implemented no later than the following dry season.

### Reporting

The results of each year's monitoring will be compiled into an annual monitoring report. The annual monitoring reports will present all monitoring data, assess the implications of that data, and make recommendations for remedial actions, where warranted. The annual reports will be submitted to the Corps not later than October 1st each year for the monitoring conducted in the preceding winter, spring and fall.

### Responsibilities

The permittees will be responsible for implementing all aspects of monitoring, reporting and implementing of required remedial measures for the wetlands constructed pursuant to their permits until the constructed wetlands achieve the performance standards defined above and the City assumes responsibility for long-term maintenance and management as described in the following section. Each permittee will be responsible for submitting annual monitoring reports for the wetlands they have constructed, and for the success of the wetlands they have constructed.

### Chapter 6

### **Long-term Maintenance and Management**

Prior to initiation of construction activities in wetlands or other waters of the U.S., under each IP, deed restrictions, consistent with the City of Roseville's Open Space Preserve Overarching Management Plan will be established over the on-site open space preserves located on the property for which the permit was issued. The deed restrictions will limit activities within the open space preserves to those activities that are beneficial to the restoration, creation, and preservation of wetlands and their surrounding upland habitats. A funding mechanism will be established to provide for the long-term maintenance of the preserves in perpetuity.

Once the constructed wetlands have been monitored for the required period and they have met or exceeded all performance criteria for a period of three consecutive years without human intervention, the open space preserves will then be dedicated to the City who will be responsible for the long-term maintenance of the mitigation areas along with the preserves. The open space preserves will be managed consistent with the City of Roseville's Open Space Preserve Overarching Management Plan.

### Chapter 7

### References

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- City of Roseville. 2011. City of Roseville Open Space Preserve Overarching Management Plan, Final Draft. August 5, 2011. Prepared by ECORP Consulting. Roseville, CA.
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- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1. US Engineer Waterways Experiment Station. Vicksburg, MS.
- North Fork Associates. 2009. Biological Assessment for the Sierra Vista Specific Plan Project, Placer County, California. Revised June 9, 2009. Prepared for URS Corporation. San Francisco, CA.

- Reed, P.B. 1988. National List of Plant Species that Occur in Wetlands: California (Region 0). Biological Report 88(26.10). May 1988. National Ecology Research Center, National Wetlands Inventory, U.S. Fish and Wildlife Service. St. Petersburg, FL.
- U.S.D.A., Soil Conservation Service. 1980. Soil Survey of Placer County, Western Part. Sacramento, CA.

### **APPENDIX A**

### **Application Drawings**

- 1. Baseline P&R
- 2. Baybrook LP
- 3. Cyril G. Barbaccia
- 4. Conley
- 5. D.F. Properties
- 6. Federico Westpark
- 7. Federico Mourier
- 8. TM#1 (Bagley, Wealth and Computer Deductions)
- 9. Infrastructure

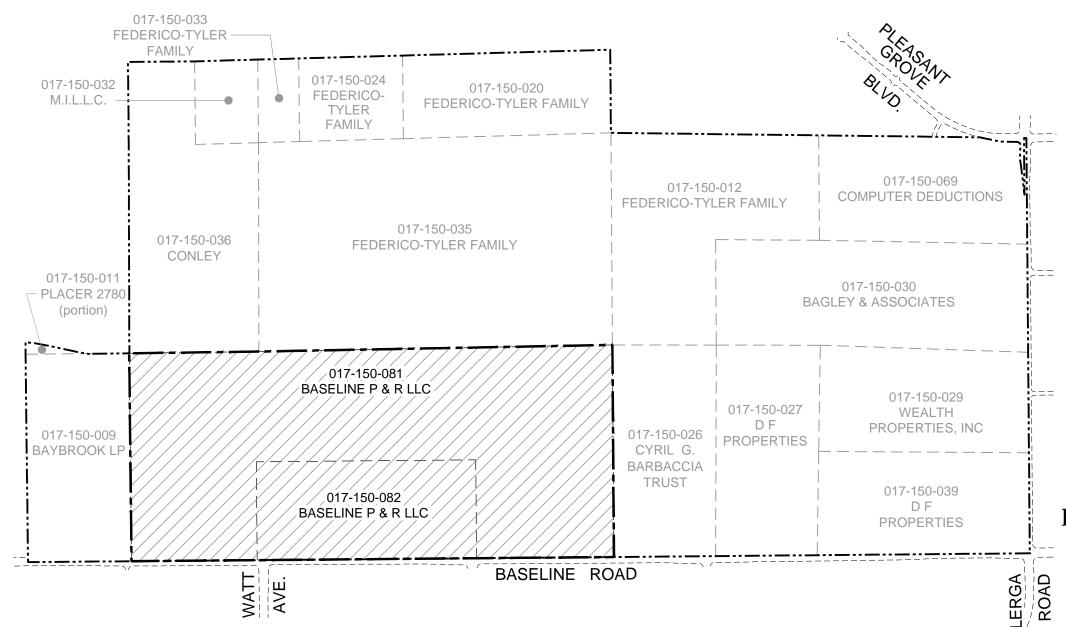


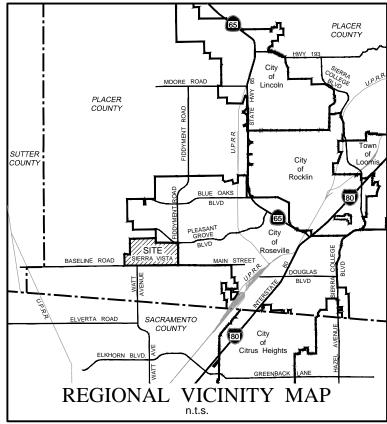
### **LEGEND**

Project Boundary

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Sierra Vista Specific Plan Area Boundary





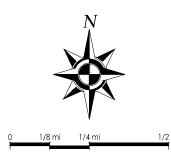


Figure 1

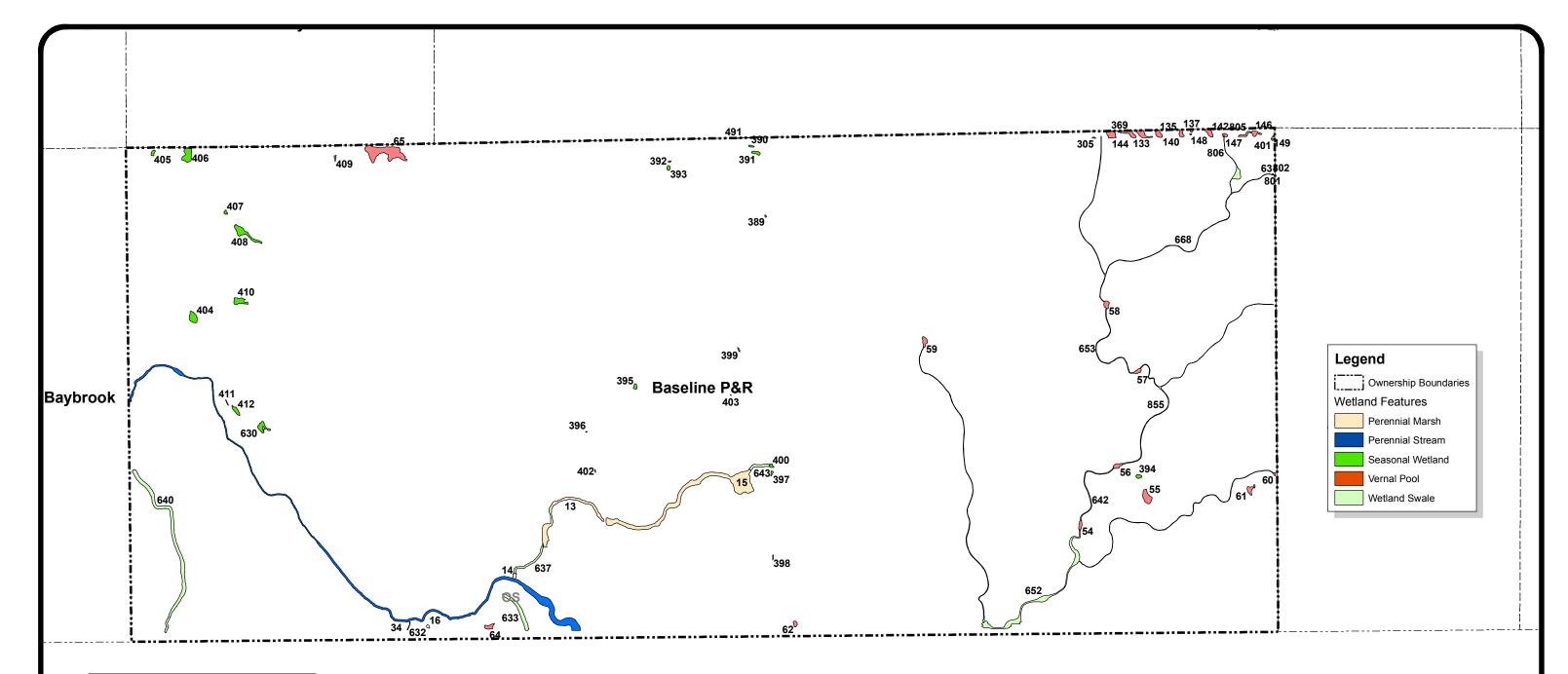
LANDS OF BASELINE P&R LLC VICINITY MAP

Sierra Vista

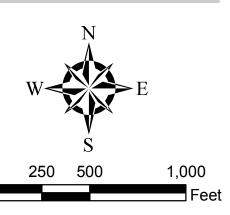
Roseville, California

Sheet 1 of 4

May 31, 2012

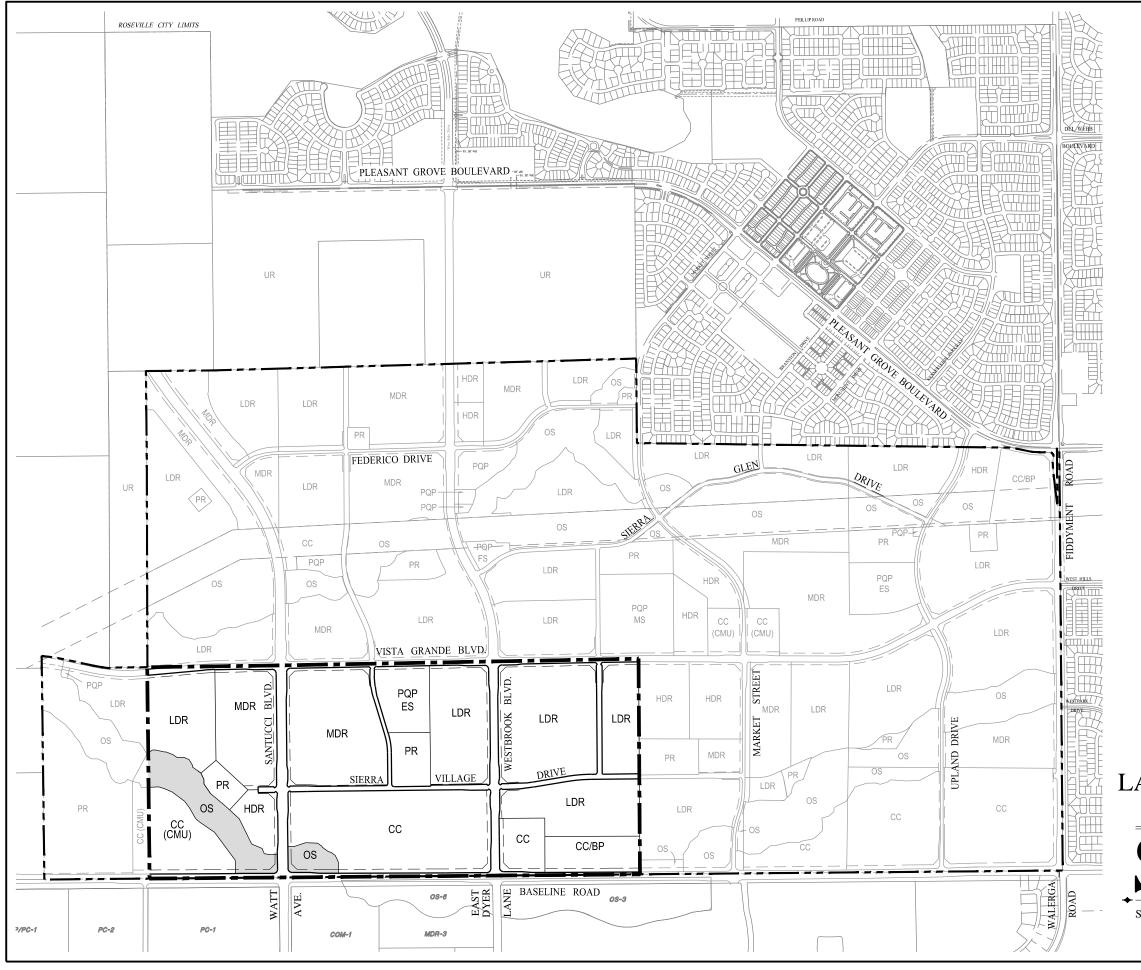


Wetland Area Summary	
Wetland Type	Total
Perennial Marsh	0.8588
Perennial Stream	0.9323
Seasonal Wetland	0.3848
Vernal Pool	0.6800
Wetland Swale	1.2957
Grand Total	4.1517

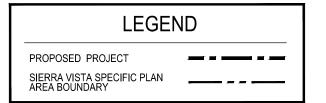


Wetland ID	Area (Acres)	Wetland Type	Wetland ID	Area (Acres)	Wetland Type	Wetland ID	Area (Acres)	Wetland Type
13	0.2042	Perennial Marsh	146	0.0357	Vernal Pool	406	0.0644	Seasonal Wetland
14	0.0106	Perennial Marsh	147	0.0097	Vernal Pool	407	0.0064	Seasonal Wetland
15	0.6393	Perennial Marsh	148	0.0015	Vernal Pool	408	0.0732	Seasonal Wetland
16	0.0048	Perennial Marsh	149	0.0017	Vernal Pool	409	0.0048	Seasonal Wetland
34	0.9323	Perennial Stream	305	0.0021	Vernal Pool	410	0.0420	Seasonal Wetland
54	0.0165	Vernal Pool	369	0.0359	Vernal Pool	411	0.0025	Seasonal Wetland
55	0.0541	Vernal Pool	389	0.0018	Seasonal Wetland	412	0.0212	Seasonal Wetland
56	0.0201	Vernal Pool	390	0.0051	Seasonal Wetland	491	0.0021	Seasonal Wetland
57	0.0162	Vernal Pool	391	0.0137	Seasonal Wetland	630	0.0388	Seasonal Wetland
58	0.0205	Vernal Pool	392	0.0022	Seasonal Wetland	632	0.0034	Wetland Swale
59	0.0232	Vernal Pool	393	0.0084	Seasonal Wetland	633	0.0982	Wetland Swale
60	0.0041	Vernal Pool	394	0.0111	Seasonal Wetland	637	0.0542	Wetland Swale
61	0.0240	Vernal Pool	395	0.0098	Seasonal Wetland	640	0.3722	Wetland Swale
62	0.0115	Vernal Pool	396	0.0007	Seasonal Wetland	642	0.0418	Wetland Swale
63	0.0013	Vernal Pool	397	0.0048	Seasonal Wetland	643	0.0346	Wetland Swale
64	0.0216	Vernal Pool	398	0.0024	Seasonal Wetland	652	0.4286	Wetland Swale
65	0.2422	Vernal Pool	399	0.0028	Seasonal Wetland	653	0.0388	Wetland Swale
133	0.0342	Vernal Pool	400	0.0075	Seasonal Wetland	668	0.1461	Wetland Swale
135	0.0241	Vernal Pool	401	0.0021	Seasonal Wetland	801	0.0000	Vernal Pool
137	0.0045	Vernal Pool	402	0.0012	Seasonal Wetland	802	0.0000	Wetland Swale
140	0.0170	Vernal Pool	403	0.0002	Seasonal Wetland	805	0.0002	Vernal Pool
142	0.0234	Vernal Pool	404	0.0450	Seasonal Wetland	806	0.0002	Wetland Swale
144	0.0348	Vernal Pool	405	0.0106	Seasonal Wetland	855	0.0777	Wetland Swale

Figure 2
Existing Waters of the U.S.
Lands of Baseline P & R LLC
Sierra Vista
Roseville, California
Sheet 2 of 4



#### LAND USE SUMMARY TABLE LAND USE ACRES DENSITY DU (du/ac.) Residential LDR 5.0 602 Low Density Residential Medium Density Residential 59.7 8.0 477 HDR High Density Residential 20.0 150 7.5 sub-total 187.7 CC (CMU) Commercial Mixed Use 20.0 365 Community Commercial 64.0 High Density Residential 12.2 94.5 Public Quasi Public - PQP P/QP Elementary School 12.0 11.8 22.2 OS Open Space Landscape Corridor/Paseo 9.0 Major Roads 38.3 375.5± Total Project Area 1594 du



(Baseline P & R LLC)

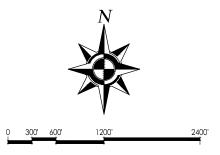


Figure 3

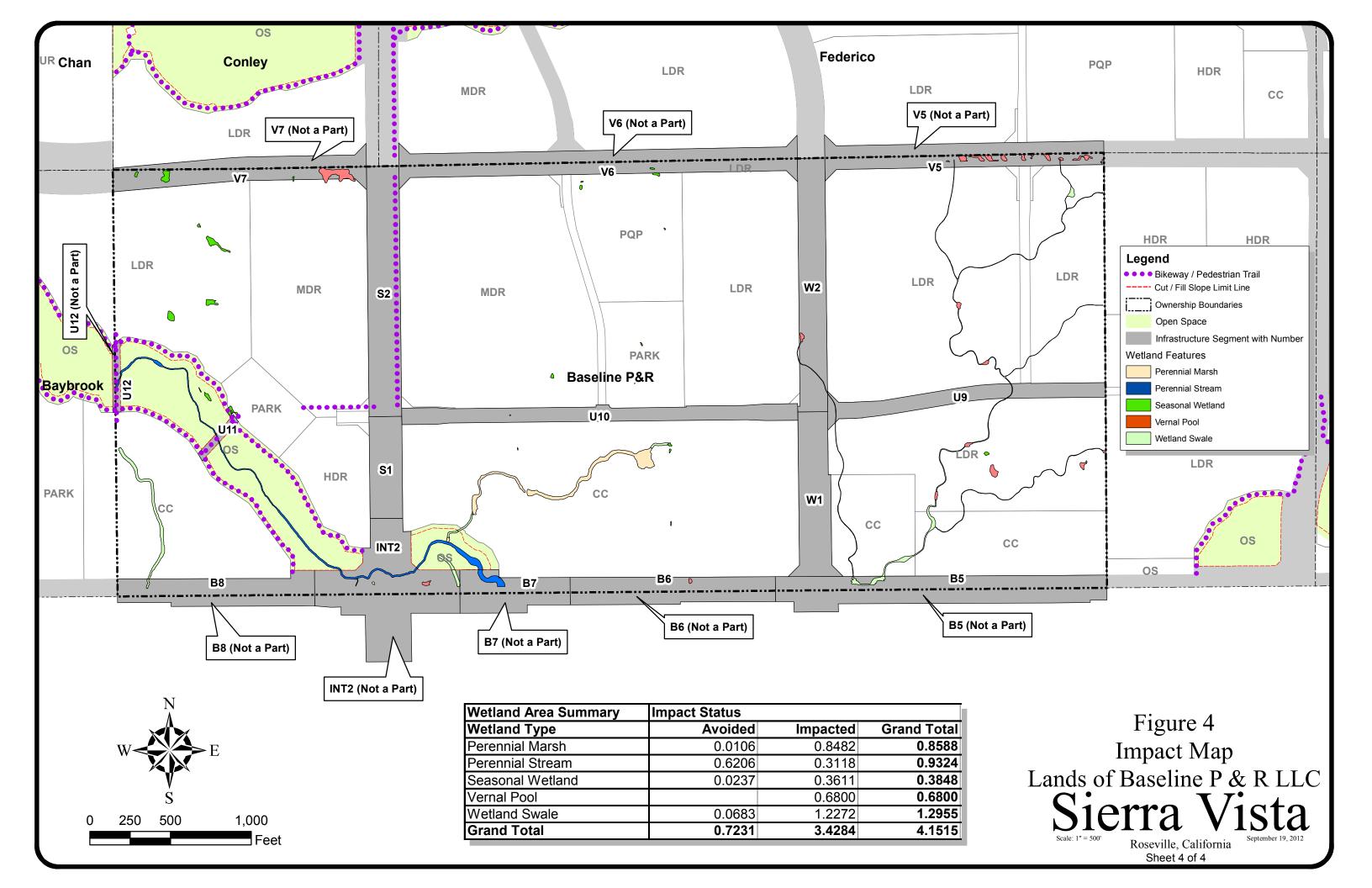
### LANDS OF BASELINE P&R LLC PROPOSED PROJECT

# Sierra Vista

Scale: 1"-1200

Roseville, California

ovember 9, 2012





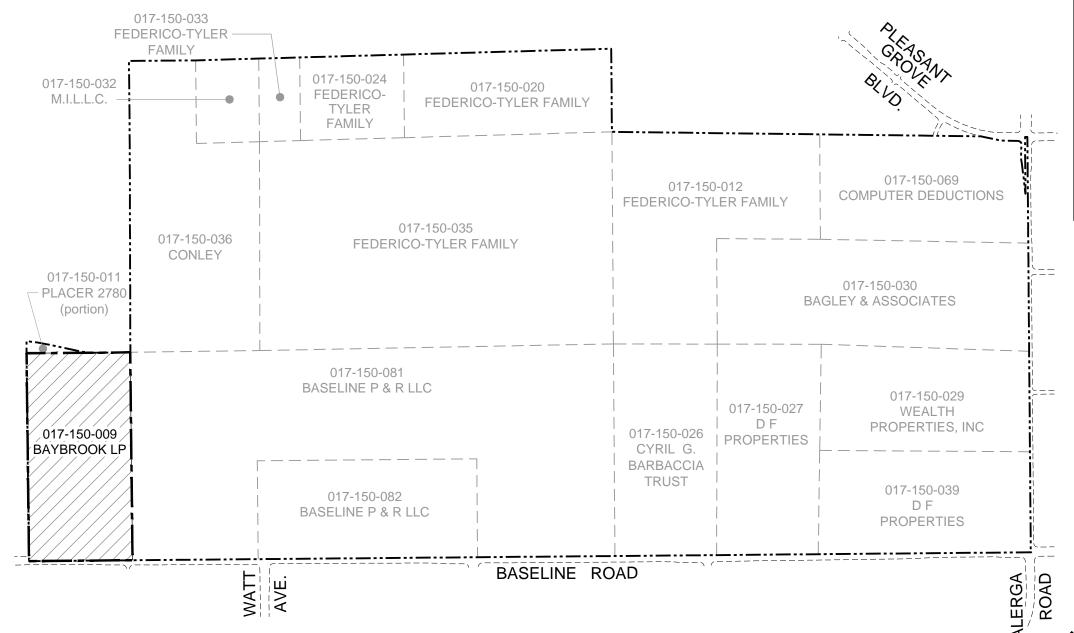
### **LEGEND**

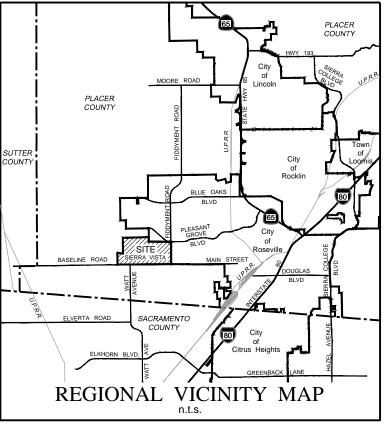
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Project Boundary

\_...

Sierra Vista Specific Plan Area Boundary





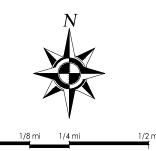


Figure 1
LANDS OF BAYBROOK LP
VICINITY MAP

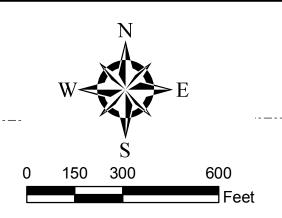
# Sierra Vista

Roseville, California

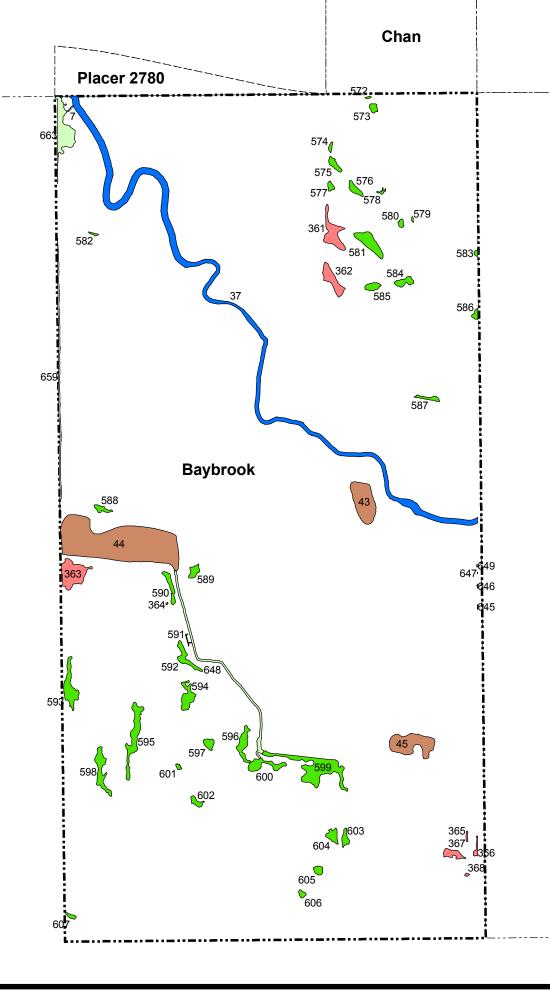
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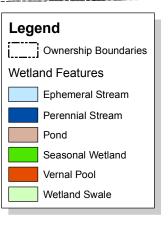
Sheet 1 of 4

May 31, 2012



Wetland ID	Area (Acres)	Wetland Type
7	0.0020	Ephemeral Stream
37	0.8680	Perennial Stream
43	0.1665	Pond
44	0.8827	Pond
45	0.1623	Pond
361	0.0827	Vernal Pool
362	0.0633	Vernal Pool
363	0.1197	Vernal Pool
364	0.0007	Vernal Pool
365	0.0035	Vernal Pool
366	0.0078	Vernal Pool
367	0.0287	Vernal Pool
368	0.0021	Vernal Pool
572	0.0021	Seasonal Wetland
573	0.0133	Seasonal Wetland
574	0.0059	Seasonal Wetland
575	0.0198	Seasonal Wetland
576	0.0214	Seasonal Wetland
577	0.0099	Seasonal Wetland
578	0.0099	Seasonal Wetland
579	0.0040	Seasonal Wetland
580	0.0017	Seasonal Wetland
581	0.0713	Seasonal Wetland
582	0.0034	Seasonal Wetland
583	0.0041	Seasonal Wetland
584	0.0258	Seasonal Wetland
585	0.0209	Seasonal Wetland
586	0.0094	Seasonal Wetland
587	0.0146	Seasonal Wetland
588	0.0160	Seasonal Wetland
589	0.0213	Seasonal Wetland
590	0.0297	Seasonal Wetland
591	0.0020	Seasonal Wetland
592	0.0406	Seasonal Wetland
593	0.0769	Seasonal Wetland
594	0.0527	Seasonal Wetland
595	0.0978	Seasonal Wetland
596	0.0485	Seasonal Wetland
597	0.0196	Seasonal Wetland
598	0.0662	Seasonal Wetland
599	0.1998	Seasonal Wetland
600	0.0514	Seasonal Wetland
601	0.0049	Seasonal Wetland
602	0.0155	Seasonal Wetland
603	0.0184	Seasonal Wetland
604	0.0261	Seasonal Wetland
605	0.0148	Seasonal Wetland
606	0.0088	Seasonal Wetland
607	0.0079	Seasonal Wetland
645	0.0001	Wetland Swale
646	0.0004	Wetland Swale
647	0.0000	Wetland Swale
648	0.1066	Wetland Swale
649	0.0006	Wetland Swale
659	0.0717	Wetland Swale
663	0.1286	Wetland Swale





Conley

Federico

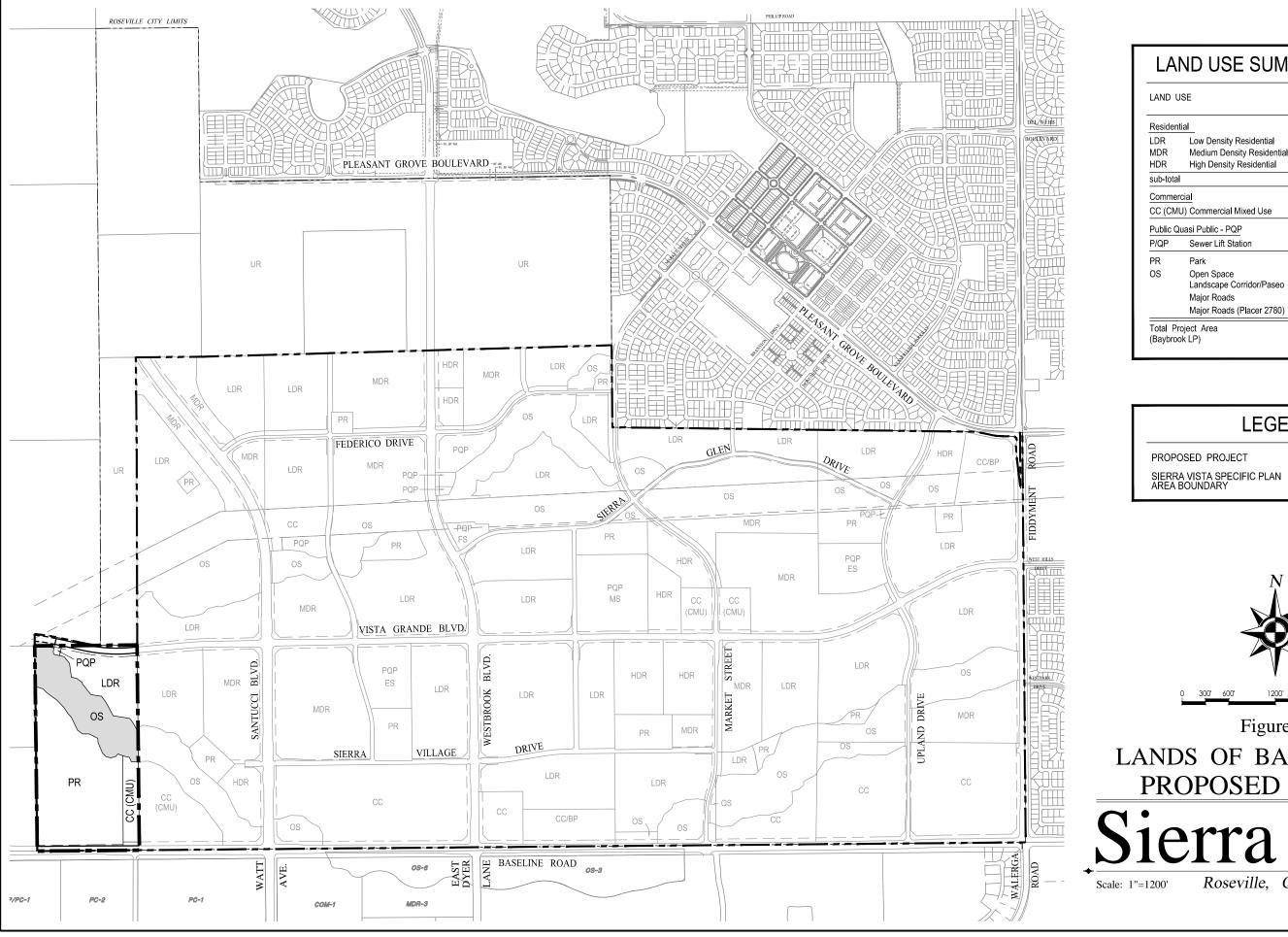
### Baseline P&R

Wetland Area Summary	
Wetland Type	Total
Ephemeral Stream	0.0020
Perennial Stream	0.8680
Pond	1.2115
Seasonal Wetland	1.0551
Vernal Pool	0.3086
Wetland Swale	0.3081
Grand Total	3.7533

Figure 2
Existing Waters of the U.S.
Lands of Baybrook LP

Sierra Vista

Roseville, California Sheet 2 of 4



#### LAND USE SUMMARY TABLE ACRES DENSITY DU (du/ac.) Low Density Residential 5.0 62 Medium Density Residential High Density Residential 12.4 CC (CMU) Commercial Mixed Use 5.2 20.0 Public Quasi Public - PQP Sewer Lift Station 0.3 39.9 17.9 Landscape Corridor/Paseo 1.6 2.5 1.6



81.4±

101 du

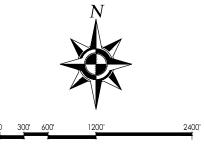
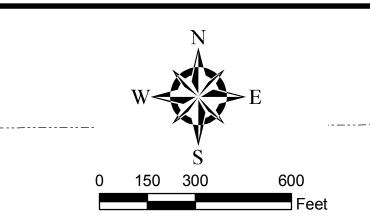


Figure 3

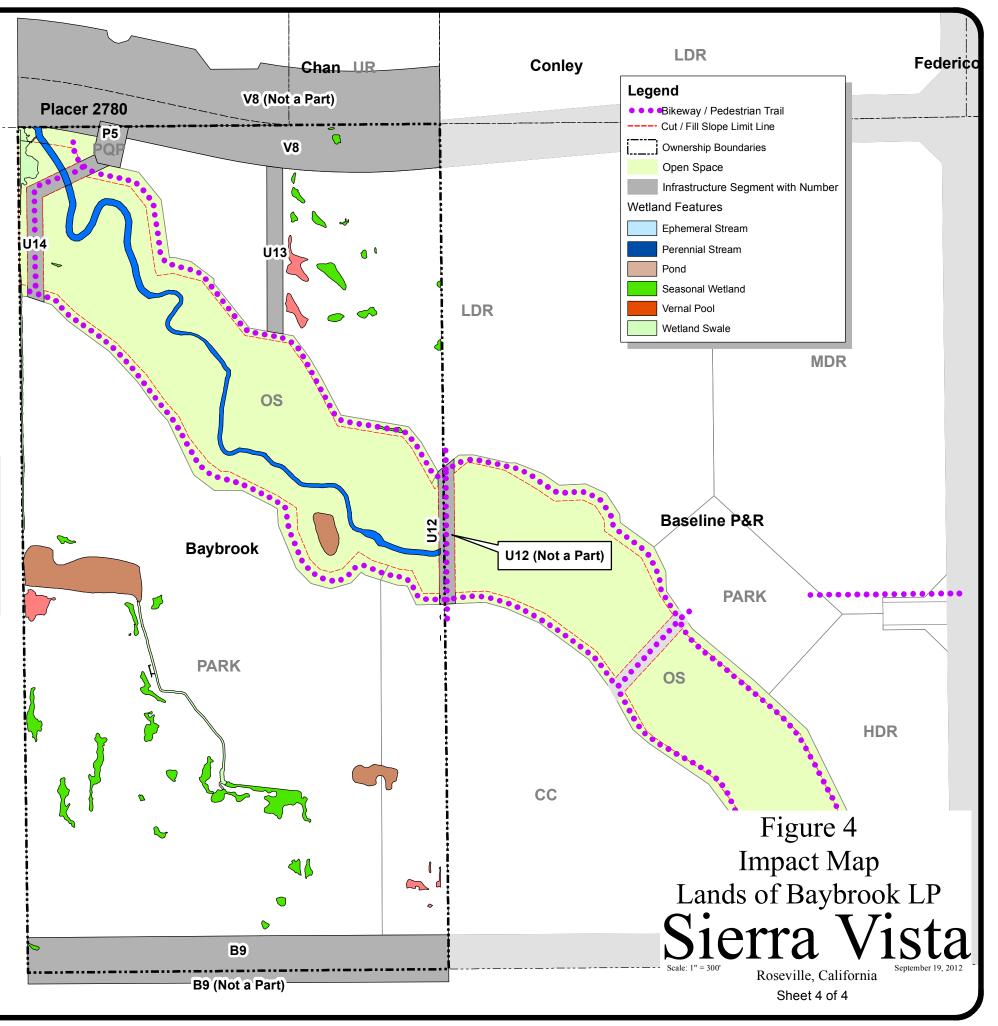
### LANDS OF BAYBROOK LP PROPOSED PROJECT

Roseville, California

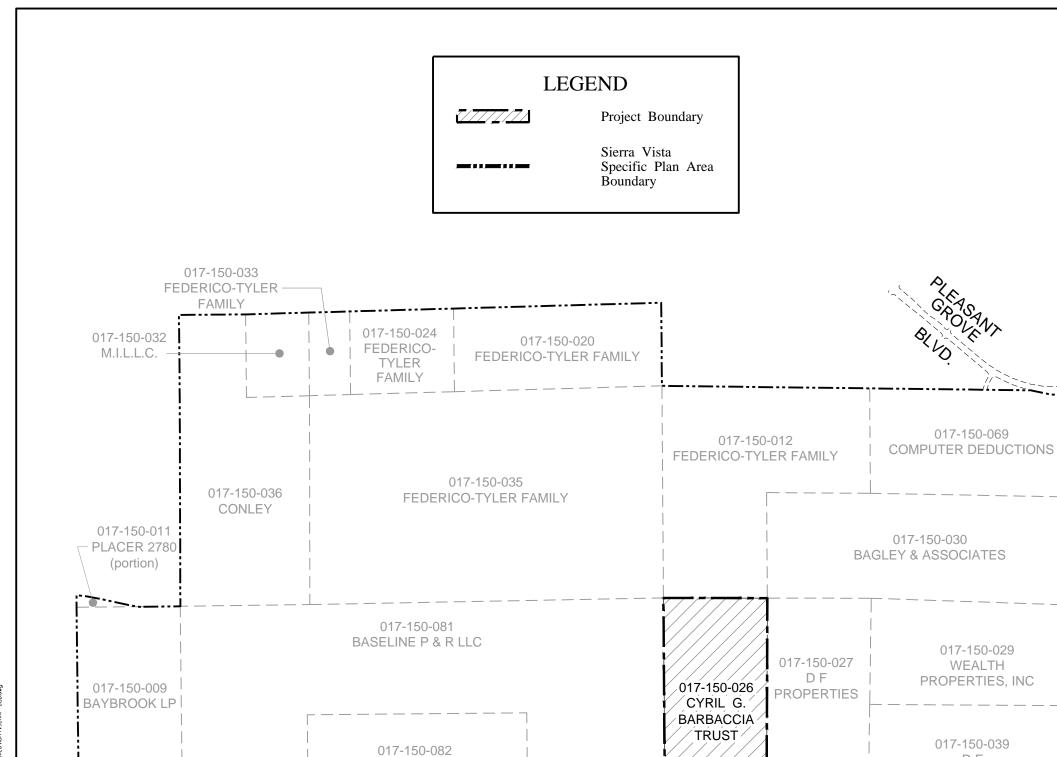
May 31, 2012



Wetland Area Summary	Impact Status		
Wetland Type	Avoided	Impacted	Grand Total
Ephemeral Stream	0.0005	0.0015	0.0020
Perennial Stream	0.8161	0.0518	0.8680
Pond	0.1665	1.0450	1.2115
Seasonal Wetland	0.0034	1.0517	1.0551
Vernal Pool		0.3086	0.3086
Wetland Swale	0.1128	0.1953	0.3081
Grand Total	1.0993	2.6540	3.7533







BASELINE P & R LLC

WATT AVE.

BASELINE ROAD

PLACER COUNTY SUTTER COUNTY REGIONAL VICINITY MAP

017-150-069

017-150-029

WEALTH

017-150-039

DF

**PROPERTIES** 

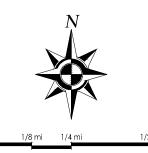


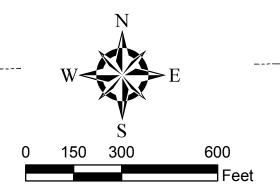
Figure 1 LANDS OF CYRIL G. BARBACCIA VICINITY MAP



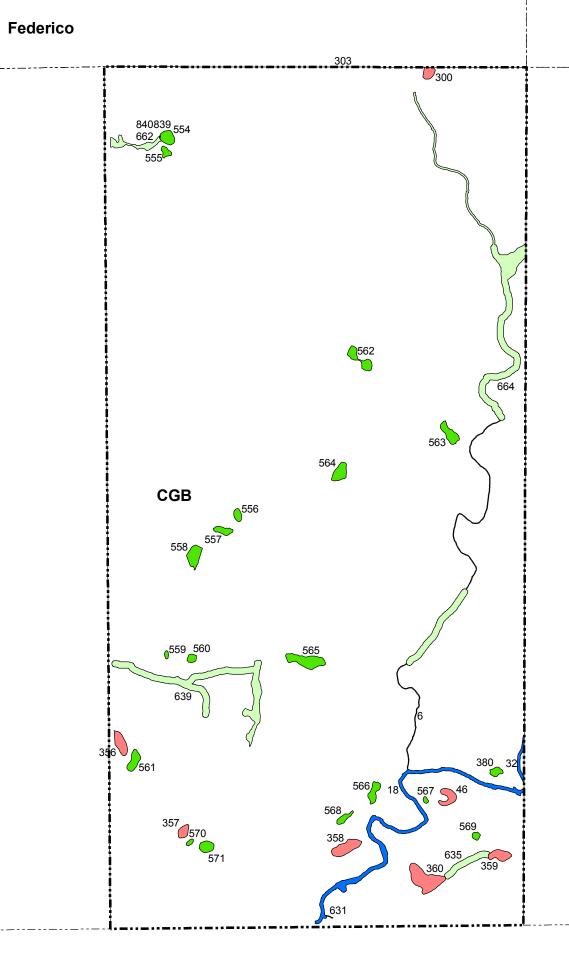
Roseville, California

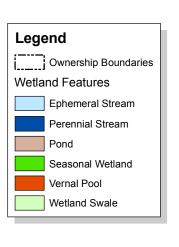
May 31, 2012

Sheet 1 of 4



Wetland ID	Area (Acres)	Wetland Type
6	0.0184	Ephemeral Stream
18	0.3342	Perennial Stream
32	0.0259	Perennial Stream
46	0.0409	Vernal Pool
300	0.0261	Vernal Pool
303	0.0000	Vernal Pool
356	0.0456	Vernal Pool
357	0.0239	Vernal Pool
358	0.0662	Vernal Pool
359	0.0413	Vernal Pool
360	0.1229	Vernal Pool
380	0.0195	Seasonal Wetland
554	0.0357	Seasonal Wetland
555	0.0163	Seasonal Wetland
556	0.0171	Seasonal Wetland
557	0.0249	Seasonal Wetland
558	0.0510	Seasonal Wetland
559	0.0057	Seasonal Wetland
560	0.0142	Seasonal Wetland
561	0.0369	Seasonal Wetland
562	0.0459	Seasonal Wetland
563	0.0448	Seasonal Wetland
564	0.0428	Seasonal Wetland
565	0.0816	Seasonal Wetland
566	0.0336	Seasonal Wetland
567	0.0055	Seasonal Wetland
568	0.0198	Seasonal Wetland
569	0.0109	Seasonal Wetland
570	0.0065	Seasonal Wetland
571	0.0301	Seasonal Wetland
631	0.0010	Wetland Swale
635	0.0723	Wetland Swale
639	0.4187	Wetland Swale
662	0.0592	Wetland Swale
664	0.6630	Wetland Swale
839	0.0002	Seasonal Wetland
840	0.0002	Wetland Swale





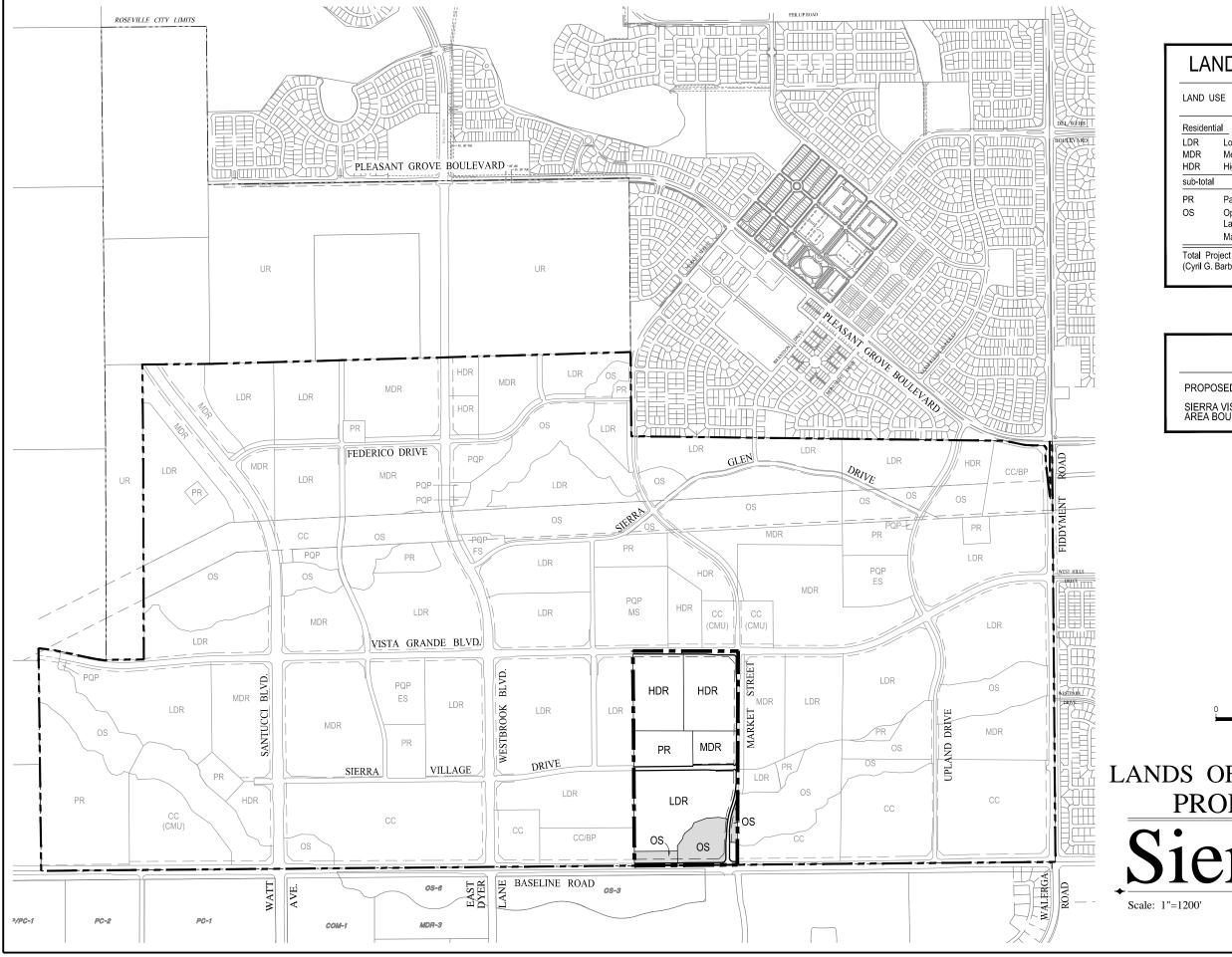
Bagley MDR

Wealth Properties

### **DF Properties**

Wetland Area Summary	
Wetland Type	Total
Ephemeral Stream	0.0184
Perennial Stream	0.3602
Seasonal Wetland	0.5429
Vernal Pool	0.3667
Wetland Swale	1.2144
Grand Total	2.5026

Figure 2
Existing Waters of the U.S.
Lands of Cyril G. Barbaccia
Sierra Vista
Roseville, California
Sheet 2 of 4



### LAND USE SUMMARY TABLE

LAND USE		ACRES	DENSITY (du/ac.)	DU
Residenti	al_			
LDR	Low Density Residential	23.0	5.0	115
MDR	Medium Density Residential	4.9	9.0	44
HDR	High Density Residential	28.6	29.0-30.0	840
sub-total		56.5		
PR	Park	7.6		
os	Open Space	9.7		
	Landscape Corridor/Paseo	1.7		
	Major Roads	5.1		
Total Project Area (Cyril G. Barbaccia)		80.6±	·	999



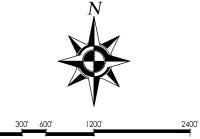


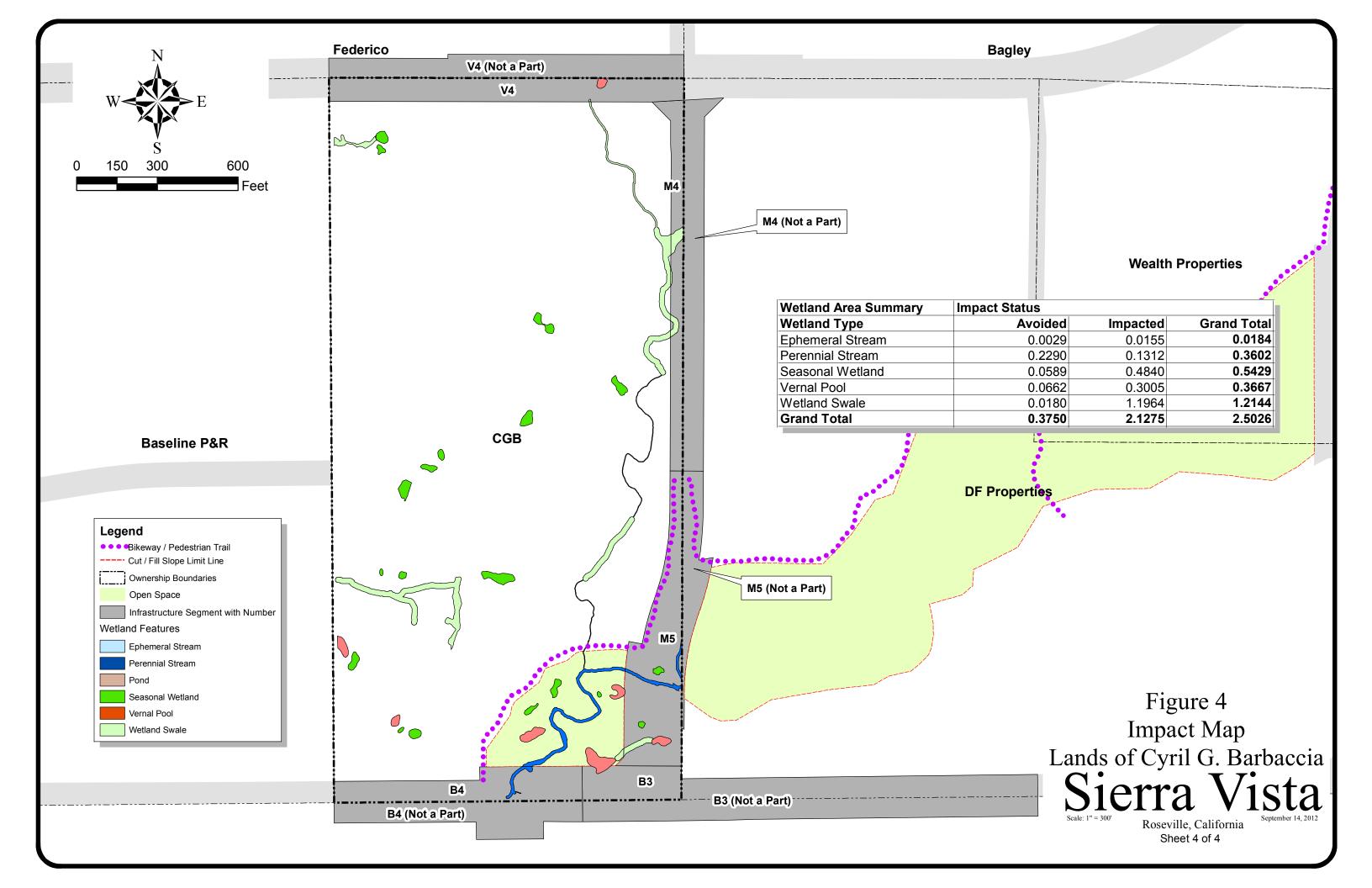
Figure 3

LANDS OF CYRIL G. BARBACCIA PROPOSED PROJECT

# Sierra Vista

Roseville, California

May 31, 2012

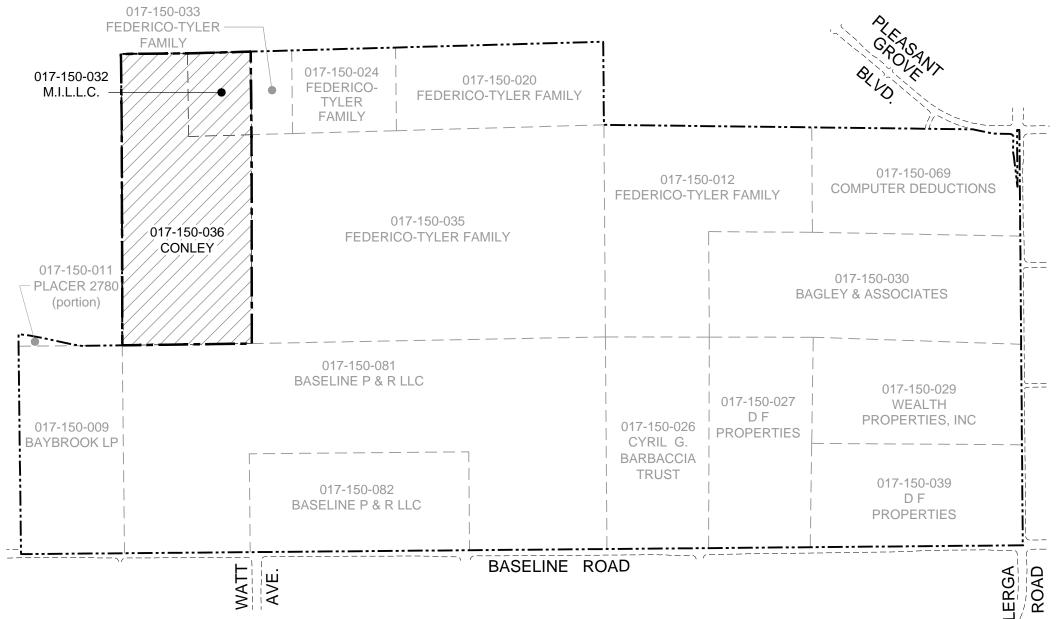


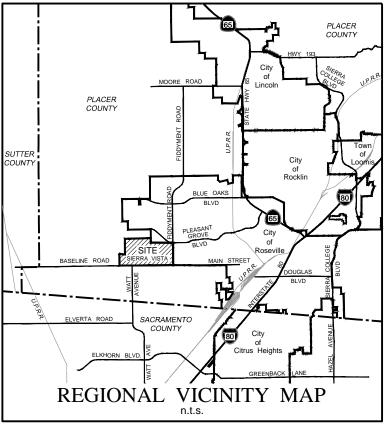
Conley Application Drawings	

### **LEGEND**

Project Boundary

Sierra Vista Specific Plan Area Boundary





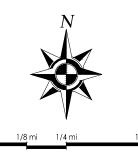
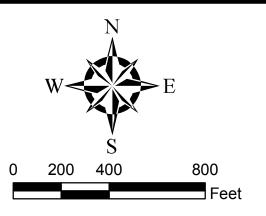


Figure 1 LANDS OF CONLEY VICINITY MAP

# Roseville, California

Sheet 1 of 4

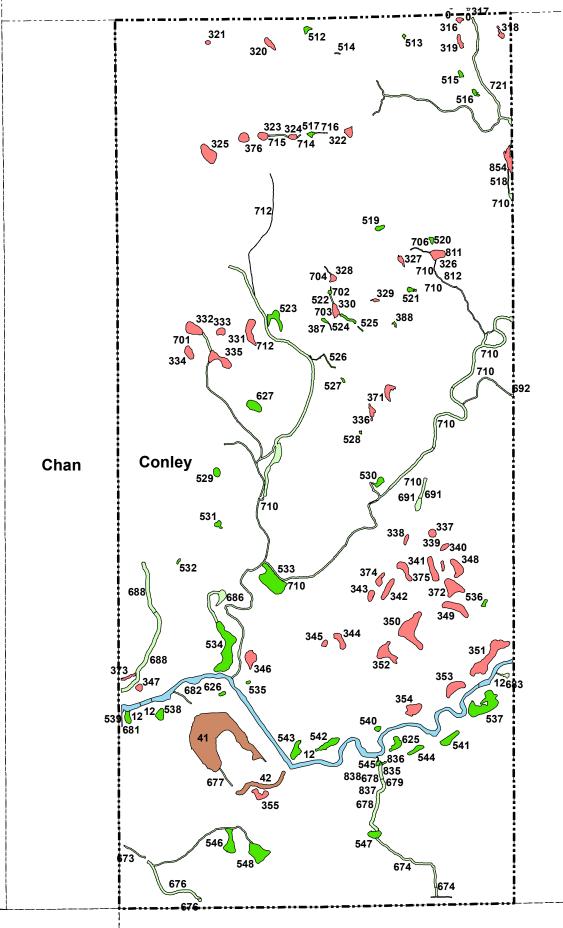
May 31, 2012

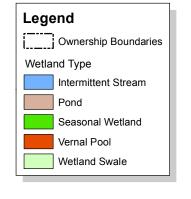


Wetland ID	Area (Acres)	Wetland Type	Wetland ID	Area (Acres)	Wetland Type
12	0.8540	Intermittent Stream	521	0.0107	Seasonal Wetland
41	0.7627	Pond	522	0.0051	Seasonal Wetland
42	0.0928	Pond	523	0.0503	Seasonal Wetland
316	0.0107	Vernal Pool	524	0.0160	Seasonal Wetland
317	0.0003	Vernal Pool	525	0.0026	Seasonal Wetlan
318	0.0146	Vernal Pool	526	0.0074	Seasonal Wetland
319	0.0191	Vernal Pool	527	0.0074	Seasonal Wetlan
320	0.0255	Vernal Pool			
321	0.0255	Vernal Pool	528 529	0.0025 0.0201	Seasonal Wetlan
					Seasonal Wetlan
322	0.0233	Vernal Pool	530	0.0223	Seasonal Wetlan
323	0.0249	Vernal Pool	531	0.0141	Seasonal Wetlan
324	0.0142	Vernal Pool	532	0.0045	Seasonal Wetlan
325	0.0766	Vernal Pool	533	0.1674	Seasonal Wetland
326	0.0443	Vernal Pool	534	0.1964	Seasonal Wetlan
327	0.0145	Vernal Pool	535	0.0045	Seasonal Wetlan
328	0.0141	Vernal Pool	536	0.0098	Seasonal Wetlan
329	0.0064	Vernal Pool	537	0.1576	Seasonal Wetlan
330	0.0271	Vernal Pool	538	0.0280	Seasonal Wetlan
331	0.0648	Vernal Pool	539	0.0238	Seasonal Wetlan
332	0.0620	Vernal Pool	540	0.0102	Seasonal Wetlan
333	0.0208	Vernal Pool	541	0.0460	Seasonal Wetlan
334	0.0326	Vernal Pool	542	0.0489	Seasonal Wetlan
335	0.0673	Vernal Pool	543	0.0449	Seasonal Wetlan
336	0.0211	Vernal Pool	544	0.0258	Seasonal Wetlan
337	0.0194	Vernal Pool	545	0.0104	Seasonal Wetlan
338	0.0123	Vernal Pool	546	0.0645	Seasonal Wetlan
339	0.0149	Vernal Pool	547	0.0311	Seasonal Wetlan
340	0.0099	Vernal Pool	548	0.0989	Seasonal Wetlan
341	0.0479	Vernal Pool	625	0.0364	Seasonal Wetlan
342	0.0473	Vernal Pool	626	0.0085	Seasonal Wetlan
343	0.0430	Vernal Pool	627	0.0476	Seasonal Wetlan
344	0.0216	Vernal Pool	673	0.0476	Wetland Swale
345	0.0376	Vernal Pool	674	0.0124	Wetland Swale
346	0.0537	Vernal Pool	676	0.1326	Wetland Swale
347					
347	0.0147	Vernal Pool	677	0.0104	Wetland Swale
	0.0542	Vernal Pool	678	0.0916	Wetland Swale
349	0.0720	Vernal Pool	679	0.0015	Wetland Swale
350	0.1633	Vernal Pool	681	0.0018	Wetland Swale
351	0.1695	Vernal Pool	682	0.0105	Wetland Swale
352	0.0769	Vernal Pool	683	0.0116	Wetland Swale
353	0.0670	Vernal Pool	686	0.0710	Wetland Swale
354	0.0558	Vernal Pool	688	0.2115	Wetland Swale
355	0.0380	Vernal Pool	691	0.0456	Wetland Swale
371	0.0348	Vernal Pool	692	0.0019	Wetland Swale
372	0.0814	Vernal Pool	701	0.0155	Wetland Swale
373	0.0137	Vernal Pool	702	0.0047	Wetland Swale
374	0.0246	Vernal Pool	703	0.0008	Wetland Swale
375	0.0554	Vernal Pool	704	0.0030	Wetland Swale
376	0.0316	Vernal Pool	706	0.0064	Wetland Swale
387	0.0094	Seasonal Wetland	710	0.6287	Wetland Swale
388	0.0040	Seasonal Wetland	712	0.4480	Wetland Swale
512	0.0133	Seasonal Wetland	714	0.0017	Wetland Swale
513	0.0044	Seasonal Wetland	715	0.0100	Wetland Swale
514	0.0022	Seasonal Wetland	716	0.0025	Wetland Swale
515	0.0022	Seasonal Wetland	710	0.1973	Wetland Swale
516	0.0106	Seasonal Wetland	811	0.0000	Vernal Pool
517	0.0100	Seasonal Wetland	812	0.0000	Wetland Swale
518	0.0068	Seasonal Wetland	835	0.0021	Seasonal Wetlan
519	0.0139	Seasonal Wetland	836	0.0021	Wetland Swale
520	0.0087	Seasonal Wetland	837	0.0001	Seasonal Wetlan
			838	0.0001	Wetland Swale
			854	0.0488	Vernal Pool

Placer 2780

Baybrook





#### **Federico**

Wetland Area Summary	
Wetland Type	Total
Intermittent Stream	0.8540
Pond	0.8555
Seasonal Wetland	1.3156
Vernal Pool	1.8638
Wetland Swale	2.0074
Grand Total	6.8964

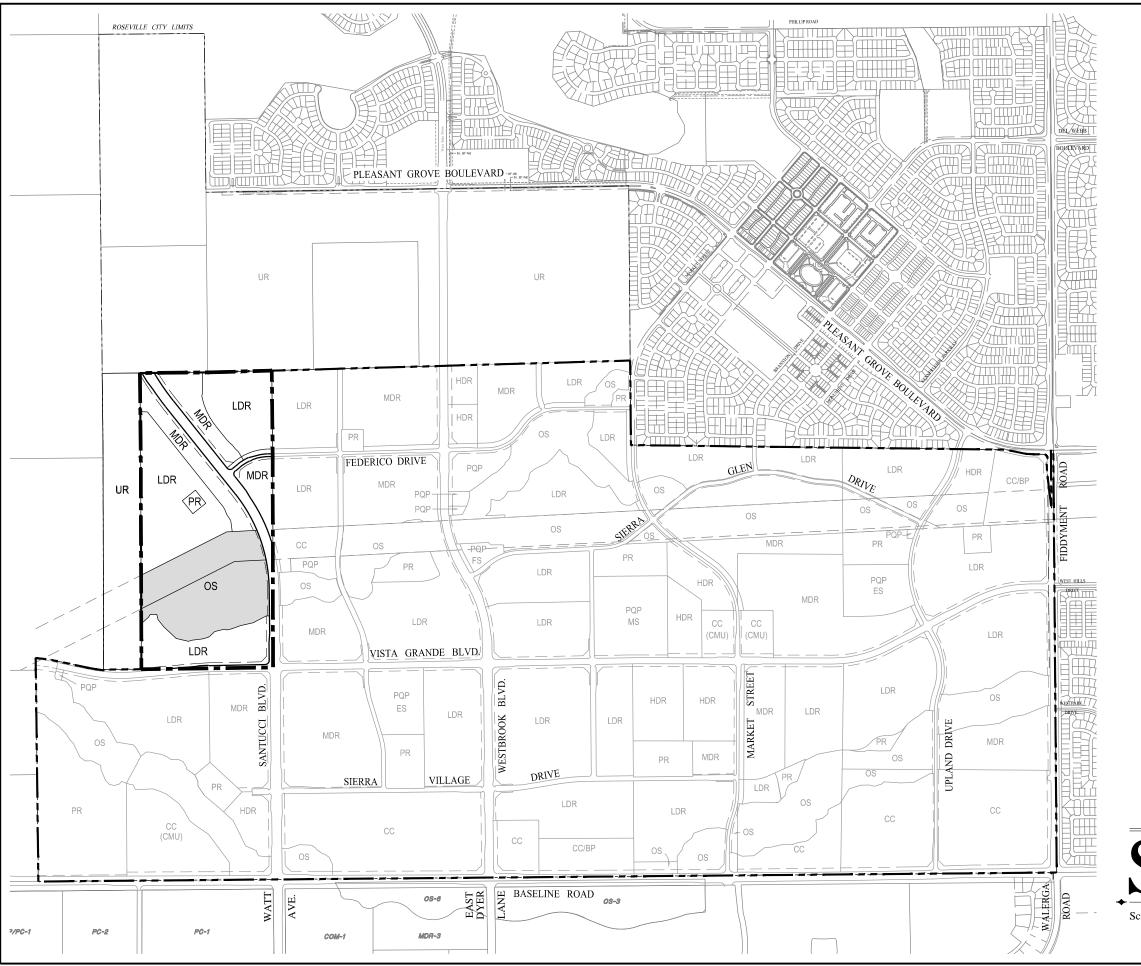
Figure 2
Existing Waters of the U.S.
Lands of Conley

Sierra Vista

Baseline P&R

Westbrook 400 LLC

Roseville, California Sheet 2 of 4



### LAND USE SUMMARY TABLE

LAND US	SE .	ACRES	DENSITY (du/ac.)	DU
Residentia	al			
LDR	Low Density Residential	61.8	5.0	308
MDR	Medium Density Residential	22.0	8.0	197
HDR	High Density Residential	0	-	0
sub-total		83.8		
Commerc	ial			
CC	Community Commercial	0.1		
PR	Park	1.0		
os	Open Space	37.1		
	Landscape Corridor/Paseo	7.1		
	Major Roads	11.0		
Total Project Area (Conley)		140.1±		505 du



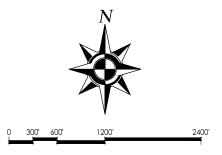


Figure 3

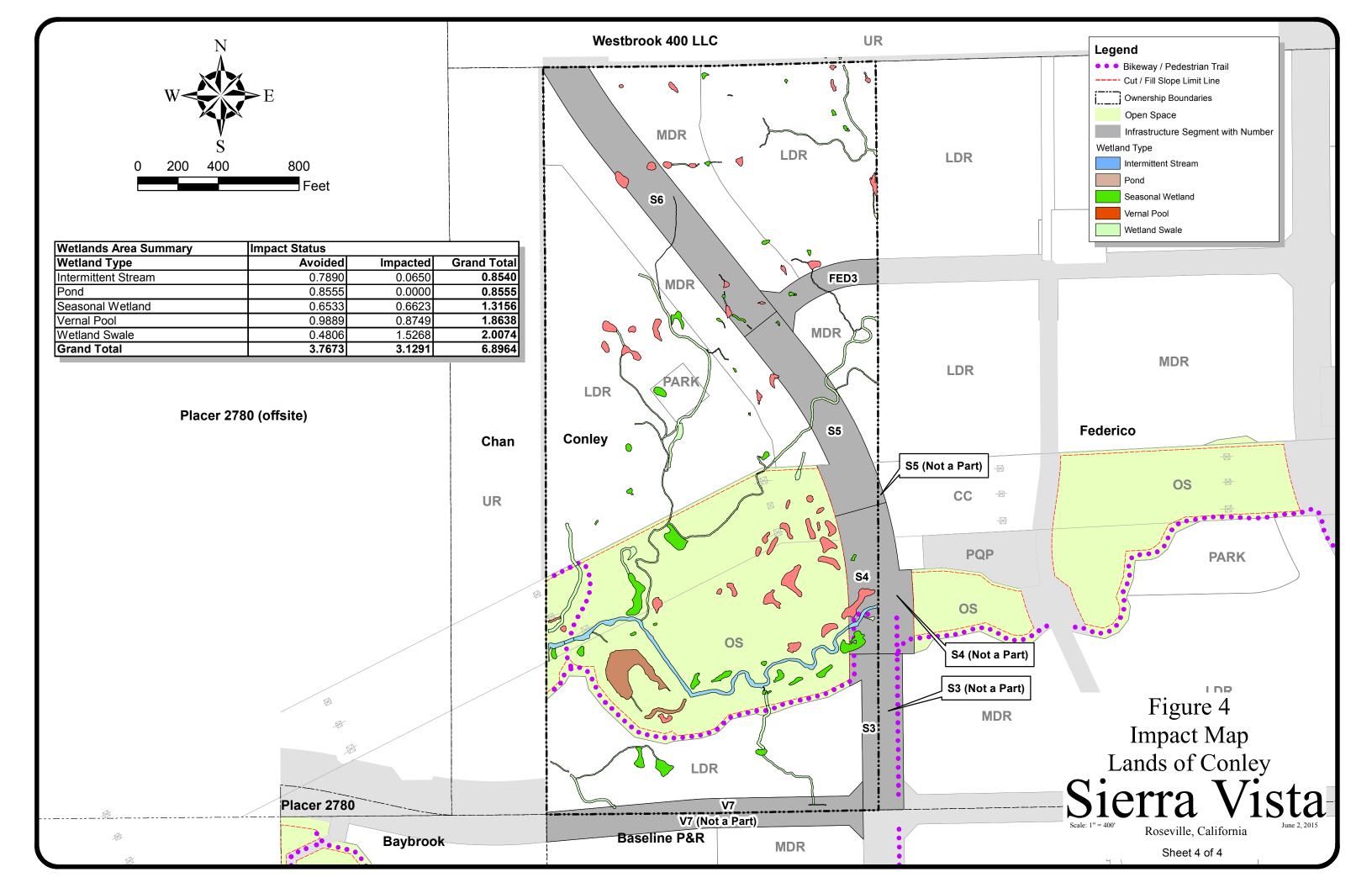
## LANDS OF CONLEY PROPOSED PROJECT

# Sierra Vista

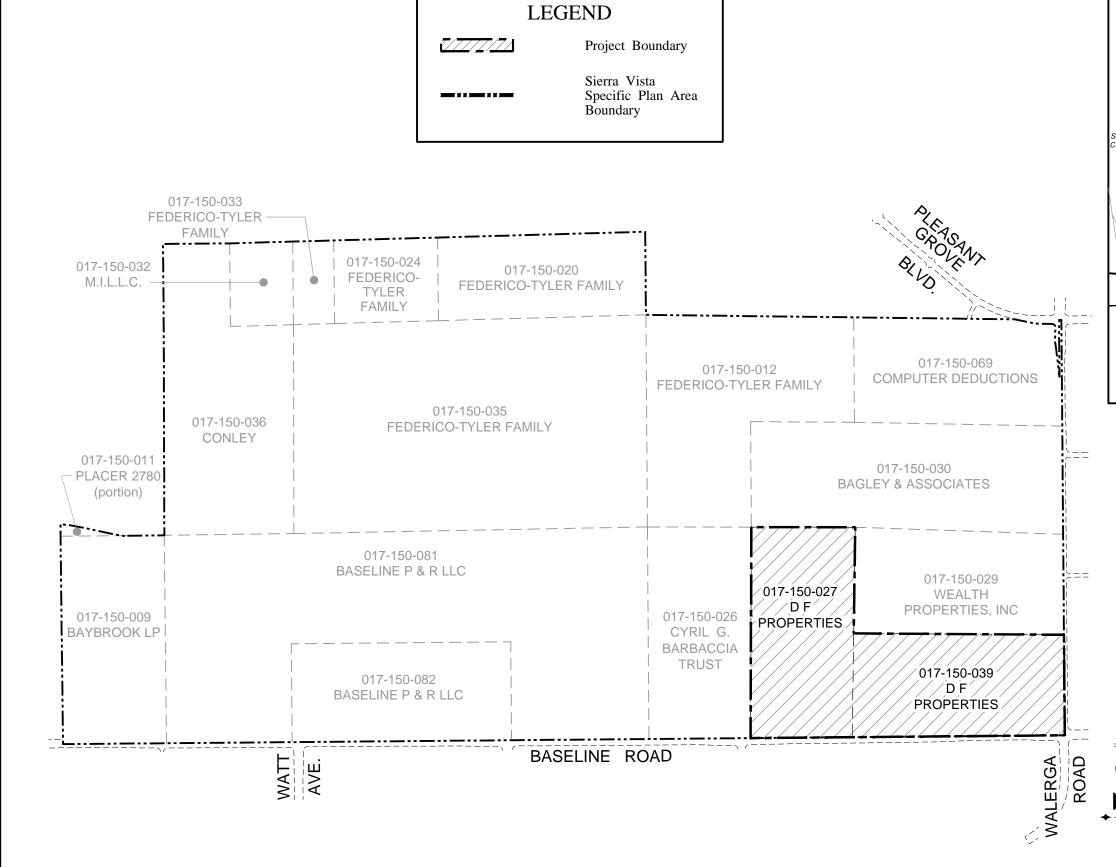
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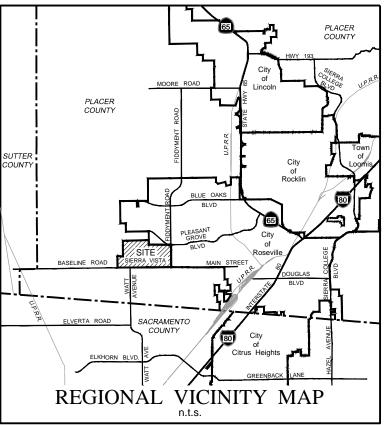
Roseville, California

May 31, 2012



D.F. Properties Application Drawings





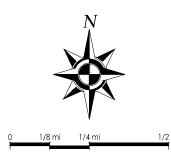
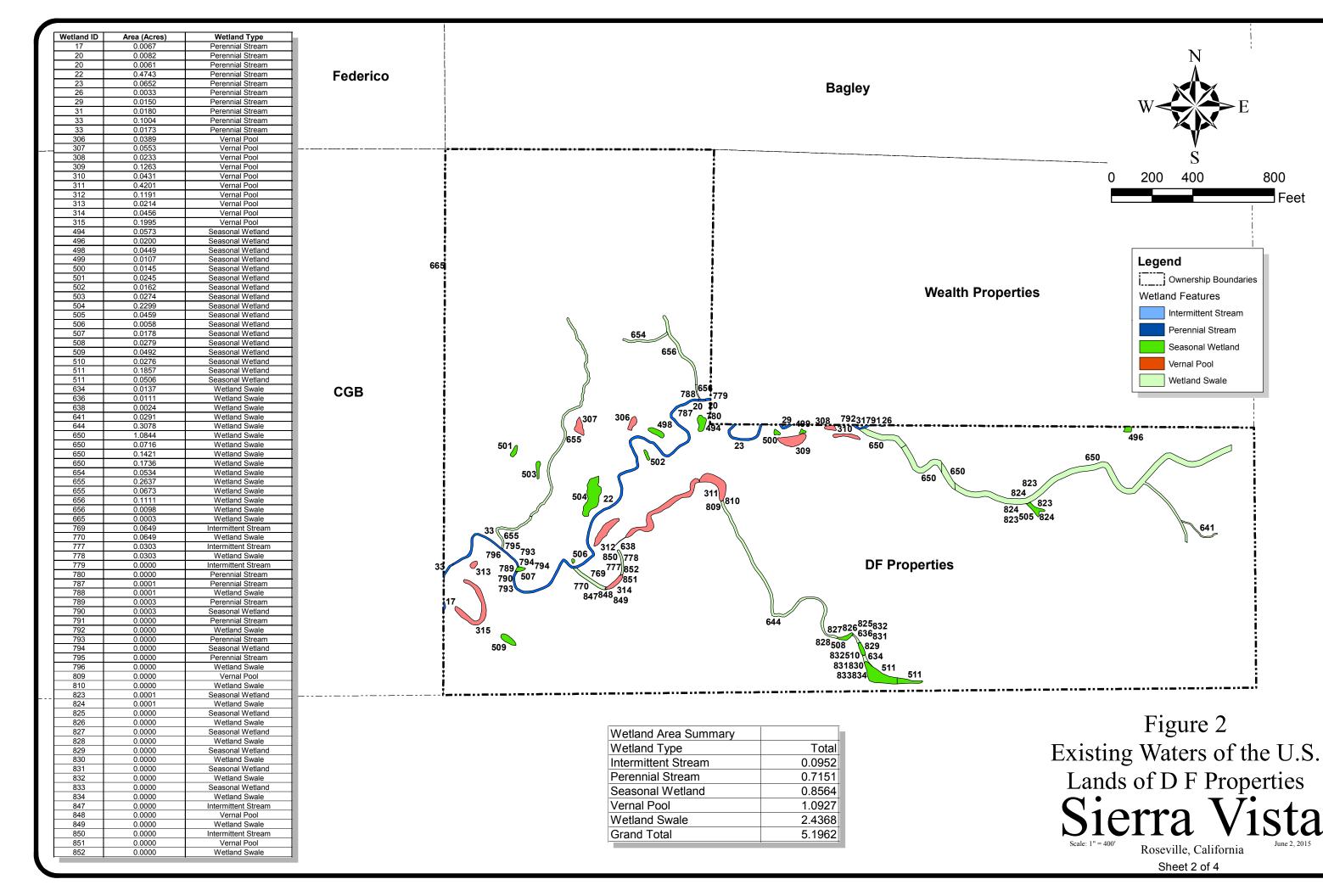


Figure 1 LANDS OF DF PROPERTIES VICINITY MAP



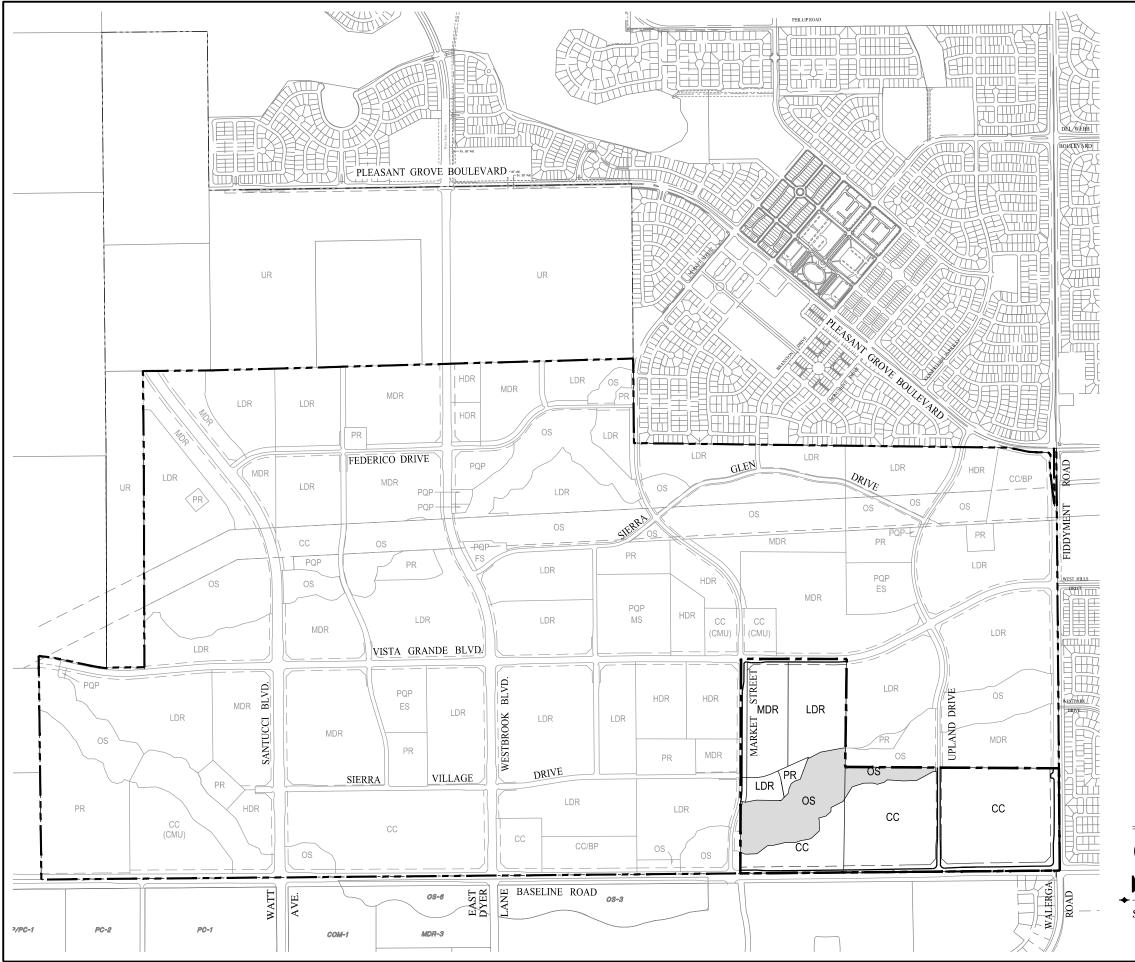
May 31, 2012

Sheet 1 of 4



800

Feet



#### LAND USE SUMMARY TABLE LAND USE ACRES DENSITY DU (du/ac.) Residential LDR Low Density Residential 5.0 117 Medium Density Residential 14.5 113 7.8 HDR High Density Residential 0 sub-total 38.0 CC 82.1

OS

sub-total

Total Project Area

(D F Properties)

Open Space

Major Roads

Landscape Corridor/Paseo

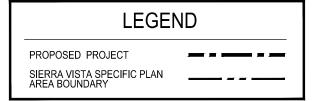
26.3

4.2 7.9

40.2

160.3±

230 du



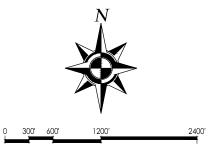


Figure 3

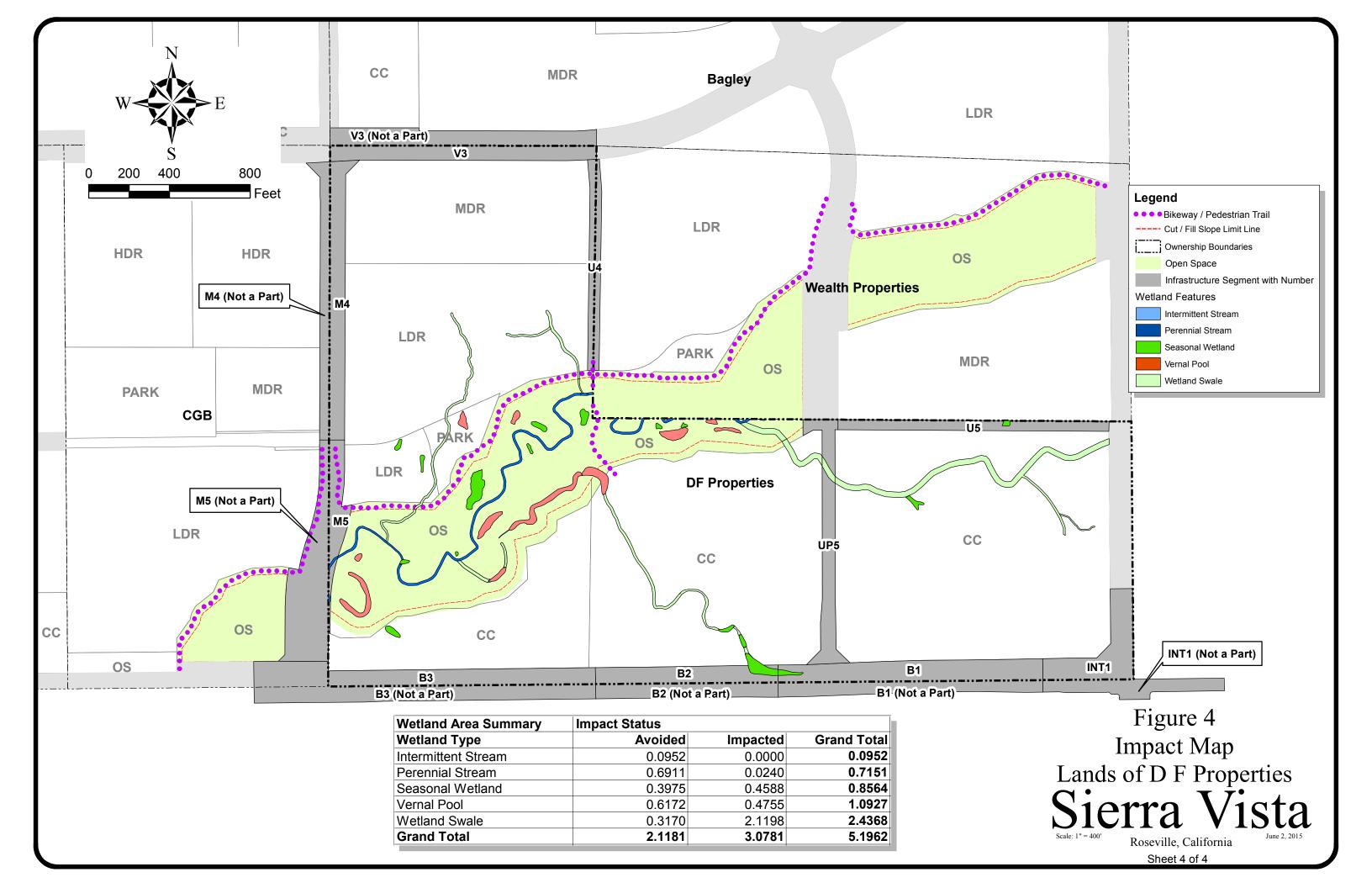
### LANDS OF DF PROPERTIES PROPOSED PROJECT

# Sierra Vista

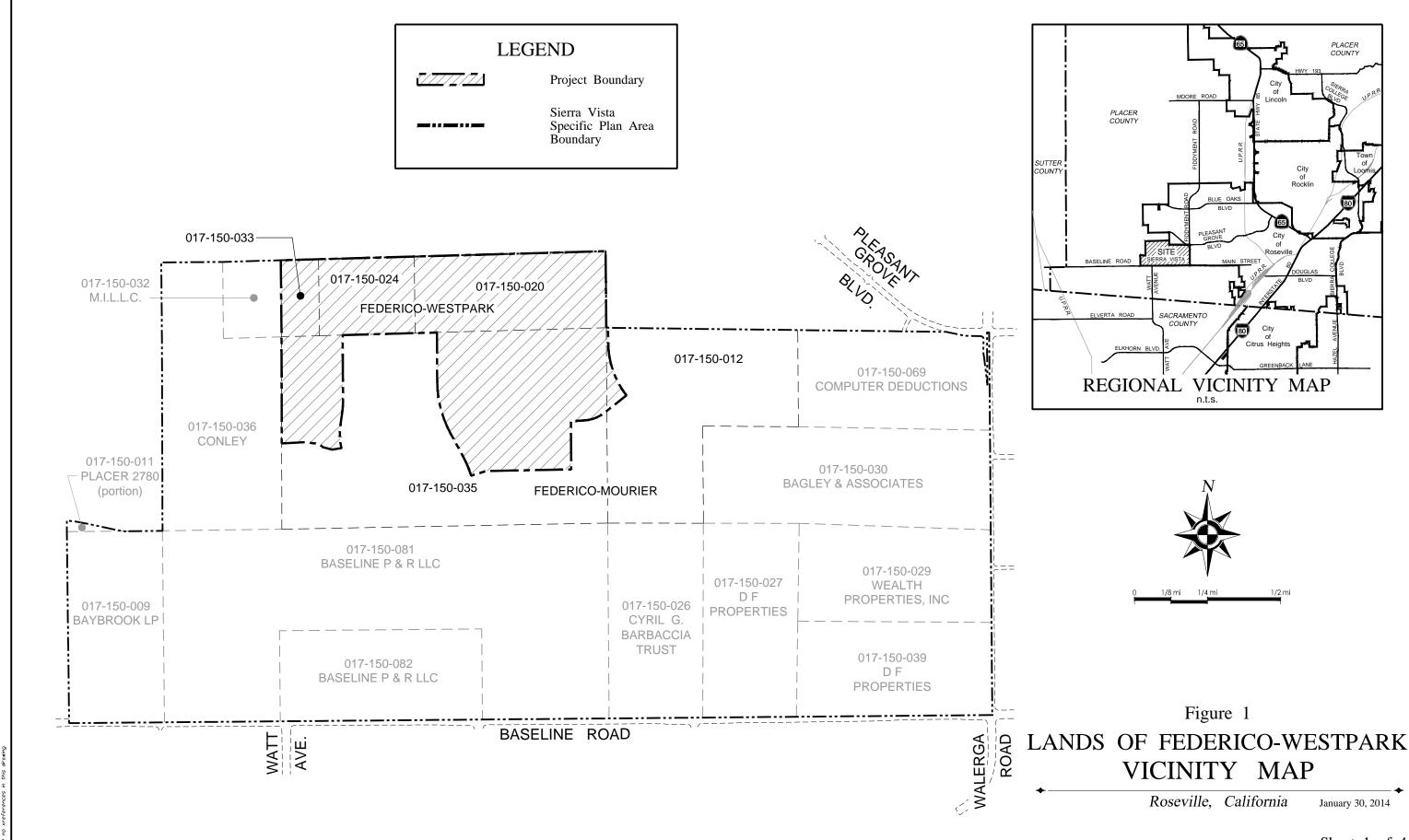
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Roseville, California

May 31, 2012

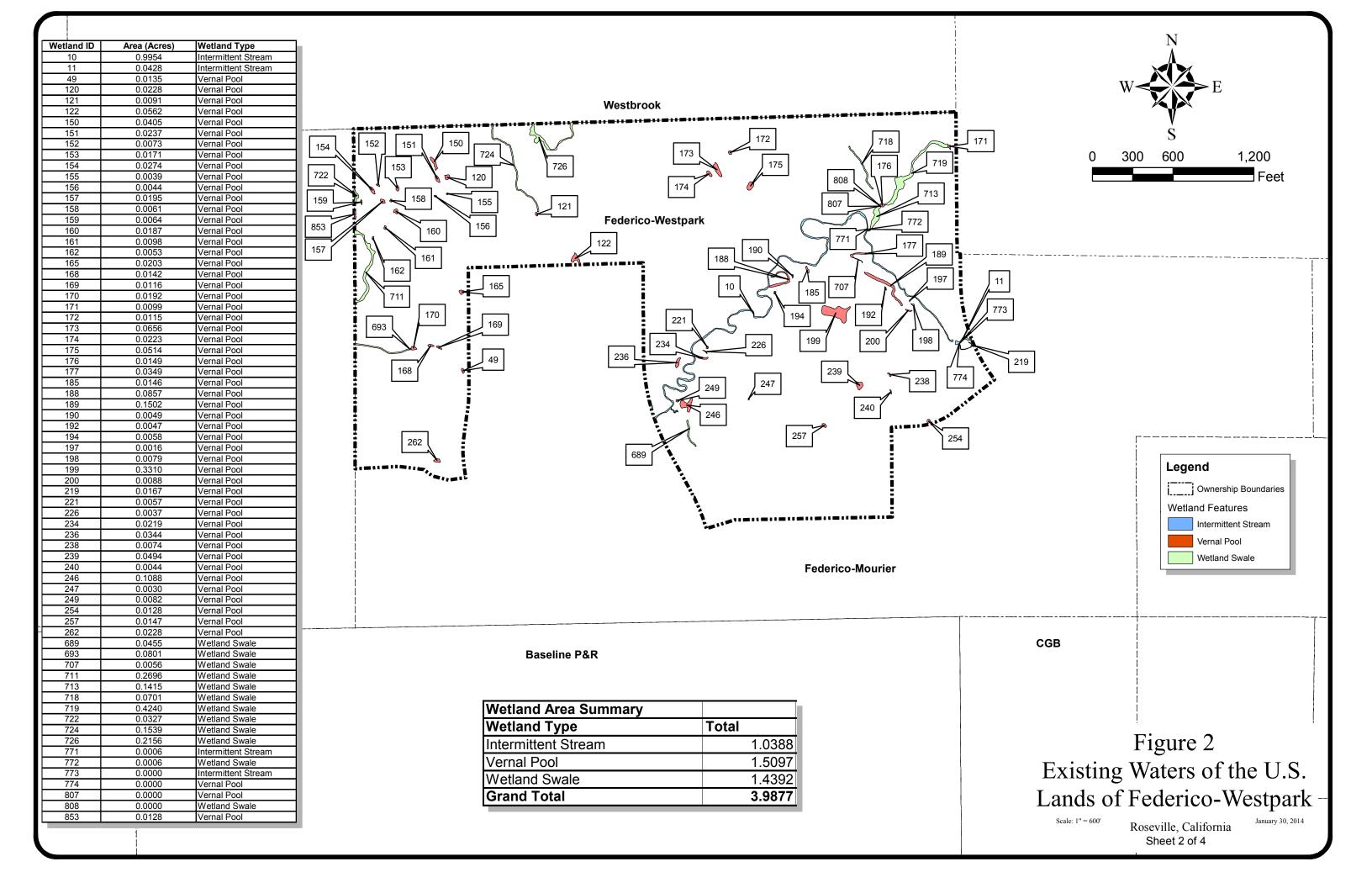


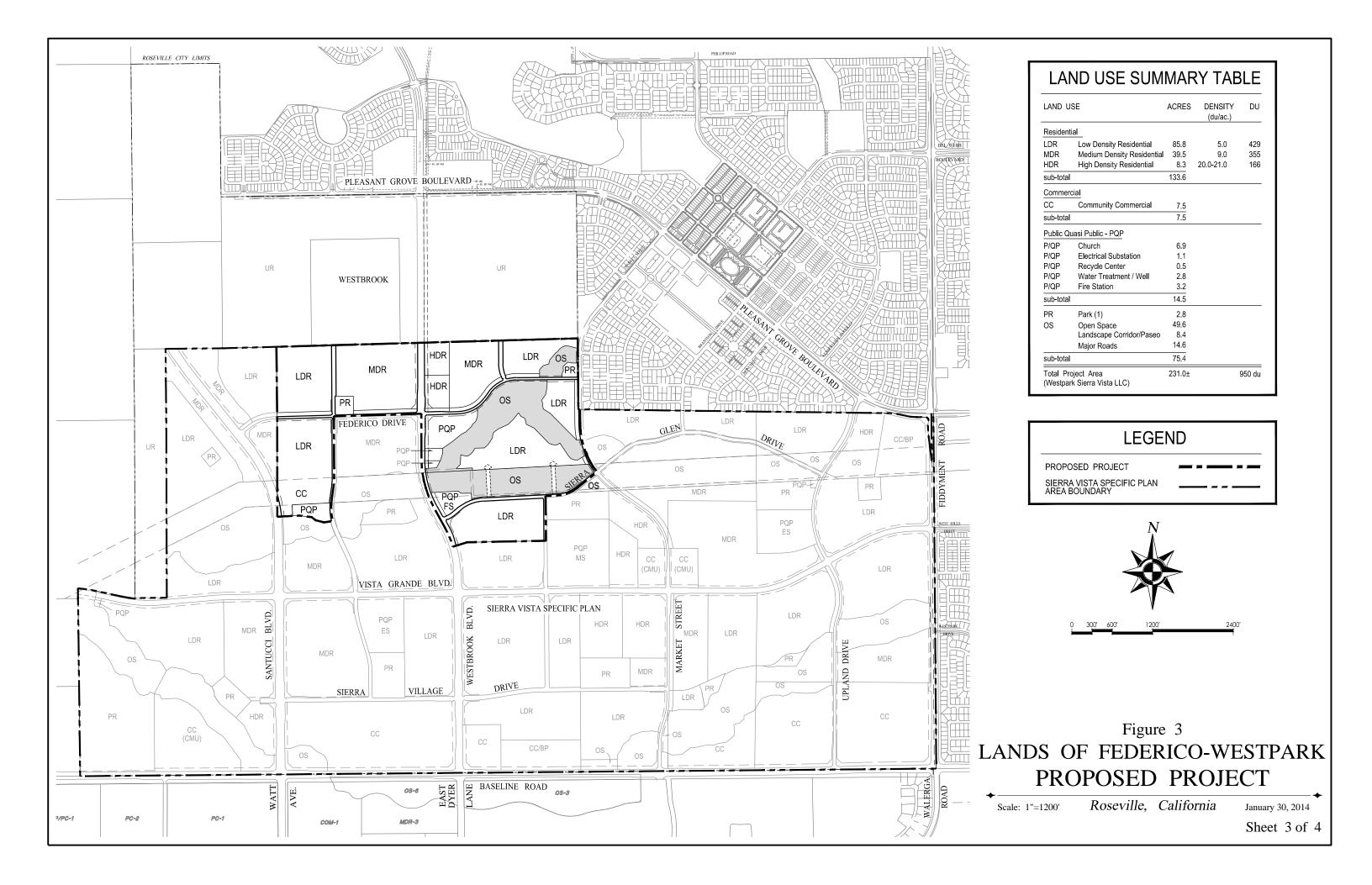
Federico – Westpark Application Drawings

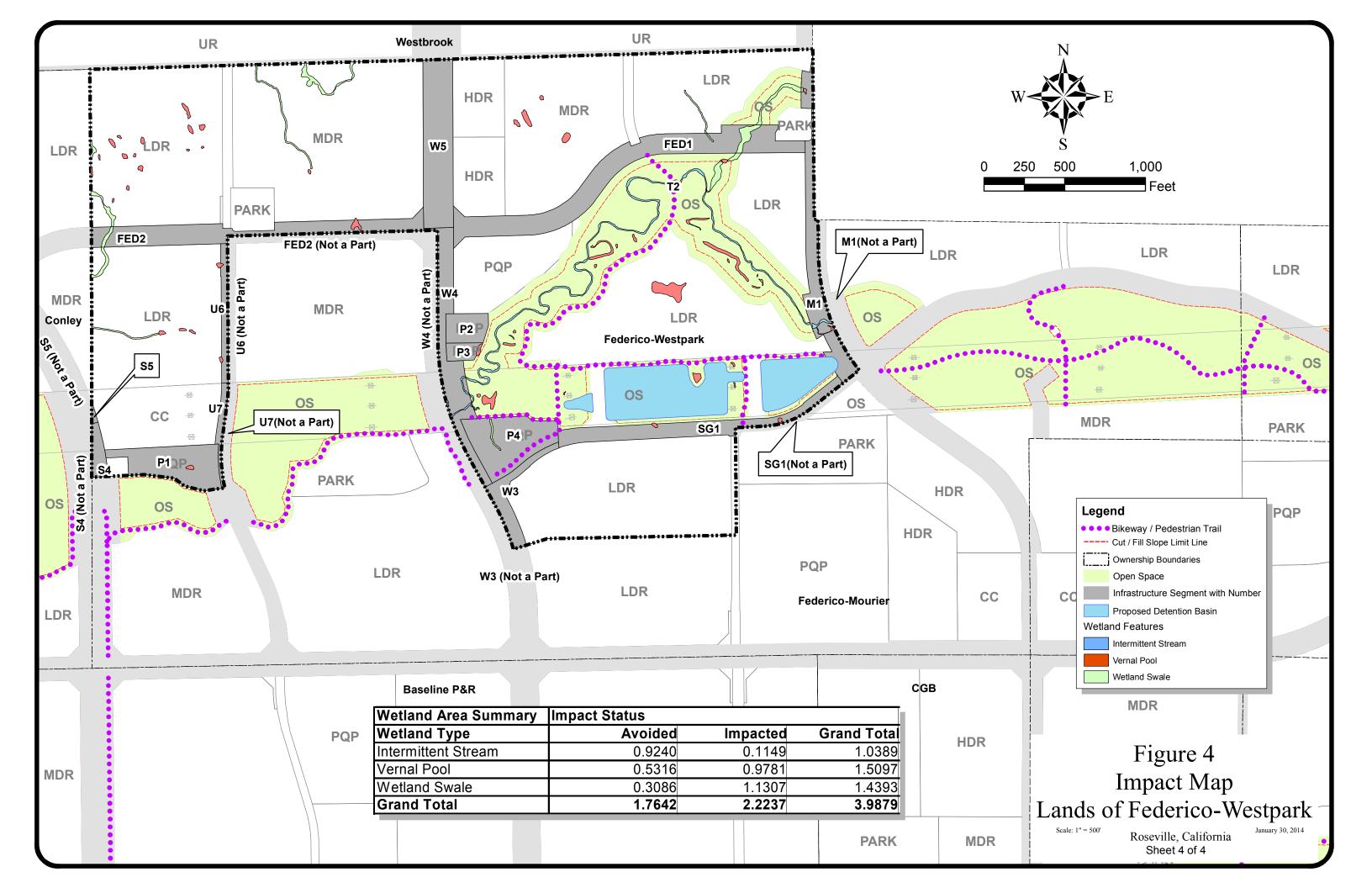


Sheet 1 of 4

January 30, 2014







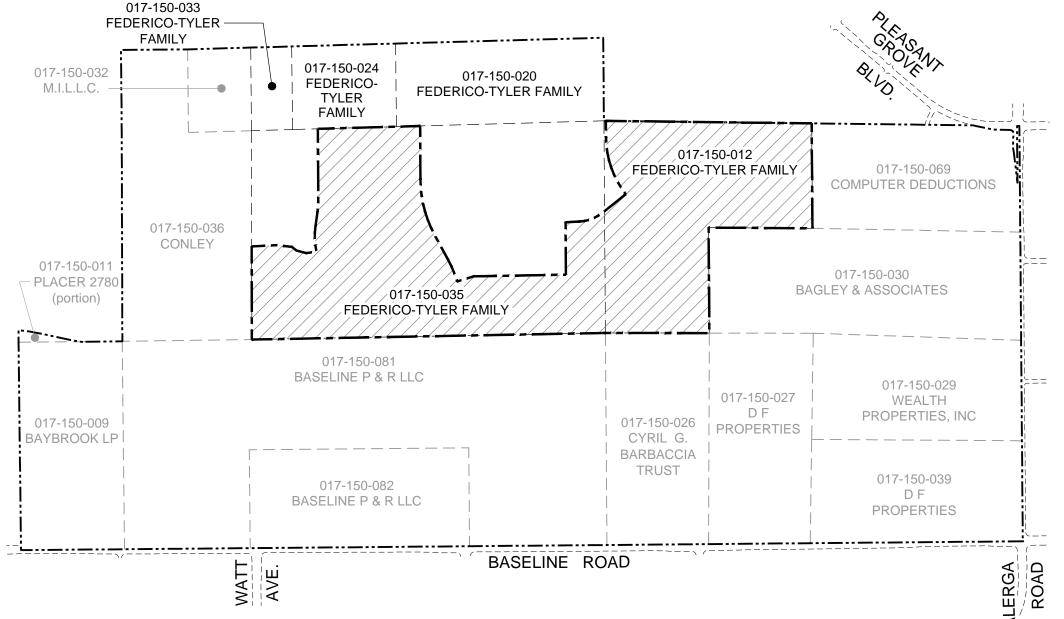


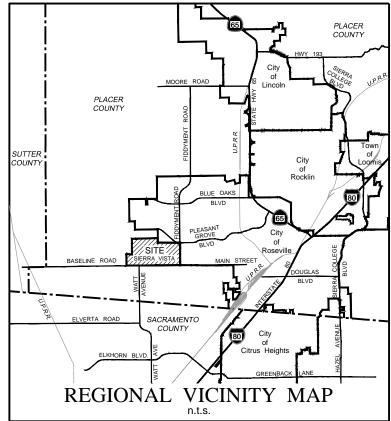
### **LEGEND**

Project Boundary

\_...\_

Sierra Vista Specific Plan Area Boundary





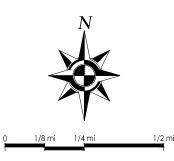


Figure 1

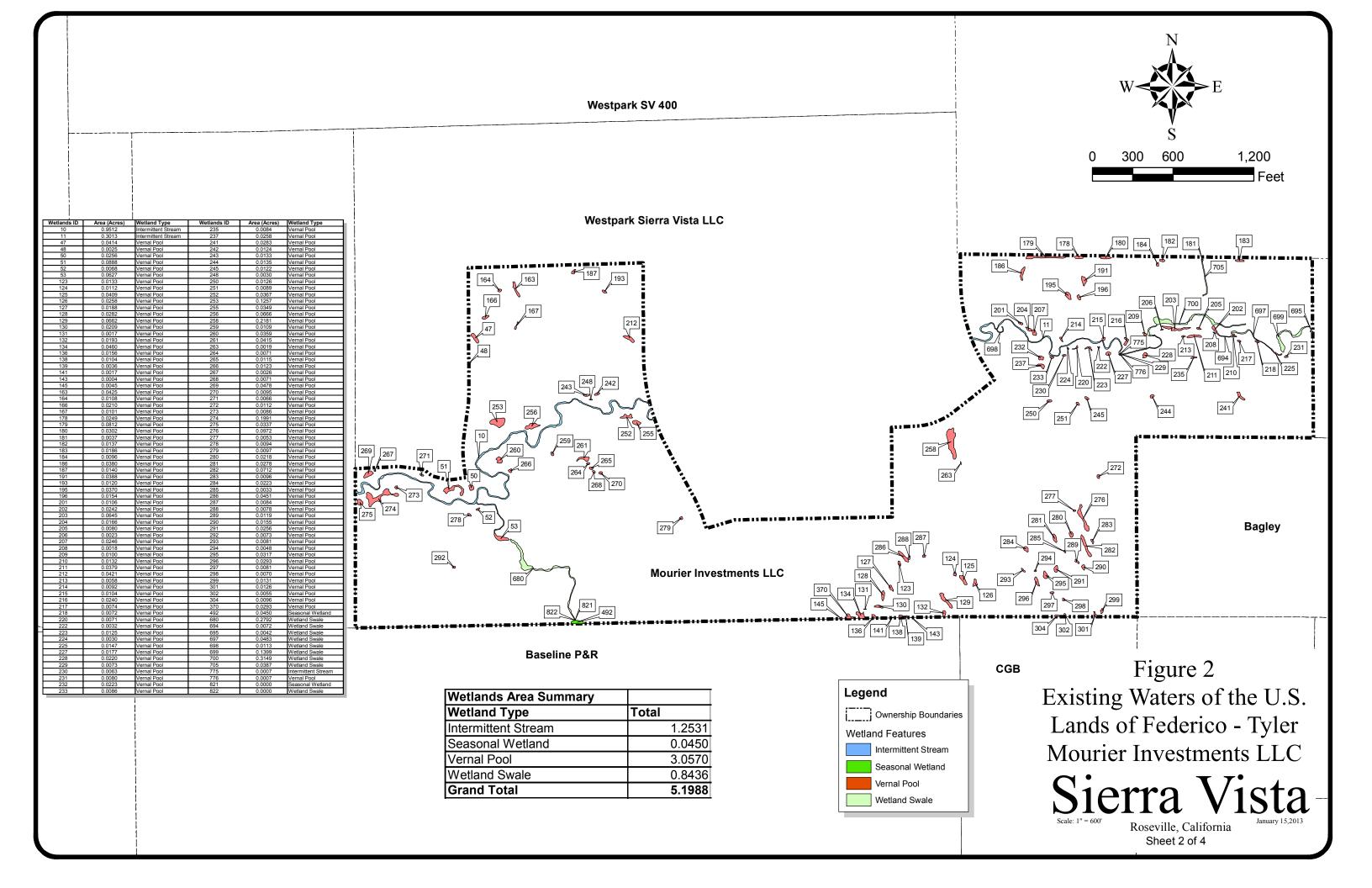
LANDS OF FEDERICO - TYLER MOURIER INVESTMENTS, LLC VICINITY MAP

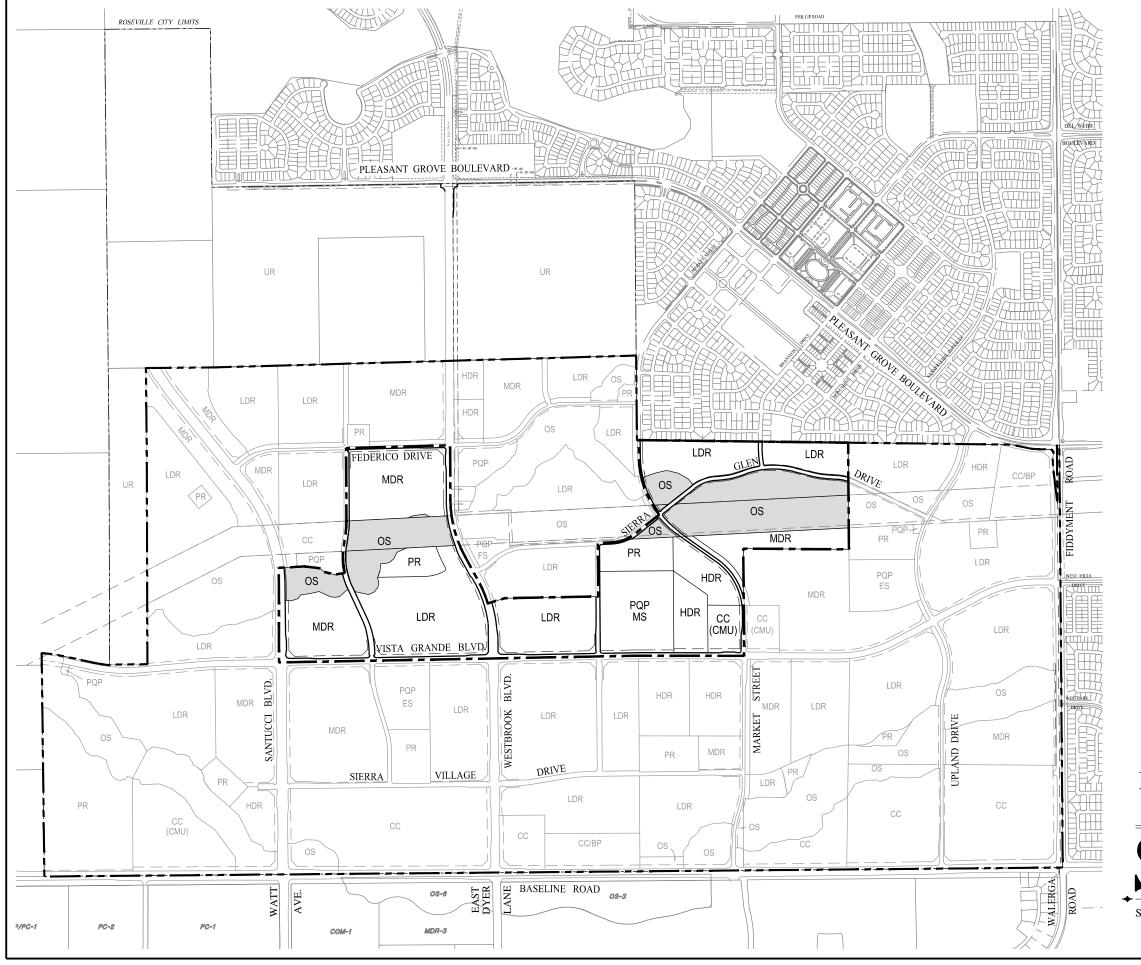
## Sierra Vista

Roseville, California

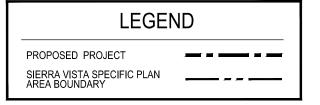
January 15, 2013

Sheet 1 of 4





### LAND USE SUMMARY TABLE LAND USE ACRES DENSITY DU (du/ac.) Residential Low Density Residential 5.0 369 Medium Density Residential 49.3 9.0 443 HDR High Density Residential 17.4 20.0-21.0 348 140.6 sub-total CC (CMU) Commercial Mixed Use 5.7 20.0 40 5.7 sub-total Public Quasi Public - PQP Middle School P/QP 21.6 21.6 sub-total 13.7 OS Open Space 62.4 Landscape Corridor/Paseo 9.0 21.9 Major Roads 107.0 sub-total 274.9± 1200 du (Mourier Investments, LLC)



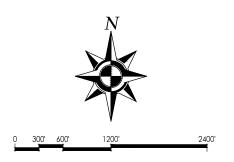


Figure 3

LANDS OF FEDERICO-TYLER MOURIER INVESTMENTS, LLC PROPOSED PROJECT

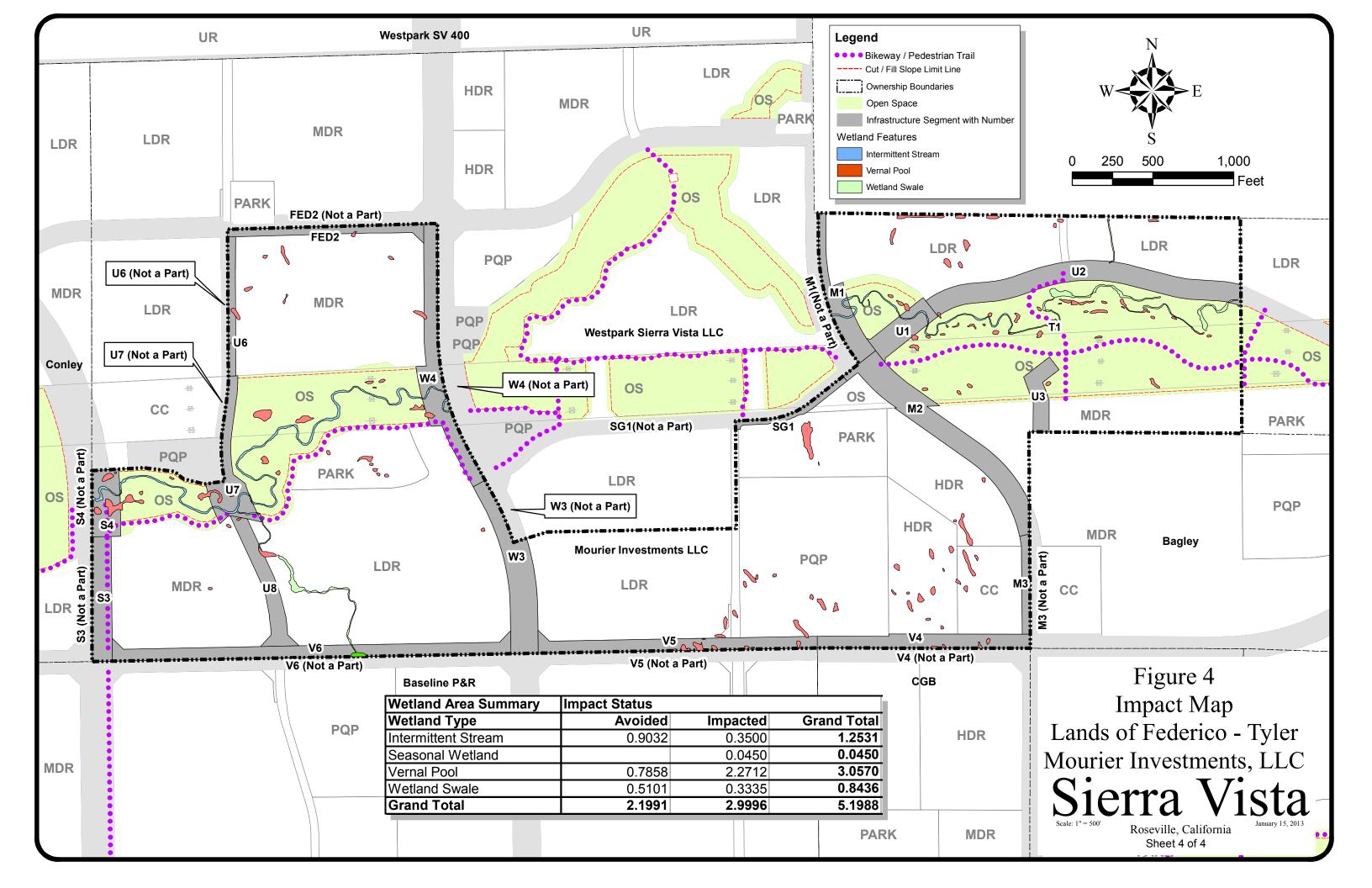
### Sierra Vista

Scale: 1"=1200'

Roseville, California

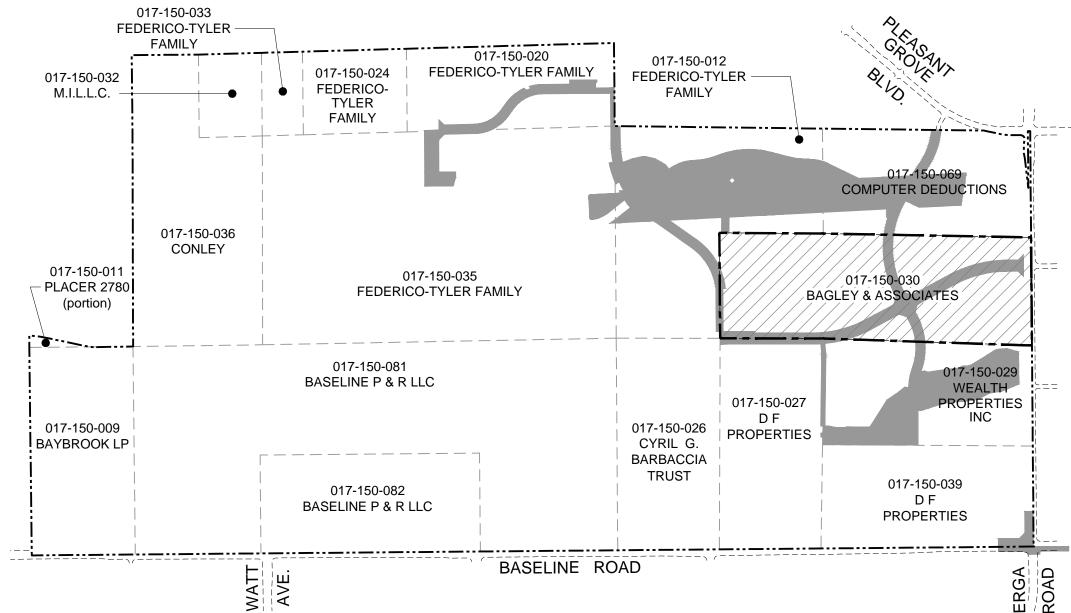
January 15, 2013

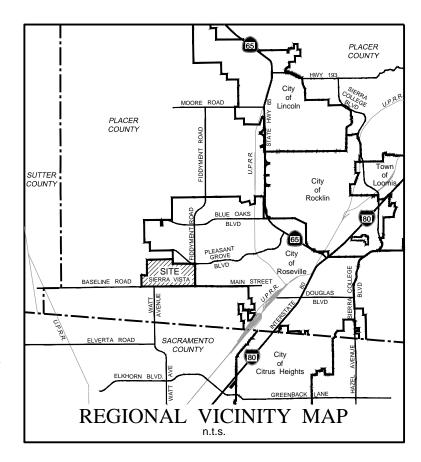
Sheet 3 of 4



### TM #1 – Bagley, Wealth and Computer Deductions Application Drawings







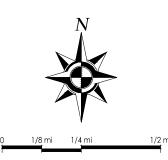


Figure 1

LANDS OF BAGLEY & ASSOCIATES

VICINITY MAP

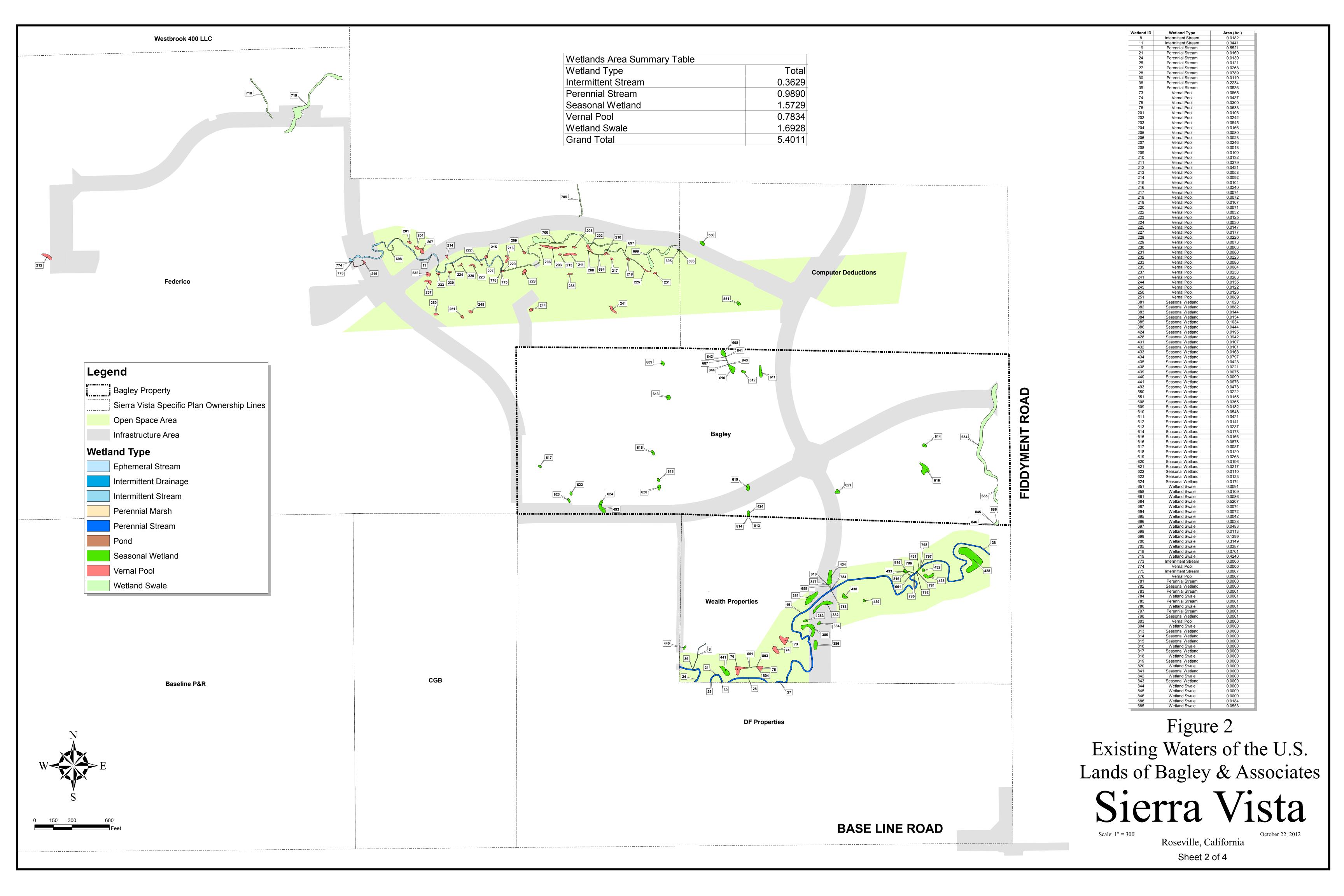
# Sierra Vista

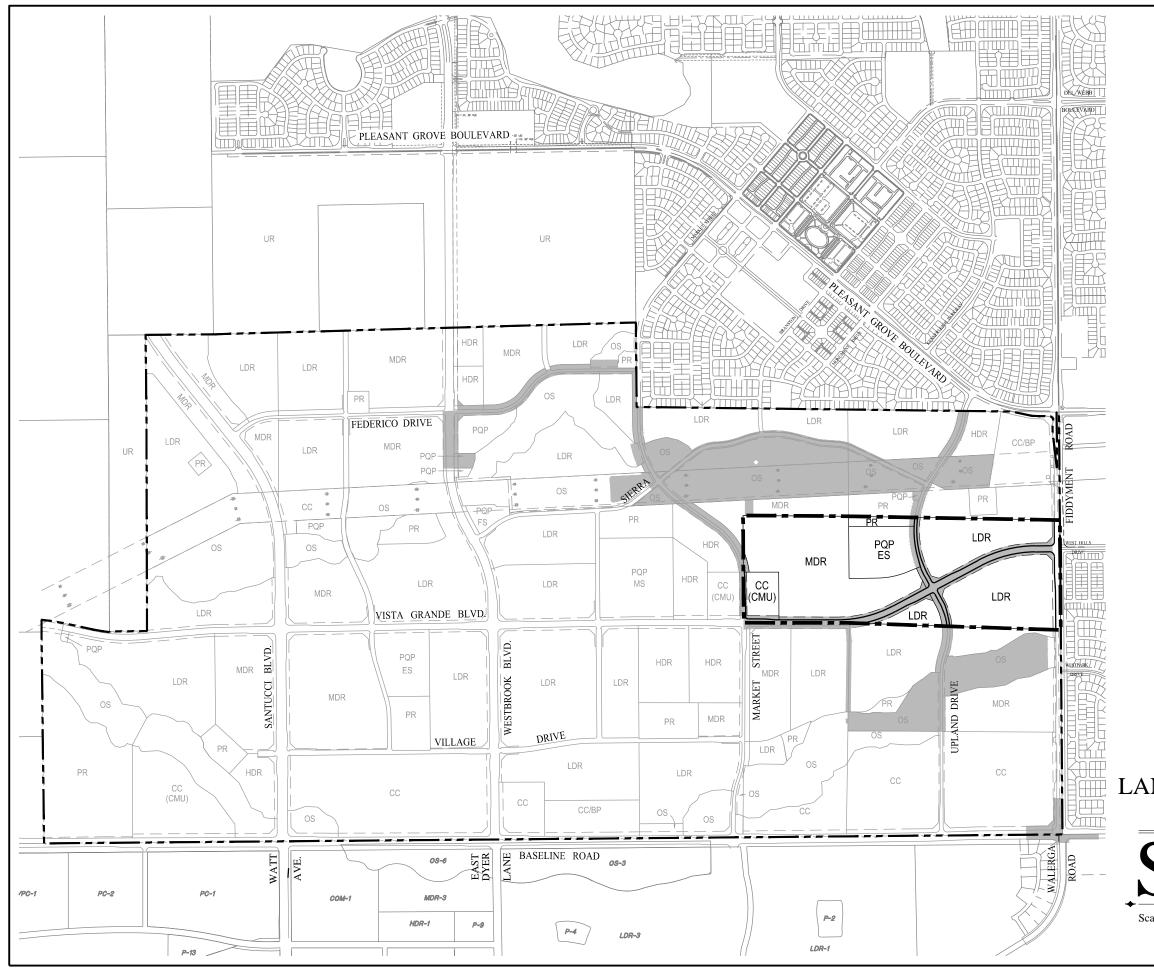
Roseville, California

Sheet 1 of 4

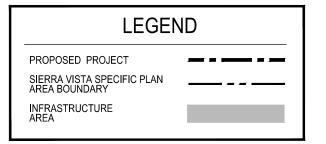
October 22, 2012

10-22-2012 11:31:13 bborgen P:\18254\GIS





### LAND USE SUMMARY TABLE LAND USE ACRES DENSITY DU (du/ac.) Residential LDR 5.0 224 Low Density Residential Medium Density Residential 39.6 8.0 356 High Density Residential sub-total 84.6 CC (CMU) Commercial Mixed Use 20.0 Public Quasi Public - PQP Elementary School 12.0 Park 2.4 Open Space Landscape Corridor/Paseo 7.5 10.4 Total Project Area 122.6± 620 du (Bagley & Associates)



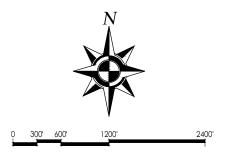


Figure 3

LANDS OF BAGLEY & ASSOCIATES PROPOSED PROJECT

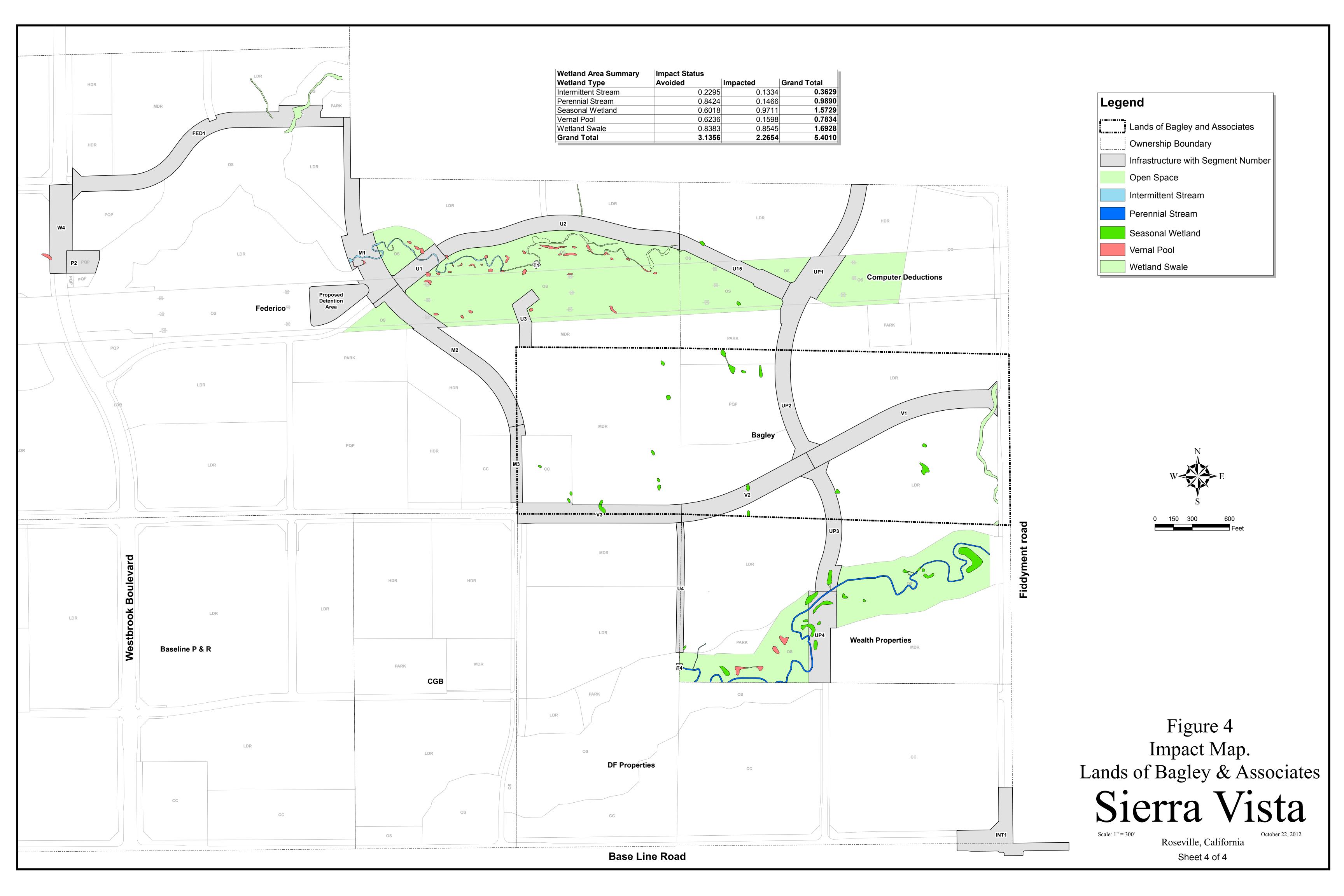
## Sierra Vista

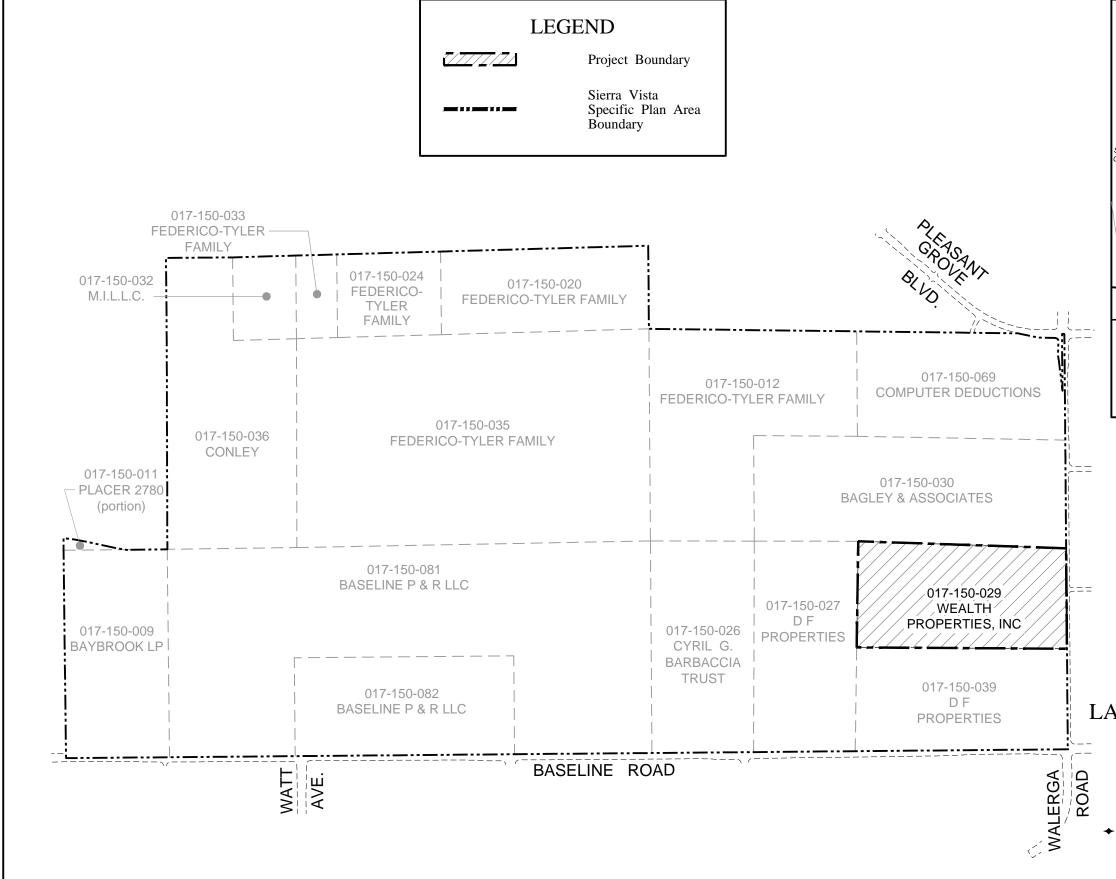
Scale: 1"-1200

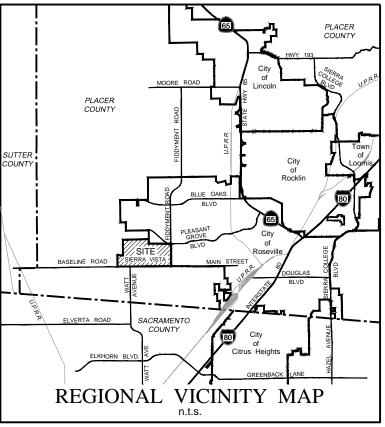
Roseville, California

October 22, 2012

Sheet 3 of 4







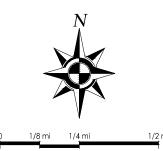


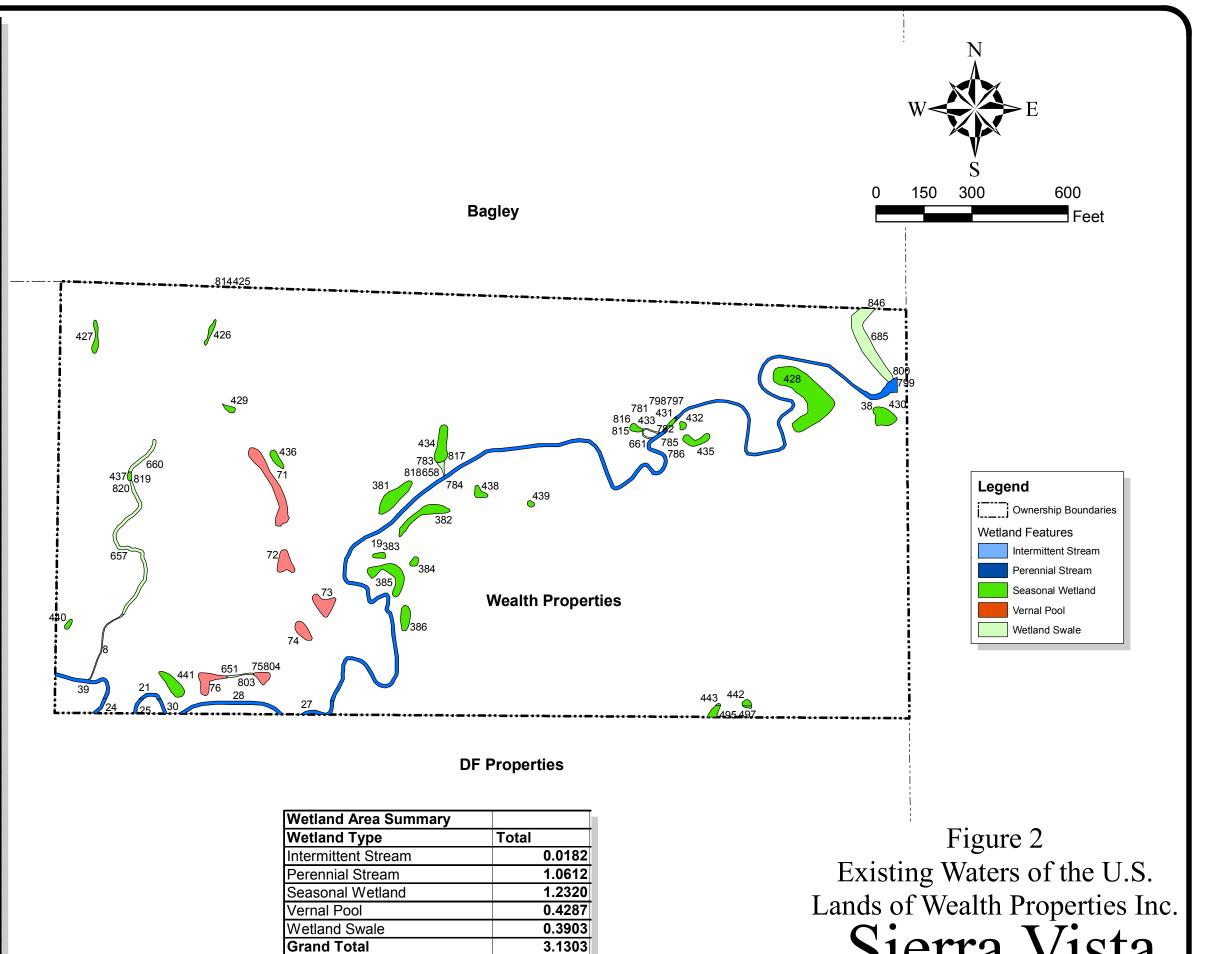
Figure 1 LANDS OF WEALTH PROPERTIES, INC. VICINITY MAP

Roseville, California

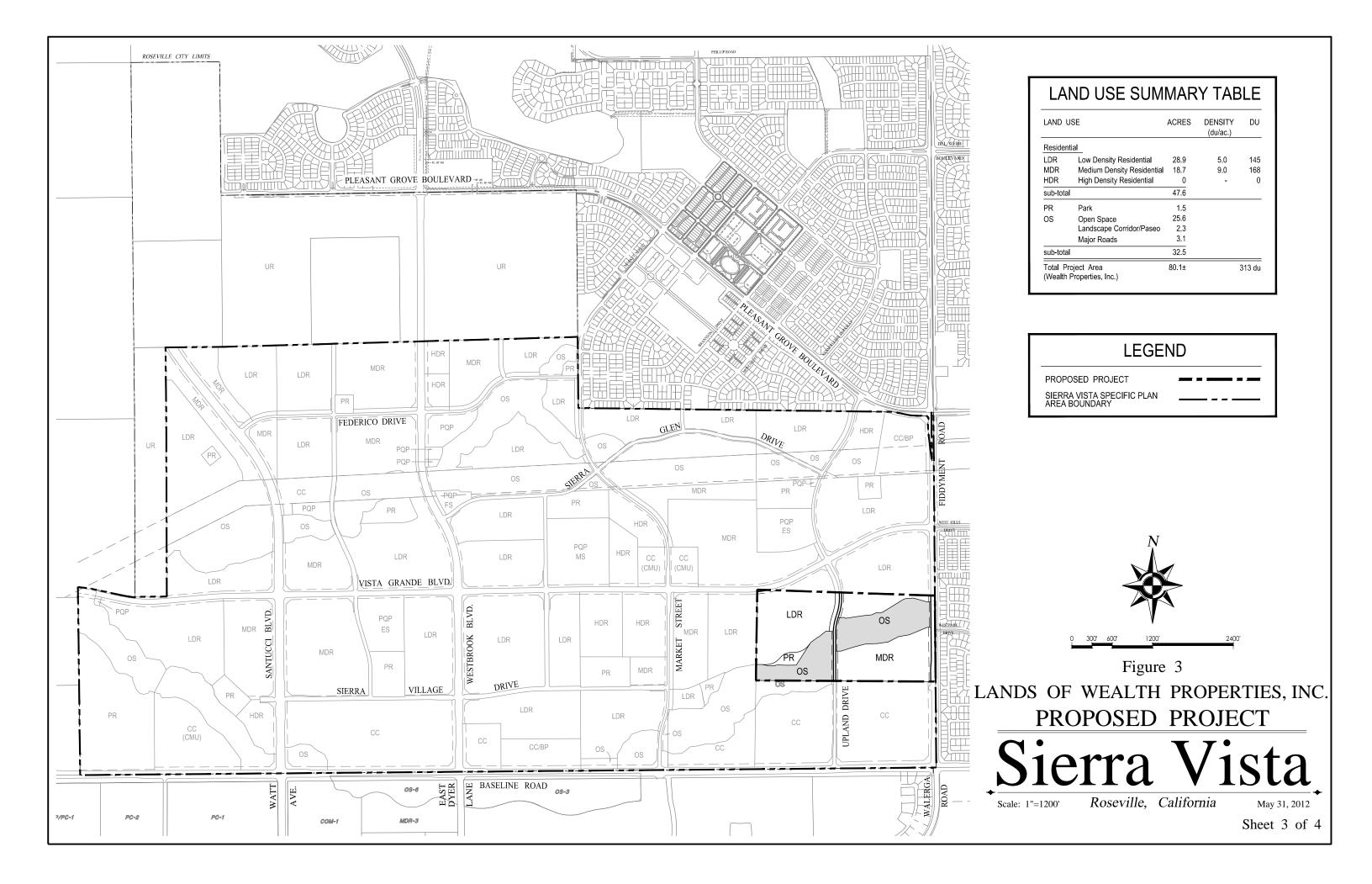
Sheet 1 of 4

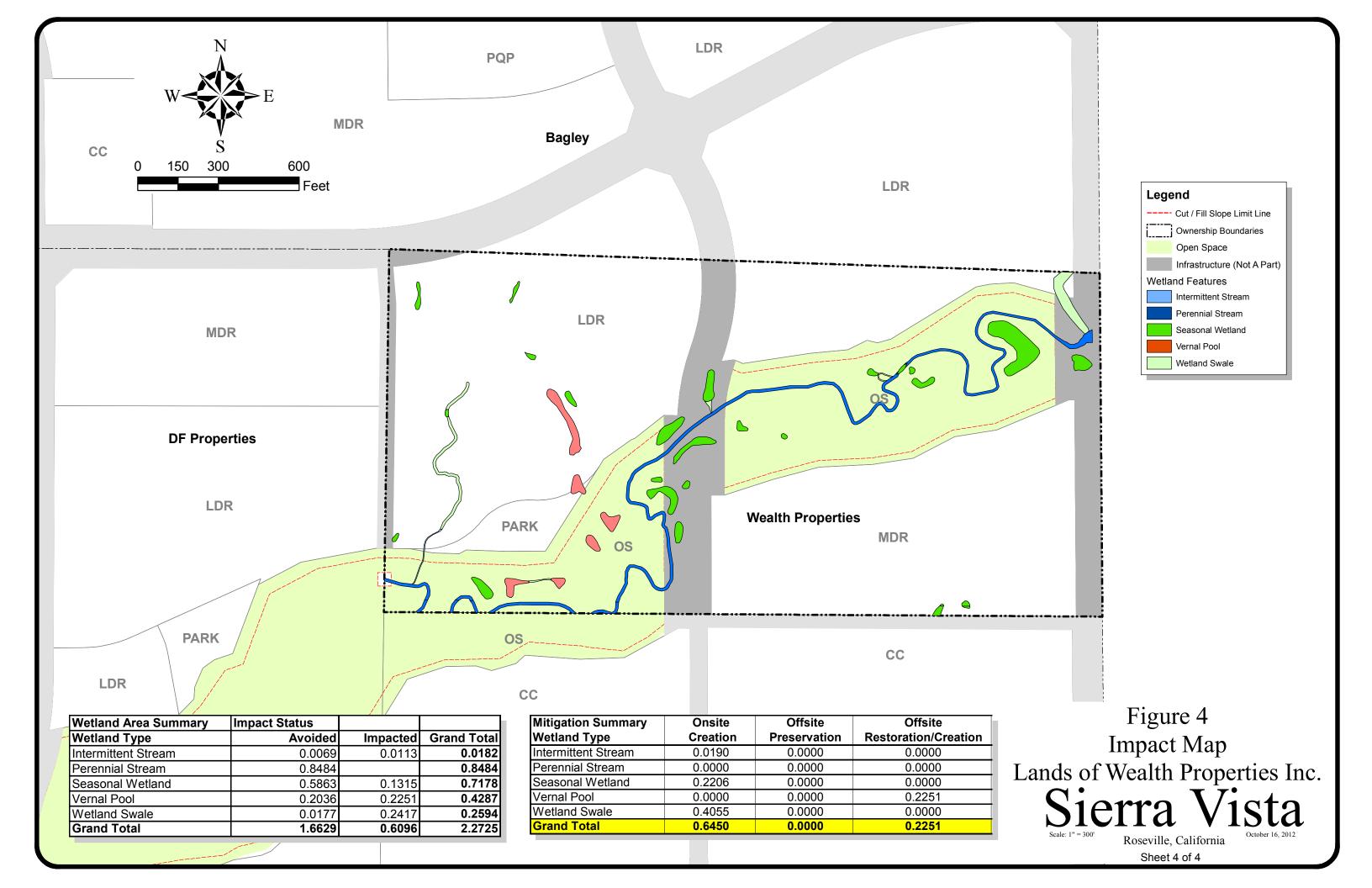
May 31, 2012

19	Wetland ID	Area (Acres)	Wetland Type
21         0.0160         Perennial Stream           24         0.0139         Perennial Stream           25         0.0121         Perennial Stream           27         0.0268         Perennial Stream           28         0.0789         Perennial Stream           30         0.0119         Perennial Stream           38         0.2956         Perennial Stream           39         0.0536         Perennial Stream           71         0.1652         Vernal Pool           72         0.0599         Vernal Pool           73         0.0665         Vernal Pool           74         0.0437         Vernal Pool           75         0.0300         Vernal Pool           76         0.0633         Vernal Pool           76         0.0633         Vernal Pool           381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           384         0.0134         Seasonal Wetland           385         0.1034         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428		0.0182	
24         0.0139         Perennial Stream           25         0.0121         Perennial Stream           27         0.0268         Perennial Stream           28         0.0789         Perennial Stream           30         0.0119         Perennial Stream           38         0.2956         Perennial Stream           39         0.0536         Perennial Stream           71         0.1652         Vernal Pool           72         0.0599         Vernal Pool           73         0.0665         Vernal Pool           74         0.0437         Vernal Pool           75         0.0300         Vernal Pool           76         0.0633         Vernal Pool           381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           385         0.134         Seasonal Wetland           425         0.0044		0.5521	Perennial Stream
25         0.0121         Perennial Stream           27         0.0268         Perennial Stream           28         0.0789         Perennial Stream           30         0.0119         Perennial Stream           38         0.2956         Perennial Stream           71         0.1652         Vernal Pool           72         0.0599         Vernal Pool           73         0.0665         Vernal Pool           74         0.0437         Vernal Pool           75         0.0300         Vernal Pool           76         0.0633         Vernal Pool           76         0.0633         Vernal Pool           381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           384         0.0144         Seasonal Wetland           385         0.1034         Seasonal Wetland           425         0.0004         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429			
27         0.0268         Perennial Stream           28         0.0789         Perennial Stream           30         0.0119         Perennial Stream           38         0.2956         Perennial Stream           39         0.0536         Perennial Stream           71         0.1652         Vernal Pool           72         0.0599         Vernal Pool           73         0.0665         Vernal Pool           74         0.0437         Vernal Pool           75         0.0300         Vernal Pool           76         0.0633         Vernal Pool           76         0.0633         Vernal Pool           381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           383         0.0144         Seasonal Wetland           384         0.0134         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           430         0.0731         Seasonal Wetland           431			
28         0.0789         Perennial Stream           30         0.0119         Perennial Stream           38         0.2956         Perennial Stream           71         0.1652         Vernal Pool           72         0.0599         Vernal Pool           73         0.0665         Vernal Pool           74         0.0437         Vernal Pool           75         0.0300         Vernal Pool           76         0.0633         Vernal Pool           76         0.0633         Vernal Pool           76         0.0633         Vernal Pool           381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           383         0.0144         Seasonal Wetland           384         0.0134         Seasonal Wetland           385         0.1034         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           430         0.0731         Seasonal Wetland           431			
30			
38         0.2956         Perennial Stream           39         0.0536         Perennial Stream           71         0.1652         Vernal Pool           72         0.0599         Vernal Pool           73         0.0665         Vernal Pool           74         0.0437         Vernal Pool           75         0.0300         Vernal Pool           76         0.0633         Vernal Pool           381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           384         0.0134         Seasonal Wetland           385         0.1034         Seasonal Wetland           386         0.0444         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.01101         Seasonal Wetland           433         0.0168         Seasonal Wetland           43			
39			
71         0.1652         Vernal Pool           72         0.0599         Vernal Pool           73         0.0665         Vernal Pool           74         0.0437         Vernal Pool           75         0.0300         Vernal Pool           76         0.0633         Vernal Pool           381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           384         0.0134         Seasonal Wetland           385         0.1034         Seasonal Wetland           386         0.0444         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           4			
72         0.0599         Vernal Pool           73         0.0665         Vernal Pool           74         0.0437         Vernal Pool           75         0.0300         Vernal Pool           76         0.0633         Vernal Pool           381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           383         0.0144         Seasonal Wetland           384         0.0134         Seasonal Wetland           385         0.1034         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0771         Seasonal Wetland           435         0.0275         Seasonal Wetland			
73         0.0665         Vernal Pool           74         0.0437         Vernal Pool           75         0.0300         Vernal Pool           76         0.0633         Vernal Pool           381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           384         0.0134         Seasonal Wetland           385         0.1034         Seasonal Wetland           386         0.0444         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0795         Seasonal Wetland			
74         0.0437         Vernal Pool           75         0.0300         Vernal Pool           76         0.0633         Vernal Pool           381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           383         0.0144         Seasonal Wetland           384         0.0134         Seasonal Wetland           385         0.1034         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0075         Seasonal Wetland			
75         0.0300         Vernal Pool           76         0.0633         Vernal Pool           381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           383         0.0144         Seasonal Wetland           384         0.0134         Seasonal Wetland           385         0.1034         Seasonal Wetland           386         0.0444         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0072         Seasonal Wetland <td></td> <td></td> <td></td>			
76         0.0633         Vernal Pool           381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           383         0.0144         Seasonal Wetland           384         0.0134         Seasonal Wetland           385         0.1034         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0072         Seasonal Wetland			
381         0.1020         Seasonal Wetland           382         0.0882         Seasonal Wetland           383         0.0144         Seasonal Wetland           384         0.0134         Seasonal Wetland           385         0.1034         Seasonal Wetland           386         0.0444         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0072         Seasonal Wetland           438         0.0221         Seasonal Wetland           439         0.0075         Seasonal Wetland </td <td></td> <td></td> <td>Vernal Pool</td>			Vernal Pool
383         0.0144         Seasonal Wetland           384         0.0134         Seasonal Wetland           385         0.1034         Seasonal Wetland           386         0.0444         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0072         Seasonal Wetland           438         0.0221         Seasonal Wetland           439         0.0075         Seasonal Wetland           441         0.0676         Seasonal Wetland           442         0.0105         Seasonal Wetland </td <td>381</td> <td></td> <td></td>	381		
384         0.0134         Seasonal Wetland           385         0.1034         Seasonal Wetland           386         0.0444         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0072         Seasonal Wetland           438         0.0221         Seasonal Wetland           440         0.0099         Seasonal Wetland           441         0.0676         Seasonal Wetland           442         0.0105         Seasonal Wetland           495         0.0194         Seasonal Wetland </td <td>382</td> <td>0.0882</td> <td></td>	382	0.0882	
385         0.1034         Seasonal Wetland           386         0.0444         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0072         Seasonal Wetland           438         0.0221         Seasonal Wetland           440         0.0099         Seasonal Wetland           441         0.0676         Seasonal Wetland           442         0.0105         Seasonal Wetland           443         0.0015         Seasonal Wetland           497         0.0038         Seasonal Wetland </td <td>383</td> <td>0.0144</td> <td>Seasonal Wetland</td>	383	0.0144	Seasonal Wetland
386         0.0444         Seasonal Wetland           425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0072         Seasonal Wetland           438         0.0221         Seasonal Wetland           449         0.0099         Seasonal Wetland           441         0.0676         Seasonal Wetland           442         0.0105         Seasonal Wetland           443         0.0015         Seasonal Wetland           443         0.0016         Seasonal Wetland           444         0.0008         Seasonal Wetland </td <td></td> <td></td> <td></td>			
425         0.0004         Seasonal Wetland           426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0072         Seasonal Wetland           438         0.0221         Seasonal Wetland           439         0.0075         Seasonal Wetland           440         0.0099         Seasonal Wetland           441         0.0676         Seasonal Wetland           442         0.0105         Seasonal Wetland           443         0.0015         Seasonal Wetland           495         0.0194         Seasonal Wetland           497         0.0038         Seasonal Wetland S			
426         0.0186         Seasonal Wetland           427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0072         Seasonal Wetland           438         0.0221         Seasonal Wetland           440         0.0099         Seasonal Wetland           441         0.0676         Seasonal Wetland           442         0.0105         Seasonal Wetland           443         0.0015         Seasonal Wetland           443         0.0015         Seasonal Wetland           444         0.0676         Seasonal Wetland           442         0.0105         Seasonal Wetland           495         0.0194         Seasonal Wetland </td <td></td> <td></td> <td></td>			
427         0.0295         Seasonal Wetland           428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0072         Seasonal Wetland           438         0.0221         Seasonal Wetland           440         0.0099         Seasonal Wetland           441         0.0676         Seasonal Wetland           442         0.0105         Seasonal Wetland           443         0.0015         Seasonal Wetland           444         0.0676         Seasonal Wetland           444         0.0105         Seasonal Wetland           443         0.0015         Seasonal Wetland           495         0.0194         Seasonal Wetland           497         0.0038         Seasonal Wetland </td <td></td> <td></td> <td></td>			
428         0.3942         Seasonal Wetland           429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           437         0.0072         Seasonal Wetland           438         0.0221         Seasonal Wetland           439         0.0075         Seasonal Wetland           440         0.0099         Seasonal Wetland           441         0.0676         Seasonal Wetland           442         0.0105         Seasonal Wetland           443         0.0015         Seasonal Wetland           444         0.0105         Seasonal Wetland           447         0.0038         Seasonal Wetland           447         0.0038         Seasonal Wetland           449         0.0194         Seasonal Wetland           497         0.0038         Seasonal Wetland           651         0.0091         Wetland Swale			
429         0.0130         Seasonal Wetland           430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0072         Seasonal Wetland           438         0.0221         Seasonal Wetland           440         0.0099         Seasonal Wetland           441         0.0676         Seasonal Wetland           442         0.0105         Seasonal Wetland           443         0.0015         Seasonal Wetland           443         0.0015         Seasonal Wetland           444         0.0091         Wetland Swale           495         0.0194         Seasonal Wetland           497         0.0038         Seasonal Wetland           497         0.0038         Seasonal Wetland Swale           651         0.0091         Wetland Swale           658         0.0109         Wetland Swale			
430         0.0731         Seasonal Wetland           431         0.0107         Seasonal Wetland           432         0.0101         Seasonal Wetland           433         0.0168         Seasonal Wetland           434         0.0797         Seasonal Wetland           435         0.0428         Seasonal Wetland           436         0.0275         Seasonal Wetland           437         0.0072         Seasonal Wetland           438         0.0221         Seasonal Wetland           440         0.0099         Seasonal Wetland           441         0.0676         Seasonal Wetland           442         0.0105         Seasonal Wetland           443         0.0015         Seasonal Wetland           443         0.0015         Seasonal Wetland           444         0.0075         Seasonal Wetland           442         0.0105         Seasonal Wetland           495         0.0194         Seasonal Wetland           497         0.0038         Seasonal Wetland           651         0.0091         Wetland Swale           652         0.0124         Wetland Swale           653         0.0109         Wetland Swale     <			
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Roseville, California Sheet 2 of 4



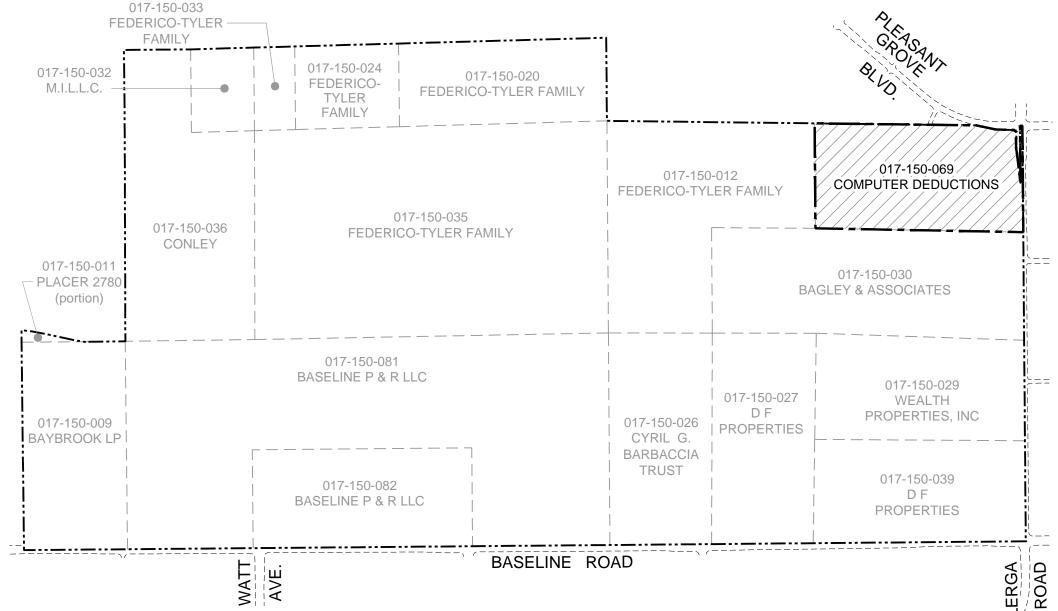


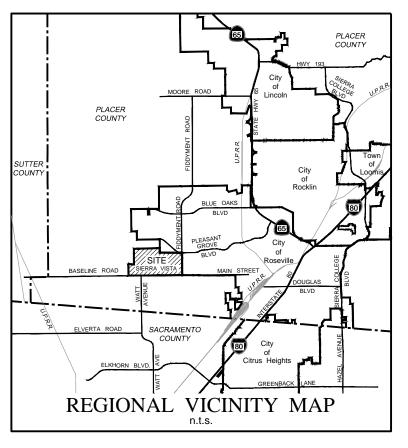
### **LEGEND**

Project Boundary

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Sierra Vista Specific Plan Area Boundary





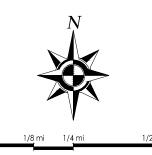
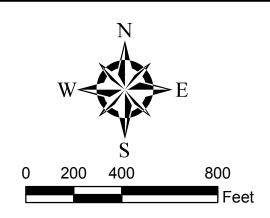


Figure 1
LANDS OF COMPUTER DEDUCTIONS
VICINITY MAP

# Sierra Vista

Roseville, California May 31, 2012

Sheet 1 of 4

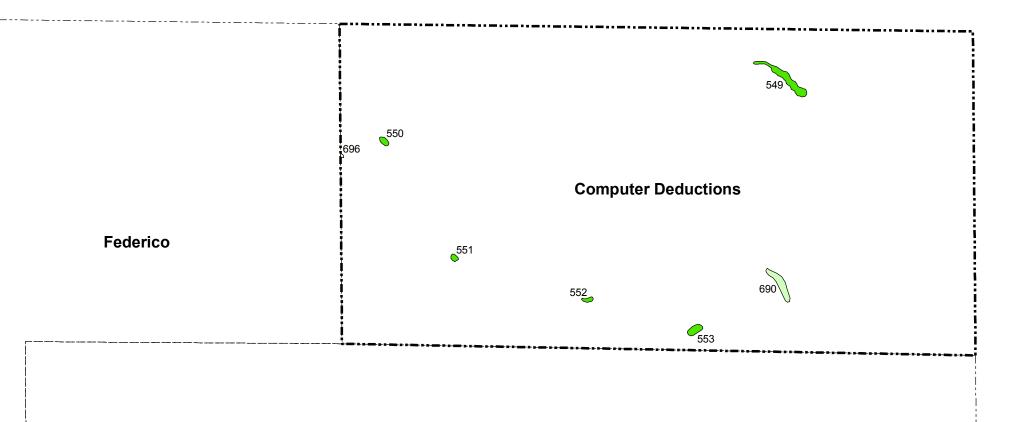


**DF Properties** 

CGB

Wetland ID	Area (Acres)	Wetland Type
549	0.1385	Seasonal Wetland
550	0.0222	Seasonal Wetland
551	0.0155	Seasonal Wetland
552	0.0160	Seasonal Wetland
553	0.0425	Seasonal Wetland
690	0.0991	Wetland Swale
696	0.0038	Wetland Swale





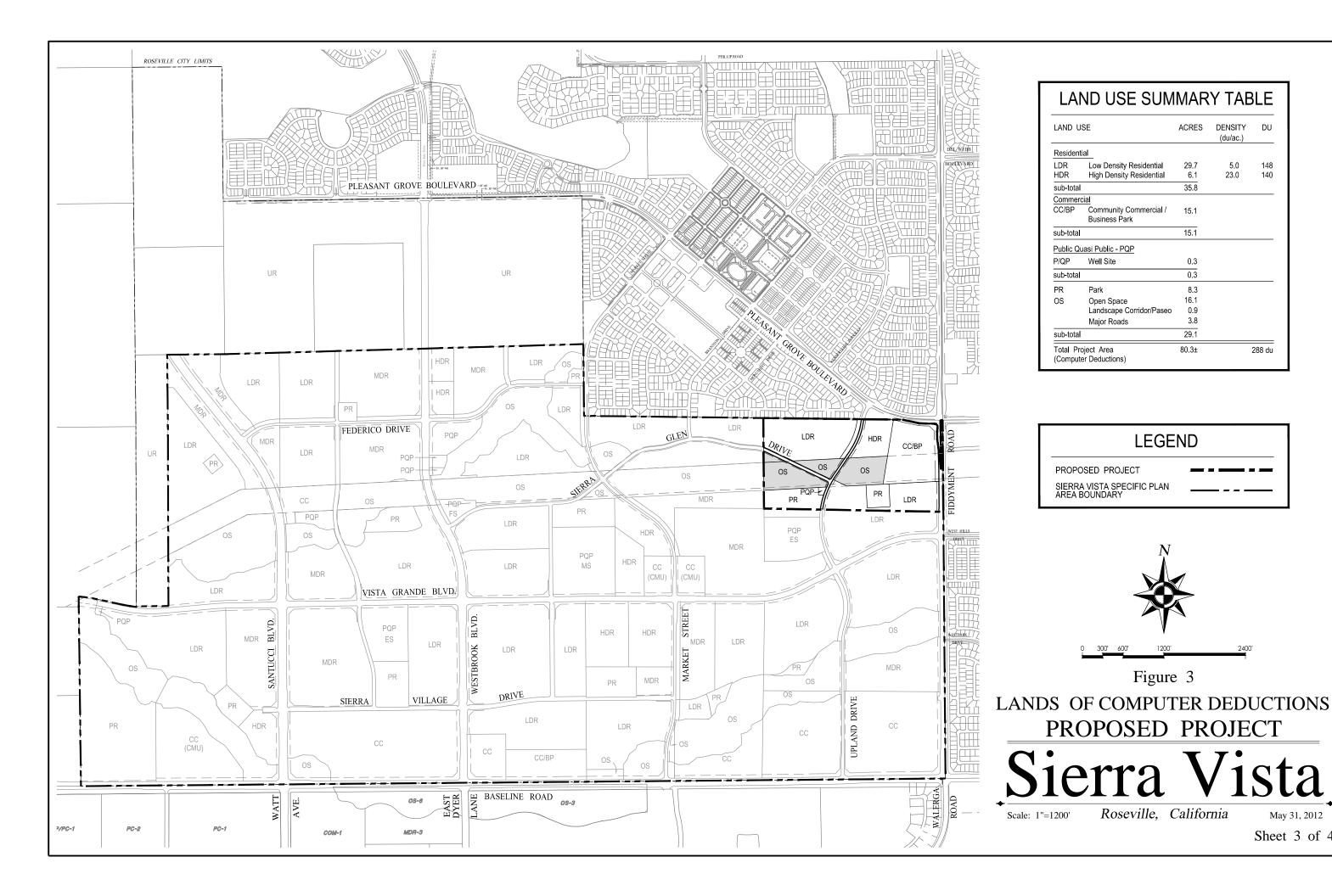
Bagley

**Wealth Properties** 

Wetland Area Summary	
Wetland Type	Total
Seasonal Wetland	0.2347
Wetland Swale	0.1029
Grand Total	0.3376

Figure 2
Existing Waters of the U.S.
Lands of Computer Deductions
Sierra Vista

1"=300' Roseville, California Sheet 2 of 4



(du/ac.)

5.0

23.0

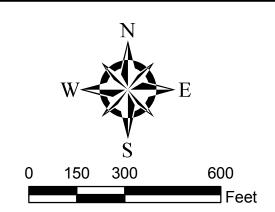
148

140

288 du

May 31, 2012

Sheet 3 of 4



**Bagley** 

MDR

Wetland Area Summary	Impact Status		
Wetland Type	Impacted	Avoided	<b>Grand Total</b>
Seasonal Wetland	0.1970	0.0155	0.2125
Wetland Swale	0.0991		0.0991
Grand Total	0.2961	0.0155	0.3116

Offsite

Preservation

0.0000

0.0000

0.0000

Onsite

Creation

0.3304

0.1663

0.4967

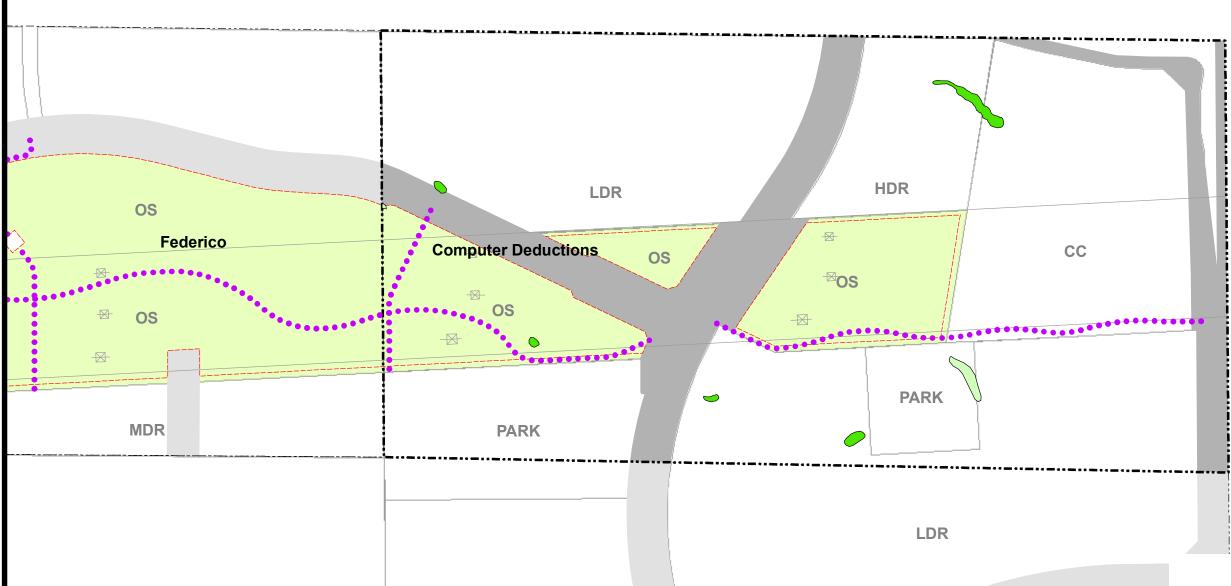
Offsite

**Restoration/Creation** 

0.0000

0.0000

0.0000



**Mitigation Summary** 

Wetland Type

Wetland Swale

Seasonal Wetland

Figure 4 Impact Map
Lands of Computer Deductions
Sierra Vista
Roseville California May 31, 2012

Legend

Bikeway / Pedestrian Trail

---- Cut / Fill Slope Limit Line Ownership Boundaries Open Space Infrastructure (Not A Part)

> Seasonal Wetland Wetland Swale

Wetland Features

Roseville, California Sheet 4 of 4

Infrastructure Application Drawings	

