ADMINISTRATIVE DRAFT

Initial Study/ Mitigated Negative Declaration
Winchester Trails Park Expansion Project

Project Location
Winchester, Riverside County, California

Prepared for:

Valley Wide Recreation & Park District
901 W Esplanade Ave
San Jacinto, CA 92583

Prepared by:

Andy Minor
Geovironment Consulting
630 W 7th Street
San Jacinto, CA 92583

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Abbreviations

AB 32	Global Warming Solutions Act of 2006
AB	Assembly Bill
ADT	Average Daily Trips
AQ	Alquist-Priolo
AQMP	Air Quality Management Plan
Amsl	Above mean sea level
Bgs	Below ground surface
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFCs	Chlorofluorocarbons
CGS	California Geologic Survey
CH_4	Methane
CMP	Congestion Management Program
CMUTCD	California Manual of Uniform Traffic Control Devices
CNEL	Community Noise Equivalent Level
CO	Carbon monoxide
CO_2	Carbon dioxide
CO2e	Carbon dioxide equivalent
CWA	Clean Water Act
County	County of Riverside
dBA	A unit of measurement of sound level corrected to the A–weighted scale.
EIC	Eastern Information Center
EIR	Environmental Impact Report
EMWD	Eastern Municipal Water District
FEMA	Federal Emergency Management Agency
GHG	Greenhouse Gas
GI	General industrial
HDPE	High density polyethylene
HFCs	Hydrofluorocarbons
I-215	Interstate 215
IS/MND	Initial Study/ Mitigated Negative Declaration
LI	Light industrial
LOS	Level of service
LST	Localized Significance Thresholds
MBTA	Migratory Bird Treaty Act
MWD	Metropolitan Water District of Southern California
MLD	Most Likely Descendent
MS4	Municipal Separate Storm Sewer System
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO	Nitrous oxide
NO_2	Nitrogen dioxide
NS	North-South
O_3	Ozone
Pb	Lead
PA-1	Planning Area 1
PFCs	Perfluorocarbons
PM10	Particulate matter of 10 microns in diameter or smaller
PM2.5	Particulate matter of 2.5 microns in diameter or smaller.
PRC	Public Resources Code
Project	Winchester Trails Park
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coast Information Center
SCE	Southern California Edison
SLF	Sacred Lands File
SCS	Sustainable Communities Strategy
SF	Square feet
SF_6	Sulfur hexafluoride
SO_2	Sulfur dioxide
SCAB	South Coast Air Basin
SWPPP	Stormwater Pollution Prevention Plan
RWQCB	Regional Water Quality Control Board
TCR	Tribal Cultural Resources
TNW	Traditional Navigable Water
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMT	Vehicle Miles Travelled
VOC	Volatile Organic Compounds

Introduction

Lead Agency

The Valley Wide Recreation & Park District would act as Lead Agency under CEQA, pursuant to §21067 of the CEQA Guidelines and would have the principal discretionary responsibility to approve or deny the Project.

Project Approvals

The following required permits, agreements, and regulatory review processes are anticipated to construct and operate the Project:

California Environmental Quality Act (CEQA)

Additional City Approvals

The following additional approvals will be obtained prior to construction of the Project:

- Grading/Building/Electrical Permits

Purpose

The purpose of the Initial Study (IS) in support of a Mitigated Negative Declaration (MND), herein referred to as IS/MND, is to identify and adequately mitigate any potentially significant environmental impacts associated with construction and operation of the proposed Project in the unincorporated area of Winchester, County of Riverside, California. The Project's objective is to expand the existing Winchester Trails Park across the entire lot zoned Open Area Combining Zone-Residential Developments (R-5, CZ) and designated Medium Density Residential (MDR) land use.

This IS/MND and its appendices, have been prepared in accordance with the CEQA Statute and the State's Guidelines for Implementation of CEQA for preparation of an IS. This IS, when combined with the Notice of Intent to Adopt an MND, serves as the environmental document for the proposed Project pursuant to the provisions of CEQA (*California Public Resources Code* §21000 et seq.) and the CEQA Guidelines (Title 14, *California Code of Regulations* §15000, et seq.).

Organization of This IS/MND

The content and format of the IS/MND are designed to meet CEQA Guidelines and contain the following sections:

Section 1, "Introduction," provides a brief summary of the purpose and scope of the IS/MND, the Lead Agency's responsibility, the Project approvals, documents incorporated by reference, and Project contacts.

Section 2, "Project Information," provides a Project overview including a description of the regional location and project vicinity, including figures; and provides a description of the Project elements – e.g., dimensions of the project.

Section 3, "Environmental Determination and Checklist" provides a list of Project facts, describes the methodology for assessing environmental factors potentially affected, and provides a record of the Environmental Determination.

Section 4, "Environmental Impact Analysis," provides a brief description of existing conditions for each topic and an analysis of potential environmental impacts based on CEQA Guidelines Appendix G. Mitigation measures are identified where necessary to reduce potential impacts to a less than significant level.

Section 5, "References," lists all reports used, websites accessed, and persons consulted to prepare the IS/MND.

Appendices Identifies Project-specific technical studies and CEQA process requirements performed for the Project:

- Appendix A Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis
- Appendix B Phase I Cultural Assessment Report
- Appendix C Valley-Wide Recreation & Parks District Landscape Plans for "Winchester Trails" Park Site – Phase 1 Tract 30351 County of Riverside

Documents Incorporated by Reference

An MND may incorporate by reference all or portions of another document that are generally available to the public (CEQA Guidelines §15150). The documents used must be available for public review for interested parties to access during public review of the IS and Notice of Intent (NOI) to adopt a Mitigated Negative Declaration for this proposed Project. The County General Plan and the County Municipal Code, which are available on-line, were used in the evaluation of the proposed Project. The Project-specific technical reports are all attached to the IS as appendices.

Project Contacts

Lead CEQA Agency and Address

Valley Wide Park & Recreation District
901 W Esplanade Ave
San Jacinto, CA 92583

Contact Person and Phone Number

James Salvador
(951) 654 - 1505

Project Consultant and Address

Geovironment Consulting
630 W 7th St.
San Jacinto, CA 92583

Contact Person and Phone Number

Mr. Andy Minor
Owner
(951) 232-1930

Project Information

1. Project Title:

Winchester Trails Park Expansion Project

2. Lead Agency Name and Address:

Valley Wide Recreation & Park District
901 W Esplanade Ave
San Jacinto, CA 92583

3. Contact Person and Phone Number:

James Salvador, (951) 654 - 1505

4. Project Location:

The Project site is located in the unincorporated community of Winchester in Riverside County. Winchester Trails Park currently sits on the southwest portion of the Project lot, APN 458-370-004-3.

5. Proponent's Name and Address:

Valley Wide Recreation & Park District
901 W Esplanade Ave
San Jacinto, CA 92583

6. Surrounding Zoning and General Plan Designations:

The Project site is zoned Open Area Combining Zone-Residential Developments (R-5, CZ) and designated Medium Density Residential (MDR) land use.

Table 1 Surrounding Land Use and Zoning

Boundary	General Plan Designations	Zoning Designations
North	MDR	R-1, CZ
South	RC-EDR	R-R
East	MDR	R-5, CZ
West	MDR	R-1, CZ

The Project site is bordered by one-family dwellings zones (R-1, CZ) to the north and west of the site, rural residential zoning (R-R) to the south of the site and an open area combing zone-residential developments zone (R-5, CZ) immediately east of the Project site (Table 1).

7. Description of Project:

The proposed project envisions development of the remaining five (5) acres of land. The elements that are proposed are a parking lot with 27 stalls, Tennis and Pickleball courts, one grass field, approximate 210 feet wide and 330' feet long, an exercise station area, restroom

buildings, shaded picnic area, bench seating, 12' wide walking path with led lighting, fencing with landscape screening for catch basin, and a flagpole.

8. Surrounding Land Uses and Setting:

The Project site is bordered by single family homes zoned R-1, CZ to the north and west, rural residential homes zoned R-R to the south and open area combining zone-residential developments zoned R-5, CZ to the west of the Project site. Winchester road, State route 79 is located to the west of the Project approximately 150 feet.

The Project site is in the western portion of Riverside County in the San Jacinto Valley in the unincorporated area of Winchester (Figure 1). The Project is located between West Stetson Avenue that runs along the Southern boundary (West to East). Winchester Road (California State Route 79) that runs along the Eastern boundary (North to South), and Hitching Post Drive that runs on the Westside, and along the North end of the property. The Project site is located at approximately 1600 feet above mean sea level (amsl). The Project is located on Southwest quarter of section 15, Township 5 South, Range 3 West, San Bernardino, Baseline and Meridian, as shown on Winchester, California 7.5' U.S. Geological Survey (USGS) topographic quadrangle map (Figure 2). The area is characterized by a Mediterranean climate with long dry summers and relatively mild winters. Annual precipitation is on average approximately 11 inches with rainfall occurring approximately 31 days per year. Most precipitation occurs in January. Average daily temperature is 65F. Temperatures range from the high 70s to the low 50s with summer highs in the 90s.

The Project is located on Tract 30351 Sheet 4 (Appendix C). The project area is described by the tract map as lot 219, 6.83 acres of open space. This space is one parcel, with Basin "B" (87,398 SQ FT) in southeast corner of the parcel extending North to the Northeast quarter of the parcel. Also present is a one acre (43,560 SQ FT.) built park in the southwest corner of the project location. The project is in a residential area, and the Project site zoning is R-5, CZ (Open Area Combining Zone-Residential Developments).

9. Other Public Agencies Whose Approval is Required

State Water Quality Control Board
Santa Ana Regional Water Quality Control Board
Eastern Municipal Water District (EMWD)Water Annexation

Geovironment CONSULTING

esri Partner Network Silver

N

0 2.88 5.75 Miles

Figure 1 - Project Vicinity
Winchester Trails Park Expansion Project



Geovironment CONSULTING

esri Partner Network Silver

N

0 450 900 1,800 Feet

Figure 2 - Project Location
Winchester Trails Park Expansion Project

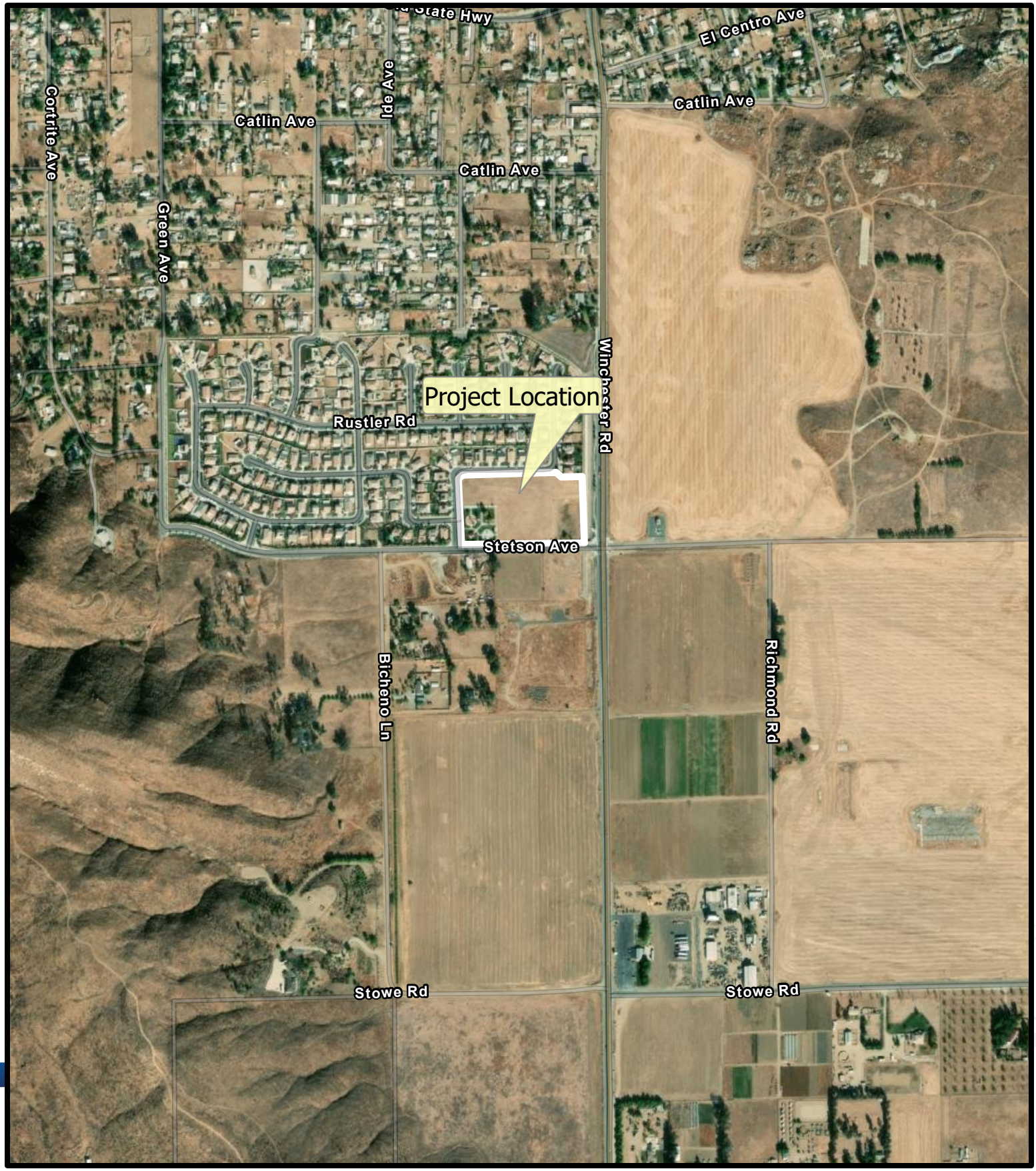


Figure 3 - MARB/IPA Land Use Map
Winchester Trails Park Expansion Project

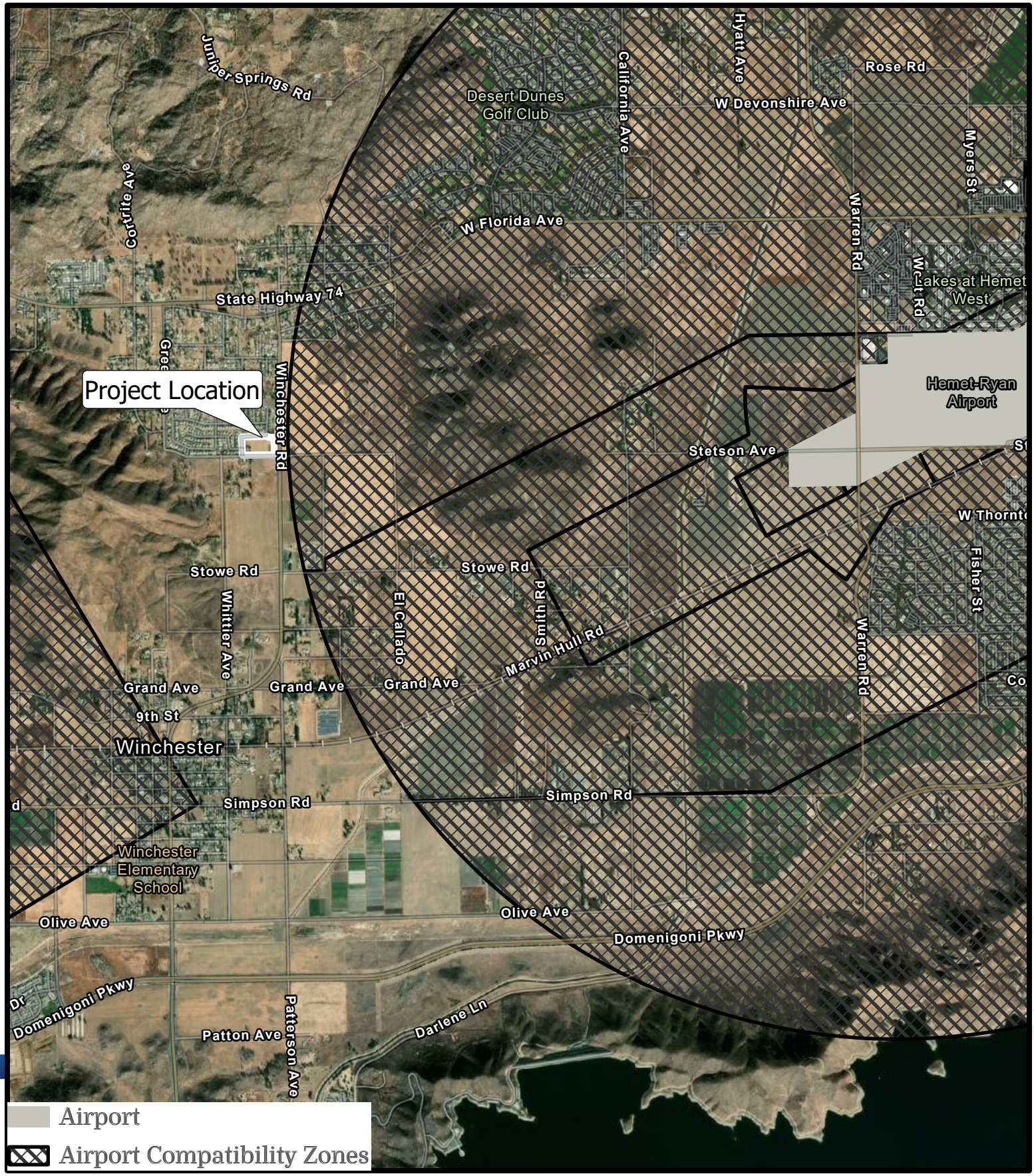


Figure 4 - Site Photographs
Winchester Trails Park Expansion Project

Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



N
0 120 240 Feet

Figure 5 - Project Site Plan
Winchester Trails Park Expansion Project



Environmental Factors

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Public Services
☐ Agriculture / Forestry Resources	☐ Hazards & Hazardous Materials	☐ Recreation
☐ Air Quality	☒ Hydrology/Water Quality	☐ Transportation
☒ Biological Resources	☐ Land Use/Planning	☒ Tribal Cultural Resources
☒ Cultural Resources	☐ Mineral Resources	☐ Utilities/Service Systems
☐ Energy	☐ Noise	☐ Wildfire
☒ Geology/Soils	☐ Population/Housing	☐ Mandatory Findings of Significance

The IS/MND fully addresses the environment, as described by CEQA, as "the physical conditions which existing within the area which will be affected by a proposed Project including land, air, water, flora, fauna, noise, objects of historic or aesthetic significance." A detailed analysis of environmental impacts will be presented for each resource area (listed above) utilizing the model Environmental Checklist Form found in Appendix G of the CEQA Guidelines §15063(f). Impacts to the environment for construction and operation of the Project will be assessed and described, and the level of significance of impacts will be measured against criteria that have been established by regulation, accepted standards, or other definable criteria. The use of an MND is only permissible if all potentially significant environmental impacts assessed in the IS are rendered less than significant with incorporation of mitigation measures.

Each environmental resource area is reviewed by analyzing a series of questions (i.e., Initial Study Checklist) regarding level of impact posed by the Project. Substantiation is provided to justify each determination. One of four following conclusions is then provided as a determination of the analysis for each of the major environmental factors.

No Impact. A finding of no impact is made when it is clear from the analysis that the project would not affect the environment.

Less than Significant Impact. A finding of a less than significant impact is made when it is clear from the analysis that a project would cause no substantial adverse change in the environment and no mitigation is required.

Less than Significant Impact with Mitigation Incorporated. A finding of a less than significant impact with mitigation incorporated is made when it is clear from the analysis that a project would cause no substantial adverse change in the environment when mitigation measures are successfully implemented by the project proponent. In this case, the project proponent would be responsible for implementing measures identified in a Mitigation Monitoring and Reporting Plan (MMRP).

Potentially Significant Impact. A finding of a potentially significant impact is made when the analysis concludes that the proposed Project could have a substantially adverse change in the environment for one or more of the environmental resources assessed in the checklist. Typically, preparation of an Environmental Impact Report (EIR) would be required in the case of potentially significant impact. No findings of significance impact were determined to potentially result from the Project.

Environmental Determination

Determination

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. ☒

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☐

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. ☐

Signature	Date
Printed Name	Title

Environmental Checklist of Impacts

I. Aesthetics

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Except as provided in Public Resources Code Section 21099, would the project have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒

No Impact. The Project site is located in a relatively flat region at approximately 1,600 feet amsl in a residential neighborhood in the unincorporated Winchester community of Riverside County. The Project site is zoned Open Area Combining Zone-Residential Developments (R-5, CZ) and designated Medium Density Residential (MDR) land use. The proposed Project would involve the expansion of the existing Winchester Trails Park to add a parking lot, soccer fields, pickleball courts and park amenities on 5 acres of relatively flat land. The Project is not located within the vicinity of any designated scenic vistas, nor would it involve the construction of any structures or features that would obstruct the views of the surrounding landscape.[1] No impacts.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Except as provided in Public Resources Code Section 21099, would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

No Impact. The California Scenic Highways and Historic Parkways Program of 1963 was established "to preserve and protect highway corridors located in areas of outstanding natural beauty" from alteration that would diminish the aesthetics value of the adjacent lands. The County of Riverside General Plan Circulation Element identifies State Route 74 as a route of regional significance because it is a linkage between Orange and Riverside Counties through the Santa Ana Mountains on into the San Jacinto Mountains and passes by Steele Peak and the San Jacinto River. The Ramona Expressway is a Riverside County Eligible (future) Scenic Highway according to the Riverside County Integrated Project. However, the proposed Project is not located within an officially designated state scenic highway of the California Scenic Highway Mapping System. The nearest state highway is I-215, which is not designated as a state scenic highway.[2] No impacts to scenic resources within a state scenic highway would occur as a result of the Project.

[1] Riverside County Planning Department (2020 August). County of Riverside General Plan & Zoning. Retrieved from: https://planning.rctlma.org/General-Plan-Zoning

[2] California Department of Transportation (2019, March 26). The California Scenic Highway Program.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Except as provided in Public Resources Code Section 21099, would the project, in nonurbanized areas, substantially degrade the existing visual character or quality of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒

No Impact. The Project site is located within a residential, urbanized area at approximately 1,600 feet amsl. The Winchester Trails Park is located adjacent to the Project site. The Project should not substantially degrade the existing visual character or quality of the site and its surroundings due to the proposed construction of expanding existing recreational facilities. Development will have a similar aesthetic to existing adjacent park features. The Project site is zoned Open Area Combining Zone-Residential Developments (R-5, CZ) and designated Medium Density Residential (MDR) land use. There are no significant visual resources on the site, or any significantly prominent topographical features as identified in the Riverside County General Plan.[1] The proposed Project would not significantly alter the developed character of the site nor adversely impact any scenic views through and across the Project site. No impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Except as provided in Public Resources Code Section 21099, would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Less Than Significant Impact. No spotlighting, floodlighting, or glare-producing equipment would be used or installed on the Project area prior to, during, or following construction activities. The Riverside County General Plan, land use element policy LU 7.4 states to retain and enhance the integrity of existing residential, employment, agricultural, and open space areas by protecting them from encroachment of land uses that would result in impacts from noise, noxious fumes, glare, shadowing, and traffic.[3] The Project shall adhere to the Riverside County Code of Ordinances No. 916 regulating outdoor lighting and for the purpose to provide minimum requirements for outdoor lighting in order to reduce light trespass, and to protect the health, property, and well-being of residents in the unincorporated areas of the County. In addition, Section 17.136.040 Development standards (10) all exterior lighting shall comply with applicable requirements of Ordinance No. 655 to ensure a clear nighttime view for Mt. Palomar Observatory. The Mt. Palomar Observatory's Dark Sky Ordinance requires all projects in the area to be conditioned to use low pressure sodium lighting.[4] The Project

[3] Riverside County Planning Department (2021 June, 29). County of Riverside General Plan Land Use Element.
[4] Riverside County (2021 October 2). Riverside County, CA Municipal Code of Ordinances.

would comply with the County's lighting ordinance and design guidelines. As a result, a less than significant impact involving light, or glare is anticipated to occur as a result of the Project.

II. Agriculture and Forestry Resources

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

No Impact. The Project site is zoned Open Area Combining Zone-Residential Developments (R-5, CZ) and designated Medium Density Residential (MDR) land use. The existing Winchester Trails Park is situated on the southwest corner of the parcel. The rest of the parcel is currently a vacant, maintained grass and ruderal lot. No agriculture or farm activities exist on the Project site. No Prime, Unique or Farmland of Statewide Importance exist on the Project site. The Project would not convert existing farmland uses to non-farmland uses and no impact would result.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

No Impact. The Project site is located in a relatively flat region at approximately 1,600 feet amsl in a residential area. The Project site is vacant and consists of maintained grass and ruderal vegetation. The Winchester Trails Park is located in the southwest portion of the lot. The Project site is zoned Open Area Combining Zone-Residential Developments (R-5, CZ) and designated Medium Density Residential (MDR) land use. The Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. No impact should result from the Project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒

No Impact. The Project site is zoned Open Area Combining Zone-Residential Developments (R-5, CZ), designated Medium Density Residential (MDR) land use and within a residential neighborhood. The Project site is located in an area of maintained grass and ruderal vegetation. The nearest forest land

and timberland are located approximately 20 miles away in San Bernardino Mountains to the north, San Jacinto Mountains to the southeast, and Cleveland National Forest to the southwest. No forest land or timberland occurs on or in the vicinity of the Project site. As a result, the Project would result in no impact to such uses.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

No Impact. The Project site is vacant and maintained grass and ruderal vegetation. The Project site is zoned Open Area Combining Zone-Residential Developments (R-5, CZ), designated Medium Density Residential (MDR) land use, and surrounded by residential areas. The nearest forests are approximately 20 miles away as mentioned in Section 6.2 (c). The Project would not require a conversion of forest land to non-forest uses. No impact would result.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

No Impact. The proposed Project does not involve the use of farmland or forest land. The Project site is zones Open Area Combining Zone-Residential Developments (R-5, CZ) and designated Medium Density Residential (MDR) land use. Conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use would not occur as a result of the Project. No impact to such resources would occur as a result of development of the Project.

III. Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Evaluation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

Less than Significant Impact. The basis for air quality review in the Project area is evaluating consistency with the South Coast Air Quality Management District (SCAQMD) regulations, which are designed to bring the South Coast Air Basin (SCAB), including the County of Riverside, into attainment

for all National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS).

An ambient air quality standard (AAQS) defines the maximum amount of a pollutant that can be present in outdoor air without harm to the public's health. The State of California and the federal government have set AAQS for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM_{10} and $PM_{2.5}$) and lead (Pb). The State has also set standards for sulfates ($SO_4(2-)$) and visibility. AAQSs are set to regulate air emissions from stationary and mobile sources to achieve clean air and to protect even the most sensitive individuals in our communities.

Growth projections from Riverside County Unincorporated Area are provided to the Southern California Association of Governments (SCAG), which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. The SCAQMD in conjunction with the California Air Resources Board (CARB), the SCAG and USEPA prepares and regularly updates an Air Quality Management Plan (AQMP 2016) to set forth an integrated program for achievement of compliance with air quality standards in the Basin.[5] Currently, the South Coast Air Basin (SCAB) is out of compliance with CAAQS $PM_{2.5,}$ PM_{10} and ozone standards and NAAQS $PM_{2.5}$, PM_{10} and ozone standards. Table 2 illustrates attainment status and attainment dates by criteria pollutant in the SCAB.

Table 2 South Coast Air Basin Attainment Status

Criteria Pollutant	Standard	Averaging Time	Designation[1]	Attainment Date[2]
1-Hour Ozone[3]	NAAQS	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 (revised deadline)
	CAAQS	1-Hour (0.09 ppm)	Nonattainment	N/A
8-Hour Ozone[4]	NAAQS	1997 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	NAAQS	2008 8-Hour (0.075 ppm)	Nonattainment (Extreme)	7/20/2032
	NAAQS	2015 8-Hour (0.070 ppm)	Nonattainment (Extreme)	8/3/2038
	CAAQS	8-Hour (0.070 ppm)	Nonattainment	Beyond 2032
CO	NAAQS	1-Hour (35 ppm) 8-Hour (9 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	CAAQS	1-Hour (20 ppm) 8-Hour (9 ppm)	Attainment	6/11/2007 (attained)
NO_2[5]	NAAQS	2010 1-Hour (0.10 ppm)	Unclassifiable/ Attainment	N/A (attained)
	NAAQS	1971 Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
	CAAQS	1-Hour (0.18 ppm) Annual (0.030 ppm)	Attainment	---
SO_2[6]	NAAQS	2010 1-Hour (75 ppb)	Designations Pending (expect Unclassifiable/ Attainment)	N/A (attained)
	NAAQS	1971 24-Hour (0.14 ppm) 1971 Annual (0.03 ppm)	Unclassifiable/ Attainment	3/19/1979 (attained)
PM10	NAAQS	1987 24-hour (150 µg/m^3)	Attainment (Maintenance)[7]	7/26/2013 (attained)
	CAAQS	24-hour (50 µg/m^3) Annual (20 µg/m^3)	Nonattainment	N/A
PM2.5[8]	NAAQS	2006 24-Hour (35 µg/m^3)	Nonattainment (Serious)	12/31/2019

5 Southern Coast Air Quality Management District (2016, March). Air Quality Management Plan

Criteria Pollutant	Standard	Averaging Time	Designation[1]	Attainment Date[2]
	NAAQS	1997 Annual (15.0 µg/m^3)	Attainment	8/24/2016
	NAAQS	2012 Annual (12.0 µg/m^3)	Nonattainment (Serious)	12/31/2025
	CAAQS	Annual (12.0 µg/m^3)	Nonattainment	N/A
Lead[9]	NAAQS	2008 3-Months Rolling (0.15 µg/m^3)	Nonattainment (Partial) (Attainment determination requested)	12/31/2015

Notes:
1 U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable
2 A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration
3 The 1979 1-hour O_3 standard (0.12 ppm) was revoked, effective June 15, 2005; however, the Basin has not attained this standard and therefore has some continuing obligations with respect to the revoked standard
4 1997 8-hour O3 standard (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; the revoked 1997 O3 standard is still subject to anti-backsliding requirements
5 New NO_2 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO_2 standard retained
6 The 1971 annual and 24-hour SO2 standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO2 1-hour standard. Area designations are still pending, with Basin expected to be designated Unclassifiable /Attainment.
7 Annual PM10 standard was revoked, effective December 18, 2006; 24-hour PM10 NAAQS deadline was 12/31/2006; SCAQMD request for attainment redesignation and PM10 maintenance plan was approved by U.S. EPA on June 26, 2013, effective July 26, 2013.
8 Attainment deadline for the 2006 24-Hour PM2.5 NAAQS (designation effective December 14, 2009) is December 31, 2019 (end of the 10th calendar year after effective date of designations for Serious nonattainment areas). Annual PM2.5 standard was revised on January 15, 2013, effective March 18, 2013, from 15 to 12 µg/m3. Designations effective April 15, 2015, so Serious area attainment deadline is December 31, 2025.
9 Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect to remain in attainment based on current monitoring data; attainment re-designation request pending.
Source: SCAQMD, 2016 Air Quality Management Plan.

The CARB defines attainment as the category given to an area with no violations in the past three years.[6] CARB prepares a State Implementation Plan (SIP) for NAAQS that exceed the significance thresholds to demonstrate the means to attainment. SIPs are a compilation of new and previously submitted plans, programs (including monitoring, modeling, permitting, etc.), district rules, state regulations and federal controls. Many of California's SIPs rely on the same core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations and limits on emissions from consumer products.[7]

The Project would result in short-term air quality impacts over a short-term construction period comprised of site preparation and grubbing, grading, facilities construction, paving, and application of architectural coating. Short-term impacts would be related to vehicle/equipment exhaust, fugitive dust, asphalt/concrete slurry, facilities construction, and painting for construction within the approximately 5-acre Project site. Operation phase air quality impacts are expected to be limited to vehicular traffic trip generation; area sources associated with landscape equipment and architectural coating; energy use; solid waste generation; and water and waste generation onsite.

6 California Air Resources Board (2019, April). Air Designation Maps – State and National
7 California Air Resources Board (2019, April). California State Implementation Plans

Additionally, the proposed Project would be required to comply with the following regulatory rules from the SCAQMD and State of California (State). SCAQMD rules that are applicable, but not limited to the proposed project:

- Rule 402 Nuisance – Controls the emissions of odors and other air contaminants;
- Rule 403 Fugitive Dust – Controls the emissions of fugitive dust;
- Rules 1108 and 1108.1 Cutback and Emulsified Asphalt – Controls the VOC content in asphalt;
- Rule 1113 Architectural Coatings – Controls the VOC content in paints and solvents; and
- Rule 1143 Paint Thinners – Controls the VOC content in paint thinners.

State of California Code of Regulations (CCR) air quality emission rules that are applicable, but not limited to the proposed project:

- CCR Title 13, Article 4.8, Chapter 9, Section 2449 – In use Off-Road Diesel Vehicles;
- CCR Title 13, Section 2025 – On-Road Diesel Truck Fleets; and
- CCR Title 24 Part 11 – California Green Building Standards.

The Project's criteria pollutant mass air emissions would be below the thresholds of significance for construction and operation and the Project would comply with applicable SCAQMD and CCR rules and requirements. Considering the Project is consistent with the County's existing zoning and growth projections in the General Plan, it would not conflict with or obstruct implementation of the AQMP, and impacts are considered less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐

Less than Significant Impact. The proposed Project consists of development of 5-acres of land. The elements that are proposed are a parking lot with 27 stalls, Tennis and Pickleball courts, one grass field, approximate 210 feet wide and 330' feet long, an exercise station area, restroom buildings, shaded picnic area, bench seating, 12' wide walking path with led lighting, fencing with landscape screening for catch basin, and a flagpole. Winchester Trails Park currently sits on the southwest corner of the lot and is used by local residents. Short-term emissions that occur are associated with site preparation and grubbing, grading, building construction, paving, and application of coating. Operation emissions will result from vehicle sources associated with daily trips to and from the Project site.

The Project area is out of attainment for ozone $PM_{2.5}$ particulate matter.[8] However, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). The greatest source of emissions is from mobile sources, which travel throughout the local area; however, Project

[8] United States Environmental Protection Agency (2021, October 31). Current Nonattainment Counties for All Criteria Pollutants. Retrieved from: https://www3.epa.gov/airquality/greenbook/ancl.html

emissions are not expected to exceed thresholds. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered would cover an even larger area. Impacts will be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Would the project expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

Less than Significant Impact. Sensitive receptors include a class of receivers considered "sensitive" to environmental factors. By definition sensitive receptors include, but are not limited to, residential uses, hospitals, schools, daycare facilities, elderly housing, and convalescent facilities. The nearest sensitive receptors to the Project site are single family residents located approximately 60 feet north and west of the Project site. The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the proposed Project. According to SCAQMD methodology, health effects from carcinogenic air toxins are usually described in terms of "individual cancer risk." "Individual cancer risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a lifetime will contract cancer, based on the use of standard risk-assessment methodology.[5]

Given the limited number of heavy-duty construction equipment and the short-term construction schedule, the proposed Project would not result in a long-term (i.e., 70 years) substantial source of toxic air contaminant emissions and corresponding induvial cancer risk. Particulate matter (PM) from diesel exhaust is the predominant toxic air contaminant (TAC) in most areas and according to the California Almanac of Emissions and Air Quality 2013 Edition, prepared by CARB. About 80 percent of the outdoor TAC cancer risk is from diesel exhaust. Some chemicals in diesel exhaust, such as benzene and formaldehyde, have been listed as carcinogens by State Proposition 65 and the Federal Hazardous Air Pollutants program.[9]

Due to the nominal number of diesel truck trips that are anticipated to be generated by the proposed Project, a less than significant TAC impact would occur during the construction and on-going operations of the proposed Project and no mitigation would be required. No significant short-term toxic air contaminant impacts would occur during construction of the proposed Project. As such, construction of the proposed Project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

[9] California Resources Board (2014 May). The California Almanac of Emissions and Air Quality – 2013 Edition

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Less than Significant Impact. Odors are one of the most obvious forms of air pollution to the general public. Odors can present significant problems for both the source and the surrounding community. Although offensive odors seldom cause physical harm, they can cause agitation, anger, and concern to the general public. Most people determine an odor to be offensive (objectionable) if it is sensed longer than the duration of a human breath; typically, two to five seconds.

Potential sources that may emit odors during construction activities include the application of coatings such as asphalt pavement, paints and solvents and from emissions from diesel equipment. Construction vehicle emissions at the Project would be short-term, intermittent, and subject to air dispersion. The objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries. It should also be noted that any odors that are released from the proposed Project would be anticipated to dissipate to less than significant levels prior to impacting the nearest sensitive receptors.

In addition, the Project would be subject to compliance with SCAQMD's Rule Book Regulation IV – Prohibitions, Rule 402, regarding nuisance. SCAQMD Rule 402 states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public or which cause, or have a natural tendency to cause, injury or damage to business or property." The Project contractor would be subject to enforcement of said rules. Due to the transitory nature of construction emissions such as those that lead to odors, a less than significant odor impact would occur, and no mitigation would be required.

IV. Biological Resources

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The Project site is currently a vacant lot with maintained grass and ruderal vegetation. The southwestern portion of the lot is the existing Winchester Trails Park. On August 16, 2021, SEARL Biological Services, Inc. performed an analysis of

the Project area per Multiple Species Habitat Conservation Plan (MSHCP) to determine if the Valley-Wide Recreation & Park District Winchester Trails Park was consistent with the goals and objectives of the MSHCP. The property location was found to be within an MSHCP-designated assessment area for Burrowing Owl. In addition, the Project required an MSHCP Section 6.1.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (MSHCP Section 6.1.2) assessment. SEARL Biological Services also conducted Vegetation community classification per the California Department of Fish and Wildlife's (CDFW) Vegetation Classification and Mapping Program (VegCAMP) List of Vegetation Alliances and Associations (Natural Communities List) (California Department of Fish and Wildlife, 2021) and A Manual of California Vegetation.[10]

SEARL Biological Services, Inc. found the property at Assessor's Parcel number (APN) 458-370-004 (6.91 acres) and estimated area of grading (4.62 acres) was comprised of non-native grasses and other flowering plants other than grass. Dominant non-natives included ripgut grass (Bromus diandrus), red brome (Bromus rubens), wall barley (Hordeum murinum), long beaked filaree (Erodium botrys), and redstem filaree (Erodium cicutarium). Common goldfields (Lasthenia gracilis), a native annual, was uncommon and tidy tips (Layia platyglossa). Other common non-native plants included wall barley (*Hordeum murinum*), London rocket (*Sisymbrium irio*), and redstem filaree (Erodium cicutarium). This area also supported Spanish false fleabane (Pulicaria paludosa), curly dock (Rumex crispus), African umbrella sedge (Cyperus involucratus), and knotweed (Polygonum aviculare) dominant. None of these species are identified as candidates, have special status, to any local or regional plans, policies, or regulations.

As per the requirements of the MSHCP all subject properties under the jurisdiction of the MSHCP that are proposing a land-use change/applying for a discretionary permit to conduct habitat assessment for Riparian/Riverine areas and Vernal Pools. The MSHCP identifies six (6) species of interest: 1) Riverside fairy shrimp, 2) vernal pool fairy shrimp, 3) Santa Rosa Plateau fairy shrimp, 4) Least Bell's Vireo, 5) Southwestern Willow Flycatcher, and 6) Yellow-billed Cuckoo. As a result of the investigation to the site for Riparian/Riverine areas, and Vernal Pools, SEARL Biological Services, Inc. found no evidence of Riparian/Riverine area or Vernal Pools impacts will occur due to the lack of Riparian/Riverine Areas and lack of Vernal Pool on the project.[10]

SEARL Biological Services, Inc. conducted a habitat assessment of the project site on March 23, 2021. Of the 35.43 acres, MSHCP designated BUOW Assessment area within 500 feet of the project area supported 19.23 acres of suitable habitat. The 500 feet included 11.59 acres of low suitability, 5.91 aces of moderate suitability and 1.74 acres of high suitability habitat. This assessment of the 6.91 acres of the property, 4.04 acres of low suitability and 1.74 acres of high suitability was within grading area of the property. The biologist found that low suitability on the property consisted of severely compact soils with low-growing mowed vegetation and did not consist of any potential owl burrows. High suitability habitat in the eastern end of the property was observed along the detention basin. This area contained numerous California Ground Squirrel burrows, but no Burrowing Owl signs were detected at any of the burrow entrances.[10]

SEARL Biological Services, Inc. conducted focused burrowing owl surveys of the Project site on March 23, April 13, May 5, and June 17, 2021, between 5:45 AM and 12:00 PM. The weather varied between

[10] Tim Searl, Searl Biological Services (2021, August 16). Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis.

0-10 %, 20 -40 %, 40-60% and 100% cloud cover. The survey involved a pre-survey records search of burrowing owl sightings within five miles of the project site. In total, 42 records of BUOW have been reported within five miles of the property. As part of the focused burrowing owl survey, pedestrian transects were paced at no more than approximately 40 to 60 feet to allow for 100% visual coverage and inspect each burrow or burrow surrogate. As a result, the focused survey of the property and adjacent vacant areas supported a large population of California Ground Squirrel burrow, SEARL Biological Services, Inc. detected 23 California Ground Squirrel burrows ranging from one to seven burrows with the most complexes consisting of one to two burrows. No BUOW signs were detected at any of the burrow entrances. Also, no burrow surrogates were detected. As per the MSHCP, a 30-day BUOW preconstruction survey to affirm BUOW has not colonized the property before the initiation of project-related construction is required[10].

With implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 prior to issuance of a grading permit, potential impacts to burrowing owls and nesting birds would be reduced to less than significant levels.

Mitigation Measure

BIO-1 **30-Day Preconstruction Burrowing Owl Survey.** Since the Project site has suitable habitat for the burrowing owl, per the Western Riverside County MSHCP Burrowing Owl Survey Instructions (March 2006), a 30-day preconstruction survey is required by the MSHCP prior to any Project-related ground disturbance activities. If BUOW have colonized the Property prior to the initiation of Project-related construction, the project proponent should immediately inform the County of Riverside and the Wildlife Agencies (i.e., California Department of Fish and Wildlife and U. S. Fish and Wildlife Service), and would need to coordinate further with County of Riverside and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating construction.

BIO-2 **Nesting Bird Surveys.** To avoid impacts to nesting birds, construction activities and construction noise should occur outside the avian nesting season (approximately January 1 to August 31: typically, January 01 to August 31 for raptors and February 01 to August 31 for all other birds). If construction occurs within the avian nesting season, all suitable habitats shall be thoroughly surveyed for the presence of nests by a qualified biologist no more than five days prior to commencement of any soil disturbance or vegetation removal to avoid direct and indirect impacts to nesting birds, and thus ensure compliance with the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code §3503 and §3503.5.

BIO-3 **Nesting Bird Setbacks.** If pre-construction nesting bird surveys locate active nests, no construction-related activities shall take place within 300 feet of sensitive bird nests and 500 feet of raptor nests, or as determined by a qualified biologist. Protective measures (e.g., sampling) shall be required to ensure compliance with the MBTA and relevant California Fish and Game Code requirements.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

No Impact. According to the biological report performed by SEARL Biological Services, Inc., No features were present on the Property that meet the criteria of a Riparian/ Riverine Area.[10] No drainage or wetland areas were mapped on or near the Property by the NWI (U.S. Fish and Wildlife Service, 2021). As a result, no Riparian/Riverine Area mitigation is required, and the Project is consistent with the Riparian/Riverine Areas section of MSHCP Section 6.1.2. No impacts should occur as a result of the Project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the project have a substantial adverse effect on federally protected state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

No Impact. SEARL Biological Services found no evidence of Riparian/Riverine area, or Vernal Pools and no impacts should occur due to the lack of Riparian/Riverine Areas and lack of Vernal Pool on the project.[10] No riparian habitat, including wetlands, exists on the project site. As such, no impact to state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means should result from the project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐

Less than Significant Impact. The project site does involve an area of 1.74 acres of high-suitability habitat for BUOW, this is part of the 35 acres MSHCP designated BUOW Assessment area. Initial studies of the area found no evidence of BUOW habitation, but a 30-day BUOW preconstruction survey to affirm BUOW has not colonized the property prior to the initiation of the project will be conducted as mitigation to confirm as discussed in Section 6.4 (a).[10] The Project site is composed of primarily disturbed, ruderal vegetation that offers little habitat value to resident or migratory wildlife and no habitat for migratory fish. Thus, no impacts to wildlife species, migratory corridors, and native wildlife

nursery sites will occur. The following mitigation measures, BIO-1, BIO-2, BIO-3 would reduce potential impacts to migratory birds to less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

Less than Significant Impact. The Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Less than significant impacts from the Project should occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The Project Site is located within the Western Riverside County MSHCP Mead Valley Area Plan. The Project Site is not located within an MSHCP criteria area or area plan subunit. The Project site does not occur within a predetermined Survey Area for narrow endemic plant species, criteria area plant species, amphibian species, or mammal species. No surveys are required for these species. No riparian resources, riverine resources, or vernal pools pursuant to Section 6.1.2 of the MSHCP were identified on the Project Site. The Project site does not occur within or adjacent to an MSHCP Core, Linkage, Constrained Linkage, or Non-Contiguous Habitat Block.[10] Therefore, an Urban/Wildland Interface analysis pursuant to Section 6.1.4 of the MSHCP is not required. The Project site is located within potential habitat for the protected burrowing owl. As discussed in question a) of Section 6.4 above, implementation of Mitigation Measure BIO-1 would reduce any potential impacts to burrowing owl habitat, a species protected under the Western Riverside County MSHCP, to less than significant. Therefore, impacts to an adopted local, regional or state conservation plan would be less than significant with implementation of Mitigation Measure BIO-1.

V. Cultural Resources

Evaluation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒

No Impact. According to §15064.5 of the CEQA Guidelines, generally, a resource is considered "historically significant" by a lead agency if the resource meets the criteria for listing on the California Register of Historical Resources (California Public Resources Code §5024.1, Title 14 CCR §4852) including the following: (A) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; (B) is associated with the lives of persons important in our past; (C) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or (D) has yielded, or may be likely to yield, information important in prehistory or history. A historical resource could be an object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant based on the above-stated criteria, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

Geovironment Consulting, Inc. performed a Phase I Cultural Resource Assessment of the Project site in September 2021 in accordance with California Environmental Quality Act (CEQA) guidelines. The report includes a records search and literature review, communication with Native American tribal representatives, and an archeological survey of the Project area. (The County's consultation with the Native American tribes under AB 52 is located under Section XVII. Tribal Cultural Resources of this IS/MND.)

The Project Phase I Cultural Resources Assessment literature and records search at the Eastern Information Center (EIC) of the California Historical Resources Information System discovered twenty-two previous cultural resource investigations and eighteen cultural resources documented within 1 mile of the Project area. The resources consist of thirteen prehistoric sites and five historical archaeological sites[11]. The EIC did not reveal any resources within the Project area, therefore, no eligible or listed cultural resources will be impacted as a result of the Project. The entire Project area has been disturbed through grading and disking; thus, any construction activities would not constitute a significant impact to any historical resources under CEQA. The proposed Project would have no impact on any historical resources as defined in §15064.5.

[11] Geovironment Consulting. (2021 September). Phase I Cultural Resource Inventory for the Winchester Trails Park Project Winchester, Riverside County, California, p. 11.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated. Results of the review of the survey reports and site records provided by the Eastern Archaeological Information Center show the five cultural resource investigations have been conducted previously within the study area. Four of these previous investigations (Bowles 1987, Love et al. 2001, Delu et al. 2014, and Delu and Duff 2014) included the entire Project area within its sensitivity assessment; however, these investigations found no archaeological significance within the Project location. Geovironment Consulting, Inc. conducted an intensive pedestrian field reconnaissance survey of the Project area on September 14, 2021. The survey began in the northwest corner of the Project area and was completed from west to east along transects oriented north-south and spaced 20 meters apart. All areas of the Project were accessible and surveyed. The Project area was repeatedly cleared of weeds and other vegetation. No native, undisturbed soils were observed on the ground surface during the intensive survey. Surface sediments were observed to be sandy loams. No cultural resources were encountered within the Project area. Because much of the terrain throughout the Project area has been disturbed previously by cultivation, intact and significant buried archaeological deposits are unlikely. While Project improvements are not anticipated to impact native base rock or native soils that could contain unique archaeological sites deemed significant per §15064.5 of the CEQA Guidelines, Mitigation Measure CULT 1 would reduce the potential for impact to less than significant.

Mitigation Measure

CULT-1 **Archeological Resources.** If unanticipated cultural resources are unearthed during construction excavations, the contractor shall cease all earth-disturbing activities within a 50-foot vicinity of the discovery until the discovery can be evaluated by a qualified archaeologist to assess the significance of such resources. The archeologist shall meet with the Valley Wide Park District personal to assess the significance of such resources and shall meet and confer regarding mitigation for such resources in order to comply with California Public Resources Code §21083.2(b).

In the event cultural archaeological resources are discovered at the Project site, the handling of the discovered resources will differ. However, it is understood that all artifacts with the exception of human remains and related grave goods or sacred/ceremonial objects, belong to the property owner. All artifacts discovered at the Project site shall be inventoried and analyzed by the professional archaeologist. If any artifacts of Native American origin are discovered, the Project proponent and Project archaeologist shall notify the Valley Wide Park District and proceed according to Mitigation Measure TRIBE-3 in XVIII. Tribal Cultural Resources.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The closest cemetery to the proposed Project alignment is the Whited Cemetery Service at 26250 Palomar Rd. Sun City, CA located approximately six miles southwest of the Project site. Project activity would not impact the cemetery. Though unlikely, Mitigation Measure CULT-2 would reduce impacts to human remains too less than significant.

Mitigation Measure

CULT-2 **Human Remains.** It is against the law to knowingly mutilate or disinter, disturb or removes any human remains from any location other than a dedicated cemetery without authority of law. If human remains are encountered, pursuant to California Health and Safety Code Section 7050.5, no further disturbance shall occur within 100-feet of the remains until the Valley Wide Park District and Riverside County Coroner have made the necessary findings as to origin, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

VI. Energy

Evaluation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐

Less than Significant Impact. Construction and operation of the Project would be subject to energy efficiency regulation, standards and goals including Title 24 Building Energy Efficiency Standards,

Assembly Bill 341 (AB 341) for trash recycling, and the County of Riverside Climate Action Plan 2019. R2 Energy Measures found in the Climate Action Plan related to energy efficiency in Riverside County that can be incorporated into the existing residential and non-residential buildings or new development projects to achieve State-aligned reduction target are found in Chapter 4 GHG Emissions Reduction Programs and Regulations, Section 4.3 Energy Efficiency.[12] The Riverside County General Plan Policies related to reducing GHG emissions and energy efficiency in buildings whether it be land use, multipurpose open space or air quality elements are LU-4.1, OS-16.1 through OS-16.10, AQ-4.1 through AQ4.4, AQ-5.1, AQ-5.2, AQ-4.6, AQ-4.7, and AQ-20.10 through AQ-20.12. The Project would be required to comply with these listed policies found in the County General Plan. In addition, the Project would be required to comply with the regulatory rules from the SCAQMD and State of California (State) identified in response a) of Section 6.3 Air Quality that are aimed at reducing unnecessary truck and equipment consumption during Project construction. Project compliance rules and regulations would reduce to less than significant for potential of environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

No Impact. The Project would also be subject to goals and policies in the County's Climate Action Plan, updated in 2019, and policies related to reducing GHG emissions and energy efficiency of the County's General Plan. The Project would not conflict with or obstruct any state or local plan for renewable energy of energy efficiency. As a result, the Project would result in no impacts.

VII. Geology and Soils

Evaluation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐

Less than Significant Impact. The main purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. It requires any structure for human occupation to be set back at least 50 feet from an active fault.

[12] Riverside County Planning Department (2019 November). County of Riverside Climate Action Plan Update

According to the California Geologic Survey (CGS), faults are classified as active, potentially active, or inactive. Under Alquist-Priolo Earthquake Fault Zoning Map Act, the State of California defines active faults as faults that have historically produced earthquakes or shown evidence of movement within the past 11,000 years (during the Holocene Epoch).[13] The Project site is located in the northern area of the unincorporated community of Winchester along state route 79. The Project is located in between the Elsinore Fault zone and the San Jacinto fault zone. The nearest active site to the Project site is the San Jacinto Fault located approximately 7.5 miles away and other major faults (i.e. Banning, San Andreas, Cucamonga, and Lake Elsinore) within a 50-mile radius of the Project site. It is anticipated the Project site will endure moderate to strong ground motions from earthquakes on regional and/or nearby causative faults. The site is not within a State of California Alquist-Priolo Earthquake Fault Zone or Riverside County fault hazard zone.[1] Impacts to people or structures, including risk of loss, injury, or death, due to rupture of an earthquake fault as a result of the Project would be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
ii) Strong seismic ground shaking?	☐	☐	☒	☐

Less than Significant Impact. The Project site is situated in a seismically active region. As is the case for most areas of Southern California, ground shaking resulting from earthquakes associated with nearby and more distant faults may occur at the project site. During the life of the Project, seismic activity associated with active faults can be expected to generate moderate to strong ground shaking at the site. The potential for surface rupture resulting from the movement of nearby major faults is not known with certainty but is considered low. The Project does not propose to the construction of buildings, which could experience strong seismic ground shaking. Recreational facilities such as soccer fields, tennis and pickle ball courts, and an outdoor exercise station area are planned. As a result, while the potential for ground shaking is evident at the Project site, risk of loss, injury, or death associated with seismic ground-shaking at the Project site is anticipated to be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐

Less than Significant Impact. Ground shaking can induce "secondary" seismic hazards such as liquefaction, dynamic densification, and ground rupture, including dynamic settlement (liquefaction and/or dry settlement). Liquefaction is the transformation of a granular material from a solid state into a liquefied state due to increased pore-water pressures. Soils and clastic sediment with particle size in the medium sand to silt range are particularly susceptible to liquefaction when they are saturated with water and shaken by an earthquake. Liquefaction hazard is greatest in uniform (poorly

[13] California Department of Conservation (2021). California Geological Survey Alquist-Priolo Earthquake Fault Zones. Retrieved from: https://www.conservation.ca.gov/cgs/alquist-priolo

graded), fine grained sandy soils when groundwater depths are less than 30 feet. Liquefaction at or near the surface can result in foundation failure and property damage. The County Geological Hazard Map indicates that the site has no susceptibility to liquefaction.[14] The elements that are proposed are a parking lot with 27 stalls, Tennis and Pickleball courts, one grass field, an exercise station area, restroom buildings, shaded picnic area, bench seating, 12' wide walking path with LED lighting, fencing with landscape screening for catch basin, and a flagpole. The Project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Potential impacts associated with seismic-related failure, including liquefaction, are considered less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
iv) Landslides?	☐	☐	☐	☒

No Impact. Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes. A combination of geologic conditions leads to landslide vulnerability, such as high seismic potential; rapid uplift and erosion resulting in steep slopes and deeply incised canyons; highly fractured and folded rock; and rock with inherently weak components such as silt or clay layers. Landslides are often triggered by seismic activity; however, slope failure does not need to be triggered by an earthquake. Strong ground motions can worsen existing unstable slope conditions, particularly if coupled with saturated ground conditions. According to the County General Plan Slope Instability Map, the Project is not within a slope instability area.[15] Project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving landslides, because the Project site and surrounding area is relatively flat. No impact would occur as a result of the Project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the project result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Less than Significant Impact. Construction of the Project could result in soil erosion or loss of topsoil during grubbing, grading and development activity. In areas that would require topsoil exposure for construction, exposed soils would be compacted and paved over quickly and/or properly covered until developed. The proposed Project grading is expected over approximately 4.62 acres. The development areas will be cleared of all debris, weeds, vegetable matter, undocumented fills, deleterious materials, etc. if found. Cavities created during site clearance will be backfilled in a controlled matter. The entire

[14] Riverside County Planning Department (2015, December 8). County of Riverside General Plan Harvest Valley/Winchester Area Plan Seismic Hazards Map. Figure 13
[15] Riverside County Planning Department (2015, December 8). County of Riverside General Plan Harvest Valley/Winchester Area Plan Slope Instability Map. Figure 15

Project area has been disturbed through grading and disking; thus any construction activities would not constitute a significant impact. In general, the Project would be required to comply with the County of Riverside General Plan Grading Policies. The Project would result in less than significant impact to soil erosion or the loss of topsoil. levels.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐

Less than Significant Impact. The Project is not located on a geological unit or soil identified as being unstable or having the potential to result in or off-site landslide, lateral spreading, subsidence, and liquefaction or collapse. Soils in the Project area are alluvial fine sandy loams derived from granitic parent material.[11] According to the County of Riverside General Plan Harvest Valley/Winchester Area Seismic Hazards Map, the Project site is located in an area of low susceptible sediments area for liquefaction susceptibility.[14] Less than significant impacts would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐

Less than Significant Impact. Expansive soils shrink when dry and swell when wet as a result of a high percentage of clay. Expansion can exert enough pressure to crack sidewalks, driveways, basement floors, pipelines, and even foundations. Soils in the Project area are alluvial fine sandy loams derived from granitic parent material.[11] The Project site is not located in an area that has been identified by the NRCS Soil Survey data as having potential for expansive soils. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

No Impact. The Project site would not consist of soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. The Project would not involve the use of septic tanks or alternative waste disposal systems. Therefore, no impact related to incapability of soil to support the use of septic tanks or alternative wastewater disposal systems would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The Project proposes the expansion of the existing Winchester Trails Park across approximately five acres, which has been disturbed by grading and disking. The Project is not expected to directly or indirectly destroy a unique paleontological resource or site or unique geological feature, however the site is located in a High Sensitivity B area of older Pleistocene valley deposits of high paleontological sensitivity according to the County of Riverside Planning Department Paleontological Sensitivity Map.[16] According to Policy OS 19.6 of the County's General Plan, whenever existing information indicates that a site proposed for development has high paleontological sensitivity, a paleontological resource impact mitigation program (PRIMP) shall be filed with the County Geologist prior to site grading. The PRIMP shall specify the steps to be taken to mitigate impacts to paleontological resources.[17] Paleontological Resources Preservation Act (PRPA) was specifically intended to codify the generally accepted practice of limiting collection on public (federal) land of vertebrate fossils and other rare and scientifically significant fossils to qualified researchers who obtain a permit from the appropriate state or federal agency and agree to donate any materials recovered to recognized public institutions where they will remain accessible to the public to other researchers. PRPA specifies that a permit is required for collecting paleontological resources from public land and also established conditions for the appropriate collection and curation processes such resources are subject to; in order to ensure preserve the scientific value of such materials. Federal regulations require that project within the county needing federal actions (e.g., issuance of a federal Clean Water Act Section 404 permit by the ACOE) also trigger application of these federal standards.[16]

Additionally, by ensuring that the Riverside County Geologist directs newly found paleontological resources to a facility within Riverside County for their curation, policy OS 19.9 would further ensure preservation. Compliance with existing laws, General Plan policies, Planning Department procedures, project-level general conditions of approval and implementation of mitigation measure GEO-1 for paleontological resources would be sufficient to ensure that impacts would be reduced to less than significant with mitigation incorporated.

Mitigation Measure

GEO-1 **Paleontological Resources.** Compliance with the following state, federal and county regulations would prevent significant impacts to paleontological resources or sites or unique features:

[16] Riverside County Planning Department (2013, December 16). County of Riverside General Plan Environmental Impact Report No. 521, Paleontological Sensitivity Map, Figure 4.9.3
[17] Riverside County Planning Department (2015, December 8). County of Riverside General Plan Open Space Element.

Prior to Grading Permit Issuance – Paleontological PRIMP and Monitor: PDP [insert report number], prepared by [insert name of technical firm] for this proposed Project, concluded the potential to impact significant paleontological resources is high or this site is mapped in Riverside County's General Plan as having a high potential for paleontological resources (fossils). Proposed Project site grading/earthmoving activities could potentially impact this resource. Hence, prior to issuance of grading permits:

a. The applicant shall retain a qualified paleontologist ("Project Paleontologist") approved by the County of Riverside to create and implement a project-specific plan for monitoring site grading/earth moving activities.

b. The Project Paleontologist retained shall review the approved development plan and grading plan and shall conduct any pre-construction work necessary to render appropriate monitoring and mitigation requirements as appropriate. The requirements shall be documented by the Project Paleontologist in a Paleontological Resource Impact Mitigation Program (PRIMP). The PRIMP shall be submitted to the Riverside County Geologist for review and approval prior to issuance of a grading permit [by the county].

c. Information to be contained in the PRIMP, at a minimum and in addition to other industry standard and Society of Vertebrate Paleontology standards, are as follows:

- Description of the proposed site and planned grading operations.
- Description of the level of monitoring required for all earthmoving activities in the Project area.
- Identification (name) and qualifications of the qualified paleontological monitor to be employed for grading operations monitoring.
- Identification of personnel with authority and responsibility to temporarily halt or diver grading equipment to allow for recovery of large specimens.
- Direction for any fossil discoveries to be immediately reported to the property owner who in turn will immediately notify the Riverside County Geologist of Discovery.
- Means and methods to be employed by the paleontological monitor to quickly salvage fossils as they are unearthed to avoid construction delays.
- Sampling of sediments that are likely to contain the remains of fossil invertebrates and vertebrates.
- Procedures and protocol for collection and processing of samples and specimens.
- Fossil identification and curation procedures to be employed.
- Identification of the permanent repository to receive any recovered fossil material. The County of Riverside must be consulting on the repository [or] museum to receive the fossil material and a written agreement between the property owner/developer and the repository must be in place prior to site grading.
- All pertinent exhibits, maps and references.
- Procedures for reporting of findings.

- Identification and acknowledgement of the developer for the content of the PRIMP as well as acceptance of financial responsibility for monitoring, reporting, and curation fees.

All reports shall be signed by the Project Paleontologist and all other professionals responsible for the report's content as appropriate. Two wet-signed original copies of the report(s) shall be submitted to the office of the Riverside County Geologist along with a copy of this condition and the grading plan for appropriate case processing and tracking. These documents should not be submitted to the project Planner, the Plan Check staff, the Land Use Counter or any other county office. In addition, the applicant shall submit proof of hiring (i.e., copy of executed contract, retainer agreement, etc.) of a Project Paleontologist for the in-grading implementation of the PRIMP.

If unanticipated paleontological resources are unearthed during construction excavations, the contractor shall cease all earth-disturbing activities within a 100-foot vicinity of the discovery until the discovery can be evaluated by a qualified paleontologist approved by the County of Riverside Geologist to assess the significance of such resources and shall meet and confer regarding mitigation for such resources in order to comply with California Public Resources Code §21083.2(b). The Paleontologist shall comply with the County's General Plan Policy OS 19.9: Whenever paleontological resources are found, the County Geologist shall direct them to a facility within Riverside County for their curation including the Western Science Center in the City of Hemet.

VIII. Greenhouse Gas Emissions

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

Less than Significant Impact. Greenhouse gas (GHG), as codified in CEQA Guidelines §15364.5, includes, but is not limited to, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Greenhouse gases are gases that cause and contribute to climate change, commonly referred to as global warming. They vary in potency and are usually measured in tons or million metric tons of carbon dioxide equivalents. Transportation followed by electricity generation and natural gas used in buildings are the largest sources of California's GHG emissions.[18] As legislation like Assembly Bill 32 (California Global Warming Solution Act of 2006), California Senate Bill 97 and Executive Order S-3-05 have brought the requirement for GHG reductions to the forefront of Californian conscientious, GHG reductions have become important through increased vehicle fuel efficiency, building energy efficiency, and increased reliance on renewable energy sources.

18 Institute of Local Government (2011, September). Evaluating Greenhouse Gas Emissions as Part of California's Environmental Review Process: A Local Official's Guide.

The County of Riverside Climate Action Plan (CAP) was updated and adopted in November 2019. Chapter 4 of the CAP discusses County measures for GHG emissions reduction programs and regulations. To continue reductions consistent with the State's long-term emissions reduction goals, the County would need to reduce emissions in 2030 by 525,511 MT CO2e from an Adjusted Business-As-Usual (ABAU) forecast and by 2,982,947 MT CO2e from an ABAU forecast by 2050. Riverside County as a whole emitted 4,905,518 MT CO2e in 2017. The largest portion of Riverside County's 2017 emissions were from transportation (36 percent), followed by agriculture (34 percent), and electricity and natural gas in buildings (24 percent).[12]

The Project site contains a total of approximately 5 acres and does not propose the development of any residential or commercial buildings and does not propose development for agricultural uses. The proposed Project is anticipated to generate GHG emissions from construction equipment and area sources, energy usage, mobile sources, waste disposal and water usage associated with operation activity; however, emissions are not anticipated to have a significant effect on the environment. The Project would not significantly increase transportation use in the area. Therefore, a less than significant generation of greenhouse gas emissions would occur from development of the proposed project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project conflict with an applicable plan, policy or regulation adopted for the purpose or reducing the emissions of greenhouse gases?	☐	☐	☐	☒

No Impact. The proposed Project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The County of Riverside adopted the County of Riverside Climate Action Plan in 2019, that was prepared in order to meet the requirements of state laws that include a GHG emissions inventory and detailed actions for the unincorporated area of Winchester to meet the GHG emissions reduction targets that the County committed to. Through implementation of the sustainability features required by the County, the proposed project would not conflict with the applicable plans, policy or regulation for reducing GHG emissions. No impacts would result.

IX. Hazards and Hazardous Materials

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

Less than Significant Impact. Hazardous Material means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard

to human health and safety or to the environment if released into the environment. As part of the State-mandated Certified Unified Program administered by the California Environmental Protection Agency, the County Department of Environmental Health coordinates regulatory and enforcement for the following programs related to hazardous materials and wastes:

- Household Hazardous Waste. Provides for collection of hazardous household wastes at locations throughout the County.
- Hazardous Waste Minimization. In coordination with the Riverside County Fire Department, responds to hazardous materials and hazardous waste spills and illegal dumping incidents.
- Underground Storage Tanks (UST). Monitors remediation of sites contaminated by leaking petroleum tanks and regulates installation and operation of underground storage tanks containing hazardous substances.
- Hazardous Waste Generator Permits. Regulates facilities that generate a hazardous waste.
- Hazardous Materials Handlers Program. Regulates facilities that handle and/or store certain types and quantities of hazardous materials.

Safety Element, Policy I.F: Hazardous Materials, commits the County of Riverside and the Riverside County Fire Department to enforce all rules related to Hazardous Materials generators and handlers. Policy S 7.3 of the County General Plan requires all entities that handle hazardous materials to take the necessary actions such as installing hazardous material detection devices, alternative communication systems, etc., in preparation for possible hazardous material accidents.[19] Compliance with existing laws, regulatory programs and General Plan policies would be sufficient to ensure that impacts related to routing handling of hazardous materials associated with future development accommodated by GPA No. 960 would be less than significant.[20] The potential for release of any materials is considered low and, even if a release were to occur it would result in a less than significant hazard to the public, surrounding uses, or the environment due to the small quantities of these materials associated with construction and operation. The Project does not involve the construction of new structures or operations that involve significant amounts of hazardous materials. Consequently, the Project will not generate hazards. Impacts are therefore anticipated to be less than significant.

[19] Riverside County Planning Department (2021, September 28). County of Riverside General Plan, Safety Element

[20] Riverside County Planning Department (2013, December 16). County of Riverside General Plan Environmental Impact Report No. 521

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐

Less than Significant Impact. The Project does not involve the construction of new structures or operations that involve significant amounts of hazardous materials. The Project would be required to comply with product labeling and the Department of Environmental Health of the Riverside County Community Health Agency. As discussed above in response Section 6.9 a), the Project be required to comply with existing regulation, programs and policies that would ensure that impacts related to the routine handling of hazardous materials associated with future development accommodated by GPA No. 960 to have a less than significant impact.[20] Compliance would reduce the potential for the release of hazard to the public or the environment through during construction of the Project. As a result, impacts to the public and environment from hazardous materials would be less than significant.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐

Less than Significant Impact. The Project does not involve the construction of new structures or operations that involve significant amounts of hazardous materials. The Project would be required to comply with product labeling and the Department of Environmental Health of the Riverside County Community Health Agency. Winchester Elementary School is located approximately 2.4 miles southwest from the Project site and of the anticipated construction and operation route. The proposed Project does not involve transporting or emitting acutely hazardous materials that could result in a danger to a nearby school. Impacts resulting from emission of acutely hazardous materials in proximity to a school would be less than significant impact.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

No Impact. The proposed Project is not located on a site included on a list of hazardous materials sites compiled pursuant to California Government Code §65962.5. (www.envirostor.dtsc.ca.gov/public/ or http://geotracker.waterboards.ca.gov accessed on November 10, 2021). No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

No Impact. Based on the Harvest Valley/Winchester Area Plan Airport Influence Area Map Hazards of the County of Riverside General Plan, the Project site is not located within an Airport Influence Area.[21] The Project is not located within an airport land use plan, or where such as plan has not been adopted, within two miles of a public airport or public use airport. The Project would not result in a safety hazard for people residing or working in the Project area. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

No Impact. The Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan as the Project has adequate access from two or more directions. Emergency access would be maintained at all times at the Project site. According to the County of Riverside General Plan Safety Element, Figure 11: Residential Parcels with Evacuation Constraints (West County), the parcel is not recognized as an evacuation constrained parcel.[22] No impact to an adopted emergency response plan or emergency evacuation plan would result from the Project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
h)	Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Less than Significant Impact. The potential for a severe wildfire to occur is increased if dense vegetation growth and accumulations of dead plant material are present. Weather conditions and steep terrain also increase the hazardous wildfire potential; however, these conditions do not cause wildfires. The Project site is located in a State Responsibility Area/Federal Responsibility Area of Very

[21] Riverside County Planning Department (2015, December 8). County of Riverside General Plan, Harvest Valley/Winchester Area Plan, Airport Influence Area Map, Figure 5.
[22] Riverside County Planning Department (2021, September 29). County of Riverside General Plan, Safety Element, Residential Parcels with Evacuation Constraints (West County) Map, Figure 11.

High/High/Moderate fire hazard safety zone (FHSZ).[23] The County of Riverside has developed the Riverside County Fire Department Fire Protection and Emergency Medical Services Strategic Master Plan to proactively plan facility, service and equipment needs for fire protection.[20] It also incorporates the CDF Management Plan for several sub-zones within Riverside County. Implementation of this plan helps reduce potential risks of fire for residents in areas of moderate to high fire danger.

The Project vicinity is developed residential uses. The southwest corner of the lot has been developed into the existing Winchester Trails Park. The rest of the Project site is a vacant lot maintained by mowing which reduces the potential for fire. The Project would comply with the existing regulations and General Plan policies to ensure that impacts related to wildland fire risks as a result of future development accommodated by GPA No. 960 would have less than significant impacts. The Project would not expose people or structure to loss, injury or death due to wildland fires and impacts would be less than significant.

X. Hydrology and Water Quality

Evaluation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The Project is located in the San Jacinto Valley sub-watershed and the Santa Ana River Watershed respectively. The Project is located at approximately 1,600 feet amsl and is relatively flat, as is the surrounding area. The Project would not result in downstream water pollution (e.g., bacterial indicators, metals nutrients pesticides, toxic organic compounds, sediments trash & debris, oil & grease), sedimentation, and/or flooding. The Project will not violate any water quality standards or waste discharge requirements. Potential short-term surface water quality impacts related to Project construction activities include runoff of loose soils and/or construction wastes and fuels that could potentially percolate into the ground or runoff onto the street. Site development would direct storm water and urban runoff into storm drain inlets in the proposed parking lot areas. As no expansion of the site's septic systems is proposed and the septic systems are in operation, impacts will be less than significant. Water Service to the entire site is provided by Eastern Municipal Water District (EMWD). Impacts to groundwater levels will be less than significant.

However, the Project would be required to comply with Section 402 of the Clean Water Act, which requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) for construction impacts to 1 acre or more. With Implementation of Mitigation Measure HYD-1: Prepare and Implement a SWPPP impacts to water quality during construction and operation of the Project would be less than significant.

[23] Riverside County Planning Department (2015, December 8). County of Riverside General Plan, Harvest Valley/Winchester Area Plan Wildfire Susceptibility Map, Figure 12.

Mitigation Measure

HYD-1 **Prepare and Implement Stormwater Pollution Prevention Plan (SWPPP).** Prior to issuance of any Grading or Building Permit, and as part of the future development's compliance with the NPDES requirements, a Notice of Intent shall be prepared and submitted to the Santa Ana Regional Water Quality Control Board (RWQCB) providing notification and intent to comply with the State of California General Construction Permit. Also, a Stormwater Pollution Prevention Plan (SWPPP) shall be reviewed and approved by the County of Riverside for water quality construction activities on-site. A copy of the SWPPP shall be available and implemented at the construction site at all times. The SWPPP shall outline the source control and/or treatment control BMPs to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable." All recommendations in the Plan shall be implemented during area preparation, grading, and construction. The project applicant shall comply with each of the recommendations detailed in the Study, and other such measure(s) as the County deems necessary to mitigate potential storm water runoff impacts.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒

No Impact. The Project is not anticipated to alter or deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The Project is served by an existing water purveyor (EMWD) with sufficient capacity in the existing water system to serve the anticipated needs of this Project. No impact to groundwater would occur as a result of the Project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river through the addition of impervious surfaces, in a manner which would:				
i) result in a substantial erosion or siltation on-or off-site/	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. No stream or river exists on the Project site. The Project will not substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site, because the Project does not affect any existing drainage pattern, stream or river. With Implementation of Mitigation Measure HYD-1: Prepare and Implement a SWPPP, the

Project wouldn't substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner which would result in substantial erosion or siltation on- or offsite. Impacts will be less than significant with mitigation incorporated.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. No stream or river exists on the Project site. The Project will not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. With Implementation of Mitigation Measure HYD-1: Prepare and Implement a SWPPP, the Project wouldn't substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite.

Less than significant impacts with mitigation incorporated.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. While the Project would result in an increase in impervious surface for development of the proposed Project, the Project would not increase impervious surfaces and/or nuisance and storm flows such that flows could not be accommodated by the existing storm drain system. Existing drainage will remain unaltered given the existing urban development of the site. The proposed grading at the Project site will only include approximately 4.6 acres of the Project site. With Implementation of Mitigation Measure HYD-1: Prepare and Implement a SWPPP, the Project would not result in runoff that would exceed the capacity of existing or planned storm water drainage systems or result in downstream water pollution (e.g., pathogens, sedimentation, metals, hydrocarbons, nitrates).

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
iv) impede or redirect flood flows?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The Project will not place any structure that could impede or direct flows within a 100-year flood hazard area, because the site is not within an identified FEMA designated flood hazard area. The Project will not place any housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map

or other flood hazard delineation map because the Project does not propose housing.[24] The Project would not impede or redirect flood flows. No impact should occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?	☐	☐	☐	☒

No Impact. The nearest open water feature to the Project is Diamond Valley Lake located approximately 3.5 miles to the southeast. The Project is located inland and away from any open water source or flood control dam that could result in a seiche, tsunami, or mudflow. The Project would not result in flood hazards, tsunami, or seiche zones, that would risk release of pollutants due to Project inundation. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The Project would not conflict or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant as a result of the Project.

For construction water quality, the Project would be required to comply with Section 402 of the Clean Water Act, which requires the preparation and implementation of a SWPPP for impacts to 1 acre or more to ensure that pollutants are not discharged offsite and into the storm drain system during construction of the Project. With Implementation of Mitigation Measure HYD-1: Prepare and Implement a SWPPP, the Project would not conflict with a water quality control plan or groundwater management plan. Impacts would be less than significant with mitigation incorporated.

XI. Land Use/Planning

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project physically divide an established community?	☐	☐	☐	☒

No Impact. The general area where the Project site is located are zoned for Single, Multiple and Rural Residential. Other zoning districts in the vicinity include general commercial (C-1/C-P) and Planned Residential (R-4). The Project proposes development to expand the existing Winchester Trails Park, which sits on the southwestern corner of the parcel zoned Open Area Combining Zone-Residential

[24] Riverside County Planning Department (2015, December 8). County of Riverside General Plan, Harvest Valley/Winchester Area Plan Special Flood Hazard Areas, Figure 11.

Developments (R-5). Development of the remaining five acres of land on the lot would include a parking lot, tennis and pickleball courts, one grass field, an exercise station area, restroom buildings, shaded picnic area, bench seating, walking path, fencing with landscape screening for catch basin, and a flagpole. The Project wouldn't result in a change to existing land use or zoning nor require, promote, make possible, or allow interference with physical access, pedestrian or vehicular, between any one part of the unincorporated area of Winchester. The Project wouldn't involve an impact resulting in physically dividing an established community. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project cause a significant impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

No Impact. The Project is located in the unincorporated area of Winchester in the County of Riverside and is zoned R-5, CZ. The designated land use is Multiple Density Residential (MDR). No general plan amendment or zone change would be required for the Project. It would be built according to the County's municipal code requirements for the R-5 zone. The Project uses conform to the allowable uses under the existing zoning. The Project wouldn't conflict with any applicable land use plan, policy, or regulation with jurisdiction over the Project. No impact would occur.

XII. Mineral Resources

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

No Impact. The unincorporated area of Winchester is designated mineral resources zone MRZ-3 which are not defined as significant resource areas.[25] Mining would be incompatible with the area's current and future land uses. Accordingly, no impact to availability of valuable mineral resources would occur. No mineral resource reserves exist on the Project site or vicinity. No impact would occur.

[25] Riverside County Planning Department (2013, December 16). County of Riverside General Plan Environmental Impact Report No. 521, Mineral Resource Zones Map, Figure 4.14.1.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan other land use plan?	☐	☐	☐	☒

No Impact. No locally important mineral recovery site exists on the Project site or vicinity. As mentioned in section 6.12 a) above, the Project site is located in an MRZ-3 zone. The Project would not result in the loss of availability of a mineral recovery site identified in a local general plan, specific plan, or other land use plan. No impact would occur.

XIII. Noise

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

Less than Significant Impact. The Project site is zoned Open Area Combining Zone-Residential Developments (R-5, CZ) and designated Medium Density Residential (MDR) land use. General single residential zoned land uses exist to the north and west, R-5 zoned land exists immediately to the east, and rural residential zoned land exists to the south of the Project site. No sensitive receptors, such as schools, libraries, churches, hospitals exist in close proximity, except for residential uses zoned R-1 and R-R. The nearest sensitive receptor susceptible to noise increases are single family homes located approximately 60 feet to the north and west of the Project on Hitching Post Drive and south of the Project site on W Stetson Avenue.

'Noise' can be defined as unwanted sound; any sound that may produce psychological damage or interfere with communication, work, rest, recreation, or sleep. On March 4, 2021 at 11:14AM, Geovironment used a sound meter to record the dB of the Project site. The average meter reading at that time for ambient sound was 62 dB. The Project would result in short-term construction noise associated with construction labor and operation of vehicles and construction equipment during site preparation, grading, building, paving, and painting. Construction noise is one of the most common mobile noise sources in the County and the use of pile drivers, drills, trucks, pavers, graders, and a variety of other equipment can result in short, sporadic elevated noise levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings.

Temporary construction is expected to abide by the County of Riverside General Plan Noise Element which includes regulations and policies to mitigate potential noise impacts to sensitive receptors. Construction noise is prohibited on Sundays and certain legal holidays. Because construction activities

are typically limited to weekdays and during daylight hours, this noise impact is considered a nuisance or annoying, rather than a significant impact.

Long-term use of the recreational facilities would involve a certain amount of noise during day-to-day activities associated with public use (vehicular, speech, etc.). Project operational noise would comply with the goals and policies of the County's General Plan Noise Element. The County's noise Ordinance No. 847 establishes the following sound level standard for the Project site's land use designation MDR, as shown in Table 3 below.

Table 3 Unincorporated Area of Winchester Exterior Sound Level Standards for Land Use Designated Medium Density Residential (MDR) (dB L_{max})

Maximum Decibel Level	
7:01 a.m. – 10:00 p.m.	**10:01 p.m. – 7:00 a.m.**
55 dBA	45 dBA
Source: County of Riverside (2007, June 19). Code of Ordinances. Ordinance No. 847, Regulating Noise. Website: http://www.rivcocob.org/ordinances/	

As discussed in the Noise Element of the County of Riverside General Plan, the experience of noise is somewhat subjective. However, it is commonly accepted that the average healthy ear can barely perceive changes of 3 dBA; that a change of 5 dBA is readily perceptible, and that an increase (or decrease) of 10 dBA sounds twice (or half) as loud. The Project isn't expected to result in substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Impacts are anticipated to be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Construction vibration may be noticeable at land uses within 100 feet of the source but is expected to be very short term and would not result in structural damage. Typical construction vibrations fall in the 10 to 30 hertz (Hz) range and usually occur around 15 Hz.[26] Table 4 presents the human reaction to various levels of peak particle velocity.

[26] Riverside County Planning Department (2015, December 8). County of Riverside General Plan, Noise Element.

Table 4 Human Reaction to Typical Vibration Levels

Vibration Level Peak Particle Velocity (inches/second)	Human Reaction
0.0059-0.0188	Threshold of perception, possibility of intrusion
0.0787	Vibrations readily perceptible
0.0984	Continuous vibration begins to annoy people
0.1968	Vibrations annoying people in buildings
0.3937-0.5905	Vibration considered unpleasant when continuously subjected and unacceptable by some walking on bridges
Source: Caltrans, 1992; Riverside County Planning Department (2015, December 8). County of Riverside General Plan, Noise Element, Table N-3.	

A few heavy trucks can be expected to visit the Project site to deliver supplies over a short-term construction period. The nearest developments are approximately 60 feet north, west, and south of the Project site and the Project only proposes grading across 5 acres. Due to the short-term, temporary nature of construction impacts, these remaining effects would not be significant. For construction-related vibration, compliance with the County's General Plan policies and existing mitigation measure NOI-1 Groundborne Vibration and Groundborne noise would ensure that new uses are not subject to excessive vibration impacts and would help reduce the effects of groundborne vibration impacts on sensitive receptors to less than significant.

Mitigation Measure

NOI-1 **Groundborne Vibration and Groundborne Noise.** Prior to the issuance of any grading permit for new development involving vibration-sensitive land uses (which shall include, but not be limited to: hospitals, residential areas, concert halls, libraries, sensitive research operations, schools and offices), the project proponent shall provide evidence to the County of Riverside that placement of such uses within the area would not exceed groundborne vibration or groundborne noise impact criteria identified by the FTA (for example, the standards shown in Table 4.15-I of this EIR) or as otherwise deemed appropriate for the situation by the County of Riverside.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Less Than Significant Impact. The Project is not located within the vicinity of a private airstrip or an airport land use plan, or where such as plan has not been adopted, within two miles of a public airport or public use airport. The nearest airport is Hemet-Ryan Airport located approximately 2.75 miles to

the east of the Project site. The Project would not expose people residing or working in the Project area to excessive noise levels. The Project would not result in noise impacts within an airport overlay zone. Less than significant impact would occur.

XIV. Population and Housing

Evaluation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

No Impact. The proposed development does not consist of any new residential development, businesses, extension of roads or other infrastructure. The proposed Project is specifically to expand the existing Winchester Trails Park across five additional acres, which currently supports recreational activities to the surrounding residential communities. The Project would not interfere with the County's General Plan Housing Element. The Project would not induce substantial unplanned population growth in the area, either directly or indirectly. The Project would not necessitate the development of new housing to accommodate construction staff. The proposed Project would result no impact on population growth.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact. The Project site is located on a vacant, maintained grass and ruderal vegetated lot. The site is zoned as R-5, CZ. The proposed Project is to expand the existing Winchester Trails Park across five additional acres with recreational facilities. The County's General Plan Housing Element identified goals, policies, actions and programs to meet the unincorporated areas of the County of Riverside housing requirements for the years 2019 – 2029. The Project does not conflict with the County's General Plan Housing Element because it does not involve the development of housing, businesses, extension of roads or other infrastructure. The Project would not result in any changes to existing zoning or land use designations that would increase population or affect housing projections from the that identified in the County's General Plan. The Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. No impact is anticipated.

XV. Public Services

Evaluation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any or the public services: Fire protection? Police protection? Schools? Parks? Other public facilities?	☐	☐	☐	☒

No Impact. Operation of the Project isn't anticipated to have any impact on parks, schools or public libraries since the Project wouldn't result in populations growth in the area. The Project's impact to police and fire response time will be related to the Project's accessibility. As the Project would comply with the County's Circulation and Safety Elements, the Project isn't anticipated to result in a deterioration of response times by police and fire.

The proposed Project would not induce an appreciable increase in population or create structures that would result in a significant increased need for any of the public service facilities listed in Table 5 below, including but not limited to, fire protection, police protection, schools, parks, or other public facilities.

Table 5 Examples of Public Services Facilities

Public Service	Location in or near Winchester	Distance from Project Site
Fire Station	32655 Haddock St, Winchester	~2.6 miles southwest
Police Department	29714 Haun Rd Unit-A, Menifee	~8.7 miles southwest
Public Library	163 E. San Jacinto Avenue, Perris	~11.2 miles northwest
City Park	33312 Hitching Post Dr, Hemet	(Located on same parcel as Project)
Schools	28751 Winchester Rd, Winchester	~2.6 miles southwest
Note: "~" = approximately Source: City Website and Google Earth, 2021		

The Project would not result in significant threats of deterioration to the existing levels of service at public service facilities nor the need to build additional public service facilities. The Project would be accommodated by existing long-range planning for government facilities in the County of Riverside. The Project does not involve the construction of new or altered government buildings and no impact to need for new government facilities is anticipated as a result of the Project.

XVI. Recreation

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

No Impact. The proposed Project is to expand the existing Winchester Trails Park located on the southwestern corner of the parcel the Project site is on. The expansion will provide public recreational facilities across an additional five acres. The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities to the extent that substantial physical deterioration of the facility would occur or be accelerated. No impacts to current park facilities would occur as a result of the Project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment?	☐	☐	☐	☒

No Impact. The proposed Project includes the development of a parking lot with 27 stalls, Tennis and Pickleball courts, one grass field, approximate 210 feet wide and 330' feet long, an exercise station area, restroom buildings, shaded picnic area, bench seating, 12' wide walking path with led lighting, fencing with landscape screening for catch basin, and a flagpole which would expand the existing Winchester Trails Park across five additional acres. The Project site is zone R-5. The Project would align with the uses permitted associated with the County of Riverside Zoning Ordinance No. 348.4947/50. The Project would not have an adverse effect on the environment. No impacts to recreational facilities are expected as a result of implementing the Project.

XVII. Transportation

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒

No Impact. The Project proposes a 12' wide walkway path through the park and a twenty-seven-stall parking lot to support park visitors and a roller coaster bike rack. The Project would comply with the

County of Riverside Circulation Element regulations and policies. The Project would not conflict with existing applicable plans, policies, or programs for public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. No impact to such facilities would result from the Project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the project conflict or be consistent with CEQA Guidelines §15064.3, subdivision (b)?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. The Project site is accessible by way of I-215, a six-lane interstate, to Highway 74, a two-lane highway, to Winchester Boulevard State-Route 79, a two-lane highway, to W Stetson Avenue, a two-lane collector, to Hitching Post Dr, a two-lane road. Vehicle miles traveled would not exceed threshold. In general, daily construction vehicle trips would be short-term and have a relatively small impact on daily traffic generation in the area. In addition, through traffic on roadways in the construction areas would be maintained at all times during construction.

The Project would result in a less than significant impact to the circulation system as long as it complies with County's applicable plans, policies, and ordinance related to the circulation system. In addition, at the County's direction, construction traffic controls would be put in place where deemed necessary, and at least one lane of travel would be open at all times for through traffic during construction. A less than significant impact to traffic circulation during construction and operation is anticipated with incorporation of Mitigation Measure TRAF-1.

Mitigation Measure

TRAF-1 **Traffic Control Measures.** Per the County's Engineer's office, traffic controls will be put in place where deemed necessary, and at least one lane of street will be open at all times for through traffic. Traffic controls will maintain safe traffic flow on local streets affected by construction at all times, including through the use of adequate signage, protective devices, or flag persons to ensure that traffic can flow. Construction road segments will remain without any significant roadway hazards remaining at the end of the construction day.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒

No Impact. The plans will be designed and engineered in compliance with the County of Riverside building, engineering, and construction regulations, policies, procedures, and standards; Caltrans standards; and the requirements of the California Manual of Uniform Traffic Control Devices

(CMUTCD), latest edition, as necessary. As a result, the Project would not increase a hazard due to a design feature or incompatible use, and no impact would result.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Would the project result in inadequate emergency access?	☐	☐	☐	☒

No Impact. Project access and circulation would accommodate emergency fire trucks, police units, and ambulance/paramedic vehicles from Stetson Avenue and Hitching Post Drive. According to the County of Riverside General Plan Safety Element, Figure 11: Residential Parcels with Evacuation Constraints (West County), the parcel is not recognized as an evacuation constrained parcel.[22] All access lanes would meet County requirements pursuant to the Uniform Building and Fire Code to ensure adequate emergency access throughout the project site. As a result, the Project would not result in inadequate emergency access, and no impact would result.

XVIII. Tribal Cultural Resources

Evaluation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated. Assembly Bill (AB) 52 requires Lead Agencies consult with Native American tribes on the Native American Heritage Commission List to determine whether the tribes believe unique archaeological sites might exist on the proposed Project site. Initiation of consultation is required prior to public review of a Project CEQA document. Notification involves a letter with a brief project description, location, lead agency contact information, and statement that the tribe has 30 days to request consultation. The lead agency must begin consultation within 30 days of receipt of tribal request. Public agencies, when feasible, are required to avoid damages to Tribal Cultural Resources (TCR): a site feature, place, cultural landscape, sacred place or object, which is of cultural value to a Tribe; and is either on or eligible for the California Historic Register or a local historic register; or the lead agency, at its discretion, chooses to treat the resource as a TCR (*Public Resources Code* [PRC] 21074 (a)(1)(A)-(B)).

Geovironment Consulting, Inc. contacted the Native American Heritage Commission (NAHC) on September 29, 2021, for a review of the Sacred Lands File (SLF), to determine if any known Native American cultural properties (e.g., traditional use or gathering areas, places of religious or sacred

activity) are present within or adjacent to the Project area. The NAHC responded on October 28, 2021, stating the SLF search was completed with positive results. The NAHC requested Geovironment Consulting, Inc. contact Native American individuals and organizations to elicit information regarding cultural resource issues related to the Project, if any. Upon review of the Native American contact list and by removing redundancies and adding individuals and organizations geographically and culturally affiliated with the Project area, Geovironment Consulting, Inc. contacted 20 individuals and/or organizations regarding the Project. Geovironment Consulting, Inc. sent a letter via electronic mail on November 5, 2021 describing the Project and asking these individuals and organizations for their input. Copies of the letters, the list of contacts, and received responses are included in Appendix A of the Project Cultural Resources Assessment (Appendix B in this document).

Individuals/organizations contacted include:

- Patricia Garcia-Plotkin, Director of Agua Caliente Band of Cahuilla Indians
- Jeff Grubbe, Chairperson of Agua Caliente Band of Cahuilla Indians
- Amanda Vance, Chairperson of Augustine Band of Cahuilla Mission Indians
- Doug Williams, Chairperson of Cabazon Band of Mission Indians
- Daniel Salgado, Chairperson of Cahuilla Band of Indians
- Ray Chapparosa, Chairperson of Los Coyotes Band of Cahuilla and Cupeño Indians.
- Ann Brierty, THPO of Morongo Band of Mission Indians
- Robert Martin, Chairperson of Morongo Band of Mission Indians
- Shasta Gaughen, Tribal Historic Preservation Officer of Pala Band of Mission Indians
- Paul Macarro, Cultural Resources Coordinator of Pechanga Band of Luiseno Indians
- Mark Macarro, Chairperson of Pechanga Band of Luiseno Indians
- Manfred Scott, Acting Chairman of Quechan Tribe of the Fort Yuma Reservation
- Jill McCormick, Historic Preservation Officer of Quechan Tribe of the Fort Yuma Reservation
- John Gomez, Environmental Coordinator of Ramona Band of Cahuilla
- Joseph Hamilton, Chairperson of Ramona Band of Cahuilla
- Bo Mazzetti, Chairperson of Rincon Band of Luiseno Indians
- Cheryl Madrigal, Tribal Historic Preservation Officer of Rincon Band of Luiseno Indians
- Lovina Redner, Tribal Chair of Santa Rosa Band of Cahuilla Indians
- Joseph Ontiveros, Cultural Resource Department of Soboba Band of Luiseno Indians
- Isaiah Vivanco, Chairperson of Soboba Band of Luiseno Indians
- Michael Mirelez, Cultural Resource Coordinator of Torres-Martinez Desert Cahuilla Indians

As of November 29, 2021, only four responses had been received. Quechan Tribe of the Fort Yuma Reservation stated they had no comments and deferred to more local Tribes and support their decisions on the Project. The Cahuilla Band of Indians stated the Project site is located in the Tribes Traditional Land Use Area and believes that to mitigate the disturbance of known cultural resources and possible undiscovered resources that may be found during ground disturbances it would be best practice to have Cahuilla Tribal Monitor(s) on site for all ground disturbances. The Cahuilla Band of Indians requested to setup a meeting to discuss the Project. The Pechanga Band Indians stated that the Project site is within the heart of their Ancestral Territory and believe that the possibility for recovering subsurface resources during ground-disturbing activities for this Project is high. Pechanga

requested the following to continue the consultation process and to provide adequate and appropriate recommendations for the Project:

1. Notification one the Project begins the entitlement process, if it has not already;
2. Copies of all applicable archaeological reports, site records, proposed grading plans, ad environmental documents (EA/MND/EIR, etc.);
3. Government-to-government consultation with the Lead Agency; and
4. The Tribe believes that monitoring by a Riverside County qualified archaeologist and a professional Pechanga Tribal Monitor may be required during earthmoving activities. Therefore, the Tribe reserves the right to make additional comments and recommendations once the environmental documents have been received and fully reviewed. Further, in the event that subsurface cultural resources are identified, the Tribe requests consultation with the Project proponent and Lead Agency regarding the treatment and disposition of all artifacts.

Additionally, the Pechanga Band of Indians states that the Project lies within a Traditional Cultural Property (TCP) known as *Chéexxayim Pumwáapivu pi 'Anó Potma*. This TCP is specifically affiliated with the Payómkawichum (Luiseño) origin history and encompasses the Double Buttes and surrounding area. The TCP was registered with the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) in 2014 as N-RIV-109. Mitigation Measures TRIBE-1 through Tribe-7 have been implemented to lower the Project's impacts to the TCP to less than significant.

The Soboba Band of Luiseno Indians stated the Project site falls within the bounds of their Tribal Traditional Use Areas and the Project location is in proximity to known sites. Soboba Band of Luiseno Indians requested the following:

1. The transfer of information to the Soboba Band of Luiseno Indians regarding the progress of this Project should be done as soon as new developments occur. This includes archaeological records, reports, and assessments as soon as they are available.
2. Working in and around traditional use areas intensifies the possibility of encountering cultural resources during the construction/excavation phase. For this reason, the Soboba Band of Luiseno Indians requests that Native American Monitor(s) from the Soboba Band of Luiseno Cultural Resource Department to be present during any ground disturbing proceedings. Including surveys and archaeological testing.
3. Requests that proper procedures be taken, and requests of the tribe be honored.

With implementation of Mitigation Measures TRIBE-1 through TRIBE-7 impacts to tribal cultural resources would be less than significant.

Mitigation Measure

TRIBE-1 **Archaeological Monitors**. Prior to the issuance of a grading permit, the Developer shall retain a professional archaeologist to conduct monitoring of all mass grading and trenching activities. The archaeological monitor(s) shall be allowed to monitor all grading, excavation and groundbreaking activities, and shall also have the authority to stop and redirect grading activities. The Project archeologist and the Consulting Tribes(s) shall attend the pre-grading meeting with the City, the construction manager and any contractors and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. All new construction personnel that will conduct earthwork or grading activities that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work and the Project archaeologist and Consulting Tribe(s) shall make themselves available to provide the training on an as-needed basis;

If potentially significant features or sites are discovered, all ground disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated by the archaeologist and the tribal monitor. A buffer area of at least 25 feet shall be established around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. Consistent with California Public Resources Code Section 21083.2(b) and Assembly Bill 52 (Chapter 532, Statues of 2014), avoidance shall be the preferred method of preservation for tribal cultural resources and archeological resources and shall be assessed in accordance with MM CULT-1. Consultation between the archaeologist, the tribal representative, the County and the Developer/Applicant shall occur within 24 hours of the find to determine the best method for managing the identified resource(s).

TRIBE-2 **Tribal Monitors.** Prior to issuance of any grading permit, the Developer shall secure agreements with the Pechanga Band of Indians and Soboba Band of Luiseno Indians or tribal monitoring. The Valley Wide Park and Recreation District is also required to provide a minimum of 30 days advance notice to the tribes of all mass grading and trenching activities. The Native American Tribal Representatives shall have the authority to temporarily halt and redirect earth moving activities in the affected area in the event that suspected archaeological resources are unearthed. the Consulting Tribes(s) shall attend the pre-grading meeting and along with the archaeological monitor provide information regarding the roles and responsivities of the monitors on site and who to contact should an inadvertent find be identified. The Consulting Tribe(s) shall make themselves available to provide the training on an as-needed basis;

TRIBE-3 **Inadvertent Finds.** If potential historic or cultural resources are uncovered during excavation or construction activities at the project site, work in the affected area must

cease immediately and a qualified person meeting the Secretary of the Interior's standards (36 CFR 61), Tribal Representatives, and all site monitors per the Mitigation Measures, shall be consulted by the City to evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, or prehistoric resource. Determinations and recommendations by the consultant shall be immediately submitted to the Planning Division for consideration, and implemented as deemed appropriate by the Community Development Director, in consultation with the State Historic Preservation Officer (SHPO) and any and all Consulting Native American Tribes as defined in CR-1 before any further work commences in the affected area.

TRIBE-4 **Contractor Specification.** Prior to issuance of any grading permit, the Engineering/Public Works Department shall confirm that the following note is included on Contractor Specifications: "Should any cultural/scientific resources be discovered during earthmoving activities, no further grading shall occur within a 50-foot radius of the area of the discovery. Tribal and archeological monitors shall have the authority to temporarily stop and redirect grading activities until the Planning Director is satisfied that adequate provisions are in place to evaluate and protect these resources."

TRIBE-5 **Final Disposition of Tribal Cultural Resources.** In the event that Native American cultural resources are discovered during the course of grading (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:

a. One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the Valley-Wide Recreation and Park District:

i. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place they were found with no development affecting the integrity of the resources.

ii. Onsite reburial of the discovered items as detailed in the treatment plan required pursuant to Mitigation Measure CR-1. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments as defined in CR-1. The location for the future reburial area shall be identified on a confidential exhibit on file with the City, and concurred to by the Consulting Native American Tribal Governments prior to certification of the environmental document.

TRIBE-6 **Human Remains.** In the event that human remains (or remains that may be human) are discovered at the development project site during grading or earthmoving, the construction contractors, Project archaeologist, and/or designated Native American observer shall immediately stop all activities within 100 feet in the immediate area of the find. The project proponent shall then inform the Riverside County Coroner as soon as possible and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b). Further, pursuant to California Public

Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the coroner determines that the remains are of Native American origin, the coroner would notify the Native American Heritage Commission (NAHC). The Commission will identify the "Most Likely Descendent" (MLD). The MLD shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The disposition of the remains would be determined in consultation with the project proponent, and the MLD.

If the human remains are determined to be other than Native American in origin, but still of archaeological value, the remains would be recovered for analysis and subject to curation or reburial at the expense of the project proponent. If deemed appropriate, the remains would be recovered by the coroner and handled through the Coroner's Office. Coordination with the Coroner's Office would be through the County of Riverside and in consultation with the various stakeholders.

TRIBE-7 **Non-Disclosure of Reburial Location.** It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code 6254 (r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).

TRIBE-8 **Archeology Report – Phase IV.** Prior to final inspection, the Project Archeologist is to submit two (2) copies of the Phase IV Cultural Resources Monitoring Report that complies with the Planning Department's requirements for such reports. The Phase IV report shall include evidence of the required cultural/historical sensitivity training for the construction staff held during the pre-grade meeting. The Planning Department shall review the reports to determine adequate mitigation compliance. Provided the reports are adequate, the Planning Department shall clear this condition. Once the report(s) are determined to be adequate, two (2) copies shall be submitted to the Eastern Information Center (EIC) at the University of California Riverside (UCR) and one (1) copy shall be submitted to the Pechanga Cultural Resources Department.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
ii)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated. As identified in response Section 6.18 a) above, the County initiated consultation with the relevant Tribes regarding the proposed Project during the week of November 5, 2021. The Cahuilla Band of Indians stated that the Project is within the Tribes Traditional Land Use Area and requested tribal monitoring during all ground-disturbing activities and to be notified of all updates and/or changes to the Project. The Soboba Band of Luiseno Indians states that the Project is within the Tribes Tribal Traditional Use Areas and requested tribal monitoring during ground-disturbing activities and to be notified of all updates and/or changes to the Project. The Pechanga Band of Indians states the Project is within the heart of the Tribes Ancestral Territory and requested tribal monitoring during ground-disturbing activities and to be notified of all updates and/or changes to the Project. With implementation of Mitigation Measures TRIBE-1 through TRIBE-3 impacts to tribal cultural resources would be less than significant.

XIX. Utilities and Service Systems

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Would the project require or result in the construction of new water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

Less than Significant Impact. The proposed Project includes the expansion of the existing Winchester Trails Park across five additional acres. The site is zoned R-5. As the proposed Project is consistent with existing zoning and land use assumptions in the Riverside County General Plan, it is anticipated Project demands would be met by existing local utility infrastructure with construction of utility tie-ins to the Project site and payment of required connection fees and design approval by the Project Engineer.

Table 6 Utility Purveyors and Services

Purveyor	Type of Service
Eastern Municipal Water District	Water, sewer, recycled water
Verizon	Telephone
Southern California Edison	Electric

Southern California Gas Company	Natural gas
CR&R Waster Services	Solid waste disposal
Time Warner Communications	Cable television and internet
Source: Riverside County Planning Department (2015, December). County of Riverside General Plan Draft Environmental Impact Report	

Water services would be provided by the Eastern Municipal Water District (EMWD) upon completion of fringe annexation. Other utility purveyors and services are listed in Table 6. Environmental impacts associated with tie-ins to existing utilities for the proposed Project are anticipated to be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐

Less than Significant Impact. EMWD provides potable water, recycled water, and wastewater services to an area of approximately 555 square miles in western Riverside County, receiving about half of water supplies from the Metropolitan Water District of Southern California (MWD). EMWD's 2020 Urban Water Management Plan, highlights the water district's plans to meet demand in its service area in the long-term, over a 20-year time frame.[27] The Project is anticipated to adequately service the Project during normal, dry and multiple dry years through expansion of its water reclamation facilities, conservation practices, and efficiency. EMWD is anticipated to maintain adequate water supplies to service the Project during normal, dry and multiple dry years. The Project would not require or result in the construction of new, or expansion of existing, water treatment facilities. Impacts to water supply from the Project is anticipated to be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒

No Impact. Construction of the Project might require use of an on-site port-a-potty during the construction period that would be serviced by a rental company in that line of business (e.g. United Rental). If a port-a-potty is provided by the Project contractor, the service provider would handle disposal at the local wastewater treatment facility. EMWD provides both water and wastewater treatment for Projects in the unincorporated area of Winchester. EMWD has adequate capacity to

[27] Eastern Municipal Water District (2021, July 1) 2020 Eastern Municipal Water District Urban Water Management Plan.

serve the Project's projected demand in addition to the provider's existing conditions. No impacts would result.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐

Less than Significant Impact. The Project would generate some amount of construction and operation waste. CR&R Inc., services the unincorporated area of Winchester in Riverside County. The Project would generate solid waste on a weekly basis during construction and operation but would be accommodated by the landfill's capacity. The proposed Project would have a less than significant impact on landfills.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

No Impact. The proposed Project would comply with all pertinent federal, state, and local statutes and regulations related to solid waste and includes no policy or design feature that would conflict with implementation of such requirements. Collection and disposal of solid waste generated by development consistent with the project General Plan would conform to applicable federal, state, and local plans and regulations including the Integrated Waste Management Act and the Riverside County Waste Management Plan.[28] State law requires local jurisdictions divert at least fifty percent of solid waste from landfills through conservation, recycling, and compositing. Like all California communities, the Winchester community is required to comply with State regulations. No impacts are anticipated related to solid waste regulations as a result of the Project.

28 Ibid., Appendices IX-62

XX. Wildfire

Evaluation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

No Impact. The Project vicinity is developed residential zoned land. The Project site is located on a partially developed and vacant lot that is maintained by mowing which would reduce the potential for fire. Weather conditions and steep terrain also increase the hazardous wildfire potential; however, the Project site and surrounding area is flat and devoid of high-density vegetation. Human error, arson, high-voltage lines, vehicles, and lightning are the primary causes of wildfires. The potential for a severe wildfire to occur is increased if dense vegetation growth and accumulations of dead plant material are present. As discussed in response h) of Section 6.9 Hazards and Hazardous Materials, the Project site is located in a State Responsibility Area/Federal Responsibility Area of Very High/High/Moderate fire hazard safety zone (FHSZ).[22] The County of Riverside has developed the Riverside County Fire Department Fire Protection and Emergency Medical Services Strategic Master Plan to proactively plan facility, service and equipment needs for fire protection.[20] It also incorporates the CDF Management Plan for several sub-zones within Riverside County. Implementation of this plan helps reduce potential risks of fire for residents in areas of moderate to high fire danger.

According to the County of Riverside General Plan Safety Element, Figure 11: Residential Parcels with Evacuation Constraints (West County), the parcel is not recognized as an evacuation constrained parcel.[22] The Project would comply with the existing regulations and General Plan policies to ensure that impacts related to wildland fire risks as a result of future development accommodated by GPA No. 960 would have less than significant impacts. The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. It is anticipated that fire and police services would be able to adequately service the Project in an emergency. No impact related to very high fire risk is anticipated as a result of the Project.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒

No Impact. As discussed in response a) above, the Project is located in in a State Responsibility Area/Federal Responsibility Area of Very High/High/Moderate fire hazard safety zone (FHSZ). The Project site is located on a relatively flat lot and is surrounded by residential development. The Project

would comply with the Riverside County Fire Department Fire Protection and Emergency Medical Services Strategic Master Plan and the CDF Management Plan. The Project would comply with the existing regulations and General Plan policies to ensure that impacts related to wildland fire risks as a result of future development accommodated by GPA No. 960 would have less than significant impacts. The Project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No impact would occur.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒

No Impact. As discussed in response a) above, the Project is located in in a State Responsibility Area/Federal Responsibility Area of Very High/High/Moderate fire hazard safety zone (FHSZ). The proposed Project would comply with the requirements of the County Fire Department and shall comply with the current Uniform Fire Code requirements and all applicable statutes, codes, ordinances, and standards (such as use of specific building materials, fuel modification areas, weed abatement, etc.) The Project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. No impact would result.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

No Impact. As discussed in response a) above, the Project is located in in a State Responsibility Area/Federal Responsibility Area of Very High/High/Moderate fire hazard safety zone (FHSZ). The Project site is not located in a susceptible area for landslides according to the County General Plan. The Project site is also located on relatively flat land. The proposed Project will comply with the requirements of the County Fire Department and shall comply with the current Uniform Fire Code requirements and all applicable statutes, codes, ordinances, and standards (such as use of specific building materials, fuel modification areas, weed abatement, etc.). The Project would not expose people or structure to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes. No impact would result.

XXI. Mandatory Findings of Significance

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated. As discussed in Section 6.4, Biological Resources; Section 6.5, Cultural Resources; Section 6.7, Geology and Soils; Section 6.17, Transportation; and Section 6.18, Tribal Cultural Resources with implementation of Mitigation Measures BIO-1 Focused Burrowing Owl Surveys; BIO-2 Nesting Bird Surveys; BIO-3 Nesting Bird Setbacks; CULT-1 Archeological Resources; CULT-2 Human Remains; TRAF-1 Traffic Control Measures; TRIBE-1 Native American Human Remains; TRIBE-2 Native American Cultural Resources; TRIBE-3 Native American Historical Resources, impacts from the Project would be reduced to a less than significant level, and as a result, would not result in any significant Project or cumulative environmental impacts to biological or cultural resources. The short- and long-term effects associated with the Project would not be considered cumulatively considerable.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐

Less than Significant Impact. As discussed in the preceding responses to Section 6.1 through Section 6.20, this Project would not result in any significant Project or cumulative environmental impacts. The short-term and long-term effects associated with Project would not be considered cumulatively considerable.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Less than Significant Impact. As discussed in the preceding responses to the entire list of impact questions, this Project would not result in any significant environmental impacts to persons. Sufficient construction control measures have been identified to reduce short-term construction impacts to a level of less than significant. Compliance with the existing federal, state and local regulations, along with standard design criteria, would ensure that the proposed Project does not directly or indirectly cause a substantial adverse effect on human beings.

List of Preparers

Technical Studies	Preparers
IS/MND	Geovironment Consulting Andy Minor, M.S. Carmen Gardner, M.C.R.S. Mathew Hyland, M.S.
Biological Assessment Report	Searl Boiological Services Tim Searl
Phase I Cultural Resources Assessment	Geovironment Consulting Jay K. Sander, M.A. Mathew Hyland, M.S.

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Appendix A
Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

Valley Wide – Winchester Trails Park

WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN CONSISTENCY ANALYSIS

VALLEY-WIDE RECREATION & PARK DISTRICT
WINCHESTER TRAILS PARK
WINCHESTER, RIVERSIDE COUNTY, CALIFORNIA
ASSESSOR'S PARCEL NUMBER 458-370-004

County of Riverside, California (Permittee)
4080 Lemon Street
Riverside, CA 92501

Valley-Wide Recreation & Park District (Applicant)
901 W. Esplanade Avenue
San Jacinto, CA 92582
Mailing Address: P. O. Box 907, San Jacinto, CA 92581
(951) 654-1505



43430 E. Florida Avenue, Suite F
PMB 291
Hemet, CA 92544
Contact: Tim Searl
Mobile: (951) 805-2028
E-Mail: tsearl@searlbio.com
Website: www.searlbio.com

August 16, 2021

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1.0 EXECUTIVE SUMMARY

This Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis (Analysis) provides the results of the required MSHCP assessments to determine if the proposed Valley-Wide Recreation & Park District's Winchester Trails Park project (Project), was consistent with the goals and objectives of the MSHCP. The subject property (Property and/or Site) was located within a MSHCP-designated assessment area for Burrowing Owl (*Athene cunicularia*) (BUOW). In addition, the Project required a MSHCP Section 6.1.2 *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools* (MSHCP Section 6.1.2) assessment.

The Property was located on the northwest corner of Winchester Road/Highway 79 (Hwy 79) and Stetson Avenue in the unincorporated area of Winchester, Riverside County, California approximately one aerial mile south of the Hwy 79 and Highway 74 (Hwy 74) intersection.

The Site was in the northeastern portion of the Harvest Valley/Winchester Area Plan (HVWAP). The HVWAP was approximately 32,181-acres (50-square miles) and consisted of two Subunits. The Project was not located in a Subunit and was not located within a Criteria Cell. The Property was not targeted for long-term conservation as part of the MSHCP Reserve Assembly.

No MSHCP Section 6.1.2 Riparian/Riverine Areas or Vernal Pools were present on the Property. A human-created detention basin was in the southeastern portion of the Property, and this basin could provide suitable habitat for MSHCP Section 6.1.2 targeted Fairy Shrimp species. The Project will avoid impacts to the detention basin which will remain in place as-is, and therefore, focused surveys for Fairy Shrimp were not required. The detention basin is a maintained flood control facility.

Searl Biological Services (SBS) conducted a BUOW protocol survey on the Property and areas within the MSHCP-designated BUOW Assessment Area within 500-feet of the Property. No BUOW were detected during the four focused surveys; however, the Project will be required to perform a 30-Day Pre-Construction BUOW Survey as part of the Project's Conditions of Approval (COA) prior to ground disturbance due to the presence of suitable BUOW habitat.

The Project, with the implementation of the 30-Day Pre-Construction BUOW Survey, is consistent with the goals and objectives of the MSHCP.

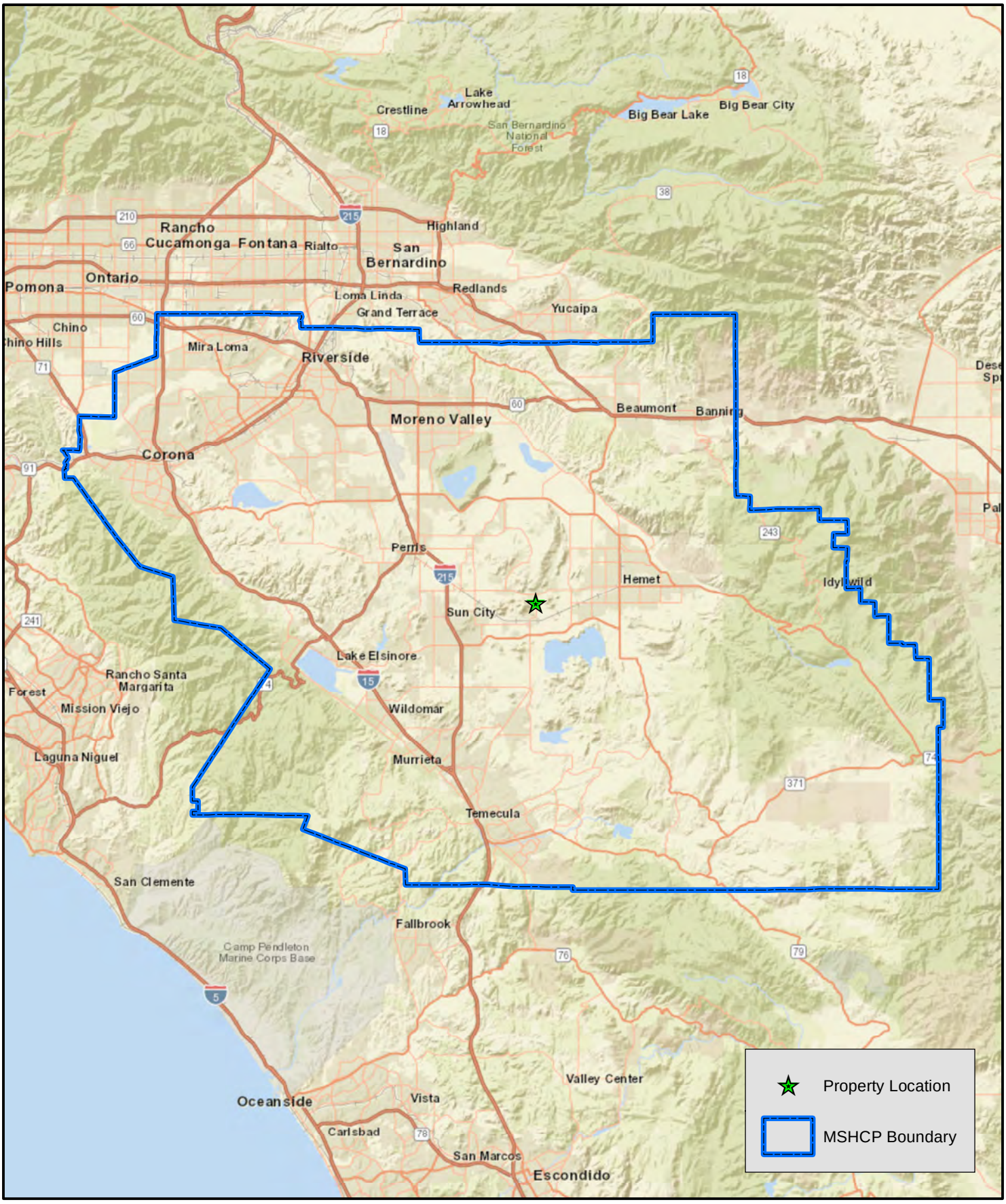
2.0 INTRODUCTION

The purpose of this MSHCP Analysis was to summarize the biological data for the Project and to document the Project's consistency with the goals and objectives of the MSHCP. According to the Regional Conservation Authority's (RCA) MSHCP Information Application (Regional Conservation Authority, 2021), the Project required a:

- MSHCP BUOW assessment.

In addition, the Project required a MSHCP Section 6.1.2 assessment which is required for all projects proposing a land use change and/or applying for a discretionary action.

The Property was located on the northwest corner of Hwy 79 and Stetson Avenue in the unincorporated area of Winchester, Riverside County, California approximately one aerial mile south of the Hwy 79 and Hwy 74 intersection. *Figure 1 - Regional Map* (Page 2) and *Figure 2 - Vicinity Map* (Page 3) depict the location of the Property.



N

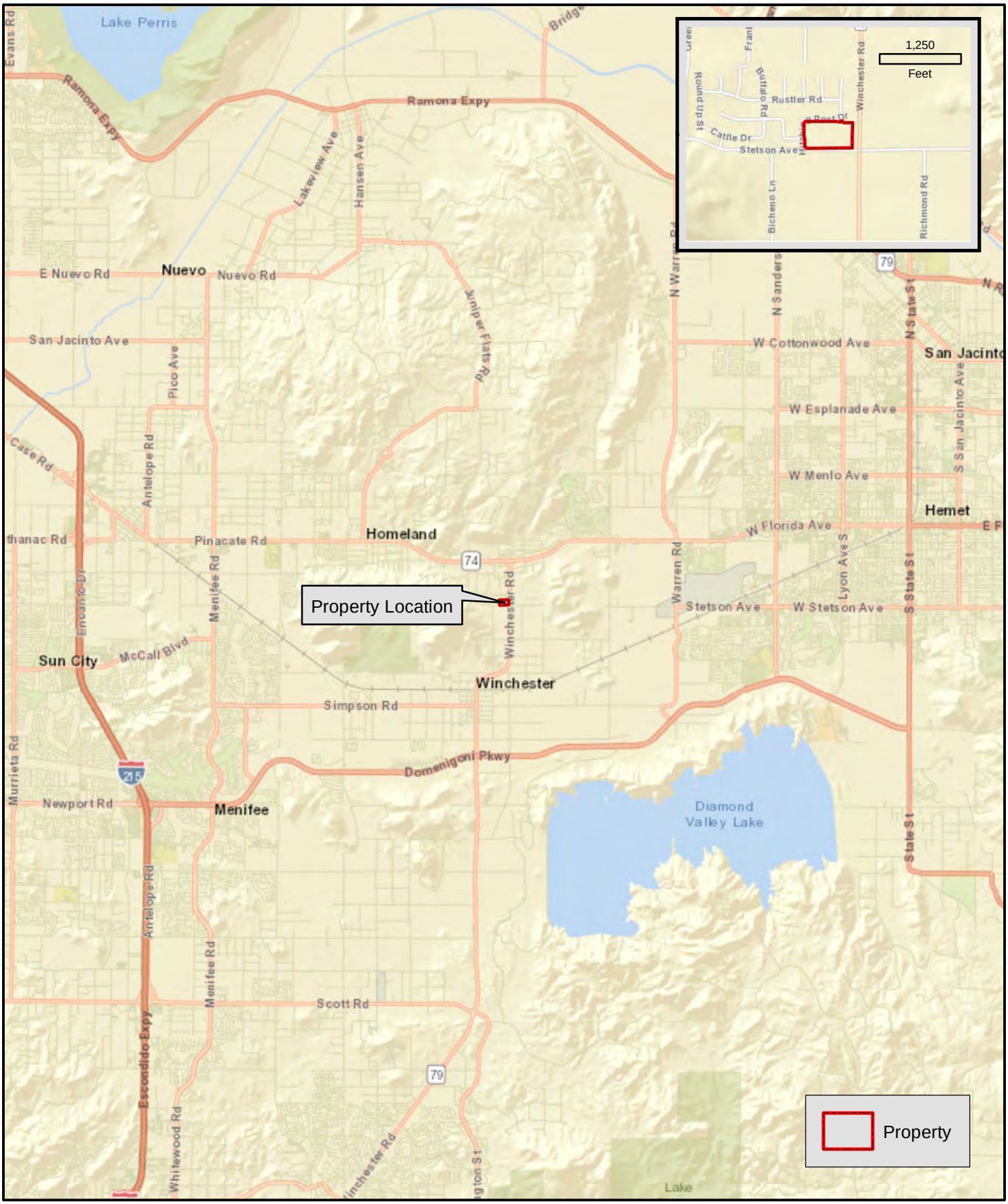
0 5 10 20 Miles

1:600,000

FIGURE 1
Regional Map

DATE: August 5, 2021
COORDINATE SYSTEM: NAD 1983 UTM Zone 11
SOURCE: ESRI World Street Map, Riverside County GIS Data

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N

0 1.5 3 6 Miles

1:125,000

FIGURE 2
Vicinity Map

DATE: August 5, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Street Map, Riverside County GIS Data

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The Property was geographically located in Township 5 South, Range 2 West along the southern boundary in the southwest quarter of Section 15 of the Winchester 7.5 Minute United States Geological Survey (USGS) California Quadrangle. *Figure 3 - USGS Topographic Map* (Page 5) depicts the Site's geographic location. The Universal Transverse Mercator (UTM) coordinates of the approximate center of the Property was 492,778-meters East; 3,732,205-meters North in Zone 11 (North American Datum [NAD] 83).

2.1 Project Area

The Property consisted of Assessor's Parcel Number (APN) 458-370-004. The Property acreage throughout the remainder of this document was based on the County of Riverside's (County) public GIS Assessor data. Using ESRI ArcMap, SBS shifted this file slightly to the west from its original position to more closely align with ESRI's aerial photograph and depict Project elements more accurately. The area of the original file was not altered, and according to the public GIS data, the APN was approximately 6.91-acres.

SBS was not in receipt of a detailed grading plan from the Applicant at the time of this assessment, and therefore, the proposed grading area was based on the Conceptual Park Plan provided in Appendix A. *Figure 4 – Proposed Project Area* (Page 6) depicts the Property, the estimated Project grading footprint, existing park facilities, and a detention basin that will be avoided by the Project and remain as-is. The estimated area of the grading footprint was 4.62-acres.

2.2 Project Description

The Project proposes to construct one tennis ball court, two pickleball courts, three soccer fields (2 U-11 sized; one U-12 sized in same location), one exercise station, two shaded picnic areas, a restroom building, a 27-stall parking lot, and a paved walking path with six bench seats along the path (two along the northern end; two along the southern end; and two in the western end). The Project will also add/change portions of the existing park facility in the southwestern corner by adding a gazebo, tables, barbecues, swings, play equipment, shade sails, and some additional lighting. The Conceptual Park Plan is provided in Appendix A.

2.3 Covered Roads

Hwy 79 was a "MSHCP Roads Right-of-Way" designated as a "Major" road according to the RCA's MSHCP Information Application (Regional Conservation Authority, 2021). The Project does not include any proposed improvements to the Right-of-Way (RW) of Hwy 79.

2.4 Covered Public Access Facilities

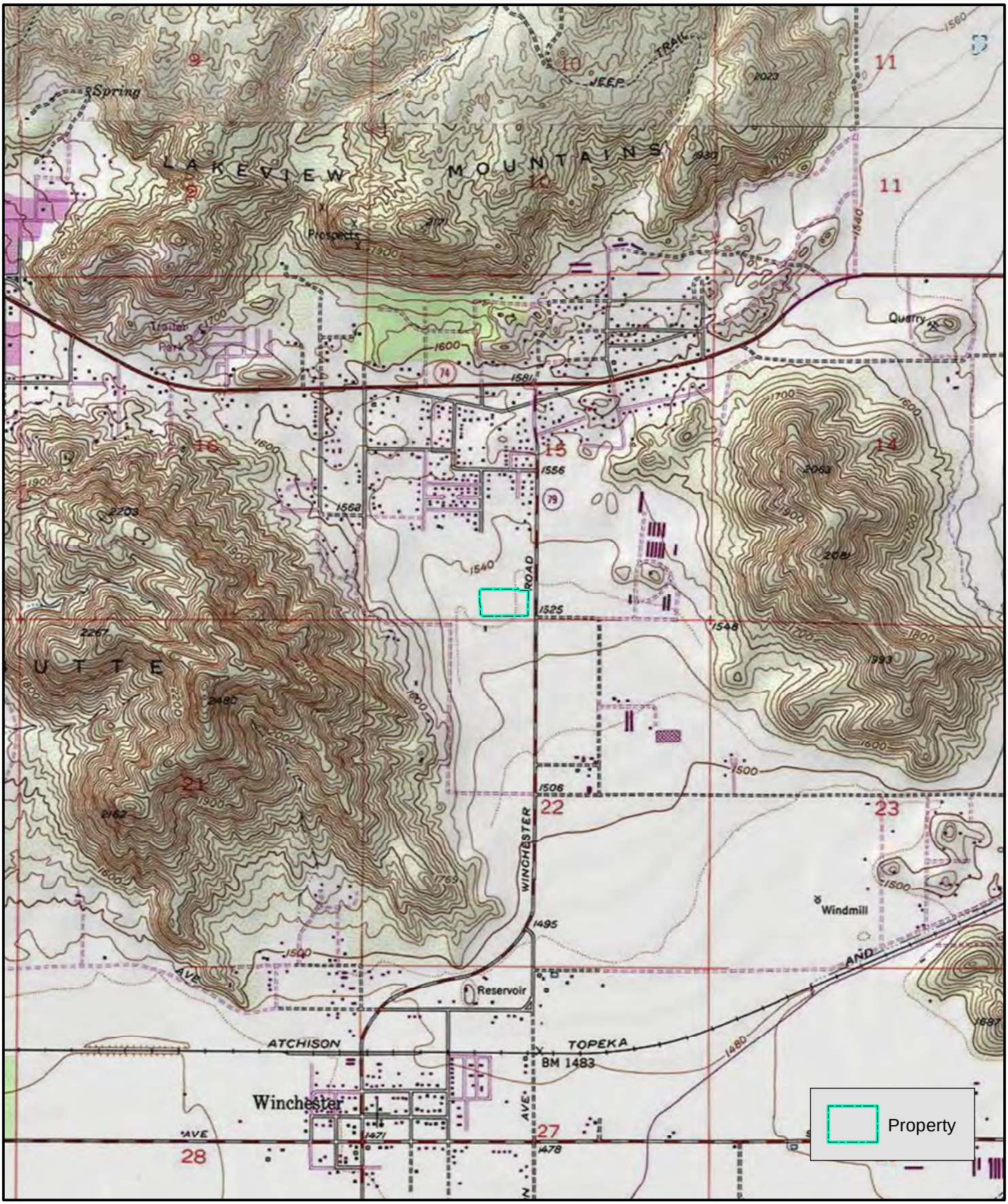
The Project does not entail the construction of, or improvements to, a Covered Public Access Facility.

2.5 General Setting

The Project was in the northern portion of Winchester in an area consisting of a mix of rural/agricultural and residential land uses. Agricultural fields were present east and south of the Property, and residential neighborhoods were situated to the north and west. The nearest landmarks/named features included the Double Butte Hills (0.3-mile), Lakeview Mountains (0.9-mile), and Diamond Valley Lake (2.90-miles). *Figure 5 – General Setting Aerial Photograph* (Page 7) depicts the setting of a 1:50,000-scale area around the Property.

3.0 RESERVE ASSEMBLY ANALYSIS

The MSHCP "...is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on Conservation of species and their associated Habitats in Western Riverside County"



N

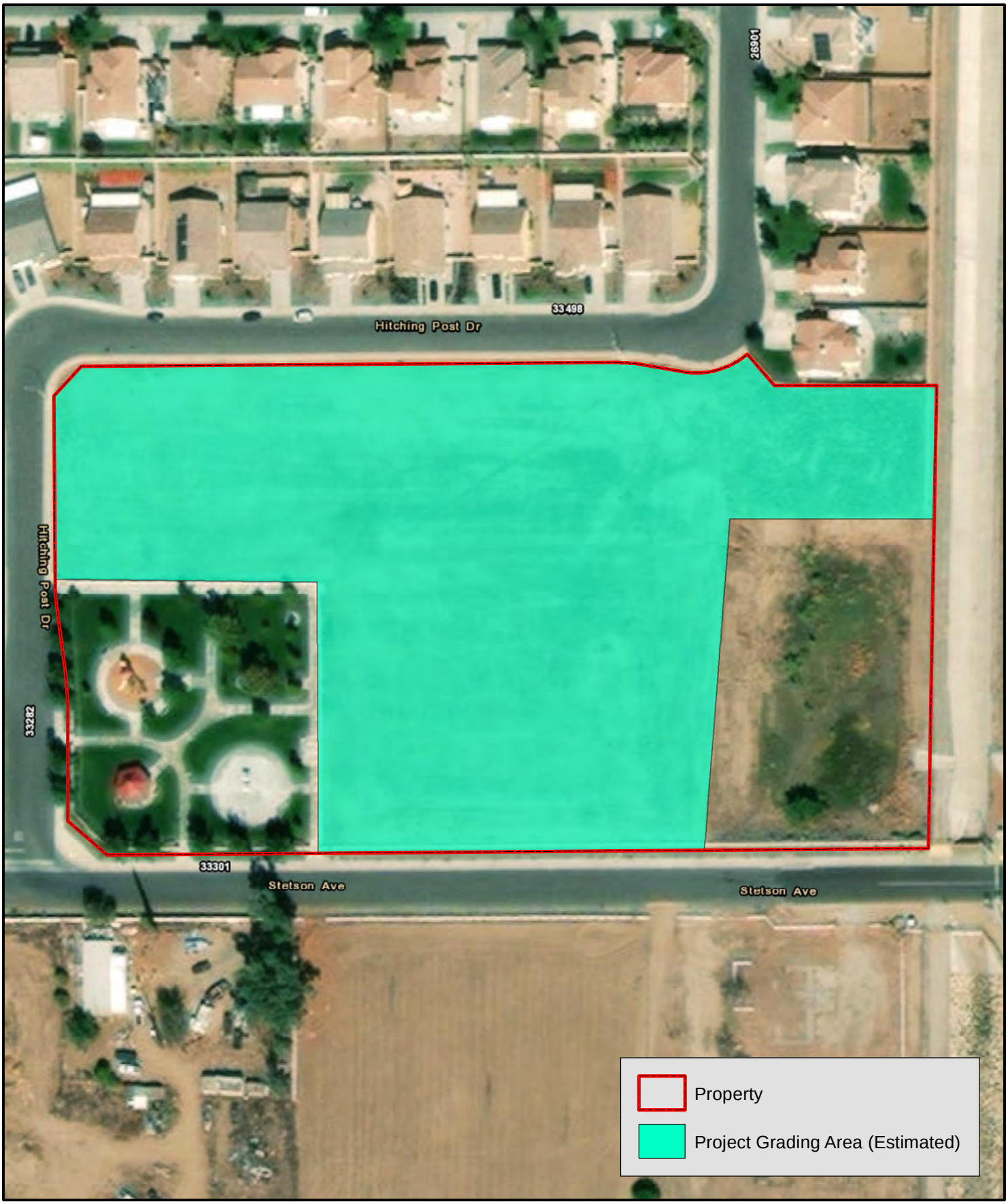
0 0.25 0.5 1 Miles

1:24,000

FIGURE 3
USGS Topographic Map

DATE: August 5, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI USA Topo Maps, Riverside County GIS Data

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N

0 35 70 140 210 280 Feet

1 inch = 110 feet

FIGURE 4
Proposed Project Area

DATE: August 6, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, Riverside County GIS Data, Valley-Wide

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N

0 0.5 1 2 Miles

1:50,000

FIGURE 5
General Setting
Aerial Photograph

DATE: August 6, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, Riverside County GIS Data

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(Dudek & Associates, Inc., 2003). The MSHCP encompasses approximately 1.26 million acres of land that stretches from the crest of the San Jacinto Mountains west to the Orange County boundary. Ultimately, the MSHCP will result in the conservation of more than 500,000 acres (347,000 acres on existing Public/Quasi-Public Lands [PQP] and 153,000-acres of Additional Reserve Lands [ARL]) that focuses on the 146-species covered by the MSHCP (Dudek & Associates, Inc., 2003).

The MSHCP is a criteria-based plan of which the County's General Plan Area Plan boundaries were utilized to provide the broad organizational framework for the criteria (Dudek & Associates, Inc., 2003). A Conceptual Reserve Design (CRD) was sketched for each Area Plan using vegetation, planning species occurrence data, and biological issues and considerations as the primary criteria for the CRD (Dudek & Associates, Inc., 2003). Subsequent to sketching the CRD, USGS quarter sections (i.e., approximate 160-acre cells) were then overlain on the CRD such that each "Criteria Cell" is an area in real space with a legal description (Dudek & Associates, Inc., 2003). Criteria Cells were then either aggregated into a Criteria Cell Group or retained as individual Criteria Cells based upon the level of conservation and configuration of the Criteria Cell or Criteria Cell Group (Dudek & Associates, Inc., 2003). Criteria Cells were assigned an identification number and each Criteria Cell Group was assigned a letter code. Conservation Criteria was drafted for each Criteria Cell or Criteria Cell Group to provide an explicit description of the areas to be targeted for conservation (Dudek & Associates, Inc., 2003). Those areas located outside of the designated Criteria Cells and/or Criteria Cell Groups are not targeted to be included within the 153,000-acres of ARL.

3.1 Harvest Valley/Winchester Area Plan

The Site was in the northeastern portion of the HVWAP. The HVWAP was approximately 32,181-acres (50-square miles) and consisted of two Subunits. The Project was not located in a Subunit as depicted by *Figure 6 – Harvest Valley/Winchester Area Plan and Subunits* (Page 9). Additionally, the Project was not located within a Criteria Cell and the nearest being Criteria Cell #3887 located approximately 1.0-mile east of the Site. A Reserve Assembly Analysis was not required for the Project given its location outside of a Criteria Cell.

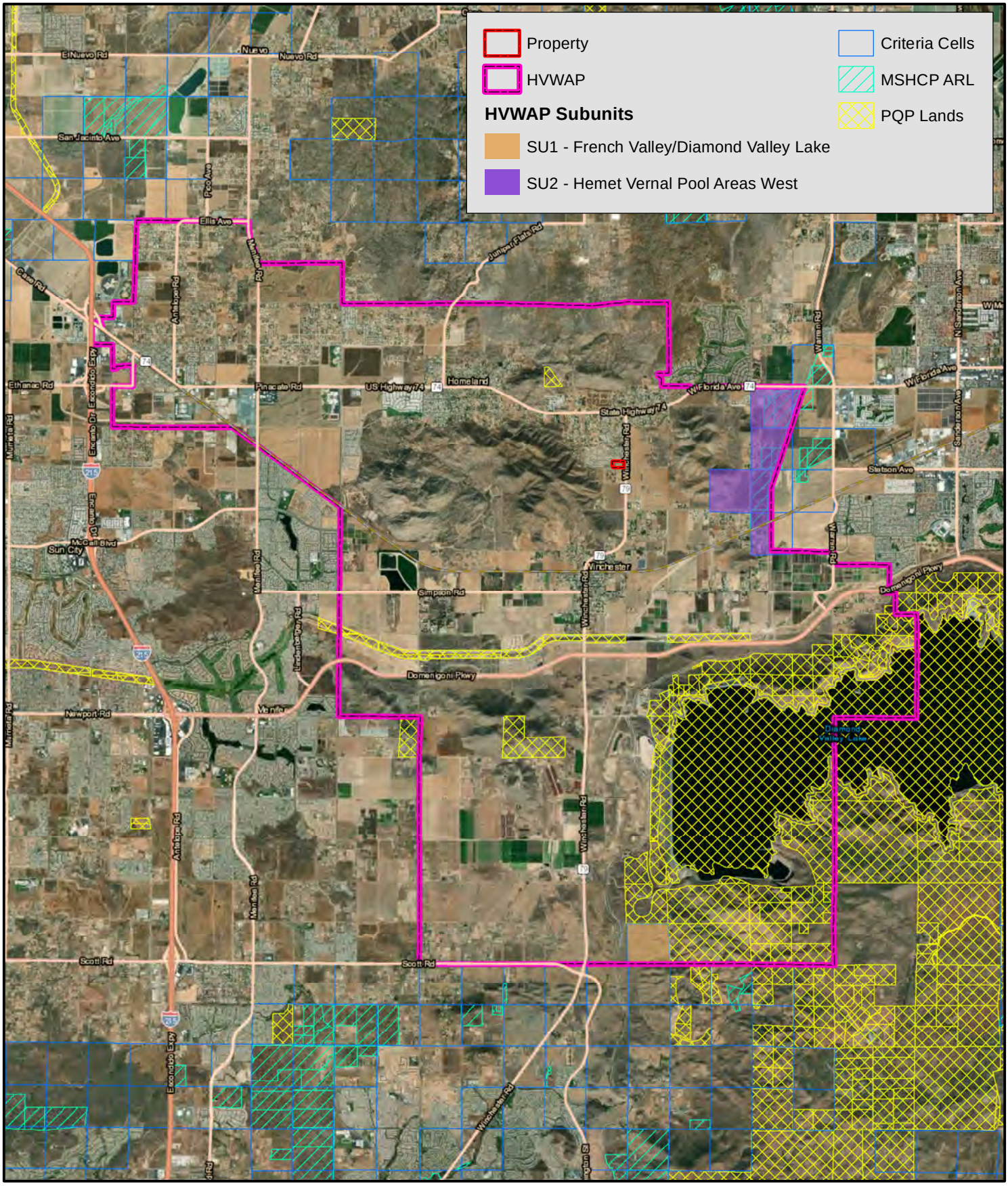
3.2 Public Quasi-Public Lands

The Project will not directly or indirectly impact PQP Lands. The nearest PQP Lands were owned by the Riverside County Flood Control and Water Conservation District (RCFC) located approximately 1.0-mile northwest of the Property.

4.0 VEGEATION MAPPING

Vegetation community classifications are typically conducted in accordance with the California Department of Fish and Wildlife's (CDFW) Vegetation Classification and Mapping Program (VegCAMP) *List of Vegetation Alliances and Associations* (Natural Communities List) (California Department of Fish and Wildlife, 2020) and *A Manual of California Vegetation.* Vegetation communities and land covers are mapped in the field utilizing both paper maps (i.e., aerial photographs and USGS topographic maps) and Collector for ArcGIS installed on a smart phone connected to a SXBlue II + GNSS submeter unit and antenna (Collector).

Some land cover types are not classified in the above-referenced sources (i.e., developed, disturbed, agriculture, etc.); therefore, each land cover is designated with a common name for the purpose of this report. A brief description of the vegetation communities/land covers present on the Project is presented below. Property and Project acreages are provided in *Table 1 – Land Covers* (Page 10). The distribution of vegetation communities and land covers on the Project are depicted on



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FIGURE 6
Harvest Valley/Winchester Area Plan and Subunits

DATE: August 7, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, Riverside County GIS Data, RCA

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Figure 7 – Vegetation/Land Covers (Page 12). A complete list of the flora observed on the Property is provided in Appendix B, and a complete list of the fauna observed on, above, or near the Property is provided in Appendix C.

- **Cattail**: A small patch of cattail (*Typha* sp.) was present in the northern end of the basin at the terminus of a culvert that receives runoff from the residential neighborhood. SBS was unable to make a definitive identification of the cattail species due to the absence of an inflorescence. This area was maintained for flood control purposes.
- **Developed**: Developed areas on the Property included the existing park facility in the southwest corner, and a concrete apron at the top of the eastern end of the detention basin. The concrete apron receives overflow from the basin during high-yield rain events and discharges into a concrete flood control channel along Hwy 79.
- **Disturbed/Ruderal**: Disturbed/Ruderal was the dominant land cover on the Property. The Property and adjacent residential neighborhood began construction in late 2005/early 2006, according to Google Earth. The area was graded, and as a result, the Property's substrates were compacted. Disturbed/Ruderal areas consisted of compacted soils with non-native annual grasses and forbs dominant. The area appeared routinely maintained through mowing making some definitive plant identifications difficult. This notwithstanding, dominants identified included ripgut grass (*Bromus diandrus*), red brome (*Bromus rubens*), wall barley (*Hordeum murinum*), long beaked filaree (*Erodium botrys*), and redstem filaree (*Erodium cicutarium*). Common goldfields (*Lasthenia gracilis*), a native annual, was uncommon and tidy tips (*Layia platyglossa*), another native annual, was scarce throughout the area in March 2021.

  The Disturbed/Ruderal area in the bed of the basin was also compacted and mowed, but plant species composition was different in areas that were routinely inundated. This area still supported primarily non-native plants with Spanish false fleabane (*Pulicaria paludosa*), curly dock (*Rumex crispus*), African umbrella sedge (*Cyperus involucratus*), and knotweed (*Polygonum aviculare*) dominant.

- **Willow Scrub:** A small patch of willow scrub, with red willow (*Salix laevigata*) dominant, was present in the southern end of the basin at the terminus of a culvert that receives runoff from Stetson Avenue. Black willow (*Salix gooddingii*) and mule fat (*Baccharis salicifolia* subsp. *salicifolia*) were also present. This area was maintained for flood control purposes.

Table 1 – Land Covers

COMMON NAME/VEGCAMP COMMUNITY	PROPERTY ACRES	PROJECT ACRES
Cattail VegCAMP Alliance Cattail marshes 52.050.00 No corresponding VegCAMP Association	0.005[1]	0
Developed No Corresponding VegCAMP Community	1.14	0.02

[1] Approximately 232 square feet

COMMON NAME/VEGCAMP COMMUNITY	PROPERTY ACRES	PROJECT ACRES
Disturbed/Ruderal VegCAMP Alliance Wild oats and annual brome grasslands 42.027.00 No corresponding VegCAMP Association	5.74	4.60
Willow Scrub VegCAMP Alliance Goodding's willow-red willow riparian woodland and forest 61.216.00 VegCAMP Association *Salix laevigata* 61.205.01	0.02	0
TOTAL	**6.91**	**4.62**

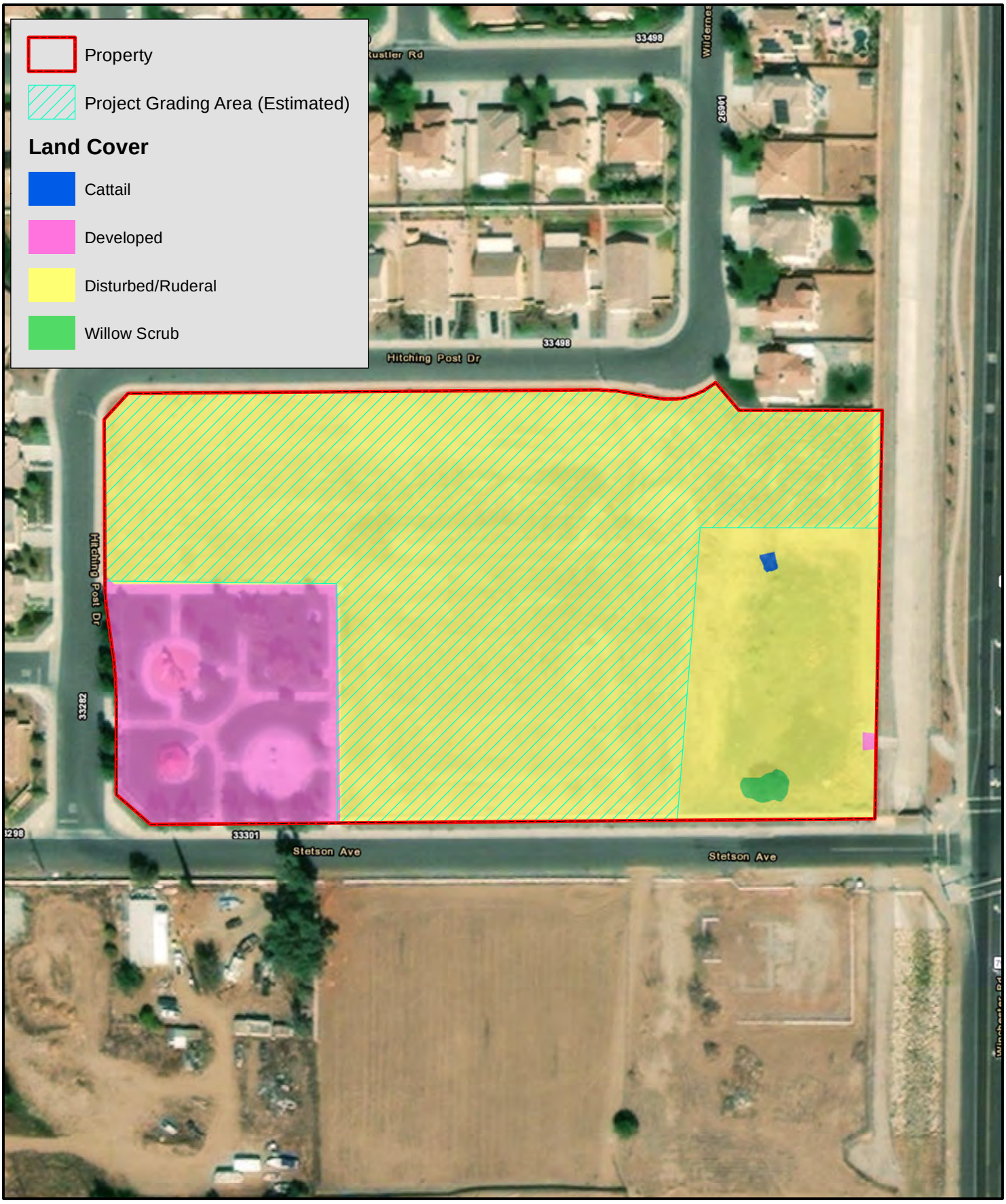
5.0 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2)

MSHCP Section 6.1.2 requires all subject properties under the jurisdiction of the MSHCP that are proposing a land use change/applying for a discretionary permit to conduct a MSHCP Section 6.1.2 assessment. This includes a habitat assessment for Riparian/Riverine Areas, Vernal Pools, three fairy shrimp species; 1) Riverside fairy shrimp (*Streptocephalus woottoni*) (RFS), 2) vernal pool fairy shrimp (*Branchinecta lynchi*) (VPFS), and 3) Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*) (SRPFS), and three bird species; 1) Least Bell's Vireo (*Vireo bellii pusillus*) (LBVI), 2) Southwestern Willow Flycatcher (*Empidonax traillii extimus*) (SWFL), and 3) Western Distinct Population Segment (DPS)[2] Yellow-billed Cuckoo (*Coccyzus americanus*) (YBCU). If the assessment identifies suitable habitat for any of the six-species above, and the proposed project design does not incorporate avoidance of the identified habitat, focused surveys would be required, and avoidance and minimization measures will be implemented in accordance with the MSHCP's species-specific objectives for these species.

The MSHCP specifically states for the MSHCP Section 6.1.2 resources described in the subsections below that:

> *"With the exception of wetlands created for the purpose of providing wetlands Habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions."*

[2] Distinct Population Segment: In addition to the listing and delisting of species and subspecies, the ESA [Endangered Species Act] allows the listing/delisting of Distinct Population Segments of vertebrate species (i.e., animals with backbones, mammals, birds, fish, reptiles, and amphibians). A Distinct Population Segment is a portion of a species' or subspecies' population or range. The Distinct Population Segment is described geographically instead of biologically, such as "all members of XYZ that occur north of 40 north latitude" (U. S. Fish and Wildlife Service - Pacific Region, 2019)



N

0 40 80 160 240 320 Feet

1 inch = 125 feet

FIGURE 7
Vegetation/Land Covers

DATE: August 9, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, Riverside County GIS Data, Valley-Wide, SBS

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5.1 Riparian/Riverine Areas

According to Section 6.1.2 of the MSHCP:

> "***Riparian/Riverine Areas*** *are lands which contain Habitat dominated by tress* [trees]*, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.*"

5.1.1 Methods

Office Review

Prior to initiating the field assessment, SBS conducted a review and analysis of the Winchester 7.5 Minute USGS California Quadrangle, historic aerial photography from Historic Aerials online (Historic Aerials by Netronline, 2021), and Google Earth, the U. S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), and the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey.

SBS also conducted a query of both the California Natural Diversity Database (CNDDB) and the USFWS Carlsbad Fish and Wildlife Office (CFWO) "Species Occurrence Data" GIS data to determine if the three-targeted fairy shrimp and/or three-targeted bird species listed above in Section 5.0 have been documented within five miles of the Property.

Riparian/Riverine Field Mapping Assessment

A potential Riparian/Riverine Area is walked and mapped with Collector, recording a vertex for every two feet traveled, as either a polyline and/or polygon depending on the habitat type (i.e., Riparian vs. Riverine) and the width of the feature[3]. The jurisdictional extent of a Riparian/Riverine Area is typically the dripline[4]of the riparian vegetation associated with the water feature if present, or the top of the streambank in the absence of riparian vegetation. Data collected while walking the potential Riparian/Riverine Area includes characteristics and functions such as hydrology, soils/substrates, dominant plant species/vegetation community, biological functions and values, presence/absence regarding the species listed in MSHCP Section 6.1.2, habitat suitability for LBVI, SWFL, YBCU, RFS, VPFS, SRPFS, and whether or not the feature contributes to downstream resources for MSHCP Section 6.1.2 species and/or MSHCP Conservation Areas.

Field Assessment Date and Weather Conditions

The MSHCP Section 6.1.2 assessment was conducted by biologist Tim Searl on March 23, 2021. Detailed survey information and conditions are presented in *Table 2 - MSHCP Section 6.1.2 Assessment Conditions* (Page 14).

5.1.2 Existing Conditions and Results

Historic Aerial Photography Analysis

Google Earth images from June 2003, 2006, and 2009 were downloaded and georeferenced for use in ArcGIS by SBS. A brief analysis of the Property and immediate surrounding area from each of those years is presented below.

[3] Any feature ≤ to three feet in width, or lacking a discernable bed and bank (i.e., erosional gully), is mapped as a polyline and given a mean width. The feature is then calculated and depicted in ArcGIS by utilizing the Buffer tool to represent the mean width.

[4] The area defined by the outermost circumference of a tree canopy where water drips from and onto the ground.

Table 2 – MSHCP Section 6.1.2 Assessment Conditions[5]

DATE	FIELD PERSONNEL	SURVEY TIME	TEMPERATURE	HUMIDITY	% CLOUD COVER	WIND SPEED	ANNUAL PRECIPITATION TO-DATE[6]
3/23/2021	Tim Searl	06:00-10:00	48-60	96-55	40-60	2-6	5.85

This portion of the document left blank intentionally

[5] Temperature (Degrees Fahrenheit), Humidity (Relative; %), and Wind Speed (mean miles per hour) were obtained in the field with a Kestrel 3500 weather meter.
[6] Annual Precipitation (July 01 to June 30) To-Date was obtained from the Riverside County Flood Control and Water Conservation District's Rain Gauge Map Website for Winchester – Station No. 248 (Riverside County Flood Control and Water Conservation District, 2021).

June 2003

In June 2003 the Property was a dryland agricultural field. The adjacent residential neighborhood had not been developed and appeared to be utilized for dryland agriculture. Two ephemeral washes were present in a north/south configuration and appeared to terminate at Stetson Avenue which was then an unimproved dirt road. *Figure 8 – June 2003 Aerial Photograph* (Page 16) depicts the conditions described above and the immediate surrounding area.

June 2006

In June 2006 the Property, adjacent residential neighborhood, and offsite flood control channel had been graded. The configuration of the detention basin on the Property is clearly depicted with the remaining areas appearing rough graded. *Figure 9 – June 2006 Aerial Photograph* (Page 17) depicts the conditions described above and the immediate surrounding area.

June 2009

By June 2009 the existing park facility in the southwest corner of the Property had been constructed. Surface streets in the adjacent neighborhood had been paved and some home lots had been constructed. The flood control channel along Hwy 79 had also been paved. According to *Figure 10 – June 2009 Aerial Photograph* (Page 18), the Property has been in its current configuration since 2009.

NWI

No drainage or wetland areas were mapped on or near the Property by the NWI (U. S. Fish and Wildlife Service, 2021).

Query Results

According to the CFWO and CNDDB, RFS and VPFS have been documented within five miles of the Property. A total of six records (RFS = 3; VPFS = 3) in duplicate locations from 1998, 2004, and 2005 were reported. The nearest documented record was of VPFS approximately 1.5-miles east/southeast of the Property in all three of the reported years. *Figure 11 – MSHCP Section 6.1.2 Targeted Species Query Results* (Page 19) depicts the query results.

Natural Resources Conservation Service Soils

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (United States Department of Agriculture Natural Resources Conservation Service, 2021), the Property consisted of four soil series as depicted by *Figure 12 – NRCS Soils* (Page 20). A brief description, as described by the NRCS, is presented below. Project acreages are provided in *Table 3 – NRCS Soils* (Page 21). No hydric, clay, or saline-alkali soils were present on the Project.

- **Greenfield sandy loam, 0 to 2 percent slopes (GyA)**: A well-drained alluvium soil derived from granite. The depth to the restrictive feature and the water table is more than 80-inches. The frequency of ponding is none.
- **Greenfield sandy loam, 2 to 8 percent slopes, eroded (GyC2)**: A well-drained alluvium soil derived from granite. The depth to the restrictive feature and the water table is more than 80-inches. The frequency of ponding is none.
- **Monserate sandy loam, 0 to 5 percent slopes (MmB)**: A well-drained alluvium soil derived from granite. The depth to the restrictive feature of duripan is typically 20 to 39-inches, and the to the water table is more than 80-inches. The frequency of ponding is none.
- **Monserate sandy loam, 5 to 8 percent slopes, eroded (MmC2)**: A well-drained alluvium soil derived from granite. The depth to the restrictive feature of duripan is typically 20 to 39-inches, and the to the water table is more than 80-inches. The frequency of ponding is none.



N

0 80 160 320 480 640

Feet

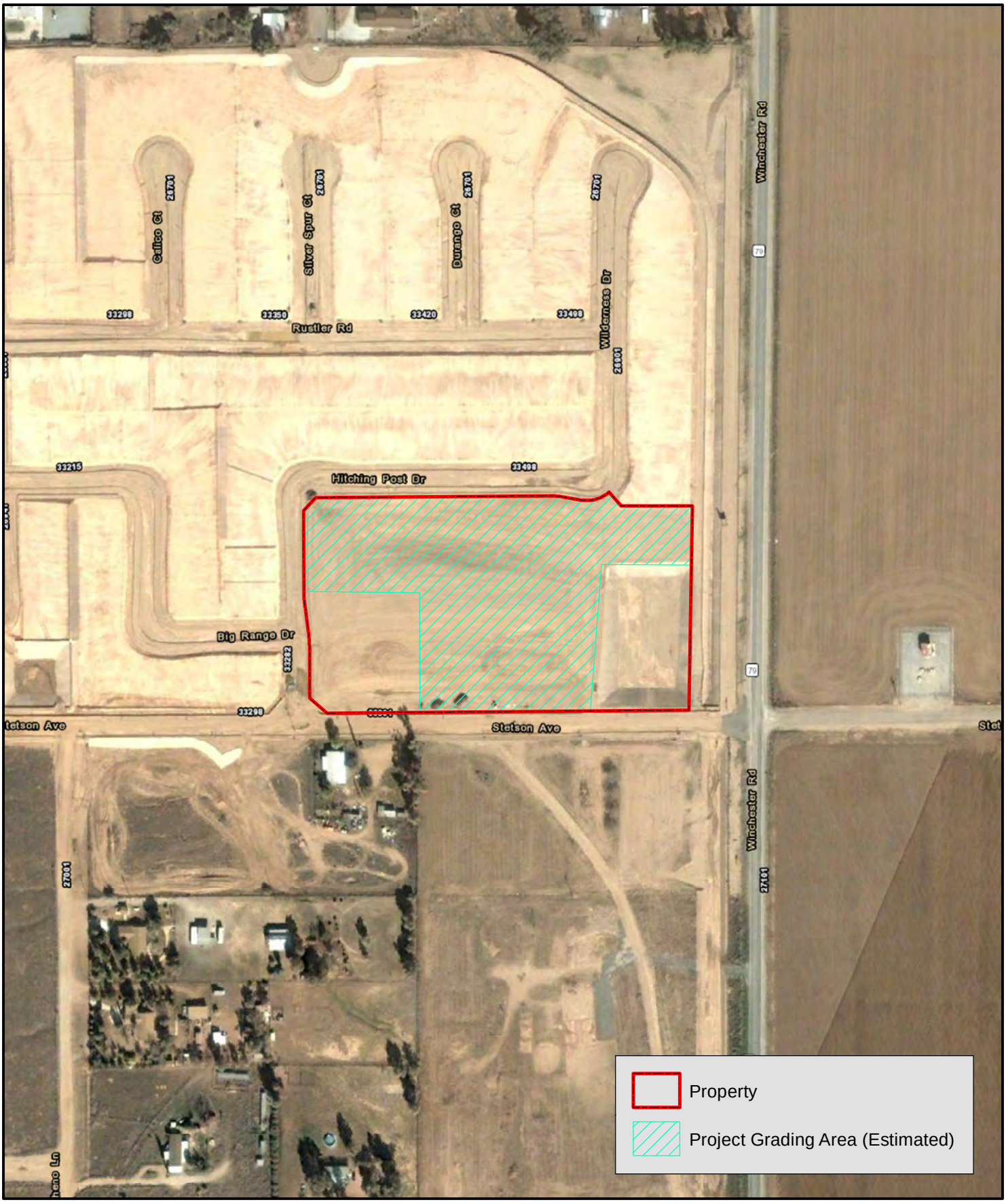
1 inch = 250 feet

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FIGURE 8
June 2003
Aerial Photograph

DATE: August 12, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: Riverside County GIS Data, Valley-Wide, Google Earth

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N

0 80 160 320 480 640 Feet

1 inch = 250 feet

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FIGURE 9
June 2006
Aerial Photograph

DATE: August 13, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Transportation, Riverside County GIS Data, Valley-Wide, Google Earth

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N

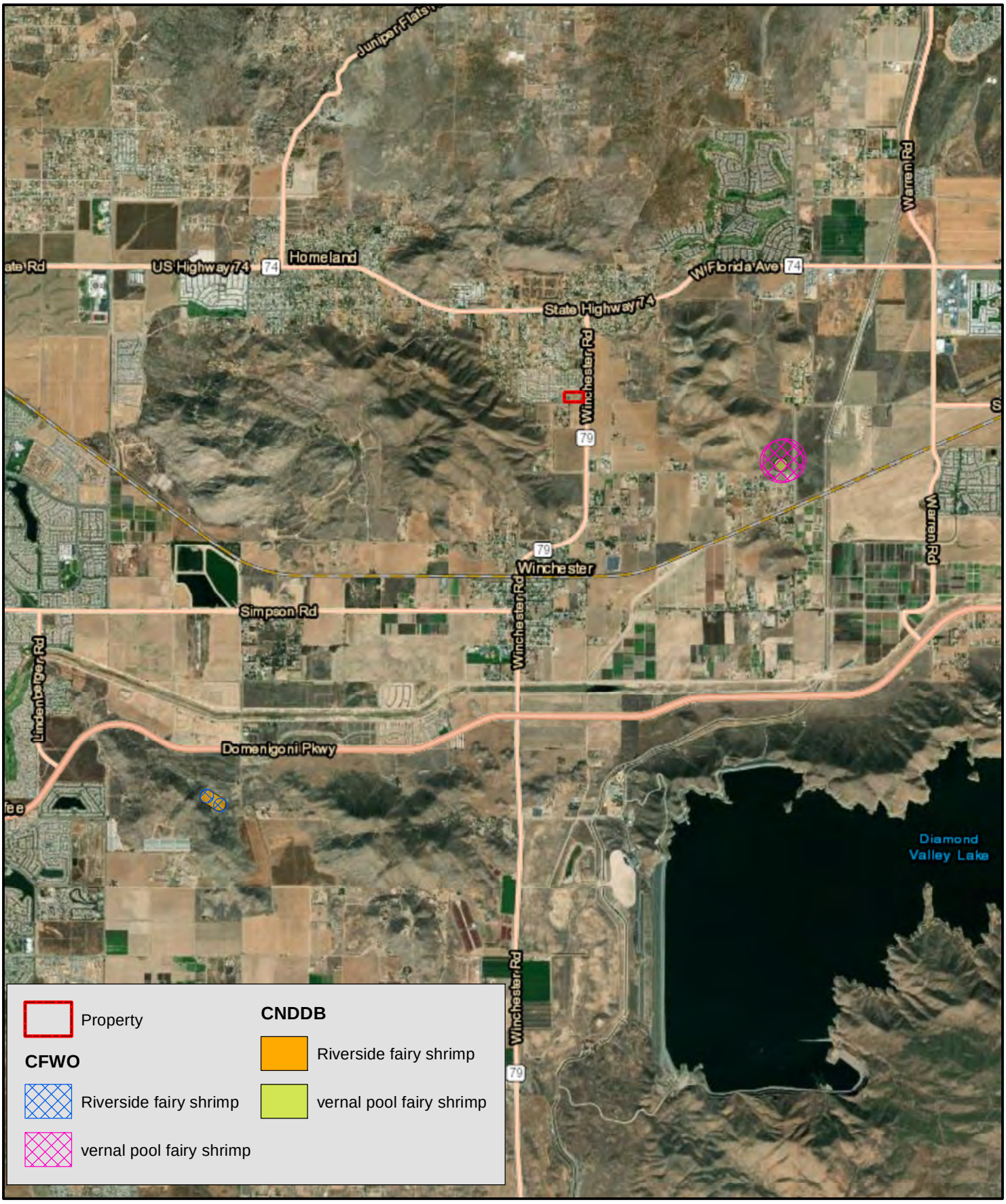
0 80 160 320 480 640 Feet

1 inch = 250 feet

FIGURE 10
June 2009
Aerial Photograph

DATE: August 13, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Transportation, Riverside County GIS Data, Valley-Wide, Google Earth

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N

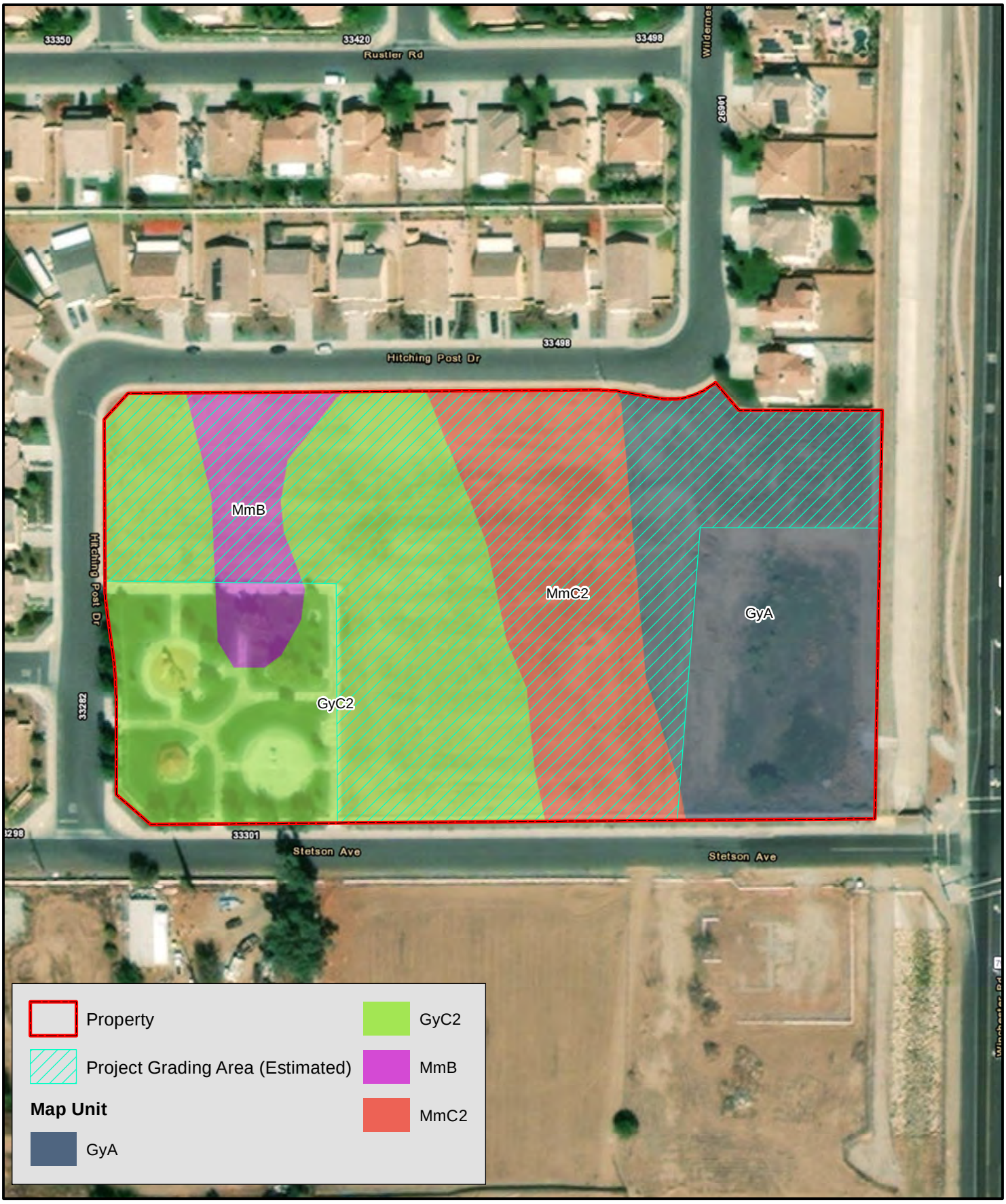
0 0.75 1.5 3 Miles

1:60,000

FIGURE 11
MSHCP Section 6.1.2
Targeted Species
Query Results

DATE: August 6, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, Riverside County GIS Data

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N

0 40 80 160 240 320 Feet

1 inch = 125 feet

FIGURE 12
NRCS Soils

DATE: August 13, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, Riverside County GIS Data, Valley-Wide, SBS, NRCS

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Table 3 – NRCS Soils

SOIL	PROPERTY ACRES	PROJECT ACRES
GyA	2.05	0.89
GyC2	3.00	2.01
MmB	0.51	0.37
MmC2	1.35	1.35
TOTAL	**6.91**	**4.62**

Riparian/Riverine Areas Results

No features were present on the Property that meet the criteria of a Riparian/Riverine Area.

5.1.3 Impacts

No Riparian/Riverine Area impacts will occur due to the lack of Riparian/Riverine Areas on the Project.

5.1.4 Mitigation

No Riparian/Riverine Area mitigation is required. The Project is consistent with the Riparian/Riverine Areas section of MSHCP Section 6.1.2.

5.2 Vernal Pools

According to Section 6.1.2 of the MSHCP:

> "***Vernal pools*** *are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records.*"

5.2.1 Methods

The perimeter of a potential Vernal Pool is walked and mapped by creating a polygon utilizing Collector. Data collected while walking each potential Vernal Pool feature includes plant species composition, presence/absence of standing water, evidence of potential ponding (i.e., cracked mud), functions and values, presence/absence regarding the species listed in MSHCP Section 6.1.2, and habitat suitability for RFS, VPFS, SRPFS.

5.2.2 Existing Conditions and Results

No evidence of naturally formed vernal pools was recorded on the Site. Vernal pools are generally naturally formed depressions in areas where a hard-underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the depressions. In the springtime, the water gradually evaporates away, until the pools become completely dry in the summer and fall. Vernal pools tend to have an impermeable layer that results in ponded water. The soil texture (i.e., the amount of sand, silt, and clay particles) typically contains higher amounts of fine silts and clays with lower percolation rates.

The human-created detention basin did not exhibit characteristics typical of a naturally formed vernal pool. The NRCS soil types that were historically present on the Property prior to grading activities were not those where naturally formed vernal pools typically develop (i.e., clays, heavy silts, saline-alkali). This notwithstanding, the detention basin's substrates, which likely consist of some type of artificial fill, were intentionally compacted during grading activities to hold, and retain water thus ponding does occur. Although the detention basin does not constitute a vernal pool, it could provide suitable habitat for fairy shrimp which is addressed below in Section 5.3.

5.2.3 Impacts

No Vernal Pool impacts will occur due to the lack of Vernal Pools on the Project.

5.2.4 Mitigation

No Vernal Pool mitigation is required. The Project is consistent with the Vernal Pools of MSHCP Section 6.1.2.

5.3 Fairy Shrimp

According to Section 6.1.2 of the MSHCP:

> "***Fairy Shrimp.*** *For Riverside, vernal pool and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified biologist.*"

5.3.1 Methods

The perimeter of a potential Fairy Shrimp Habitat feature is walked and mapped by creating a polygon utilizing Collector. Data collected while walking each potential Fairy Shrimp feature includes plant species composition, presence/absence of standing water, evidence of potential ponding (i.e., cracked mud), functions and values, presence/absence regarding the species listed in MSHCP Section 6.1.2, and habitat suitability for RFS, VPFS, SRPFS.

5.3.2 Existing Conditions and Results

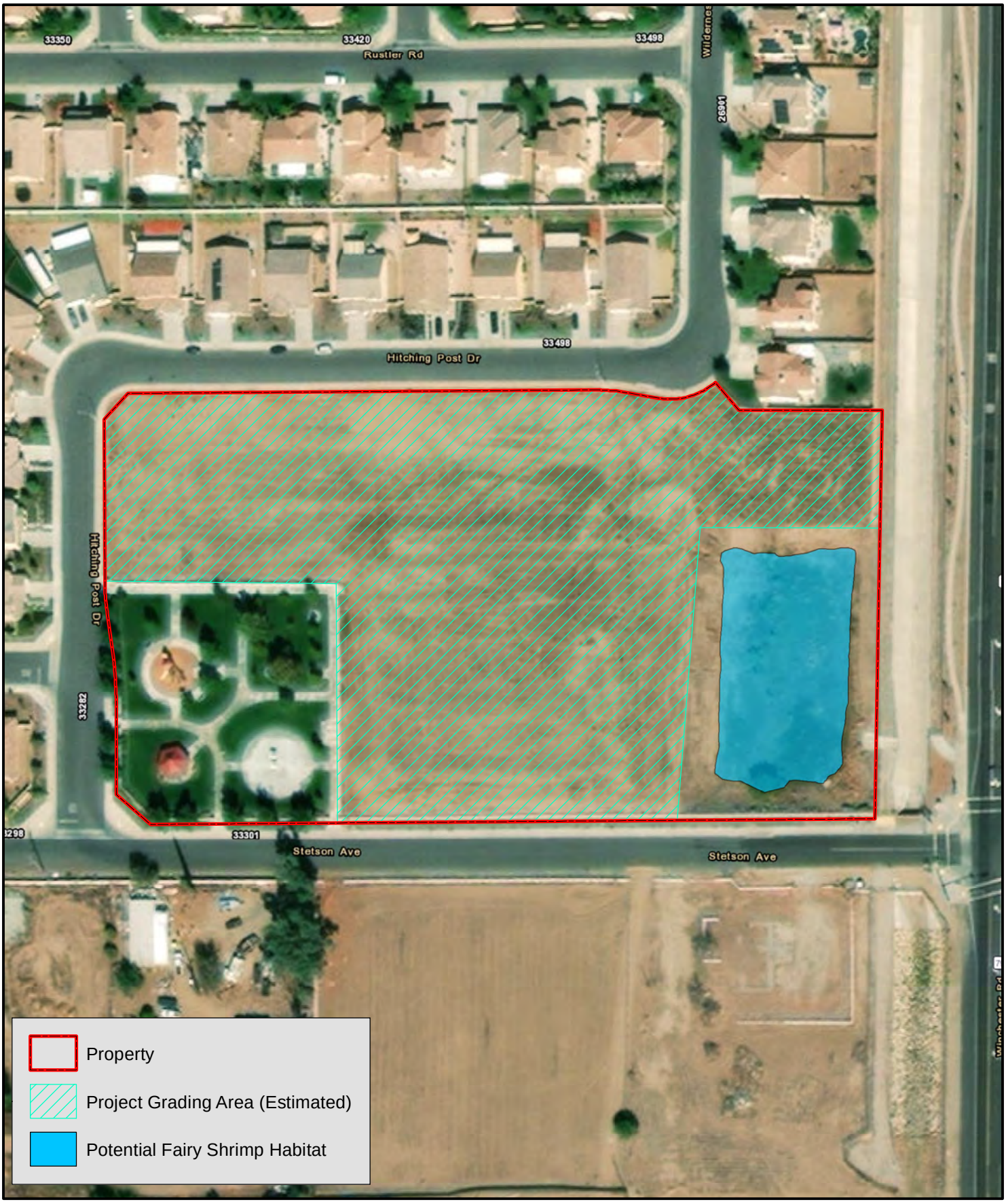
The bed of the detention basin, which totaled approximately 0.62-acre, provides potentially suitable habitat for RFS and VPFS. Though artificially created, the basin was constructed to address runoff and flood control concerns in an area where ephemeral washes were present prior to the grading of the Property and adjacent residential neighborhood (i.e., altering natural stream courses). The bed of the basin receives runoff via culverts located in the northern and southern ends. SBS observed shallow water in the basin on March 23, and though to a lesser extent, standing water was observed near the northern culvert on subsequent surveys conducted for BUOW on April 13, May 5, and June 17, 2021. *Figure 13 – Potential Fairy Shrimp Habitat* (Page 23) depicts the mapped extent of the bed of the basin.

5.3.3 Impacts

No Fairy Shrimp impacts will occur due to the Project avoiding the detention basin. The basin will remain in place as-is and continue to function as it does currently.

5.3.4 Mitigation

No Fairy Shrimp mitigation is required. The Project is consistent with the Fairy Shrimp of MSHCP Section 6.1.2.



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N

0 40 80 160 240 320 Feet

1 inch = 125 feet

FIGURE 13
Potential Fairy Shrimp Habitat

DATE: August 13, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, Riverside County GIS Data, Valley-Wide, SBS

PROJECT
Valley-Wide Recreation & Park District
Winchester Trails Park

5.4 Riparian Birds

5.4.1 Methods

Potentially suitable habitat for LBVI, SWFL, and/or YBCU are mapped in the field utilizing Collector. Habitat assessments are conducted by SWFL and YBCU permitted biologist Tim Searl (Permit Number: TE02351A-1).

A polygon is created in the field utilizing Collector while walking the perimeter of potentially suitable habitat for riparian birds. Data collected while assessing the potential habitat includes characteristics such as vegetation community, dominant plant species present, plant densities, and presence or absence of surface water.

5.4.2 Existing Conditions and Results

No suitable habitat for LBVI, SWFL, or YBCU was present on the Property. The willow scrub associated with the southern culvert was too limited in extent to support Riparian Birds.

5.4.3 Impacts

No impacts will occur to Riparian Birds due to the lack of Riparian Bird habitat on the Project.

5.4.4 Mitigation

No Riparian Bird mitigation is required. The Project is consistent with MSHCP Section 6.1.2.

6.0 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)

The Property was not located within a designated assessment area for Narrow Endemic Plant Species (NEPS).

7.0 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

The MSHCP covers 146 species of plants and animals of which 40 species have specific survey requirements (Dudek & Associates, Inc., 2003). 34 of the 40 species have an associated survey area map that designates areas where surveys may be required if suitable habitat is present (Dudek & Associates, Inc., 2003). According to the MSHCP:

> *"For locations with positive survey results, 90% of those portions of the property that provide for long-term conservation value for the identified species shall be avoided until it is demonstrated that conservation goals for the particular species are met. Avoidance shall not be considered to be Conservation contributing to Reserve Assembly unless the avoided populations are acquired and managed as Additional Reserve Lands."*

7.1 Criteria Area Plant Species

The Property was not located within a designated assessment area for Criteria Area Plant Species (CAPS).

7.2 Amphibians

The Property was not located within a designated assessment area for Amphibians.

7.3 Burrowing Owl

The Property was located within a designated assessment area for BUOW as depicted by *Figure 14 – BUOW Assessment Area* (Page 26). A description of the MSHCP Objectives and BUOW assessment process are provided below.

7.3.1 Background

MSHCP Objectives

The MSHCP objectives for BUOW include the following:

Objective 1

Include within the MSHCP Conservation Area at least 27,470 acres of suitable primary habitat for the burrowing owl including grasslands.

Objective 2

Include within the MSHCP Conservation Area at least 5 Core Areas and interconnecting linkages. Core areas may include the following: (1) Lake Skinner/Diamond Valley Lake area (Existing Core C plus Proposed Extension of Existing Cores 5, 6, 7; 29,060 acres); (2) playa west of Hemet (Proposed Noncontiguous Habitat Block 7; 1,250 acres); (3) San Jacinto Wildlife Area/Mystic Lake area including Lake Perris area (Existing Core H; 17,470 acres); (4) Lake Mathews (Existing Core C plus Proposed Extension of Existing Cores 2; 23,710 acres); and (5) along the Santa Ana River (9,670 acres). The Core Areas should support a combined total breeding population of approximately 120 burrowing owls with no fewer than five pairs in any one Core area.

Objective 3

Include within the MSHCP Conservation Area at least 22,120 acres of suitable secondary habitat for the burrowing owl including playas and vernal pools, and agriculture outside of the Core Areas identified above. Areas where additional suitable habitat could be conserved include west of the Jurupa Mountains, near Temescal Wash (i.e., vicinity of Alberhill), near Temecula Creek, within the Lakeview Mountains, Banning, the Badlands, Gavilan Hills, and Quail Valley.

Objective 4

Include within the MSHCP Conservation Area the known nesting locations of the burrowing owl at Lake Perris, Mystic Lake/San Jacinto Wildlife area, Lake Skinner area, the area around Diamond Valley Lake, playa west of Hemet, Lakeview Mountains, Lake Mathews/Estelle Mountain Reserve and Sycamore Canyon Regional Park.

Objective 5

Surveys for burrowing owl will be conducted as part of the project review process for public and private projects within the burrowing owl survey area where suitable habitat is present (see Burrowing Owl Survey Area Map, Figure 6-4 of the MSHCP, Volume I). The locations of this species determined as a result of survey efforts shall be conserved in accordance with procedures described within Section 6.3.2, MSHCP, Volume I and the guidance provided below:



N

0 80 160 320 480 640 Feet

1 inch = 250 feet

FIGURE 14
BUOW Assessment Area

DATE: August 14, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, Riverside County GIS Data, Valley-Wide, SBS

PROJECT
Valley-Wide Recreation & Park District
Winchester Trails Park

Burrowing owl surveys shall be conducted utilizing accepted protocols as follows. If burrowing owls are detected on the project site, then the action(s) taken will be as follows:

If the site is within the Criteria Area, then at least 90 percent of the area with long-term conservation value will be included in the MSHCP Conservation Area. Otherwise:

1. *If the site contains, or is part of an area supporting less than 35 acres of suitable habitat or the survey reveals that the site and the surrounding area supports fewer than 3 pairs of burrowing owls, then the on-site burrowing owls will be passively or actively relocated following accepted protocols.*

2. *If the site (including adjacent areas) supports three or more pairs of burrowing owls, supports greater than 35 acres of suitable habitat and is non-contiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite.*

The survey and conservation requirements stated in this objective will be eliminated when it is demonstrated that Objectives 1 – 4 have been met.

Objective 6

Pre-construction presence/absence surveys for burrowing owl within the survey area where suitable habitat is present will be conducted for all Covered Activities through the life of the permit. Surveys will be conducted within 30 days prior to disturbance. Take of active nests will be avoided. Passive relocation (use of one-way doors and collapse of burrows) will occur when owls are present outside the nesting season.

Objective 7

Translocation sites for the burrowing owl will be created in the MSHCP Conservation Area for the establishment of new colonies. Translocation sites will be identified, taking into consideration unoccupied habitat areas, presence of burrowing mammals to provide suitable burrow sites, existing colonies and effects to other Covered Species. Reserve Managers will consult with the Wildlife Agencies regarding site selection prior to translocation site development.

Life History

The BUOW is a priority 2 California Species of Special Concern (SSC) (Gervais, 2008), and is a Covered species under the MSHCP. In California, the BUOW is a year-round resident throughout much of the state (Gervais, 2008); however, migrants from other regions of western North America may augment resident lowland populations in winter (Gervais, 2008). Habitat for the BUOW primarily consists of open grasslands, but it also occurs in some human-altered landscapes such as agricultural environments (Gervais, 2008). Nest and roost burrows of the BUOW are most commonly dug by the California ground squirrel (*Spermophilus beecheyi*) (CGS) in California, but it will also utilize burrows and dens constructed by the American badger (*Taxidea taxus*), coyote (*Canis latrans*), and fox (*Urocyon cinereoargenteus* and *Vulpes* spp.) (Gervais, 2008).

The diet of the BUOW consists primarily of insects (i.e., centipedes, spiders, beetles, crickets, and grasshoppers) (Gervais, 2008), but it will also take small mammals, reptiles, birds, and carrion (i.e., dead flesh) (Polite, 1999). BUOW hunt from a perch, hover, hawk, dive, and hop after prey on the ground (Polite, 1999). Although insects dominate the BUOW diet numerically, recent research has suggested that

in California, rodent populations, particularly those of the California vole (*Microtus californicus*), may greatly influence BUOW survival and reproductive success (Gervais, 2008).

The BUOW breeding season is typically March through August with peak breeding activity occurring in April and May (Polite, 1999). Male BUOW give courtship displays and notes in front of the burrow (Polite, 1999). Clutch size is relatively large with a range of two to ten eggs and a mean of five to six eggs per clutch (Polite, 1999). Young BUOW emerge from the burrow at about two weeks old and can fly by about four weeks old (Polite, 1999).

Burrowing Owl Survey Protocols

Habitat assessments and focused surveys for BUOW in the MSHCP Plan Area are conducted in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (Environmental Programs Department, 2006) (BUOW Survey Instructions). The MSHCP references the California Burrowing Owl Consortium's *Burrowing Owl Survey Protocol and Mitigation Guidelines* (California Burrowing Owl Consortium, 1993), which was adopted by CDFW in 1995. On March 7, 2012, CDFW provided a revised *Staff Report on Burrowing Owl Mitigation* (California Department of Fish and Wildlife, 2012) that provides more current scientific methods. The survey methods described in the BUOW Survey Instructions and CDFW's revised staff report are similar. However, the BUOW Survey Instructions provide additional detail to ensure consistency with specific conservation requirements of the MSHCP. Surveys are conducted with an attempt to incorporate CDFW guidance, where appropriate such as the *Time of Day* specifically stating that surveys can be conducted until 10:00 AM. The BUOW Survey Instructions are detailed below.

The BUOW Survey Instructions describe Step I as follows:

> "*The first step in the assessment process is to walk the property to identify the presence of burrowing owl habitat on the project site. If habitat is found on the site, then walk a 150-meter (approximately 500 feet) buffer zone around the project boundary. If permission to access the buffer area cannot be obtained, do not trespass on adjacent property but visually inspect the adjacent habitat areas with binoculars and/or spotting scopes.*"

If a habitat assessment reveals that BUOW habitat occurs on a site, then, in the least, a *Step II Part A: Focused Burrow Surveys* and *Pre-construction Survey* are required. If BUOW habitat is not present, then no further surveys are required.

Step II surveys consist of two parts; *Part A: Focused Burrow Surveys* and *Part B: Focused Burrowing Owl Surveys*. All Step II surveys must be conducted during the BUOW breeding season (March 1 to August 31), between the hours of one hour before sunrise and two hours after sunrise, and/or two hours before sunset and one hour after sunset. Further, Step II surveys cannot be conducted within five days of rain, during rain, high winds (>20mph), dense fog, or temperatures exceeding 90 ºF.

Part A surveys are conducted to detect natural potential BUOW burrows (i.e., CGS burrows), suitable human-created structures (i.e., culverts), and/or occupied BUOW burrows. The BUOW Survey Instructions describe the methods for conducting a Part A survey and those are presented below.

> "*1. A systematic survey for burrows including burrowing owl sign should be conducted by walking through suitable habitat over the entire survey area (i.e., the project site and within 150 meters). Pedestrian survey transects need to be spaced to allow 100% visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approximately 100 ft.) and should be reduced to account for differences in*

terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys."

"*2. The location of all suitable burrowing owl habitat, potential owl burrows, burrowing owl sign, and any owls observed should be recorded and mapped, including GPS coordinates. If the survey area contains natural or man-made structures that could potentially support burrowing owls, or owls are observed during the burrow surveys, the systematic surveys should continue as prescribed in Part B. If no potential burrows are detected, no further surveys are required. A written report including photographs of the project site, location of burrowing owl habitat surveyed, location of transects, and burrow survey methods should be prepared. If the report indicates further surveys are not required, then the report should state the reason(s) why further focused burrowing owl surveys are not necessary.*"

Part B surveys are conducted on four separate field survey dates, and the first survey may be conducted concurrent with the Part A survey. These four focused surveys are conducted to determine the presence or absence of BUOW when those structures or features it inhabits, as described above, are present on a subject property. The BUOW Survey Instructions describe the methods for conducting Part B surveys and those are presented below.

"*1. Upon arrival at the survey area and prior to initiating the walking surveys, surveyors using binoculars and/or spotting scopes should scan all suitable habitat, location of mapped burrows, owl sign, and owls, including perch locations to ascertain owl presence. This is particularly important if access has not been granted for adjacent areas with suitable habitat.*"

"*2. A survey for owls and owl sign should then be conducted by walking through suitable habitat over the entire project site and within the adjacent 150 m (approx. 500 feet). These "pedestrian surveys" should follow transects (i.e., Survey transects that are spaced to allow 100% visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approx 100 feet.) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys.) It is important to minimize disturbance near occupied burrows during all seasons.*"

"*3. If access is not obtained, then the area adjacent to the project site shall also be surveyed using binoculars and/or spotting scopes to determine if owls are present in areas adjacent to project site. This 150-meter buffer zone is included to fully characterize the population. If the site is determined not to be occupied, no further surveys are required until 30 days prior to grading (see Pre-construction Surveys below).*"

After the completion of the proper surveys, a final report shall be submitted to the appropriate Lead Agency (i.e., City or County). The final report shall contain and discuss the necessary information (i.e., survey methods, transect widths, duration, conditions, results, etc.), and the appropriate maps (i.e., transect location map, burrow location map, etc.).

All subject properties containing suitable habitat and/or potential BUOW burrows must conduct a Pre-Construction Survey within 30 days prior to ground disturbance. This includes sites where BUOW were determined to be absent.

7.3.2 Methods

CNDDB Query

SBS conducted a query of the CNDDB GIS data to determine if BUOW have been reported to occur within five miles of the Property. The results of the query are presented in section 7.3.3 below.

Field Survey Date and Weather Conditions

The Step I: Habitat Assessment was conducted by biologist Tim Searl on December 7, 2020. The Step II surveys were conducted by Tim Searl on March 1, March 24, April 9, and May 8, 2021. Detailed survey information and conditions are presented in *Table 4 - BUOW Assessment Conditions* (Page 31).

Field Assessment

Step I: Habitat Assessment

Initially, the Site and surrounding area was observed from a vehicle while parked (i.e., windshield survey) to observe general habitat conditions. After performing the "windshield survey," a pedestrian survey of the Property was conducted. Transects were spaced at no more than approximately 20 to 40-feet to allow for 100% visual coverage. Field observations such as plant communities, vegetation height and density, topography, and soil suitability were noted. Habitat suitability for BUOW was classified as Not Suitable, Low[7], Moderate[8], or High[9].

Step II Part A: Focused Burrow Survey

Potential BUOW burrows (i.e., CGS burrows) and burrow surrogates (i.e., earthen berms, cement culverts, asphalt piles, rock piles, and openings underneath cement or asphalt pavement) detected as part of a focused burrow survey are mapped in the field utilizing Collector. Data collected for each burrow location includes type of burrow or burrow surrogate, a range of the number of burrows (i.e., single burrow vs. burrow complex), number of burrows, presence or absence of BUOW sign (i.e., feathers, wash, pellets, etc.), and pertinent ecological notes.

Step II Part B: Focused Burrowing Owl Surveys

If BUOW are detected the location is recorded using Collector. Additional data recorded includes the number of adults and juveniles, detection location (i.e., burrow site, perch, etc.), and any pertinent ecological and/or behavioral observations.

7.3.3 Existing Conditions and Results

CNDDB Query

According to the CNDDB, a total of 42 records of BUOW have been reported within five miles of the Property. 23 of the 42 records were designated as "Sensitive" by the CNDDB, and therefore, the specific location data for those records were suppressed and only the 7.5 Minute USGS Quad Name was given. The nearest documented occurrence of the remaining 19 records was approximately 0.22-mile north of the

[7] The habitat was structurally suitable; however, factors such as compacted soils, presence of trees, dense sage scrub, human activity (i.e., disking, historical use), domesticated dogs/cats, etc. have degraded the quality of the habitat.
[8] The habitat was structurally suitable with less of the above degrading factors, but still not "preferred" BUOW habitat.
[9] The habitat was open, treeless to nearly treeless, with low growing/sparse vegetation supporting high densities of fossorial mammals.

Table 4 – BUOW Assessment Conditions[10]

DATE	FIELD PERSONNEL	SURVEY TYPE[11]	SURVEY TIME	SUNRISE[12]	TEMPERATURE	HUMIDITY	CLOUD COVER	WIND SPEED	ANNUAL PRECIPITATION TO-DATE[13]	MOON PHASE
3/23/2021	Tim Searl	HA, BS, FS	06:00-12:00	06:48	48-60	96-55	40-60	2-6	5.85	Waxing Gibbous
4/13/2021	Tim Searl	BS, FS	06:00-10:30	06:20	53-55	96-91	100-100	2-4	5.89	Waxing Crescent
5/5/2021	Tim Searl	BS, FS	06:00-10:00	05:56	56-79	77-28	0-10	0-2	5.97	Waning Crescent
6/17/2021	Tim Searl	BS, FS	05:45-09:45	05:38	69-86	69-34	20-40	1-1	5.97	Waxing Crescent

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[10] Temperature (Degrees Fahrenheit), Humidity (Relative; %), and Wind Speed (mean miles per hour) were obtained in the field with a Kestrel 3500 weather meter
[11] HA: Habitat Assessment; BS: Burrow Survey; FS: Focused Survey
[12] Sunrise and Moon Phase was obtained from the Winchester, California Weather Underground Website (Weather Underground, 2021)
[13] Annual Precipitation (July 01 to June 30) To-Date was obtained from the Riverside County Flood Control and Water Conservation District's Rain Gauge Map Website for Winchester – Station No. 248 (Riverside County Flood Control and Water Conservation District, 2021).

Property in 2006. *Figure 15 - BUOW Query Results* (Page 33) depicts the locations for the 19 public records.

Assessment Results

The results of the BUOW assessment are detailed below. The assessment results (i.e., suitable habitat, potential owl burrows, transects) are depicted on *Figure 16 – BUOW Assessment Results* (Page 34). Representative photographs of the Site and surrounding area are presented in Appendix D.

Step I: Habitat Assessment

The MSHCP-designated BUOW Assessment Area on the Property plus the areas within 500-feet supported a total of 19.23-acres of suitable BUOW habitat. This included 11.59-acres of Low suitability, 5.91-acres of Moderate suitability, and 1.74-acres of High suitability habitat. The Property supported 4.04-acres of Low suitability and 1.74-acres of High suitability.

Low Suitability

Low suitability areas on the Property consisted of severely compacted soils with low-growing, mowed vegetation. This area, although structurally suitable, did not consist of any potential owl burrows, and it appeared that the substrates were compacted to the point that fossorial animals could not construct burrows.

The Low suitability areas east and southeast of the Property were comprised of active agricultural fields. These areas were routinely tilled and harvested, thus likely precluding BUOW from establishing nest or roost burrows.

Moderate Suitability

Moderate suitability habitat was present south and east of the Property. The area to the south was vacant and appeared to be abandoned rural residential lots. Vegetation was low to mid-height growing non-native grasses and forbs with a few scattered trees and shrubs. A flood control channel was present in the eastern end consisting of an earth bed with densely packed riprap along most of the banks.

The Moderate-quality habitat east of Hwy 79 consisted of a roadside ditch running along Stetson Avenue. This area appeared to be occasionally maintained for weed abatement.

High Suitability

The High-quality habitat in the eastern end of the Property consisted of the detention basin, including its banks, and the area north of the basin which was less compacted than the areas to the west. Numerous CGS burrows were present throughout these areas and were primarily associated with the detention basin.

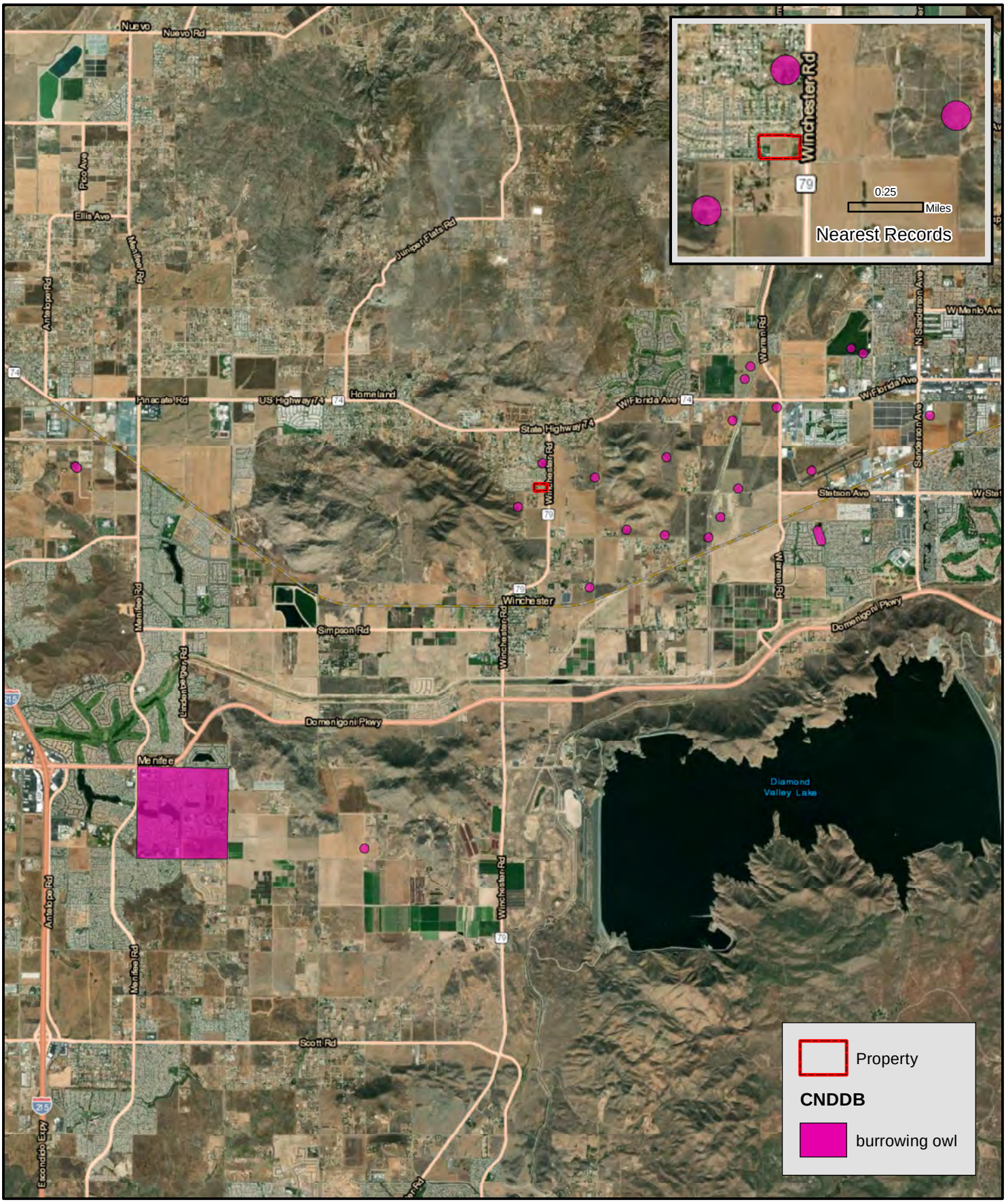
The Step II Part A: Focused Burrow Survey

The High-suitability habitat on the Property supported a large population of CGS. SBS detected 23 CGS burrow complexes that ranged from one to seven burrows with most complexes consisting of one to two burrows. No BUOW sign was detected at any of the burrow entrances. No burrow surrogates were detected.

The Moderate-quality habitat offsite to the south and east both supported CGS populations; however, individual burrows were not mapped or inspected for BUOW sign in these locations due to these areas being located on private property.

Step II Part B: Focused Burrowing Owl Surveys

No BUOW or BUOW sign was detected over the course of the protocol surveys. BUOW were absent within 500-feet of the Property at the time of this assessment.

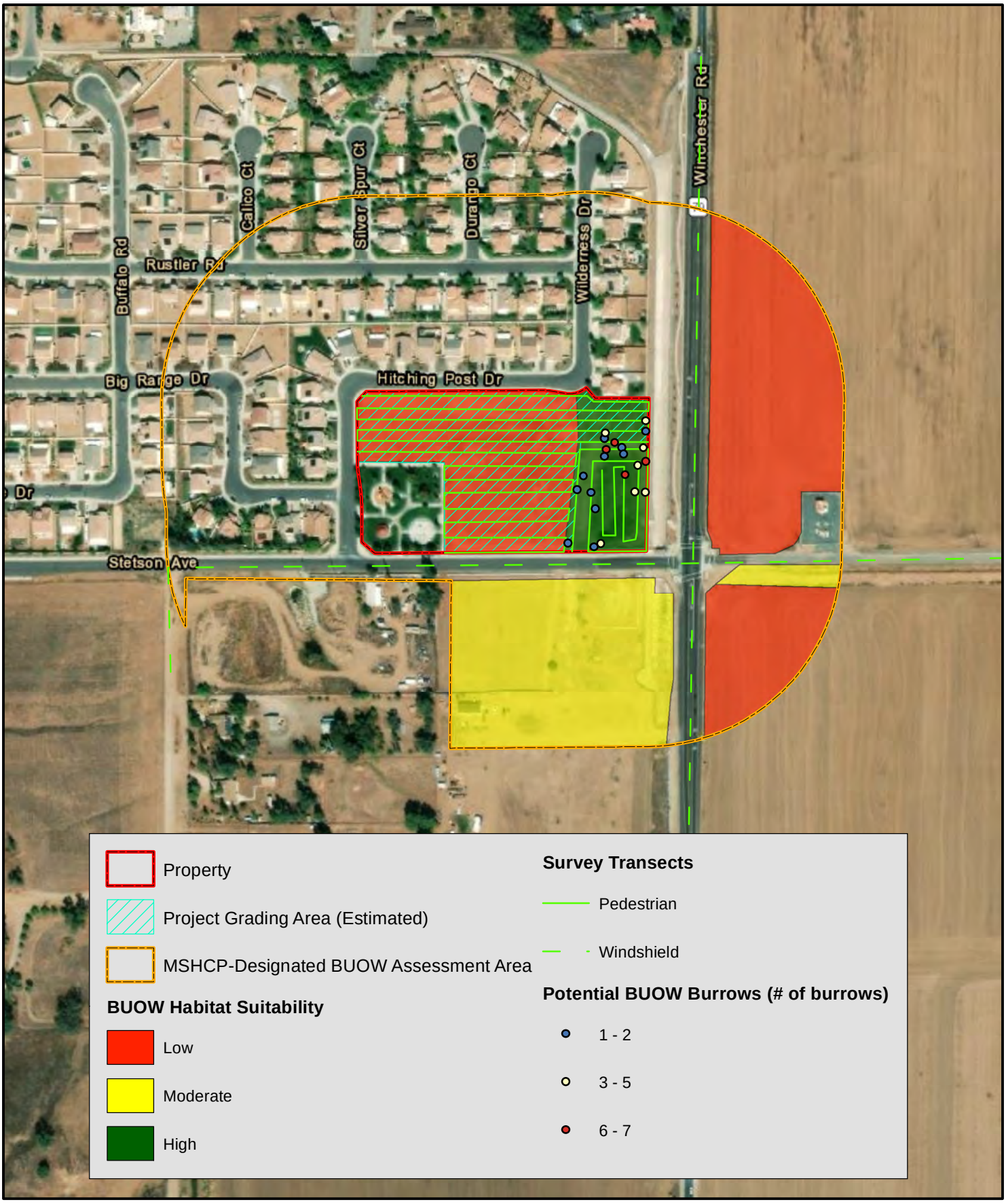


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FIGURE 15
BUOW Query Results

DATE: August 14, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, Riverside County GIS Data, CNDDB

PROJECT
Valley-Wide Recreation & Park District
Winchester Trails Park



N

0 125 250 500 750 1,000 Feet

1 inch = 333 feet

FIGURE 16
BUOW Assessment Results

DATE: August 16, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, Riverside County GIS Data, Valley-Wide, SBS

PROJECT
Valley-Wide Recreation & Park District
Winchester Trails Park

7.3.3 Impacts

No Project impacts will occur to BUOW with the implementation of the required 30-Day BUOW Pre-Construction Survey due to the presence of suitable habitat.

7.3.4 Mitigation

BUOW mitigation is not anticipated; however, if BUOW have colonized the Property prior to the initiation of project-related construction, the Applicant should immediately inform the Riverside County Environmental Programs Department (EPD), RCA and Wildlife Agencies (i.e., CDFW and USFWS), and would need to coordinate further with EPD, RCA and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance.

7.4 Mammals

The Property was not located within a designated assessment area for Mammals.

8.0 INFORMATION ON OTHER SPECIES

8.1 Delhi Sands Flower Loving Fly

The Property was not located within an area consisting of Delhi sands according to the NRCS.

8.2 Species Not Adequately Conserved

No species listed in MSHCP Table 9-3 (Dudek & Associates, Inc., 2003) were detected on or near the Site.

9.0 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4)

Section 6.1.4 of the MSHCP provides recommendations and guidelines to minimize potential "edge effects"[14] resulting from locating development projects near the MSHCP Reserve Assembly and other conservation areas. Measures, such as buffers and/or barriers, are typically put in place to control drainage, toxics, lighting, noise, and invasives.

The Property was not located within a Criteria Cell, and the nearest Criteria Cell was #3887 located approximately 1.0-mile east of the Site. The Project will not have adverse edge effects on the targeted ARL within Criteria Cell #3887. Compliance with MSHCP Section 6.1.4 is not required for the Project; however, the Project will still implement applicable BMPs.

10.0 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C)

The following BMPs, taken directly from the MSHCP (Dudek & Associates, Inc., 2003), should be implemented where applicable and to the extent feasible.

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating

[14] Edge effects are defined by the MSHCP as "Adverse direct and indirect effects to species, Habitats and Vegetation Communities along the natural urban/wildlands interface. May include predation by mesopredators (including native and non-native predators), invasion by exotic species, noise, lighting, urban runoff and other anthropogenic impacts (trampling of vegetation, trash and toxic materials dumping, etc.)."

the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.

2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.
7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS [USFWS], and CDFG [CDFW], RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
10. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion

fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

15. The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

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12.0 CERTIFICATION

I hereby certify that the statements furnished above, the associated figures, and the attached appendices present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signed: _____ Date: August 16, 2021

Tim Searl, Owner/Biologist, Searl Biological Services
Permit Number: TE02351A-1

FIGURE DISCLAIMER

Figures and data are to be used for reference purposes only. Map features are approximate and are not necessarily accurate to surveying or engineering standards. Tim Searl, SBS makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on any of the Figures associated with this report.

APPENDIX A

Site Plan





CURRENT CONDITION



PRIOR DESIGN

0 20' 40' 80' 120'

SCALE 1"= 40'-0"

NORTH

VALLEY-WIDE RECREATION & PARK DISTRICT

DEAN WETTER | Date:

APPROVAL BY VALLEYWIDE RECREATION & PARK DISTRICT IS FOR VALLEYWIDE MAINTENANCE AREAS ONLY.

MARK	BY	DATE	REVISIONS	APPR.	DATE
ENGINEER				COUNTY	

LAND DEVELOPMENT CONSULTING

VALLEY-WIDE RECREATION AND PARK DISTRICT

GoRecreation.org
AWARD WINNING CALIFORNIA PARKS

SCALE:	AS SHOWN
DESIGN:	
DRAWN:	JP
CHECKED:	
APPROVED:	
DATE:	02-04-21

TRACT 30351 I.P. No. xxxxx

WINCHESTER TRAILS PARK

CONCEPTUAL PARK PLAN

STETSON AVE AND HITCHING POST LANE, WINCHESTER, CA

SHEET NO. 1 ___ OF___ SHTS

FOR: VWRPD | W.O. | FILE NO.

APPENDIX B

Plants Observed

The plants listed below were detected on the Property during field surveys conducted on March 23, April 13, May 5, and June 17, 2021. Nomenclature follows *The Jepson Online Interchange*. Introduced species are indicated with an (I). Ornamental landscape plants are not included below.

COMMON NAME	SCIENTIFIC NAME
Borage Family	**Boraginaceae**
alkali heliotrope	*Heliotropium curassavicum* var. *oculatum*
common cryptantha	*Cryptantha intermedia*
common fiddleneck	*Amsinckia menziesii*
narrow-toothed pectocarya	*Pectocarya linearis* subsp. *ferocula*
Buckwheat Family	**Polygonaceae**
curly dock (I)	*Rumex crispus*
knotweed (I)	*Polygonum aviculare*
Cattail Family	**Typhaceae**
cattail	*Typha* sp.
Geranium Family	**Geraniaceae**
long beaked filaree (I)	*Erodium botrys*
redstem filaree (I)	*Erodium cicutarium*
Goosefoot Family	**Chenopodiaceae**
five-hooked bassia (I)	*Bassia hyssopifolia*
tumbleweed (I)	*Salsola tragus*
Grass Family	**Poaceae**
rabbitfoot grass (I)	*Polypogon monspeliensis*
rattail sixweeks grass (I)	*Festuca myuros*
red brome (I)	*Bromus rubens*
ripgut grass (I)	*Bromus diandrus*
wall barley (I)	*Hordeum murinum*
Legume Family	**Fabaceae**
American bird's-foot trefoil	*Acmispon americanus* var. *americanus*
California burclover (I)	*Medicago polymorpha*
Mallow Family	**Malvaceae**
cheeseweed (I)	*Malva parviflora*
Mustard Family	**Brassicaceae**
black mustard (I)	*Brassica nigra*
London rocket (I)	*Sisymbrium irio*
shepherd's purse (I)	*Capsella bursa-pastoris*
shortpod mustard (I)	*Hirschfeldia incana*
Myrsine Family	**Myrsinaceae**
Scarlet pimpernel (I)	*Lysimachia arvensis*
Pink Family	**Caryophyllaceae**
Boccone's sand-spurrey (I)	*Spergularia bocconi*
Sedge Family	**Cyperaceae**
African umbrella sedge (I)	*Cyperus involucratus*
Spurge Family	**Euphorbiaceae**
doveweed	*Croton setiger*
Sunflower Family	**Asteraceae**
Canada horseweed	*Erigeron canadensis*
common goldfields	*Lasthenia gracilis*
mule fat	*Baccharis salicifolia* subsp. *salicifolia*

COMMON NAME	SCIENTIFIC NAME
prickly lettuce (I)	*Lactuca serriola*
stinknet (I)	*Oncosiphon pilulifer*
telegraph weed	*Heterotheca grandiflora*
western ragweed	*Ambrosia psilostachya*
Tamarisk Family	**Tamaricaceae**
saltcedar (I)	*Tamarix ramosissima*
Willow Family	**Salicaceae**
black willow	*Salix gooddingii*
red willow	*Salix laevigata*

APPENDIX C

Wildlife Observed

Birds

The bird species listed below were detected visually or aurally either on, above, or near the Property during field surveys conducted on March 23, April 13, May 5, and June 17, 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Icteridae), Common Name, and Scientific Name follow the American Ornithological Society *Checklist of North and Middle American Birds*. Introduced species are indicated with an (I). The Location of each detection corresponds with the following:

P = Property
N = Near the Property; within a visual (i.e., with the use of 10 by 42 binoculars and a 20 by 60 spotting scope) and/or aural detection radius
OH = Flying overhead or above the Property

COMMON NAME	SCIENTIFIC NAME	LOCATION
Blackbirds	**Icteridae**	
Red-winged Blackbird	*Agelaius phoeniceus*	N
Western Meadowlark	*Sturnella neglecta*	N
Caracaras and Falcons	**Falconidae**	
American Kestrel	*Falco sparverius*	N
Crows and Jays	**Corvidae**	
Common Raven	*Corvus corax*	OH
Ducks, Geese, and Swans	**Anatidae**	
Mallard	*Anas platyrhynchos*	OH
Fringilline and Cardueline Finches and Allies	**Fringillidae**	
House Finch	*Haemorhous mexicanus*	P/N/OH
Lawrence's Goldfinch	*Spinus lawrencei*	N
Lesser Goldfinch	*Spinus psaltria*	N/OH
Hawks, Kites, Eagles, and Allies	**Accipitridae**	
Red-tailed Hawk	*Buteo jamaicensis*	N
Swainson's Hawk[1]	*Buteo swainsoni*	OH
Hummingbirds	**Trochilidae**	
Anna's Hummingbird	*Calypte anna*	N
Lapwings and Plovers	**Charadriidae**	
Killdeer	*Charadrius vociferus*	P/N
Mockingbirds and Thrashers	**Mimidae**	
Northern Mockingbird	*Mimus polyglottos*	P/N
New World Sparrows	**Passerellidae**	
Lark Sparrow	*Chondestes grammacus*	N
Savannah Sparrow	*Passerculus sandwichensis*	N
White-crowned Sparrow	*Zonotrichia leucophrys*	P/N
Old World Sparrows	**Passeridae**	
House Sparrow (I)	*Passer domesticus*	P/N
Pigeons and Doves	**Columbidae**	
Mourning Dove	*Zenaida macroura*	P/N/OH
Rock Pigeon (I)	*Columba livia*	OH
Starlings	**Sturnidae**	

[1] Listed as Threatened under the California Endangered Species Act. A flock of six were observed migrating overhead on April 13, 2021.

COMMON NAME	SCIENTIFIC NAME	LOCATION
European Starling (I)	*Sturnus vulgaris*	OH
Swallows	**Hirundinidae**	
Barn Swallow	*Hirundo rustica*	OH
Cliff Swallow	*Petrochelidon pyrrhonota*	OH
Thrushes	**Turdidae**	
Western Bluebird	*Sialia mexicana*	N
Tyrant Flycatchers	**Tyrannidae**	
Black Phoebe	*Sayornis nigricans*	P/N
Cassin's Kingbird	*Tyrannus vociferans*	P/N
Say's Phoebe	*Sayornis saya*	P/N
Wagtails and Pipits	**Motacillidae**	
American Pipit	*Anthus rubescens*	N

Mammals

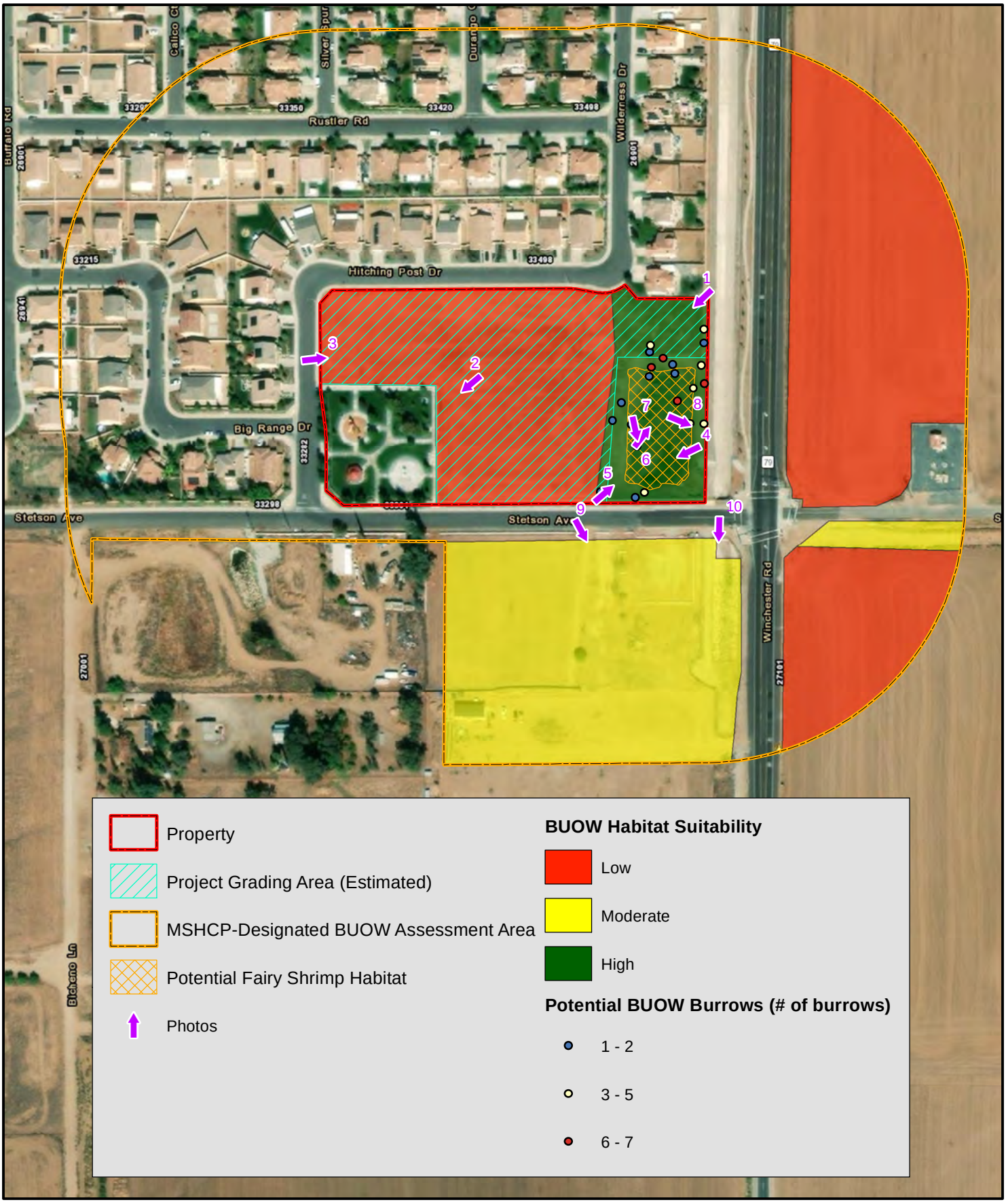
The mammals listed below were observed on or near the Site through sign and/or physical sightings during field surveys conducted on March 23, April 13, May 5, and June 17, 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Sciuridae), Common Name, and Scientific Name follow *Wilson & Reeder's Mammal Species of the World*. The Location of each detection corresponds with the following:

P = Property
N = Near the Property; within a visual (i.e., with the use of 10 by 42 binoculars and a 20 by 60 spotting scope) and/or aural detection radius

COMMON NAME	SCIENTIFIC NAME	LOCATION
Ground Squirrels	**Sciuridae**	
California ground squirrel	*Spermophilus beecheyi*	P/N
Hares and Rabbits	**Leporidae**	
black-tailed jackrabbit	*Lepus californicus*	N
desert cottontail	*Sylvilagus audubonii*	N
Pocket Gophers	**Geomyidae**	
Botta's pocket gopher	*Thomomys bottae*	P/N

APPENDIX D

Assessment Photographs



BSEARL BIOLOGICAL SERVICES

N

0 90 180 360 540 720 Feet

1 inch = 250 feet

Appendix D
Assessment Photos
Key Map

DATE: August 16, 2021
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (US Feet)
SOURCE: ESRI World Imagery, ESRI World Transportation, Riverside County GIS Data, Valley-Wide, SBS

PROJECT
Valley-Wide Recreation & Park District
Winchester Trails Park



PHOTOGRAPH 1: A southwesterly view of the Property from the northeast corner.



PHOTOGRAPH 2: A view of the compacted soils and vegetation on undeveloped areas outside of the detention basin. The existing park area is pictured in the background.



PHOTOGRAPH 3: Another view of the general conditions of the Property.



PHOTOGRAPH 4: Standing water present in the basin.



PHOTOGRAPH 5: A view of the detention basin from the southwest corner.



PHOTOGRAPH 6: On April 13 the basin contained less standing water. Saturated soils and cracked mud were present.



PHOTOGRAPH 7: A view of the willow scrub associated with a culvert that receives flows from Stetson Avenue.



PHOTOGRAPH 8: CGS burrows along the toe-of-slope in the basin bed. No BUOW or BUOW sign was detected.



PHOTOGRAPH 9: A view of the moderate-quality BUOW habitat south of the Property during the 1st BUOW survey.



PHOTOGRAPH 10: An offsite flood control channel. The southern area consisted of an earthen channel with riprap then transitioned to a concrete channel.

Appendix B
Phase I Cultural Resources Assessment

A PHASE I CULTURAL RESOURCES INVENTORY FOR THE WINCHESTER TRAILS PARK PROJECT Winchester, RIVERSIDE COUNTY, CALIFORNIA

by: Matthew L. Hyland, M.S. & Jay K. Sander, M.A.
Geovironment Consulting
630 W. 7th Street
San Jacinto, California 92583

for: Valley-Wide Recreation and Park District
901 W. Esplanade Ave.
San Jacinto, CA 92582

July 31, 2023

Keywords: USGS 7.5' *San Jacinto* Quadrangle, Riverside County, No cultural resources

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MANAGEMENT SUMMARY

Geovironment Consulting (Geovironment) performed a Phase Ia cultural resources study in support of the proposed extension to the Winchester Trails Park project. The approximately 6 acres project is located on the Northwest corner of Stetson Avenue and Winchester Road (California State Route 79) in the unincorporated area of Winchester (Figures 1 and 2). The project area is between the Parris and San Jacinto valleys, Riverside County, California. It is bounded by the intersection of Winchester Road to the east and Hitching Post Drive to the West. The property is surrounded by agricultural fields to the east and south. The project area lies within the U.S. Geological Survey (USGS) 7.5-minute *Winchester, California* topographic quadrangle.

Results of the review of the survey reports and site records provided by the Eastern Archaeological Information Center indicate that a total of nine previous cultural resource inventories or other archaeological investigations have been conducted within a one-mile radius of the project area. Of these reports, five (McCarthy 1983, Bowles 1987, Love et. al. 2001, Delu et. al. 2014, and Delu and Duff 2014) included portions of the current project area (Table 1). Thirteen additional reports provide overviews of the project vicinity. The records search also revealed that there are 18 previously recorded cultural resources within a one-mile radius of the project area. The nearest previously recorded resource is < 0.10 mile from the project area. There are no cultural resources within or adjacent to the project area. Therefore, no eligible or listed cultural resources will be impacted as a result of the proposed project.

INTRODUCTION

This report provides the results of the cultural resources inventory for the proposed Winchester Trails Park Project. The project is located on the Northwest corner of Stetson Avenue and Winchester Road (California State Route 79) in the city of Winchester (Figure 2) and is approximately 6 acres. State law, as set forth in the California Environmental Quality Act (CEQA) §21083.2(a) and §15064.5, requires that a cultural resources evaluation of the project area be completed before construction work can proceed.

In compliance with CEQA, Geovironment Consulting (Geovironment) was retained to perform a records/literature review of cultural resources known to exist on or near the project area, as well as a desktop study to identify any previously unrecorded cultural resources that may exist there. The cultural resources inventory presented herein consists of the results of the cultural resources record search/literature review and the results of the desktop study of the project area.

LOCATION AND ENVIRONMENTAL SETTING

The project area is between the Perris Valley to the west and San Jacinto Valley to the east. It is bounded by the Lakeview Mountains to the north and west, the Santa Rosa Mountains to the east and the Domenigoni Valley to the south. The property is about 1500 feet above mean sea level with very little topographic relief. Almost no native vegetation remains but it was likely comprised of coastal sage scrub. Soils in the project area are alluvial fine sandy loams derived from granitic parent material.

CULTURAL BACKGROUND

Prehistory

It is generally believed that human occupation of southern California dates back to at least 10,000 years before present (BP). Four cultural periods of prehistoric occupation of California during the Holocene Epoch (10,000 years BP to present) are discussed below: the Early Holocene Period, the Early Horizon Period, the Middle Horizon Period, and the Late Horizon Period. During the Early Holocene Period (10,000 to 8,000 years BP), hunters/gatherers utilized lucustrine and marshland settings for the varied and abundant resources found there. Milling-related artifacts are lacking from archaeological sites dating to this period, but the atlatl and dart are common. Hunting of large and small game occurred, as well as fishing. A few scattered permanent settlements were established near large water sources, but a nomadic lifestyle was more common (Erlandson 1994; Moratto 1984).

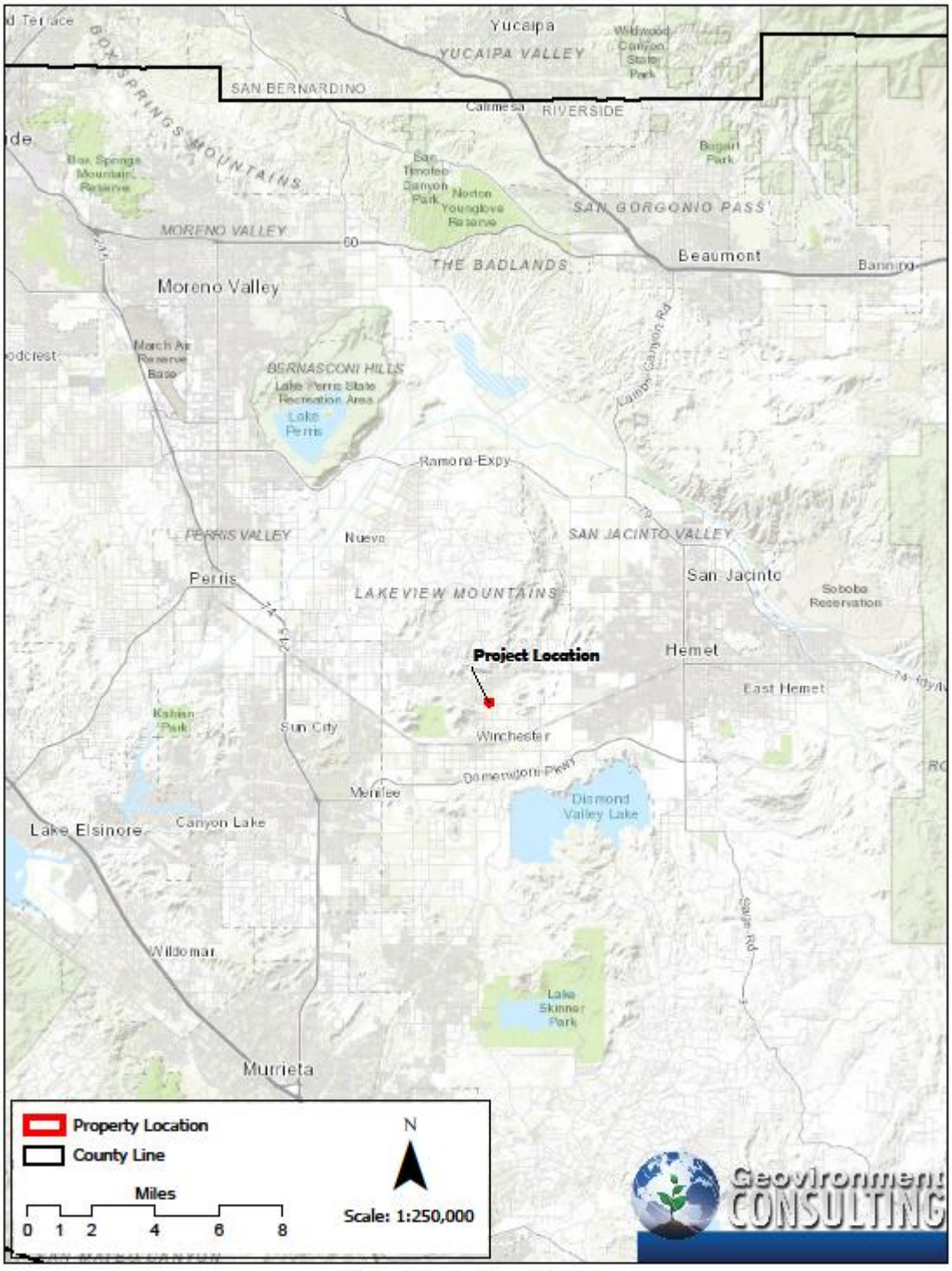


Figure 1 Project Area Vicinity



Figure 2 Project Area Location

Milling-related artifacts first appear in archaeological sites dating to the Early Horizon Period (8,000 to 4,000 years BP). Hunting and gathering continued during this period, but with greater reliance on vegetal foods. Mussels and oysters were a staple among coastal groups. This gave way to greater consumption of shellfish in the Middle Horizon Period (4,000 to 2,000 years BP). Use of bone artifacts appears to have increased during this period, and baked-earth steaming ovens were developed. Occupation of permanent or semi-permanent villages occurred in this period, as did reoccupation of seasonal sites. During the Late Horizon Period (2,000 years BP to the time of European Contact (around A.D. 1769), population densities were high and settlement in permanent villages increased. Regional subcultures also developed, each with its own geographical territory and language or dialect. These groups, bound by shared cultural traits, maintained a high degree of interaction, including trading extensively with one another (Erlandson 1994; Moratto 1984).

Ethnohistory

The project area is located in an area where the traditional territories of two Native American groups, the Luiseño and the Cahuilla, overlapped. Together, the homelands of these two Takic-speaking peoples extend from the Coachella Valley in the northeast to present-day Oceanside in the southwest, encompassing most of the western and central portions of what is now Riverside County. both groups are discussed below.

Luiseño. The term Luiseño was given by the Spanish to the native groups who were living in the area under influence of Mission San Luis Rey (Bean and Shipek 1978). The Luiseño lived in sedentary and autonomous village groups, each with specific subsistence territories encompassing hunting, collecting, and fishing areas. Villages were typically located in valley bottoms, along streams, or along coastal strands near mountain ranges where water was available and village defense was possible. Inland populations had access to fishing and gathering sites on the coast, which they used during the winter months (Bean and Shipek 1978).

Luiseño subsistence was centered around the gathering of acorns, seeds, greens, bulbs, roots, berries, and other vegetal foods. This was supplemented with hunting mammals such as deer, antelope, rabbit, woodrat, ground squirrels, and mice, as well as quail, doves, ducks, and other birds. Bands along the coast also exploited marine resources, such as sea mammals, fish, crustaceans, and mollusks. Inland, trout and other fish were taken from mountain streams (Bean and Shipek 1978).

Hunting was done both individually and by organized groups. Tool technology for food acquisition, storage, and preparation reflects the size and quantity of items procured. Small game was hunted with

the use of curved throwing sticks, nets, slings, or traps. Bows and arrows were used for hunting larger game. Dugout canoes, basketry fish traps, and shell hooks were used for near-shore ocean fishing. Coiled and twined baskets were made for food gathering, preparation, storing, and serving. Other items used for food processing included large shallow trays for winnowing chaff from grain, ceramic and basketry storage containers, manos and metates for grinding seeds, and ceramic jars for cooking (Bean and Shipek 1978).

Villages had hereditary chiefs who controlled religious, economic, and territorial activities (Bean and Shipek 1978; Boscana 1933). An advisory council of ritual specialists and shamans was consulted for environmental and other knowledge. large villages located along the coast or in inland valleys may have had more complex social and political structures than settlements controlling smaller territories (Bean and Shipek 1978; Strong 1929).

Most Luiseño villages contained a ceremonial structure enclosed by circular fencing located near the center of the village. Houses were semisubterranean and thatched with locally available brush, bark, or reeds. Earth-covered semisubterranean sweathouses were also common and were used for purification and curing rituals (Bean and Shipek 1978).

The Luiseño first came into contact with Europeans in 1769 when the expedition led by Gaspar de Portolá arrived in their territory. That same year, the San Diego Mission was established just to the south, followed by the San Juan Capistrano Mission in 1776 and the San Luis Rey Mission in 1798. Poor living conditions at the missions and introduced European diseases led to a rapid decline of the Luiseño population. Following the Mission Period (1769-1834), Luiseño Indians scattered throughout southern California. Some became serfs on the Mexican ranchos, others moved to newly founded pueblos established for them, some sought refuge among inland groups, and a few managed to acquire land grants. Later, many moved to or were forced onto reservations. Although many of their cultural traditions had been suppressed during the Mission Period, the Luiseño were successful at retaining their language and certain rituals and ceremonies. Starting in the 1970s, there was a revival of interest in the Luiseño language and classes were organized. Since then, traditional games, songs, and dances have been performed, traditional foods have been gathered and prepared, and traditional medicines and curing procedures have been practiced (Bean and Shipek 1978).

Cahuilla. Cahuilla territory was bounded on the north by the San Bernardino Mountains, on the east by the Orocopia Mountains, on the west by the Santa Ana River, the San Jacinto Plain and the eastern slope

of the Palomar Mountains, and on the south by Borrego Springs and the Chocolate Mountains (Bean 1978).

The diversity of the territory provided the Cahuilla with a variety of foods. It has been estimated that the Cahuilla exploited more than 500 native and non-native plants (Bean and Saubel 1972). Acorns, mesquite, screw beans, piñon nuts, and various types of cacti were used. A variety of seeds, wild fruits and berries, tubers, roots, and greens were also a part of the Cahuilla diet. A marginal agricultural existence provided corn, beans, squashes, and melons. Rabbits and small animals were also hunted to supplement the diet. During high stands of Ancient Lake Cahuilla, fish, migratory birds, and marshland vegetation were also taken for sustenance and utilitarian purposes (Bean 1978).

Structures within permanent villages ranged from small brush shelters to dome-shaped or rectangular dwellings. Villages were situated near water sources, in the canyons near springs, or on alluvial fans at man-made walk-in wells (Bean 1972). Mortuary practices entailed cremation of the dead. Upon a person's death, the body was bound or put inside a net and then taken to a place where the body would be cremated. Secondary interments also occurred. A mourning ceremony took place about a year after a person's death. During this ceremony, an image of the deceased was burned along with other goods (Lando and Modesto 1977; Strong 1929).

Precontact Cahuilla population has been estimated as low as 2,500 to as high as 10,000. At the time of first contact with Europeans, around 1774, the Cahuilla numbered approximately 6,000. Although they were the first to come into contact with the Cahuilla, the Spanish had little to do with those of the desert region. Some of the Cahuilla who lived in the plains and valleys west of the desert and mountains, however, were missionized through the asistencia located near present day San Bernardino. Cahuilla political, economic, and religious autonomy was maintained until 1877 when the United States government established Indian reservations in the region. Protestant missionaries came into the area to convert and civilize the Native American population. During this era, traditional cultural practices, such as cremation of the dead, were prohibited. Today, the Cahuilla reside on eight separate reservations in southern California, located from Banning in the north to Warner Springs in the south and from Hemet in the west to Thermal in the east (Bean 1978).

History

The first significant European settlement of California began during the Spanish Period (1769 to 1821) when 21 missions and 4 presidios were established between San Diego and Sonoma. Although located primarily along the coast, the missions dominated economic and political life over the majority of the California region during this period. The purpose of the missions was primarily Indian control, along with economic support to the presidios, forced assimilation of the Indians to Hispanic society, and conversion of the native population to Spanish Catholicism (Castillo 1978; Cleland 1941).

The Mexican Period (1821 to 1848) began with the success of the Mexican Revolution in 1821, but changes to the mission system were slow to follow. When secularization of the missions occurred in the 1830s, the vast land holdings of the missions in California were divided into large land grants called ranchos. The Mexican government granted ranchos throughout California to Spanish and Hispanic soldiers and settlers (Castillo 1978).

In 1848, the Treaty of Guadalupe Hidalgo ended the Mexican-American War and marked the beginning of the American Period (1848 to present). The discovery of gold the same year initiated the 1849 California Gold Rush, bringing thousands of miners and settlers to California, most of who settled in the north. For those settlers who chose to come to southern California, much of their economic prosperity was fueled by cattle ranching rather than by gold. This prosperity, however, came to a halt in the 1860s as a result of severe floods and droughts, which put many ranchos into bankruptcy (Castillo 1978; Cleland 1941).

The present city of San Jacinto is one mile north of the original settlement. It was created by the San Jacinto Land Association after purchasing 18,000 acres from the family that owned the original (San Jacinto) Rancho. The Post Office was moved from the original settlement in 1885 and by 1888 the town had almost 2,000 inhabitants who welcomed the newly completed San Jacinto Branch railroad from Perris (Gunther 1984). Today San Jacinto remains mainly rural in character with agriculture being the primary economic force. Tourism also contributes to the local economy due to the presence of natural hot springs and the Soboba Indian Casino.

METHODOLOGY

Background Record Search Methods

A record search/literature review was conducted on September 14, 2021 at the Easter Information Center, located at the University of California, Riverside. The purpose of this review was to access any existing cultural resources survey reports, archaeological site records, and historic maps to evaluate whether previously documented prehistoric or historic archaeological sites, architectural resources, cultural landscapes, or ethnic resources exist within or near the project area. The record search/literature review was also conducted to evaluate whether any historic properties listed on or determined eligible for listing on the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR) exist within the project area.

Desktop Study Methods

While a rigorous research design is not a critical component to a Phase I archaeological survey, a basic understanding of the history of a property can provide insight into the types of historic or archaeological remains that may exist. Geovironment used the results of the record search to develop a rudimentary research design to guide the survey. In addition, experience with conducting similar Perris Valley and San Jacinto Valley surveys suggested that it was highly unlikely that previously unrecorded historic refuse would be located on the property which could be of sufficient age to merit documentation. Geovironment archaeologist, Jay Sander, conducted a desktop study of the project area on September 16, 2021.

Native American Coordination Methods

Matthew Hyland sent a letter to the Native American Heritage Commission (NAHC) notifying them of the proposed project activities. The NAHC was also asked to conduct a search of the Sacred Lands File and to make a recommendation as to whether any local Native American groups should be contacted regarding their concerns about potential impacts to cultural resources resulting from implementation of the proposed project (Appendix A).

Archaeological Field Survey Methods

On September 21, 2021, Archaeologist, Matthew Hyland, conducted an intensive pedestrian survey of the approximately 6 acres project area that is slated for construction. The surveyor walked east-west transects perpendicular to Hitching Post Drive spaced 20 meters apart in order to ensure overlapping fields of view. Notes and photos were taken on the environmental setting and disturbances.

RESULTS

Records Search Results

Results of the review of the survey reports and site records provided by the Eastern Information Center indicate that a total of nine previous cultural resource inventories or other archaeological investigations have been conducted within a one-mile radius of the project area. Of these reports, five (McCarthy 1983, Bowles 1987, Love et. al. 2001, Delu et. al. 2014, and Delu and Duff 2014) included portions of the current project area (Table 1). Thirteen additional reports provide overviews of the project vicinity. The records search also revealed that there are 18 previously recorded cultural resources within a one-mile radius of the project area. The nearest site is 33-020531, the site is described as a well-maintained, asphalt-paved, historical-period road and is located 0.10 mile east of the project area. There are no previously recorded cultural resources within or adjacent to the project area. Therefore, no eligible or listed cultural resources will be impacted as a result of the proposed project.

Desktop Study Results

Geovironment Consulting archaeologist Jay Sander studied photographs of the project area which revealed that the entire project area has been mechanically graded and disked in the past. This precludes the possibility of finding any intact cultural resources within the project area.

Table 1. Previous Investigations within One-Mile of the Project Area

Report No.	Author	Date	Cultural Resources Found
RI-00002	Rogers, Malcolm J.	1953	No
RI-00026	Akin, Margie	1971	No
RI-00027	Ambrose, T., N. Carter	1974	No
RI-00130	Clough, Helen	1974	Yes
RI-00534	Lowell, John Bean ed., and Sylvia Brakke ed.	1979	Yes
RI-00964	Quinn, Harry M.	1978	No
RI-00988	Barker, James P., Sarah H. Schlanger	1974	Yes
RI-00989	Wildesen, Leslie E.	1974	No
RI-00990	Barker, James P.	1974	Yes
RI-01660	McCarthy, Daniel F.	1983	Yes
RI-02168	Bowles, Larry L.	1987	No
RI-02344	Drover, Christopher E., and Daniel McCarthy	1988	No
RI-02942	Scientific Resource Surveys Inc.	1988	No
RI-03490	Mcintosh, Beverly Childs	1991	No
RI-03604	Jones, Carleton S.	1992	No
RI-04762	Barker, Leo R. and Ann Huston, Editors	1990	No
RI-05024	McKenna et al.	2004	No
RI-05509	Love, Bruce, BAI Tang, Daniel Ballester, and Melissa Hernandez	2001	No
RI-08946	Tang, Bai “Tom”, Michael Hogan, Mariam Dahdul, and Daniel Ballester	2013	Yes
RI-08990	Tang, Bai “Tom”, Michael Hogan, Mariam Dahdul, and Daniel Ballester	2013	Yes
RI-09689	Delu, Antonina M., John J. Ebby, and Gabrielle Duff	2014	Yes
RI-09690	Delu, Antonina M. and Gabrelle Duff	2014	No

Table 2. Previous Recorded Cultural Resources within One-Mile of the Project Area

Resource No.	Description	Approximate Distance from Current Project Area (Miles)
P-33-002610	Bedrock-milling feature	0.41
P-33-002611	Bedrock-milling feature	0.37
P-33-002612	Bedrock-milling feature	0.49
P-33-015739	Historic residence	0.23
P-33-020530	Historic Period Road	0.32
P-33-020531	Historic Period Road	0.01
P-33-020532	Historic Period Road	0.41
P-33-020539	Historic Period Road	0.52
P-33-020716	Historic Period Road	0.47
P-33-021505	Bedrock-milling feature	0.51
P-33-021508	Bedrock-milling feature	0.49
P-33-021509	Bedrock-milling feature	0.48
P-33-021511	Bedrock-milling feature	0.41
P-33-021512	Bedrock-milling feature	0.38
P-33-021513	Bedrock-milling feature	0.51
P-33-021747	Bedrock-milling feature	0.45
P-33-021835	Bedrock-milling feature	0.44
P-33-021836	Bedrock-milling feature	0.35

Native American Coordination Results

The search of the Sacred Lands File of the NAHC did indicate the presence of Native American cultural resources in the vicinity of the project location. The NAHC asked Geovironment to contact the Pechanga Band of Luiseno Indians for further information. The NAHC also sent a list of tribes, organizations, and/or individuals with traditional tires to the area to contact. All NAHC correspondence is provided in Appendix A.

Archaeological Field Survey Results

No archaeological sites or isolates were found within or adjacent to the project area. It was noted that the entire area has been heavily disturbed through weed abatement activities which probably included mechanical leveling of the ground.

CONCLUSIONS AND RECOMMENDATIONS

Results of the review of the survey reports and site records provided by the Eastern Information Center indicate that a total of nine previous cultural resource inventories or other archaeological investigations have been conducted within a one-mile radius of the project area of these reports five (McCarthy 1983, Bowles 1987, Love et. al. 2001, Delu et. al. 2014, and Delu and Duff 2014) included portions of the current project area (Table 1). Thirteen additional reports provide overviews of the project vicinity. The records search also revealed that there are eighteen previously recorded cultural resources within a one-mile radius of the project area. The nearest site is 33-020531 and located 0.10 mile east of the project area. There are no previously recorded cultural resources within or adjacent to the project area; therefore, no eligible or listed cultural resources will be impacted as a result of the proposed project. The entire project area has disturbed through grading and disking; thus, any construction activities would not constitute a significant impact to any historical resources under CEQA; therefore, no further cultural resources work is recommended.

Any grading permit or contract should contain a clause regarding the appropriate actions to take in the event that any subsurface archaeological deposits are unearthed during ground-disturbing construction activities. In that event, all activities must be suspended in the vicinity of the find until the deposit(s) are recorded and evaluated by a qualified archaeologist. If human remains of any kind are found, all activities must cease immediately and the Riverside County Coroner, and a qualified archaeologist must be notified. If the coroner determines the remains to be of Native American origin, he or she will notify the Native American Heritage Commission (NAHC). The NAHC will then identify the most likely descendants to be consulted regarding treatment and/or repatriation of the remains.

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2012 *San Jacinto Master Drainage Plan Line C, Stage 2, C-4, C-5, and Line B. In the Cities of San Jacinto and Hemet, Riverside County, California.* CRM TECH, Colton. Unpublished manuscript (RI-8735) on file at the Eastern Information Center, University of California, Riverside.

Appendix A

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Winchester Trails Park

County: Riverside

USGS Quadrangle Name: U.S. Geological Survey (USGS) 7.5-minute Winchester

Township: 5S **Range:** 2W **Section(s):** 15

Company/Firm/Agency: Geovironment Consulting

Street Address: 630 W 7th St

City: San Jacinto **Zip:** 92583

Phone: c: 909.557.8710 o: 951.292.5129

Fax:

Email: mhyland@geovironment.com

Project Description:

The project is located the Northwest corner of Stetson Avenue and Winchester Road (California State Route 79) in the unincorporated area of Winchester CA. The project area is between Parris Valley and San Jacinto Valley, Riverside County, California. It is bounded by the intersection of Winchester Road to the east, and Hitching Post Drive to the West, the property is surrounded by agricultural fields to the east and south.
The project proposes to develop the land into a park. The park intends to have a parking lot, tennis and pickelball courts, one grass field, an exercise station area, restrooms, shaded picnic area, bench seating, walking path, and a flagpole.

Appendix C
Valley-Wide Recreation & Park District Landscape Plans for "Winchester Trails" Park Site – Phase One Tract 30351 County of Riverside

VALLEY-WIDE RECREATION & PARK DISTRICT
LANDSCAPE PLANS
for
"WINCHESTER TRAILS" PARK SITE - PHASE ONE
TRACT 30351
COUNTY OF RIVERSIDE, CALIFORNIA

PROJECT OWNER:
OSBORNE DEVELOPMENT
30001 COMMERCIO
SANTA MARGARITA, CALIFORNIA 92688
(949) 888-3822 Fax (949) 888-3820
CONTACT: ROBERT OSBORNE

LANDSCAPE ARCHITECT:
FRANK RADMACHER ASSOC.,INC.
14841 YORBA STREET SUITE 204
TUSTIN, CALIFORNIA 92780
(714) 832-1774 Fax (714) 832-5721
CONTACT: VALERIE VLHA

PROJECT ENGINEER:
PSOMAS ENGINEERING, INC.
2010 IOWA STREET SUITE 101
RIVERSIDE, CALIFORNIA 92517
(951) 683-5234 Fax (951) 682-3379
CONTACT: TOM LOVE

INSPECTION LIST

1. IRRIGATION INSPECTIONS:
   a. Site inspections and notifcation time.

i.	Pre-construction conference	7 days
ii.	Pressure line installation and testing	48 hours
iii.	Controller installation	48 hours
iv.	Lateral line and sprinkler installation	48 hours
v.	Coverage test	48 hours
vi.	Final inspection	7 days

   b. No field inspections will commence unless record drawings are current and available for observation upon request by the Owner's representative.

2. PLANTING INSPECTIONS:
   a. Request for inspections must have 48 hour notice in advance. CALL (951) 660-4700.
   b. Contractor must be on site for all inspections.
   c. Any work not completed when inspector arrives which was requested for, shall be billed to the contractor at the current inspector's rate.
   d. Any work completed without inspection or approval shall be removed, exposed or replaced at the cost of the contractor.
   e. Contractor shall call for inspection for the following items:
      i. Final grading
      ii. Weed abatement observation
      iii. Tree and shrub layout
      iv. Tree and shrub planting pits
      v. Finish grade prior to hydro-seeding
      vi. Final inspection

3. SUBMITTALS:
   a. All submittals shall be submitted within 15 days after receipt of executed contract.
   b. Contractor shall submit the following items but not limited to:
      i. Plant material proof of purchase with listed nurseries and material sizes for approval
      ii. All soil amendments
      iii. Bark mulch
      iv. Soil report
      v. Labels for all herbicides and fertilizers used
      vi. Hydro0seed mix

CONTRACTOR SHALL OBTAIN VALLEY-WIDE SPEC. BOOK PRIOR TO BIDDING PROJECT

ALL WORK MUST CONFORM TO 'VALLEY-WIDE'S' CURRENT DETAILS AND SPECIFICATIONS DATED 01-17-2006.

TIME LIMITATION NOTE:

THE TIME LIMIT ON DRAWING APPROVAL SHALL BE SIX (6) MONTHS FROM THE DATE OF PLAN APPROVAL. IF CONSTRUCTION HAS NOT COMMENCED WITHIN THE STATED TIME, VALLEY-WIDE WILL REQUIRE RE-SUBMITTAL OF PLANS TO ENSURE CURRENT REQUIREMENTS AND STANDARDS.

SHEET INDEX

L-1	TITLE SHEET
L-2	GRADING PLAN
L-3	CONSTRUCTION & LIGHTING PLAN
L-4	CONSTRUCTION DETAILS
L-5	CONSTRUCTION DETAILS
L-6	CONSTRUCTION DETAILS
L-7	IRRIGATION PLAN
L-8	PLANTING PLAN
L-9	IRRIGATION DETAILS
L-10	IRRIGATION DETAILS
L-11	IRRIGATION DETAILS (DRIP)
L-12	IRRIGATION SPECIFICATIONS
L-13	IRRIGATION SPECIFICATIONS
L-14	PLANTING DETAILS
L-15	PLANTING SPECIFICATIONS

AMERICANS WITH DISABILITIES NOTES

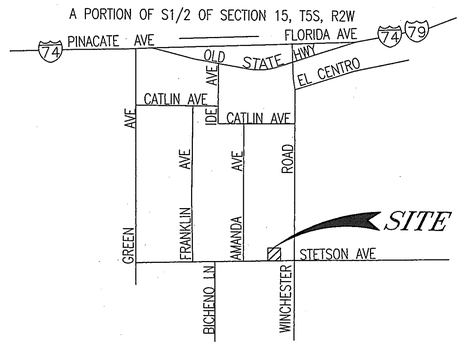
ALL SLOPES SHOWN ON THIS PLAN WERE DESIGNED AT OR BELOW MAXIMUMS ALLOWED BY THE AMERICANS WITH DISABILITY ACT ACCESS GUIDE (A.D.A.A.G.) IN ORDER TO ALLOW FOR CONSTRUCTION TOLERANCES. IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH A.D.A.A.G. AND IN THE EVENT THAT A DESIGN QUESTION SHOULD ARISE, OR A FIELD CONDITION PRESENT ITSELF THAT IS DIFFERENT THAN SHOWN ON THESE PLANS, WORK SHOULD CEASE AND THE ENGINEER BE NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.

THE CONTRACTOR IS ADVISED TO CAREFULLY CHECK ALL PHASES OF WORK RELATING TO A.D.A.A.G. ACCESS FOR THIS PROJECT. SINCE THE CODE DOES NOT ALLOW FOR A CONSTRUCTION TOLERANCE, ANY CONSTRUCTION THAT EXCEEDS MAXIMUM OR MINIMUM DIMENSIONS AND SLOPES AS CALLED OUT BY A.D.A.A.G. ARE SUBJECT TO REJECTION BY THE COUNTY AND MAY BE REQUIRED TO BE REMOVED AND REPLACED.

3. SINCE THE CIVIL ENGINEER OR SURVEYOR CANNOT CONTROL THE EXACT METHODS OR MEANS USED BY THE GENERAL CONTRACTOR OR THEIR SUB-CONTRACTOR DURING GRADING AND CONSTRUCTION OF THE PROJECT, THE CIVIL ENGINEER OR SURVEYOR ASSUMES NO RESPONSIBILITY FOR FINAL ACCEPTANCE OF A.D.A.A.G. RELATED ITEMS OF THIS PROJECT BY THE COUNTY, ANY OTHER AUTHORITY OR OTHER AFFECTED PARTIES.

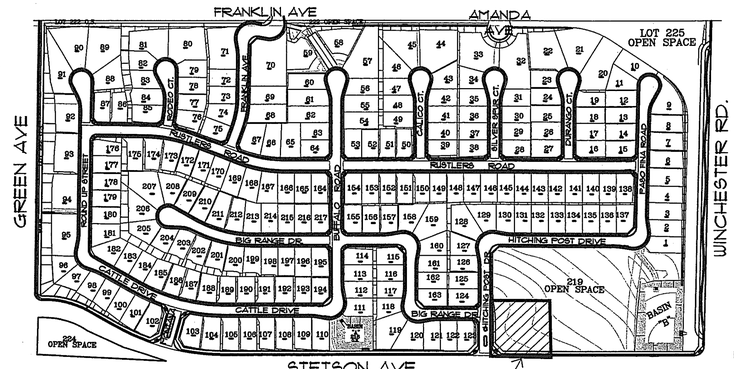
COMPLIANCE WITH A.D.A.A.G. CONSTRUCTION REQUIREMENTS WILL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THEIR SUB-CONTRACTORS.

VICINITY MAP



NOT TO SCALE

INDEX MAP



NOT TO SCALE

VALLEY-WIDE MAINTENANCE RESPONSIBILITY AREA

DIGALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

CONTINUOUS LANDSCAPE MAINTENANCE PROVIDED BY VALLEY-WIDE RECREATION & PARK DISTRICT

TOTAL LANDSCAPE AREA = 50,200 SQUARE FEET

HOLD HARMLESS & INDEMNIFICATION CLAUSE

CONTRACTOR AGREES TO ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER/DEVELOPER, THE COUNTY OF LOCAL JURISDICTION AND THE LANDSCAPE DESIGNER HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER/DEVELOPER, COUNTY OF LOCAL JURISDICTION AND THE LANDSCAPE DESIGNER.

APPROVAL BY THE TRANSPORTATION DEPARTMENT IS FOR THE AREA WITHIN THE R.O.W. ONLY

VALLEY-WIDE RECREATION & PARK DISTRICT

DESIGN APPROVAL BLOCK

Samuel W. Gray — Date: 5-23-07

NOTE:
WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER COUNTY APPROVAL OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE COUNTY.

DATE	BY	MARK	REVISIONS	APPR.	DATE

ENGINEER — COUNTY

SEAL—COUNTY
REGISTERED PROFESSIONAL ENGINEER — KHALED A. OTHMAN — NO. 33950 EXP. 6-30-08 — CIVIL — STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:

KHALED A. OTHMAN, P.E. — DATE
R.C.E. 33950 EXP. 6-30-08

RECOMMENDED BY WILLDAN — DATE

SEAL—LANDSCAPE ARCHITECT
LICENSED LANDSCAPE ARCHITECT — VALERIE VLHA — Signature 5/31/08 — Expiration Date — STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC.
Landscape Architects
PHONE (714) 832-1774 FAX (714) 832-5721
14841 Yorba Street, Suite 204 Tustin, CA 92780
EMAIL: F-R-A@PACBELL.NET

PREPARED BY: STAFF — LIC. NO. 1110
DATE: 2/19/2007 — EXP. DATE: 5/31/08

FRA# 2628

BENCHMARK:

SCALE:
H: 1"=20' V: 1"=20'

TRACT No. 30351 IP No. 030170
COUNTY OF RIVERSIDE
LANDSCAPE PLANS
"WINCHESTER TRAILS" PARK
TITLE SHEET

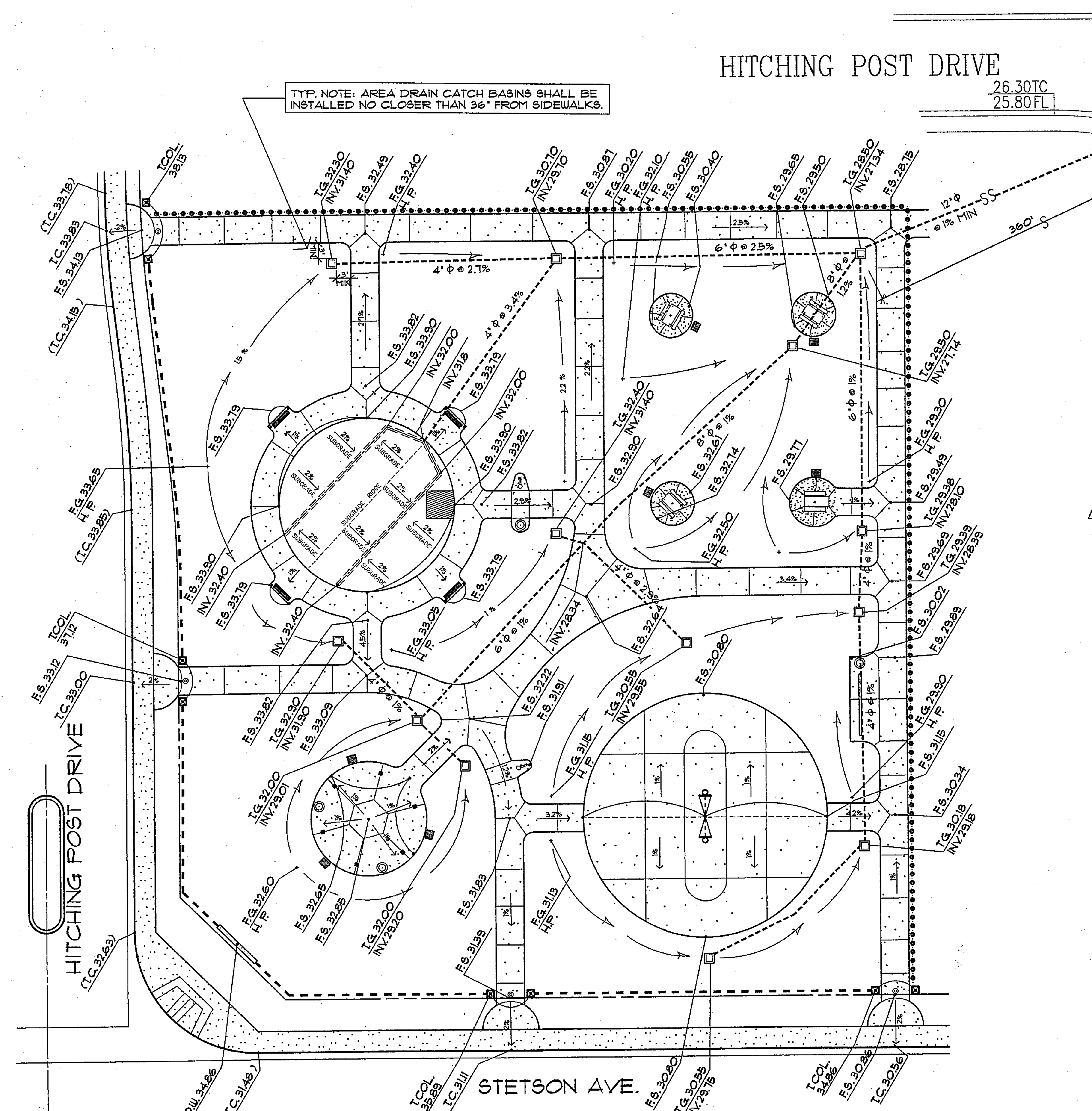
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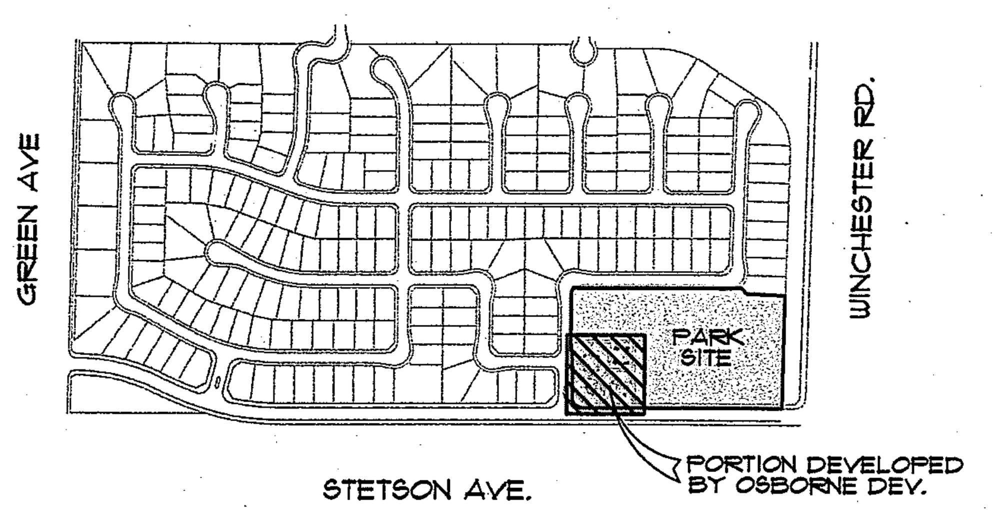
FOR: OSBORNE DEVELOPMENT | W.O. | COUNTY FILE NO.

FRA# 2628 / WINCHESTER TRAILS

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NO SCALE

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AMERICANS WITH DISABILITIES NOTES

1. ALL SLOPES SHOWN ON THIS PLAN WERE DESIGNED AT OR BELOW MAXIMUMS ALLOWED BY THE AMERICANS WITH DISABILITY ACT ACCESS GUIDE (A.D.A.A.G.) IN ORDER TO ALLOW FOR CONSTRUCTION TOLERANCES. IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH A.D.A.A.G. AND IN THE EVENT THAT A DESIGN QUESTION SHOULD ARISE, OR A FIELD CONDITION PRESENT ITSELF THAT IS DIFFERENT THAN SHOWN ON THESE PLANS, WORK SHOULD CEASE AND THE ENGINEER BE NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.
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COMPLIANCE WITH A.D.A.A.G. CONSTRUCTION REQUIREMENTS WILL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THEIR SUB-CONTRACTORS.

HOLD HARMLESS & INDEMNIFICATION CLAUSE

CONTRACTOR AGREES TO ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER/DEVELOPER, THE CITY, COUNTY OF LOCAL JURISDICTION AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER/DEVELOPER, THE CITY, COUNTY OF LOCAL JURISDICTION AND THE LANDSCAPE ARCHITECT.

TAKE PRECEDENCE

THE "VALLEY WIDE" LANDSCAPE STANDARDS PARK SITE REQUIREMENTS SHALL TAKE PRECEDENCE OVER THE APPROVED LANDSCAPE PLANS. SHOULD A DISCREPANCY OCCUR BETWEEN ANY NOTES, SPECIFICATIONS, DETAILS, SITE CONDITIONS, OR OTHER SITUATION REGARDING THE INTERPRETATION OF CONSTRUCTION FROM THESE PLANS, VALLEY WIDE REPRESENTATIVE'S DECISIONS SHALL BE FINAL.

ALL ENGINEER SIDEWALKS TO BE CONSTRUCTED AT 4.5% MAX. PER VALLEY-WIDE

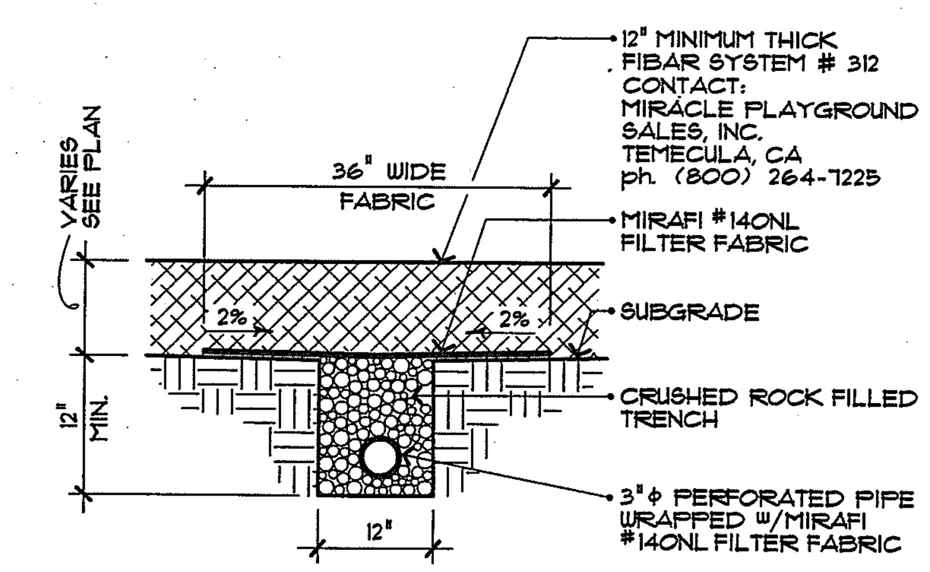
ALL WORK MUST CONFORM TO VALLEY-WIDE RECREATION & PARK DISTRICT STANDARDS

GRADING LEGEND

(75.00) ELEVATIONS PER CIVIL ENGINEERS GRADING PLANS
76.00 PROPOSED ELEVATIONS
4"φ DRAIN PIPE (OTHER SIZES NOTED)
NOTE: VERIFY PIPE SIZES WITH THE CIVIL ENGINEER and/or CERTIFIED HYDROLOGIST.
12" SQ. FLAT GRATE ON SPEE-D-BASIN COLOR: GREEN BY NATIONAL DIVERSIFIED SALES
TRENCH DRAIN, SEE DET." A"/L-2

ABBREVIATIONS

B.O.F.	BOTTOM OF FIBER	T.C.	TOP OF CURB
F.F.	FINISH FLOOR	T.CO.	TOP OF COLUMN
F.G.	FINISH GRADE	T.F.	TOP OF FOOTING
F.L.	FLOW LINE	T.G.	TOP OF GRATE
F.S.	FINISH SURFACE	T.P.	TOP OF PILASTER
H.P.	HIGH POINT	T.W.	TOP OF WALL
L.P.	LOW POINT	T.M.F.	TOP OF METAL FENCE
INV.	INVERT ELEVATION	TYP.	TYPICAL
T.O.F.	TOP OF FIBER	T.O.W.	TOP OF WALL
T. COL.	TOP OF COLUMN		



A TRENCH DRAIN @ TOT LOT
NO SCALE

NOTES

1. ALL MATERIALS AND WORKMANSHIP TO CONFORM TO GOVERNING CODES AND ORDINANCES.
2. HOLD FINISH GRADES 1" BELOW ADJACENT FINISH SURFACES.
3. HOLD FINISH GRADES 6" MINIMUM BELOW FINISH FLOORS.
4. ALL LANDSCAPED AREAS TO DRAIN AT A MINIMUM OF 1%.
5. FINISH SURFACES TO DRAIN AT A MINIMUM OF 1%.
6. LAWN AREAS SHALL NOT EXCEED A SLOPE OF 4:1.
7. ALL JUNCTIONS AND CHANGES OF DIRECTIONS TO BE MADE WITH SWEEP ELLS OR 45°.
8. CONTR. SHALL BE RESPONSIBLE FOR ACHIEVING PROPER DRAINAGE IRRESPECTIVE OF HOW THE SITE IS RECEIVED.
9. DRAIN AND PERFORATED PIPES SHALL BE P.V.C. OR A.B.S. SDR 35.

VALLEY-WIDE RECREATION & PARK DISTRICT
DESIGN APPROVAL BLOCK
Samuel W. Goepp — Date: 5-23-07

SCALE: 1" = 20'
0' 20' 40'

NOTE:
WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER COUNTY APPROVAL OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE COUNTY.

DATE	BY	MARK	REVISIONS	APPR.	DATE
ENGINEER				COUNTY	

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-08 CIVIL STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:
KHALED A. OTHMAN, P.E. — DATE
R.C.E. 33950 EXP. 6-30-08
RECOMMENDED BY: — DATE

SEAL-LANDSCAPE ARCHITECT
LICENSED LANDSCAPE ARCHITECT FRANK A. RADMACHER Signature 5/31/08 Renewal Date 5/16/07 Date STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC.
Landscape Architects
PHONE (714) 832-1774 FAX (714) 832-5721
14841 Yorba Street, Suite 204 · Tustin, CA 92780
EMAIL: F-R-A@PACBELL.NET
PREPARED BY: G.P. — LIC. NO. 1110
DATE 2/19/2007 — EXP. DATE: 5/31/08

BENCHMARK:
SCALE: H: 1"=20' V: 1"=20'

TRACT No. 30351 IP No. 030170
COUNTY OF RIVERSIDE
LANDSCAPE PLANS
"WINCHESTER TRAILS" PARK
CONSTRUCTION PLAN

FOR: OSBORNE DEVELOPMENT — W.O. — COUNTY FILE NO.

SHEET NO. L-2
OF 15 SHEETS

FRA# 2628 / WINCHESTER TRAILS

CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO GOVERNING CODES AND ORDINANCES.
2. ALL CONSTRUCTION TO BE PLUMB AND TRUE, UNLESS OTHERWISE SPECIFIED.
3. ALLOW FOR ADJOINING CONSTRUCTION.
4. REFER TO FINISH GRADING PLANS, L-2, FOR GRADING AND DRAINAGE INFORMATION.
5. WALL DIMENSIONS APPLY TO FACE OF FIRST COURSE (INCLUDING VENEER).
6. WALL CONSTRUCTION JOINTS TO OCCUR AT 20' MAXIMUM INTERVALS.
7. PAVING CONTRACTOR SHALL COORDINATE WITH DRAIN CONTRACTOR, IRRIGATION CONTRACTOR AND ELECTRICAL CONTRACTOR TO ENSURE THAT ALL SLEEVING AND CROSSINGS ARE PROVIDED FOR PRIOR TO POURING CONCRETE.
8. ALL CONCRETE TO OBTAIN A COMPRESSIVE STRENGTH OF 2500 P.S.I. MINIMUM IN 28 DAYS.
9. INSTALL ½" WIDE POLYFELT JOINT W/ MASTIC FILL AT ALL CONDITIONS WHERE CONCRETE PAVING IS AGAINST A WALL OR COLUMN.
10. ** PAVING CONTRACTOR SHALL VERIFY WITH PROJECT SOILS ENGINEER THE NEED FOR REINFORCING, BASE MATERIALS, PRESATURATION, ETC. FOR WALKS, FOOTINGS, DECKS, GUNITE, ETC.
11. ** PAVING CONTRACTOR SHALL VERIFY WITH PROJECT SOILS ENGINEER THE VALUE FOR COMPRESSIVE STRENGTH, THE CONCRETE MIX COMPOSITION, ADDITIVES, ETC.

** CONTRACTORS SPECIFIC RESPONSIBILITY

AMERICANS WITH DISABILITIES NOTES

1. ALL SLOPES SHOWN ON THIS PLAN WERE DESIGNED AT OR BELOW MAXIMUMS ALLOWED BY THE AMERICANS WITH DISABILITY ACT ACCESS GUIDE (A.D.A.A.G.) IN ORDER TO ALLOW FOR CONSTRUCTION TOLERANCES. IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH A.D.A.A.G. AND IN THE EVENT THAT A DESIGN QUESTION SHOULD ARISE, OR A FIELD CONDITION PRESENT ITSELF THAT IS DIFFERENT THAN SHOWN ON THESE PLANS, WORK SHOULD CEASE AND THE ENGINEER BE NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.
2. THE CONTRACTOR IS ADVISED TO CAREFULLY CHECK ALL PHASES OF WORK RELATING TO A.D.A.A.G. ACCESS FOR THIS PROJECT. SINCE THE CODE DOES NOT ALLOW FOR A CONSTRUCTION TOLERANCE, ANY CONSTRUCTION THAT EXCEEDS MAXIMUM OR MINIMUM DIMENSIONS AND SLOPES AS CALLED OUT BY A.D.A.A.G. ARE SUBJECT TO REJECTION BY THE CITY AND MAY BE REQUIRED TO BE REMOVED AND REPLACED.
3. SURVEYOR ASSUMES NO RESPONSIBILITY FOR FINAL ACCEPTANCE OF A.D.A.A.G. RELATED ITEMS OF THIS PROJECT BY THE CITY, ANY OTHER AUTHORITY OR OTHER AFFECTED PARTIES.

COMPLIANCE WITH A.D.A.A.G. CONSTRUCTION REQUIREMENTS WILL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THEIR SUB-CONTRACTORS.

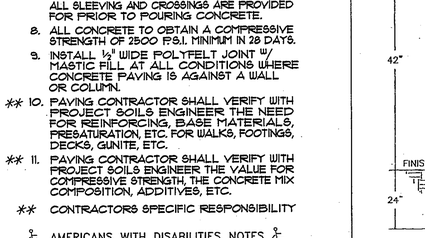
HOLD HARMLESS & INDEMNIFICATION CLAUSE

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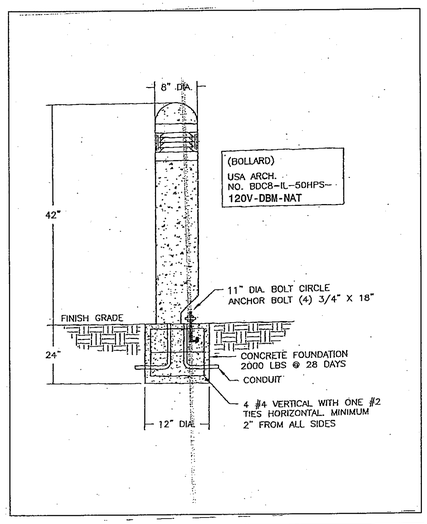
TAKE PRECEDENCE

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NOTE:
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AREA MAPPED
NO SCALE

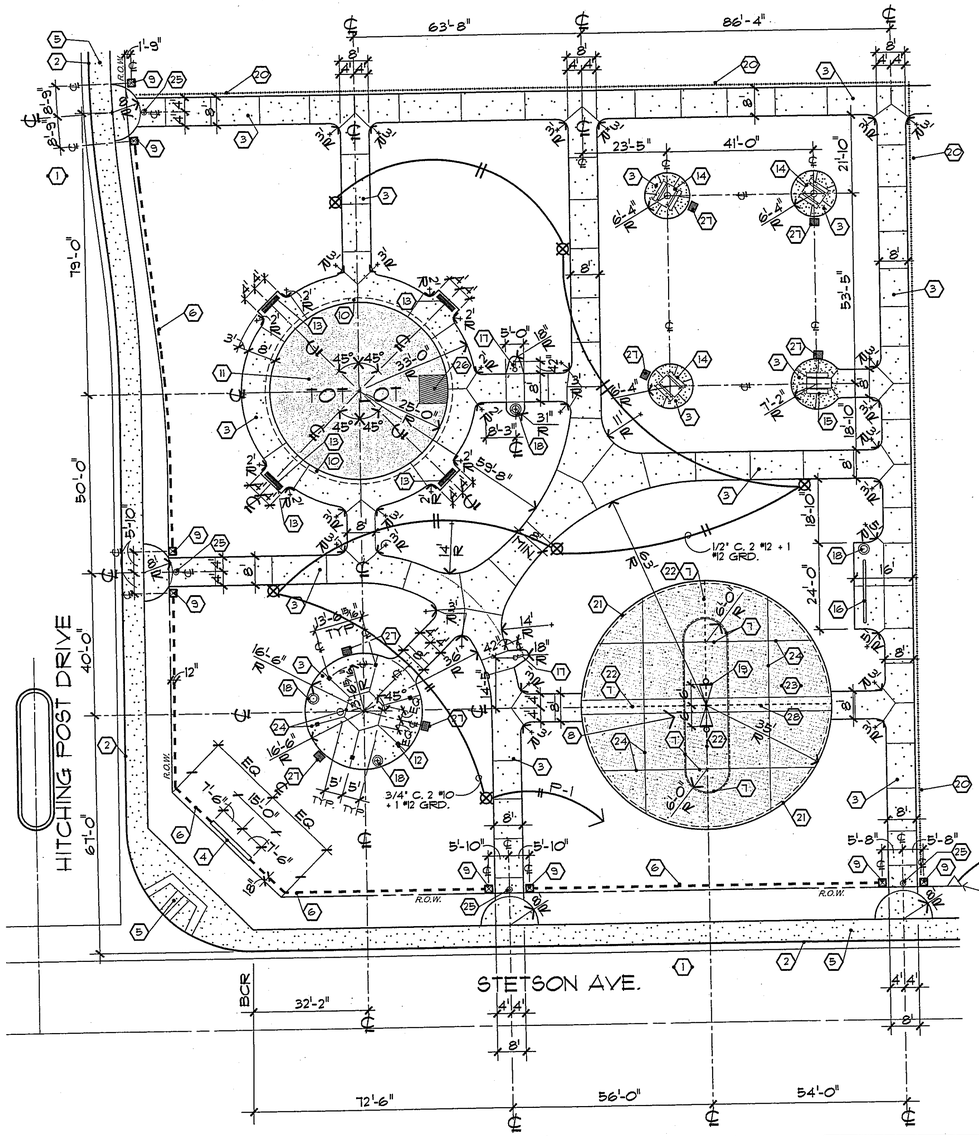


LIGHTING LEGEND

Symbol	Model /Specification	Quantity
⊠	USA ARCHITECTURAL LIGHTING MODEL #BDC8-IL-50 HPS-120V-DBM-NAT	6

LIGHTING NOTES:

1. ALL INSTALLATION AND MATERIALS SHALL BE PER VALLEY-WIDE RECREATION GUIDELINES.
2. ALL LIGHTS TO BE MOUNTED ON CONCRETE BASE.
3. THE QUANTITY OF LIGHTS SHOWN ON THIS PLAN HAVE BEEN SPECIFIED BY 'VALLEY-WIDE', AND IS NOT SUFFICIENT FOR SAFE NIGHT TIME USE OF THE PARK BUT INSTEAD, IS MEANT TO PROVIDE MINIMAL ILLUMINATION FOR PURPOSES OF SECURITY AND SURVEILLANCE.



ELECTRICAL REQUIREMENTS FOR BOLLARD LIGHTING
ELEC. METER PEDESTAL:MODEL NO. U5P16-M2100-112C-HP
100 AMP / 100 AMP MAIN BREAKER
120/240 VOLTAGE
1PHASE- 3W
MIN. 10K AIC RATING
1- 20 AMP CIRCUIT BREAKER FOR BOLLARDS
1- 20 AMP CIRCUIT BREAKER FOR CONTROLLER

ELECTRICAL ENGINEERING PROVIDED BY:
CROSS STATE ELECTRIC, INC.
PH: 951-737-8870

CONSTRUCTION/PAVING LEGEND

1. ASPHALT PAVING, REFER TO CIVIL ENGINEER'S PLANS
2. CONCRETE CURB AND GUTTER, REFER TO CIVIL ENGINEER'S PLAN
3. 4" THICK PLAIN CONCRETE PAVING W/ MEDIUM BROOM FINISH W/ TOOLED CONTROL JOINTS AS SHOWN, SEE DETAILS 1 LC 2"/L-4 4" D 1/L-6
   NOTE: ALL CONCRETE PAVING SHALL BE PER SOILS ENGINEER'S SPECIFICATIONS / REPORT. CONTACT THE SOILS ENGINEER BEFORE START OF CONSTRUCTION.
4. PARK SIGN, SEE DETAIL 'LC30' / L-4
5. PRODUCTION SIDEWALK PER CITY STANDARDS, REFER TO CIVIL ENGINEER'S PLAN
6. 2 RAIL P.V.C. FENCING, SEE DETAIL 'LC31' / L-4
7. 2" WIDE PAINTED NON-SLIP PLAY LINE COLOR: (TO BE DETERMINED)
8. BASKETBALL HALF COURT 'LC20' / L-4
9. LOW STONE COLUMN, SEE DETAIL 5 B 1/L-6
10. DEEPENED EDGE AT TOT LOT, SEE DETAIL 1 LC4 1/L-4
11. TOT LOT PLAN, SEE DETAIL 1 A 1/L-6
12. GAZEBO STRUCTURE, (MODEL # GW133MR) SEE DETAIL 1 C 1/L-5
13. BENCH, (4 TOTAL) (MODEL #1267, 1156-2 & #1142) SEE DETAIL 3 LC28 1/L-4
14. PICNIC TABLE, (3 TOTAL) (MODEL #1267, 1156-2 & #1142) SEE DETAIL 3 LC28 1/L-4
15. A.D.A. PICNIC TABLE, (1 TOTAL) (MODEL #1158-4) SEE DETAIL 3 LC28 1/L-4
16. BIKE RACK, (2 TOTAL) (MODEL # 1602-09) SEE DETAIL 1 A 1/L-5
17. DRINKING FOUNTAIN W/ DRAIN SUMPS AND CLEAN OUTS, SEE DETAIL 1 LC11, LC12 1/L-5 (MODEL # HAWS 3380) (2 TOTAL)
18. TRASH RECEPTACLE, (4 TOTAL) (MODEL # 1129) SEE DETAIL 1 LC21 1/L-4
19. BASKETBALL EQUIPMENT, (1 TOTAL) (MODEL # 90312 'A' OR 'B') SEE DETAIL 1 LC21 1/L-4
20. TEMPORARY 6' HIGH CHAIN LINK FENCE
21. DEEPENED CONCRETE EDGE, SEE DETAIL 1 B 1/L-5
22. ½" WIDE POLYFELT JOINT W/MASTIC FILL, COLOR TO MATCH ADJACENT CONCRETE
23. 6" THICK CONCRETE PAVING (OVER 2 SAND BASE), W/ LIGHT BROOM FINISH W/ EXPANSION JOINTS, SEE ITEM No. 28 BELOW
    CONCRETE COLOR: NATURAL
    COURT SHALL BE SURFACED PER V.W.R. & P.D.
24. CONCRETE SCORE JOINT, SEE DETAIL 1 D 1/L-6
25. REMOVAL BOLLARD, (MODEL # BOL800-IG-G-RM-EYB) SEE DETAIL 1 E 1/L-5
26. HANDICAP RAMP AT TOT LOT AREA, 8'x 8', SEE DETAIL 1 LC33 1/L-4
27. BARBECUE, SEE DETAIL 2 D 1/L-5 (7 TOTAL) (MODEL # NS-208)
28. BAR DOWELS IN CONCRETE PAVING (@ BASKETBALL COURT) SEE DETAIL 1 C 1/L-6

ALL ENGINEER SIDEWALKS TO BE CONSTRUCTED AT 4.5% MAX. PER VALLEY-WIDE

ALL WORK MUST CONFORM TO VALLEY-WIDE RECREATION & PARK DISTRICT STANDARDS

VALLEY-WIDE RECREATION & PARK DISTRICT
DESIGN APPROVAL BLOCK
Signature: [signature] Date: 5-23-07

SCALE: 1" = 20'
0' 20' 40'

DIGALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

NOTE:
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DATE	BY	MARK	REVISIONS	APPR.	DATE

ENGINEER | COUNTY

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-08 CIVIL STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:

KHALED A. OTHMAN, P.E. R.C.E. 33950 EXP. 6-30-08 — DATE

RECOMMENDED BY: — DATE

SEAL-LANDSCAPE ARCHITECT
LICENSED LANDSCAPE ARCHITECT Signature 5/31/08 Date STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC.
Landscape Architects
PHONE (714) 832-1774 FAX (714) 832-5721
14841 Yorba Street, Suite 204 · Tustin, CA 92780
EMAIL: F-R-A@PACBELL.NET

PREPARED BY: G.P.
DATE 5/14/2007
LIC. NO. 1110
EXP. DATE: 5/31/08

BENCHMARK:

SCALE:
H: 1"=20' V: 1"=20'

TRACT No. 30351 IP No. 030170
COUNTY OF RIVERSIDE LANDSCAPE PLANS
"WINCHESTER TRAILS" PARK
CONSTRUCTION/LIGHTING PLAN

SHEET NO. L-3 OF 15 SHEETS

FOR: OSBORNE DEVELOPMENT | W.O. | COUNTY FILE NO.

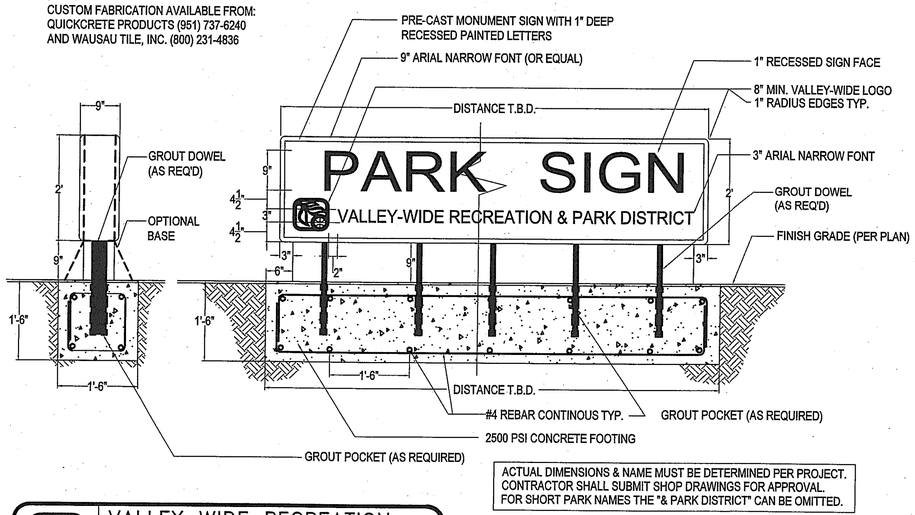
FRA# 2628 / WINCHESTER TRAILS

\\RIDDUM\2600's\2628 Winchester Trails-OSBORNE\2628 Park Site 20 L-2 L-3.dwg, L-3, 5/15/2007 10:21:40 AM, 1:240, W

MONUMENT SIGN

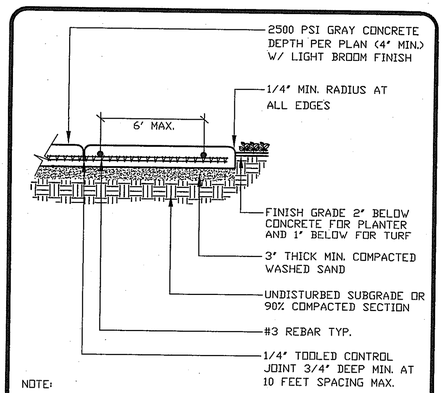
-NOT TO SCALE-

CUSTOM FABRICATION AVAILABLE FROM:
QUICKCRETE PRODUCTS (951) 737-6240
AND WAUSAU TILE, INC. (800) 231-4836



ACTUAL DIMENSIONS & NAME MUST BE DETERMINED PER PROJECT.
CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL.
FOR SHORT PARK NAMES THE "& PARK DISTRICT" CAN BE OMITTED.

VALLEY WIDE RECREATION | TYPICAL PARK SIGN | LC-30

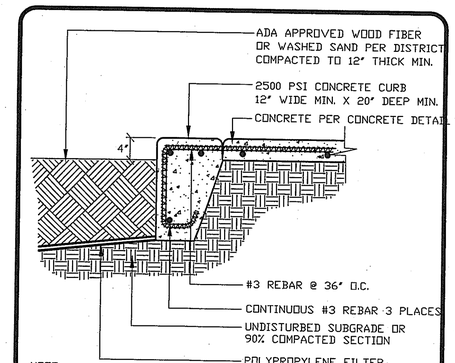


NOTE:

ALL CONCRETE SHALL HAVE A CROSS SLOPE NOT GREATER THAN 2%
PROVIDE 3/8" FELT EXPANSION JOINTS WHEN CONCRETE JOINS WITH A BLOCK WALL OR OTHER STRUCTURE
ALL CONCRETE MUST COMPLY WITH ADA REGULATIONS
PROVIDE #3 REBAR AT 6' SQUARE SPACING
ALL CONCRETE MUST COMPLY WITH ADA REGULATIONS
ALL CONCRETE FORMS MUST BE INSPECTED PRIOR TO POURING

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION | 01/06 | CONCRETE FLATWORK | LC-2

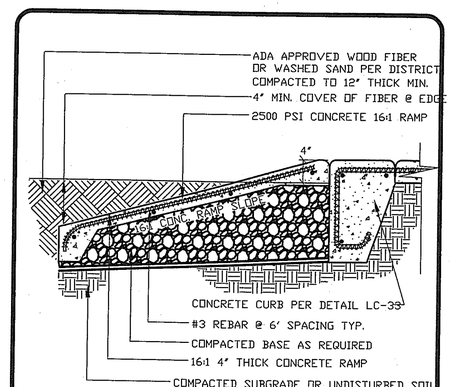


NOTE:

SUBGRADE FOR WOOD FIBER OR SAND SHALL SLOPE TO SUMP DRAINS PER PLAN FOR WATER RUN-OFF
PROVIDE 1/2" MIN RADIUS AT CONCRETE EDGE
WOOD FIBER SAMPLE MUST BE SUBMITTED FOR APPROVAL TO OWNER'S REPRESENTATIVE PRIOR TO PURCHASE OF MATERIAL
PROVIDE A 16:1 CONCRETE ADA ACCESS RAMP PER ADA REGULATIONS
PROVIDE SAND IN LIEU OF WOOD FIBER FOR PLAYGROUNDS FOR ANY AREA WITHIN ANY AREA WHERE ACCESS MOISTURE OCCURS
PROVIDE RUBBER SURFACING FOR 50% OF THE PLAYGROUND AREA FOR ADA ACCESS WHEN SAND IS USED

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION | 01/06 | PLAYGROUND CURB | LC-4

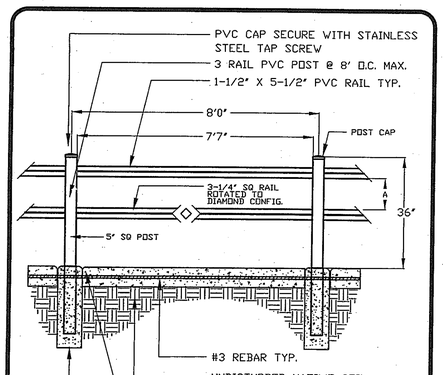


NOTE:

PROVIDE 1/2" MIN RADIUS AT CONCRETE EDGE
INSTALL ACCESS RAMP PER ALL ADA REGULATIONS
PROVIDE A MIN. WIDTH OF 60"

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION | 01/06 | PLAYGROUND RAMP | LC-33

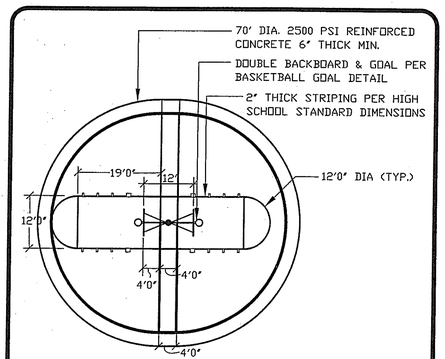


NOTE:

WHERE PVC FENCING IS ADJACENT CONCRETE OR TURF, PROVIDE A CONCRETE MOWCURB ALONG FENCE LINE. REFER TO DETAIL LC-6 FOR FOOTING ELEVATION
APPROVED MATERIAL AVAILABLE FROM FENCEWORKS

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION | 01/06 | TWO RAIL PVC FENCING | LC-31

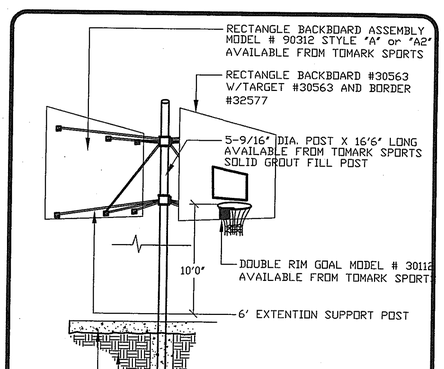


NOTE:

CONCRETE SHALL HAVE A HIGH POINT AT POST AND SLOPE TO PERIMETERS PER PLAN TO PROVIDE PROPER DRAINAGE
ENTIRE PLAYING AREA SHALL HAVE AN APPROVED SURFACE COLORS AND LAYOUT MUST BE APPROVED PRIOR TO CONSTRUCTION

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION | 01/06 | BASKETBALL HALF COURT | LC-20



NOTE:

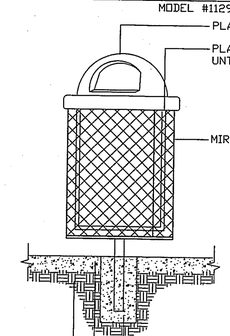
CONTACT TOMARK SPORTS @ (800) 959-1844
FOOTING MUST BE INSPECTED BY VVRPD PRIOR TO POURING

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION | 01/06 | BASKETBALL GOAL | LC-21

MIRA-THERM RECEPTACLE

MODEL #1129



NOTE:

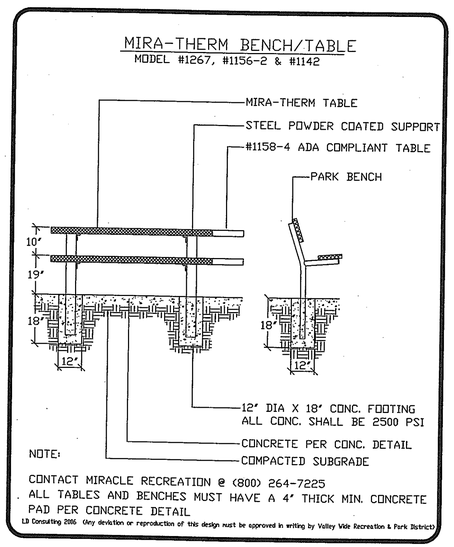
CONTACT MIRACLE RECREATION @ (800) 264-7225
ALL RECEPTACLES MUST HAVE A 4" THICK MIN. CONCRETE PAD PER CONCRETE DETAIL

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION | 5/03 | TRASH RECEPTACLE | LC-27

MIRA-THERM BENCH/TABLE

MODEL #1267, #1156-2 & #1142



NOTE:

CONTACT MIRACLE RECREATION @ (800) 264-7225
ALL TABLES AND BENCHES MUST HAVE A 4" THICK MIN. CONCRETE PAD PER CONCRETE DETAIL

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION | PARK BENCH / TABLE | LC-28

DIGALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

NOTE:
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DATE	BY	MARK	REVISIONS	APPR.	DATE
	ENGINEER			COUNTY	

SEAL-COUNTY: REGISTERED PROFESSIONAL ENGINEER, KHALED A. OTHMAN, NO. 33950, EXP. 6-30-08, CIVIL, STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:

KHALED A. OTHMAN, P.E. R.C.E. 33950 EXP. 6-30-08 — DATE
RECOMMENDED — DATE

SEAL-LANDSCAPE ARCHITECT: REGISTERED LANDSCAPE ARCHITECT, Frank W. Radmacher Lic. 1110, (Date) 2/21/07, STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC.
Landscape Architects
PHONE (714) 832-1774 FAX (714) 832-5721
14841 Yorba Street, Suite 204 : Tustin, CA 92780
EMAIL: F-R-A@PACBELL.NET

PREPARED BY: GP
DATE 2/19/2007
LIC. NO. 1110
EXP. DATE: 5/31/08

BENCHMARK:

SCALE:
H: NOTED V: NOTED

VALLEY-WIDE RECREATION & PARK DISTRICT
DESIGN APPROVAL BLOCK
Samuel W. Goss — Date: 5-23-07

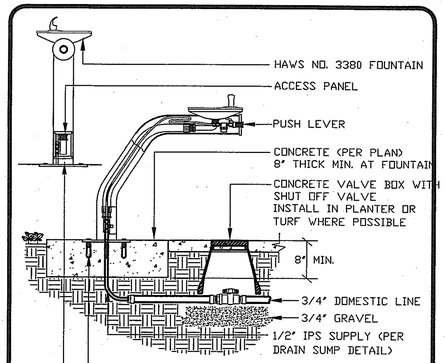
TRACT No. 30351 IP No. 030170
COUNTY OF RIVERSIDE
WINCHESTER TRAILS PARK CONSTRUCTION DETAILS

SHEET NO. L-4 OF 15 SHEETS

FOR: OSBORNE DEVELOPMENT | W.O. | COUNTY FILE NO.

FRA# 2628

\\RIDIUM\2600\2628 Winchester Trails-OSBORNE\2628 park L-4.dwg, Model, 2/20/2007 10:10:49 AM, 0.75:12, VV



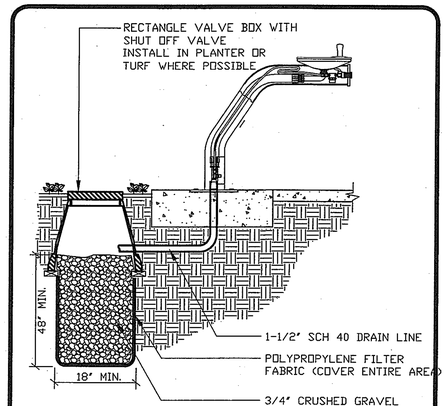
NOTE:

INSTALL DOMESTIC WATER SUPPLY PER PLAN, LOCAL CODES AND MANUFACTURER'S RECOMMEDATIONS

INSTALL DRAIN SUMP AND WASTE SUPPLY PER DRAIN SUMP DETAIL AND MANUFACTURER'S RECOMMEDATIONS

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Vide Recreation & Park District)

VALLEY WIDE RECREATION		
01/06	DRINKING FOUNTAIN	LC-11

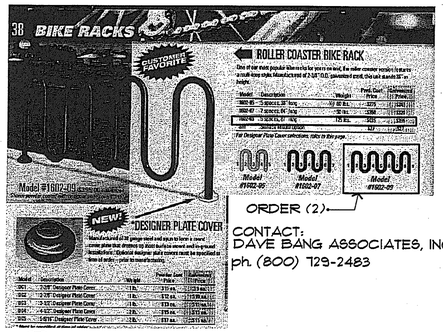


NOTE:

INSTALL DOMESTIC WATER SUPPLY PER PLAN, LOCAL CODES AND MANUFACTURER'S RECOMMEDATIONS

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Vide Recreation & Park District)

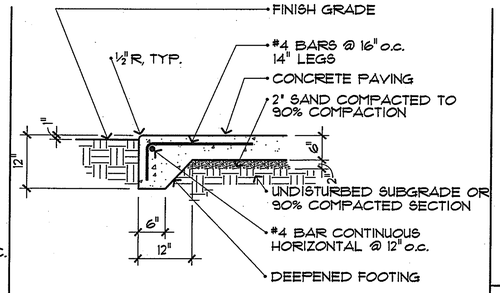
VALLEY WIDE RECREATION		
01/06	FOUNTAIN SUMP	LC-12



ORDER (2)

CONTACT:
DAVE BANG ASSOCIATES, INC.
ph. (800) 729-2483

A BICYCLE RACK



B DEEPENED CONCRETE EDGE / BASKETBALL COURT

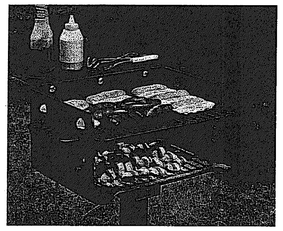
3/4" = 1'-0" SEE DET. 'C'/L-6

MFG. BY:
THOMAS MFG. CO., INC. (800) 762-5002
www.pilotrock.com

MODEL: # NS-20S PARK GRILL

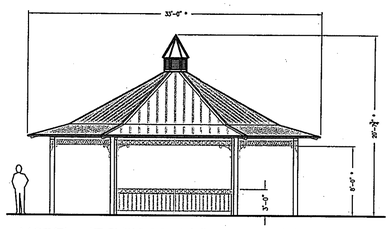
NOTE:

1. INSTALL PER MANUFACTURERS SPECIFICATIONS



D BARBECUE

NO SCALE



MODEL: IRONWOOD GAZEBO - 28' STEEL SHELTER
GW133MR (FORMERLY GIW28MR)
MULTI-RIB METAL ROOFING, DIAMOND PATTERN ORNAMENTATION/HANDRAILS (3 SIDES), CUPOLA, POWDER COATED FRAME/HANDRAILS/ORNAMENTATION

GAZEBO BY:
BY POLIGON PARK ARCHITECTURE
www.poligon.com

NOTE:

CONTACT POLIGON PARK ARCHITECTURE OR MIRACLE PLAYGROUND SALES, INC. FOR ADDITIONAL DETAILED INFORMATION NOT LISTED ON THIS DETAIL.

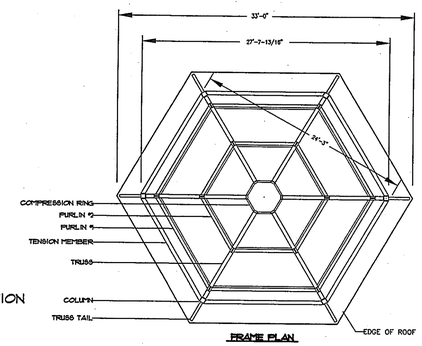
NOTE:

1. INSTALL PER MANUFACTURERS SPECIFICATIONS AND SHOP DRAWINGS.
2. SIZES OF CONCRETE FOOTINGS FOR SHELTER TO BE DETERMINED BY A STRUCTURAL ENGINEER
3. ALLOW 4 TO 6 WEEKS FOR DELIVERY
4. COLORS TO BE SELECTED BY: V.W.R & P.D.

MIRACLE PLAYGROUND SALES, INC.
(800) 264-7225

C GAZEBO STRUCTURE (PREFABRICATED)

NO SCALE



FRAME PLAN

NOTES
FOR FINAL TIGHTENING, USE TURN OF NUT METHOD: USING A SPUD WRENCH, TIGHTEN AS MUCH AS POSSIBLE WITH A NORMAL MANS STRENGTH THEN, USING AN EXTENSION, TIGHTEN AN ADDITIONAL 1/3 TURN.

FRAME MUST BE PLUMB, SQUARE AND BOLTS TIGHTENED BEFORE INSTALLING PURLINS, IF REQUIRED. PURLINS MUST BE PARALLEL TO THE EAVE BEAMS AND TENSION MEMBERS.

FASTENERS: ALL BOLTS USED FOR STRUCTURAL CONNECTIONS ARE ASTM A325. DO NOT SUBSTITUTE WITH A LESSER GRADE. INSPECTION OF HIGH STRENGTH BOLTING, IF REQUIRED, TO BE PER CHAPTER 17 OF THE UNIFORM BUILDING CODE 1994 EDITION.

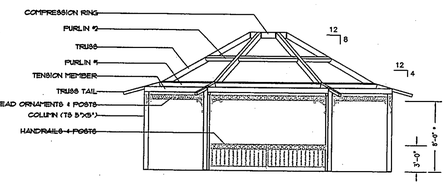
FRAME FINISH: FRAME COMPONENTS ARE RED OXIDE PRIME PAINTED ONLY. FINISH PAINT ON-SITE WITH MATERIALS AND LABOR BY OTHERS.

ORNAMENTATION FINISH: ORNAMENTATION AND RAILING ARE ZINC PLATED. FINISH PAINT ON-SITE WITH MATERIALS AND LABOR BY OTHERS.

FINISH OPTIONS: POWDER COATING, E-COATING, AND GALVANIZING ARE FINISH OPTIONS AVAILABLE AT AN ADDITIONAL CHARGE FOR BOTH FRAME AND ORNAMENTATION.

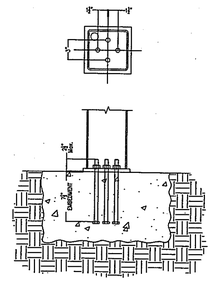
MATERIAL SPECIFICATIONS

TUBULAR SHAPES: ASTM A500 GRADE B 46 KSI
COLD FORMED CEES: A570 GRADE 55
CONNECTION BOLTS: ASTM A325
CONNECTION PLATES: ASTM A36
ANCHOR BOLTS: ASTM A307
WELDING PROCESS: GAS METAL ARC WELDING
WELDING ELECTRODES: E70xx

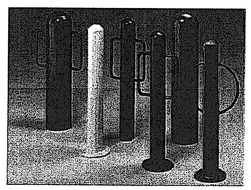


FRAME ELEVATION

NOTE:
STRUCTURAL CALCS REQUIRED PRIOR TO CONSTRUCTION.



POST FOOTING



MFG. BY:
MADRAX
1080 Unick Drive
Waunakee, WI 53597
Toll Free 800-448-7931
PH: 608-849-1080
Fx: 608-849-1081
www.madrax.com

MODEL: # BOL800-IG-G-RM-EYB
COLOR SELECTION BY:
BY VALLEY WIDE

NOTE:

1. INSTALL PER MANUFACTURERS SPECIFICATIONS

E BOLLARD

NO SCALE

DIGALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

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DATE	BY	MARK	REVISIONS	APPR.	DATE

ENGINEER COUNTY

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER
KHALED A. OTHMAN
NO. 33950
EXP: 6-30-08
CIVIL
STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:

KHALED A. OTHMAN, P.E. DATE
R.C.E. 33950 EXP. 6-30-08

RECOMMENDED DATE

SEAL-LANDSCAPE ARCHITECT
REGISTERED LANDSCAPE ARCHITECT
Frank W. Radmacher
Lic. #1110
(Date) 5/28/08
STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC.
Landscape Architects
PHONE (714) 832-1774 FAX (714) 832-5721
14841 Yorba Street, Suite 204 - Tustin, CA 92780
EMAIL: FR-A@PACBELL.NET

PREPARED BY: GP LIC. NO. 1110
DATE 2/19/2007 EXP. DATE: 5/31/08

BENCHMARK:

SCALE:
H: NOTED V: NOTED

VALLEY-WIDE RECREATION & PARK DISTRICT
DESIGN APPROVAL BLOCK
Samuel W. Goss Date: 5-23-07

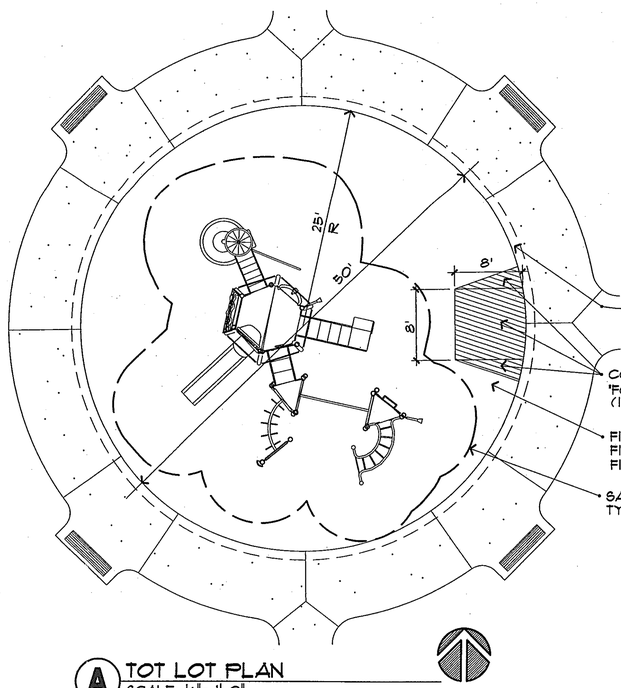
TRACT No. 30351 IP No. 030170
COUNTY OF RIVERSIDE
WINCHESTER TRAILS PARK
CONSTRUCTION DETAILS

SHEET NO. L-5 OF 15 SHEETS

FOR: OSBORNE DEVELOPMENT | W.O. | COUNTY FILE NO.

FRA# 2628

\\IRIDIUM\2600's\2628 Winchester Trails-OSBORNE\2628 park L-5.dwg, Model, 2/20/2007 10:21:08 AM, 0.75:12, VV



LC4 L-4 DEEPENED EDGE

CONCRETE ACCESS RAMP INTO 'FOREST FIBER PLAY' (12" DP. MIN.) (INCLUDING 'WINGS') PER V.W.R. & P.D. — LC33 L-4

FIBAR SYSTEM #312 : FIBAR MATERIAL + COMPACTION, FIBARCLOTH, FIBAR DRAIN STRIPS AND FIBAR MATS

SAFETY ZONE LIMIT TYPICAL AS SHOWN

A TOT LOT PLAN
SCALE: 1/8" = 1'-0"

COLORS FOR PLAYGROUND EQUIPMENT :

ROOFS:
POSTS, ARCH, RAILINGS & CLIMBER:
DECKS, STEPS, RAMPS & BRIDGES: } PER V.W.R. & P.D.
SLIDES:
PANELS:

NOTE:
1. INSTALL PLAY EQUIPMENT STRUCTURE PER MANUFACTURERS SPECIFICATIONS
2. PLACEMENT FOR ALL PLAY EQUIPMENT SHALL BE COORDINATED WITH THE MIRACLE PLAYGROUND SALES REPRESENTATIVE, NOTE: 48 HOUR NOTICE REQUIRED - (800)-264-7225
3. ALLOW 6 TO 8 WEEKS FOR DELIVERY

THIS PLAY AREA & EQUIPMENT IS DESIGNED FOR AGES 2-12 YEARS

IT IS THE MANUFACTURERS OPINION THAT THIS PLAY AREA DOES CONFORM TO THE A.D.A. ACCESSIBILITY GUIDELINES (ADAAG), ASSUMING AN ACCESSIBLE PROTECTIVE SURFACING IS PROVIDED, AS INDICATED, OR WITHIN THE ENTIRE USE ZONE.

THIS CONCEPTUAL PLAN WAS BASED ON INFORMATION AVAILABLE TO US. PRIOR TO CONSTRUCTION, DETAILED SITE INFORMATION INCLUDING SITE DIMENSIONS, TOPOGRAPHY EXISTING UTILITIES, SOIL CONDITIONS, AND DRAINAGE SOLUTIONS SHOULD BE OBTAINED, EVALUATED, & UTILIZED IN THE FINAL DESIGN. PLEASE VERIFY ALL DIMENSIONS OF PLAY AREA, SIZE, ORIENTATION, AND LOCATION OF ALL EXISTING UTILITIES, EQUIPMENT, AND SITE FURNISHINGS PRIOR TO ORDERING. SLIDES SHOULD NOT FACE THE HOT AFTERNOON SUN.

CHOOSE A PROTECTIVE SURFACING MATERIAL THAT HAS A CRITICAL HEIGHT VALUE OF AT LEAST THE HEIGHT OF THE HIGHEST ACCESSIBLE PART/FALL HEIGHT OF THE ADJACENT EQUIPMENT. (REF. CONSUMER PRODUCT SAFETY COMMISSION (CPSC) GUIDELINES, SECTION 10: SURFACING.)

ACCESSIBLE/PROTECTIVE SURFACING TO BE A COMBINATION OF UNITARY AND LOOSE FILL MATERIALS. (POURED-IN-PLACE RUBBER & SAND)

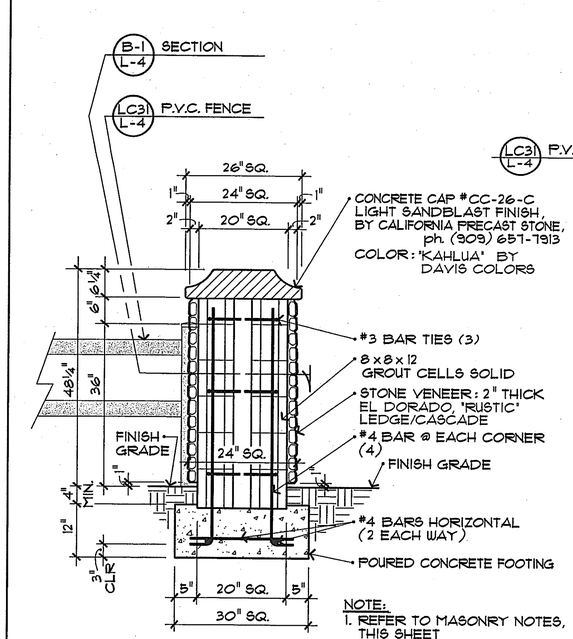
IT IS THE MANUFACTURERS OPINION THAT THIS PLAYSTRUCTURE CONFORMS TO THE CALIFORNIA CODE OF REGULATIONS TITLE 22, DIVISION 4, CHAPTER 22.

HOLD HARMLESS & INDEMNIFICATION CLAUSE

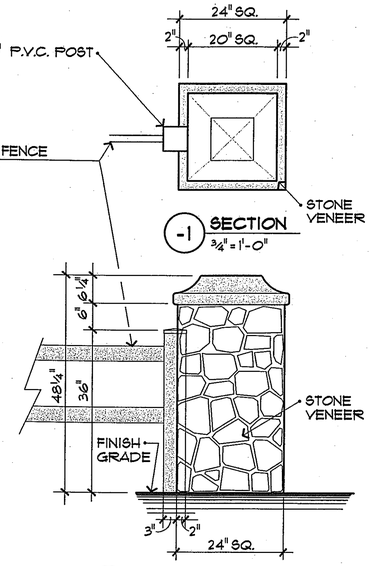
CONTRACTOR AGREES TO ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER/DEVELOPER, THE CITY, COUNTY OF LOCAL JURISDICTION AND THE LANDSCAPE ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARSING FROM SOLE NEGLIGENCE OF THE OWNER/DEVELOPER, THE CITY, COUNTY OF LCCAL JURISDICTION AND THE LANDSCAPE ARCHITECT.

TAKE PRECEDENCE

THE "VALLEY WIDE" LANDSCAPE STANDARDS PARK SITE REQUIREMENTS SHALL TAKE PRECEDENCE OVER THE APPROVED LANDSCAPE PLANS. SHOULD A DISCREPANCY OCCUR BETWEEN ANY NOTES, SPECIFICATIONS, DETAILS, SITE CONDITIONS, OR OTHER SITUATION REGARDING THE INTERPRETATION OF CONSTRUCTION FROM THESE PLANS, VALLEY WIDE REPRESENTATIVE'S DECISIONS SHALL BE FINAL.



B LOW STONE COLUMN
3/4" = 1'-0"



-1 SECTION
3/4" = 1'-0"

-2 COLUMN ELEVATION
3/4" = 1'-0"

Winchester Trails
Valley Wide Park District

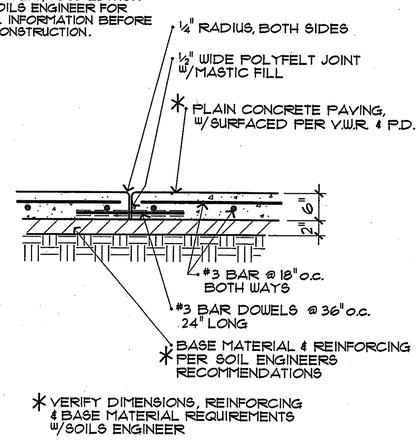


MIRACLE RECREATION EQUIPMENT COMPANY

MODEL # CD139073

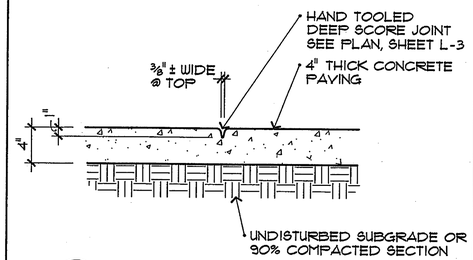
COLOR SELECTION BY: V.W.R. & P.D.

NOTE:
BASKETBALL COURT
CONCRETE PAVING SHALL HAVE #3 REBARS @ 18" o.c., BOTH WAYS, CENTERED WITHIN.
USE TYPE 5 CEMENT WITH MAXIMUM WATER-CEMENT RATIO AT 0.45-0.50, SEE U.B.C. TABLE NO. 19-A-4 (CONCRETE SULFATE EXPOSURE) PAGE 2-179 VOL. 2, 2003 EDITION
CONTACT SOILS ENGINEER FOR ADDITIONAL INFORMATION BEFORE START OF CONSTRUCTION.



* VERIFY DIMENSIONS, REINFORCING & BASE MATERIAL REQUIREMENTS W/SOILS ENGINEER

C BAR DOWELS IN CONCRETE PAVING
3/4" = 1'-0" @ BASKETBALL COURT



D SCORED JOINT
1" = 1'-0"

GENERAL NOTES: FOR MASONRY CONSTRUCTION WALLS

1. CONCRETE SHALL BE MACHINE MIXED. PROPORTIONS TO BE 1:2½:3½ BY VOLUME USING A MAXIMUM OF 7 GALLONS OF WATER PER SACK OF CEMENT, UNLESS APPROVED OTHERWISE. CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 2500 P.S.I. AT 28 DAYS, UNLESS NOTED OTHERWISE. PORTLAND CEMENT SHALL BE TYPE 'I' FROM TESTED STOCK PER ASTM C-150, UNLESS PERMITTED OTHERWISE IN SOILS REPORT.
2. CONCRETE MASONRY UNITS FOR HOLLOW UNIT MASONRY CONSTRUCTION, SHALL BE GRADE 'N' UNITS CONFORMING TO THE REQUIREMENTS OF ASTM C-90. THE ULTIMATE COMPRESSIVE STRENGTH OF THE MASONRY WALL, GROUTED SOLID, SHALL BE A MINIMUM OF f'm = 1500 P.S.I.
3. MORTAR SHALL BE FRESHLY PREPARED AND UNIFORMLY MIXED OF 1 PART PORTLAND CEMENT, ½ MAXIMUM TO ¼ MINIMUM PARTS LIME PUTTY OR HYDRATED LIME AND 2½ TO 3 PARTS CLEAN WASHED SAND. MORTAR TO BE TYPE 'S' WITH WITH A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 2500 P.S.I. AT 28 DAYS.
4. GROUT WALL SOLID UNLESS OTHERWISE NOTED. GROUT SHALL BE PROPORTIONED BY VOLUME AND SHALL HAVE SUFFICIENT WATER ADDED TO PRODUCE CONSISTENCY FOR POURING WITHOUT SEGREGATION. FINE GROUT IN SPACES 2" OR LESS, SHALL BE COMPOSED OF 1 PART PORTLAND CEMENT, TO WHICH MAY BE ADDED NOT MORE THAN 1/10 PART HYDRATED LIME OR LIME PUTTY AND 2½ TO 3 PARTS SAND. FOR COURSE GROUT ADD 1 TO 2 PARTS PEA GRAVEL TO THE FINE GROUT. GROUT SHALL ATTAIN A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 2500 P.S.I. AT 28 DAYS.
5. REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 40 FOR #4 BARS AND LESS, GRADE 60 FOR #5 BARS AND GREATER, UNLESS OTHERWISE NOTED.
6. ALL CONTINUOUS BARS OR DOWELS SHALL LAP A MINIMUM 40 BAR DIAMETERS IN CONCRETE AND MASONRY, UNLESS OTHERWISE NOTED.
7. EXCAVATE FOR FOUNDATIONS TO THE DEPTHS SHOWN ON THE DRAWINGS BELOW UNDISTURBED SOIL OR COMPACTED EARTH, 12" MINIMUM UNLESS OTHERWISE NOTED.
8. TELEPHONE THE STRUCTURAL ENGINEER IF SITE CONDITIONS ARE NOT AS SHOWN.
9. DO NOT BACKFILL WALL SOONER THAN 7 DAYS OR PRIOR TO REACHING STRENGTHS REQUIRED IN ITEMS 2, 4, AND 5 ABOVE.
10. DO NOT BACKFILL RETAINING WALLS WITH HEAVY EQUIPMENT CLOSER THAN THE VERTICAL HEIGHT OF WALL.
11. DESIGN EQUIVALENT FLUID PRESSURE IS FROM SOILS REPORT OR REQUESTED BY OWNER AND IS NOT THE RESPONSIBILITY OF THIS ENGINEER.
12. MASONRY CONSTRUCTION SHALL CONFORM WITH ALL APPLICABLE CODES AND ORDINANCES (1997 UNIFORM BUILDING CODE).
13. WATERPROOFING SEAL: COAT BACKSIDE OF WALL IN CONTACT WITH EARTH USING 'THOROSEAL' FOUNDATION COATING. APPLY PER MANUFACTURERS SPECIFICATIONS.

VALLEY-WIDE RECREATION & PARK DISTRICT

DESIGN APPROVAL BLOCK

Samuel W. Gregg — Date: 5-23-07

DIGALERT
DIAL TOLL FREE 1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

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ENGINEER				COUNTY	

SEAL—COUNTY: REGISTERED PROFESSIONAL ENGINEER — KHALED A. OTHMAN — NO. 33950 EXP. 6-30-08 — CIVIL — STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:

KHALED A. OTHMAN, P.E. R.C.E. 33950 EXP. 6-30-08 — DATE

RECOMMENDED — DATE

SEAL—LANDSCAPE ARCHITECT: REGISTERED LANDSCAPE ARCHITECT — Frank W. Radmacher — Lic. #1110 — (Date) 5/16/07 — STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC.
Landscape Architects
PHONE (714) 832-1774 FAX (714) 832-5721
14841 Yorba Street, Suite 204 - Tustin, CA 92780
EMAIL: FR-A@PACBELL.NET

PREPARED BY: GP — LIC. NO. 1110
DATE 12/12/2006 — EXP. DATE: 5/31/08

BENCHMARK:

SCALE: H: NOTED V: NOTED

TRACT No. 30351 IP No.030170
COUNTY OF RIVERSIDE
WINCHESTER TRAILS PARK
CONSTRUCTION DETAILS

SHEET NO. L-6 OF 15 SHEETS

FOR: OSBORNE DEVELOPMENT | W.O. | COUNTY FILE NO.

FRA# 2628

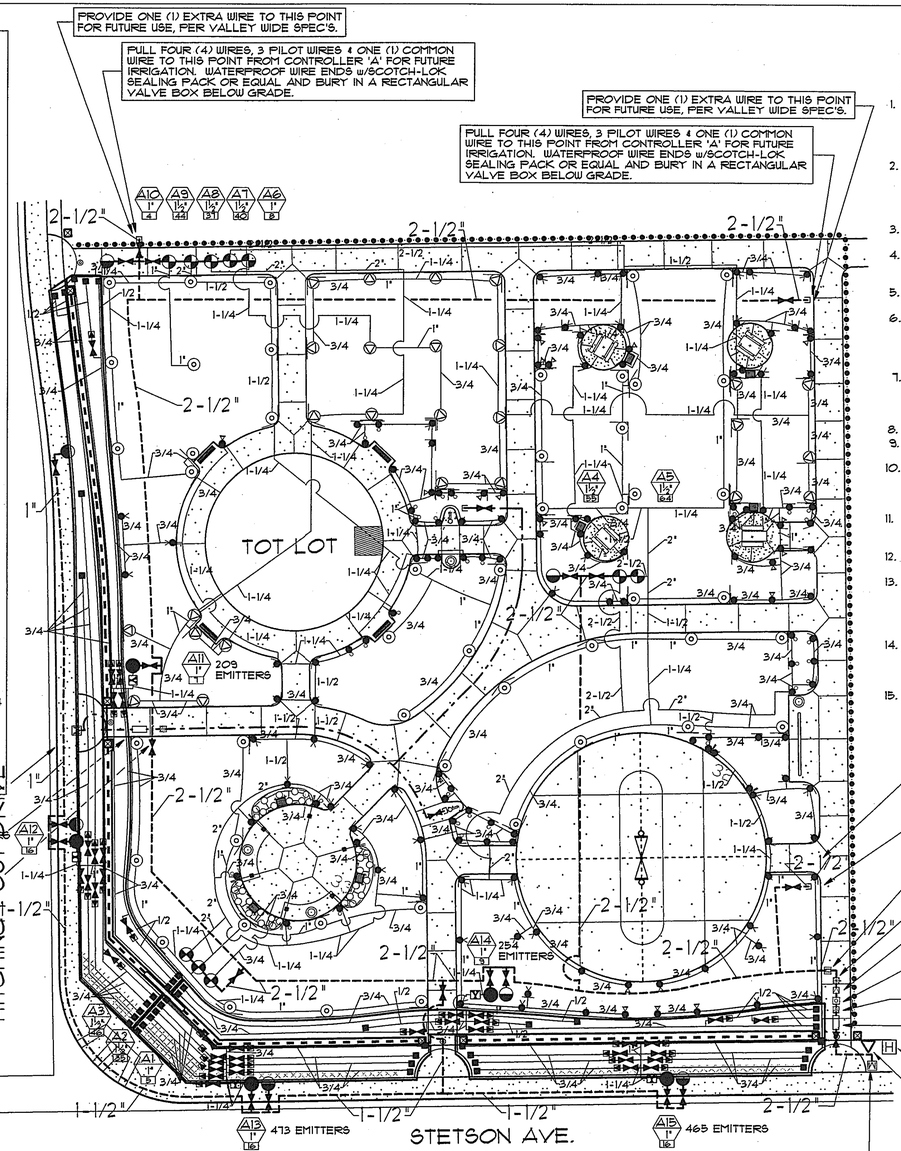
\\RIDILN\2600's\2628 Winchester Trails-OSBORNE\2628 park L-6.dwg, Model, 2/20/2007 11:42:28 AM, 0.75:12, VV

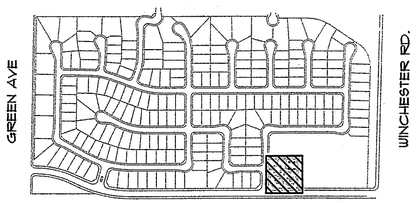
IRRIGATION LEGEND

SYMBOL	MANUFACTURER	MODEL NUMBER	TYPE	PERF.	PSI	RADIUS	DETAIL REF.
	HUNTER/RAINBD.	PROS-06-CV-5H,T,Q	LAWN	2,13,1	30	5'	IR-17
	HUNTER/RAINBD.	PROS-06-CV-8H,T,Q,VAN	LAWN	5,4,3,5	30	8'	IR-17
	HUNTER/RAINBD.	PROS-06-CV-12H,T,Q,VAN	LAWN	1.3,9,7,4	30	12'	IR-17
	HUNTER/RAINBD.	PROS-06-CV-15H,T,Q,VAN	LAWN	1.9,12,9,6,	30	15'	IR-17
	HUNTER/RAINBD.	PROS-06-CV-18VAN	LAWN	2.6,18,13,22,1	30	18'	IR-17
	HUNTER/RAINBD.	PROS-12-CV-5H,T,Q	SHRUB	2,13,1	30	6'	IR-17
	HUNTER	I-20-368,ADS-6R-3.0,3.0,3.0,3.0,1.5,1.5	LAWN	25,25,25,25,1.1,1.1	30	23'	IR-19
	HUNTER	I-20-368,ADS-6.0,6.0,4.0,3.5,3.0,3.0	LAWN	42,42,32,26,22	30	35'	IR-19

SYMBOL	DESCRIPTION	DETAIL REF.
M	WATER METER BY OTHERS - PER LOCAL CODE - SIZE NOTED	IR-30
	RAINBIRD #PESB-PRS SERIES ELECTRIC CONTROL VALVE - SIZES NOTED	IR-1
	1" RAINBIRD #PESB SERIES ELECTRIC CONTROL VALVE FOR DRIP SYSTEMS	IR-2
	3/4" RAINBIRD #33DRC QUICK COUPLING VALVE w/YELLOW RUBBER COVER	IR-3
	NIBCO T-580 BRASS BALL VALVE, LINE SIZE - 2" MAX, USE SCH. 80 THREADED BALL VALVE FOR DRIP	IR-4/DR-6
	FEBCO #825Y-A REDUCED PRESSURE BACKFLOW PREVENTER-INSTALL IN A STRONG BOX VANDAL RESISTANT ENCLOSURE #SBCC-3065 - SIZES NOTED	IR-6
	AMIAD #TAF-500/150 TURBO CLEAN FILTER w/AUTO FLUSH VALVE, 200 MESH SCREEN, & 24 VAC CONTROL OPTION-CONNECT TO CALSENSE CONTROLLER DRIP 2 PROGRAM FOR DISTRICT MONITORING-SIZES NOTED	IR-8
	1-1/4" WILKINS #500 PR PRESSURE REDUCING VALVE - SET @ 50 P.S.I. DISCHARGE PRESSURE	
	2" TORO P220 MASTER VALVE w/PRESSURE COMPENSATING SOLENOID	IR-21
	CALSENSE FLOW SENSOR SCH. 80 PVC MODEL FM-15 - INSTALL PER MANUFACTURER'S SPECIFICATIONS	IR-21
	2-2" FERTILIZER INJECTORS-PLANT'S CHOICE MODEL #F-4000 - INSTALL TWO (2) UNITS IN PARALLEL	
	CALSENSE SERIES 48 STATION AUTOMATIC IRRIGATION CONTROLLER w/RAIN SHUT-OFF DEVICE- FOR MODEL & MOUNTING, SEE CALL-OUT AT POINT OF CONNECTION AT RIGHT. CONTRACTOR SHALL PROVIDE ONE CALSENSE #RRE-TRAN HAND HELD RADIO UNIT WITH CONTROLLER	IR-24/IR-25
H	CALSENSE HUB #LR-R-SSE IN ENCLOSURE W/LMR-400-DB ANTENNAE CABLE & LR-YAGI	
	PRESSURE MAIN LINE PIPING-FOR 2-1/2" USE PVC CLASS 315, FOR 2" & SMALLER USE PVC SCH. 40 - SIZES NOTED	IR-11
	NON-PRESSURE LATERAL LINE PIPING-USE PVC SCH. 40, MINIMUM 3/4" DIAMETER - SIZES NOTED	IR-11
	3/4" PVC SCH. 40 WATER LINE TO TWO (2) DRINKING FOUNTAINS	IR-11
Y	AMIAD #1-1201, 1" WYE STRAINER w/DISK FILTER	IR-2
W	3/4" SENNINGER IN-LINE PRESSURE REGULATOR	DR-6
	3/4" DURA PRODUCTS #548-007 FHT PVC CAP w/O-RING	DR-5
(NOT SHOWN)	SALCO 2 GPH SELF-CLEANING EMITTER	DR-1,2,3,4
	24" BOX TREES - 4 DRIP EMITTERS EACH #A-050-12	DR-4
	ALL SHRUBS - 1 DRIP EMITTER EACH #A-050-12	DR-2

CONTROLLER STATION
VALVE SIZE
FLOW IN G.P.M.





AREA MAPPED
NO SCALE

GENERAL IRRIGATION NOTES:

1. This sprinkler system design is based on the minimum operating pressure shown on the irrigation drawings at each point of connection. The irrigation contractor shall verify water pressure on the site prior to construction. Report any difference between the water pressure indicated on the drawings and the actual pressure reading at the irrigation point of connection to the Landscape Architect and Owner or Developer's Representative.
2. The Developer/Owner will provide required line voltage to the controller location(s). Irrigation contractor shall make final hook-up. Install No. 14 UF minimum direct burial irrigation wire (black pilot, white common). Use epoxy connectors and bury wire with main line, bundled and taped together every ten feet. Form expansion coils at each remote control valve and change of direction. Install schedule 40 PVC sleeves under all paving.
3. All piping between the point of connection and backflow preventer and/or vacuum breakers shall be of materials and installation methods required by the local codes.
4. Irrigation contractor must stop all "low head" drainage of sprinkler heads with a "Valcon ADV" check valve installed in the riser or use a "Seal-A-Matic" pop-up body. Install only as needed after flushing to prevent backdrainage. Adjust to minimum pressure loss.
5. This design is diagrammatic. Equipment shown in paved areas is for design clarification only; actual equipment is to be installed within planted areas wherever possible.
6. Irrigation contractor shall flush all lines and adjust all heads for maximum performance and to prevent overspray onto walks, drives, and buildings as much as possible. This shall include selecting the best degree of arc to fit existing site conditions and throttling the flow control at each valve to obtain the best operating pressure for each system. Install Rainbird PCS screens in the risers of heads as necessary to reduce radii.
7. Do not willfully install the system as designed when it is obvious in the field that unknown obstructions or grade differences exist that were not known during designing. Such conditions shall be brought to the attention of the Landscape Architect and Owner or Developer's representative; otherwise the irrigation contractor must assume full responsibility for any and all necessary revisions.
8. Install all components as called for in specifications and detail drawings.
9. Final location of automatic controller(s) shall be approved by the Owner or Developer's representative prior to installation.
10. It is the responsibility of the irrigation contractor to familiarize himself with all grade differences, locations of walls, walks, mow curbs and turf location edges, etc.. He shall coordinate his work with the general contractor and other sub-contractors for the location and installation of pipe sleeves through walls, under roadways, paving, structures, etc..
11. The irrigation contractor shall review the planting plan prior to irrigation installation to familiarize himself with all turf locations. All turf edges shall require "pop-up heads" regardless of what is shown on the plans.
12. In addition to the control wire sleeves shown on the drawings the irrigation contractor shall be responsible for the installation of control wire sleeves of sufficient size under all paved areas.
13. Sleeving for all pressure/non-pressure lines and wires under hardscape shall be installed prior to paving by the irrigation contractor. Sleeve all piping and wires under pavement a minimum of 24" deep with PVC SCH. 40 pipe sized two times the pipe diameter or wire bundles larger if necessary. Extend sleeves 24" beyond pavement. Sleeves under roadways shall be installed a minimum of 36" deep.
14. In addition to the pop-up sprinkler heads shown on the drawings, the irrigation contractor shall be responsible for installing pop-up heads wherever they occur adjacent to walks, curbs, concrete header and turf edges. Shrub risers adjacent to walks, curbs, concrete headers and/or turf will not be accepted.
15. When radius of spray heads required for proper coverage is more than 25% less than radius shown on the legend, Irrigation Contractor shall install a Rainbird "PCS" pressure compensation screen for flow and radius reduction. Select screen from PCS nozzle screen selection chart for appropriate radius.

POINT OF CONNECTION-CONNECT TO 2" WATER METER IN THIS AREA, BY OTHERS FOR IRRIGATION.
EXISTING WATER PRESSURE: 110 P.S.I.
MINIMUM OPERATING PRESSURE: 80 P.S.I.
PEAK IRRIGATION DEMAND: 64 G.P.M.

NOTE: WATER PRESSURE INFORMATION BASED ON 1.81" HGL. INFORMATION OBTAINED FROM ED BYRNES OF CANTY ENGINEERING ON 7-27-06.

NOTE: CONTACT BOB MOXLEY WITH CALSENSE PRIOR TO ORDERING CONTROLLER (800) 572-8608.

CONTACT BILL BELLINGER WITH CALSENSE PRIOR TO INSTALLATION (800) 572-8608.

WORST CONDITION PRESSURE LOSS CALCULATION

VALVE NO.	A5
WATER METER	3.0
BACKFLOW PREVENTER	12.0
AMIAD FILTER	3
PRESSURE REDUCING VALVE	13.9
MASTER VALVE	1.0
BALL VALVE	.1
REMOTE CONTROL VALVE	4.7
FLOW METER	.4
FERTILIZER INJECTOR	.8
MAINLINE	2.8
LATERAL LINE	3.5
FITTINGS (10% LOSS)	.4
ELEVATION	
TOTAL SYSTEM LOSSES	42.9
PRESSURE REQUIRED @ HEAD	30.0
TOTAL PRESSURE REQUIRED	72.9
AVAILABLE STATIC PRESSURE	110.0
RESIDUAL WATER PRESSURE	37.1

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DATE	BY	MARK	REVISIONS	APPR.	DATE

ENGINEER | COUNTY

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER — KHALED A. OTHMAN — NO. 33950 EXP. 6-30-08 — CIVIL — STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:

KHALED A. OTHMAN, P.E. R.C.E. 33950 EXP. 6-30-08 — DATE

RECOMMENDED BY: — DATE

SEAL-LANDSCAPE ARCHITECT
LICENSED LANDSCAPE ARCHITECT — Signature 5/31/08 — Registered Owner — Date — STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC.
Landscape Architects
PHONE (714) 832-1774 FAX (714) 832-5721
14141 Yorba Street, Suite 204 · Tustin, CA 92780
EMAIL: F-R-A@PACBELL.NET

PREPARED BY: DS1 — LIC. NO. 1110
DATE: 2/19/2007 — EXP. DATE: 5/31/08

BENCHMARK:

SCALE:
H: 1"=20' V: 1"=20'

VALLEY-WIDE RECREATION & PARK DISTRICT
DESIGN APPROVAL BLOCK
Samuel W. Gates — Date: 5-23-07
SCALE: 1" = 20'
0' 20' 40'

TRACT No. 30351 IP No. 3030170
COUNTY OF RIVERSIDE LANDSCAPE PLANS
"WINCHESTER TRAILS" PARK IRRIGATION PLAN

SHEET NO. L-7 OF 15 SHEETS

FOR: OSBORNE DEVELOPMENT | W.O. | COUNTY FILE NO.

FRA# 2628 / WINCHESTER TRAILS

\\RIDIUM\2600's\2628 Winchester Trails-OSBORNE\2628 Park Site 20 scl Irr.dwg, Layout1, 2/20/2007 10:34:17 AM, 1:240, W

PLANT MATERIALS LEGEND

SYMBOL	TREES	BOTANICAL NAME	COMMON NAME	SIZE
	T1	MAGNOLIA G. 'SAMUEL SOMMERS'	MAGNOLIA	24" BOX STD.
	T2	LAGERSTROEMIA FAURIEI - RED	CRAPE MYRTLE	24" BOX STD.
	T3	BRACHYCHITON POPULNEUS	BOTTLE TREE	24" BOX
	T4	PYRUS CALLERYANA 'ARISTOCRAT'	ARISTOCRAT PEAR	24" BOX STD.
	T5	PLATANUS ACERIFOLIA 'BLOODGOOD'	LONDON PLANE	24" BOX

SYMBOL	SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE
⊙	S1	AGAPANTHUS AFRICANUS 'QUEEN ANNE'	LILY OF THE NILE	1 GAL. @ 18" O.C.
⊙	S2	MRYTUS COMMUNIS 'COMPACTA'	DWARF MYRTLE	1 GAL. @ 24" O.C.
⊙	S3	RAPHIOLEPIS INDICA 'SPRING RAPTURE'	INDIAN HAWTHORN	5 GAL. @ 36" O.C.
⊙	S4	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	15 GAL. @ 42" O.C.
⊕	S5	MORAEA BICOLOR	FORTNIGHT LILY	5 GAL. @ 24" O.C.
⊙	S6	ESCALLONIA 'COMPAKTA'	DWARF ESCALLONIA	5 GAL. @ 30" O.C.
⊕	S7	PHORMIUM TENAX 'RUBRUM'	DWARF RED FLAX	5 GAL. @ 36" O.C.
⊗	S8	NANDINA 'WOODS DWARF'	WOODS HEAVENLY BAMBOO	5 GAL. @ 24" O.C.

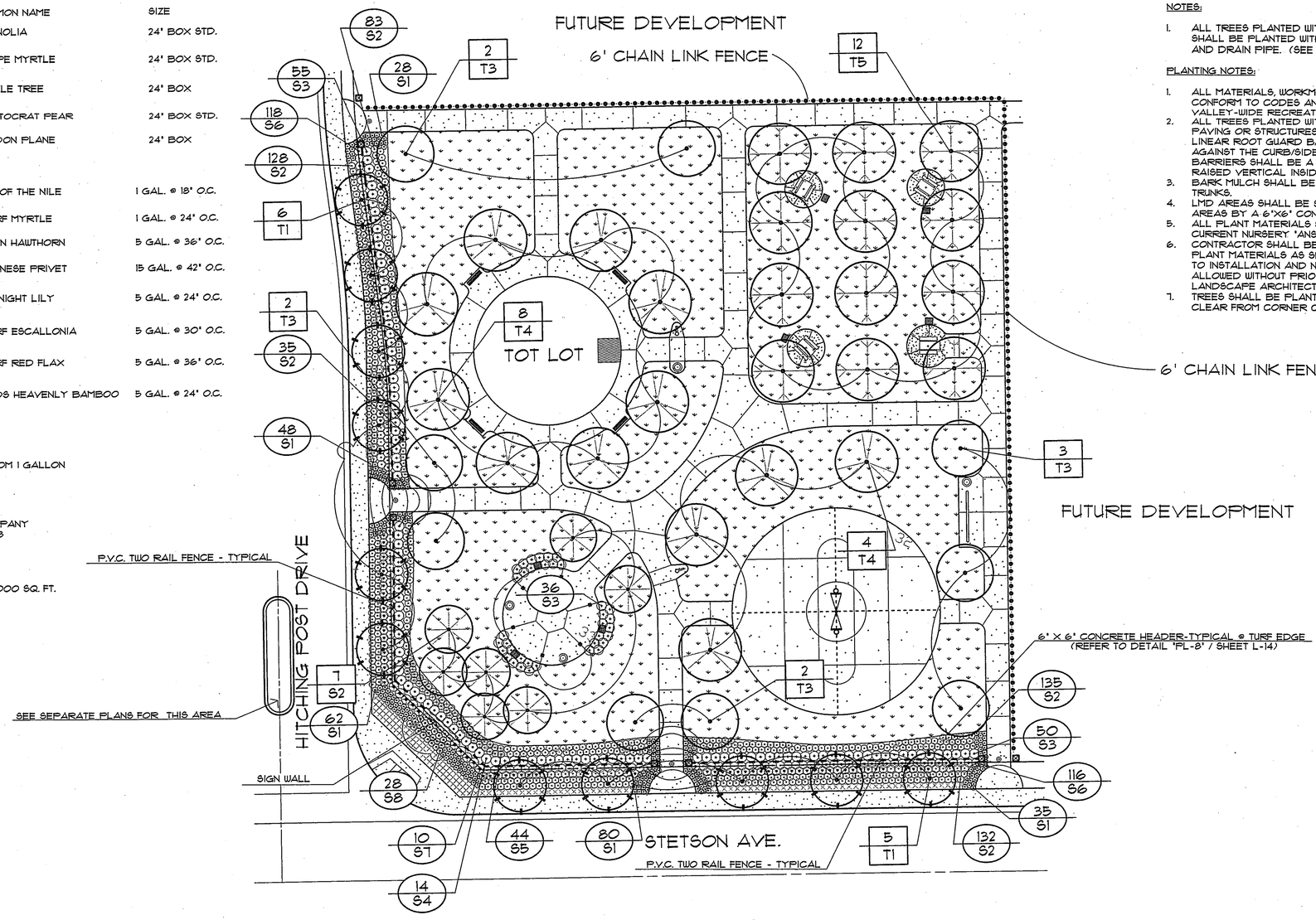
GROUNDCOVER

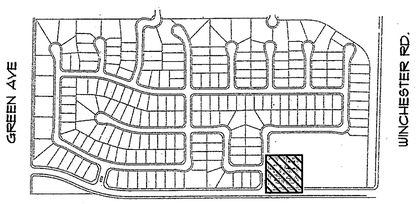
GC1 - TULBAGHIA VIOLACEA 'SILVER LACE' FROM 1 GALLON @ 18" O.C. / TRIANGULAR SPACING

ALL PLANT BEDS

4" COVER - FOREST FLOOR MULCH- 0-2"
SOURCE: AGUINAGA FERTILIZER COMPANY
IRVINE, CA (949) 786-9558

HYDROSEEDED TURF-'TEAMCREST' @ 15 LBS/1,000 SQ. FT.
WITH 6" X 6" CONCRETE HEADER EDGE
(SEE SPECIFICATIONS ON SHEET L-14)





AREA MAPPED
NO SCALE

NOTES:

1. ALL TREES PLANTED WITHIN 5' OF PAVING AND OR STRUCTURES SHALL BE PLANTED WITH AN APPROVED DEEP ROOT BARRIER AND DRAIN PIPE. (SEE DETAIL PL-9/SHEET L-13)

PLANTING NOTES:

1. ALL MATERIALS, WORKMANSHIP AND INSTALLATION SHALL CONFORM TO CODES AND ORDINANCES AS SET FORTH BY THE VALLEY-WIDE RECREATION & PARK DISTRICT.
2. ALL TREES PLANTED WITHIN EIGHT FEET (8') OF HARDSCAPE, PAVING OR STRUCTURES SHALL BE PLANTED WITH AN "APPROVED" LINEAR ROOT GUARD BARRIER. BARRIERS SHALL BE INSTALLED AGAINST THE CURB/SIDEWALK OR WALL SIDE AS APPLICABLE. BARRIERS SHALL BE A MINIMUM OF .06 ML. THICKNESS WITH RAISED VERTICAL INSIDE RIBS 3" APART (24" X 10' LONG).
3. BARK MULCH SHALL BE KEPT TO A MINIMUM OF 3" FROM ALL TREE TRUNKS.
4. LMD AREAS SHALL BE SEPARATED FROM PRIVATE LANDSCAPE AREAS BY A 6"X6" CONCRETE MOW STRIP.
5. ALL PLANT MATERIALS SHALL BE IN CONFORMANCE WITH CURRENT NURSERY "ANSI" STANDARDS'
6. CONTRACTOR SHALL BE RESPONSIBLE FOR PROCURING ALL PLANT MATERIALS AS SPECIFIED IN PLANT LEGEND PRIOR TO INSTALLATION AND NO PLANT SUBSTITUTIONS SHALL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT.
7. TREES SHALL BE PLANTED 10' CLEAR FROM DRIVEWAYS AND 20' CLEAR FROM CORNER CUTBACKS.

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DATE	BY	MARK	REVISIONS	APPR.	DATE

ENGINEER — COUNTY

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER — KHALED A. OTHMAN — NO. 33950 EXP. 6-30-08 — CIVIL — STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:

KHALED A. OTHMAN, P.E. R.C.E. 33950 EXP. 6-30-08 — DATE

RECOMMENDED BY: — DATE

SEAL-LANDSCAPE ARCHITECT
LICENSED LANDSCAPE ARCHITECT — THOMAS A. RADMACHER — Signature 5/31/08 — Expires Date 5/31/08 — Date — STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC.
Landscape Architects
PHONE (714) 832-1774 FAX (714) 832-5721
14841 Yorba Street, Suite 204 · Tustin, CA 92780
EMAIL: F-R-A@PACBELL.NET

PREPARED BY: V.V. — LIC. NO. 1110
DATE: 2/19/2007 — EXP. DATE: 5/31/08

BENCHMARK:

SCALE:
H: 1"=20' V: 1"=20'

VALLEY-WIDE RECREATION & PARK DISTRICT
DESIGN APPROVAL BLOCK
Samuel W. Cohen — Date: 5-23-07

SCALE: 1" = 20'
0' 20' 40'

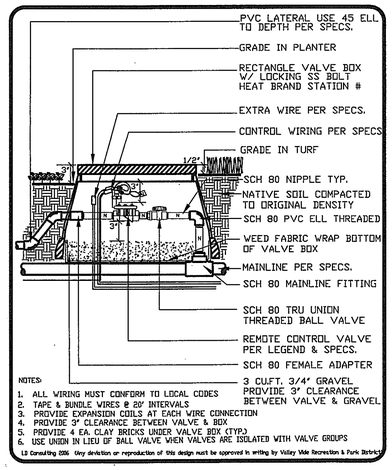
TRACT No. 30351 IP No.030170
COUNTY OF RIVERSIDE
LANDSCAPE PLANS
"WINCHESTER TRAILS" PARK
PLANTING PLAN

SHEET NO. L-8 OF 15 SHEETS

FOR: OSBORNE DEVELOPMENT — W.O. — COUNTY FILE NO.

FRA# 2628 / WINCHESTER TRAILS

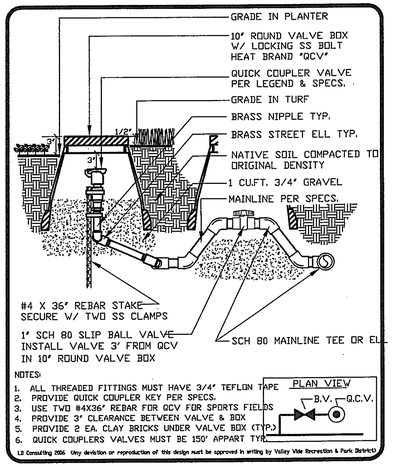
\\RIVDIUM\2600's\2628 Winchester Trails-OSBORNE\2628 Park Site 20 scl pltg.dwg, Layout1, 2/19/2007 4:05:55 PM, 1:240, VV



NOTES:
1. ALL WIRING MUST CONFORM TO LOCAL CODES
2. TAPE & BUNDLE WIRES @ 20' INTERVALS
3. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION
4. PROVIDE 3" CLEARANCE BETWEEN VALVE & BOX
5. PROVIDE 4 EA. CLAY BRICKS UNDER VALVE BOX (TYP.)
6. USE UNION IN LIEU OF BALL VALVE WHEN VALVES ARE ISOLATED WITH VALVE GROUPS

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

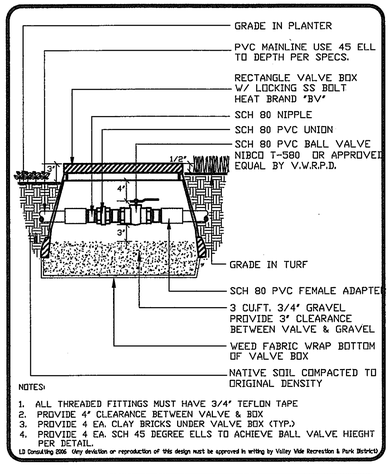
VALLEY WIDE RECREATION
01/06 REMOTE CONTROL VALVE IR-1



NOTES:
1. ALL THREADED FITTINGS MUST HAVE 3/4" TEFLON TAPE
2. PROVIDE QUICK COUPLER KEY PER SPECS.
3. USE TWO #4X36" REBAR FOR QCV FOR SPORTS FIELDS
4. PROVIDE 3" CLEARANCE BETWEEN VALVE & BOX
5. PROVIDE 2 EA. CLAY BRICKS UNDER VALVE BOX (TYP.)
6. QUICK COUPLERS VALVES MUST BE 150' APPART TYP.

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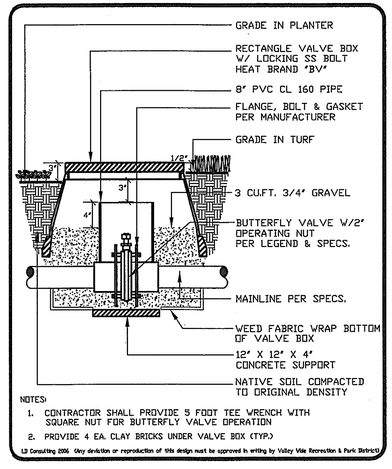
VALLEY WIDE RECREATION
01/06 QUICK COUPLER VALVE IR-3



NOTES:
1. ALL THREADED FITTINGS MUST HAVE 3/4" TEFLON TAPE
2. PROVIDE 4" CLEARANCE BETWEEN VALVE & BOX
3. PROVIDE 4 EA. CLAY BRICKS UNDER VALVE BOX (TYP.)
4. PROVIDE 4 EA. SCH 45 DEGREE ELLS TO ACHIEVE BALL VALVE HIEGHT PER DETAIL.

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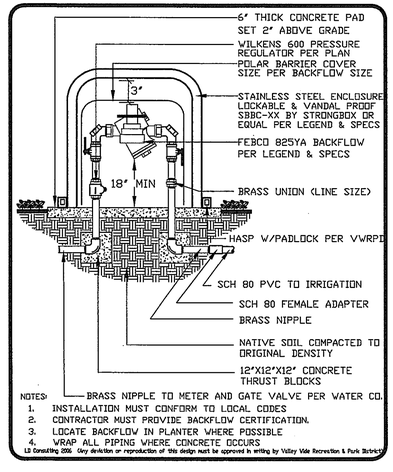
VALLEY WIDE RECREATION
01/06 BRASS BALL VALVE IR-4



NOTES:
1. CONTRACTOR SHALL PROVIDE 5 FOOT TEE WRENCH WITH SQUARE NUT FOR BUTTERFLY VALVE OPERATION
2. PROVIDE 4 EA. CLAY BRICKS UNDER VALVE BOX (TYP.)

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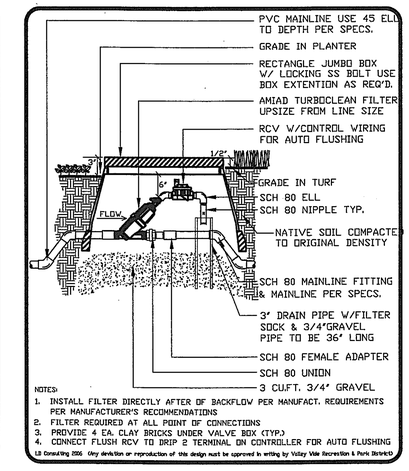
VALLEY WIDE RECREATION
1/06 BUTTERFLY VALVE IR-5



NOTES:
1. INSTALLATION MUST CONFORM TO LOCAL CODES
2. CONTRACTOR MUST PROVIDE BACKFLOW CERTIFICATION.
3. LOCATE BACKFLOW IN PLANTER WHERE POSSIBLE
4. WRAP ALL PIPING WHERE CONCRETE OCCURS

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VALLEY WIDE RECREATION
01/06 BACKFLOW PREVENTER IR-6



NOTES:
1. INSTALL FILTER DIRECTLY AFTER OF BACKFLOW PER MANUFACT. REQUIREMENTS PER MANUFACTURER'S RECOMMENDATIONS
2. FILTER REQUIRED AT ALL POINT OF CONNECTIONS
3. PROVIDE 4 EA. CLAY BRICKS UNDER VALVE BOX (TYP.)
4. CONNECT FLUSH RCV TO DRIP 2 TERMINAL ON CONTROLLER FOR AUTO FLUSHING

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VALLEY WIDE RECREATION
01/06 MAINLINE INLINE FILTER IR-8

NOTES:
1. PROVIDE BLUE SEALANT IN ADDITION TO PRE-FILLED CONNECTOR
2. PROVIDE WIRE CONNECTORS FOR ALL CONTROL WIRE SPLICES
3. PROVIDE WIRE CONNECTORS AT ENDS OF ALL EXTRA WIRES
4. WIRE SPLICES SHALL BE INSIDE VALVE BOXES AT VALVES ONLY OR FOR RUNS OVER 2500 FEET.
5. PROVIDE #12 CONTROL WIRING FOR RUNS OVER 2500 FEET AND ALL COMMON CONTROL WIRE

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 WIRE CONNECTORS IR-9

NOTES:
1. ALL WIRING MUST CONFORM TO LOCAL CODES
2. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION
3. PROVIDE 3" CLEARANCE BETWEEN WIRES & BOX
4. ELECTRICAL SWEEP OPEN END SHALL BE SEALED WITH EXPANSION FOAM
5. PROVIDE 4 EA. CLAY BRICKS UNDER VALVE BOX (TYP.)
6. NO WIRE SPLICES SHALL BE ALLOWED UNLESS APPROVED BY V.W.R.P.D.
7. ALL SPARE WIRES FOR END OF RUN SHALL BE IN A PULL BOX TYP. AND SHALL BE LABELED IN BOX AND AT CONTROLLER

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VALLEY WIDE RECREATION
01/06 PULL BOX IR-10

DEPTH	A	B	C	D	E	F
4" & LARGER	-	30"	30"	36"	36"	36"
3" & SMALLER	18"	24"	24"	30"	36"	36"
2-1/2" & SMALLER	12"	24"	24"	24"	30"	30"
WIRING	-	-	BELOW MAIN	-	-	BELOW MAIN

NOTES:
1. LINES MUST HAVE MIN. CLEARENCE OF 4" FROM EACH OTHER & 24" FROM OTHER TRADE
2. RUN WIRING UNDER MAINLINE, TAPE & BUNDLE @ 10' O.C.
3. TIE A 24" LOOP IN ALL WIRING AT CHANGES IN DIRECTION
4. ALL SLEEVES MUST BE 2X THE DIAMETER OF THE PIPE WITHIN
5. ALL SLEEVES MUST HAVE FOAM SEALANT INSIDE PIPE
6. ALL SLEEVES MUST EXTEND 12" MIN. DISTANCE PAST CURB OR SIDEWALK
7. CONTRACTOR MUST ADJUST MAINLINE ARDUND ALL STREET LIGHT LOACTIONS

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VALLEY WIDE RECREATION
01/06 PIPE & WIRE TRENCHING IR-11

NOTES:
1. SUPPLY LINES 2" - 3" IN DIAMETER SHALL RECEIVE CONCRETE THRUST BLOCKS
2. SUPPLY LINES OVER 3" SHALL HAVE IRON DUCTILE RESTRAINT SYSTEM
3. A MINIMUM OF 6" OF CONCRETE SHALL BE POURED ON VIRGIN OR COMPACTED SOIL BENEATH EACH INSTALLATION
4. CONCRETE SHALL BE 3 SACK MIX SLURRY CONTAINING NO GRAVEL
5. WHERE CONCRETE AND PVC ARE TOGETHER PVC PIPE SHALL BE PROTECTED WITH PIPE WRAP

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 CONCRETE THRUST BLOCK IR-12

NOTE:
ALL TREES MUST HAVE BREATHER TUBES UNLESS TREE WELL BUBBLER IS SPECIFIED

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 TREE BREATHER TUBE IR-13

NOTES:
1. USE 3/4" TEFLON TAPE AT ALL SCH 40 ELLS
2. INSTALL RISER PERPENDICULARLY PLUMB TO ADJACENT GRADE
3. INSTALL RISER 12" FROM WALL OR FENCE
4. ADJUST NOZZLE TO PREVENT OVERSPRAY ONTO HARDSCAPE
5. USE POP-UP SPRAY HEAD @ TOE OF SLOPE & WITHIN 6' OF SIDEWALK, TURF OR CURBING

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VALLEY WIDE RECREATION
01/06 SHRUB SPRAY ON GRADE IR-15

APPROVAL BY THE TRANSPORTATION DEPARTMENT IS FOR THE AREA WITHIN THE ROAD RIGHT-OF-WAY ONLY.

VALLEY- WIDE RECREATION & PARK DISTRICT
DESIGN APPROVAL BLOCK
Samuel W. Goepp — Date: 5-23-07

NOTE:
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DATE	BY	MARK	REVISIONS	APPR.	DATE

ENGINEER — COUNTY

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER — KHALED A. OTHMAN — NO. 33950 EXP. 6-30-08 CIVIL — STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:
KHALED A. OTHMAN, P.E. R.C.E. 33950 EXP. 6-30-08 — DATE
RECOMMENDED: — DATE

SEAL-LANDSCAPE ARCHITECT
LICENSED LANDSCAPE ARCHITECT — Signature 5/31/08 — Renewal Date — STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC. FRA# 2628
LANDSCAPE ARCHITECTS
PHONE (714) 832-1774 FAX (714) 832-5721
14841 YORBA STREET SUITE 204 TUSTIN, CA 92780
EMAIL: F-R-A@PACBELL.NET

PREPARED BY: V.V.
DATE: 12/12/2006
LIC. NO. 1110
EXP. DATE: 5/31/2008

BENCHMARK:

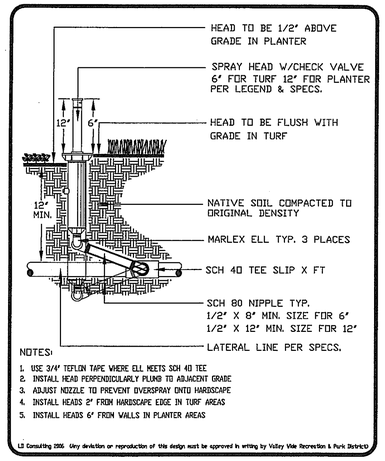
SCALE:
H: 1"=20' V: 1"=20'

TRACT No. 30351 IP No.030170
COUNTY OF RIVERSIDE LANDSCAPE PLANS
"WINCHESTER TRAILS" PARK IRRIGATION DETAILS

SHEET NO. L-9 OF 15 SHEETS

FOR: OSBORNE DEVELOPMENT | W.O. | COUNTY FILE NO.

I:\RDI\LW\2600's\2628 Winchester Trails-OSBORNE\2628 Park LMD Irrig Details.dwg, Model, 12/11/2006 7:21:29 PM, 1:1:2, VV

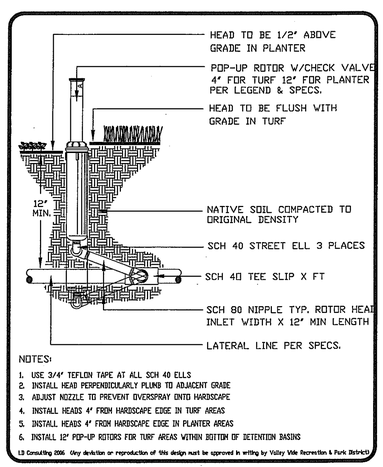


NOTES:

1. USE 3/4" TEFLON TAPE WHERE ELL MEETS SCH 40 TEE
2. INSTALL HEAD PERPENDICULARLY PLUMB TO ADJACENT GRADE
3. ADJUST NOZZLE TO PREVENT OVERSPRAY ONTO HARDSCAPE
4. INSTALL HEADS 2" FROM HARDSCAPE EDGE IN TURF AREAS
5. INSTALL HEADS 6" FROM WALLS IN PLANTER AREAS

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION
01/06 POP-UP SPRAY HEAD IR-17

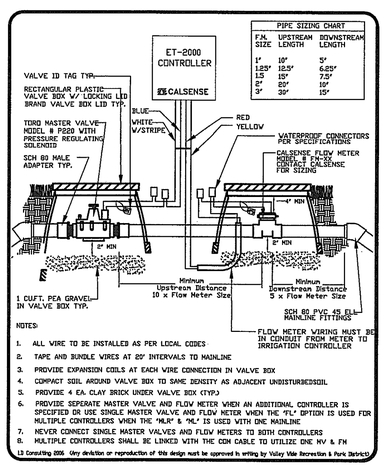


NOTES:

1. USE 3/4" TEFLON TAPE AT ALL SCH 40 ELLS
2. INSTALL HEAD PERPENDICULARLY PLUMB TO ADJACENT GRADE
3. ADJUST NOZZLE TO PREVENT OVERSPRAY ONTO HARDSCAPE
4. INSTALL HEADS 4" FROM HARDSCAPE EDGE IN TURF AREAS
5. INSTALL HEADS 4" FROM HARDSCAPE EDGE IN PLANTER AREAS
6. INSTALL 12" POP-UP ROTORS FOR TURF AREAS WITHIN BOTTOM OF DETENTION BASINS

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION
01/06 POP-UP ROTOR HEAD IR-19



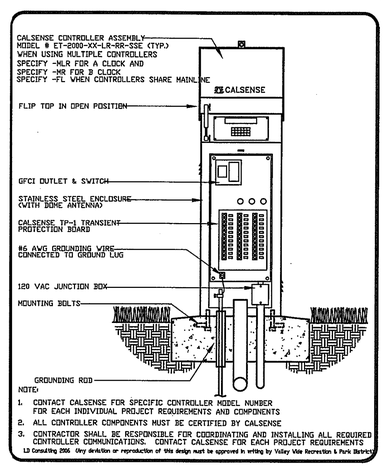
PIPE SIZING CHART		
P.V. SIZE	UPSTREAM LENGTH	DOWNSTREAM LENGTH
1"	10"	5"
1.25"	12.5"	6.25"
1.5	15"	7.5"
2"	20"	10"
3"	30"	15"

NOTES:

1. ALL WIRE TO BE INSTALLED AS PER LOCAL CODES
2. TAPE AND BUNDLE WIRES AT 20' INTERVALS TO MAINLINE
3. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX
4. COMPACT SOIL AROUND VALVE BOX TO SAME DENSITY AS ADJACENT UNDISTURBED SOIL
5. PROVIDE 4 EA. CLAY BRICK UNDER VALVE BOX (TYP.)
6. PROVIDE SEPERATE MASTER VALVE AND FLOW METER WHEN AN ADDITIONAL CONTROLLER IS SPECIFIED OR USE SINGLE MASTER VALVE AND FLOW METER WHEN THE "FL" OPTION IS USED FOR MULTIPLE CONTROLLERS WHEN THE "MLR" & "ML" IS USED WITH ONE MAINLINE
7. NEVER CONNECT SINGLE MASTER VALVES AND FLOW METERS TO BOTH CONTROLLERS
8. MULTIPLE CONTROLLERS SHALL BE LINKED WITH THE CDN CABLE TO UTILIZE ONE MV & FM

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION
01/06 MASTER VALVE & FLOW METER IR-21

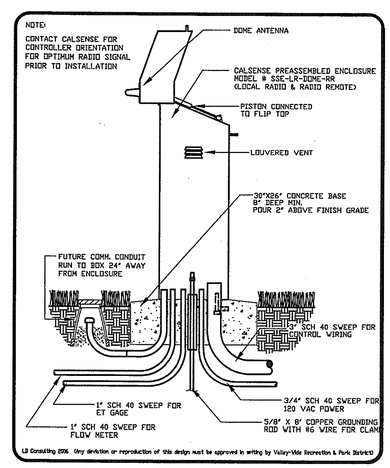


NOTE:

1. CONTACT CALSENSE FOR SPECIFIC CONTROLLER MODEL NUMBER FOR EACH INDIVIDUAL PROJECT REQUIREMENTS AND COMPONENTS
2. ALL CONTROLLER COMPONENTS MUST BE CERTIFIED BY CALSENSE
3. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND INSTALLING ALL REQUIRED CONTROLLER COMMUNICATIONS. CONTACT CALSENSE FOR EACH PROJECT REQUIREMENTS

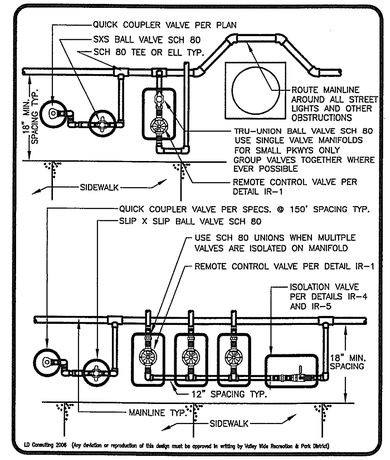
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VALLEY WIDE RECREATION
01/06 PEDESTAL CONTROLLER IR-23



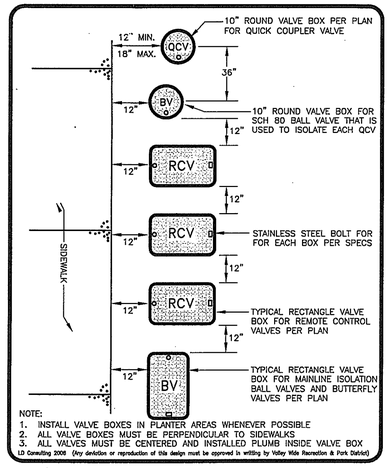
LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley-Wide Recreation & Park District)

VALLEY WIDE RECREATION
01/06 PEDESTAL ASSEMBLY IR-24



LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION
01/06 VALVE MANIFOLD IR-26

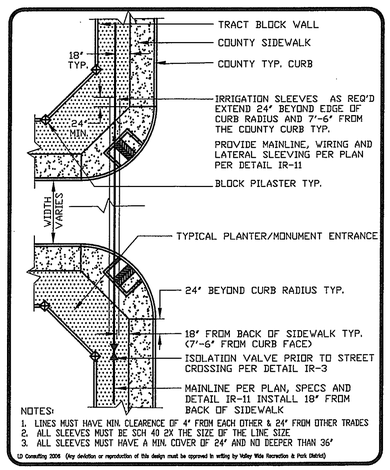


NOTE:

1. INSTALL VALVE BOXES IN PLANTER AREAS WHENEVER POSSIBLE
2. ALL VALVE BOXES MUST BE PERPENDICULAR TO SIDEWALKS
3. ALL VALVES MUST BE CENTERED AND INSTALLED PLUMB INSIDE VALVE BOX

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION
01/06 VALVE BOX LAYOUT IR-27

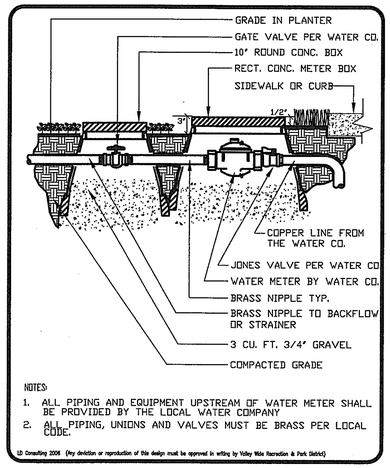


NOTES:

1. LINES MUST HAVE MIN. CLEARENCE OF 4" FROM EACH OTHER & 24" FROM OTHER TRADES
2. ALL SLEEVES MUST BE SCH 40 2X THE SIZE OF THE LINE SIZE
3. ALL SLEEVES MUST HAVE A MIN. COVER OF 24" AND NO DEEPER THAN 36"

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VALLEY WIDE RECREATION
01/06 STREET SLEEVING IR-28



NOTES:

1. ALL PIPING AND EQUIPMENT UPSTREAM OF WATER METER SHALL BE PROVIDED BY THE LOCAL WATER COMPANY
2. ALL PIPING, UNIONS AND VALVES MUST BE BRASS PER LOCAL CODE.

LD Consulting 2006 (Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District)

VALLEY WIDE RECREATION
01/06 WATER METER CONNECTION IR-30

APPROVAL BY THE TRANSPORTATION DEPARTMENT IS FOR THE AREA WITHIN THE ROAD RIGHT-OF-WAY ONLY.

VALLEY-WIDE RECREATION & PARK DISTRICT
DESIGN APPROVAL BLOCK
Samuel W. Gonzales Date: 5-23-07

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DATE	BY	MARK	REVISIONS	APPR.	DATE
		ENGINEER		COUNTY	

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-08 CIVIL STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:

KHALED A. OTHMAN, P.E. DATE
R.C.E. 33950 EXP. 6-30-08

RECOMMENDED: DATE

SEAL-LANDSCAPE ARCHITECT
LICENSED LANDSCAPE ARCHITECT FRANK R. RADMACHER Signature 5/31/08 Renewal Date Date STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC. FRA# 2628
LANDSCAPE ARCHITECTS
PHONE (714) 832-1774 FAX (714) 832-5721
14841 YORBA STREET SUITE 204 TUSTIN, CA 92780
EMAIL: F-R-A@PACBELL.NET

PREPARED BY: V.V. LIC. NO. 1110
DATE: 12/12/2006 EXP. DATE: 5/31/2008

BENCHMARK:

SCALE:
H: 1"=20' V: 1"=20'

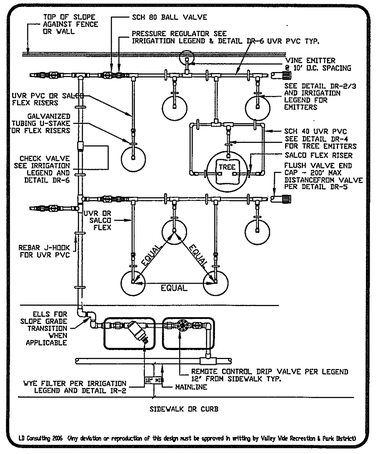
TRACT No. 300351 IP No.030170
COUNTY OF RIVERSIDE
LANDSCAPE PLANS
"WINCHESTER TRAILS" PARK
IRRIGATION DETAILS

SHEET NO. L-10 OF 15 SHEETS

FOR: OSBORNE DEVELOPMENT | W.O. | COUNTY FILE NO.

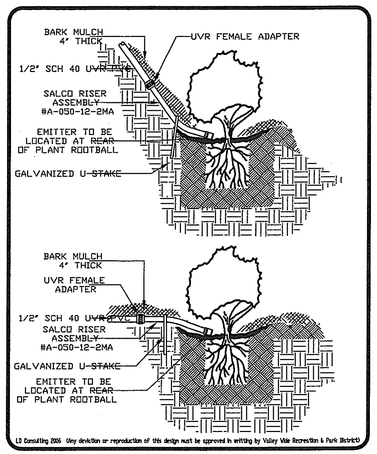
FRA# 2628 / WINCHESTER TRAILS

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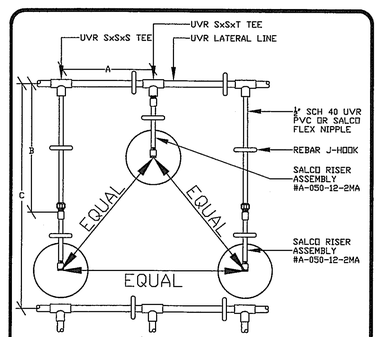
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VALLEY WIDE RECREATION
01/06 POINT TO POINT LAYOUT DR-1



L3 Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

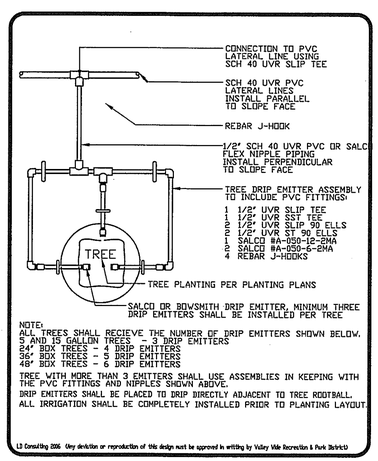
VALLEY WIDE RECREATION
01/06 SHRUB EMITTER DR-2



PLANT SPACING	A	B	C
3' O.C.	18"	30"	5'0"
4' O.C.	24"	42"	7'0"
5' O.C.	30"	54"	8'6"

L3 Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 EMITTER ASSEMBLY DR-3

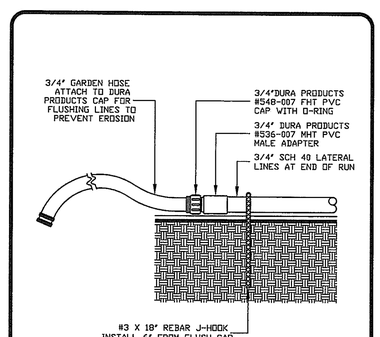


NOTE:
ALL TREES SHALL RECIEVE THE NUMBER OF DRIP EMITTERS SHOWN BELOW.
5 AND 15 GALLON TREES - 3 DRIP EMITTERS
24" BOX TREES - 4 DRIP EMITTERS
36" BOX TREES - 5 DRIP EMITTERS
48" BOX TREES - 6 DRIP EMITTERS

TREE WITH MORE THAN 3 EMITTERS SHALL USE ASSEMBLIES IN KEEPING WITH THE PVC FITTINGS AND NIPPLES SHOWN ABOVE.
DRIP EMITTERS SHALL BE PLACED TO DRIP DIRECTLY ADJACENT TO TREE ROOTBALL.
ALL IRRIGATION SHALL BE COMPLETELY INSTALLED PRIOR TO PLANTING LAYOUT.

L3 Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

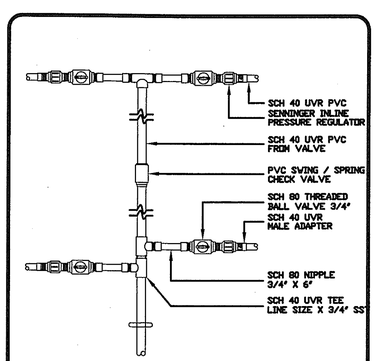
VALLEY WIDE RECREATION
01/06 TREE EMITTER LAYOUT DR-4



NOTE:
ALL FLUSH VALVES MUST BE LISTED ON PLAN AND ON AS-BUILTS

L3 Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 DRIP FLUSH ASSEMBLY DR-5



NOTE:
SPRING CHECK VALVES TO BE USED FOR RCV'S LOCATED AT TOP OF SLOPE.
SWING CHECK VALVES TO BE USED FOR RCV'S LOCATED AT TOE OF SLOPE.

FLUSH LATERAL LINES COMPLETELY USING WATER BEFORE INSTALLTION OF THE SENNINGER PRESSURE REGULATRS.

L3 Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 CHECK VALVE & PR. DR-6

\\RIDIUM\2600's\2628 Winchester Trails-OSBORNE\2628 Park LMD Irrig Details.dwg, Model, 12/11/2006 7:22:33 PM, 1:12, VV

VALLEY-WIDE RECREATION & PARK DISTRICT
DESIGN APPROVAL BLOCK
Samuel W. George
Date: 5-23-07

APPROVAL BY THE TRANSPORTATION DEPARTMENT IS FOR THE AREA WITHIN THE ROAD RIGHT-OF-WAY ONLY.

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DATE	BY	MARK	REVISIONS	APPR.	DATE

ENGINEER | COUNTY

SEAL-COUNTY
REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN NO. 33950 EXP. 6-30-08 CIVIL STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:

KHALED A. OTHMAN, P.E. DATE
R.C.E. 33950 EXP. 6-30-08

RECOMMENDED: DATE

SEAL-LANDSCAPE ARCHITECT
LICENSED LANDSCAPE ARCHITECT Signature 5/31/08 Renewal Date 2716/67 Date STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC. FRA# 2628
LANDSCAPE ARCHITECTS
PHONE (714) 832-1774 FAX (714) 832-5721
14841 YORBA STREET SUITE 204 TUSTIN, CA 92780
EMAIL: F-R-A@PACBELL.NET

PREPARED BY: V.V. LIC. NO. 1110
DATE: 12/12/2006 EXP. DATE: 5/31/2008

BENCHMARK:

SCALE:
H: 1"=20' V: 1"=20'

TRACT No. 300351 IP No.030170
COUNTY OF RIVERSIDE
LANDSCAPE PLANS
"WINCHESTER TRAILS" PARK
DRIP IRRIGATION DETAILS

SHEET NO. L-11 OF 15 SHEETS

FOR: OSBORNE DEVELOPMENT | W.O. | COUNTY FILE NO.

FRA# 2628 / WINCHESTER TRAILS

SECTION 02700 IRRIGATION SYSTEMS
Revised 01/06

IRRIGATION SPECIFICATIONS — GENERAL

1. **General Requirements**
   a. Permits: Contractor shall obtain and pay for any permits required.
   b. Contractor shall be responsible for notifying all utility companies 3 days prior to any trenching.
   c. Contractor must provide Valley-Wide's representative with the Dig Alert number at first inspection.
   d. The current Standard Landscape Specifications & Design Guidelines booklet must be on site at all times for each project.

2. **Scope of Work**
   a. The intent of the drawings and specifications is to indicate the processes required for the installation of a complete operating irrigation system.
   b. The work consists of furnishing all tools, equipment, material, labor and any processes required to provide a complete operating irrigation system as specified in the drawings and specifications.
   c. Drawings are diagrammatic and must be field verified. Contractor must notify Engineer and/or Valley Wide immediately of any discrepancies prior to starting work.
   d. Due to the scale of the drawings it is not possible to show all offsets, assemblies, fittings, etc. for a complete irrigation system.
   e. Under this section the contractor shall provide all necessary assemblies, fittings, etc. to provide a complete fully automatic irrigation system as listed in drawings and specifications with no additional cost to the owner.
   f. Any extra work performed shall be approved in writing by the Owner or Owner's representative prior to the start of such work.
   g. Any unapproved work may be at the contractor's expense.
   h. If reclaimed water is used, contractor shall provide all necessary reclaimed water signage and equipment. The entire irrigation system must be in accordance to the local reclaimed water specifications and as listed in drawings.

3. **Record Drawings**
   a. Record accurately on one set of black and white prints denoting variation in work from original drawings.
   b. Dimension from two permanent points of reference (sidewalks, pavement, curbs, street lights, buildings) Record on as-builts daily or as work is performed. All drafting must be clearly legible and dimensions shall be no smaller the 1/4" in size
   c. Show dimensions from the following locations and depths:
      i. Point of connection (P.O.C.).
      ii. Backflow prevention assembly, master valve and flow sensor.
      iii. Routing of irrigation pressure mainlines and all directional changes.
      iv. Ball and butterfly isolation valves.
      v. Irrigation control valves.
      vi. Automatic controller. rain sensors and electrical conduits.
      vii. Sleeves and pull boxes.
      viii. Other related equipment (as directed by the Engineer).
   c. Upon completion and approval of record drawing prints, transfer all information to reproducible mylars and provide two additional blue line copies.
   d. Maintain as-built drawings on site at all times. These drawings are subject to inspection at any time.
   e. Make changes to reproducible drawings in ink (no ball-point pen). Erase or use eradicating fluid when revising drawings. Make changes in a manner equal to the original drawings.
   f. Contractor must submit as-built drawings (sepia mylars and two sets of blue lines) to the Engineer inspecting the site seven days prior to the start of the maintenance period for approval.
   g. **As-built measurements must be transferred to an Autocad digital file by the Landscape Architect or qualified draftsman prior to turn-over. All site lines must be black, mainline and valves must be red and dimension lines must be blue.**

4. **Controller Charts**
   a. As-built drawings shall be approved in writing prior to preparing charts.
   b. Provide two controller charts for each controller supplied, showing the area covered by the automatic controller.
   c. The chart shall be a reduced reproduction of the as-built system. If the controller sequence is not legible when reduced, enlarge it to a size that will be legible when reduced.
   d. Charts shall be black line print with a different transparent color used to show area of coverage for each station.
   e. Completed and approved charts must be laminated with plastic 10 mil thick minimum.
   f. Charts shall be completed and approved prior to final inspection of the irrigation system.
   g. Controller access. The Engineer reserves the right to have complete access to the controller clocks for monitoring and controlling system failures. The contractor shall provide the Engineer with two sets of all keys necessary for access to the controller clocks within the designated area. The keys will then become the property of the Owner.

5. **Operation and Maintenance Manuals**
   a. Prepare and deliver to the Engineer, prior to the start of maintenance, all required and necessary descriptive material in complete detail and sufficient quantity properly prepared in four individually bound copies. Describe the material installed in sufficient detail to permit qualified operating personnel to understand, operate and maintain all equipment. Each manual shall include the following:
      i. Index sheet, stating contractor's address and telephone number.
      ii. Duration of guarantee period with guarantee forms.
      iii. List of equipment with names and addresses of manufacture's local representatives.
      iv. Complete operating and maintenance instructions on all major equipment.
   b. In addition to the maintenance manuals, provide the maintenance personnel with the instructions for major equipment and show written evidence to the Engineer at the conclusion of the work that this service has been completed.

6. **Spare Parts and Equipment**
   a. Prior to the start of maintenance prepare and deliver to the Engineer, all required spare parts, tools and equipment. Spare parts, tools and equipment shall include but not limited to the following:
      i. Two quick coupler keys with 3/4 inch bronze hose bib with hand wheel.
      ii. Two quick coupler lid keys
      iii. One valve box cover wrench or key
      iv. Two wrenches and shrew drivers for adjustment and disassembly for each type of sprinkler head used in the irrigation system
      v. One 5-foot tee wrench for operating isolation valves specified
      vi. Six extra sprinkler heads of each type and size used in the irrigation system
      vii. Remote radio device for irrigation controller(s) for systems 30 stations or greater and if otherwise specified

7. **Guarantee**
   a. Provide written guarantee in form approved that all work with defects in workmanship and materials will be repaired or replaced at no cost to the Owner for a period of one year from the date of acceptance by the Owner's representative.
   b. This form shall be transferred onto the contractor's letterhead and must contain the following:

"Name of Project"

We hereby guarantee that the irrigation system we have furnished and installed for "Name of Project" is free from defects in materials and workmanship, and the work has been completed in accordance with the drawings and specifications. Ordinary wear and tear and unusual abuse or neglect expected. We agree to repair or replace any defects in material or workmanship, which may develop during the period of one (1) year from the date of acceptance, and also to repair or replace any damage resulting from the repairing or replacing of such defects at no additional cost to the Owner. We shall make such repairs or replacements within a reasonable time after receipt of such written notice. In the event of our failure to make such repairs or replacements within a reasonable time after receipt of such written notice from the Owner, we authorize the Owner to proceed to have said repairs or replacements made at our expense and we will pay for the cost and charges therefore upon demand.

Project Name: _____
Owner: _____
Landscape Architect: _____
Location: _____
Signed: _____ Title: _____
Address: _____
Telephone: (___)_____
Date of Signature: _____

8. **Inspections**
   a. Site inspections and notification time.

i.	Pre-construction conference	7 days
ii.	Pressure line installation and testing	48 hours
iii.	Controller installation	48 hours
iv.	Lateral line and sprinkler installation	48 hours
v.	Coverage test	48 hours
vi.	Final Grading	48 hours
vii.	Weed-abatement	48 hours
viii.	Tree & shrub observation & layout	48 hours
ix.	Finish grade prior to hydro-seeding	48 hours
x.	Acceptance to commence maintenance	48 hours
xi.	Monthly maintenance walk	48 hours
xii.	Final Inspection	7 days

   b. No field inspections will commence unless record drawings are current and available for observation upon request by the Owner's representative.

9. **Irrigation System Testing**
   a. Owner's representative must be notified 48 hours prior to any irrigation testing or inspections.
   b. Contractor shall perform a pressure test to all pressure lines in the presence of the Owner's representative.
   c. All pressure line must be tested under hydrostatic pressure of 150 pounds per square inch (PSI) and be proven watertight.
   d. Pressure lines must maintain pressure for as period of 2 hours. If pressure drop occurs, contractor shall replace joints and repeat test until no pressure drop is achieved.

10. **Pressure Line Observation**
   a. Prior to any backfilling of any trench(s) contractor shall call for field observation for verification of material, depths, clearances and warning tape by the Owner's representative.
   b. Any trenching covered that was not inspected or approved shall be made visible for observation at the cost of the Contractor.

11. **Controller Testing**
   a. Prior to final acceptance contractor shall provide certification from manufacture stating that controller specified on drawings has been installed per manufacturer's specifications.
   b. Contractor shall test in the presence of the Owner's representative that all control wires and extra control wires are functioning properly.
   c. Contractor shall provide sufficient manpower and/or radio device to complete such testing in a timely manner.

12. **Lateral Line Testing**
   a. Prior to any backfilling of any trench(s) contractor shall call for field observation for verification of material, depths and clearances by the Owner's representative.
   b. All sprinklers and assemblies shall be made visible for observation for verification that all material has been installed per plans and specifications.
   c. Any trenching covered that was not inspected or approved shall be made visible for observation at the cost of the Contractor.

13. **Coverage Test**
   a. Contractor shall perform a coverage test in the presence of the Owner's representative. All irrigation sprinkler systems must providing 100% head to head coverage. Any areas not receiving head to head coverage shall be corrected and retested per the Owner's representative.
   b. Permanent power must be connected prior to scheduling of the coverage test.
   c. Contractor shall provide sufficient manpower and/or radio device to complete such testing in a timely manner.
   d. All heads must be adjusted to prevent over spray to buildings, walks, streets etc. (see adjusting the system section).
   e. No planting or hydro-seeding shall take place until coverage test as been approved in writing by the Owner's representative. Tree planting may commence upon approval from Owner's representative.

14. **Final Irrigation Inspection**
   a. All irrigation systems shall be tested in the presence of the Owner's representative and by under complete automatic operation and proven to be leak free irrigating designated areas per plans and specification with least amount of over spray as possible.
   b. Contractor shall provide as-built record drawings and controller charts at final irrigation inspection for approval prior to mylar transfer and laminating of controller charts.
   c. All irrigation turn over items shall be turned in to the Owner's representative prior to the star of maintenance.

IRRIGATION SPECIFICATIONS — MATERIALS

1. **Backflow Prevention Devices**
   a. Backflow prevention units shal be approved by the Foundation for Cross-Connection Control and Hydraulic Research.
   b. Backflow assemblies shall be installed using brass ells, unions and nipples.
   c. Type: Febco 825YA or approved equal.
   d. Backflow device enclosure shall be constructed of stainless steel #9 expanded metal with an angle iron frame. Enclosure shall have a hinge on one end that allows for removal of the enclosure for backflow service. Enclosure shall be bolted to a concrete pad using galvanized steel hardware.

   Manufactures: LeMeur, Strong Box, All Spec or approved equal.

2. **Pressure Reducing Valves**
   a. Pressure reducing valves shall be of bronze and stainless steel construction and be adjusted from 25 P.S.I. to 125 P.S.I.

   Manufactures: Wilkens 500HLR or approved equal.

3. **Wye Strainers**
   a. Wye strainer shall be bronze construction with a stainless steel screen element. Wye strainer shall have a standard filtration size of 80 mesh.

   Manufactures: Wilkens 100YSBR or approved equal.

4. **Shut off Valves**
   a. Ball Valve:
      i. Shut off valves 2-1/2 inch and smaller shall be ball valves.
      ii. Ball valves shall have a one-piece body constructed of 600 lb. WOG Bronze material conforming to ASTM B-584 alloy 844. Ball valve shall have a vented ball with a blowout proof system. Ball valves shall have a working pressure of not less than 150 P.S.I. and shall conform to AWWA standards.

      Manufactures: Nibco T-580 or approved equal.
   b. Butterfly Valves:
      i. Shut off valves 3 inch and larger shall be butterfly valves.
      ii. Butterfly valves shall have a one-piece body constructed of cast iron and stainless steel stem. Butterfly valves shall be equipped with Vanstone lange adapters and a 2-inch square-operating nut. Butterfly valves shall have a working pressure of not less than 150 P.S.I. and shall conform to AWWA standards. Butterfly valves shall have a ductile iron porcelain enamel coated disc. Manufactures: Nibco, Matco or approved equal.

5. **Quick Coupler Valves**
   a. Quick coupler valves shall have a body constructed of red brass with a wall thickness guaranteed to withstand normal working pressure of 150 P.S.I. without leakage with female threads (penning at base). Quick coupler valve shall have a hinge cover constructed of red brass with leather like vinyl cover bonded to it on such a manner that it becomes permanent type of cover. Quick couplers used with potable water shall have vinyl covers yellow in color. Quick coupler valves used for reclaimed water shall have vinyl covers purple in color with the appropriate reclaimed water warnings in English and Spanish as well as the international "Do Not Drink" symbol.
   b. All quick coupler valves must have a schedule 80 ball valve to isolate mainline from quick coupler valve. Mainline shall be the size of quick coupler valve from mainline tee to quick coupler.

   Manufactures: Potable Water: Rainbird 44LRC, Rainbird 33LRC or approved equal
   Reclaimed Water: Nelson # 7645

6. **Remote Control Valves**
   a. The remote control valve shall be normally closed 24 VAC solenoid actuated globe pattern, spring-loaded diaphragm type. The valve shall be pressure rated up to 200 P.S.I. at 150 degrees F.
   b. The valve shall have a 600-pound test fabric reinforced rubber diaphragm assembly with self-cleaning stainless steel screen.
   c. Remote control valve body and bonnet shall be brass and the valve shall have a stainless steel control/ shut-off stem and manual operator.

   Manufactures: Rainbird PESB-PRS or approved equal.

7. **Master Control Valves**
   a. The master control valve shall be a switch-able normally closed or open 24 VAC solenoid actuated globe pattern, spring loaded diaphragm type. The valve shall have up to 220 P.S.I. at 150 degrees F. pressure rating.
   b. The body bonnet shall be plastic and the valve shall have a stainless steel control shut-off stem and manual operator.
   c. The valve shall have a 600-pound test fabric reinforced rubber diaphragm assembly with self-cleaning stainless steel screen.
   d. The master valve shall be capable of regulating pressure.
   e. Install down stream of filter.

   Manufactures: Toro P220 or approved equal.

8. **Flow Meter**
   a. Flow meter shall be constructed of a schedule 80 tee whenever possible with a solid state o-ring sealed epoxy fused sensor housing and nylon impeller.
   b. Flow meter must be installed and wired per manufacturer's specifications.
   c. Irrigation zones must be sized so that the specified flow meter is capable of reading the minimum and maximum gallons per minute for all proposed zones.
   d. Install down stream of master valve.

   Manufacture: Calsense FM-X

9. **Rain Sensor**
   a. Rain sensor shall be a heavy-duty plastic container with epoxy sealed electronics installed within a 1/8-inch thick steel enclosure. Mount sensor on controller enclosure or building eave per manufacturer's specifications. Sensor shall be wired per manufacturer's specs.
   b. The sensor must be housed within a stainless steel vandal proof enclosure by the manufacturer.

   Manufacture: WCS Rainguard

10. **Filtration Device (Reclaimed Water)**
   a. Filter shall be manufactured with a steel powder coat or stainless steel body with an 80-mesh filtration element with a stainless steel basket.
   b. Filter must comply with all EMWD requirements.

   Manufactures: Yardney, Ag Products or approved equal.

11. **Booster Pump**
   a. Booster pump shall be as manufactured by Barrett Engineered Pumps, San Diego, California (619) 232-7867. The engineer shall determine pump.
   b. The booster pump must be controlled by a flow switch activator. Pump relay switches will not be allowed.
   c. The booster pump must be pre-assembled from the manufacturer with an enclosure and pressure regulator.
   d. Pump size, pressure regulator settings and relay timing shall be determined by the landscape architect and the pump manufacturer and approved by Valley-Wide.
   e. Pumps with VFD motors are recommended when low-volume drip valves and high flow spray head or rotor valves are used together.

12. **Filtration Equipment**
   a. Filter shall be Turbo-Clean in filter available from Amiad Filtration Systems Inc. (800) 969-4055.
   b. Specify filter at P.O.C. directly down stream of the backflow device. Install per filter detail.
   c. Filter must have an automatic remote control valve with control wiring connected to irrigation controller for automatic flushing per filter detail.
   d. Auto flush valve must be connected to DRIP 2 program within the Calsense controller for District monitoring.

13. **Fertigation Injector**
   a. All point-to-point irrigation systems must have an in-line fertilizer injector.
   b. Fertilizer injector shall be #F-4000 available from Plant's Choice, Inc. (619) 585-9909
   c. Fertilizer injector must be installed after the flow meter.
   d. Fertilizer injector shall be installed in a jumbo valve box supplied by the manufacturer. Valve box must be set at grade per typical valve box detail.
   e. Fertilizer injector must be installed per manufacture's installation specifications.

14. **Automatic Controller**
   a. The controller shall operate on a minimum of 120 volts A.C. power input and shall be capable of operating up to four 5.5 VAC 24 volt A.C. remote control valves at once. The controller shall have a reset circuit breaker to protect the controller from overloading.
   b. The controller shall have independent programmable stations. The controller-programming schedule shall be capable of allowing four automatic start times per day on four separate programs. Station timing shall be variable from 1 to 99 minutes. The controller must have a water budgeting function to allow increasing or degreasing of watering times for all stations at once.
   c. The controller shall have a master valve/remote pump start circuit for use with a master valve to pressurize the system when the programmed cycle starts to activate a remote pump start relay to run the pump during the programmed cycle.
   d. The controller shall have manual watering capabilities for single station operation at any time with out changing programmed times.
   e. The controller shall have a factory installed backup program for standby operation and a backup battery to maintain the programs during power loss.
   f. Install one extra 1-1/2" inch conduit to controller for future use.
   g. Contractor shall be responsible to communicate with Calsense to insure that all of the required components are ordered and installed per the District's requirements as determined by Calsense for each individual project.
   h. Architect must provide the following information to Calsense:
      i. Project name and tract number
      ii. Project location-cross streets or address if applicable
      iii. Number of controllers on the project and proposed specification
      iv. Number of water meters on the project

      Example (ET2000-24-LR-RR-SSER) This is important to make sure that the specification is correct for application and location.
   i. The architect must obtain a letter from Calsense confirming District compliance.
   j. Controller compliance letter must be attached with first irrigation plan submittal.

   Manufacture: Calsence ET-2000. Contact Bob Moxley with Calsense at (800) 572-8608 for specific District requirements and communication components as determined per project.

15. **Controller Enclosure**
   a. All controllers installed outside must be mounted inside a stainless steel enclosure with lockable-hinged doors provided by the controller manufacturer.
   b. The enclosure shall have one full time 120 VAC GFCI type circuit with on/off switch and pigtail connection for remote control use.

   Manufacture: Calsense SSE-R.

16. **Electrical Pedestal**
   a. All electrical pedestals must be stainless steel
   c. All electrical pedestals must comply with local electrical code and agency requirements.

   Manufactures: Strongbox #MPS-A16-10K or approved equal

17. **Control Wiring**
   a. All control wiring for connections between remote control valves and controllers shall be direct burial AWG-F wire installed in accordance with manufacture's specifications.
   b. All splices shall be sealed with waterproof connectors and waterproof sealant.
   c. All extra wires shall be sealed with waterproof connectors.
   d. Wiring shall be buried adjacent to mainline wherever possible and for more than one wire they shall be bundled at every ten feet using black electrical tape.
   e. Expansion curl shall be provided within three feet of each connection and at all changes in direction. Provide a two-foot expansion loop for every 100 feet of run.
   f. Wire size shall not be less than #14. Provide #12 for runs over 2500 feet.
   g. All common wires shall be #12.
   h. Control wires shall be black in color. If additional controllers are installed provide different color common wires for each controller.
   i. Common wire shall be white in color. If additional controllers are installed provide white wire with colored stripe. Stripe to be same color as control wire color.
   j. Contractor shall provide one extra wire for every five valves and two extra wires shall be provided for every valve in any isolated area and the extra wires shall extend past the last valve in a group. Extra wires shall be orange in color and looped in every valve box and made accessible for future use if needed.
   k. No wire splices shall be permitted unless run is longer than 2500 feet or approved by Owner's representative.

   Manufactures: Paige or approved equal.

VALLEY-WIDE RECREATION & PARK DISTRICT

DESIGN APPROVAL BLOCK

Samuel W. Dopp — Date: 5-23-07

APPROVAL BY THE TRANSPORTATION DEPARTMENT IS FOR THE AREA WITHIN THE ROAD RIGHT-OF-WAY ONLY.

NOTE:
WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER COUNTY APPROVAL OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE COUNTY.

DATE | BY | MARK — ENGINEER

REVISIONS

APPR. | DATE — COUNTY

SEAL—COUNTY: REGISTERED PROFESSIONAL ENGINEER, KHALED A. OTHMAN, NO. 33950, EXP. 6-30-08, CIVIL, STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:
KHALED A. OTHMAN, P.E. R.C.E. 33950 EXP. 6-30-08 — DATE
RECOMMENDED: — DATE

SEAL—LANDSCAPE ARCHITECT: LICENSED LANDSCAPE ARCHITECT, Signature 5/31/08, Date, STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC. FRA# 2628
LANDSCAPE ARCHITECTS
PHONE (714) 832-1774 FAX (714) 832-5721
14841 YORBA STREET SUITE 204 TUSTIN, CA 92780
EMAIL: F-R-A@PACBELL.NET
PREPARED BY: V.V.
DATE: 8/14/2006
LIC. NO. 1110
EXP. DATE: 5/31/2008

BENCHMARK:
SCALE: H: N.T.S. V: N.T.S.

TRACT No. 30351 IP No. 030170
COUNTY OF RIVERSIDE
LANDSCAPE PLANS
"WINCHESTER TRAILS" PARK
IRRIGATION SPECIFICATIONS

SHEET NO. L-12 OF 15 SHEETS

FOR: OSBORNE DEVELOPMENT | W.O. | COUNTY FILE NO.

I:\RIDUPA\2600\s2628-Winchester-Trails\2628-Valleywide-Irrig-Specs.dwg, Model, 3/15/2006 5:37:21 PM, 1:1x2, WV

18. Valve Boxes

a. Rectangular valve boxes shall be 9-1/2 inch wide by 16 inch long and 11 inch high. Round valve boxes shall be 10-inch diameter and 10 1/4 inch. All valve boxes shall be constructed of rigid polyolefin.

b. Valve boxes shall have locking covers secure with a 3/8-inch stainless steel bolt and washer.

c. Rectangle valve boxes shall be used for control valves, master control valves, pressure regulators, flow sensors, wye strainers, filtration devices, ball valves, butterfly valves and pull boxes.

d. Round valve boxes shall be used for quick coupler valves.

e. All valve boxes to be green in color unless otherwise specified for use of reclaimed water. All valve boxes for reclaimed water shall be purple in color and bare the reclaimed water warnings as well as the international "Do Not Drink" symbol.

f. Heat brand all box lids with the appropriate two-inch high identification letters and/or numbers.

g. All valve boxes shall receive landscape fabric. Landscape fabric shall be constructed of 5.0 oz. weight proven polypropylene weed barrier with burst strength of 225 P.S.I. and capable of 12 gallons per minute of water flow and puncture strength of 60 lbs. Dewitt Pro, Mirify or approved equal.

h. All valve boxes shall receive 2 cubic feet of 3/4-inch gravel per plan.

Manufactures: Carson, Brooks, or approved equal.

19. General Piping

a. Pressure line from point of connection to backflow prevention device shall be brass or Type K copper

b. Pressure lines 2" and smaller after backflow prevention device shall be Schedule 40 solvent weld PVC

c. Pressure lines 2-1/2 inch to 3 inch after backflow prevention device shall be Class 315 solvent-weld P.V.C.

d. Pressure lines 1-1/2 inch and smaller after backflow prevention device shall be Schedule 40 solvent-weld P.V.C.

e. Pressure lines 4 inch and larger after backflow device shall be Class 200 bell and gasket P.V.C.

f. Lateral lines 1-1/2 inch and smaller shall be Schedule 40 solvent-weld P.V.C.

g. Lateral lines 2 inch and larger shall be Class 315 solvent-weld P.V.C.

h. All pipe and fittings shall bear the markings of the Manufacturer's name, nominal pipe size, pressure rating P.S.I., NSF, schedule or class and date of extrusion.

20. Plastic Pipe

a. Solvent weld pipe shall conform to ASTM D 1784 or D 2241 to meet the requirements of cell classification 12454B for pipe. Pipe shall be extruded of an improved P.V.C. virgin pipe compound high impact strength. Compound shall have a hydrostatic design stress rating of 2,000 P.S.I. Manufactures: Pacific Plastics or approved equal.

b. Rubber gasket P.V.C. pipe shall conform to ASTM D-1784 Type I, Grade I 2,000 P.S.I. design stress. All pipes shall conform to commercial standards CS-256-64 and NSF testing laboratories. Rubber gaskets shall conform to ASTM 1869.

Manufacturers: Pacific Plastics or approved equal.

c. Reclaimed water pipe shall conform to ASTM D1784 or D 2241 to meet the requirements of cell classification 12454B for pipe. Pipe shall be extruded of an approved P.V.C. virgin pipe compound high strength. Compound shall have a hydrostatic design street rating of 2,000 P.S.I. Reclaimed water pipe shall be purple in color and bare the words "CAUTION - RECLAIMED WATER" printed in black letters on two sides of all pipes.

Manufacturers: Pacific Plastics or approved equal.

d. Ultra Violet Resistant (U.V.R.) pipe shall conform to ASTM D 1784 or D 2241 to meet the requirements of cell classification 12454B for pipe. Pipe shall be extruded of an approved P.V.C. virgin pipe compound high strength. Compound shall have a hydrostatic design street rating of 2,000 P.S.I. U.V.R. pipe shall be manufactured using material proven to resist corrosion by ultra-violet radiation. Pipe shall be brown in color.

Manufacturers: Pacific Plastics or approved equal.

21. Fittings

a. All pressure line fittings 3 inch and smaller shall be Schedule 80 solvent weld P.V.C. Fabricated pipe shall be from an NSF approved Type I, Grade I, P.V.C. compound conforming to ASTM D1784

Manufacturers: Dura, Lasco or approved equal.

b. All pressure line fittings 4 inch and larger shall be iron ductile deep bell type constructed of grade 65-45-12 and shall be in accordance with ASTM A536. Rubber for gaskets in fittings shall be in accordance with ASTM-477. All iron ductile fittings shall have stainless steel exterior lugs to secure a joint restraint system.

Manufacturers: Leemco or approved equal.

c. All lateral line fittings downstream control valve shall be Schedule 40 solvent weld P.V.C. Fabricated pipe shall be from an NSF approved Type I, Grade I, P.V.C. compound to ATTM D1784

Manufacturers: Dura, Lasco or approved equal.

d. Provide primer and solvent cement for PVC solvent weld pipe and fittings of specified type by manufactures recommendations.

Manufacturer: Weld-on or approved equal.

e. All fittings shall have the manufacture's name, trademark and size applicable NSF or IPS approval.

f. All threaded fittings shall have ¾ inch teflon tape.

22. Brass Pipe and Fittings

a. Brass pipe shall be in accordance with American National Standard Institute and be 85 percent Schedule 40 red brass.

b. Brass fittings shall be threaded 125-pound class.

23. Galvanized Steel Pipe and Fittings

a. Galvanized steel pipe shall be Schedule 40 hot dipped galvanized.

b. Galvanized fittings shall be Schedule 40 hot dipped galvanized.

24. Irrigation Heads (General)

a. All irrigation heads shall be the size, type, and provide the same rate of precipitation with the same radius of spray, pressure and discharge in G.P.M. as listed on drawings

b. All spray head sprinklers shall have stainless steel screw adjustment for radius of spray.

c. Riser and swing joint assemblies shall be as indicated on drawings.

d. All irrigation heads shall have a factory installed check valve or have an after market check valve installed.

e. All other requirements for non-pressure lateral line pipe to be as specified in fitting specification section.

f. In no case shall the irrigation head spacing exceed the maximum manufacturer's recommendation.

g. Irrigation heads along walks, curbs, paving, etc. shall be positioned 1 inch above finish grade. Irrigation in turf areas shall be positioned 2 inches above finish grade.

h. All sprinkler heads shall be set perpendicular to finish grades.

i. All sprinklers in turf areas shall have a minimum pop-up height of six (6) inches.

j. All sprinklers in planter/slope areas shall have a minimum pop-up height of twelve (12) inches.

25. Bubblers

a. Bubblers shall be constructed of heavy duty plastic and be pressure compensation full circle. The bubbler shall have a screen to protect it from clogging.

b. Bubblers shall be adjustable from .25 - 1.0 GPM and operate between 20-90 PSI.

Manufacturer: Rainbird 1400 Series or approved equal.

26. Sprinkler Heads

a. The sprinkler body, nozzle, stem and screen shall be molded out of heavy duty plastic.

b. Pop-up height shall be as listed in drawings and in no case shorter than 4 inches.

c. The sprinkler shall have an adjustment screw used for regulating flow and radius with matched precipitation rate (MPR) nozzle.

d. The sprinkler shall have a removable screen to protect it from clogging.

e. The sprinkler shall have a stainless steel spring for proper pop down.

f. The sprinkler shall be equipped with a factory installed check valve identified on the cap and capable of holding water up to 10 feet of elevation change.

g. The sprinkler shall be equipped with a factory installed pressure-regulating device constructed of stainless steel and heavy-duty plastic capable of maintaining a pressure of 35-70 P.S.I. to 30 P.S.I. for operation of the sprinkler.

Manufacturers: Hunter INST-CV. or approved equal.

27. Rotor Heads (Medium Range)

a. All pop-up rotors shall have a rubber cover and be constructed of heavy duty plastic except for wiper seal, bearing spring and bearing washers. All rotors to have a reinforced rib design with flange encasement.

b. Pop-up height shall be as listed in drawings and in no case be shorted than 3-1/2 inches.

c. The rotor shall have a diffuser pin for regulating flow and radius.

d. The rotor shall have a screen to protect it from clogging and have a minimum inlet of 3/4 inch.

e. The rotor shall be capable of covering 16-55 feet radius at 20-60 PSI with a rate of .5 - 9.2 GPM. and be adjustable from 1-360 degrees.

Manufacturers: Hunter I-10, Hunter I-20, Rainbird 5000 Plus series or approved equal.

28. Rotor Heads (Large Range)

a. All pop-up rotors shall have a rubber cover and be constructed of heavy duty plastic except for wiper seal, bearing spring and bearing washers. The riser shall be constructed of plastic encased in a stainless steel sleeve. All rotors to have a reinforced rib design with flange encasement.

b. Pop-up height shall be as listed in drawings and in no case be shorted than 3-1/2 inches.

c. The rotor shall have a diffuser pin for regulating flow and radius.

d. The rotor shall have a screen to protect it from clogging and have a minimum inlet of 1 inch.

e. The rotor shall be capable of covering 16-55 feet radius at 40-74 PSI with a rate of 3.8 - 27.5 GPM. and be adjustable from 1-360 degrees.

Manufacturers: Hunter I-25, Hunter I-40 Rainbird 7005 or approved equal.

29. Trenching and Backfilling

a. Contractor must contact Dig Alert prior to any trenching.

b. No trenches are to be backfilled until approval from Owner's representative has been acquired.

c. Excavate trenches straight and support pipe continuously on the bottom of trench per layout indicated on drawings.

d. All lines shall have a minimum clearance of 4 inches from each other and 24 inches from any other lines from other trades.

e. Provide the minimum covers as listed below:

i.	Pressure lines 4 inch and larger	30 inches
ii.	Pressure lines 3 inch and larger:	24 inches
iii.	Pressure lines 2-1/2 inches and smaller:	24 inches
iv.	Lateral lines	18 inches
v.	Control wiring	24 inches

f. Fine granular soil not larger than 1/2 inch shall be for initial backfill and compacted to a density equal to undisturbed soil. Clean backfill soil not greater than 1 inch for remaining backfill.

g. No flooding shall be performed to compact trenches unless approved by the Owner's representative.

h. Sand backfill to a minimum of 3 inches shall be applied to all piping under paved areas.

i. If any settlements occur and irrigation adjustments are required the contractor shall make these adjustments with no additional cost to the Owner.

j. Contractor shall install concrete thrust blocks for all pressure lines 2 inch and larger. Thrust blocks shall be a minimum size of one cubic foot. For bell and gasket pipe a joint restraint system shall be used instead of thrust blocks per manufacture's specifications.

30. Flushing the System

a. Open control valve after all piping and required assemblies have been completed to flush out the system.

b. Irrigation heads are to be installed after completion of flushing the system satisfactory to the Owner's representative.

31. Adjusting the System

a. The contractor shall flush and adjust all irrigation heads, control valves, pressure regulators, etc. for optimum performance.

b. All heads must be adjusted to prevent over spray to buildings, walks, streets etc.

32. Sleeving

a. All sleeving shall be 2 times the diameter of the pipe used. Sleeving for control wires shall be 2 inches in diameter minimum.

b. All sleeving shall have minimum a cover of 24 inches under paving.

c. All sleeving shall extend 12" past paving.

d. All street sleeving must be installed per sleeving detail

e. All trenches for sleeving must be compacted to 95% compaction using manual or mechanical taping device.

f. Contractor shall cap and pressure test all pressure lines under paving prior to backfilling and paving.

g. Contractor shall be responsible for the installation of all sleeves required for the irrigation system not listed in the drawings.

33. Layout

a. Contractor shall layout irrigation mainline, valves, and sprinklers etc. for approval from the Owner's representative.

34. Additional Miscellaneous Items

a. All pipe above grade are to be stabilized with j-hooks at every 10 feet. J-hooks shall be #4 x 18 inch rebar painted with black epoxy paint prior to installation.

e. All assemblies requiring rebar stabilizing rods per plan and details shall be with #4 x 30 inch rebar and supported by vandal proof clamps constructed of stainless steel installed with a tool specifically designed for the process.

c. Contractor shall install metallic warning tape over all pressure supply line with a cover of 12 inches from grade. Warning tape for potable water shall be blue in color and the words, "CAUTION WATER LINE" permanently attached to tape. Warning tape for reclaimed water shall be lavender in color and the words, "CAUTION RECLAIMED WATER" permanently attached to tape. Warning tape shall be 3" wide minimum.

d. Contractor shall provide identification tags with the number labeled for each valve attached the each valve. For potable water the tags shall be yellow in color with black letterng. For reclaimed water the tags shall be lavender in color with black lettering.

e. All utilities, valve boxes, valves, sprinklers, quick couplers, etc. shall either have lavender caps or lavender colored parts as provided by the manufacturer for use a reclaimed water.

35. Water Supply

a. The Irrigation system shall be connected to water supply as shown on drawings. Contractor shall notify Architect immediately of any discrepancies.

b. The Contractor shall be responsible for any minor changes due to actual site conditions.

36. Electrical Supply

a. Contractor to coordinate final location of controller with job site Superintendent and Owner's representative.

b. Prior to installation of controller contractor to verify that all required electrical equipment is accessible for complete installation.

c. Electrical connections and equipment must be as listed in controller installation section and per manufacturer's specifications.

37. Grades

a. Prior to commencing any work the contractor shall carefully check all grades and verify that after all irrigation work and soil preparation completed, all grades will be per specified depth as per the landscape contractor's scope of work with a +- 1/10.

38. Maintenance

a. Contractor shall have irrigation system under complete operation for a period of 7 days prior to and planting or hydro-seeding.

b. Contractor shall maintain entire irrigation system to an acceptable condition to the Owner's representative for the period of 90 days unless otherwise noted.

40. Clean-Up

a. Clean up shall take place on a daily basis, after each portion of work has been completed and as directed by the Owner's representative. The contractor shall legally remove from site any trash or material from his scope of work.

41. Final Approval

a. All irrigation shall be tested in its entirety by the Owner's representative and approved in writing before commencement of planting and hydro-seeding accept for trees as directed by the Owner's representative.

b. Contractor shall provide all charts, record drawings, turn over items etc. as listed in Irrigation (general) section prior to final approval.

- END OF SECTION -

VALLEY-WIDE RECREATION & PARK DISTRICT

DESIGN APPROVAL BLOCK

Samuel W. Gossett — Date: 5-23-07

APPROVAL BY THE TRANSPORTATION DEPARTMENT IS FOR THE AREA WITHIN THE ROAD RIGHT-OF-WAY ONLY.

NOTE:
WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER COUNTY APPROVAL OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE COUNTY.

ENGINEER

DATE	BY	MARK	REVISIONS	APPR.	DATE
				COUNTY	

SEAL-COUNTY: REGISTERED PROFESSIONAL ENGINEER — KHALED A. OTHMAN — NO. 33950 EXP. 6-30-08 CIVIL — STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:

KHALED A. OTHMAN, P.E. R.C.E. 33950 EXP. 6-30-08 — DATE

RECOMMENDED: — DATE

SEAL-LANDSCAPE ARCHITECT: LICENSED LANDSCAPE ARCHITECT — Signature 5/31/08 — Renewal Date — Date — STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC. FRA# 2628
LANDSCAPE ARCHITECTS
PHONE (714) 832-1774 FAX (714) 832-5721
14841 YORBA STREET SUITE 204 TUSTIN, CA 92780
EMAIL: F-R-A@PACBELL.NET

PREPARED BY: V.V. — LIC. NO. 1110
DATE: 8/14/2006 — EXP. DATE: 5/31/2008

BENCHMARK:

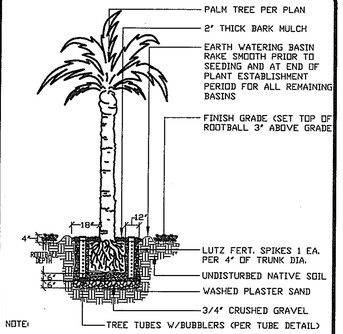
SCALE: H: N.T.S. V: N.T.S.

FOR: OSBORNE DEVELOPMENT | W.O. | COUNTY FILE NO.

TRACT No. 30351 IP No. 030170
COUNTY OF RIVERSIDE
LANDSCAPE PLANS
"WINCHESTER TRAILS" PARK
IRRIGATION SPECIFICATIONS

SHEET NO. L-13 OF 15 SHEETS

\\RIDILIM\2600\s2628.Winchester Trails\2628.Valleywide.Irrig..Specs2.dwg, Model, 3/16/2006 8:32:16 AM, 1:1.2, JW

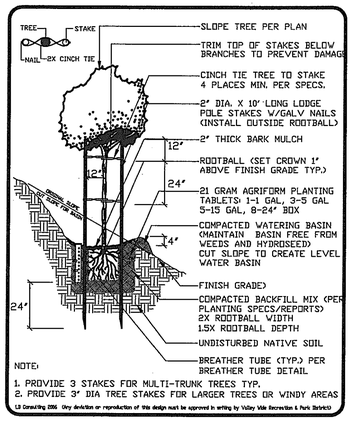


NOTE:

1. ALL BACKFILL TO BE WATER JETTED DURING PLANTING FOR STABILITY
2. ALL FRONDS TO BE TIED TOGETHER PRIOR TO PLANTING
3. FRONDS TO BE PRUNED AS DIRECTED BY V.W.R.P.D.
4. ALL BREATHER AND BUBBLER TUBES SHALL HAVE FILTER SOCK

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 PALM TREE PLANTING PL-1

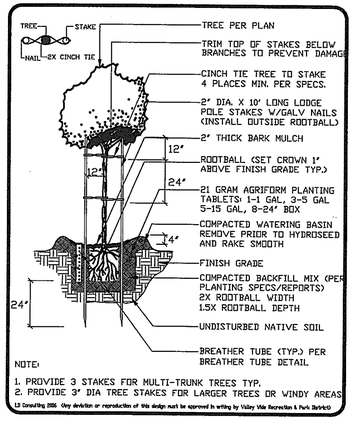


NOTE:

1. PROVIDE 3 STAKES FOR MULTI-TRUNK TREES TYP.
2. PROVIDE 3" DIA TREE STAKES FOR LARGER TREES OR WINDY AREAS

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 SLOPE TREE PLANTING PL-2

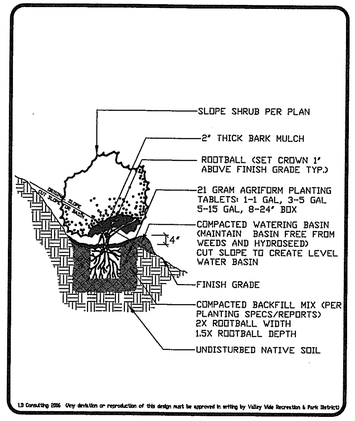


NOTE:

1. PROVIDE 3 STAKES FOR MULTI-TRUNK TREES TYP.
2. PROVIDE 3" DIA TREE STAKES FOR LARGER TREES OR WINDY AREAS

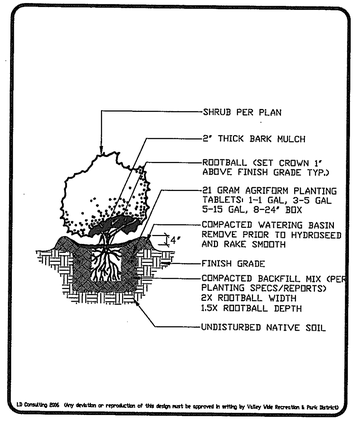
LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 TREE PLANTING PL-3



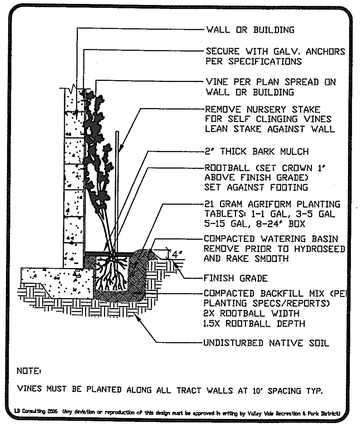
LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 SLOPE SHRUB PLANTING PL-4



LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 SHRUB PLANTING PL-5

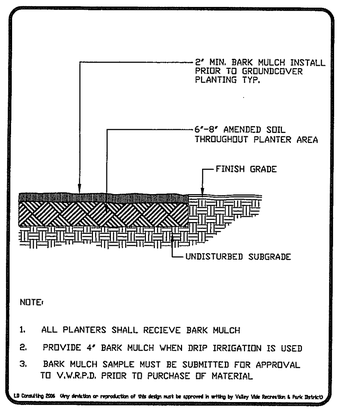


NOTE:

VINES MUST BE PLANTED ALONG ALL TRACT WALLS AT 10' SPACING TYP.

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 VINE PLANTING PL-6

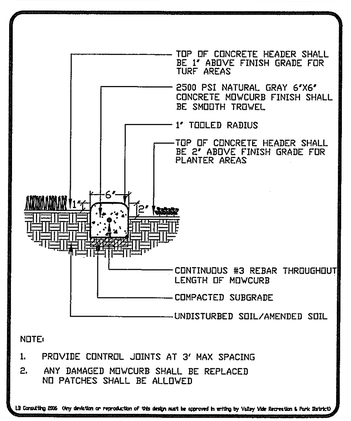


NOTE:

1. ALL PLANTERS SHALL RECIEVE BARK MULCH
2. PROVIDE 4" BARK MULCH WHEN DRIP IRRIGATION IS USED
3. BARK MULCH SAMPLE MUST BE SUBMITTED FOR APPROVAL TO V.W.R.P.D. PRIOR TO PURCHASE OF MATERIAL

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 BARK MULCH PL-7

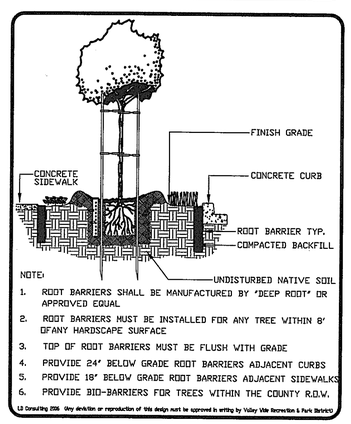


NOTE:

1. PROVIDE CONTROL JOINTS AT 3' MAX SPACING
2. ANY DAMAGED MOWCURB SHALL BE REPLACED NO PATCHES SHALL BE ALLOWED

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 CONCRETE MOWCURB PL-8

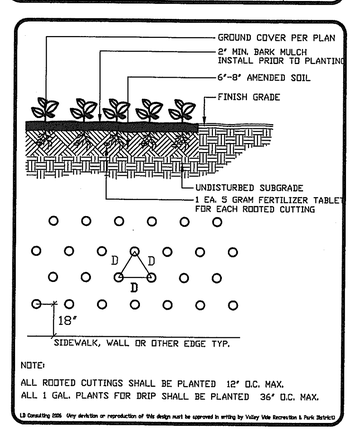


NOTE:

1. ROOT BARRIERS SHALL BE MANUFACTURED BY 'DEEP ROOT' OR APPROVED EQUAL
2. ROOT BARRIERS MUST BE INSTALLED FOR ANY TREE WITHIN 8' OFANY HARDSCAPE SURFACE
3. TOP OF ROOT BARRIERS MUST BE FLUSH WITH GRADE
4. PROVIDE 24' BELOW GRADE ROOT BARRIERS ADJACENT CURBS
5. PROVIDE 18' BELOW GRADE ROOT BARRIERS ADJACENT SIDEWALKS
6. PROVIDE BIO-BARRIERS FOR TREES WITHIN THE COUNTY R.O.W.

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 ROOT BARRIER PL-9

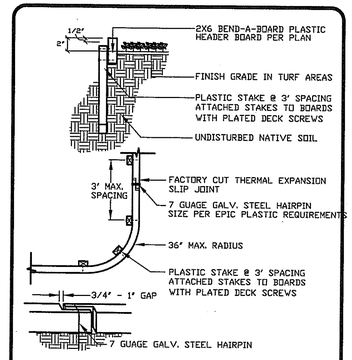


NOTE:

ALL ROOTED CUTTINGS SHALL BE PLANTED 12" O.C. MAX.
ALL 1 GAL. PLANTS FOR DRIP SHALL BE PLANTED 36" O.C. MAX.

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

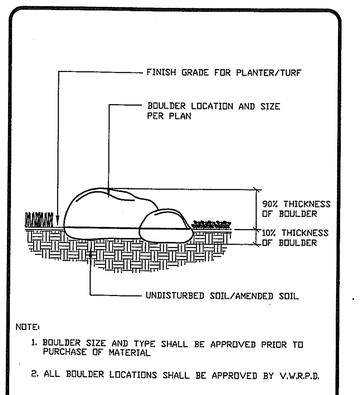
VALLEY WIDE RECREATION
01/06 GROUND COVER PLANTING PL-10



1. DO NOT SCREW THROUGH SLIP JOINT
2. USE COURSE WOOD WORKING TOOLS FOR CUTTING & DRILLING
3. PROVIDE 3/4" - 1" GAP IN ALL SLIP JOINTS FOR EXPANSION

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 PLASTIC HEADER PL-11

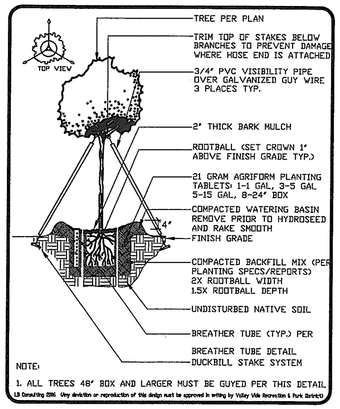


NOTE:

1. BOULDER SIZE AND TYPE SHALL BE APPROVED PRIOR TO PURCHASE OF MATERIAL
2. ALL BOULDER LOCATIONS SHALL BE APPROVED BY V.W.R.P.D.

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 BOULDER PLACEMENT PL-12



NOTE:

1. ALL TREES 48" BOX AND LARGER MUST BE GUYED PER THIS DETAIL

LD Consulting 2006 Any deviation or reproduction of this design must be approved in writing by Valley Wide Recreation & Park District

VALLEY WIDE RECREATION
01/06 TREE GUYING PL-13

APPROVAL BY THE TRANSPORTATION DEPARTMENT IS FOR THE AREA WITHIN THE ROAD RIGHT-OF-WAY ONLY.

VALLEY-WIDE RECREATION & PARK DISTRICT

DESIGN APPROVAL BLOCK

Samuel W. Eskew — Date: 5-23-07

NOTE:

WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

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DATE	BY	MARK	REVISIONS	APPR.	DATE

ENGINEER — COUNTY

SEAL-COUNTY

REGISTERED PROFESSIONAL ENGINEER — KHALED A. OTHMAN — NO. 33950 EXP. 6-30-08 — CIVIL — STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:

KHALED A. OTHMAN, P.E. R.C.E. 33950 EXP. 6-30-08 — DATE

RECOMMENDED: — DATE

SEAL-LANDSCAPE ARCHITECT

LICENSED LANDSCAPE ARCHITECT — Signature 5/31/08 — Date — STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC. FRA# 2628
LANDSCAPE ARCHITECTS
PHONE (714) 832-1774 FAX (714) 832-5721
14841 YORBA STREET SUITE 204 TUSTIN, CA 92780
EMAIL: F-R-A@PACBELL.NET

PREPARED BY: V.V.
DATE: 12/12/2006
LIC. NO. 1110
EXP. DATE: 5/31/2008

BENCHMARK:

SCALE:
H: N.T.S. V: N.T.S.

TRACT No. 30351 IP No. 030170

COUNTY OF RIVERSIDE
LANDSCAPE PLANS
"WINCHESTER TRAILS" PARK
PLANTING DETAILS

SHEET NO. L-14 OF 15 SHEETS

FOR: OSBORNE DEVELOPMENT
W.O.
COUNTY FILE NO.

FRA# 2628 / WINCHESTER TRAILS

\\RIDIUM\2600's\2628 Winchester Trails-OSBORNE\2628 Park Plant Details.dwg, Model, 12/11/2006 7:23:49 PM, 1:12, VV

SECTION 02800

PLANTING
Revised 01/06

PLANTING SPECIFICATIONS GENERAL

1. General Requirements

a. Permits: Contractor shall obtain and pay for any permits required.

b. All irrigation shall be completed, approved and under automatic irrigation in order for the weed-abatement process to commence.

c. No planting shall commence until the weed-abatement process has been completed.

d. The current Standard Landscape Specifications & Design Guidelines booklet must be on site at all times for each project.

e. No planting can occur until permanent electric and power is provided.

2. Scope of Work

a. The intent of the drawings and specifications is to indicate the processes required for the installation of complete planting

3. Inspections

a. Request for inspections must have 48 hour notice in advance.

b. Contractor must be on site for all inspections.

c. Any work not completed when inspector arrives which was requested for, shall be billed to the contractor at the current inspector's rate

d. Any work completed without inspection or approval shall be removed, exposed or replaced at the cost of the contractor.

e. Contractor shall call for inspection for the following items:

i. Final grading
ii. Weed-abatement Observation
iii Tree and shrub layout
iv Tree and shrub planting pits
v. Finish grade prior to hydro-seeding
vi. Final Inspection

4. Submittals

a. All submittals shall be submitted at the time of the pre-job conference

b. Contract shall submit the follow items but not limited to:

i. Plant material proof of purchase with listed nurseries and material sizes for approval

ii. All soil amendments

iii. Bark mulch

iv. Soil report

v. Labels for all herbicide and fertilizers used

vi. Hydro-seed mix

PLANTING SPECIFICATIONS MATERIALS

1. Plant Material

a. All plant material shall be the same as specified in the drawings.

b. Contractor shall tag one plant from each bundle or lot with the plant name in accordance with the recommendations of the American Association of Nurserymen.

c. All plant material shall be free of pest, plant diseases abrasions or any other object-able disfigurations.

d. Plant material must show vigorous habit of growth that is normal for that particular species.

2. Tree Stakes/Guying

a. Tree stakes shall be copper maphthanate, green color impregnated lodge pole.

b. Tree stake shall be 2" in diameter 10 feet long.

c. Tree stake for larger trees or windy areas shall be 3" diameter.

d. Tree ties shall be V.I.T. cinch ties or approved equal (four per tree).

e. Tree ties shall be attached to lodge poles with galvanized nails per detail.

f. Contractor shall install 3" diameter stakes for all trees where high winds occur as directed by Valley-Wide's representative.

g. All trees 36" box and larger shall have three guys with ½" PVC pipe to protect wire.

h. 3" lodge poles may be used for 36" box trees and larger in high traffic areas or in small tree wells with the approval of Valley-Wide's representative.

3. Vine Ties

a. Vine ties shall be as specified in details.

4. Herbicides

a. Contractor shall submit labels of all herbicides used prior to application for approval.

b. Contractor shall apply pre-emergent herbicide to all areas possible as recommended by a licensed pest control consultant.

5. Concrete Mow Curb

a. Concrete mow curb shall be 2500 PSI concrete and as specified in detail.

b. All mowcurb shall be 6" x 6" with #3 continuous rebar.

6. Plastic Bend-A-Board Header

a. Plastic header shall be manufactured by Epic Plastics unless otherwise approved in writing by Valley-Wide.

b. All borders between turf and planters shall be concrete mowcurb unless otherwise approved in writing by Valley-Wide. When mowcurb has been approved to be substituted, a plastic header must be used.

c. Plastic headers must be 2" x 6" minimum size unless header must concave or convex more than 12" in height per 36" run.

d. Plastic headers may also be used for long temporary project limits in lieu of concrete mowcurbs when approved in writing by Valley-Wide.

7. Plant Tablets

a. Planting tablets shall be Agriform, Gro-Power or approved equal as specified in plans and details.

b. The NPK and specific application rates must be determined per project and per the soil report.

8. Soil Conditioners

a. All soil conditioner material shall be approved prior to ordering under this section.

e. Soil conditioners shall be based on soil report recommendations.

f. Soil conditioners shall be EPA class 'A' co-compost or compost with SAR less than 3.0 and CN ratio of 15 to 25:1 passing through ½" mesh screen as approved by Valley-Wide's representative prior to delivery of material.

PLANTING SPECIFICATIONS EXECUTION

1. Installation

a. Contractor shall clean, remove legally dispose of all weeds, grasses including roots and construction debris under this section.

b. Contractor shall be responsible for the protection and storage of all material for the project.

c. All grades shall be as indicated on the drawings and must be +-10%.

2. Landscape Grading

a. The contractor shall complete grading and filling as needed or remove additional dirt, rock and debris over 3/4 inch in diameter within the top 3 inches in all turf and planter areas less than 3:1.

b. Contractor shall bring all landscaped areas to finish grade.

c. Flow lines shall be established to existing curbs and/or sidewalks.

d. All landscape areas shall be sloped to provide positive drainage.

3. Soil Preparation

a. Contractor shall rotor-till amendments into all turf and planter areas 3:1 or less throughout the first 6 inches.

b. Contractor shall rake soil conditioner lightly into all 2:1 slopes areas.

c. The following application rate is for bidding purposed only and is per 1000 square feet of planting area.

i. 4 cubic yards of soil conditioner

ii. 30 lbs. of commercial fertilizer approved by the Owner's representative

iii. 50 lbs. of agriculture grade gypsum

iv. 25 lbs. soil sulfur

g. Actual soil preparation shall be based on the soil report.

f. Soil samples shall be taken in the presence of the Owner's representative.

g. Contractor shall submit soil samples to an approved laboratory testing facility.

h. Contractor shall provide one soil report for every 50,000 square feet.

i. Soil recommendations must be separated for turf, planter, slope and plant material backfill mix.

4. Weed-abatement

a. Weed-abatement shall not commence until complete irrigation system is under complete automatic irrigation and has been approved.

b. Upon completion of soil preparation the contractor shall complete the following:

i. Irrigate all areas to be planted, sodded or seeded for a period of seven days to germinate all weed seeds.

ii. Cut watering and apply approved weed killer per manufacture's recommendations and allow adequate time to complete kill.

iii. Repeat step one and two.
iv. Obtain approval of completed weed-abatement prior to any planting. Trees may be planted prior to weed-abatement process with the approval of the Owner's representative in writing.

5. Layout

a. Contractor shall layout all trees and shrubs for approval from the Owner's representative prior to excavation of any planting pits.

d. Contractor shall not willfully layout any planting material where obstructions exist. The contractor shall notify the engineer to obtain direction.

e. Contractor shall adjust tree locations around all street lights as directed by Valley-Wide's representative.

6. Planting

a Planting shall be as shown in detail and as follows:

i. Excavate all planting pits to a diameter twice the size of container to be planted and 11/2 times the depth of container to be planted.

ii. Contractor shall scarify the side of planting pits if an auger is used with shovel or digging bar.

iii. Plant material shall be placed in planting pit in a manner as not to disrupt the root ball and the crown shall be set 1" above grade.

iv. Provide 21gram fertilizer tablets per detail.

v. Backfill all plant material with approved backfill mix.

vi. Contractor shall provide 5 gram fertilizer tablets to all rooted cuttings.

7. Percolation Test

a. Contractor shall flood planting pits with water to test water penetration through the soil, if no penetration occurs the contractor shall auger 6 inches in diameter and 36 inches long and backfill with pea gravel, repeat water test and if water still does not penetrate the contractor shall notify the Owner's representative prior to planting.

8. Sodded Turf

a. All sodded areas shall be semi dwarf fescue unless otherwise noted.

b. Contractor shall evenly rake all sodded areas to level and remove all rocks 3/4 inch in diameter and larger.

c. Contractor shall spread 16-20-0 commercial fertilizer to all sodded areas.

d. Contractor shall lay sod immediately upon arrival.

e. Sod must be laid along a straight line staggering each row like laying bricks and must be butted tightly together preventing any air pockets. Do not overlap edges.

f. Sod shall be cut with a sharp knife and never pulled apart.

g. Sod shall be rolled immediately after sod is installed.

h. Sod must be watered thoroughly to a depth of 12 inches.

i. Contractor shall monitor watering to prevent browning and fungus.

j. Contractor shall take every measure possible to protect sod by providing temporary fencing if necessary at no additional cost.

9. Hydro-seeding

a. Turf hydro-seed mix shall be "Team Crest available from Creative Hydroseed (951) 461-9745

b. Contractor shall evenly rake all areas to receive turf to level and remove all rocks 3/4 inch in diameter and larger.

c. Hydro-seed mixes shall be as follows:

FESTUCA RUBRA

440 #S/PER AC.	CREEPING RED FESCUE
2000	WOOD FIBER MULCH
300	15-15-15 FERTILIZER
120	M-BINDER

BASIN BOTTOMS

174#S/PER AC.	HYBRID BERMUDA
261#S	PERENNIAL RYE
2000	WOOD FIBER MULCH
120	M-BINDER

PARK/PARKWAY TURF

653#S/PER AC.	TEAM FESCUE 90% CREST BLUEGRASS 10%
2000	WOOD FIBER MULCH
300	15-15-15 FERTILIZER

d. Additional hydro-seed mixes may be specified for detention basin bottom based on project specific layouts and sizes as approved by Valley-Wide.

e. Contractor shall monitor watering to prevent browning and fungus.

f. Contractor shall take every measure possible to protect seed by providing temporary fencing if necessary at no additional cost.

g. Hydro-mulch slurry shall be applied under high pressure evenly and provide a uniform coat an all areas specified.

h. Over spray shall be removed immediately from sidewalks, walls or any structures.

i. Contractor shall provide 98 percent germination to all hydro-seeded areas prior to turn- over.

j. Hydro-seeding can not commence until all irrigation, soil preparation and final finish grade has been accepted.

10. Root Barriers

a. Root barrier shall be "Deep Root" control barrier panels # UB 24-2 or approved equal. No cylinder root barriers shall be approved.

b. Root barrier shall be "Bio Barrier" for all trees within 8 feet of and street curbs within the County right of way.

c. Root barriers shall be installed for all trees planted within 8 feet of any walls, sidewalks, building structure or other hard surface.

d. Contractor shall install root barriers per detail.

11. Jute Netting

a. Jute netting shall be uniform plain weave mesh. Geo-jute or approved equal. The mesh shall be brown in color.

b. Jute shall be 48 inches wide with a weight of .97 pounds per linear yard.

c. All slopes adjacent sidewalks are subject to jute netting as directed by Valley-Wide's representative.

12. Grades

a. Prior to commencing any work the contractor shall carefully check all grades and verify that after all irrigation work and soil preparation completed, all grades will be per specified depth as per the landscape contractor's scope of work with a +-1/10.

13. Guarantee

a. All trees and shrubs shall guaranteed for a period of one year.

b. All plant material that is dead or dying or as directed by the engineer within the guarantee period shall be replaced at the cost of the contractor with 7 days of written notice.

c. All replacement plant material shall be exact as specified in species and size. No substitutions shall be allowed unless written approval is obtained.

d. Guarantee period shall start on the date of the project letter of acceptance.

- END OF SECTION -

SECTION 02900

MAINTENANCE SPECIFICATIONS GENERAL

1. Maintenance Duration

a. Contractor shall maintain entire project within the contractor's scope of work until approval to enter unto maintenance period has been obtained in writing. After approval the contractor shall enter into the 90 calendar day maintenance period and call for the following inspections:

i. 30 Day Maintenance Walk
ii. 60 Day Maintenance Walk
iii. 90 Day Maintenance Walk/Final Inspection

b. Contractor shall continuously maintain the entire project until all correction items have been completed and approved in writing.

2. Turf Maintenance

a. Contractor shall mow weekly or as needed, all turf areas to a height between ¾" and 2 ½" depending on variety of turf.

b. Contractor shall edge all turf areas adjacent sidewalks, walls, or other applicable structures and trees bi-weekly or as needed.

c. All clippings must be removed from sidewalks and adjacent areas.

d. Contractor shall remove all excess clipping from turf areas.

e. Contractor shall monitor watering to all turf areas and provide sufficient moisture levels as required to achieve a lush appearance.

3. Tree and Shrub Maintenance

a. Contractor shall remove any dead growth on all trees and shrubs as needed.

b. Lower branches of all trees under twelve feet shall be pruned using best horticultural practices and as directed by Valley-Wide's representative.

c. No topping of any tree is allowed unless directed by Valley-Wide's representative.

d. Pruning of trees above twelve feet will be considered additional work.

e. Contractor shall remove tree stakes when stakes are no longer needed.

4. Groundcover

a. Contractor shall edge all groundcover areas as required to maintain a neat lush thriving appearance and shall edge no less that once per month.

b. Contractor shall edge groundcover around shrub and tree basins as required.

c. Contractor shall trim all groundcover over 24" in height.

5. Weed Control

a. Contractor shall eradicate all weeds from all turf, planter and slope areas by means of manual or chemical abatement.

b. Contractor must have a valid pest control license.

c. Contractor shall apply pre-emergent herbicide where possible to prevent weeds as directed by a licensed pest control consultant.

d. Any undesirable plant ¾" or larger shall be considered a weed.

e. Contractor shall maintain all sidewalks clean and weed free.

6. Rodent Control

a. Contractor shall be responsible for maintaining a rodent free project.

b. All measures to eradicate rodents must be as directed by a licensed pest control consultant.

c. Contractor shall repair/replace all damaged caused by rodents under this section.

7. Fertilization

a. Contractor shall fertilize turf, slope and planter areas every 30 calendar days with approved fertilizer at the manufacture's recommended application rate.

b. Approved fertilizers are 15-15-15, 16-6-8 and 21-7-14

8. Irrigation

a. Contractor shall be responsible for complete irrigation adjustments to achieve proper moisture levels throughout all projects for all seasons as required to promote healthy, thriving plant material, ground cover and turf while taking every possible measure to conserve water.

b. Contractor shall be responsible for repairing all nozzles, sprinkler heads, lateral lines, mainlines, valves and/or other required assemblies throughout the project.

c. Contractor shall ensure that all irrigation heads are adjusted properly to alleviate over spray wherever possible.

d. Contractor shall test irrigation system a minimum of once per week or as required.

e. Provide backflow certification prior to turn-over.

f. Repair and/or replace and damaged backflow devices, water meters, electric pedestals and/or irrigation controllers.

9. Maintenance General

a. Edge groundcover as needed to maintain no growth over sidewalks, around tree and shrub basins or up walls or fences.

b. Remove all trash weekly

c. Test complete irrigation system biweekly.

10. Clean-Up

a. Clean up shall take place on a daily basis, after each portion of work has been completed and as directed by Valley-Wide's representative.

b. The contractor shall legally remove from site any green waste, trash or other debris.

11. Graffiti

a. Removal of any and all graffiti shall be completed within 48 hours of notification.

b. Contractor shall be responsible until project has been completed and has received the letter of completion.

12. Vandalism

a. Contractor shall be responsible for all vandalism to the project until project has been completed, and approved in writing.

13. Final Approval

a. All landscaped areas shall be inspected in it's entirety by Valley-Wide's representative upon the completion of the 90 calendar day maintenance period.

b. Contractor shall provide all charts, record drawings, turn over items etc. prior to final turn over.

c. The contractor shall be responsible for the entire project until final acceptance has been provided in writing by Valley-Wide.

- END OF SECTION -

VALLEY-WIDE RECREATION & PARK DISTRICT

DESIGN APPROVAL BLOCK

Samuel W. Goo... Date: 5-23-07

APPROVAL BY THE TRANSPORTATION DEPARTMENT IS FOR THE AREA WITHIN THE ROAD RIGHT-OF-WAY ONLY.

NOTE:
WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER COUNTY APPROVAL OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE COUNTY.

DATE	BY	MARK

ENGINEER

REVISIONS

APPR.	DATE

COUNTY

SEAL-COUNTY: REGISTERED PROFESSIONAL ENGINEER KHALED A. OTHMAN No. 33950 EXP. 6-30-08 CIVIL STATE OF CALIFORNIA

COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT
APPROVED BY:

KHALED A. OTHMAN, P.E. DATE
R.C.E. 33950 EXP. 6-30-08

RECOMMENDED: DATE

SEAL-LANDSCAPE ARCHITECT: LICENSED LANDSCAPE ARCHITECT Signature 5/31/08 Expiration Date STATE OF CALIFORNIA

FRANK RADMACHER ASSOCIATES, INC. FRA# 2628
LANDSCAPE ARCHITECTS
PHONE (714) 832-1774 FAX (714) 832-5721
14841 YORBA STREET SUITE 204 TUSTIN, CA 92780
EMAIL: F-R-A@PACBELL.NET

PREPARED BY: V.V.
DATE: 8/14/2006
LIC. NO. 1110
EXP. DATE: 5/31/2008

BENCHMARK:

SCALE:
H: N.T.S. V: N.T.S.

TRACT No. 30351 IP No. 030170

COUNTY OF RIVERSIDE
LANDSCAPE PLANS
"WINCHESTER TRAILS" PARK
PLANTING SPECIFICATIONS

SHEET NO. L-15 OF 15 SHEETS

FOR: OSBORNE DEVELOPMENT
W.O.
COUNTY FILE NO.

I:\2600's\2628 Winchester Trails\2628 Valleywide Planting Specs.dwg, Model, 3/15/2006 5:36:14 PM, 1:1.2, VV